



Infor VISUAL 9.0.0 Release Notes

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Contents

- About this guide..... 9**
 - Intended audience..... 9
 - Related documents 9
 - Contacting Infor..... 9

- Chapter 1 Prerequisites 11**
 - Gupta runtime requirements 11

- Chapter 2 Overview 13**
 - Core business features 13
 - Analytics and business intelligence..... 13
 - Scheduling and Throughput 14
 - Shop Floor 14
 - Material Planning 14
 - Utilities and administration 14
 - Sales 15
 - Procurement enhancements 15
 - Accounting enhancements..... 15
 - Enhancements for VISUAL for .NET users 16

- Chapter 3 Notifications and email..... 17**
 - Notifications 17
 - Creating notification email content 17
 - Triggering notifications..... 18
 - Reviewing notifications 18
 - Emailing with SMTP relay 18
 - Customer and vendor email contacts..... 19
 - Finding more information about Notifications and email enhancements 19

Chapter 4	Document attachment management	21
	Documents by site or by tenant.....	21
	Document storage by site and reference type.....	21
	Default reference types	22
	Document attachments and database conversion	22
	Finding more information about Document attachment management.....	22
Chapter 5	Other core business feature enhancements	23
	Audit History dialog	23
	Document Lifecycle.....	24
	Chart colors.....	24
	Web sites and queries on user toolbars	24
	ISO country codes.....	24
	Line item table configuration	24
	Part Description field	25
	IBAN field.....	25
	Recalculating overlapping labor tickets.....	25
	Finding more information about other core business feature enhancements.....	25
Chapter 6	Dashboard enhancements	27
	User-defined Dashboard metrics	27
	About data sources	27
	About Analytics	28
	About Detail Grids.....	28
	Using custom metrics.....	29
	Sample content.....	29
	Other Dashboard enhancements	32
	Security and the Dashboard.....	32
	Work Order Estimated vs. Projected Overall analytic	32
	Date filters on work order metrics	32
	Dashboard table windows.....	32
	Finding more information about Dashboard enhancements.....	32
Chapter 7	Leadtime Lifecycle.....	35
	About leadtime processes.....	35
	Setting up the leadtime lifecycle.....	37

Using a leadtime process.....	37
Analyzing leadtime processes.....	37
Leadtime Lifecycle	37
Leadtime View Panel	38
Process Activity % Over Std	40
Process Activity Average Performance.....	41
Finding more information about Performance Leadtime Lifecycle enhancements	41
Chapter 8 Scheduling and Throughput enhancements	43
Scheduler preferences	43
Work order scheduling options.....	43
Throughput improvements	44
Unallocated demand and supply in the Customer Service Impact Inquiry	44
Finding more information about Scheduler and Throughput enhancements.....	45
Chapter 9 Shop Floor enhancements.....	47
Labor transactions.....	47
Inventory transactions	47
Other Shop Floor enhancements	48
Finding more information about Shop Floor	48
Chapter 10 Material Planning	49
Nettable quantity calculation	49
Net using Nettable Quantity	49
Suggested Master Production Schedule (MPS) calculation	49
Planning Period Details dialog	50
Color in the Advanced mode.....	51
Period Want Day in the Master Production Schedule and Copy Demand to MPS dialogs.....	52
Period column headers in Advanced mode.....	52
Finding more information about Material Planning	52
Chapter 11 Utilities and Administration	53
AutoRun	53
DBR Scheduler Service	53
Coordinating MRP and Scheduling services.....	53
Polling interval.....	54

MRP AutoRun configurations.....	54
Query Tool updates.....	54
Security and user management	54
Default preference settings in Preferences Maintenance.....	55
Display License dialog	55
Finding more information about utilities and administration enhancements.....	56
Chapter 12 Sales enhancements	57
Estimating enhancements.....	57
Import Quick Quote from spreadsheet.....	57
Bid rate groups and categories	57
Vendor price breaks on quotes that use costs from parts	58
Estimating Window right-click menu	58
RMA enhancements.....	58
Emailing customer invoices.....	59
Setting up.....	59
Emailing invoices	59
Consolidated customer orders	60
Price Book.....	60
Product Cost and Gross Profit view panel.....	60
Finding more information about sales enhancements.....	62
Chapter 13 Procurement enhancements.....	63
Drill-down buttons in Receiving Inspection.....	63
Outside Service Maintenance customizable user-defined fields	63
Finding more information about procurement enhancements.....	63
Chapter 14 Accounting enhancements.....	65
Viewing information by account group in the Accounting Window	65
Single transaction batches	65
VAT transactions.....	66
Exporting the Recalculate Standard Costs table to Microsoft Excel.....	66
Commercial WIP Balance summary report in project databases	66
Finding more information about accounting enhancements.....	66
Chapter 15 Enhancements for VISUAL for .NET users	69

Direct updates to .NET VISUAL tables..... 69

Global Financials and the Document Lifecycle viewer 70

Finding more information about accounting enhancements..... 70

About this guide

This document describes features introduced in Infor VISUAL 9.0.0. For information about features introduced in earlier versions of VISUAL, consult the release notes for that version. For example, if you are upgrading from VISUAL 7.1.0 to VISUAL 9.0.0, consult the release notes for VISUAL 7.1.1, VISUAL 7.1.2, and VISUAL 8.0.0 for important information about the features introduced in those releases.

You can find release notes on Infor Xtreme.

Intended audience

This document is intended for any VISUAL user.

Related documents

You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in "Contacting Infor" on page 9.

Infor VISUAL 9.0.0 Hardware Guidelines

Infor VISUAL 9.0.0 Software Compatibility

Infor VISUAL 9.0.0 Applications Installation Guide

Infor VISUAL 9.0.0 Database Installation Guide for Oracle

Infor VISUAL 9.0.0 Database Installation Guide for SQL Server

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal.

If we update this document after the product release, we will post the new version on this Web site. We recommend that you check this Web site periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

This section lists the software required to use Infor VISUAL as of the publication date of this document. For up-to-date information, see the *Infor VISUAL 9.0.0 Compatibility Matrix*.

This software is required to use Infor VISUAL 9.0.0:

Database engine. You must use one of these database engines:

- SQLServer 2008 R2
- SQLServer 2012 and 2012 R2
- SQLServer 2014
- SQLServer 2016
- Oracle 11g
- Oracle 12c

Server operating system. You must use one of these server operating systems:

- Windows 2008 32-bit with Oracle 11g or SQL Server 2008 R2. Windows 2008 64-bit with Oracle 11g, Oracle 12c, or SQL Server 2008 R2.
- Windows 2008 R2 64-bit with any of the above database engines
- Windows 2012 and 2012 R2 with any of the above database engines

Client operating system. Your clients must use one of these operating systems:

- Windows 7 SP1
- Windows 8
- Windows 8.1
- Windows 10

Gupta runtime requirements

VISUAL 9.0.0 requires the use of the Gupta 7.0 Update 1 runtime. Previous versions of the Gupta runtime are **not** compatible with VISUAL 9.0.0.

Infor strongly recommends removing all previous versions of the Gupta runtime before installing VISUAL 9.0.0.

Infor strongly recommends that you **do not** use multiple versions of the Gupta runtimes on the same client.

This release introduces over 50 enhancements and improvements in a variety of areas in VISUAL. Videos that demonstrate many of these enhancements are available in a directory with your VISUAL executables.

Core business features

VISUAL 9.0.0 offers many enhancements that are designed to streamline your day-to-day operations. These features include:

- **Notifications and email.** You can now set up VISUAL to automatically email internal and external contacts when a business event occurs, such as an update to a purchase order or the receipt of a payment. In addition, you can now use email clients such as Gmail and Thunderbird to send and receive email from VISUAL.
- **Document attachment management.** You can now set up different directories for document attachments by site and by document reference type.
- **Audit History dialog, User Toolbar changes, and other core business features.** The Audit History dialog is available in several areas of VISUAL. You can use this dialog to track audited changes to a particular document. You can now set up your User Toolbar to launch a website or run a query from the Query Tool. In addition, several other features have been introduced, including the use of ISO country codes in addresses, the ability recalculate proration after editing overlapping labor tickets, an extension of the length of the Part Description field, and the standardization of table configuration.

Analytics and business intelligence

VISUAL 9.0.0 introduces more methods for you to use to analyze your business. These features are:

- **Leadtime Lifecycle.** You can use the new Leadtime Lifecycle feature to set benchmarks for your sales cycle and to measure your actual performance against the benchmarks.

- **User-defined Dashboard Metrics.** With User-defined Dashboard metrics, you can design your own analytics and detail grids based on any table or custom view in your database.

Scheduling and Throughput

In the Throughput Window, several changes have been made to improve the accuracy of the analysis. You can also use the new soft allocations audit dialogs and soft allocations report to gain insight into how VISUAL is matching supply to demand. You can also view unallocated orders in the Customer Service Impact Detail analysis.

In the Concurrent Scheduler, you can now set up scheduling preferences at the tenant, site, and schedule levels.

Shop Floor

The Shop Floor app has been expanded to include labor reporting and inventory transactions.

Material Planning

Several enhancements have been made to the Advanced mode of the Material Planning window to make calculations of nettable quantity and suggested MPS more predictable. You can now also view a breakdown of each supply period by day. You can apply the color coding that you set up for the Standard mode to the Advanced mode.

