

## **SAP Data Services Road Map**

May 2018

CUSTOMER



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For all recent and planned innovations, potential data protection and privacy features include simplified deletion of personal data, reporting of personal data to an identified data subject, restricted access to personal data, masking of personal data, read access logging to special categories of personal data, change logging of personal data, and consent management mechanisms.

## **About SAP road maps**

Companies today are planning their digital journeys – transforming business models, reengineering business processes, and reimagining work.

SAP road maps highlight innovations that may help you plan and implement your digital journey. They span products relevant to lines of business in your industry and explain how our innovations may add value to your business.

In our road maps, you can learn about our innovations along four different timelines:

- 1. Recent innovations for our products that have been launched in the past weeks or months and can already be purchased
- 2. Planned innovations for our products that are intended to be launched in the short term or midterm
- 3. Product direction, providing a long-term perspective on high-level development plans for innovations for our solutions inspired by your requirements
- 4. Product vision, providing a high-level and long-term business perspective on innovations for our products

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## Vision and direction

- Key trends and customer needs
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## **Product innovations**

Detailed innovations

## Product description

SAP Data Services software empowers IT users to easily integrate, transform, improve, and deliver accurate, complete data to support operational and analytical data-driven initiatives, with batch and microbatch capabilities, as a hub-and-spoke architecture on Windows and Linux platforms. It supports data migration and analytics for both SAP and third-party applications and data systems.

#### **Native integration capabilities**

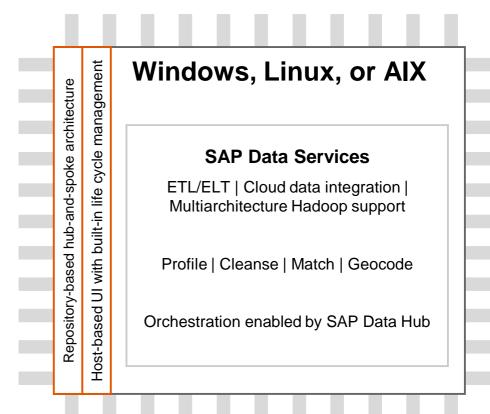
- Support for batch data delivery on a scalable server group architecture
  - Bulk or batch: ETL or ELT
  - Near real-time: microbatching
  - Real-time support for message type
- Out-of-the-box and partner-supported adapters
- Adapter SDK for customers and partners to integrate third-party systems
- On-premise, cloud, or hybrid deployments
- Tight coupling with SAP enterprise applications

#### **Data transformation**

- Data cleansing, enrichment, transformation, and harmonization
- Batch, microbatch, or real time (message type)
- Dedicated designer tool

#### **Data quality**

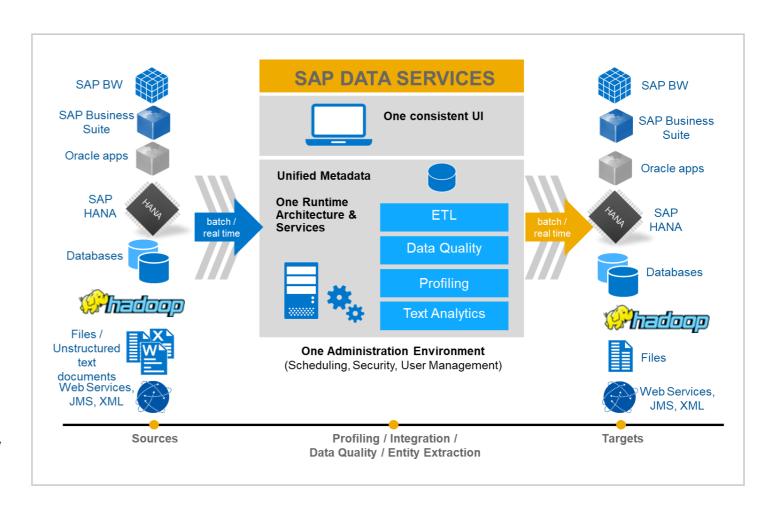
- Profiling of datasets to gain more insights
- Cleansing of person, company, and address data
- Identification of duplicates within a dataset or across multiple datasets
- Integration with SAP Data Quality Management, microservices for location data



