



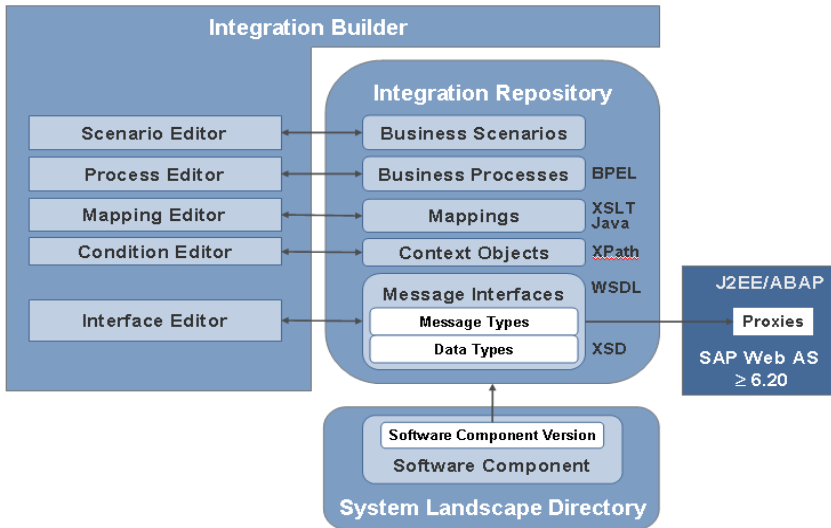
New Features of the Integration Builder

SAP AG

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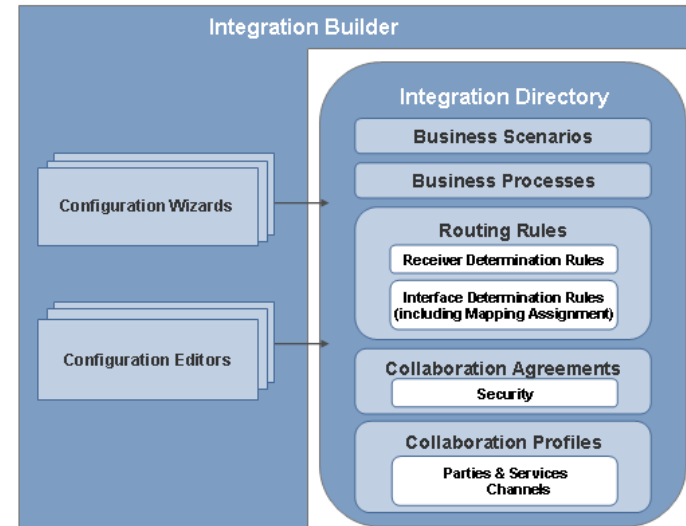
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Integration Builder – Design Time



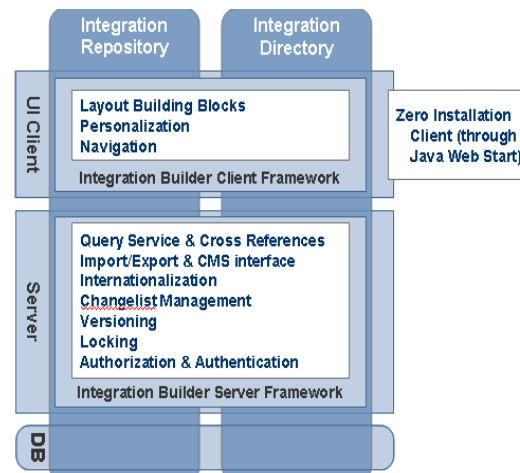
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Integration Builder – Configuration Time

