

SAP Process Orchestration – News and Roadmap

Alexander Bundschuh, Product Management

Customer



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Agenda

Where are we today?

Latest features

Roadmap topics



Where are we today?

SAP Process Orchestration

Where are we today?

Data from March 2016

9,100+

licensed customers

7,400+

productive customers

~400

productive customers with
B2B add-on

~190

new **licensed** customers
per quarter

~150

new **productive** customers
per quarter

~40%

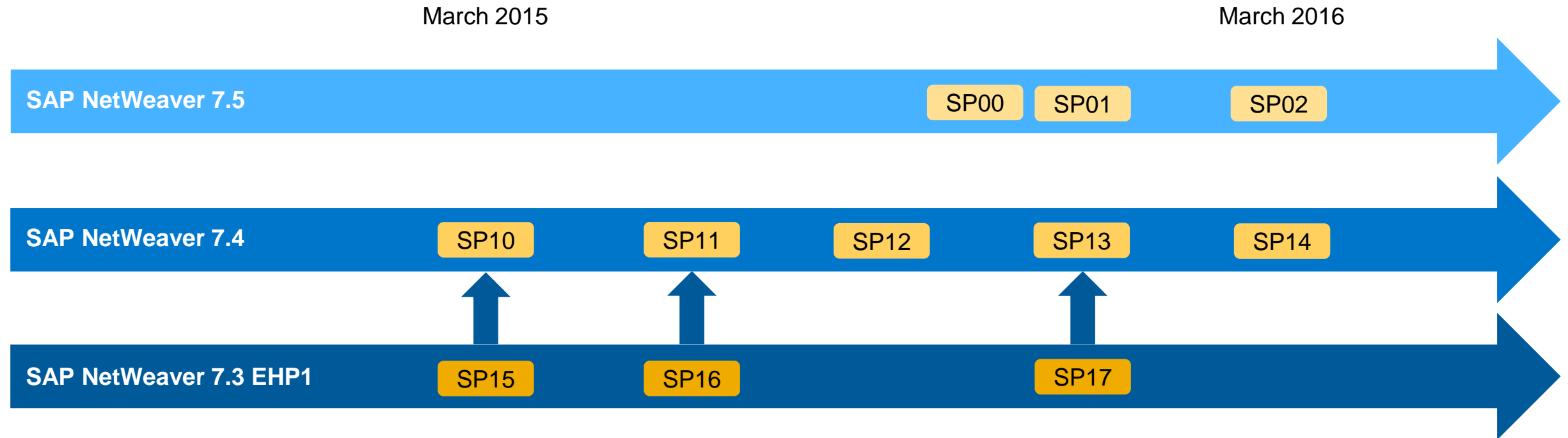
running on **latest releases**
7.31, 7.4 or 7.5

How is SAP Process Orchestration used at customers?

- Integration scenarios: A2A, B2B, EDI, ESB, SOA
- SAP and to a large extent non-SAP integration
- On-premises to on-premises as well as on-premises to cloud
- Human-centric as well as integration-centric business processes across applications
- Replacement of 3rd party middleware and B2B solutions
- Processing of millions of messages per day

SAP Process Orchestration

Continuous innovation



Further enhancements via additional Add-ons

- Business-to-Business Add-on
- Secure Connectivity Add-on
- Connectivity Add-on



Latest features

Developer productivity

Unified Eclipse-based development environment

Unified tooling in Eclipse

- PI, ESR, BPM and BRM development all in SAP NetWeaver Developer Studio
- Based on Eclipse Mars (4.5)
- **Closing major gaps in ESR in Eclipse compared to Java WebStart UI**
[See blog series](#)
- **Improved operation and maintenance of Integration Flows**

Leverage the full power of BPMN

- Model both processes and integration flows in BPMN
- Develop based on standard enterprise integration patterns
- Exchange process models via BPMN 2.0 XML serialization standard
- Seamless integration of SAP PowerDesigner with Process Composer

Transport & Lifecycle Management <ul style="list-style-type: none"> • File transport* • CTS+ transport • Release of Change List via CTS+ • Transport log • Transfer of design objects • Version history 	Mapping <ul style="list-style-type: none"> • Display queue* • Error markers in message mapping • Support for recursive structures • View Enhanced fields in Data Type & Mapping editor • Copy part of expressions • Compare mapping versions • Show value of constant function
Change List & Content Organization <ul style="list-style-type: none"> • Copy of ESR objects** • Import of external definitions** • Transfer / Transfer & Activate other's change list • Close change list without transport • CRUD of Software Component Versions • CRUD of folder / move objects across folders 	Usability <ul style="list-style-type: none"> • Search* • Where-used list** • Expand all, Collapse all options on source/target tree • Easier connectivity of function bricks in mapping • Drag & drop types to Data Type editor • Group nodes without content is not shown in ES browser

* Supported from 7.31 SP 16 / 7.4 SP11 onwards

** Supported from 7.50 SP00 onwards

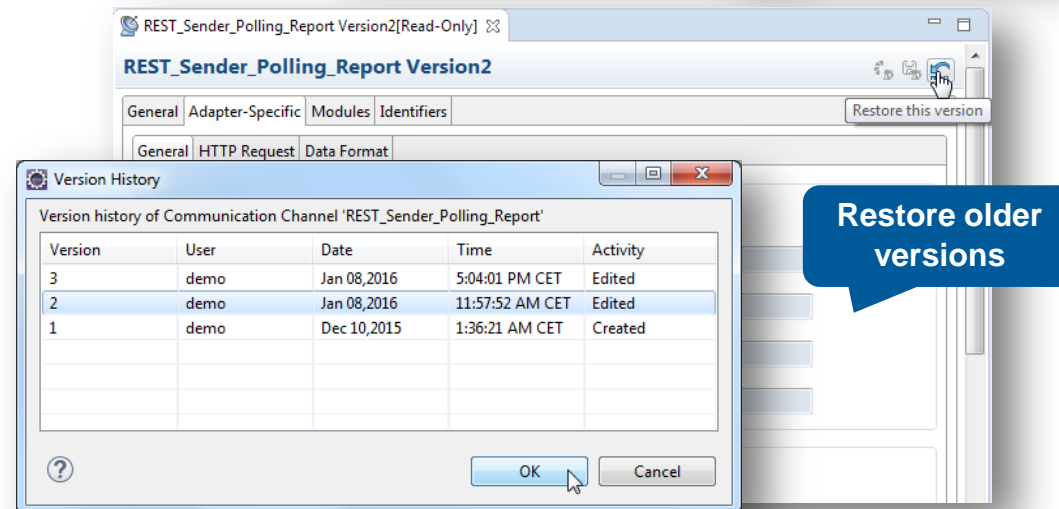
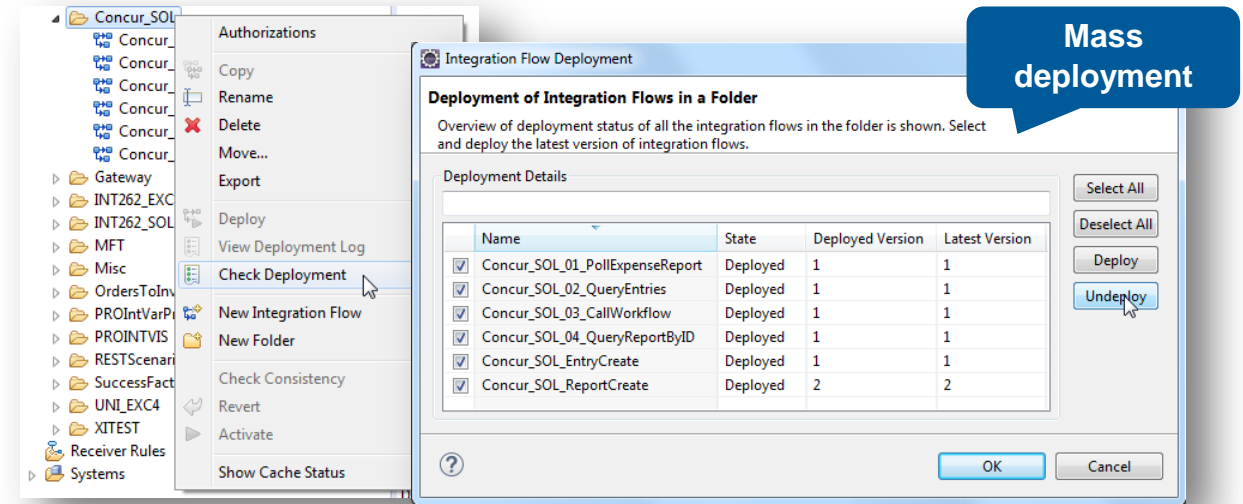
Rest all supported from 7.50 SP02 onwards

