GEP SMART™

GEP SMART SAP ADAPTER SAP CONNECT

GEP® INSIGHT DRIVES INNOVATION

The Need

Software ecosystems for today's enterprises typically have an integration component, which is continuously evolving with new standards, protocols and especially now, due to the advent of cloud and cloud-based SaaS solutions.

In an on-premises only ecosystem, integration between systems is either direct or through middleware, depending on the organization's IT policies and architecture principles. This may require use of various standards and formats that are sometimes custom-built, without due attention to reusability, build and maintenance costs.

In an on-premises and cloud-hybrid ecosystem, integration can become even more complex. In many cases, there are third-party SaaS solution providers who have their own standards and formats for integration.

> SMART by GEP also provides an API that customers can use to integrate with the cloud-native procurement platform, through middleware. In this case, the customer or their partner is responsible for the build, maintenance and operation of the integration component on the customer side.

To reduce additional costs and overheads for the customer, and provide more value to customers who use SAP® software, GEP has built a plug-and-play SAP adapter called SMART by GEP SAP ADAPTER.

> SMART by GEP SAP ADAPTER adopts, transforms and transposes data between the SAP® ERP and SMART by GEP systems. It serves as a one-stop shop for mediating data exchange and service delivery, across multiple SAP® instances. SMART by GEP SAP ADAPTER allows customers to eliminate most of the challenges involved in implementation, maintenance and operations.

This fact sheet describes the key characteristics of SMART by GEP SAP ADAPTER, and also highlights its architecture and configurations.

SMART by GEP SAP ADAPTER

GEP SMART SAP ADAPTER is a simple yet effective communication system that sits on top of the SAP ERP, and facilitates all SAP® integration scenarios with GEP SMART. This connector can:

- Extract master data from SAP ERP system and transfer this data to GEP SMART
- Extract transactional data such as purchase requisition, purchase order and invoice, convert it to CXML and upload these documents to GEP SMART
- Pull transactional documents from GEP SMART, convert and upload documents in SAP® software using SAP BAPI™ or IDoc
- Pull ile attachments to transactional documents such as supplier invoice image or PDF and attach these documents on SAP® system transactions

Key Integration Criteria & Considerations

Below is a high-level, three-step process to successfully integrate GEP SMART with SAP® software. It is important to understand the three core business requirements that the integration should support.

STEP 1
UNDERSTAND THE BUSINESS CONTEXT

What data entities are involved?

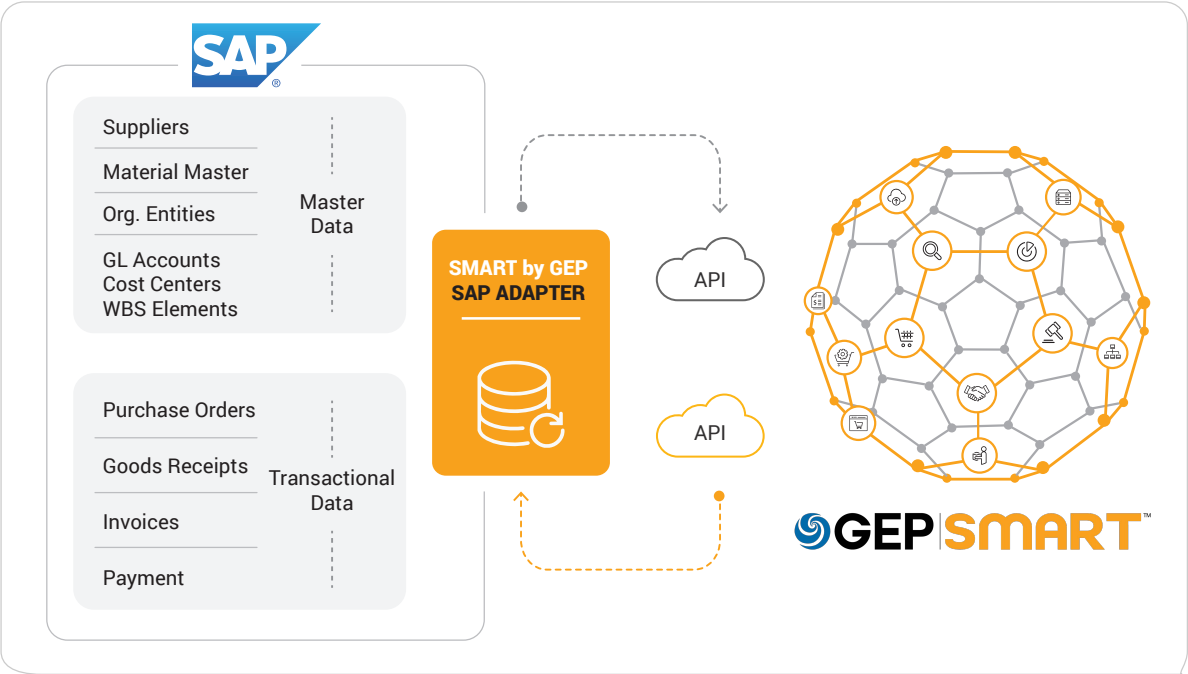
Data entities describe data objects such as master data and transactional data that include company codes, purchasing organizations, plants, suppliers, purchase orders, goods receipts, and invoices.

