Microsoft

Microsoft Dynamics 365

2019 RELEASE WAVE 2 PLAN

Features releasing from October 2019 through March 2020

Last updated on September 23, 2019.

Contents

Dynamics 365: 2019 release wave 2 plan

The Dynamics 365 release plan (formerly release notes) for the 2019 release wave 2 describes all new features releasing from October 2019 through March 2020. You can either browse the release plan online or download the document as a PDF file. The PDF file also includes information about PowerApps, Microsoft Flow, and Common Data Model and data integration.

New for wave 2: The Power Platform (PowerApps, Microsoft Flow, and Power BI) features coming in the 2019 release wave 2 have been summarized in a separate release plan as well as a downloadable PDF.

2019 release wave 2 overview

The 2019 release wave 2 for Dynamics 365 brings new innovations that provide you with significant capabilities to transform your business.

Dynamics 365 applications

The enhancements to Dynamics 365 applications include hundreds of new capabilities across the business process applications:

- Sales
- Marketing
- Customer Service
- Field Service
- Project Service Automation
- Finance
- Supply Chain Management
- Talent
- Retail
- Business Central

New addition to the Dynamics 365 applications

Starting in October 2019, we will have a new business process application.

Dynamics 365 Commerce – Built on the proven Dynamics 365 Retail capabilities—delivers a comprehensive omnichannel solution that unifies back-office, in-store, call center, and digital experiences.

Artificial intelligence

The 2019 release wave 2 enhances artificial intelligence capabilities to help organizations accelerate their transformation of customer service, sales, and marketing functions:

- **Sales Insights** empowers teams with more foresight, to enhance productivity and better anticipate outcomes across the sales lifecycle.
- **Customer Service Insights** provides an actionable view into critical performance metrics, operational data, and emerging trends using industry-leading artificial intelligence.
- **Virtual Agent for Customer Service** enables organizations to create AI-powered bots that chat with customers and provides new opportunities for organizations to improve customer service through digital transformation.
- **Customer Insights** enables every organization to unify and understand their customer data to harness it for intelligent insights and actions.
- **Market Insights** enables business users to gather actionable insights based on what consumers say, seek, and feel about their brands and products.
- **Fraud Protection** enables the e-commerce merchants to drive down fraud loss, increase bank acceptance rates to yield higher revenue, and improve the online shopping experience.

New additions to the AI apps

Starting in October 2019, we will have two additional artificial intelligence apps:

- **Product Insights** enables organizations to transform their product development, marketing, sales, and support by acting on real-time insight into their customers' usage and experience.
- **Connected Store** enables merchants of brick-and-mortar stores with actionable insights by using data from cloud-connected sensors.

Mixed reality

The 2019 release wave 2 continues to add a whole new set of experiences to enhance employee productivity using mixed reality:

- **Dynamics 365 Remote Assist** empowers technicians to solve problems faster the first time.
- **Dynamics 365 Layout** provides a new way for space planners to bring designs from concept to completion with confidence and speed.

- **Dynamics 365 Product Visualize** empowers salespeople to convey the true potential of their products to their customers by harnessing the power of augmented reality on their mobile devices.
- **Dynamics 365 Guides** is a mixed-reality application for Microsoft HoloLens that enables employees to learn in the flow of work by providing holographic instructions when and where they need them.

This release plan describes functionality that may not have been released yet. Delivery timelines and projected functionality may change or may not ship (see Microsoft policy).

Key dates for the 2019 release wave 2

Here are the key dates for the 2019 release wave 2.

Milestone	Date	Description
Release plans available	June 10, 2019	Learn about the new capabilities coming in the 2019 release wave 2 (October 2019 – March 2020) across Dynamics 365 and the Power Platform.
Release plans available in additional 11 languages	July 8, 2019	The Dynamics 365 and Power Platform release plans are published in Danish, Dutch, Finnish, French, German, Italian, Japanese, Norwegian, Portuguese (Brazilian), Spanish, and Swedish.
Early access available	August 2, 2019	Try and validate the new features and capabilities that will be a part of the 2019 release wave 2, October update, before they get enabled automatically for your users.
General availability	October 1, 2019	Production deployment for the 2019 release wave 2 begins. Specific deployment dates for each country or region or instance will be communicated in advance.

We are listening: New for 2019 release wave 2

In the April '19 release, we heard feedback that it was not clear which features were turned on automatically and when exactly each feature would be delivered. To address this, we specify when each feature will be available. In addition, we call out how each feature is enabled:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.

- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

You can get ready with confidence knowing which features will be enabled automatically.

We've done this work to help you—our partners, customers, and users—drive the digital transformation of your business on your terms. We're looking forward to engaging with you as you put these new services and capabilities to work, and we're eager to hear your feedback as you dig into the 2019 release wave 2.

Let us know your thoughts. Share your feedback on the Dynamics 365 community forum. We will use your feedback to make improvements.

Change history

This topic is updated when features are added, or when a feature's release date changes. To find out about updates to these release plans, follow us on Twitter @MSFTDynamics365.

Dynamics 365 Marketing

Release date changed

Feature	Change	Date updated
Support for surveys using Microsoft Forms Pro	Changed General Availability date from November 2019 to December 2019.	September 18, 2019
Support for surveys using Microsoft Forms Pro	Changed General Availability date from October 2019 to November 2019.	September 11, 2019

Dynamics 365 Sales

Release date changed

Feature	Change	Date updated
Microsoft Teams integration enhancements	Public Preview date updated to August 2019.	July 30, 2019
Improve or simplify most common sales workflows	Public Preview date updated to August 2019.	July 22, 2019

Dynamics 365 Customer Service

Features added to release plan

Feature	Date added
Service scheduling migration tool	June 28, 2019
Knowledge article templates	June 27, 2019
Knowledge management inline image enhancement	June 17, 2019

Release date changed

Feature	Change	Date updated
Integration with Dynamics 365 Virtual Agent for Customer Service	Changed Public Preview date from August 2019 to October 2019. Changed General Availability date from October 2019 to December 2019.	August 20, 2019
Knowledge management search and rendering enhancement	Changed Public Preview date from October 2019 to August 2019. Changed General Availability date from December 2019 to October 2019.	June 12, 2019

Features removed from release plan

Feature	Reason	Date removed
Automatic record creation enhancements	Moved to the next release wave	June 21, 2019

Dynamics 365 Project Service Automation

Release date changed

Feature	Change	Date updated
Comprehensive project operations	Changed General Availability date from January 2020 to February 2020.	June 17, 2019

Finance and Operations

Features added to release plan

Feature	Date added
Planning Optimization support for production scheduling	September 13, 2019
Planning Optimization for distribution	September 13, 2019
Cash control	September 07, 2019
Flexible warehouse-level dimension reservation	September 02, 2019
Pre-wave metrics	August 30, 2019
RF dynamic load building	August 30, 2019
Pre-Wave Load Build Planning	August 30, 2019
Warehouse app task validation with RSAT	August 30, 2019
Quality management item sampling	August 30, 2019

Feature	Date added
Parallelized firming of planned orders	August 30, 2019
Further catch weight integration 10.0.6	August 30, 2019
Build automation hosted in Azure DevOps	August 29, 2019
Onboard to Azure Monitor	August 29, 2019
Configure add-ins through Lifecycle Services	August 29, 2019
Report as finished to a license plate-controlled location from the job card device	August 29, 2019
Inventory value report storage	August 29, 2019
Database movement RESTful APIs in Lifecycle Services	August 28, 2019
Retained earnings calculation enhancements for financial reporting when using currency translation	August 14, 2019
Dynamics 365 Asset Management	July 24, 2019
Expanded regional coverage of Regulatory Configuration Service to China	July 24, 2019
Data in Common Data Service – Phase 2	July 19, 2019
Attachment recovery	July 19, 2019
"Select consolidation amount from" control on the consolidate online for dual currency consolidation	July 18, 2019
Reset workflow status for vendor invoices from Unrecoverable to Draft	July 18, 2019
Cancel bank reconciliation	July 18, 2019

Feature	Date added
Create checks with a Blank status on the Checks page	July 18, 2019
Revenue Recognition	July 18, 2019
Extended chart control options now include Solid Gauge visualizations	July 15, 2019
Billing schedules	July 14, 2019
Credit management	July 14, 2019
Reverse journal posting	July 14, 2019
Visual refresh of the web client to align with the Fluent design language	June 10, 2019
Remove project group dependency from project	June 10, 2019
Remove project type dependency from project	June 10, 2019

Release date changed

Feature	Change	Date updated
Wave label printing enhancements	Changed Public Preview date from April 2019 to September 2019.	September 17, 2019
Material handling/warehouse automation	Changed Public Preview date from August 2019 to January 2020. Changed General Availability date from October 2019 to February 2020.	September 16, 2019
Product variant uptake of volumetric data	Public Preview date updated to February 2020.	August 30, 2019

Feature	Change	Date updated
Quality management for warehouse processes	Public Preview date updated to October 2019. Changed General Availability date from February 2020 to November 2019.	August 30, 2019
Packing vs. storage dimensions	Changed Public Preview date from July 2019 to November 2019. Changed General Availability date from October 2019 to January 2020.	August 30, 2019
Receive sortation	Changed Public Preview date from August 2019 to October 2019. Changed General Availability date from October 2019 to November 2019.	August 30, 2019
Put-away clusters	Changed Public Preview date from August 2019 to October 2019. Changed General Availability date from October 2019 to November 2019.	August 30, 2019
Advanced transportation planning	Changed Public Preview date from October 2019 to November 2019. Changed General Availability date from November 2019 to January 2020.	August 30, 2019
Retail store pack and ship	Changed Public Preview date from July 2019 to February 2020. Changed General Availability date from February 2020 to March 2020.	August 30, 2019
Carrier assignment/routing wave step	Changed Public Preview date from July 2019 to November 2019. Changed General Availability date from February 2020 to January 2020.	August 30, 2019
Small package shipping (SPS)	Changed Public Preview date from August 2019 to November 2019.	August 30, 2019
Blind returns receiving	Changed Public Preview date from August 2019 to November 2019.	August 30, 2019

Feature	Change	Date updated
Improved experience on mobile devices - Phase 1	Changed Public Preview date from January 2020 to November 2019. Changed General Availability date from **To be announced** to January 2020.	August 26, 2019
Simplifying configuration of tax extensions for India	Changed General Availability date from November 2019 to January 2020.	August 22, 2019
Priority-based scheduling for batch jobs	Changed General Availability date from January 2020 to **To be announced**.	August 21, 2019
Simplifying configuration of tax extensions for India	Changed General Availability date from January 2020 to November 2019.	August 15, 2019
Shipment auto update	Removed Public Preview date.	August 14, 2019
Wave step code	Removed Public Preview date.	August 14, 2019
Quality management for warehouse processes	Removed Public Preview date.	August 14, 2019
Product variant uptake of volumetric data	Removed Public Preview date.	August 14, 2019
QC inbound dock check	Changed Public Preview date from August 2019 to September 2019.	August 13, 2019
User productivity – New grid	Changed Public Preview date from October 2019 to August 2019. General Availability date updated to **To be announced**.	August 12, 2019
User productivity – Saved views	Changed Public Preview date from October 2019 to August 2019. General Availability date updated to **To be announced**.	August 12, 2019

Feature	Change	Date updated
Inventory on-hand service	Changed Public Preview date from August 2019 to October 2019. Changed General Availability date from October 2019 to December 2019.	August 12, 2019
Quality management for warehouse processes	Changed Public Preview date from August 2019 to September 2019.	August 01, 2019
Shipment auto update	Changed Public Preview date from June 2019 to August 2019.	August 01, 2019
Wave step code	Changed Public Preview date from June 2019 to August 2019.	August 01, 2019
Expanded regional coverage of Regulatory Configuration Service to Europe	Changed Public Preview date from June 2019 to September 2019. Changed General Availability date from October 2019 to December 2019.	July 24, 2019
QC inbound dock check	Changed Public Preview date from June 2019 to August 2019. Changed General Availability date from February 2020 to October 2019.	July 24, 2019
Advanced transportation planning	Changed Public Preview date from July 2019 to August 2019. Changed General Availability date from February 2020 to October 2019.	July 24, 2019
Cancel work	Changed Public Preview date from April 2019 to June 2019.	July 23, 2019
Data in Common Data Service - Phase 1	Changed Public Preview date from June 2019 to July 2019. Changed General Availability date from **To be announced** to October 2019.	July 19, 2019
Geo expansion to France	Removed Public Preview date.	July 19, 2019
Country of origin enhancements	Changed General Availability date from October 2019 to November 2019.	July 19, 2019

Feature	Change	Date updated
Hazardous materials shipping documentation	Changed General Availability date from October 2019 to November 2019.	July 19, 2019
Hazardous materials product information management	Changed General Availability date from October 2019 to November 2019.	July 19, 2019
Sales process control via enhanced order holds	Changed General Availability date from October 2019 to November 2019.	July 19, 2019
Self-billing invoice control for sales	Changed General Availability date from October 2019 to November 2019.	July 19, 2019
Self-billing invoice control for procurement	Changed General Availability date from October 2019 to November 2019.	July 19, 2019
Purchase-order delivery via cXML	Changed General Availability date from October 2019 to November 2019.	July 19, 2019
External catalog enhancements	Changed General Availability date from October 2019 to November 2019.	July 19, 2019
Priority-based scheduling for batch jobs	Changed Public Preview date from September 2019 to November 2019. Changed General Availability date from October 2019 to January 2020.	July 19, 2019
Auto release shipment for cross dock	Changed Public Preview date from July 2019 to August 2019.	July 19, 2019
Location product dimension mixing	Changed Public Preview date from July 2019 to August 2019.	July 19, 2019
Change work pool button	Changed Public Preview date from June 2019 to August 2019.	July 19, 2019

Feature	Change	Date updated
Wave template grouping	Changed Public Preview date from May 2019 to August 2019.	July 19, 2019
Receive sortation	Changed Public Preview date from July 2019 to August 2019.	July 19, 2019
Advanced cross-docking	Changed Public Preview date from July 2019 to August 2019.	July 19, 2019
Material handling/warehouse automation	Changed Public Preview date from July 2019 to August 2019.	July 19, 2019
Put to wall/Put to store	Changed Public Preview date from June 2019 to August 2019.	July 19, 2019
Put-away clusters	Changed Public Preview date from July 2019 to August 2019.	July 19, 2019
Release to warehouse rule	Changed Public Preview date from April 2019 to August 2019.	July 19, 2019
Zone-based replenishment	Changed Public Preview date from April 2019 to August 2019.	July 19, 2019
Pallet building post-packing station	Changed Public Preview date from June 2019 to August 2019.	July 19, 2019
System-directed cluster picking	Changed Public Preview date from June 2019 to August 2019.	July 19, 2019
Advanced allocation strategies - FIFO and LIFO	Changed Public Preview date from April 2019 to August 2019.	July 19, 2019
Location status logic	Changed Public Preview date from March 2019 to August 2019.	July 19, 2019

Feature	Change	Date updated
Split work	Changed Public Preview date from May 2019 to August 2019.	July 19, 2019
Cluster full	Changed Public Preview date from April 2019 to August 2019.	July 19, 2019
Pick-line grouping	Changed Public Preview date from March 2019 to August 2019.	July 19, 2019
Location wizard enhancements	Changed Public Preview date from March 2019 to August 2019.	July 19, 2019
System-directed clustering	Changed Public Preview date from June 2019 to August 2019.	July 19, 2019
Confirm and transfer	Changed Public Preview date from February 2019 to August 2019.	July 19, 2019
Advanced load building during a wave	Changed Public Preview date from February 2019 to August 2019.	July 19, 2019
Replenishment Slotting Plan - part I (Slotting)	Changed Public Preview date from March 2019 to August 2019.	July 19, 2019
Wave status visualization	Changed Public Preview date from March 2019 to August 2019.	July 19, 2019
Configurable business documents reporting in Word and Excel	Public Preview date updated to August 2019.	July 18, 2019
Visual refresh of the web client to align with the Fluent design language	Public Preview date updated to August 2019.	July 16, 2019

Feature	Change	Date updated
RFQ activities	Changed General Availability date from October 2019 to February 2020.	July 10, 2019
Vendor bidding—questions from vendors and summarized responses	Changed General Availability date from October 2019 to December 2019.	July 10, 2019
Purchase agreement enhancements	Changed General Availability date from October 2019 to November 2019.	July 10, 2019
Calculate PO delivery date based on lead times and working days (public sector)	Changed General Availability date from October 2019 to November 2019.	July 10, 2019
Further catch weight integration 10.0.3	Changed General Availability date from October 2019 to December 2019.	June 14, 2019
Further catch weight integration 10.0.2	Changed General Availability date from October 2019 to December 2019.	June 14, 2019
Further catch weight integration 10.0.1	Changed General Availability date from October 2019 to December 2019.	June 14, 2019
Further catch weight integration 10.0.4	Changed General Availability date from October 2019 to December 2019.	June 14, 2019
Inventory on-hand service	Changed Public Preview date from September 2019 to August 2019.	June 10, 2019

Features removed from release plan

Feature	Reason	Date removed
URS-based resource management for projects in Microsoft Dynamics 365 Finance	Moved to the next release wave	August 30, 2019

Feature	Reason	Date removed
Automate routing and distribution procedures for core business documents	Moved to the next release wave	August 26, 2019
Data feeds for third-party integrations	Deprioritized and will not be delivered	August 09, 2019
Automatic ledger settlements	Moved to a future release wave	August 07, 2019
Dock management planning	Deprioritized and will not be delivered	July 24, 2019

Dynamics 365 Talent

Release date changed

Feature	Change	Date updated
Deeper experience integration with Finance and Operations and third-party applications	Removed Public Preview date.	September 18, 2019
[Create guides in minutes with intelligent suggestions for activities and content]()	Changed Public Preview date from October 2019 to **To be announced**. Changed General Availability date from December 2019 to **To be announced**.	September 03, 2019
[Improve diverse hiring with detection of bias and cryptic language in job descriptions]()	Changed Public Preview date from August 2019 to **To be announced**. Changed General Availability date from October 2019 to **To be announced**.	September 03, 2019
[Customize and extend analytics reports]()	Changed Public Preview date from August 2019 to **To be announced**.	September 03, 2019

Feature	Change	Date updated
Add a mixed reality guide as an onboarding task	Changed Public Preview date from October 2019 to **To be announced**. Changed General Availability date from December 2019 to **To be announced**.	September 03, 2019
Intelligent candidate recommendations	Changed General Availability date from October 2019 to **To be announced**.	September 03, 2019
Embed third-party apps	Changed Public Preview date from September 2019 to November 2019. Changed General Availability date from October 2019 to December 2019.	August 15, 2019

Features removed from release plan

Feature	Reason	Date removed
Deeper experience integration with Finance and Operations and third-party applications	Deprioritized and will not be delivered	August 15, 2019

Dynamics 365 Retail

Features added to release plan

Feature	Date added
Product Recommendations in POS	September 11, 2019
Hide designated pickup, carryout, and electronic modes of delivery from ship-all and ship-selected processes in POS	September 10, 2019
Financial reconciliation of retail transactions in the store (Public Preview)	August 29, 2019

Feature	Date added
Modern POS offline availability improvements	July 19, 2019
Improved CDX scalability through Cloud Async Client	July 19, 2019
Merchandising improvements – add support to configure and observe the custom order for product attributes, refiners, and values	July 19, 2019
Merchandising improvements – add support for custom order for categorized products, related products, and dimension groups	July 19, 2019
Numpad to remain on-screen in POS inventory receiving form	June 25, 2019
Translations for charges codes in POS	June 10, 2019
E-commerce inventory API improvements	June 10, 2019

Release date changed

Feature	Change	Date updated
In-store components mass deployment	Changed Public Preview date from January 2020 to November 2019. Changed General Availability date from March 2020 to January 2020.	August 27, 2019
Improved inventory (inbound and outbound) operations in store	Changed Public Preview date from October 2019 to November 2019.	August 27, 2019
Merchandising improvements – add support for custom order for categorized products, related products, and dimension groups	Changed Public Preview date from September 2019 to October 2019. Changed General Availability date from November 2019 to January 2020.	August 26, 2019

Feature	Change	Date updated
Call center localization for Eastern Europe	Changed General Availability date from December 2019 to January 2020.	August 21, 2019
In-store components mass deployment	Changed Public Preview date from September 2019 to January 2020. Changed General Availability date from November 2019 to March 2020.	August 16, 2019
E-commerce inventory API improvements	Public Preview date updated to October 2019. Changed General Availability date from November 2019 to January 2020.	August 13, 2019
One Version – Auto-update for Retail Cloud Scale Unit	Changed Public Preview date from August 2019 to October 2019.	August 12, 2019
Clienteling – Empower sales associates to become trusted advisors and establish long-term relationships with customers	Changed Public Preview date from September 2019 to October 2019. Changed General Availability date from November 2019 to January 2020.	August 09, 2019
Management of customer registration numbers from POS for India	Public Preview date updated to September 2019.	July 19, 2019
Regression Suite Automation Tool for POS	Public Preview date updated to September 2019.	July 19, 2019
In-store components mass deployment	Public Preview date updated to September 2019. Changed General Availability date from October 2019 to November 2019.	July 19, 2019
Clienteling – Empower sales associates to become trusted advisors and establish long-term relationships with customers	Public Preview date updated to September 2019. Changed General Availability date from October 2019 to November 2019.	July 19, 2019

Feature	Change	Date updated
Tender-based discounts	Public Preview date updated to October 2019. Changed General Availability date from October 2019 to January 2020.	July 19, 2019
External gift card support in call center	Public Preview date updated to October 2019. Changed General Availability date from October 2019 to January 2020.	July 19, 2019
Secure access to secrets	Public Preview date updated to September 2019. Changed General Availability date from October 2019 to November 2019.	July 19, 2019
Environment history for Retail Cloud Scale Unit	Public Preview date updated to February 2020. Changed General Availability date from October 2019 to February 2020.	July 19, 2019
Auto-refresh device activation token	Public Preview date updated to January 2020. Changed General Availability date from October 2019 to **To be announced**.	July 19, 2019
Improved inventory (inbound and outbound) operations in store	Public Preview date updated to October 2019. Changed General Availability date from November 2019 to January 2020.	July 19, 2019
Numpad to remain on-screen in POS inventory receiving form	Public Preview date updated to August 2019.	July 19, 2019
Translations for charges codes in POS	Public Preview date updated to August 2019.	July 19, 2019
Enhancements to Retail statement posting	Public Preview date updated to August 2019.	July 19, 2019
Merchandising improvements – support to custom sort the display order of categories belonging to various category hierarchies	Public Preview date updated to August 2019.	July 19, 2019

Feature	Change	Date updated
POS and headquarters extensions	Public Preview date updated to August 2019.	July 19, 2019
One Version – Auto-update for Retail Cloud Scale Unit	Public Preview date updated to August 2019.	July 19, 2019
Store Scale Unit improvements	Public Preview date updated to August 2019.	July 19, 2019

Features removed from release plan

Feature	Reason	Date removed
Warranty set up and sell	Moved to the next release wave	September 06, 2019
Sales order modification improvements	Moved to the next release wave	September 06, 2019
Intelligent stores through spatial-driven insights	Moved to the next release wave	September 06, 2019
Clienteling – Cross sell using product collections	Moved to the next release wave	September 06, 2019
Consistency in payments management across retail channels	Moved to the next release wave	September 06, 2019
Improved order recall for omnichannel orders in Customer Service	Moved to the next release wave	September 06, 2019
Retail auto-charges configured by channel	Moved to the next release wave	September 06, 2019

Feature	Reason	Date removed
Independent packaging for Modern POS	Moved to the next release wave	September 06, 2019
In-store employee task management	Moved to the next release wave	August 28, 2019
Enhanced inventory dimension support in Retail order processing	Moved to the next release wave	July 19, 2019
Improved support for batch inventory dimension in store	Moved to the next release wave	July 19, 2019

Dynamics 365 Commerce

Features added to release plan

Feature	Date added
Product recommendations and personalization	September 16, 2019
Store starter kit	September 16, 2019
Extensibility	September 16, 2019
Merchandising and storytelling	September 16, 2019
SEO	September 16, 2019
Ratings and reviews	September 16, 2019
Provisioning and environment management	September 16, 2019
UX platform	September 16, 2019

Dynamics 365 Business Central

Features added to release plan

Feature	Date added
Identify the company by a badge	September 15, 2019
Allow non-sequential numbering	August 29, 2019
Create records and convert prospects with better templates	August 20, 2019
Implementing hierarchical menus	August 15, 2019
Filtering XmlPort Objects	August 01, 2019
Use the Copy Document function on blocked lines	July 08, 2019
Longer timeout period for the server connection	June 24, 2019
Support for technical upgrades	June 16, 2019
Convert tables from C/AL definitions to AL table definitions	June 10, 2019

Release date changed

Feature	Change	Date updated
Multitask across multiple pages	Changed Public Preview date from September 2019 to August 2019.	August 15, 2019
Design for extensibility	Public Preview date updated to August 2019.	June 27, 2019

Feature	Change	Date updated
Multitask across multiple pages	Public Preview date updated to September 2019.	June 24, 2019
Filter option fields by multiple values	Public Preview date updated to September 2019.	June 24, 2019
Enter data with speed and agility	Public Preview date updated to September 2019.	June 24, 2019
Customize user profiles without writing code	Public Preview date updated to September 2019.	June 24, 2019
More power to developers using Designer	Public Preview date updated to August 2019.	June 20, 2019
Save and personalize list views	Public Preview date updated to August 2019.	June 20, 2019
Add links to your navigation menu	Public Preview date updated to August 2019.	June 20, 2019
General user experience adjustments	Public Preview date updated to August 2019.	June 19, 2019
Resize columns with fewer clicks	Public Preview date updated to August 2019.	June 19, 2019
Personalize actions on your Role Center	Public Preview date updated to August 2019.	June 19, 2019
Filter reports more efficiently	Public Preview date updated to August 2019.	June 19, 2019
Support for performant data upgrade from C/AL tables to AL tables	Public Preview date updated to August 2019.	June 19, 2019

Feature	Change	Date updated
Improved app dependency handling on build and deploy	Public Preview date updated to August 2019.	June 19, 2019
Base application delivered as AL applications	Public Preview date updated to August 2019.	June 19, 2019
Access modifiers	Public Preview date updated to August 2019.	June 19, 2019
Attach and debug next	Public Preview date updated to August 2019.	June 19, 2019
Surrogate keys	Public Preview date updated to August 2019.	June 18, 2019
Page background tasks	Public Preview date updated to August 2019.	June 18, 2019
Lock-free number series	Public Preview date updated to August 2019.	June 18, 2019
Partners can enter support contact details in the Business Central Administration Center	Public Preview date updated to August 2019.	June 18, 2019
Report production outage in the Business Central Administration Center	Public Preview date updated to August 2019.	June 18, 2019
New Support Request option in the Business Central Administration Center	Public Preview date updated to August 2019.	June 18, 2019
Get overview of all business features	Public Preview date updated to August 2019.	June 18, 2019
Add notes and links to data	Public Preview date updated to August 2019.	June 18, 2019

Feature	Change	Date updated
Full keyboard shortcut support	Public Preview date updated to August 2019.	June 18, 2019
Modern clients only for Business Central	Public Preview date updated to August 2019.	June 18, 2019
Carry line descriptions to G/L entries when posting	Public Preview date updated to August 2019.	June 17, 2019
Cancel reminders and finance charge memos	Public Preview date updated to August 2019.	June 17, 2019
Switch between companies in your Business Inbox in Outlook	Public Preview date updated to August 2019.	June 14, 2019
Detailed notifications for update events	Public Preview date updated to August 2019.	June 14, 2019
Ability to download a database export file	Public Preview date updated to August 2019.	June 14, 2019
Enhancements to Excel integration	Public Preview date updated to August 2019.	June 14, 2019

Features removed from release plan

Feature	Reason	Date removed
Write larger item cross-reference numbers	Moved to the next release wave	September 06, 2019
Code documentation attributes	Moved to the next release wave	August 29, 2019

Dynamics 365 Sales Insights

Features added to release plan

Feature	Date added
Extend action options taken from the suggested actions	September 12, 2019
Understand how sellers are using suggested actions	September 12, 2019

Release date changed

Feature	Change	Date updated
Capture more customer communications	Changed Public Preview date from October 2019 to December 2019.	June 10, 2019

Features removed from release plan

Feature	Reason	Date removed
Better privacy controls for Who knows whom - Relationship Analytics	Moved to the next release wave	September 17, 2019

Dynamics 365 Customer Service Insights

Release date changed

Feature	Change	Date updated
Improved support for topic generation for non-English case titles	Public Preview date updated to October 2019.	August 27, 2019

Feature	Change	Date updated
Improve Dynamics 365 Virtual Agent for Customer Service through topics for automation	Changed General Availability date from **To be announced** to December 2019.	August 27, 2019

Features removed from release plan

Feature	Reason	Date removed
Get a combined overview of human and virtual agents	Moved to the next release wave	August 27, 2019

Dynamics 365 Virtual Agent for Customer Service

Features added to release plan

Feature	Date added
Connect to channels	August 27, 2019
Microsoft Bot Framework Skills support	August 27, 2019
User authentication	August 27, 2019
AI-assisted authoring – Topic suggestions from websites	August 27, 2019
Global variables	August 27, 2019

Release date changed

Feature	Change	Date updated
Import and export bot topics	Changed General Availability date from October 2019 to January 2020.	August 27, 2019
Integration with Dynamics 365 Customer Service Insights	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Hand off to a generic live-chat provider	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Slot-filling capabilities	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Entity extraction with system entities	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Entity extraction with custom entities	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Variable capabilities	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Enhanced conversation testing and debugging	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Enable actions or access data from back-end systems with Microsoft Flow	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Support for multiple users editing topics at the same time within a bot	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Customize the canvas themes	Changed General Availability date from October 2019 to December 2019.	August 27, 2019

Feature	Change	Date updated
Customer satisfaction (CSAT) dashboards	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Publish to web channels	Changed General Availability date from October 2019 to December 2019.	August 27, 2019
Hand off to Dynamics 365 Omnichannel for Customer Service	Public Preview date updated to October 2019. Changed General Availability date from October 2019 to December 2019.	August 20, 2019
Entity extraction with system entities	Removed Public Preview date.	July 31, 2019
Entity extraction with custom entities	Removed Public Preview date.	July 31, 2019
Hand off to Dynamics 365 Omnichannel for Customer Service	Removed Public Preview date.	July 31, 2019
Hours saved	Removed Public Preview date.	July 31, 2019
Integration with Dynamics 365 Customer Service Insights	Removed Public Preview date.	July 31, 2019
Slot-filling capabilities	Removed Public Preview date.	July 31, 2019
Hand off to a generic live-chat provider	Removed Public Preview date.	July 31, 2019
Publish to web channels	Removed Public Preview date.	July 31, 2019

Features removed from release plan

Feature	Reason	Date removed
Hours saved	Moved to a future release wave	August 27, 2019

Dynamics 365 Market Insights

Features added to release plan

Feature	Date added
Customize alert notifications (time, frequency, and consolidation) and delete user accounts	July 01, 2019
Get email notifications when there is news or new insights about your topic(s)	June 16, 2019
Easily share individual insights with colleagues via social media, email, IM, and text	June 10, 2019
Access the news and insights related to topics of interest in a web app	June 10, 2019
Get additional insights related to business topics from web data, search activity and browsing behavior (US only)	June 10, 2019
Get more relevant insights by defining topic characteristics in a user's business universe	June 10, 2019

Release date changed

Feature	Change	Date updated
Get more relevant insights by defining topic characteristics in a user's business universe	Changed General Availability date from October 2019 to **To be announced**.	September 16, 2019
Easily share individual insights with colleagues via social media, email, IM, and text	Changed Public Preview date from August 2019 to September 2019.	July 01, 2019
Get additional insights related to business topics from web data, search activity and browsing behavior (US only)	Changed Public Preview date from August 2019 to September 2019.	July 01, 2019
Get more relevant insights by defining topic characteristics in a user's business universe	Changed Public Preview date from August 2019 to September 2019.	July 01, 2019
Access the news and insights related to topics of interest in a web app	Changed Public Preview date from August 2019 to September 2019.	July 01, 2019

Features removed from release plan

Feature	Reason	Date removed
Integrate with Dynamics 365 Sales	Moved to the next release wave	June 30, 2019
Get additional insights related to your topics (March 2020)	This feature is merged with **Get additional insights related to business topics from web data, search activity and browsing behavior (US only)**.	June 30, 2019

Dynamics 365 Fraud Protection

Release date changed

Feature	Change	Date updated
External compliance certification	Changed Public Preview date from October 2019 to August 2019. Changed General Availability date from **To be announced** to October 2019.	August 27, 2019
Extend and tailor Dynamics 365 Fraud Protection	Changed Public Preview date from October 2019 to December 2019.	August 19, 2019

Dynamics 365 Product Insights

Features added to release plan

Feature	Date added
Rich custom metrics	September 17, 2019
Interactive drilldowns	September 17, 2019
High-value AI insights	September 17, 2019
Deep integration	September 17, 2019
Built-in collaboration	September 17, 2019
Sharing and discovery	September 14, 2019
Out-of-the-box insights	September 11, 2019
360-degree signals	September 11, 2019

Dynamics 365 Connected Store

Features added to release plan

Feature	Date added
Temperature and humidity monitoring	September 17, 2019
Store heat map	September 17, 2019
Scheduled reports	September 17, 2019
Notifications	September 17, 2019
Foot traffic	September 17, 2019
Customer demographics	September 17, 2019
Checkout queue management	September 17, 2019

Dynamics 365 Guides

Features removed from release plan

Feature	Reason	Date removed
Support for additional languages	Moved to the previous release wave	September 03, 2019

Microsoft Forms Pro

Release date changed

Feature	Change	Date updated
Survey incentives	Public Preview date updated to September 2019.	June 11, 2019
Categorize survey comments automatically	Public Preview date updated to October 2019. Changed General Availability date from October 2019 to **To be announced**.	June 11, 2019

Features removed from release plan

Feature	Reason	Date removed
Categorize survey comments automatically	Moved to a future release wave	August 06, 2019

2019 release wave 2 features available for early access

This topic lists the features that can be enabled for testing in your environment beginning August 2, 2019.

Features from the following apps are available as part of early access:

- Dynamics 365 Marketing
- Dynamics 365 Sales
- Dynamics 365 Customer Service
- Dynamics 365 Field Service
- Finance and Operations
- Dynamics 365 Retail

The features from these apps update the existing user experiences. You can opt in early to enable these features in your environment. This will allow you to test these features and then adopt them across your environments. For information on how to enable these features, see Opt in to 2019 release wave 2 updates.

For Power Platform early access features, see Release wave 2 features available for early access.

Dynamics 365 Marketing

For a complete list of the Dynamics 365 Marketing features, see What's new and planned for Dynamics 365 Marketing.

IMPORTANT Dynamics 365 Marketing requires additional steps to activate the 2019 release wave 2 features (you must first opt in for early access on the instance and then update the Marketing app). See the instructions for complete details.

Feature	Enabled for	Early access	General availability
Customer Insights integration	Users, automatically	August 2, 2019	October 2019
Easy setup for subscription lists	Users, automatically	August 2, 2019	October 2019

Feature	Enabled for	Early access	General availability
Email A/B testing	Users, automatically	August 2, 2019	October 2019
Layout editor	Users, automatically	August 2, 2019	October 2019
Support approvals using Microsoft Flow	Users, automatically	August 2, 2019	October 2019

Dynamics 365 Sales

For a complete list of the Dynamics 365 Sales features, see What's new and planned for Dynamics 365 Sales.

Feature	Enabled for	Early access	General availability
Business card scan	Users, automatically	August 2, 2019	October 2019
Customization of Opportunity Close dialog box*	Users by admins, makers, or analysts	August 2, 2019	October 2019
Enhance the adding or editing Opportunity/Quote/Order/Invoice products experience	Users, automatically	August 2, 2019	October 2019
Improve or simplify most common sales workflows	Users, automatically	August 2, 2019	October 2019
LinkedIn Sales Navigator integration enhancements	Users, automatically	August 2, 2019	October 2019
Microsoft Teams integration enhancements	Users, automatically	August 2, 2019	October 2019
Out-of-the-box hierarchical relationship on the Territory entity	Users, automatically	August 2, 2019	October 2019

Feature	Enabled for	Early access	General availability
Simplified lead management experience	Users, automatically	August 2, 2019	October 2019
Softphone dialer*	Users by admins, makers, or analysts	August 2, 2019	October 2019

* These features will not be rolled out automatically; an admin must enable them for the users.

Dynamics 365 Customer Service

For a complete list of the Dynamics 365 Customer Service features, see What's new and planned for Dynamics 365 Customer Service.

Feature	Enabled for	Early access	General availability
Knowledge article templates	Users, automatically	August 2, 2019	October 2019
Knowledge management search and rendering enhancement	Users, automatically	August 2, 2019	October 2019
Timeline usability enhancements	Users, automatically	August 2, 2019	October 2019

Dynamics 365 Field Service

For a complete list of the Dynamics 365 Field Service features, see What's new and planned for Dynamics 365 Field Service.

Feature	Enabled for	Early access	General availability
Mixed reality Guides for Field Service*	Users by admins, makers, or analysts	August 2, 2019	October 2019

* This feature will not be rolled out automatically; an admin must enable it for users.

Finance and Operations

For a complete list of the features for Finance and Operations apps, see What's new and planned for Finance and Operations.

For information about how to enable previews, see Service Update Availability.

Feature	Enabled for	Public preview	General availability
“Select consolidation amount from” control on the consolidate online for dual currency consolidation	Users by admins, makers, or analysts	August 5, 2019	October 2019
Advanced allocation strategies - FIFO and LIFO	Users by admins, makers, or analysts	August 5, 2019	October 2019
Advanced cross-docking	Users by admins, makers, or analysts	August 5, 2019	October 2019
Advanced load building during a wave	Users by admins, makers, or analysts	August 5, 2019	October 2019
Attachment recovery	Users by admins, makers, or analysts	August 5, 2019	October 2019
Auto release shipment for cross dock	Users by admins, makers, or analysts	August 5, 2019	October 2019
Cancel bank reconciliation	Users by admins, makers, or analysts	August 5, 2019	October 2019
Change work pool button	Users by admins, makers, or analysts	August 5, 2019	October 2019
Cluster full	Users by admins, makers, or analysts	August 5, 2019	October 2019

Feature	Enabled for	Public preview	General availability
Configurable business documents reporting in Word and Excel	Users by admins, makers, or analysts	August 5, 2019	October 2019
Confirm and transfer	Users by admins, makers, or analysts	August 5, 2019	October 2019
Create checks with a Blank status on the Checks page	Users by admins, makers, or analysts	August 5, 2019	October 2019
Extended chart control options now include Solid Gauge visualizations	Admins, makers, or analysts, automatically	August 5, 2019	October 2019
Inventory on-hand service	Users by admins, makers, or analysts	August 5, 2019	October 2019
Location product dimension mixing	Users by admins, makers, or analysts	August 5, 2019	October 2019
Location status logic	Users by admins, makers, or analysts	August 5, 2019	October 2019
Location wizard enhancements	Users by admins, makers, or analysts	August 5, 2019	October 2019
Material handling/warehouse automation	Users by admins, makers, or analysts	August 5, 2019	October 2019
Pallet building post-packing station	Users by admins, makers, or analysts	August 5, 2019	October 2019
Pick-line grouping	Users by admins, makers, or analysts	August 5, 2019	October 2019
Put to wall/Put to store	Users by admins, makers, or analysts	August 5, 2019	October 2019

Feature	Enabled for	Public preview	General availability
Put-away clusters	Users by admins, makers, or analysts	August 5, 2019	October 2019
Receive sortation and cluster put-away	Users by admins, makers, or analysts	August 5, 2019	October 2019
Release to warehouse rule	Users by admins, makers, or analysts	August 5, 2019	October 2019
Replenishment Slotting Plan - part I (Slotting)	Users by admins, makers, or analysts	August 5, 2019	October 2019
Reset workflow status for vendor invoices from Unrecoverable to Draft	Users by admins, makers, or analysts	August 5, 2019	October 2019
Revenue recognition	Users by admins, makers, or analysts	August 5, 2019	October 2019
Split work	Users by admins, makers, or analysts	August 5, 2019	October 2019
System-directed cluster picking	Users by admins, makers, or analysts	August 5, 2019	October 2019
System-directed clustering	Users by admins, makers, or analysts	August 5, 2019	October 2019
Visual refresh of the web client to align with the Fluent design language	Users, automatically	August 5, 2019	October 2019
Wave status visualization	Users, automatically	August 5, 2019	October 2019
Wave template grouping	Users by admins, makers, or analysts	August 5, 2019	October 2019

Feature	Enabled for	Public preview	General availability
Zone-based replenishment	Users by admins, makers, or analysts	August 5, 2019	October 2019

Dynamics 365 Retail

For a complete list of the Dynamics 365 Retail features, see What's new and planned for Dynamics 365 Retail.

Feature	Enabled for	Public preview	General availability
Enhancements to Retail statement posting	Users by admins, makers, or analysts	August 5, 2019	October 2019
Improved CDX scalability through Cloud Async Client	Users, automatically	August 5, 2019	October 2019
Modern POS offline availability improvements	Users, automatically	August 5, 2019	October 2019
Numpad to remain on-screen in POS inventory receiving form	Admins, makers, or analysts, automatically	August 5, 2019	October 2019
One Version – Auto-update for Retail Cloud Scale Unit	Admins, makers, or analysts, automatically	August 5, 2019	October 2019
POS and Headquarters extensions	Admins, makers, or analysts, automatically	August 5, 2019	October 2019
Store Scale Unit improvements	Admins, makers, or analysts, automatically	August 5, 2019	October 2019
Translations for charges codes in POS	Users by admins, makers, or analysts	August 5, 2019	October 2019

Feature	Enabled for	Public preview	General availability
Merchandising improvements	Users by admins, makers, or analysts	August 5, 2019	October 2019

Dynamics 365 Marketing

Overview of Dynamics 365 Marketing 2019 release wave 2

Dynamics 365 Marketing is a marketing automation solution that can help businesses turn more prospects into business relationships. Since its launch in April 2018, Dynamics 365 Marketing has seen increasing adoption by organizations looking to align sales and marketing, make smarter decisions, and grow with an adaptable platform. The app goes beyond basic email marketing to provide deep insights and generate qualified leads for your sales teams. Its graphical content-creation and design tools make visually rich emails, landing pages, and customer journeys easy to design and execute.

Our customers are looking to achieve more with less effort through an intuitive experience that doesn't require the assistance of technical experts to perform common tasks. The 2019 release wave 2 doubles down on ease of use and simplification while continuing to invest in intelligent scenarios. Here are the key investment areas for this release:

- **Marketing made simple**: Having simplified trial sign-ups, we are continuing to streamline the rest of the product by concentrating on the scenarios most often mentioned in user feedback. We've simplified processes, eliminated extra clicks, and added many small improvements that help make marketers' lives easier. Improvements include: new email layouts, subscription-list management, and much more.
- **Personalized marketing**: The system helps marketers build effective content effortlessly. With A/B testing, marketers can set up powerful experiments with a few clicks and let the system take care of the rest. Thanks to a robust platform, large organizations can customize their marketing execution to run independently for each business unit.
- **Connected business apps**: Sales teams are looking for marketing-powered insights that let them drill down into details to learn more about their customers, for example while preparing for meetings or replying to emails.
- **Actionable intelligence** lets you build optimized audiences and orchestrate effective communication strategies. With Dynamics 365 Customer Insights, marketers can leverage the power of the Microsoft ecosystem to increase the effectiveness of their marketing initiatives.
- **Fundamental investments** continue to deliver improved performance, scalability, system management, extensibility, and throughput for campaign execution and email marketing. Improved provisioning makes life easier for admins and power users.

[Watch overview video]

What's new and planned for Dynamics 365 Marketing

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	Early access*	General availability
Marketing support for business units	Users by admins, makers, or analysts	-	-	Oct 2019
Customer Insights integration	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Easy setup for subscription lists	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Email A/B testing	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Improved segmentation experience	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Layout editor	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Support approvals using Microsoft Flow	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Quick send	Users by admins, makers, or analysts	-	-	Dec 2019

Feature	Enabled for	Public preview	Early access*	General availability
Support for surveys using Microsoft Forms Pro	Users by admins, makers, or analysts	-	-	Dec 2019

* Some features are available for you to opt-in as part of early access on August 2, 2019, including all mandatory changes that impact users. Learn more about early access.

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

Marketing support for business units

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Feature details

Large organizations with multiple customer bases often use multiple *business units* to manage their marketing datasets and campaigns. On top of these, a parent business unit often manages centralized reporting or creates templates to be propagated across all the child business units. The Common Data Service platform supports this model, and the Marketing app now supports this during all aspects of marketing execution, including: access to contact records, display of segment members, access to contact insights, availability of email templates, and more.

Support for surveys using Microsoft Forms Pro

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Dec 2019

Feature details

Create stellar customer experiences by using surveys to measure customer sentiment and satisfaction at every touchpoint. Surveys also help you make smarter decisions by capturing and analyzing customer feedback.

Surveys based on Microsoft Forms Pro bring a rich set of capabilities for inquiring about your customers' needs, thereby preparing you to make data-driven decisions and to apply your findings to your marketing initiatives. You can also make automated use of survey responses by including them in the criteria for segmentation, lead scoring, or branching a customer journey.

See also

Feature exploration (video)

Customer Insights integration

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2019	Oct 2019

Feature details

The new Customer Insights app for Dynamics 365 applies artificial intelligence to analyze rich pools of customer data collected from across other apps like Dynamics 365 Sales, Service, and Marketing. Its standard functionality generates powerful analytical displays for each contact, which makes the information easy to understand and use. The integrated solution can:

- Push marketing interactions to the Customer Insights data lake to produce a complete 360-degree view for each contact.
- Apply data cleansing, enrichment, and fuzzy matching.
- Use segments created by Customer Insights to target customer journeys in Dynamics 365 Marketing.

See also

Feature exploration (video)

August update and early access (blog)

Use segments from Customer Insights in Marketing (docs)

Easy setup for subscription lists

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Feature details

Marketers often run campaigns that target subscription lists directly, without applying any additional filters or criteria to establish the target segment. We now make this scenario easy to accomplish by helping marketers to work end-to-end with subscription lists throughout the marketing lifecycle. Key improvements include:

- Subscription lists are now available natively from the main navigator in the Dynamics 365 Marketing app.
- Read, create, edit, and delete subscription lists directly in Dynamics 365 Marketing.
- Use the new *subscription lists* design element to add lists to subscription forms.

See also

August update and early access (blog)

Easy subscription lists (docs)

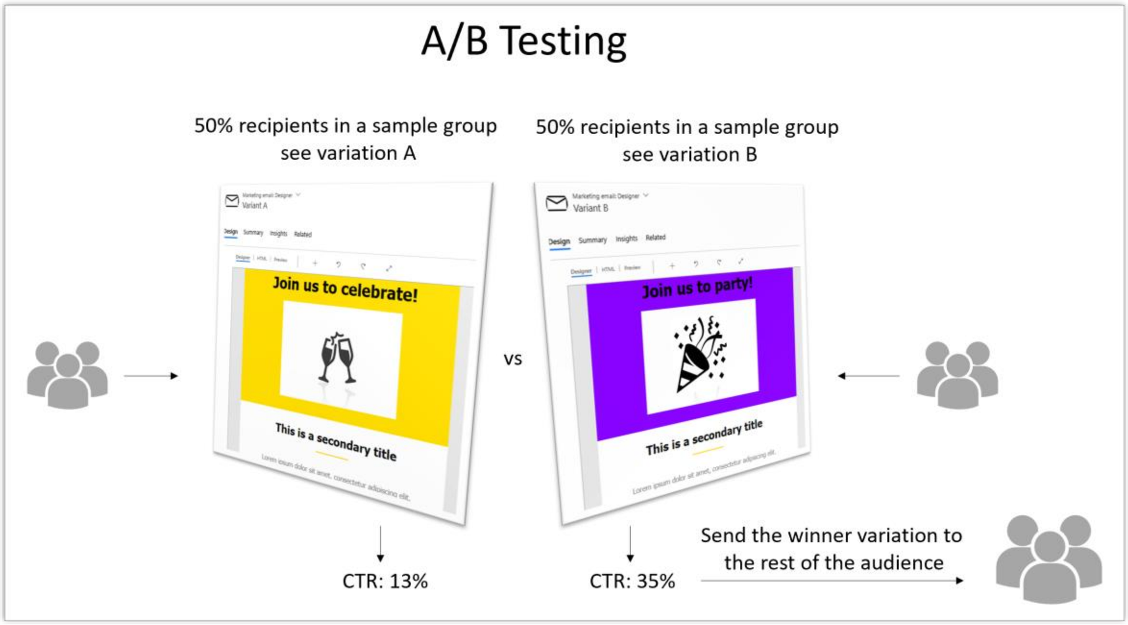
Email A/B testing

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Feature details

One of the best ways to find out which of several possible email designs will produce the best results is to try each design on a different subset of your audience and then analyze interaction records to see how each design was received. Marketers call this *A/B testing*.

We've now built this capability right into the Marketing product by allowing marketers to create alternative versions of a message and define their business goals for it. The system establishes a few small test groups within the target segment and sends a different version of the message to each group, followed by statistical analysis that automatically identifies the winning design based on the stated business goal. The winner is then delivered to the rest of the segment.



A/B testing process overview diagram

See also

[Feature exploration](#) (video)

[August update and early access](#) (blog)

[Design and run A/B test on your email designs](#) (docs)

Improved segmentation experience

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

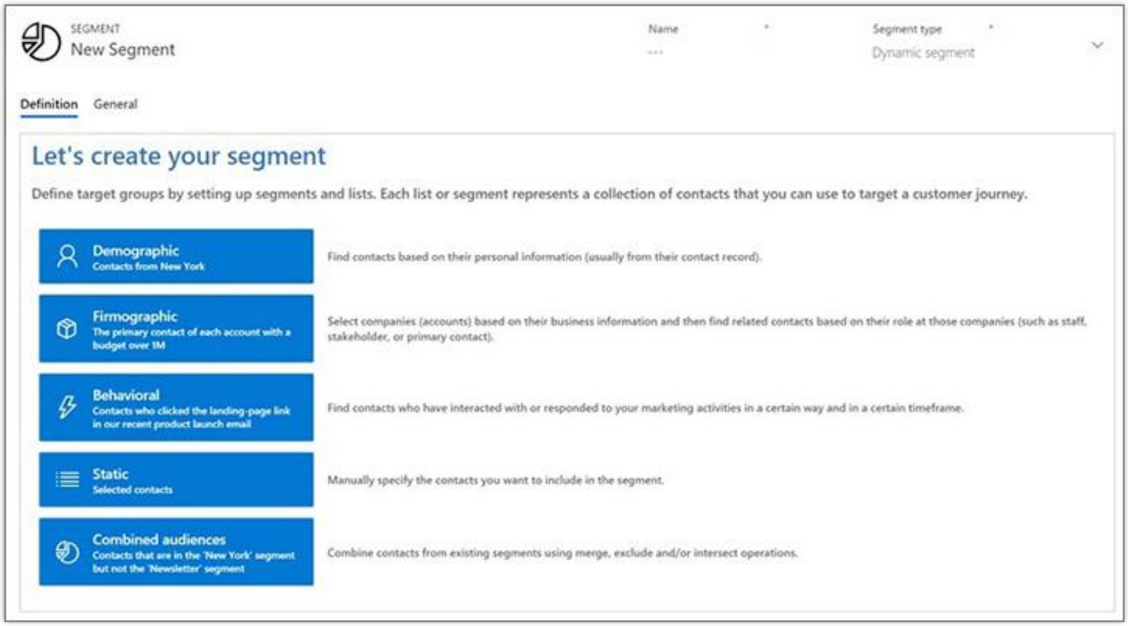
Business value

Build targeted audiences for demand generation easily.

Feature details

Choosing the right target audience is key for running a successful campaign, so we're continuing to improve the design and performance of the segmentation designer in Dynamics 365 Marketing. This release brings a fresh, intuitive segment builder that addresses many of the usability pain points of the previous design. Improvements include:

- A new segmentation hub that helps you get started quickly when creating the most-used types of segments, such as interaction-based, demographics-based, and compound segments.
- A redesigned query builder that lets you design queries from the bottom up, starting from contacts, which provides an experience that's more intuitive and similar to the "advanced find" feature.
- Accurate segment-size estimates, which you can request and refresh at any time while building a segment, prior to going live.
- A new views selector that lets you filter the contacts list while browsing segment members.



The new segmentation hub

See also

August update and early access (blog)

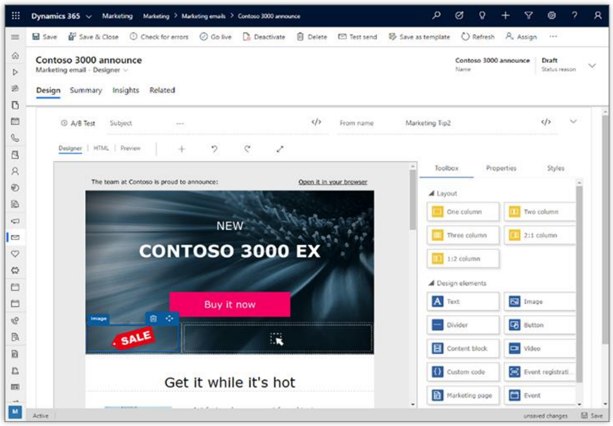
Create segments with the new segmentation designer (docs)

Layout editor

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Feature details

With this release, we continue to make it easier for marketers to design and modify published content. The visual email designer now provides a layout editor for designing multi-column layouts. This provides a quick and easy way to alter the appearance of email messages, which is a feature that marketers often look for.



The layout editor

See also

[August update and early access](#) (blog)

[Design multi-column layouts for email messages](#) (docs)

Support approvals using Microsoft Flow

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

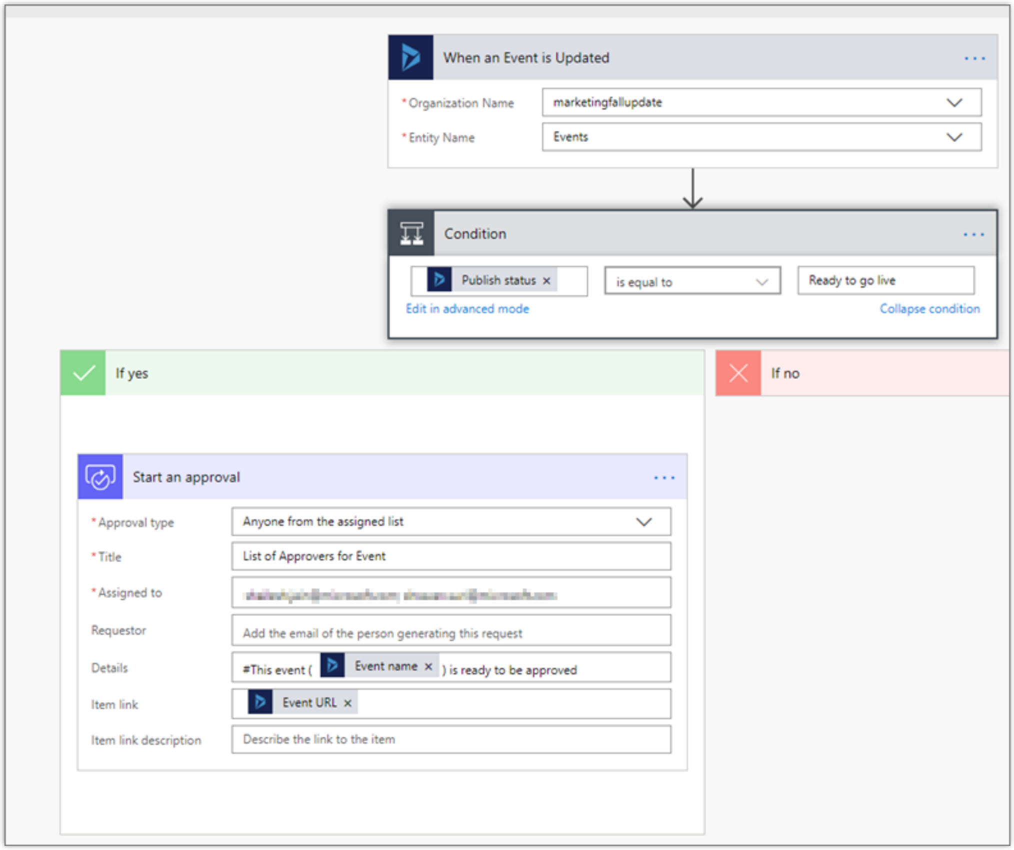
Feature details

Dynamics 365 Marketing now supports a customizable approval workflow that helps make sure new marketing materials and campaigns are properly approved before going into effect.

After marketers finish setting up a new record, such as a marketing email or customer journey, they can send that record for approval with just a single click. Based on how the approval workflow is set up, the relevant manager is then notified of the approval request. Core approval scenarios include:

- Request approval for a record
- Cancel request for approval
- Approve or reject an approval request
- Delegate a request for approval
- Manage an overdue approval request

The approval system is delivered as a Microsoft Flow app that can enforce a simple approval process based on core marketing entities. Because each organization probably has its own business process and hierarchy, Microsoft Flow provides the flexibility required for easy customization by business users, makers, or partners.



Approval workflow designer

See also

[August update and early access](#) (blog)

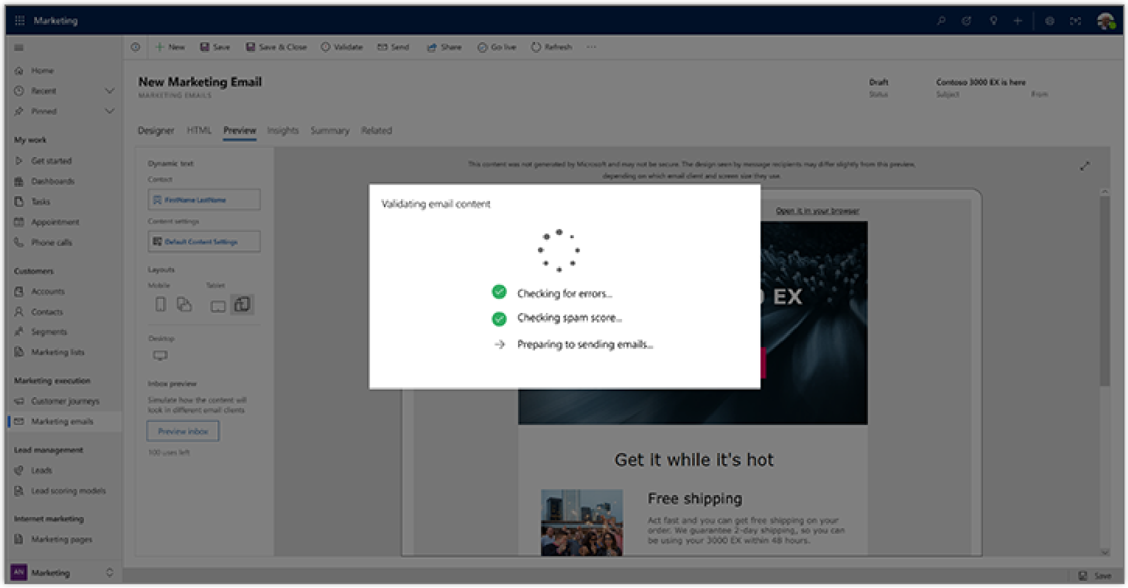
[Build an approvals feature](#) (docs)

Quick send

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Dec 2019

Feature details

Often, marketers just need to send out a quick email blast to a target audience without requiring follow-up automation or behavioral triggers. We've optimized this experience by making it easy to craft and send emails to a large audience in just a few clicks. Users can gradually move on to create more complex, multi-step customer journeys when needed.



Quick send

Dynamics 365 Sales

Overview of Dynamics 365 Sales 2019 release wave 2

Dynamics 365 Sales is an enterprise-grade customer engagement software that enables sales teams to build strong relationships with their customers, take actions based on insights, and close deals faster. As the most popular application on the Dynamics 365 platform, Sales encompasses many scenarios that range from traditional outbound sales models to complex configurations that meet many large enterprise business needs.

The product is designed to offer a turn-key solution for lightweight needs with Dynamics 365 Sales Professional, supporting customized experiences as these organizations grow and expand. Dynamics 365 Sales is purpose-built, helping organizations increase revenue with actionable insights that drive more relevant and authentic customer engagements, all while maximizing productivity.

Our customers and prospects seek stability and satisfaction in their investment with Dynamics 365. To bet their sales strategies on Dynamics 365 Sales, these customers need to trust the stability of our software. Stability includes standard fundamentals like availability, performance, and supportability but also other important aspects, such as compliance, data protection, security, and communications. Satisfaction needs are primarily centered on the ease of use of the product and a minimum number of steps to complete each scenario.

In 2019 release wave 2, we are investing heavily in the stability and satisfaction of the platform, delivering more value to our customers. These improvements are centered around the following themes:

- **Reliability and performance**: Continue to provide improved performance, scalability, availability, extensibility, and supportability to help sellers focus on customer relationships.
- **Modern and simple user interface**: Continue to streamline and simplify key scenarios most mentioned in user feedback. Simplified processes, eliminating extra clicks, and improvements that help make sellers' lives easier.
- **Relationship-selling enhancements**: Invest in integrations that let sellers quickly transition between CRM and communications, without the need to switch context, ensuring conversations are authentic and meaningful.
- **Sales productivity**: Go beyond simplification to offer intelligence, turning data into insights that can help organizations increase revenue and empower sellers to have more personal conversations.

- **Ecosystem enablement**: With Dynamics 365 Sales, sellers can leverage the power of the Microsoft ecosystem to increase the effectiveness of their selling activities.

Watch overview video

What's new and planned for Dynamics 365 Sales

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	Early access*	General availability
Contextual email communication	Users by admins, makers, or analysts	Oct 2019	-	-
Simplified signup experience for Sales Professional	Users by admins, makers, or analysts	-	-	Oct 2019
Softphone dialer	Users by admins, makers, or analysts	-	-	Oct 2019
Business card scan	Users, automatically	-	✔ Aug 1, 2019	Oct 2019
Customization of Opportunity Close dialog box	Users by admins, makers, or analysts	-	✔ Aug 1, 2019	Oct 2019

Feature	Enabled for	Public preview	Early access*	General availability
Enhance the adding or editing Opportunity/Quote/Order/Invoice products experience	Users, automatically	-	✔ Aug 1, 2019	Oct 2019
Improve or simplify most common sales workflows	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
LinkedIn Sales Navigator integration enhancements	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Microsoft Teams integration enhancements	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Out-of-the-box hierarchical relationship on the Territory entity	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Simplified lead management experience	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
LinkedIn Sales Navigator Data validation	Users by admins, makers, or analysts	-	-	Nov 2019

* Some features are available for you to opt-in as part of early access on August 2, 2019, including all mandatory changes that impact users. Learn more about early access.

Description of **Enabled for** column values:

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For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

Contextual email communication

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	-

Business value

A top request by customers.

Because Microsoft provides several integrations of Dynamics 365 Sales with Outlook, we have relied on lightweight email editor experiences for many years. Email is a central component every day in the life of salespeople, who are in constant contact with their leads and stakeholders. When composing emails, sales teams frequently refer to data displayed on a page and they don't want to navigate away from it. By overlaying an email composition screen on top of the existing form, sellers will be able to compose an email without having to navigate away from the screen they are on. This allows them to compose more thoughtful emails to their customers and improve the quality of engagement.

Feature details

With a rich text editor and a pop-up non-blocking window, composing email has never been better in Dynamics 365 Sales. Salespeople will be able to write email with context of the record they are working on, navigate between records, have multiple active draft emails open simultaneously, preview the content before sending, add attachments, and be able to use email templates to optimize commonly used tasks. The email opening up in a non-blocking window gives salespeople all the relevant content at a glance, while they compose their email to the customer.

NOTE This feature is available in the Unified Interface only.

See also

Feature exploration (video)

Simplified signup experience for Sales Professional

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Business value

Reduced time and effort for users to sign up for a trial or paid version of Dynamics 365 Sales Professional.

Feature details

The trial and purchase experience for Dynamics 365 Sales Professional is being overhauled so that new customers can easily and quickly reach the Sales Professional app and get started. The app is enhanced to look modern and welcoming, enabling users to discover its value instantly.

- Future users can sign up for trials easily and quickly. On signing up, they will land in the Sales Professional app quickly with minimal administrative tasks.
- New users who purchase Sales Professional licenses will be able to land in the Sales Professional app directly after purchase.
- New users will be greeted with a welcome screen that helps them understand the key scenarios that the application helps them achieve immediately.
- Users will get guided help for the most common actions they expect to achieve in the application.

NOTE This capability is intended only for Dynamics 365 Sales Professional. No preview will be available for this capability.

NOTE This feature is available in the Unified Interface only.

Softphone dialer

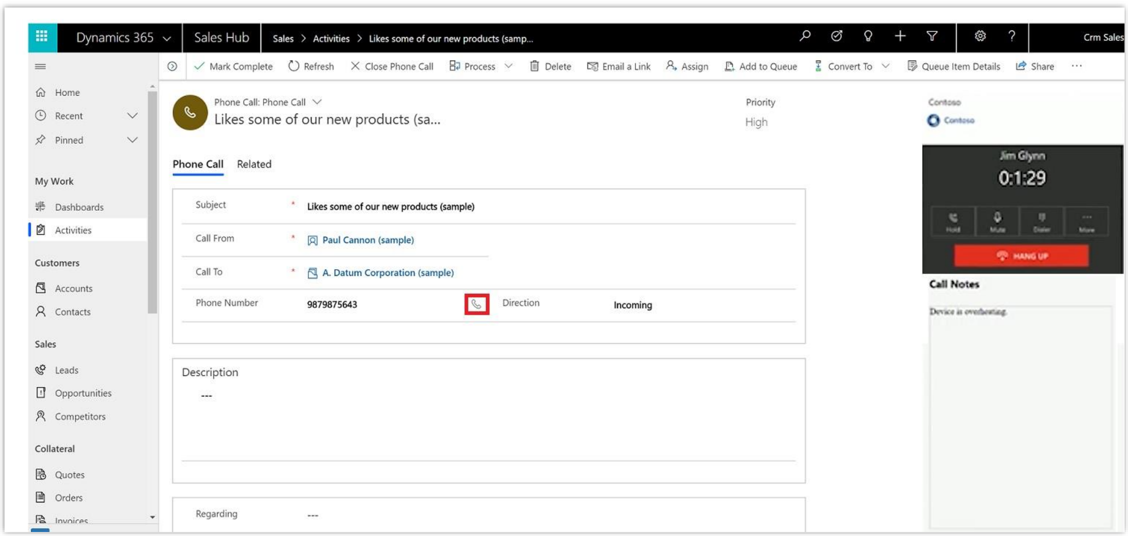
Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Business value

Remote selling is a constantly growing segment, driven by the increasing trend of online and over-the-phone purchasing. Sellers and inside sellers reach out to their customers over the phone every day, always seeking to simplify and streamline these communications. By integrating the calling experience and automating how these communications are captured in Dynamics 365 Sales, we help sellers be more productive and focus on having more meaningful conversations.

Feature details

Customers can leverage the channel integration framework in Dynamics 365 Sales to integrate the softphone dialer from their telephony provider, within the customer engagement app. Sales reps can quickly dial numbers directly from the browser to call contacts by selecting a phone number. The softphone dialer immediately appears and initiates the call.



Soft phone dialer

NOTE This feature is available in the Unified Interface only.

Business card scan

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 1, 2019	Oct 2019

Business value

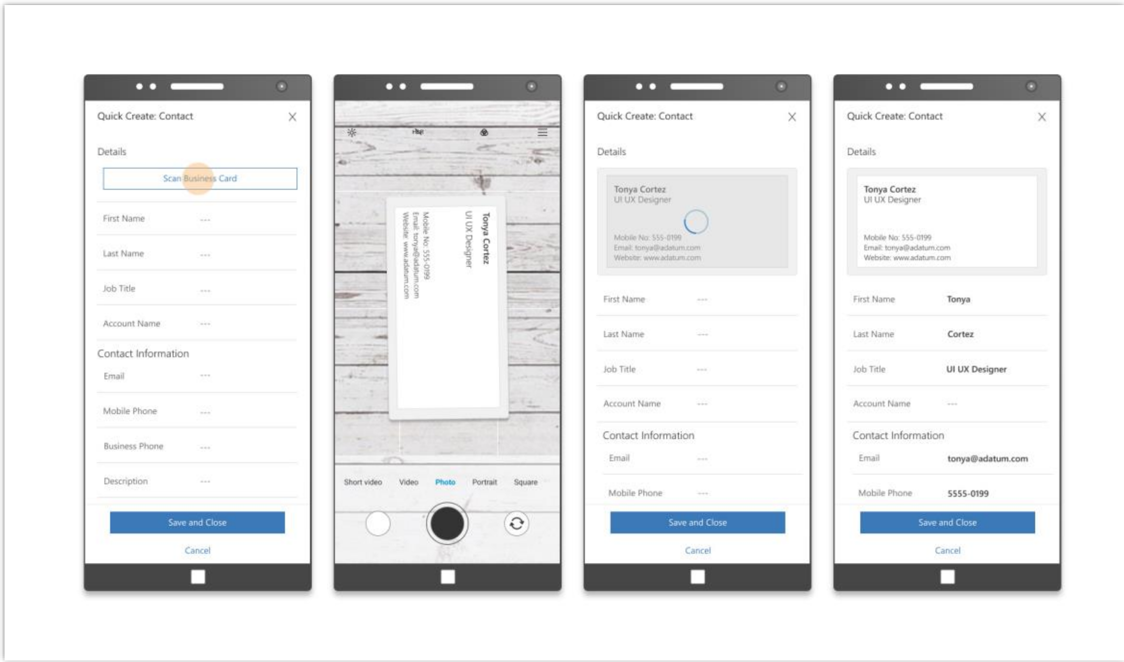
A top request by customers.

Business cards are typically handed out at meetings, then often misplaced or lost. Sales professionals need a way to quickly capture information from these cards, freeing them to focus on more important tasks. Scanning business cards is particularly useful when on the go, at conferences, or offsite meetings.

Feature details

Business cards can be scanned via mobile or web. The scanner will analyze the card for relevant information, and automatically update respective fields in the system. The feature also offers configuration, allowing users to select alternative fields to populate.

- Business card scan feature will only be available in the US and EU regions.



Business card scan

NOTE This feature is available in the Unified Interface only.

See also

[Business card scan](#) (blog)

[Scan business cards](#) (docs)

Customization of Opportunity Close dialog box

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	✔ Aug 1, 2019	Oct 2019

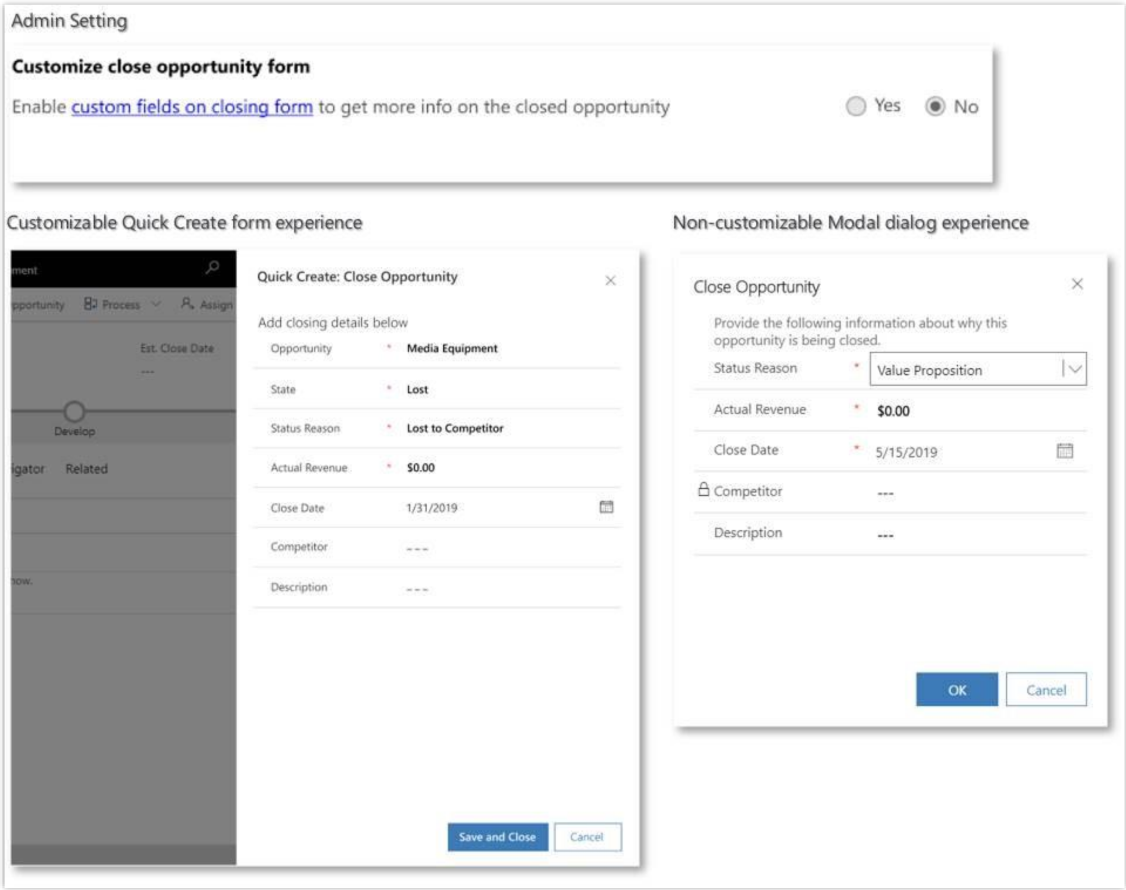
Business value

A top request by customers.

When closing an opportunity, businesses often need to understand why the opportunity was lost or won to build upon past losses and successes or to try new strategies for improving win rates. By supporting customization of the Opportunity Close dialog box, Dynamics 365 Sales helps companies capture close/win details based on their strategic sales initiatives. Furthermore, sales managers can see which competitors are trending in losses, or what drove success in wins. This information helps managers identify products and services that are performing well, to form future product and service strategies. In addition, the data captured can benefit analysis and machine learning models, helping to predict the likelihood of future opportunities to close.

Feature details

- Administrators can add fields such as Profit Margin or Winning Product in the Close as Won form/dialog box of the Opportunity entity.
- Administrators can add fields such as Competitive Advantage in the Close as Lost form/dialog box of the Opportunity entity.
- Administrators can introduce new client-side business validations or remove existing ones.
- Administrators can customize the Opportunity Close entity.
- Administrators can choose between the non-customizable modal dialog experience (default setting) and the customizable form experience.
- Sales reps can close an opportunity via the desktop or mobile app and provide relevant details required by their organization for closing the opportunity.



Opportunity Close

NOTE This feature is available in the Unified Interface only.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

See also

Customize the Opportunity Close form (docs)

Enhance the adding or editing Opportunity/Quote/Order/Invoice products experience

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 1, 2019	Oct 2019

Business value

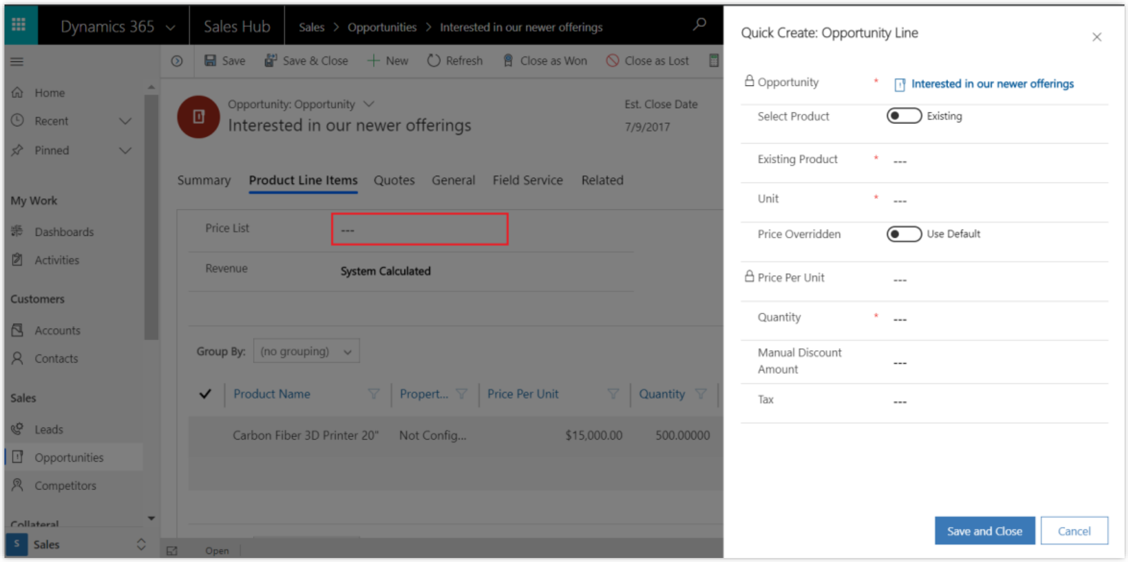
A top request by customers.

Enhancements to this feature help improve searching and filtering experiences by allowing salespeople to select a product on any line item, empowering them to be more productive and avoid unnecessary context switching.

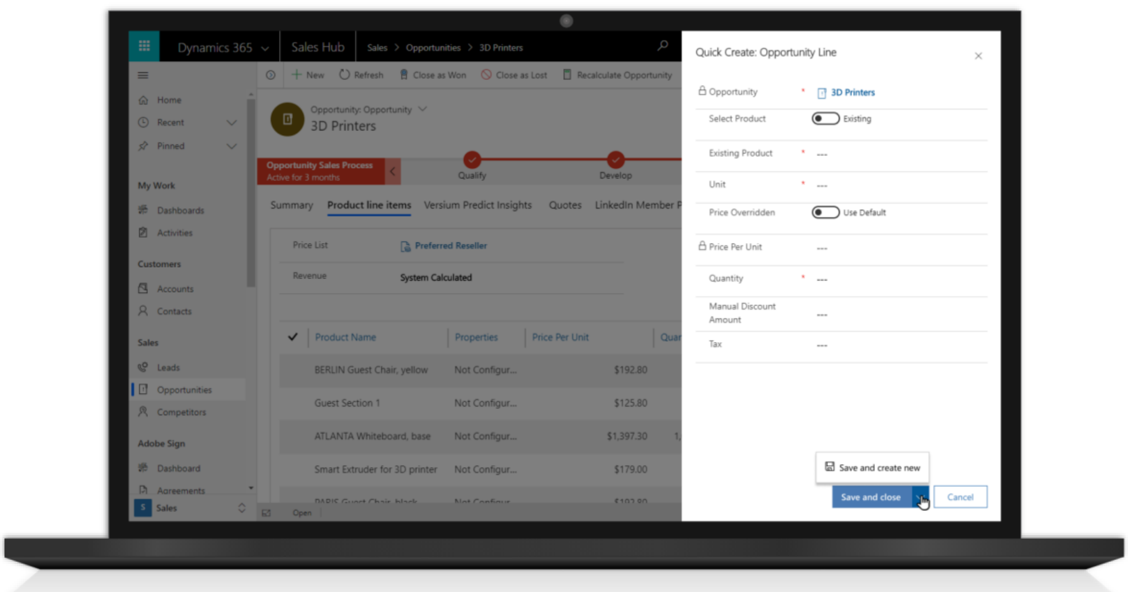
Feature details

Creation of multiple product line items, which can be a repetitive task, is now streamlined with the new Create and Add capability. By quickly iterating on adding new products to an opportunity, salespeople can save time and quickly shift focus to more important tasks. In addition:

- Salespeople can add an existing product to an Opportunity, Quote, Order, and Invoice, with or without a price list.
- Administrators can choose whether to enforce selection of a price list.
- Salespeople can quickly view and edit properties for a product, even while editing Opportunity or Quote line items.
- Administrators can use additional customization options on the price list item entity.



Price list optional



Option to Save and create new

NOTE This feature is available in the Unified Interface only.

See also

[Enhance the adding or editing](#) (blog)

[Make selection of price list optional](#) (docs)

Improve or simplify most common sales workflows

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Business value

Simplified workflows will introduce ease of access to commonly used components. Enhancements to sales stakeholder and sales team management processes will help improve their productivity while offering flexibility in product management and UI-based product reparenting.

Feature details

- Make the **Documents** tab visible in the main form for Contact, Opportunity, Lead, and Account entities.
- Enhance the Opportunity form user experience.
- Support reparenting of products and the addition of properties at the product level (supported on both the legacy web client and the Unified Interface).
  - While defining a product catalog, admins can update the parent of a product, bundle, or family in cases where products need to be realigned. Additionally, they can add properties directly at the product or bundle level.

NOTE This feature is available in the Unified Interface only.

See also

Improve or simplify most common sales workflows (blog)

LinkedIn Sales Navigator integration enhancements

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Business value

Microsoft Relationship Sales solution brings together LinkedIn Sales Navigator and Dynamics 365 Sales to empower sellers to drive more personalized and meaningful engagements with buyers. InMails by LinkedIn are a commonly used communication channel for sales representatives to connect with their customers. Dynamics 365 Sales will foster efficient customer engagement by allowing sales reps to compose and send InMail from within Dynamics 365 Sales entities.

To help sellers more easily identify contacts, profile pictures from LinkedIn will now be available within Dynamics 365 Sales.

Feature details

- A new LinkedIn widget will be introduced inside a Dynamics 365 record to host the LinkedIn InMail component. This LinkedIn widget will allow sales representatives to send InMails to their contact, opportunity, lead, and entity contacts while viewing the LinkedIn profile information alongside.
- Sales users will be able to access the InMail component while working on the Org chart feature in Dynamics 365 Sales. They can just double-click the Org chart node and select the InMail icon to be able to send LinkedIn InMails directly from Dynamics 365 Sales.
- If organizations have enabled the sync, the sent InMail is also added as an activity in the activity timeline of the contact, opportunity, lead, and account entity from where the InMail was sent.
- If organizations have enabled the sync, profile photos from LinkedIn will show as the contact picture within Dynamics 365. This will replace any existing picture that has been uploaded as the contact picture.

NOTE This feature is available in the Unified Interface only.

See also

LinkedIn Sales Navigator integration enhancements (blog)

Microsoft Teams integration enhancements

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Business value

Dynamics 365 integration with Teams was introduced in April 2019. Enhancements help to connect Dynamics 365 records to Teams channels without leaving the Dynamics 365 app. Sellers will receive team member recommendations, during the connection flow, based on Dynamics

365 access privileges. To further improve the extensibility, file sharing can now be enabled for any out-of-the-box and custom entities, across Dynamics 365 and Teams connections. Connections refer to the ability to add a Dynamics 365 tab to a Teams channel.