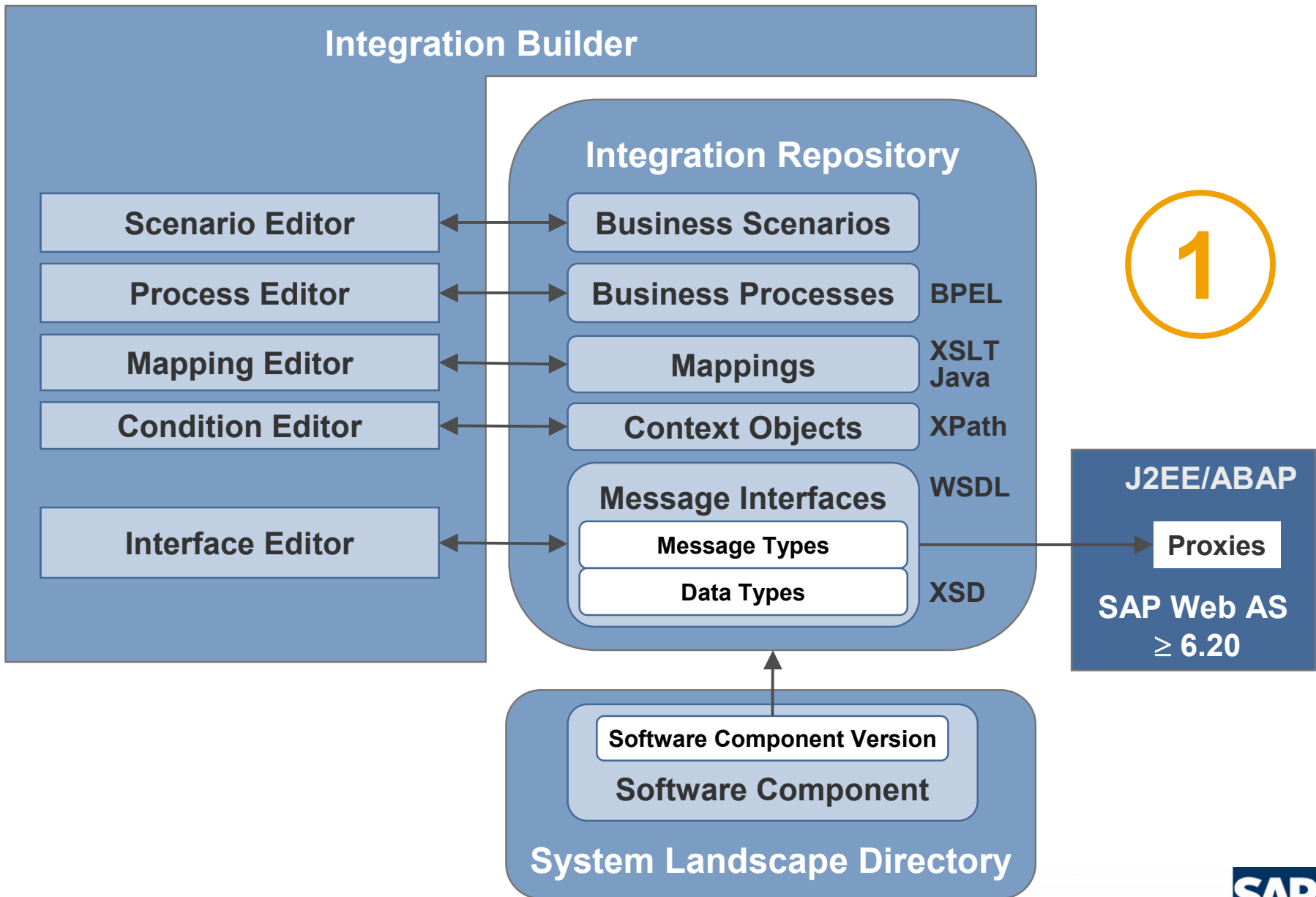


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Integration Builder – Generic Functions



Integration Builder – Design Time



New: Business Process Objects

You can design new objects for executable **business processes** by using the graphical editor.

You can use different modeling elements and patterns to design a stateful cross-component business process.

The following modeling patterns and elements are supported:

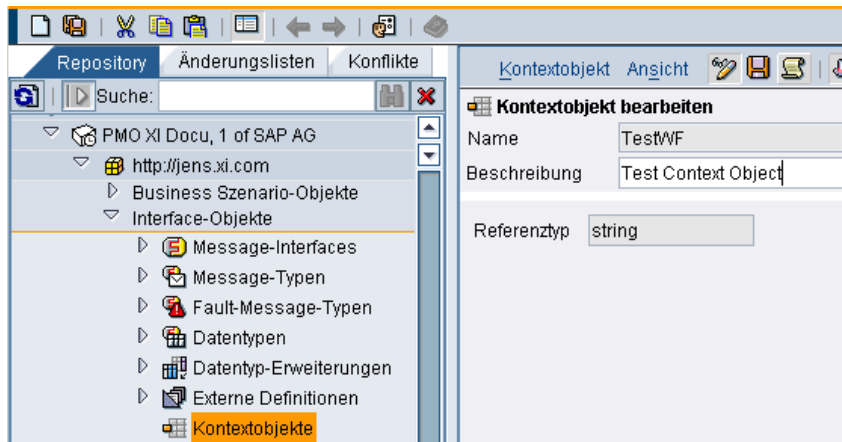
- Receive messages and trigger process
- Send, transform (merge or split) messages
- Collect messages
- Multicast
- Serialization
- Process control elements such as switch, assign, fork, wait, block, loop, control
- Deadlines, exception handling, conditions

New: Context Objects

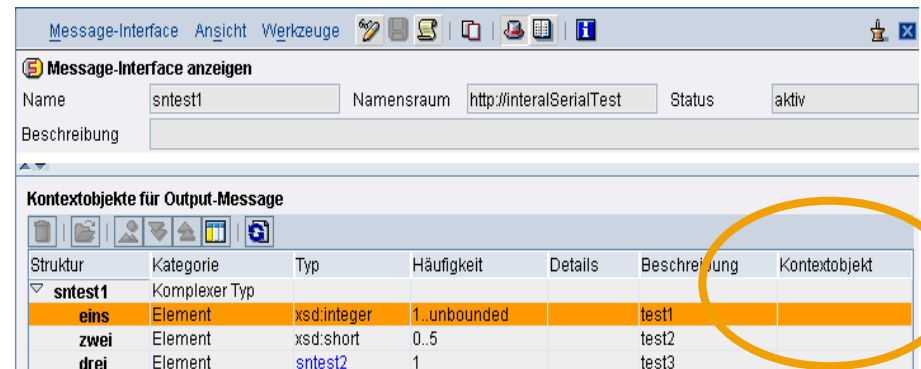
Context Objects

- Encapsulate access to data that is contained in the message itself or in an attachment
- Increase the readability of routing rules because no XPath knowledge is needed at design or configuration time to formulate a condition
- Can be used in a business process model to access and evaluate message data

1. Create Context Object



2. Use Context Object in Message Interface

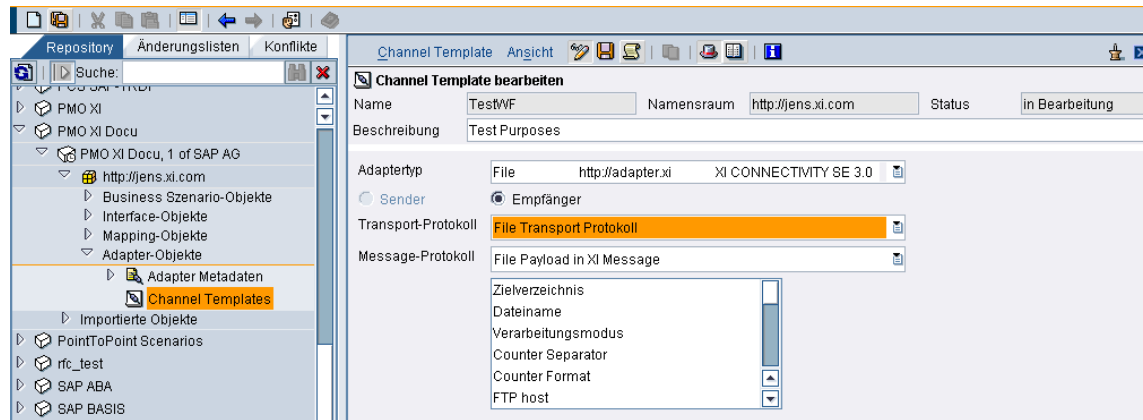


New Object: Channel Template

Designers can define **channel templates** in the Integration Repository and deliver them with the Software Component Version.