Developer productivity

Configuration enhancements

Integration Flow enhancements

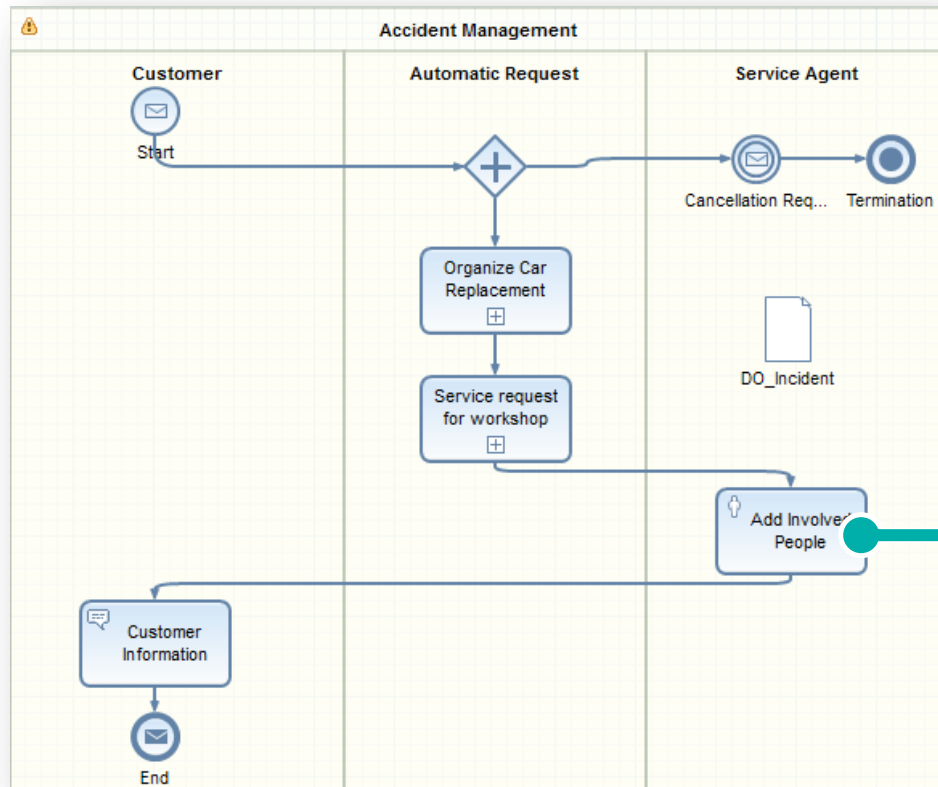
- Enhanced transport capabilities of Integration Flows
 - Exports can be started from context menu
 - Hide deleted objects
 - Automatically deploy after import
- Reload/refresh the assigned referenced channels
- Show deployment status of all integration flows
- Mass deploy or undeploy
- View history and restore older versions



Developer productivity

Generating SAPUI5 Task UIs from process context

Automatic generation of Task UI for a human activity
Support for complex types, collections and faults
Preview of UI in SAP NetWeaver Developer Studio



The screenshot shows the 'Incident Report' task UI, specifically the 'Car Accident Report' form. The form contains the following fields and controls:

- ID:** 56162819a3e411e586de0000068b352
- Date Of Incident:** Dec 15, 2015, 1:00 AM
- Place Of Incident:** Main Road
- Incident Type:** Car to Car Crash
- Is Servicingrequired:** ☒ ON
- Is Paint Required:** ☒ ON
- Reporting Channel:** Call to Service Center
- Description:**

Below the form, there are two expandable sections:

- > Vehicle**
- > Garage**

The 'Involved Persons (2)' section is expanded, showing a table with the following data:

Is Customer	First Name	Last Name	ID	
<input checked="" type="checkbox"/>	Bernd	Mayer	20382690	> ✖
<input type="checkbox"/>	Volkmar	Herbert		> ✖

At the bottom of the form, there are three buttons: 'Approve' (green), 'Reject' (red), and 'Put Back' (grey).

Improved end user experience

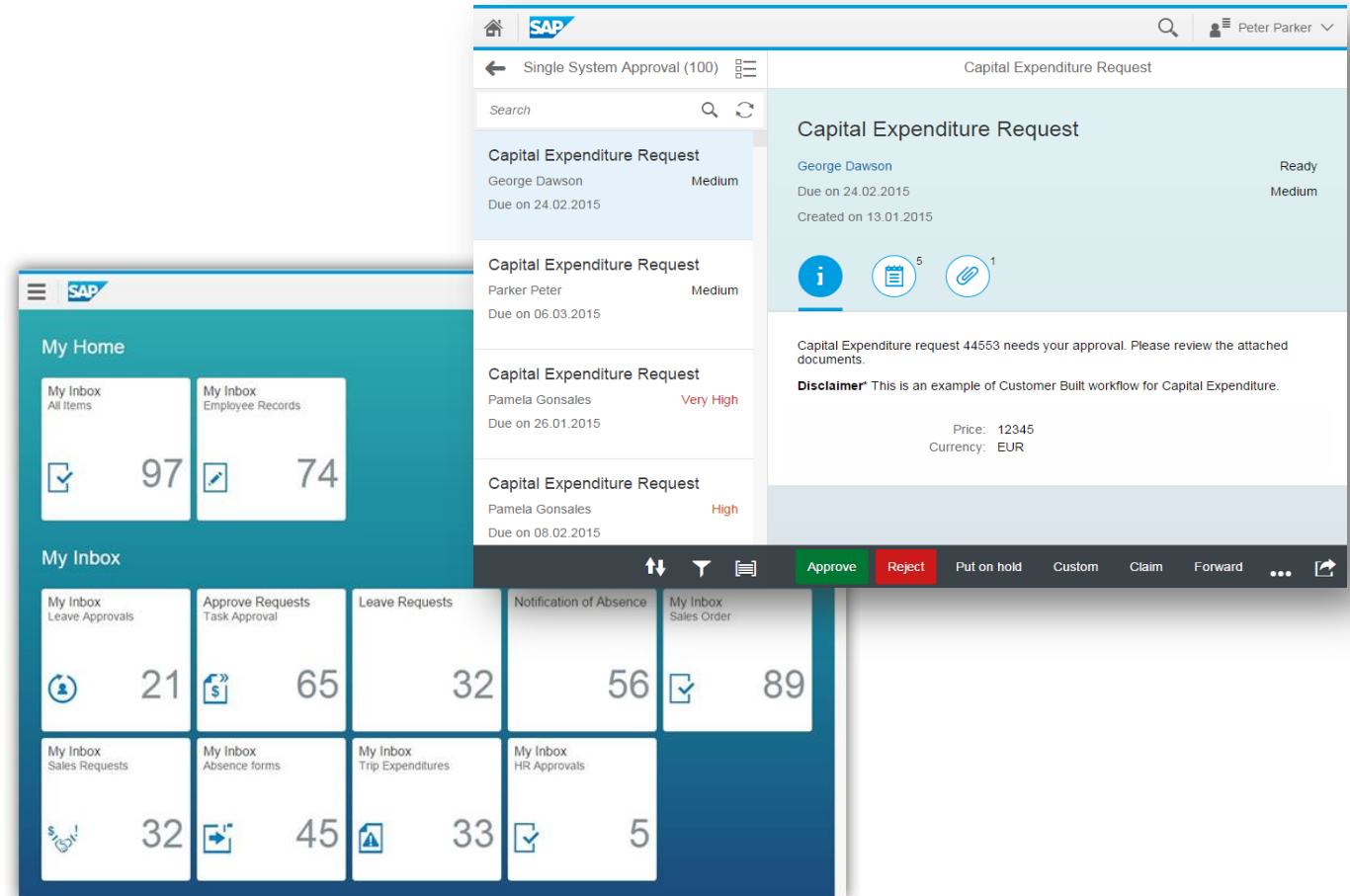
Manage all your tasks from a single inbox