What actions/tasks need to be performed?

Tasks describe the activities that are being performed with these objects such as transformations, validations, creations, updates and deletions.

What are the timing requirements?

Timing describes if the tasks are performed synchronously or asynchronously, whether they are batch, event driven and how frequently they are performed.

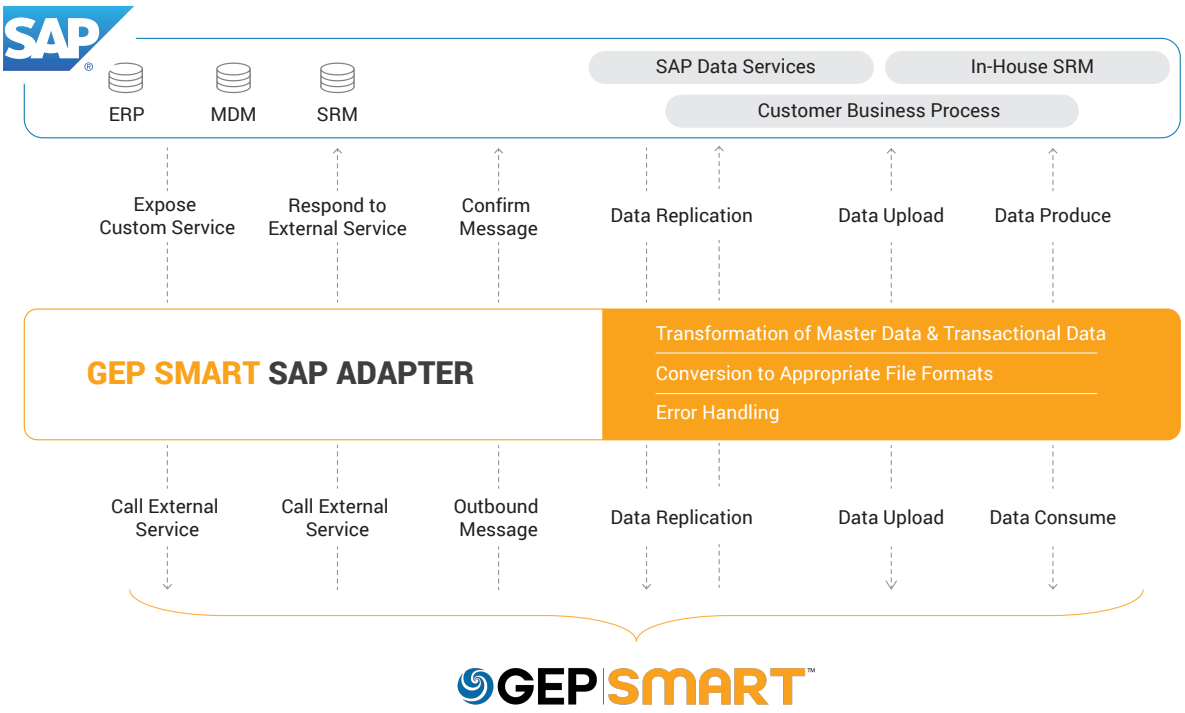


STEP 2
UNDERSTAND THE INTEGRATION LAYER

GEP SMART SAP ADAPTER uses Secured Services Layer Integration. This is a robust approach as it provides simple access to modern APIs such as enterprise services from SAP and SMART APIs from SMART by GEP. For integration at the service layer, applications are connected to each other through APIs that provide an abstraction layer and a series of rules for how the data is presented and shared with SMART by GEP.