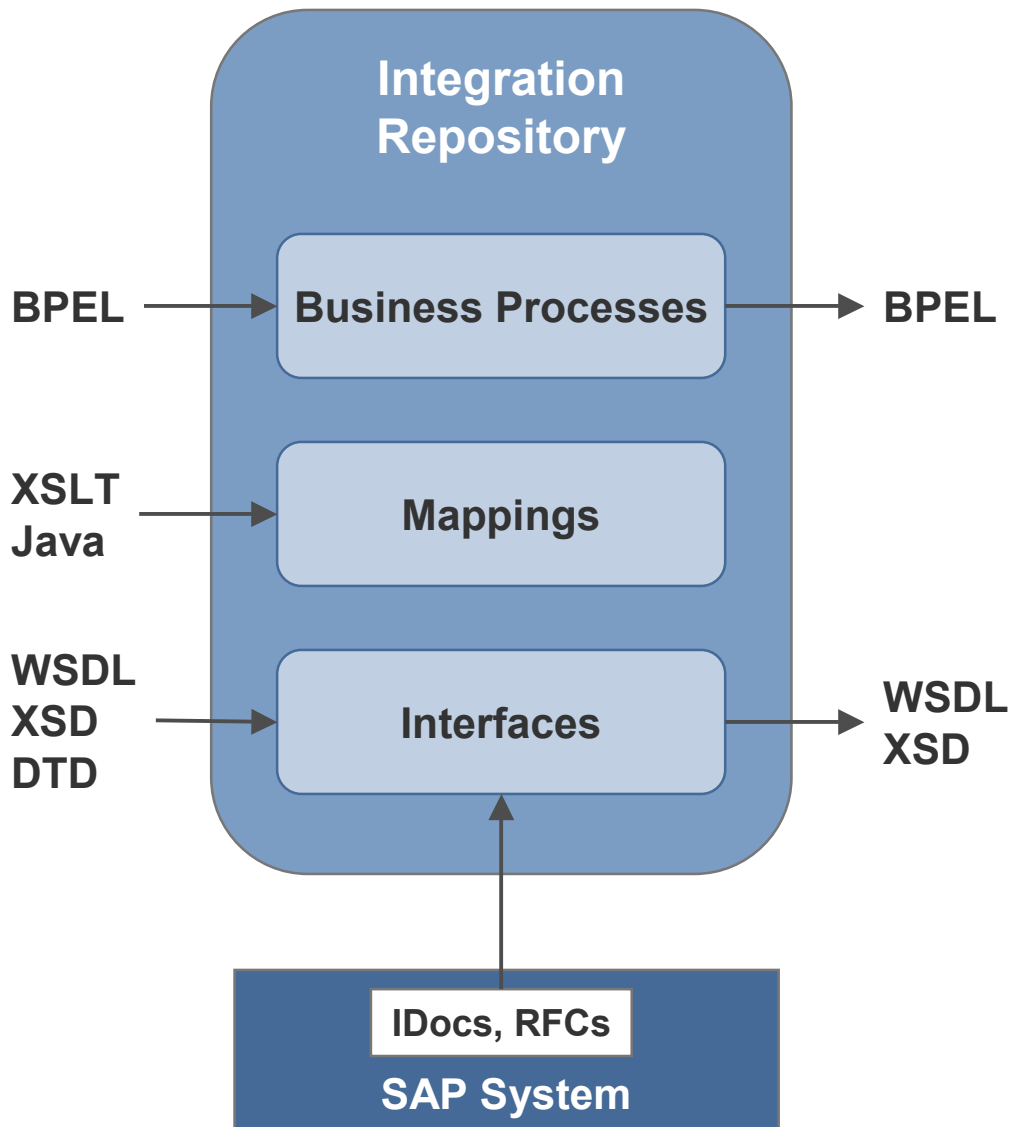
Configurators can use these templates to configure channels (that is, information on message protocol, transport protocol and logon data) in the Integration Directory.

The instantiation of a repository template, which copies the template to the directory, is supported by a wizard.



Main usage of this feature: RosettaNet PIPs

Import / Export Function



In XI 2.0 you can import XSLT (XML Stylesheet Language Transformation)/ Java and export WSDL (Web Service Description Language)/ XSD (XML Schema Definition).

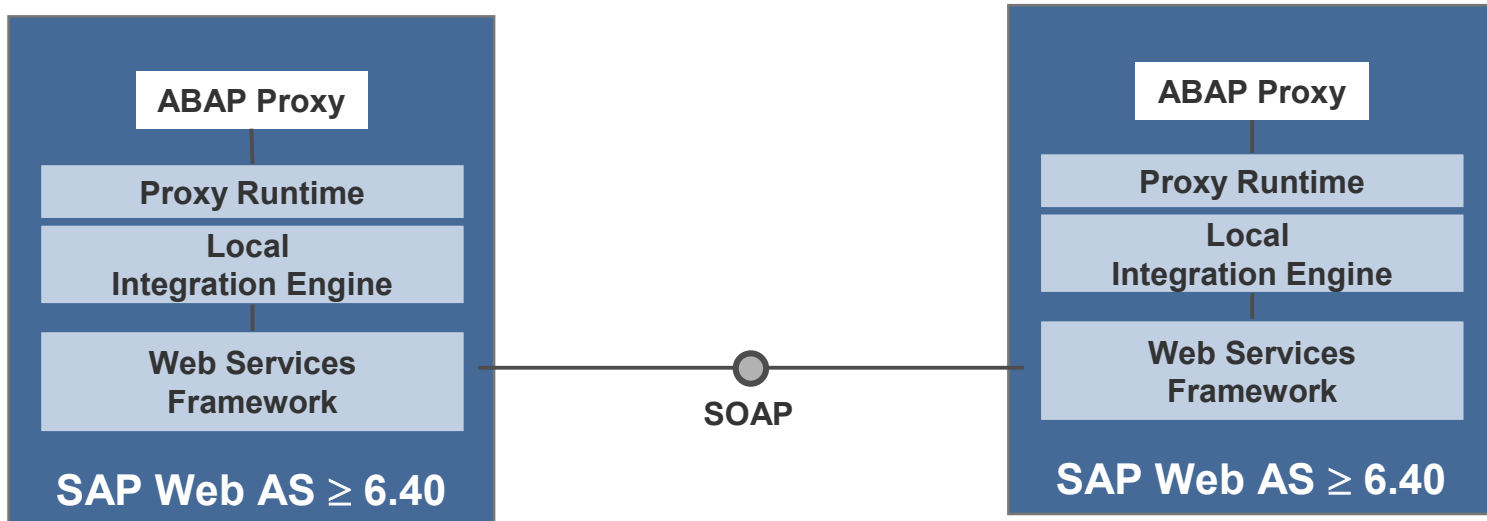
In XI 3.0 you can now import descriptions in WSDL, in XSD or in DTD (Document Type Definition) as well.