“My Inbox” application in SAP Fiori*

- Manage tasks from different systems
- Fully responsive across different devices
- Integrated into Fiori Launchpad
- Customizable via Fiori extensions
- Supports SAP BPM and SAP Business Workflow tasks

Features

- Sort, group and filter the task list
- Search for individual tasks
- See task details and custom attributes
- Complete task via direct action
- Mass approval
- Navigate to task application
- Attachments and comments
- Forward tasks
- Send task via email or post to JAM
- Manage substitutes



* My Inbox is available separately and not part of SAP Process Orchestration

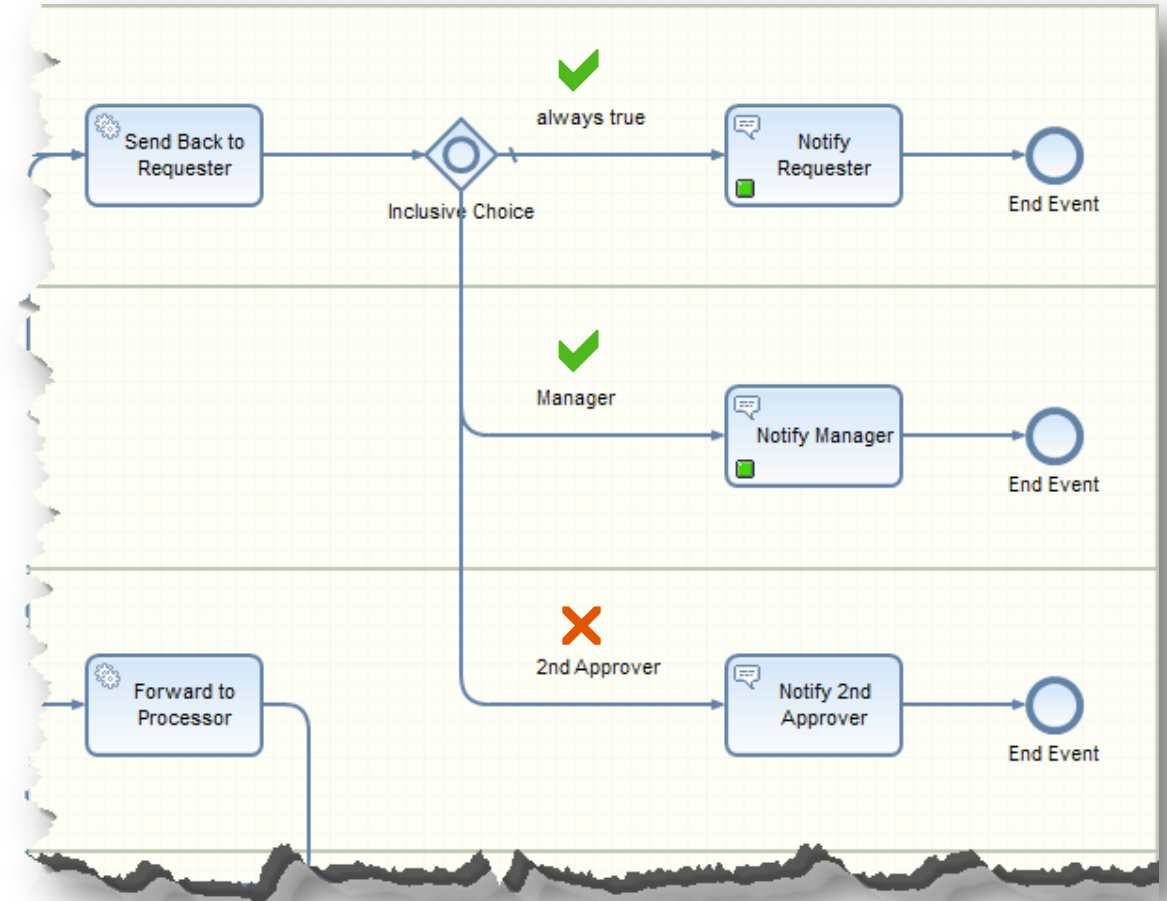
More information at <http://scn.sap.com/docs/DOC-62602>

Developer productivity

BPMN inclusive gateway

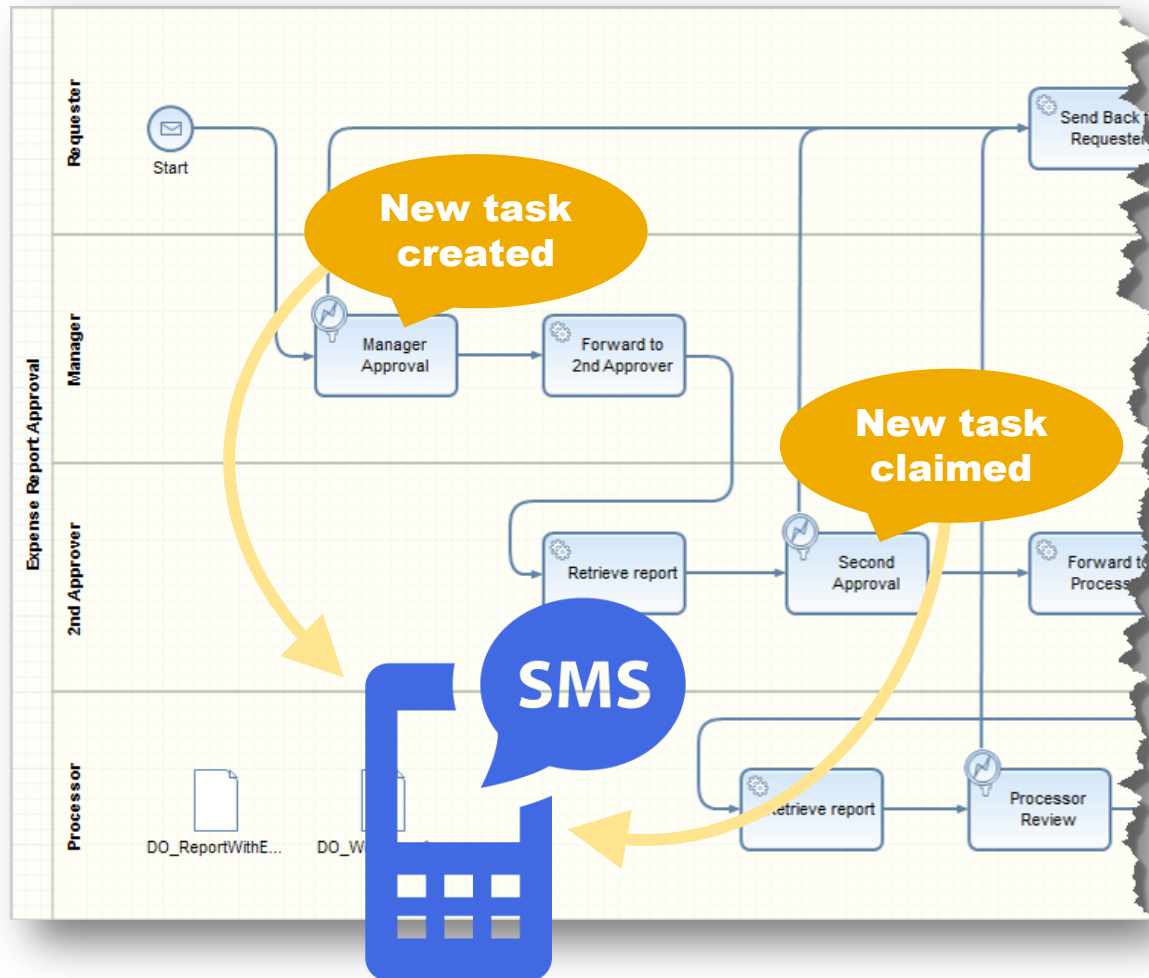
New BPMN shape introduced in Process Composer and supported by process runtime

- Define multiple conditions based on process context data
- Split up token flow into one or more parallel tokens based on the matching conditions
- Merge back via uncontrolled merge, or end with multiple end events



JMS Provider for BPM Events

Access lifecycle events with Push API



SAP BPM provides access to lifecycle events with a Push API

- Register for events on process or task instances
- Receive events for process completion, task creation, etc.
- React accordingly, by e.g. sending notifications (SMS, email, App, etc.)