Utilities and administration

The DBR scheduler can now be run with VISUAL AutoRun. In MRP AutoRun, you can now schedule the net change MRP run separately from the regeneration run. When you set up the schedule for MRP AutoRun and the Scheduler AutoRun, you can now ensure that the two services do not run at the same time.

Other improvements include changes to the Query Tool to make writing queries easier. In addition, the User dialog in Security Maintenance has been redesigned, and the SYSADM user can more easily set up global preferences in Preferences Maintenance.

Sales

These enhancements have been made to Sales functionality:

- **Quick Quote and Estimating enhancements.** You can now develop a Quick Quote in an Excel spreadsheet and then import it into the Quick Quote window. In addition, you can set up bid rates for parts and resources that you can use in your quick quotes. In the Estimating Window, you can use preferred vendor pricing when you are creating a quote from a part.
- **RMA enhancements.** The RMA process is now more flexible and streamlined. You have a range of options when a customer makes a return: you can choose to credit or send a replacement to a different customer, you can reorder RMA lines, and you can reuse or copy the evaluation work order the repair work order. To streamline the RMA process, you can suppress the dialogs that are displayed during RMA processing. To increase the accuracy of the return process, you can now pre-assign returns to the appropriate supply work orders.
- **Other sales enhancements.** You can now email AR invoices in a batch rather than one-by-one. In Customer Order Entry and the Order Management Window, a new Sales Order Gross Profit View Panel shows you the anticipated profit for the entire sales order. In Price Book, a new Price Group context has been introduced.

Procurement enhancements

Drill-down buttons have been added to the Receiving Inspection window. In Outside Service Maintenance, you can now create customizable user-defined fields.

Accounting enhancements

In the Accounting Window, you can create account groups. You can use account groups to track performance of specific areas of your business.

In Accounting Entity Maintenance, you can set up a preference to create single-document batches when you post to the General Ledger. If your accounting entity is VAT-enabled, you can create specific Euro-VAT codes for transactions that you conduct within the Euro zone.

In Costing Utilities, you can export the contents of the Recalculate Standard Costs table to Microsoft Excel.

Enhancements for VISUAL for .NET users

In many cases, VISUAL now writes directly to your .NET databases instead of sending information via the Exchange service. Documents from .NET are now shown on the Document Lifecycle viewer.

The ability to send information from VISUAL via an email has been expanded and improved.

Notifications

When certain business events occur, such as the creation of a customer order or receipt of a purchase order, you can now set up VISUAL to automatically send email notifications to the contact listed on the sales order or purchase order. You can also send a copy of the notification to employees.

These business events can trigger notifications:

- A customer order is created
- A customer order is edited
- A shipment is sent
- A shipment is edited
- A payment for an invoice is created (sent to internal contacts only)
- A purchase order is created
- A purchase order is edited
- A purchase is received
- A payment for an invoice is created (sent to internal contacts only)

Creating notification email content

To create the content of notification emails, use Notification Maintenance. To open Notification Maintenance, select **Admin > Notification Maintenance**.

You can create separate email content for each application that supports notifications. You can use tokens to personalize the content for the recipient. When the email is created, the token is replaced with content from your database. For example, you can use the %ContactName token in a notification for customer orders. When the email is created, %ContactName is replaced with the contact on the order.

Internal recipients receive the same email as your customer and vendor contacts. You cannot create different email templates for internal and external audiences.

Triggering notifications

Use Vendor Maintenance and Customer Maintenance to set up default notification triggers.

To specify default actions for customers, from Customer Maintenance select **Maintain > Notifications**. You can send email to the order contact when a new order is created, when an order is changed, and when an order ships. For employees only, you can also send an email when an invoice is created. To specify default actions for vendors, from Vendor Maintenance select **Maintain > Notifications**. You can send email to the order contact when a new order is created, when an order is changed, and when an order is received. For employees only, you can also send an email when an invoice is created.

In both Customer Maintenance and Vendor Maintenance, you can also select the employees that receive a copy of the notification. To be eligible for selection, an employee must have an email address.

You can override the default settings for customers in Customer Order Entry and for vendors in Purchase Order Entry. In these applications, you can also use the Notify Me check box to send notifications to the user who created the order. To activate the check box, the ID of the signed in user must be specified on an employee record. The employee record must also contain an email address.

Reviewing notifications

You can review a list of the notifications sent in conjunction with an order in the Notification History dialog. You can access this dialog from Customer Order Entry, the Order Management Window, Purchase Order Entry, and the Purchase Management Window. Open the order, and then select **Info > Notification History**. The dialog shows information about the notifications sent for the order, including the recipient, the sender, and the action that triggered each notification.

Emailing with SMTP relay

If you do not have a default email system installed on your computer, you can configure VISUAL to send email with an SMTP relay instead. For example, you can use SMTP relay to email information from VISUAL with Gmail or Thunderbird.

To configure VISUAL to use SMTP relay, use the eMail section of Preferences Maintenance.

When you send an email from VISUAL, a dialog is provided for you to compose and address the email.

Customer and vendor email contacts

In the Email Documents dialog in Customer Maintenance and Vendor Maintenance, you now specify by site who receives emails.

Finding more information about Notifications and email enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Notifications	“Notifications and Email” chapter of the Infor VISUAL Concepts and Common Features Guide.
Emailing with SMTP Relay	“Notifications and Email” chapter of the Infor VISUAL Concepts and Common Features Guide.
Customer and Vendor Email Contacts	“Notifications and Email” chapter of the Infor VISUAL Concepts and Common Features Guide.

Chapter 4 Document attachment management

4

Several enhancements have been made to improve the management of document attachments.

Documents by site or by tenant

When you add a document attachment in Document Maintenance, you can specify that the document can be used only by a particular site. Specify the site in the Site ID field before you add the document.

If the document can be shared among multiple sites, you can add the document at the tenant level. Specify **** Tenant **** in the Site ID field before you add the document. When you add a document at the tenant level, all sites can use it by default. You can manage which sites have access to the document in the Allowable Sites dialog. In Document Maintenance, select **Maintain > Allowable Sites** to select the sites that can use the document.

When you create a document attachment for a site-level record in a maintenance window, the document is stored at the site level. For example, if you create an attachment in the Customer Order Entry window, the attachment is associated with the site that you specified for the order.

Document storage by site and reference type

You can set up sub-directories for document attachments by site and by reference type.

After you create the directories on your hard drive, use the Document Folders Maintenance dialog to associate the directories with the appropriate site and reference type. To open the Document Folders Maintenance dialog, select **Maintain > Document Folders**.

You can control access to the Document Folder dialog in Security Maintenance.

Note: Because you can set up multiple directories for document attachments, the Default Directory for Documents field in Application Global Maintenance has been removed.

Default reference types

You can specify the default reference type to use when you create an attachment in a maintenance window. For example, you can specify that documents attached to customer orders should be created with the Customer reference type.

You can specify the default reference type by site. To set up the defaults, select **Maintain > Default Reference Types**.

Document attachments and database conversion

When you convert your VISUAL database to 9.0.0, a formal association between the attachment and the relevant sites is made.

For single-site databases, existing attachments are associated with the ID of the single site.

For multi-site databases, existing attachments are processed in these ways:

- Existing attachments are associated with the tenant. All sites in the database are allowed to use existing attachments.
- For documents attached to part records, a document reference is created for each site associated with the part. In 9.0.0, you can no longer attach a document to a part at the tenant level.
- For documents attached to shop resource records, a document reference is created for each site associated with the shop resource. You can no longer attach a document to a shop resource at the tenant level.

Finding more information about Document attachment management

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Document attachment management	“Document Maintenance” chapter of the Infor VISUAL System-wide User’s Guide.

Chapter 5 Other core business feature enhancements

5

These other enhancements have been made to core business features and functions.

Audit History dialog

You can now view the audit history for individual documents directly in the document's maintenance window.

You can view audit history in these windows:

- Accounting Window
- Contact Maintenance
- Customer Maintenance
- Customer Order Entry
- Estimating Window
- Manufacturing Window
- Order Management Window
- Outside Service Maintenance
- Part Maintenance
- Project Maintenance
- Purchase Order Entry
- Purchase Management Window
- Requisitions
- RFQ Entry
- RMA Entry
- Shop Resource Maintenance
- Vendor Maintenance
- Warehouse Maintenance

To view audit information, open a document in one of the windows listed above. Then, select Info > Audit History. The date, field, new value, and old value are displayed for the document you selected. The ID of the user who made the change is also displayed.

To show information in the Audit History dialog, you must audit certain tables. The tables depend upon the window you are using.

You can use Security Maintenance to determine which users can view audit information.

Document Lifecycle

In the graphical view, if a user does not have security access to view a particular type of transaction in the lifecycle viewer, a card with minimal information is displayed for the transaction.

Chart colors

The colors used in charts have been updated to match the current Infor SoHo standard.

Web sites and queries on user toolbars

You can now set up user toolbar buttons to launch a web page or to run a query that you have created in Query Maintenance.

ISO country codes

A browse button for country codes has been added to all areas of VISUAL where you create addresses. The browse table contains the two-letter ISO code for each country.