You can also now import/export BPEL (Business Process Execution Language).

Message Exchange Between ABAP Proxies

If no services of the Integration Server are required (for example Mapping), the generated ABAP proxies can communicate point-to-point by using the Web Service Infrastructure of the SAP Web AS.

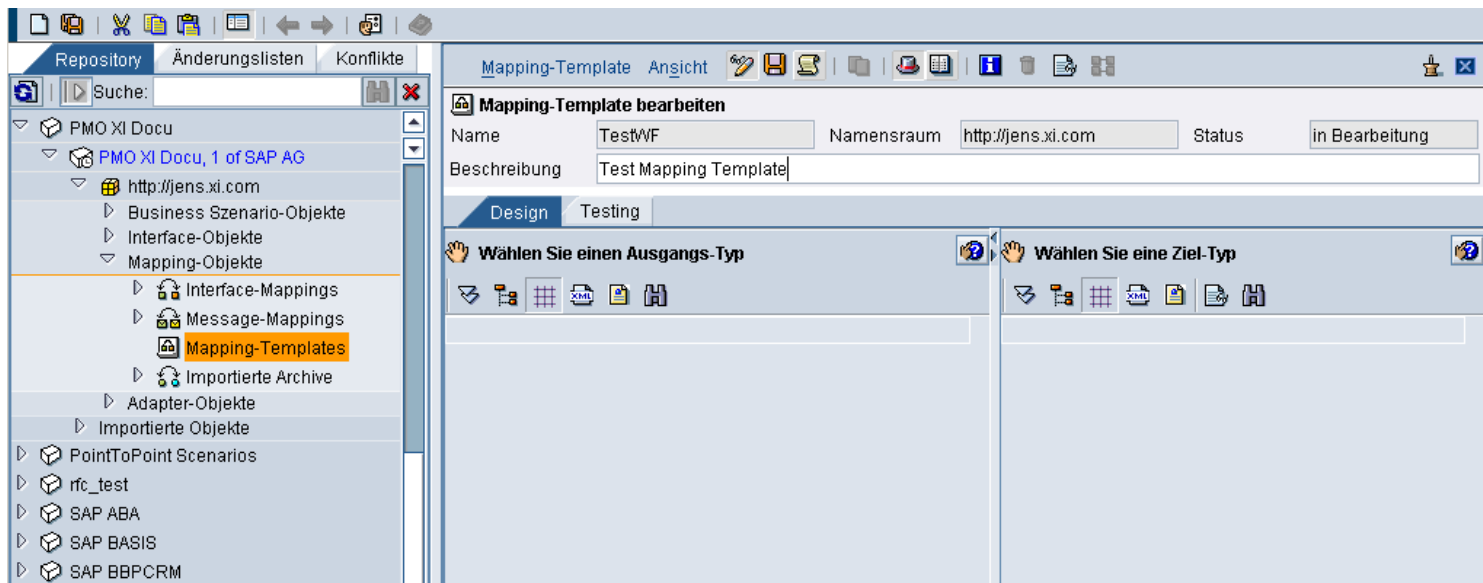
Advantage: Improved performance, while knowledge about interfaces is still located centrally, in the Integration Builder.



Mapping Enhancements

Enhancements to **mapping** functions:

- You can load imported DTD documents into the mapping editor.
- You can split and merge messages for business processes.
- You can define mapping templates at data type level.
Advantage: Reuse of mappings in new message mappings.



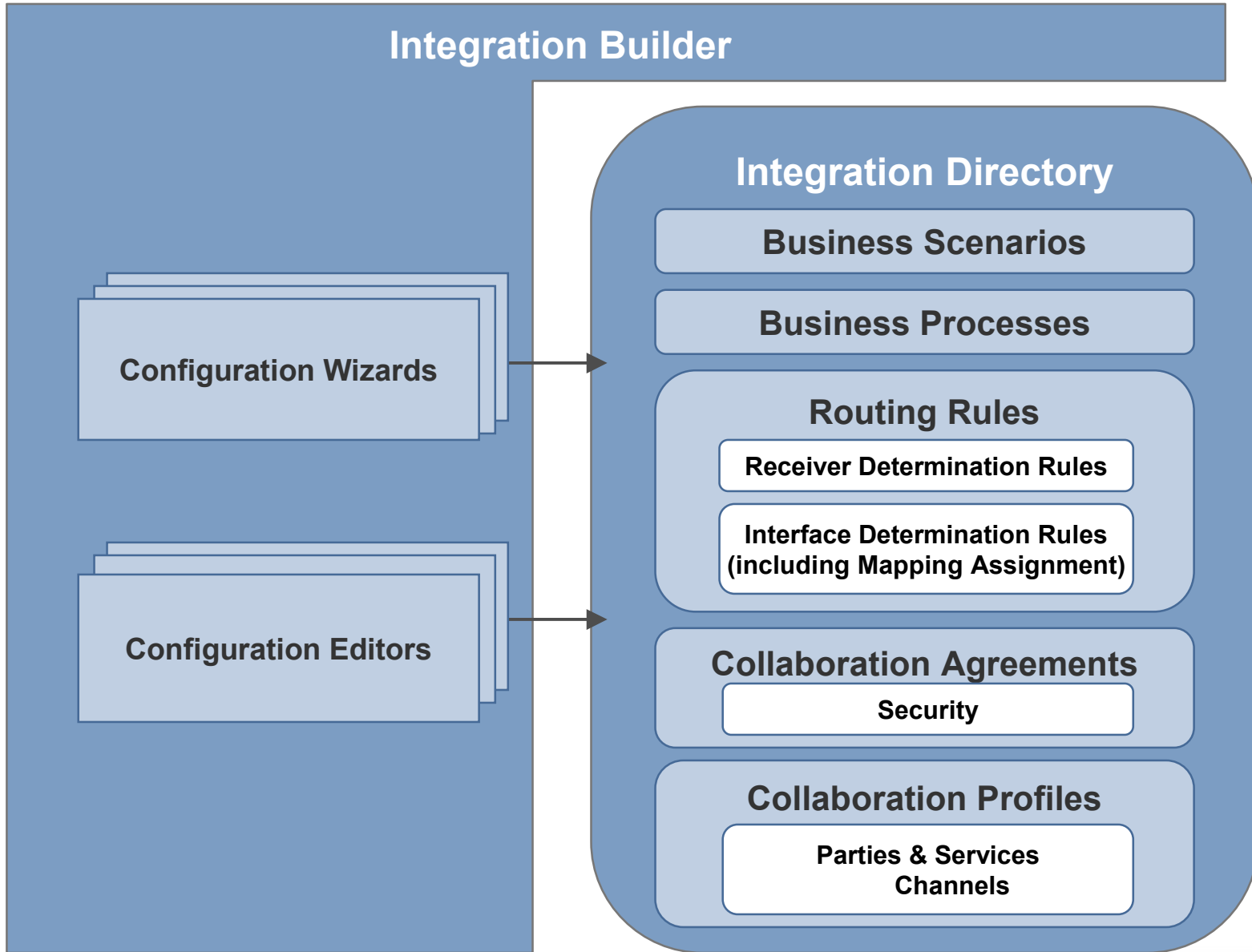
The information modeled in **business scenarios** can be used to describe product release combinations. It is also possible to generate parts of the configuration automatically in the Integration Directory.