Feature details

- When connecting a Dynamics 365 record to a Teams channel, relevant members are suggested based on users associated with the Dynamics 365 record. Member suggestions will be available to a user if designated as a channel owner.
- SDK support is now available for the Microsoft Teams integration feature for any entity type, including custom entity types.
- When creating a Teams channel from the Dynamics 365 record page, users can automatically connect the Dynamics 365 record to the selected channel.

NOTE This feature is available in the Unified Interface only.

See also

Feature exploration (video)

Microsoft Teams integration (blog)

Out-of-the-box hierarchical relationship on the Territory entity

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Business value

Organizations will be able to get valuable insights by visualizing hierarchically related territories.

Feature details

A hierarchical relationship will now be available out of the box on the Territory entity. This will allow organizations to model and visualize their sales territories in a hierarchical format.

NOTE This feature is available in the Unified Interface only.

See also

Out-of-the-box hierarchical (blog)

Simplified lead management experience

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

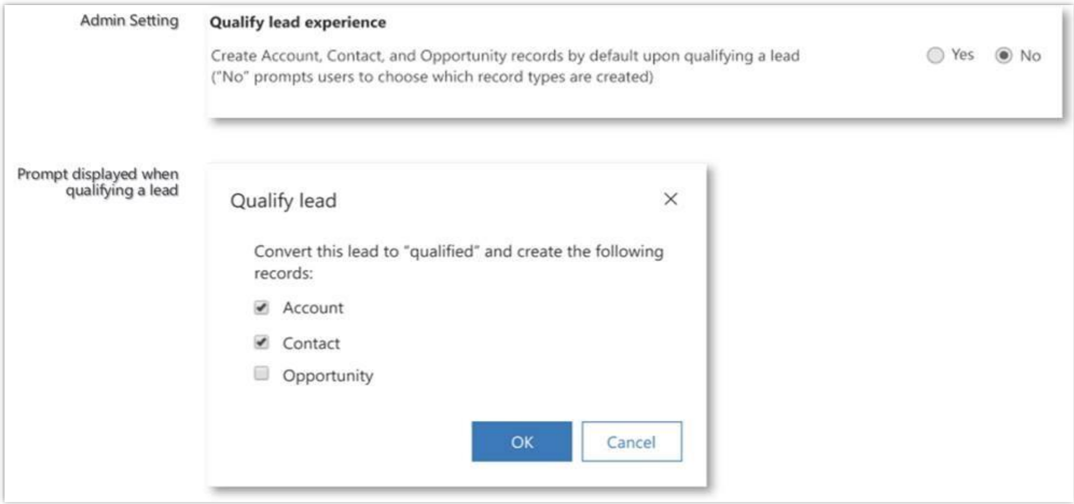
Business value

To help our customers maximize productivity, we are introducing improvements across top scenarios related to lead management.

Feature details

Top scenarios include:

- Autopopulate contact and/or company-related fields when a sales rep selects an existing contact and/or account at the creation of a new lead.
- Display notes and attachments captured by a sales rep when promoting a lead in the opportunity record after the lead is qualified.
- Enable sales reps to qualify leads and quickly move to the next stage of the sales cycle: optionally create opportunity, account, or contact records based on the organization-level settings configured by the admin for the lead creation experience. The default setting would be **Yes**, which would automatically create an account, contact, and opportunity when qualifying a lead.



Options while qualifying a lead

NOTE This feature is available in both the legacy web client and Unified Interface.

See also

Feature exploration (video)

Qualify Lead (docs)

LinkedIn Sales Navigator Data validation

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Nov 2019

Business value

The Data validation capability that we are introducing as part of the LinkedIn integration will enable salespeople to stay up to date on the career movements of their contacts. They can use this information to quickly refine their deal strategies, assess new opportunities that might open up, and foster relevant engagement with their connections.

Feature details

For Microsoft Relationship Sales users with CRM sync enabled, the Data validation capability can be turned on from **Admin Settings**.

Once this feature is on, users will be notified of job changes of all of their owned contacts that are posted on LinkedIn. The organization chart capability of Dynamics 365 Sales will indicate all contacts with a recent job change and allow users to update their contact information within Dynamics 365 Sales.

NOTE This feature is available in the Unified Interface only.

Dynamics 365 Customer Service

Overview of Dynamics 365 Customer Service 2019 release wave 2

Dynamics 365 Customer Service is an end-to-end, self-support and assisted-support service that supports multiple channels of customer engagement, provides comprehensive and efficient case routing and management for agents, and enables authoring and consumption of knowledge management articles. For wave 2 of 2019, we are focused on the following three areas:

- **Agent productivity**: Delivering improvements that help agents be more productive such as improved email authoring experiences and timeline enhancements.
- **Omnichannel for Customer Service**: Enabling customers to experience a seamless personalized service as they switch across support channels.
- **Service insights**: Investing in improved insights for supervisors and managers to drive better business decisions.

The next sections offer details on the specific features being released across these areas.

Watch overview video

What's new and planned for Dynamics 365 Customer Service

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Customer Service

Dynamics 365 Customer Service aims to enable businesses to differentiate themselves from their competition by providing world-class customer experiences.

Feature	Enabled for	Public preview	Early access*	General availability
Knowledge management inline image enhancement	Users by admins, makers, or analysts	-	-	Oct 2019
Service scheduling migration tool	Users by admins, makers, or analysts	✓ Aug 1, 2019	-	Oct 2019
Knowledge article templates	Users, automatically	-	✓ Aug 2, 2019	Oct 2019
Knowledge management search and rendering enhancement	Users, automatically	-	✓ Aug 2, 2019	Oct 2019
Timeline usability enhancements	Users, automatically	-	✓ Aug 2, 2019	Oct 2019

Omnichannel for Customer Service

Omnichannel for Customer Service offers a suite of capabilities that extend the power of Dynamics 365 Customer Service to enable organizations to instantly connect and engage with their customers via additional channels like Chat and SMS.

Feature	Enabled for	Public preview	Early access*	General availability
Unified routing for entity records	Users by admins, makers, or analysts	✓ Aug 31, 2019	-	Oct 2019
Integration with Dynamics 365 Virtual Agent for Customer Service	Users by admins, makers, or analysts	Oct 2019	-	Dec 2019
Analytics for third-party channels	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Bot-assisted agent guidance	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020

Feature	Enabled for	Public preview	Early access*	General availability
Dynamics 365 Channel Integration Framework v2	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Enhanced search experience	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Facebook messaging	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Guide customer interactions with agent scripts	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Macros	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Multiple-provider support	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Notification customization	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Proactive chat	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Sentiment analysis enhancement	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
Skill-based routing	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020
User navigation history	Users by admins, makers, or analysts	Oct 2019	-	Jan 2020

* Some features are available for you to opt-in as part of early access on August 2, 2019, including all mandatory changes that impact users. Learn more about early access.

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

Customer Service

Overview

Customers today value the ease and speed of resolution and they want to receive service on their preferred channel of engagement, at any time, and on any device. We are enabling these capabilities by building an intelligent omnichannel customer experience and an empowered agent experience.

A true omnichannel experience in the product will preserve context and provide a continuous experience as customers seamlessly switch across self-service, peer-to-peer service, and assisted-service channels. An empowered agent experience will provide an application experience that is unified across channels and line-of-business (LOB) applications, is contextual to the engagement, and comes with productivity tools to resolve issues faster.

Knowledge management inline image enhancement

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Feature details

Investments in improving knowledge management will benefit knowledge authors, customer service agents, and customers. Knowledge authors will be able to author more easily. The ability to create professional presentations of articles will help drive self-service adoption by making knowledge base articles more effective at shifting customers toward self-help.

Knowledge authors will have an improved inline image experience in which they can directly copy, paste, and drag and drop images, or select them from File Explorer and add them to knowledge articles, instead of sourcing them from links, as is done today.

Service scheduling migration tool

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	✔ Aug 1, 2019	Oct 2019

Business value

Allows customers to migrate from the legacy Service scheduling to the new Service scheduling.

Feature details

The Service scheduling migration tool allows migration of legacy configuration and service appointment data to the new service scheduling experience. The migration tool provides a simple user interface to migrate data and troubleshoot any error scenarios that might occur during migration.

See also

Service scheduling guide (docs)

Knowledge article templates

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Business value

Knowledge article templates help knowledge authors reuse the common content and maintain consistent branding, language, and messaging.

Feature details

Customers will get out-of-the-box templates that they can readily use. They will also have the ability to create, edit, or delete templates as per the needs of the business. Knowledge authors in the customer's organization can use these templates to quickly create knowledge articles.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

See also

Create knowledge articles using templates (docs)

Knowledge management search and rendering enhancement

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2019	Oct 2019

Feature details

Investments in improving knowledge management will benefit knowledge authors, customer service agents, and end customers. Currently knowledge base search control supports filtering only on status and language of articles. To provide a better knowledge search experience for agents, this feature extends the filtering capability to other attributes.

See also

Feature exploration (video)

Search knowledge article in csh (docs)

Timeline usability enhancements

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2019	Oct 2019

Feature details

The current timeline experience provides users with an overview of notes and activities associated with the entity for which it is shown (case, account, contact, and so on). However, the interaction model and a lack of information density prevent users from finding the information that they need efficiently.

Updates to the timeline experience will enable customers to see larger amounts of information and filter to see specific activities. Sales managers, salespeople, and customer service agents who are looking at the history of interactions with an account, contact, or case will benefit from the ability to find data more quickly.

Timeline enhancements include the following:

- Improved information density for greater visibility of items without the need to scroll.
- Improved filtering by activity type, ability to set multiple filters simultaneously, and visual indications that the list is filtered.

See also

Feature exploration (video)

Timeline (docs)

Omnichannel for Customer Service

Overview

Omnichannel for Customer Service provides a modern, customizable, high-productivity app that allows agents to engage with customers across different channels. This app offers contextual customer identification, real-time notification, integrated communication, and agent productivity tools like knowledge base (KB) integration, search, and case creation to ensure agents are effective.

Supervisors get real-time and historical visibility and insights into the operational efficiency of agents and the utilization across various channels.

The enterprise-grade routing and work distribution engine allows customers to configure agent presence, availability, and routing rules, thus ensuring agents are working on the most relevant engagements.

Unified routing for entity records

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	✔ Aug 31, 2019	Oct 2019

Feature details

Today, customer service case routing in Dynamics 365 enables organizations to route cases to static queues. These cases are either manually distributed by supervisors or manually picked by agents. With unified routing, now cases can be routed to omnichannel enabled queues along with work items that originate from other channels such as Chat and SMS.

NOTE Omnichannel leverages the existing CDS queue entity, and if you have already setup queues for cases or other entities, you can continue to use the same with omnichannel work distribution.

This allows organizations to tightly define the work profile that their agents are supposed to handle, and organizations can automate the work flow assignment across channels and assign the work items based on agents capacity, availability, and skill.

This unified customer service routing will also be opened up for any activity enabled CDS entity records like custom entities or other out of the box entities.

Agents can use the Omnichannel for Customer Service app, which is the same multi-session experience, to handle these entity record work items alongside work items coming from other channels, such as Chat and SMS.

NOTE Today, it's possible for customers to request support using Dynamics 365 Portal. With unified routing, these support work items originating from Portal can be routed and automatically assigned to best available agents.

NOTE Routing for case entity records is available in public preview release. Routing for other entity records will be available with GA release.

See also

Entity Records Routing (docs)

Integration with Dynamics 365 Virtual Agent for Customer Service

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Dec 2019

Feature details

This feature enables Dynamics 365 Virtual Agent for Customer Service integration with Chat. Virtual Agent for Customer Service allows organizations to automate routine conversations, letting agents focus on high-value interactions. The key capabilities from integration of virtual agents with Chat include:

- Routing incoming chat requests to virtual agents created with Dynamics 365 Virtual Agent for Customer Service.
- Enabling seamless escalation of conversations from virtual agents to a human agent.
- Providing complete context to human agents by making available the full transcript of virtual agent conversations while human agents engage with customers.

See also

Feature exploration (video)

Analytics for third-party channels

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Omnichannel for Customer Service already provides several out-of-the-box channel-specific metrics for first-party channels—for example, average handling time and conversation volume. As part of this feature, third-party channel providers using Dynamics 365 Channel Integration Framework can provide relevant measures for their channels. This enables organizations to get a holistic view of KPIs and insights across different channels and providers.

Bot-assisted agent guidance

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Bot-driven conversation context-based recommendations can help agents resolve issues faster. Some potential capabilities that can be built are:

- Suggest quick replies based on the conversation context.
- Knowledge article suggestions for agent to share with customer.
- Suggestions on the next best action that can be taken by the agent.
- Similar-case suggestion for current conversation.

Dynamics 365 Channel Integration Framework v2

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Here are the new features introduced in Channel Integration Framework version 2.0:

- **Integration with the multi-session experiences in Omnichannel for Customer Service**. The Channel Integration Framework version 2.0 provides APIs to integrate with the multi-session experiences in the Omnichannel for Customer Service app. These APIs allow providers to show notifications on incoming conversations with relevant information, start new sessions for conversations from predefined templates, and open application tabs when needed. For more information about the new agent experience, see Agents using Omnichannel for Customer Service app.
- **New modes and locations for the conversation control**. Providers can define experiences for the minimized mode of the conversation controls they build. Agents can manually change the mode of the control from docked to minimized and vice versa. They can also change them programmatically.
- **Support for multiple providers**. Using Channel Integration Framework version 2.0, organizations can configure multiple providers in the Omnichannel for Customer Service app. This enables agents to simultaneously work on multiple sessions that cater to different customers on different channels (for example, live chat and telephony), where each of these sessions belongs to different providers.

NOTE All conversation controls built using the APIs of Channel Integration Framework version 1.0 will continue to work with version 2.0 in the single-session Unified Interface apps, such as Customer Service Hub.

The new capabilities of Channel Integration Framework are available only with the Omnichannel for Customer Service app, which supports the multi-session paradigm.

Enhanced search experience

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

The existing search experience allows the agent to search based on account, contact, and case attributes. The upcoming enhancements make the search experience suitable for enterprises with more complex requirements.

Key enhancements include:

- **Search customization**: Enterprises need agents to search based on attributes that are not included in the out-of-the-box list of attributes. The enhancements in search experience allow easy customization of the search fields.
- **Faster and more intuitive experience for agents**: The agents benefit from an improved search and link experience with increased usability, thus enabling them to meet their productivity KPIs.

Facebook messaging

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

While large numbers of consumers are using social messaging channels like Facebook Messenger for their personal communication needs, they also prefer to use these mobile messaging channels to engage with businesses. The asynchronous nature of these channels gives consumers the convenience of getting their issues resolved as and when they find time, unlike real-time channels like live chat where the session ends when the chat window is closed.

The social messaging feature gives companies an opportunity to capitalize on this trend and engage with their customers right where they are, providing them with a seamless and personalized experience that can help them become fans and brand advocates.

This feature has the following capabilities:

- Administrators can configure social channels like Facebook Messenger to engage with their customers.
- Customers can reach out to the company through these channels and seek support in an asynchronous nature.
- Agents can use the same unified, contextual, and productive interface used by Chat to engage with customers and resolve their issues.
- Supervisors and managers have access to rich reports to help them run the support center efficiently and effectively.

Guide customer interactions with agent scripts

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Businesses have a critical need to continuously train agents on the latest processes and products due to a high degree of churn in people, products, and processes. Despite regular trainings, recurrent errors and delays in service delivery are common, resulting in customer dissatisfaction. To ensure the required levels of regulatory compliance and offer a consistently positive customer experience, process adherence is critical. This feature provides organizations a means to configure scripts that provide step-by-step guidance to agents. These steps can be configured and automated based on session types (such as chat or phone calls) to ensure adherence to the appropriate processes.

Macros

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Macros enable agents to stay efficient and productive by automating a series of repetitive tasks with a single click. For example, agents will be able to automate tasks like resolving a case after updating a field, assigning it to a different user after capturing notes, or sending an acknowledgement email with contextual data from the session using macros.

Administrators will be able to configure macros to suit their specific business or process needs.

Multiple-provider support

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

For a true omnichannel experience, agents should be able to work on different channels from different providers in a unified and consistent manner. This capability helps maximize the agent capacity use for contact centers and enables Dynamics 365 customers to reach their users in channels of their choice while the agent continues to have a consistent experience.

The multi-provider support enables user-interface level integration where agents get a unified agent experience, while third-party channels are routed by respective channel providers. This allows channel providers to bring their existing routing infrastructure to coexist with Chat for Dynamics 365 Customer Service at the agent experience level.

Notification customization

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Notifications alert the agents when a record is assigned to them or when there are incoming requests from users who need assistance. These notifications include additional context about important customer attributes like name and location of the user.

Notification customization allows users to customize the notification pop-ups to include relevant information based on their business needs, like user entitlements and relationship type. This helps the agent get a quick glimpse of the user information prior to accepting an incoming request.

Proactive chat

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Chat channel allows users to effortlessly engage with organizations via a chat widget on the website. Proactive chat enables organizations to engage with users by automatically inviting them to a chat conversation based on the configured rules. Organizations can use user data, user journey information, time spent on web page, and more to decide when to best engage with them. Organizations can control the proactive chat experience using personalized trigger messages and configurable rules to define the target audience, time frame, and target location.

Sentiment analysis enhancement

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

The ability to identify negative sentiment events in ongoing messaging sessions is key as it provides an opportunity for agents and supervisors to act on that data and ensure a positive customer outcome. We will introduce some additional sentiment analytics enhancements in this update:

- **Additional language support**: Sentiment analysis support of additional languages makes the text analytics feature available to additional markets.
- **Agent sentiment alert**: Agents can identify and get alerted when a support session doesn't go well, and they can proactively request supervisor or peer help in addressing the issue.
- **Admin configuration improvement**: Administrators can configure sentiment based on real-time alert thresholds and escalations.

Skill-based routing

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Skill-based routing enables conversations to be routed to agents based on their skills and proficiencies. This improves the efficiency of automatic work distribution by looking for an agent with the right skills who can handle a conversation and resolve a customer issue most effectively.

Administrators and supervisors can optimize the work distribution by assigning the right skills to the agents based on their proficiency. They can directly route the conversations to agents without managing the queues.

User navigation history

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Oct 2019	Jan 2020

Feature details

Agents can provide a more personalized service if they have visibility into the user's activity on the website that led the user to request support. Today, the Recent activities view on the Customer Summary page displays the activities recorded as part of the Account/Contact/Case record in Dynamics 365 Customer Service. With the User navigation history enhancement, agents can view additional information on the Customer Summary page to understand the user's activity on the website, such as pages visited by the user on the website, knowledge base articles viewed by the user, and more.

Dynamics 365 Field Service

Overview of Dynamics 365 Field Service 2019 release wave 2

Dynamics 365 Field Service is an end-to-end solution for on-site service that empowers organizations to move from being reactive to providing proactive or predictive field service, and to embrace new business models such as outcome-based service or "anything-as-a-service."

For the 2019 release wave 2, we are focused on the following areas:

- Technician success through integration with Dynamics 365 Guides.
- Continued investment in proactive service with Azure IoT.
- Ongoing improvements in resource scheduling.

What's new and planned for Dynamics 365 Field Service

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	Early access*	General availability
Mixed reality guides for Field Service	Users by admins, makers, or analysts	-	✔ Aug 2, 2019	Oct 2019

* Some features are available for you to opt-in as part of early access on August 2, 2019, including all mandatory changes that impact users. Learn more about early access.

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.

- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

Mixed reality guides for Field Service

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	✔ Aug 2, 2019	Oct 2019

Feature details

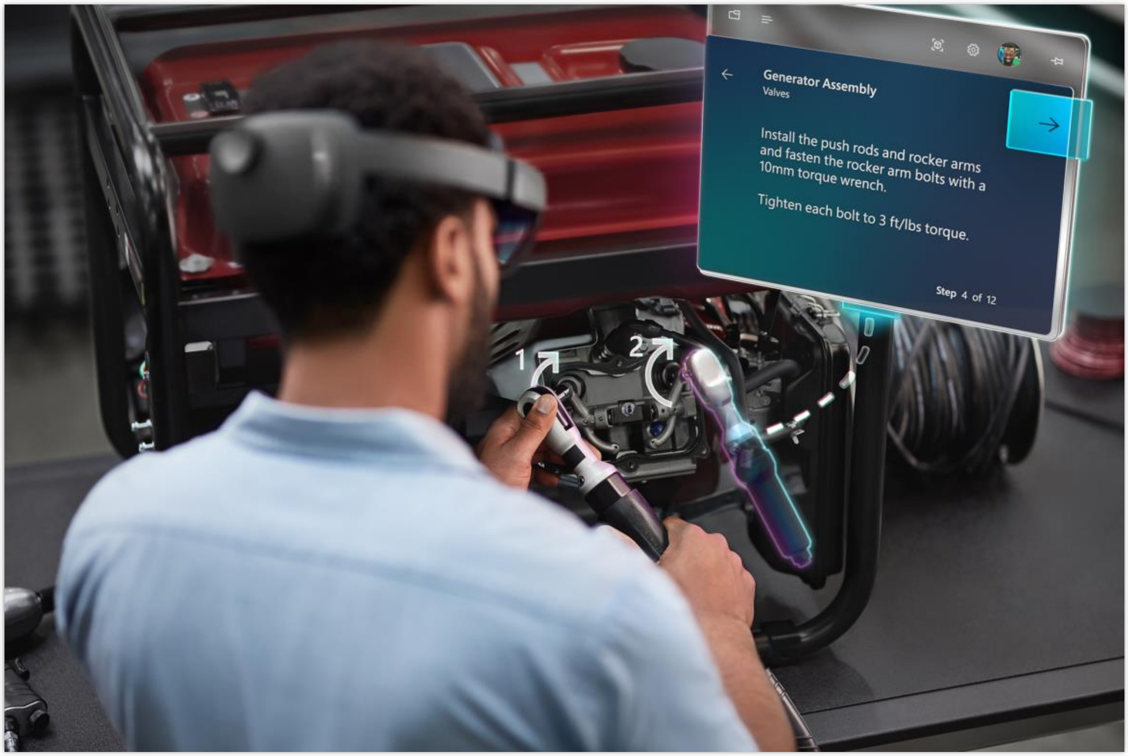
Dynamics 365 Guides on HoloLens is a new mixed reality app that empowers employees to learn by doing. Dynamics 365 Guides enhances learning with step-by-step instructions that guide employees to the tools and parts they need, and shows them how to use these tools in real-world situations.

With Dynamics 365 Guides, we've eliminated a longstanding problem for augmented reality (AR) and virtual reality (VR) experiences: the need for an easy way to create content. In addition to the experience of using Dynamics 365 Guides on HoloLens, a Guides PC app makes it easy to create interactive content, attach photos and videos, import 3D models, and customize training to turn institutional knowledge into a repeatable learning tool.

The included Analytics feature provides insight into details behind every step of each guide, which can be used to assess production line processes, measure improvements, and drive efficiencies by modifying processes and updating the corresponding guide.

Mixed reality Guides for Field Service enables the Dynamics 365 Guides capability to be seamlessly integrated within the Field Service experience. Service tasks can have associated Dynamics 365 Guides that can be easily accessed by technicians when out on the jobsite.

Visit the documentation for Dynamics 365 Guides to learn more about integration with Field Service.



A field technician wearing a HoloLens device, looking at a virtual guide

NOTE This feature is available in the Unified Interface only.

See also

[Integrate Dynamics 365 Field Service with Dynamics 365 Guides](#) (docs)

Dynamics 365 Project Service Automation

Overview of Dynamics 365 Project Service Automation 2019 release wave 2

Dynamics 365 Project Service Automation is an end-to-end solution for project-based organizations to manage projects from sales through delivery. The application has deep resource management, sales, pricing, invoicing, time and expense entry, and approval capabilities along with a minimum set of project task and work breakdown structure (WBS) capabilities. With Microsoft Project replatforming onto the Common Data Service platform, the Project Service Automation application that is already on the Common Data Service platform is uniquely positioned to leverage this industry-standard set of project-planning and task-scheduling capabilities. The service industries module in Finance and Operations is especially strong in project accounting, with revenue recognition and customer-facing invoicing that leverage date-effective exchange rates and a rich sales tax feature set.

The 2019 release wave 2 investments will be focused on providing modular offerings where capabilities across Microsoft Project, Project Service Automation, and Finance and Operations service industries will complement each other in a seamless fashion when combined and will provide a simple go-to-market story that is easily consumable. The themes that will inform the features for this release wave are:

- Leverage the best of Office and Dynamics 365 for projects

The focus for this release wave will be completing the Project Online move to Common Data Service and creating a combined offering that brings together Microsoft Project Online and Project Service Automation capabilities into a singular experience on Common Data Service. The Microsoft Project capabilities on the Common Data Service platform will offer rich and fluid experiences for planning projects with rich task-scheduling capabilities and collaboration platforms, and the Dynamics 365 Project Service Automation capabilities will extend the project-scheduling capabilities to provide configurable pricing and costing setup for human resources, resource scheduling and calendar management, time and expense entry and approval with tracking of project revenue and spend, and generating billable project transactions for the project manager to review. Together, these two solutions are expected to offer a comprehensive set of capabilities for project-based organizations.

- Model alignment with project functionality in Finance and Operations

This release will also see major investments in aligning the data models between Project Service Automation and Finance and Operations service industries with the future vision to seamlessly integrate operational project data to a financial system of record for revenue recognition, invoicing, and proper accounting. These investments will accrue toward reducing duplication of capabilities across Finance and Operations service industries and Project Service Automation and leverage the best of the two products for lighting up a Sales to General ledger thread to manage projects.

What's new and planned for Dynamics 365 Project Service Automation

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Comprehensive project operations	Users by admins, makers, or analysts	-	Feb 2020
Joint Dynamics 365 and Office offering for project-based organizations	Users by admins, makers, or analysts	-	Feb 2020
Upgrade from Dynamics 365 Project Service Automation to Better Together	Users by admins, makers, or analysts	-	Mar 2020

Description of **Enabled for** column values:

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Comprehensive project operations

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Feb 2020

Feature details

Extending the new Project Service and Dynamics Sales Extensions for Project with the Project Financials capabilities in Dynamics 365 Finance will provide a comprehensive offering for project-based organizations. This initiative will center around combining the existing capabilities in Project Service Automation and Dynamics 365 Finance to complete the business processes for projects.

The following additions to the Project Service Automation functionality are targeted for this release wave:

- **Ability to set up split-billing for project contracts**: With this feature, customers using the project-quoting and contracting capabilities of the Better Together or the current Project Service Automation solution will be able to set up multiple customers for each contract with a percentage split of the billings for each of those customers. This setup for billing will help in scenarios where there is a manufacturer or product vendor involved who is willing to pay a portion of the cost of customized implementation or value-add, as required by the customer.
- **Ability to set up not-to-exceed limits for project contracts and quotes and enforce them during invoicing**: For time and material (T&M) project contract types, there is often a cap negotiated between the customer and the service provider (vendor) in order to prevent overages and inefficiencies in service delivery. With this feature, customers will be able to set up a cap or a monetary limit on T&M project contracts that will be enforced by the system during invoicing.
- **Ability to set up billing and chargeability options for work breakdown structure (WBS) tasks**: In project organizations, it is common to have different contractual agreements for different phases of work. For example, a vendor could negotiate a fixed-price billing setup for the prototype phase of a project and a T&M type of arrangement for the actual

implementation. Certain tasks on the project could also be categorized as chargeable while others could be non-chargeable or complimentary. With this feature, it will be possible to associate project tasks to project contract lines, thereby subjecting them to the same billing method on that contract line. The feature will also allow for a project manager to mark certain tasks as chargeable, non-chargeable, or complimentary, which will then be enforced when recording sales values and creating invoices for the costs incurred on those project tasks.

- **Support for retainers on project contracts**: Retainer-type of contracts are those that will allow the customer to have a predictable cash outflow. The customer will have a standard monthly payment that will be used by the services provider to draw down against for the cost of services delivered in that period. Any services in that period in excess of the retainer will be invoiced at the end of that period or pushed to the next period's billings until the end of the project. With this feature, a vendor will be able to draw up a contract that will have a set retainer schedule and retainer billings by period. These retainers will be used during invoicing to draw down against the cost of services delivered.
- **Point-of-origin-based project operations**: Projects from sales to pro forma invoicing can be originated in Project Service Automation or Dynamics 365 Finance. Projects initiated in either system will be visible in the other in a read-only fashion. This feature will allow customers to manage their projects in their system of choice based on divisional requirements. Our investments to remove duplicate project capabilities across Dynamics 365 Finance and Project Service Automation will continue and once we have feature-parity, the need to make a system-of-origin choice will be eliminated.
- **Revenue recognition for Project Service Automation projects**: For projects originating in Project Service Automation and being managed in the Project Service Automation app, there will be an out-of-the-box integration of that data to the Dynamics 365 Finance service industries module, which will then enable the continuation of the business process. Projects can be managed from sales to pro forma invoicing in Project Service Automation, and Dynamics 365 Finance service industries will enable the generation of a customer-facing invoice and revenue recognition.

Joint Dynamics 365 and Office offering for project-based organizations

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Feb 2020

Feature details

Built on Common Data Service, the new project service solution will be released by Office in the third quarter of 2019. This solution will introduce the Project Scheduling Service, a cloud-based version of Microsoft Project's highly performant scheduling engine. We have designed a set of core project entities based on the intersection of key Project Service Automation entities and Microsoft Project capabilities. This experience will be delivered only through the new project service user interface, and only include the capabilities shipping with that product, including work breakdown structure (WBS), Gantt, and task scheduling.

Our 2019 release wave 2 will build on this new project service and will deliver the Dynamics 365 Project Service Automation capabilities with Microsoft Project in a single experience. This will include capabilities such as bookings, sales, pricing, costing, time and expense capture, and approvals and project actuals. These capabilities will be packaged as a solution representing **Dynamics Sales Extension for Projects**. New customers will have the ability to build on these joint features at this time. We will be releasing an upgrade strategy for existing Project Service Automation customers after this new experience is available.

Upgrade from Dynamics 365 Project Service Automation to Better Together

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Mar 2020

Feature details

The 2019 release wave 2 will include investments that allow existing Dynamics 365 Project Service Automation customers to move to the new combined Office (new Project Service) and Dynamics (Dynamics Sales Extensions for Projects) offering in a frictionless manner. We will leverage capabilities from the platform team to provide a frictionless upgrade of data from the old Project Service Automation application to the new offering.

Finance and Operations

Overview of Finance and Operations 2019 release wave 2

Finance and Operations unifies global financials and operations to empower people to make fast, informed decisions. Finance and Operations helps businesses adapt quickly to changing market demands and drive rapid business growth.

To enable businesses everywhere to accelerate their digital transformation, we are continuously enhancing Finance and Operations with new capabilities. As we add product enhancements at a rapid pace, we deliver monthly updates that will help customers stay current in a consistent, predictable, and seamless manner. The core capabilities introduced with the 2019 release wave 2 will be persona opt-in enabled, which allows customers to implement new features at their own cadence. The key driver for all of the new core capabilities is to increase productivity and return on investment.

This release also focuses on fundamentals to enhance the user experience. The targeted areas of these enhancements include performance, compliance, automation, and supportability of service.

Watch overview video

What's new and planned for Finance and Operations

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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Cloud operations and Lifecycle Services

Feature	Enabled for	Public preview	General availability
Geo expansion to France	Admins, makers, or analysts, automatically	-	Oct 2019
Migration to self-service deployments	Admins, makers, or analysts, automatically	-	Oct 2019
Database movement RESTful APIs in Lifecycle Services	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Configure add-ins through Lifecycle Services	Admins, makers, or analysts, automatically	-	Feb 2020
Cross-project management – License allocation	Admins, makers, or analysts, automatically	-	Feb 2020
Implementation metrics	Admins, makers, or analysts, automatically	-	Feb 2020
Onboard to Azure Monitor	Admins, makers, or analysts, automatically	Oct 2019	Feb 2020

Data and process integration

Feature	Enabled for	Public preview	General availability
Trigger and monitor a flow	Users by admins, makers, or analysts	Jan 2020	
Data in Common Data Service – Phase 1	Users by admins, makers, or analysts	✔ Jul 24, 2019	Oct 2019

Feature	Enabled for	Public preview	General availability
Data in Common Data Service – Phase 2	Users by admins, makers, or analysts	Dec 2019	Jan 2020

Dynamics 365 Finance

The 2019 release wave 2 focuses on insights and digital transformation in finance, risk reduction and a subscription based economy.

Feature	Enabled for	Public preview	General availability
"Select consolidation amount from" control on the consolidate online for dual currency consolidation	Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019
Cancel bank reconciliation	Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019
Create checks with a blank status on the Checks page	Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019
Reset workflow status for vendor invoices from Unrecoverable to Draft	Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019
Revenue Recognition	Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019
Credit management	Users by admins, makers, or analysts	-	Jan 2020
Reverse journal posting	Users by admins, makers, or analysts	-	Jan 2020
Retained earnings calculation enhancements for financial reporting when using currency translation	Users by admins, makers, or analysts	✔ Sep 3, 2019	Jan 2020

Feature	Enabled for	Public preview	General availability
Billing schedules	Users by admins, makers, or analysts	-	Feb 2020
Intelligent insights in financials	Users by admins, makers, or analysts	Dec 2019	To be announced

Dynamics 365 Supply Chain Management

Feature	Enabled for	Public preview	General availability
Planning Optimization support for materials requirements planning (MRP)	Users by admins, makers, or analysts	Feb 2020	
Planning Optimization support for production scheduling	Users by admins, makers, or analysts	Mar 2020	
Shipment auto update	Users by admins, makers, or analysts	-	Oct 2019
Wave step code	Users by admins, makers, or analysts	-	Oct 2019
Split demand replenishment work from create pick work step	Users by admins, makers, or analysts	Apr 2019	Oct 2019
Consolidate shipment enhancements	Users by admins, makers, or analysts	May 2019	Oct 2019
Deferred put processing	Users by admins, makers, or analysts	✔ Jun 5, 2019	Oct 2019
Cancel work	Users by admins, makers, or analysts	✔ Jun 7, 2019	Oct 2019

Feature	Enabled for	Public preview	General availability
Dynamics 365 Asset Management	Users, automatically	✔ Jul 23, 2019	Oct 2019
Advanced allocation strategies – FIFO and LIFO	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Advanced cross-docking	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Advanced load building during a wave	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Auto-release shipment for cross dock	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Change work pool button	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Cluster full	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Location product dimension mixing	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Location status logic	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Location wizard enhancements	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Pallet building post-packing station	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Pick-line grouping	Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature	Enabled for	Public preview	General availability
Put to wall/Put to store	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Release to warehouse rule	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Replenishment Slotting Plan – part I (Slotting)	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Split work	Users by admins, makers, or analysts	Aug 2019	Oct 2019
System-directed cluster picking	Users by admins, makers, or analysts	Aug 2019	Oct 2019
System-directed clustering	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Wave status visualization	Users, automatically	Aug 2019	Oct 2019
Wave template grouping	Users by admins, makers, or analysts	Aug 2019	Oct 2019
Zone-based replenishment	Users by admins, makers, or analysts	Aug 2019	Oct 2019
QC inbound dock check	Users by admins, makers, or analysts	Sep 2019	Oct 2019
Wave label printing enhancements	Users by admins, makers, or analysts	Sep 2019	Oct 2019
Confirm and transfer	Users by admins, makers, or analysts	Sep 2019	Oct 2019

Feature	Enabled for	Public preview	General availability
Calculate PO delivery date based on lead times and working days (public sector)	Users by admins, makers, or analysts	-	Nov 2019
External catalog enhancements	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Hazardous materials product information management	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Hazardous materials shipping documentation	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Purchase-order delivery via cXML	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Sales process control via enhanced order holds	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Self-billing invoice control for procurement	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Self-billing invoice control for sales	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Inventory value report storage	Users by admins, makers, or analysts	✔ Sep 6, 2019	Nov 2019
Report as finished to a license plate-controlled location from the job card device	Users by admins, makers, or analysts	✔ Sep 6, 2019	Nov 2019
Country of origin enhancements	Users by admins, makers, or analysts	Sep 2019	Nov 2019
Put-away clusters	Users by admins, makers, or analysts	Oct 2019	Nov 2019

Feature	Enabled for	Public preview	General availability
Quality management for warehouse processes	Users by admins, makers, or analysts	Oct 2019	Nov 2019
Quality management item sampling	Users by admins, makers, or analysts	Oct 2019	Nov 2019
Receive sortation	Users by admins, makers, or analysts	Oct 2019	Nov 2019
Purchase agreement enhancements	Users by admins, makers, or analysts	-	Nov 2019
Further catch weight integration 10.0.1	Users by admins, makers, or analysts	✔ Mar 1, 2019	Dec 2019
Further catch weight integration 10.0.2	Users by admins, makers, or analysts	✔ Apr 1, 2019	Dec 2019
Further catch weight integration 10.0.3	Users by admins, makers, or analysts	✔ May 1, 2019	Dec 2019
Further catch weight integration 10.0.4	Users by admins, makers, or analysts	✔ Jun 1, 2019	Dec 2019
Further catch weight integration 10.0.5	Users by admins, makers, or analysts	✔ Aug 2, 2019	Dec 2019
Parallelized firming of planned orders	Users by admins, makers, or analysts	✔ Sep 6, 2019	Dec 2019
Further catch weight integration 10.0.6	Users by admins, makers, or analysts	✔ Sep 9, 2019	Dec 2019

Feature	Enabled for	Public preview	General availability
Inventory on-hand service	Users by admins, makers, or analysts	Oct 2019	Dec 2019
Vendor bidding—questions from vendors and summarized responses	Users by admins, makers, or analysts	-	Dec 2019
Advanced transportation planning	Users by admins, makers, or analysts	Nov 2019	Jan 2020
Carrier assignment/routing wave step	Users by admins, makers, or analysts	Nov 2019	Jan 2020
Packing vs. storage dimensions	Users by admins, makers, or analysts	Nov 2019	Jan 2020
Pre-wave load build planning	Users by admins, makers, or analysts	Nov 2019	Jan 2020
Pre-wave metrics	Users by admins, makers, or analysts	Nov 2019	Jan 2020
RF dynamic load building	Users by admins, makers, or analysts	Nov 2019	Jan 2020
Warehouse app task validation with RSAT	Admins, makers, or analysts, automatically	Sep 2019	Feb 2020
Flexible warehouse-level dimension reservation	Users by admins, makers, or analysts	Oct 2019	Feb 2020
Blind returns receiving	Users by admins, makers, or analysts	Nov 2019	Feb 2020
Small package shipping (SPS)	Users by admins, makers, or analysts	Nov 2019	Feb 2020

Feature	Enabled for	Public preview	General availability
Product variant uptake of volumetric data	Users by admins, makers, or analysts	Feb 2020	Feb 2020
Planning Optimization for distribution	Users by admins, makers, or analysts	Oct 2019	Feb 2020
Material handling/warehouse automation	Users by admins, makers, or analysts	Jan 2020	Feb 2020
RFQ activities	Users by admins, makers, or analysts	-	Feb 2020
Retail store pack and ship	Users by admins, makers, or analysts	Feb 2020	Mar 2020

Globalization

Microsoft continuously delivers regulatory updates to respond to legislation changes in 37 supported countries/regions. Also, customers can now easily adjust their business documents in Office formats to meet local requirements and route the generated documents to different distribution channels.

Feature	Enabled for	Public preview	General availability
Configurable business documents reporting in Word and Excel	Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019
Expanded regional coverage of Regulatory Configuration Service to Europe	Users by admins, makers, or analysts	Sep 2019	Dec 2019
Simplified localization configuration management in Regulatory Configuration Service	Users by admins, makers, or analysts	Oct 2019	Jan 2020

Feature	Enabled for	Public preview	General availability
Simplifying configuration of tax extensions for India	Admins, makers, or analysts, automatically	Oct 2019	Jan 2020
Expanded regional coverage of Regulatory Configuration Service to China	Users by admins, makers, or analysts	Oct 2019	Jan 2020
Regulatory Configuration Service: Regulatory update discovery	Users, automatically	Oct 2019	To be announced

Platform

Feature	Enabled for	Public preview	General availability
Developer tools as installable components	Admins, makers, or analysts, automatically	Nov 2019	-
Embed Power BI solutions directly into analytical workspaces	Users by admins, makers, or analysts	✔ May 1, 2019	Oct 2019
Preview documents using embedded viewer control	Users by admins, makers, or analysts	✔ Jul 5, 2019	Oct 2019
Attachment recovery	Users by admins, makers, or analysts	✔ Aug 1, 2019	Oct 2019
Extended chart control options now include Solid Gauge visualizations	Admins, makers, or analysts, automatically	✔ Aug 2, 2019	Oct 2019
Turn insights into action using context menu commands for embedded Power BI reports	Users by admins, makers, or analysts	✔ Aug 2, 2019	Oct 2019
Visual refresh of the web client to align with the Fluent design language	Users, automatically	✔ Aug 5, 2019	Oct 2019

Feature	Enabled for	Public preview	General availability
User productivity – Filtering enhancements	Users by admins, makers, or analysts	-	Jan 2020
User productivity – Personalization enhancements	Users by admins, makers, or analysts	-	Jan 2020
Improved experience on mobile devices – Phase 1	Users by admins, makers, or analysts	Nov 2019	Jan 2020
Build automation hosted in Azure DevOps	Admins, makers, or analysts, automatically	Jan 2020	Jan 2020
User productivity – New grid	Users by admins, makers, or analysts	✔ Aug 5, 2019	Mar 2020
User productivity – Saved views	Users by admins, makers, or analysts	✔ Aug 5, 2019	Mar 2020
Priority-based scheduling for batch jobs	Admins, makers, or analysts, automatically	Nov 2019	To be announced

Public sector

Feature	Enabled for	Public preview	General availability
Cash control	Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019

Service industries

Feature	Enabled for	Public preview	General availability
Remove project group dependency from project	Users by admins, makers, or analysts	-	Mar 2020

Feature	Enabled for	Public preview	General availability
Remove project type dependency from project	Users by admins, makers, or analysts	-	Mar 2020

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Cloud operations and Lifecycle Services

Overview

Finance and Operations is expanding its availability in specific geographies. A data resident cloud for Finance and Operations will ensure that all customer data, code, metadata, and diagnostics remain within the designated geography.

Several other planned improvements will enhance the self-service capabilities within Lifecycle Services to deliver easier lifecycle management for applications.

Geo expansion to France

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

As a business-critical application managing confidential data, there is high demand for Microsoft Dynamics 365 Finance to be available locally and to be data-resident within specific geographical areas. A data-resident cloud for Finance ensures that all customer data, code, metadata, and diagnostics remain within the designated geo. Finance and Lifecycle Services (LCS) will be made available in the following clouds:

- France (July 2019)

Finance without LCS is currently deployed across 15 data regions and can be used when an environment is deployed.

Migration to self-service deployments

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Microsoft enabled self-service deployments for new customers in the fall of 2018. Starting in summer 2019, Microsoft will coordinate with customers to migrate their environments to self-service deployment. The default sandbox is migrated first, seven calendar days before the production environment is migrated. Two notification emails are also sent. The first email is a 30-day advance notice, and the second email is a reminder notice five days before the scheduled migration. Migration can be rescheduled through an online form in extenuating circumstances.

Preparing for migration

Customers should start updating their environments on the current online service with combined deployable packages going forward. This was always the recommended best practice and will now be enforced.

What's new or changed

Customers will no longer have direct access to server admin credentials on Tier 2+ environments. They will continue to have access to Azure SQL Database and will be able to connect using just-in-time access from Lifecycle Services (LCS).

Customers will no longer have access to remote desktop credentials on Tier 2+ environments. All operations needing remote desktop access have been made available as self-service operations on LCS.

Zero downtime update for self-service deployments

With 2019 release wave 2, customers will be added to the zero-downtime update flow for Microsoft monthly service updates. Customers with zero downtime enabled are now able to configure an update window during which the update will happen. Interactive users will not experience any connection loss during the update. In the unlikely event a user session has to be terminated to complete the update in the specified window, a notification indicates that the user should save their work and refresh their browser. Any running batch jobs will be terminated during the preconfigured update window. All terminated batch jobs will be restarted when the update completes. New batch jobs can be started in the update window. Customers will be notified about the status of the update through email and through LCS update history.

Database movement RESTful APIs in Lifecycle Services

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

Business value

On average, customers use the database refresh copy process at least once a week. Today, customers must use the self-service action to trigger the refresh, which impacts the Standard Acceptance Test environment availability during business hours. RESTful APIs will allow customers to implement the activity during off hours or as part of their nightly build process.

Feature details

Lifecycle Services (LCS) will expose RESTful API endpoints. Documentation that covers how to authenticate and make the appropriate calls to trigger refresh will be provided. This functionality can be exercised by using Azure LogicApps or other recurrence engines to provide scheduling and automation.

Configure add-ins through Lifecycle Services

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Feb 2020

Feature details

This feature will enable customers and partners to add functionality on top of an existing environment. Add-ins are first-party services that might have license requirements or can be free. They are used to extend the core functionality with a simple click-through experience.

Cross-project management – License allocation

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Feb 2020

Feature details

Several large customers (approximately 10 percent of our current customer base) have multiple environments that are hosted across different geographies to support a global presence. The current view for the customer is at the project level in Lifecycle Services (LCS). The customer has to sign in to a separate project representing each region and operate it in a silo. Cross-project management features such as license allocation, a cross-project management dashboard, and asset management across projects will help customers manage and operate these projects more effectively.

License allocation will be the first feature that will be made available for tenant administrators to allocate the appropriate licenses to each project and view the total allocation across their tenant.

Implementation metrics

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Feb 2020

Feature details

Finance and Operations supports flexible and extensive customizations from our partners, customers, and ISVs. Often, customers have code from multiple ISVs in their project. This calls for quality checks across all code in a production instance to ensure that we maintain quality of service with high availability and reliability. Metrics based on both static and runtime analysis in sandbox and production environments will be made available to partners from within Lifecycle Services. Specific performance benchmarking will also be available to indicate how customizations have deterred productivity for commonly used scenarios.

Onboard to Azure Monitor

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	Feb 2020

Feature details

With this feature, customers will have the option to access raw, telemetry, and diagnostics data so that they can set up alerts and/or create dashboards to proactively monitor their environment.

To get raw logs, customers will need to set up their own Azure subscription and select a destination location for the logs that are emitted from their environment. They can choose to archive to a storage account, send to log analytics, or stream to an event hub. Once this is configured, a pre-defined set of the telemetry logs will be routed to the configured destination. At that point, customers have the option to use log analytics for troubleshooting or can choose to route the logs to an external third-party service for advanced analysis.

Data and process integration

Overview

Common Data Service will now include additional out-of-the-box entity mappings. This release will target supporting end-to-end scenarios covering project, inventory, sales, and procurement through to financials. These entities will enable deeper extensibility scenarios through the Microsoft Power Platform. Finance and Operations will have business events added in several business process areas (for example, manufacturing, warehouse and transportation, and bank and cash management) as well as the ability to trigger and monitor Microsoft Flow, making it the primary driver of workflow in Finance and Operations.

With the general availability of Entity store in Azure Data Lake Gen2, customers can go live with the next-generation AI and analytics platform. Transactional data from Finance and Operations is available in a customer’s own Azure Data Lake Storage Gen2 in real time (within minutes). Legacy data warehouses will also transition to Azure Data Lake, and standard Finance and Operations entities will be in Azure Data Lake Gen2.

Trigger and monitor a flow

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Jan 2020	-

Feature details

An administrator can add flows to pages. Users can trigger and monitor the execution of those flows. This complements the flow integration features that were introduced between April and July 2019 that enabled integration of workflow events, tasks, and approvals with Microsoft Flow. These integration capabilities are an important competitive advantage and reduce the cost of implementation for our partners and customers.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Data in Common Data Service - Phase 1

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Jul 24, 2019	Oct 2019

Business value

This feature facilitates seamless data exchange with Common Data Service.

Feature details

Get your data in Common Data Service and keep it up to date.

We are making the dual-write setup an out-of-the-box experience. This will allow businesses to exchange near real-time data seamlessly in a synchronous bidirectional fashion, beyond application boundaries. We want to provide users a "One Dynamics 365" experience.

Knowing every business is unique in itself, we have made the dual-write framework extensible. This includes enabling custom entities, as well as extensions to existing entities, to fully utilize Common Data Service and surrounding tools for your most important business data.

Phase 1 release

The Phase 1 release provides multi-mastering capabilities for customers, vendors, and products, along with an introduction to the company concept in Common Data Service and to the single-user management experience for Dynamics 365 users. These features will be released in public preview in June and made generally available in the October time frame. Entities that are being covered are as follows:

OMOrganizationHierarchyPurposeEntity
OMOrganizationHierarchyPublishedEntity
OMOrganizationHierarchyTypeEntity
OMOperatingUnitEntity
OMLegalEntity
CustCustomerGroupEntity
PaymentTermEntity
CustomerPaymentMethodEntity
CustCustomerV3Entity
VendVendorV2Entity
VendVendorGroupEntity
VendorPaymentMethodEntity
SmmContactPersonEntity
RetailLoyaltyCardEntity
PaymentScheduleEntity
PaymentScheduleLineEntity
CDSPaymentDayEntity
CDSPaymentDayLineEntity
EcoResProductCDS
CDSEcoResProductMaster
EcoResProductProperties
EcoResProductBarcode
EcoResProductDefaultOrderSettings
EcoResProductDimensionGroup
UnitOfMeasures
NameAffix

Phase 2 release

The Phase 2 release will target supporting end-to-end scenarios covering project, inventory, sales, and procurement through to financials. Out-of-the-box scenarios supporting the most important entities in these areas will be provided by default. These scenarios can be further enriched by customers and partners.

These features will be released in public preview in October and made generally available in the April timeframe. Entity coverage will be revealed at a future date.

Data in Common Data Service – Phase 2

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Dec 2019	Jan 2020

Business value

This feature facilitates seamless data exchange with Common Data Service.

Feature details

Get your data in Common Data Service and keep it up to date.

We are making the dual-write framework an out-of-the-box experience. This will allow businesses to seamlessly exchange near real-time data in a synchronous, bidirectional fashion, beyond application boundaries. We want to provide users a "One Dynamics 365" experience.

Knowing every business is unique, we have made the dual-write framework extensible. This includes enabling custom entities, as well as extensions to existing entities, to fully utilize Common Data Service and surrounding tools for your most important business data.

In Phase 1, we released a set of entities that provides multi-mastering capabilities for customers, vendors, and products. We also introduced the company concept and provided visibility to organization hierarchy.

Phase 2 release

The Phase 2 release will target supporting end-to-end scenarios covering project, inventory, sales, and procurement through to financials. Out-of-the-box scenarios supporting the most important entities in these areas will be provided by default. These scenarios can be further enriched by customers and partners.

These features will be released for public preview in the November-December timeframe and made generally available in the January timeframe. Entity coverage will be revealed at a future date.

Dynamics 365 Finance

Overview

Insights and digital transformation

CFOs want and expect a world-class system that lets them intelligently analyze financial data. Insights into when a customer will pay show users what the risks and benefits are and allow them to focus on making strategic decisions instead of manually analyzing data.

Reduce risk with automated revenue recognition and credit management

Be compliant with IFRS 15 and ASC 606 with revenue pricing and schedules to automatically create the allocations needed to recognize revenue, and bill according to the schedule that meets your needs. Automatically assign credit limits to your customers according to rules that meet the risk tolerance of your organization.

“Select consolidation amount from” control on the consolidate online for dual currency consolidation

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019

Business value

This features helps you control the currency (either the accounting or reporting currency) that's used as the transaction currency in the consolidation company and can automatically copy amounts from the source company to the consolidation company if the currencies are the same.

Feature details

- Add the “Select consolidation amount from” control on the consolidate online form.

When the feature is enabled, the user can choose whether the accounting currency or the reporting currency from the source company will be used as the transaction currency in the consolidation company.

- Directly copy amounts from the source company to the consolidation company if the currencies are the same.

When the feature is enabled, the accounting or reporting currency amounts from the source company will be copied directly to the accounting or reporting currency amounts in the consolidation company if either of the currencies are the same. The accounting and reporting currency amounts in the consolidation company are calculated using the exchange rate if neither of the currencies is the same.

See also

Select consolidation amount from in Consolidate Online (docs)

Cancel bank reconciliation

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Aug 5, 2019	Oct 2019

Feature details

Users will be able to cancel bank reconciliations in chronological order of reconciliation starting with the most recent. History is tracked to show when and by whom the reconciliation was reversed. This will prevent users from having to manually adjust journals to correct any errors that occurred during the periodic process.

See also

Cancel bank reconciliation (docs)

Create checks with a blank status on the Checks page

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Aug 5, 2019	Oct 2019

Feature details

The **Checks** page is where you perform maintenance tasks on checks, such as creating new check numbers and deleting checks. During the payment process, when this feature is enabled, you can't create checks with a blank status during the payment process. This enhancement helps prevent wasting checks unnecessarily.

Reset workflow status for vendor invoices from Unrecoverable to Draft

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019

Feature details

You can use the Workflow history page to reset the workflow status to Draft. This page can be opened from the Vendor invoice page or by going to **Common** > **Inquires** > **Workflow**. To reset the workflow status to Draft, select **Recall**. You can also reset the workflow status to Draft by selecting the Recall action on either the Vendor invoice or Pending vendor invoices page. After the workflow status is reset to Draft, it becomes available for editing on the Vendor invoice page.

Revenue Recognition

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019

Feature details

New capabilities will include support for product bundles and kits such as:

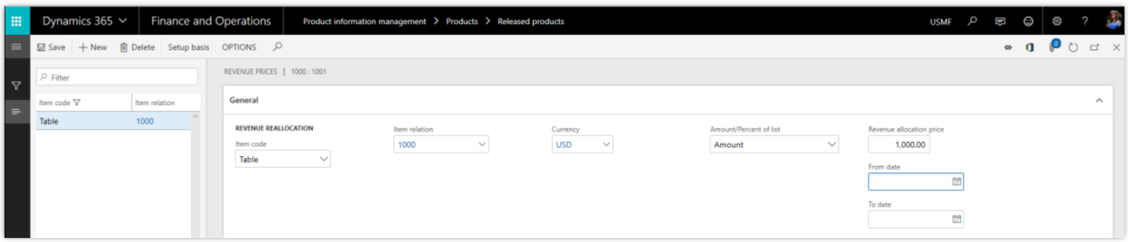
- Software and maintenance
- Software and services
- Software
- Hardware and service

These capabilities will handle the following features:

- Revenue pricing
- Revenue schedules
- Bundle setup
- Multiple sales order reallocation
- Workspace navigation and reporting

Revenue pricing

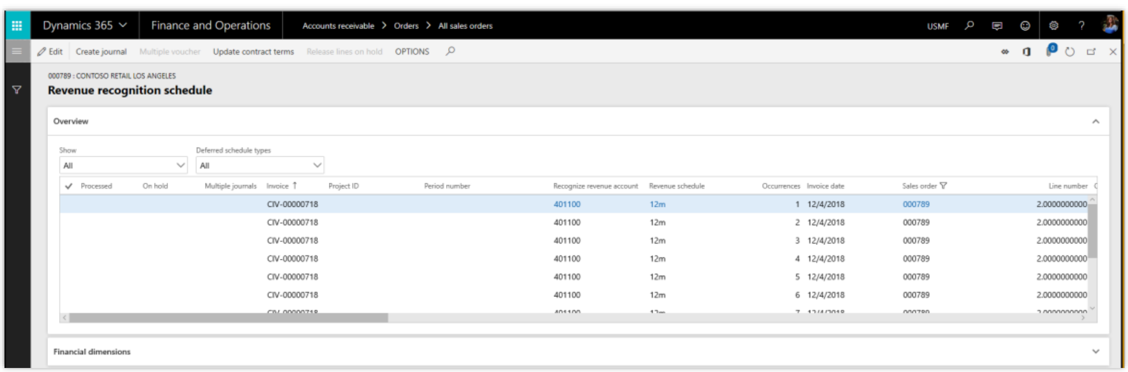
Users can enter a different price that they will recognize as different from what they charge the customer.



Revenue pricing screenshot

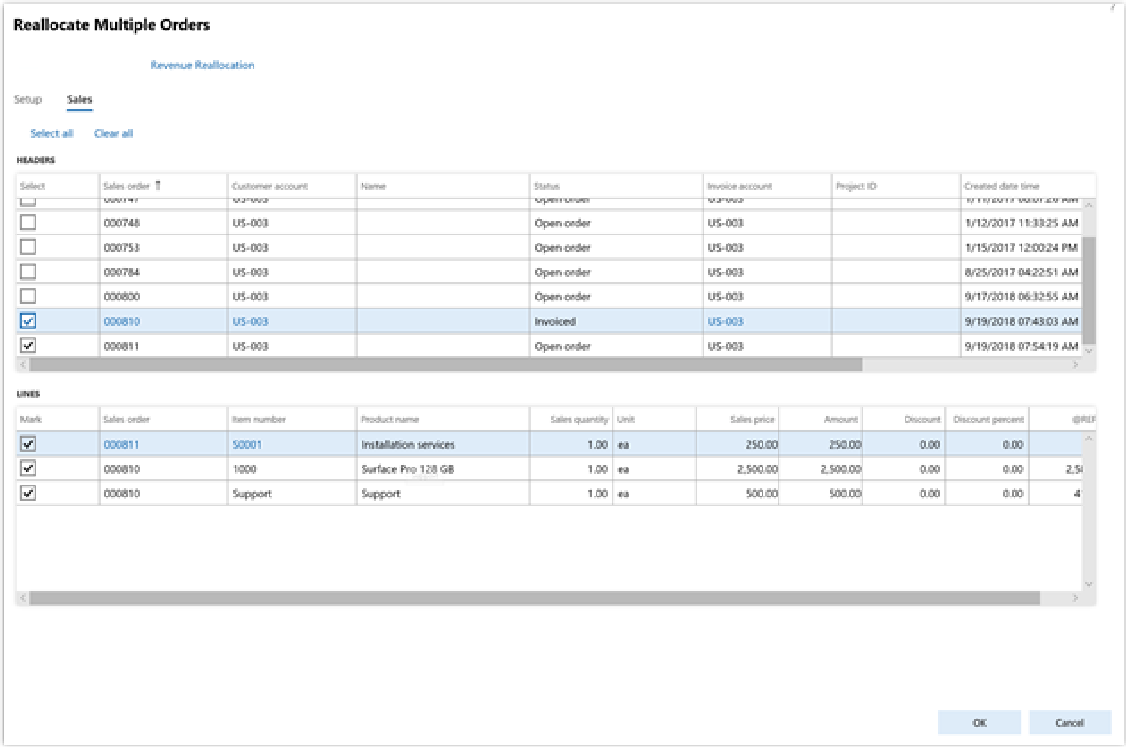
Revenue schedules

Revenue schedules determine the number of months for the revenue deferral. Options are available to create the schedule based on actual days of the month, splitting equally across month or based on a set number of occurrences.



Revenue schedules screenshot

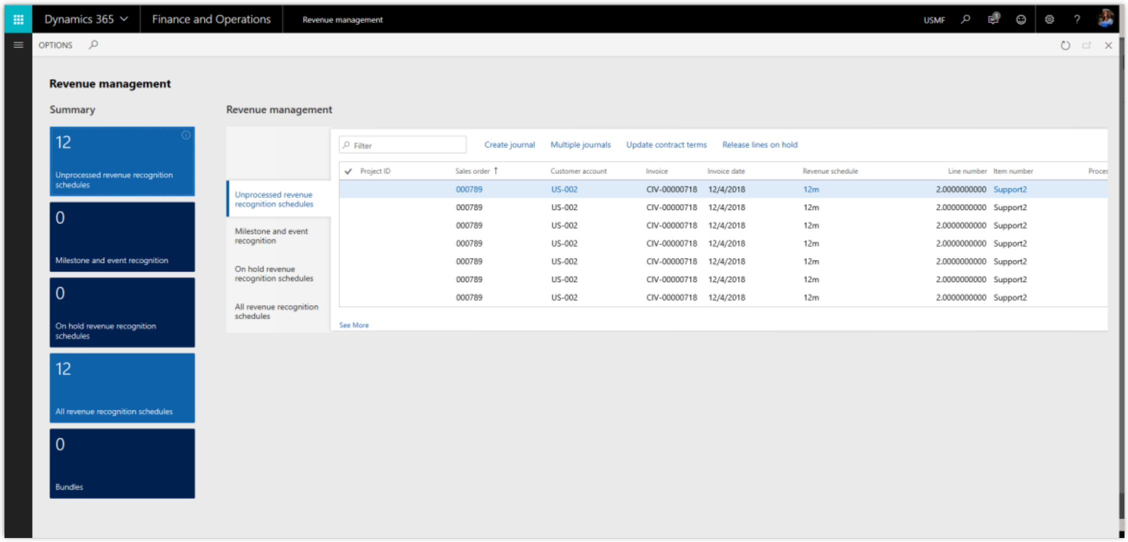
Multiple sales order reallocation



Multiple sales order reallocation screenshot

Workspace

The new workspace is used to look at the status of the revenues schedule records created for deferred revenue.



Revenue recognition workspace screenshot

See also

[Revenue recognition overview](#) (docs)

Credit management

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Jan 2020

Feature details

Enterprise credit management will proactively suggest credit control activities, thereby improving cashflow, reducing bad debts, and providing insight and controls that help you manage credit risks while ensuring that customers have the flexibility to take advantage of promotions and make the purchases they need.

The capabilities will include:

- Management of risk scores
- System-suggested credit limits
- Configurable blocking rules
- Automation of credit cases
- Dynamic release of credit holds

- Credit limit management
- Tracking historical credit limits

Reverse journal posting

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Jan 2020

Feature details

Reversals have been improved to let you reverse multiple general journal lines or an entire general journal. From the voucher transaction page, you can reverse a limited number of subledger journal entries. You can also reverse subledger journal entries from the accounting source explorer. This enhancement makes a common process easier to complete and more efficient.

Retained earnings calculation enhancements for financial reporting when using currency translation

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Sep 3, 2019	Jan 2020

Business value

This feature improves the precision of calculations of retained earnings when earnings are calculated across multiple years using currency translation.

Feature details

When you enable this feature, any retained earnings account that has the **Currency translation type** set to **Transaction date** will calculate the translated balance of the account using rates and balances from its entire history, rather than only the year and rate.

Billing schedules

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Feb 2020

Feature details

Billing schedules let you create flexible billing rules against customer sales orders. For example, you can define a different billing schedule for each line of a sales order.

Currently, you can use payment schedules to immediately post the full amount of a sale to accounts receivable distributed over the periods defined in the payment schedule.

Billing schedules post the full sale amount to unbilled accounts receivable and then create invoices based on the billing schedule. Each invoice will create an accounting entry to move the balance from unbilled accounts receivable to accounts receivable. This lets future periods remain on hold until the invoice is posted.

Intelligent insights in financials

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Dec 2019	To be announced

Business value

Optimizing cash flow is critical for any organization. Having insights into when a customer will pay helps to forecast one part of cash flow and reduce risk.

Feature details

Organizations often find it challenging to predict when customers will pay their invoices. This lack of insight can lead to inaccurate cash flow forecasts and inefficient collection processes. Customer payment insights (preview) will uses machine learning to predict when an invoice will be paid. Organizations will be able to use these payment predictions to make collections proactive and improve the accuracy of cash flow forecasting.

See also

Financials (blog)

Dynamics 365 Supply Chain Management

Overview

Trade, product information, and inventory management

The continuous feedback obtained by operating the service allows us to identify specific subprocesses within the inventory management area that can be subject to tangible performance improvements. This is an ongoing effort with broad impact on several areas of the service, allowing for faster feedback, less waiting time, and the ability to unblock resources that otherwise would be waiting for a process to finish.

We continue to invest in both our product information management and inventory management capabilities. New classes of products and production processes will drive an evolution of the product definition and supporting elements. The inventory-valuation capabilities will be expanded to support scenarios where multiple valuation methods and multiple currencies are required—for example, in cases of different managerial reporting and statutory reporting requirements. We will also invest in making inventory on-hand information more readily available in distributed scenarios—for example, in the retail industry.

This release will bring usability enhancements in sales and procurement that increase users' productivity and satisfaction. Super users will be able to propose filtered views and to purpose-build forms where unnecessary fields or actions can be removed, allowing for a quick understanding of the purpose of the form and fast interaction with it. The benefits are two-fold. The knowledge of super users can be disseminated to the organization, and all skill levels of users can benefit from targeted views crafted to fit the task at hand.

The focus for the sales, procurement, and sourcing areas will be on improving franchising capabilities, Evaluated Receipt Settlement (ERS) capabilities, hazardous material handling, business support within areas of supplier collaboration (looking into extended self-service, data sharing, and data maintenance capabilities), and improving business support within integration scenarios covering purchase requisition, request for quotation, and purchase ordering relative to data flow and accounting distribution constraints.

Going forward, across the sales and procurement areas, the primary focus will be on improvements in our ability to track and account for goods in transit scenarios. Enhancing support of business scenarios within kit to stock as well as kit to order and extending our support for sales price and promotion management by adding extended price-management flexibility leads to improved efficiency and lower cost of maintenance.

Warehouse management

The Warehouse Management System (WMS) is a recent successful addition to the application suite that serves several industries, each with specific requirements on how to operate a warehouse. The solution has been gradually enhanced since the introduction in Microsoft Dynamics AX 2012, and a large suite of enhancements has recently been licensed from an ISV.

With the 2019 release wave 2, we will continue enhancing the released catch weight feature by adding capabilities of the second catch weight purpose-built solutions, with the aim of allowing existing customers to upgrade to the April release or its following monthly releases. The solution will both fit the needs of distributors as well as manufacturers. The lack of this integration has been hampering the uptake of the WMS solution for certain customers—this reservation will be removed. The suite of 30-plus distinct features will be integrated as a preview after the April '19 release as part of the subsequent monthly releases. For example, a feature like "enable label printing during wave" adds flexibility in configuration and operation.

All feature exposures will be achieved through flighting to allow for a controlled roll-out. Investments include enabling warehouse automation using Microsoft HoloLens and enabling spatial data analytics using video feeds.

Manufacturing and planning

It is a core priority to leverage the continuous feedback obtained from operating the service to drive tangible performance improvements as well as optimize core manufacturing business processes. Public preview for the Planning Optimization is planned to launch in October 2019.

We are continuously enhancing and evolving current manufacturing functionality to support the connected, intelligent operations of modern manufacturers. We will integrate with the intelligent Microsoft Azure IoT service to help manufacturing customers close the digital feedback loop. This will consolidate close-to-real-time information from the shop floor with business data to generate business events and actionable insights. With the acquisition, we will introduce enterprise asset management capabilities that will enable customers to track the total cost of ownership of operations assets, as well as to manage the ongoing maintenance of those assets.

Planning Optimization support for materials requirements planning (MRP)

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Feb 2020	-

Business value

Value for manufacturers:

- Eliminate daily time reserved for planning batch job.
- Future business growth will not overload the planning system.
- More frequent planning runs – not just daily or weekly.
- Improved customer service with shorter total lead time.
- Cost and capital savings by reduced inventory levels.

Feature details

Material requirements planning (MRP) helps planners at manufacturing companies ensure that materials are available for production and that products are available for delivery to customers. Planning optimization functionality facilitates close to real-time planning, as a separate service. Businesses rely on MRP to plan their production and ensure that needed material and products are available.

With planning optimization support for MRP, manufacturers can benefit from:

- Improved performance with high data volume.
- Removing the load of master planning from their ERP system.
- Close to real-time insight to requirement changes.

Planners will be able to plan production orders and the related requirements with planning optimization:

- Supply suggestions for production.
- Support for bill of materials (BOM).
- Support for phantom BOMs.
- Planning with scrap rules.

Planning Optimization support for production scheduling

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Mar 2020	-

Feature details

With planning optimization support for production scheduling, manufacturers can benefit from:

- Improved performance with high data volume.
- Removing the load of master planning from their ERP system.
- Support for close to real-time insight to requirement changes.

The support for production scheduling with routes will enable planners to control resource load and determine delivery lead time:

- Includes resource and route information.
- Schedule production suggestions with infinite capacity.

- Schedule production orders with check for conflicts – finite capacity.
- Determine applicable resources based on capability requirements.
- Sequencing of operations.

Shipment auto update

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Oct 2019

Business value

This feature allows a business to seamlessly provide updates to a warehouse without having to worry about order line updates not being reflected on related shipments and loads. Without this feature, users have to manually update or delete and then re-release lines if order quantities increase or new order lines are added.

Feature details

This functionality in this feature automatically updates quantities, increases as well as decreases, on a load line associated with a shipment after it's been released to warehouse. This will occur as long as the load line on the shipment or load has not been processed on a wave. This implies that the feature will allow any order updates to automatically flow through to the warehouse without manual intervention as long as warehouse work hasn't been created. Without this feature, only quantity decrease automatically flows through for as long as warehouse work hasn't been created. This feature applies to sales order lines and transfer order lines.

The feature is enabled for a specific warehouse. This allows the company to apply different shipment auto update policies across warehouses, when required. By default, the shipment auto update policy applied for all warehouses that use a warehouse management process is on quantity decrease. With this policy setting, only quantity decreases automatically flow through to a shipment and load for as long as warehouse work hasn't been created.

See also

Shipment Auto update (docs)

Wave step code

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Oct 2019

Business value

This feature allows for a more robust handling of the wave step codes that are modified from free text to code. The utilization of it will become more robust, including unique values that are set up and unified throughout warehouses and that are less error prone. Users will not be able to alter a value if it is in use.

Feature details

Wave step codes will allow users to set up codes that are used to link specific wave method instances with their corresponding template. This includes templates for replenishment, containerization, label printing, load building, and sorting. Without this feature, users will have to reference a specific template from the wave process method using free text only. Using free text is error prone because it requires a user to ensure that the wave step text added for a specific wave template matches the exact wave step text in the target template. Wave step codes are set up for a specific wave step type in a separate form. Each wave step method in a wave template that requires a wave step code will require the wave step code to be selected from a drop-down list. Linking a wave step method in a wave template to a target template for the method will no longer rely on free text, but on setup codes. This reduces the risk and impact of human errors.

It is optional to uptake wave step codes and move away from wave step free text. The uptake is done per legal entity. As part of the uptake per legal entity, all existing wave step codes in the specific legal entity are upgraded into the new structure.

Split demand replenishment work from create pick work step

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Apr 2019	Oct 2019

Business value

This feature allows for future performance enhancements of each of the transactions. It also intrinsically reduces the impact of a potential lock, by reducing the transaction size.

Feature details

In the version 7.1 timeframe, we improved the allocation step of waving by introducing multithreading. The remainder of the steps are not currently multithreaded and run in a single long database transaction. One of the issues with optimizing the long transaction that creation of pick work represents is the fact that demand replenishment is created within that transaction. For future performance optimization purposes, we are separating the replenishment work creation step into its own thread that has its own transaction.

Consolidate shipment enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	May 2019	Oct 2019

Business value

The system allows for a flexible setup accommodating consolidated shipments per customer, warehouse, mode of delivery, and all types of characteristics defined for the customer or item. This ultimately allows for higher efficiency at the warehouse and better customer service.

Feature details

This feature will allow for a more flexible configuration of the consolidated shipment that takes place when releasing the outbound source document to the warehouse. A consolidate shipment policy is introduced as well as a shipment consolidation template. These new entities will allow the user to define, per query, how to apply the policy when releasing the shipments and how to apply the template when consolidating the shipments. The current functionality is limited to a toggle at the warehouse level, making it difficult to select or deselect which customer or orders should be consolidated.

Deferred put processing

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Jun 5, 2019	Oct 2019

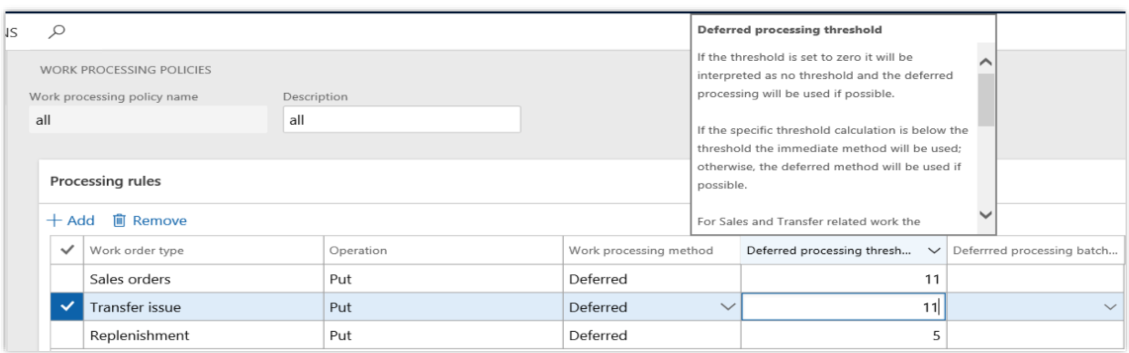
Business value

Deferred put processing will free up mobile devices right away, allowing the user to pick up new tasks. The system will also become resilient to random peak times of put processing—all processing time will be handled by batch servers, allowing warehouse workers to operate without disruption when there is unexpected slow server performance for registration of puts.

Feature details

This is a performance-related feature focused on increasing the productivity of warehouse workers. Instead of requiring online processing of the various inventory updates each time a put is complete, which “freezes” the mobile device, we will allow for that process to be performed asynchronously. Warehouse workers will experience an increase of performance for all operations requiring a certain number of updates—for example, a put registration of a pick of 10 lines involves 20 inventory updates for the locations involved and 10 source document lines updates. These operations will be automated through batches, and the load of the system will be more balanced. Warehouse workers will not be dependent on sporadic or random peak utilization of the system.

The feature will be flighted so that we can test the feature with some customers—we want to understand the impact on various follow-up processes such as the manifesting and printing of shipping documents.



Work processing policies

See also

[Deferred processing of warehouse work]() (docs)

Cancel work

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Jun 7, 2019	Oct 2019

Business value

The cancel work feature is an attractive and secure alternative to SQL corrective scripts that are typically requested through IcM tickets to fix inconsistent data that can now be employed by the company's users with admin rights.

Feature details

Warehouse Work Force Cancel is an admin facility available from the user interface that enables the user to cancel specific warehouse work that is currently in progress but is blocked (often, but not necessarily, due to data corruption).

Unlike the standard **Cancel** button (the one available directly from the Work page), the new cancel work function does not have a precondition for the last completed work line to be of type **Put**. In other words, it does not require item quantity on a work line to be on a non-user location.

Only work of type **Sales**, **Transfer issue**, **Raw material picking**, or **Replenishment** can be canceled by this job. Cancellation will not be executed for frozen raw material picking work or work that can be canceled by a regular cancel function (as described earlier).

To unblock the work, the system will cancel any remaining work lines and fix the warehouse data that is associated with the work ID. This will allow any regular warehouse-handling operations that involve the impacted item quantity to resume.

See also

Warehouse management overview (docs)

Dynamics 365 Asset Management

Enabled for	Public preview	General availability
Users, automatically	✓ Jul 23, 2019	Oct 2019

Business value

This functionality provides:

- Improved machine effectiveness with preventive maintenance capabilities that reduces asset failure and extended equipment life expectancy.
- Condition-based Maintenance (CBM), which reduces asset lifecycle costs.
- Improved visibility into production performance, which helps customers to plan ahead.

- Insight into downtime, with intelligent analytics helping users make informed data-driven decisions.
- Automated management of maintenance workflows to limit risks.
- Efficient spare parts management, ensuring complete overview of item consumption on assets, thereby optimizing the maintenance process.
- Reduced production costs via enhanced visibility of assets across sites and departments. ▪
- Visibility into real-time asset financial information.
- Advanced cost control on assets, locations, faults, work hours, and work orders.
- Reduction in maintenance overtime, labor, and contractor costs.

Feature details

Dynamics 365 Asset Management will enable customers to optimize maintenance processes and help with maintenance planning, execution, and analytics. The functionality will help to reduce downtime and overall maintenance cost, and will be a core part of Finance and Operations apps.

See also

Asset Management preview (blog)

Advanced allocation strategies - FIFO and LIFO

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

Two new picking-location directive strategies are introduced: FIFO (first in, first out) and LIFO (last in, first out). These work in conjunction with aging date fields on the location and license plate to track when inventory first entered the warehouse. These strategies can be used for both batch and nonbatch tracked items, to ship items to customers based on when the inventory entered the warehouse. This can be especially useful for nonbatch tracked inventory where an expiration date is not available to use for sorting. When inventory is first received or created in the warehouse, the license plate is updated with the current date populated as the aging date. This date is then used by the strategies to determine the oldest or youngest inventory in the warehouse. If inventory is moved to a non-license-plate-tracked location, the location itself is updated with an aging date, which will also be used by the strategies.

Advanced cross-docking

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

This functionality introduces advanced planned cross-docking where the inventory quantity required to satisfy an order will be directed to the correct outbound dock or staging area straight from receipt or creation. All remaining inventory from the inbound source will be directed to the correct storage location through regular put-away process. Cross-docking therefore allows a worker to skip inbound put away and outbound picking of inventory that is already marked to an outbound order. The result is a minimized number of touches of inventory where possible, together with greater time and space savings on the warehouse shop floor due to less interaction with the system.

The user must configure a new cross-dock template where the supply source and other requirements for cross-docking are specified. As the outbound order is created, the line must be marked against an inbound order containing the identical item. Marking is the process of matching the outbound order with inbound inventory. It will be used to create the cross-dock work order, and it can be done manually or automatically via release to warehouse. At the time of inbound order receiving, cross-docking setup will automatically identify the need for a cross-dock and create the movement work for the required quantity based on location directive setup.

Advanced load building during a wave

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

Advanced load building allows the wave to assign the shipment to an existing load, if one exists that meets the criteria, or create a new load if required. This feature allows for the system to automatically build loads to represent a route, carrier, or other concepts as needed by the business. Loads can be built based on information from the sales order or containers created in an earlier wave step. Load building will also integrate with transportation management when using the route plan functionality.

Auto-release shipment for cross dock

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

When creating cross-dock work with a supply source of a production order, it's possible to set up the cross-dock template to be "opportunistic." When set up this way and if the production order is marked to a sales or transfer order, when the user completes the report as a finished transaction on a mobile device, the system will automatically release the marked sales order to the warehouse, creating a shipment and allowing cross-dock work to be created.

Change work pool button

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

The **Change work pool** button is a simple addition to the system that enables the warehouse manager to simply change the work pool of the already created work ID. It introduces the ability to react faster to any possible changes on the shop floor and to better streamline the physical process when required by changing situations.

Cluster full

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

When used with cluster picking, this feature offers a flexible manner of breaking the pick work and acknowledges the need for a larger margin of error in volumetric constraints of containers or totes. The functionality introduces the ability to execute the “full” option on one of the work units within a cluster. The feature differs from the standard “full” button flow in that it cancels the remaining work. Additionally, it does not suggest adding another bin to the same cluster because it does not create new work automatically.

Location product dimension mixing

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

This new location profile functionality enables better location utilization when using product variants. It allows you to decide whether configurations, colors, style, and sizes can be mixed on a certain location (profile) or if only one or a combination of some of those dimensions can be put to the same location.

Location status logic

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

This functionality introduces several new fields on the locations table for more flexibility in working with and maintaining locations. Location statuses (empty, storage, picking, or frozen) can be included in the location directives query for better warehouse flow control. Blocking causes can be set up and can later be assigned to any location to either block inbound or outbound transactions against such a location. Location blocking does not exclude locations for reservations. It is meant only as a temporary operational blocking.

Location wizard enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

This enhancement includes three additional zone fields and support for them in the location setup wizard. These additional zone fields in the location setup can be used in queries for filtering the information. This adds flexibility to the warehouse structure, with additional zones for the same location and processing of data by queries.

Pallet building post-packing station

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

Pallet building offers the ability to sort packed containers to a correct pallet after the packing station and to build a packing hierarchy. Such pallets can later be moved to the correct staging location with a single work order capturing all packed containers. The warehouse worker has the freedom to choose which pallet the packed container should be put to, the maximum number of boxes a pallet can have, and how many pallets are needed in any given scenario.

A container packing policy and a sorting location profile are introduced, which together offer greater flexibility in handling packed containers from the packing station. Different consolidation criteria are introduced—after the user has assigned a criterion for each destination pallet, all subsequent packed containers will be guided to the matching pallet, and the worker must confirm only the put step of the work order. When the pallet is full, the pallet position is closed, and it can be moved as a single unit. This means faster handling and better overview of containers because it reduces the necessary steps for movement of packed containers within the warehouse. This feature does not use containerization processes when merging containers to a pallet, but it extends the existing container group license plate functionality. The pallet content list can therefore not be printed via this enhancement. This feature is subject to change as it is integrated with existing system features.

Pick-line grouping

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

Pick-line grouping setup allows users to dynamically group together and aggregate multiple pick lines into a single pick execution step on a mobile device. The system groups together all pick lines with a matching dimension set, namely item ID and location ID, and the user will only have to visit the pick location once for a single work order with multiple matching pick lines. This feature offers faster execution of picking work and reduces worker pick path significantly in certain scenarios. The functionality is applied automatically via the setup of the mobile device. All matching pick lines and associated transactions of the work order being processed will be updated by the system mutually. The work order structure will remain as initially created, and the lines will not be aggregated within the client. However, the pick lines should be sorted by item ID for this functionality to work.

Put to wall/Put to store

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

With this feature, you can handle scenarios where consolidation of product to a prepack staging area based on configurable criteria is required. Companies shipping to stores or handling small items will benefit from this functionality due to decreased picking time—it allows for picking to a single target license plate, and it can leverage a greater number of put positions than cluster picking. The put-to-wall workflow directs picked products to a sorting location for distribution into various types of containers. Generally, each sorting location includes multiple sort positions. Each sort position is assigned according to the criteria set by the business process, most commonly destination, store, shipment, or load.

Once the product is picked, it is taken to the sorting station and distributed to the sort position by the quantity associated to the order, destination, shipment, or load. When a container is full or complete, it is moved to a staging location or a shipping location for further handling, depending on the business process. Technically, the put-to-wall functionality allows for individual items or quantities to be taken from the target license plate assigned during picking, sorted to a sort position, and assigned to a sort license plate, typically representing a container. As the sort position is closed, work is created according to the warehouse management setup.

Release to warehouse rule

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

The release to warehouse rule introduces new abilities for greater flexibility when releasing to the warehouse. It controls whether release of partially reserved order lines is allowed by the system or not. It works hand-in-hand with advanced cross-docking functionality where part of an order line might be marked against a supply source, and part of the order line can still be processed in the warehouse, to allow the release of such a line and continue with warehouse processing for the available inventory quantity.

