What does SAS® Data Surveyor for SAP do?
SAS Data Surveyor for SAP provides data integration designers with the ability to search, navigate and extract SAP data without the need to understand complex SAP data structures – and integrate and analyze this data within SAS solutions.

Why is SAS® Data Surveyor for SAP important?
It enables organizations to quickly and efficiently integrate SAP data with other data sources, providing a complete view of the enterprise for business analytics and reporting needs.

For whom is SAS® Data Surveyor for SAP designed?
SAS Data Surveyor for SAP is designed for data integration developers and decision support users seeking to exploit SAP data, both by itself or with other disparate data sources, for decision support needs.

As enterprise resource planning (ERP) products have evolved, they’ve become more complicated and difficult to manage. To retrieve data from SAP applications, transform it and generate new insights, you need to create a substantial amount of custom coding. Due to this complexity, getting the data needed from SAP systems requires extensive employee training, expensive SAP consultants – or both.

SAS Data Surveyor for SAP provides the environment you need to access SAP data for crucial business intelligence – whether it’s stored in SAP HANA or any other database – helping you easily locate and extract data from the complex structures within SAP.

With easy-to-use wizards, powerful metadata search capabilities, packaged transformations and integrated data quality tools, SAS Data Surveyor for SAP gives you the power to quickly and easily integrate ERP data with other organizational information and data sources.

Key benefits
- **Save time, money and resources.** SAP data structures are complex. SAS Data Surveyor for SAP allows users to quickly find necessary data without having to understand SAP data structures, whether using traditional InfoCubes, HANA-optimized InfoCubes, or semantically partitioned objects (SPO). An easy-to-use interface and powerful metadata search capabilities allow data integration designers to quickly locate relevant information from the hundreds of tables and database schemas in SAP applications.

- **Reduce maintenance overhead.** With SAS Data Surveyor for SAP, no custom (ABAP) coding is needed to get to SAP applications data. Instead, all relevant extraction information is stored as metadata that is easily managed and maintained – and these routines can be reused by other developers and engineers.

- **Manage data on an enterprise scale.** Accessing relevant ERP information is just one facet of organizational data. SAS delivers the only business analytics software that enables you to manage data on an enterprise scale, allowing you to integrate and manage data sources on all platforms. It provides the perfect environment for helping you access SAP data to create business intelligence.
Product overview

SAS Data Surveyor for SAP is integrated into the interactive interface delivered with SAS Enterprise Data Integration Server and SAS Data Integration Server to help manage, maintain and build data integration processes. SAS Data Surveyor for SAP provides the ability to locate, identify, understand and extract data from SAP, giving you a powerful data integration tool for SAP environments.

SAS Data Surveyor for SAP places SAP metadata in an open, common metadata framework. Integrating SAP metadata within an open, common metadata architecture helps you transform SAP data into true intelligence by exposing SAP rules and data to SAS Analytics technology.

Easy access to all of your SAP data

SAS Data Surveyor for SAP exposes data from both SAP R/3 ERP systems and SAP BW systems, also known as SAP Business Information Warehouse. With SAS Data Surveyor for SAP, you can explore metadata from your entire SAP suite without specialized SAP knowledge.

SAS provides data integration professionals with an easy way to navigate the tens of thousands of tables that make up SAP, as well as its SPOs and HANA-optimized InfoCubes. You can find this information without severely affecting performance of the operational system.

Powerful metadata search

Metadata search, incorporated in SAS Data Surveyor for SAP, allows you to search, browse and identify the desired data within complex SAP data structures. Using SAP metadata, such as column names and descriptive text, you can easily identify and access the data needed to populate an enterprise data warehouse or analytical data mart in a timely fashion.

Integrated metadata framework

By using SAS Metadata Server within SAS Data Surveyor for SAP, you can extend SAP metadata to an open metadata framework, allowing you to build consistent views of all data and information across the enterprise. SAS Metadata Server stores all relevant information about SAP data structures as metadata so that it can easily be used and reused from one location. This promotes easy maintenance because all information resides in metadata and no source code needs to be touched.