Up to now, the Integration Repository supported versioning of all repository objects at software component level. **Support Packages of a software component version** are now also supported.

It is possible to enhance **data types** shipped by SAP with customer-specific fields. These enhancements will not be lost in the event of a release upgrade.

Integration Builder – Configuration Time

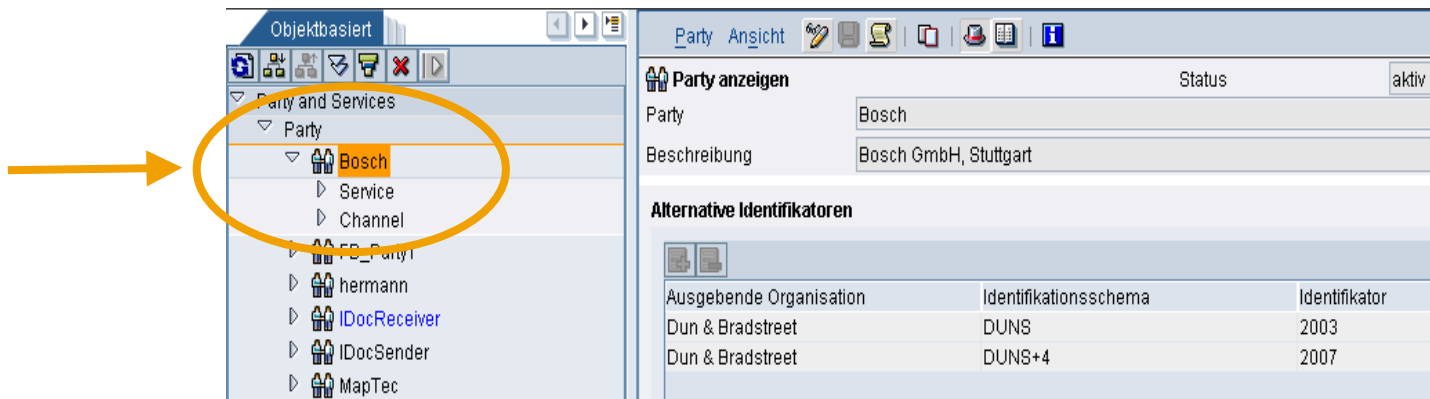
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New Object: Party

The new object **party** facilitates the B2B functions of SAP Exchange Infrastructure and contains the following information:

- Name, description, and additional identifiers (DUNS, DUNS+4, GLN) of the party
- Service (explained on the following slide)
- Channel (message protocol, transport protocol, logon data, adapter configuration)



This enables **adapters** to be **configured centrally** in the Integration Directory!

New Object: Service

The new object **service** generalizes business systems.

A service can represent:

- A business system
- A grouping of interfaces, which is used mainly for routing purposes in the communication between multiple B2B parties but does not reveal internal information about system landscapes
- A business process

The screenshot displays the SAP Service Manager interface. On the left, a tree view under 'Objektbasiert' shows a hierarchy: 'Party and Services' > 'Party' > 'Service'. The 'Service' folder is expanded, and 'BXL_000' is highlighted with a yellow circle and an arrow. Other services listed include 'Kundendienst', 'KurzerProzess', and 'VilleroyUndBoch'. Below this, 'Channel' is expanded to show 'FB_Party', 'hermann', 'IDocReceiver', 'IDocSender', 'MapTec', 'MBSerializationTestParty1', 'MBSerializationTestParty2', 'Miz_Receiver', and 'Miz_Sender'. The main area shows the 'Service anzeigen' view for 'BXL_000'. The 'Party' is 'Bosch' and the status is 'aktiv'. Below this, the 'Business-System' section is active, showing 'Empfänger' (Receiver) details. A table of 'Inbound-Interfaces' is displayed with columns for Name, Namensraum (Namespace), and Software-Komponentenversion (Software Component Version).

Name	Namensraum	Software-Komponentenversion
_RSP0_CALL_HANDLERS	urn:sap-com:document:sap:rfc:functio...	SAP BASIS 6.40
A2RPY_TRANSACTION_INSERT	urn:sap-com:document:sap:rfc:functio...	SAP BASIS 6.40
AmtIn	http://mapping	SAP BASIS 6.40
AmtSyncln	http://mapping	SAP BASIS 6.40
BAPI_DXPROJECT_CREATE	urn:sap-com:document:sap:rfc:functio...	SAP BASIS 6.40
BestaetigungEmpfangerIn	http://xitest	SAP BASIS 6.40
BestellungEmpfangerIn	http://franks/namespace	SAP BASIS 6.40
BFA_TEST_2_CREATE.BFA_TEST_2_...	urn:sap-com:document:sap:doc:mes...	SAP BASIS 6.40
BookingOrderConfirmation_In	http://sap.com/xidemo/agency	SAP BASIS 6.40
CATT.CATT01	urn:sap-com:document:sap:doc:mes...	SAP BASIS 6.40

The new party and service objects represent the capabilities of communication partners and can be subsumed under the term „**collaboration profiles**“.