Replenishment Slotting Plan – part I (Slotting)

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

Picking locations can be replenished before releasing orders to the warehouse. Slotting allows you to create replenishment work at any time based on order demand. This feature will collect demand from orders in the system based on a user-defined query and make the consolidated demand available to be viewed by warehouse personnel. Once demand has been identified, the slotting process will assign all of the demand to picking locations. After pick locations have been identified, replenishment work can be created to bring inventory to the pick locations. When the demand is released to the warehouse, it can use the inventory that has "just" been brought to the pick location. A part 2 feature will also allow linking to any incomplete replenishment work as needed.

Split work

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Business value

This feature helps to increase the utilization of the warehouse workforce, allowing for flexibility in planning day-to-day tasks. It allows the user to manually correct some automatically created assignments.

Feature details

This feature helps solve the business challenge in which a single employee cannot finalize work within a given time and other users are available to assist completing it. The work can be split in two or more work headers in order to assign it to available employees. The feature adds the flexibility of restructuring work after it has been created and is in either an open or in-progress state. A worker will not be able to proceed with work lines that might concurrently be split to another user. The existing blocking mechanism has been refactored.

System-directed cluster picking

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

With system-directed cluster picking, pick work headers are clustered based on a system-generated cluster. The system will cluster picking orders up to the number of positions specified on the cluster profile. This feature is an alternative to manual cluster building where the system uses a cluster profile to create clusters. The cluster profile elaborates on "Number of positions," which corresponds to the number of orders included in a cluster and consequently to the number of totes; "Break cluster at" determines when the cluster should be broken; "Generate cluster ID" controls whether the cluster ID will be generated by the system or entered by the user; and "Sort verification type" determines whether any position verification is needed or not. The warehouse workers will automatically be presented with a created cluster where picking orders have been pre-assigned to cluster positions. The worker can pick an item for multiple work orders by visiting the pick location only once, as with user-directed cluster picking.

System-directed clustering

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

With the setup of system-directed cluster picking, you can cluster pick work headers based on a system-generated cluster. The system clusters picking orders up to the number of positions specified on the cluster profile and allows the user to pick multiple orders at the same time without having to create a cluster manually. This feature offers an alternative to manual cluster building by offering to use a cluster profile that the system will use to create a cluster. Several setup lines should be determined on the cluster profile before use. "Number of positions" will correspond with the number of orders that will be put on a cluster and consequently to the number of totes; "Break cluster at" will determine when the cluster should be broken; "Generate cluster ID" will control whether the cluster ID will be generated by the system or entered by the user; and "Sort verification type" will determine whether any position verification is needed or not.

The new mobile-device menu item should be used for system-directed cluster picking with the new "Directed by" option, where the wanted cluster profile ID must be specified. The assignment of work orders can be further optimized by specifying customized sorting criteria on the system-directed query order, which can group orders based on company-specific criteria. At the time of picking via system-directed cluster, warehouse workers will be automatically presented with a created cluster where picking orders have been pre-assigned to cluster positions. The worker can therefore start picking an item for multiple work orders by visiting the pick location only once. The picking process for this feature is the same as for user-directed cluster picking.

Wave status visualization

Enabled for	Public preview	General availability
Users, automatically	Aug 2019	Oct 2019

Business value

This feature enables more information and visibility in wave processing and the current status of the wave.

Feature details

This feature will allow the user to understand the degree of completion of the waving and allow the user to wait until completion or to do an ad-hoc cancellation and understand the amount of resources that has been used prior to a possible cancellation.

This feature adds information on the wave progress by visualizing the following:

- Progress of the wave as a percentage.

- Wave completion estimate, based on current processing performance of the wave.
- Wave allocation progress with total of load lines, allocated load lines, total pending allocations, and total processed pending allocations.
- Wave submethods, updating processed load lines for each one.

Wave template grouping

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

Wave template grouping functionality is similar to existing work-template grouping behavior, but instead it enables grouping and breaking by functionality already on the wave template. This can be useful in warehouses where waves are being created based on a certain criterion but where automatic wave creation is preferred to manual.

Zone-based replenishment

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Aug 2019	Oct 2019

Feature details

Zone-based replenishment is a feature that uses min/max replenishment strategy but evaluates warehouse zones instead of individual locations. By not taking a dependency on a fixed location setup, the functionality allows for replenishment of dynamic locations. This opens up a min/max replenishment process for companies using dynamic locations, such as retailers that have numerous stocked items with a short live time.

At the replenishment template for min/max replenishment, the user specifies whether the threshold should be evaluated per location or per zone. In the case of zones, specific zones are then added to the zone-selection query. As it is for location-based min/max replenishment, zone-based min/max replenishment is based on setting up a minimum threshold of inventory that triggers the creation of a replenishment work order for selected items and item variants. In return, replenishment will be created for the quantity that increases inventory up to the desired zone maximum threshold.

QC inbound dock check

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Oct 2019

Feature details

With this functionality, you can perform rapid quality checks on the spot at the time of receiving to the inbound dock area. These spot checks are beneficial when packaging or any other easily recognizable part of the item is being inspected. They serve as quick looks to see if anything is standing out as faulty before stocking the inventory to its location. This function offers an alternative to existing quality-check processes, with more flexibility and faster processing. It does not require any quality orders to be created but instead creates one after a license plate is rejected on initial inspection. At the time of receiving, the worker is required to perform a desired quality check and must decide whether to accept or reject each license plate scanned. Accepted license plates will be guided to the storage location as normal, while rejected license plates will be diverted to a quality check location for further inspection. Existing put-away work will be cancelled, a new "Quality In Quality Check" work order will be created, and the user will automatically continue with the put step. This process can also be automated to divert all scanned license plates to the quality check location immediately.

Wave label printing enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Oct 2019

Business value

These changes will make it more efficient to support the labeling of cartons prior to palletizing. Some customers for whom compliance is an issue are vendors to large retailers that mandate the layout and content of labels for each carton. These large customers have a "label receiving process" where the cartons, while in receiving, are placed on conveyors, and the bar code is read automatically, allowing for automated creation of put-away.

Feature details

Wave label printing functionality will be enhanced with the following:

- Allow for labels to be printed according to number of cartons on a single work line. Without using the containerization feature, this would mean that for a quantity of 100 cartons, the feature will print out 100 labels.
- Include an enumeration of the labels (1/124, 2/124…124/124).
- Allow for a bill of lading (BOL) to be created and printed on the label.
- Allow a unique Serial Shipping Container Code (SSCC) to be created per carton and included on the label.
- Allow for the creation of a GS1-compliant number sequence for BOL and SSCC numbers.
- Allow for a HAZMAT code to be included (if relevant) on the label.
- Support reprint of labels (from hand-held devices, as from a rich client).
- Support for voiding of labels (for example, for short pick scenarios) and reprint.
- Support for clean-up of wave label history.

These changes will make it more efficient to support labeling of cartons prior to palletizing. It is especially helpful to companies shipping to large retailers that perform order receipt confirmation automatically by scanning each individual carton.

Confirm and transfer

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Oct 2019

Feature details

This functionality supports the scenario in which all product cannot fit onto a truck or where some of the load should leave the warehouse before the remainder is ready for shipping. The left-over product can be transferred to a new load and consequently to a new truck. This feature can be used with loads that are otherwise intended to allow only full-load shipping and, as a result, gives more flexibility to transport managers for solving nonstandard or unforeseen scenarios.

Calculate PO delivery date based on lead times and working days (public sector)

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Nov 2019

Business value

This feature is helpful for organizations that want to track vendor compliance. When a vendor submits a lead time on an RFQ, the delivery date is automatically calculated on the resulting purchase order. The purchaser can run reports to view vendor performance based on their original proposals and commitments.

Feature details

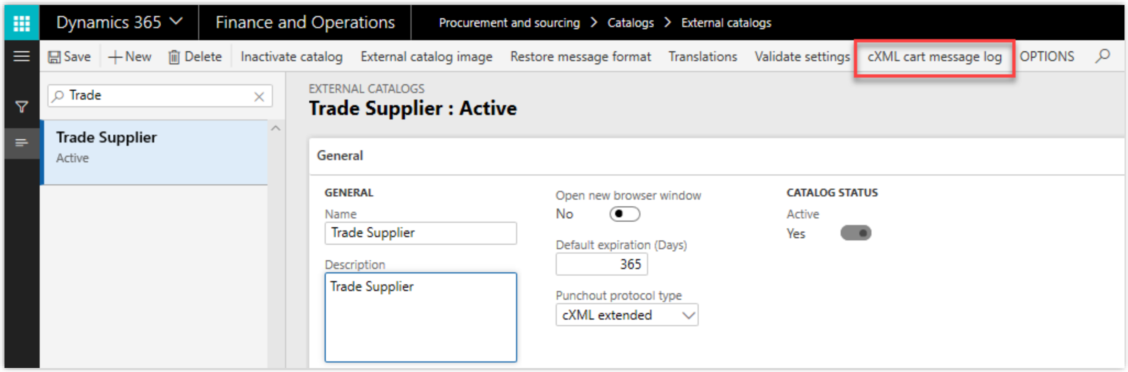
Calculate a delivery date for a line based on a vendor's lead time and your organization's working-days calendar. Vendors can enter a lead time for each line. When a purchase order is confirmed, a delivery date for a line is calculated from the confirmation date, based on the lead time and the working-days calendar. If no lead time is specified, the delivery date is the confirmation date. After the feature is enabled by the admin, it must be enabled by using the procurement and sourcing parameters.

External catalog enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

Feature details

Procurement organizations were able to leverage the external catalogs cXML protocol in Microsoft Dynamics 365 for Finance and Operations version 7.2. Due to different vendor systems, setting up and testing external catalogs can involve some troubleshooting. With the new catalog enhancements, the procurement organization can enable the logging feature that captures common issues that might require changes to external catalog parameters.



External catalog enhancements

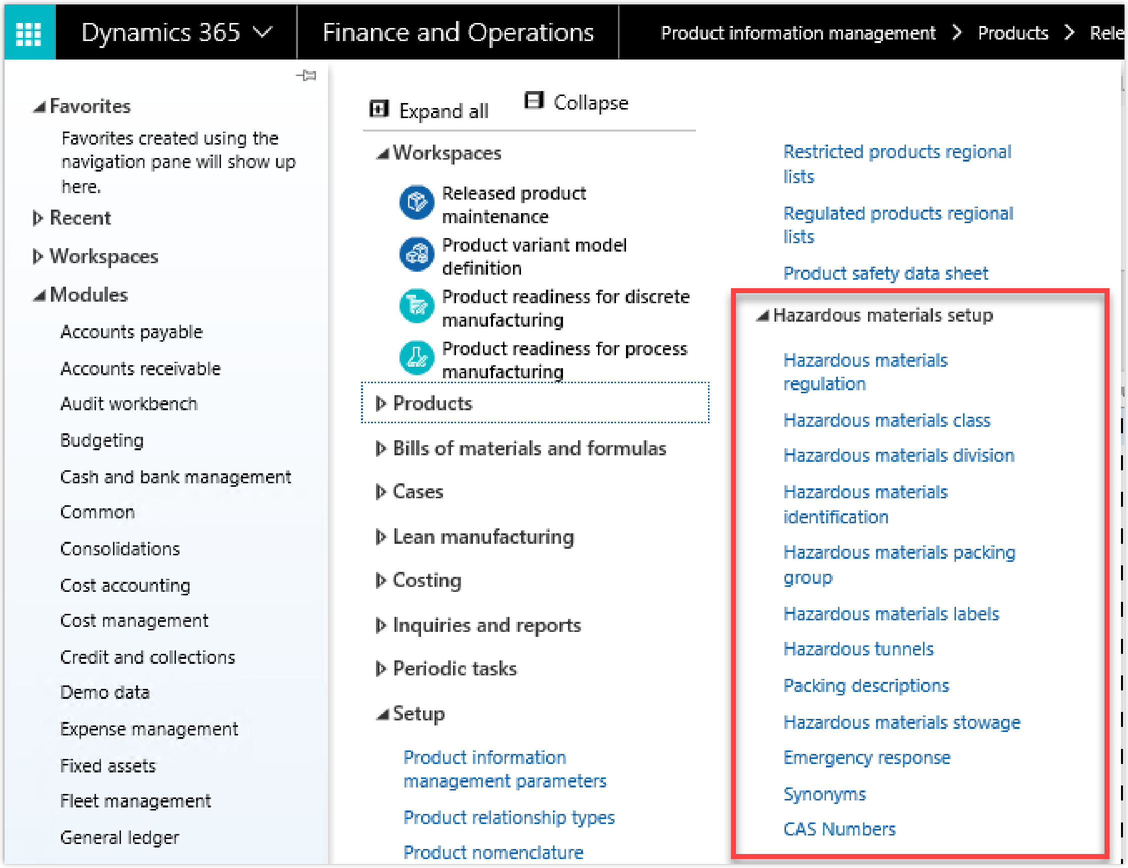
Additional support is being added to allow the return of the **SupplierPartIAuxiliary** ID from the shipping basket and to capture it on the purchase requisition and the related purchase order. This identification is used by some suppliers to represent a unique configuration for an item.

Hazardous materials product information management

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

Feature details

Distribution companies that handle products that contain hazardous or dangerous goods need to be able to store additional information about those products. This information will help the company build a process to conform with regulations around shipping and handling these products. With this enhancement, product information management will include additional setup options to store data related to the item, including item descriptions per the different shipping regulations on the dangerous-goods lists.



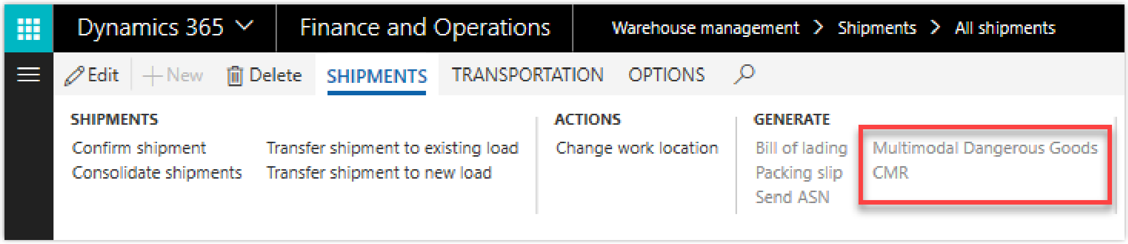
Hazardous materials setup

Hazardous materials shipping documentation

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

Feature details

Because additional information regarding hazardous materials will now be stored for products, we are introducing additional documents that can be used in the warehouse to manage shipments that contain hazardous materials. The new document will be an enhanced bill of lading, CMR document, multimodal dangerous goods document, enhanced packing list, and Verified Gross Mass (VGM) document. These documents will work similarly to the existing bill of lading. The operator can generate the data for the document and then edit as needed to include external data or adjustments needed to represent the shipment.



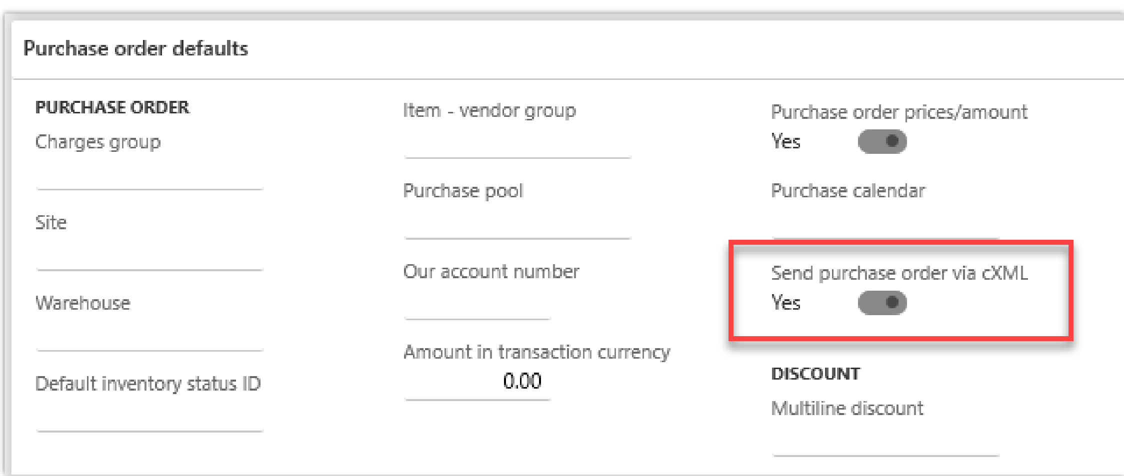
Multimodal dangerous goods

Purchase-order delivery via cXML

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

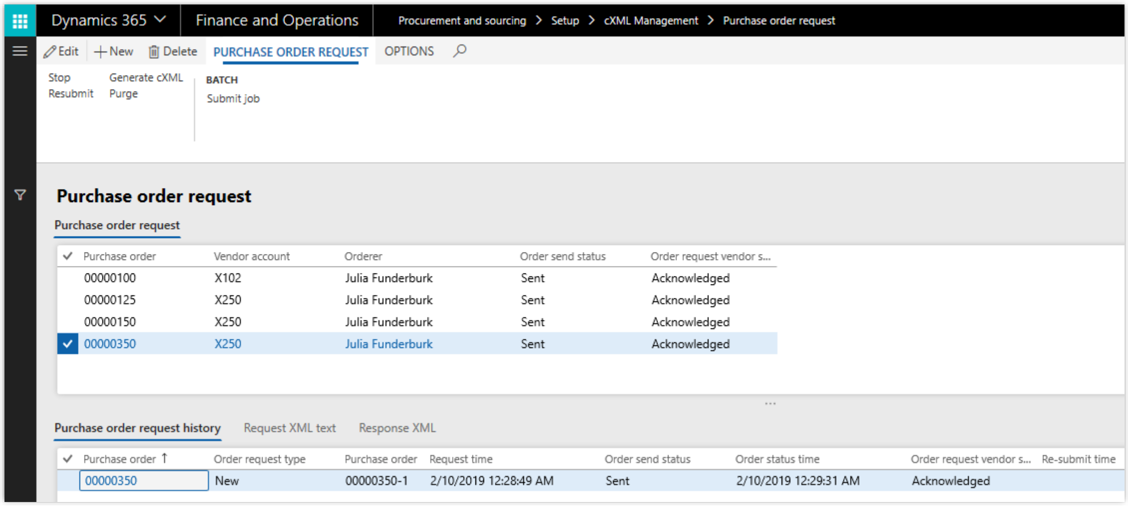
Feature details

Procurement organizations can gain operational efficiencies and provide value-added service to their organization by enabling external catalogs and allowing employees to purchase directly from suppliers' e-commerce sites. When the requisition is returned, approved, and converted to a purchase order, the communication of the purchase order back to the vendor is manual. With this enhancement, we have added support for the cXML Purchase Order Request message. Vendors can be enabled for this feature if your supplier supports receiving the purchase order. Additional setup and parameters are enabled through the external catalog configuration.



Purchase order defaults

Purchased orders are sent using confirmed purchase orders. The procurement team can enable background processing for the purchase order sending the order, and they can monitor the acknowledgment of purchase orders.



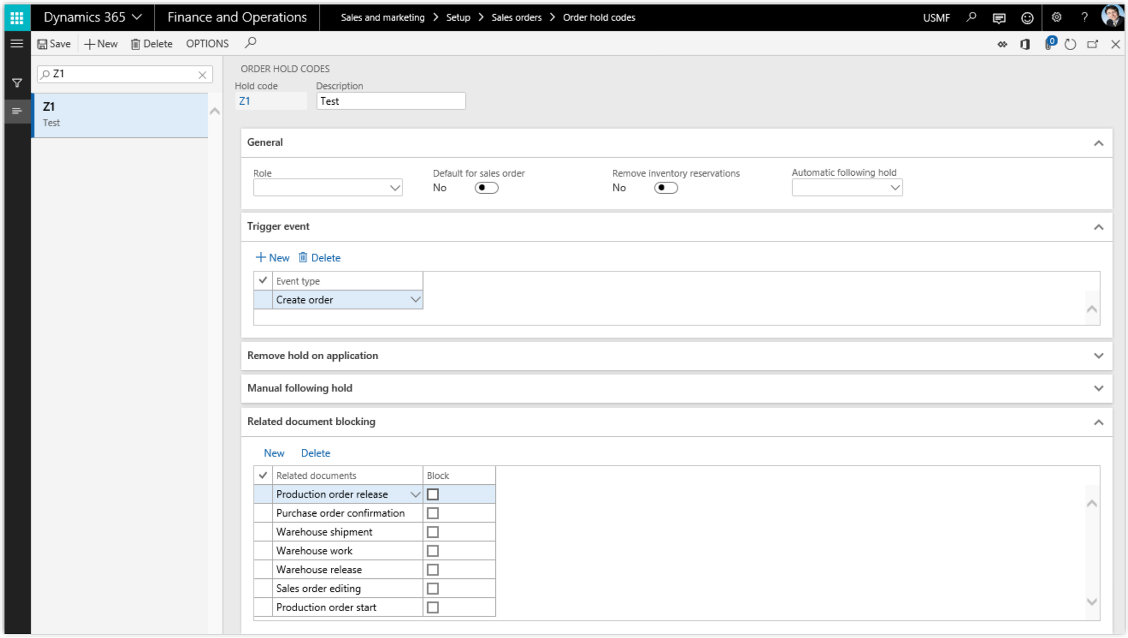
Purchase order request

Sales process control via enhanced order holds

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

Feature details

In B2B trading scenarios, departments are trying to reduce the time involved in processing a sales order through the organization. This often involves collaboration between customer services, financial teams, and operation teams to review the order and deal with exceptions. Often, a full workflow process is too much overhead for the sales order. With this enhancement, organizations can use additional parameters on order holds to create virtual workflows, and they can use status indication processes to enable communication of the order status and requirements for follow-up activities to control the order. The status information is visible on the warehouse release and shipment, which enables the communication of status information between the sales representatives and the operational fulfillment teams.



Enhanced order holds

Self-billing invoice control for procurement

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

Feature details

Collaboration with trade partners to reduce the process overhead in business documents is common in some industry verticals that have a high movement of inventory in reliable trade relationships. Trade partners can set up processes where they will pay for goods based on defined trade terms like the receipt of product. This allows the vendor to avoid having to send a specific invoice document. The trade partners will have a reconciliation process to audit processes and deal with exceptions rather than have the overhead of processing every business document. With these features, the procurement and accounts payable organizations can enable payment of receipts by using the self-billing process.

Self-billing invoice control for sales

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

Feature details

Collaboration with trade partners to reduce the process overhead in business documents is common in some industry verticals that have a high movement of inventory in reliable trade relationships. Trade partners can set up processes where they receive payment for goods based on defined trade terms like the receipt of product. This avoids having to send an invoice to the customer because the customer has agreed to pay on receipt of product. The trade partners will have a reconciliation process to audit processes and deal with exceptions, rather than have the overhead of processing every business document. With these features, the sales and accounts receivable organizations can enable receipts and reconciliation of payments by using the self-billing process.

Inventory value report storage

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Sep 6, 2019	Nov 2019

Business value

This new way of executing the inventory value report is beneficial in cases where the output contains a large number of lines. For example, requesting the inventory ending balance by item, site, and warehouse in a scenario with 50.000 items and 300 stores would yield a very long report, where data is difficult to review. Being able to sort and filter the results, or to export the results to an external system, makes the inventory value report results faster and easier to navigate.

Feature details

A new inventory value report storage capability has been introduced. When you initiate a new execution of the inventory value report, you will have to provide a unique name for the specific execution, and the results of the report generation will be stored under this name. This eliminates the need for running multiple inventory value reports for the same period.

The output of the report execution will be accessible in the inventory value report storage details form. This form dynamically adjust columns and aggregate balances depending on the inventory value report layout configured. All your current inventory value report configurations can be used.

A new inventory value report data entity has also been introduced. This enables you to export the output of a specific, named inventory value report run to any format supported by data management.

Report as finished to a license plate-controlled location from the job card device

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Sep 6, 2019	Nov 2019

Business value

This enhancement enables the use of the job card device in scenarios where the finished goods output from the production are tracked by license plates throughout both production and the warehouse.

Feature details

The **Report progress** dialog in the job card device has been enhanced to allow registration of a license plate. This capability is available when:

- The finished good is enabled for the advanced warehouse processes.
- The finished good is reported to a location that is setup to track inventory by license plate.
- The finished good is reported to an existing license plate.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

See also

Report as finished to a license plate controlled location from the Job card device (docs)

Country of origin enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Nov 2019

Feature details

Trading across country borders often requires that companies include information about the country of origin of the products they are moving. Supply Chain Management includes a field on the product master document. These enhancements will build on that existing capability. Often, suppliers will provide a certificate to customers that has an expiry date and certificate number. These enhancements will provide the capability for the procurement organization to document this information. This information can then be used in preparing paperwork for shipping documentation.

The feature also enables the procurement organization to follow up with suppliers when a certificate expires. Sales organizations can also verify this information before making sales—for example, if product from a specific country shouldn't be shipping into another country due to possible tariffs or additional paperwork that the shipping department will need to prepare. These updates will help organizations build trade-compliance processes.

Put-away clusters

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Nov 2019

Feature details

Put-away clusters is a functionality that enables clustering to be used during the put-away process. It allows workers to group put-away work into a cluster and pick multiple license plates at once, which are later taken to different warehouse locations. This feature is especially useful for retail warehouses or any other scenario where received license plates are not full pallets. It provides enhanced efficiency on inbound processes of the warehouse, allowing a faster alternative to single license plate put-away, where a user must repeat the process for each license plate individually.

Quality management for warehouse processes

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Nov 2019

Business value

This functionality extends the existing quality order feature by introducing the ability to create a work order to move the inventory to and from the quality check location via a mobile device.

Feature details

This functionality extends the existing quality order feature by introducing the ability to create a work order to move the inventory to and from the quality-check location via mobile device. Upon the receipt of inbound inventory, a quality order can be created using quality associations. This functionality is used when a set sample of inventory coming into the warehouse needs to be examined for quality purposes. It could be a new vendor who needs to be kept to business standards or a vendor who has had issues in the past and needs closer examination.

Quality management item sampling

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Nov 2019

Feature details

Upon the receipt of inbound inventory, a quality order can be created using quality associations. The order is processed using existing quality management processes.

This functionality is used when a set sample of inventory coming into the warehouse needs to be examined for quality purposes. It could be a new vendor where they need to be kept to business standards, or a vendor who has had issues in the past and needs closer examination.

The way orders are created depends on the criteria in how the quality associations and item sampling are set up. They can either be per load, shipment, or order. The number of license plates to be examined is also determined here, as well as whether the complete license plate should be examined or a part of it and whether each item id should be examined separately or not.

Upon the receipt of inventory, a quality order can be created using quality associations. If a quality order is created in this manner, the work to move the inventory for the order is created using the quality in quality sampling work trans type. Work is created to move the needed inventory from the receive dock (or start location) to the quality location. The inventory will stay in the location until the quality order is processed and completed via quality management. Once the quality order is complete, a new work order can be created to move the inventory to the storage location.

Receive sortation

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Nov 2019

Feature details

Receive sortation functionality extends the put-away cluster functionality by sorting the inventory at the receiving dock. The sorted inventory is added to the put-away cluster profile prior to creating put-away clusters. Using this functionality, received items can be sorted by the destination location zone, handling equipment, or any other configurable criteria, and workers can move multiple license plates to different locations at the same time. It therefore provides enhanced efficiency to the put-away clusters functionality on the inbound side of warehouse processes.

Purchase agreement enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Nov 2019

Feature details

This feature will allow users to identify the employees that are responsible for maintaining purchase agreements. When a purchase agreement is closed, if the agreement is marked to be no longer actively used, users will not be able to create release orders from the purchase agreement. Users can define an invoice matching policy to use for purchase orders released from a purchase agreement. Purchase agreements are used by different persons in the organization, but there is often one person who is responsible for maintaining the agreement. To avoid mistakes, it is important that it is clearly visible who is responsible for the agreement and whether it can be used or not.

- **PA enhancements** – Responsible party (GA in October 2019)
- **PA enhancements** – Mark Purchase agreement as "Closed" (GA in November 2019)
- **PA enhancements** – Purchase agreement matching policy (GA in November 2019)

Further catch weight integration 10.0.1

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Mar 1, 2019	Dec 2019

Business value

This feature provides various enhancements on the catch weight solution following additional integration work of various scenarios supported in the Fullscope solution.

Feature details

This feature provides various enhancements on the catch weight solution following additional integration work of various scenarios supported in the Fullscope solution:

- Enables intercompany scenarios: it will be possible to use catch weight products enabled for warehouse management in intercompany scenarios.
- Clean-up job for the catch weight tag integration: clean up historical information related to catch weight tag registrations.
- Mixed license plate receiving for purchase order and load receiving: enable this process for CW items.

Further catch weight integration 10.0.2

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Apr 1, 2019	Dec 2019

Feature details

This feature provides various enhancements on catch weight product processing within warehouse management processes. We are providing the following additional integration work supported in the Fullscope ISV solution:

- Mixed license plate receiving (transfer and return sales orders): enables warehouse app processing for catch weight products to use mixed license plate receiving for transfer and return sales orders.
- Restrict weight adjustments: enables the possibility of restricting the warehouse management picking processes from capturing weights resulting in catch weight profit/loss adjustments for the following warehouse app processes:
    - Sales order
    - Transfer order
    - Production order
    - Movement
    - Movement by templates
    - Adjustment out
- Weight capturing during movements: enables the possibility of capturing weight during internal inventory movements.
- Catch weight tag maintenance enhancements: enables creation and correction actions directly in the catch weight tag form.
- Data entity support for catch weight tags: enables a public OData-enabled data entity, supporting creation and maintenance of the catch weight tags.

Further catch weight integration 10.0.3

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ May 1, 2019	Dec 2019

Feature details

This feature provides various enhancements on the catch weight product processing within warehouse management processes. The feature adds the following additional integration work supported in the Fullscope ISV solution:

- Counting weight capturing method: enables the warehouse app counting processing to capture the weight per catch weight unit.
- Warehouse transfer weight capturing method: enables the warehouse app to capture the weight per catch weight unit as part of the warehouse transfer process.

- Restrict weight adjustments for additional processes: enables the possibility to restrict the picking processes from capturing weights resulting in catch weight profit/loss adjustments as part of warehouse app:
- Warehouse transfer
- Inventory status change
- Weight information as part of warehousing app inquire operations: enables the warehouse app inquire processes to display weight information and units.
- Change inventory status (periodic) for catch weight products: enables the change inventory status process for non–catch weight tag products.

Further catch weight integration 10.0.4

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Jun 1, 2019	Dec 2019

Feature details

This feature provides various enhancements on catch weight product processing within warehouse management processes. We are providing the following additional integration work in the Fullscope ISV solution:

- Quality order validation (with inventory status change).
- Inventory status change from on-hand by location.
- Inventory status change via movement work processing.
- Enable the “Complete work” capability for final pick-put work lines pairs.

Further catch weight integration 10.0.5

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓ Aug 2, 2019	Dec 2019

Feature details

Various enhancements are coming for catch weight product processing within warehouse management processes. There will be additional integration work for various scenarios supported in the Fullscope ISV solution:

• Enable **Consolidate license plates** warehouse app capability.

• Enable **Reverse work** capability.

• Support for using **Consume full LP** and use of weight capturing and variance methods by means of the **Register material consumption** warehousing app process.

See also

Catch weight product processing with warehouse management (docs)

Parallelized firming of planned orders

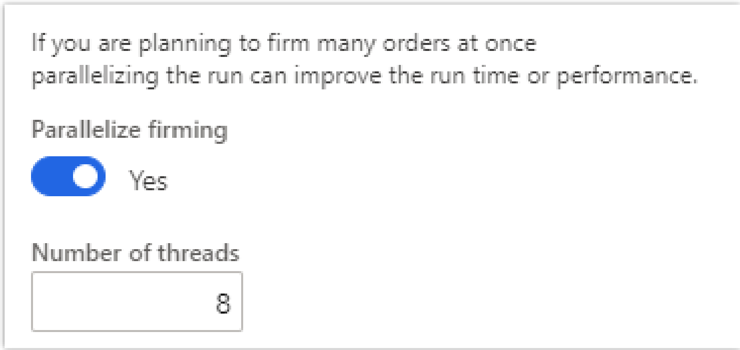
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Sep 6, 2019	Dec 2019

Business value

If you are planning to firm many orders at once, parallelizing the run can improve the run time or performance.

Feature details

Parallelized firming with multiple threads from the planned orders page enables the user to speed up the firming process by parallelizing the firming process across multiple threads. This can be relevant when a high number of planned orders are firmed. The parallelize firming and number of threads options are available when multiple planned orders are selected for firming.



Parallelized firming options

See also

[Parallelize firming](#) (docs)

Further catch weight integration 10.0.6

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Sep 9, 2019	Dec 2019

Feature details

Various enhancements have been made on the catch weight product processing within the warehouse management processes. There has been additional integration work for various scenarios supported in the Fullscope ISV solution and additional scenarios added on top of the BHS ISV solution:

- Enable linking against all storage dimensions for catch weight tags.
- Enable catch weight tag capturing for warehouse app movements.
- Uptake inventory status change processes for catch weight tag tracked products (all storage dimensions).

See also

[Catch weight product processing with warehouse management](#) (docs)

Inventory on-hand service

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Dec 2019

Business value

Providing near real-time access to inventory on-hand information through a separate micro-service simplifies integration with external systems, optimizes response times, and reduces the incremental load and performance impact on Dynamics 365 Supply Chain Management.

Feature details

Organizations that leverage Dynamics 365 Supply Chain Management for managing their inventory on-hand might also have other external systems that could benefit from on-hand inventory information. These could be external sales solutions or mobile solutions. Other scenarios include the requirement to share inventory on-hand information with trading partners.

The inventory on-hand service is a separate micro-service that provides on-hand information in a hyper-scalable, hyper-performant manner without incurring additional load or compromising the performance of Dynamics 365 Supply Chain Management.

All information that relates to on-hand information is exported in near real-time to the inventory on-hand service through low-level SQL integration. External systems access the inventory on-hand service through RESTful APIs that enable on-hand information on given sets of dimensions to be queried, and that enables retrieval of a list of available on-hand positions.

The inventory on-hand service also enables external systems to update on-hand information. In these scenarios, the service will maintain on-hand information that is accurate in near real time, even though the on-hand changes are processed in Dynamics 365 Supply Chain Management with significant delay (for example, through a daily import job).

Vendor bidding—questions from vendors and summarized responses

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Dec 2019

Feature details

This feature will provide added ability for a vendor to submit questions via an RFQ reply in a free-form text format that can be grouped, and allows for a summary question and answer for the grouped questions. During a bidding process, a vendor might have questions about the requested services or products, and this feature will facilitate communication between vendor and customer in the context of the RFQ.

Advanced transportation planning

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Jan 2020

Feature details

Sometimes shipments take multiple legs of transport to arrive at the distribution facility. A new concept of “trip” is introduced that allows multiple loads to be grouped together into a single trip for transportation planning purposes. If transport from the vendor origin requires multiple legs—for example, a truck to the port, then a ship across the ocean, followed by another truck to the distribution facility—one trip can be created containing three loads to model this transport. Each individual load can be rated and tracked individually, while the single trip record consolidates all of the information about the journey.

Carrier assignment/routing wave step

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Jan 2020

Feature details

Some distributors need to assign transport carriers to orders as they are processed through the warehouse but don’t want to do this process manually. A new wave step is introduced that allows an order to rate automatically during the waving process. When a shipment is waved using a wave template that has the AssignCarrierRate step selected, the system will automatically rate shop the associated sales order and apply the cheapest rate. Once the order has been rated, the rest of the warehouse processing can take the assigned carrier/service into account to direct the order to the correct dock door, to print labels, and so on.

Packing vs. storage dimensions

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Jan 2020

Feature details

Some items are packed or stored in such a way that there is a need to track physical dimensions for the different processes. A new field is being added to the **Physical dimensions** page to allow users to specify what process the specified dimensions are used for: packing, storage, or nested packing. The storage dimensions will be used along with location volumetrics to determine how much of the item can be stored in locations in the warehouse. The packing dimensions will be used during containerization and the manual packing process to determine how many of the items will fit in different container types. The nested packing dimensions will be used when the packing process contains multiple levels.

Pre-wave load build planning

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Jan 2020

Feature details

Pre-wave load planning allows users to assign shipments to loads before the wave has been processed, and use the load build template to turn those ghost loads into shipping loads. This enables users to build a load with the full demand for the day, and create shipping loads up to the load capacity as inventory becomes available in the warehouse.

Pre-wave metrics

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Jan 2020

Feature details

The pre-wave metrics are a framework for developers to add custom KPI metrics that can be used in wave planning. The feature provides a framework for customers to add methods to.

RF dynamic load building

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Jan 2020

Feature details

This feature enables the creation of the loads using a mobile warehouse RF scanner. A user can create loads out of staged items using the RF scanner running the WMA app.

Warehouse app task validation with RSAT

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Sep 2019	Feb 2020

Feature details

You can now record tasks with the warehouse mobile app (WMA) and use them for acceptance testing with the Regression Site Automation Tool (RSAT). With the warehouse app task validation page it is possible record tasks, create replacement variables, and define validation rules. You can then use RSAT to run previously recorded tasks.

Flexible warehouse-level dimension reservation

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Feb 2020

Business value

Maintain the optimization-focused approach to picking batch-tracked products for routine operations while still being able to set overrides based on customer requirements. Even when a product's default reservation policy prescribes that decisions on which batches to pick and where to locate them within the warehouse are postponed until the warehouse picking operations start (for example, an optimization-focused approach to inventory stocking strategy), batch numbers for the same product can also be reserved up front for the customer's order. This functionality removes the need to compromise on inventory and warehouse efficiency for products whose batch number selection for the most part takes place in the warehouse.

Allow workers who take sales orders to respect their customer's request to re-order a specific batch number. A batch number can be recorded and reserved at the order-taking time by the sales order processor, with no possibility of it changing during warehouse operations or it being committed to other demand.

Feature details

Flexible warehouse-level dimension reservation includes the following capabilities:

- Allow reservation of a specific tracking or warehouse storage dimension value for the product quantity on the demand order, when those dimensions are placed below warehouse location in the product's reservation hierarchy (only batch number reservation on sales orders is supported in the 2019 release wave 2).
- Batch numbers as reserved for the sales order are handled by the existing WMS processes so that the committed batch is picked and shipped to the customer.
- Support for batch reservation from a sales order against on-hand quantities.

Blind returns receiving

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Feb 2020

Feature details

Often a warehouse will receive a return shipment with items that were not added on the matching return order. This feature extends standard return order processing by enabling workers to receive items that were not present on the original return order without having to adjust the order beforehand. When such a return shipment arrives to the warehouse and a missing item is scanned by the worker, a confirmation message is shown on the mobile device. If confirmed, a new line is created on the return order for the received item with the matching quantity. This functionality can be managed on the user level.

Small package shipping (SPS)

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Feb 2020

Business value

The small package shipping feature allows packed containers to be rated and have tracking numbers assigned from custom carrier rating engines.

Feature details

Small package shipping (SPS) allows packed containers to be rated and have tracking numbers assigned from custom carrier rating engines. SPS works in conjunction with either manual warehouse management packing, wave containerization, or retail store pack-and-ship to send details about a packed container to a shipping carrier and receive back a rate and tracking number. The returned rate will be added to the associated sales order as a miscellaneous charge. The returned label can optionally be printed to a ZPL printer automatically. Users specify their account information for each carrier that will be used, and the container information is sent to the associated service, which will return a rate, tracking number, and label information. Additionally, a third-party account number can be specified for each customer, as desired. Note that specific carrier rating engines are not included and must be acquired separately.

Product variant uptake of volumetric data

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Feb 2020	Feb 2020

Business value

Businesses who buy, make, or sell products with variants that have different physical dimensions can now capture the precise volumetric data so that charges, space, and equipment that are dependent on and constrained by accurate volumetric data are correctly calculated and optimally utilized.

Feature details

This functionality adds the ability to create physical dimensions for a product variant. The dimensional values (length, width, and depth) give the volumetric data of a distinct product variant. The volumetric data is used in warehouse and transportation processes to calculate storage space, warehouse equipment, container size requirements, and more, including calculating charges based on the exact volumetric information for the product variant. The feature enables scenarios such as one in which one unit of large-size shirts has a different volumetric requirement than one unit of small-size shirts and then uses the calculated volumetric data for downstream processes.

Planning Optimization for distribution

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Feb 2020

Feature details

Planning optimization is specifically designed for very fast calculations with massive data volume. It's built as a hyper-scalable multitenant service, meaning that multiple tenants can cooperate simultaneously to calculate the plan. Also, the planning service will remove the load of master planning from your ERP system and work with a data stream that minimizes the server load.

Customer benefits

Eliminate daily time reserved for planning batch job

- Customers with large data sets have issues completing all batch jobs at night.
- 24/7 business where it is hard to get any timeslots.

Comfort that future business growth will not overload the planning system

- A hyper-scalable service ensures that planning will be fast and not have performance implications.
- Automated upgrade to latest version without downtime.

More frequent planning runs – not just daily or weekly

- Update plan during office hours, without having to wait for the nightly run.
- Changed planning parameters are reflected in minutes.
- See the result of planning simulations right away and keep tweaking parameters on the fly until you get the desired result.

Improved customer service with shorter total lead time

- New demands are detected and managed earlier.
- Order same day because you don't have to wait for the nightly plan.
- Many customers can save one day of lead time as supply is ordered right away.

Cost and capital savings by reduced inventory levels

- Less safety stock is needed due to faster replenishment.

Availability

For more information on how to get started with the planning optimization preview, see Get Started.

Feature highlights

- The first version of the planning service will address the needs of both distributors and wholesalers with purchase and transfer supply.
- Out-of-the-box integration with Dynamics 365 Supply Chain Management.
- Support purchase and transfer supply suggestions.
- Ensure supply suggestions to maintain fixed safety stock levels, based on on-hand levels and future demand.
- Time-based safety stock option, to support fluctuation and seasonality in demand.
- Include purchase and transfers lead times, for duration and order date calculation.
- Pegging between supply and demand, providing full visibility for how a given demand is fulfilled or what demand a given supply fulfills.
- Lot-for-lot reordering policy support, combining all demand within a defined period into one supply suggestion.
- Order quantity modifiers that adjust order suggestions to a desired minimum, multiple, and/or maximum quantity.
- Plan just one item or a subset of all products by filtering the products included in a given planning run.
- Multiple plans with specific setup, allowing the planner to simultaneously operate with multiple plans.
- Detect and communicate order delays and possible fulfillment dates, when the plan can't be optimized to fit all demands.
- Calendar support to handle available and closed periods related to warehouses, vendors, customers, and more.
- Support for reservations between supply and demand are recorded and respected by the planning engine.
- Option to include demand forecast with reduction based on recorded demand.
- Reordering policy that supports refilling to a predefined maximum inventory level.

Geographic areas

This feature will be released into the following Microsoft Azure geographic areas:

- United States
- Europe
- Australia
- Canada

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

See also

Master planning home page (docs)

Material handling/warehouse automation

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Jan 2020	Feb 2020

Feature details

The material handling feature is a framework for interfacing with warehouse automation and material handling equipment. Users can set up outbound subscriptions on warehouse events, such as work creation, completion, and cancellation. These events, along with associated data, will be tracked in a queue, which can be accessed via a web service by external equipment. The data associated with each transaction is completely user configurable. Up to 10 fields can be specified to accompany each queue record. The status of each record will be tracked from blocked through sent. Similarly, an inbound queue exists, which external equipment can populate via a web service. When the inbound queue records are consumed, warehouse actions will be triggered, such as work completion and license plate receiving. Work can be executed one work line at a time, or a pick/put pair can be executed in a single transaction. Short pick and location override are also supported.

RFQ activities

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Feb 2020

Feature details

This feature will enable the user to create tasks, appointments, and events that are assigned to other users to develop RFQ documents. Multiple people on the customer side are collaborating to create the RFQ case, and they are also collaborating after the bids have been received. Having the ability to create tasks and appointments in the context of the RFQ will facilitate such collaboration.

Retail store pack and ship

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Feb 2020	Mar 2020

Feature details

Retail store pack and ship allows retailers or distributors to systematically pack inventory into containers without using the rest of the warehousing module. Users can initiate packing from an existing sales order or transfer order, create containers, assign items to containers, assign container weights, and manifest containers as they are closed. A new order can also be created directly from the packing screen. Most normal packing functionality is retained, including the ability to rate with small package shipping.

Globalization

Overview

Supported countries/regions and languages

Finance and Operations is localized for 37 countries or regions and provided in 42 languages directly by Microsoft. For information about the list of countries or regions localized and languages provided by Microsoft, refer to the [Product localization and translation availability guide](). Information about localization features provided by Microsoft per country or region can be found in [Localization and Regulatory features](). For information about localization and translation solutions supported by channel partners that extend the localizations and languages provided by Microsoft, visit appsource.microsoft.com.

Regulatory updates

Microsoft continuously delivers regulatory updates to respond to legislation changes in 37 countries or regions supported by Microsoft. The list of planned and recently shipped regulatory updates can be found at Localization and Regulatory features – Regulatory updates. Alternatively, you can sign in to Lifecycle Services (LCS) and view planned and released regulatory updates through the LCS Issue Search tool, where you can search by country, types of features, and releases.

Configurable localization

Customers deploying globally need to easily adjust their business documents to meet regulatory and other local requirements. To enable that flexibility, we provide modern business document templates in Office formats out of the box. Now business users can easily modify these documents in Word and Excel and easily route the generated documents to different distribution channels. For users extending tax configurations in India, we have simplified the user experience to add new tax codes and apply predefined tax rules.

Global services

We shipped Regulatory Configuration Service (RCS) in October 2018 with deployment options in the United States and India. In 2019 release wave 2, we extended RCS deployment options to China and Europe to meet data residency requirements. RCS lets business and power users configure the regulatory reports, invoices, payment formats, and tax rules that are frequently affected by changing legal requirements. These configurations can be shared and reused in multiple applications. To simplify the storage, handling, and sharing of these configurations, RCS will support a new type of global repository through which users can centrally keep and manage their configurations directly in RCS.

Configurable business documents reporting in Word and Excel

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019

Business value

One of the top pain points reported by customers is the absence of a business user experience to customize printable business documents. By using Microsoft Office-based templates, we provide customers with predefined documents in the most familiar tools available in the market to customize business documents. This also opens the door to create a marketplace around standard and regulatory business documents that are tailored for specific industries or regions not covered by Finance and Operations.

Feature details

This functionality delivers well-designed Microsoft Word and Microsoft Excel template capabilities in phases.

Account Receivable (General availability - October 2019):

- Collections letter note
- Customer account statement
- Customer invoice
- Interest note
- Payment advice
- Sales advance invoice
- Sales agreement confirmation
- Sales order confirmation
- Sales order packing slip
- Sales quotation
- Sales quotation confirmation

Account Payable (General availability - October 2019):

- Payment advice
- Purchase advance invoice
- Purchase agreement confirmation
- Purchase order
- Purchase order packing slip
- Purchase order purchase inquiry
- Purchase order receipts list
- Request for quotation
- Request for quotation - accept

- Request for quotation - reject
- Request for quotation - return
- Vendor invoice

Project (General availability - November 2019):

- Customer retention release
- Project invoice with billing rules
- Project invoice without billing rules
- Project quotation
- User-defined project invoice

Inventory (General availability - November 2019):

- Picking list (order)

Warehouse (General availability - December 2019):

- Shipping pick list
- Production pick list
- Picking list
- Load list
- Bill of lading
- Container contents

Transportation management (General availability - December 2019):

- Commercial invoice
- Certification of origin
- Route
- Load tender

Business user experience for document customization and routing:

- Changing the document layout
- Adding/removing fields in the document
- Simple routing

Consultant (power user) experience for more complex document customizations and routing:

- Extending Data Model
- Complex formulas
- Complex routing
- Document lifecycle management, versioning (including rebase of new configurations from Microsoft and ISVs)

See also

Configurable business documents reporting in Word and Excel (docs)

Expanded regional coverage of Regulatory Configuration Service to Europe

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Dec 2019

Business value

This regional expansion will allow customers in Europe to meet local data residency requirements and utilize the benefits of Regulatory Configuration Service (RCS) instead of relying on the configuration designers built into Dynamics 365 Finance, which has limited functionality.

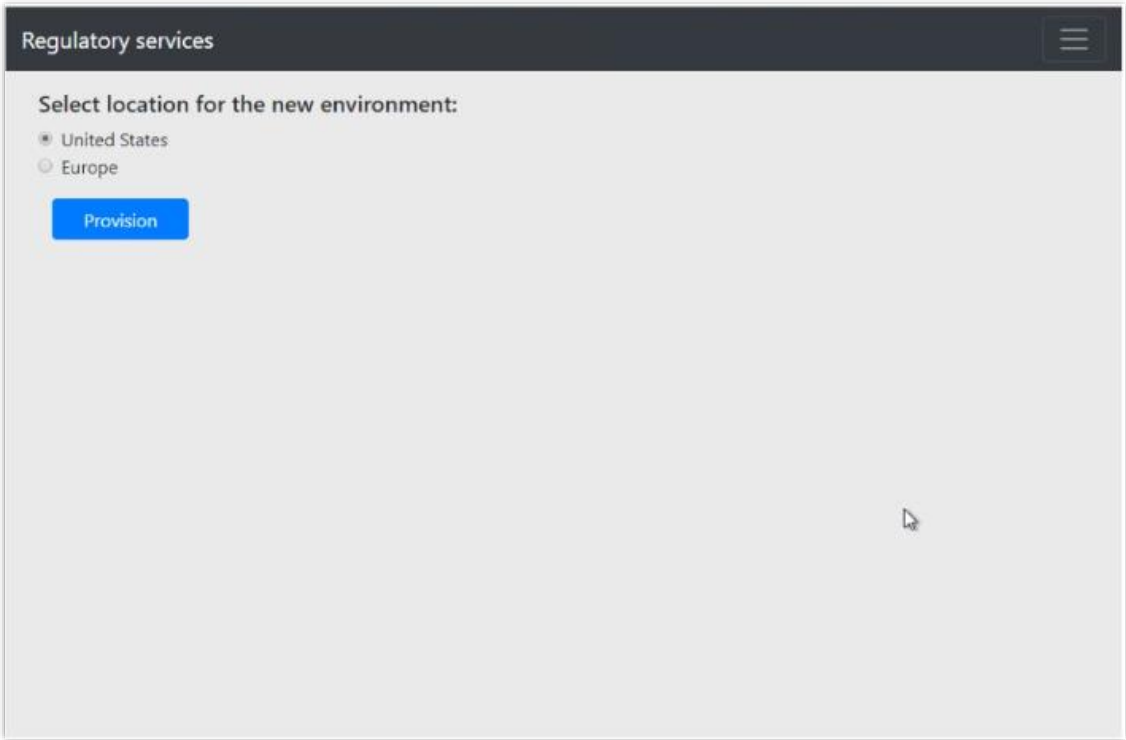
Feature details

As part of the ongoing enhancements, we are increasing the breadth of regional coverage where the RCS environments can be deployed. The system admin, when undertaking the initial service sign-up, can select to have their RCS environments deployed in the existing supported regions, or select to deploy their instance in the new regions being supported.

In 2019 release wave 2, users can select to host their RCS environments in the following countries or regions:

- United States (already available)
- India (already available)
- Europe (preview in September 2019)

As part of the RCS provisioning flow, users can select the geographic data center where their environment will be provisioned. For example:



Users can select a geographic data center

Simplified localization configuration management in Regulatory Configuration Service

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Business value

Currently, users need to complete a multistep process to leverage Microsoft Dynamics Lifecycle Services (LCS) in order to publish and export their configurations and share them with external users or organizations. By using the new centralized configuration storage in the Regulatory Configuration Service (RCS), users will be able to easily share their configurations directly from the configuration designer.

Feature details

As part of 2019 release wave 2, the following capabilities will be supported in RCS:

- Users will have access to all Microsoft-produced configurations directly in RCS (without using LCS).
- Users will be able to centrally store, publish, and share their configurations with their own organization.
- Users will have the ability to share configurations with external users or organizations.
- Users will be able to broadcast (push) new configurations to external users or organizations.

Simplifying configuration of tax extensions for India

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	Jan 2020

Business value

A tax accountant can now create a new tax component with predefined tax rules in GTE with minimal training and effort. A functional consultant, or power user, can configure more complex tax rules in GTE that are not predefined (for example, complex tax calculations or tax posting).

Feature details

This feature allows users to create tax components that support the most common scenarios. New functionality includes new and enhanced controls to use when creating tax components. These new controls include Reverse change, Non-deductible, and Tax in price. The system automatically generates all required tax measures, tax formulas, and posting profiles.

Expanded regional coverage of Regulatory Configuration Service to China

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Business value

This regional expansion will allow customers in China to meet local data residency requirements and use the benefits of Regulatory Configuration Service (RCS) instead of relying on the configuration designers built into Dynamics 365 Finance, which has limited functionality.

Feature details

As part of the ongoing enhancements, we are increasing the breadth of regional coverage where the RCS environments can be deployed. The system admin, when undertaking the initial service sign-up, can select to have their RCS environments deployed in the existing supported regions, or select to deploy their instance in the new regions being supported.

In 2019 release wave 2, users can select to host their RCS environments in the following countries or regions:

- United States (already available)
- India (already available)
- Europe (preview in September 2019)
- China (preview in October 2019)

Regulatory Configuration Service: Regulatory update discovery

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Business value

Currently, several different channels are available to partners and customers where globalization information is shared. Some of these channels include documentation at docs.microsoft.com, the Localization Portal on CustomerSource, and Lifecycle Services (LCS) Issue Search. The type of information shared is dependent on the channel, which makes it difficult to get an overall picture of upcoming changes in this area.

The regulatory update discovery provides a centralized location and an interactive sharing mechanism for all types of regulatory and localization information for solutions provided by Microsoft and ISV partners.

Feature details

The release will support publishing of Microsoft content with the following capabilities:

- Planned and released localization features shared through an interactive search.
- Feature description and links to related documentation.
- Related configurable artifact listing.

Platform

Overview

User productivity and experiences

Investments in improved user experiences and enhancements to existing capabilities are focus areas for 2019 release wave 2. Saved views will become generally available, and several improvements to this feature will follow as part of monthly updates, such as saved view support for workspaces and dialogs, as well as improved management of modified views. The new grid control (in preview as of July 2019) will be generally available with an improved user experience due to new capabilities such as the ability to see totals for numeric columns in tabular grids, the ability to group data based on the values in one or more columns, as well as the ability to freeze a column so it doesn't scroll out of view.

Improvements to filtering, such as easier and more useful ways to filter on **enum** and **datetime** fields, will be provided to enhance the experience for most users and business scenarios. Personalization capabilities that allow users to build optimized experiences will be made, and investments in improving mobile experiences will greatly improve the usability of applications on mobile devices.

With 2019 release wave 2, management of batch jobs and batch queues will be greatly improved, giving administrators the ability to prioritize batch jobs by business processes. In addition, document reporting, routing, and printing will become more configurable and scalable to enterprise scenarios.

Developer tools

We are introducing a mandatory new phase in the lifecycle of partners and system integrators to evaluate their implementation. Metrics will be made available to partners from within Lifecycle Services that are based on both static analysis and runtime analysis in sandbox and production environments. These quality gates will enable blocking custom packages that could negatively impact production environments from being deployed. These metrics will be aggregated across implementations for a partner and made available in the partner portal.

Many large customers have multiple projects within Lifecycle Services and would like to manage, update, and monitor their environments across projects. Partners and ISVs also need aggregated views across their customers. A new cross-project workspace will be introduced in Lifecycle Services to manage updates and functions and monitor health across these projects. This will also be integrated with the centralized Microsoft Azure ISV portal. Developer tools will be available as standalone installable components.

Microsoft Power Platform integration

Common Data Service will now include additional out-of-the-box entity mappings. This release will target supporting end-to-end scenarios covering project, inventory, sales, and procurement through to financials. These entities will enable deeper extensibility scenarios through the Microsoft Power Platform. Finance and Operations will have business events added in several business process areas (for example, manufacturing, warehouse and transportation, and bank and cash management) as well as the ability to trigger and monitor Microsoft Flow, making it the primary driver of workflow in Finance and Operations.

A single admin experience will be available in the Microsoft Power Platform admin center for Common Data Service integration scenarios where customers will need to extend and troubleshoot integration scenarios between Finance and Operations, Customer Engagement, and Common Data Service. Support cases can be centrally logged, and this will enable faster resolution. To assist with troubleshooting, the environments and diagnosis capabilities will also be available in the Microsoft Power Platform admin center.

Geo expansion and availability zones in Azure

Finance and Operations is expanding to be available in certain geographies within six months of Microsoft Azure availability in that location, and where there is viable business opportunity. A data resident cloud for Finance and Operations will ensure that all customer data, code, metadata, and diagnostics remain within the designated geography.

Availability zones (physically separate locations within an Azure region made up of one or more datacenters equipped with independent power, cooling, and networking) will be supported across Finance and Operations and enable the service to offer business continuity when partial region or zonal outages occur.

Developer tools as installable components

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Nov 2019	-

Feature details

Setting up development environments for Finance and Operations applications is simple and reliable through the availability of ready-to-use cloud and on-premises virtual machines (VMs). This popular feature is also costly, because you need to manage many development environments as your development team grows or when you are developing multiple applications or multiple versions of the same application. You can now install developer tools and associated runtime components on your own computer or VM and manage more than one application on the same box. Preconfigured cloud-hosted VMs are (optionally) still available for quick setup and deployment of development environments via Lifecycle Services (LCS).

Embed Power BI solutions directly into analytical workspaces

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ May 1, 2019	Oct 2019

Business value

Power users of Finance and Operations are able to embed Microsoft Power BI reports directly in application workspaces. Customers are finding amazing success using the Power BI service to author graphically rich analytical solutions and then share the solutions with members of their organization. The latest platform enhancement allows customers to integrate existing Power BI solutions that can include views sourced from external data systems. Best of all, there are no service interruptions required to distribute updates, giving customers greater flexibility to publish, at their own pace, enhancements to analytical solutions hosted on Power BI.

Feature details

Users love analytical workspaces in Finance and Operations, with rich visualizations shown in the context of business operations. In addition to the analytical workspaces shipped by Microsoft, ISVs and partners have also built specialized analytical workspaces. Using guidance and tools, power users can transition analytical workspaces authored with entity store into Power BI template apps based on data flows. They can also submit apps to the Microsoft AppSource marketplace.

The analytical workspace experience that your users expect will remain unaffected while you get the benefit of better application lifecycle management. ISVs and partners who build analytical workspaces can now market their solutions to Dynamics 365 customers through AppSource.

See also

Select analytical workspaces from PowerBI.com (docs)

Preview documents using embedded viewer control

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Jul 5, 2019	Oct 2019

Business value

Enhance the report viewing experience for customers with advanced document interaction options.

Feature details

Streamline the customer experience when viewing application reports by taking advantage of the new hosted document **Preview** option. The embedded viewer options give customers direct access to locally connected printers and offers consistency between the screen presentation and the printed output. In addition, report viewing times are drastically reduced when compared to legacy solutions.

The new **Preview** option is available on all supported devices and does not require any locally installed third-party software on the user's device. Documents can be downloaded and quickly navigated using the built-in viewer toolbar options.

See also

Preview PDF documents with an embedded viewer (docs)

Attachment recovery

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 1, 2019	Oct 2019

Feature details

An attachment recovery feature will be added that provides a recycle bin for record attachments. Users and administrators will be able to recover deleted attachments, for a configured period of time after deletion, using the new deleted attachments forms.

See also

Attachment recovery (docs)

Extended chart control options now include Solid Gauge visualizations

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 2, 2019	Oct 2019

Business value

The Solid Gauge charts embedded in Finance and Operations applications are used to visualize predictive analytics.

Feature details

Developers use Visual Studio designer tools to embed chart controls bound to form data sources in Finance and Operations applications. Platform update 29 includes support for several new control designer options.

Designer tools now include the following:

- Control properties used to select **Solid Gauge** chart visualizations.
- Designer options to control **Series Color**.
- **MIN** and **MAX** values for the Y-axis.
- **Visibility** options for Y-axis labels (title/value independently).

See also

What's new or changed in platform update 29 (docs)

Turn insights into action using context menu commands for embedded Power BI reports

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 2, 2019	Oct 2019

Feature details

Turn insights into action by using the custom context menu commands for chart visualizations displayed in Power BI reports that are embedded in Finance & Operations Application Workspaces. Empower users with intuitive gestures to perform business operations on filtered views of their data. Developers can add custom extensions that provide users with an actionable experience of interacting with analytical solutions within the application.

See also

What's new in PU28 (docs)

Visual refresh of the web client to align with the Fluent design language

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 5, 2019	Oct 2019

Feature details

Finance and Operations apps, in conjunction with the other products in Dynamics 365, will be incrementally updated with a visual refresh of the web client to more closely align controls and pages with the Microsoft Fluent design language. An initial set of changes will be included in October 2019, with enhancements to follow in subsequent monthly updates.

The following changes are included with Platform update 29:

- Styling updates to the various states of input control, buttons, and container controls.
- A visual refresh of the navigation pane that provides quicker access to the dashboard, Recents, Favorites, Workspaces, and Modules and also a styling update for the modules dialog box.
- Updates to font size and gray palette to align with other Dynamics 365 products.

See also

What's new for PU29 (docs)

User productivity – Filtering enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Jan 2020

Feature details

Filtering is one of the most common and important foundational features of the user interface and affects most users and business scenarios. Being able to find data easily is critical to user success and satisfaction. To improve the filtering capabilities, several improvements are planned, including:

- Making it easier to find the field you want to filter on.
- Improving the filtering experience with **enum** and **datetime** fields.
- Introducing easy-to-use filter variables for parameterized queries (for example, @Me, @Today, @ThisWeek, @ThisMonth).

These features will be incrementally available as part of monthly releases starting in January of 2020.

User productivity – Personalization enhancements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Jan 2020

Feature details

Continual improvements and enhancements will be made to personalization capabilities that enable customers and individual users to build optimized form experiences that maximize usability and user productivity.

This includes:

- Improving the speed of hiding, skipping, or locking fields and actions.
- Common global entry point for personalization via the **Settings** menu.

These features will be incrementally available as part of monthly releases.

Improved experience on mobile devices – Phase 1

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Jan 2020

Feature details

The web client and its form patterns will be responsive on mobile devices, enabling a majority of the application user interfaces to be usable on smaller screens. This will significantly improve the usability of the application on mobile devices, minimizing the need to build separate user interfaces for smaller screens. This set of improvements will stretch over multiple release waves.

Build automation hosted in Azure DevOps

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Jan 2020	Jan 2020

Business value

This removes the need for deploying build and test environments to enable daily build automation. Builds hosted in Azure DevOps are free for up to 1,800 minutes per month (currently).

Feature details

NuGet packages of the Finance and Operations application models and platform binaries will be available in Lifecycle Services. Upload these NuGet packages to your Azure DevOps project and create a build definition. Use standard Azure DevOps build pipeline functionality to build your code and create custom deployable packages. More details will be available when the feature becomes public.

User productivity – New grid

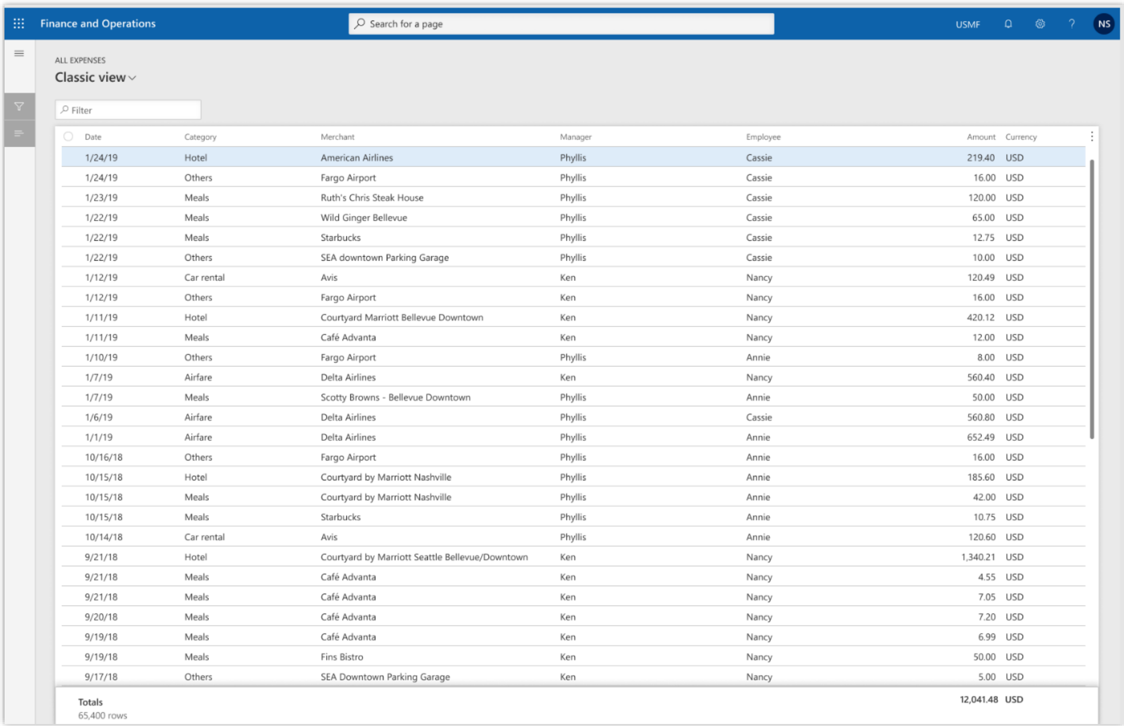
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 5, 2019	Mar 2020

Feature details

A preview of a new and improved grid control is scheduled for October 2019. The new grid provides improved rendering speed and a much faster scrolling experience. Users are also able to positionally scroll within the data that has been loaded in the browser.

The following enhancements to the grid are planned for subsequent monthly updates:

- **Totals:** Business users can see totals for numeric columns in tabular grids. For example, financial users will be able to view totals for a filtered set of transactions for a specific customer.



Total shown for the Amount column

- **Fast data entry:** This feature allows users to enter data in a grid as quickly as possible, minimizing the need for users to wait for the server to validate a row before moving to another row in the grid.

See also

[What's new for PU29](#) (docs)

User productivity – Saved views

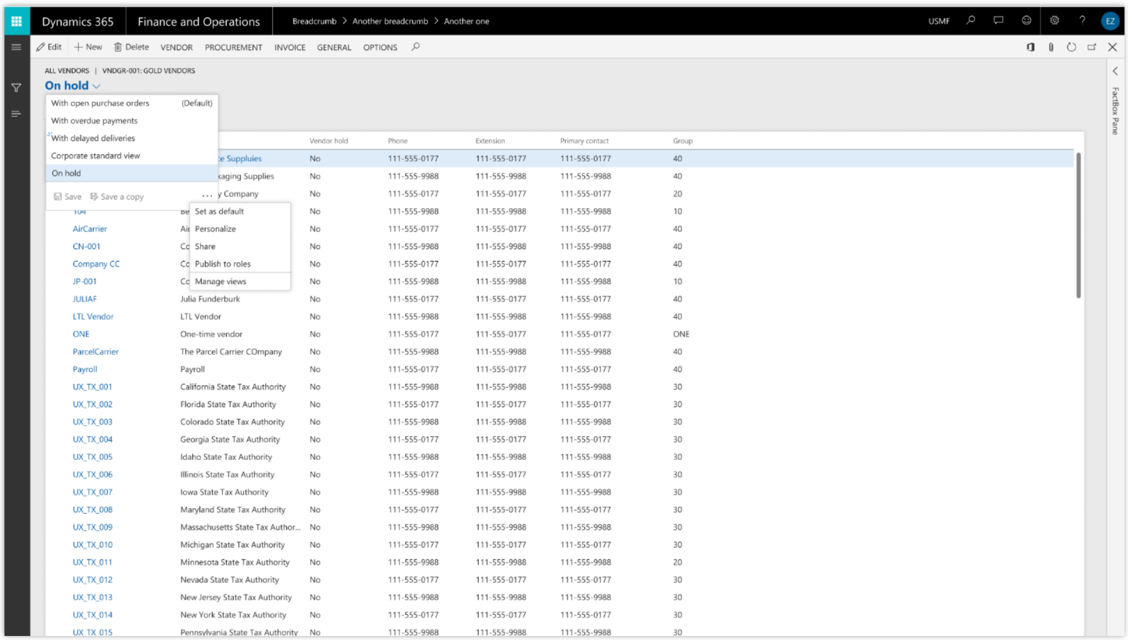
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 5, 2019	Mar 2020

Feature details

A preview of [saved views](#) is available starting in October 2019.

Further saved views enhancements will be introduced as part of monthly updates:

- Overhaul of the administrator's form for managing views and personalization.
- Ability to pin views as tiles, lists, and links on workspaces.
- Ability to publish views to specific legal entities.
- Saved views for dialogs.



Multiple views on the All Vendors page

See also

[What's new for PU29](#) (docs)

Priority-based scheduling for batch jobs

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Nov 2019	To be announced

Feature details

With the urgent need for elasticity and scalability, a smarter approach to handling batch processing is needed. Additionally, assigning batch jobs to batch servers based on batch groups does not meet the complexity of business-process requirements in a modern cloud service.

Customers do not need to be concerned about their application's infrastructure—they would rather focus on their business processes.

With these reasons in mind, we will enable administrators to prioritize their batch jobs per business process, and they will not need to manage batch groups.

Public sector

Overview

Cash control

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 5, 2019	Oct 2019

Business value

This feature provides additional control over cash disbursements while also giving you reasonable flexibility to address business needs.

Feature details

Accounts payable vendor invoices and General ledger advanced ledger entries are validated when they are created, edited, and posted. If the transaction's posting will cause the related cash account's balance to be reduced below the limit defined for the account, an error message will alert you and you'll need to change the account to continue.

You can also allow specific users to override cash control. If an authorized user receives a warning that the cash balance for the account will be reduced below the limit, they can continue posting the transaction. For example, you might override the cash control limit when the expenditure must be posted in advance of receiving the funds to cover it, or when it requires a transfer that's been approved but that hasn't been entered or posted yet.

The cash control limit is compared to the cash control balance (the cash account balance minus all posted, unpaid AP invoices). The limit is surpassed when the cash control balance is less than the cash control limit (threshold).

See also

Use cash control limits (docs)

Service industries

Overview

The Service Industries solution provides capabilities to plan and deliver services and product to their customers, as well as internal projects across multiple industries. Functionality to control costs, optimize resource usage, and track the profitability of a project provide the tools that help organizations to delivers products and services on time and on budget.

Remove project group dependency from project

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Mar 2020

Feature details

This feature will remove the dependency of "Project group" from the project. Project group will become an optional grouping mechanism for projects. A new entity, "Project revenue profile," will be created that will contain the configuration related to work in progress (WIP)/revenue accrual and revenue recognition for fixed-price projects. The project revenue profile will be set on the contract line.

Remove project type dependency from project

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Mar 2020

Feature details

When this feature is enabled, a project will no longer have a type of Fixed-price, Time and material, Cost, Time, Internal, or Investment. The project contract line will determine whether a project is Fixed-price or Time and material, allowing for the same project to have both a fixed-price component and a time-and-material component. Projects that do not have a contract will track costs but will not track revenue.

Dynamics 365 Talent

Overview of Dynamics 365 Talent 2019 release wave 2

Dynamics 365 Talent enables organizations to centralize workforce data and drive operational excellence across HR programs. As people resources are the most expensive part of operating expenses, the imperatives of efficiency and cost reduction have always been a part of the HR mandate. However, when workforce practices are disconnected and lack a cohesive strategy across the company, the result is high turnover rates, longer hiring cycles, and lower employee engagement. All of which contribute to lack of product innovation, expensive operational errors, less satisfied customers, and suboptimal financial results. Our vision for Dynamics 365 Talent is to help HR teams balance operational excellence, organizational agility, and the employee experience to create a workplace where people and the business thrive.

Dynamics 365 Talent consists of three applications:

- Attract – Streamline your recruiting processes to help find, engage, interview, and extend offers to the right people.
- Onboard – Make new hires feel welcome, connected, and successful by quickly ramping up new team members and accelerating their time to impact.
- Core HR - Give your managers and employees core HR capabilities in a single location that streamline processes and create programs that optimize workforce costs, deliver business impact, and drive an agile, high-performance culture.

Watch overview video

What's new and planned for Dynamics 365 Talent

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Attract

Feature	Enabled for	Public preview	General availability
Intelligent candidate recommendations	Users by admins, makers, or analysts	✔ Apr 1, 2019	To be announced
Customize and extend analytics reports	Users by admins, makers, or analysts	To be announced	To be announced
Improve diverse hiring with detection of bias and cryptic language in job descriptions	Users by admins, makers, or analysts	To be announced	To be announced

Core HR

Feature	Enabled for	Public preview	General availability
Streamlined employee data entry	Users, automatically	✔ Aug 22, 2019	Oct 2019
Broader environment management	Admins, makers, or analysts, automatically	Oct 2019	Oct 2019
Embed third-party apps	Users by admins, makers, or analysts	Nov 2019	Dec 2019
Expand data entities in Common Data Service	Admins, makers, or analysts, automatically	Feb 2020	Mar 2020

Onboard

Feature	Enabled for	Public preview	General availability
Add a mixed reality guide as an onboarding task	Admins, makers, or analysts, automatically	To be announced	To be announced

Feature	Enabled for	Public preview	General availability
Create guides in minutes with intelligent suggestions for activities and content	Admins, makers, or analysts, automatically	To be announced	To be announced

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

Attract

Overview

The 2019 release wave 2 will continue to turn **Attract** into a more powerful product that increases recruiter productivity. Our efforts will be focused on enabling a better integration experience with Core HR, providing intelligent recommendations for candidate matching and helping you keep your talent networked engaged. We are also improving the candidate experience to reflect your brand and drive more visits to your open positions.

Intelligent candidate recommendations

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Apr 1, 2019	To be announced

Feature details

Recruiters deal with large volumes of applicants, which makes triaging challenging. Similarly, candidates have to process information about several positions in order to find the right fit. While people find it difficult to process large volumes of data, Attract can do so with ease, and thanks to its intelligence engine, it can help both recruiters and candidates find the right candidates and jobs, respectively. Our machine-learning models analyze job requirements and the candidate's profile to determine a match. Attract then displays both sets of recommendations to help you make decisions faster.

Customize and extend analytics reports

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	To be announced	To be announced

Feature details

The default reports in Attract provide valuable hiring process insights for any hiring team, but hiring is unique to every company, department, and team. Attract now allows you to adapt these reports with little effort and tailor them to the unique needs of your organization. This feature allows hiring teams to work with Dynamics 365 Talent partners to:

- Modify existing Attract reports.
- Build custom reports that leverage the Attract data model.

Improve diverse hiring with detection of bias and cryptic language in job descriptions

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	To be announced	To be announced

Feature details

Attract helps you attract the largest set of diverse candidates possible by alerting you to possible noninclusive language in your job descriptions.

Job descriptions play a crucial part in helping prospective candidates make up their mind to apply for a job. Studies show that candidates are very sensitive to the language used in job descriptions and that noninclusive words and terms can skew the composition of applicant pools. To attract a diverse group of talented individuals, recruiters and hiring managers need to author great job descriptions that are free of biased language.

Attract helps you during the authoring process by intelligently analyzing job descriptions and highlighting any parts that might contain noninclusive language. With Attract's customizable language assistant, you can ensure you attract a diverse applicant pool.

Core HR

Overview

The 2019 release wave 2 continues the work started in the April ’19 release. This release provides further integration with third-party apps through an expanded set of entities available in Common Data Service. In addition, streamlined data entry and navigation makes it easier to keep employee records current.

Streamlined employee data entry

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 22, 2019	Oct 2019

Feature details

Streamlined data entry and navigation makes it easier to keep your employee records up to date. You can enter data for the future or update data retroactively, giving you the flexibility you need to provide accurate data for your upcoming new hires or for exiting employees.

See also

Feature exploration (video)

Streamlined employee entry and Navigation (docs)

Broader environment management

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	Oct 2019

Feature details

During your testing and implementation, you might need to move information from your test to production environments, or vice versa. This feature lets you start a process to move data from one environment to another.

Embed third-party apps

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Dec 2019

Feature details

You might have third-party apps that work in conjunction with Core HR, either built in house or by a Microsoft partner. This feature provides seamless integration with third-party apps by allowing you to:

- Include third-party apps within the Core HR experience.
- Navigate to third-party applications within Core HR.

Expand data entities in Common Data Service

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Feb 2020	Mar 2020

Feature details

Customers need efficient means to drive the digital transformation of their HR and Talent experiences to attract and retain critical talent. A single coherent view of people is one of the critical foundations needed to achieve this. Most Core HR entities are already available in Common Data Service. Other areas are now available to drive this digital transformation:

- Performance
- Competencies
- Training and courses
- Health and safety
- Compliance

Onboard

Overview

The 2019 release wave 2 will provide a frictionless experience for creating and administering onboard guides. Traditionally, most hiring managers don't use a dedicated onboarding tool to get their employees ramped up. For the onboarding application to be impactful, managers must put some up-front effort into the creation of an onboarding guide. If it takes too much effort to create this guide, hiring managers will fall back to their old ways and just not use our onboarding application. By providing intelligent content recommendations, we are finding creative ways to enable hiring managers to create powerful, impactful guides with the least amount of effort.

Add a mixed reality guide as an onboarding task

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	To be announced	To be announced

Feature details

Accelerate the impact of your new hires and improve employee retention by providing an engaging and interactive onboarding experience. You can empower employees to learn new tasks through step-by-step holographic instructions by creating and adding Dynamics 365 Guides to an onboarding guide. With this feature, you can also track the completion of a Dynamics 356 guide.

Create guides in minutes with intelligent suggestions for activities and content

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	To be announced	To be announced

Feature details

Onboard's intelligent suggestions for activities and content help you build onboarding guides in minutes. Onboard finds relevant tools and content you might not even have thought of and suggests them to you while you're building your guide. All you have to do is drag and drop.

Dynamics 365 Retail

Overview of Dynamics 365 Retail 2019 release wave 2

Today's consumers demand delightful and integrated shopping experiences across channels, while traditional channels are getting disrupted and new ones are constantly emerging. Retailers need a modern, flexible cloud solution that will help them be nimble, compete better, and build lasting relationships with their shoppers. Dynamics 365 Retail provides an end-to-end integrated solution for retailers that includes back-office processes, such as merchandising and inventory, as well as front-office channels.

The investments will span these pillars:

Fundamentals

- **Deployment and servicing**: Easily deploy, service, and manage distributed retail components.
- **Store and Cloud Scale Units**: Retailers can choose the best topology that will meet their business needs.
- **Extensibility and integrated developer experiences**: Enhanced extensibility for headquarters, in-store, and e-commerce channels with integrated experiences for developers to build solutions.

Industry excellence

- **Inventory management**: Centralized and in-store inventory capabilities such as picking, receiving, stock counting, and inventory visibility.
- **Omnichannel capabilities**: Order capture, order processing, merchandising, and payments to enhance experiences across channels.
- **Regulatory and compliance**: Regulatory and compliance-related enhancements will provide service in all supported countries.

What's new and planned for Dynamics 365 Retail

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Fundamentals

Investments in infrastructure, servicing, quality, and performance

Feature	Enabled for	Public preview	General availability
Translations for charges codes in POS	Users by admins, makers, or analysts	✓Aug 1, 2019	Oct 2019
Enhancements to Retail statement posting	Users by admins, makers, or analysts	✓Aug 2, 2019	Oct 2019
Improved CDX scalability through Cloud Async Client	Users, automatically	✓Aug 2, 2019	Oct 2019
Modern POS offline availability improvements	Users, automatically	✓Aug 2, 2019	Oct 2019
Numpad to remain on-screen in POS inventory receiving form	Admins, makers, or analysts, automatically	✓Aug 2, 2019	Oct 2019
POS and headquarters extensions	Admins, makers, or analysts, automatically	✓Aug 2, 2019	Oct 2019
One Version – Auto-update for Retail Cloud Scale Unit	Admins, makers, or analysts, automatically	Oct 2019	Oct 2019
Store Scale Unit improvements	Admins, makers, or analysts, automatically	✓Aug 2, 2019	Oct 2019

Feature	Enabled for	Public preview	General availability
Product Recommendations in POS	Users by admins, makers, or analysts	-	Nov 2019
Regression Suite Automation Tool for POS	Admins, makers, or analysts, automatically	✔ Sep 3, 2019	Nov 2019
Secure access to secrets	Admins, makers, or analysts, automatically	✔ Sep 3, 2019	Nov 2019
E-commerce inventory API improvements	Users by admins, makers, or analysts	Oct 2019	Jan 2020
Hide designated pickup, carryout, and electronic modes of delivery from ship-all and ship-selected processes in POS	Users by admins, makers, or analysts	Oct 2019	Jan 2020
In-store components mass deployment	Admins, makers, or analysts, automatically	Nov 2019	Jan 2020
Financial reconciliation of retail transactions in the store (Public Preview)	Users by admins, makers, or analysts	Nov 2019	Feb 2020
Environment history for Retail Cloud Scale Unit	Admins, makers, or analysts, automatically	Feb 2020	Feb 2020
Auto-refresh device activation token	Admins, makers, or analysts, automatically	Jan 2020	To be announced

Industry excellence

Investments in core retail business processes and industry requirements and capabilities

Feature	Enabled for	Public preview	General availability
Enhancements for product discoverability	Users by admins, makers, or analysts	Oct 2019	-
Merchandising improvements - support to custom sort the display order of categories belonging to various category hierarchies	Users by admins, makers, or analysts	✔ Aug 2, 2019	Oct 2019
Management of customer registration numbers from POS for India	Users by admins, makers, or analysts	✔ Sep 6, 2019	Nov 2019
Call center localization for Eastern Europe	Users by admins, makers, or analysts	-	Jan 2020
Clienteling – Empower sales associates to become trusted advisors and establish long-term relationships with customers	Users by admins, makers, or analysts	Oct 2019	Jan 2020
External gift card support in call center	Users by admins, makers, or analysts	Oct 2019	Jan 2020
Merchandising improvements – add support for custom order for categorized products, related products, and dimension groups	Users by admins, makers, or analysts	Oct 2019	Jan 2020
Merchandising improvements - add support to configure and observe the custom order for product attributes, refiners, and values	Users by admins, makers, or analysts	Oct 2019	Jan 2020
Tender-based discounts	Users by admins, makers, or analysts	Oct 2019	Jan 2020

Feature	Enabled for	Public preview	General availability
Improved inventory (inbound and outbound) operations in store	Users by admins, makers, or analysts	Nov 2019	Jan 2020

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
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For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

Fundamentals

Overview

We continue to invest in the fundamental aspects of the solution and platform to ensure quality, improve performance and scalability, and to ensure our partners and ISVs can extend the solution to meet retailers' needs.