The ISO codes are added to the country browse table during upgrade. You can continue to use custom country codes.

Line item table configuration

The dialog that you use to configure line item tables has been updated to match the dialog that you use to configure browse tables. The dialog is also resizable.

Part Description field

In Part Maintenance, the size of the Part Description field has been increased to 120 characters.

IBAN field

Then length of the IBAN field has been increased to 40 characters.

Recalculating overlapping labor tickets

If you edit overlapping labor tickets in Labor Ticket Entry, you can now recalculate proration values. The ability to create overlapping labor tickets depends upon the system that you use for labor reporting. For example, you can create overlapping labor tickets with VISUAL Time & Attendance or VISUAL Barcode.

After you edit labor tickets, you can click the **Recalc Proration** button to update prorated values. If you prorate by hours, then the Hours information is updated. If you prorate by costs, then the Multiplier 2 information is updated. After the recalculation is complete, the changes are displayed in a dialog.

Finding more information about other core business feature enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Audit History dialog	“Audit Maintenance” chapter of the Infor VISUAL System Administrator’s Guide.
Document Lifecycle	“Document Lifecycle” chapter of the Infor VISUAL Concepts and Common Features Guide.
Web sites and queries on user toolbars	“Customizing VISUAL” chapter of the Infor VISUAL Concepts and Common Features Guide.

Enhancement	User Guide
ISO country codes	"Application Global Maintenance" chapter of the Infor VISUAL System-wide User's Guide.
Line item table configuration	"Fields, Buttons, Menus, and Other Window Controls" chapter of the Infor VISUAL Concepts and Common Features Guide
Recalculating overlapping labor tickets	"Labor Ticket Entry" chapter of the Infor VISUAL Manufacturing User's Guide.

You can now create your own dashboard metrics. Additionally, enhancements have been made to the built-in metrics.

User-defined Dashboard metrics

You can create custom metrics based on any table, set of tables, or views in the database. After your metric is complete, users can add the metric to their dashboards.

To create a custom metric, you first define a data source. Then, you use the data source to build a metric. You can build analytics and detail grids.

About data sources

Data sources contain the table columns and database view columns that are used as the basis of the metrics that you build. You can use the same data source as the basis of multiple metrics.

In addition to providing data to your metrics, data sources also determine how end users interact with your custom metrics. Use data sources to set up these behaviors:

- **Filters.** When you set up the data source, you specify the types of filters that end users can apply to the data. For example, you can set up the data source so that it allows users to filter information by a customer ID or a part ID.
- **Drill-to links.** For detail grids, you can specify the columns that contain clickable links. When users click the link, information is opened in the relevant maintenance window. For example, you can specify that users can click a part ID to open the part's record in Part Maintenance.
- **Colors.** You can color-code the information in detail grids. You can set up static colors that do not change regardless of the data in the grid. You can also set up conditional colors that change based on data parameters that you specify.

Set up data sources in Dashboard. From the Dashboard, select **Edit > Edit Data Source**.

To create a data source, you complete these basic steps:

- 1 Select the tables or database views to include in the data source.

- 2 If you select more than one table or view, specify how to join them. You join tables and views based on a piece of data that is shared between the tables and views, such as customer ID or part ID.
- 3 As you select tables and columns, a SQL statement is constructed for you. You can test the performance of the SQL statement in the Edit Data Source dialog.

When you are satisfied with your data source, set its status to Active. You can then use the data source to construct analytics and detail grids.

About Analytics

Use analytics to represent your data in chart form. When you create an analytic, you specify these details:

- **Data source of the analytic.** The data source determines the information that is available to the analytic.
- **Type of analytic.** The type of analytic determines how information is measured. You can create an analytic that measures values, measures values over time, or identifies the top results for parameters that you specify.
- **Chart type.** You can select from a variety of charts, including pie charts, bar charts, column charts, and line charts.
- **Chart format.** You can specify information such as the format of the x- and y-axes and the location and position of the legend.

You can also specify default values that end users can change when they add the analytic to their dashboards.

Create custom analytics in the Dashboard. In the Dashboard, select **Edit > Edit Analytic**.

About Detail Grids

Use detail grids to represent your information in table form. When you create a detail grid, you specify these details:

- **Data source of the analytic.** The data source determines the information that is available to the grid.
- **Type of analytic.** The type of analytic determines how information is measured. You can create an analytic that shows all data, a top “n” analytic, or a bottom “n” analytic. For top n and bottom n analytics, you select the table column that you want to use to evaluate results. You can decide whether you are measuring the top or bottom individual values in the table column or the top or bottom totals.
- **Chart type.** You can select from a variety of charts, including pie charts, bar charts, column charts, and line charts.

- **Chart format.** You can specify information such as the format of the x- and y-axes and the location and position of the legend.
- **Chart content.** You can specify the columns to include in the grid.

Create custom detail grids in the Dashboard. In the Dashboard, select **Edit > Edit Detail Grid**.

Using custom metrics

After you create a custom metric and set its status to Active, users can add the metric to their dashboards.

When users add custom analytics, they are presented with a dialog that shows the filters that you enabled for the analytic in the data source. Any default settings that you specified when you created the analytic or detail grid are displayed.

For value-based custom analytics, users can select the database tables to use for series and groupings. For example, if you created an analytic that shows sales order amounts, users could decide to group amounts by customer when they add the analytic. Users can also add series to certain analytics. A series sub-divides a group.

Sample content

Sample custom metric content is provided in the DASHBOARDCONTENT.ZIP file located in your VISUAL directory. You can use the samples to examine how data sources are constructed and how they are used to create metrics. You cannot edit the original samples, but you can edit copies of the samples.

To use this content, you must first create a view in your database. A script for each database engine is provided.

After you run the script, load the content into the Dashboard.

- 1 Select **File > Dashboard**.
- 2 Select **Edit > Import Content**.
- 3 Navigate to the content file for your database engine.
- 4 Click **Import**.

These sample data sources and metrics are provided:

Data Source	Description	Related Metrics
Infor_Activities	Returns information about activities created for customer and vendor records.	Analytic: Infor_Activities Detail Grid: N/A

Data Source	Description	Related Metrics
Infor_ActivitiesByStartDate	Returns information about activities, including when the activity was started and when it is due.	Analytic: Infor_ActivitiesByPeriod Detail Grid: N/A
Infor_BookingsVsShipments	Built on the custom view. Returns information about booked sales amount and shipped amount.	Analytic: Infor_BookingsvsShipments Detail Grid: N/A
Infor_CustomerAmount	Returns information about customer orders.	Analytics: Infor_CustomerSales Infor_TopCustomers Detail Grids: Infor_BottomCustomers Infor_CustomerAmount Infor_TopCustomers
Infor_DeliveryPerformance	Returns information about when you shipped orders and when customers expected orders to be shipped.	Analytic: Infor_DeliveryPerformance Detail Grid: Infor_DeliveryPerformance
Infor_PayableHeader	Returns information found on the Accounts Payable invoice header.	Analytic: Infor_OpenAccountsPayable Detail Grid: Infor_OpenAccountsPayable
Infor_ReceivableHeader	Returns information found on the Accounts Receivable invoice header.	Analytic: Infor_OpenAccountsReceivable Detail Grid: Infor_OpenAccountsReceivable
Infor_Shipment	Returns information about shipments.	Analytic: Infor_Shipment Detail Grid: N/A

Data Source	Description	Related Metrics
Infor_ShippingForecast	Returns information about anticipated future shipments.	Analytic: Infor_ShippingForecast Detail Grid: Infor_ShippingForecast
Infor_Tasks	Returns information about tasks.	Analytic: N/A Detail Grid: N/A
Infor_VendorAmount	Returns information about purchase orders.	Analytics: Infor_TopVendors Infor_VendorPurchase Detail Grids: Infor_BottomVendors Infor_TopVendors Infor_VendorAmount
Infor_VendorDeliveryPerformance	Returns information about when you actually received orders and when you expected to receive orders. It also returns information about	Analytic: Infor_VendorDeliveryPerformance Detail Grid: Infor_VendorDeliveryPerformance
Infor_VendorPerformance	Returns information about when you actually received order and when you expected to receive orders.	Analytic: N/A Detail Grid: N/A
Infor_WorkOrderCost	Returns information about estimated, actual, and projected work order costs.	Analytic: Infor_WorkOrderCost Detail Grid: Infor_WorkOrderCost

Other Dashboard enhancements

Security and the Dashboard

You can control access to metrics and analytics in Security Maintenance. You can control access to both system and custom metrics.

You can set up access to metrics by profile and by user.

Work Order Estimated vs. Projected Overall analytic

The Work Order Estimated vs Projected Overall analytic compares the estimated costs of work orders with the projected costs incurred during particular periods of time.

Date filters on work order metrics

The date filter is applied to work order want date instead of work order release date in these metrics:

- Work Order Estimated vs. Projected analytic
- Work Order Estimated vs. Projected Overall analytic
- Work Order Estimated vs. Projected detail grid

Dashboard table windows

The grids used to display information have been replaced with table windows. This improves performance of the dashboard.

