

SAP NetWeaver Process Integration 7.1  
Modeling Enhancements in ccBPM



SAP NetWeaver Regional Implementation Group  
SAP NetWeaver Product Management  
December 2007

THE BEST-RUN BUSINESSES RUN SAP™ 



After reading this document, you will know:

- **About the modeling enhancements in ccBPM for SAP NetWeaver Process Integration 7.1**

# Agenda



1. **Step Groups**
2. **Configurable Parameters**
3. **Generic User-Decisions**

# Agenda

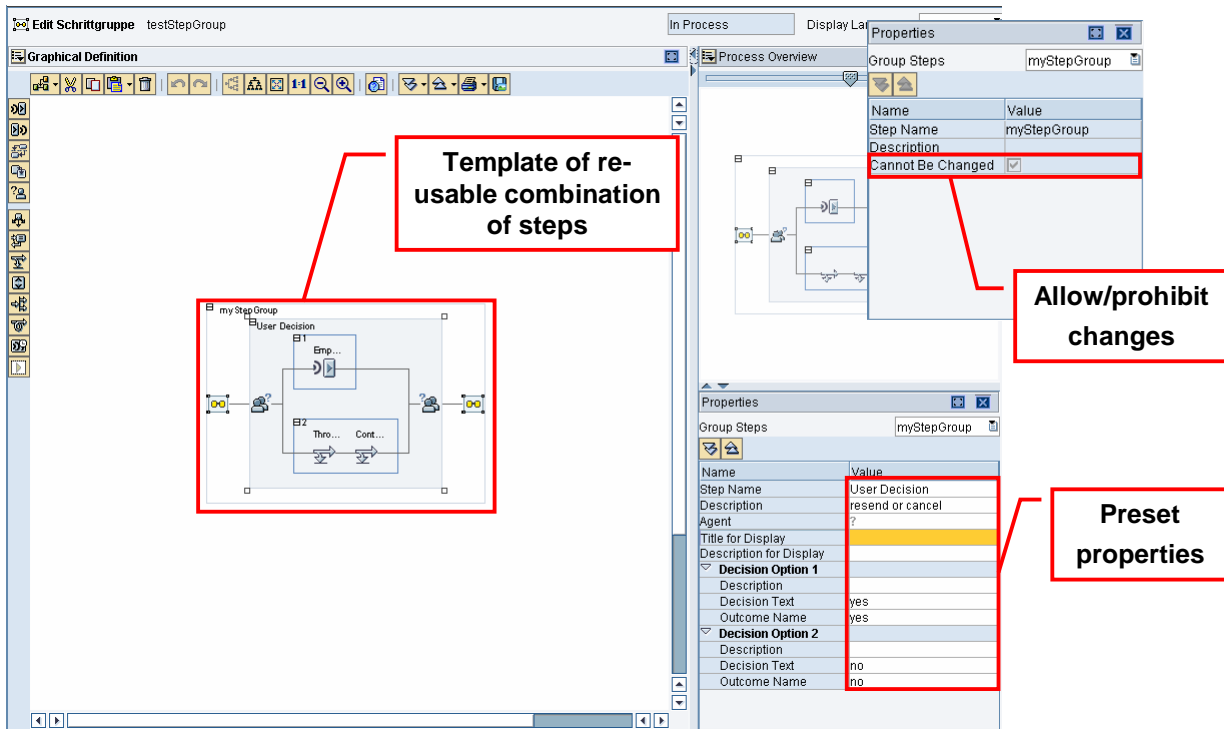


1. **Step Groups**
2. **Configurable Parameters**
3. **Generic User-Decisions**



- Design time artifact
- Template of re-usable combination of steps
- Pre-setting of some simple properties
- Globally available (no SWCV restrictions)
- Set to changeable / not changeable
- Usage of step groups as-is. Change of Step Group does **not** affect embedded Step Groups

- Step Groups are a design tool to group often occurring sequences of process steps
- After having been defined they can be included into Integration Processes
- The usage of step groups is as-is. Change of Step Group does **not** affect Step Groups that are already in use.