Translations for charges codes in POS

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 1, 2019	Oct 2019

Business value

Charges codes can now be used in point of sale (POS) to add additional charges to POS orders and order lines. The translations that can be defined for these charges codes will be made available to the POS application to allow a user to see the description of the charges in their configured language.

Feature details

If translations have been defined on charges codes in headquarters, the data can be pushed to the channel database and shown to users based on their configured POS user interface language setup.

See also

Omni-channel advanced auto charges (docs)

Enhancements to Retail statement posting

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✓Aug 2, 2019	Oct 2019

Business value

In Microsoft Dynamics 365 Retail, the statement posting process is used to account for the transactions that occur in Cloud point of sale (POS) or Modern POS (MPOS). This process is an integral and vital function of a physical store operation because all the transactions in the store in terms of sales, payments, cash movements, and so on for a business day are reflected back to the headquarters (HQ) through this process. All key daily reporting that personnel in the HQ rely on for decision making such as sales by store for a day, collections by store for a day, inventory movements for different products and categories, and so on are made available through the statement posting process.

The statement posting process also plays a pivotal role in the loss prevention function of a retail organization because data from statement posting is used by the sales audit clerks to monitor and track issues and patterns around fraud and loss prevention. Given that, it is imperative that any retail organization with physical stores has a reliable and performant statement posting process.

Feature details

This feature will enhance the current statement posting process in the ways described here.

Data fidelity checker

The reliability of a statement posting process is highly dependent on the quality of the data that feeds this process. This data is generated and sent over from the retail stores based on transactions in the first-party or third-party POS systems. It is often seen that the fidelity of the data that comes from the store is questionable due to factors like bugs in the POS client, which writes inconsistent data to the store database or data brought in from a third-party POS system through the integration framework. This creates issues and bugs in the downstream process of statement postings.

To overcome these challenges, the data fidelity checker will check the data for omissions and anomalies and only those transactions that pass the validation will be included in the statement process. The following are some of the types of validation that the data fidelity checker will perform (this is not an exhaustive list):

- Validate that gift card items are not associated with return lines.
- Validate that the records in the discount table match the discount amount in the retail transaction line tables for every transaction.
- Validate that the amount on the retail transaction payment lines add up to the payment amount on the header retail transaction table.
- Validate that the records in the tax table match the tax amount in the retail transaction line tables for every transaction.

The data fidelity checker feature will also allow a user to fix transactions that are not consistent with the expectations set for auditing for traceability and reconciliation purposes.

Trickle feed order creation (Public Preview)

The current statement posting process is managed in two major parts:

- Based on the data synchronized to the HQ, an “inventory job” reserves the inventory for products at a defined recurring schedule.
- At the end of the day, when the stores are closed and the end-of-day operations are performed in the store, the remaining data is synchronized to the HQ. Based on a defined schedule, the system creates a statement document for every store and, when this statement document is posted, the system removes the reservation for inventory created and then creates sales orders, payment journals, and ledger journals in the system.

As evident from the above points, only temporary inventory reservations are created during the day. These inventory reservations are then removed at the end of the day and all transactions are processed as sales orders; new inventory transactions are created along with other transactions at the end of the day. There is no processing of these transactions happening during the day and all of them are back-loaded to the end of the day. This creates a situation where large transactions have to be processed in a limited time window and results in phenomenal load and locks, which can result in statement posting failures.

To address these issues, the following improvements will be made to the statement posting process:

- Deprecate the “inventory job” that creates temporary reservations.
- Create a new job that will, at a predefined schedule, create sales orders, invoice them, and create, post, and apply payments for all the transactions that are synchronized to the HQ at that point of time. In addition, it will also create any ledger journals that need to be created for discounts, gift cards, and so on.
- The statement document that gets created at the end of the day will only be used to calculate and post any counting variances.

Handling of return lines

To ensure that the return lines are posted with the correct return cost, the current retail statement posting process requires the original sale to be posted before allowing the return posting. However, in scenarios where a statement for the original sale is not posted, then the statement associated with the return transaction also cannot be posted. This results in statements getting backed up and involves users trying to figure out the dependency before posting them manually in the correct sequence. To resolve this and not enforce chronological dependency between the statements, the returns will be posted leveraging the inventory costs from the business date of the original sale.

Handling of batch-controlled items

For batch-tracked items, Retail POS does not support the capture of batch numbers at the time of sale. However, batch numbers are required while posting the sales of these products in the HQ. The current statement posting framework picks an already existing batch number at the time of statement posting. However, in scenarios where quantity with batch numbers does not exist for these products, the statement posting process fails even when negative inventory is turned on for these products. This feature will ensure that statement posting is not blocked for batch-tracked items if the inventory is zero or the batch number is not available if negative inventory is turned on for these items.

See also

Configure and run jobs to post statement (docs)

Improved CDX scalability through Cloud Async Client

Enabled for	Public preview	General availability
Users, automatically	✓ Aug 2, 2019	Oct 2019

Business value

Commerce Data Exchange (CDX) is the critical process of generating, making available, downloading, and applying crucial business data to Channel databases and Offline databases. This unseen core architecture is vital and must function with speed and efficiency. This feature migrates the Async Client out of headquarters to better use the full complement of Azure capacity. This feature enhances the scalability, performance, and availability of the CDX architecture to more quickly generate data, more efficiently make it available, and enhance bandwidth to Async Clients within Modern POS for the offline database or to the Channel database.

Feature details

CDX is no longer directly a part of headquarters. By enhancing this into its own Azure service, there are no resources to compete with. Instead, the full scalability and strength of Azure is behind it to give the fullest complement of current and future improvements possible.

Modern POS offline availability improvements

Enabled for	Public preview	General availability
Users, automatically	✓ Aug 2, 2019	Oct 2019

Business value

Offline functionality in Modern POS (MPOS) is critical to business continuity and continuous store operations. MPOS must be available whenever needed, and as a result, it is critical that offline mode is provided for the broadest set of scenarios. This feature further incorporates additional scenarios enhancing the already robust MPOS availability.

Feature details

This feature further expands the seamless offline functionality that exists in MPOS. Expanded scenarios include the ability to switch to offline manually prior to signing in to MPOS. This enables the ability to go offline and continue using POS operations even in disaster scenarios.

The sign-in process is where the largest number of scenarios could occur to cause the terminal to switch to offline. To accommodate this, we have implemented an offline configuration that can be enabled or disabled in headquarters for advanced scenarios where MPOS will more quickly and more frequently switch seamlessly to offline during sign-in. For example, when a cashier or manager signs in to the application.

Numpad to remain on-screen in POS inventory receiving form

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 2, 2019	Oct 2019

Feature details

As part of this feature, we will bring back functionality that was available in point of sale (POS) in Retail version 7.2. This functionality allowed for the numeric keypad (numpad) to appear at all times on the product receiving form. Having the numpad always available helps improve the efficiency of scanning product barcodes as part of POS receiving. This feature was removed after Retail version 7.3 due to screen redesign, and is being brought back in this release.

See also

Store inventory management (docs)

POS and headquarters extensions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 2, 2019	Oct 2019

Business value

Many retailers need or choose to extend Dynamics 365 Retail to modify the existing business logic or add some new feature to the product to meet their business goals. In the point of sale (POS), commerce runtime (CRT), and headquarters (HQ), we are adding more extension points to support custom business scenarios. The goal of this feature is to add the necessary core extension points in the product to support extension scenarios.

Feature details

Framework enhancements

After moving toward the binary-based extension model, we are wrapping and exposing all our core POS logic and user interface (UI) controls as SDK (APIs) to help the extension to easily consume and override our logic. Without these APIs, it will be difficult for the extension to write some custom logic. In some cases, the extension has to rewrite some of the existing code or write too many lines of code to do a simple scenario. To avoid this and to reduce the number of lines of code, we're introducing more advanced APIs and configuration-driven development to simplify the overall development process.

POS UI and API extension

We are continuously enhancing the POS framework to add more POS APIs to consume our logic in extension and UI extension points to add custom columns, app bar buttons, and custom controls in core POS views.

POS overridable requests and triggers

New overridable requests are added in POS to override the POS workflow or POS business logic and to add custom logic or validation. POS trigger framework helps you to run custom logic before or after core POS logic. With this new pattern, developers can easily customize any workflow in POS.

See also

Retail POS APIs (docs)

One Version – Auto-update for Retail Cloud Scale Unit

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	Oct 2019

Business value

This feature will alleviate the need for IT professionals in a retail organization to manually apply updates. Auto-updates will enable customers to always be up to date with the latest system improvements and features.

Feature details

This feature will enable auto-update for Retail Cloud Scale Units. You can choose from one of three delivery mechanisms for auto-updating Retail Cloud Scale Units:

- **Scheduled updates**: Retail Cloud Scale Units, along with the rest of the environment, are updated on a scheduled monthly basis.
- **Early access**: If you opt in to this program, you will get early access to updates and will have the ability to manually update Retail Cloud Scale Units before the scheduled auto-update time.
- **First release**: If you opt in to this program, your Retail Cloud Scale Units, along with the rest of the environment, will be auto-updated as soon as the monthly release is available. You will not be able to specify an update schedule if you opt in to the First release program.

This feature will not include auto-update capability for components installed in-store, such as Modern point of sale (MPOS), Retail Store Scale Unit, or hardware station.

Store Scale Unit improvements

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 2, 2019	Oct 2019

Business value

A Retail Store Scale Unit provides a retailer with an in-store (on-premises) deployment option to help ensure uptime and reduce latency in locations with connectivity and network infrastructure issues. It is important that this scale unit maintains reliability and security at all times. To fulfill this need, it is critical for the usage of the scale unit to continue when connectivity is limited or nonexistent.

Feature details

This feature has been supported for many releases now and has been used by many retailers worldwide. However, there are some design limitations that prohibit the use of the scale unit as needed. This investment reduces the dependency a Retail Store Scale Unit has with back-office (headquarters) connectivity when renewing authentication tokens, while still maintaining security. This functionality will allow point of sale (POS) to function in cross-terminal scenarios even when the back office is not available, providing greater offerings and depths of hybrid-style deployments.

Product Recommendations in POS

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Nov 2019

Business value

Product Recommendations is a transformative business application that spans across all retail spaces to create rich, engaging, and tailored product discovery experiences. Product Recommendations enables customers to easily and quickly find products they need and want (relevant), find more than they had originally intended (cross-sell, upsell), all the while having an experience that serves them well (satisfaction). For retailers, the discovery is powered by a variety of technologies at large scale (ML-AI, algorithms, humans, or a hybrid) that create conversion opportunities across all customers and products, resulting in more all-up sales revenue and end-customer satisfaction.

Feature details

The Product Recommendations service uses transactions data and product information to generate machine learning and trending lists appropriately scoped for the respective retail channel.

Types of recommendations lists and specific examples include:

- Transaction screen recommendations: “Frequently bought together” list.
- Product details page (PDP) recommendations: contextual “Recommended Products” list, leveraging the product as seed.
- Customer details page recommendations: contextual "Recommended Products" list, leveraging the customer's wish list as seed.

All of the lists have the capability for retailers to make amendments to include specific products at the beginning of the list or exclude unwanted items. This functionality combines the power of AI with human knowledge.

By making omnichannel recommendations available, retailers can increase sales revenue and user satisfaction by providing an easy product discovery experience for shoppers.

Regression Suite Automation Tool for POS

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Sep 3, 2019	Nov 2019

Business value

Retailers or partners can use test recorder and business process modeler (BPM) in Lifecycle Services (LCS) to create user acceptance test libraries for point of sale (POS). Task recorder is a powerful tool for recording test cases. The test cases can then be organized by business process using BPM. BPM can be synchronized with Azure DevOps to automatically create test cases (including test steps) in an Azure DevOps project. Azure DevOps can then serve as a test configuration and test management tool where users can create targeted test plans and test suites, manage the execution of tests, and investigate results. The test can support omnichannel scenarios; for example, create an order in Retail and pick up in a store using the POS.

Feature details

The following is an example of the end-to-end flow that is available with this functionality:

- Author and execute business cycle tests on any environment that can access POS and via a web browser.
- Run tests against sandbox environments with a copy of your production database.
- Record once, play back multiple times with different data sets, different legal entities.
- Validate against expected values.
- Chain-test cases (end-to-end test) by passing parameters from one test case to the next.
- Use Azure DevOps to manage test suites, test runs, and investigate test results.
- Author and distribute by doing the following:
  - Configure the test plan.
  - Execute tests and manage results.

See also

Test recorder and Regression suite automation tool for Retail Cloud POS (docs)

Secure access to secrets

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Sep 3, 2019	Nov 2019

Business value

This feature will enable a standardized and secure mechanism for customizations to access customer-owned secrets using Azure Key Vault. Customizations hosted in Retail Cloud Scale Unit (RCSU) will be able to access a customer-owned key vault to securely retrieve secrets and use them—for example, to connect to external systems. This will provide a secure and manageable means of using secrets and credentials within customizations.

Feature details

This feature will enable an IT pro to securely use configurations and secrets using Azure Key Vault for integrating with third-party systems within Dynamics 365.

See also

Manage secrets for Retail channels (docs)

E-commerce inventory API improvements

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Business value

Businesses need reliable, performant APIs to obtain estimated on-hand item inventory availability.

Feature details

New APIs will provide an estimation of on-hand inventory for a requested item and warehouses. These APIs replace the existing GetProductAvailabilities and GetAvailableInventoryNearby APIs that are currently in-market. These new APIs have improved calculation logic and caching to improve performance.

Additionally, new parameters will uptake these new APIs as well as turn off the existing expensive logic of the current APIs that attempted to find the "best" warehouse to source the cart order lines based on default order settings for the item. This logic will not be in the new APIs. Organizations can choose to use our Distributed Order Management functionality in the future to enable optimized fulfillment location selection for non-in-store pickup saleslines; therefore, this expensive logic will no longer be part of the new APIs.

Hide designated pickup, carryout, and electronic modes of delivery from ship-all and ship-selected processes in POS

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Feature details

This feature will give flexibility to retailers who might not want to see "non-carrier" delivery modes appearing in the shipment configuration screens in POS. Currently, if a designated "pickup," "carryout," or "electronic" mode of payment is acceptable for the item, channel, and delivery address combination, those payment modes will appear as a selection option during the "ship all" or "ship selected" operation. For retailers who prefer not to have these types displayed in this shipment creation flow, a new parameter will be available to allow these types of modes of delivery to be hidden from the mode of delivery selection display.

In-store components mass deployment

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Nov 2019	Jan 2020

Business value

To use hardware with Cloud point of sale (POS), a hardware station is required. With larger businesses, massive deployment and installation of hardware stations have become unmanageable. This feature will not only dramatically reduce the difficulty of initial and long-term deployment and maintenance, it will enhance the flow of hardware stations that increases reliability and resiliency.

Feature details

These new features allow users to silently perform a mass deployment of the hardware station. Customers can choose the deployment tool of their choice (such as System Center) to deploy and service these components. Additionally, because merchant account information is critical to hardware station functionality, improvements will be made to allow the required information to be downloaded automatically through Modern POS (MPOS) or Cloud POS. This will provide improvements to reliability and resiliency over time for the hardware station.

Financial reconciliation of retail transactions in the store (Public Preview)

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Feb 2020

Business value

In a retail store, store managers are accountable and responsible for all aspects of cash handling and reconciliation in the store. At the end of their shift, they are required to reconcile and post the cash entries for their shift. Having the capability to do so in the POS client is a key capability that is needed by the store managers to perform their responsibilities.

Feature details

This feature will only work with the trickle feed order creation process and will be driven by a parameter for retailers to decide if they want to create financial statements in the MPOS/CPOS client or in the Retail headquarters. This feature will enable store managers to:

1. Create financial retail statements for their shift in MPOS/CPOS.
2. Make adjustment entries for cash, as needed, using the currently available cash management transaction types.
3. Post financial retail statements in MPOS/CPOS.
4. Use financial statements posted in MPOS/CPOS and post the same in Retail headquarters.

This process will eliminate the need to create and post financial statements in Retail headquarters.

Environment history for Retail Cloud Scale Unit

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Feb 2020	Feb 2020

Business value

This capability is valuable for IT personas when troubleshooting issues and working with Microsoft support. The environment history serves as an audit trail of key operations performed on an environment.

Feature details

This feature will enable an IT Pro persona operating on environment configuration in the Lifecycle Services portal to view the history of system operations related to Retail Cloud Scale Unit (RCSU). This will include operations such as new scale unit deployment, update, or extension deployment. Users will be able to view time stamp, user, version, and related metadata details as part of the history.

Auto-refresh device activation token

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Jan 2020	To be announced

Business value

This will alleviate the need for retailers to reactivate POS devices in their stores each time the activation tokens expire. This feature will also improve security by reducing the default token expiration period, which will alleviate the need for retailers to manually configure this value.

Feature details

This feature will introduce auto-refresh capabilities for device activation tokens, using industry-standard JSON web tokens.

Industry excellence

Overview

Key areas of investment include centralized and in-store inventory management enhancements as well as omnichannel management and order processing improvements.

Enhancements for product discoverability

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

Product discoverability is a quick and easy way for a retail customer to be able to discover products by browsing through categories and using search and filtering. Product discovery is a primary tool for customer interaction across all retail channels.

Customers are used to web search engines, sophisticated e-commerce websites, and social apps that offer relevant search suggestions as you type, faceted navigation, highlighting matching terms, and more—all with near-instantaneous response times. If consumers do not find the right product quickly enough, they do not hesitate to move to another retail site that offers better performance.

This investment for enhancing product discoverability in Dynamics 365 Retail will empower retailers to meet expectations of their consumers by assisting them in their shopping journey, which would help retailers grow their share of consumer retention and conversion rates across all channels, including both e-commerce and POS.

Feature details

Current support for search, browse, and filter using refiners available with our in-market solution is slow and not particularly robust. New functionality in Retail will provide better product discoverability, and discovery will be scalable and performant.

- **Browse and search**: Search relevance and performance is key to our omnichannel experience, as product discovery relies primarily on search for information retrieval and content navigation. An effective and efficient search helps increase conversion.
- **Refiners/faceted navigation**: Faceted navigation helps users browse for content more easily by filtering on refiners that are tied to terms in a term set. By using faceted navigation,

you can configure different refiners for different terms in a term set without having to create additional pages.

- **Immersive auto-suggest**: Current auto-suggest shows only keywords that trigger search for the matching keyword. With new enhancements, users will be able to surface links to products, directly navigable to product details. There will also be support for "keywords match in various categories," which enables users to see the count of matching keywords in categories and trigger the search for the keyword for that category.
- **Sort**: With this enhancement, users will be able to sort search, browse, and refine search results by details, such as price, product name, product number, new, top-selling, or recently added.

Merchandising improvements – support to custom sort the display order of categories

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 2, 2019	Oct 2019

Business value

As more businesses and larger organizations are leveraging the Dynamics 365 Retail functionality for online, call center, and store channels, the Retail solution needs to grow to support the more complex business processes that these organizations require.

By adding support for some of these complex business scenarios to our standard product, we eliminate the need for more complex extensions and customizations that can delay the organization's ability to quickly configure and be live on a new selling channel.

In order to provide a seamless omnichannel merchandising solution and provide a consistent set of experiences to our retailers for configuration of products, categories, and attributes for any retail channel, we must re-factor some of these areas to ensure consistency of merchandising features and the flow of catalog-, product-, and attributes-related data in all channels.

Feature details

Custom display sort order for various merchandising entities empowers the merchandising manager to configure the custom sort order for various merchandising entities across all user clients including headquarters and call centers.

The following scenarios will be supported:

- Configurable sort order for **categories** in the channel **Retail product hierarchy**.

- Configurable sort order for **categories** in the channel **Channel navigation hierarchy**.
- Configurable sort order for **categories** in the **Supplemental hierarchies**.

See also

Change the sort order for merchandising entities (docs)

Management of customer registration numbers from POS for India

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Sep 6, 2019	Nov 2019

Business value

In many cases, having a GSTIN number specified for a named customer is required in retail sales. Without the ability to manage customer registration numbers from Retail point of sale (POS), the only workaround is to manage the registration numbers from retail headquarters, which leads to additional efforts and significant delays due to data synchronization. This is especially critical when a new customer record is being created from POS.

Feature details

This functionality provides a user with the following capabilities:

- Enter a customer registration number when creating a new customer record from POS. Synchronize the data to retail headquarters.
- View and modify customer registration numbers in POS.
- Search by customer registration number in POS.
- Print customer registration numbers in receipts for retail sales.

Geographic areas

This feature will be released into the following Microsoft Azure geographic area:

- India

For more information about geographic areas, data centers (regions), data storage, and replication, select **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

See also

[Manage customer registration numbers from POS](#) (docs)

Call center localization for Eastern Europe

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Jan 2020

Business value

This functionality allows customers operating in Czech Republic, Estonia, Hungary, Latvia, Lithuania, and Poland to automate their call center operations in these countries or regions using Dynamics 365 Retail.

Feature details

Call center localization for Eastern Europe includes support for petty cash payments and prepayments per local requirements in Czech Republic, Estonia, Hungary, Latvia, Lithuania, and Poland.

Clienteling – Empower sales associates to become trusted advisors and establish long-term relationships with customers

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Business value

Many retailers, especially high-end specialty retailers, want their sales associates to form long-term relationships with their key customers. The sales associates are expected to know their customers' likes and dislikes, purchase histories, product preferences, and important dates, such as anniversaries and birthdays. The associates need a place to capture and easily find such information.

Moreover, a retailer engages with the customer using multiple applications (for example, e-commerce for purchases, social media for sentiment tracking, Dynamics 365 Sales for presales, and Dynamics 365 Customer Service for post-sales). All this data can help with valuable customer insights that can empower the sales associate to better understand their customers and thus better meet their needs.

Feature details

Associates can use the Client book to add their key customers and capture additional information, such as birthdays, anniversaries, likes, and dislikes. With this investment, the retailer can configure whether the captured information is private to the sales associate who manages the customer or is available to all associates. Additionally, if the retailer uses Dynamics 365 Customer Insights, then the retailer will be able to choose the insights that should be displayed in the point of sale (POS).

Sales associates will be able to take notes on the customer profile that will leverage Common Data Service as the data source so that any other application that leverages Common Data Service can show the notes, and the notes taken in the other applications will be displayed in the POS.

Lastly, sales associates will be able to create a collection of products and send it to their customers using the customers' preferred means of communication (for example, email, WhatsApp, WeChat, and Messenger). Associates will also be able to see analytics around the effectiveness of the communications sent to the customer.

External gift card support in call center

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Business value

Many merchants choose to have a third party manage their gift card services in order to ensure that the cards can be redeemed across legal entities and financial back-end systems. With this new capability, external gift cards will be supported in the call center through the payments SDK. The new capabilities through the SDK will also be leveraged by the Dynamics 365 payment connector for Adyen to support external gift cards out of the box in the call center.

Feature details

This feature will add out-of-the-box support for configuring external gift card payments for use in call center channels. In addition to the required SDK changes needed to support external gift cards, several changes will be made in the back office to support setup of external gift cards in call center. The Dynamics 365 payment connector for Adyen will also be updated to support external gift cards out of the box.

Merchandising improvements – add support for custom order for categorized products, related products, and dimension groups

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Business value

As more businesses and larger organizations are leveraging the Dynamics 365 Retail functionality for online, call center, and store channels, the Retail solution needs to grow to support the more complex business processes that these organizations require.

By adding support for some of these complex business scenarios to our standard product, we eliminate the need for more complex extensions and customizations that can delay the organization's ability to quickly configure and be live on a new selling channel.

In order to provide a seamless omnichannel merchandising solution and provide a consistent set of experiences to our retailers for configuration of products, categories, and attributes for any retail channel, we must re-factor some of these areas to ensure consistency of merchandising features and the flow of data related to catalog, product, and attributes in all channels.

Feature details

Custom "Display sort order" for various merchandising entities

The custom "Display sort order" for various merchandising entities feature will allow the merchandising manager to configure the custom sort order for various merchandising entities across all user clients including headquarters and call centers.

The following scenarios will be supported:

- Configurable sort order for **Products** associated with category in **Navigation hierarchy of a channel**.
- Configurable sort order for **Products** associated with category in **Navigation hierarchy of a catalog**.
- Configurable sort order for **Related products** associated with an **Individual product**.
- Configurable sort order for **Dimension groups** for a given **Product master**.

Merchandising improvements – add support to configure and observe the custom order for product attributes, refiners, and values

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Business value

As more businesses and larger organizations leverage the Dynamics 365 Retail functionality for online, call center, and store channels, the Retail solution needs to grow to support the more complex business processes that these organizations require.

By adding support for some of these complex business scenarios to our standard product, we eliminate the need for more complex extensions and customizations that can delay the organization's ability to quickly configure and be live on a new selling channel.

In order to provide a seamless omnichannel merchandising solution and provide a consistent set of experiences to our retailers for configuration of products, categories, and attributes for any retail channel, we must re-factor some of these areas to ensure consistency of merchandising features and the flow of data related to catalog, product, and attributes in all channels.

Feature details

Custom "Display sort order" for various merchandising entities

The custom "Display sort order" for various merchandising entities feature will empower the merchandising manager to be able to configure the custom sort order for various merchandising entities across all user clients including headquarters and call centers.

The following scenarios will be supported:

- Observe the display order for **Attributes** defined in **Attribute groups** for products.
- Observe the display order for **Attributes** defined in **Attribute groups** for refiners.
- Configurable sort order of **Attribute values** for **Fixed list** attribute type.
- Observe the display order for **Attribute values** for **Fixed list** for refiner values.

- Observe the display order for Refiner values defined for Dimension values, fixed list attribute types, and categories.

Tender-based discounts

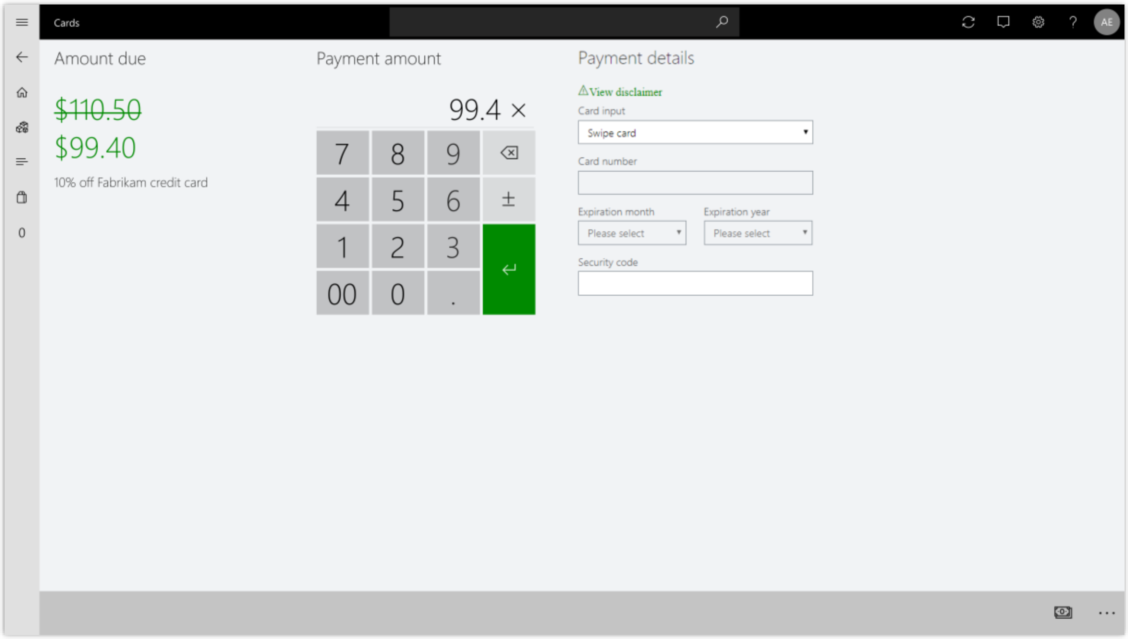
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	Jan 2020

Business value

It's a common practice for large retailers to release private-branded credit cards. Retailers benefit from getting preferred rates from the banks, and according to a study by GE Capital Retail Finance, such credits cards result in an increase in the store visit frequency, thus directly improving the bottom line of the retailer. As a result, retailers are motivated to increase the usage frequency of their credit cards, and tender-based discounts are a commonly used motivator. Similarly, some retailers want to motivate the customers to pay by alternate means (for example, cash, check, or loyalty) and thus reduce the expense in credit card processing fees. Such retailers want to create discounts for these alternate tender types.

Feature details

With this investment, we will allow the retailer to configure discount percentage on a selected tender type. When a tender with configured discount is selected, the customer will see the discounted amount as the new balance. The customer can choose to do partial payment or a full payment and would accordingly get the appropriate discount amount. The discount information can be printed on a physical paper receipt or sent via email using a virtual receipt.



Calculating tender discount

Improved inventory (inbound and outbound) operations in store

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Nov 2019	Jan 2020

Business value

This feature will improve upon the point of sale (POS) application by adding new operations to allow for receiving inventory and the creation or fulfillment of transfer orders. These new operations will allow these store inventory tasks to be performed in a more usable and reliable way compared to the capabilities that have historically existed in the POS application.

Feature details

This feature will create new user interfaces to specifically support workflows common to retail receiving and transfer order creation and fulfillment scenarios. These new interfaces will be optimized for bar code scanning and provide an easier way to view items on the related inbound/outbound documents. Additional features will also be added to enhance and validate the data being entered, to ensure smooth processing and error handling when posting receipts or shipments.

Dynamics 365 Commerce

Overview of Dynamics 365 Commerce 2019 release wave 2

Dynamics 365 Commerce—built on the proven Dynamics 365 Retail capabilities—delivers a comprehensive omnichannel solution that unifies back-office, in-store, call center, and digital experiences. Dynamics 365 Commerce enables you to build brand loyalty through personalized customer engagements, increase revenue with improved employee productivity, optimize operations to reduce costs and drive supply chain efficiencies, ultimately delivering better business outcomes.

This release enables the creation of digital experiences using built-in web authoring and development tools to produce engaging and intelligent digital storefronts. A connected marketing and headless commerce platform further enable the seamless management of content, assets, promotions, inventory, and pricing across all channels.

- Everything to build and run digital commerce: Streamline your business and end-to-end commerce solution that scales to your needs across traditional and emerging channels. Built-in web authoring and development tools enable you to create engaging intelligent digital storefronts, while a connected marketing and headless commerce platform enables seamless management of content, assets, promotions, inventory, and pricing across channels.

- Build loyalty and exceed customer expectations: Use clienteling tools to gain a comprehensive view of your customer and respond to their needs at every level of engagement, based on customer profile, history, and preferences that flow across physical and digital channels. Empower your employees to foster lasting relationships through AI-driven recommendations, customer insights, and loyalty programs that elevate brand appeal.

- Flexible and intelligent omnichannel experience: Unify physical and digital commerce by providing consistent experiences to customers across cloud search and discovery, product reviews, wish lists, inventory, gift cards, and loyalty. Allow customers to purchase when, how, and where they want, on any device—while providing choice around modern payment methods and product collection or delivery.

- Streamline operations using AI in the cloud: Drive omnichannel commerce experiences and integrated, optimized back-office operations through ingrained, pervasive, and context-aware cloud intelligence. Use advanced merchandising, inventory management, distributed order management, and pricing and promotion to innovate and stay ahead of competition. Derive insights by visualizing and analyzing comprehensive and consistent data across all aspects of your business. Use AI-driven technologies to provide accessible websites, protect your business against payment fraud, and efficiently moderate user-generated content like ratings and reviews.

Learn more about our Dynamics 365 Retail capabilities.

What's new and planned for Dynamics 365 Commerce

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Extensibility	Users by admins, makers, or analysts	Oct 2019	-
Merchandising and storytelling	Users by admins, makers, or analysts	Oct 2019	-
Product recommendations and personalization	Users by admins, makers, or analysts	Oct 2019	-
Provisioning and environment management	Users by admins, makers, or analysts	Oct 2019	-
Ratings and reviews	Users by admins, makers, or analysts	Oct 2019	-
SEO	Users by admins, makers, or analysts	Oct 2019	-

Feature	Enabled for	Public preview	General availability
Store starter kit	Users by admins, makers, or analysts	Oct 2019	-
UX platform	Users by admins, makers, or analysts	Oct 2019	-

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

Extensibility

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

Marketing teams will need to leverage third-party services and data within their e-commerce sites. Our latest extensibility feature provides in-house developers and system integrators (SIs) the ability to create extensions that enable merchandisers and marketers to consume and present these services and their data in their websites.

Feature details

When a retailer needs customization beyond the e-commerce starter kit, Commerce supports extensibility with less development time and investment. Commerce allows customizations to provide the same value to the operations team as the e-commerce starter kit, including UX modules that adapt to different looks in different markets and service integrations that activate with the flip of a switch.

With the extensibility story, the retailer's development team has the option to create new templates, new modules, new variants for a module, or use the open source community and take an existing piece of code (or module) and modify it. The goal is to ensure the developer's time is productive, and to simplify making changes.

In addition to adding new UX, it is also easy to package complex third-party service integrations so that the retailer can quickly and confidently enable them. For each type of service, from ratings and review to experimentation to analytics, the retailer is able to pick the provider per site and market and change it later with a single configuration. Does your targeting provider require JavaScript on every page, a server-side call for the user's segment, and a special API to fetch recommended products? The platform orchestrates these pieces so that admins activate or deactivate them all together in one step.

Merchandising and storytelling

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

Marketing teams will need an authoring tool with product and marketing web page editing capabilities. This tooling should be deeply integrated with Dynamics 365 for product and list management and the e-commerce CMS for marketing content and image and video assets.

Feature details

Modern e-commerce solutions provide rich and integrated merchandising and storytelling experiences that work seamlessly across a range of devices and operating systems. These solutions allow retailers to drive the learn-and-buy experiences that lead to high conversion rates.

Dynamics 365 Commerce enables retailers to easily create a rich online presence that is tailored to fit their corporate brand and messaging style, while working directly with their Dynamics 365 online product channel. Each online presence will support automated or curated home pages as well as automated category landing pages and product pages.

Retailers will also be able to extend their product pages to adorn them with customized storytelling (for example, marketing messages, images, videos, 360 product tours, and immersive experiences). These adornments have been designed to provide a significant increase in conversation rates and revenue. Using a template-based authoring approach, in conjunction with a rich collection of prebuilt modules, retailers instead of developers will be able to control their brand and their message through easy-to-use authoring tools. These tools will enable a user to easily locate a home page or product page, open them in a what-you-see-is-what-you-get (WYSIWYG) editor, apply storytelling adornments, and then publish them to the public for immediate consumption.

Retailers will be able to view and manage the impact of their message in terms of both views and conversions via the third-party business analytics and telemetry capabilities that can be configured within Dynamics 365.

Some of the many new features will be:

- Easy template creation and management.
- Easy page creation and management.
- Ability to manage and adorn product pages with storytelling content.
    - Creation of reusable storytelling fragments and product lists that can be used across a site.
- Easy asset management for images and videos, including integrated video transcoding and streaming.
- Ability to enrich the marketing experience with third-party data sources and capabilities.

Retailers will be able to leverage their developer resources to further customize or extend the templates and modules they use in their site. The rich extensibility feature set will further enable marketers to tailor their message and experience. Retailers will be assured of compliance with the General Data Protection Regulation (GDPR) and accessibility standards through platform enforcement of privacy (including cookies) and a centralized reporting dashboard.

Product recommendations and personalization

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

Recommendations is a transformative business application that spans all retail spaces to create rich, engaging, and tailored product discovery experiences. Recommendations enables customers to easily and quickly find products they need and want (relevant), find more than they had originally intended (cross-sell, upsell), all the while having an experience that serves them well (satisfaction).

For retailers, the discovery is powered by a variety of technologies at large scale (ML-AI, algorithms, humans, or a hybrid) that create conversion opportunities across all customers and products, resulting in more all-up sales revenue and end-customer satisfaction.

Feature details

The Dynamics 365 Commerce Recommendations service uses transactions data and product information to generate machine learning and trending lists appropriately scoped for a retail channel.

Types of recommendations lists and specific examples include:

- Personalized recommendations: "Pick for you" for each signed-in end customer who has purchased something from the store in the past.
- Cart and checkout recommendations: “Frequently bought together” lists.
- Product detail page (PDP) recommendations: “People also buy these.”
- Landing and browse pages: “New,” “Best selling,” “Trending.”
- Human-curated lists: “Spotlight,” collections created by retailers (for example, “Mother’s Day sale”).

All of the lists have the capability for retailers to make amendments to include specific products at the beginning of the list, or exclude unwanted items, thus marrying the power of AI with human knowledge.

By making omnichannel recommendations available, retailers can increase sales revenue and user satisfaction by providing an easy product discovery experience for shoppers.

Provisioning and environment management

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

IT engineers or system integrators (SIs) need a way to enable and provision the e-commerce feature set. The provisioning feature will allow IT engineers and SIs to complete this work in Dynamics Lifecycle Services (LCS) and provision a fully functional CMS, authoring, and rendering environment.

Feature details

In today's fast-paced business environment, the time to market and the ability to react quickly to an ever-changing marketplace are essential. Administrators working with these companies need the ability to provision and decommission environments at will. Dynamics 365 Commerce will have seamless integration with the Dynamics 365 Lifecycle Services portal.

With this, administrators for a retailer will be able to provision a new e-commerce environment on demand, which will be completed through the automated provisioning services. Once provisioned, the administrator will be able to manage and deploy customizations to the different environments. This automated approach to environment provisioning and management would represent significant cost savings to a retailer because it means, in addition to reduced time to have the new environment up and running, the personnel necessary to maintain the environments is significantly reduced.

Ratings and reviews

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

Customers have an expectation to see customer-driven product ratings and reviews presented to them as part of the learn-and-buy experience in an e-commerce site. This feature will enable customers to rate products and provide reviews. The reviews can be moderated by the merchandising manager and marketing manager to ensure the quality and compliance of their site. The feature will be omnichannel and support the display of ratings and reviews online, in the store, and in the customer call center.

Feature details

Shoppers today expect to voice their opinions on the products they buy, making ratings and reviews a must-have for any e-commerce store. Ratings and reviews should be available across different channels. Dynamics 365 Commerce provides this service out of the box, without requiring a separate provider. It includes a flexible UX with variants for matching your site's look, compelling features such as most helpful and critical reviews, word clouds, world-class scale and performance, and rich administration dashboards for moderation, business intelligence (BI) reporting, and analytics.

Ratings and reviews will not be limited to e-commerce sites. Ratings and reviews will also be provided in the store and in customer call centers so that sales and support staff can inform customers and enable them to make the best purchasing decisions.

SEO

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

A canonical URL is the version of a URL that has been selected by the marketing manager to act as the main URL for a page. As an example, consider a site that has the following two URLs associated with the same page:

contoso.com/womenswear/dresses/pid=9999

contoso.com/sale/clearance/dresses/pid=9999

The marketing manager needs to inform the search engine bots which URL is the most representative URL for the page and define it as the canonical URL. By defining the canonical URL, the link signals for similar or duplicate pages can be consolidated to prevent an e-commerce page or website from being ranked poorly by search engines.

Feature details

A marketing manager might want to increase product discoverability by associating a product with multiple categories within an e-commerce website. Each of these product associations can result in a different and dynamic web page instance, each with their own URL. Each of the page instances will then compete with each other for search engine rank, ultimately starving all of the pages of a healthy search engine rank. To help marketing managers avoid this common SEO mistake, they will be able to designate a single page URL as the canonical URL for the product.

Store starter kit

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

This feature provides in-house developers and system integrators (SIs) with a fully functional demo site that can be leveraged, deconstructed, and used as a reference for creating custom templates, modules, and data providers.

Feature details

Traditionally, building a store on Dynamics 365 required significant time, expense, and developers and continuous investment to ensure interoperability between the front-end and the back-end systems. Rigorous testing and reducing the intake of updates was the only way to guarantee a functional store.

However, with the e-commerce starter kit fully integrated with Dynamics 365, that model is changed. Now, the ability to have a functional store fully integrated with Dynamics 365, running on the latest version of the stack, is a reality with minimal to no cost for upgrades to the latest and greatest offering. The e-commerce starter kit is a reference set of templates and modules that is built on top of the UX platform, and serves as an introductory resource for best practices to build out and maintain a store on the platform.

The e-commerce starter kit will include a reference implementation for a functional store. This reference store can be modified by defining the brand, selecting a theme, and using a collection of proven experiences in the form of modules and templates. Multiple templates, which are customized, are provided for each page type: home page, department page, product details page, search, deals, and so on.

Modules, which can be customized, fit into the template to define the experience, whether the retailer is looking for a list of products, a module to tell a story, image carousel, or the critical area of the product details page we refer to as the "buy box."

The last step is to select a data source for a module. The starter kit will include preconfigured data sources for the Dynamics, CMS, and Asset Manager data sets.

Once a store has been created, it is time to focus on the core goal–optimizing the store to drive business metrics. For a given experience, the store can be customized by leveraging the dev extensibility model to serve the needs of the business. Use experimentation to find out the right balance to best sell products, all by changing a few settings. If a slightly different experience is needed, take a module and change it; all the source code is available.

UX platform

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

Merchandising and marketing managers need an easy and intuitive way to lay out web marketing pages and content. The UX platform provides in-house developers and system integrators (SIs) the ability to create reusable layout templates and responsive modules that support the creation of stunning and profitable websites.

Feature details

In Dynamics 365 Commerce, a retailer's store runs on the same UX platform Microsoft developed to run its own integrated learn-and-buy e-commerce experience (microsoft.com\store). This Azure-built, modern cloud web infrastructure guarantees the retailer the performance, availability, and scale that powers Microsoft's nearly 30 billion page views, half-trillion asset views per month, and $10 billion in annual online revenue.

In the UX platform, the retailer builds the site out of templates and pages such as a home page, department page, and an integrated learn-and-buy product detail page. These pages are made up of modules—a modular piece of UX that know how to display and behave—that follow the constraints of the template the page is associated with. Modules are bound to a data provider that automatically feeds information straight from the Commerce instance, content management system (CMS), or other data repository.

The retailer then applies a theme to control styling, such as colors, borders, fonts, padding, and so on across modules. Themes might change throughout the year. For example, there might be a holiday theme or a back-to-school theme, and the themes are customized to the retailer's brand. Templates, pages, modules, and the content within them reside in the Dynamics 365 e-commerce CMS, which provides authenticated security, versioning, global redundancy, and media streaming capabilities. Data stored in the CMS is consumed by the e-commerce rendering service, which provides rendered HTML that is responsive and flexible to fit all common display sizes.

Dynamics 365 Business Central

Overview of Dynamics 365 Business Central 2019 release wave 2

Dynamics 365 Business Central provides a complete business application solution designed and optimized for SMB organizations. Since its launch in April 2018, Business Central has seen increasing adoption by organizations looking to digitally transform their businesses. In the October '18 update, we updated Business Central to include on-premises deployments as well. The latest version, the April '19 update, brought an update to Business Central that improves the productivity of users.

The independent software vendor (ISV) ecosystem is important for customers who want vertical or horizontal solutions for Business Central. We will accelerate this ISV ecosystem to begin moving new and existing customers to Business Central online. To achieve that goal, the following development pillars define the 2019 release wave 2 update:

- **Service fundamentals**: Laser focus on performance, reliability, supportability, and security is essential to ensure that service quality remains ahead of the growth in service usage. Accessibility, already in a strong position, must be preserved.
- **Modern client**: With the 2019 release wave 2, users access Business Central in the browser, Windows 10 desktop app, mobile apps on Android and iOS, or in Outlook. We accelerate our investment in speed and productivity features for the modern browser experience, achieving a major milestone in its transformation into a world-class desktop experience for new and expert users alike. The 2019 release wave 2 is the first version that does not include the Dynamics NAV Client connected to Business Central (also known as the Windows client). The modern clients now support so many productivity features that the Windows client is discontinued for Business Central going forward. The legacy Dynamics NAV client remains supported in the April '19 update and earlier versions in alignment with the support lifecycle.
- **Modern developer tools**: The 2019 release wave 2 is the first version that does not include the classic development environment (also known as C/SIDE). The modern developer experience based on Visual Studio Code with Azure DevOps, and an AL language that supports an extension-based approach to customization, now supports developing large apps such as the base application from Microsoft, and so C/SIDE is discontinued for Business Central going forward. The classic development environment remains supported in the April '19 update and earlier versions in alignment with the support lifecycle.
- **Empower ISV acceleration**: The 2019 release wave 2 update delivers a set of features designed to simplify ISV development for new solutions and, specifically, for streamlining the

migration from the source code customization model of Dynamics NAV to Business Central. The Dynamics NAV business has been driven by strong vertical ISV solutions, surrounded by add-on solutions. For the 2019 release wave 2 update, our focus will be streamlining the path for ISVs to bring their solutions—and in turn their customers—to Business Central online.

- **Customer migration tools**: After enabling Dynamics NAV ISVs to bring their solutions to Business Central online, the next step is to simplify the journey for existing Dynamics SMB customers coming from Dynamics NAV, Dynamics GP, or Dynamics SL to migrate from their current on-premises solutions to Business Central online. A set of tools already exists; these will be enhanced with the 2019 release wave 2.

Limited extension to the Business Central online localizations is planned for the 2019 release wave 2 in order to prioritize the service fundamentals work ahead of expanding the service footprint. Additional partner-developed localizations will be added following the 2019 release wave 2.

What's new and planned for Dynamics 365 Business Central

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Application enhancements

We will continue to enhance the application through our focus on performance in the most used areas. The Business Central Ideas site continues to be a source for application enhancements.

Feature	Enabled for	Public preview	General availability
Allow non-sequential numbering	Users, automatically	-	Oct 2019

Feature	Enabled for	Public preview	General availability
Cancel reminders and finance charge memos	Users, automatically	✔ Aug 1, 2019	Oct 2019
Carry line descriptions to G/L entries when posting	Users, automatically	✔ Aug 1, 2019	Oct 2019
Create records and convert prospects with better templates	Users, automatically	✔ Aug 1, 2019	Oct 2019
Use the Copy Document function on blocked lines	Users, automatically	✔ Aug 1, 2019	Oct 2019
Aged Accounts Payable includes External Document Number field	Users, automatically	✔ Sep 1, 2019	Oct 2019
Reconcile payables with the External Document Number field	Users, automatically	✔ Sep 1, 2019	Oct 2019

Application lifecycle management

Once partners have customers live on Business Central, there is an immediate need to be able to manage the lifecycle of the customer, the solution, provide support, manage updates, testing, and so on. We will continue our investment in expanding the scope of the tools available to partners.

Feature	Enabled for	Public preview	General availability
Ability to download a database export file	Admins, makers, or analysts, automatically	-	Oct 2019
Detailed notifications for update events	Admins, makers, or analysts, automatically	-	Oct 2019

Feature	Enabled for	Public preview	General availability
Multiple production environments	Admins, makers, or analysts, automatically	-	Oct 2019
Report production outage in the Business Central Administration Center	Admins, makers, or analysts, automatically	-	Oct 2019
Support for technical upgrades	Admins, makers, or analysts, automatically	-	Oct 2019
Support for performant data upgrade from C/AL tables to AL tables	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Empower ISV acceleration

The Dynamics NAV business has been driven by strong vertical ISV solutions, surrounded by add-on solutions. For the 2019 release wave 2, our focus will be on streamlining the path for ISVs to bring their solutions – and in turn their customers – to Business Central online.

Feature	Enabled for	Public preview	General availability
Design for extensibility	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Migrations to Business Central online

This area details our migrations to Business Central online roadmap.

Feature	Enabled for	Public preview	General availability
Enhancements for customer migration tools	Admins, makers, or analysts, automatically	-	Oct 2019

Modern clients

We accelerate our investment in speed and productivity features for the modern browser experience, achieving a major milestone in its transformation into a world-class desktop experience for new and expert users alike.

Feature	Enabled for	Public preview	General availability
Add links to your navigation menu	Users, automatically	✔ Aug 1, 2019	Oct 2019
Add notes and links to data	Users, automatically	✔ Aug 1, 2019	Oct 2019
Enhancements to Excel integration	Users, automatically	✔ Aug 1, 2019	Oct 2019
Filter reports more efficiently	Users, automatically	✔ Aug 1, 2019	Oct 2019
Full keyboard shortcut support	Users, automatically	✔ Aug 1, 2019	Oct 2019
General user experience adjustments	Users, automatically	✔ Aug 1, 2019	Oct 2019
Get overview of all business features	Users, automatically	✔ Aug 1, 2019	Oct 2019
Identify the company by a badge	Users, automatically	✔ Aug 1, 2019	Oct 2019
Longer timeout period for the server connection	Users, automatically	✔ Aug 1, 2019	Oct 2019
Modern clients only for Business Central	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Feature	Enabled for	Public preview	General availability
Personalize actions on your Role Center	Users, automatically	✔ Aug 1, 2019	Oct 2019
Resize columns with fewer clicks	Users, automatically	✔ Aug 1, 2019	Oct 2019
Save and personalize list views	Users, automatically	✔ Aug 1, 2019	Oct 2019
Switch between companies in your Business Inbox in Outlook	Users, automatically	✔ Aug 1, 2019	Oct 2019
Multitask across multiple pages	Users, automatically	✔ Aug 15, 2019	Oct 2019
Customize user profiles without writing code	Users, automatically	✔ Sep 1, 2019	Oct 2019
Enter data with speed and agility	Users, automatically	✔ Sep 1, 2019	Oct 2019
Filter option fields by multiple values	Users, automatically	✔ Sep 1, 2019	Oct 2019

Modern developer tools

For the 2019 release wave 2, Business Central retires the legacy development tool, C/SIDE, and development language, C/AL, replacing them with a modern solution based on Visual Studio Code, Azure DevOps, and an AL language that supports an extension-based approach to customization.

Feature	Enabled for	Public preview	General availability
Convert tables from C/AL definitions to AL table definitions	Admins, makers, or analysts, automatically	-	Oct 2019
Database insights made available in AL	Admins, makers, or analysts, automatically	-	Oct 2019
Translating other extensions	Admins, makers, or analysts, automatically	-	Oct 2019
Access modifiers	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019
Attach and debug next	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019
Base application delivered as AL applications	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019
Filtering XmlPort Objects	Users by admins, makers, or analysts	✔ Aug 1, 2019	Oct 2019
Implementing hierarchical menus	Users by admins, makers, or analysts	✔ Aug 1, 2019	Oct 2019
Improved app dependency handling on build and deploy	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019
More power to developers using Designer	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Service fundamentals

Laser focus on performance, reliability, supportability and security is essential to ensure that service quality remains ahead of the growth in service usage. Accessibility, already in a strong position, must be preserved.

Feature	Enabled for	Public preview	General availability
New Support Request option in the Business Central Administration Center	Admins, makers, or analysts, automatically	-	Oct 2019
Partners can enter support contact details in the Business Central Administration Center	Admins, makers, or analysts, automatically	-	Oct 2019
Lock-free number series	Users, automatically	✔ Aug 1, 2019	Oct 2019
Page background tasks	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019
Surrogate keys	Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

For more information about geographic areas, data centers (regions), data storage, and replication, click **expand all** on the Where your data is located page and find the Microsoft cloud service for this feature.

Application enhancements

Overview

We will continue to enhance the application through our focus on performance in the most-used areas. We will continue to improve the application to make it easier for ISVs to build extensions on top of our applications. The Business Central Ideas site continues to be a source for application enhancements.

Allow non-sequential numbering

Enabled for	Public preview	General availability
Users, automatically	-	Oct 2019

Business value

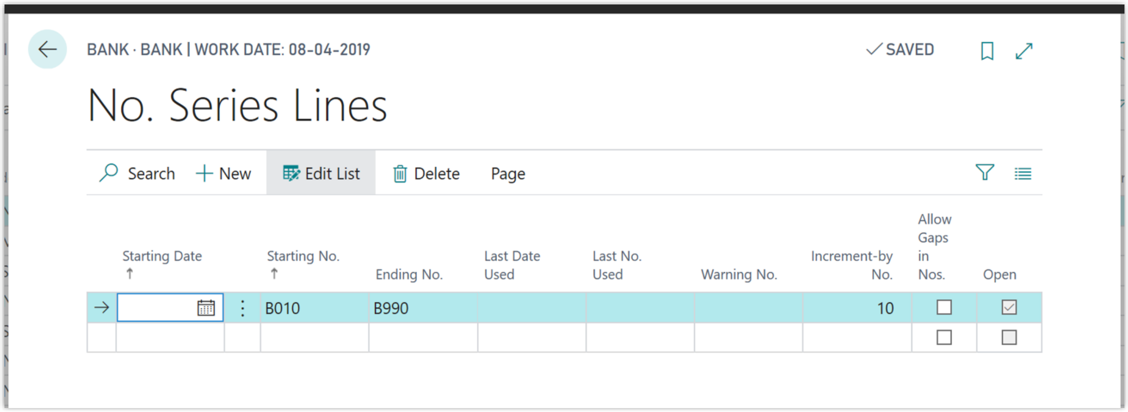
For many types of records, such as customer cards and warehouse activities, it is not a legal requirement that the assigned numbers are in sequence. To improve system performance and to give users flexibility to delete records, you can set up a number series to allow the assigned numbers to not be in sequence.

Feature details

On the **No. Series Lines** page for a number series, you can select the **Allow Gaps in Nos.** check box to enable automatic or manual assignment of numbers without requiring sequential numbers. This avoids potential performance issues that occur when the **No. Series Line** table is locked while the system creates and consumes a new number from a number series. In addition, it gives users flexibility to delete records, such as an obsolete bank account card, and thereby causing gaps in the numbered list of records.

NOTE If you want to allow gaps in certain number series, you should first consult with your auditor or accounting manager to ensure that you adhere to the legal requirements in your country or region.

The non-sequential assignment of numbers leverages the sequencing logic of the SQL server. For more information, see Lock-free number series.



Allow gaps in numbering

Cancel reminders and finance charge memos

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

You can quickly correct mistakes during close-of-period work by canceling issued reminders or finance charge memos.

Feature details

Reminders and finance charge memos are usually created in batches—for example, at the end of the month—to remind your customers of due or overdue invoices. If incorrect information is detected during this busy period, you must be able to quickly correct such errors by canceling issued reminders or finance charge memos.

Tell us what you think

Help us improve Dynamics 365 Business Central by discussing ideas, providing suggestions, and giving feedback. Use the forum at https://aka.ms/bcideas.

Thank you for your idea

Thank you for submitting [this idea](). We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Carry line descriptions to G/L entries when posting

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

When reconciling or auditing data, such as expenses, it is useful to see the source document line description in the general ledger entries.

Feature details

On the **Sales & Receivables Setup** and **Purchases & Payables Setup** pages, you can choose the **Copy Line Description to G/L Entry** check box to define for sales, purchase, and service documents that the description text on lines of type G/L Account is carried to the resulting general ledger entries.

Tell us what you think

Help us improve Dynamics 365 Business Central by discussing ideas, providing suggestions, and giving feedback. Use the forum at https://aka.ms/bcideas.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Create records and convert prospects with better templates

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

It is very important to have a consistent way of creating master data, such as customers, vendors, and items, while also defining how that master data is used in the system. This ensures that subsequent posting and reporting of the master data is consistent and transparent.

Feature details

Configuration templates now allow you to look up template fields' default values directly from related tables. This ensures that the default values that you select when configuring templates are correct when you use templates to create master data, such as customers, vendors, and items. You can now also easily find contact conversion templates that are used to convert contacts (prospects) to customers.

Tell us what you think

Help us improve Dynamics 365 Business Central by discussing ideas, providing suggestions, and giving feedback. Use the forum at https://aka.ms/bcideas.

Thank you for your idea

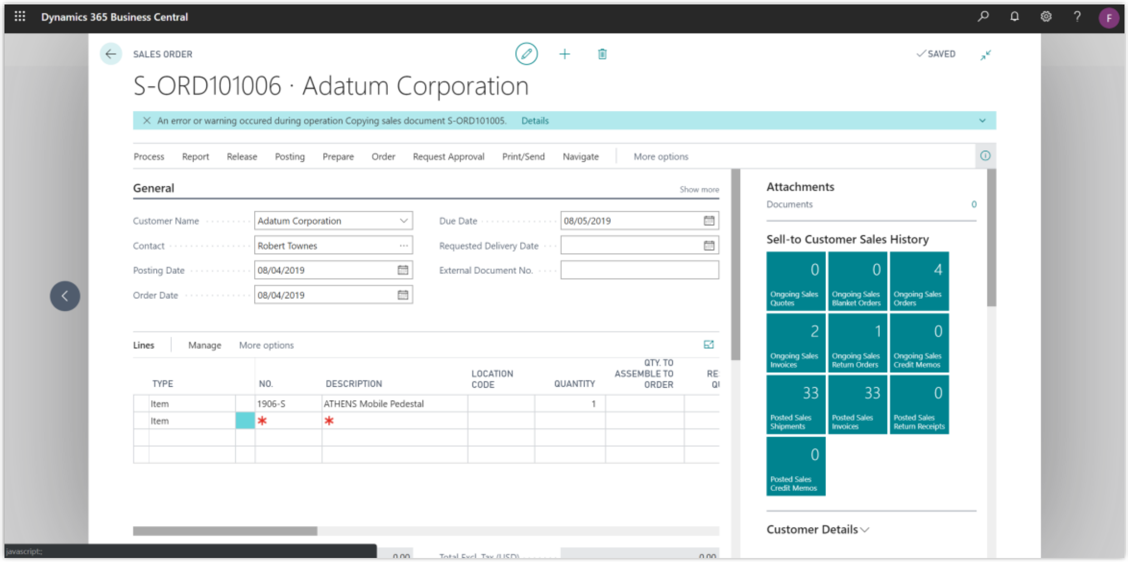
Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Use the Copy Document function on blocked lines

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Feature details

When using the Copy Document function to create new documents based on existing documents, you are now notified if any items or resources on the source document lines are blocked. The blocked document lines are excluded from the new document. The notification shows an overview of all document lines that are blocked in the source document.



Notification of blocked item

Aged Accounts Payable includes External Document Number field

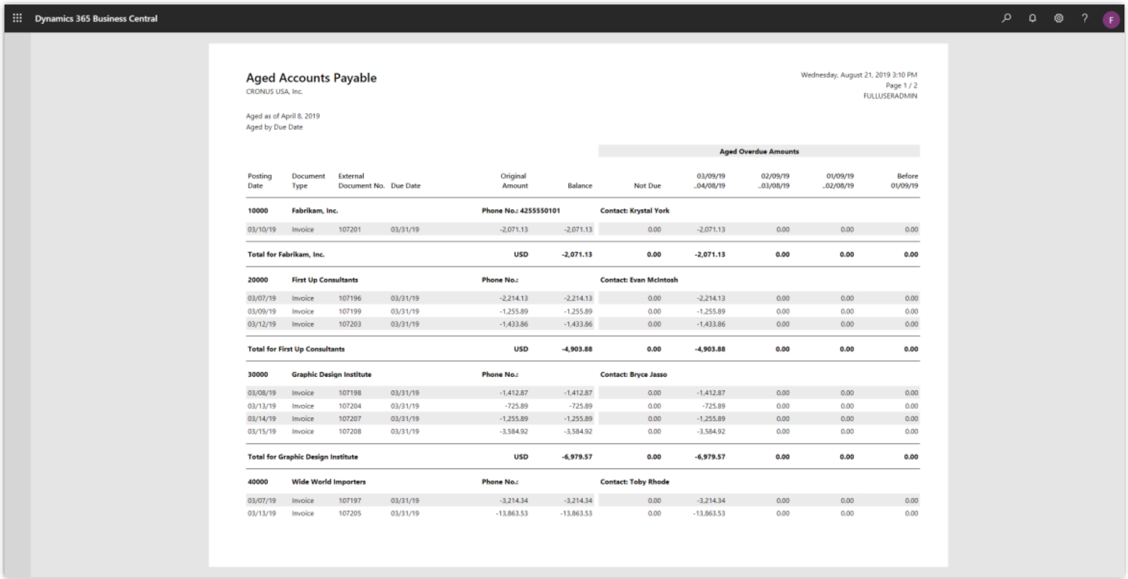
Enabled for	Public preview	General availability
Users, automatically	✔ Sep 1, 2019	Oct 2019

Business value

The Aged Accounts Payable report is a tool for managing small business debt, planning your cash flow, and scheduling payments. It is important to have this information provided in a clear and flexible manner.

Feature details

The Aged Accounts Payable report has a refreshed, modern layout. You can now analyze data in the Aged Accounts Payable report based on the **External Document Number** field.



Aged Accounts Payable
CRONUS USA, Inc.

Wednesday, August 21, 2019 3:10 PM
Page 1 / 2
FULLUSERADMIN

Aged as of April 8, 2019
Aged by Due Date

						Aged Overdue Amounts				
Posting Date	Document Type	External Document No.	Due Date	Original Amount	Balance	Not Due	03/09/19 ..04/08/19	02/09/19 ..03/08/19	01/09/19 ..02/08/19	Before 01/09/19
10000	**Fabrikam, Inc.**			**Phone No.: 4255550101**		**Contact: Krystal York**				
03/10/19	Invoice	107201	03/31/19	-2,071.13	-2,071.13	0.00	-2,071.13	0.00	0.00	0.00
Total for Fabrikam, Inc.				**USD**	**-2,071.13**	**0.00**	**-2,071.13**	**0.00**	**0.00**	**0.00**
20000	**First Up Consultants**			**Phone No.:**		**Contact: Evan McIntosh**				
03/07/19	Invoice	107196	03/31/19	-2,214.13	-2,214.13	0.00	-2,214.13	0.00	0.00	0.00
03/09/19	Invoice	107199	03/31/19	-1,255.89	-1,255.89	0.00	-1,255.89	0.00	0.00	0.00
03/12/19	Invoice	107203	03/31/19	-1,433.86	-1,433.86	0.00	-1,433.86	0.00	0.00	0.00
Total for First Up Consultants				**USD**	**-4,903.88**	**0.00**	**-4,903.88**	**0.00**	**0.00**	**0.00**
30000	**Graphic Design Institute**			**Phone No.:**		**Contact: Bryce Jasso**				
03/08/19	Invoice	107198	03/31/19	-1,412.87	-1,412.87	0.00	-1,412.87	0.00	0.00	0.00
03/13/19	Invoice	107204	03/31/19	-725.89	-725.89	0.00	-725.89	0.00	0.00	0.00
03/14/19	Invoice	107207	03/31/19	-1,255.89	-1,255.89	0.00	-1,255.89	0.00	0.00	0.00
03/15/19	Invoice	107208	03/31/19	-3,584.92	-3,584.92	0.00	-3,584.92	0.00	0.00	0.00
Total for Graphic Design Institute				**USD**	**-6,979.57**	**0.00**	**-6,979.57**	**0.00**	**0.00**	**0.00**
40000	**Wide World Importers**			**Phone No.:**		**Contact: Toby Rhode**				
03/07/19	Invoice	107197	03/31/19	-3,214.34	-3,214.34	0.00	-3,214.34	0.00	0.00	0.00
03/13/19	Invoice	107205	03/31/19	-13,863.53	-13,863.53	0.00	-13,863.53	0.00	0.00	0.00

Aged Accounts Payable report

Tell us what you think

Help us improve Dynamics 365 Business Central by discussing ideas, providing suggestions, and giving feedback. Use the forum at https://aka.ms/bcideas.

Reconcile payables with the External Document Number field

Enabled for	Public preview	General availability
Users, automatically	✔ Sep 1, 2019	Oct 2019

Business value

Using the **External Document Number** or the **Vendor Invoice Number** field in accounts payable reports greatly simplifies analysis and reconciliation of accounts payable for small businesses.

Feature details

You can now reconcile accounts payable using the **External Document Number** field in the Vendor Detail Trial Balance, Balance to Date, and Open Entries reports.

Tell us what you think

Help us improve Dynamics 365 Business Central by discussing ideas, providing suggestions, and giving feedback. Use the forum at https://aka.ms/bcideas.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Application lifecycle management

Overview

As partners move customers and solutions to the Business Central service, there is an immediate need for tools to manage both the customers and solutions. We are adding functionality to cover the complete lifecycle, first with a focus on VARs/SIs, and subsequently with a focus on ISVs building extensions for AppSource.

Ability to download a database export file

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Many countries have legal requirements that customers must be able to access their data files. Additionally, this provides a way for customers to download the file locally in order to import it into a local database.

Feature details

In the Business Central Administration Center, tenant administrators can create and download a database export for each environment for that tenant.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Detailed notifications for update events

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Tenant administrators often have questions about required actions when an environment update fails. Now, with detailed notifications of an update failure, we are able to provide information on what caused the update failure and any next steps that can be taken by the administrator to resolve the error. This further streamlines the update process for Business Central.

Feature details

As an enhancement to the Business Central update process, tenant administrators now receive email notifications with detailed feedback when an environment update fails. This includes actionable information and next steps for when correcting the cause of the failure requires action from the administrator.

Multiple production environments

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Multinational companies must be able to manage their finances based on the legal requirements in the countries or regions in which they operate. With this update, you can create a Business Central production environment for business divisions, subsidiaries, and so on, that operate in different countries or regions across the world.

Feature details

For each tenant, administrators can create multiple production environments. This will include the option for environments to be on different country-specific or region-specific versions of Business Central.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Report production outage in the Business Central Administration Center

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Once it is determined that the customer's tenant is down, you can quickly create a support ticket in the Business Central Administration Center. When you choose the customer's production environment, a new option, **Report Production Outage**, is enabled. This option is not available for a sandbox environment. If you choose this action, the available outage types are **Unable to log on (all users)** and **Cannot access API/Web Service**.

Once selected, the other required fields are Name, Email address, and Phone number. The next screen allows more details about the outage such as the browsers tried, any companies they can sign in to, and error messages received. The last question is about the date and time the outage began.

After marking the consent box, select **Report** to create the outage. A support ticket is created automatically with all details. It can be viewed in the **Reported Outages** page in the Business Central Administration Center.

Support for technical upgrades

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Starting with the 2019 release wave 2 update, you can use the PowerShell cmdlet Invoke-NAVApplicationDatabaseConversion to move a database from version 14 to the latest version in what is known as a technical upgrade. Moving forward, we continue to support this type of upgrade using the same Windows PowerShell cmdlet.

Support for performant data upgrade from C/AL tables to AL tables

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Business value

When converting customers with on-premises C/AL code customized solutions to an AL-based solution, data must be carried forward from the former to the latter as part of the upgrade process.

Feature details

When you convert C/AL to AL code customizations, such as the conversion of the Business Central base application to AL, there will likely be a need to transfer data for existing customers from "old C/AL" tables to "new AL" tables. To support this, we rename tables by adding the AL extension's AppId as part of the table names.

Using the PowerShell cmdlet Sync-NAVApp, partners can convert all C/AL tables to AL tables with minimal database overhead and without the need to write any upgrade code. The command `Sync-NAVApp -Mode BaseAppUpgrade` renames tables on the tenant database to conform to the naming convention for AL tables. This corresponds to the technical platform upgrade for a tenant, bringing the table structure from the base application to the table structure for extensions.

Empower ISV acceleration

Overview

The 2019 release wave 2 update delivers a set of features designed to simplify ISV development for new solutions and, specifically, for streamlining the migration from the source code customization model of Dynamics NAV to Business Central. The Dynamics NAV business has been driven by strong vertical ISV solutions, surrounded by add-on solutions. For the 2019 release wave 2 update, our focus will be on streamlining the path for ISVs to bring their solutions—and in turn their customers—to Business Central online.

Design for extensibility

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Feature details

The first release of the source code for the Microsoft application in AL launches a new era where all applications are extensions, and extensibility begins to replace code customization. To help drive this change, we're making the core application thinner, more extensible, and easier to localize by extracting more and more of our system logic into modules, forming a system application and an application foundation.

These modules put simplicity into focus by following a *one feature = one module* principle. Each module encapsulates complexity and replaces implementation details with clean, documented, and stable APIs. The smaller modules speed up the development cycle, and make it easier to monitor and optimize functionality from security and performance perspectives. The number of modules can vary, depending on the configuration, and you can update each module individually. Because this is a major shift in the development paradigm for both Microsoft and our partner community, we make each module available well ahead of the 2019 release wave 2.

As we finish modules, we publish the source code in the ALAppExtensions repo on GitHub so that you can provide direct feedback and make contributions. Currently the following modules are published:

Name	Responsibility
Auto Format	Formats the appearance of decimal data types in fields of a table, report, or page. For example, you can change how amounts that include decimals appear in a Cue on a Role Center.
Blob Storage	Provides a way to store various kinds of data. It consists of the TempBlob container to store BLOB data in-memory, the Persistent BLOB Management interface for storing BLOB data between sessions, and the TempBlob List interface for storing sequences of variables, each of which stores BLOB data. Potential uses are storing images, very long texts, PDF files, and so on.
Caption Class	Defines how the CaptionClass property displays captions for pages and tables. You can define rules for how captions display.

Name	Responsibility
Confirm Management	Contains helper methods that either display a confirm dialog when logic is run, or suppresses it if UI is not allowed, such as background sessions or webservice calls.
Cryptography Management	Provides helper functions for encryption and hashing. For encryption in an on-premises versions, use it to turn encryption on or off, and import and export the encryption key. Encryption is always turned on for online versions.
Data Classification	Helps you comply with data privacy standards by enabling you to classify data for objects that might contain sensitive information. Classifications for data sensitivity include normal, personal, company confidential, and sensitive.
Data Compression	The purpose of this module is to provide ability to create, update, read and dispose a binary data compression archive.
Date-Time Dialog	Helper page for entering a date-time value
Environment Information	Contains helper methods for getting information about the tenant and general settings, such as determining whether this is a production or sandbox environment, or deployed as an online or on-premises version, and so on.
Extension Management	Provides features for installing and uninstalling, downloading and uploading, and publishing extensions and their dependencies. It can also check whether an extension and its dependencies are installed.
Field Selection	Provides a page where you can look up and select one or more fields from one or more tables. For example, this is useful when you want to set up a KPI on a Role Center.
Filter Tokens	This module enhances filtering so that users can enter additional filter tokens. The Code or Text filters accept the %me, %user, and %company filter tokens. The Date, Time, and DateTime filters accept the %today, %workdate, %yesterday, %tomorrow, %week, %month, %quarter filter tokens. In addition, the Date filters support date formulas. Developers can add more filter tokens by subscribing to the OnResolveDateFilterToken, OnResolveTextFilterToken, OnResolveTimeFilterToken, OnResolveDateTokenFromDateTimeFilter and OnResolveTimeTokenFromDateTimeFilter events.

Name	Responsibility
Language	Changes the language for Windows and applications, and converts language codes to language IDs, and vice versa. The Language table is a subset of Windows languages. You can add languages, and edit translations and descriptions in the list.
Object Selection	Look up page for all of the application objects, including objects from installed extensions.
Password Dialog	This module introduces a dialog for the user to enter a password.
Record Link Management	Users can add notes and links to almost any record into the system. The current module provides APIs for developer to deal with records, for example to transfer/copy link from one record to another, transform text input into BLOB format expected by platform, clean up orphaned links.
Server Settings	Exposes methods that get settings from the server configuration file. For example, the extension checks if the Excel add-in is installed, or if online services can be installed on the server.
Tenant License State	Retrieves the current state of the tenant license, such as trial, paid, or suspended, including the start and end dates of the license.
User Login Times	Records the date when users sign in for the first time, and keeps track of their two most recent sign ins.
User Selection	Provides a page where you look up and select one or more registered users. For example, this is useful for assigning a person to things like documents, processes, or items.

See also

Development in AL (docs)

Migrations to Business Central online

Overview

Moving from an on-premises solution to Business Central online is a major area of focus for our partners and customers. With the 2019 release wave 2, we further enhance the scenarios for migrating data from Business Central on-premises, Dynamics GP 2018 R2, and Dynamics SL 2018 CU2.

We also have a separate migration tool for older versions of Dynamics GP and Dynamics SL. With these tools, you can migrate the chart of accounts and a beginning balance in the general ledger, and for customers and vendors with their outstanding transactions in payables and receivables. Lastly, you can migrate inventory items with the quantity on hand at the time the migration is run. As our roadmap shows, we are going to streamline the update process even more so that we reduce friction and make the process of moving from on-premises to online as simple and seamless as possible.

For Dynamics NAV customers, the migration path goes through an upgrade to Business Central on-premises, and then switches to Business Central online. For more information, see [Upgrading to Dynamics 365 Business Central On-Premises].

Enhancements for customer migration tools

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

After enabling ISVs to bring their solutions to Business Central online, the next step is to simplify the journey for existing Dynamics SMB customers using Dynamics 365 Business Central on-premises, Dynamics GP 2018 R2, and Dynamics SL 2018 CU1.

Feature details

For the 2019 release wave 2 update, migration tooling for Business Central on-premises comes first, followed later with enhancements for Dynamics GP and Dynamics SL. The existing data replication tooling is based on Azure Data Factory. This update adds additional tables that are needed for the migration to be complete. The setup process remains the same, but there will be a rebranding component and additional tables added to support a more streamlined migration. The migration tool also supports migrating data from installed extensions by default, so a customer who has customized their Business Central on-premises application with extensions can bring that data with them to Business Central online without any additional effort.

With this update, administrators can use Azure Data Factory to connect their SQL Server database to a Business Central online tenant and bring their data across. In addition, the 2019 release wave 2 adds a checklist for information needed to complete the migration.

Modern clients

Overview

With the 2019 release wave 2, users access Business Central in the browser, Windows 10 desktop app, mobile apps on Android and iOS, or in Outlook. The 2019 release wave 2 is the first version that does not include the classic development environment (also known as C/SIDE) or the Dynamics NAV Client connected to Business Central (also known as the Windows client). The modern developer experience based on Visual Studio Code now supports developing large apps such as the base application from Microsoft, and so C/SIDE is discontinued for Business Central going forward.

Similarly, the modern clients now support so many productivity features that the Windows client is discontinued for Business Central going forward. The legacy Dynamics NAV client is retired in this release but remains supported for the April '19 release and earlier versions in alignment with the support lifecycle. We accelerated our investment in speed and productivity features for the modern browser experience, achieving a major milestone in its transformation into a world-class desktop experience for new and expert users alike.

Add links to your navigation menu

Enabled for	Public preview	General availability
Users, automatically	✓ Aug 1, 2019	Oct 2019

Business value

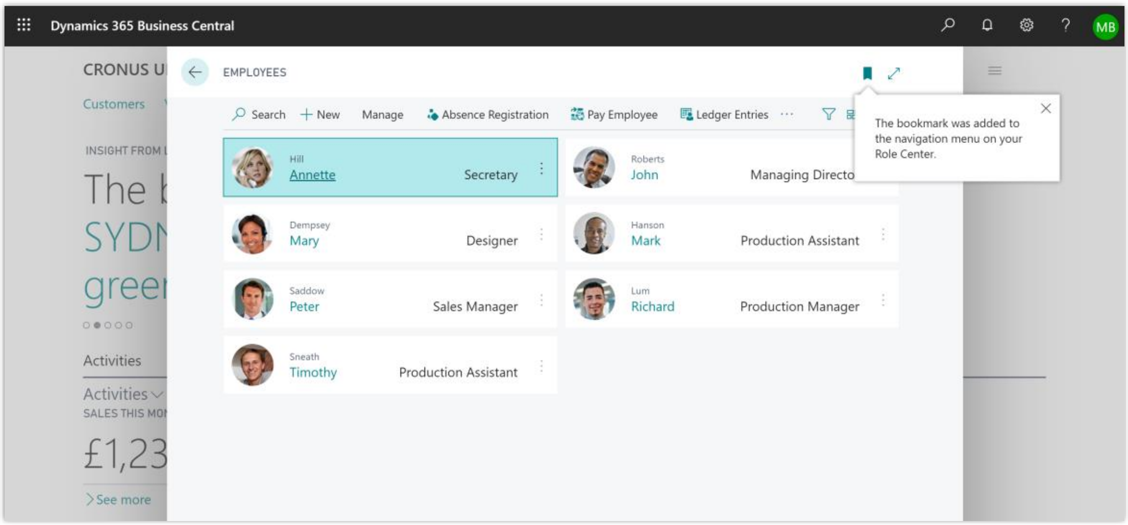
Business Central is ready to adapt to the unique needs of each business, department, and user. Desktop users are fully empowered to optimize their workspace to support their daily tasks and the most common data they work with.

Feature details

Business Central 2019 wave 2 introduces a new and simple way to quickly reach your favorite content and business tasks.

Using the new bookmark icon, you can add a link to any page in the navigation menu of your Role Center. The bookmark icon is shown in the top right corner of the page and also in the **Tell Me** window where you can efficiently bookmark multiple pages. Any page that is discoverable in the **Tell Me** window can be bookmarked. When you're satisfied with your bookmarks, start personalizing the navigation menu to reorder your bookmarks or group them by similarity.

Similar to other UI personalization, bookmarks roam with you no matter which device you sign in to.



Adding a link in the navigation menu to the employees list page

Tell us what you think

Help us improve Dynamics 365 Business Central by discussing ideas, providing suggestions, and giving feedback. Use the forum at https://aka.ms/bcideas.

Add notes and links to data

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

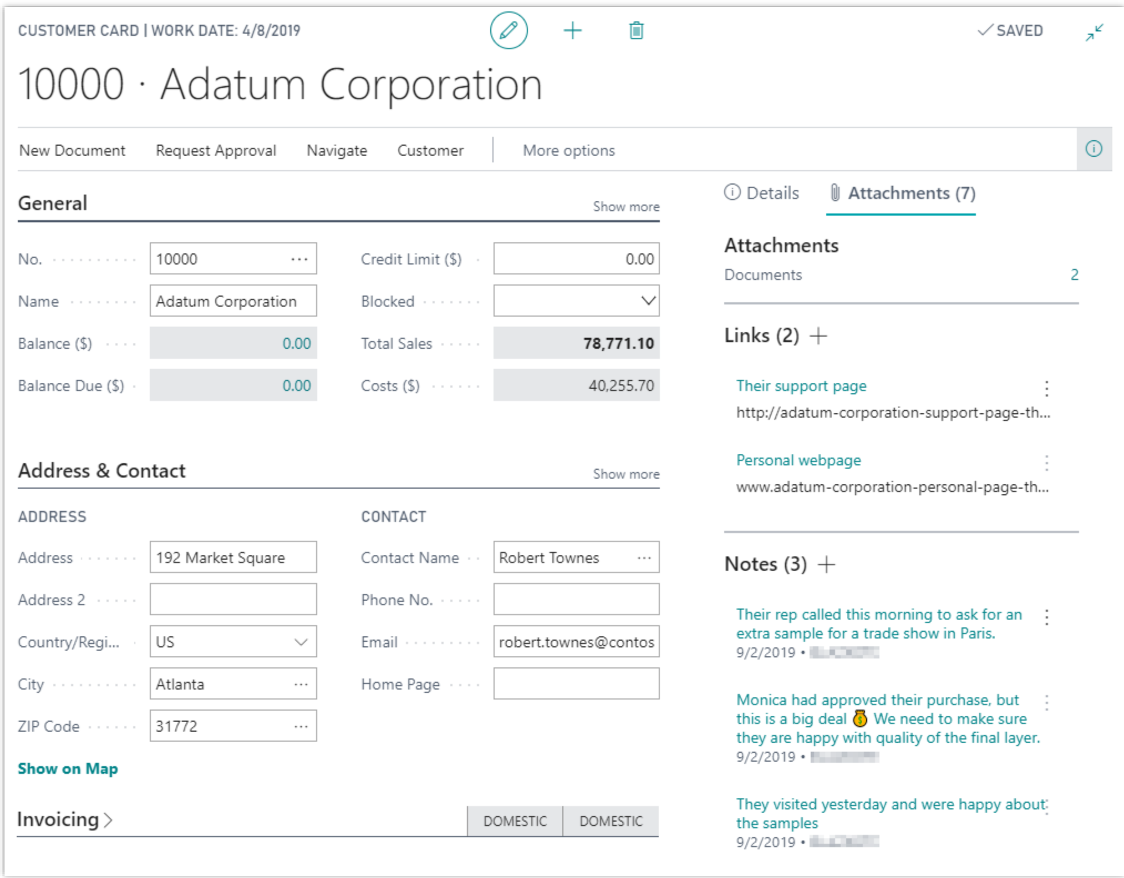
Business value

An ability to add notes that represent slightly more unstructured data is essential in modern business applications. Notes and links are already available for on-premises deployments of Business Central, and now we bring these capabilities to the online world as well, enriching its capabilities to store data in the cloud.

Feature details

Users can add internal notes to business data that is captured and processed in Business Central online and on-premises. Notes are shown next to the data in a restyled panel inside the FactBox pane.

All the FactBoxes there are now divided into two groups: **Details** (which includes all business-related FactBoxes) and **Attachments** (which includes notes, links, and document attachments). The groups are shown only when needed so there is no clutter on the screen.



Working with notes

Notice the following special capabilities:

- You can add a note using the Alt+O keyboard shortcut from anywhere on the screen, even when the **Notes** FactBox is not in view.
- You can switch focus between groups in the FactBox pane with the Alt+Shift+F2 keyboard shortcut.
- There is a counter on the screen showing all attachments, including notes and links.

- A newly added note is always placed first and the focus is preserved there.
- The notes can be longer and have multiple lines, and they are displayed like that on the screen if there's enough space.

With the **Links** part, users can add hyperlinks to online content from card and document pages, opening up for various advanced scenarios.

Enhancements to Excel integration

Enabled for	Public preview	General availability
Users, automatically	✓Aug 1, 2019	Oct 2019

Business value

Excel is one of the most commonly used tools in financial management. Based on customer feedback, more enhancements are added to improve scenarios for using the Microsoft Dynamics add-in for Excel with Dynamics 365 Business Central.

Feature details

When the user selects the **Edit in Excel** action from a list page, most filters set on the list page are applied to the list when it is exported to Excel. This also enables publishing changes back into Business Central from a filtered list of records in Excel.

In addition, the number of fields available for reading and publishing edits from Excel is expanded. This includes being able to view and edit fields that are added through extensions.

Filter reports more efficiently

Enabled for	Public preview	General availability
Users, automatically	✓Aug 1, 2019	Oct 2019

Business value

As the business grows, so do the data sources powering reports. This increases the need for control over precisely how much data is processed.

Feature details

When running a report in Business Central, users are presented with a request page where they can specify various options and filters.

Filtering report data

The filter experience has been greatly improved with features similar to filtering lists that allow you to:

- Add as many filtered fields as you like by choosing any field from the source table or typing to quickly find the field.
- Get assistance with specifying filter values using look-ups and similar pickers, including filtering on multiple option-field values.
- Create complex filters using operators, ranges, formulas, and filter tokens.