SMART by GEP SAP ADAPTER can help connect SAP® software to SMART by GEP by directly integrating with APIs, thus eliminating the need for middleware. However, SMART by GEP SAP ADAPTER is also equipped to connect to a middleware solution, if required. This connector uses SAP ABAP® Proxy Objects to orchestrate communication with SMART by GEP and helps customers to be flexible and make in-house middleware solutions mandatory.

GEP SMART SAP ADAPTER
SAP CONNECT



In the SAP Exchange Infrastructure environment, GEP SMART SAP ADAPTER can (using proxy) send and receive messages from/to the integration server. WAS 6.20 with XI2.0 add-on is the minimum configuration to support SAP ABAP proxies used in SMART by GEP SAP ADAPTER. Select configuration steps are required to facilitate the use of GEP SMART SAP ADAPTER in SAP ERPs.

Along with this, the following configuration is required on the application side to enable proxy connection:

- **HTTP Connection**

This connector has inbuilt objects created such as the namespace, data type, message type, message interface, mapping program and mapping interface. Implementing class, developed structure objects for master data, transactional data and table types are firsthand available with SMART by GEP SAP ADAPTER. Proxies in SMART by GEP SAP ADAPTER are generated from the WSDL description of interface objects and have same attributes as the message interface.

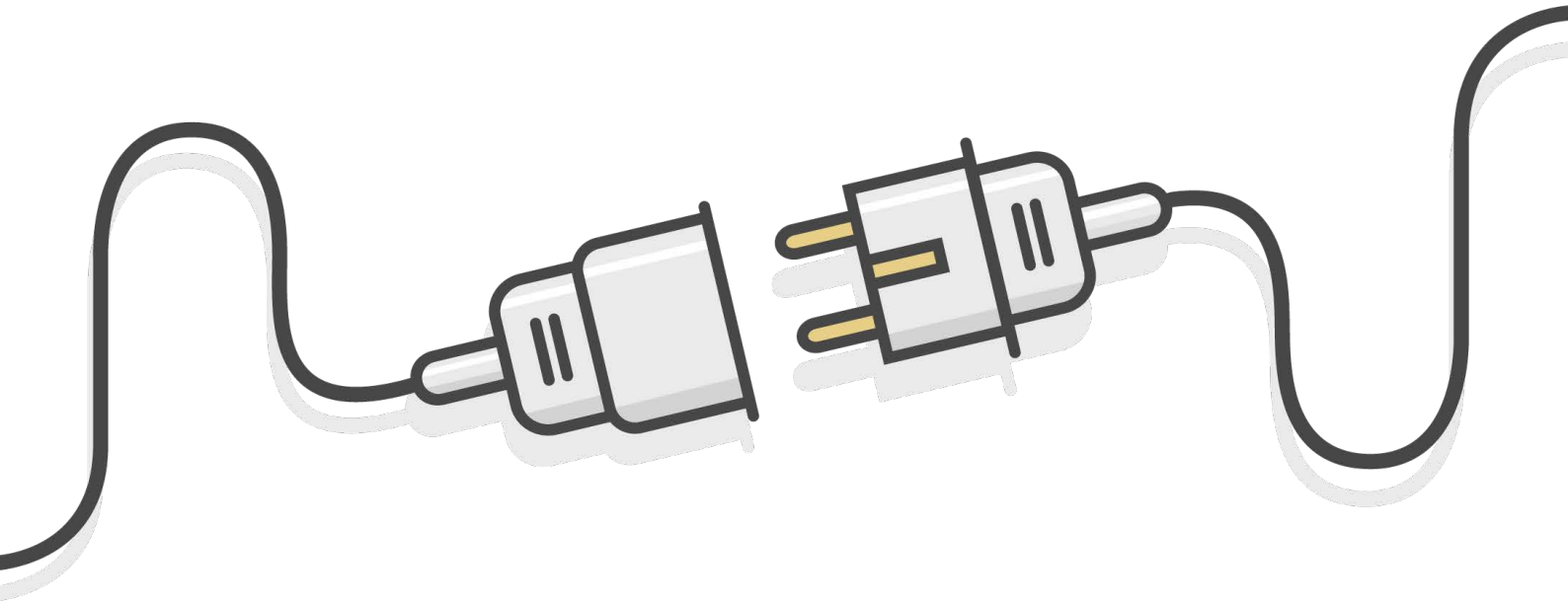
Client Proxy: SMART by GEP SAP ADAPTER is built on client proxy. It uses SAP ABAP client proxies that are generated from outbound message interface and used to send message from SAP ERP to SMART by GEP. Client proxy generation creates an SAP ABAP class with the method EXECUTE_SYNCHRONOUS/EXECUTE_ASYNCHRONOUS that depends on the mode of the interface. Along with the class, it also generates structures and table type with specified name prefixes.

