

SAP Technical Brief

SAP Solutions for Enterprise Information Management
SAP Data Services

Objectives

Solution

Benefits

Quick Facts

Making Data a High-Value Business Asset



The Best-Run Businesses Run SAP™

Provide trusted data for confident decisions

Provide trusted data for confident decisions

Sound decisions and smooth business processes require data that is accurate, consistent, and complete. Organizations must be able to trust the integrity of their data to fully realize the value of that asset. Data quality management functionality within SAP® Data Services software helps you **govern data across all information domains and sources** at the point of entry.

You may think that the data your organization depends on is reliable. But missing information, lack of consistency, and incorrect values can erode a company's efficiency and agility – opening the door to unnecessary risks and costs and compromising decisions. With consistent information, key stakeholders can make critical decisions that support compliance, innovation, and growth.

A strategically planned data quality initiative is essential to successful information management – whether it involves a Big Data,

business intelligence, or data-warehousing project; a new HR, financial, or procurement system; or data migration after an acquisition.

Data quality management software from SAP helps you correct issues as they arise, enrich data assets, eliminate duplication, and consolidate information. You can use the tools in real time or with batch processing. Built on Web services, the software supports a wide range of applications, platforms, and databases – including SAP, third-party, and proprietary.



Cleanse data across domains and sources at point of entry

Cleanse data across domains and sources at point of entry

Standardize, correct, and validate data based on your needs

Enrich data with internal or external sources

Match and consolidate data with embedded duplication checks

Data quality management functions in SAP Data Services support real-time, point-of-entry processing – from data parsing, standardization, and validation to data correction, enrichment, and matching – for any type of data, structured or unstructured.

Data quality transforms in SAP Data Services are reusable throughout the build process to reduce development effort and help ensure repeatable design accuracy and quality. The transforms can be shared across an internal community via a central repository that supports full capabilities for multiple users – including a check-in and check-out process, object labeling, and versioning.

The software supports comprehensive capabilities for testing, such as a design-time data viewer that lets users see live data during the design process to increase overall accuracy and reduce potential errors. There is also a powerful debugging tool, along with prebuilt transforms that enable conditional workflow and detect system exceptions.

A centralized, Web-based management console gives IT administrators full control for securely scheduling and executing jobs and supports an overall object-promotion process for the development, test, and production environments.



Standardize, correct, and validate data based on your needs

Cleanse data across domains and sources at point of entry

Standardize, correct, and validate data based on your needs

Enrich data with internal or external sources

Match and consolidate data with embedded duplication checks

Tools for data quality management in SAP Data Services help you ensure consistency across data sources – whether you use them on premise or in the cloud or embed them in applications. This functionality helps you parse, standardize, and cleanse data of any type from any source or domain.

Multiple data elements are often collected and stored in a database where they are grouped into single fields. Parsing identifies individual data elements and breaks them into their component parts. It rearranges data

elements in a single field or moves multiple data elements from a single data field to multiple discrete fields.

Once your data is parsed, you can impose consistency across all records to prepare it for validation, correction, and accurate record matching. Standardization enforces business rules around formats, abbreviations, acronyms, punctuation, greetings, casing, order, and pattern matching, according to your specific business requirements.

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Set business rules that meet your specific requirements.



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Cleanse data across domains and sources at point of entry

Standardize, correct, and validate data based on your needs

Enrich data with internal or external sources

Match and consolidate data with embedded duplication checks

Cleansing inaccurate or “dirty” data involves correcting it and adding any missing elements. SAP Data Services supports cleansing for many different types of data. You can remove or correct common types of dirty data using sophisticated algorithms and rules with referential data (for example, using address information from a national postal service to correct address data).

Data quality management software from SAP supports comprehensive and global coverage for cleansing address and location data from more than 230 countries. There is built-in integration with the SAP HANA® platform, SAP Business Suite software, the SAP Master Data Governance application, and analytics solutions from SAP.