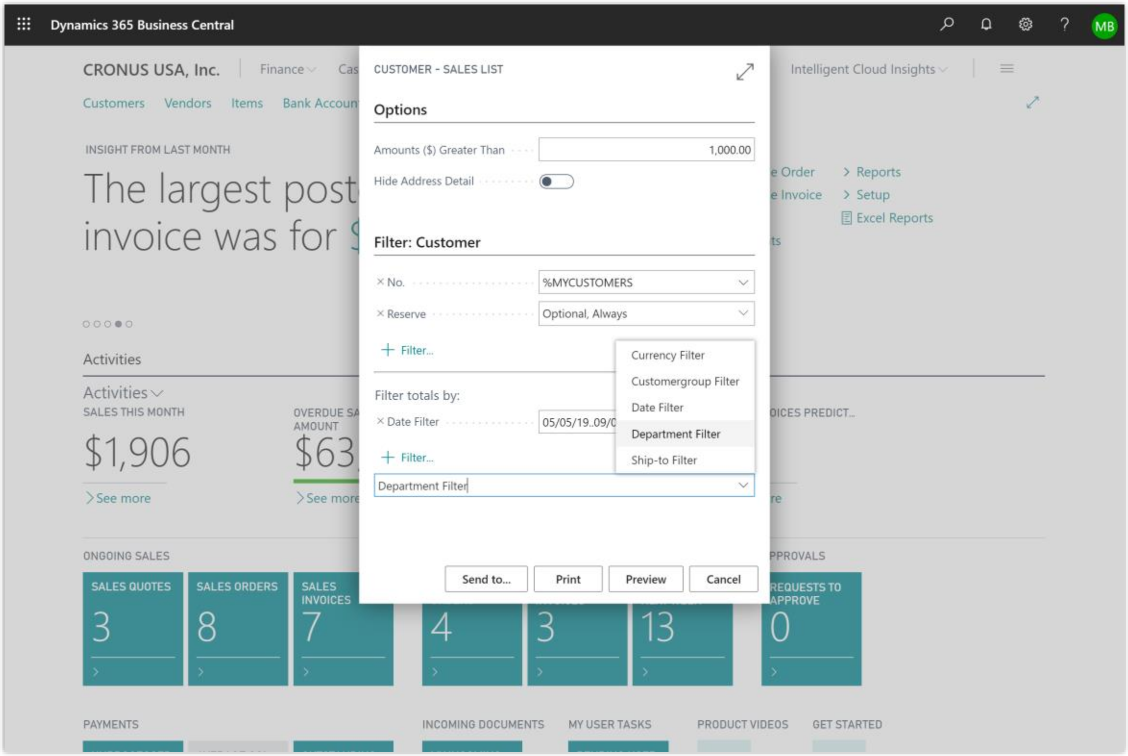
Business Central remembers the filters you applied and also allows you to choose from report settings you made earlier.

Filtering totals

One of the most popular features of Dynamics NAV is now also available for reports. Reports often display aggregated or computed values through FlowFields, such as currency amount totals. With this release, Business Central allows you to apply filters to one or more dimensions that influence computed values.

Consistently powerful

The improved experience is consistent across report objects as well as XmlPort objects and screens originating from the RunRequestPage command or FilterPageBuilder command.



A customer report exhibiting various filtered fields

Tell us what you think

Help us improve Dynamics 365 Business Central by discussing ideas, providing suggestions, and giving feedback. Use the forum at https://aka.ms/bcideas.

Full keyboard shortcut support

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

Proficient users are more productive when they can access commonly used features with their keyboard without having to explore the action bar to find each one. Developers now also get the possibility to respond to user feedback by adding keyboard shortcuts to their solutions.

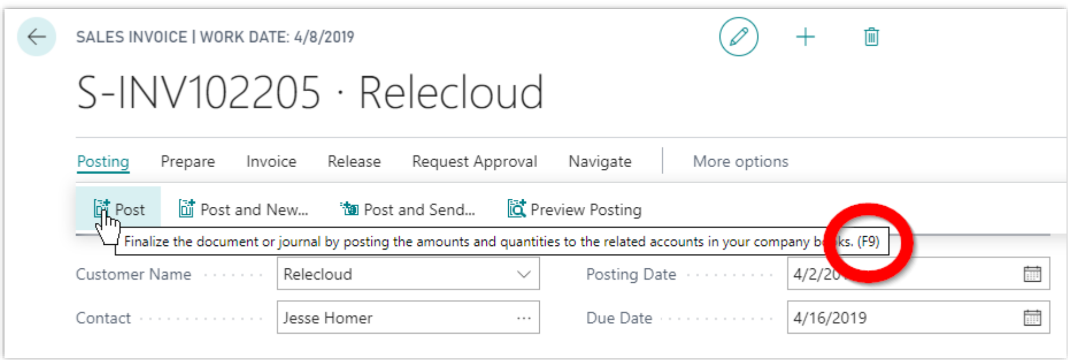
Feature details

Developers creating extensions for Business Central can now add keyboard shortcuts to most actions and operations via an AL property. This means that application developers can specify keyboard shortcuts for actions in the base application and their own objects in their extensions. To do this, the developer must use the [ShortCutKey property] in AL (the programming language for Business Central extensions).

This feature complements the predefined list of keyboard shortcuts in Business Central and enables more flexible development for partners.

Additional keyboard shortcuts are added in the 2019 wave 2 release. Most of these come from shortcuts defined in the business application area and might be changed in the future to be more flexible.

A full list of updated keyboard shortcuts is always published on [Keyboard Shortcuts]. For instance, one newly added keyboard shortcut is *F9* for posting a document.



Posting an invoice using a keyboard shortcut

General user experience adjustments

Enabled for	Public preview	General availability
Users, automatically	✓ Aug 1, 2019	Oct 2019

Business value

Business users often work across productivity and business apps to complete their tasks. As they transition back and forth, differences in user experiences cause friction and lost productivity.

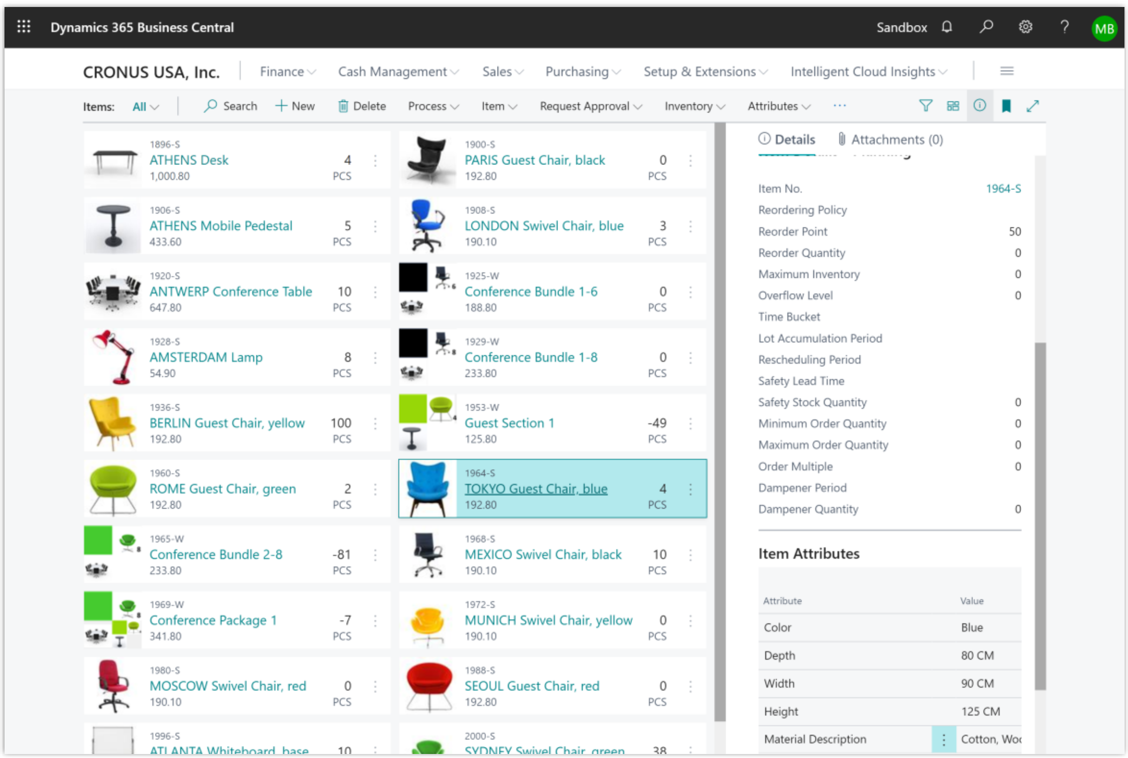
Feature details

Continuing our familiar look and feel across Dynamics 365 and Office 365, this update includes the addition of more fluent design elements and subtle stylistic changes to buttons, list headers, and captions on parts.

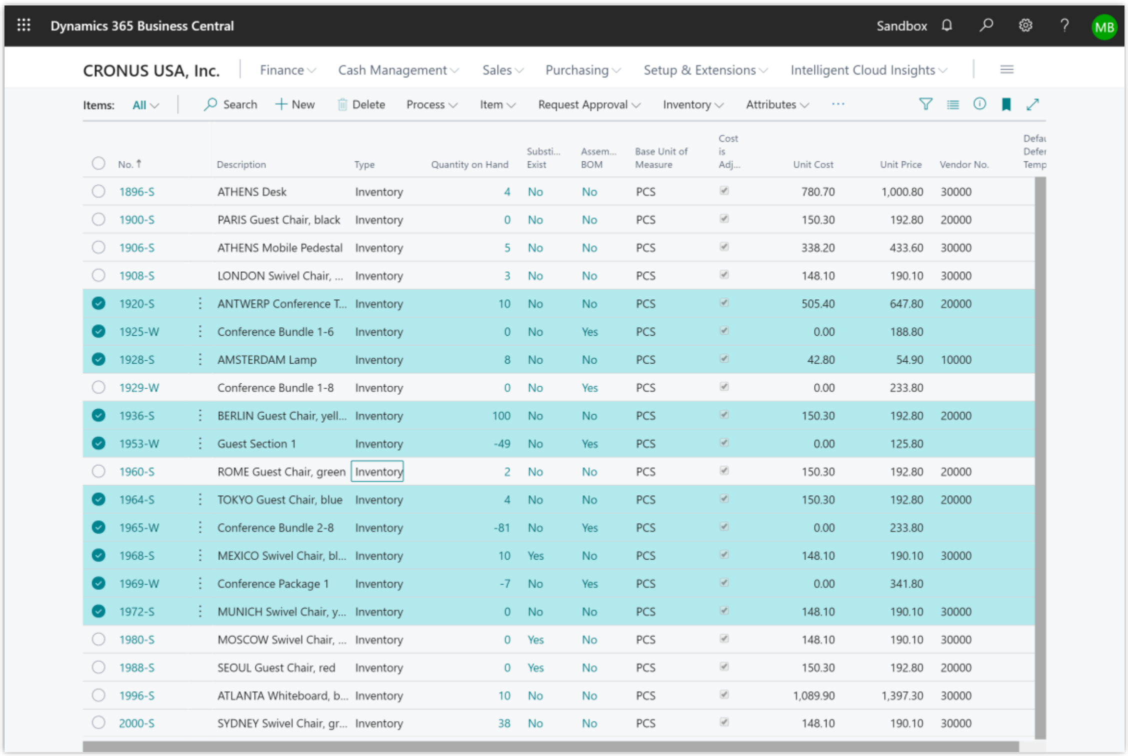
Rows have minor stylistic improvements and a new indicator when selecting multiple records.

Bricks stretch to fill the available horizontal space and apply new click targets that make it easier to select an individual brick and display related FactBoxes. The Ctrl+C keyboard shortcut to copy a single brick has also been enabled.

Role Centers no longer automatically separate root-level actions from action groups. The sequence in which they were defined in code is respected and reflected in the client for each action area.



A screenshot of the restyled brick layout



A screenshot of a list page demonstrating the new row selection indicators

Tell us what you think

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Get overview of all business features

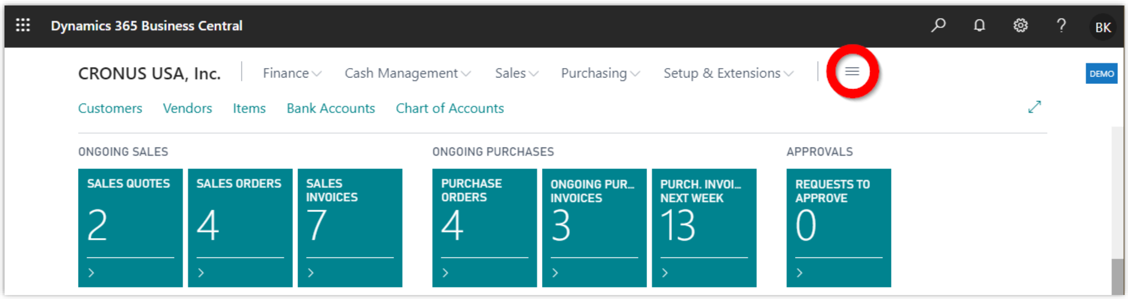
Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

Finding the pages or features in an easy navigation structure is essential for all users. While the navigation bar is very prominent and useful, it doesn't offer an expanded view. Similarly, prospects commonly request a high-level overview of what's in the product. Role Center navigation defines this structure already but is now presented in a more prominent way, allowing the user to explore.

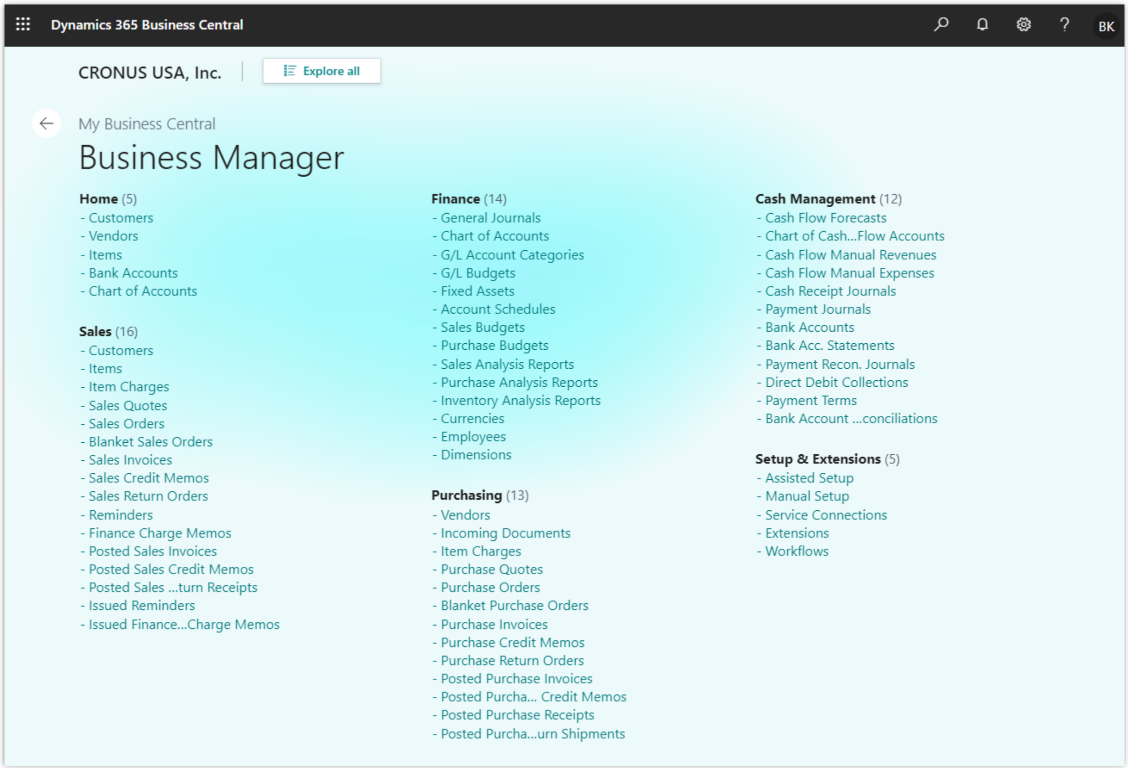
Feature details

Finding functionality becomes easier with a full overview of pages in the product based on the content of the various Role Centers. This makes it easier for users to navigate and find the right page, and it serves as an overview of Role Centers and their content. As a supplement to using the current Role Centers navigation bar, the command bar, or Tell Me, the new overview feature, Role Explorer, brings the different areas of Business Central closer to you so that you can stay focused and productive.



Opening the Role Explorer

Users access the Role Explorer with a menu icon next to the navigation bar (see above) or by using a Shift+F12 keyboard shortcut. When opened, the page presents to the user the whole content of the navigation bar of the current role, structured as tree views.



Working with the Role Explorer

From the Role Explorer, users can also access a second overview showing the business features for all roles in the product. (Note that only roles where the related profile is set up to be shown on the Role Explorer are visible.) This second, expanded feature overview allows users to explore features that are not normally assigned to the user's role, allowing them to find features even if they don't know their names.

From the search results in the **Tell Me** window, there is a link to Role Explorer in case users want to explore in a visual feature overview.

Identify the company by a badge

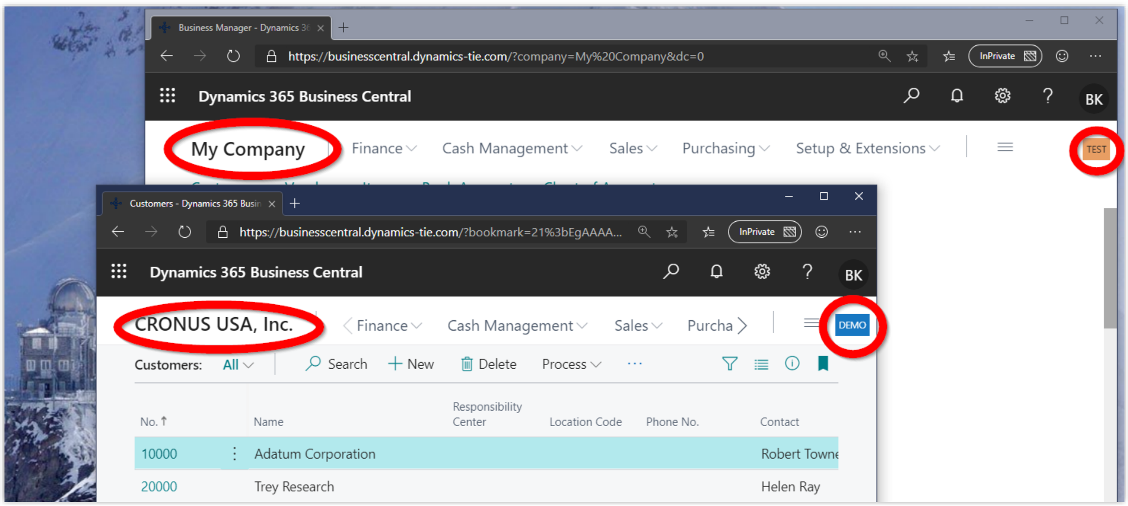
Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

Whether you just switch between two companies from time to time or if you are an accountant working with dozens of them, the colorful company badge helps you figure out where you are.

Feature details

Users can now use the Company Badge functionality to identify one company from another that they work in. This is helpful when users have multiple tabs or popped-out windows open or when they are working with multiple companies on a daily basis.



Company badge

To set it up, go to the **Company Information** page (for example, by typing "badge" in the **Tell Me** window) and choose your badge color and label.

Longer timeout period for the server connection

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

You no longer have to sign in to Business Central again when you come back from lunch or from a meeting.

Feature details

In earlier versions of Business Central online, the session timeout period was set to 20 minutes. We have increased this value to two hours so that users are not asked to sign in to Business Central again and again.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Modern clients only for Business Central

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Business value

Businesses and users want to be comfortable that the tools they use are fit for new hardware, operating systems, and changing environments. They can now access Business Central through a range of modern clients so they are reassured that only the newest, most advanced, and up-to-date tools are being used.

Feature details

Business Central continues to evolve the modern client experiences where users work with Business Central in the browser, Windows 10 desktop app, or mobile apps on Android and iOS. With this release of Business Central on-premises, the legacy Dynamics NAV Windows client is no longer available for deployment. Instead, users can switch to the modern experience in the browser, the Android/iOS mobile apps, or the Windows 10 desktop app (available through the respective stores). For more information, see Getting Business Central on Your Mobile Device.

Personalize actions on your Role Center

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

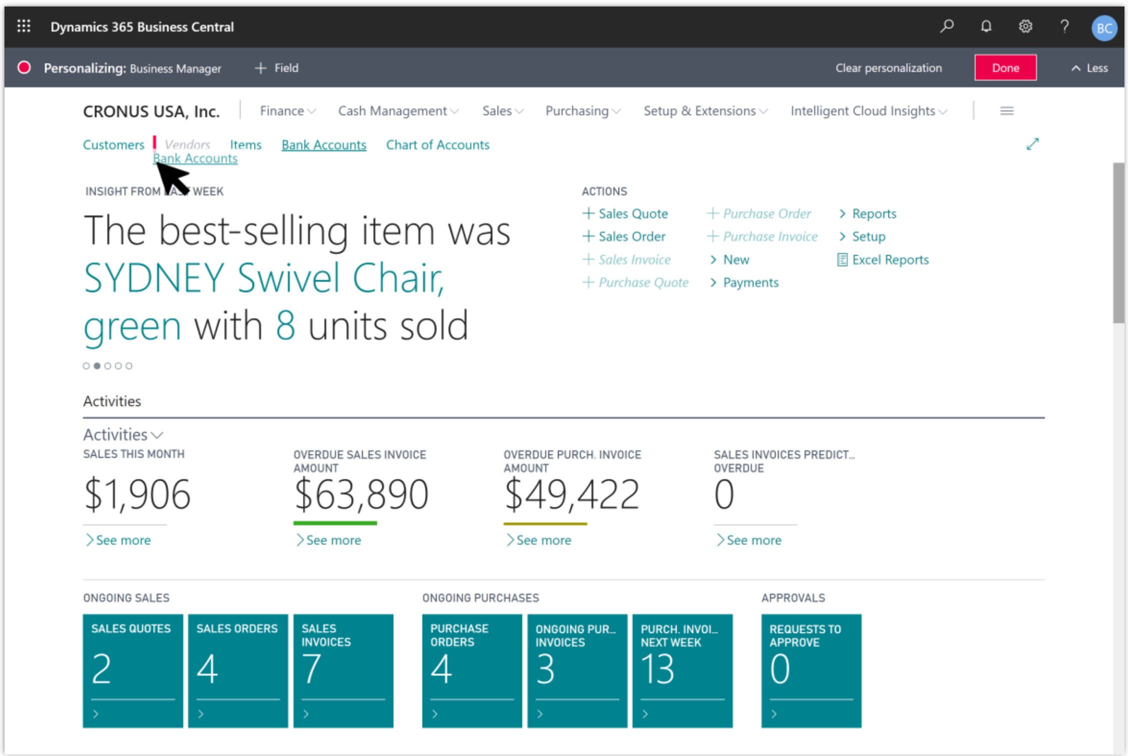
Business value

Business Central is ready to adapt to the unique needs of each business, department, and user. Desktop users are fully empowered to optimize their workspace to support their daily tasks and the most common data that they work with.

Feature details

Personalizing the navigation menu includes:

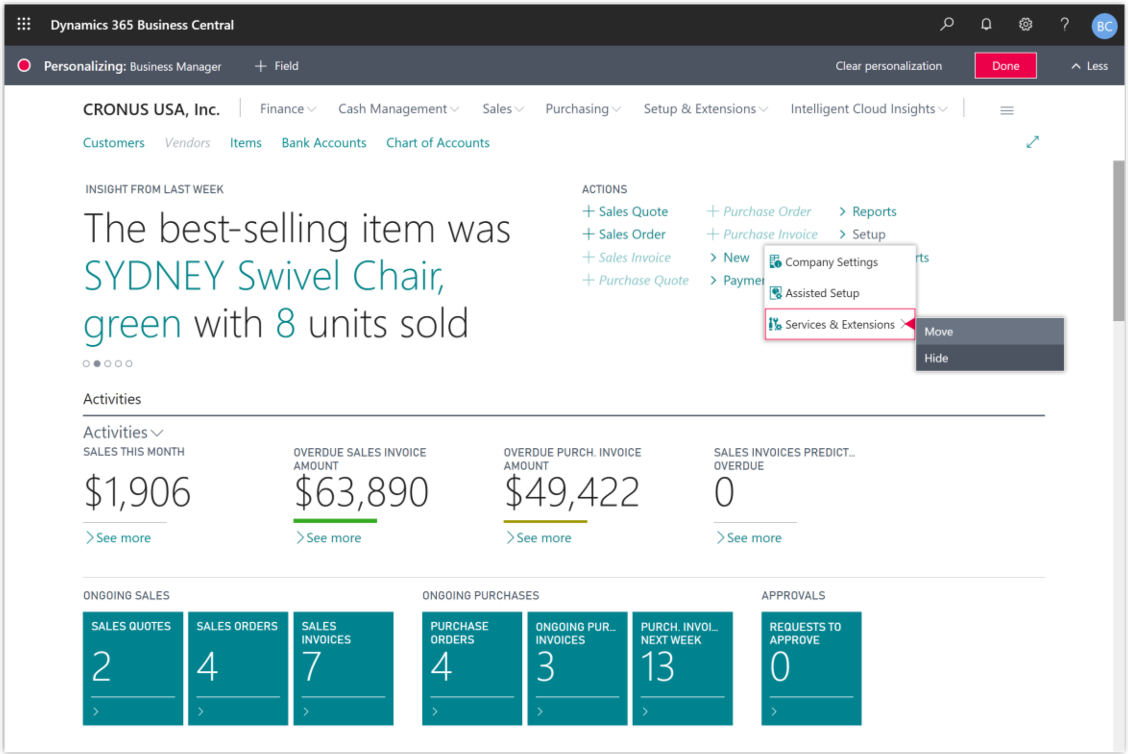
- Moving menu links to another position within the same group or a different group or subgroup.
- Moving menu groups to another position.
- Hiding menu links or entire groups.
- Clearing your personalization, effectively returning the Role Center to its original navigation menu layout.



Personalizing the navigation menu

Personalizing Role Center actions includes:

- Moving actions to another position within the same or different group.
- Moving action groups to another position.
- Hiding actions or entire groups of actions.
- Clearing action personalization, effectively returning the Role Center to its original action layout.



Personalizing the action menu

As with all other personalization, the changes are effective immediately and roam with the user, no matter which device they sign in to.

NOTE When Business Central 2019 release wave 2 is deployed on-premises, all new personalization features are enabled by default. Personalization is no longer an opt-in feature, and is now fully aligned across online and on-premises experiences.

Tell us what you think

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Resize columns with fewer clicks

Enabled for	Public preview	General availability
Users, automatically	✓ Aug 1, 2019	Oct 2019

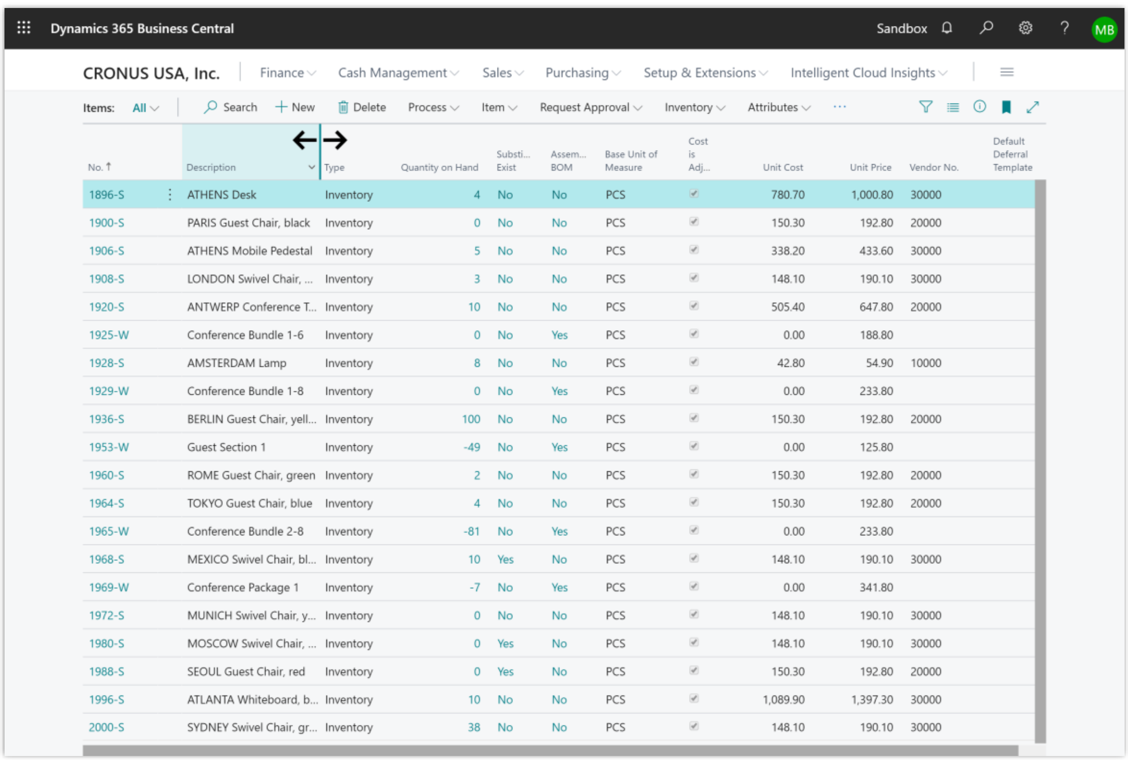
Business value

Users need to quickly and easily adjust the interface to get a better view of their business data. As users switch between business and productivity apps, consistency in fundamental interactions, such as resizing columns, keeps the learning curve low.

Feature details

Adjusting the width of any column just got easier. Without having to start personalizing, you can drag the border of any column header to resize it. Similar to Microsoft Excel, you can double-click the border to autofit to the width that comfortably displays the caption and value of all columns currently on the screen.

Similar to other UI personalization, your changes roam with you no matter which device you sign in to.



A screenshot of a list page where a column is being resized

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Save and personalize list views

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

As the business grows, so does table data in the database, making quick analysis or finding records more challenging without the right tools. Defining the perfect set of filters can be a time-consuming, iterative process where the ability to persist filters will save having to recreate them the next time they are needed.

Feature details

Powerful filtering capabilities in Business Central accelerate work on lists by providing absolute control over which data is shown. The 2019 release wave 2 update eliminates the need to recreate commonly used filters by allowing users to permanently save filters as a view and combining personal views, system views, and those from extensions under one pane.

Saving a view

Users can now save filters in the filter pane as a list view with a recognizable name, such as "Items I own."

- Save a new list view with custom filters on specific fields, on totals, and other calculated fields.
- Fine-tune and perfect your views over time by saving changes to them.
- Clone any system view by saving a personal copy that you can modify.
- Easily rename and remove personal views.
- Apply the full spectrum of filter expressions, ranges, and filter tokens (such as %MyCustomers) to dynamically filter to the right data.
- Quickly switch between different views of a list in the filter pane or from the command menu, no matter how you accessed that page.

Similar to other UI personalization, list views roam with the users no matter which device or browser they sign in to.

Personalizing the filter pane

As the number of views on a page grows, Business Central gives you new tools to personalize and optimize the filter pane.

- Remove personal views that you no longer need or hide unwanted system views.
- Reorder your views to get the perfect sequence.

Upgrading from an earlier version of Business Central

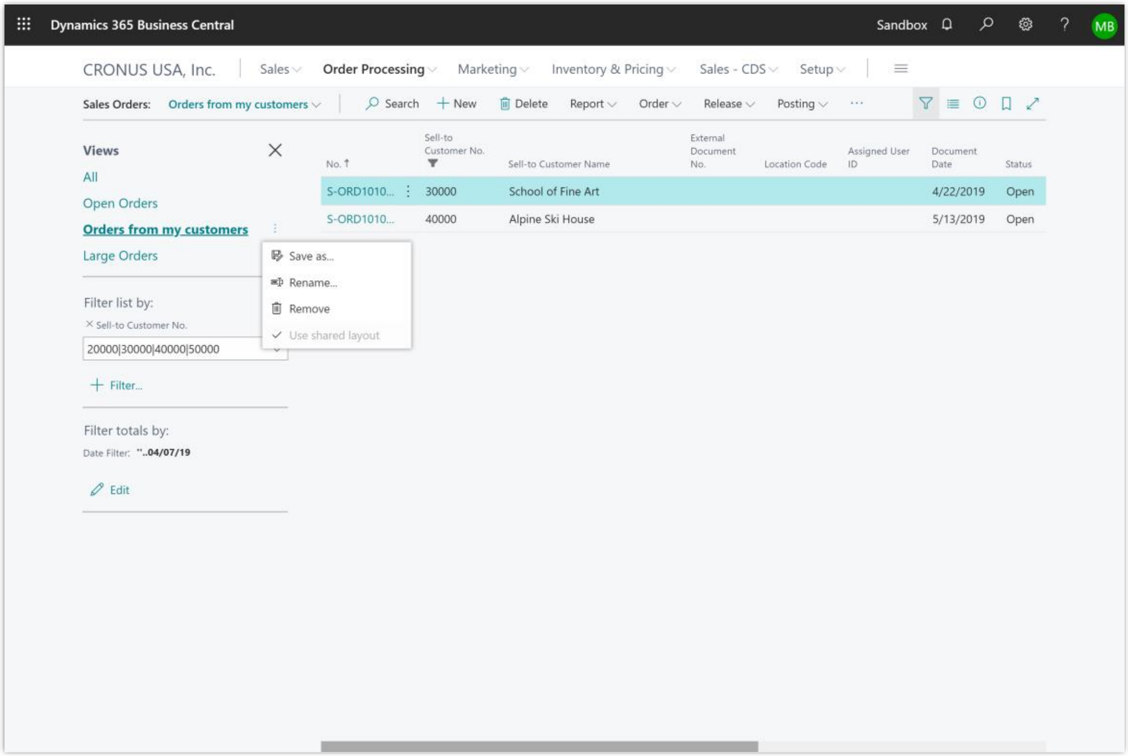
With this release, the way personal views are defined, stored, and customized has undergone a major overhaul to unlock these capabilities for the cloud and for the modern clients. Notice the following important changes:

- The AL language is now the underlying syntax used to consistently describe list views, whether they were authored by a developer in Visual Studio Code or saved in the client for a specific user or role. Through this technical change, the top five shortcomings of the legacy model have been eliminated. For example, your personal views are always available on the list that they apply filters to, whether you access that list from the navigation menu or through the **Tell Me** window.
- The legacy model used to define list views on a Role Center object is still available to developers for backward compatibility and will become obsolete in a future release.
- When upgrading your database, any legacy views for a specific user or role are discarded. Views created using earlier versions are not compatible with Business Central 2019 release wave 2 and later. Any personal views must be recreated manually.

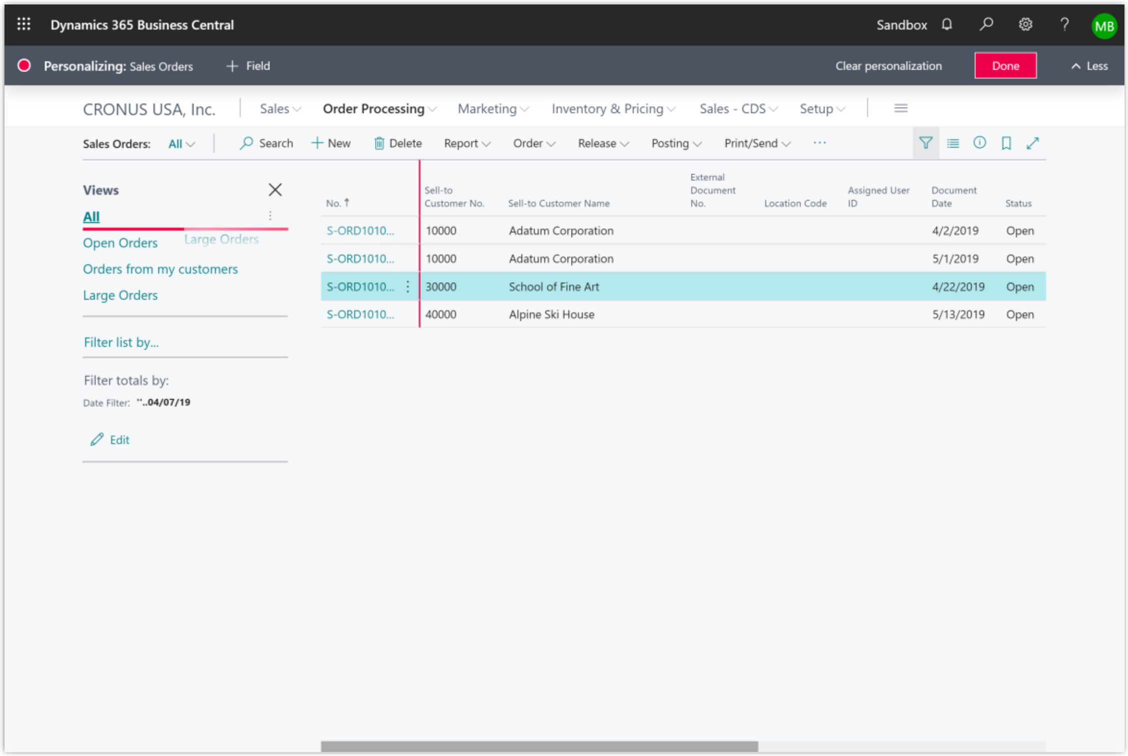
More to come

Views will be updated incrementally after the initial release in October 2019. Updates to look forward to include:

- Personalizing the column layout that is unique to a view.
- Toggling between the expression and resolved value of that expression in any filter field.



Screenshot of a list page where the filter pane is open and displaying various views



Screenshot of a list page where the filter pane is being personalized

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Switch between companies in your business inbox in Outlook

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Business value

Many businesses use multiple companies in Business Central, and users want to be able to switch between companies in their business inbox in Outlook. With the ability to quickly switch companies, users save time and feel more productive.

Feature details

Use the new action in the business inbox in Outlook to switch the Business Central company context.

Multitask across multiple pages

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 15, 2019	Oct 2019

Business value

Business Central users often work on multiple tasks at a time and have to manage interruptions, such as when a call comes in that they have to take action on. Unblocking users and shortening idle time by allowing them to work in concurrent browser tabs/windows or opening a mini page in a pop-out is very important in these busy times.

Feature details

In this release, users can open several pages at the same time to perform multiple tasks at the same time. The new functionality supports two scenarios.

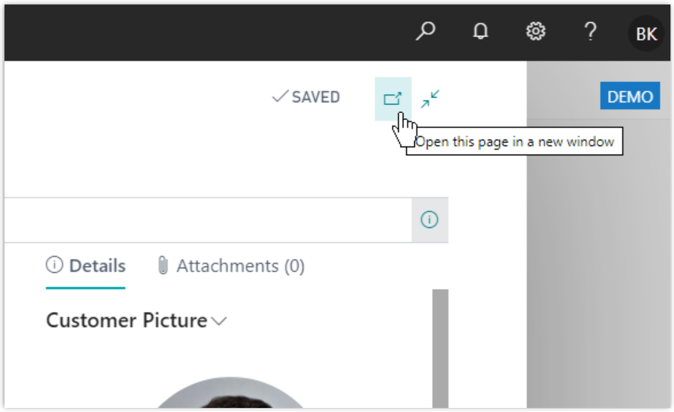
New browser tab

This functionality allows users to open several browser tabs or windows while working in the same company. To do this, users can open a new browser window (Ctrl+N) and then use a Business Central bookmark or an icon on the desktop to open Business Central in a new browser. This is safe to use several times, both for the same and another company.

When a user has several browser windows open, each is acting as another connection or session. This works basically in the same way as if one user connects to Business Central from several computers at once. Those separate browser windows allow you to work concurrently on any two or more pages without restrictions, except for any standard network data-locking mechanism or business data validation. Users can also expand the different browser windows or put them on different monitors to quickly switch between tasks or validate data against each other.

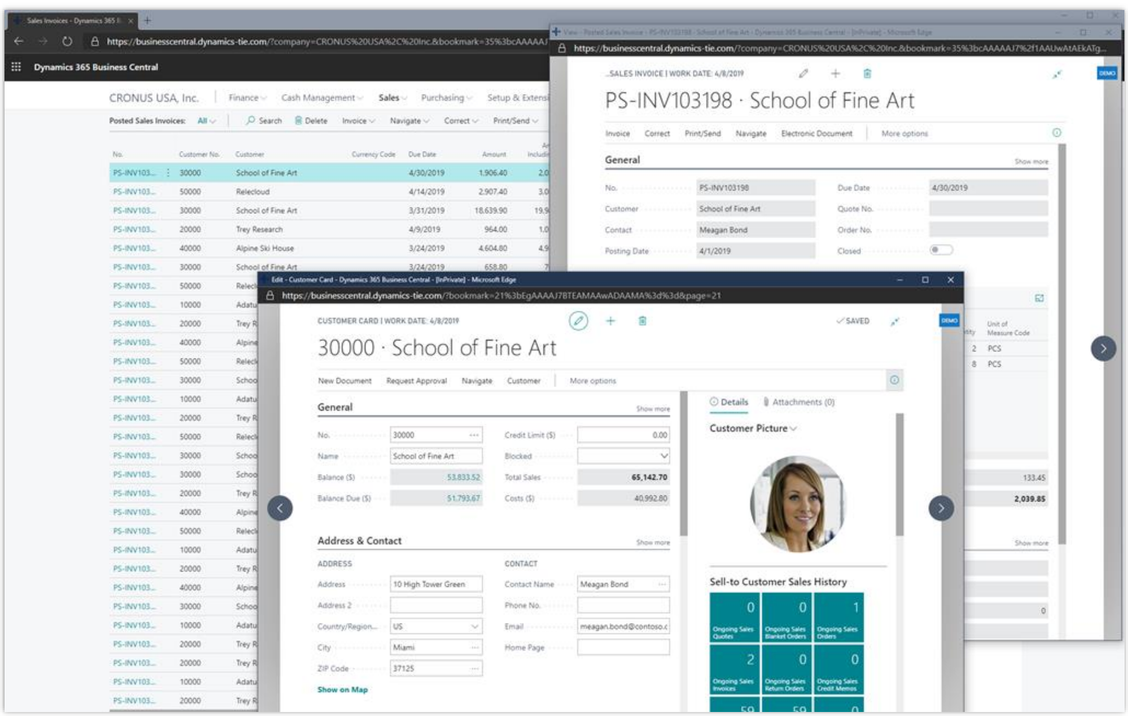
Open page in a new window

This functionality allows users to pop out a card or document into a smaller, connected window. You do this by choosing the **Open this page in a new window** button in the upper-right corner of every card or document page, or by pressing Alt+Shift+W.



Open the customer card in a new window

Users can thereby open a page in a separate pop-out window for quick and easy data comparison. This enhances productivity both when working with multiple screens and if users want to place the new windows on top of each other on one screen.



Multitasking across windows

Note that all pages that are popped out using this functionality are linked to the main page so that users can observe data being updated across both windows. Since the pages are opened within the same context, this functionality is more useful when working on similar tasks, such as comparing two posted sales invoices, editing data for an invoice while having the customer card open, or popping out an item card to update it while editing a sales order.

Customize user profiles without writing code

Enabled for	Public preview	General availability
Users, automatically	✔ Sep 1, 2019	Oct 2019

Business value

Organizations are typically composed of well-defined user roles, some of which might be unique to that business, department, or industry. Users might work across multiple departments and occasionally stretch to fill a variety of roles as needed. Where one size does not fit all, Business Central is ready to adapt to unique and changing needs. Power users, department owners, and consultants need control over which tasks are relevant for any role, and are able to manage role-tailoring without the need for code customization.

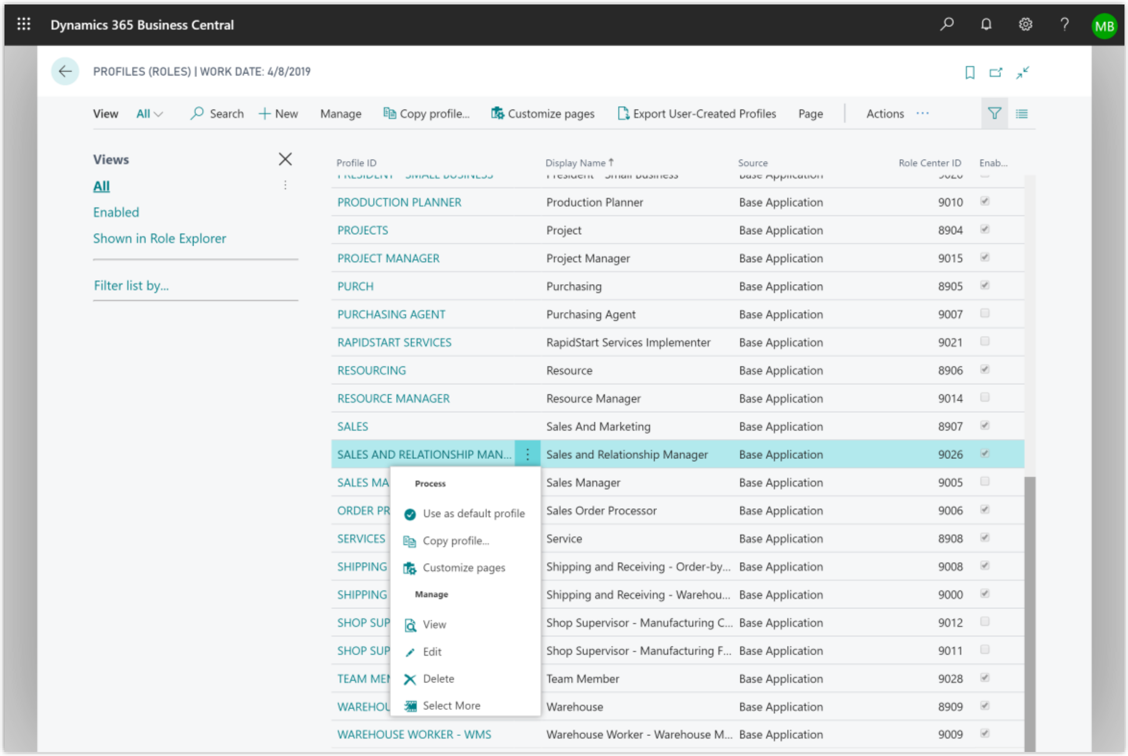
Feature details

In Business Central, profiles are used to define and distinguish organizational roles along with their basic settings, such as the starting home screen that displays content relevant to that role. Business Central provides a set of profiles covering a variety of specialized roles or departmental needs, which administrators can fully customize using tools similar to when users personalize.

Administration of profiles (roles)

The **Profiles (Roles)** page is used to perform a variety of tasks in Business Central online and on-premises:

- Get an overview of available profiles, including which extensions they might originate from.
- Remove or disable profiles that are not relevant to your organization.
- Determine which profiles are fit for the Role Explorer so that any user can navigate and find new content across roles or departments.
- Add new profiles to represent unique roles or edit any profile, including those originating from extensions.
- Create and share URLs that link directly to any profile using the profile URL parameter.

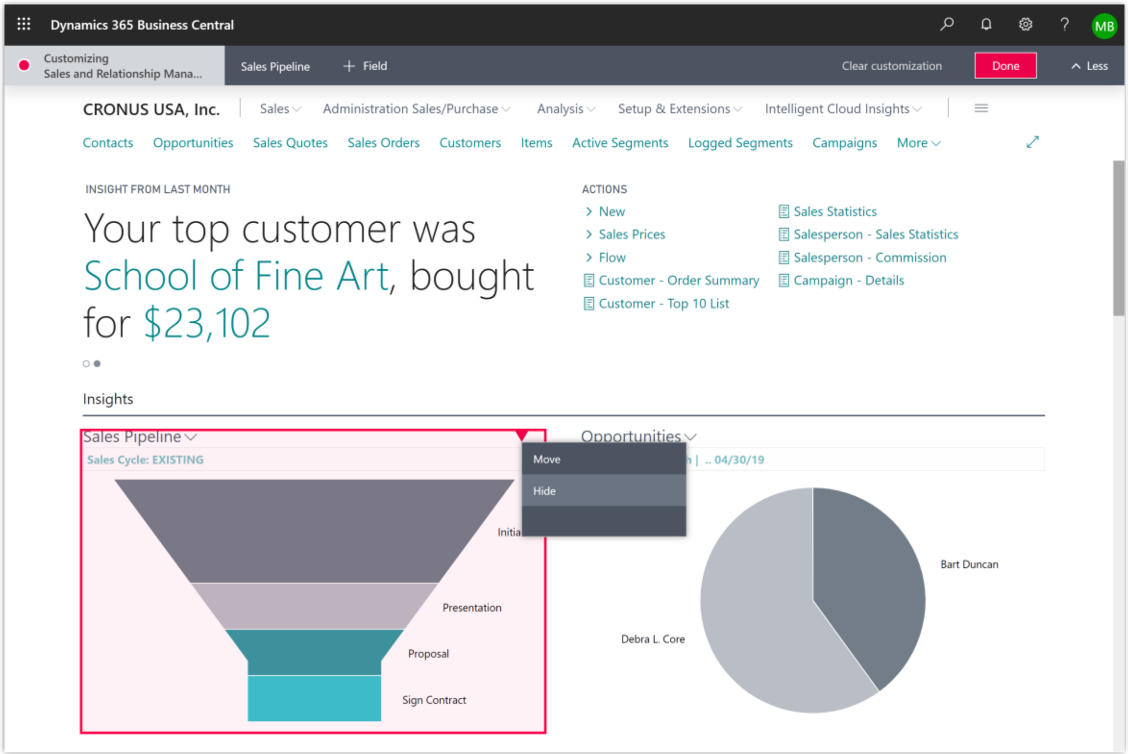


A variety of profiles shown in the profiles list page

Customizing pages for a specific role

Similar to profile configuration mode in Dynamics NAV, the Business Central desktop experience allows lightweight UI customizations for users who share the same profile. This can be done on any production or sandbox environment without the use of Visual Studio Code and AL.

- Leverage all the rich capabilities of the personalization tool to make lightweight UI customization of that profile and test your customization while you design. Examples of such customization include creating a role-specific list view, defining a navigation menu, or hiding fields on a page.
- View the set of pages that have been customized per profile and clear customizations per page.
- Export a copy of all profile customizations in AL format that is ready to hand off to developers to include in an extension, for example.



Customizing the sales and relationship manager profile directly in the UI

Note that customization of user profiles does not secure access to objects or data. Administrators are still required to apply the relevant user groups or permissions sets.

More profiles in the box

Business Central online now includes profiles previously available only to sandbox environments. In addition, 10 entirely new profiles covering the breadth of departmental functionality are available in select countries or regions.

Upgrading from an earlier version of Business Central

With this release, the way user profiles are defined, stored, and customized has undergone a major overhaul to unlock these capabilities for the cloud and for the modern clients. Both Business Central online and on-premises are now consistent in experience and richness of capability. Below are important changes in this release:

- The AL language is now the underlying syntax used to consistently describe profiles and page customizations, whether they were authored by a developer in AL or by a consultant or power user directly in the client. The legacy XML format is discontinued.

- The set of profiles available with Business Central no longer includes page customizations. Users of these profiles might experience slight differences in the layout of pages for their roles.
- When upgrading your database, any legacy profiles remain available but their accompanying profile configuration is discarded. Legacy profile configuration created using earlier versions is not compatible with Business Central 2019 wave 2 and later. Page customizations must be either recreated using the Business Central client or as an AL extension.
- Various system tables have been introduced, have changed, or are marked as obsolete. Page objects that depend on them have been updated with fields and functionality to reflect the new profile model.
- Business Central no longer distinguishes between System and Tenant profiles, and administrators can no longer specify a profile of System scope. Defining a starting set of profiles for all customers on a multitenant server can still be achieved using extensions.

Tell us what you think

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Enter data with speed and agility

Enabled for	Public preview	General availability
Users, automatically	✔ Sep 1, 2019	Oct 2019

Business value

Back-office workers often need to capture information or digitize paper material at high speed. For some users, this is their main activity for the whole workday. When this cannot be automated through means like OCR and AI, users require an efficient interface that does not get in the way of quickly typing in data.

Feature details

Business Central accelerates repetitive data entry through a more responsive field editing experience.

Freedom to type unhindered

When typing data into a row, such as a general journal line, you can enter the value of a field, use the tab key to go to the next field and continue typing without having to wait for the server to respond. This allows you to quickly enter an entire record, only having to pause for the row to validate before typing in the next row. Similarly, input fields on cards and other page types also minimize the need to wait for the server to process each field.

While this already provides a more responsive experience in itself, data entry gets faster when combined with personalized Quick Entry that skips over unnecessary fields, keyboard shortcuts for actions like F9 to post a journal, and system shortcuts like Alt+N to create a new record.

Tell us what you think

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Filter option fields by multiple values

Enabled for	Public preview	General availability
Users, automatically	✓ Sep 1, 2019	Oct 2019

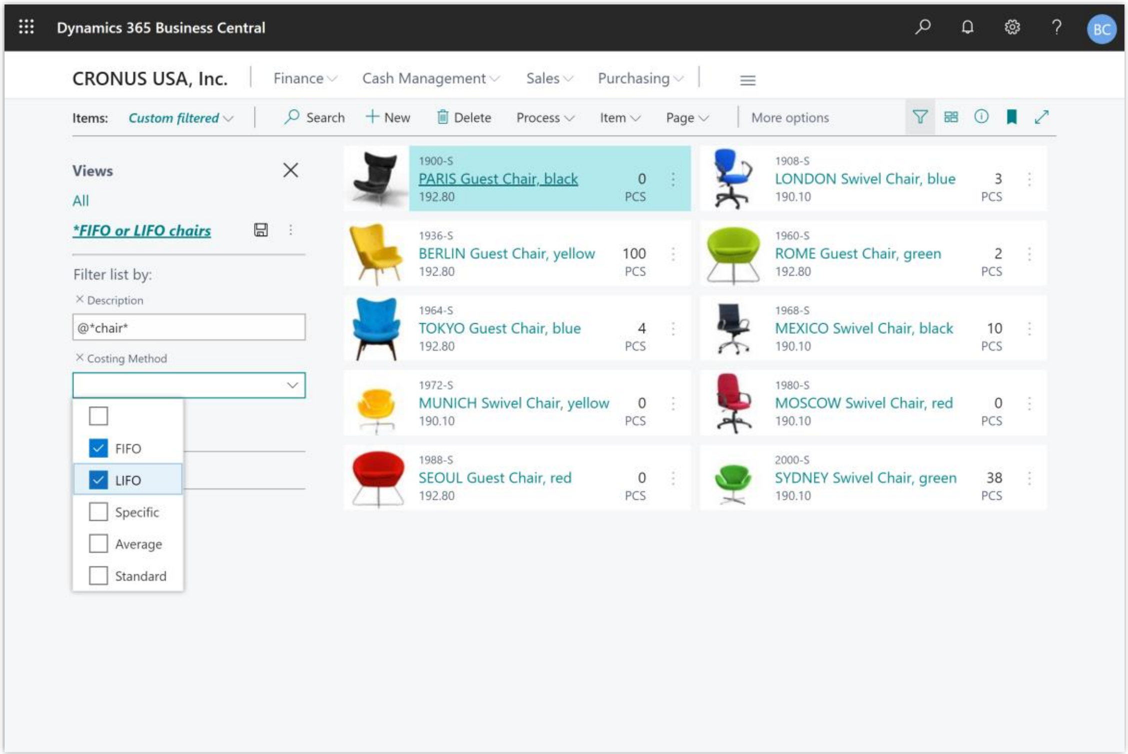
Business value

Back-office information workers spend significant amounts of time working with lists and reports and applying filters to narrow down their data to the relevant records. Users often need a higher degree of control as the size of the business database grows. Option fields are essentially enumerations with predefined values. Until now, users have been able to choose only a single value when they set a filter in option fields.

Feature details

With this wave, we introduce a new multi-selection control in filters for fields of type **Option** so that users can filter on these by multiple values. This is treated as an OR operation. For example, you can filter the **Color** field by red, green, or blue.

Filtering option fields by multiple values is available consistently across filter experiences: On list pages, reports, XmlPorts, and on filter screens driven by the RunRequestPage and FilterPageBuilder commands. Multi-selection of values is available only when filtering, not when specifying the field value on the record.



Screenshot of filters on the Items list, including a filter on multiple option values

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Modern developer tools

Overview

As we make the move entirely to Visual Studio Code, we continue to invest in areas that enhance productivity for developers. Specifically, we are enhancing the troubleshooting and debugging experiences, improving performance and usability when you work on multiple and large projects, empowering code insights and telemetry for ourselves and our partners, and extending capabilities in the AL language with, for example, profile extensibility.

The 2019 release wave 2 is the first version that does not include the classic development environment (also known as C/SIDE). Because the classic development environment contains tooling for many areas not directly related to actual development, we are also working on finding new homes for the features that currently reside in C/SIDE.

Convert tables from C/AL definitions to AL table definitions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

The Windows PowerShell cmdlet Sync-NAVApp is updated so that you can convert all C/AL tables to AL tables with a minimal database overhead and without the need to write any upgrade code. The command `Sync-NAVApp -Mode BaseAppUpgrade` renames tables on the tenant database to conform with the naming convention for AL tables. This corresponds to a technical upgrade of the tenant, converting the table structure from the base application in earlier versions to the table structure for AL apps.

Database insights made available in AL

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

AL developers can write test code that includes tests on database usage. This way, some performance issues can be caught during development and not in production.

Feature details

Selected database insights that surfaced in the April '19 release of the debugger will be available from AL.

Translating other extensions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Translate other apps, including the base app.

Feature details

In earlier versions of Business Central, you could only provide translations of strings that were in that same extension. Now that the base application is reworked into multiple extensions, we are adding support for providing translations across extensions, including the base application.

Access modifiers

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Business value

By using access modifiers, you have control over where it can be called from, be it your own code or third-party code building on top of your code.

Feature details

You can control access and encapsulation of your code by adding local/private, protected, internal, or public access modifiers to AL language elements. This is similar to the way C# uses access modifiers.

Attach and debug next

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Business value

Sometimes you cannot or do not want to publish and invoke functionality to debug it, but instead attach a session to the server and await a process to trigger the breakpoint. With attach and debug next, you can do that.

Feature details

Set a breakpoint in code and attach to a running server, online or on-premises, and the debugger will break if the breakpoint is hit while it is attached to the server.

Base application delivered as AL applications

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Business value

All code customization on-premises is now in AL and the modern Visual Studio Code developer environment, finally unifying the tools for code customization and creating extensions, and enabling much richer developer scenarios going forward.

Feature details

The 2019 release wave 2 marks the first release of the base application on AL, and code customization on-premises now happens in AL and Visual Studio Code, unifying the tools for code customization and extensions. With the volume of investments in Visual Studio Code, and the stronger compiler support for AL, this allows much richer developer scenarios.

The 2019 release wave 2 is the first version that does not include the classic development environment (also known as C/SIDE) or the Dynamics NAV Client connected to Business Central (also known as the Windows client). The modern developer experience based on Visual Studio Code now supports developing large apps such as the base application from Microsoft, and so C/SIDE is discontinued for Business Central going forward.

Filtering XmlPort Objects

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 1, 2019	Oct 2019

Business value

As your business database grows, you often need a higher degree of control over the data that you export out of or into Business Central.

Feature details

Developers can set the UseRequestPage property to True on an XmlPort object so that users will see a request page in the browser client. Users can then filter on any fields from the source table and potentially reduce the exported data to precisely the records they want, taking advantage of powerful filtering capabilities such as date ranges, expressions, and filter tokens.

Tell us what you think

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Implementing hierarchical menus

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Aug 1, 2019	Oct 2019

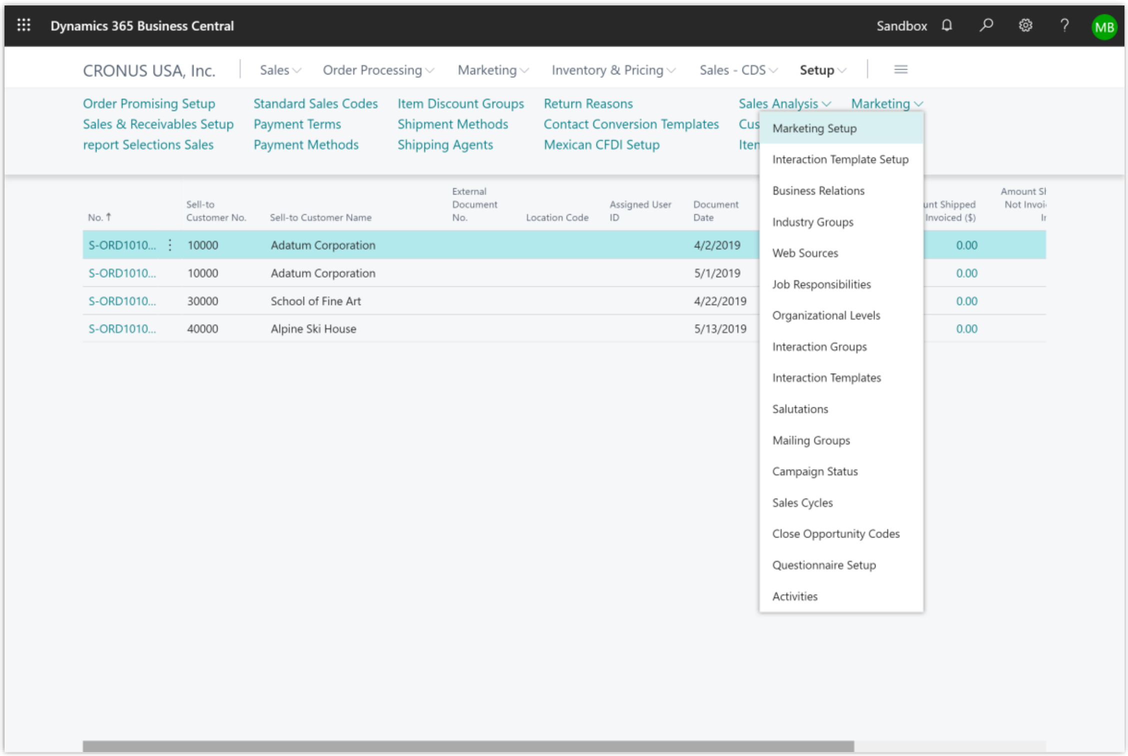
Business value

App developers are often asked to present the entire catalog of business functionality that is offered by their solution so that their users or prospects understand what it can do. Similarly, resellers often want to implement business features by some logical grouping that matches the unique needs of their customers' departments or user roles.

Feature details

In AL, developers can split the sections area control into further subgroups to create more complex hierarchies of links in the navigation menu. Links can run a variety of AL objects including Pages, Reports, XmlPorts, and Codeunits.

In earlier versions of Dynamics NAV, this was achieved through MenuSuites and Departments. In Business Central, these new abilities allow developers to design richer, role-based navigation menus where users can explore functionality available to other roles that might be of interest to them.



A screenshot showing subgrouping of a typical navigation menu

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Improved app dependency handling on build and deploy

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Business value

Avoid tedious and manual work on compiling and deploying extensions in the correct order.

Feature details

Until now, you have had to manually ensure that projects with dependencies are built in the correct order, and deploying extensions with dependencies required manually uninstalling and reinstalling dependent extensions. With the 2019 release wave 2, this is managed by the tools, by traversing the dependency graph.

More power to developers using Designer

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

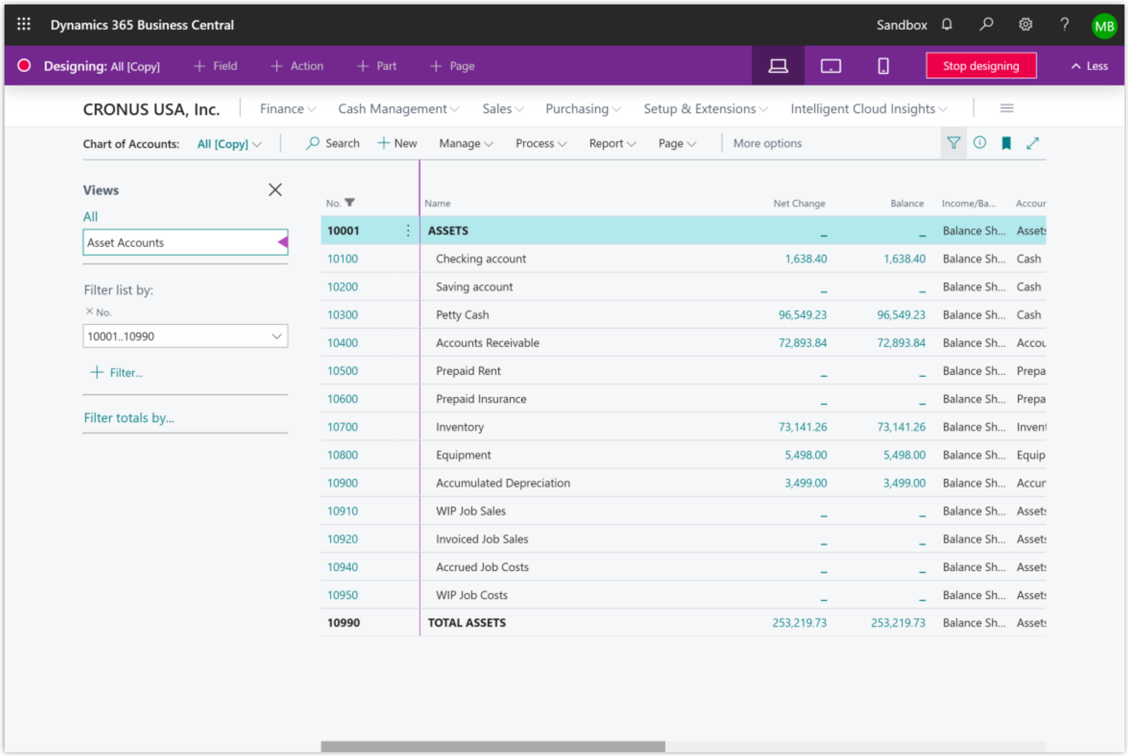
Business value

Writing code in Visual Studio Code is efficient, but designing and adjusting page layout can be cumbersome without having a faithful and visual overview of what the page looks like and how it behaves.

Feature details

With this release, developers can also use the Designer to:

- Adjust actions and action groups on a Role Center.
- Adjust the navigation menu items, grouping and subgrouping on a Role Center, including building up the menu from scratch by bookmarking relevant pages.
- Double-click to autofit a column on a list page.
- Define filters on a list and save them as a named view.



A screenshot showing the addition of a list view on a list page

Tell us what you think

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Service fundamentals

Overview

No matter the industry or size of a small or medium-sized business (SMB), business users expect a dependable service and platform on which to run their business, collaborate, and get work done. Along with our wave of innovative new features, we've invested heavily in boosting performance, reliability, and scalability of Business Central, across the platform and business application.

Business Central runs much faster with a focus on typical business scenarios and usage patterns. The experience in the browser is more responsive thanks to on-demand loading of page elements, server resources that are optimized for fast user interaction, and the database being tuned to handle more data and faster load times. We will continue to improve the application performance and are prioritizing common usage scenarios.

Users experience an even more stable service with scheduled upgrades that suit the individual business, maintenance during non-working hours, and matured service health practices to ensure maximum uptime. Users requiring assistance now have a single screen through which to find self-help material, share ideas with the community, and request support with streamlined response time.

The Business Central security team works behind the scenes to safeguard the security of your data. In addition to continual improvements of our security infrastructure and processes, we ensure Business Central continues to meet ISO27001, ISO27017, ISO27018, SOC 1 & 2 Type 2, HIPPA BAA, and FERPA industry security and privacy compliance standards. For more details and a list of all certificates, see [Microsoft Dynamics 365 Cloud services compliance].

New Support Request option in the Business Central Administration Center

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

In the Business Central Administration Center, a new support option will improve the support process for partners. In the Dynamics shell, select the question mark to see **New Support Request**. You will then be directed to a new portal to enter support tickets for Business Central. To get updates and manage the support request, you will use the new portal. The Business Central Administration Center is the new starting point so partners have clear direction on where to enter the tickets.

Partners can enter support contact details in the Business Central Administration Center

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

In the Business Central Administration Center, the reselling partner can choose an environment, and then specify their name, email address, and/or a website for support. This information is then presented to the customer in their Business Central tenant when they go to the **Help & Support** page. Customers now have a clear picture of how to get support from their reselling partner. Partners do have the option to update all tenants when entering their information to save them time from entering it on all environments.

Lock-free number series

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 1, 2019	Oct 2019

Feature details

Users can choose to mark number series to allow gaps in the series. These number series will be non-blocking, which will boost performance.

Selected non-financial number series in the application will be made non-blocking.

Page background tasks

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Feature details

A page background task can run a codeunit (without a UI) in a read-only child session of the page session. On completion of the task, a completion trigger with the result is invoked on the page session.

If the page is closed before the task completes or the page record ID changed, the task is canceled.

Surrogate keys

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Feature details

A surrogate key will be added to all tables. AL developers can look up a record based on the key.

Artificial intelligence

Overview of Dynamics 365 Sales Insights 2019 release wave 2

For many years, customer relationship management (CRM) was a one-dimensional system of records. Sales teams spent long hours entering data into the system, in practice "working for the system." Dynamics 365 Sales Insights helps sales teams transform CRM systems to work on their behalf, leveraging the power of predictive and personalized intelligence.

Dynamics 365 Sales Insights empowers teams with more foresight to enhance productivity and better anticipate outcomes across the sales lifecycle. This empowerment helps sales professionals be consistently ahead of each customer's needs and every competitor's potential move.

Dynamics 365 Sales Insights makes AI accessible to everyone across the sales organization, giving sales teams time back so they can focus on building relationships with customers. Insights tailored to every member of the sales team are now available with a new digital assistant. The assistant offers sellers contextual relationship insights and transforms guided selling with next-best-action recommendations. Sales managers benefit from smart coaching suggestions based on customer conversations.

With the 2019 release wave 2, we will continue to enhance these services and make them available worldwide in more regions and languages.

Our 2019 release wave 2 will focus on the following themes:

- **Availability in more regions and languages**: We continue to invest in making Dynamics 365 Sales Insights available in more regions and in supporting more languages through our machine learning models.
- **Personalized and actionable intelligence**: We are committed to help sellers build meaningful relationships effortlessly. With the new digital assistant and AI-based guided engagement, sales professionals are empowered with contextual assistance that helps them focus on the right activity at the right time and in the right way.
- **Meaningful and relevant conversations**: We continue to invest in assisting sellers to lead meaningful customer interactions by offering seamless and automated analysis across multiple conversation channels. By highlighting gaps as well as compelling product pitches, teams can improve engagement quality, focusing on behaviors that are likely to lead to positive outcomes.
- **Enhanced automation and privacy**: We continue to deliver enhancements to intelligent services based on ongoing customer feedback. This includes in-depth and flexible

automation as well as more granular privacy controls to help promote adoption across the organization.

Watch overview video

What's new and planned for Dynamics 365 Sales Insights

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Extend action options taken from the suggested actions	Admins, makers, or analysts, automatically	Oct 2019	
More personalized and guided assistance	Users by admins, makers, or analysts	Oct 2019	-
Understand how sellers are using suggested actions	Admins, makers, or analysts, automatically	Oct 2019	
Capture more customer communications	Users by admins, makers, or analysts	Dec 2019	-
Customize scoring to adapt to organizational needs	Users by admins, makers, or analysts	Dec 2019	
Improve seller coaching with Conversation intelligence	Users by admins, makers, or analysts	-	Oct 2019
Guide sellers with next best actions through the Assistant Studio	Users by admins, makers, or analysts	✓ Apr 1, 2019	Oct 2019

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

Extend action options taken from the suggested actions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Business value

Sellers must track many things at once. Suggested actions can help them determine their next steps. Following up on them can be a lot of work, but automation can improve sellers' productivity.

With this release, organizations have the option to extend the actions a seller can take. Previously, sellers could only open an entity, like an opportunity, or open an URL as a follow up for suggested action. Now, you can preview extending those actions for custom actions, REST APIs, launching a playbook, and triggering a flow.

Feature details

-**Change the name of the displayed action**: Make your actions more descriptive. Currently, the only option to show to the seller is **Open**. Now, you can customize the texts for your needs. -**Automate suggested actions with Flow**: Like a custom action in Dynamics 365, you can run a Microsoft Flow as a response to your seller interacting with the system. You can, for example, automate sending a document via email. -**Automate suggested actions with custom actions**: Let your sellers trigger the execution of a custom action from a suggested action. Simple actions, like updating a field, can be triggered directly from within the suggested action. -**Automate using a REST API call**: If you can't use Microsoft Flow or a custom action to help to automate an action, you can configure a REST API call that lets sellers execute any automatic action directly from the suggested action within Dynamics 365.

More personalized and guided assistance

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

To focus on selling, sellers can benefit from a personal assistant that knows their specific context and is available to help across all interactions with Dynamics 365. The assistant can offer guidance and in-the-moment suggestions for the next best course of action, helping to advance every customer engagement.

Feature details

Assistant in Microsoft Teams: The new assistant in Teams helps sellers be proactive, productive, and personal, offering timely insights and freeing time to focus on relationships. Supported in Teams mobile application.

- **Prepare for your day**: Get a digest of important customer engagements and key information, all in a single place. Receive personalized insights during every phase of the sales journey.
  - **Prepare for meetings**: Arrive informed and prepared to meetings by reviewing a summary of customer interactions across the team, as well as latest news about the customer. Learn who in your company knows the meeting attendees and receive talking points based on past conversations, all helping to build rapport and start the meeting smoothly.
  - **Next best action**: Nothing falls between the cracks with the insights feed, proactively offering next best-action suggestions throughout the day. Sales operations can customize the insights feed, adapting to specific processes and guidelines of the organization.
  - **Follow up after a meeting**: Transform note taking. Instead of tediously typing handwritten notes into Dynamics 365 after a meeting, save time by using your phone's camera to capture the notes and analyze them, using optical character recognition to convert writing into text.
  - **Capture business cards**: Save time manually entering contacts with the new business card scanner. Easily use your phone's camera to capture business cards, analyze, and save relevant information as new contacts in Dynamics 365.

Assistant in Sales Insights for managers: Assistant displays relevant insights on each seller to help managers recognize issues that require immediate attention or action. By tying together Dynamics 365 sale outcomes and processes with Office 365 activities and sales calls, the assistant can surface out-of-box coaching insights to help managers and sellers directly in the app.

See also

Feature exploration (video)

Understand how sellers are using suggested actions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Business value

Sellers are busy and need to keep track of numerous customers and a wide range of sales materials. Organizations also invest significant time and resources producing materials and guidance to maximizes revenue. Giving sellers the right information in the right context can help ensure they leverage their sales materials, which helps to maximize ROI and improves the selling process.

We're empowering sales organizations so you can create suggested actions in the flow, delivered to sellers via the Dynamics 365 Assistant, meeting sellers wherever they are. This will help to ensure the most pertient information is promoted and to avoid unnecessary distractions. We're offering measures to help maximize the usage and health of suggested actions and to help you understand the impact of sales guidance. These measures highlight which sales materials are used and whether they are useful for sellers, ensuring suggested actions are more targeted, better prioritized, and drive impact.

Feature details

- **Understand the usefulness of a suggested action**: To understand the usefulness of an insight card, organizations need to understand how each suggestion is used. Measures for each suggested action includes:
  - How often was a suggested action shown, and to how many sellers?
  - How often did sellers interact with a suggested action and what was the interaction?
  - How many sellers gave positive or negative feedback via dedicated buttons?

- **Understand the health of the underlying logic**: To understand whether a suggested action is working properly, organizations need to understand the context and flow. Measures for suggestion health include:
    - Name of the underlying flow
    - Last time the flow was executed and if the execution was successful
    - Indication whether the flow resulted in the creation of a suggested action To ensure this information is easy to access, health information is also shown as part of the manage insight-cards tab within the studio.

Capture more customer communications

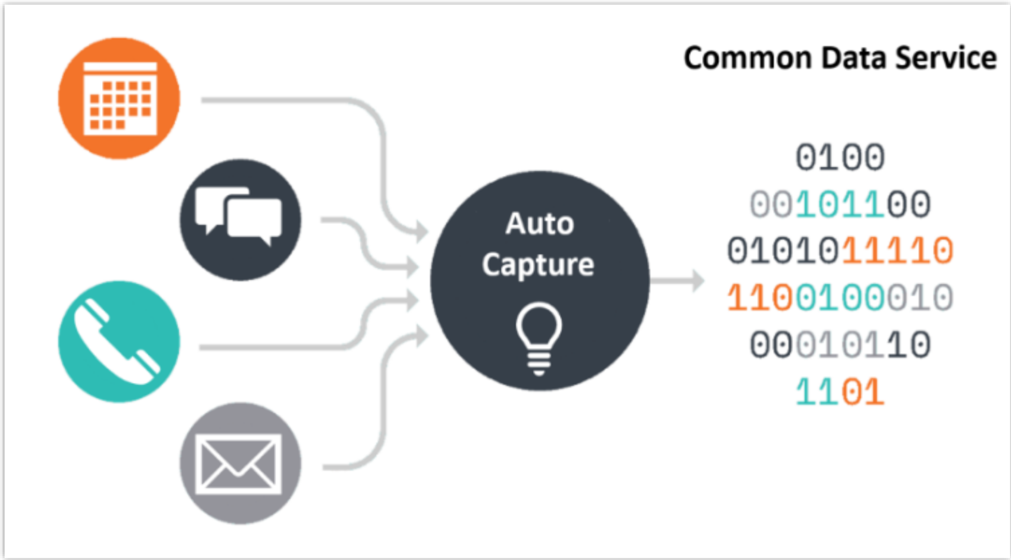
Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Dec 2019	-

Business value

Sellers seek to focus their time on selling rather than updating Dynamics 365 and logging every customer-related activity. Now Auto capture goes beyond capturing emails with customers to also capture meetings on the calendar, logging them into appropriate records. Auto capture also provides suggestions to create new contacts, based on communications, reducing overall time spent on these tedious tasks and freeing sellers to focus on what matters most.

Feature details

- **Automatically capture communication with customers**: Automatically add emails and meetings with customers to the timeline of related records and share them across the organization.
- **Enrich CRM by proposing to track specific emails, meetings, and contacts**: Surface suggestions to enrich data in Dynamics 365 and make sure nothing falls between the cracks by proposing emails, meetings, and contacts.
- **Privacy controls**: Allow admins to manage privacy settings with highly granular controls.



Zero-click Auto capture

See also

Feature exploration (video)

Customize scoring to adapt to organizational needs

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Dec 2019	-

Business value

Organizations rely on intelligent predictions to make critical business decisions. To make predictions more meaningful, it is key to adapt to the nuances of each organization's processes and strategies. Now, organizations can add their unique business-specific inputs to the overall scoring models and customize them to fit their specific business needs.

Feature details

- **Add custom fields to predictive opportunity scoring and predictive lead scoring**: Business analysts can add custom signals that are specific to the business, extending out-of-box predictive models.

See also

Feature exploration (video)

Improve seller coaching with Conversation intelligence

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	-	Oct 2019

Business value

Customer conversations are a critical part of the sales cycle, directly contributing to sales and revenue generation. Conversation intelligence offers a seamless and automated process for analyzing conversations across multiple channels to ensure quality is monitored and improved over time.

Feature details

- **Emotion and brand detection**: New AI models for emotion detection provide granularity to understand customer sentiments during calls. Brand detection helps to discover new products and brands that customers are talking about in sales calls.
- **Timely insights**: Assistant in the app continuously provides unique and timely insights.
- **Natural language Q&A**: Data exploration of sales and conversational data offers an opportunity to ask simple questions in English and to dynamically receive reports that address these questions.
- **Analyze seller behaviors**: Analysis of top seller behaviors empowers managers to understand common patterns leading to positive sales outcomes.
- **Cross-channel and sales KPIs**: Highlight valuable information leading to win/loss in sales, across the team, out of the box.
- **Conversation review**: A detailed view of conversations, surfacing areas that are effective versus those that are unsuccessful, highlighting brand mentions and gaps where sellers can benefit from coaching.

Sales coaching journey

See also

Feature exploration (video)

Guide sellers with next best actions through the Assistant Studio

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Apr 1, 2019	Oct 2019

Business value

Sellers are busy. They spend significant time collecting information, reaching out to peers, and preparing for customer engagements. All the while, they ensure that they follow up with the right customer, at the right time, and in the right way. Suggested actions can help sellers optimize their next best action and can help save time and maximize effectiveness, improving overall sales productivity.

In April 2019, we started offering organizations the ability to create custom suggested actions for sellers. These suggested actions empower organizations to transform the sales process by helping guide sellers with more targeted suggestions. Organizations can use events from many systems and define conditions to describe circumstances under which each suggestion will be surfaced. This provides flexibility when guiding sellers in their business processes. The guidelines proactively push the right information into the seller's workflow at the right moment. By streamlining business practices and introducing more predictability into sales motions, the studio helps organizations enforce best practices and transform productivity, guiding sellers on a path to close deals faster and increase revenue.

Feature details

- **Guide sellers with customized suggested actions**: Use Microsoft Flow and the studio to create new insight cards that adhere to particular sales processes and are delivered to sellers at the right moment via the Relationship Assistant and other surfaces. Suggested actions can be based on events triggered by over 200 services registered with Microsoft Flow, such as emails received or updates in Dynamics 365 Sales, offering unique flexibility to adhere to every organizational best practices.
- **Target roles for personalized guidance**: Select the addressable audience for each action, to target suggested actions at the right seller roles, ensuring the right content is surfaced to the right individual at the right time. When the context is right, sellers are more likely to leverage sales materials.
- **Benefit from enhanced experiences**: As part of our commitment to customers, we are actively listening to feedback and improving experiences accordingly. Users can now search for cards they have created, benefit from more filters, and enjoy a more streamlined experience. Notably, the flow creation experience is embedded into the studio to save unnecessary context switching.

See also

Feature exploration (video)

Overview of Dynamics 365 Customer Service Insights 2019 release wave 2

Dynamics 365 Customer Service Insights provides an actionable view into critical performance metrics, operational data, and emerging trends using industry-leading artificial intelligence. These insights empower customer service managers to make better decisions to improve customer satisfaction and operational efficiency with confidence. Thanks to the power of artificial intelligence (AI), machine learning, and business intelligence (BI), you can easily get a clear view into your contact center on what is happening, why it is happening, and what could happen, and then decide your best course of action. The AI model used by Customer Service Insights proactively learns from users' gestures and optimizes over time per each individual customer. Best of all, the AI capabilities are included out of the box and don't require any AI expertise to use.

