

IBM Intelligent Insights for SAP Solutions

Get insights on Configuration Master Data extracted from SAP ECC/S4 systems and ask natural language queries on config data



Highlights

Extracts master data configuration from SAP ERP systems using set of offline transports

Represents the data in analytical formats grouped by SAP functional areas

Provides capability to ask additional queries in natural language about the configuration

Gets text insights about the configuration analysis

Displays extracted data to perform as-is deep dive analysis

Many clients struggle with the inefficiencies encountered during project transition in relation to SAP ERP utilization. A significant challenge arises from the difficulty in accessing the customer's organization setup across different lines of business, particularly the SAP Project Reference Object - SPRO configuration details. This necessity is often hindered by lengthy customer processes and stringent confidentiality clauses that delay the transition period. Moreover, functional consultants rely heavily on existing knowledge documents and the availability of the solution team to resolve SPRO-related inquiries, leading to dependency and potential delays.

Another major concern is the lack of a unified platform for functional consultants to access all configuration-related analytical content. Currently, these consultants must navigate through disparate sources, which limits their ability to gain comprehensive insights into configuration data, ask queries on extracted data not included in pre-delivered content, and make well-informed decisions. Furthermore, the generation of configuration documents, a critical deliverable in any transition engagement or handover process, proves to be both time-consuming and challenging, adding to the client's operational burden.

IBM Intelligent Insights for SAP Solutions offers a comprehensive view of SAP configuration data across various functional areas such as Finance, Sales & Distribution, and Materials Management. It presents analytical components like Organization Hierarchy, Tax Components, and Company Code Analysis, each displaying summary charts like "Number of Company Codes per Controlling Area".

Data extraction occurs via offline ABAP transports through an extraction cockpit, allowing selection of specific functional areas. The data is then uploaded to a cloud database for further analytics. Functional consultants can access raw, extracted data using the Metadata browser, viewing its structure and origin. For analyses not covered by best practice content, a generative AI component enables users to ask natural language questions about the configuration data. The system generates a SQL query based on this input, executed on the cloud database data, yielding responses as tables or charts.

Component	Component Type	Material Type Desc	Source List	Object	Component Type	Description	Number Range	Source Material (at Plant level)
Vendor account Group	0001	Customer	Source List	Source List Plant	A001	TECO Adh Plant		
Vendor account Group	ALL	General vendors	Source List	Source List Plant	A002	Laboratory Adh Plant		
Vendor account Group	ALL	General vendors	Source List	Source List Plant	A003	Capital Plant Adh Plant		
Vendor account Group	AVS	no	Source List	Source List Plant	A004	Research Plant		
Vendor account Group	CPS	Over-time vendors	Source List	Source List Plant	A005	Research Plant		
Vendor account Group	CPSA	Over-time vendors	Source List	Source List Plant	A006	Research Plant		

Component	Component Type	Material Type Description
Payment Terms	0001	Payment immediately due net

Figure 1. Materials Management Insights

Extracts master data configuration from SAP ERP systems using set of offline transports

Using a finance deep dive example the SAP configuration data is extracted from SAP Finance module (via the offline ABAP transport, executed in the customer system). The enterprise structure assessment is summarized into following categories:

- a. Company Code
- b. Operating Concern & Controlling Area
- c. Company Code & Profit Centre
- d. Company Code & Ledger

Represents the data in analytical formats grouped by SAP functional areas

Using a sales & distribution deep dive the SAP Transition Tool extracts data from SAP Sales & Distribution module (via the offline ABAP transport, executed in the customer system). The summarized assessment is done for:

- a. Organization Chart Hierarchy
- b. Sales Document Types
- c. Billing Types
- d. Pricing Procedures

Provides capability to ask additional queries in natural language about the configuration

The functional user can ask a query related to the functional area (e.g. ‘How are my company codes aligned to distinct company code?’). The data already exists in the extracted tables, but no ready-made data representation exists. The Generative AI foundational model interprets the query, transforms to SQL and executes it on top of data stored in the cloud database. The user response is a table and sometimes a chart is also displayed depending on the response content.

Displays Text Insights about the configuration analysis - Generative AI infused Insights

Copy: The analytical representation of the data is summarized to provide text insights for the configuration data. This is useful to discover hidden insights in data and also point out possible missing configurations (like NULL values). The user has the capability to select the dashboard per functional area (Finance, Sales & Distribution and Materials Management) and view the text insights

Extracts Master Data Configuration from SAP ERP Systems

The first step of SAP configuration data extraction from SAP ERP systems (ECC/S4) involves copying a set of data files (SAP transports) into customer system and extracting the SPRO configuration data from the Cockpit. The user has an option to choose the function areas and extract the XML data, which is then ingested into a relational database (MySQL). This relational data is used to generate the analytical insights.

Conclusion:

IBM Intelligent Insight for SAP Solutions is a specialized tool for transition engagements, providing functional consultants an analytical view of the organization's configuration data. It provides enhanced productivity and efficiency benefits. Firstly, it significantly reduces transition time, enabling quicker support and engagement, thereby saving on Full-Time Equivalent (FTE) resources. Secondly, it generates text-based insights from configuration data, akin to how a consultant would summarize key points but with the speed and accuracy of automation.

In terms of benefits, SAP Intelligent Insight offers an organization-wide view of configuration data without accessing the production system, bypassing delays and confidentiality issues. It integrates an extraction module (for offline ABAP transports) and an analytics module, providing all necessary information in one place. Moreover, the Generative AI Insight module allows consultants to answer system configuration queries instantly without needing to understand the data or wait for content creation, ensuring streamlined transitions and efficient operations for SAP users.

Why IBM

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