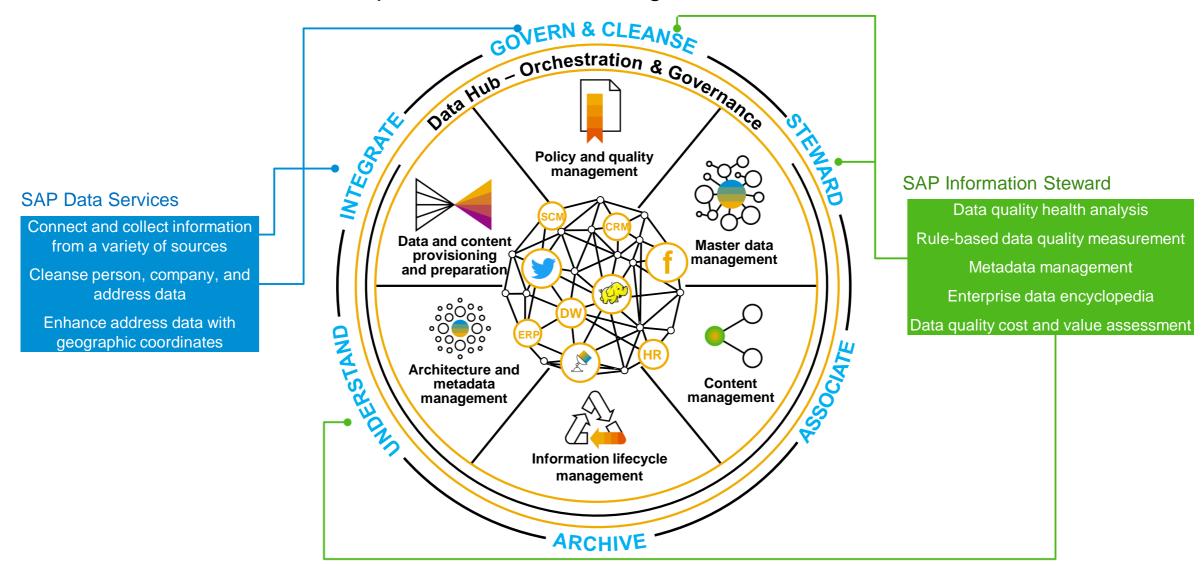
Data virtualization, data replication, data integration, data quality, and data profiling



- Access and extract structured and unstructured data, SAP and third-party sources, in batch or real time (message type)
- Transform, cleanse, match, and consolidate data
- Scale from single to multiple servers for all volumes of data
- Support wide variety of SAP and thirdparty targets, on premise and in the cloud
- Single Web-based administration and operations user interface
- Self contained lifecycle management utility with version control system



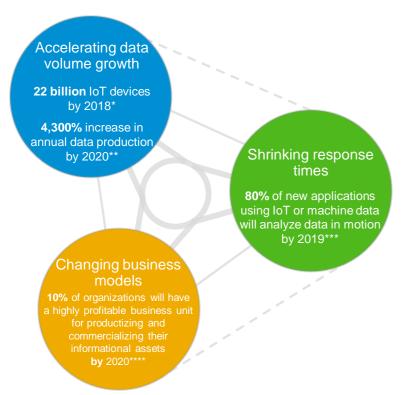
Part of SAP solutions for enterprise information management



Key trends, customer needs, and value proposition

## Key trends and impacts in business and technology

Digital transformation is driving the need for information excellence



<sup>\* &</sup>quot;Worldwide IT Industry 2016 Predictions," IDC, November 2015.

### **Customer needs and the value propositions of the product**

Transform all data into insight

50% of the G2000 will see the majority of their business depend on their ability to create digitally enhanced products, services, and experiences by 2020\*

Act in the moment

75% of organizations believe inaccurate data is undermining their ability to provide an excellent customer experience\*\*

Innovate without constraints

80% of business processes from a decade earlier will be reinvented, digitized, or eliminated using information by 2020\*\*\*

<sup>\*\* &</sup>quot;Big Data Overload: Why Most Companies Can't Deal With The Data Explosion," Forbes, April 2016.

<sup>\*\*\* &</sup>quot;100 Data and Analytics Predictions through 2020," Gartner Inc., March 2016.

<sup>\*\*\*\* &</sup>quot;Prepare to Monetize Data from Internet of Things," Gartner Inc., September 2016.

<sup>\* &</sup>quot;IDC FutureScape: Worldwide IT Industry 2017 Predictions," IDC, 2016.

<sup>\*\* &</sup>quot;2016 Global Data Management," Experian, 2016.

<sup>\*\*\* &</sup>quot;Why and How to Measure the Value of Your Information Assets," Gartner Inc., August 2015.

### Product areas of future investment

**Vision:** Integrate, transform, and improve your enterprise data quickly to unlock business value from all your organization's data as well as open-source data and social media. Transform and integrate enterprise data and nonenterprise data into a trusted, actionable asset for clearer business insight, streamlined processes, and maximum efficiency.



Extend data access connectivity to a growing list of out-of-the-box adapters for data migration, data integration, and analytics use cases.