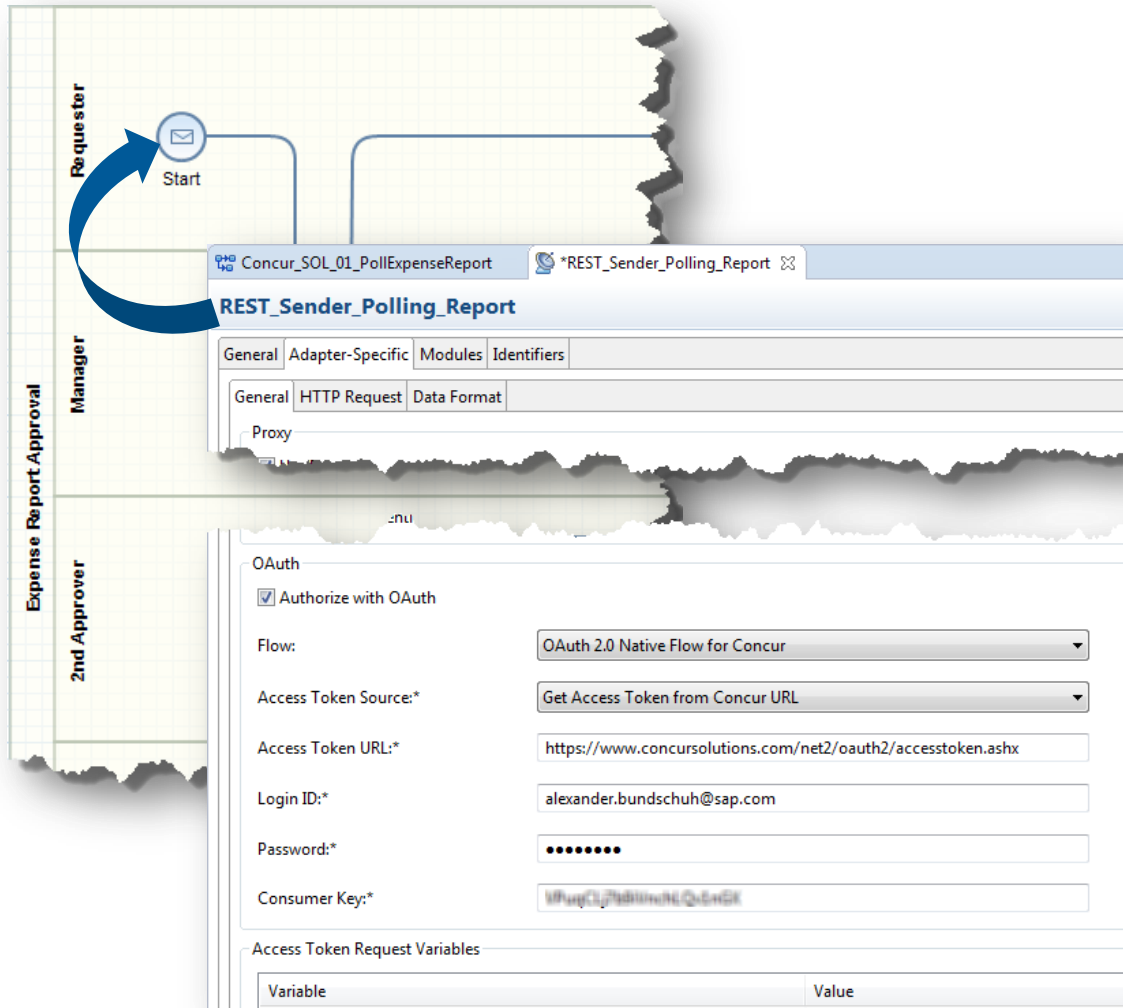
Events are published using Java Message Service (JMS)

- Leverages messaging system in SAP NetWeaver AS Java
- Exchange data without directly connected apps
- Communication is obtained using messages

An application can consume lifecycle events using the Java Public API

Enhanced connectivity capabilities

Consumption and provisioning of RESTful services

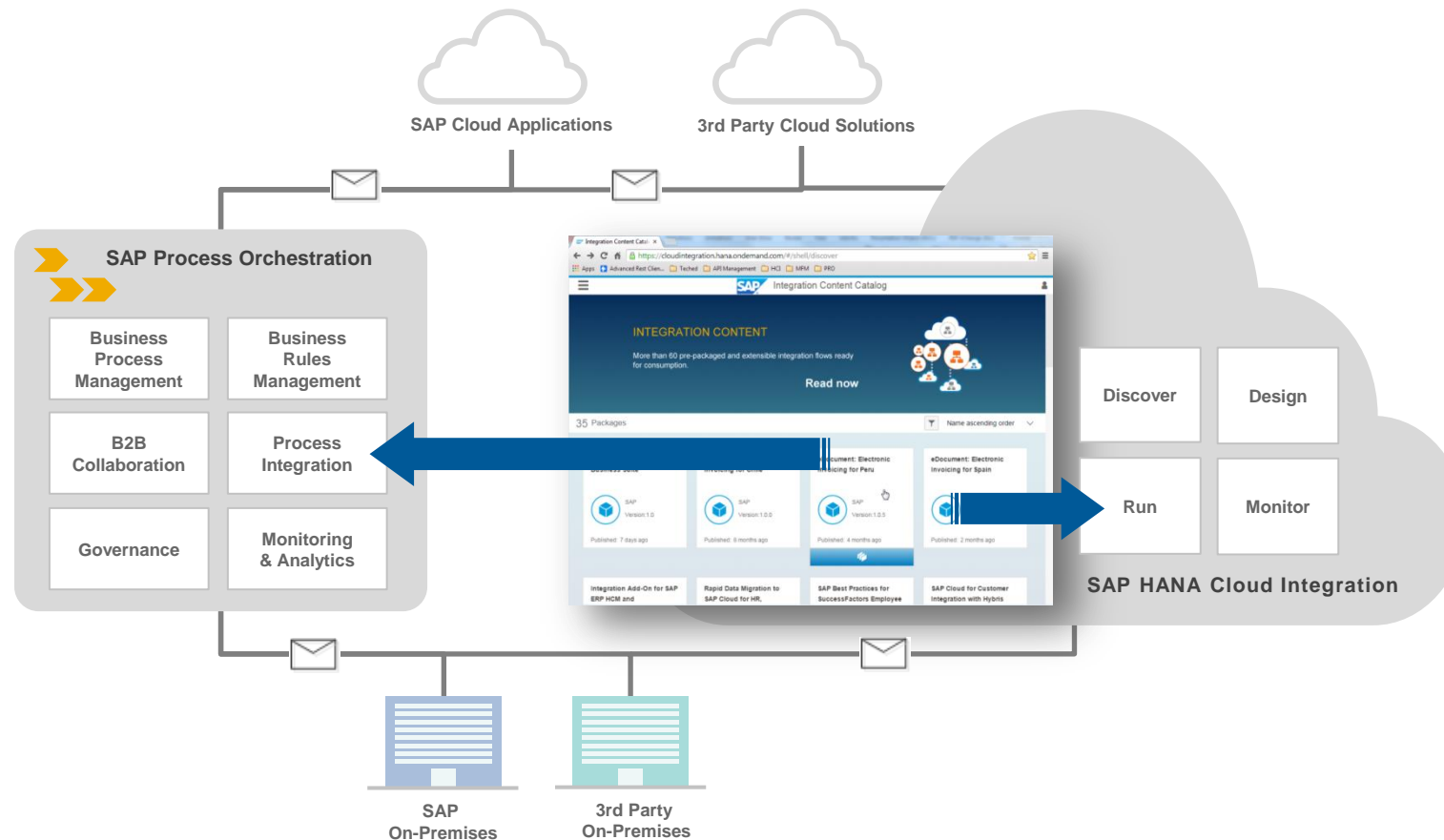


Further enhancements with 7.5 SP01

- Enhanced XML/JSON conversion capabilities: supporting namespaces, array types and data types
- Enhanced custom error handling
- Support for Cross-Origin Resource Sharing (CORS)
- Anonymous access on sender side
- Customizable HTTP result headers on REST sender channel
- Keep HTTP response headers
- Support for Access Control List
- Support for OAuth 2.0 Native Flow for Concur
- Disabling server redirects of HTTP GET calls
- Custom Actions for sender polling when token is missing or empty
- For more details about REST adapter capabilities, see [blog series](#)