Cardinality (0..1 - 0..n):

- Parties can offer any number of services. In some cases it may be necessary (for example, with special message protocols) to omit services completely. In this case the relevant information is assigned to the party directly.
- A service can be assigned to a party but can also be used without such an assignment. This makes sense in A2A scenarios (business system as service) or when a service represents a business process.

Party and/or service objects can act as sender and receiver, depending on the scenario in which they are used.

Receiver Determination Rules

Receiver determination rules determine which receiver a certain message has to be sent to at runtime.

In XI 2.0 you can define content-based routing rules manually by using XPath in the condition editor.

In XI 3.0 you can now also reference context objects, which have been defined beforehand in the Integration Repository. These context objects improve usability as they hide the XPath language from the user.

The **business process object** in the Integration Directory contains a read-only link to its originating repository process and is used to define the required receiver determination rule. Thus, business processes may appear as receivers or senders of messages in receiver determination rules.

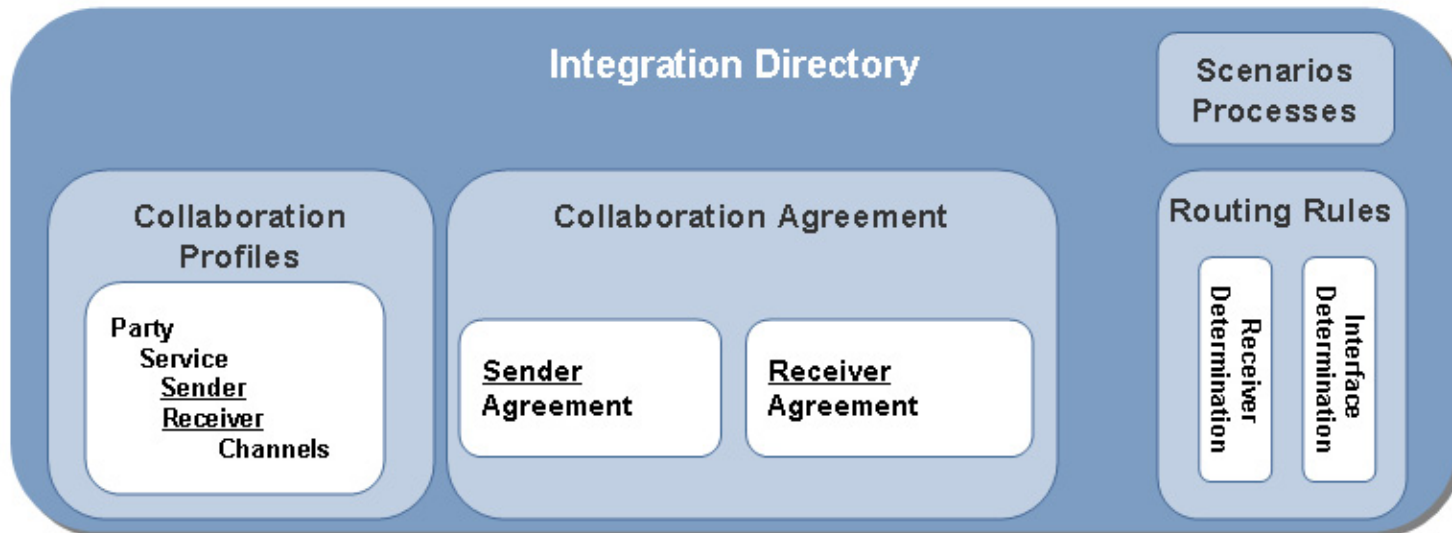
Business process objects do not contain a process definition and can only be deployed, not created in the Integration Directory.

Sender and Receiver Agreement

The new objects **sender agreement** and **receiver agreement** describe which of the various possibilities (message protocol, transport protocol and so on) are actually used at runtime.

The sender agreement is used on the Integration Server for inbound processing, the receiver agreement for outbound processing.

Sender agreement and receiver agreement can be subsumed under the term „**collaboration agreement**“.

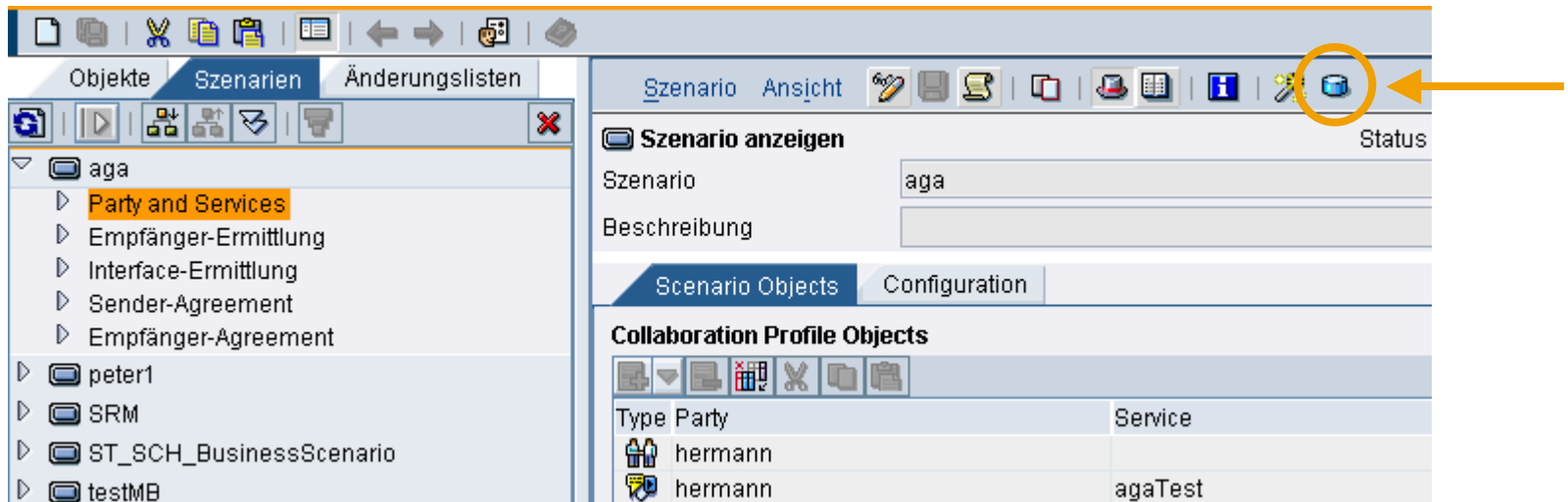


Business Scenarios

In general, **business scenarios** in the Integration Directory serve as (optional) groupings for all kinds of configuration objects.