With the product's general availability (GA) in April 2019, we enabled an integrated experience with more enterprise capabilities that give you a richer view into your customer service organization.

In the 2019 release wave 2 updates, you'll see a number of new capabilities released every month. These features include the ability to create shared workspaces that connect to your case data stored in Dynamics 365 and Common Data Service, which can include data from Salesforce, Zendesk, ServiceNow, or other sources.

In addition, you'll be able access Customer Service Insights directly from the Dynamics 365 Customer Service application without losing context. Additional dashboards and metrics in your Customer Service Insights workspaces will provide a deeper view into your organization and opportunities to improve. Enhancements to existing AI-driven topic generation features as well as additional features using artificial intelligence will continue to help you make better decisions and proactively improve customer satisfaction with confidence.

Throughout 2019 release wave 2, you'll see a number of new capabilities in Customer Service Insights. Review the "what's new" page regularly for the latest updates. Additional feature requests can be added in the Customer Service Insights ideas page.

Watch overview video

What's new and planned for Dynamics 365 Customer Service Insights

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Continuous topic improvement such as additional topic controls, opportunities for user feedback	Admins, makers, or analysts, automatically	Dec 2019	-
Improved integrations across business application products	Admins, makers, or analysts, automatically	Mar 2020	
More insights across dashboards including improved navigation and new metrics to measure customer impact	Admins, makers, or analysts, automatically	Mar 2020	
Support topic generation based on case titles in French, German, and Spanish	Admins, makers, or analysts, automatically	-	Oct 2019
Improve Dynamics 365 Virtual Agent for Customer Service through topics for automation	Admins, makers, or analysts, automatically	-	Dec 2019
Improved support for topic generation for non-English case titles	Admins, makers, or analysts, automatically	Oct 2019	Dec 2019

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

Continuous topic improvement such as additional topic controls, opportunities for user feedback

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Dec 2019	-

Feature details

Customer Service Insights provides AI-driven topic generation based on the case titles imported into the system. While the AI model has been tuned for customer service scenarios, we understand not every business is the same and have enabled multiple controls and feedback avenues within the products, so that customers can ensure the model works best for them. In this wave of updates you'll see additional capabilities around topic generation and the different controls available in order to influence and provide feedback to the model, including better highlighting of topics and cases that need the most feedback. This will help users improve the topic clustering result more efficiently and effectively.

Improved integrations across business application products

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Dynamics 365 Customer Service Insights works better with other business application products, and in this wave of updates, you'll see improved integration with Dynamics 365 Customer Service, Dynamics 365 Virtual Agent for Customer Service, Common Data Service platform, and others based on customer requests. These integrations provide improved access to your insights, easier configuration within the product, and more, all to help you better understand your customer service business and make the right decisions with confidence.

More insights across dashboards including improved navigation and new metrics to measure customer impact

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Dynamics 365 Customer Service Insights proactively creates AI-generated topics and ensures their stability with every refresh. In 2019 release wave 2, you'll see additional insights that will help you make better decisions more quickly. Some capabilities being considered include improved dashboard navigation and new metrics that help measure customer impact. These new features will be deeply integrated with existing AI capabilities in Customer Service Insights and will include controls and settings to ensure the behavior meets your business needs.

Support topic generation based on case titles in French, German, and Spanish

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Customer Service Insights now supports AI-generated topics from case data in more languages than English. Previously, an English-only model was used to understand the case titles and automatically group the similar cases into topics. While this model could be used with case titles that were in other languages, the accuracy and relevance of the topics would be decreased as the full meaning of the case titles was not understood. With this addition of specific language models, including French, German, and Spanish, customer service managers that work with cases in those particular languages will now receive benefit from much more accurate topic generation. In addition, if the customer service organization serves customers in a dominant language we support as well as English case titles, the language-specific model will still perform and provide accurate topic generation across both languages. The support for additional languages will be continuously added into the service.

Improve Dynamics 365 Virtual Agent for Customer Service through topics for automation

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

Customer Service Insights identifies the topics that are best suited for automation using Virtual Agent for Customer Service. You can review the list of suggestions, import the suggested topics into a virtual agent, and deploy the virtual agent in minutes using the integrated experience with the Virtual Agent Designer.

- Discover all potential topics from support data, and efficiently identify high business value topics best suited for virtual agents.
- Analyze and present the potential business impact for each suggested topic; for example, the impact on customer satisfaction (CSAT), or agent handling time.
- Select and import suggested topics into virtual agents with an integrated experience, to help create the virtual agent content quickly.

Improved support for topic generation for non-English case titles

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	Dec 2019

Feature details

Customer Service Insights started with topic generation based on case titles with an AI model focused on English only. The 2019 release wave 2 includes support for additional languages including French, German, and Spanish as well as accounts that have a mix between one of those languages and English. While that expands the capabilities to many more customers, we understand that there are additional dominant languages in customer case titles that are not fully addressed by these models. This wave of updates will include even more language support, focusing on mix-Latin languages. Additional support can be requested through our ideas forum.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Overview of Dynamics 365 Virtual Agent for Customer Service 2019 release wave 2

Dynamics 365 Virtual Agent for Customer Service enables organizations to create AI-powered bots that chat with customers to help them with support topics, and provides new opportunities for organizations to improve customer service through digital transformation. Virtual Agent for Customer Service frees up valuable cycles for the support team, allowing human agents to focus on more complex and strategic cases. In addition, bots can greatly improve customer satisfaction because they are always available, require no hold times, and allow customers to get help immediately.

Typically, creating a bot has been a complex and time-intensive undertaking, with long content update cycles and requiring a team of developers and AI experts. Dynamics 365 Virtual Agent for Customer Service enables any customer service manager to create a powerful custom bot using an easy, code-free graphical interface, without the need for AI experts or teams of developers. The bot can chat with customers, ask appropriate clarifying questions to identify issues, and guide customers to a resolution.

With tight integration with Dynamics 365 Customer Service Insights, support teams use AI-driven dashboards to identify high-volume support topics that can be automated with a bot. These conversation topics can easily be created using an intuitive, graphical experience in a conversation editor without the need for AI experts, data scientists, or teams of professional developers. And as customers interact with the bot, the customer service manager can see which topics are performing well and which need further improvement.

What's new and planned for Dynamics 365 Virtual Agent for Customer Service

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [Microsoft policy]).

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This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Analytics dashboards

See at a glance how your bot is performing and identify which topics need further improvement.

Feature	Enabled for	Public preview	General availability
Publish to web channels	Admins, makers, or analysts, automatically	-	Dec 2019
Customer satisfaction (CSAT) dashboards	Admins, makers, or analysts, automatically	✔ May 30, 2019	Dec 2019

Bot configuration

Configure the bot to suit the business needs

Feature	Enabled for	Public preview	General availability
Connect to channels	Admins, makers, or analysts, automatically	-	Dec 2019
Microsoft Bot Framework Skills support	Admins, makers, or analysts, automatically	-	Dec 2019
User authentication	Admins, makers, or analysts, automatically	-	Dec 2019

Core authoring

Utilize the Virtual Agent conversational editor to construct your dialogs, add variables or synonyms, and incorporate Microsoft Flows that enable you to connect to other systems.

Feature	Enabled for	Public preview	General availability
Customize the canvas themes	Admins, makers, or analysts, automatically	-	Dec 2019
Support for multiple users editing topics at the same time within a bot	Admins, makers, or analysts, automatically	-	Dec 2019

Feature	Enabled for	Public preview	General availability
Enable actions or access data from back-end systems with Microsoft Flow	Admins, makers, or analysts, automatically	✔ May 30, 2019	Dec 2019
Enhanced conversation testing and debugging	Admins, makers, or analysts, automatically	✔ May 30, 2019	Dec 2019
Variable capabilities	Admins, makers, or analysts, automatically	✔ May 30, 2019	Dec 2019
Import and export bot topics	Admins, makers, or analysts, automatically	-	Jan 2020
Global variables	Admins, makers, or analysts, automatically	-	Mar 2020

Enhanced natural language capabilities

AI and natural language capabilities enable the system to understand and parse complex user language.

Feature	Enabled for	Public preview	General availability
AI-assisted authoring – Topic suggestions from websites	Admins, makers, or analysts, automatically	-	Dec 2019
Entity extraction with custom entities	Admins, makers, or analysts, automatically	-	Dec 2019
Entity extraction with system entities	Admins, makers, or analysts, automatically	-	Dec 2019
Integration with Dynamics 365 Customer Service Insights	Admins, makers, or analysts, automatically	-	Dec 2019

Feature	Enabled for	Public preview	General availability
Slot-filling capabilities	Admins, makers, or analysts, automatically	-	Dec 2019
AI-assisted authoring – Topic suggestions from bot sessions	Admins, makers, or analysts, automatically	-	Mar 2020

Handoff to a human agent

Gracefully hand off customer conversation from the bot to a human agent.

Feature	Enabled for	Public preview	General availability
Hand off to a generic live-chat provider	Admins, makers, or analysts, automatically	-	Dec 2019
Hand off to Omnichannel for Dynamics 365 Customer Service	Admins, makers, or analysts, automatically	Oct 2019	Dec 2019

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Analytics dashboards

Overview

To effectively resolve customer problems, customer service managers need to have a clear view of the performance of their bot in terms of resolutions, escalations to human agents, abandons, and customer satisfaction. Dynamics 365 Virtual Agent for Customer Service provides intuitive and actionable dashboards with recommendations on which topics to focus on and how to continuously improve a bot's performance.

In the 2019 release wave 2, we are including features that will further amplify these analytics.

Publish to web channels

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

Bot authors can deploy their bot to a demo website and share it internally within the customer support organization. The demo website lets team members try out the bot and provide feedback without the need to create their own website.

Customer satisfaction (CSAT) dashboards

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ May 30, 2019	Dec 2019

Feature details

A customer service manager is interested in the topics that are having the most impact on customer satisfaction and topics that are not addressing customer problems. Through a detailed customer satisfaction dashboard, the customer service manager can get a view into the overall customer satisfaction (CSAT) score and the bot topics that drive that score.

The CSAT drivers display topics in order of their impact on customer satisfaction over the specified time. These actionable insights can inform the customer service managers about managing topics to drive the overall customer experience.

See also

Customer Satisfaction page (docs)

Bot configuration

Overview

The bot can be configured to suit the individual needs of an organization and to provide further extensibility with other services and features. This includes authentication provider support, the use of Microsoft Bot Framework Skills to augment the bot's capabilities, integration with Teams and Facebook channels, and the direct embedding of a bot in web-based mobile apps.

Connect to channels

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

A channel is the method your customers use to contact you, such as via email, your call center, or your website. With this release, authors can configure their bots to connect to Facebook and Microsoft Teams channels, as well as embed their bot on a website or in a web-based mobile app.

Additionally, an admin can share their channel configurations with a system integrator or partner, who can then use the configuration via a programming interface with sample code provided by Microsoft to connect their native mobile app and other channels to the bot.

Microsoft Bot Framework Skills support

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

Skills are reusable conversational capabilities built on the Microsoft Bot Framework. With this release, Skills can be used to author scenarios using complex capabilities.

After registering a new Skill, bot authors can use the bot building experience to seamlessly trigger actions embedded in a Skill. Additionally, organizations with existing Microsoft Bot Framework bots can convert their bots into Skills.

User authentication

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

User authentication can be enabled by configuring an Identity Provider for business(*). This capability allows a user to sign in directly to the provided service from within a chat, which means the bot can access a customer's information and take actions on their behalf, streamlining the support experience.

The support experience can be further augmented by using flows and Skills to call in to other applications with the customer's authentication information.

* OAuth2.0 is supported in the 2019 release wave 2 of Dynamics 365 Virtual Agent for Customer Service.

Core authoring

Overview

Use the authoring canvas in Dynamics 365 Virtual Agent for Customer Service to create and edit topics, and add trigger phrases and variables. Extend your bot's conversational capabilities with Microsoft Flow.

Customize the canvas themes

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

Organizations look to create differentiated experiences that reflect the personality of their brands through customized bots.

Off-the-shelf bots lack the personality and the custom look and feel that organizations want their bots to personify.

Dynamics 365 Virtual Agent for Customer Service offers the ability to personalize canvas elements like the avatar, background colors, chat bubble, and colors.

Support for multiple users editing topics at the same time within a bot

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

This release enables multiple users to edit different conversation topics within a bot, helping organizations ensure that employees with the right domain expertise implement conversation improvements.

For example, one author can be editing the topic about networking issues, while another author is editing the topic about store hours.

Enable actions or access data from back-end systems with Microsoft Flow

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ May 30, 2019	Dec 2019

Feature details

There are situations where solutions require a bot to trigger a back-end workflow or business process—for example, when a user asks a question about upcoming deals to be sent to an email address.

Virtual Agent for Customer Service integrates with Microsoft Flow, empowering customer service managers to trigger existing flows or create new ones that call back-end systems, without writing code.

Microsoft Flow has hundreds of connectors to common services that can be used to automate existing internal workflows. These connectors can then be called directly from dialogs authored in the Virtual Agent for Customer Service.

Custom code and connections to legacy systems can also be supported through custom connectors, providing opportunities to extend the Virtual Agent for Customer Service as your business needs change and grow.

See also

Add actions to your bot using Microsoft Flow (docs)

Enhanced conversation testing and debugging

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ May 30, 2019	Dec 2019

Feature details

Dynamics 365 Virtual Agent for Customer Service offers an easy-to-use graphical interface. Using a simple, no-code conversation editor, customer service managers and subject matter experts can build, manage, and maintain their own bots.

Virtual Agent for Customer Service provides a test bot to help authors verify functionality before deploying a bot broadly. The test bot allows authors to trace conversations through dialog trees by highlighting the current place in the conversation path. The conversation editor displays highlighted nodes in green with check marks.

Interactive chat bubbles allow quick navigation to a specific node within a dialog, making it simple and effective for a bot author to identify and fix problems in the conversations they build.

See also

Work with the Test bot pane (docs)

Variable capabilities

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ May 30, 2019	Dec 2019

Feature details

Variables are used to store customer information that can be referenced later in a conversation, saving the bot author time when creating complex interactions and communicating with other systems.

The system can parse a user's natural language response, extracting the appropriate customer information and assigning it to a variable for use in the conversation. Variables enable complex and rich conversations with a customer and are powerful tools to reduce customer service agent calls.

Key capabilities for variables

- Use variables in conversations
- Use variables for Microsoft Flow inputs and outputs
- Debug variables with powerful tools
- Support for mathematical operations on variables
- Variable reassignment
- Custom variable types and synonyms
- System-supplied variable types

See also

Work with variables (docs)

Import and export bot topics

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Jan 2020

Feature details

To help customer service teams move bot content to different environments for testing or other purposes, authors will have the ability to import and export bot topics.

Global variables

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

Bot authors can specify that variables set in preceding topics are carried across subsequent topics in a conversation.

Enhanced natural language capabilities

Overview

Dynamics 365 Virtual Agent for Customer Service is powered by conversational AI and natural language capabilities, which enable the system to understand complex language, parse it for the appropriate information, and ask for clarification when needed.

AI-assisted authoring – Topic suggestions from websites

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

Bot authors often already have website content and assets that they'd like to leverage when they build bots.

To get started quickly, authors can extract topic suggestions from their organization's website and then add the suggested topics to their bot. This capability works especially well with FAQ or support pages that already contain valuable content that can be leveraged in bots.

Entity extraction with custom entities

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

In addition to prebuilt system entities, an author can create custom entities to recognize and use in conversations.

For example, an author can define a list of supported payment types as: "*Visa, Mastercard, Discover, American Express, PayPal*"

The bot will be able to recognize responses such as “I have an American Express card” and will be able to route the conversation correctly.

Entity extraction with system entities

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

Dynamics 365 Virtual Agent for Customer Service can recognize, extract, and act on dozens of common entities in a user's responses. For example, colors, currencies, ages, dates and times, names, telephone numbers, durations, cities, states, addresses, zip codes, email addresses, languages, weights, speeds, temperatures, organizations, percentages, points of interests, and links can all be recognized.

The system uses natural language capabilities to match a user's responses to recognized entities. For example, if a bot asks a user to provide a city entity, it understands that the response "I live in the emerald city" maps to the city of Seattle.

Moreover, the system validates these entities. For example, when the bot asks the user for a color, and the user gives an unexpected answer, the bot will repeat this question.

Integration with Dynamics 365 Customer Service Insights

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

Dynamics 365 Customer Service Insights gives you an actionable view into critical performance metrics, operational data, and emerging trends for your customer service organization.

Built-in dashboards, interactive charts, and visual filters provide insights into support operations across channels, automatically highlighting areas for improvement with the greatest impact on customer satisfaction levels.

With the 2019 release wave 2 of Dynamics 365 Virtual Agent for Customer Service, a customer service manager using Customer Service Insights can select topics to automate from within Customer Service Insights, and click through seamlessly to the Virtual Agent conversation editor to build and deploy them.

Slot-filling capabilities

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

Every time a user says something to interact with a bot, the response might contain useful information that helps guide the conversation. The system continuously parses the user's responses for information that it uses to guide the conversation.

This means the bot can recognize information that the user has already provided or that is missing, ask clarifying questions if needed, and continue with the dialog. This capability is called slot filling.

For example, to ask about the weather, the user might naturally include the topic (weather forecast), the location (Redmond), and the time (Thursday). For example:

User: *What's the weather in Redmond on Thursday?*

Bot: *The weather forecast for Thursday in Redmond Washington is sunny with a chance of rain...*

However, sometimes a user's response is more ambiguous and less scripted, and the user might not give all the information needed to perform a task. With slot filling, the bot can have a short conversation with the user to find out the missing information required to complete the task.

For example, to ask about the weather, here's what the conversation with slot filling might look like:

User: *What's the weather like Thursday?*

Bot: *I can look up the weather for you. Where should I check?*

User: *Redmond Washington*

Bot: *The weather forecast for Thursday in Redmond Washington is sunny with a chance of rain...*

AI-assisted authoring – Topic suggestions from bot sessions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

In addition to suggestions from websites and from support cases (via Dynamics 365 Customer Service Insights integration), we are supporting suggestions from bot sessions using chat transcripts. The more users interact with a bot, the better it gets. As people interact with a bot, the system surfaces suggestions to the author about topics and trigger phrases people are using that the bot doesn't yet know how to answer. The author can then act on those suggestions to create new topics or add trigger phrases to existing topics to build a bot's repertoire.

Handoff to a human agent

Overview

When a bot can't handle the user's requests or the user asks to talk to an agent at any point in the conversation, it's important to gracefully bring in a human agent. In Dynamics 365 Virtual Agent for Customer Service, we are providing customer service managers with the ability to configure and connect to multiple live chat engagement hubs.

Hand off to a generic live-chat provider

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Dec 2019

Feature details

In the 2019 release wave 2, IT admins can configure a hand-off from Virtual Agent to other live chat engagement hubs using an interface and sample code.

Hand off to Omnichannel for Dynamics 365 Customer Service

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	Dec 2019

Feature details

Dynamics 365 Virtual Agent for Customer Service comes integrated out of the box with Omnichannel for Dynamics 365 Customer Service.

The bot hands off seamlessly to agents using Omnichannel for Customer Service for the agent-facing experience, providing the human agent with the full context of its conversation with the user, and helping the human agent avoid questions the bot has already asked.

Overview of Dynamics 365 Market Insights 2019 release wave 2

Today, business professionals face several challenges to understanding their customers and their market. An enormous amount of information is continuously being updated and coming from many different sources. In addition, some of the information needed may not be accessible. It may also take weeks or months to collect and understand the information about a specific topic, and this information is often expensive to access, gather and process. In the worst case, you may miss an important event or find out about it too late. These challenges result in low visibility into market trends and missed opportunities to build customer relationships.

With Dynamics 365 Market Insights, you can close this gap with access to a variety of insights about the things you're interested in most (e.g. your products, customers, competitors, partners, events, and general topics). These insights come from a variety of data sources (including but not limited to news, web data, internet browsing behavior, and search activity) and are delivered to you in a concise, timely and proactive manner. In addition to providing relevant news about your topic(s), Dynamics 365 Market Insights also enables you to make more informed decisions based on what consumers say, seek, and feel about their products and brands.

What's new and planned for Dynamics 365 Market Insights

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Get email notifications when there is news or new insights about your topic(s)	Users, automatically	✔ Apr 1, 2019	Oct 2019
Access the news and insights related to topics of interest in a web app	Users, automatically	Sep 2019	Mar 2020

Feature	Enabled for	Public preview	General availability
Customize alert notifications (time, frequency, and consolidation) and delete user accounts	Users, automatically	Sep 2019	Mar 2020
Easily share individual insights with colleagues via social media, email, IM, and text	Users, automatically	Sep 2019	Mar 2020
Get additional insights related to business topics from web data, search activity and browsing behavior (US only)	Users, automatically	Sep 2019	Mar 2020
Get more relevant insights by defining topic characteristics in a user's business universe	Users, automatically	Sep 2019	Mar 2020

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
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For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

Get email notifications when there is news or new insights about your topic(s)

Enabled for	Public preview	General availability
Users, automatically	✔ Apr 1, 2019	Oct 2019

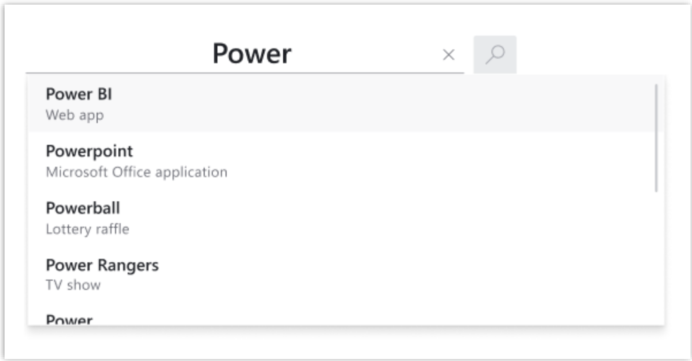
Business value

Use alerts to keep up with developments in the market and make informed decisions that help you stay ahead of the competition and serve your customers better. Alerts help you maximize business impact by notifying you about what's most important and reducing much of the noise using artificial intelligence (AI).

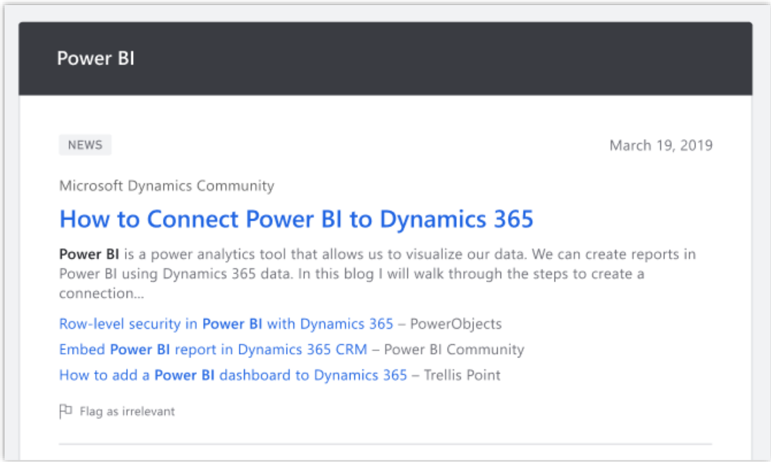
Feature details

Since April 2019, the alerts feature has been available for preview. (US-Eng Only)

Use it to recognize top products, brands, and companies so you only see results for the business-related topic of interest.

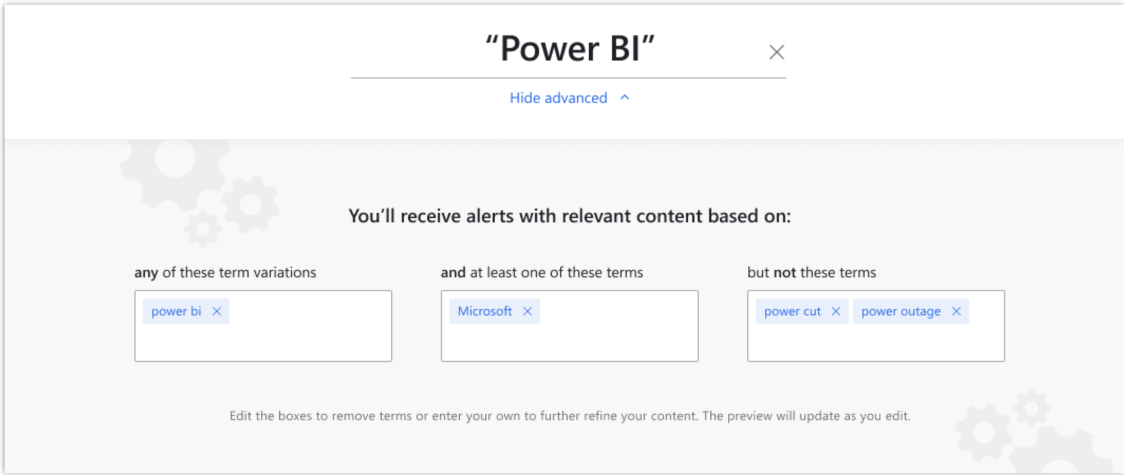


Matches for top brands and companies



Content for relevant match

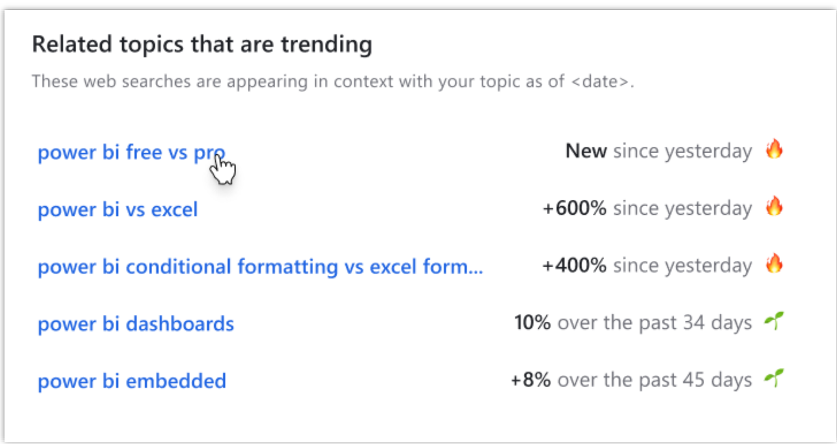
Leveraging AI, we send a notification email only when something is important enough, therefore eliminating the noise from less relevant articles. The focus is on content that is most relevant to business professionals, such as mergers, acquisitions, product launches or sunsets, customer issues, and more. As a user, you can customize topics to tailor the content and stay focused on what matters most for your business.



How users tailor when they receive alerts

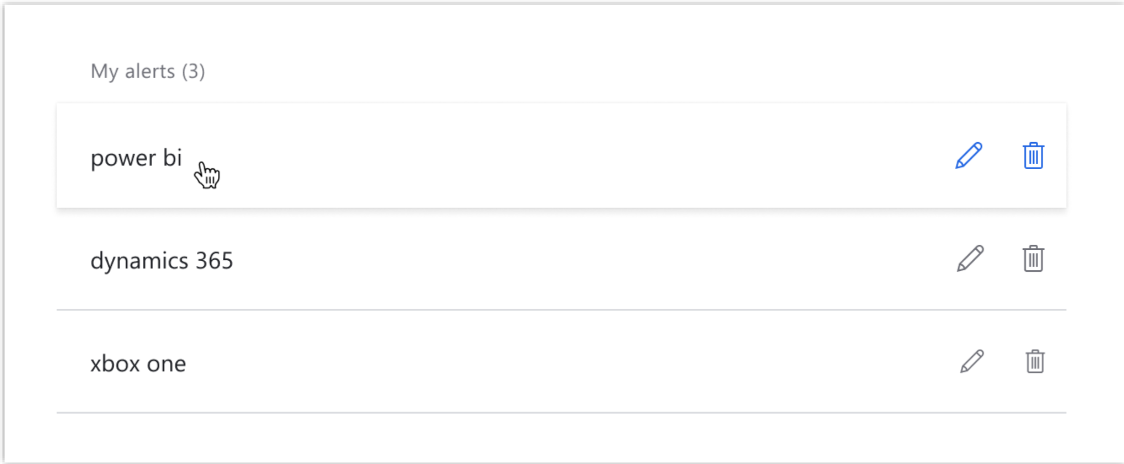
This goes beyond what's in the news about the topic and identifies trending topics or anomalies to help you make decisions and take action.

You can monitor what people are browsing and searching for on the web, and get information on what's trending related to a topic before it even makes it to the news.



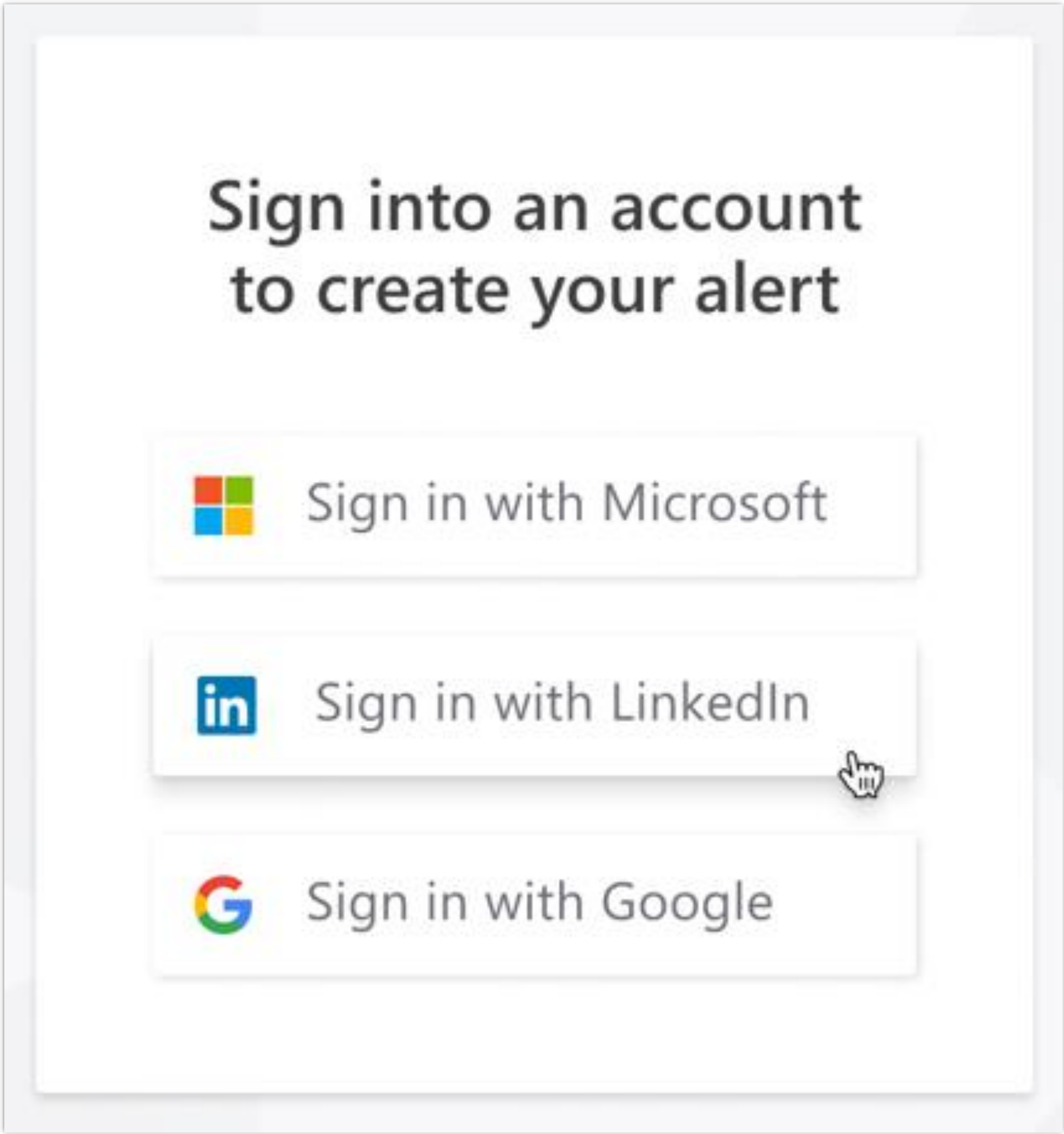
Related topics that are trending

You can edit and manage your alerts at any time to ensure they are always relevant for your business context.



List of alerts for a user

Choose from several sign-in options, and use accounts you already have to sign in.



Sign-in options for Market Insights alerts

The 2019 release wave 2 includes the following enhancements:

- **Tailored alerts**: Get more relevant content for your job function or needs by choosing from a set of categories of interest to organize, filter, and prioritize content. Get insights specific to your needs and job functions.
- **Richer insights from the market**: Get even more insights about what consumers and competitors are doing online.

- **Sentiment and tone insights**: Understand at a glance the overall public sentiment and media tone of developing content.
- **Advanced alerts refinement**: Specify details for topics using Boolean operators.
- **Grouped alerts**: Group multiple related topics into a single digest notification for easy organization and consumption, saving people time and promoting efficiency.

Access the news and insights related to topics of interest in a web app

Enabled for	Public preview	General availability
Users, automatically	Sep 2019	Mar 2020

Business value

One place to access information (news and insights) about your topics in a concise format that is easy and quick to scan.

Feature details

See the latest updates, upcoming events, and emerging insights about your topics of interest, all in one place in the Insights feed. Select any specific insight to see more details related to that insight.

Customize alert notifications (time, frequency, and consolidation) and delete user accounts

Enabled for	Public preview	General availability
Users, automatically	Sep 2019	Mar 2020

Business value

Users have more control over the service and can set up delivery of notifications based on their preferences.

Feature details

Users can customize the time of delivery (hourly) and choose to receive notifications on weekdays only (in addition to having a weekly and daily option). Additionally, users can now also opt to receive one email notification for all their topics. Lastly, they can delete their user account if they don't want to use the service anymore.

Easily share individual insights with colleagues via social media, email, IM, and text

Enabled for	Public preview	General availability
Users, automatically	Sep 2019	Mar 2020

Business value

Make decisions collaboratively by sharing insights with other people.

Feature details

Share insights with others by sharing the link to a publicly accessible page with your insight via popular social media platforms (Twitter, LinkedIn), or by sending the link via standard messaging platforms such as email, WhatsApp, and Microsoft Teams.

Get additional insights related to business topics from web data, search activity and browsing behavior (US only)

Enabled for	Public preview	General availability
Users, automatically	Sep 2019	Mar 2020

Business value

Gaining insights and seeing broad patterns about what people are saying, feeling, and searching for about your topics of interest allows you to understand how your product, brands, and competitors are doing in the marketplace, and helps you make informed business decisions.

Feature details

The product release in October adds the following new types of insight for business topics:

- *Rising topics* let you to see changes in online activity of specific sub-topics related your topics as they happen and will show related content (when available).

- *Search trends* allow you to understand overall changes in how people are searching for your topics.
- *Product launches* notify you of product announcements related to your topic (if your topic is a company or product).
- *Product attributes* help you understand what attributes or features of your product people are searching for most when comparing to competing products.
- *Navigation patterns* help you understand browsing behavior on the Internet related to the website of your topics.
- *Audience demographics* help you understand the demographic distribution (age and gender) of people who search for your topics.

The insights will be available in English only and focus on data from the United States.

Get more relevant insights by defining topic characteristics in a user's business universe

Enabled for	Public preview	General availability
Users, automatically	Sep 2019	Mar 2020

Business value

You can define multiple topics of interest around your business ecosystem and relationships between these topics. The Assisted Query capabilities allow semantic understanding of topics and increase relevancy and accuracy of insights.

Feature details

Automatic and manual definition of topics lets the app understand the semantics in your business universe. This will find news and generate insights that are more relevant to those topics and let you make faster business decisions and act faster. Assisted Query helps you define the best possible setup of your topics. Additionally, you can provide fine-grained classification of your topics and define the relationship of your topics toward yourself and toward your competitors.

Overview of Dynamics 365 Customer Insights 2019 release wave 2

Customer experience is at the very core of every organization's digital transformation ambitions. To compete in today's market, organizations need to build meaningful relationships with their customers on a personal level. The ability to effectively personalize at scale requires a complete, unified view of customers. Build a deep understanding of customers by connecting customer data from various transactional, behavioral, and observational sources to create a 360-degree customer view to deliver insights that drive customer-centric experiences and processes.

The latest release of Microsoft Dynamics 365 Customer Insights includes new capabilities to help businesses further unify data across sources to get a single view of customers, optimize engagement, and discover insights that drive personalized experiences.

What's new and planned for Dynamics 365 Customer Insights

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Extending Customer Insights with Power Platform	Admins, makers, or analysts, automatically	Oct 2019	
Guided experience to predict customer patterns	Admins, makers, or analysts, automatically	Oct 2019	
Infusing Customer Insights into Dynamics 365 apps	Users by admins, makers, or analysts	Oct 2019	-
Ability to link accounts and contacts in the customer model	Admins, makers, or analysts, automatically	Oct 2019	-

Feature	Enabled for	Public preview	General availability
AI-driven experience to create customer segments	Admins, makers, or analysts, automatically	Oct 2019	
Customer Insights consulting services available in Microsoft AppSource	Admins, makers, or analysts, automatically	-	Oct 2019
Data unification improvements	Admins, makers, or analysts, automatically	-	Oct 2019
Extend Customer Insights with Azure Machine Learning	Admins, makers, or analysts, automatically	-	Oct 2019
Flexible deployment options	Admins, makers, or analysts, automatically	-	Oct 2019
Guided experience helps users to create KPIs and dashboards	Admins, makers, or analysts, automatically	-	Oct 2019
Segment builder and measures wizard enhancements	Admins, makers, or analysts, automatically	-	Oct 2019
Recommended segments and measures	Admins, makers, or analysts, automatically	-	Oct 2019

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Extending Customer Insights with Power Platform

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Business value

Get started quickly with out-of-box templates and connectors for Power BI, Microsoft Flow, and PowerApps.

Feature details

Extend Customer Insights with Power Platform:

- Out-of-box templates for PowerApps help users to build apps more quickly.
- Enhanced Microsoft Flow connectors include triggers to set up workflows.
- Updated Power BI connectors improve the get-data experience and performance.

Guided experience to predict customer patterns

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Business value

Spend less time building machine learning capabilities and more time benefiting from the results they deliver.

Feature details

Guided experience:

- Helps create predictions based on unified customer profiles.
- Adds ability to use results in measures, segments, and reporting.

Infusing Customer Insights into Dynamics 365 apps

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	-

Business value

Unlock more insights and take more decisive action with an improved customer card that provides a more comprehensive timeline of the customer journey across the marketing, sales, and customer service functions.

Feature details

A variety of enhancements in the customer card include visual indicators for measures, the ability to display data sources to direct users to the source document, options to re-order fields, as well as the ability to expand and collapse timeline controls.

Ability to link accounts and contacts in the customer model

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Business value

Create more actionable Customer Insights depending on your business model for both Organizations (B2B) and Individuals (B2C).

Feature details

Users can now build segments and measures to combine the activities and attributes of both individuals and organizations by using the Account to Contact relationship functionality.

That relationship will become available in other areas of Customer Insights such as segments and measures.

AI-driven experience to create customer segments

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Business value

Create insights that are actionable to help increase customers engagement by providing AI-driven segments that are tailored to your specific business goals.

Feature details

A new AI-driven experience provides recommendations to create segments based on data patterns. Examples are customers likely to churn or customers likely to engage with new offers.

Customer Insights consulting services available in Microsoft AppSource

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Quickly identify Microsoft partners to help you implement Customer Insights.

Feature details

Microsoft AppSource now includes consulting service offers for Dynamics 365 Customer Insights to help business users find a partner and get started quickly.

Data unification improvements

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Advanced configuration options provide users with greater control on how data is unified.

Feature details

Advanced configuration options provide:

- Ability to manually overwrite system-generated matches.
- Ability to implement weighted scores to better control how the system matches records—for example, name and address can have a different weighted score.
- Ability to normalize addresses to help increase match results.

Extend Customer Insights with Azure Machine Learning

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Easily extend Customer Insight through your own Azure ML models, predict outcomes, and create deeper insights within your unified customer profile, for example by predicting next steps.

Feature details

Extend Customer Insights with Azure Machine Learning:

- Automate the export of Customer Insights unified profiles to your Azure subscription, run your models using Azure Machine Learning, and ingest the results back into Customer Insights.
- Add the ability to use model results in measures, segments, and reporting.

Flexible deployment options

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Enable customers to bring their own Azure data storage for data ingestion and storage of unified data providing flexible configuration options and help support customer specific requirements.

Feature details

As part of the initial deployment and configuration process, admins can now select their own Azure storage for data ingestion and storage of unified customer data.

Guided experience helps users to create KPIs and dashboards

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Gain a more holistic view of your business and customers by identifying and tracking your business goals through a new guided experience and dashboard. The wizard helps reduce user time and effort and unlock the full set of insights that drive your business goals.

Feature details

New guided experience and dashboard:

- **Guided experience** allows users to select from a list of predefined business goals—for example, to reduce customer churn. The wizards provide recommendations on which insights to create.
- **Business goal dashboard** allows users to track progress toward achieving the business goal.

Segment builder and measures wizard enhancements

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Enhanced wizard functionality helps build customer segments and measures that business analysts can use to more effectively track customer activity and engagements.

Feature details

Improved segment and measures creation wizard to author your own queries, support for additional operators, and complex query definition capabilities.

Recommended segments and measures

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Business value

Reduce the manual efforts needed by getting recommendations for segments and measures.

Feature details

System-generated recommendations for segment creation-based data patterns found in the unified customer profiles.

Overview of Dynamics 365 Fraud Protection 2019 release wave 2

Today's digitally transformed enterprise conducts most of its business online and in real time with little human intervention. This reduces costs and improves the customer experience, but it also exposes the enterprise to serious threats from those who attempt to take advantage of the online channel's relative anonymity and accessibility.

For example, in e-commerce, people may attempt to use compromised accounts and stolen payment instruments to commit payment fraud. They also attempt other nefarious activities like account takeover, free-trial abuse, fake product reviews, warranty fraud, refund fraud, reseller fraud, abuse of program discounts, and many more—all of which impact the enterprise's profitability and reputation.

Some types of fraud even have grave consequences to society at large. Examples include laundering money and posting fake news. Because the ROI for online fraud is so high, it is highly likely that every vulnerability of an enterprise will ultimately be discovered and fully exploited. Moreover, unlike during the nascent years of the internet, fraud today is committed by well-funded and well-equipped rings of professionals. Fraud protection professionals are best equipped to fight them.

It is our mission to help digitally transformed enterprises to fight fraud while keeping their doors open for genuine customers and partners.

Dynamics 365 Fraud Protection will initially focus on payment fraud protection and account creation. It will help enable an e-commerce merchant to drive down fraud loss, increase bank acceptance rates to yield higher revenue, and improve the online shopping experience of its customers.

Microsoft has many years of experience protecting our own e-commerce businesses from fraud. We have developed a sophisticated technology stack that uses connected big data across multiple lines of business and applies cutting-edge artificial intelligence (AI) to help provide more accurate decisions in real time. We have core differentiators such as device fingerprinting, operations research, a fraud protection network, and transmission of trust knowledge to banks.

Using Dynamics 365 Fraud Protection, you can help protect your business from fraud using innovative and advanced capabilities, including:

- Artificial intelligence and insights from the fraud protection network
- A rules engine and virtual fraud analyst
- Graph explorer and KPI scorecard
- Transaction acceptance booster

These are part of a comprehensive set of features grouped into three user experiences that will accelerate your journey into full production.

- Gain insights into fraud issues in your environment using the *Diagnose* experience in Dynamics 365 Fraud Protection.
- Understand the effectiveness of Dynamics 365 Fraud Protection relative to your incumbent fraud protection solution using the *Evaluate* experience.
- In the *Protect* experience of Dynamics 365 Fraud Protection, use risk assessments to configure business rules for making e-commerce transaction decisions.

NOTE You can enter any of these three experiences at any time.

Capability	Diagnose	Evaluate	Protect
Be secure and compliant, and have full transparency into data handling and privacy.	X	X	X
Understand the conditions of your business. Diagnose and analyze the state of your fraud protection.	X	X	X
Send transactions through application programming interfaces (APIs) in real time, and gain risk insights through inline evaluation that includes explanations.		X	X
Use the scorecard to understand the performance of Dynamics 365 Fraud Protection. Compare Dynamics 365 Fraud Protection to your existing fraud solution.		X	X
Upload your historical data to tune the machine learning model to your business scenarios. Extend and tailor Dynamics 365 Fraud Protection to the needs of your business.		X	X
Reap the benefits of AI, and derive insights from the fraud protection network.		X	X
Configure lists and model operating points to shape real-time decision making.		X	X
Use the virtual fraud analyst to configure optimal risk score thresholds.		X	X

Capability	Diagnose	Evaluate	Protect
Use the graph explorer to investigate fraud and do linkage analysis.		X	X
Use device fingerprinting to help identify devices that engage with your business, while respecting customer privacy.		X	X
Use the customer (risk) support tool to evaluate and act on customer escalations for risk-related rejections.		X	X
Use the transaction acceptance booster to help improve bank acceptance.			X
Make Dynamics 365 Fraud Protection your solution of record.			X

What's new and planned for Dynamics 365 Fraud Protection

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Artificial intelligence and insights from the fraud protection network	Users, automatically	✓Apr 23, 2019	Oct 2019
Boost bank acceptance rates	Users by admins, makers, or analysts	✓Apr 23, 2019	Oct 2019
Device fingerprinting	Users, automatically	✓Apr 23, 2019	Oct 2019

Feature	Enabled for	Public preview	General availability
Diagnose	Users, automatically	✓ Apr 23, 2019	Oct 2019
Evaluate	Users, automatically	✓ Apr 23, 2019	Oct 2019
Graph explorer	Users, automatically	✓ Apr 23, 2019	Oct 2019
Protect	Users, automatically	✓ Apr 23, 2019	Oct 2019
Rules engine	Users, automatically	✓ Apr 23, 2019	Oct 2019
Scorecard	Users, automatically	✓ Apr 23, 2019	Oct 2019
Virtual fraud analyst	Users, automatically	✓ Apr 23, 2019	Oct 2019
Sign-up assessment	Users by admins, makers, or analysts	✓ Jul 31, 2019	Oct 2019
External compliance certification	Users, automatically	✓ Aug 9, 2019	Oct 2019
Account protection	Users by admins, makers, or analysts	Oct 2019	To be announced
Extend and tailor Dynamics 365 Fraud Protection	Users by admins, makers, or analysts	Dec 2019	To be announced

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Artificial intelligence and insights from the fraud protection network

Enabled for	Public preview	General availability
Users, automatically	✔ Apr 23, 2019	Oct 2019

Feature details

Dynamics 365 Fraud Protection enables merchants to assess, in real time, whether an incoming purchase transaction or sign-up event should be approved or rejected. Dynamics 365 Fraud Protection assesses a transaction's likelihood of fraud using Microsoft's industry-leading AI platform. The AI platform uses transactional data to train machine learning models and detect linkages of fraud that occur across all merchants in the fraud protection network. By participating in this network, merchants can derive insights from the collective experience of other merchants who use Dynamics 365 Fraud Protection. In this way, merchants can help businesses handle emerging fraud vectors.

Boost bank acceptance rates

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Apr 23, 2019	Oct 2019

Feature details

Microsoft fraud detection technology has a proven track record with banks and issuers based on many years of experience protecting our own multi-billion-dollar business. Dynamics 365 Fraud Protection helps merchants boost their acceptance rates with banks and reduce wrongful declines. This market differentiator, called the transaction acceptance booster, enables merchants to share contextual information about Dynamics 365 Fraud Protection's assessment of the transaction to participating banks and issuers, who can then incorporate this information in their own evaluation to make a more informed assessment. Merchants can benefit from this feature by simply opting in to the program, without having to change their authorization-settlement flow with banks and issuers.

Additionally, merchants can opt in to receive MID recommendations from Dynamics 365 Fraud Protection. These recommendations can be used to group transactions being submitted to banks and issuers and increase the overall acceptance rate.

See also

Boost bank acceptance rates (docs)

Device fingerprinting

Enabled for	Public preview	General availability
Users, automatically	✔ Apr 23, 2019	Oct 2019

Feature details

Dynamics 365 Fraud Protection offers device fingerprinting based on cutting-edge machine learning and artificial intelligence. This enables the service to collect information about devices that engage with protected merchants. Device fingerprinting runs on Azure. It is cloud-scalable, reliable, and provides enterprise-grade security. A major advantage over similar products in the marketplace is that device fingerprinting is being continually tested against the latest fingerprinting-evasion tools.

See also

Implement device fingerprinting (docs)

Diagnose

Enabled for	Public preview	General availability
Users, automatically	✔ Apr 23, 2019	Oct 2019

Feature details

Dynamics 365 Fraud Protection offers a **Diagnose** experience where you can preview the product's ability to detect fraud. After analyzing a representative dataset from your business, the product will generate risk evaluation reports that provide an array of valuable risk insights. These reports summarize the fraud patterns that exist in your business and will give you a quantitative analysis of fraud and revenue opportunity, which can help you identify opportunities to improve your fraud protection capabilities.

See also

Diagnose experience (docs)

Evaluate

Enabled for	Public preview	General availability
Users, automatically	✔ Apr 23, 2019	Oct 2019

Feature details

The Evaluate experience in Dynamics 365 Fraud Protection enables merchants to use their real-time transactional traffic to compare Dynamics 365 Fraud Protection with their existing fraud solution. Not only can merchants send their transactions through real-time APIs to get an inline evaluation, they can also upload their historical data and load asynchronous data (for example, chargebacks) to tune the model to their business scenarios.

Graph explorer

Enabled for	Public preview	General availability
Users, automatically	✔ Apr 23, 2019	Oct 2019

Feature details

Dynamics 365 Fraud Protection provides a graph explorer for easy viewing of your e-commerce data. You can use the graph explorer to search and find linkages between entities, like payment instruments, users, addresses, devices, and many others. This includes connections of fraudulent and legitimate transactions to these entities. This can indicate, for example, if someone used a stolen payment instrument to make purchases across several user accounts. The graph explorer can therefore be a powerful fraud investigation tool.

See also

Visually explore your data (docs)

Protect

Enabled for	Public preview	General availability
Users, automatically	✓Apr 23, 2019	Oct 2019

Feature details

The Protect experience embeds Dynamics 365 Fraud Protection into a merchant's full production environment. Dynamics 365 Fraud Protection can provide risk assessments for transactions, which merchants can leverage to make their own decisions about acceptance or rejection. Merchants can use the customer support tool to efficiently adjudicate any escalations from customers regarding rejections, and can use the transaction acceptance booster to share pertinent information about transaction trustworthiness with banks and issuers to boost their acceptance rates.

See also

Protect experience (docs)

Rules engine

Enabled for	Public preview	General availability
Users, automatically	✓Apr 23, 2019	Oct 2019

Feature details

Using the rules engine, merchants can create model operating points and policy rules to help manage the handling of their transactions. These model operating points and rules leverage payload attributes, custom lists (safe and block lists of customers, along with custom lists of data relevant to your business scenarios), and more to help merchants manage the trade-offs inherent in preventing fraud and abuse while minimizing false positives.

Scorecard

Enabled for	Public preview	General availability
Users, automatically	✓Apr 23, 2019	Oct 2019

Feature details

Use the scorecard to understand the month-by-month performance of your fraud protection. In the **Evaluate** experience, your scorecard lets you evaluate the capabilities of Dynamics 365 Fraud Protection. In the **Protect** experience, you can monitor the real-time performance of Dynamics 365 Fraud Protection as your system of record. The scorecard can be filtered and pivoted on business critical attributes that provide valuable snapshots of key performance indicator (KPI) trends.

See also

Learn from the scorecard (docs)

Virtual fraud analyst

Enabled for	Public preview	General availability
Users, automatically	✓Apr 23, 2019	Oct 2019

Feature details

The virtual fraud analyst will support additional functionality to allow for a more customized fraud protection strategy. It will offer benchmarking and a flexible rules engine alongside the powerful model operation experience that exists today. Updates will include:

- Ability to view model operation and policy rules holistically to make decisions for a merchant's full stack quickly and easily.
- Updates to the risk score thresholds to achieve optimal profitability.

See also

Use the virtual fraud analyst (docs)

Sign-up assessment

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	✔ Jul 31, 2019	Oct 2019

Feature details

Users intending to commit fraudulent activity might create fake accounts to obtain free or promotional benefits as a new user, or create sleeper accounts that can be leveraged later for fraud attacks against a merchant. These actions can lead to financial and non-financial losses. Dynamics 365 Fraud Protection will provide merchants the capability to assess account creation events in their ecosystem and protect themselves from abuse or automated attacks. It will also help minimize the impact to legitimate customers, thus maintaining a seamless sign-up experience.

See also

Dynamics 365 Fraud Protection Overview (blog)

External compliance certification

Enabled for	Public preview	General availability
Users, automatically	✔ Aug 9, 2019	Oct 2019

Feature details

Fraud products use considerable amounts of sensitive data. Thus, customers require strong security and compliance adherence from any product they intend to use for their fraud prevention business. Dynamics 365 Fraud Protection addresses this concern with high standards of compliance.

Dynamics 365 Fraud Protection is certified to be compliant with assessment standards ISO/IEC 27001:2013 and ISO/IEC 27018:2019 by an accredited third-party certification body. This provides independent validation that applicable security controls are in place and operating effectively. As part of this compliance verification process, auditors have validated in their statement of applicability that the Microsoft in-scope cloud service has incorporated ISO/IEC 27001:2013 and ISO/IEC 27018:2019 controls for the protection of PII in Azure as well. To remain compliant, Dynamics 365 Fraud Protection will be subject to annual third-party reviews.

See also

Dynamics 365 Fraud Protection overview (docs)

Account protection

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Oct 2019	To be announced

Feature details

As businesses shift focus to e-commerce, they are facing new fraud challenges that didn't exist with the traditional brick-and-mortar sales channel. In this environment, protecting customer accounts is a growing challenge. Account Takeover (ATO) can lead to financial and reputation loss for merchants. Dynamics 365 Fraud Protection will provide features to businesses to protect their customers' accounts and will augment existing purchase protection capabilities.

Account sign-in assessment

ATO is becoming a growing challenge for merchants, leading to increased chargeback rates, revenue loss, and reputation damage. Dynamics 365 Fraud Protection will provide merchants the ability to assess sign-in events within their ecosystem and detect fraudulent sign-in activity that might be intended to test credentials and get unauthorized access to accounts. Merchants will receive an ATO assessment score that they can leverage to block such fraudulent sign-in attempts or trigger two-factor authentication or other challenges on suspicious attempts.

Fraud protection network

Dynamics 365 Fraud Protection has an existing fraud protection network that can detect fraud patterns across multiple businesses and protect them before there is any significant damage. We will enrich account protection-specific knowledge in this network that will enhance protection for all existing and new fraud scenarios covered by Dynamics 365 Fraud Protection.

Extend and tailor Dynamics 365 Fraud Protection

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Dec 2019	To be announced

Feature details

There are several cases where a merchant might need capabilities beyond the core features provided by Dynamics 365 Fraud Protection.

Extend the base ontology with custom knowledge

In the marquee scenarios of payment fraud and account takeover, merchants might want to use specialized data beyond the base ontology of Dynamics 365 Fraud Protection to improve the fraud protection capability of the product. For example, for airline ticket purchases, the seat class might be an important attribute to consider. Furthermore, customers might have niche fraud protection scenarios such as refunds, loyalty programs, and warranty programs, each with their own set of relevant data. We will enable merchants to bring specialized data into the product by extending the ontology as needed.

Define custom rules

Custom knowledge can be used to create and update rules configuration using specialized data. These model operating points can consume the full spectrum of available knowledge to produce decisions for each type of event.

Overview of Dynamics 365 Product Insights 2019 release wave 2

Dynamics 365 Product Insights enables organizations to transform their product development, marketing, sales, and support by acting on real-time insight into their customers' usage and experience. In minutes, organizations can easily collect signals from their products and services and gain actionable insights tailored to their industry and strategy.

Product Insights transforms the product-related business processes from slow, reactive processes driven by manual customer feedback in a traditional "sell-and-forget" model into fast, proactive processes powered by automated observational data from the product itself. Product development teams can easily use Product Insights to make data-driven decisions and grow their business.

Product Insights provides out-of-the-box insights about the usage, performance, and health of products and services so businesses get value right away. Because businesses want signals and insights tailored to their product and strategy, Product Insights makes it easy for business users to create custom signals and custom insights.

Product Insights integrates seamlessly with Dynamics 365 Customer Insights as well as the rest of the Dynamics 365 suite so that customers can gain holistic and actionable insights into their customers, products, marketing, sales, and customer service.

What's new and planned for Dynamics 365 Product Insights

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
360-degree signals	Users, automatically	Oct 2019	To be announced
Built-in collaboration	Users, automatically	Oct 2019	To be announced

Feature	Enabled for	Public preview	General availability
Deep integration	Users, automatically	Oct 2019	To be announced
High-value AI insights	Users, automatically	Oct 2019	To be announced
Interactive drilldowns	Users, automatically	Oct 2019	To be announced
Out-of-the-box insights	Users, automatically	Oct 2019	To be announced
Rich custom metrics	Users, automatically	Oct 2019	To be announced
Sharing and discovery	Users, automatically	Oct 2019	To be announced

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
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For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

360-degree signals

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Users can easily instrument their Internet of Things (IoT) devices, mobile applications, web sites, cloud services, and line-of-business applications. They can also easily bring in existing signals from a variety of data sources, including Azure IoT. This enables them to understand their products holistically, not just the devices but also companion apps and supporting services.

Built-in collaboration

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

As users find opportunities and issues, they can easily collaborate with their colleagues and other teams to discuss, analyze, and resolve them. This breaks down the silos across the product development teams.

Deep integration

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Users can easily embed their product insights in the marketing, sales, and customer service applications in the Dynamics 365 suite. This eliminates the silos between product development and other departments in an organization and enables transforming how organizations market, sell, and support their customers.

High-value AI insights

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Using the latest advancement in AI and machine learning, Product Insights helps users prioritize their attention and explore their data. Upon launching it, they get news feeds of the top insights, such as outliers and anomalies, into the metrics that matter to them. For each of the insights, they can drill down into the data and take actions. As they explore the data, they get AI-powered suggestions on interesting paths to explore.

Interactive drilldowns

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Users can drill down from aggregate-level insights to the instance-level product signals to understand what happened and identify what action to take. They can explore and analyze petabytes of data with interactive latencies.

Out-of-the-box insights

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Users can get started quickly with out-of-the-box templates for Product Insights. From there, customers can easily customize the signals and insights to the unique nature of their products and their strategy for differentiation.

Rich custom metrics

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Users can create the metrics that matter for their products and services. They can aggregate the signals (for example, counts, averages, percentiles), filter and split by dimensions, smooth and clean the data, and compute expressions.

Sharing and discovery

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Users can share their projects, signals, and insights with their colleagues and collaborate on them. They can leverage the modern fine-grained tenancy model to provide access to the right people while maintaining control of data privacy.

Overview of Dynamics 365 Connected Store 2019 release wave 2

Dynamics 365 Connected Store is a new product that helps store managers understand and manage their connected physical spaces.

- Grow in-store retail profitability with actionable insights by using data from cloud-connected sensors.
- Use AI and IoT to turn observational data captured in your store into insights that managers and employees can act on.
- Learn what's going on across the business with insights, such as long checkout lines and equipment failures, presented in data visualizations and actionable alerts.

The Dynamics 365 Connected Store observational data is stored in Common Data Service, which makes it possible for analysts and developers to create customized insights and integrate this new class of data into existing Dynamics 365 workflows.

Dynamics 365 Connected Store provides the tools necessary to measure the performance of your physical spaces to make informed, data-driven decisions that help optimize your entire operation, reduce costs, and increase revenue.

What's new and planned for Dynamics 365 Connected Store

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Checkout queue management	Users, automatically	Oct 2019	To be announced
Customer demographics	Users, automatically	Oct 2019	To be announced

Feature	Enabled for	Public preview	General availability
Foot traffic	Users, automatically	Oct 2019	To be announced
Notifications	Admins, makers, or analysts, automatically	Oct 2019	To be announced
Scheduled reports	Admins, makers, or analysts, automatically	Oct 2019	To be announced
Temperature and humidity monitoring	Users, automatically	Oct 2019	To be announced
Store heat map	Users, automatically	Dec 2019	To be announced

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
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For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

Checkout queue management

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Increase customer satisfaction and avoid customer abandonment by using queue analytics to monitor and react to checkout queue length and wait time. Optimize checkout staffing levels based on store foot traffic and average queue times.

Customer demographics

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Understand the demographic breakdown (age and gender) of the customers visiting your store. Base merchandising decisions on who is actually coming into your store. All data is anonymous.

Foot traffic

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Understand your customer traffic with people count data. Make informed decisions based on customer traffic to help evaluate the effectiveness of in-store advertising campaigns, sales promotions, and product placement.

Notifications

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	To be announced

Feature details

Set up and configure push notifications that allow you to react faster to incidents and events. Trigger actions based on in-store occurrences, such as long checkout lines or refrigerator maintenance warnings, to improve response times and customer experience.

Scheduled reports

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	To be announced

Feature details

With weather and event information, plan ahead for changes in demographics and foot traffic and easily share this information with your teams and organizational leaders. Receive daily, weekly, and monthly summaries of your retail spaces.

Example: Mondays typically have higher customer traffic, which demands higher staffing levels. This week's email report reminds you of a parade scheduled for Monday. Since large events like a parade tend to reduce the store's foot traffic by 50 percent, you reduce staffing to account for the upcoming event and reduce your operation costs for the day.

Temperature and humidity monitoring

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	To be announced

Feature details

Understand the health of critical physical assets such as refrigerators and coolers through IoT device monitoring. Reduce manual asset monitoring through IoT device data integration and receive notifications when temperatures exceed the safe thresholds you set.

Store heat map

Enabled for	Public preview	General availability
Users, automatically	Dec 2019	To be announced

Feature details

Optimize store layout and flow using heat map data. Configure your space to attract customers to high-profit-margin areas based on customer dwell and foot-traffic heat maps.

Mixed reality

Overview of Dynamics 365 Remote Assist 2019 release wave 2

Dynamics 365 Remote Assist empowers technicians to solve problems faster the first time. With heads-up, hands-free video calling on Microsoft HoloLens, technicians can collaborate with remote experts on a PC or mobile device to troubleshoot issues in context.

The list of capabilities for the 2019 release wave 2 includes:

- Capture and share annotations without being in a call.
- Improved call experience for low-bandwidth situations.
- Dynamics 365 Remote Assist for mobile phones.

What's new and planned for Dynamics 365 Remote Assist

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Dynamics 365 Remote Assist for mobile phones	Users, automatically	-	Oct 2019
Capture and share annotations without being in a call	Users, automatically	-	Jan 2020
Improved call experience for low-bandwidth situations	Users, automatically	-	Feb 2020

Description of **Enabled for** column values:

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Dynamics 365 Remote Assist for mobile phones

Enabled for	Public preview	General availability
Users, automatically	-	Oct 2019

Feature details

Our first augmented reality application for mobile phones launched as an Android-based public preview in April 2019. We'll add iOS support and additional features to bring the mobile and HoloLens experiences closer to parity. First-line workers will be able to annotate and mark up the world in a method similar to using a HoloLens, but with their phone.

Dynamics 365 Remote Assist for mobile phones will provide a pathway for customers who are unable to meet all of their Dynamics 365 Remote Assist needs due to limited HoloLens device availability. The app will also result in wider usage of Dynamics 365 Remote Assist due to the scale that mobile phones represent.

Capture and share annotations without being in a call

Enabled for	Public preview	General availability
Users, automatically	-	Jan 2020

Feature details

We have received feedback from customers asking us to support scenarios where remote assistance is needed, but a call can't be established due to network limitations.

Example scenarios:

- Capturing information about an issue when there's no internet connection or the connection can't support a video call. Examples: oil company cargo ship carrying liquified natural gas; remote power substation.
- Capturing information about an issue when an expert isn't available and sending via chat/email. Example: airline company needs to communicate with the FAA.
- Recording remote inspections. Examples: factory acceptance tests; safety inspections; incident inspections.
- Documenting procedures for future training and reference.

This feature includes support for the following:

No-call annotations. First-line workers will be able to begin a session without making a call. They will be able to annotate their world to provide additional context about what they're looking at or trying to do, so an expert (colleague, third party, and so on) can provide efficient assistance at the appropriate time.

No-call photo and video capture. Photos and videos help convey necessary information and context about an issue so an expert can provide assistance. Photos and videos also serve as required artifacts for inspections, audits, and training documentation.

Asynchronous file sharing. First-line workers will be able to send captured information in different ways, depending on the scenario. They'll be able to save information on the device, upload it to OneDrive, or send it to someone on Microsoft Teams.

Improved call experience for low-bandwidth situations

Enabled for	Public preview	General availability
Users, automatically	-	Feb 2020

Feature details

Customers experience various types of bandwidth situations. With the added support for low-bandwidth scenarios, Dynamics 365 Remote Assist will scale gracefully from full two-way video with annotations (available today) to live annotations and audio over a still image, as well as points in between.

Overview of Dynamics 365 Layout 2019 release wave 2

Dynamics 365 Layout provides a new way for space planners to bring designs from concept to completion with confidence and speed. Lay out spaces with imported or gray box assets and view high-quality holograms overlaid in the real world with Microsoft HoloLens or in a virtual representation in Windows Mixed Reality. Import 3D models and experience designs as high-quality holograms.

The list of capabilities for the 2019 release wave 2 includes:

- Application compatibility with HoloLens 2.
- Optimized room-scanning capabilities.
- Locked assets view for Dynamics 365 Layout reviews.

What's new and planned for Dynamics 365 Layout

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
App compatibility with HoloLens 2	Users, automatically	-	Oct 2019
Asset lock	Users, automatically	-	Oct 2019
Optimized room scan	Users, automatically	-	Oct 2019

Description of **Enabled for** column values:

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For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

App compatibility with HoloLens 2

Enabled for	Public preview	General availability
Users, automatically	-	Oct 2019

Feature details

Dynamics 365 Layout will be available as an in-box application on Microsoft HoloLens 2. Users will be able to continue using all the currently supported features, but with a better field of view and better performance supported by the new device. We'll also include a new out-of-the-box experience through a non-interactive tour to introduce the application and demonstrate its value.

Asset lock

Enabled for	Public preview	General availability
Users, automatically	-	Oct 2019

Feature details

Users will be able to use a view to lock 3D models for reviewing purposes, so the models can't be edited by other collaborators or peers. This will help reduce any intentional or unintentional manipulation of spaces.

Optimized room scan

Enabled for	Public preview	General availability
Users, automatically	-	Oct 2019

Feature details

Set up a new layout and start planning in seconds with optimized room scan. Users can simply select the floor and rotate the floor grid to adjust the coordinate system to their preferred orientation. Users can still place walls and ceilings, but it's not required to start a new layout.

Overview of Dynamics 365 Product Visualize 2019 release wave 2

A salesperson's ability to achieve a shared understanding with the customer as early as possible in the sales process is critical for faster deal closure, fewer changed orders, and increased customer trust. Microsoft Dynamics 365 Product Visualize empowers salespeople to convey the true potential of their products to their customers by harnessing the power of augmented reality on their mobile devices (iOS devices only for the 2019 release wave 2).

Deep integration with Dynamics 365 Sales ensures salespeople have a continuous workflow between opportunity management and product visualization. Additional tools for creating notes with spatial context and integration with Microsoft Teams ensures the full context of the conversation can be captured and shared with colleagues across the organization.

For the 2019 release wave 2, we're focusing on integrating customer feedback to make our app more usable. Usability updates include (but are not limited to) user interface improvements for 3D model layers, and improvements that will make the app more inclusive and accessible. We'll also focus on localizing the app for new regions and languages.

What's new and planned for Dynamics 365 Product Visualize

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Usability improvements	Users, automatically	Oct 2019	-
Localization	Users, automatically	Mar 2020	-
Accessibility	Users, automatically	Mar 2020	-

Description of **Enabled for** column values:

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Usability improvements

Enabled for	Public preview	General availability
Users, automatically	Oct 2019	-

Feature details

We'll integrate customer feedback to make our app more usable. Updates include (but are not limited to) user interface improvements for 3D model layers, and improvements that will make the app more inclusive and accessible.

Localization

Enabled for	Public preview	General availability
Users, automatically	Mar 2020	-

Feature details

Dynamics 365 Product Visualize will expand support for new regions and languages.

Accessibility

Enabled for	Public preview	General availability
Users, automatically	Mar 2020	-

Feature details

Through user research and best practices, Dynamics 365 Product Visualize is working toward a more accessible, inclusive experience.

Overview of Dynamics 365 Guides 2019 release wave 2

Dynamics 365 Guides is a mixed-reality application for Microsoft HoloLens that enables employees to learn in the flow of work by providing holographic instructions when and where they need them. Dynamics 365 Guides:

- Engages employees through hands-on learning.
- Helps organizations improve training efficiency.
- Generates data to improve processes.

Dynamics 365 Guides addresses the needs of three key personas: content authors, operators, and managers/analysts.

Content authors

Authoring includes two steps:

Step 1: Create the guide. Using the Dynamics 365 Guides PC app, create the guide by defining the steps required to perform a task and attach 2D images/videos and/or 3D assets to each step from a central content library. Media files are automatically optimized for best quality and performance on HoloLens.

Step 2: Preview the guide and place the objects. Using the Dynamics 365 Guides HoloLens app, preview the guide flow and place the instruction cards and 2D/3D assets in the appropriate place in the physical world. Add aids such as 3D tethers and styles (such as a warning or caution).

Operators

The Dynamics 365 Guides HoloLens app provides employees both first-time training or on-the-job assistance, by placing the information employees need in the physical space where they work. Users can control the experience completely hands-free, using their gaze to navigate through the app. Instructions follow users around but don’t get in the way, and when users don’t need the instructions anymore, they can turn them off with a glance.

Managers/analysts

Dynamics 365 Guides Analytics provides insight into details behind every step of each guide, which can be used to assess production line processes, measure improvements, and drive efficiencies by modifying processes and updating the corresponding guide.

Focus for 2019 release wave 2

The list of capabilities for the 2019 release wave 2 includes:

- Assign or filter guides through prebuilt or custom entities.
- General availability of Dynamics 365 Field Service integration.

What's new and planned for Dynamics 365 Guides

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

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This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Feature	Enabled for	Public preview	General availability
Assign or filter guides through prebuilt or custom entities	Admins, makers, or analysts, automatically	-	Oct 2019
Integration with Dynamics 365 Field Service	Admins, makers, or analysts, automatically	✓ Aug 1, 2019	Oct 2019

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
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Assign or filter guides through prebuilt or custom entities

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Dynamics 365 Guides will expose a configuration that allows customers to define a view in the Guides entity. They can use this view to specify the guides assigned to a signed-in user. The user will see an ordered list of guides when they sign in to the HoloLens app, which will make it easy to find the content they need to do their assigned tasks. This view retrieves information from entities in Common Data Service, which makes it easy for customers to integrate Dynamics 365 Guides with their existing systems via the Common Data Service API.

Integration with Dynamics 365 Field Service

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Aug 1, 2019	Oct 2019

Feature details

Dynamics 365 Field Service integration is now generally available. Dynamics 365 Field Service integration enables Field Service customers to attach guides to Field Service tasks. When work orders are assigned to technicians, the technicians can use the dedicated **Field Service** tab in the HoloLens application to launch the assigned guide and do their work.

See also

Field Service integration blogpost (blog)

Microsoft Forms Pro

Overview of Microsoft Forms Pro 2019 release wave 2

Customers today expect businesses to adapt and align to their needs continually. When those needs are not met, they are often quick to share their opinions with others or turn to alternative solutions. It is therefore important for every business to actively listen to customers so they can quickly address any gaps and improve experiences, transforming one-time casual purchasers into loyal customers.

While there are multiple solutions for collecting customer feedback, results are often disparate. With Forms Pro, businesses can build on their familiarity with Microsoft Forms, connecting input from the full customer journey—purchase through support—and offering a comprehensive and meaningful perspective that can help make meaningful changes.

Following our public preview release in March 2019, we have collected customer feedback and made improvements accordingly. Key improvement areas for this release include:

- **Survey distribution**: Improve your survey response rate through built-in survey incentives from Microsoft.
- **Survey insights**: Autotag your survey response comments using the AI model powered by the new Microsoft AI Builder.

What's new and planned for Microsoft Forms Pro

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Survey distribution

Enhanced distribution that allows survey owners to increase responses.

Feature	Enabled for	Public preview	General availability
Survey incentives	Users, automatically	Sep 2019	Oct 2019

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

For a list of the countries or regions where Dynamics 365 business applications are available, see the International availability guide.

Survey distribution

Overview

Survey response rate is one of the key metrics when you send out surveys. Microsoft Forms Pro helps you improve your response rate by making sure the survey is sent by a trusted sender and making it easy for your survey recipient to fill out the survey. Forms Pro also helps survey owners to easily follow up with contacts and remind them to respond to the survey.

Survey incentives

Enabled for	Public preview	General availability
Users, automatically	Sep 2019	Oct 2019

Business value

One of the key goals for a survey owner when sending a survey is to get as many responses as possible. The more survey responses received, the better insights the survey owner can get from the survey. Offering incentives to people when they are filling out a survey has been proven to be an effective way to increase the response rate.

Feature details

Microsoft Rewards and Microsoft Forms Pro are partnering to offer Microsoft Rewards as incentives for survey respondents to fill in surveys created by Forms Pro. When Forms Pro users send Forms Pro surveys, the survey recipients are informed that they will be entered into the Microsoft Reward Sweepstakes for a chance to win a Microsoft Surface Book when they complete the survey.

Change history

This topic is updated when features are added, or when a feature's release date changes. To find out about updates to these release plans, follow us on Twitter @MSFTDynamics365.

Microsoft PowerApps

Features added to release plan

Feature	Date added
Custom connectors in solutions	August 19, 2019
PowerApps checker PowerShell module and Azure DevOps task	July 16, 2019
Usability enhancements to lookups in Unified Interface	June 16, 2019
Improving Save Changes dialog	June 10, 2019
Adding Save and Create Another record option to Quick Create buttons	June 10, 2019
Timeline wall filter improvements	June 10, 2019

Release date changed

Feature	Change	Date updated
Admin connectors for Microsoft PowerApps	Changed General Availability date from October 2019 to **To be announced**.	September 17, 2019
PowerApps cmdlets for admins	Changed General Availability date from October 2019 to **To be announced**.	September 17, 2019
One admin center for PowerApps and Microsoft Flow	Removed Public Preview date. Changed General Availability date from October 2019 to November 2019.	September 17, 2019

Feature	Change	Date updated
PowerApps test framework	Changed Public Preview date from October 2019 to November 2019.	September 13, 2019
Build responsive, reflowing canvas pages	Changed Public Preview date from December 2019 to March 2020.	September 11, 2019
Share apps with users outside your tenant, B2B or B2C	Changed Public Preview date from August 2019 to July 2019.	August 14, 2019
New solution components get full support	Public Preview date updated to October 2019. Removed General Availability date.	August 13, 2019
Enhanced offline capabilities for apps on the Dynamics 365 mobile app	Removed Public Preview date.	August 12, 2019
PowerApps Portals	Changed Public Preview date from July 2019 to April 2019.	July 23, 2019
The PowerApps Checker includes rules for canvas apps and flows	Public Preview date updated to September 2019.	July 16, 2019
Improved capacity governance	Public Preview date updated to May 2019.	June 17, 2019
Admin connectors for Microsoft PowerApps	Public Preview date updated to August 2018.	June 17, 2019
PowerApps cmdlets for admins	Public Preview date updated to May 2018.	June 17, 2019
One admin center for PowerApps and Microsoft Flow	Public Preview date updated to September 2018.	June 17, 2019

Features removed from release plan

Feature	Reason	Date removed
Admin connectors for Microsoft PowerApps	Moved to the next release wave	September 17, 2019
Runtime telemetry	Deprioritized and will not be delivered	July 16, 2019
Model-driven app for Outlook to be generally available	Moved to the previous release wave	July 01, 2019
External users can access apps on the PowerApps mobile app	Merged the feature information with **Share apps with users outside your tenant B2B or B2C** feature.	June 10, 2019

Microsoft Flow

Release date changed

Feature	Change	Date updated
Business process flow immersive experiences	Removed Public Preview date.	July 22, 2019
Work with business process flows offline	Removed Public Preview date.	July 22, 2019
Use your form processing model in Power Platform	Changed General Availability date from October 2019 to **To be announced**.	September 18, 2019
Extract structured text from documents using form processing model	Changed General Availability date from October 2019 to March 2020.	September 03, 2019
Use your object detection model in Power Platform	Changed General Availability date from October 2019 to March 2020.	September 03, 2019

Feature	Change	Date updated
Use your text classification model in Power Platform	Changed General Availability date from October 2019 to March 2020.	August 21, 2019
Classify text data using text classification model	Changed General Availability date from October 2019 to March 2020.	August 21, 2019

Common Data Model and data integration

Features added to release plan

Feature	Date added
Ensure the Dual Write service meets accessibility standards	September 13, 2019
Enabling sales order flow to Finance and Operations	September 13, 2019
Ensure the export to data lake service meets accessibility standards	September 13, 2019
Add support to soft delete data	September 13, 2019
Configurable Snapshot interval	September 13, 2019
Historical data snapshots	September 13, 2019
Dashboard showing count and trend of records with notifications on failures	September 13, 2019
Deprecation of older versions of the on-premises gateway	September 12, 2019
Enhanced security	September 12, 2019
Manage gateways outside the default Power BI region	August 26, 2019
Gateways now scale based on the CPU	August 26, 2019

Release date changed

Feature	Change	Date updated
New and enhanced connectors	Changed Public Preview date from October 2019 to January 2020.	September 13, 2019
Custom connector and extensibility support	Changed General Availability date from October 2019 to November 2019.	September 13, 2019
Query Diagnostics enhancements	General Availability date updated to March 2020.	September 13, 2019
Public documentation for Common Data Model object model libraries	Changed Public Preview date from October 2019 to March 2020.	September 13, 2019
New Common Data Model standard entity definitions	Removed Public Preview date. General Availability date updated to March 2020.	September 13, 2019
Gateway management enhancements	Changed Public Preview date from October 2019 to **To be announced**.	September 12, 2019
New and enhanced connectors in Power Query Online	Changed General Availability date from October 2019 to March 2020.	September 12, 2019
Automate gateway installation	Changed Public Preview date from October 2019 to December 2019.	August 26, 2019
Improved experiences in Common Data Model and Power Query Online	Changed Public Preview date from October 2019 to March 2020.	August 26, 2019
Additional capabilities in Common Data Model folders	Changed Public Preview date from October 2019 to March 2020.	August 26, 2019
New Dynamics 365 Industry Accelerator solutions	Changed Public Preview date from October 2019 to March 2020.	August 26, 2019

Feature	Change	Date updated
New Common Data Model standard entity definitions	Changed Public Preview date from October 2019 to March 2020.	August 26, 2019
Use the Microsoft Excel Online connector in PowerApps	Changed Public Preview date from October 2019 to March 2020.	August 26, 2019
Write existing data before turning on Dual Write	Changed Public Preview date from August 2019 to September 2019.	August 22, 2019
Supporting multiple legal entities	Changed Public Preview date from August 2019 to September 2019.	August 22, 2019
Making Dual Write resilient to planned or unplanned maintenance	Changed Public Preview date from August 2019 to September 2019.	August 22, 2019
Ability to link the Common Data Service environment to an Azure data lake	Changed Public Preview date from August 2019 to September 2019.	August 22, 2019
Hydrate Azure Data Lake with Common Data Service data	Changed Public Preview date from August 2019 to September 2019.	August 22, 2019
Support for initial and incremental data writes to Azure Data Lake	Changed Public Preview date from August 2019 to September 2019.	August 22, 2019
Support for initial and incremental metadata changes in Azure Data Lake	Changed Public Preview date from August 2019 to September 2019.	August 22, 2019
Author dataflows in the PowerApps Maker Portal	Changed Public Preview date from August 2019 to September 2019.	August 21, 2019
SDK for Data Integrator	Changed General Availability date from October 2019 to **To be announced**.	August 15, 2019

Feature	Change	Date updated
[Author dataflows in the PowerApps Maker Portal]()	Public Preview date updated to July 2019.	June 28, 2019
[Write existing data before turning on Dual Write]()	Public Preview date updated to July 2019.	June 14, 2019
[Making Dual Write resilient to planned or unplanned maintenance]()	Changed Public Preview date from May 2019 to July 2019.	June 14, 2019
[Supporting multiple legal entities]()	Changed Public Preview date from October 2019 to July 2019.	June 14, 2019
[Support for initial and incremental metadata changes in Azure Data Lake]()	Changed Public Preview date from June 2019 to August 2019.	June 14, 2019
[Support for initial and incremental data writes to Azure Data Lake]()	Changed Public Preview date from June 2019 to August 2019.	June 14, 2019
[Hydrate Azure Data Lake with Common Data Service data]()	Changed Public Preview date from July 2019 to August 2019.	June 14, 2019
[Ability to link the Common Data Service environment to an Azure data lake]()	Changed Public Preview date from June 2019 to August 2019.	June 14, 2019

Features removed from release plan

Feature	Reason	Date removed
SDK for Data Integrator	Deprioritized and will not be delivered	September 13, 2019
Common Data Model object model available in public package managers	Moved to a future release wave	September 13, 2019

Feature	Reason	Date removed
Support testing on certified connectors	Deprioritized and will not be delivered	August 26, 2019

Microsoft PowerApps

Overview of Microsoft PowerApps 2019 release wave 2

PowerApps is a suite of apps, services, connectors, and a data platform that provides an environment for rapidly developing custom apps for your business needs. Using PowerApps, you can quickly build custom business apps that connect to your business data stored either in the underlying data platform (Common Data Service) or in various online and on-premises data sources (SharePoint, Excel, Office 365, Dynamics 365, SQL Server, and so on). Use PowerApps documentation to get expert information and answers to address your needs, regardless of how you use PowerApps.

The 2019 release wave 2 provides major improvements across the themes in this list to enable app makers to build higher-quality apps more easily, while still supporting more advanced enterprise and administrator requirements.

Improvements in PowerApps focus not only on introducing capabilities but also on simplifying existing concepts to improve maker and user productivity in PowerApps and Dynamics 365 apps built upon PowerApps and the Unified Interface.

Watch overview video

What's new and planned for Microsoft PowerApps

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✔) shows which features have been released for public preview or early access and for general availability.