Cloud integration content at SAP Process Orchestration

Content re-use across SAP's integration platforms



Further Enhancements with 7.5 SP02

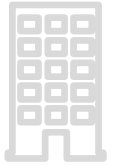
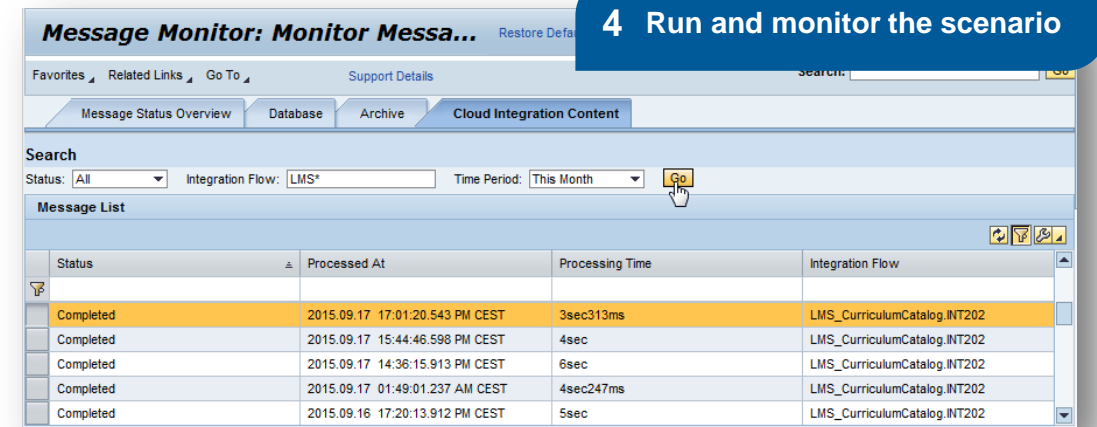
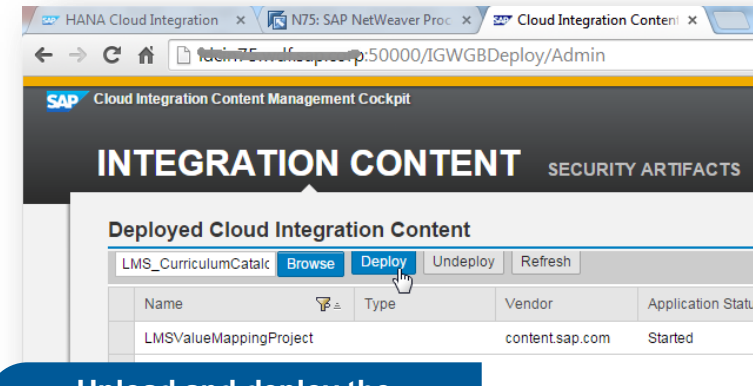
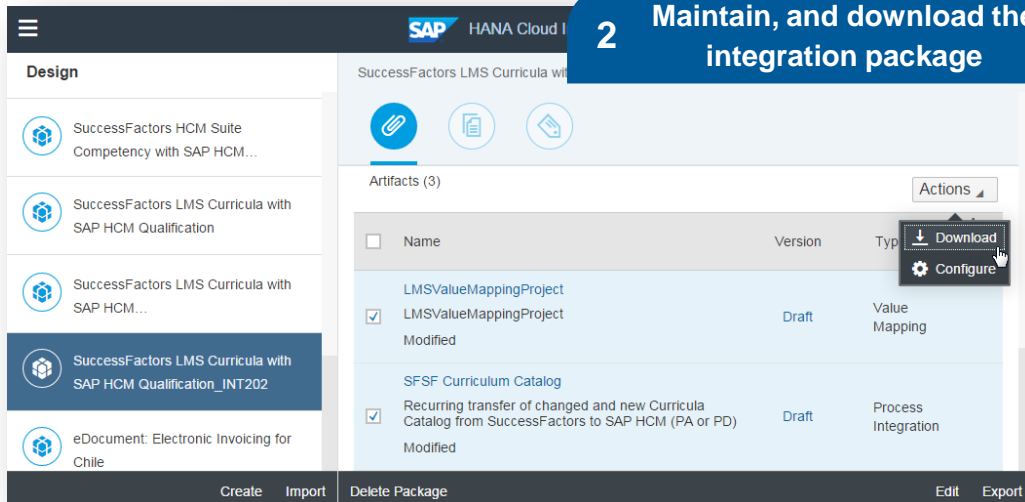
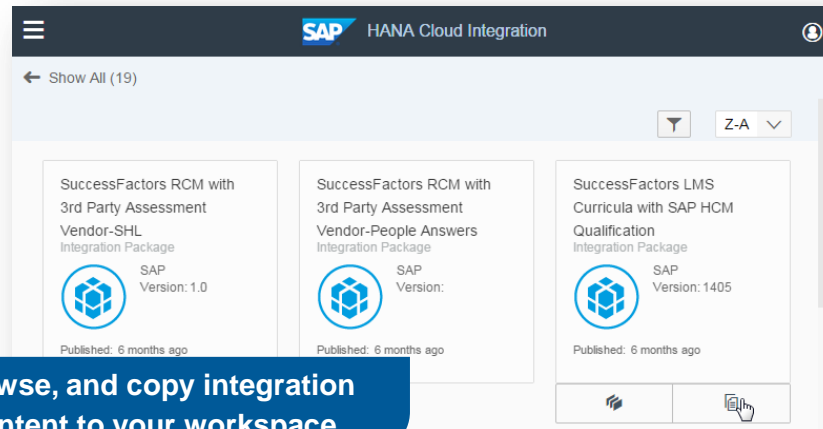
- HANA Cloud integration capabilities as documented in [Supported Components, Adapters, and Events](#)
- Search cloud integration content messages based on message GUID
- Show cloud integration content messages in message overview monitor
- Audit log has been enhanced to show deployment and un-deployment of cloud integration content
- New scheduler jobs for cleaning up message processing log (MPL) store, data store and message store