Business Scenarios thus allow configurators to define task-specific views of directory objects.

These scenarios may refer to a repository scenario. In this case you can generate receiver and interface determinations and adapt these according to specific customer needs.



The screenshot displays the SAP Integration Directory interface. The left pane shows a tree view of scenarios, with 'aga' expanded to show sub-scenarios like 'Party and Services'. The right pane shows the 'Szenario anzeigen' view for the 'aga' scenario, including a table of Collaboration Profile Objects.

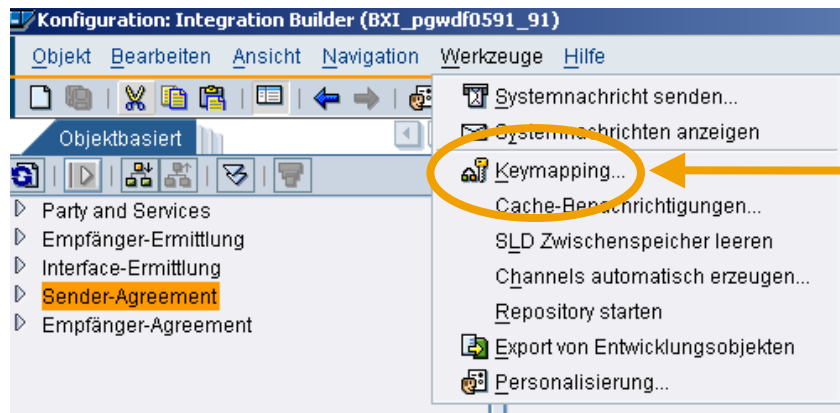
Type	Party	Service
	hermann	
	hermann	agaTest

Enhanced Value Mapping Function

There is a new API for replicating **value mappings** to the Integration Server.

This API is used by the improved maintenance tool, which is part of the Integration Directory, as well as by any other (third party) tool.

Another new feature is a display UI to check the database content of the Integration Server.



Where do I find my objects after an upgrade?

Business systems migrate to ‘partyless’ services.

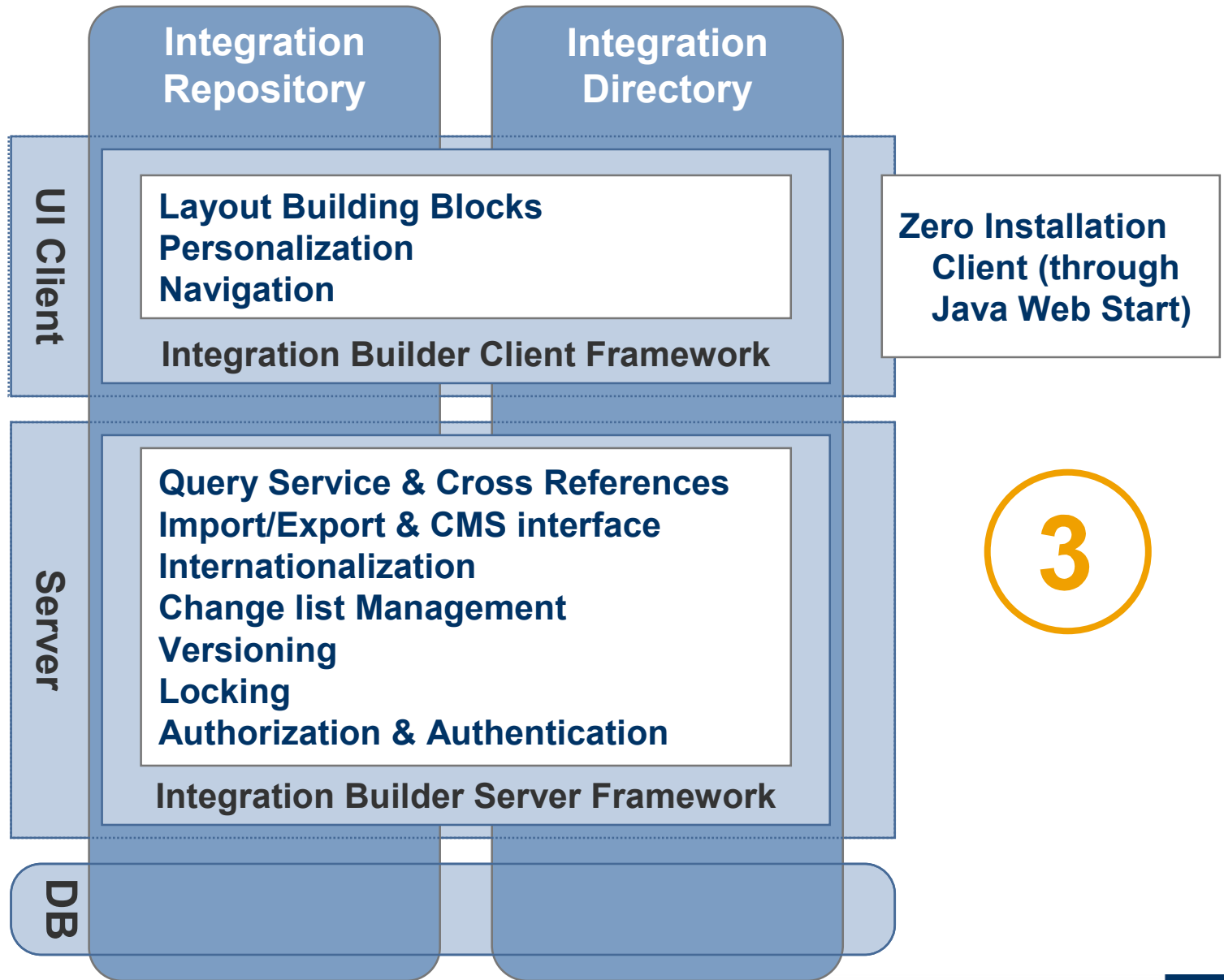
Receiver determinations of a sender business system and interface belonging to different XI 2.0 scenarios will be grouped in one receiver determination.

