



Best Practices Salesforce Integration & Error Handling with SAP Cloud Platform Integration

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Agenda

- **Introduction cbs Corporate Business Solutions**
- **Salesforce Integration**
- **Best Practices Error Handling with CPI**

Introduction cbs Corporate Business Solutions



One Corporation

Landscape Transformation

Globalization

s.m.a.r.t. 



End-to-End Digital Enterprise Transformation Services

Management Consulting

Project Management

Business Process Consulting

SAP Application Consulting

SAP Technology Consulting

SAP Application Management



Digital Supply Chain Excellence



Planning

Execution

GTS

CRM / CX

MDM



Finance & Controlling

Business Intelligence | Real Time Reporting

Digital Architecture & Technology

Cloud Solutions

SCP, HANA

Enterprise Integration

UX / Fiori

Basis & Security

We deliver
Corporate Business
Solutions

1,500+
Consultants
in global network

92M
EUR Revenue 2019

600
Employees

17
International Offices



Business Unit Enterprise Integration

Full Service Provider for Integration of hybrid SAP Landscapes

Integration Strategy & Architecture

S/4HANA, Cloud, hybrid Landscapes, IoT, Governance

Project Management

Coordination,
Methodology

Integration Design

Requirement Definition,
End-to-End Design

Interface Implementation

Integration Layer,
Application Integration

Backoffice Enterprise Integration

Continuous Integration Projects, Support & Optimization

> 70

Customers in 2019

> 800

Integration Projects
since 1998

Close Partnership

Long-term collaboration
with customers, SAP and
integration partners

Global Integration Projects & Delivery



Salesforce Integration

Salesforce Integration – Integration Architecture



User Integration

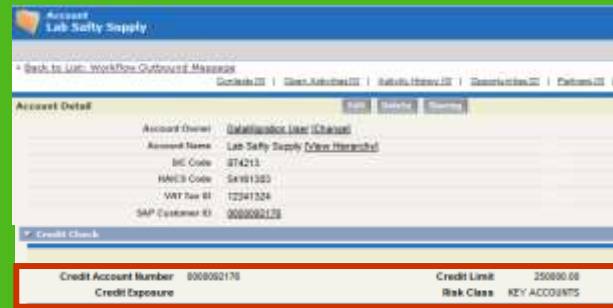


Mashups

Example:
Invoice information



Application Integration



Real-time integration

Examples:
Credit check, order simulation



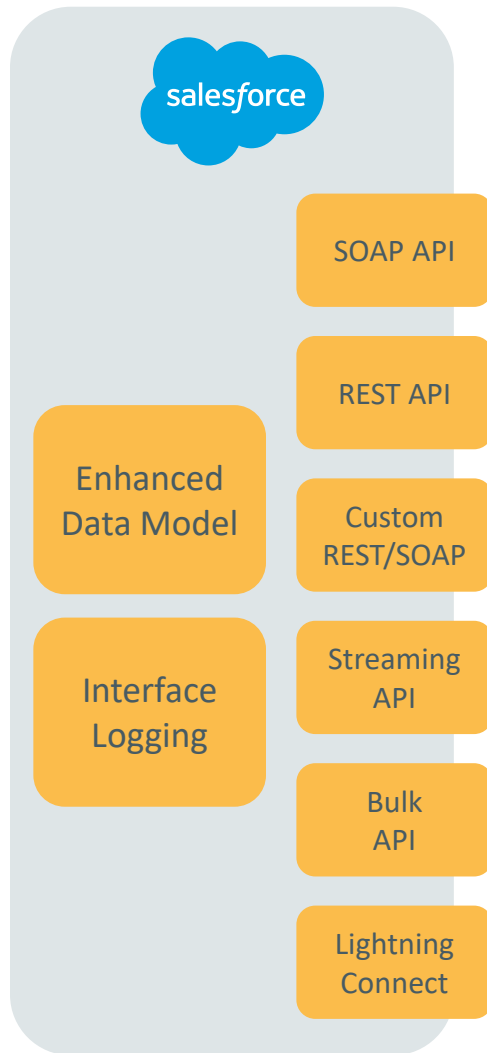
Master Data Integration



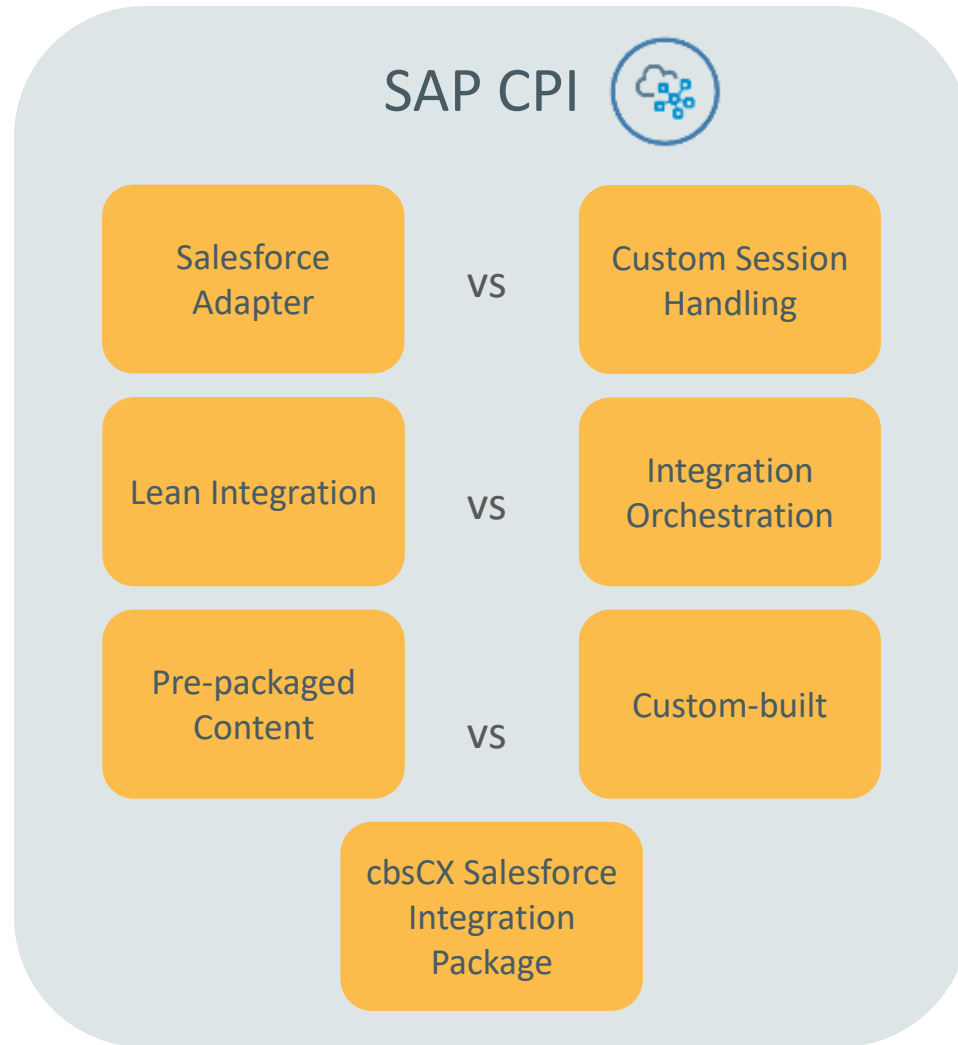
Real-time or batch integration

Examples:
Material master, customer master

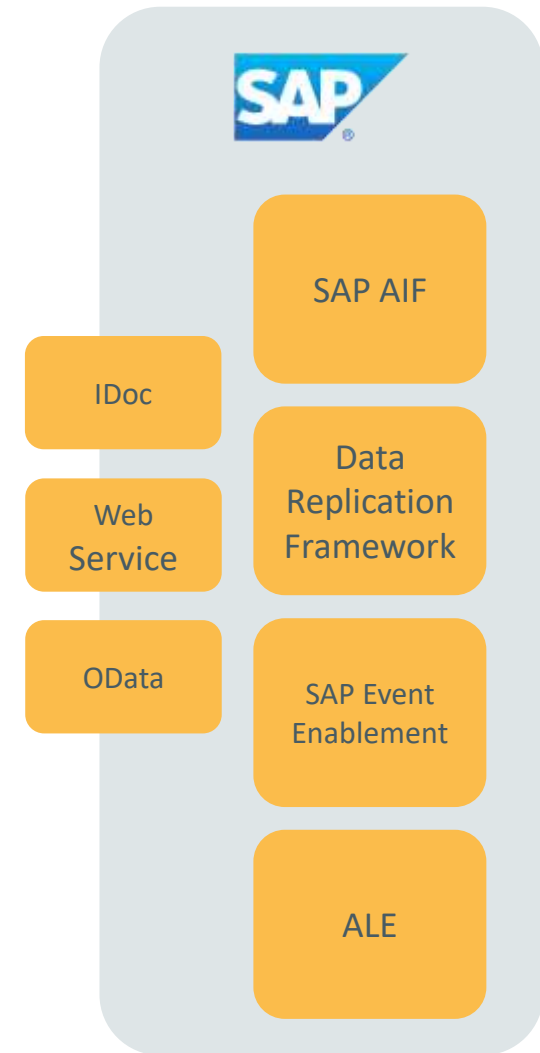
Salesforce Integration – Integration Design Options