Add intelligence using AI Builder

Feature	Enabled for	Public preview	Early access*	General availability
Add intelligence to PowerApps with AI Builder	Admins, makers, or analysts, automatically	✔ Jun 9, 2019	-	Oct 2019

Easier to deliver high-quality apps

Provide the right tools and components to build awesome apps for users.

Feature	Enabled for	Public preview	Early access*	General availability
PowerApps component framework for canvas apps	Users by admins, makers, or analysts	Nov 2019	-	
Build responsive, reflowing canvas pages	Users by admins, makers, or analysts	Mar 2020	-	
Build and consume reusable canvas components	Users by admins, makers, or analysts	-	-	Oct 2019
Faster, reliable, and stable canvas and model-driven apps on mobile	Users, automatically	-	-	Oct 2019
New Common Data Service form designer adds support for event handlers	Admins, makers, or analysts, automatically	-	-	Oct 2019
Office 365 suite header coming to PowerApps	Admins, makers, or analysts, automatically	-	-	Oct 2019
PowerApps component framework for model-driven apps	Users by admins, makers, or analysts	-	-	Oct 2019
Improvements to entity designer	Admins, makers, or analysts, automatically	✔ Aug 28, 2019	-	Oct 2019

Feature	Enabled for	Public preview	Early access*	General availability
Sign in using an email address in the Dynamics 365 mobile app on an Android device	Users, automatically	-	✔ Aug 28, 2019	Oct 2019

Integrated experience and tooling for administrators

Admin experiences are key to the adoption of any trusted platform.

Feature	Enabled for	Public preview	Early access*	General availability
Data loss prevention policy enhancements	Admins, makers, or analysts, automatically	-	-	Oct 2019
Improved capacity governance	Admins, makers, or analysts, automatically	✔ May 22, 2019	-	Oct 2019
One admin center for PowerApps and Microsoft Flow	Admins, makers, or analysts, automatically	-	-	Nov 2019
PowerApps cmdlets for admins	Admins, makers, or analysts, automatically	✔ May 21, 2018	-	Mar 2020

Portal capabilities for PowerApps

Feature	Enabled for	Public preview	Early access*	General availability
Power BI Embedded support for portals	Users by admins, makers, or analysts	-	-	Oct 2019
PowerApps Portals	Users by admins, makers, or analysts	✔ Apr 10, 2019	-	Oct 2019

Feature	Enabled for	Public preview	Early access*	General availability
Portal Checker enhancements	Admins, makers, or analysts, automatically	-	-	Nov 2019

Scalable enterprise solutions

Enterprises have scalable solutions as part of the Power Platform.

Feature	Enabled for	Public preview	Early access*	General availability
New solution components get full support	Admins, makers, or analysts, automatically	Oct 2019	-	-
PowerApps test framework	Admins, makers, or analysts, automatically	Nov 2019	-	
Enhanced offline capabilities for apps on the Dynamics 365 mobile app	Users by admins, makers, or analysts	-	-	Oct 2019
Modern Solution Explorer is the default customization experience	Admins, makers, or analysts, automatically	-	-	Oct 2019
PowerApps checker PowerShell module and Azure DevOps task	Admins, makers, or analysts, automatically	✔ Jul 15, 2019	-	Oct 2019
Share apps with users outside your tenant, B2B or B2C	Users by admins, makers, or analysts	✔ Jul 26, 2019	-	Oct 2019
The PowerApps Checker includes rules for canvas apps and flows	Admins, makers, or analysts, automatically	Sep 2019	-	Oct 2019
Improved reliability of cascading changes	Admins, makers, or analysts, automatically	-	✔ Sep 9, 2019	Oct 2019

Unified Interface for everybody

Feature	Enabled for	Public preview	Early access*	General availability
Adding Save and Create Another record option to Quick Create buttons	Users, automatically	-	✔ Jul 26, 2019	Oct 2019
Improving Save Changes dialog	Users, automatically	-	✔ Aug 1, 2019	Oct 2019
Anchoring error notifications in Unified Interface	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Connection role enabled in the Unified Interface	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Form header usability improvements	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Improved usability, density, and filtering capabilities for the Unified Interface grid	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Manage email on the timeline wall in Unified Interface	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Timeline wall filter improvements	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Timeline wall improvements in Unified Interface	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
Usability enhancements to lookups in Unified Interface	Users, automatically	-	✔ Aug 2, 2019	Oct 2019
View inline images for emails that are read-only	Users, automatically	-	✔ Aug 2, 2019	Oct 2019

* Some features are available for you to opt-in as part of early access on August 2, 2019, including all mandatory changes that impact users. Learn more about early access.

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

Add intelligence using AI Builder

Overview

AI Builder is a new Power Platform capability for teams with the business expertise to easily automate processes and predict outcomes to improve business performance. AI Builder is a turnkey solution that brings the power of Microsoft AI through a point-and-click experience. You can now build AI without knowing programming or data science. Using AI is made even easier with integration directly into PowerApps and Microsoft Flow.

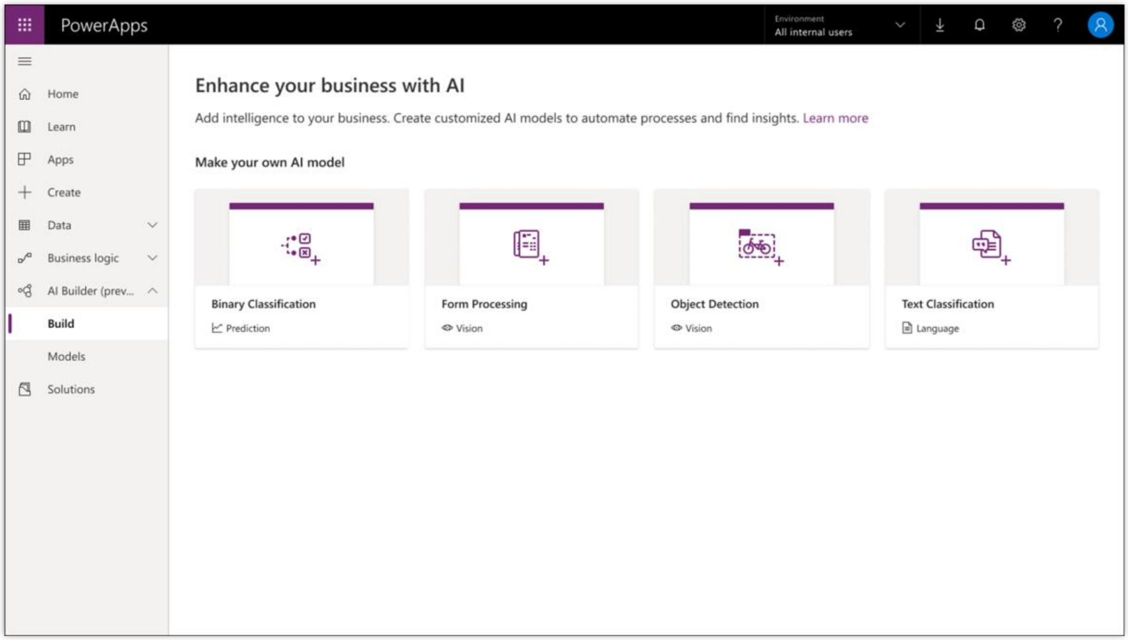
Add intelligence to PowerApps with AI Builder

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✔Jun 9, 2019	Oct 2019

Feature details

To start using AI Builder from Microsoft PowerApps:

1. Sign in to Microsoft PowerApps.
2. Select **Build** under **AI Builder (preview)** in the menu on the left side of the page.
3. Select one of the templates.
4. Get started creating AI models for your organization.



AI Builder in PowerApps

Geographic areas

This feature will be released into the following Microsoft Azure geographic areas:

- United States
- Europe

See also

[Introducing AI Builder for Power Platform](#) (blog)

[Learn about AI Builder](#) (docs)

Easier to deliver high-quality apps

Overview

Improvements for app makers and users are focused on improving productivity by introducing capabilities and simplifying existing concepts to remove barriers while still providing rich capabilities for advanced users. PowerApps introduces capabilities for pro-developer components and reusable components, as well as improvements for working with Common Data Service for both canvas and model-driven apps. In addition to improvements to the app-maker experiences, PowerApps also introduces updates to the Unified Interface to improve density, usability, and navigation.

PowerApps component framework for canvas apps

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Nov 2019	-

Business value

By taking advantage of PowerApps component framework, customers can build the components and features they need and not have to wait for support from Microsoft.

Feature details

PowerApps component framework allows professional developers to build custom components that can be used in canvas apps. Makers can import custom components to enhance their canvas apps with the functionality that is not available out of the box.

Public preview of PowerApps component framework allows developers and makers to test their custom components in canvas apps, taking advantage of the growing list of supported APIs, as well as the new theming system.

See also

Feature exploration (video)

Build responsive, reflowing canvas pages

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	Mar 2020	-

Feature details

In PowerApps Studio, app makers can build pages that are fully responsive to changes in screen size and orientation but that also offer the same flexibility for custom UI and data binding as standard canvas-app screens. These pages contain prebuilt layouts with regions that automatically reflow as the available real estate on the screen changes, as well as supporting all existing canvas concepts, such as reusable custom components. App makers can build these components in PowerApps Studio, or a professional developer can build them by using PowerApps component framework.

All app developers, including implementers of Dynamics 365, can build fully custom and responsive experiences into their applications, thus improving experiences that are tailored to the needs of users and increasing their satisfaction. Many people in the PowerApps community have requested this important step on the journey toward unifying app types.

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

Build and consume reusable canvas components

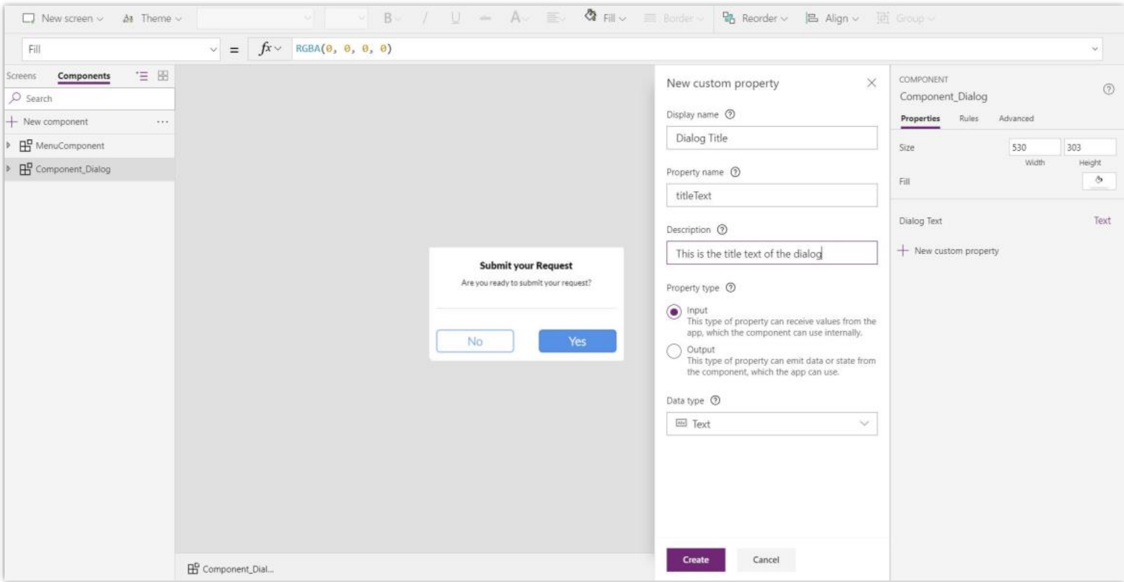
Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Feature details

Canvas components are generally available for app makers to use in production apps. App makers can build and share elements, such as menus or calendars, on multiple screens of the same app or in multiple apps. App makers can build these reusable components and composite controls in PowerApps, just as they build canvas apps.

In addition, canvas components are fully supported as part of solutions and PowerApps environments. These components participate in the solution lifecycle for managing and updating components and apps between environments. App makers can browse components across their environments and insert them directly into their apps without importing or exporting the component.

By using canvas components, app makers can quickly create, consume, and share their building blocks across screens and apps, build apps more quickly, and maintain apps more easily.



Pane for defining a custom property

See also

[Feature exploration](video) (video)

Faster, reliable, and stable canvas and model-driven apps on mobile

Enabled for	Public preview	Early access	General availability
Users, automatically	-	-	Oct 2019

Feature details

Canvas applications on mobile devices are more reliable and faster. With improved reliability, errors and unexpected experiences are minimized. Load time of applications has significantly improved. Time to load data and navigate through the application has also improved, contributing to a better user experience.

- With optimizations to the email sign-in and app-loading experience, the Dynamics 365 Mobile app is significantly faster for users.
- First-time users can sign in and get to their app of choice within a few seconds reliably.
- Returning users can jump right into their app from their previous session and view their most up-to-date information, with background refresh.

- Errors and unexpected experiences are minimized, with reliability of actions and updates greatly improved.

New Common Data Service form designer adds support for event handlers

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

The new Common Data Service form designer offers a major experience improvement from the classic experience of authoring forms.

Following the general availability release, the form designer will enable support to add and configure event handlers on the form and its child controls.

Using event handlers, makers will be able to achieve advanced customizations on the display and behavior of forms. For example, using event handlers, makers will be able to hide or show certain fields based on logic (JavaScript) when the form is loaded or when another field's value is changed.

The new form designer will not only improve the experience of adding and configuring event handlers, it will also tackle other common problems faced by makers such as discoverability of configured events on the form.

Using the classic form designer, makers do not have an easy way to find the elements on the form that have event handlers associated with them. The new form designer will readily surface this information in the **Tree** view, enabling makers to instantly identify and inspect elements of the form that have event handlers associated with them.

Office 365 suite header coming to PowerApps

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

The Office 365 suite header is coming to powerapps.com, and PowerApps is coming to the Office 365 suite header.

The Power Platform will align with the new Office header, allowing you to access all of your Microsoft applications, notifications, and messages from a consistent header. Additionally, panels like help, notifications, and feedback will be aligned so that you always get the same experience across all of Microsoft.

We'll also take this opportunity to make improvements to existing controls that are specific to PowerApps, like the environment picker, so that they are easier to use.

Aligned header

PowerApps component framework for model-driven apps

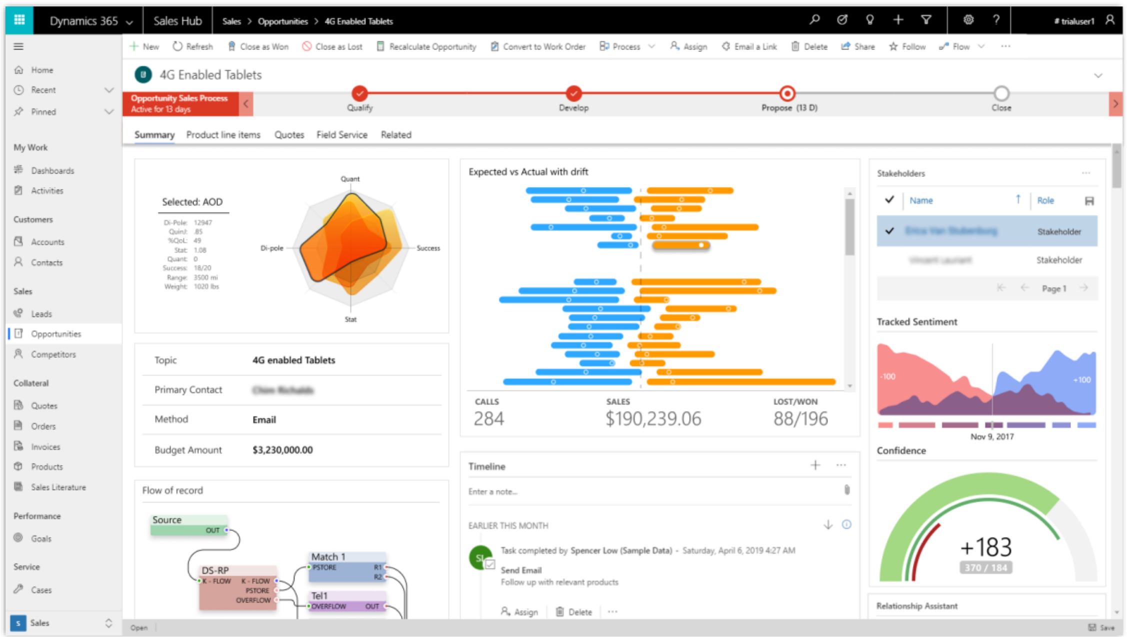
Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Feature details

The PowerApps component framework is generally available for model-driven apps, allowing professional developers to create custom components for use across the full breadth of PowerApps capabilities. Third-party developers can now create their own custom components using the libraries and services of their choice and add these reusable components to any model-driven app. The framework not only saves time but also unlocks powerful capabilities for advanced interactions. To facilitate the development of custom components, the Microsoft PowerApps CLI tool enables fast component creation, easy debugging, built-in validation, and testing using the code editor of your choice.

Professional developers can now add to user experiences that are available out of the box. Custom components have access to a rich set of framework APIs that expose capabilities like control lifecycle management, contextual data and metadata access, seamless server access, utility, data formatting methods, device features like camera, location, and microphone along with easy-to-invoke UX elements like dialogs, lookups, and full-page rendering. Component developers can use modern web practices and harness the power of external libraries to create advanced user interactions. The framework automatically handles component lifecycle, retains application business logic, and optimizes for performance (no more async iframes).

Components created using the framework are fully configurable and can be reused on multiple surfaces in the model-driven apps like forms, dashboards, grids, and business process. Component definition, dependencies, and configurations can all be packaged into a solution and moved across environments and shipped via AppSource. The PowerApps component framework is the foundation for the new Unified Interface released with Common Data Service that uses responsive web design principles to provide an optimal viewing and interaction experience for any screen size, device, or orientation.



PowerApps component framework example

See also

[Feature exploration](#) (video)

Improvements to entity designer

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✔ Aug 28, 2019	Oct 2019

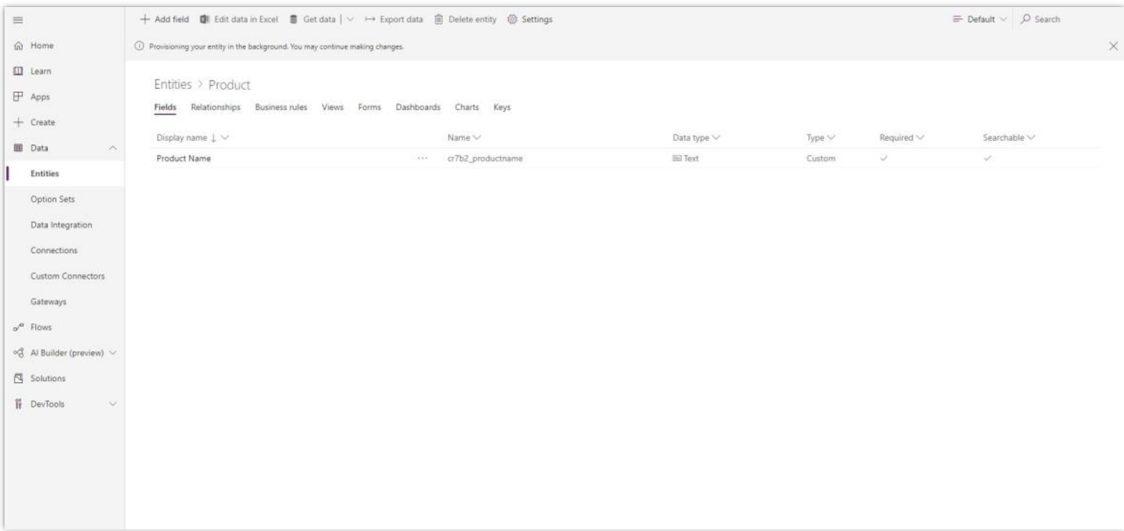
Feature details

The new entity designer for Common Data Service lets makers more quickly create and edit app components, such as entities, fields, and relationships. Some notable feature improvements to the entity designer include the ability to:

- Create the entity in the background so the maker can proceed with adding fields and relationships, and make key changes while the entity, its default forms, and views are created. These additional changes can be saved after the entity is created.

- Modify the primary field properties along with the entity definition.
- Add fields for the new image and file data types.
- Make changes to the managed properties.
- Add, edit, delete, and view data in the updated and accessible **Data** tab.
- Add or edit data in Microsoft Excel using the **Edit data in Excel** command.

These enhancements will further improve the usability, convenience, and productivity for makers.



Background entity create

See also

[Entity relationships overview](#) (docs)

Sign in using an email address in the Dynamics 365 mobile app on an Android device

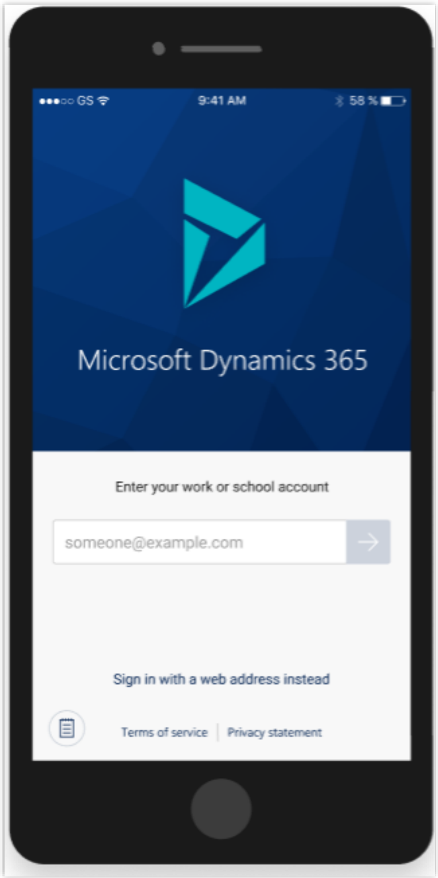
Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 28, 2019	Oct 2019

Feature details

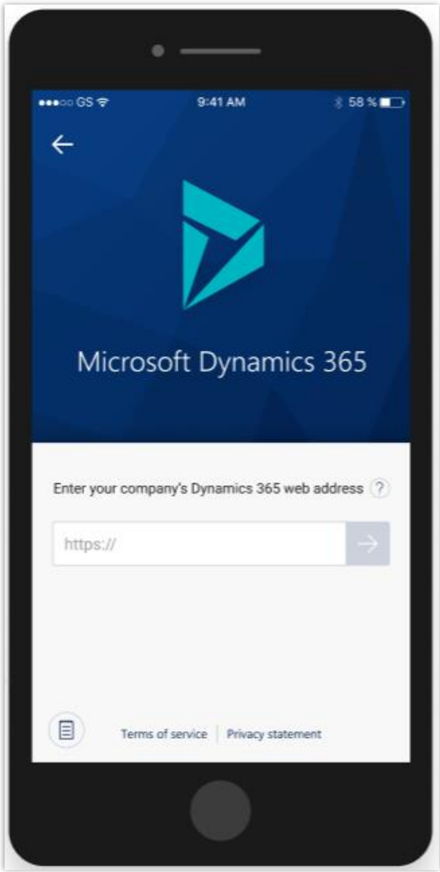
Model-driven app users can now sign in to the Dynamics 365 mobile app on an Android device using their corporate email addresses.

Details about the experience:

- Online users can sign in easily using their email addresses and on-premises users can still sign in using the web address option.

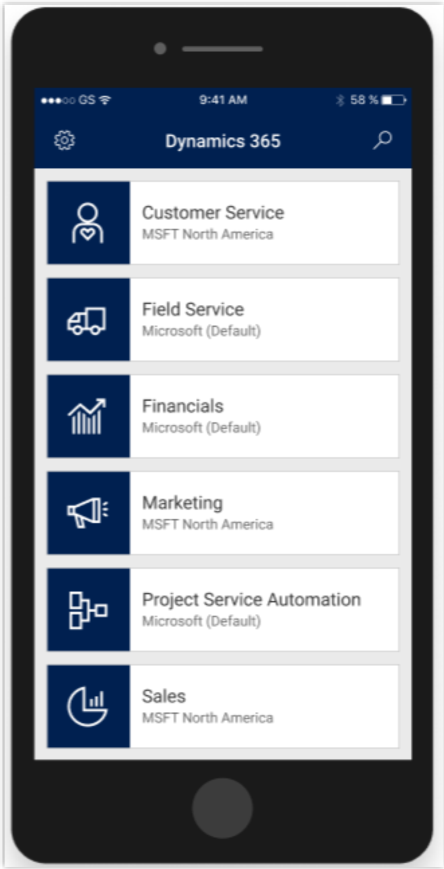


Sign in using email address



Sign in using web address

- Online users now have access to all their apps across multiple instances in a single list. Users no longer need to sign out and sign in multiple times with different instances to use all their apps.
- The sign-in and app selection experience is easy and intuitive with a modern look and feel.



Choose an app

See also

[Public Preview: Email-based sign-in for Android users of Dynamics 365 for Phones and Tablets] (blog)

[Sign in using your email address (Preview feature for Android users)] (docs)

Integrated experience and tooling for administrators

Overview

PowerApps makes maintaining and managing apps across your organization easier than ever. The Power Platform Admin center is now the single admin center for PowerApps and Microsoft Flow admins and partners, offering a more reliable, unified experience to manage storage capacity, environments, and deployments. Powerful analytics empowers admins to investigate and diagnose issues with their deployments, and the integrated help and support experience allows them to find the help they need and escalate to Microsoft Support when necessary.

Data loss prevention policy enhancements

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

Data loss prevention (DLP) policies provide organizations with the ability to group connectors into business and non-business data groups. This allows organizations to build flows that contain only business data sources and prevent business data from leaking to non-business data sources. A common example is: I don’t want my SharePoint data to end up on Twitter.

There are many scenarios, however, where this level of control is not enough. One common example is companies with outside principals in their production tenant (for example: vendors and partnerships). The companies might want to limit access for these users to their business data sources through PowerApps and Microsoft Flow. With our new DLP enhancements, you will be able to define which user principals would be accepted by connectors that use Basic Auth and OAuth authentication.

Improved capacity governance

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✔ May 22, 2019	Oct 2019

Feature details

With the introduction of the new capacity-based provisioning model in April '19, citizen developers are able to more easily provision environments they need for their applications. With this change comes the need for IT admins to be able to better plan and manage database, file, and log capacity consumption within their organization. To support this, the Power Platform Admin center will provide a new real-time view of capacity consumption (Database, File, and Log), historical trends for up to 12 months, and storage breakdowns by entity and application to help facilitate capacity planning and cross-charging to the business units that consume platform capacity.

One admin center for PowerApps and Microsoft Flow

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Nov 2019

Feature details

The Power Platform Admin center that provides the unified admin experience for PowerApps, Microsoft Flow, and Common Data Service will be generally available. With this release, the Power Platform Admin center will be the single entry point for following key admin operations:

- Install, upgrade, and manage apps and flows
- Create and manage environments
- Review analytics and telemetry

See also

Preview: Administer Power Platform (docs)

PowerApps cmdlets for admins

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✔ May 21, 2018	Mar 2020

Feature details

With the preview launch of the PowerShell cmdlets for administrators last year, admins are able to automate many of the monitoring and management tasks that were previously only possible through the PowerApps admin center.

In the 2019 release wave 2, we will be announcing the general availability (GA) of these cmdlets, as well as the addition of new cmdlets around:

- Capacity management
- Permission and user management
- Environment lifecycle management

See also

PowerShell support for PowerApps (docs)

Portal capabilities for PowerApps

Overview

Use the portal capabilities of PowerApps to create websites that external users can access either with a wide variety of identities (such as personal accounts and LinkedIn) or anonymously.

Power BI Embedded support for portals

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Business value

In the April 2019 release of Dynamics 365 Portals, we started a preview for Power BI Embedded service. With Power BI Embedded service, customizers can provide access to Power BI dashboards and reports to users who don't have a Power BI account. As part of this release, this functionality would be generally available for all customers.

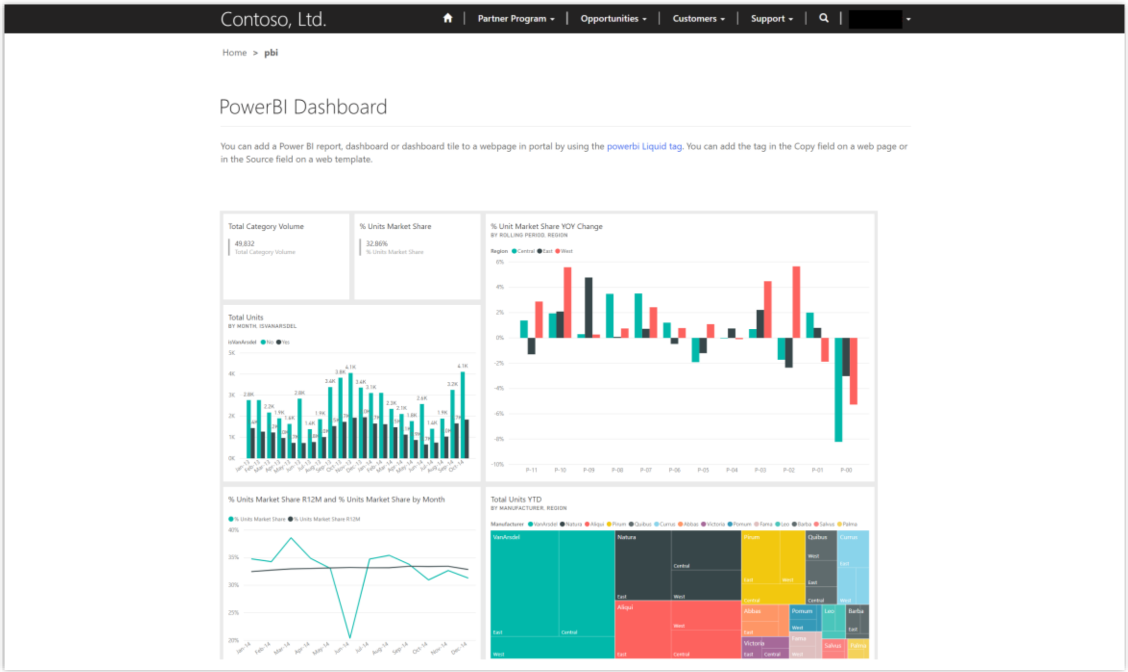
Feature details

This feature provides the ability to surface Power BI Embedded service components (reports, dashboards, and tiles) contextually to portal users who don't have a Power BI license.

With this feature you can embed Power BI components on a portal and contextually serve the data to users coming to the portal. Some of the core capabilities of this feature include:

- Pass automatic filters to reports using a filter parameter along with the **powerbi** liquid tag. This will help you to filter down the data contextually based on what the user is viewing on the portal.
- Enable Power BI row-level security (RLS) capabilities by passing the **roles** parameter in the context of the signed-in user. This will help organizations to secure the data that is visible to users and show them only what they are allowed to see.

More details about this feature can be found at Enable Power BI Embedded service and powerbi.



Power BI

Geographic areas

This feature will be released to the following Microsoft Azure geographic areas:

- United States
- Europe
- Asia Pacific
- United Kingdom
- Australia
- South America
- Canada
- India
- Japan

PowerApps Portals

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	✓Apr 10, 2019	Oct 2019

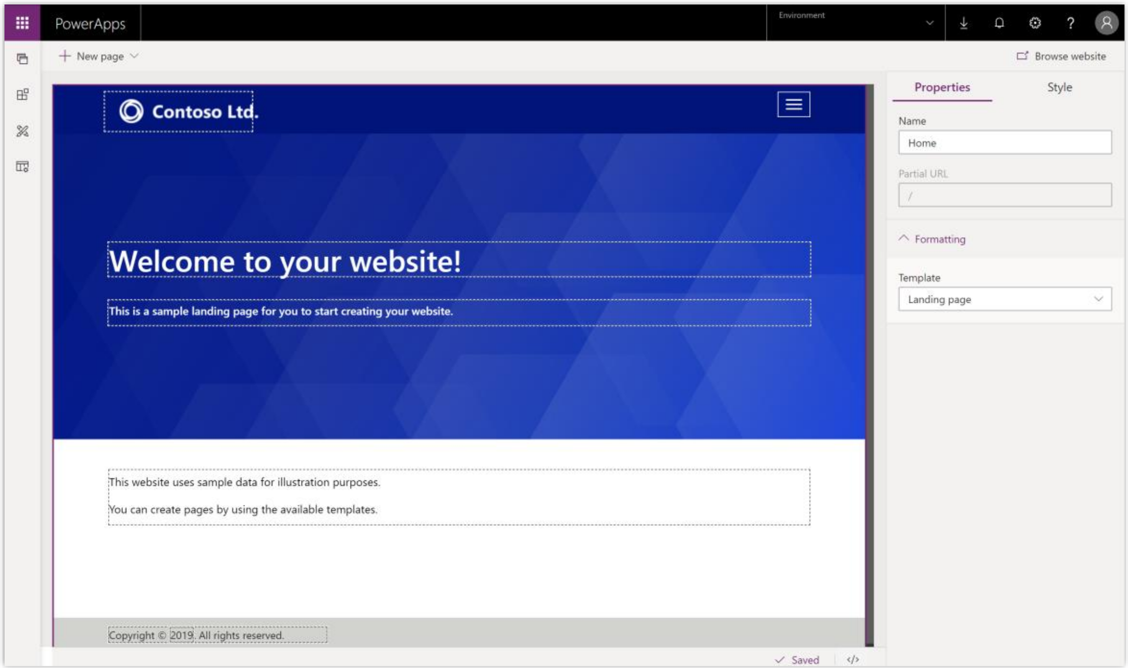
Business value

PowerApps makers can now create a powerful new type of experience: web portals that surface data stored in Common Data Service to employees or users outside their organizations.

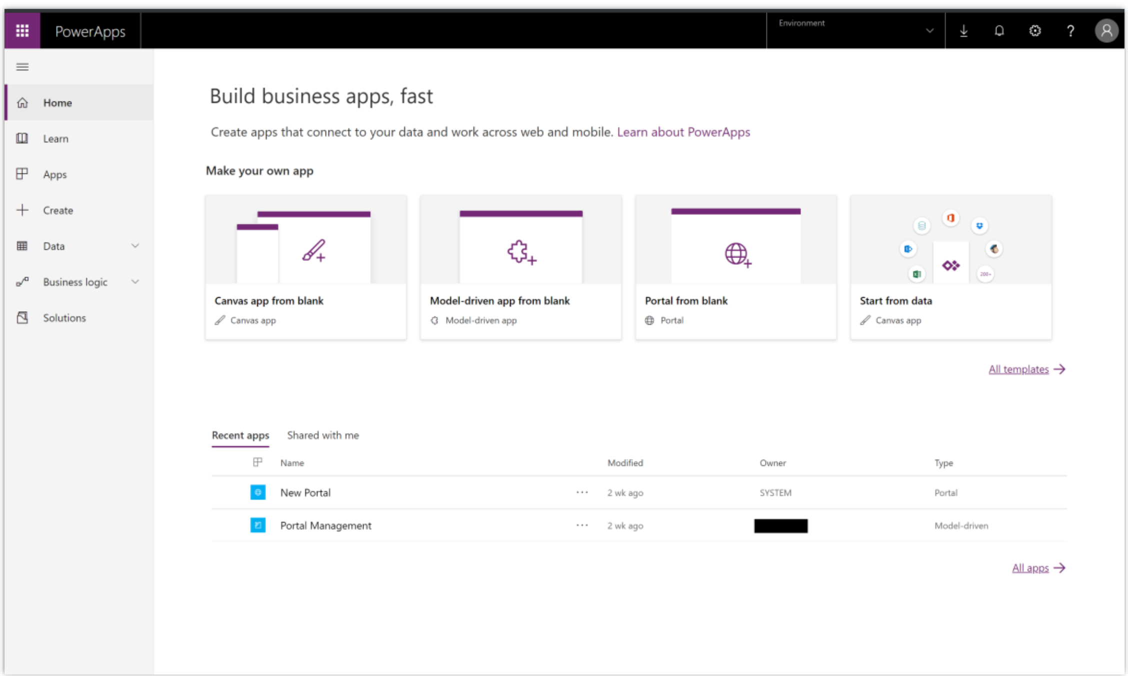
Feature details

As part of this feature, PowerApps and Dynamics 365 makers can create a new type of app called **Portals** to create a website that can be extended to users who are outside your organization and can sign in with a wide variety of identities, or even browse the content anonymously.

This feature will provide full capabilities of Dynamics 365 Portals, previously offered only as an add-on to Dynamics 365 model-driven applications. It also features a revamped end-to-end experience for makers to quickly create a website, customize it with pages, layout, and content, reuse page design through templates, add forms, views, and other key data from Common Data Service, and publish to users. With these new capabilities, makers can deliver rich, web-based experiences to users far beyond their fellow employees, unlocking a host of business scenarios for employees, business to business (B2B) partners, and end customers.



Maker image



Web PowerApps

Geographic areas

This feature will be released to the following Microsoft Azure geographic areas:

- United States
- Europe
- Asia Pacific
- United Kingdom
- Australia
- South America
- Canada
- India
- Japan
- US Gov

Thank you for your idea

Thank you for submitting this idea. We listened to your idea, along with comments and votes, to help us decide what to add to our product roadmap.

See also

Feature exploration (video)

PowerApps (blog)

Portal Checker enhancements

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Nov 2019

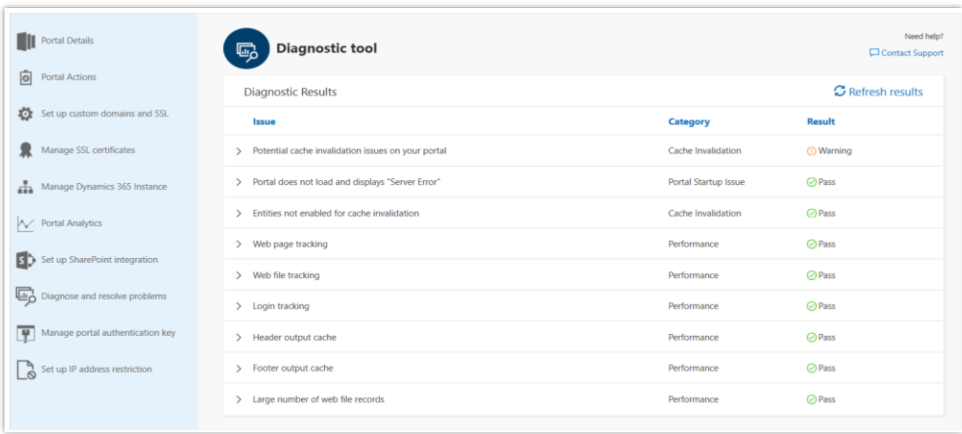
Business value

The Portal Checker tool released in the October '18 wave looks at portal configuration and identifies potential configuration problems as well as provides solutions on how to resolve the issues. Portal customizers and administrators can use this tool to quickly resolve common issues and reduce the amount of time spent on diagnosing issues. As part of this feature enhancement, we will be adding enhancements to identify more scenarios that will help customers to resolve common issues with their portal.

Feature details

The feature enhancements allow users to:

- Identify complex entity permissions that can cause slowness.
- Identify performance-impacting slow queries and views.
- Identify configuration issues with authentication-related site settings.



Portal Checker

Geographic areas

This feature will be released into the following Microsoft Azure geographic areas:

- United States
- Europe
- Asia Pacific
- United Kingdom
- Australia
- South America
- Canada
- India
- Japan
- US Gov

Scalable enterprise solutions

Overview

Enterprise makers have quality embedded throughout their experiences. Diagnostic data is available for canvas apps to make troubleshooting easier, and a test framework is available in canvas apps for makers to create test coverage for their mission-critical apps. Enterprises can share apps with vendors, contractors, and other partners outside of their companies.

New solution components get full support

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	Oct 2019	-

Business value

The Power Platform is continuing to adopt a single packaging mechanism. We're continuing to close gaps so that any solution component has consistent behavior and pre-existing user workflows are not negatively impacted. Combined with enhancements to our developer tooling, all customizations can be managed in source control enabling CI/CD (continuous integration/continuous delivery) with fully automated build and release pipelines.

Feature details

With 2019 release wave 2, you will be able to take full advantage of the new types of components that are added to a solution. The latest features like canvas apps, flows, connections, custom connectors, and environment variables will now follow the full end-to-end lifecycle, including:

- Canvas apps with flows are supported within solutions.
- Custom connectors are added that were not originally created from a solution.
- Connections get created automatically when importing solutions.
- Dependencies are tracked and enforced.
- Flows natively consume environment variables.

In addition, flows in solutions are easier to discover and edit. They are located under **Team Flows** and don't need to be turned off before editing.

Required licenses and plans

This feature requires the following licenses or plans:

- PowerApps for Office 365

PowerApps test framework

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	Nov 2019	-

Feature details

App makers and testers can leverage the PowerApps test framework to create UI automation and end-to-end tests for their canvas apps. App makers can catch and react to issues early as they move across environments, test out the latest service versions, or push updates to their existing production applications.

By using this framework, you can perform these tasks:

- Create and organize test suites and test cases for your app in a new test designer.
- Capture your actions and create test steps automatically by using an intuitive recorder.
- Manually create test steps and validate expected results by using new PowerApps testing expressions.
- Play back your tests to quickly identify issues early and understand any failures.

See also

Feature exploration (video)

Enhanced offline capabilities for apps on the Dynamics 365 mobile app

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Feature details

Ability to work with data in offline mode is a key business requirement for field scenarios. We released the first phase of robust offline functionality early this year. With our commitment to provide a great offline solution, we are continuously investing in building more capabilities on top of it.

New capabilities and enhancements:

- Offline metadata is now synced automatically in the background to provide a better user experience. Previously, anytime there was a change in offline metadata, a user got a prompt to update the metadata to be able to work in offline mode. Metadata sync happened in the foreground, blocking the user. Now, a user no longer has to worry about syncing offline metadata or data and can continue working seamlessly in both online and offline mode.
- Notes are available in offline mode. Users are now able to access their notes, create notes, and add attachments in offline mode.
- User experience is better in offline mode, such as improved messaging in offline.

Modern Solution Explorer is the default customization experience

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Business value

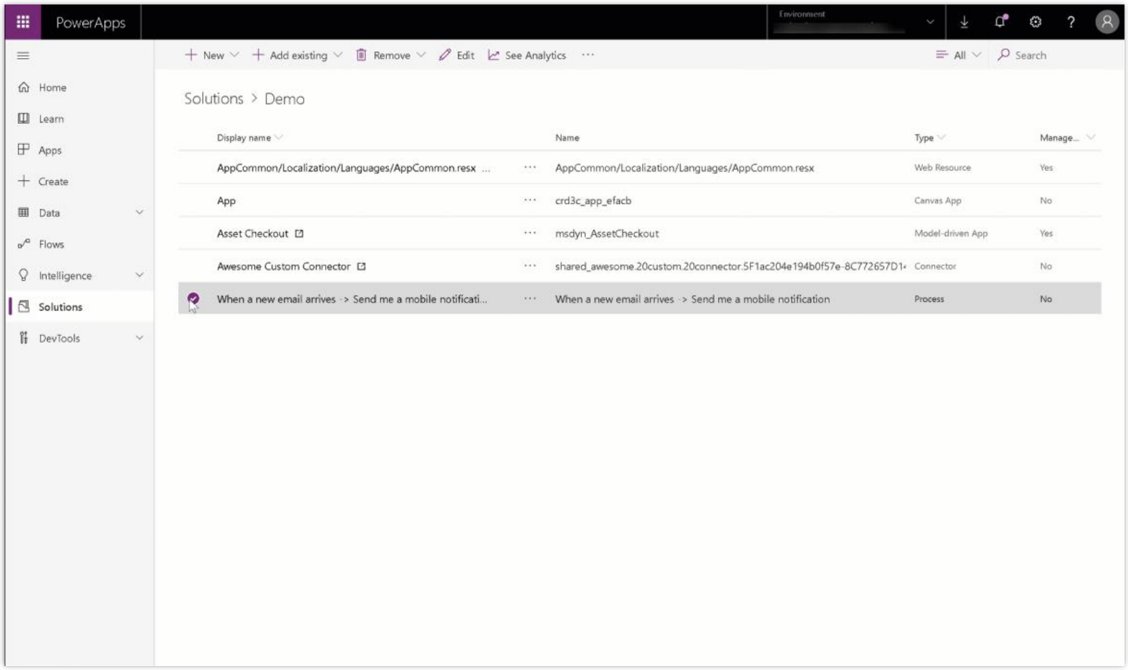
Modern Solution Explorer offers several key benefits over the classic experience, including multiple new features, building and managing customizations under one umbrella, inline help when you need it, and a more performant and usable interface.

Feature details

Makers are more productive and no longer need to switch between solution interfaces. Along with many new solution capabilities such as canvas apps, flows, custom connectors, and environment variables, all the familiar capabilities from classic Solution Explorer are now available within the new experience. If you still need to access classic Solution Explorer, simply select **Switch to classic**.

Other improvements include:

- Tailored interface for advanced users.
- Updated import/export experiences with the ability to configure environment variables.
- Solution actions panel to support healthy application lifecycle management (ALM).



Modern Solution Explorer in action

Required licenses and plans

This feature requires the following licenses or plans:

- PowerApps for Office 365

PowerApps checker PowerShell module and Azure DevOps task

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✔ Jul 15, 2019	Oct 2019

Feature details

Using the PowerApps checker PowerShell module or Azure DevOps build task, you can now continuously validate your solutions as part of the solution build process and identify issues early on in the development lifecycle. This new capability enables you to locate and correct solution problems during development, resulting in improved efficiency and reduced development costs.

See also

Feature exploration (video)

Use PowerApps checker (blog)

Share apps with users outside your tenant, B2B or B2C

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	✓ Jul 26, 2019	Oct 2019

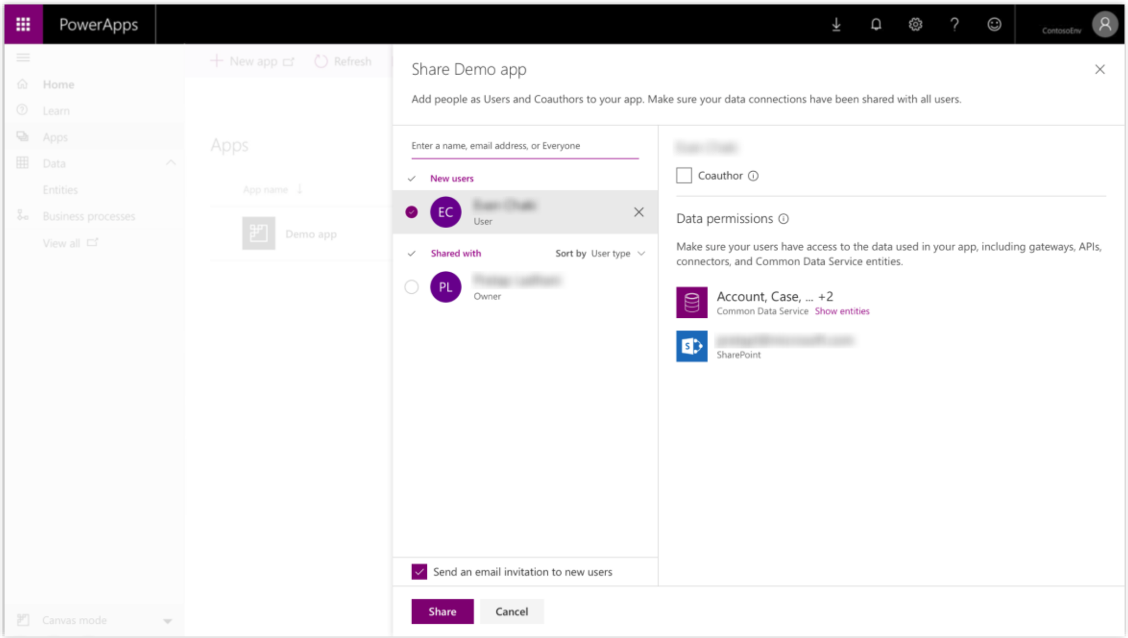
Feature details

You can invite external business partners, contractors, and third parties to run your company's canvas apps. You can share your apps with any guest of your Azure Active Directory tenant.

You can share a canvas app with a guest as easily as you do with a co-worker. Type your guest's email address to quickly share both the app and its data.

If a SharePoint list has been shared with a guest user, that user can also run any canvas apps that are embedded in that list.

To run standalone apps, guest users need the same license as users in your tenant. All apps require a paid license, and some apps require a PowerApps Plan 1 or higher license.



Sharing pane for canvas apps

See also

[Feature exploration](#) (video)

[Share canvas apps with guests](#) (blog)

[Share with guests](#) (docs)

The PowerApps Checker includes rules for canvas apps and flows

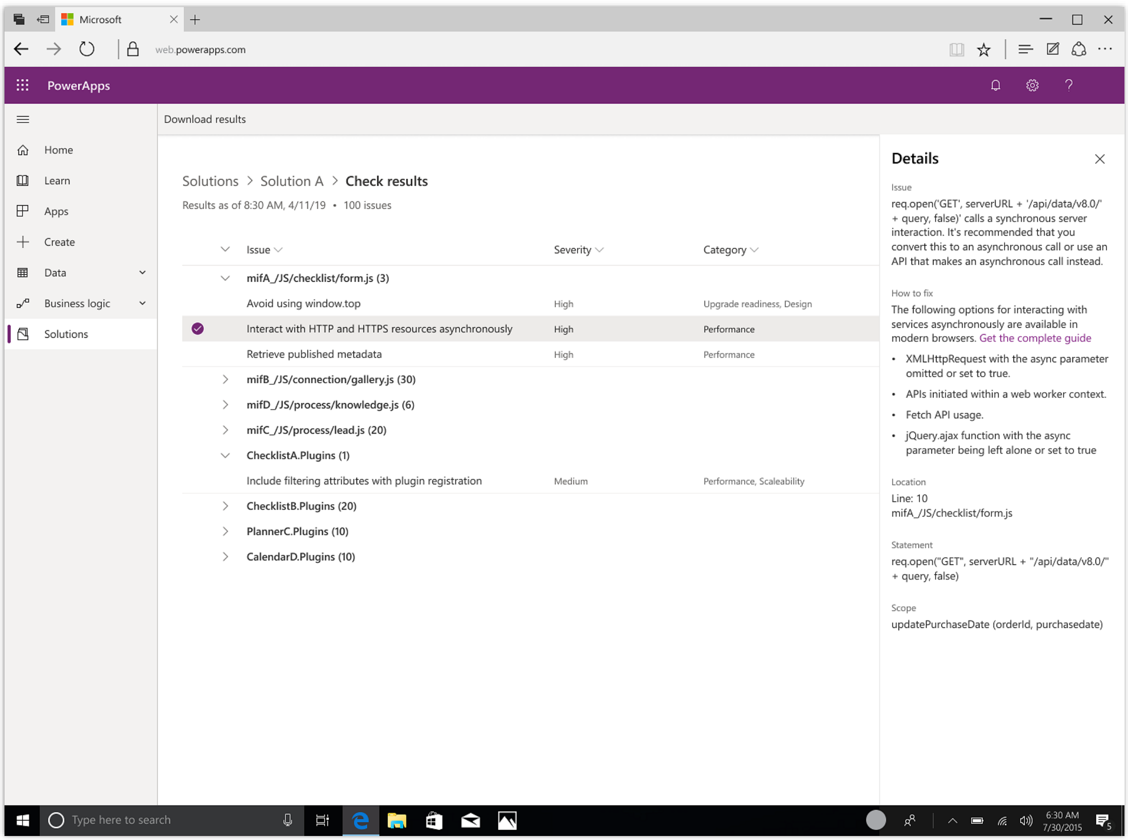
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	Sep 2019	Oct 2019

Business value

PowerApps has added components to the rule set that encourages best practices in the PowerApps Checker. You can check your canvas apps and flows that are included in solutions and then review all issues in a single, consolidated report.

Feature details

The PowerApps Checker has helped hundreds of admins and makers pinpoint potential issues in their solutions and quickly resolve them with rich documentation. That experience has been enhanced in several ways. The PowerApps Checker pulls data not only from the App Checker in PowerApps Studio but also the Flow Checker in the flow designer.



Details pane of the PowerApps Checker

Improved reliability of cascading changes

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✔ Sep 9, 2019	Oct 2019

Business value

By moving cascading (assign, delete) jobs into the background, users will be able to resume interaction with the application sooner with fewer timeouts. Large volume cascading changes will have a higher success rate with fewer database timeouts. Long-running cascade jobs will no longer block other processes from being executed.

Feature details

Cascading changes (assign, delete) that affect more than 100 records will be processed in the background asynchronously. This allows users to resume interaction with the UI sooner and reduces UI and database timeouts when processing cascading changes. Processing these changes in the background allows for a higher rate of success when large numbers of records are involved and prevents the changes from blocking other processes that are being run on the system.

There will be a delay between when the initial change is made and when all records have been processed. The delay duration will be based on the number of records processed. The status of the background processing can be viewed in the **Settings** for the organization using the **Jobs** list.

NOTE At preview this feature will only support asynchronous processing of **Assign** and **Delete**; however, by October 2019 all cascading changes will be asynchronous.

See also

Asynchronous cascading (docs)

Unified Interface for everybody

Overview

The Unified Interface is the model-driven app layer that generates great user experiences over Common Data Service. The Unified Interface uses responsive web-design principles to provide an optimal viewing and interaction experience for any screen size, device, or orientation. The new Unified Interface brings all the rich experiences to any client that you're using. Whether you're on a browser, a tablet, or a phone, you can consume similar experiences with:

- Similar form experiences to update and view your records.
- Interactive dashboards across all devices to view your information and drill into it.
- Improved performance.
- Support for right-to-left (RTL) languages.
- Accessibility improvements across all experiences on the Unified Interface.

Adding Save and Create Another record option to Quick Create buttons

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Jul 26, 2019	Oct 2019

Business value

Users do not have to save and click on the **Quick Create** form when they need to quickly add multiple records. The new buttons on the quick create forms will support both saving and closing the form and saving and opening a new **Quick Create** form to add additional records with less clicks, which improves overall productivity when adding new records.

Feature details

The current **Save and Close** button will change to support a multi-select option, including **Save and Close** and **Save and Create New**. The new action will save the existing record and open a new **Quick Create** form for a user to quickly add another record without additional clicks or actions.

See also

Quick Create Save and Create New (blog)

Improving Save Changes dialog

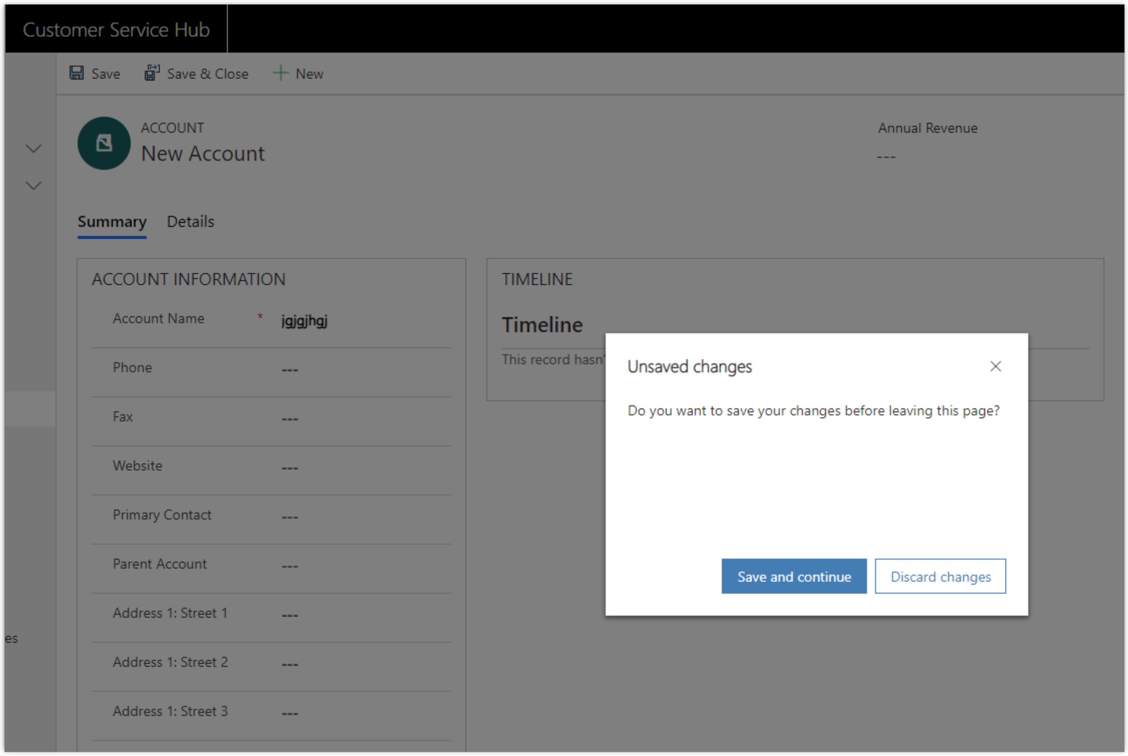
Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 1, 2019	Oct 2019

Business value

The new experience will make it very clear when a user is going to be navigated away from a main form to another record. The new messaging and call to actions will help the user make informed decisions on the action they want to take including saving and continuing, discarding changes and continuing or simply closing the dialog.

Feature details

The current save changes dialog is unclear and confusing to customers. The new experience will make it very clear when a user navigates away from the main form to another record. The new messaging and call to actions will help the user make informed decisions on the action they want to take including save and continue, discard changes and continue, or simply closing the dialog. The buttons will be updated to say **Save and continue** or **Discard changes**.



Unsaved changes dialog

See also

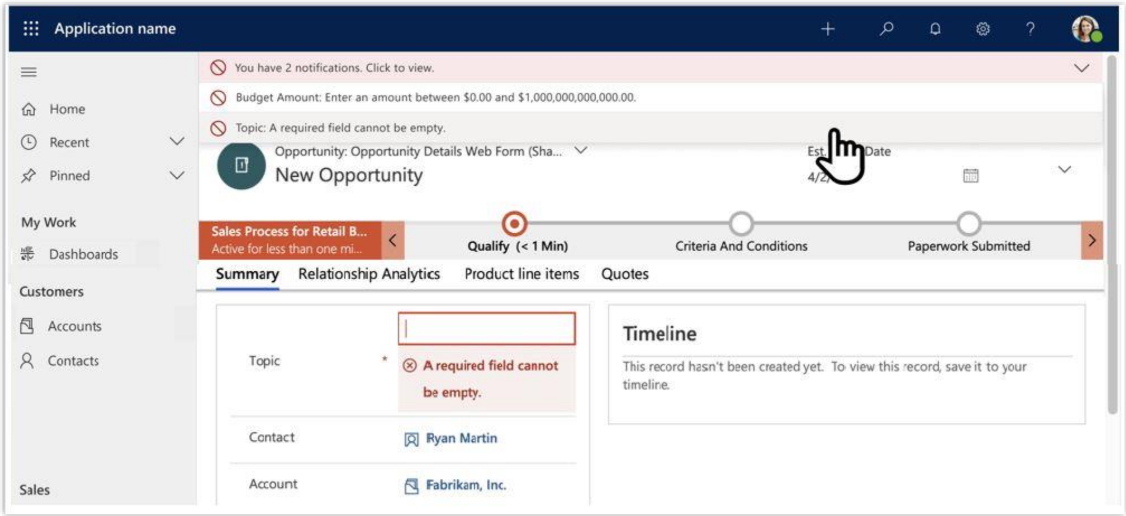
[Unsaved Changes Dialog Improvements](#) (blog)

Anchoring error notifications in Unified Interface

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Feature details

Users will be able to quickly navigate to a field on a form that has an error from a notification by simply clicking on the error message. The focus will be set on the error field, reducing clicks and improving productivity when there is an error on a form.



Error notification

See also

Feature exploration (video)

Error Notification Navigation (blog)

Connection role enabled in the Unified Interface

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Business value

Closes feature gaps between the legacy web client and the Unified Interface, reducing issues or friction for customers updating from v9.x web client to the Unified Interface. Also allows for new users to easily add a connection role to a connection in the Unified Interface.

Feature details

Users will be able to add or delete connection roles with the August 2019 preview and October 2019 general availability release of the Unified Interface. This entity was previously available only when relating a connection role to a connection, with no ability to manage a connection role. This will close a feature gap between the legacy web client and the Unified Interface.

See also

Connection Role (docs)

Form header usability improvements

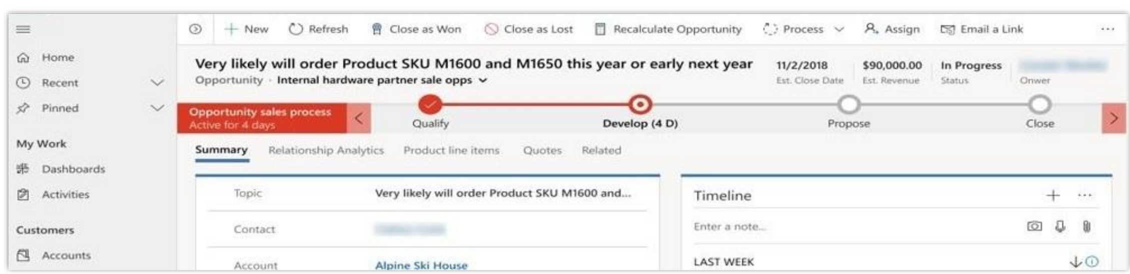
Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Feature details

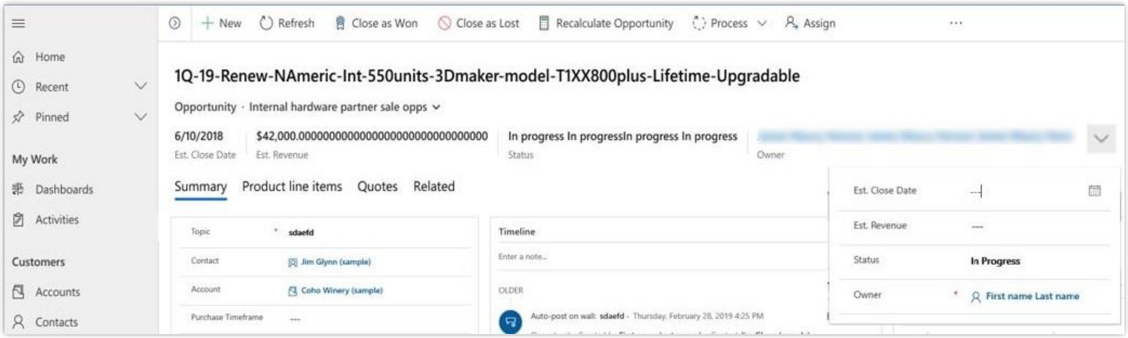
Customers will have an improved experience when they open and read information for a record in the Unified Interface with increased data density and usability with the form header.

Enhancements to the header include:

- Information will always be available in the header with four read-only fields, reducing clicks and improving productivity.
- The title of the record will never truncate.
- Current forms will support editable fields with a simple click of a chevron to enter data.
- A read-only form will have an enhanced notification with details on why a form is read-only.



Header density



Legacy form header

See also

[Feature exploration](#) (video)

[Show information in header](#) (blog)

Improved usability, density, and filtering capabilities for the Unified Interface grid

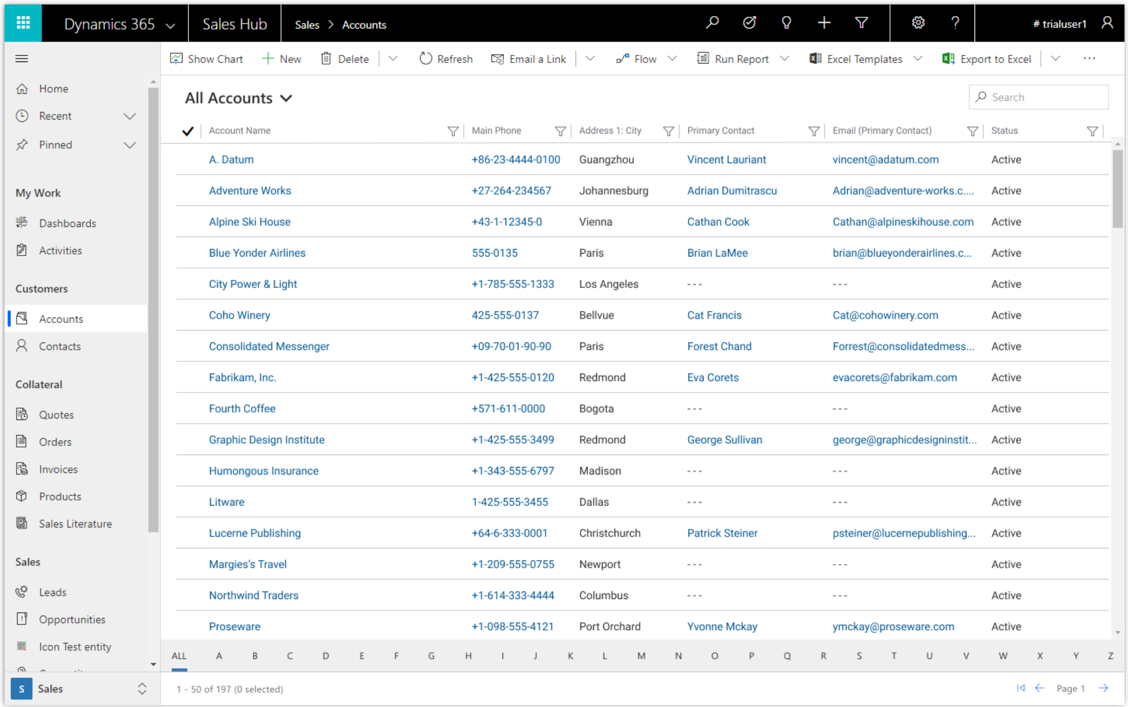
Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Feature details

The Unified Interface grid now includes several updates focused on usability and navigation for users. The grid layout and styling have been optimized to improve density, allowing users to see more records on a single screen without it feeling cluttered. This update removes unused and redundant space in the grid that has been highlighted in user feedback as impacting efficiency and making the grid harder to navigate.

In addition to the density changes, updates have been made to improve the filtering and navigation behavior. Now as users filter records in the view page, navigate to a record, and return to the grid, the filters on the grid are remembered. This allows users to navigate back and forth between the grid and filtered records without reapplying the filter, search, or view selection each time.

Improvements have also been made to the advanced grid column filtering options to find their records quickly. This includes filtering on the activity type field and alignment of date field filtering for existing operators.



Improved grid density

Required licenses and plans

This feature requires the following licenses or plans:

- PowerApps Plan 2

See also

[Feature exploration](#) (video)

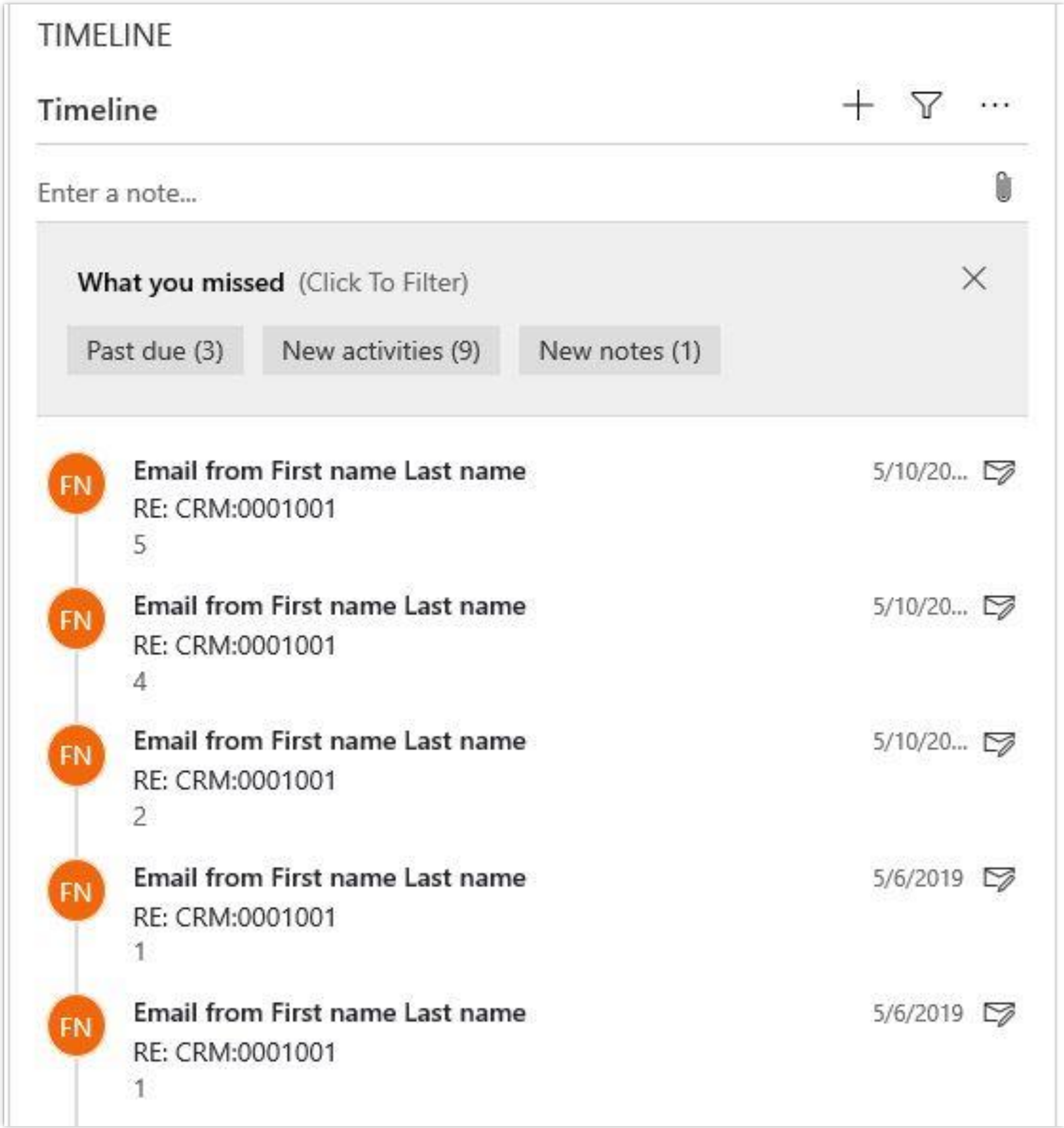
[Enhanced functionality in Unified Interface grid](#) (blog)

Manage email on the timeline wall in Unified Interface

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Feature details

Users can easily set email messages to show as conversation threads on their timeline wall, significantly reducing scrolling and clicks when they are managing email activities in the Unified Interface.



Email conversation thread

See also

View email threads (blog)

Email Activities (docs)

Timeline wall filter improvements

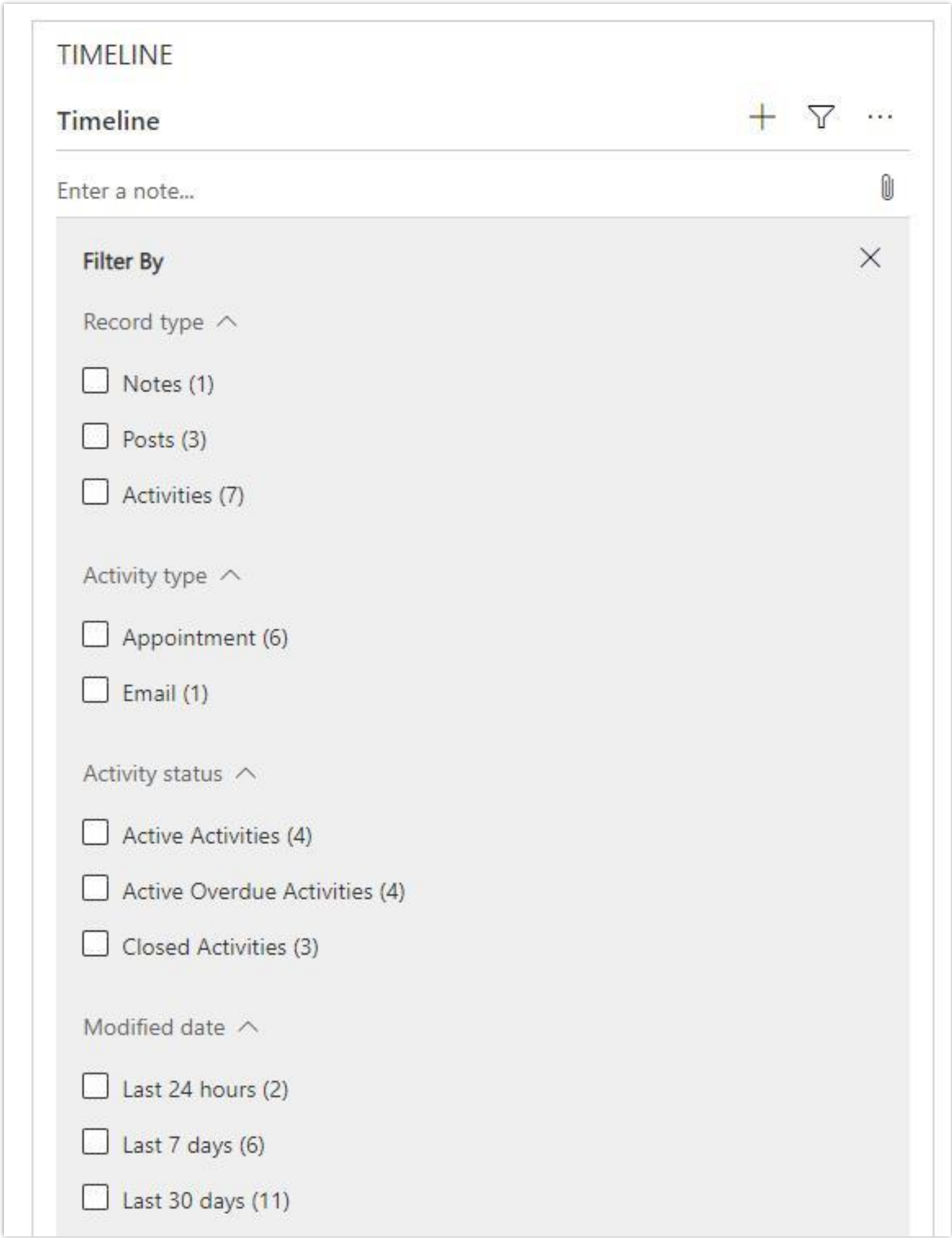
Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Business value

Filtering activities will be faster and easier to use, improving productivity and aligning the experience to similar industry standards that customers are used to like Outlook, Power BI, and SharePoint.

Feature details

Filtering activities will now be simple and easy to use. It will include multiple filter options, and data and times will be clearer and easy to understand. We are also reducing confusion by removing pie charts to simplify and align to a more modern filtering experience. The experience will be more aligned to what users expect with similar filtering in Outlook, Power BI, and SharePoint.



Timeline wall filtering

See also

Activities Timeline Wall (blog)

Timeline wall improvements in Unified Interface

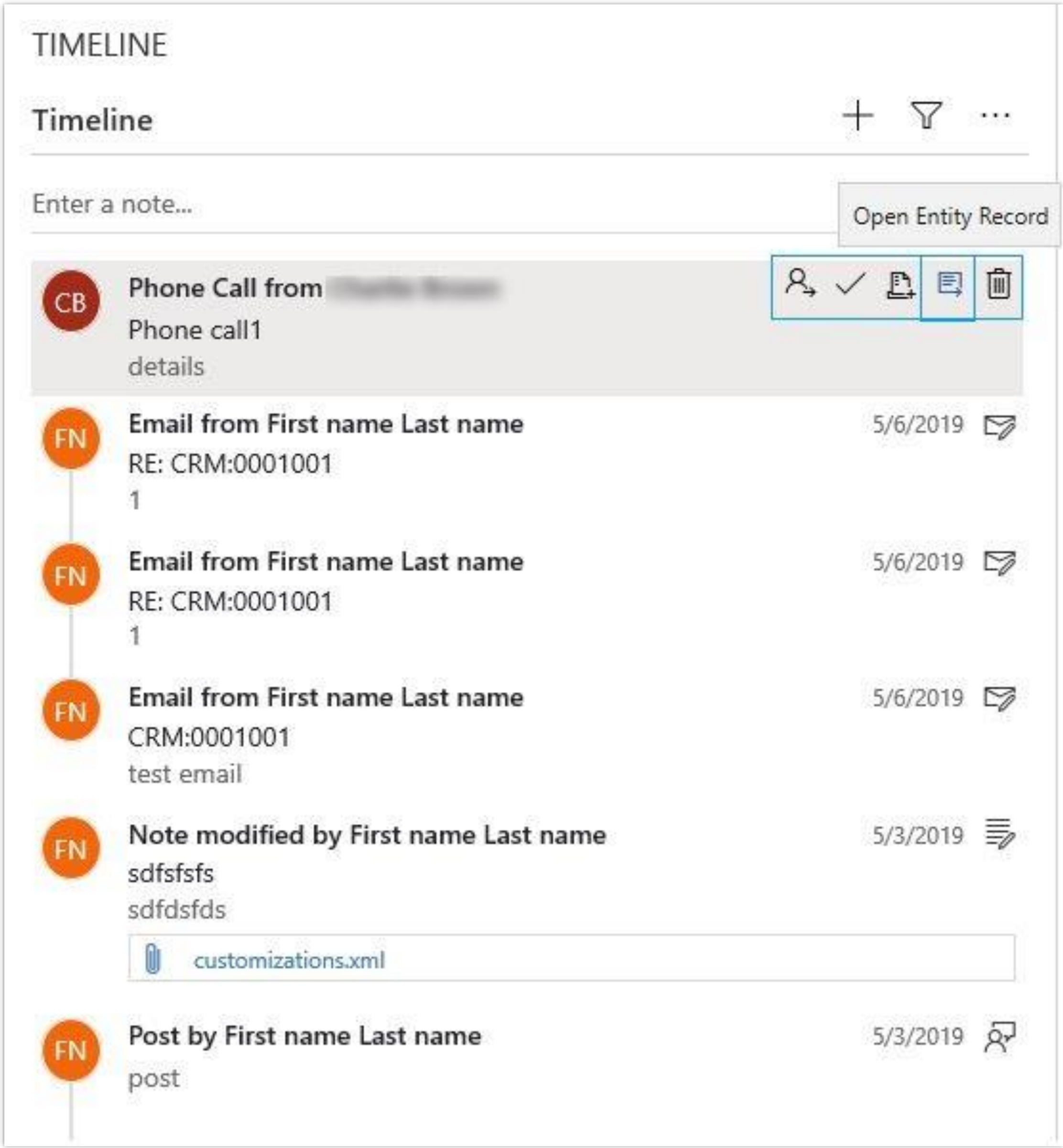
Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 2, 2019	Oct 2019

Feature details

Managing activities in the timeline wall will be faster and more responsive with improvements to data density and usability.

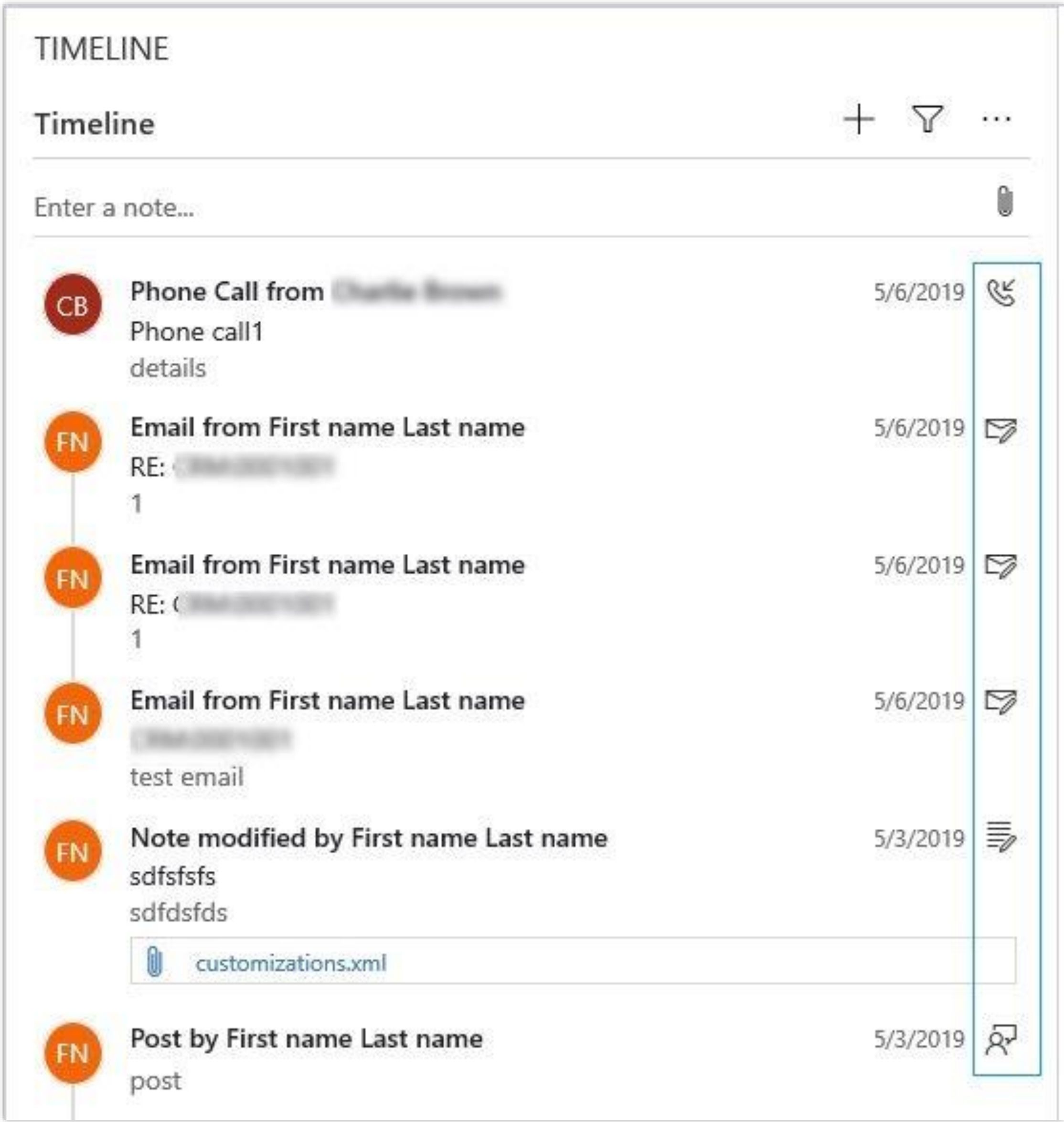
Enhancements include:

- Easily expand and collapse activities in the timeline wall.