Expand and enhance architecture for cloud infrastructure and cloud-based data systems.



Achieve certifications quickly for connectivity and compatibility with the most popular data systems like Hadoop and NoSQL and open source technologies.



Enhance existing adapters or connectors to support new security standards on demand from customers and extend secured support for unstructured data formats.

## Product road map overview – key innovations

#### **Recent innovations**

#### 2018 - Planned innovations<sup>1</sup>

2019 - Product direction<sup>1</sup>

#### 2020 - Product vision<sup>1</sup>

#### Access anywhere: Big Data

- Cloud database integration: Azure Data Lake system
- Cloud storage device integration: Amazon Web Services (AWS) S3 file encryption
- SAP Data Services in the cloud: AWS EC2. Microsoft Azure. GCE
- Hadoop: WebHDFS and HttpFS protocols, support of CDH Impala
- Performance optimization: Hive ODBC, Azure Data Lake bulk loader support
- Integration of SAP Data Quality
  Management, microservices for location data
- Support OAuth 2.0 authentication for OData adapter v4

#### End to End: enterprise

- SAP Vora: dedicated datastore
- ODP reader extractor support in continuous workflow

#### Ease of use

- ODP version tracing
- Transaction order support in Continuous Work Flow
- Substitution parameter for file location parameters
- Enhanced data anonymization

#### Access anywhere: Big Data

- Azure Data Lake enhancements
- Cloud-based application connectivity
- Hadoop: Avro and ORC storage formats
- SPARK engine integration
- Big Data enhancements: Apache Knox gateway authentication and Ranger security

#### **Big Data integration**

- SAP Cloud Platform Big Data Services (Altiscale)
- Expanded integration with SAP Data Hub
- Certifications

#### Ease of use

- Smart user experience (UX)
- Landscape management
- Cloud-based adapter bridge

#### Access anywhere: Big Data

- Kafka integration
- Expanded connectivity driven by market
- Payload management
- Historical data analysis
- Enhanced data domain cleansing to product and material master data

#### **Big Data integration**

- Orchestration for end-to-end Big Data scenarios
- Data refinery: cleanse data before or after ingestion
- Integration with analytics and predictive models

- Intelligent payload handling and routing
- Extended data type support and processing
- Self-healing data movement
- Enhanced hybrid cloud (automation/intelligence)
- DevOps integration
- Microscopic data governance
- Enhanced lifecycle management: zeroimpact change control
- Self-guided user interface
- Continued innovation of SAP Data Services as cornerstone of SAP's innovation strategy for Big Data integration
- Machine learning-based data quality

Release up to 4.2 SP10

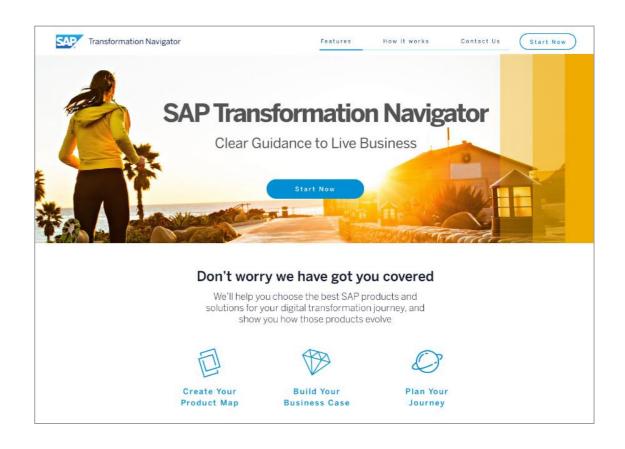
<sup>1.</sup> This is the current state of planning and may be changed by SAP at any time without notice.

## **SAP Transformation Navigator**

Our customers are asking for clear guidance for their digital journey to reimagining business models, business processes, and how their people work.

The self-service SAP Transformation Navigator tool recommends an SAP S/4HANA—centric product map based on the products a customer is currently using and on their business and IT priorities.

SAP Transformation Navigator builds on SAP road maps and produces an individualized document that highlights business value, shows integration from SAP S/4HANA to our cloud solutions, explains available transformation services, and provides license information for additional products and solutions.



Discover **SAP Transformation Navigator**\* for guidance to your future SAP S/4HANA–centric product map.

<sup>\*</sup>Accessible to all internal users and S-users as of May 15, 2017

## **Learn more**SAP customers and partners

- SAP Road Maps
- SAP Community
- ► <u>IT Planning Resources</u>
- Innovation Discovery
- SAP Transformation Navigator
- SAP User Groups
- SAP Help Portal EIM
- SAP HANA Customer Influence Program



# Thank you.



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