Flexible deployment options

Content re-use across SAP's integration platforms – step-by-step



Cloud



On-Premise

Developer productivity

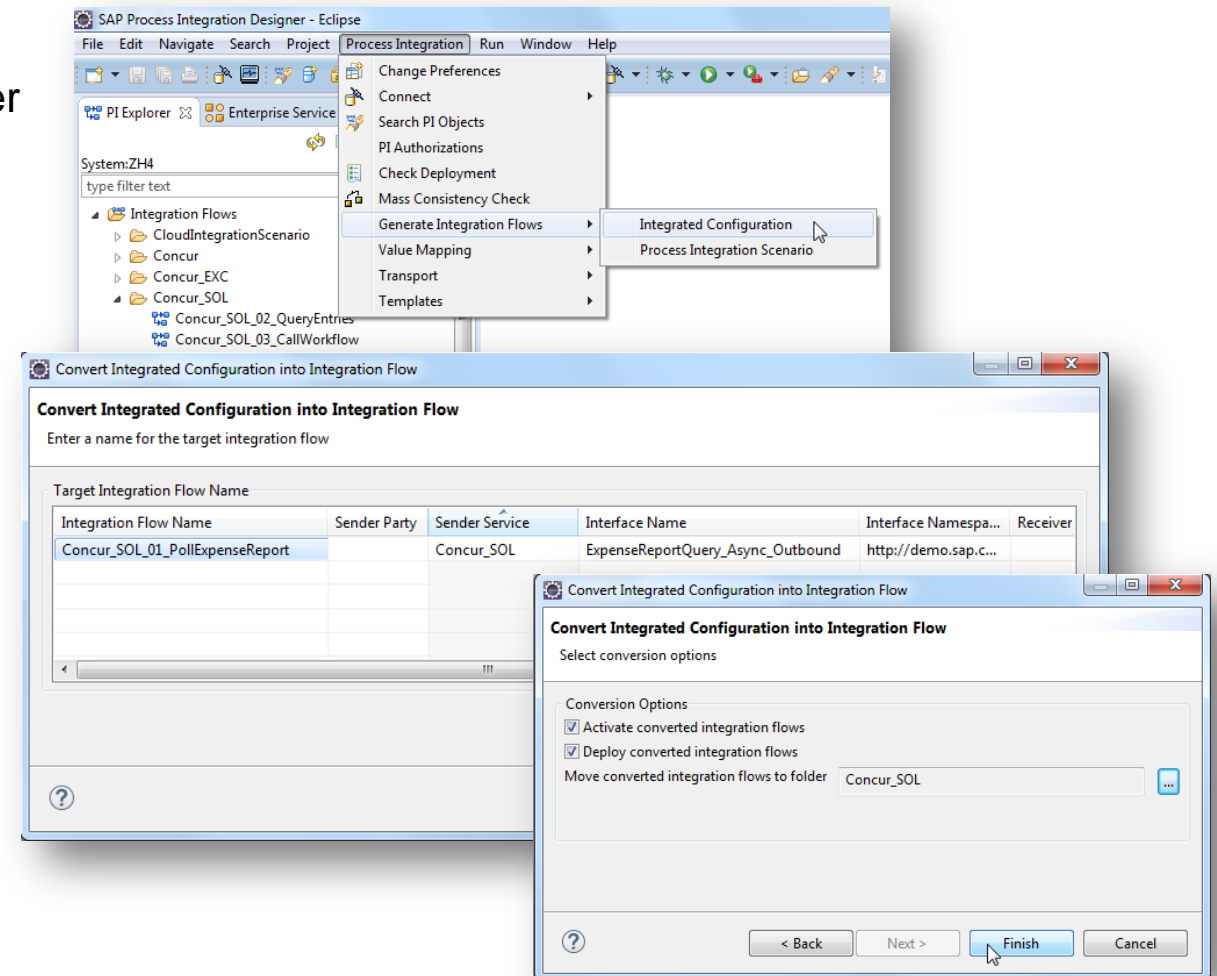
Migration to SAP Process Orchestration

Integration Directory migration tool enhancements

- Choose between migrating PI Dual-Stack scenarios to either Integrated Configuration Objects or Integration Flows
- Supporting migration of scenarios with Receiver Rules
- Automatic resolution of Receiver List for scenarios with Extended Receiver Determination

Process Integration Designer enhancements

- Converting Integrated Configuration to Integration Flow





Roadmap topics

Continuous innovation

Customer connection project for SAP Process Orchestration

<https://influence.sap.com/PO2015>

The screenshot shows the SAP Customer Influence interface for the 'SAP Process Orchestration' project. The header includes the SAP logo, the project name 'Customer Influence', the tagline 'Collaborate and Co-Innovate', and a search bar. A navigation menu on the left allows users to 'Navigate to ...' (My Influence, Private Communities) and 'Projects by ...' (Lines of Business, Industries, Products, Phase). A user greeting on the right says 'Welcome, Alexander Bundschuh!' with links for 'logout' and 'setup'. The main content area features a progress bar for the project lifecycle: Define (Completed), Collect (Completed), Select (19 days left), Develop (Starts in 19 days), and Use (Starts in 8 months). Below this, the 'Scope of project' section describes the integration of SAP Business Process Management, SAP Process Integration, and SAP Business Rules Management. A 'Focus Topic Statistics' sidebar on the right shows 148 requests, 181 comments, 1,173 subscriptions, and 481 visitors. Action buttons for 'Submit new request', 'Follow this project', 'Send as email', and 'Contact project manager' are also present.

SAP Customer Influence
Collaborate and Co-Innovate

Search this project

Navigate to ...
My Influence »
Private Communities »

Projects by ...
Lines of Business »
Industries »
Products »
Phase »

Welcome, Alexander Bundschuh!
[logout](#) | [setup](#)

SAP Process Orchestration

Home Requests Documents & Events Manage Project Setup « Back

Define Completed Collect Completed **Select 19 days left** Develop Starts in 19 days Use Starts in 8 months

Scope of project
SAP Process Orchestration combines the products SAP Business Process Management, SAP Process Integration, and SAP Business Rules Management into one integrated offering. The solution provides all components organizations need to quickly automate and optimize business processes - from simple workflows to integrated processes that span applications geographies and organizational boundaries. Within SAP Process Orchestration SAP Process Integration PI is SAP's Enterprise Service Bus offering helping companies to integrate both their A2A and B2B scenarios.

This Customer Connection focus topic is about improving PI's integration capabilities based on feedback from the involved customers. We do not restrict this initiative to any specific topic however would like to stress that the topics selected here should be aligned with our overall strategy for Process Orchestration which goes clearly in the direction of a Java-only ESB.

If you have any questions in regards to this Focus Topic please contact the project manager.

Submit new request »

★ Follow this project »
✉ Send as email »
👤 Contact project manager »