Flexible search options

SAS Data Surveyor for SAP provides flexible search capabilities that allow data integration developers to easily get necessary information based on input from users. You can search by entity model, fields, columns and tables.

SAP-specific transformations

Only SAS has SAP-specific transformations, such as snowflake denormalization routines, which change the complex data structures of SAP BW into standard star schemas that are far more suitable for analysis. These packaged transformations greatly reduce the time required to complete data integration efforts.
### Key Features

#### Easy access to all SAP data
- SAP Certified for integration on SAP R/3 Enterprise.
- Integrates data from SAP Business Information Warehouse (BW).
- Integration with SAS Metadata Server extends SAP metadata to a common, open metadata framework, allowing for consistent analysis and information sharing across the enterprise.
- Provides multiple language support, enabling you to view metadata in your own language; eliminates the need to understand German acronyms.
- Provides search and clarification of SAP data without affecting ERP system performance; a metadata caching function offloads metadata browsing to the SAS application server.
- Supports the SAP security model, including SAP organizational roles.
- Supports single sign-on.

#### Powerful metadata search
- Reads SAP data dictionary, enabling you to explore metadata and data structures without extensive knowledge of the SAP application.
- Lets you search by entity, model, fields, columns and tables.
- Performs business metadata decomposition, enabling users to search using business terms and understand how the business objects relate to the underlying data.

#### Flexible search options
- Provides flexible search capabilities that enable data integration developers to easily get to the necessary information based on input from users.
- Search by entity model, fields, columns and tables.

#### SAP-specific transformations
- Converts SAP BW's complex snowflake schema into a denormalized star schema more suitable for analysis.

#### Automatic code generation
- Automatically generates the code necessary to retrieve required data from SAP applications.
- Provides interactive GUI-based code generator that is integrated into SAS Data Integration products.

#### Improved ETL performance
- Uses server-side joins, batch extracts, etc., wherever appropriate in extraction routines.
- Extracts only the data that has changed in SAP BW, speeding up data integration processes.
- Transfers only the required data from SAP during ETL processes.

#### Integrated environment for enterprise data integration and integrated data quality
- Integrates with other data sources, including DB2, Oracle, PeopleSoft, Siebel, SQL Server and many more.
- Directly add data quality to your data integration processes.
- Provides a point-and-click process to run SAP applications data through SAS data quality routines to ensure quality and consistency.

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### Automatic code generation

SAS Data Surveyor for SAP automatically generates the code necessary to retrieve the required data from SAP applications. The extraction routines use optimization techniques to bring over only the necessary data.

### Improved ETL performance

SAS Data Surveyor for SAP provides server-side joins that allow you to perform queries on the SAP server, moving only the required data from SAP. Change data capture features allow only the data that has been added or changed to be incorporated into the ETL process, which saves valuable time and processing resources.

### Integrated data quality

By combining SAS Data Surveyor for SAP with other SAS Data Integration products, a simple point-and-click process allows you to run SAP applications data through SAS data quality routines to ensure quality and consistency.

### Integrated environment for enterprise data integration

Integrate your SAP data with other vital information and use the powerful SAS environment to manage all of your enterprise data integration processes. Along with native connectivity to SAP HANA via SAS/ACCESS® Interface to SAP HANA, you can take advantage of push-down capabilities to run SAS procedures inside the SAP HANA environment. Only SAS enables you to manage data in this way on an enterprise scale so you can integrate all data sources on all platforms. Because you only have to manage one data integration solution, you can control resources more effectively and reduce the cost and complexity of training and maintenance.
SAS® Data Surveyor for SAP
Technical Requirements

Client environment

Server environment
- AIX: AIX 7.1 TL0 on the pSeries chip family
- HP/UX 11.31 (HP-UX 11i v3 Update 9) on the Itanium chip family
- Linux (64-bit for x64 chip family): Oracle Linux 6.1, Red Hat Enterprise Linux 6.1, SUSE Linux Enterprise System 11 SP1
- Solaris (64-bit for x64 chip family): Solaris 10 Update 9, Solaris 11

Required software
- SAS Data Management or SAS Data Integration Server

SAS Data Surveyor for SAP facilitates exploration, review and registration of SAP table metadata without having to know the original table names.