**Template of re-usable combination of steps**

Name	Value
Step Name	myStepGroup
Description	
Cannot Be Changed	<input checked="" type="checkbox"/>

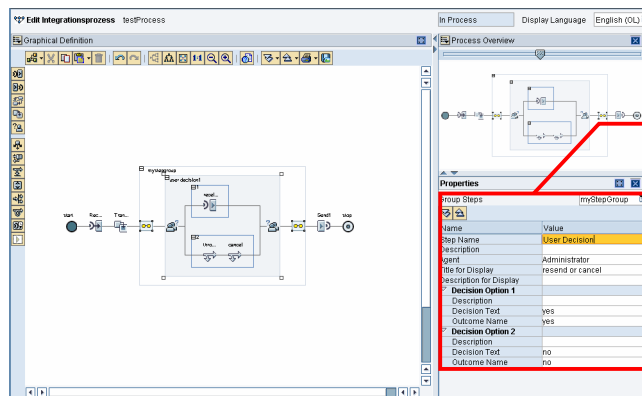
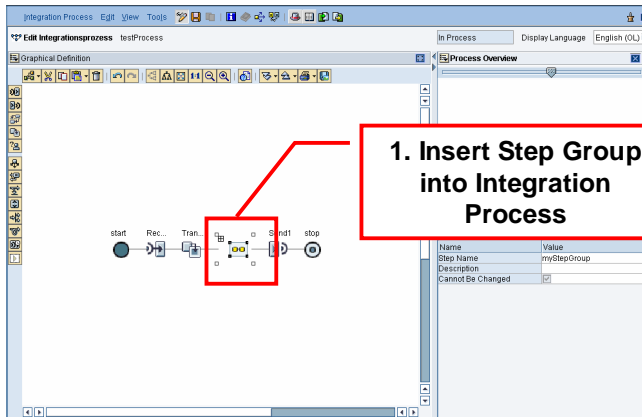
**Allow/prohibit changes**

Name	Value
Step Name	User Decision
Description	resend or cancel
Agent	?
Title for Display	
Description for Display	
<b>Decision Option 1</b>	
Description	
Decision Text	yes
Outcome Name	yes
<b>Decision Option 2</b>	
Description	
Decision Text	no
Outcome Name	no

**Preset properties**

- Definition follows development of Integration Processes
- A subset of properties can be beforehand defined.

# Step Groups – Usage



© SAP 2007 / Page 7

- In order to use Step Groups, you may insert it into your process definition
- In a second step you may complete/overwrite pre-set properties.

# Agenda



1. **Step Groups**
2. **Configurable Parameters**
3. **Generic User-Decisions**





- **Configurable Parameters are defined during development of the Integration Process (placeholder)**
- **Parameters are filled at configuration time in the Integration Directory**
- **Use case: multiple process types using varying parameter sets being based on the same process definition**
- **Examples:**
  - **Agent** for user decisions
  - **Simple Type** for pre-setting of simple typed containers
  - **Adapters** for communication channels used in mapping look-ups

# Configurable Parameters - Usage (I)



The screenshot displays the SAP NetWeaver Process Integration 7.1 interface. The main window shows a process diagram with a 'User Decision' step. A red box highlights the 'Configurable Parameters' table in the bottom right corner. A callout box points to this table with the text 'Define list of Configurable Parameters in the ESR'.

Name	Category	Type	Default Value	Description
Administrator	Agent			
decisionText	Simple Type	xsd:string	yes or no	
lookupChannel	Adapter	JDBC		

- 1st step: Define list of Configurable Parameters in the ESR

# Configurable Parameters - Usage (II)



**Edit Communication Component** Status: In Process Display Language: English (OL)

Communication Component: myProcessType  
Party:   
Description:   
**Integration Process**  
Integration Process in Enterprise Services Repository: testProcess http://jfo.com/test

**Parameters**

Name	Value
Administrator	USMYSELF
decisionText	yes or no?
lookupChannel	*   BS_Training_MSSQL_DB   JDBC_Receiver_MSSQL

**Inbound Interfaces**

Name	Namespace	Software Component Version
compensation	http://jfo.com/test	JO_SOFTWARECOMP 1.0 of jfo.com

**Specify values for relevant process type in the Integration Directory**

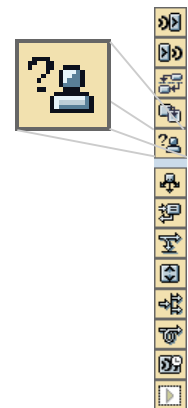
- 2nd step: Specify values for relevant process type in the Integration Directory