Finding more information about Dashboard enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
User-defined Dashboard Metrics	“Custom Dashboard Metrics” chapter of the Infor VISUAL Concepts and Common Features Guide.
Security and the Dashboard	“User Management” chapter of the Infor VISUAL System Administrator’s Guide.
Work Order Estimated vs. Projected Overall Date filters in Work Order metrics Dashboard table windows	“Dashboard” chapter of the Infor VISUAL Concepts and Common Features Guide.

You can use the leadtime lifecycle feature to measure your performance from quote to cash. You can specify the steps in the process and the projected time each step should take. As you complete the steps, the time that each step actually took is compared to the projected time. You can use graphs and metrics to analyze your performance compared to the process standards and to identify where your processes can be improved.

Set up leadtime processes in Part Maintenance.

You can view leadtime information about a particular sale in the Estimating Window, the Customer Order Entry window, and the Order Management window.

You can evaluate the overall performance of leadtime processes in the Dashboard.

About leadtime processes

When you create leadtime processes, you can associate steps in your process with these document types:

- Quote
- Sales Order
- Work Order
- Shipment
- RMA
- Invoice
- Payment

You do not need to include every document type in your processes. For example, if you created a process for the sale of in-stock items, you could omit work orders from your process.

As you work on each step, the start date, end date, and percent complete of the step is updated. To update the start date, end date, and percent complete, you can use built-in functionality only, SaveProcess macros only, or a combination of the two.

This table describes the options:

Option	How it works	Notes
Built-in functionality only	Updates the start date, end date, actual days, and percent complete at pre-defined stages of the sales process, such as releasing a sales order, shipping a sales order, and creating a payment.	Functions out-of-the-box Functionality cannot be customized Only one process step per document type is allowed
SaveProcess macro only	Updates the start date, end date, and percent complete at stages that you define in the macro.	Multiple steps per document type are allowed. For example, you can create one step for preparing the quote and a second step for receiving approval from the customer. Multiple stages in a single step is allowed. For example, you can use a macro to update the quote step 50% complete when the quote has a status of ready and to 100% complete when the quote has a status of Won.
Built-in functionality and macros	Updates the start date, end date, and percent complete at pre-defined stages. Also updates the start date, end date, and percent complete at stages that you define in the macro.	Only one process step per document type is allowed. Multiple stages in a single step are allowed. For example, you can use a macro to update the quote step 50% complete when the quote has a status of ready. When the quote has a status of Won or Lost, the built-in functionality updates the percent complete to 100%

After you decide whether to use built-in functionality or macros, specify your preference in Preferences Maintenance. In the VISUAL Mfg section, locate or add the UpdateProcessActivity preference setting. Specify Y to use built-in functionality only or a combination of built-in functionality and macros. Specify N to use only macros.

Setting up the leadtime lifecycle

Set up leadtime processes in Part Maintenance.

To specify the steps in your processes, select **Maintain > Process Type**. Add the steps in your process and specify the number of days each step should take. Processes are defined at the site level.

You can save a process as a template. When you save a process as a template, you must specify **TEMPLATE** as the process type. You can create one template for each site.

To use a template, click the **Process Type** browse button and select **TEMPLATE**. Specify a new name in the Process Type field, and then click **Save**.

Using a leadtime process

After you set up a leadtime process, use the Process Type field in the header of the Part Maintenance window to specify which process is used for a part.

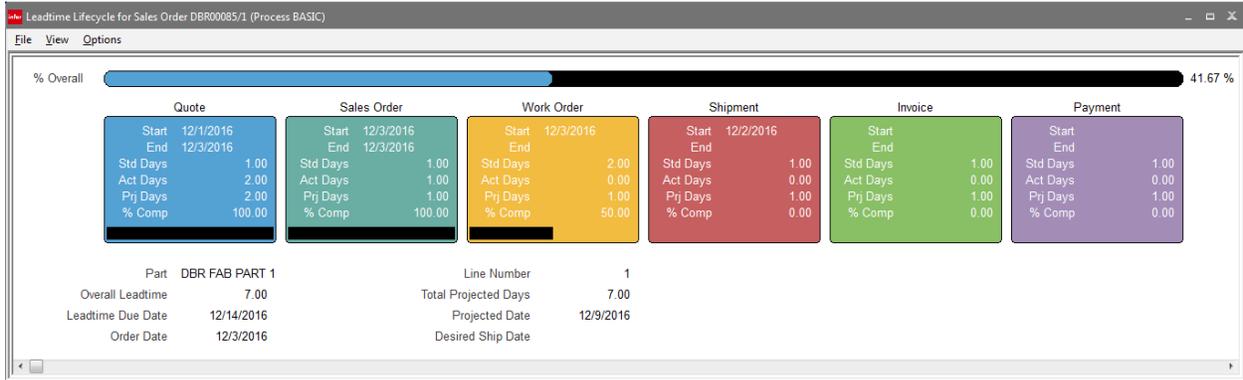
The start date, end date, and percent complete of each step in your process is updated automatically as you proceed through the sales cycle for the part. You can also manually edit the information in the Process Activity dialog that is available in the Customer Order Entry window, the Order Management window, and the Estimating window. To access the dialog, select **Edit > Process Activity**.

Analyzing leadtime processes

You can use the tools described in this section to analyze your leadtime processes.

Leadtime Lifecycle

Use the Leadtime Lifecycle dialog to view the leadtime performance for a particular sales order or quote. The dialog shows the overall percent complete of each step in your process and the overall percent complete of the entire process:



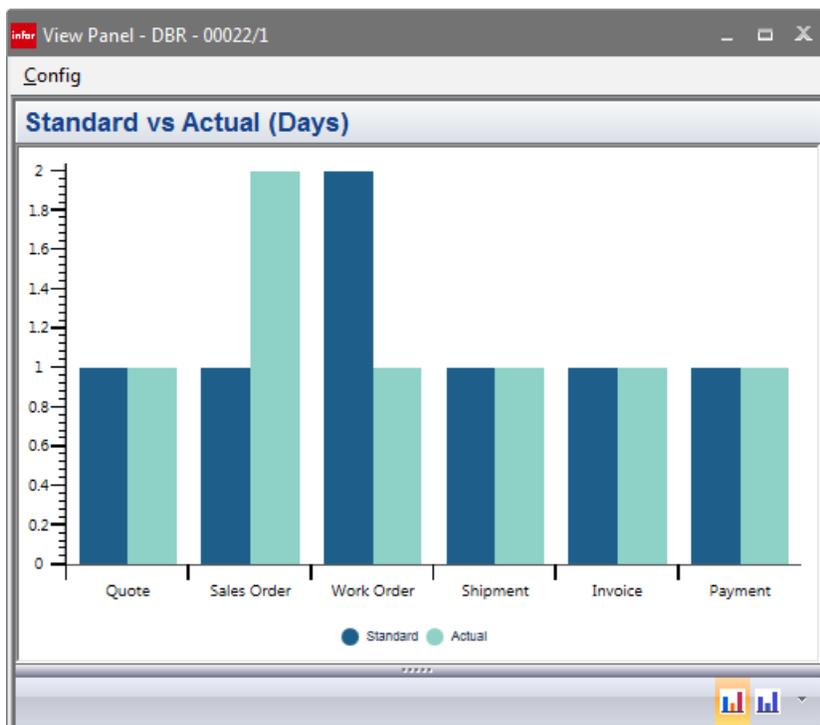
The Leadtime Lifecycle dialog is available on the Info menu in Customer Order Entry, the Order Management Window, and the Estimating Window.

You can customize the colors used in the lifecycle. You can also decide whether to measure the overall percentage complete. You can measure the overall percentage by dividing the total number of days spent on the process by the total number of days in the process. Or, you can measure the overall percentage by dividing the total number of processes completed by the total number of processes.

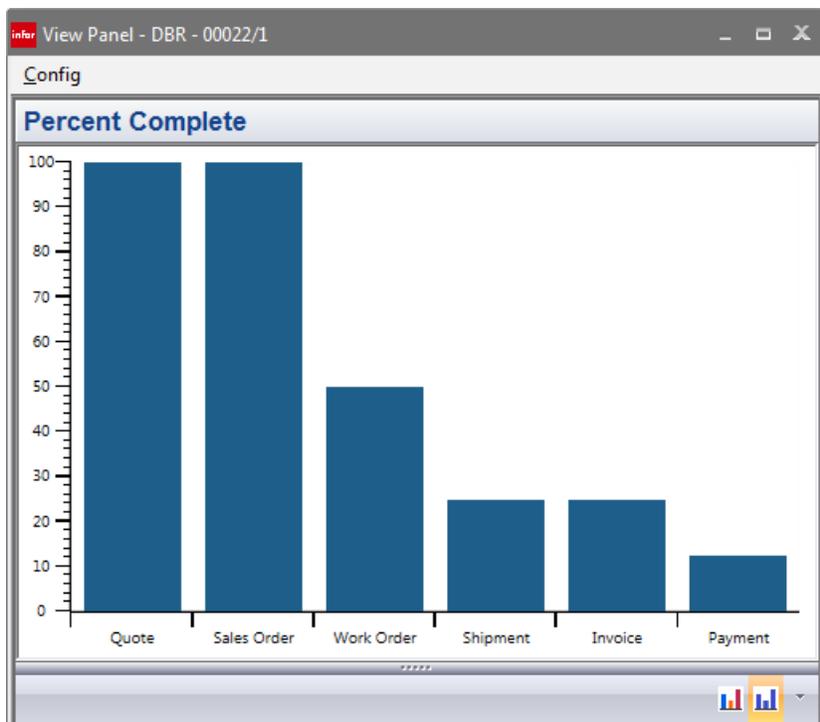
Leadtime View Panel

Use the Leadtime View Panel to view information about the leadtime performance for a particular sales order or quote. You can view two charts: the Standard vs. Actual (Days) chart and the Percent Complete chart.