Salesforce



Integration Layer






ERP

Salesforce Integration – Pre-packaged Content

Available Integration Packages

- › For S/4HANA, S/4HANA Cloud and ERP
- › Uses Advantco SF Adapter

 SAP S/4HANA Integration with Salesforce ... the integration between SAP S/4HANA and Salesforce . Included within SAP Cloud Platform ...	Published: 5 months ago Version: 1.0 Vendor: SAP
 SAP S/4HANA Cloud Integration with Salesforce ... integration between SAP S/4HANA Cloud and Salesforce . Included within SAP Cloud Platform ...	Published: 5 months ago Version: 1.0 Vendor: SAP
 SAP ERP Integration with Salesforce ... documentation for SAP On-premises and Salesforce integration.	Published: 5 months ago Version: 1.0 Vendor: SAP

Delivered interfaces

- › Replicate sales order to SAP
- › Replicate sales contract to SAP
- › Update account to SAP
- › Receive sales pricing from SAP
- › Receive availability information from SAP
- › Receive sales order history from SAP
- › Replicate sales order to Salesforce
- › Replicate account to Salesforce
- › Replicate product master data to Salesforce

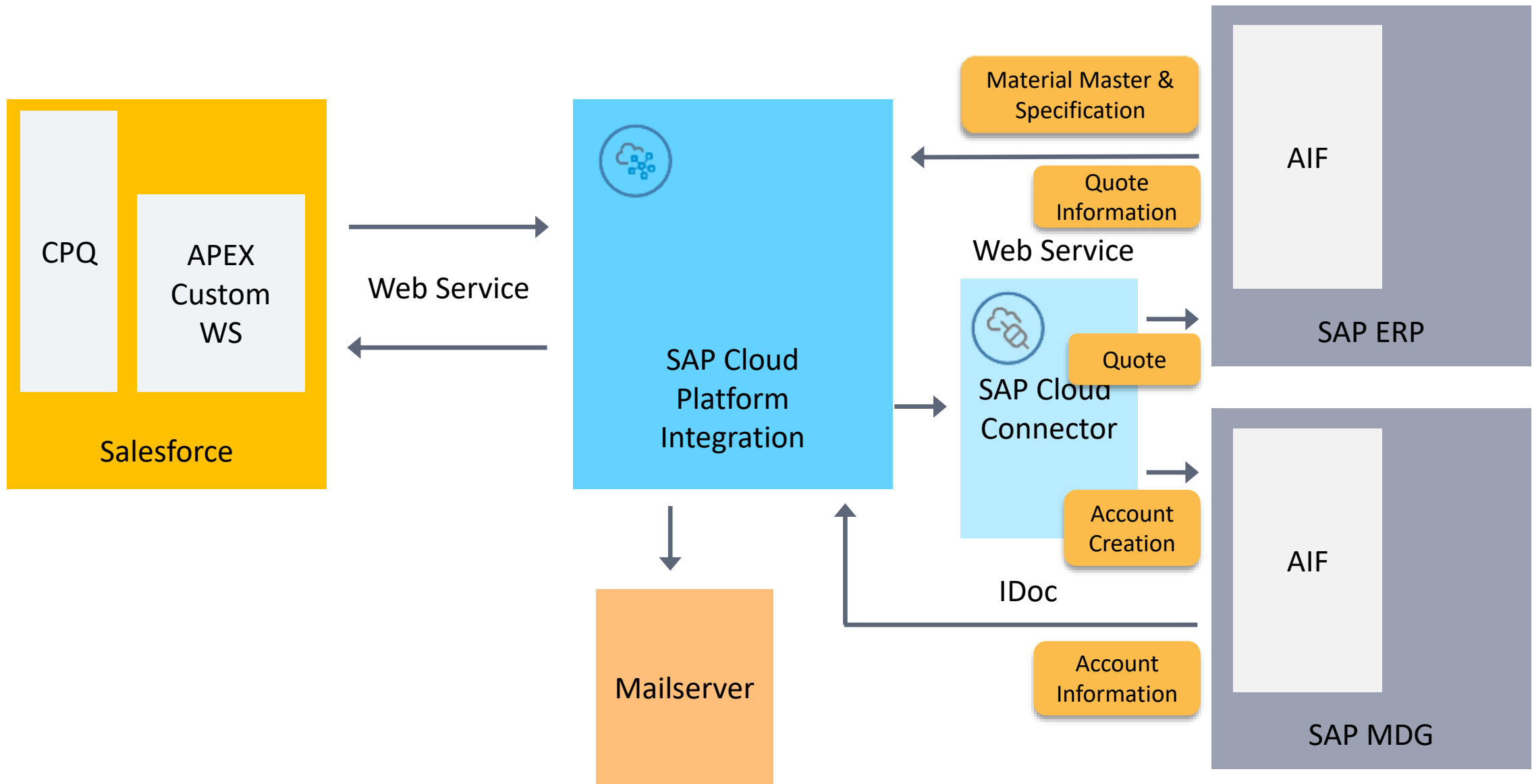
Implementation

- › Guideline also describes field extensions for Salesforce
- › Different technical integration for S/4HANA (OData) and ERP (IDoc, RFC)
- › Uses SOAP API to call and query Salesforce objects