No further changes to interface determinations.

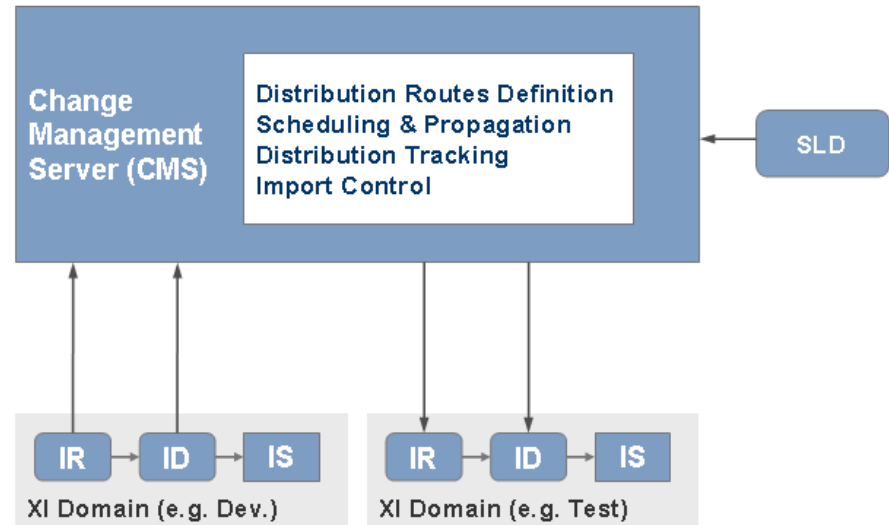
End points and logon data will create channels to the business systems and receiver agreements – There may be a n:m relation because of the combinatorics.

Scenarios will migrate to scenarios which group receiver determinations.

Integration Builder – Generic Functions



The Integration Builder uses the **change and transport management** functions provided by the **Change Management Server (CMS)**.

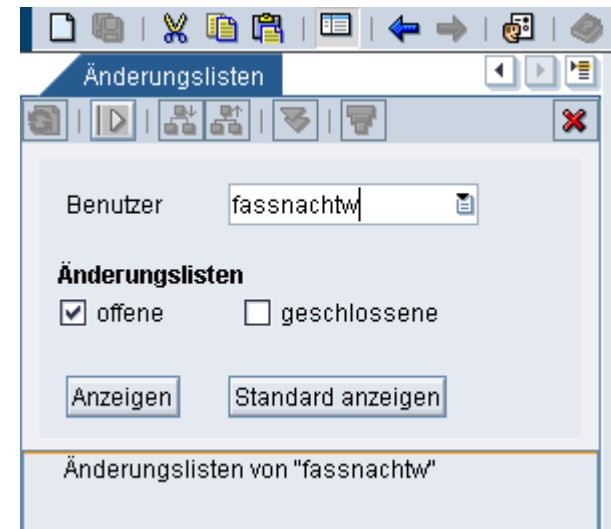


The following objects can be transported:

- All objects in a change list
 - ◆ Design time: All objects of a software component version
 - ◆ Configuration time: business scenarios including the configuration objects used

Functional enhancements in the development environment and change management:

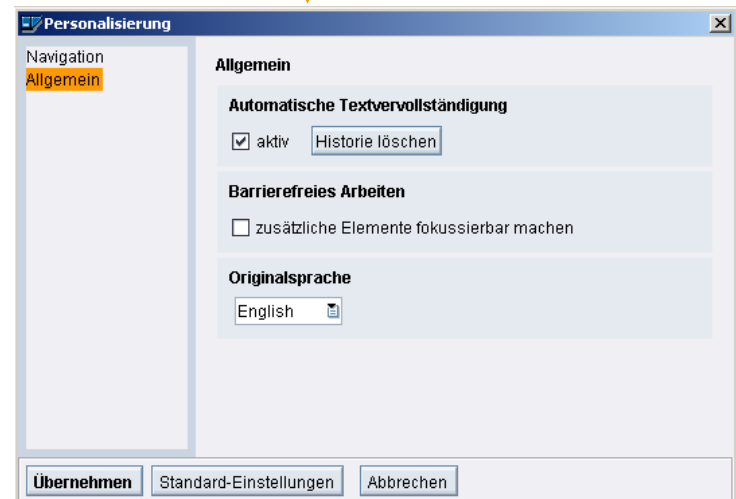
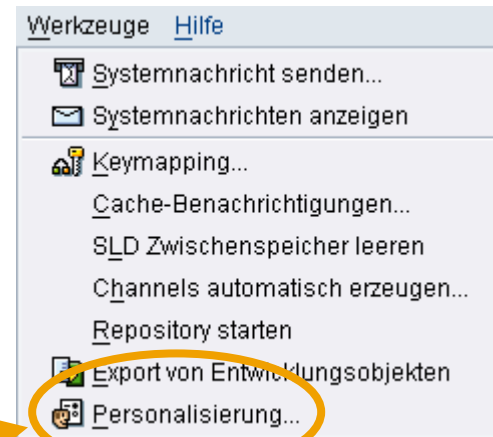
- Where-used lists make dependencies between objects more transparent
- Each user can create an infinite number of change lists (for managing changes)
- You can display error messages in an amodal message box and simultaneously work on the corresponding error
- Object documentation can be translated into multiple languages



Authorization, Personalization and Accessibility

Functional enhancements regarding **authorization**, **personalization** and **accessibility**:

- Authorizations for actions such as display, change, or delete can be assigned to individual objects and groups of objects.
- The user interface of the Integration Builder can be personalized by each user to fit individual requirements.
- Users with disabilities can access the most important functions and editors.
- Keyboard shortcut keys are supported.



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