The Standard vs. Actual (Days) chart shows a comparison of your actual performance and the standards that you specified in the Process Type dialog.

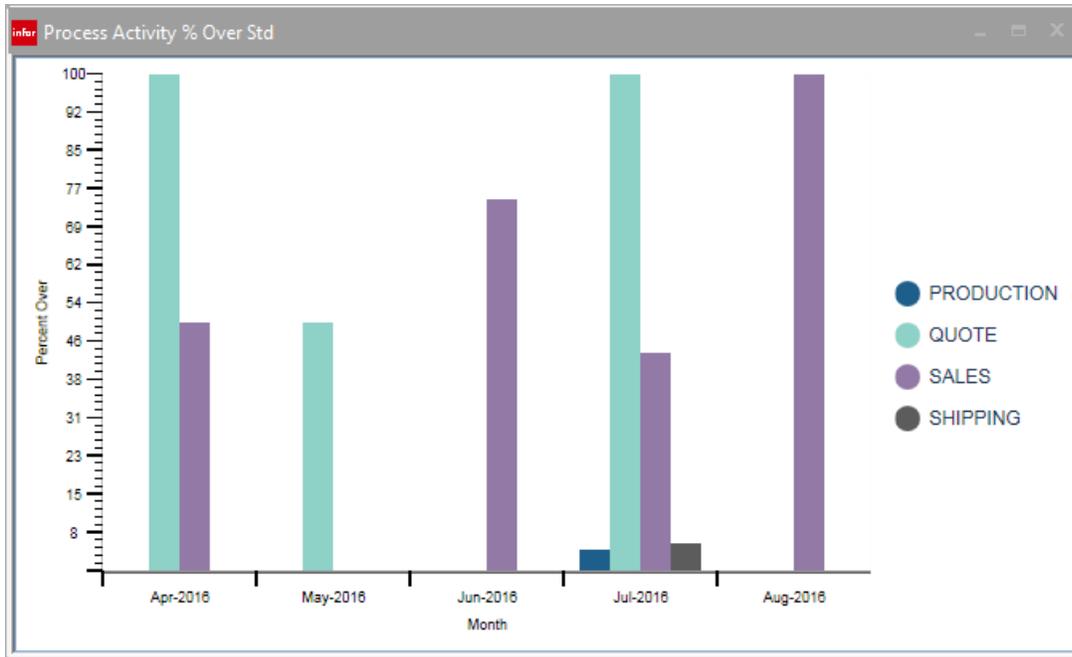


The Percent Complete chart shows the percentage complete of each step in the process:



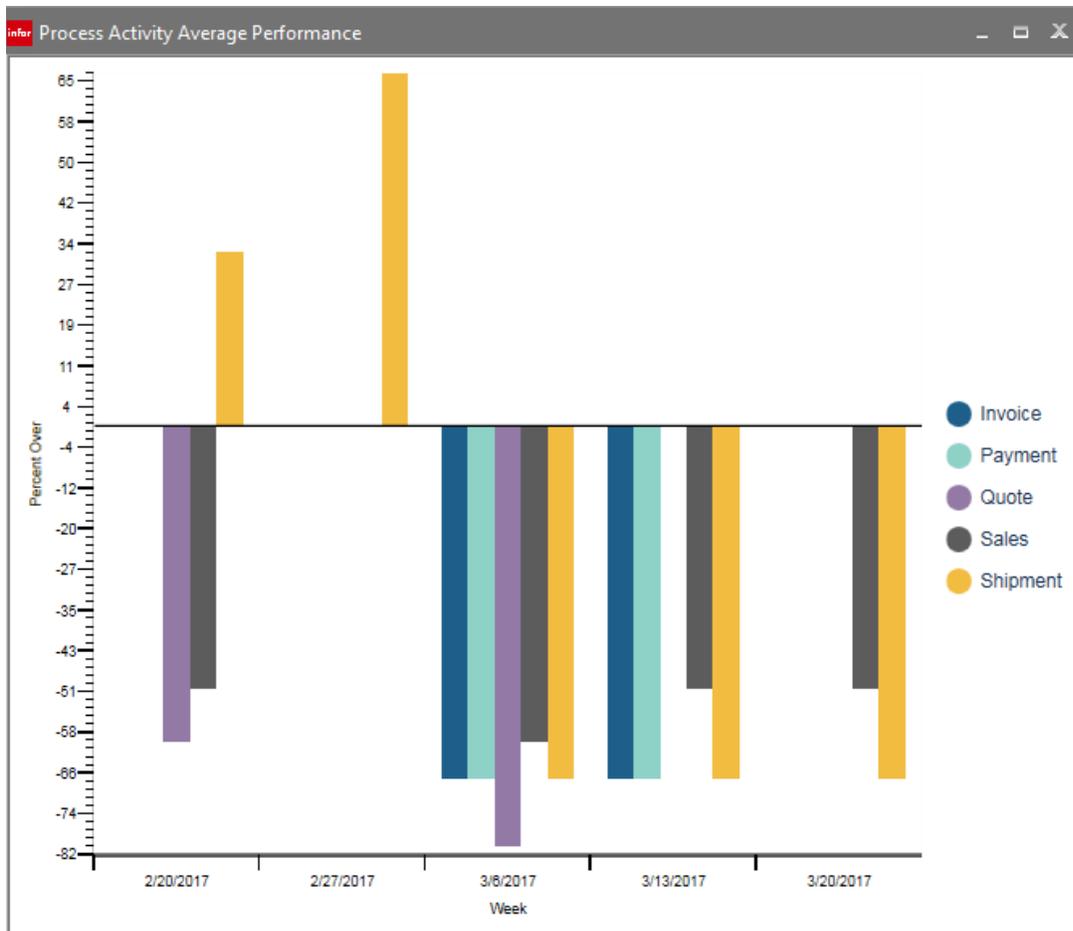
Process Activity % Over Std

This metric is available in the Dashboard. Use this metric to view the percentage of activities that exceeded the standards that you specified. The information is grouped in time buckets. You can view the metric by processes or by particular steps in the process. You can use this metric to identify which processes or which steps in the processes take longer than anticipated. You can also use this metric to identify whether your performance is better during certain times of the year.



Process Activity Average Performance

This metric is available in the Dashboard. Use this metric to view the average performance of processes. The metric shows the average percentage over or under the standard. The information is grouped in time buckets. You can view the metric by processes or by particular steps in the process. You can use this metric to identify which processes or which steps in the processes take longer or shorter than anticipated. You can also use this metric to identify whether your performance is better during certain times of the year.



Finding more information about Performance Leadtime Lifecycle enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
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Performance Leadtime	"Performance Leadtime" chapter of the Infor VISUAL Sales User's Guide.
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Chapter 8 Scheduling and Throughput enhancements

8

These enhancements have been made in the to help you schedule work orders and analyze throughput.

Scheduler preferences

You can now set up scheduler preferences by schedule, by site, or by tenant.

If you are licensed to use multiple sites, you can set up tenant-level, site-level, and schedule-level preference settings. When you create a new schedule in a site, the site-level settings are used for the default settings for the schedule. If site-level settings are not available, then the tenant-level settings are used. You can edit the schedule-level preferences to override the tenant- or site-level settings. If you do not create tenant-level, site-level, or schedule-level preferences, then the system default settings are used.

If you are licensed to use a single site, you can set up tenant-level and schedule-level preference settings. When you create a new schedule, the tenant-level settings are used for the default settings for the schedule. You can edit the schedule-level preferences to override the tenant-level settings. If you do not create tenant-level or schedule-level preference settings, then the system default settings are used.

In the Global Scheduler window, users must have system administrator privileges to change scheduler preferences. Other users can view the preferences but cannot make changes.

The SYSADM user can also edit scheduler preferences in Preferences Maintenance.

Work order scheduling options

The Sort by Priority, Create Date option has been replaced with the Sort by Priority, Release Date. When you select the Sort by Priority, Release Date option, work orders with the highest priority are identified. Among work orders with the highest priority, the orders with the earliest release dates are scheduled first.

