Introducing SAP Integration Advisor
A Learning System for Faster Exchange of Business Data in Heterogeneous Landscapes

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Agenda

SAP Integration Strategy in context of the Intelligent Enterprise

Integration Advisor at a Glance

Demo

Further Information

Questions & Answers
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SAP Integration Strategy for the Intelligent Enterprise
SAP’s Integration Plan in the Cloud

1. Big Picture for the Integrated Intelligent Suite
2. End-to-End Business Process Integration along Suite Qualities
3. Business Technology Platform incl. SAP Cloud Platform Integrate Suite
4. Roadmaps for End-to-End Business Processes
SAP Integration Strategy for the Intelligent Enterprise

Key Integration Principles

1. OUT-OF-THE-BOX INTEGRATION
   SAP to SAP
   Integrated mission-critical business processes

2. OPEN INTEGRATION
   SAP to Non-SAP
   APIs and 160+ connectors for third parties & extensions

3. AI-DRIVEN INTEGRATION
   Artificial Intelligence
   Simplified integration development
SAP’s Integrated Intelligent Suite
Suite Qualities facilitate seamless business process integration across SAP’s portfolio and third party applications.
SAP Cloud Platform Integration Suite
Leverage Pre-Packaged Integration Flows and Openness to Third Party Application

SAP C/4HANA
SAP S/4HANA Cloud
SAP Ariba
SAP SuccessFactors
SAP Fieldglass
SAP Concur
More

SAP CLOUD PLATFORM

SAP API BUSINESS HUB
1300+ prepackaged integration flows | API-first | Workflow | Open connectors to 160+ third-party cloud apps | Governance

CLoud INTEGRATION
End-to-end process integration

DATA INTELLIGENCE
Data integration, orchestration, and AI

INTEGRATION ADVISOR
AI-based integration and metadata management

API MANAGEMENT
Expose your data as APIs, manage the end-to-end lifecycle

ENTERPRISE MESSAGING
Sense and respond to business events

OPEN CONNECTORS
Accelerate connectivity to non-SAP applications

Process Integration
Cloud Connector
Data Integration

Process Orchestration
On-premise middleware

Ground-to-cloud secure tunnel

Data Intelligence
Accelerate and expand the flow of data across enterprise services
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Current Integration Situation

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Questions & Answers
Reality: Integrate APIs/interfaces in heterogeneous landscapes

Each interface has its own complexity

How to connect all these combinations?
Current Situation: Design Time – Manual and Redundant Work

**Functional Specification**
- Interface or Message Implementation Guidelines (MIG) for source and target
- Mapping Guideline (MAG)

**Technical Implementation & Runtime Artefacts**
- Schemas
- Integration tools: SAP AIF
- Scripts: XSLT, JS
- Programming languages: Java, ABAP

**Testing & Correction**
- Manual comparison of results with functional specification

**Deployment**
- Middleware (Runtime)
- Backend (Implementation): S/4, C/4

**Efforts**
- 50%
- 15%
- 30%
- 5%

**Integration experts**
- Usually: business expert
- Currently: integration expert

**Run PI**
- SAP S/4, SAP C/4, SAP AIF

**Business domain experts**
- Integration experts

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Examples of Guidelines

5. Invoice Specifics

5.4. Aruba FL Invoice Validation

The Aruba FL will perform the following checks:

- Invoice lines that are not valid COA data elements (e.g., items with line numbers greater than 1,000)

In addition to the above, the Aruba FL will perform the following checks:

- Invoice against PO: Invoices that are not against a PO will be rejected.
- Invoice with a change: Invoices with a change will be rejected.
- Invoice with an error: Invoices with errors will be rejected.
- Invoice with an address: Invoices with a missing or invalid address will be rejected.
- Invoice with a cost center: Invoices with a missing cost center will be rejected.
- Invoice with a payment term: Invoices with a missing payment term will be rejected.
- Invoice with a department: Invoices with a missing department will be rejected.