Focus Topic Statistics

- 💡 148 requests
- 🗣️ 181 comments
- ✍️ 1,173 subscriptions
- 👤 481 visitors

Customer connection project

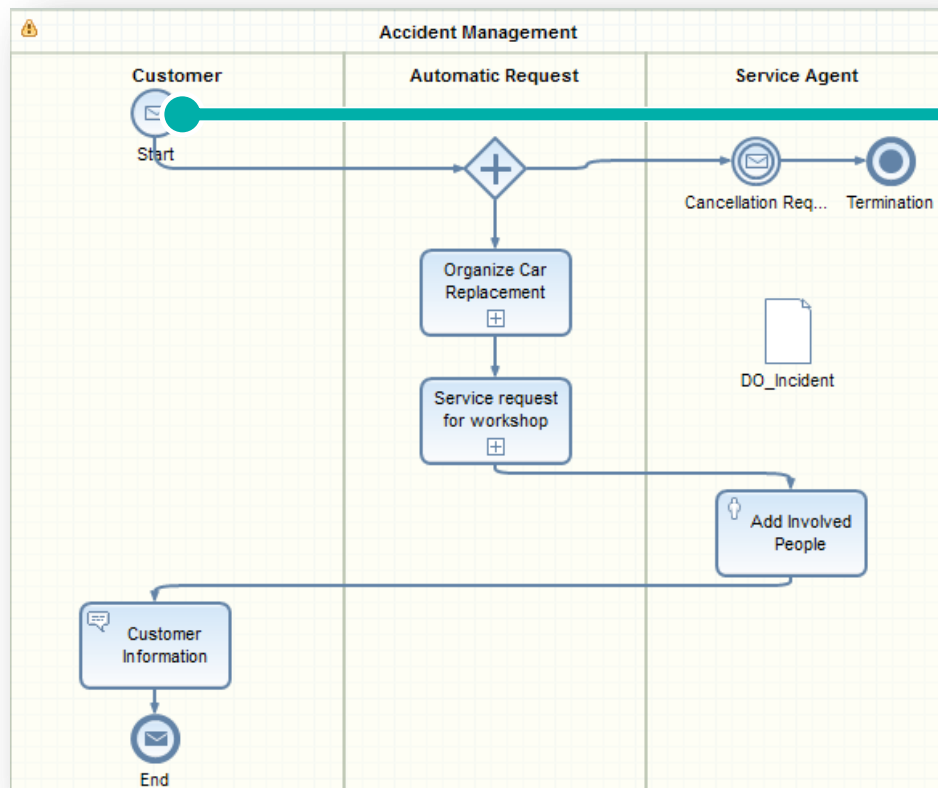
Selected Requests

Request title	Code	Points	Category	Status
Allow multiple inbound channels for one ICO / Integration Flow	<u>D9801</u>	22	Configuration	Scoped
Integration Flow: Visualization for large amount of receivers	<u>D9438</u>	19	Configuration	Stretch
Message monitoring at service operation detail level	<u>D7724</u>	18	Monitoring	Scoped
Message Monitor: Possibility to Save the Favorite display settings as Variant	<u>D9901</u>	18	Monitoring	Scoped
Custom monitoring layout	<u>D9753</u>	18	Monitoring	Scoped
Automatic alerting capability from BPM	<u>D7760</u>	17	Monitoring/BPM	Scoped
Missing channel ping functionality for AS2 adapter (B2B Add-On)	<u>D9437</u>	16	Monitoring/B2B	Scoped
File sender channel to support trigger file	<u>D9742</u>	15	Adapter	Scoped
EDISeparator: Limited field length for sender and receiver id / support for lists	<u>D9532</u>	14	B2B	Scoped

Developer productivity

Generating Fiori UIs for process start

Automatic generation of UI for a message start event
Human triggering a business event requires human interaction with an UI



SAP Labs preview

The screenshot shows the 'Report Accident' Fiori UI. It has a header bar with the title 'Report Accident'. Below the header, there are three sections:

- Incident Initial:** Contains three input fields: 'Registration Number' (value: HD-XY99), 'Place Of Incident' (value: Main Road 23), and 'Date Of Incident' (value: Dec 16, 2015, 12:42 PM).
- Customer:** Contains a toggle switch for 'Is Customer' (set to YES), and three input fields: 'ID' (value: 092302), 'First Name' (value: Ernst), and 'Last Name' (value: Smith).
- Contact Info (1):** A section with a plus icon to expand. It contains a table with columns: 'Contact Type', 'Fax', 'Email', 'Phone', and 'Mobile'. The 'Contact Type' is set to 'Work'. The 'Mobile' field contains the value '+491782348929' and has a red 'X' icon next to it.

At the bottom right, there is a green 'Submit Data' button.

This is the current state of planning and may be changed by SAP at any time.

Developer productivity

Form engine for BPM

Reduce development efforts by building UIs without code

- Define UIs for process start and task processing with an easy-to-use forms editor in NWDS
- Rendered as Fiori UI, natively integrated into My Inbox
 - Value Help, Input Validation, Theming, etc.
- Adjust the UI layout by adding additional parameters
 - Logical grouping and ordering
 - Supported by a specialized tool without touching any coding
- Supports the requirements definition process with LoB users
 - Quick roundtrips with immediate results
 - Supports UI prototyping and agile project methodology

SAP Labs preview

Please release purchase order 4500009504

Standard PO 6,010,000 EUR
4500009504 In Approval

Supplier: ANDREA_V1
Created on: 19.08.2015
Net Order Value: 6.010,00 EUR
Desc. of Play Term:
Incoterms:
Incoterms (Part 2):
Company Code: SAP A.G. (0001)
Purchasing Group: Einkaufsorg. 0001 (0001)
Purch. Organization: Einkaufsorg. 0001 (0001)

Short Text	Material	Material Group	Delivery Date	Order Quantity	Net Order Price	Price Unit	Net Order Value
as	HANAFD1 Pump	Tools 01	19.09.2015	10,00 PC	100,00 EUR	1,00 PC	1.000,00 EUR
Material YK06 Retail	MAT_YK06	Tools 01	19.08.2015	1,00 PC	8,00 EUR	1,00 PC	8,00 EUR
Test Item		Tools 01	20.09.2015	1,00 EA	10,00 EUR	1,00 EA	10,00 EUR
Item 1		Tools 01	20.08.2015	10,00 EA	100,00 EUR	1,00 EA	1.000,00 EUR
Item 2		Tools	20.09.2015	20,00 EA	200,00 EUR	1,00 EA	4.000,00 EUR

Approve Reject Claim Forward Suspend

This is the current state of planning and may be changed by SAP at any time.

Developer productivity

Integration flow enhancements

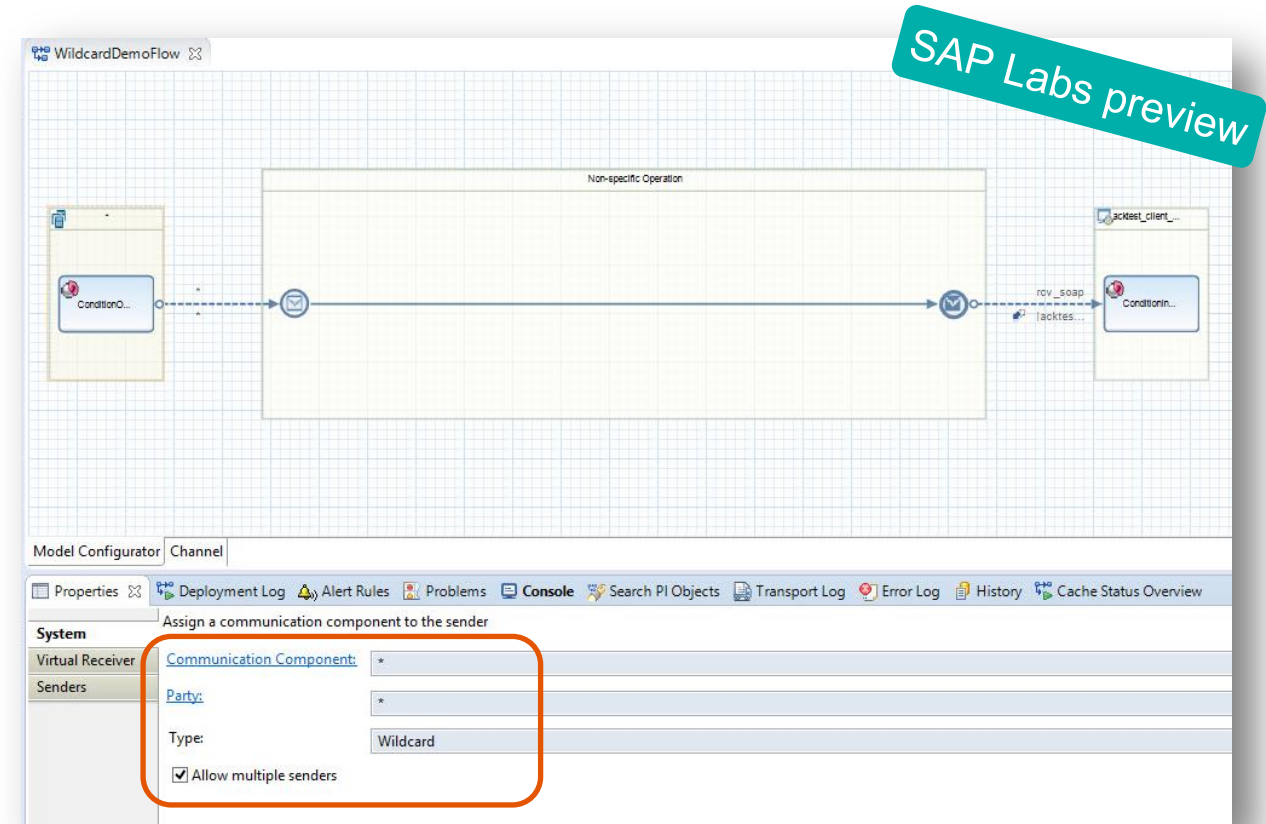
Lower configuration effort in case of same routing rules for multiple integration scenarios
Better visibility in case of mass receiver components

Mass maintenance of Integration Flows

- Wildcard logic at sender as well as receiver side
- Support of sender and receiver agreements
- Maintenance of receivers in table structure

Additional Integration Flow patterns

- Native support for Integration Flows across multiple adapter engines



This is the current state of planning and may be changed by SAP at any time.