Throughput improvements

These improvements have been made to the Throughput Window:

- **Soft allocation processing.** In soft allocations, the pairing of supply to demand is now determined separately for each schedule. In earlier versions of VISUAL, the production schedule was used to pair supply with sales order demand. These pairings were used for all other schedules in a site, which led to an inaccurate analysis of throughput. Since resource capacity can vary by schedule, a work order that was available to supply a customer order in the production schedule may not be available to supply a customer order in alternate “what if” schedules.
- **Soft allocation setup.** The Soft Allocation Setup dialog has been expanded to include allocation, late by date, work order cost method, and the method to use to measure customer service. You no longer need to specify this information each time that you create a throughput graph.
- **Time buckets.** You can now specify the number of time buckets to include in graphs. You can specify a number of monthly, weekly, and daily buckets to display. Specify this information in the Soft Allocation Setup dialog.
- **Debug windows.** You can choose to display debug windows after soft allocation is complete. The Demand window shows customer orders. The Inventory Supply window shows the in-stock inventory available to meet demand. The Work Order and Purchase Order supply window shows supply orders that are available to meet demand. The Soft Allocations window shows how supply was matched to demand.
- **Exceptions report.** Exceptions encountered during soft allocation generation are now shown in an Exceptions report. To view the report, select **File > Exceptions Report** in the Throughput Window.
- **Streamlined inquiry generation.** When you ran an inquiry for the first time in previous versions of VISUAL, you selected the options for the inquiry in a separate dialog from the graph dialog. The separate inquiry dialog has been removed.
- **Performance improvements.** To improve performance, value late, days late, and opportunity lost are calculated during soft allocation generation. The information is stored in the CUST_ORDER_ALLOC table.

Unallocated demand and supply in the Customer Service Impact Inquiry

You can now include unfulfilled sales orders and unallocated work orders in the Customer Service Impact inquiry. These new check boxes are available in the Customer Service Impact dialog:

Include COs – Select this check box to include unallocated sales orders in the inquiry. Allocated sales orders will also be included.

COs Only – Select this check box to include only unallocated sales orders in the inquiry. Allocated sales orders will not be included.

Finding more information about Scheduler and Throughput enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Scheduler enhancements	“Concurrent Scheduler and Scheduling Window” chapter of the Infor VISUAL Manufacturing User’s Guide.
Work Order scheduling options	“Concurrent Scheduler and Scheduling Window” chapter of the Infor VISUAL Manufacturing User’s Guide.
Throughput enhancements	“Throughput Window” chapter of the Infor VISUAL Manufacturing User’s Guide

You can now enter labor tickets and issue materials to work orders directly in the Shop Floor apps.

Labor transactions

You can now record labor in the Shop Floor Labor. You can clock in and clock out for the day, clock in and out for breaks, and start and stop set up, run, and indirect jobs. For run jobs, you can enter the quantity complete, the quantity deviated, and any required trace information. You can view documents that are attached to the work order.

When you select a job to work on, you can see at-a-glance key information about the job, such as whether the material required for the job is available, whether the work order is on time, and whether any labor tickets have already been recorded. You can use this information to prioritize your work.

You can use the My Labor page to review the labor tickets that you are currently working on.

Inventory transactions

You can now perform these inventory transactions in Shop Floor Inventory Transaction:

- Adjust in
- Adjust out
- Inventory transfer between locations
- Issue to work order
- Issue return from work order
- Receive from work order

Other inventory transactions, including purchase receipts, purchase returns, shipments, shipment returns, interbranch transfers, and physical inventory counts.

You can scan barcodes into the app.

Other Shop Floor enhancements

These additional enhancements have been introduced:

- A new icon indicates when a material requirement is a tool or fixture.
- A new icon indicates when document attachments are available.

Finding more information about Shop Floor

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Shop Floor	Infor VISUAL Shop Floor Installation and Configuration Guide Context-sensitive help in the Shop Floor app

These changes have been made in the Material Planning Window.

Nettable quantity calculation

Nettable quantity is now calculated consistently in all areas of the Material Planning Window. Parts stored in unavailable and transit locations are no longer considered as nettable in Material Requirements Planning.

This calculation is used throughout the Material Planning Window:

Nettable quantity = the sum of the quantity for all locations in the PART_LOCATION table for the part ID, warehouse ID, and Site ID being processed, where the location status is not set to Unavailable or the location is not marked as a Transit location.

Net using Nettable Quantity

You can now use the nettable quantity as the starting quantity when netting is initiated in the standard and advanced material planning modes. To use the nettable quantity, select **View > Net Using Nettable Qty**. When you generate the Material Planning Report, you can also use the nettable quantity as the starting quantity.

You can also use the available quantity or the on-hand quantity as the starting quantity.

Suggested Master Production Schedule (MPS) calculation

In the Advanced Material Planning mode, you can now decide whether to calculate suggested MPS.

To calculate this value, select **Options > Calculate Suggested MPS**.

When you activate the option, two new rows are displayed in the Advance Material Planning window and the Master Product Schedule dialog: Suggested MPS and Proposed Inventory.

The Suggested MPS row is calculated using this formula:

If Gross Demand > (Beginning Inventory + Current Firmed Orders), then Suggested MPS =
Gross Demand – (Beginning Inventory + Current Firmed Orders)

Otherwise, the suggested MPS = 0.

In the planning period that contains the current date, the safety stock is taken into consideration. This formula is used to calculate suggested MPS:

If Gross Demand > (Beginning Inventory + Current Firmed Orders – Safety Stock), then
Suggested MPS = Gross Demand – (Beginning Inventory + Current Firmed Orders)

If the part has minimum order quantity, maximum order quantity, or multiples of values, then these values are taken into consideration when calculating suggested MPS.

The Proposed Inventory row shows the inventory level of the part if you update the MPS for the part to match the suggested MPS. This formula is used to calculate proposed inventory:

Proposed Inventory = (Beginning Inventory + Current Firmed Orders + Suggested MPS) –
Gross Demand

In the Master Production Schedule, you can now select Suggested MPS when you copy demand to the production schedule.

The Material Planning Report available in the Advanced mode also uses the Suggested MPS calculation and also shows the Proposed Inventory row.

If you are calculating Suggested MPS, then MRP processing is changed in these ways:

Current Firmed orders are no longer applied against MPS entries. Current firmed orders are now part of the suggested MPS calculation.

The Net On-Hand for Master Scheduled Parts check box is no longer available.

Planning Period Details dialog

The Planning Period Details dialog has been added to the Advanced mode of the Material Planning Window. This dialog shows a daily breakdown of the planning period.

The header shows the totals for the period. The type of demand period is also displayed. The demand period type indicates how gross demand values are calculated.

The first table shows the daily breakdown of the totals shown in the header. You can use the Show Active Forecasts check box to add a row for active forecasts.

The second table shows supply and demand orders for the period. You can view supply and demand orders for a particular day or range of days by selecting columns in the first table.

To view the dialog, double-click a planning period column header. You can also select the column and then select **Info > Show Planning Period Details**.

Planning Period: 1/2/2016 - 2/1/2016

Beginning Inventory: -10 Gross Forecast: 0 Current MPS: 0
 MRP Planned Orders: 0 Customer Demand: 0 Projected Inventory: 0
 Current Firmed Orders: 50 Dependent Demand: 40
 Gross Supply: 40 Gross Demand: 40

Show Active Forecasts Demand Period Type: Real

	1/2/2016	1/3/2016	1/4/2016	1/5/2016	1/6/2016	1/7/2016	1/8/2016	1/9/2016	1/10/2016	1/11/2016	1/12/2016
Beginning Inventory	-10	0	0	0	0	0	0	0	0	0	0
MRP Planned Orders	0	0	0	0	0	0	0	0	0	0	0
Suggested MRP Release											
Current Firmed Orders	50	0	0	0	0	0	0	0	0	0	0
Gross Supply	40	0	0	0	0	0	0	0	0	0	0
Customer Demand	0	0	0	0	0	0	0	0	0	0	0
Dependent Demand	40	0	0	0	0	0	0	0	0	0	0
Gross Demand	40	0	0	0	0	0	0	0	0	0	0
Projected Inventory	0	0	0	0	0	0	0	0	0	0	0

Order ID	Status	Order Qty	Qty Due	Want Date	Release Date	Customer ID	Vendor ID	Warehouse ID	Consignment	Site ID
RQ 00023/1	Released	10	10	7/29/2014					<input type="checkbox"/>	DBR
RQ 00024/1	Released	10	10	7/29/2014					<input type="checkbox"/>	DBR
RQ 00024/1	Released	20	20	7/29/2014					<input type="checkbox"/>	DBR
P DBR00001/1	Released	10	10	8/7/2013			ACME		<input type="checkbox"/>	DBR
P DBR00008/1	Released	10	10	8/9/2013			ACME		<input type="checkbox"/>	DBR
P DBR00012/1	Released	10	10	7/29/2014			ACME		<input type="checkbox"/>	DBR
P DBR00016/1	Released	20	20	7/29/2014			ACME		<input type="checkbox"/>	DBR

Color in the Advanced mode

You can now apply color preferences to the Advanced mode.

To access the Color Preference dialog, select **Options > Color Preferences**. Select the **Apply to Advanced Mode** check box to apply color to both the standard and advanced modes.

Period Want Day in the Master Production Schedule and Copy Demand to MPS dialogs

These enhancements have been introduced:

- When a value is specified in the Period Want Day field in the Master Production Schedule and Copy Demand to MPS dialogs, the value is retained when you close and re-open the dialog
- You cannot enter a value less than one or greater than any of the values in the planning calendar

Period column headers in Advanced mode

You can now display the first day of the period as the period column header. To use the first day of the period as the column header, select **View > Show First Day of Period**.

Finding more information about Material Planning

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Material Planning	“Material Planning Window” chapter in the Infor VISUAL Inventory User’s Guide.