The proxy generation retrieves the WSDL description of the interface from the Integration Repository using HTTP. The address of the appropriate server is taken from the exchange profile. Queries to the repository are subject to authentication. User tokens are used or authentication and domain access. Information used to navigate from the SAP ABAP Proxy Generation to the initial page of the Integration Builder is also taken from the exchange profile.

STEP 3
SELECTING AN IMPLEMENTATION APPROACH

When defining an implementation approach there are three options — build the interfaces from scratch using integration toolsets, build the mapping structures in the middleware solution or implement a working solution. GEP SMART SAP ADAPTER eliminates the need to build.

"<BAPI, ABAP> are the trademarks or registered trademarks of SAP SE in Germany and in several other countries."



GEP helps global enterprises operate more efficiently and effectively, gain competitive advantage, boost profitability, and maximize business and shareholder value.

Fresh thinking, innovative products, unrivaled domain and subject expertise, and smart, passionate people — this is how GEP creates and delivers unified supply chain solutions of unprecedented scale, power and effectiveness.

Named a Leader in Gartner Magic Quadrants, Winner for Best Procurement Software and Best P2P Provider at the World Procurement Awards, Best Procurement Consultancy at CIPS Supply Management Awards, and Best Provider at the EPIC Procurement Excellence Awards, GEP is frequently honored as an innovator and leader in source-to-pay direct and indirect procurement software by Gartner, Forrester, IDC, Procurement Leaders, Spend Matters and CPO Rising.

GEP is also ranked leader in managed procurement services (procurement outsourcing) by Everest Group, NelsonHall, IDC, ISG, HfS and IAOP. In addition, the primary research firm in the management consulting sector, ALM Intelligence, ranks GEP leader in procurement strategy and supply chain consulting.

With 21 offices and operations centers in Europe, Asia and the Americas, Clark, New Jersey-based GEP helps enterprises worldwide realize their strategic, operational and financial objectives. To learn more about our comprehensive range of software and services, please visit www.gep.com.

GEP SMART™

GEP SMART is an AI-powered, cloud-native software for direct and indirect procurement that offers comprehensive source-to-pay functionality in one user-friendly platform, inclusive of spend analysis, sourcing, contract management, supplier management, procure-to-pay, savings project management and savings tracking, invoicing and other related functionalities.

GEP NEXXE™

GEP NEXXE is a unified and comprehensive supply chain platform that provides end-to-end planning, visibility, execution and collaboration capabilities for today's complex, global supply chains.

Built on a foundation of big data, artificial intelligence and machine learning, GEP NEXXE is next-generation software that helps enterprises make supply chain a competitive advantage.

100 Walnut Avenue, Clark, NJ 07066 | P 732.382.6565 | info@gep.com | www.gep.com

Clark, NJ | Houston | Chicago | Toronto | Mexico City | San Jose, Costa Rica | São Paulo | Dublin | London
Amsterdam | Frankfurt | Prague | Pretoria | Mumbai | Hyderabad | Kuala Lumpur | Singapore | Shanghai | Sydney

Copyright © 2020 GEP. All rights reserved.