# Agenda



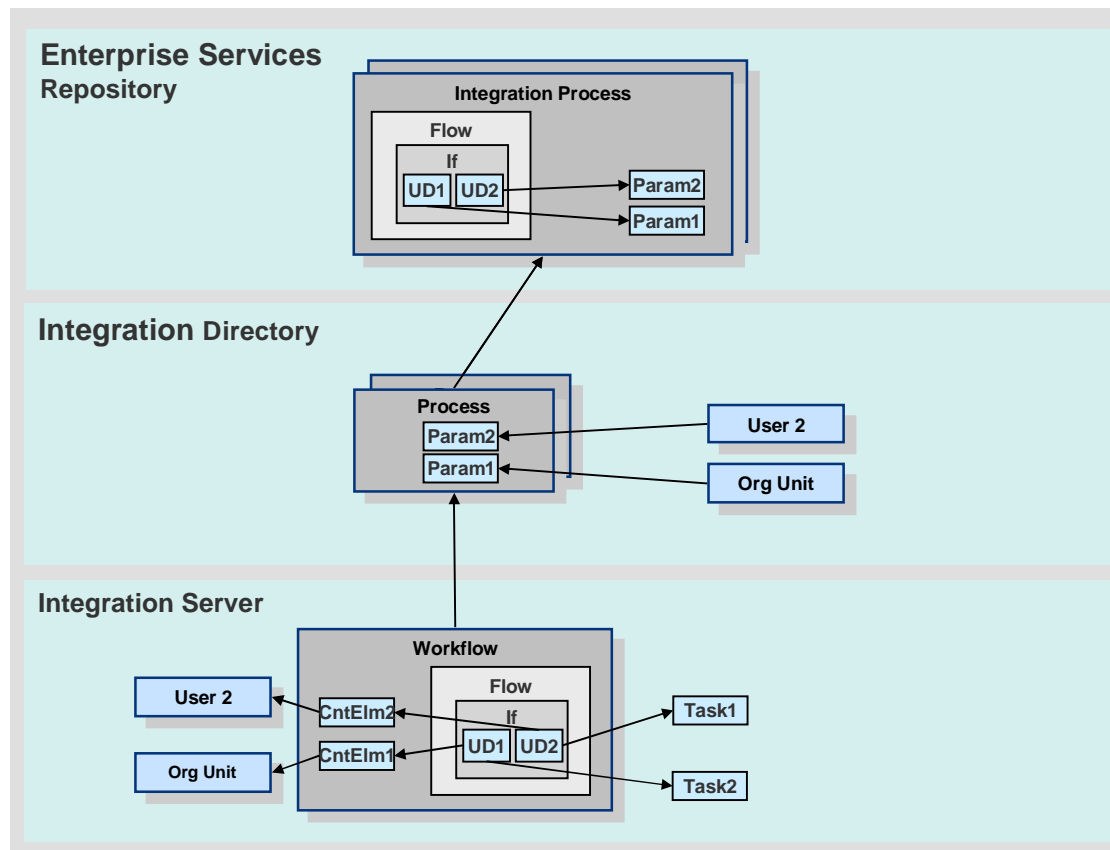
1. **Step Groups**
2. **Configurable Parameters**
3. **Generic User-Decisions**

- **Generic user decision during the execution of an Integration Process**
- **Deadline occurs, or an alert is thrown, option needed to directly interact**
- **Provide the decision gateway and outcomes of the user decision, and use the Integration Directory for responsibility determination**
- **Uses container elements type “agent” from the configurable parameters**
- **Assigned user receives a dialog work item in the workflow inbox at runtime**



© SAP 2007 / Page 13

- Use the new step type “User Decision” to enable a user to decide which branch of a process flow should be executed.
- For each decision option a branch is entered.
- At runtime the user will be notified by a dialog work item in the workflow inbox.
- To define the text, which will be displayed for the user, it is possible to use local variables. At runtime these variables will be replaced with the current data from the process.
- Within “User Decision” you will use the introduced “Configurable Parameters” to determine which user should be notified at runtime. Therefore you use the configurable parameter type “Agent”.



© SAP 2007 / Page 14

- Design an Integration Process in the Enterprise Services Builder and use the step type “User Decision”.
- Define the parameters of the possible choices for the user decision.
- In the Integration Directory associate the user to the messages.
- At runtime these data are put together and the corresponding tasks will be created.