AutoRun

This section describes the changes made to VISUAL's AutoRun functions.

DBR Scheduler Service

You can now run the DBR Scheduler with the DRB Scheduler Service. You can use the Scheduling Service to run the DBR Scheduler automatically on the days and times you specify. If you have multiple sites and would like to run the service for all sites, then you must install the service once for each site.

To specify when to run the service, use the Set as Scheduled dialog in the DRB Scheduler. You can use the service to run the DBR Scheduler up to six times a day. You also specify the standard settings to use to run the schedule, such as the sort order and how to schedule started work orders.

You can set up one run schedule for each schedule ID in the DBR Scheduler window. Any user that has access to the Set as Scheduled dialog in the DBR Scheduler window can edit the run schedule for a schedule ID. The system administrator can control which users have access to the Set as Scheduled dialog.

After the service is installed and the service schedule is set up, the database is examined based on the polling interval that you specify to see if a schedule needs to be run. When the service finds a schedule that needs to be run, the service opens the DBR Scheduler and runs the schedule based on the settings you specify in the Set as Scheduled dialog.

If you set up the DBR Scheduling Service, you can still run the DBR Scheduler manually.

Coordinating MRP and Scheduling services

Since material requirements planning and scheduling can be dependent upon each other, you can set up the schedules for these services to ensure that each runs only when the other is not running. When you set up the MRP service schedule, select the **Delay for Scheduling** check box to ensure that MRP is not run while scheduling is being run. When you set up the Scheduling service

schedule, select the **Delay for MRP** check box to ensure that Scheduling is not run while MRP is being run.

Polling interval

The maximum polling interval is now 900 seconds for all Auto Run services.

MRP AutoRun configurations

You can now set up separate schedules for regeneration and net change.

Query Tool updates

The Query Tool has been updated to help you join tables in a query.

When you double-click a table, the table is added to the Join Tables grid. When you highlight a table in the Join Tables grid, tables that have a foreign key relationship to the table are displayed in the Database Tables and Column section. The column that the tables share in common is displayed in parenthesis. If a table name is displayed in red, then the table contains a foreign key reference to the tables in the Join Tables grid. If a table name is displayed in blue, then the table in the Join Tables grid contains a foreign key reference to the table displayed in blue.

As you add tables to the Join Tables grid, the join statement is written automatically. By default, an inner join is created. You can use a left outer join or no join instead.

If you have custom database tables, you can use the Extra Joins table to identify additional foreign key relationships in your database.

After you save a query, you can add the query to a user toolbar in the Query Tool window. When you return to the Query Tool window, you can re-run the query by clicking the toolbar button. To add a query to a toolbar, select **File > Add User Toolbar**.

You can also add the query to a user toolbar that you use in other windows in VISUAL. Use Toolbar Maintenance to add the query. When you run a query from a toolbar in any window other than the Query Tool window, the new Query Runner (VMQRYRUN) executable is used to run the query.

Security and user management

In the Users dialog, the list of users in your database is now presented in a table. You can see all users in your database.

The columns that are included in the Users dialog depends upon your license. If you use a named user license for VISUAL and also have VISUAL CRM, then a column is displayed for CRM. You can use this column to add users that have access to CRM only.

If you are licensed to use VISUAL Mobile Labor or VISUAL Mobile Material, then columns are displayed for those applications. You can assign users to the mobile apps without consuming a VISUAL user.

These settings have been added to Security Maintenance:

- **Dashboard security.** You can restrict user access to system and custom metrics. You can restrict access by user or by profile.
- **Query security.** You can restrict user access to queries that have been created in the Query Tool. You can restrict access by user or by profile.

Audit History dialog. You can restrict user access to the Audit History dialog. This setting has been added to the Program Component settings on each executable that supports the Audit History dialog. You can restrict access by user or by profile.

Default preference settings in Preferences Maintenance

The system administrator can now set up default preferences that are applied to all VISUAL users.

When the system administrator sets up default preferences, the system administrator can specify that a preference is global. A global preference is a required preference. Individual users cannot override a global preference setting. When individual users set up preferences, required preference settings are displayed in red.

If the system administrator specifies that a default preference is not a global preference, then individual users can specify a different value for the preference setting. If an individual user specifies a different value than the default value, then the value is displayed in blue.

Display License dialog

In the Display License dialog, the names of the products and modules have been updated to better reflect their functionality.

Finding more information about utilities and administration enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
AutoRun updates	“VISUAL AutoRun Services” chapter in the Infor VISUAL System Administrator’s Guide.
Query Tool updates	“Query Tool” chapter in the Infor VISUAL Concepts and Common Features Guide.
Security and user management	“User Management” chapter in the Infor VISUAL System Administrator’s Guide.
Default preference settings in Preferences Maintenance	“Customizing VISUAL” chapter in the Infor VISUAL System Administrator’s Guide.
Display License dialog	“Set Up and Maintenance” chapter of the Infor VISUAL System Administrator’s Guide.

Estimating enhancements

These enhancements were made to estimating functions.

Import Quick Quote from spreadsheet

When you use Quick Quote to prepare an estimate, you can now import information from a Microsoft Excel spreadsheet.

To import a spreadsheet, click the Copy From button in the Quick Quote dialog. Click the Excel option, and then specify the spreadsheet to import.

To successfully import the spreadsheet, it must meet these criteria:

- The spreadsheet must have columns for W/O Sub ID, Part ID, Seq No, and Piece No.
- The quote cannot contain legs.
- The spelling and case of the columns in the spreadsheet must match the spelling and the case of columns used in VISUAL.

To ensure that the spreadsheet columns are formatted correctly, you can send an existing Quick Quote to Excel. Edit the spreadsheet for the new quote, and then use the Copy From function to import the spreadsheet into VISUAL.

After you import the spreadsheet, it is attached to the quote as a document attachment.

After you create a Quick Quote using an Excel spreadsheet, you can edit the information in the Quick Quote dialog. To review the original information imported from the spreadsheet, click the **View ExcelData** button. A grid that contains the imported information is displayed.

Bid rate groups and categories

You can now set up bid rate categories and organize them into groups. You can use bid categories and groups to analyze your quoting processes. You can compare the budgets that you set up in quotes to the actual costs of manufacturing a product.

To set up bid groups and categories, use Application Global Maintenance.

After you set up categories, you can assign them to shop resources and parts.

When you create a Quick Quote in the Estimating Window, the bid categories associated with the resources and materials are displayed. You can export the quote information to Excel for further analysis.

Vendor price breaks on quotes that use costs from parts

If you use the Part record as the source of the cost on a quote, you can now apply vendor price breaks when you calculate the quote price. The price breaks offered to you by the preferred vendor for the part are used. If you do not use vendor price breaks when you calculate the quote price, then the costs specified for the part on the Costs tab in Part Maintenance are used to calculate the quote price.

Estimating Window right-click menu

The Material Planning Window has been added to the right-click menu.

RMA enhancements

These enhancements have been introduced to RMA processing.

- **Reuse or copy evaluation work order for repair work order.** When you convert an evaluation RMA to a repair RMA, you are given the option of copying or reusing the work order that you created for the evaluation.
- **Use a different customer to process an RMA.** You can now send repaired or replacement parts to a different customer from the customer who returned the part. You can also credit a different customer for a return.
- **Line numbering.** When you create a new customer order to process an RMA, you can now use the next number available for the customer order line instead of copying the line number from the original customer order.
- **Shipping repairs on customer orders.** When you process a repair RMA, you can now include more than one RMA on the same customer order. When you ship the customer order, you now select the RMA for the shipment at the line level. The RMA field in the Shipping Entry header has been removed.
- **Pre-assigning returned quantities to work orders.** If an order has multiple supply links, it can be difficult for the individual who process the return receipt to determine how the return should be assigned to the supply. To remove the guesswork, you can now pre-assign the returned quantities to supply when you create the RMA.

- **Contact for RMA.** You can specify a contact for the RMA. By default, the contact from the customer order is used, but you can select a different contact.
- **User-defined fields.** The standard user-defined fields have been added to the RMA header and RMA line item table.
- **RMA Acknowledgement report.** You can now generate an RMA Acknowledgement report. You can send the acknowledgement to your customer to confirm that you have created an RMA for the customer's return.
- **RMA Preferences.** To streamline data entry in the RMA Entry window, you can set up preferences that set default values and suppress dialogs. Specify preferences in Preferences Maintenance.
- **RMA in the Document Lifecycle.** In both the Graphical view and Table view, you can now view the status of the RMA.

Emailing customer invoices

In Invoice Forms, you can now email invoices directly to customers.

Setting up

To set up the emailing of invoices, complete these tasks:

- In Document Maintenance, specify where to store the invoices that you generate. You can create a directory specifically for invoices in each site.
- In Notification Maintenance, specify the content of the email message. Use the Email AR Invoices tab to specify this information.
- In Customer Maintenance, specify which customers and contacts receive emailed invoices. Specify this information by site. To specify that a customer receives emails, select the **Email Invoices** check box on the Order Mgt tab. To select the contacts that receive emails, use the Email Documents dialog. For each site and contact, select the Customer Inv check box if the contact receives invoices by email for the site.