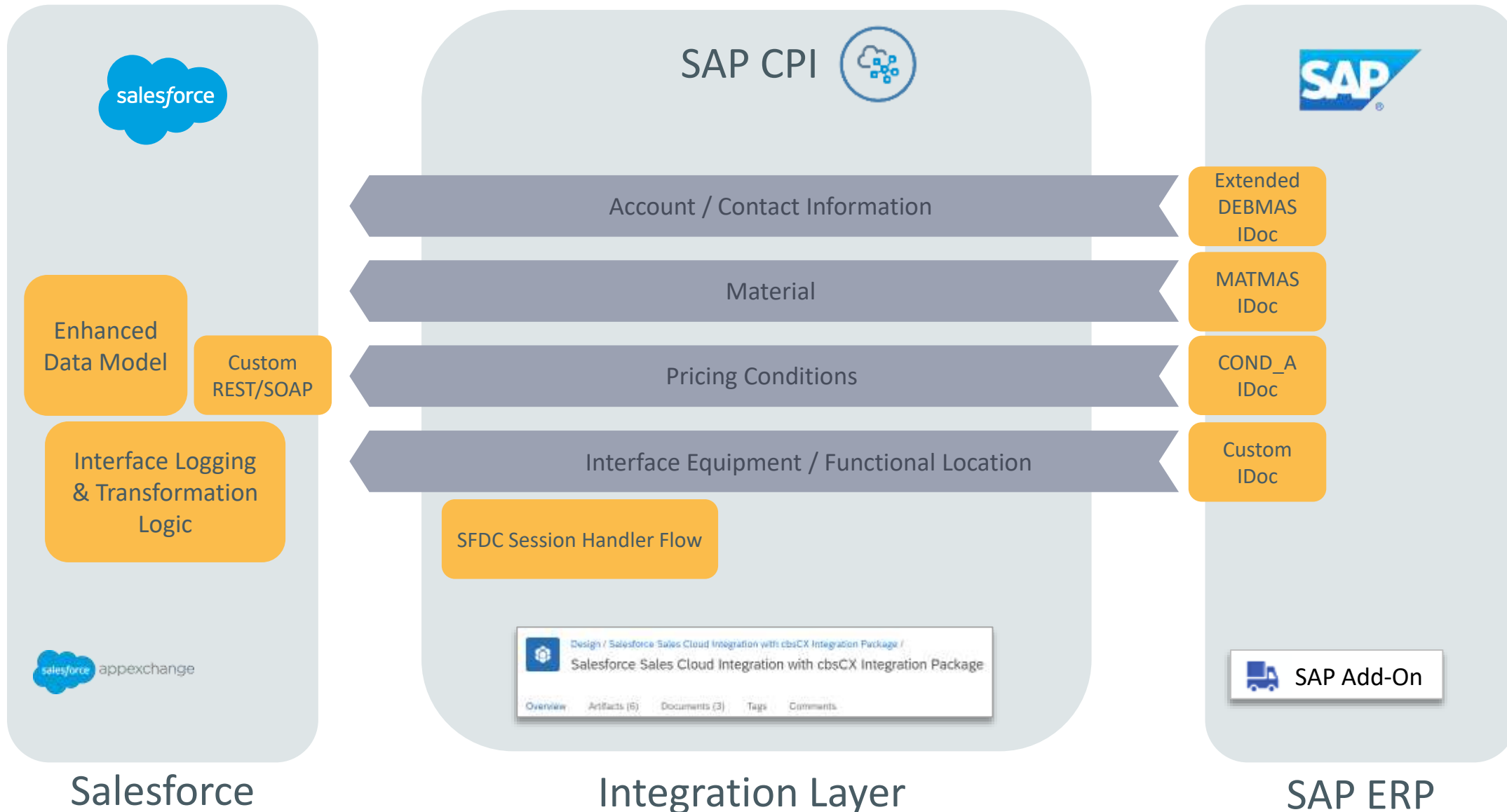
Limitations

- › No coverage of multiple sales organizations and multi backend (SAP, Salesforce)
- › Modification-free extension concept via Process Direct adapter not yet supported
- › Error handling with focus on message processing

Salesforce Integration – Custom-built (Project Example)



Salesforce Integration – cbsCX Integration Package

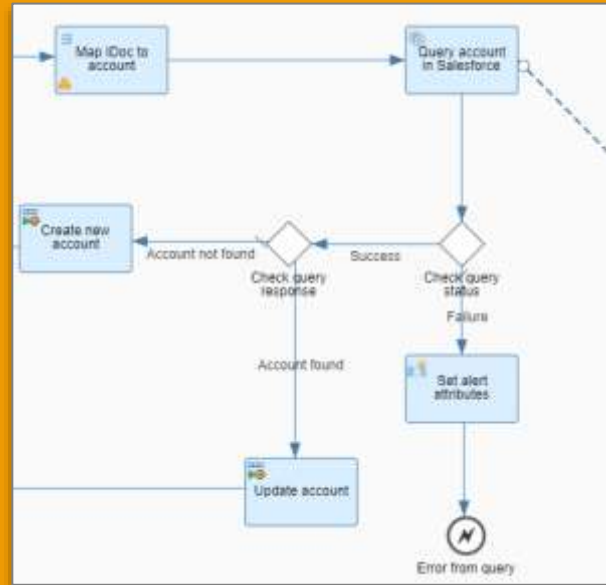


Best Practices Error Handling with CPI

Error Handling with CPI – Design

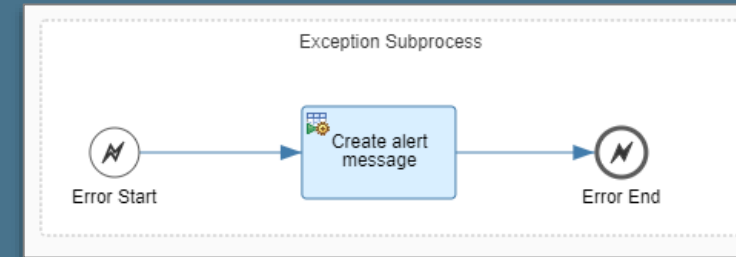
Application-related Errors

- Example:
Quote cannot be created due to wrong sales org
- Error Handling in CPI:
Router artifact
- Restart:
Usually in sender or receiver application



Technical Errors

- Examples:
Target system is down or web service not reachable
- Error Handling in CPI:
Exception subprocess calling local Integration Process to handle exceptions
- Restart:
On CPI (→ queueing) or in sender application