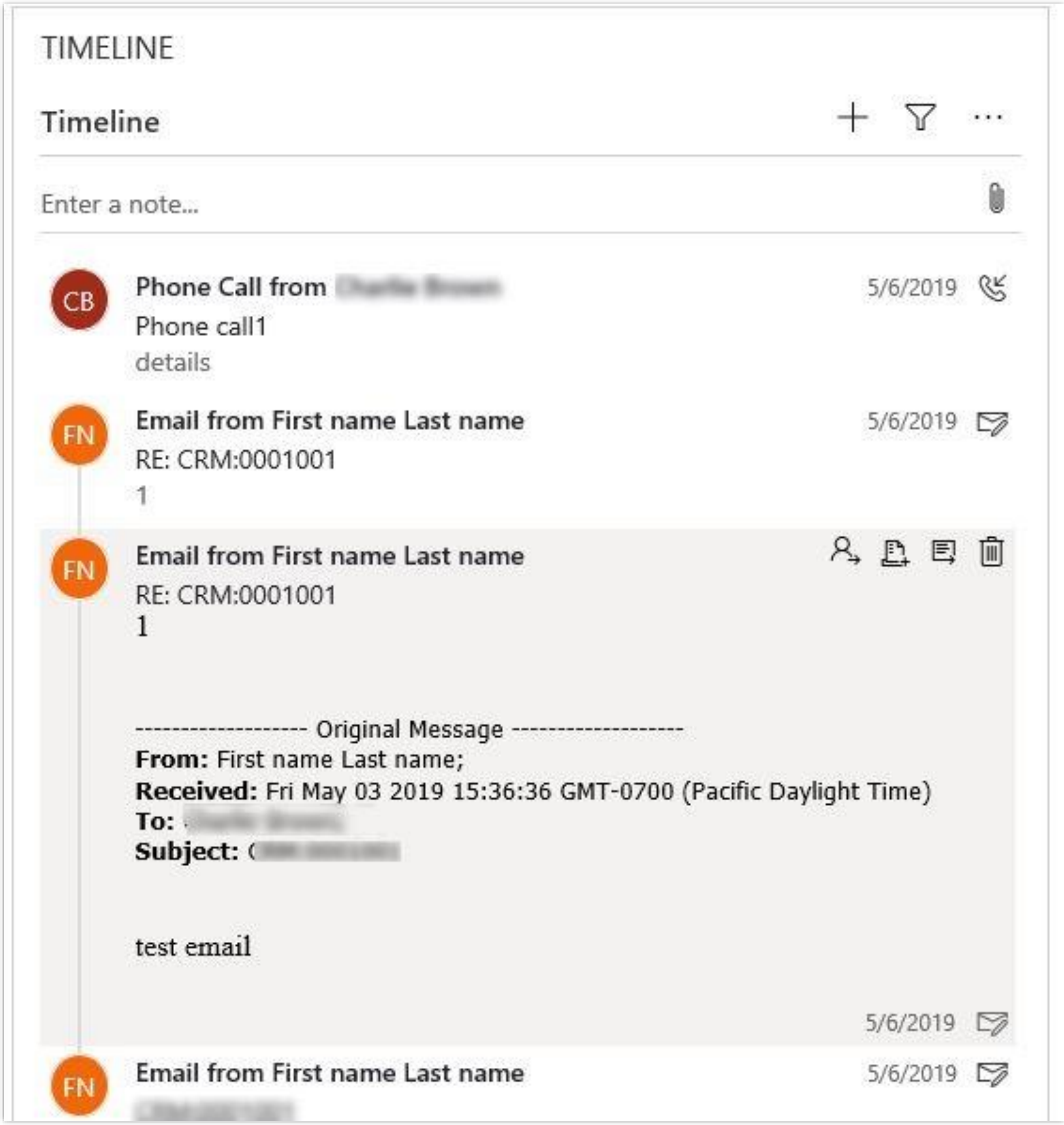
Command bar

- Simple icons that help users quickly identify key activities.

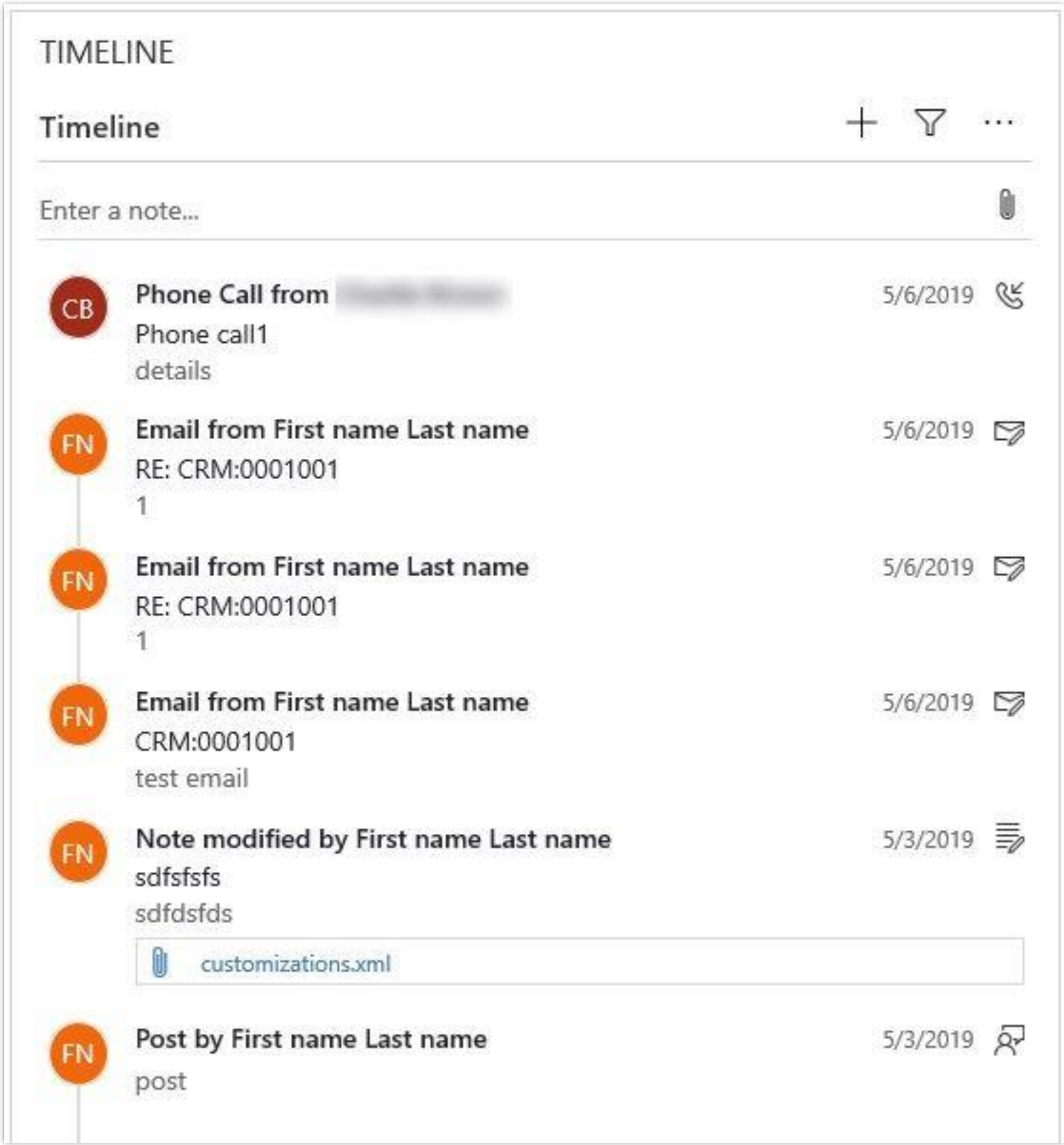


Icons

- Quick and easy access to the command bar to perform common actions on an activity.



Expanded view



Improve density

See also

Feature exploration (video)

Timeline Improvements (blog)

Usability enhancements to lookups in Unified Interface

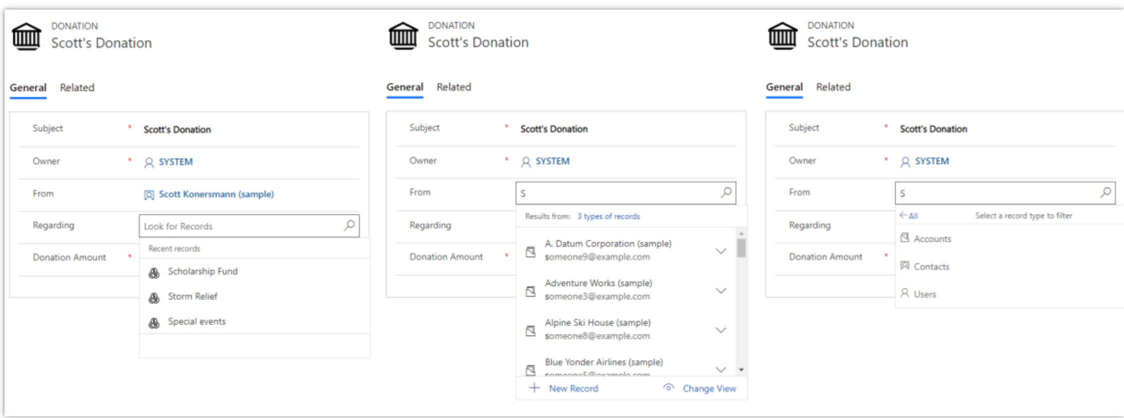
Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2019	Oct 2019

Business value

Enhanced lookup functionality will give users improved interactivity and consistency with the drop-down menu.

Feature details

Enhanced functionality within lookup includes improved entities filter layout, improved interactivity with the search box, and consistency displaying recent and pinned records.



Lookup enhancements

See also

[Enhancements to lookups](blog) (blog)

View inline images for emails that are read-only

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✓ Aug 2, 2019	Oct 2019

Feature details

With the 2019 release wave 2, customers can easily view images inline when they open and read an email. This eliminates the need to open each individual image that is attached in an email. Providing inline image support for read-only emails streamlines the experience and improves usability and user productivity when they manage their email in the Unified Interface.

See also

Feature exploration (video)

View inline images in Emails (blog)

Microsoft Flow

Overview of Microsoft Flow 2019 release wave 2

Microsoft Flow is the popular process automation and workflow product from Microsoft. Every month, over a million people automate everything from simple notifications to highly tailored multi-step approval processes spanning organizational boundaries. Microsoft Flow exemplifies the future of automation by infusing intelligence and empowering completely non-technical users to automate complex workflows—all without tortuous IT deployments. This October, Microsoft Flow is introducing several new features in three key areas.

For **flow makers**, we are providing smarter and more powerful experiences. For example, with the new **AI Builder** capabilities, makers can create flows that parse content from a PDF form or classify the objects in an image.

For the **users** of flows, we are delivering world-class business process capabilities, including working with business processes offline.

For **admins**, there is now much richer tooling, such as our PowerShell cmdlets and new Power Platform Admin center.

Watch overview video

What's new and planned for Microsoft Flow

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✓) shows which features have been released for public preview or early access and for general availability.

More intelligent and powerful capabilities for Microsoft Flow makers

The citizen developers of the Microsoft Power Platform now have richer capabilities when they are building out business processes inside of Microsoft Flow.

Feature	Enabled for	Public preview	Early access*	General availability
Flows that use other solution components are generally available	Admins, makers, or analysts, automatically	-	-	Oct 2019
Running flows from a geofence is generally available	Admins, makers, or analysts, automatically	-	-	Oct 2019
Share flows as templates	Admins, makers, or analysts, automatically	-	-	Oct 2019
Support gateways in all environments	Admins, makers, or analysts, automatically	-	-	Oct 2019
Add intelligence to Microsoft Flow with AI Builder	Admins, makers, or analysts, automatically	✔ Jun 9, 2019	-	Oct 2019

Rich tooling for administrators

Admin experiences are key to the adoption of any trusted platform.

Feature	Enabled for	Public preview	Early access*	General availability
Admin connectors for Microsoft Flow are generally available	Admins, makers, or analysts, automatically	-	-	Oct 2019
Improved capacity governance for resource usage	Admins, makers, or analysts, automatically	-	-	Oct 2019
Manage Microsoft Flow in the Power Platform Admin center	Admins, makers, or analysts, automatically	-	-	Oct 2019
Microsoft Flow PowerShell cmdlets for admins are now generally available	Admins, makers, or analysts, automatically	-	-	Oct 2019

World-class business process capabilities

Microsoft Flow provides world-class business process capabilities for its users that span endpoints and experiences.

Feature	Enabled for	Public preview	Early access*	General availability
Build business process flow stages with custom controls	Users by admins, makers, or analysts	-	-	Oct 2019
Business process flow immersive experiences	Users by admins, makers, or analysts	-	-	Oct 2019
Work with business process flows offline	Users by admins, makers, or analysts	-	-	Oct 2019
Fluent experience for flows in Dynamics 365 and SharePoint available	Users, automatically	-	✔ Aug 5, 2019	Oct 2019

* Some features are available for you to opt-in as part of early access on August 2, 2019, including all mandatory changes that impact users. Learn more about early access.

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

More intelligent and powerful capabilities for Microsoft Flow makers

Overview

The citizen developers of the Microsoft Power Platform now have richer capabilities when they are building out business processes inside of Microsoft Flow. Flow makers can now leverage the **smarter** experiences of AI Builder.

Flows that use other solution components are generally available

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

The Microsoft Power Platform is continuing to adopt a single packaging mechanism. We're continuing to close gaps so that any solution component has consistent behavior and pre-existing user workflows aren't negatively affected. Combined with enhancements to our developer tooling, you can manage all customization in source control, enabling continuous integration and continuous delivery with fully automated build and release pipelines.

You will be able to take full advantage of the new types of components that are added to a solution. The latest features, like canvas apps, flows, connections, custom connectors, and environment variables, will now follow the full end-to-end lifecycle, including:

- Canvas apps with flows are supported within solutions.
- Add custom connectors that were not originally created from a solution.
- Dependencies are tracked and enforced for new solution components.
- Flows natively consume environment variables.

Additionally, flows in solutions are easier to discover and edit. They are located under **Team Flows** and no longer need to be turned off before editing.

See also

Feature exploration (video)

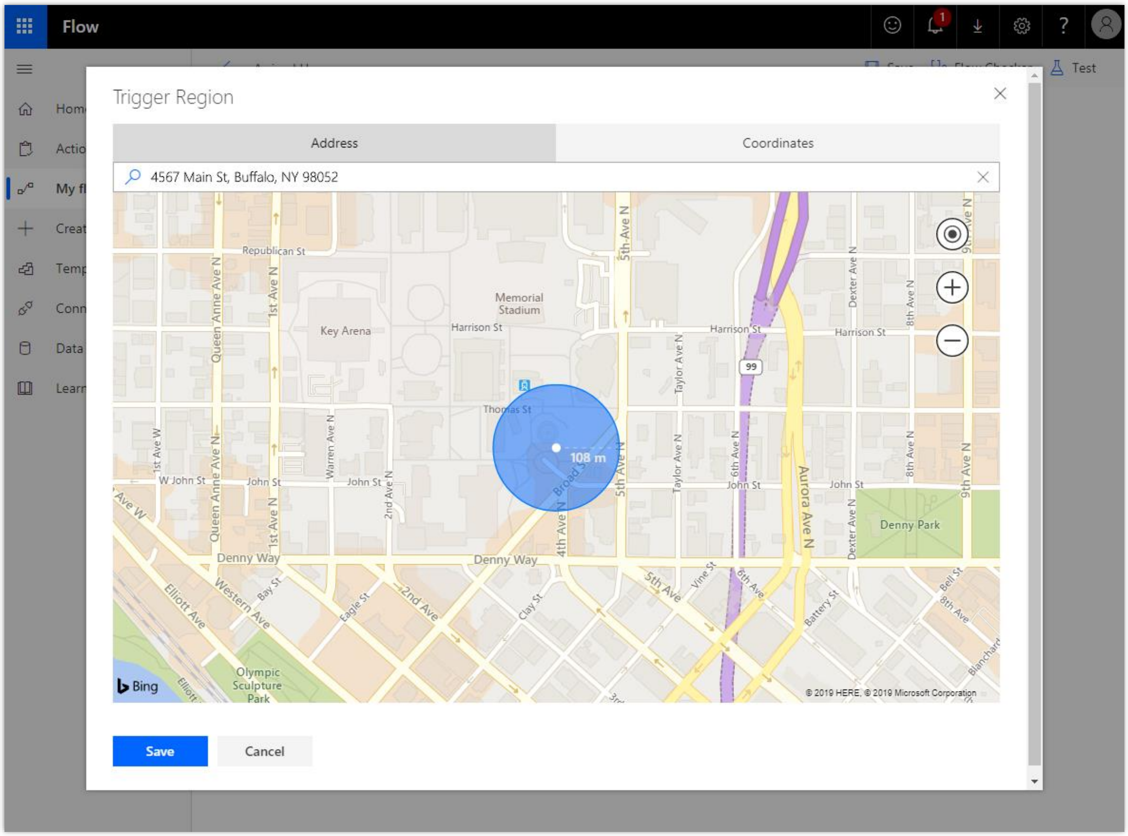
Flow (blog)

Running flows from a geofence is generally available

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

In the previous release wave, we previewed the ability to trigger a flow from the Microsoft Flow app on iOS and Android devices. This feature allows users to create a location range that triggers a flow when a mobile device enters or leaves the location range. This enables certain flows to automatically run, without manual activation, further adding to the mobile application's efficiency.



Setting up a geofence

See also

[Feature exploration](#) (video)

Share flows as templates

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

Earlier this year, we previewed the ability for users to share copies of their flows with their co-workers. When you send a copy of a flow, recipients can create their own copies of the original flow. These recipients own their copies, and their copies use the recipient's connections (not the original owner's connections). Recipients can make any changes they want after they create their own copy.

We're now making this feature generally available for everyone to use. You can use this feature to create an organization-specific gallery of templates for your users, for example.

Support gateways in all environments

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

You can now create and manage gateways in any environment, not just the *default* environment. This release allows users to use all of the gateways that they have access to within their environment's region. Admins can use the rich gateway management experience in the Power Platform Admin center to manage and control access to gateways. Admins can also define who can access gateways and their permissions.

Add intelligence to Microsoft Flow with AI Builder

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✔Jun 9, 2019	Oct 2019

Feature details

AI Builder (preview) is a new Microsoft Power Platform capability for teams with the business expertise to easily automate processes and predict outcomes to improve business performance. AI Builder is a turnkey solution that brings the power of Microsoft AI through a point-and-click experience. You can now build AI without knowing programming or data science. Using AI is made even easier with integration directly into PowerApps and Microsoft Flow.

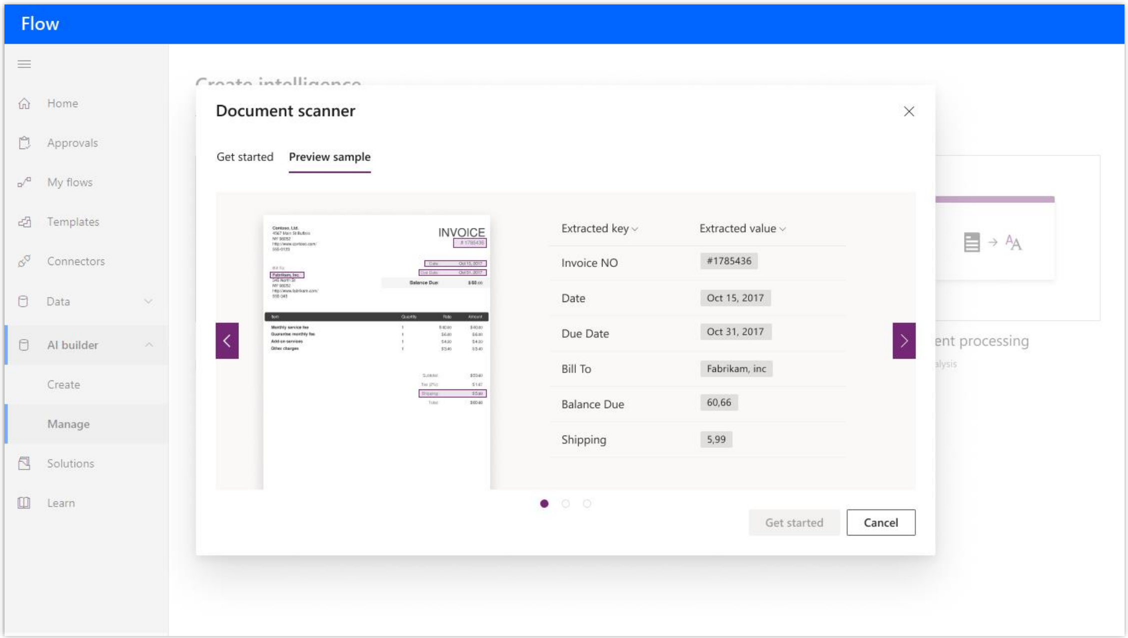
To start using AI Builder from Microsoft Flow:

1. Sign in to [Microsoft Flow](#).

2. Select **Build** under **AI Builder (preview)** on the left menu.

3. Select one of the templates.

4. Get started creating AI models for your organization.



AI Builder image

Geographic areas

This feature will be released into the following Microsoft Azure geographic areas:

- United States
- Europe

See also

[Feature exploration](video) (video)

Introducing AI Builder (blog)

Rich tooling for administrators

Overview

Microsoft Flow makes maintaining and managing business processes across your organization easier than ever. The Power Platform Admin center is now the single admin center for Microsoft Flow admins and partners, offering a more reliable, unified experience for managing storage capacity, environments, and deployments. Powerful analytics empower admins to investigate and diagnose issues with their deployments, and the integrated Help & Support experience allows them to find the help they need and escalate to Microsoft Support when necessary.

Admin connectors for Microsoft Flow are generally available

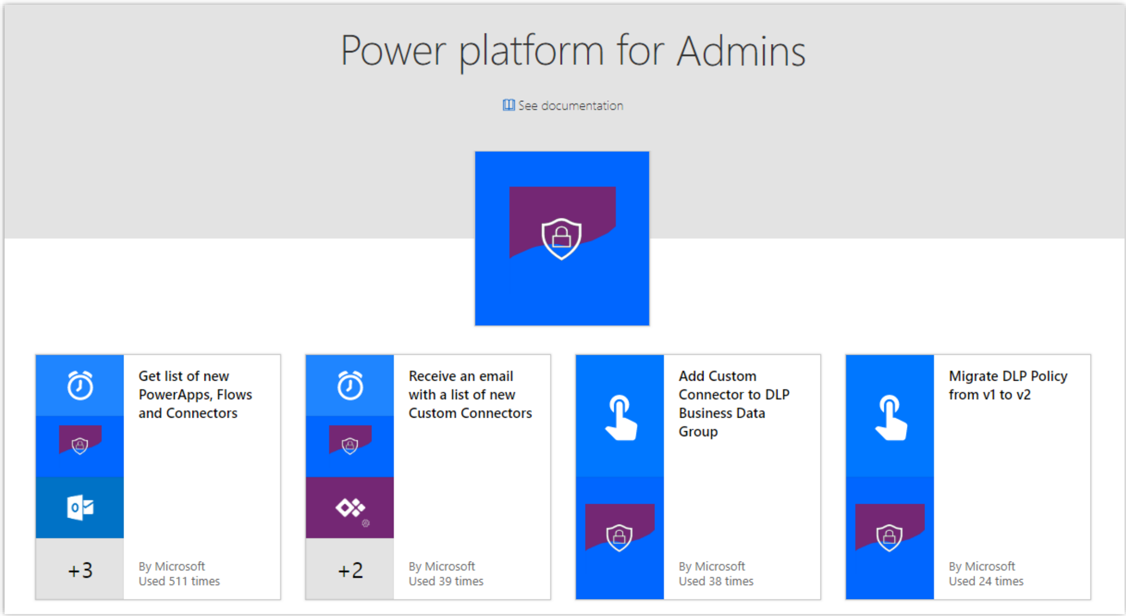
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

With the preview launch of the Admin connectors for PowerApps and Microsoft Flow last year, Power Platform admins found new and powerful ways to improve their productivity by using the same tools that they manage.

We are now announcing the general availability of these connectors and the addition of some templates and samples that outline common use cases for canvas apps and flows that are built against these connectors:

- Power Platform for Admins
- Microsoft Flow for Admins



Power Platform Admin connectors are available

Improved capacity governance for resource usage

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

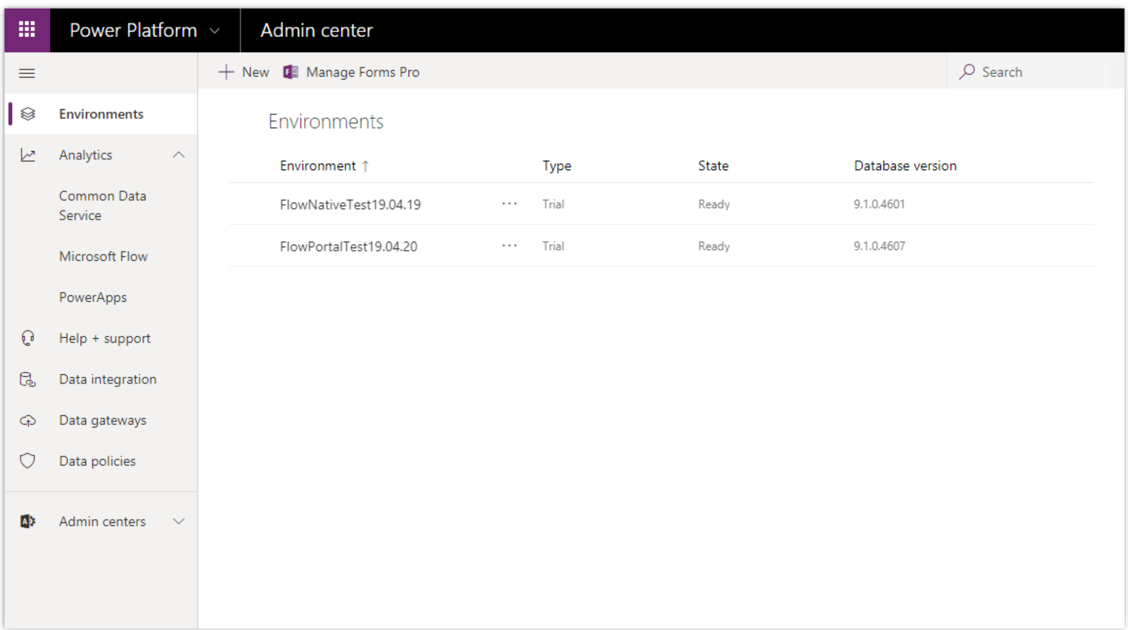
With the introduction of the new capacity-based provisioning model earlier this year, citizen developers are able to more easily provision the environments they need for their applications. With this change, however, comes the need for IT admins to better plan and manage database, file, and log capacity consumption within their organizations. To support this, the Power Platform Admin center will launch a new real-time view of capacity consumption (database, file, and log), historical trends for up to 12 months, and storage breakdowns by entity and application to help facilitate capacity planning and cross-charging to the business units that consume platform resources.

Manage Microsoft Flow in the Power Platform Admin center

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

Historically, admin experiences for Dynamics 365, PowerApps, Microsoft Flow, and Common Data Service have been spread across multiple portals, lacking a single, unified, end-to-end experience. Now, we're very excited to announce the general availability of the new Power Platform Admin center.



Admin center

With this launch, the Power Platform Admin center is now the single place to:

- Install, upgrade, and manage flows.
- Create and manage environments.
- Review analytics and telemetry.
- Set governance controls and data loss prevention policies.

Microsoft Flow PowerShell cmdlets for admins are now generally available

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	Oct 2019

Feature details

With the preview launch of the PowerShell cmdlets for administrators last year, admins are able to automate many of the monitoring and management tasks that were only possible through the Microsoft Flow Admin center.

We are now announcing the general availability of these cmdlets, as well as the addition of new cmdlets around:

- Capacity management.
- Permission and user management.
- Environment lifecycle management.

World-class business process capabilities

Overview

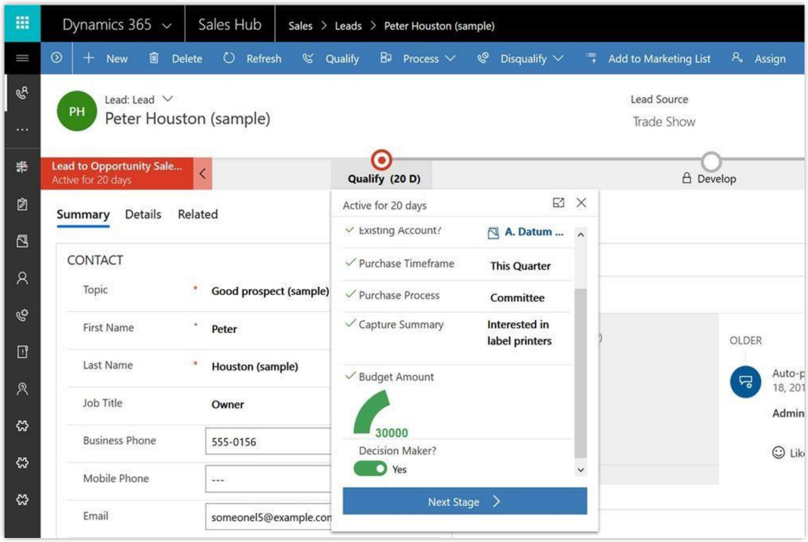
Microsoft Flow provides world-class business process capabilities for its users that span endpoints and experiences. These include significant experience improvements for users so that they can now accomplish basic scenarios with business processes offline.

Build business process flow stages with custom controls

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Feature details

Business process flows provide a guided way to get work done in the form of stages and steps. Stages tell you where you are in the process, whereas steps are action items that lead to a desired outcome. Steps in a business process are bound to fields in Common Data Service and, until now, only allowed default visualizations of the field type (text boxes, drop-down lists, and so on).



Custom controls in a business process flow

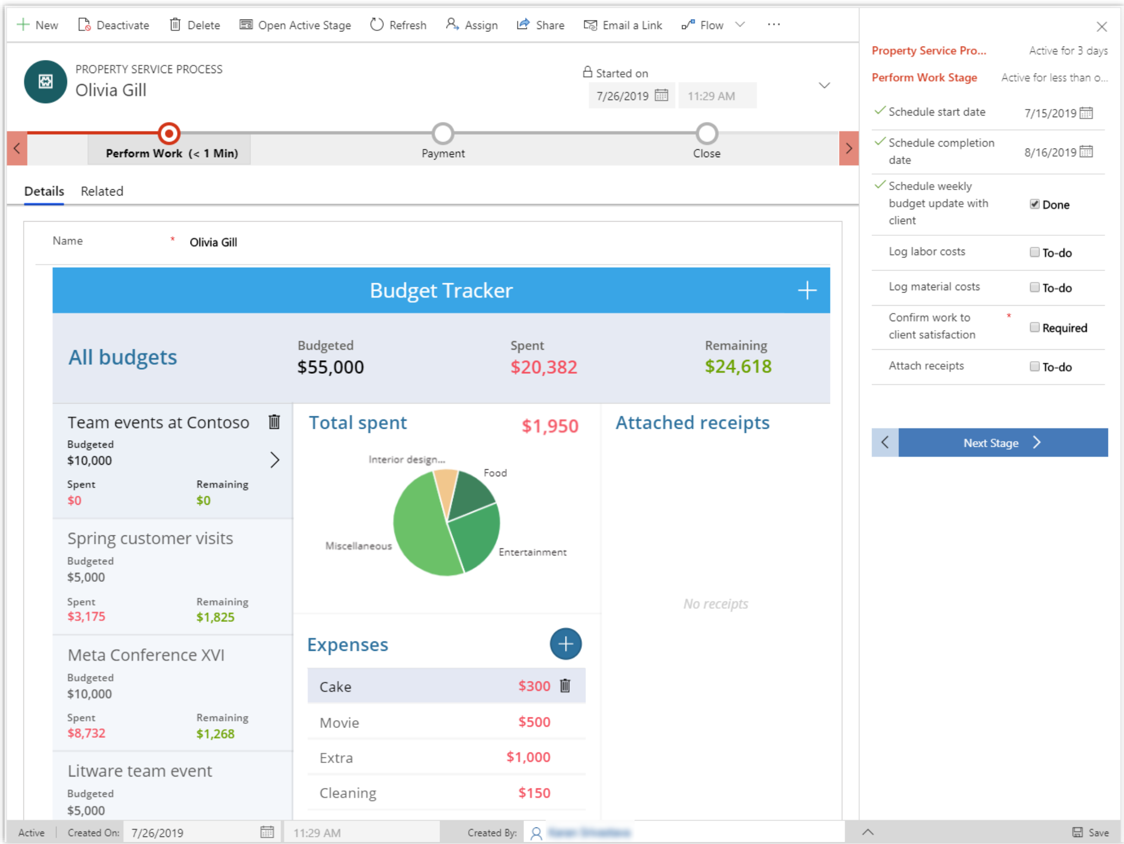
With this release, we're making a new feature generally available so that you can use custom controls to add rich visualizations (such as sliders, radial knobs, the LinkedIn control, and more) to business process flow steps and then deliver engaging experiences to those who use your business process flows.

Business process flow immersive experiences

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Feature details

Organizations are increasingly using business process flows to model their key processes. There is now much more flexibility in how business processes are built and used. For example, business process flows can now be built in a standalone fashion so that they don't need to rely on other records in Common Data Service. Moreover, you can now use the new form designer to fully customize the appearance of business process flows, including using custom controls with the PowerApps Control Framework.



Immersive business process flow with side pane

Additionally, now that we have a single, immersive experience for a full business process flow, a separate type of business process flow for task flows is no longer required. Thus, task flows are now deprecated.

See also

[Feature exploration](#) (video)

Work with business process flows offline

Enabled for	Public preview	Early access	General availability
Users by admins, makers, or analysts	-	-	Oct 2019

Feature details

You can now use business process flows offline if the following conditions are met:

- The business process flow is used from a PowerApps app.
- The PowerApps app is enabled for offline use.
- The business process flow has a single entity.

Specifically, the three commands that are available for a business process flow when the PowerApps app is offline are:

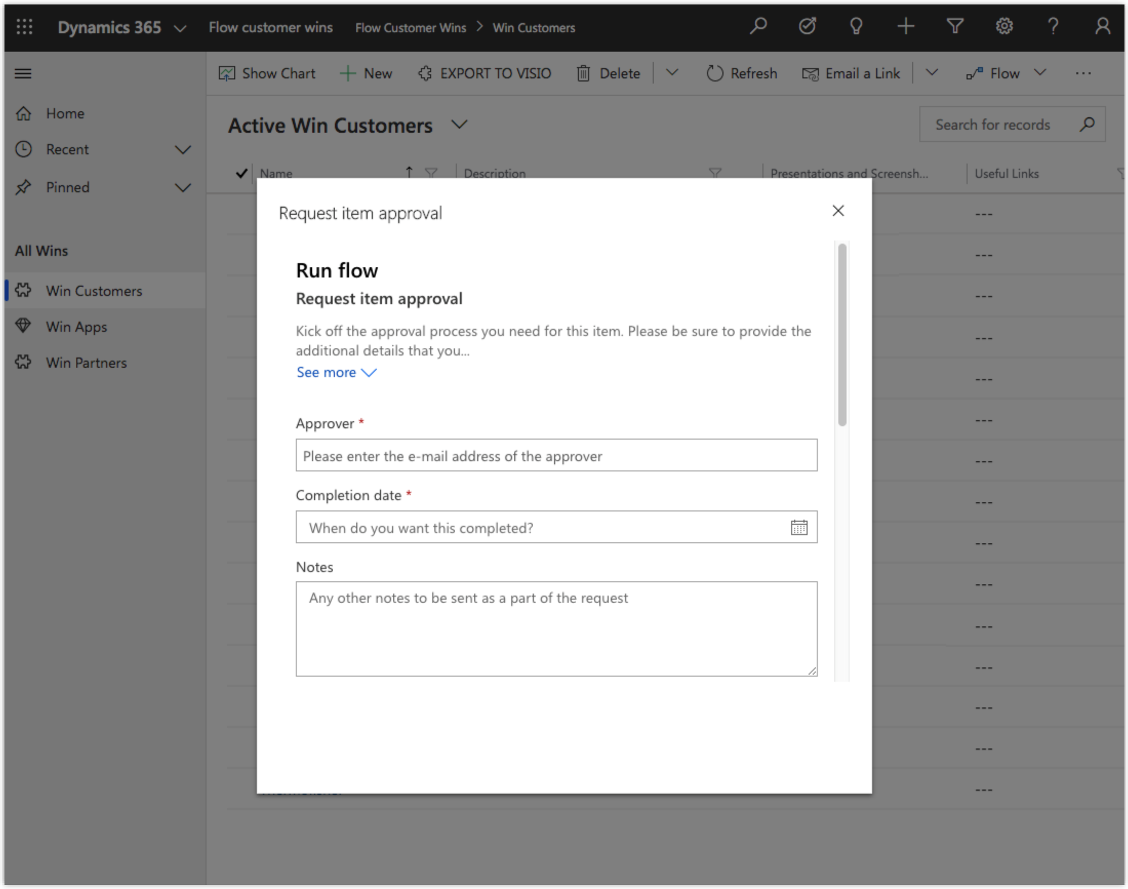
- Next stage
- Previous stage
- Set Active stage

Fluent experience for flows in Dynamics 365 and SharePoint available

Enabled for	Public preview	Early access	General availability
Users, automatically	-	✔ Aug 5, 2019	Oct 2019

Feature details

The experience for triggering button flows in SharePoint, OneDrive, and Dynamics 365 now matches the latest Fluent Design System—the same design system that's used across all Microsoft 365 and Dynamics 365 applications.



Flow run in Fluent

Users can see the details of a flow and more easily edit the connections that a flow uses now.

With this release, it is no longer possible to disable the **Flow** button in Dynamics 365 applications.

See also

Flow (blog)

Common Data Model and data integration

Overview of Common Data Model and data integration 2019 release wave 2

Our vision is to democratize data (integration) for business users, so that it is seamless to extract, transform, and load data into Common Data Service and Azure Data Lake Storage from any data source, and to provide structure and meaning to that data through the Common Data Model. To achieve this vision, we are investing in three key pillars:

- **Common Data Model**: Establishes industry-wide structure and semantics of underlying data so that customers can then reason about that data through various business application solutions, analytics, and machine learning (ML) algorithms. In this milestone, we will extend the reach of the Common Data Model through SDKs and object models to support developers and partners, better in-product experiences, and more.
- **Power Platform Dataflows**: Power Query is the industry-leading smart data preparation tool and evolves by infusing AI and ML into data transformations, and by extending dataflows to all of the Microsoft Power Platform.
- **Enable analytics on Common Data Service data**: Enhanced data integration through Office data integration, new and enhanced connectors, improvements to the connectivity platform, extending Dual Write, improving the data export service, and enhancing on-premises gateways for enterprises.

Here are the themes and guiding principles for our investments in this milestone:

- Improved fundamentals and engineering excellence
  - Security, reliability, performance, compliance, supportability, and efficiency
- Remove enterprise blockers
  - Services are deployed to every geography with a Hero or Hub region.
  - Enterprise connectivity asks: For example, guest access, Excel data, and SAP
- Improved and intelligent data integration
  - Power Platform Dataflows
  - Enable analytics on Common Data Service data

- Smart data preparation
- Common Data Model and the Open Data Initiative
- Make our partners successful

What's new and planned for Common Data Model and data integration

This topic lists features that are planned to release from October 2019 through March 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see Microsoft policy).

In the **General availability** column, the feature will be delivered within the month listed. The delivery date can be any day within that month. Released features show the full date, including the day of release.

This check mark (✓) shows which features have been released for public preview or early access and for general availability.

Common Data Model

Feature	Enabled for	Public preview	General availability
Additional capabilities in Common Data Model folders	Admins, makers, or analysts, automatically	Mar 2020	
Improved experiences in Common Data Model and Power Query Online	Admins, makers, or analysts, automatically	Mar 2020	
New Dynamics 365 Industry Accelerator solutions	Admins, makers, or analysts, automatically	Mar 2020	
Public documentation for Common Data Model object model libraries	Admins, makers, or analysts, automatically	Mar 2020	
New Common Data Model standard entity definitions	Admins, makers, or analysts, automatically	-	Mar 2020

Data Integrator and Dual Write

Feature	Enabled for	Public preview	General availability
Back up and restore Dual Write artifacts	Admins, makers, or analysts, automatically	-	Oct 2019
Copy Finance and Operations data into Common Data Service	Admins, makers, or analysts, automatically	-	Oct 2019
Making Dual Write resilient to planned or unplanned maintenance	Admins, makers, or analysts, automatically	Sep 2019	Oct 2019
Supporting multiple legal entities	Admins, makers, or analysts, automatically	Sep 2019	Oct 2019
Write existing data before turning on Dual Write	Admins, makers, or analysts, automatically	Sep 2019	Oct 2019
Actionable and user friendly error messages	Admins, makers, or analysts, automatically	-	Mar 2020
Enabling sales order flow to Finance and Operations	Admins, makers, or analysts, automatically	-	Mar 2020
Ensure the Dual Write service meets accessibility standards	Admins, makers, or analysts, automatically	-	Mar 2020
Improved error management with an ability to retry failed records	Admins, makers, or analysts, automatically	-	Mar 2020
Show failed records for initial and catch-up writes	Admins, makers, or analysts, automatically	-	Mar 2020
Simple and intuitive Dual Write user interface in PowerApps maker portal	Admins, makers, or analysts, automatically	-	Mar 2020

Feature	Enabled for	Public preview	General availability
Support for government cloud for Data Integrator and Dual Write	Admins, makers, or analysts, automatically	-	Mar 2020

Enable analytics on Common Data Service data

Feature	Enabled for	Public preview	General availability
Ability to link the Common Data Service environment to an Azure data lake	Admins, makers, or analysts, automatically	Sep 2019	Oct 2019
Hydrate Azure Data Lake with Common Data Service data	Users by admins, makers, or analysts	Sep 2019	Oct 2019
Support for initial and incremental data writes to Azure Data Lake	Users by admins, makers, or analysts	Sep 2019	Oct 2019
Support for initial and incremental metadata changes in Azure Data Lake	Users by admins, makers, or analysts	Sep 2019	Oct 2019
Add support to soft delete data	Admins, makers, or analysts, automatically	-	Mar 2020
Configurable Snapshot interval	Admins, makers, or analysts, automatically	-	Mar 2020
Dashboard showing count and trend of records with notifications on failures	Admins, makers, or analysts, automatically	-	Mar 2020
Ensure the export to data lake service meets accessibility standards	Admins, makers, or analysts, automatically	-	Mar 2020
Historical data snapshots	Admins, makers, or analysts, automatically	-	Mar 2020

Feature	Enabled for	Public preview	General availability
Optimize performance for large data sets	Admins, makers, or analysts, automatically	-	Mar 2020
Support for government cloud	Admins, makers, or analysts, automatically	-	Mar 2020
Support smart partitioning	Admins, makers, or analysts, automatically	-	Mar 2020
User friendly error messages	Admins, makers, or analysts, automatically	-	Mar 2020

Gateway

Feature	Enabled for	Public preview	General availability
Manage gateways outside the default Power BI region	Admins, makers, or analysts, automatically	Oct 2019	
Performance monitoring and diagnostics for gateways	Admins, makers, or analysts, automatically	Oct 2019	
Add intelligence to gateway load balancing	Admins, makers, or analysts, automatically	Oct 2019	
Automate gateway installation	Admins, makers, or analysts, automatically	Dec 2019	
Automate gateway updates	Admins, makers, or analysts, automatically	Mar 2020	
Gateway management enhancements	Admins, makers, or analysts, automatically	Mar 2020	

Feature	Enabled for	Public preview	General availability
[Power BI refresh using the dataset owner's UPN]	Admins, makers, or analysts, automatically	Mar 2020	
[Gateways now scale based on the CPU]	Admins, makers, or analysts, automatically	-	Oct 2019
[Deprecation of older versions of the on-premises gateway]	Admins, makers, or analysts, automatically	-	Mar 2020
[Enhanced security]	Admins, makers, or analysts, automatically	-	Mar 2020

Power Platform dataflows

Feature	Enabled for	Public preview	General availability
[Author dataflows in the PowerApps Maker Portal]	Admins, makers, or analysts, automatically	✔ Sep 10, 2019	Oct 2019
[Consume data from entities stored in Common Data Model folders]	Admins, makers, or analysts, automatically	✔ Sep 11, 2019	Oct 2019

Power Query Desktop

Feature	Enabled for	Public preview	General availability
[Support for new AI Insights including Cognitive Services and custom Azure Machine Learning models]	Admins, makers, or analysts, automatically	Oct 2019	
[New and enhanced connectors]	Admins, makers, or analysts, automatically	Jan 2020	

Feature	Enabled for	Public preview	General availability
Moving the Power Query SDK to the Visual Studio Code SDK	Admins, makers, or analysts, automatically	Mar 2020	
Support for using cached query results	Admins, makers, or analysts, automatically	Mar 2020	
New and enhanced connectors in Power BI	Admins, makers, or analysts, automatically	-	Oct 2019
Data Profiling enhancements including better visualizations and more enhanced capabilities	Admins, makers, or analysts, automatically	-	Oct 2019
Enhancements to Data Profiling	Admins, makers, or analysts, automatically	-	Oct 2019
Custom connector and extensibility support	Admins, makers, or analysts, automatically	-	Nov 2019
Query Diagnostics enhancements	Admins, makers, or analysts, automatically	Oct 2019	Mar 2020

Power Query Online

Feature	Enabled for	Public preview	General availability
Parity with Power Query Desktop	Admins, makers, or analysts, automatically	-	Oct 2019
Smart data preparation	Admins, makers, or analysts, automatically	-	Oct 2019
New and enhanced connectors in Power Query Online	Admins, makers, or analysts, automatically	-	Mar 2020

PowerApps and Microsoft Flow Connector Platform

Feature	Enabled for	Public preview	General availability
Better enterprise connectivity to Oracle Database	Admins, makers, or analysts, automatically	Oct 2019	
Improved command-line interface for connector developers	Admins, makers, or analysts, automatically	Oct 2019	
New and enhanced connectors in PowerApps and Microsoft Flow	Admins, makers, or analysts, automatically	Oct 2019	
Use the Microsoft Excel Online connector in PowerApps	Admins, makers, or analysts, automatically	Mar 2020	
More open-source connectors are available on GitHub	Admins, makers, or analysts, automatically	-	Oct 2019
Support for Azure API Management policies in custom connectors	Admins, makers, or analysts, automatically	✓ May 1, 2019	Oct 2019
Certification portal	Admins, makers, or analysts, automatically	✓ Jun 1, 2019	Oct 2019
Better enterprise connectivity to SQL Server	Admins, makers, or analysts, automatically	Oct 2019	Dec 2019

Description of **Enabled for** column values:

- **Users, automatically**: These features include change(s) to the user experience for users and are enabled automatically.
- **Admins, makers, or analysts, automatically**: These features are meant to be used by administrators, makers, or business analysts and are enabled automatically.
- **Users by admins, makers, or analysts**: These features must be enabled or configured by the administrators, makers, or business analysts to be available for their users.

Common Data Model

Overview

The Common Data Model is the shared data language used by applications to enable consistency of the meaning of data across applications. It provides modular and extensible business entities (account, lead, opportunity, and so on) and also observational data concepts (such as Link clicks and Email opens). It unifies data in a well-known schema across data silos, applications, and deployments. Although the Common Data Model started in Common Data Service and Dynamics 365, it is bringing the same semantic consistency to Azure Data Lake Storage with Common Data Model folders, allowing an organization to take advantage of AI and machine learning on a scale that wasn't previously possible. The Common Data Model enables business and analytics applications to interoperate over a variety of areas, including sales, service, healthcare, higher education, and more. The span of products, platforms, and services that implement, produce, and consume data in Common Data Model form continues to grow, both inside and outside of Microsoft.

Additional capabilities in Common Data Model folders

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Common Data Model folders and the metadata file (model.json) support describing data that's stored within Azure Data Lake. After the initial release of Common Data Model object model and libraries, several partners provided feedback, feature requests, and more, through forums like GitHub Issues. Based on feedback regarding the data types, file formats, and partition structures specification, we're extending the capabilities in the Common Data Model folder specification to include data types such as *date*.

Although the libraries provide capabilities for reading and writing metadata files, one clear area of feedback from partners is to add and expand the validation capabilities to ensure that the metadata files are compliant with the specification.

Improved experiences in Common Data Model and Power Query Online

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Power Query Online offers several capabilities to connect, transform, and load data into Azure Data Lake. To improve the experience when a query is mapped to a standard Common Data Model entity, this feature uses the *Map to Standard* transform, which is more intuitive. One key feature is the incorporation of the schema hierarchies included in the standard entities, such as crmCommon, solutions, or marketing. This feature allows customers to better understand the available set of Common Data Model standard entities, so that they can ensure that their data is mapped correctly.

New Dynamics 365 Industry Accelerator solutions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Industry accelerators are basic components within the Microsoft Power Platform and Dynamics 365 that enable ISVs and other solution providers to quickly build industry vertical solutions. The accelerators extend the Common Data Model so that it includes new entities to support a data schema for concepts within specific industries.

Public documentation for Common Data Model object model libraries

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Partners who want to take advantage of Common Data Model libraries will now have additional content and guidance to given them a better understanding of the purpose and capabilities of the libraries. This content will include best practices and scenario-based examples to make it even easier for partners to produce and consume data in Common Data Model form.

New Common Data Model standard entity definitions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

The set of Common Data Model standard entities that is published and open sourced on GitHub continues to grow as more applications and data producers contribute to the standard. New concepts submitted by subject matter experts are diligently reviewed before being publicly released. Similarly, extensions to existing concepts (like Account and Contact) are done with a careful review of the current semantics, ensuring alignment. With an increased focus on analytics, Common Data Model standard definitions are being extended to include observation and perception models and traits that can be used in analytical applications.

Data Integrator and Dual Write

Overview

The Common Data Service Data Integrator (for Admins) is a point-to-point integration service used to integrate data into Common Data Service. It supports process-based integrations, like Prospect to Cash, that provide direct writes between apps for Finance and Operations and Dynamics 365 Sales. It also supports integrating data from multiple sources into Common Data Service.

Whereas Data Integrator is a highly customizable batch-based integration service, Dual Write is a near-real-time integration service that allows Finance and Operations customers to natively get their data in Common Data Service. Customers should be able to adopt business applications from Microsoft and expect that they will speak the same language and seamlessly work together. Dual Write allows our customers not to think about these apps as different systems that must be written to independently. Instead, the underlying infrastructure makes it seamless for these apps to write simultaneously.

With this release, we continue to make Data Integrator the data integration tool of choice for enterprises and ISVs by making investments in lightweight ALM along with the ability to ship templates as part of solutions. Additionally, we are making big investments in making Dual Write setup a frictionless experience where, in a few clicks, Finance and Operations customers can natively get their data in Common Data Service. The primary goal of Dual Write is to enable seamless writes between Finance and Operations and Common Data Service. When you make a change in one app, it is seamlessly reflected in the other in near-real time.

In the GA release of this feature, Finance and Operations customers will be able to natively get their data into Common Data Service. For customers who want to customize their setup, we will provide an advanced and intuitive UI with step-by-step instructions that will guide them through the setup process. As Finance and Operations expands globally and includes the China sovereign cloud, we are making Data Integrator compliant with Azure China cloud so that our customers in China who want to keep their data within the China region can comply with government regulations.

Back up and restore Dual Write artifacts

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Protecting your data and ensuring continuous availability of services are important. As more ISVs and enterprises adopt our services, it is increasingly important to support their requirements--not only from a functionality and scalability standpoint but also from a lifecycle management and software redistribution standpoint.

With this feature, admins can use on-demand backup and restore for Data Integrator and Dual Write artifacts, including projects and templates, and package them in solutions.

Copy Finance and Operations data into Common Data Service

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Dual Write enables seamless writes between apps for Finance and Operations and Common Data Service. Changes that you make in one app seamlessly replicate to the other app in near-real time.

This feature provides a frictionless experience by automatically connecting to or creating a Dual Write–enabled Common Data Service environment. Finance and Operations customers can now natively put their data in Common Data Service.

Every business is different. Customers who want to customize their setup can use the advanced and intuitive user interface (UI) with step-by-step instructions.

Making Dual Write resilient to planned or unplanned maintenance

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Sep 2019	Oct 2019

Feature details

In the unfortunate event that data writes to an app fail because of planned or unplanned maintenance, admins want to be notified and to be empowered to take immediate action. This new feature provides additional ability for admins to define experiences that are suitable for their business needs. Admins can now define rules that provide email notifications or take actions on their behalf for specific error types and thresholds.

Supporting multiple legal entities

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Sep 2019	Oct 2019

Feature details

Finance and Operations allows certain data to be striped by legal entity. Each legal entity has its own customers. Products might be released per company, whereas prices might be defined per legal entity. While integrating data, the appropriate products and prices need to be sent to Common Data Service, but visibility to the right users also needs to be ensured. Similarly, opportunities in Common Data Service need to be created in the appropriate legal entity. Although workarounds exist, there is a need to provide out-of-box support for multiple legal entities. This new feature enables you to use the same project across multiple legal entities.

Write existing data before turning on Dual Write

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Sep 2019	Oct 2019

Feature details

With this feature, we will write existing data before turning on Dual Write. This feature also keeps that data updated.

Actionable and user friendly error messages

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

We are making additional investments in Dual Write to improve usability through intuitive, actionable, and user friendly-error messages.

Enabling sales order flow to Finance and Operations

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

Pricing is one of the key features for Prospect to Cash scenarios. With this feature, for Dual Write, you will be able to write sales orders between apps for Finance and Operations and Dynamics 365 Sales.

Ensure the Dual Write service meets accessibility standards

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

We are making investments to ensure that the Dual Write service meets the accessibility standards.

Improved error management with an ability to retry failed records

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

During initial writes using Dual Write, you will see the failed records and the option to retry the failed writes if you encounter failures while writing to apps.

Show failed records for initial and catch-up writes

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

In this release, for Dual Write, we are making investments to improve usability by showing detailed failure logs if there are errors during the initial or catch-up writes.

Simple and intuitive Dual Write user interface in PowerApps maker portal

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

Customers have been administering Dual Write via the user interface in Finance and Operations. In this release, we are making additional investments to enable and administer Dual Write through the PowerApps maker portal.

Support for government cloud for Data Integrator and Dual Write

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

We are making investments in compliance for government cloud so that government customers can benefit from this service.

Enable analytics on Common Data Service data

Overview

Our vision is to empower our customers to gain comprehensive insights and drive business actions based on their data in Common Data Service. To run analytics and extract intelligence from your data, there is a need to push the data to Azure Data Lake, which enables best-in-class analytics performance along with the fundamental availability, security, and durability capabilities of Azure storage. Through this effort, we will empower our customers and first-party apps such as Dynamics 365 Customer Insights, Dynamics 365 Sales Insights, and Dynamics 365 Customer Service Insights to push data from Common Data Service to Azure Data Lake.

Ability to link the Common Data Service environment to an Azure data lake

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Sep 2019	Oct 2019

Feature details

To export your entity data to a data lake, you need to first link your Common Data Service environment to a data lake in your Azure subscription. You'll be able to walk through wizard that links a Common Data Service environment to a data lake in your Azure subscription.

Hydrate Azure Data Lake with Common Data Service data

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Oct 2019

Feature details

Using a wizard, you can select Common Data Service entities (standard or custom) that support change tracking to hydrate your Azure data lake in just a few steps. Data is stored in the Common Data Model format. The wizard also lets you manage (add/remove) entities as part of your ongoing administration.

Support for initial and incremental data writes to Azure Data Lake

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Oct 2019

Feature details

Any changes in data (initial and incremental) in Common Data Service is automatically pushed to your data lake without any additional setup.

Support for initial and incremental metadata changes in Azure Data Lake

Enabled for	Public preview	General availability
Users by admins, makers, or analysts	Sep 2019	Oct 2019

Feature details

Any changes in metadata (initial and incremental) in Common Data Service is automatically pushed to the data lake without any additional setup.

Add support to soft delete data

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

We will provide an option to soft delete data for situations in which you need to remove data from the source but keep the data in the data lake for reporting purposes.

Configurable Snapshot interval

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

Currently, we provide only hourly snapshots for larger analytical workloads. In this release, you will now be able to configure snapshot intervals based on the needs of your business.

Dashboard showing count and trend of records with notifications on failures

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

During the initial writes of larger datasets to a data lake, we'll now display counts, trending data, and failure notifications for the records. These investments will let you predict convergence of records and take appropriate remedial measures as needed.

Ensure the export to data lake service meets accessibility standards

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

In this release, we are making investments to ensure that the export to data lake service meets accessibility standards.

Historical data snapshots

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

This feature gives data scientists the option to use historical data for lead and opportunity scoring.

Optimize performance for large data sets

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

In this release, we are making investments that optimize the performance for larger data sets. This feature would be beneficial to enterprises that work with large datasets.

Support for government cloud

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

We are also making the export to data lake service compliant with government cloud and US Department of Defense, so that government customers can benefit from this service.

Support smart partitioning

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

When writing to a data lake, we partition the data based on the year. In this release, based on the amount of data, we will use smart partitioning while writing data to the data lake.

User friendly error messages

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

We are making investments to improve usability through intuitive, actionable, and user friendly error messages.

Gateway

Overview

The on-premises data gateway is a well-established product that is widely used by enterprises to access on-premises data sources and transfer petabytes of data weekly. Today, gateways are used with either one or a combination of services and applications, like Power BI, PowerApps, Microsoft Flow, Logic Apps, and others. Based on enterprise requests, the focus for this milestone is to improve the management of gateways, improve scale and performance (as enterprises access more and more on-premises data through gateways and depend on them), improve monitoring and diagnostic capabilities for issues (refresh errors, slow-running queries, and so on), and offer a lot of new functionality (like gateway installation automation) to improve the overall enterprise experience.

Manage gateways outside the default Power BI region

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Feature details

Gateway admins can only manage gateways within the default Power BI region today, using the gateway management user interface or PowerShell/REST APIs.

Going forward, using the Power Platform admin center, gateway admins will be able to administer and perform all standard management operations for all gateways installed in or outside the default Power BI region for their tenant.

Performance monitoring and diagnostics for gateways

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Feature details

Today, gateway admins use the Windows Performance Monitor tool to troubleshoot gateways. This new feature enables gateway admins to analyze system performance counters and query execution details for the gateway machine, so that they can identify bottlenecks and optimize gateway performance. Additionally, they can choose to store this information in Application Insights for historical trend analysis.

Add intelligence to gateway load balancing

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Feature details

Currently, gateway clusters distribute traffic between gateway members by using a round-robin approach. We plan to enable Admins to define additional criteria for CPU and memory. This criteria will determine the next gateway member available to process requests for the best cluster performance.

Automate gateway installation

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Dec 2019	-

Feature details

Today, gateway admins must manually install and register gateways on every machine where the gateway is needed. This manual process takes significant effort in large organizations with many gateways. To address this, we're adding a new feature that allows for the installation and registration of gateways via the command prompt.

Automate gateway updates

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

We currently release monthly updates for the on-premises data gateway. Currently, gateway admins need to manually upgrade to the latest version. We plan to give gateway admins the option to automate the upgrade process so that they can deploy the latest features more easily.

Gateway management enhancements

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Centralized gateway management will help gateway admins have a standard experience for managing gateways across all products on the Microsoft Power Platform including Power BI, PowerApps, and Microsoft Flow. Gateway admins managing multiple gateways can have a lot of data sources to manage, but they do not currently have search and sort capabilities, which makes the management experience less than ideal. We plan to enhance this management experience by including sort and search functionality. We also plan to offer management of high-availability clusters from the gateway management portal. This includes visibility into gateway members and their versions.

Currently, tenant-level gateway administration is only available for Office 365 or global tenant admins. We plan to make this available for application and service admins too, so that they can:

- Get visibility into all gateways within a tenant.
- View gateway members.
- Manage administrators.

Additionally, we plan to enhance the public REST APIs and Windows PowerShell cmdlets with additional functionality and documentation.

We also plan to release additional management capabilities for gateways and Power BI data sources, including:

- Checking status
- Managing data source users
- Sorting and searching the list of data sources by admins

We also plan to enable gateway management capabilities in sovereign clouds.

Power BI refresh using the dataset owner's UPN

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Currently, dataset owners must either provide credentials for Power BI cloud refreshes or use the credentials that the gateway admin defined on the on-premises data gateway. With this new feature, dataset owners can use their own UPN to schedule Power BI refreshes.

Gateways now scale based on the CPU

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Currently, the gateway application utilizes resources on gateway machines based on preset configurations. When you use this feature, the gateway application automatically scales up or down depending on the CPU.

Deprecation of older versions of the on-premises gateway

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

We plan to deprecate older versions of the on-premises gateway to improve support. This would also help customers benefit from the new features we've released in recent versions. We would provide ample notice to gateway admins so that they can plan for upgrades.

Enhanced security

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

Currently, the recovery key provided by the gateway admin during installation of the gateway cannot be changed. This recovery key is used to encrypt/decrypt credentials for on-premises data sources. Many enterprises have requirements for key rotation. This feature enables gateway admins to rotate the recovery key. This rotation also updates the symmetric key that's used to encrypt/decrypt credentials for on-premises data sources.

Power Platform dataflows

Overview

Data preparation is considered the most difficult, expensive, and time-consuming task of enterprise analytics and app projects. Moreover, data is often fragmented and dispersed across data sources, lacks structural or semantic consistency, and requires complex system integrations to bring it together.

The new dataflows capability in the Microsoft Power Platform aims to reduce the time, cost, and expertise required to prepare and aggregate data for analytics. Power Platform dataflows allow any Power Platform customer to easily define ETL pipelines (dataflows) to ingest data into their company's Business data lake (Azure Data Lake Storage). Dataflows can be configured to use an existing Azure Data Lake Storage account, or they can also use an Azure Data Lake Storage data lake that is auto-provisioned and auto-managed by the Microsoft Power Platform, enabling a friction-free setup experience for customers who do not yet have a Data Lake implementation.

Power Platform dataflows increase the momentum of Power BI dataflows, which were launched into Public Preview in November 2018 and hit General Availability within Power BI in March 2019. Power BI dataflows received extremely positive feedback from customers and market analysts because of their innovative approach to democratizing data ingestion into a company's data lake for data analysts and other non-technical users.

Power Platform dataflows are one of the building blocks that allow Microsoft to provide out-of-box analytics and AI insights to its users, such as the analytic and insights provided by AI Builder or Dynamics 365 Customer Insights, making them a huge differentiator for the company's Dynamics 365 offerings.

In addition to Power Platform dataflows, Microsoft is also investing in making Dynamics 365 data automatically available in Azure Data Lake Storage, to make it even easier for Dynamics 365 customers to derive analytics and insights from their existing Dynamics 365 data.

Author dataflows in the PowerApps Maker Portal

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Sep 10, 2019	Oct 2019

Feature details

Power Platform dataflows are familiar and simple to author. The authoring experience is based on Power Query, which millions of customers use in several Microsoft products, including Power BI, Microsoft Excel, Analysis Services, Microsoft Flow, and Common Data Service.

Power Platform dataflows are a no-code experience for connecting, reshaping, and combining data from hundreds of data sources. They support both cloud and on-premises data sources via the on-premises data gateway. The breadth of data connectivity options is one of the strongest differentiators that Microsoft has in this space.

Power Platform dataflows are easily composable, meaning that users can define dataflows that load one or more entities into their data lake and keep them refreshed on a schedule.

Users can also reference other Azure Data Lake entities (their own or those that other users create) in multiple dataflows to compose new entities.

When you refresh the root entities, Power Platform dataflows refresh all dependent entities without any additional configuration. This allows users to easily build multiple ETL pipelines that are automatically synchronized, without having to deal with advanced configurations. Traditionally, this task needed professional ETL developers. This feature gives millions of data analysts a frictionless experience without requiring additional skills.

See also

Create and use dataflows in the Power Platform (docs)

Consume data from entities stored in Common Data Model folders

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ Sep 11, 2019	Oct 2019

Feature details

Power Platform dataflows use the Common Data Model to provide semantic meaning alongside the data, making it easier for other systems and applications to understand and use data stored in a data lake.

Power Platform dataflows create Common Data Model folders within the data lake and can also consume Common Data Model folders created by other applications and data producers.

Additionally, the dataflow experience allows users to create data and easily map data of any shape and size to Common Data Model standard entities. These entities, starting with key concepts used within Microsoft Dynamics 365, have been extended with the help of subject matter experts across many verticals, including healthcare, non-profit, education, retail, and marketing.

See also

[Create and use Power Platform Dataflows]() (docs)

Power Query Desktop

Overview

Power Query provides a no-code experience for non-technical users to seamlessly connect, transform, and combine data from hundreds of data sources. Power Query is natively integrated into several Microsoft offerings, both in the desktop experience and through a web-based experience built on Microsoft Azure.

Support for new AI Insights including Cognitive Services and custom Azure Machine Learning models

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Feature details

Power Query is adding support for new Artificial Intelligence (AI) Insights, including Cognitive Services and Azure Machine Learning models:

- **Cognitive Services**: Power BI provides access to a variety of pretrained models that you can use to transform data in the Power Query editor. The initial set of models consists of language detection, sentiment scoring, key phrase extraction, entity recognition, and image tagging.

- **Azure Machine Learning**: In the AI Insights browser in the Power Query editor, analysts can automatically see all the Azure Machine Learning models that have been shared with them. When they select a model, Power BI automatically maps columns from their data to the parameters of the model, when the name and data type match. By applying the model to their query, they add the score from the machine learning model as a new column in their dataset.

New and enhanced connectors

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Jan 2020	-

Feature details

We plan to improve the Power Query connector library by enhancing some existing connectors and adding new connectors.

Enhancements to existing connectors

The enhancements to existing connectors include:

- Support for the Snowflake connector in Power BI without using an on-premises data gateway. The Snowflake connector will also be enhanced to support Azure Active Directory–based single sign-on delegation for DirectQuery datasets.
- Support for Oracle Kerberos–based single sign-on via the on-premises data gateway.

Moving the Power Query SDK to the Visual Studio Code SDK

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

We’re moving the Power Query SDK to the Visual Studio Code SDK. This will allow us to release updates more easily. All future capabilities will be available in the Visual Studio Code SDK.

Support for using cached query results

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Power Query will be adding the capability for users to cache the results of query steps allowing them to perform additional operations against these cached results. Using cached results will improve the user authoring experience and some refresh experiences, too.

New and enhanced connectors in Power BI

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

We plan to improve the Power Query connector library by enhancing some of the existing connectors and by adding new connectors.

Enhancements to existing connectors

The enhancements to existing connectors include:

- Support for SAP BW single sign-on using Common Crypto Library via the gateway.
- Support for SAP HANA HDI 2.0 Containers.
- Redshift connector support via the gateway.
- Support for the IBM DB2 Connect Gateway feature in the existing IBM DB2 connector.
- The AtScale connector will become generally available.
- Increasing the number of operations that fold in the Odata connector for better performance.

New connectors

- Azure Data Lake Gen2 connector with support for physical storage and Common Data Model folders
- Parquet file connector

Data Profiling enhancements including better visualizations and more enhanced capabilities

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Power Query continues to lead innovation in the area of smart data preparation by taking advantage of and creating products based on the strong Microsoft-wide investments in artificial intelligence and other research efforts around data preparation. Over the last 18 months, we've added several Power Query features to enable customers to transform their data in smarter ways, including:

- **Example Data Extraction**: Enables customers to extract data from HTML pages or from any table within the Power Query Editor, simply by entering sample output values that they want to extract, even selecting from a set of suggested values that Power Query automatically detected based on common transformation patterns. Power Query's AI algorithms can then infer the user intent and the optimal combination of data transformations that's needed to go from input data to the desired output specified by the user.
- **Fuzzy Merge**: Merges tables by using fuzzy matching algorithms (the Jaccard index) to determine matching rows across tables. These fuzzy matching algorithms are the result of several years of research at Microsoft, and they have been released in multiple products, including Microsoft Excel and Microsoft SQL Server, in addition to Power Query.
- **Data Profiling**: Supports over 300 different data transformations, allowing users to filter outlier values, remove duplicates, remove or replace errors, and so on. However, recent investments in Data Profiling within the Power Query Editor have made it even easier for customers to realize that their data has such issues, so that they know that they need to apply the necessary data transformations to fix them.
- **Mapping to the Common Data Model entities schema**: Allows Power Query Online customers to map arbitrary tables from any data source to a target entity schema that's defined as part of the Common Data Model specification. After an entity mapping is defined, downstream processing of that data becomes more powerful, because it can operate over this data at the semantic level instead of only the data level.

Going forward, Power Query's investments will further expand these capabilities.

Here is an overview of the next wave of smart data preparation capabilities that will be delivered to Power Query customers:

- Enhancements to Data Profiling
- Support for new AI Insights, including Cognitive Services and Azure Machine Learning models
- Query Diagnostics

Enhancements to Data Profiling

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Data Profiling is one of the most acclaimed features by Power Query customers. Based on customer feedback, we're continuing to expand Data Profiling capabilities to include the following:

- **Taking action from within Data Profiling UI controls**: Includes the ability to apply value-based filters (equals, does not equal, starts with, ends with, contains, and more).
- **Enabling richer exploration of data profiles**: Includes the ability to group data by using different criteria based on column data types, such as value length (for text columns), year, quarter, month, day, and so on (for date columns), even, odd, positive, and negative (for number columns), and more.
- **Allowing customers to export data profiling information**: Supports the ability to export to a clipboard or a CSV file, so that the data is easily shared with others within an organization (such as other data analysts or the owners of a problematic data source).

Custom connector and extensibility support

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Nov 2019

Feature details

Multiline support for custom connectors in Power BI Desktop will enable a more user-friendly user interface for connectors that passes native queries through to back-end systems. Users will be able to view the contents of queries that they paste, allowing them to more easily confirm that the correct query is used.

Query Diagnostics enhancements

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	Mar 2020

Feature details

Another major area of investment going forward is in Query Diagnostics.

Often, customers connect to slow data sources and then create queries with many or complex transformation steps, resulting in slow queries. To debug issues with queries, customers need to look into Power Query traces to understand whether their queries are pushed to the data source (if the data source supports the transformations being used), or whether Power Query compensated and ran those queries locally within the Mashup Engine.

In a few months, a new user experience surface will be added to the Power Query editor, making it easier for customers to gain insights, including:

- Knowledge of what data source queries are being generated to run their M queries.
- Knowledge of what data source queries are being generated to retrieve schema and metadata information.
- The amount of time queries take to run within the data source versus locally in the Mashup Engine.

Query Diagnostics will allow customers to more easily troubleshoot issues with their queries and identify potential optimizations. In addition to all these smart data preparation capabilities that will result in customer-facing features, Power Query will also become smarter about understanding data transformation usage patterns based on telemetry (non-PII), so that these and future capabilities can be further refined.

Power Query Online

Overview

Power Query Online will approach parity with many of the features in Power Query Desktop integrations, allowing users to have a more seamless authoring experience against more data sources and providing a seamless authoring experience in the browser.

Parity with Power Query Desktop

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

Many features that are present in Power Query Desktop are being brought to Power Query Online to significantly improve the query development and management experiences and the interface. These improvements include a significant number of tweaks. The areas of focus include:

- Automatic column type detection.
- Data Transformations, including fill up, fill down, pivot, extract text before/after/between delimiters, keep/remove characters, split by character transition, append queries, combine files, and more.
- Venn diagram icons in merge dialog to represent join types.
- Security and authentication features, including support for privacy levels and encryption warnings.
- Support for query parameters in the user interface.
- Parameters experience and the ability to bind to query parameters from input controls in specific operations. These include connector dialog boxes (for URLs and paths) and the most commonly used transformations (split columns, replace values, filter rows, and so on).
- Function creation and invocation user experience, enabling users to easily convert queries with parameters into functions that are easily invoked from other queries.
- Steps pane improvements to allow advanced authoring capabilities such as reordering steps, support for descriptions for any step, or refactoring base query steps into new queries for easy reusability.
- Query groups improvements, including the ability to move queries between groups and reorder groups.
- Queries pane improvements, including the ability to easily reorder queries and manage other query properties from the queries pane.
- Navigator parity items, including related tables, refresh tree, refresh preview, only selected items, other display options, and more.
- IntelliSense support in the formula bar and advanced editor dialog box.

Smart data preparation

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

A continuing goal for Power Query and Power Query Online is to make data preparation *smarter*. This enables analysts to have artificial intelligence (AI) capabilities at the touch of a button, enriching and enhancing data. In addition to the AI insight capabilities that are already in Power Query Online for Power BI Dataflows, two new smart data preparation capabilities will be added:

- **Fuzzy Merge**: Allows users to easily combine data from multiple tables by using fuzzy matching algorithms instead of strict matching.
- **Data Profiling**: Helps users easily identify error, empty, and outlier values within their Power Query Editor data previews.

New and enhanced connectors in Power Query Online

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Mar 2020

Feature details

We will improve existing connectors, bringing support for native database queries and other connector advanced options, including time-outs and hierarchical navigation.

Here's a list of the new database, folder, and cube connectors:

Database connectors

- HDInsight Spark
- Apache Spark
- HDInsight Interactive Query
- Google BigQuery
- Power Platform Dataflows

- Impala
- Vertica
- Snowflake
- ADLS Gen 1
- CDS Connector

Folder connectors

- Local Folder
- SharePoint Folder
- SharePoint Online Folder
- Azure Data Lake Storage Gen2

Cube Connectors

- SAP HANA
- SAP BW
- SQL Server Analysis Services
- Azure Analysis Services

We'll also increase investments in the following categories of connectivity.

Connector	Description
Generic ODBC	This connector, which is widely used in Power BI Desktop, will become available in Power Query Online to enable connectivity to any data source that provides an ODBC interface.
PDF Files	This connector, which was released a few months ago for Power BI Desktop, will also be available in Power Query Online.

New data preparation capabilities in Power Query Online will bring it closer to parity with Power Query Desktop in these areas:

Transformation	Description
Table	Includes fill up, fill down, pivot, extract text, before, after, or between delimiters, keep or remove characters, split by character transition, append queries advanced mode, combine files, and more.
List	Includes keep or remove, top, bottom or duplicates, alternate, reverse, sort, and statistics, including sum, avg, min, max, std, count, and countD.
Scalar	Includes text transforms (ToList, table, split, and format. Upper, lower/capitalize, trim, clean, prefix, and suffix), extract (length, first, last, range), and parse (JSON/XML).

PowerApps and Microsoft Flow Connector Platform

Overview

A critical part of data integration and the suite of products it supports — PowerApps, Microsoft Flow, Power BI, and Power Query — is connectivity to external data sources. Although we built the initial set of connectors ourselves, most of the connectors over the past few semesters have been built directly by our ISV partners.

During this semester, we plan to further bolster our connector platform ecosystem to make it easier for our ISV partners to create their own connectors and enable them on our applications. A few examples of our investment include providing CLI tools to ISV partners so that they can update, manage, and deploy their own connectors, and providing sample connector source code by open-sourcing a limited set of existing connectors. We also plan to invest in providing policy templates, providing more comprehensive documentation, and creating a dedicated discussion forum. Finally, we will launch a fully automated certification portal that will enable our ISV partners to submit their connectors for certification and deployment.

Along with strengthening the ISV community's ability to create their own connectors, we plan to continue to invest in enterprise-grade data connectors like SQL Server, Oracle Database, Outlook, and more. More specifically, our investments in enterprise connectivity will include support for Azure Active Directory authentication in SQL Server, support for Excel Online in PowerApps, and enhanced connectivity to Oracle databases.

Better enterprise connectivity to Oracle Database

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Feature details

The Oracle database connector now returns output parameters from stored procedures. Therefore, users can now invoke any stored procedure and process the result in their flows and apps.

The Oracle database connector now supports native queries that can run on the Oracle server. Users can enter a SQL query and have the query run on the Oracle server. The connector then returns the result to the app or flow. This unlocks a powerful feature in the connector.

The Oracle database connector can now be used directly, without the need for an on-premises data gateway. For enterprises with their Oracle database server on the cloud, this eliminates the need to install a gateway and Oracle libraries. It also means that Logic Apps customers can now use the Oracle database connector in their Integration Service Environments.

Improved command-line interface for connector developers

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Feature details

The command-line interface (CLI) provides a useful tool for developers who want to take advantage of source control systems for their connectors. The tool allows connectors to be updated, deployed, and managed from their source control systems. This release includes improvements to the CLI for Microsoft Flow and PowerApps custom connectors. These improvements focus on expanding the scope of the CLI (such as supporting Logic Apps), and also on improving the user experience and capabilities of the CLI.

New and enhanced connectors in PowerApps and Microsoft Flow

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	-

Feature details

We continuously add new connectors for PowerApps and Microsoft Flow as we engage partners and ISVs to build them. As the ecosystem grows, we expect more partners and ISVs to build and certify connectors. We will also continue to add new features to existing connectors.

Use the Microsoft Excel Online connector in PowerApps

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2020	-

Feature details

Although Excel Online documents can be accessed from Microsoft Flow, until recently it has not been possible to use the Excel Online connector in PowerApps. This release includes support for the Excel Online connector in PowerApps. Therefore, we now provide a capable, reliable, quick-start approach to building apps over data in Excel spreadsheets. This will unlock the vast set of unstructured data that we have in Excel today and benefit users who are familiar with Excel, allowing them to take advantage the low-code, no-code app building experience that we provide through PowerApps.

More open-source connectors are available on GitHub

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2019

Feature details

With the launch of the open-source connector repository on GitHub, Microsoft encourages the community to contribute to the maintenance of connectors. With this release, we see more connectors that are open source. Microsoft also encourages partners to adopt an open-source connector development model and to take advantage of the developer ecosystem to maintain their connectors.

Support for Azure API Management policies in custom connectors

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✔ May 1, 2019	Oct 2019

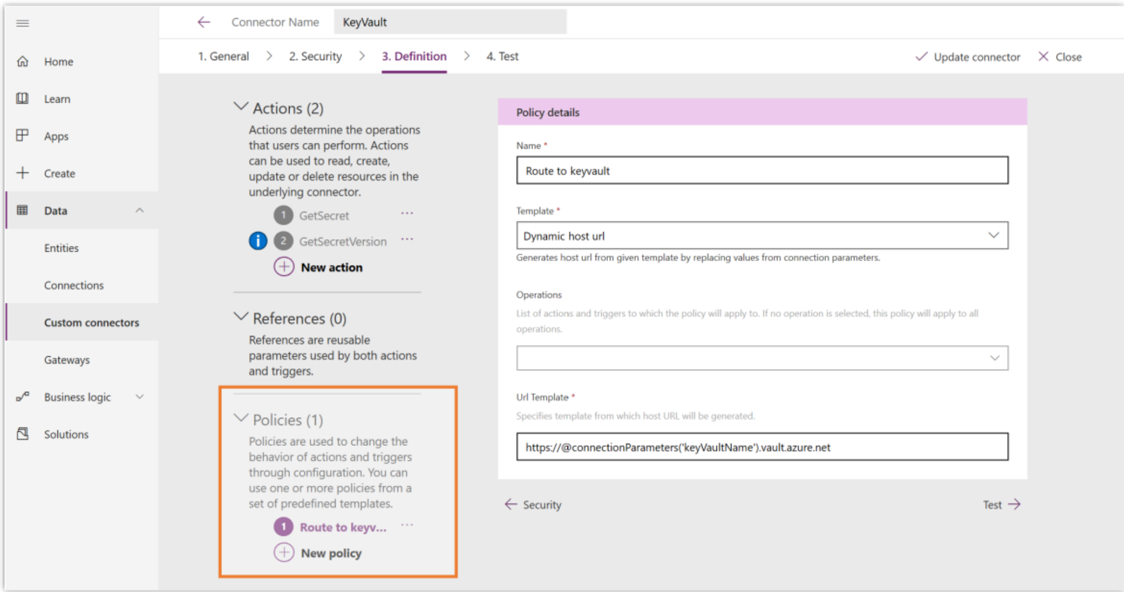
Feature details

While building connectors for PowerApps and Microsoft Flow, developers might need to modify behaviors for the underlying API. For example, in cases where a service provides custom domain or sub-domain endpoints, connectors might need to dynamically route the requests to endpoints based on the connection parameters.

In other cases, connectors might add extra headers or query parameters, or enforce throttling limits for their operations. Today, you can manage these behavioral modifications with Azure API Management (APIM) policies for any of the standard built-in connectors.

Until now, APIM policies weren't available for custom connectors. This has meant that any modification to custom connectors must be done in-house. Partners who build these custom connectors rely on Microsoft for any modification to their connectors, even to try out and test them. This leads to a high-touch development model, which isn't ideal.

With this release, you can enable APIM policies on your custom connectors for your apps (PowerApps) and flows, and then use APIM policies to modify the behaviors of your connectors. For example, APIM policies allow you to limit the number of calls from a connection on one or more operations in your connector. You can use other APIM policies to fix headers or query parameters, or even modify a field or a parameter. You can also use policies to improve the overall user experience of your connectors.



Policy in custom connector

See also

[Open source connectors](#) (blog)

[Policy templates overview](#) (docs)

Certification portal

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Jun 1, 2019	Oct 2019

Feature details

As we work with various developers and partners, the certification process needs to be improved so that there is a predictable SLA, visibility into status, a decrease in human errors, and an overall improvement in the time and process for certification. This release includes a new certification portal where ISV partners can submit their custom connectors for certification, see the status of the certification, and see a rich set of information about their certified connectors.

See also

[Certify a connector](#) (docs)

Better enterprise connectivity to SQL Server

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2019	Dec 2019

Feature details

As more enterprises move their workloads to the cloud, Azure AD–based authentication for their SQL Server database on the cloud has become more prevalent. Azure AD provides better security because access control is enforced at the data source. You no longer have to manage separate user accounts and authentication for SQL Server databases.

In this release, we've added support for Azure AD authentication for SQL Server from PowerApps and Microsoft Flow. There's no impact on existing users. Enterprises benefit from using an enhanced security model for their data sources and apps. Makers can now seamlessly connect their apps and flows to a SQL Server database and rely on Azure AD to secure the underlying database.

When you share apps, each user authenticates directly with the database by using their own identity.

Other improvements in the SQL Server connector include enhanced support for date types (date, datetime, datetime2, and smalldatetime) and support for connection strings. When you use these data types from PowerApps, they participate and will delegate the processing to SQL Server. With the support for connection strings, customers can now use a popular format to specify the connection details.

Got feedback?

Share your feedback on a community forum for Dynamics 365 or Power Platform. We'll use your feedback to make improvements. To find out about updates to these release notes, follow us on Twitter @MSFTDynamics365.

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