Emailing invoices

After you generate invoices in Invoice Forms, use the Email Invoices dialog to email the invoices. Select **File > Email Invoices** to access the dialog. In the dialog, you can view a list of invoices that are eligible to be emailed. Select the invoices to email, and then click Run. You can also print invoices from the Email Invoices dialog.

The Email Invoices dialog has also been added to the Progress Billing and Project Billing windows.

In Accounts Receivable Invoices, you can view information about how an invoice was emailed to a customer on the Distribution tab.

Consolidated customer orders

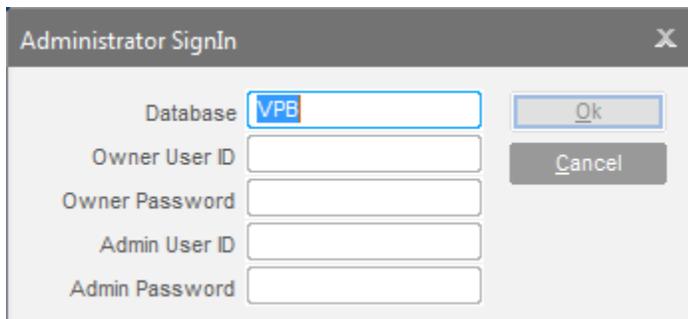
When you create a customer order, you can now specify sites at the line level. The sites that you select for lines must share the same parent entity as the site specified on the order header.

You cannot use this functionality if you generated the order from a quote.

Price Book

Price group has been added as a context to VISUAL Price Book. You can specify price groups and assign them to parts in Part Maintenance.

When you sign into the VPB database after you install VISUAL 9.0.0, you are prompted to upgrade your database.



The image shows a dialog box titled "Administrator SignIn" with a close button (X) in the top right corner. The dialog contains four input fields: "Database" (with "VPB" entered), "Owner User ID", "Admin User ID", and "Admin Password". To the right of the "Database" field is an "Ok" button, and below it is a "Cancel" button.

Specify the VPB user ID and password for both the Owner credentials and the Admin credentials.

Product Cost and Gross Profit view panel

In Customer Order Entry and the Order Management Window, you can now view production cost and gross profit for the entire order.

To display this analytic, select **View > Production Cost and Gross Profit**.



Use this chart to evaluate the accuracy of your cost estimates and the profitability of your customer pricing structure.

All amounts are shown in the functional currency of the parent accounting entity for the site specified in the order header.

The chart has two lines: Sell Price and Profit. The Sell Price line shows the extended price of the customer order line. The profit line is calculated by subtracting the projected costs from the sell line.

The chart also has three bars: Estimated Costs, Actual Costs, and Projected Costs.

The Estimated Costs bar shows the estimated cost to produce the quantity on the order line. If the customer order line is linked to a work order, then the work order is used to calculate estimated costs. If the customer order line is not linked to a work order, then the standard costs specified on the part record for the site are used.

The Actual Costs bar shows the actual costs incurred for any shipped quantities. If the customer order line is linked to a work order, then the actual costs from the work order are used. If the customer order line is not linked to a work order, then the actual cost layers for shipped quantities are used to calculate this bar.

The Projected Costs bar shows the projected total costs to produce the quantity on the line. Projected costs are calculated by adding the actual costs for any shipped quantities to the estimated costs for any unshipped quantities. If the customer order line is linked to a work order, then the work order is used to calculate the actual and estimated costs. If the customer order line is not linked to a work order, then the actual cost layer for the shipment is used for the actual costs, and any remaining quantity is calculated using the part standard.

Click any bar or line to view information about linked work orders or part standard costs. This information is displayed for all quantities: supply qty, shipped qty, estimated costs, actual costs, projected costs, sell price, estimated gross profit, projected gross profit, gross profit difference, and unit of measure. The functional currency used to express the values is also displayed. For work orders, the ID, want date, status, scheduled start date, and scheduled finish date are also displayed.

Finding more information about sales enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Estimating enhancements	“Estimating Window” chapter in the Infor VISUAL Sales User’s Guide.
RMA enhancements	“Return Material Authorization” chapter in the Infor VISUAL Sales User’s Guide.
Emailing customer invoices	“Customer Maintenance” and “Invoice Forms” chapters in the Infor VISUAL Sales User’s Guide.
Consolidated customer orders	“Purchasing and Sales in a Multi-site Environment” chapter in the Infor VISUAL Multi-entity and Multi-site User’s Guide.
Price Book	“Price Book” chapter in the Infor VISUAL Sales User’s Guide.
Product Cost and Gross Profit view panel	“Customer Order Entry” chapter in the Infor VISUAL Sales User’s Guide.

Drill-down buttons in Receiving Inspection

You can now use drill-down buttons to drill to more information about parts, purchase receipts and vendors directly from the Receiving Inspection window.

Outside Service Maintenance customizable user-defined fields

You can now add customizable user-defined fields in Outside Service Maintenance.

Finding more information about procurement enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Drill-down buttons in Receiving Inspection	“Fields, Buttons, Menus, and Other Window Controls” chapter in the Infor VISUAL Concepts and Common Features Guide.
Outside Service Maintenance customizable user-defined fields	“Customizing VISUAL” chapter in the Infor VISUAL System Administrator’s Guide.

Viewing information by account group in the Accounting Window

You can now view information in the Accounting Window by account group.

If the account group contains income statement accounts, you can view a line chart that compares year-to-date balance and year-to-date budget amounts.

When you set up account groups, you decide whether equity, liability, and revenue accounts are considered to be positive or negative values.

Single transaction batches

You can now create a separate batch for each transaction when you post financial transactions to the General Ledger. Use the Create Financial Batches with Only One Transaction check box on the Defaults tab in Accounting Entity Maintenance to specify which entities use single transaction batches. To remind you that multiple batches will be generated, a One Tx per Batch check box is displayed on the Post Distributions to General Ledger dialog. This check box cannot be edited; it is only displayed if the Create Financial Batches with Only One Transaction check box is selected in Accounting Entity Maintenance.

When you view the G/L Transactions report before or after posting the transactions, all batches created during processing are displayed in the report.

The View Batch dialog has been added to the Accounts Payable Invoice Entry, Accounts Payable Payment Entry, Accounts Receivable Invoice Entry, Accounts Receivable Cash Application, and Cash Book windows. In the View Batch Information dialog, this information has been added:

- Batch Posting Date
- Batch Create Date
- Batch Posted By
- Batch Locked
- Dist Posting Date

- Dist Create Date
- Dist Created By

VAT transactions

Updates have been made to allow local VAT charges to be applied to goods that are imported between two countries that use the Euro.

Exporting the Recalculate Standard Costs table to Microsoft Excel

You can export the contents of the table in the Recalculate Standard Costs dialog to Microsoft Excel. Click the **Send to Microsoft Excel** button.

Commercial WIP Balance summary report in project databases

You can now print a summary version of the WIP balance report for commercial work orders. Print this report in the Post Manufacturing Journals window.

Finding more information about accounting enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Viewing information by account group in the Accounting Window	“Accounting Window” chapter in the Infor VISUAL General Ledger User’s Guide.
VAT Transactions	“Accounting Entity Maintenance” chapter in the Infor VISUAL System-wide User’s Guide.

Enhancement	User Guide
Exporting the Recalculate Standard Costs table to Microsoft Excel	"Manufacturing Costing" chapter in the Infor VISUAL System-wide User's Guide.
Commercial WIP Balance summary report in Project databases	"Post Manufacturing Journal" chapter in the Infor VISUAL General Ledger User's Guide.

These enhancements are available for users who use VISUAL in conjunction with VISUAL for .NET applications.

Direct updates to .NET VISUAL tables

If you use VISUAL .NET, changes that you make in standard VISUAL are now made to the .NET tables directly instead of through the VISUAL Exchange Service.

Changes made to this information in VISUAL are directly updated in VISUAL Time & Attendance:

- Labor Tickets
- Indirect IDs
- Shop Resources
- Departments
- Shifts
- Deviation Reasons
- Countries
- States
- Employees
- Earning Types

Changes made to this information in VISUAL are directly updated in VISUAL Global Financials:

- Countries
- States
- Employees
- Earning Types

After you upgrade your VISUAL database to 9.0.0, perform these tasks to activate direct updates:

- In VISUAL, select **Admin > Application Global Maintenance**. Select **Maintain > VISUAL .NET Configuration**. Ensure that the instance group, instance name, and VISUAL .NET install path are correct. If they are not correct, then review your database topology in VISUAL .NET to ensure that the VISUAL manufacturing database is properly registered.

- In the VISUAL executable directory, run VMVXCTGR.exe to remove the triggers and stored procedures used with VISUAL Exchange.

Global Financials and the Document Lifecycle viewer

If you use VISUAL for .NET Global Financials, you can now view Accounts Payable and Accounts Receivable invoices and memos in the document lifecycle. You can drill directly into Global Financials from the lifecycle viewer.

Finding more information about accounting enhancements

This table shows where you can find more information about the enhancements described in this chapter:

Enhancement	User Guide
Direct updates to .NET VISUAL tables	“Application Global Maintenance” chapter in the Infor VISUAL System-wide User’s Guide.
Global Financials and the Document Lifecycle viewer	“Document Lifecycle” chapter in the Infor VISUAL Concepts and Common Features Guide.