Error Handling with CPI – Technical Error Handling

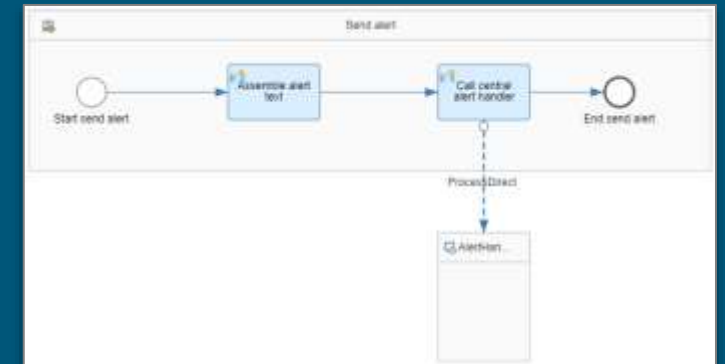
Determine failed flow step

- › via property.SAP_ErrorModelStepID
- › to set descriptive alert message or
- › to perform specific retry logic and/or
- › to put/return message into queue



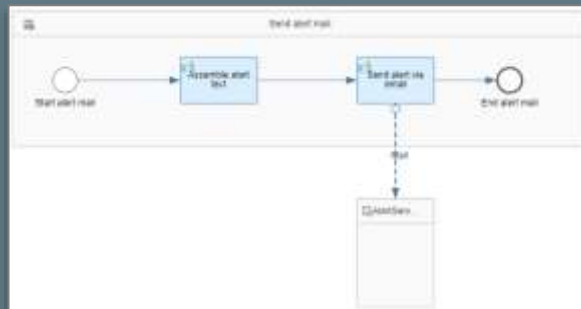
Send alert message via

- › Local Integration Process
- › generic Integration Flow for alert handling



How to process alerts

- › Push alert message from Integration Flow
- › Pull failed messages via CPI monitoring API



Forwarding of alert / error message

- › Sender system (AIF, update IDoc status for ABAP backends)
- › Alert email with configurable receivers
- › SAP Cloud Platform Alert Notification, SAP Solution Manager, SAP Cloud ALM
- › Other monitoring and ticketing solutions, e.g. BMC Remedy, Service Now, Jira Service Desk

Error Handling with CPI – Monitoring

Standard CPI Monitoring

- › use SAP_ApplicationID for content-based search
- › configurable persistence of MPL attachments (limited to 1 GB per day)
- › naming convention should help to group relevant Integration Flows (prefixes, direction)
- › Process Direct adapter results in additional message entry



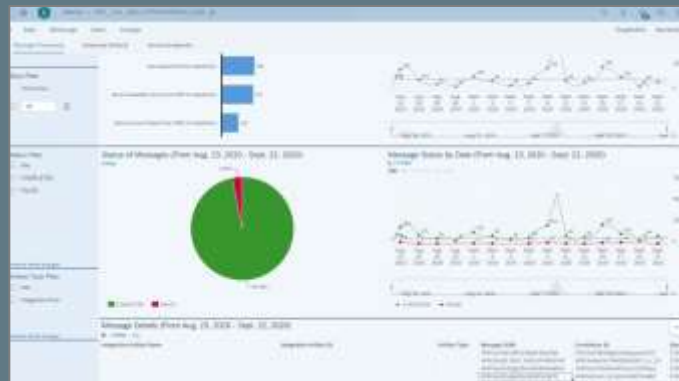
SAP Application Interface Framework

- › display end-to-processing status in connected SAP ABAP backend



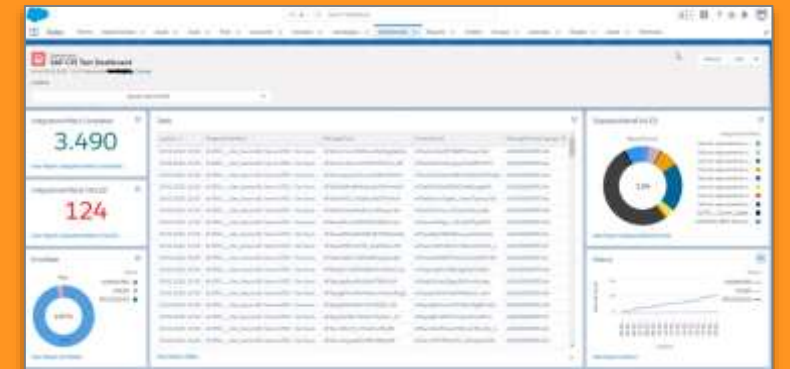
SAP Analytics Cloud

- › Using SAP content package template in the SAC Content Innovation 17 release



Dashboard in Salesforce or Third Party

- › Use of comprehensive CPI OData API



Thanks for your attention!

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