A PROVEN APPROACH TO ACHIEVE DATA QUALITY

When consumer-products giant Kellogg Company launched a new IT environment for integrating its data and supporting new acquisitions, the company had to determine how to migrate data from multiple, highly customized SAP applications. To help ensure data consistency and quality during and after the migration, Kellogg used software for data quality management from SAP.

State-of-the-art best practices supported in the software helped Kellogg speed up data integration, facilitate adoption by end users, and reduce project risk. By eliminating duplicate data, Kellogg cut the number of customer accounts by 20%.



Enrich data with internal or external sources

Cleanse data across domains and sources at point of entry

Standardize, correct, and validate data based on your needs

Enrich data with internal or external sources

Match and consolidate data with embedded duplication checks

Appending data from internal and external sources provides information that is more complete to help you effectively target customers and prospects, take advantage of cross-selling opportunities, and gain deeper insights into your business. Enhancement options available with SAP Data Services include:

- Full international postal information
- Longitude and latitude information to enhance records for marketing initiatives that are geographically or demographically based
- Geospatial assignment of customer addresses for tax jurisdictions, insurance-rating territories, and insurance hazards
- Use of third-party referential data to enhance records

SAP Data Services has a long history of providing broad connectivity to many different environments, which continues with emerging Big Data sources. You can use the software to access, reformat, transform, and deliver and publish data in these environments – thereby maximizing the data's value.

SAP Data Services provides comprehensive connectivity with more than 40 information sources. These include all major enterprise-level relational databases as well as business applications, Web services protocols, Hadoop, mainframe sources, hierarchical structures such as XML, and unstructured sources like Microsoft Word, Outlook, and zip files.



Match and consolidate data with embedded duplication checks

Cleanse data across domains and sources at point of entry

Standardize, correct, and validate data based on your needs

Enrich data with internal or external sources

Match and consolidate data with embedded duplication checks

Consolidating data can uncover hidden relationships, provide a single version of the truth, and connect data relationships to improve process efficiency and customer and supplier engagements. Data consolidation helps you correct information – such as invalid contact information and incorrect material or product attributes, as well as improper addresses, identification numbers, and ship-to or bill-to information. It can also help you eliminate duplicate information so that you can properly identify the correct entity when entering new information or verifying existing information.

Duplicate records can exist within one or multiple source systems. With data matching tools in SAP Data Services, you can determine

whether records refer to the same entity based on how well the individual fields, or record attributes, match each other. Matching algorithms can help correct data-entry errors, character transposition, and other data errors.

You can use the software to set rules based on combinations of various elements matching at a certain threshold. For example, you could require the address-line information and the first-name information of records to match before they are flagged as a possible match. Once you identify matches, you can salvage and post data from the matched groups to form a single best record or update all matching records.



Make better decisions with reliable, trusted data

Make better decisions with reliable, trusted data

SAP Data Services offers data management functionality that provides highly advanced data quality support. You can use the software to deliver the accurate and complete information that your business requires.

With support from SAP Data Services, you can:

- Improve data by parsing, standardizing, and cleansing data from any source, domain, or type
- Enhance data with internal or external sources to maximize its value
- Consolidate data to uncover hidden relationships and provide a single version of the truth



Get the most from your information assets.



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Summary

Let SAP® Data Services software help you correct issues as they arise, enrich data assets, eliminate duplication, and consolidate information. Tools for data quality management in the software help you make more-informed decisions and improve business process efficiencies with accurate, consistent, and complete data. You get the help you need to understand and analyze the trustworthiness of your enterprise information and gain continuous insight into the quality of your data.

Objectives

- Improve data quality
- Uncover hidden relationships in data
- Eliminate errors and duplicate data

Solution

- Tools for standardizing, correcting, and validating data according to business rules and requirements
- Enrichment of data with internal or external sources to fill gaps within the data you already have
- Ability to match and consolidate data by embedding data duplication checks directly into any workflow or application

Benefits

- Help ensure consistency across data sources on premise, in the cloud, or embedded in applications
- Complete the picture and maximize the value of your data
- Improve process efficiency and customer engagement by connecting data relationships

Learn more

To find out more, call your SAP representative today or visit us online at www.sap.com/eim.



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