Monitoring and operations

Monitoring enhancements

Personalized views in integration monitors

- Save display settings, visible columns, sort sequence, etc., as your personal favorites
- Enhance existing A2A and B2B view with custom views

Message monitor at service operation level

Alerting for BPM processes

- Leverage PI alerting infrastructure for BPM processes

Monitoring of cloud integration scenarios via SAP Solution Manager

- Availability and self test
- Aggregated message status

Channel ping for B2B adapters

SAP Labs preview

The screenshot displays the 'Message Alert Configuration - SAP NetWeaver' interface. It features a left sidebar with a tree view of integration scenarios under 'System: ZH4'. The main area is divided into two panes. The top pane, titled 'Message Alert Configuration: Overview', shows a table of alert rules. The bottom pane, titled 'Message Statuses', shows a list of status groups with checkboxes for various components.

State	Name	Description
Successful	BPM	BPM alerting
Not Active	b2b	

Status Group	Status Details
<input checked="" type="checkbox"/> ABAP Runtime	
<input checked="" type="checkbox"/> AS2 Adapter	
<input checked="" type="checkbox"/> BPM Engine	
<input checked="" type="checkbox"/> CIDX Adapter	
<input checked="" type="checkbox"/> Channel	
<input checked="" type="checkbox"/> EDI Separator Adapter	
<input checked="" type="checkbox"/> File Adapter	
<input checked="" type="checkbox"/> HTTP Adapter	
<input checked="" type="checkbox"/> IDoc Adapter	
<input checked="" type="checkbox"/> JAVA Runtime	

This is the current state of planning and may be changed by SAP at any time.

Flexible deployment options

Shared integration capabilities

Benefit from investments in SAP HANA Cloud Integration

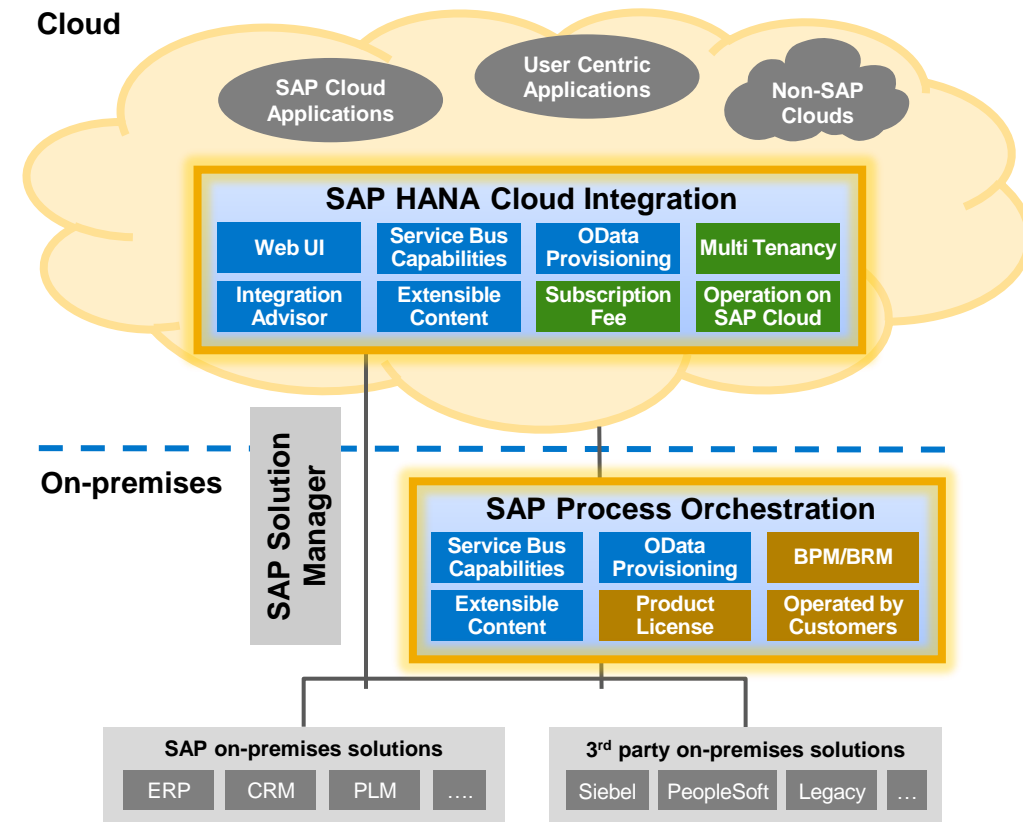
- Common cloud-based design time for modeling integration content
- Continuous updates of cloud integration runtime capabilities in SAP Process Orchestration as documented in [Supported Components, Adapters, and Events](#)
- Support for further integration content for hybrid integration scenarios
- Shared adapter SDK for 3rd party adapters

OData integration and provisioning

- Additional data sources for OData provisioning such as SOAP, REST, JPA, JDBC, etc.
- Composition of OData Entities from multiple data sources
- Browser based tooling for modeling OData entities

High-performance and high-volume messaging scenarios

- Co-innovation with HW appliance provider for Big Data movement



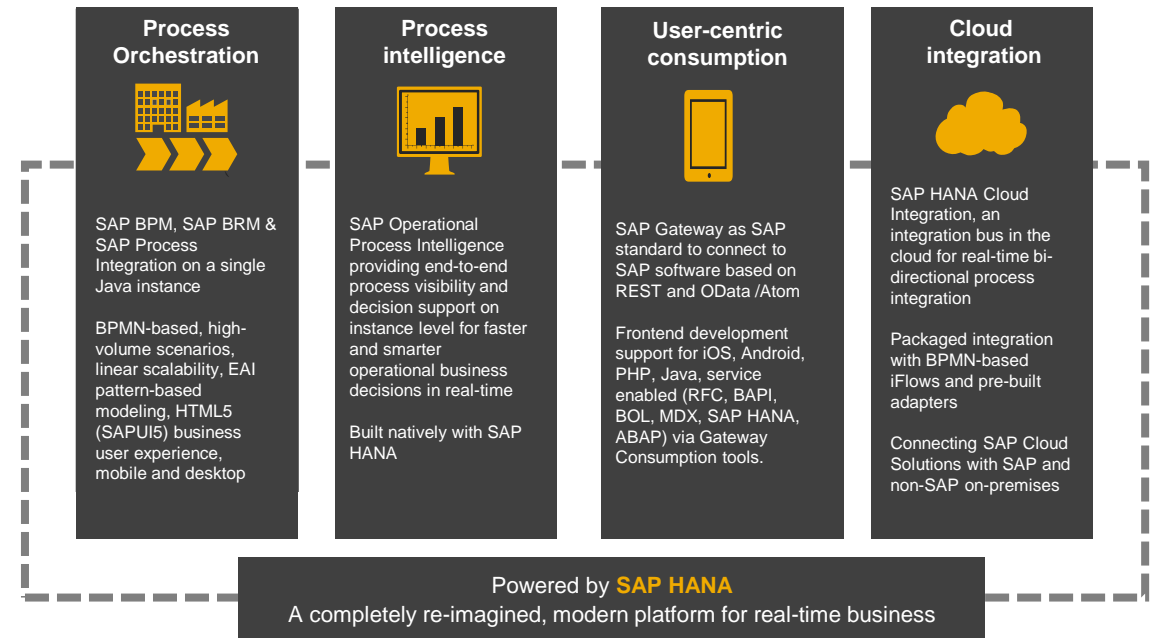
This is the current state of planning and may be changed by SAP at any time.

Related road maps

In the context of SAP's orchestration and integration portfolio, refer to the following other roadmaps

Related product road maps available on Service Marketplace:

- SAP Operational Process Intelligence
- SAP Gateway
- SAP HANA Cloud Integration
- SAP API Management
- SAP PowerDesigner





Thank you

Contact information:

Alexander Bundschuh
Product Management
alexander.bundschuh@sap.com

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