Ryder Specific Validation

Ryder invoices can be validated:

- Invoice against PO: If the invoice is not against a PO, it will be rejected.
- Invoice with a change: If the invoice has a change, it will be rejected.
- Invoice with an address: If the invoice has a missing or invalid address, it will be rejected.
- Invoice with a cost center: If the invoice has a missing cost center, it will be rejected.
- Invoice with a payment term: If the invoice has a missing payment term, it will be rejected.
- Invoice with a department: If the invoice has a missing department, it will be rejected.

Segment Description

ORDER MAINTENANCE CENTER

4 SEGMENTS DESCRIPTION

Invoice Line: Line 1 - MESSAGE HEADER

UNIT: M1 - MESSAGE HEADER

This segment is used to identify and specify a message.

SGR: M1 - Segregation of message

This segment is used to specify the type of functional segment number.

DTN: M1 - Document number

This segment is used to specify the date of the invoice.

SG2 - M2 - NAD-F1053

A group of segments identifying names, addresses, delivery schedule.

NAME: M1 - Name and address

This segment is used to identify the trading partner identification of the buyer and supplier of goods and services. Additionally, the buyer of the invoice and the invoice is buying and supplying parties. The consignee or delivery address is the buyer.

FI-C1: Financial institution information

A segment identifying the financial institution and related buyer and seller necessary parties.

SGG - M1 - RTF-OTM

A segment group for giving references only relevant to the invoice.

BFP - M1 - Reference

This segment is used to identify additional reference data.

BSG - M1 - CUR-OTM

A group of segments specifying the currency and related information. This data might be used in national as well as international transactions.

CUX - M1 - Currency

This segment is used to specify currency information for the invoice.

SG1 - M1 - PAT-OTM

A group of segments specifying the terms of payment.
Technical Implementation: Message Mapping

Graphical Technical Mapping

Transformation Scripts (Groovy, XSLT)
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The Integration Advisor Approach

Integration Advisor

Functional Specification
Message Implementation Guidelines (MIG) for source and target
Mapping Guideline (MAG)

Testing & Correction
Embedded in guideline editors

Runtime Artefacts
Schemas
Scripts
Programming languages

Technical Implementation & Deployment
Middleware (Runtime)
Backend (Implementation)

Business domain experts
60%

Integration experts
80%

~ Savings
30%

APIs
S/4 On-Premise
C/4

Standards & Libraries
SAP SOA InvoiceSend
SAP IDoc
INVOICE03
Third Party API Invoice
SAP OData API SUPPLIERINVOICE
cXML InvoiceRequest
Concur REST API Invoice
CSV Invoice
OAGIS GetInvoice
ASC X12 810
Proprietary WSDL
UN/EDIFACT INVOICE

ML
Propose
Contribute

Integration Knowledge Graph

Integration Content

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Collaborative Learning and Automation
SAP Cloud Platform Integration Advisor at a Glance

One stop shop
- One tool for all phases of A2A/B2B/B2G integration projects

Wikipedia like
- All necessary information on single place

Proposal service
- Machine learning using crowd sourced learnings

Business oriented
- Addresses business domain experts

Community collaboration
- Common working on integration content

Agnostic
- Independent of runtime and platform technologies

Automatic generation and deployment
- Documentation and runtime artifacts
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Benefits

Provides benefits to the user in all phases of integration projects

- Focus on guidelines, and specifications + automatic generation of runtime artefacts
- Proposal service, use and start with what is proposed
- Central management system – documentation in one place

This facilitates

- Lower cost for implementation
- Higher flexibility
- Higher consistency
- Better transparency
- Reduce redundant work and capabilities
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Integration Advisor is generally available

- Available with SAP Cloud Integration Suite Enterprise Edition or as SAP CPEA license in combination with other Cloud Integration Suite license

Target audience are the business domain experts who are responsible for guidelines/specifications

- In specific (integration) departments, partners or SAP Intelligent Delivery Group

SAP Intelligent Delivery Group plans a fixed price service using Integration Advisor

Customers like Endress & Hauser already using Integration Advisor for all their B2B scenarios
Interest?

Workshops, PoCs, ramp-up trainings, licenses, further questions or projects, contact:

- Marco Ertel (PM Cloud Integration Suite) – marco.ertel@sap.com
- Jürgen Tötschinger (Integration Advisor Evangelist) for PoCs and workshops – juergen.toetschinger@sap.com
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Thank you.

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