## New step type “User Decision” with

- Decision options
- Short and long text (using container-variables)
  - All texts are end-user relevant
- Container for indirection to avoid XPath expressions in texts
  - Visibility of container-elements
    1. User Decision container does not inherit at all from process container
    2. User decision container belongs only to the step and does not shine through (to it's decision branches)
  - Container-elements must be typed to XSD-simple types
  - Assignment from process container to user decision container
- Property for Agent assignment (only type agent allowed)

## Usage of Configurable Parameters

- Definition in repository (configuration in directory, aligned with XI parameter concept type agent as placeholders of user assignments)
- Introduce container category “agent” or type “agent” for receiver
  - Enables easy F4 help in the directory (Would not be possible with String type)

**Language dependent texts for end-user display enriched with variables**

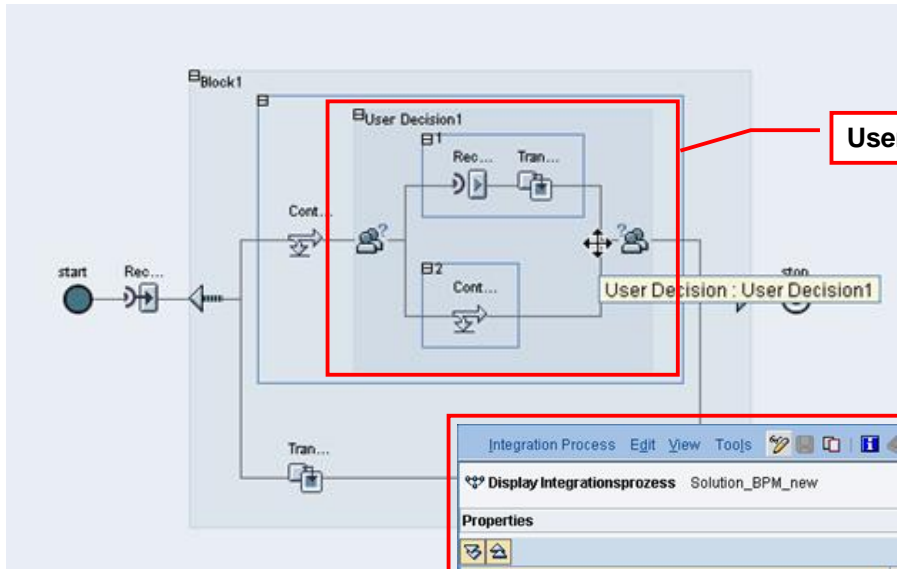
**Text editor with input assistance**

**Uses container elements type "agent" from the configurable parameters**

Name	Type	Default Value	Description
po_nr	xsd:integer		



# User Decision in Integration Process



User Decision in Integration Process

Properties of the step type "User Decision"

Integration Process Edit View Tools

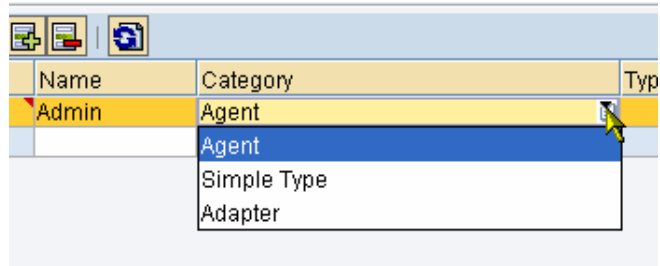
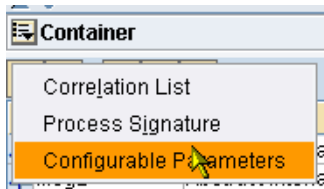
Display Integrationsprozess Solution\_BPM\_new Active Display Language English (OL)

**Properties**

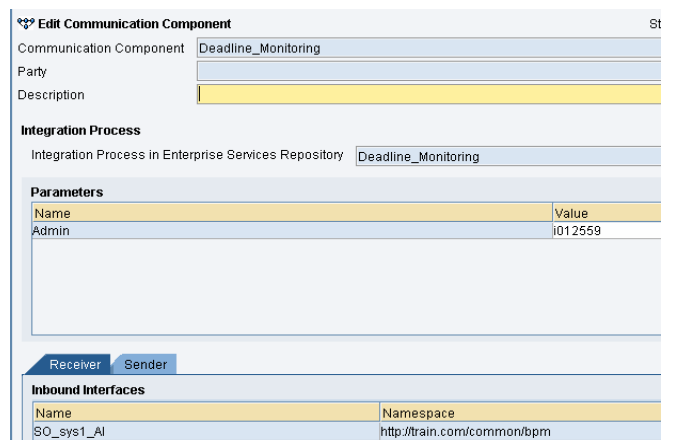
Name	Value
Step Name	User Decision1
Description	
Agent	Admin
Title for Display	
Description for Display	
▼ Decision Option 1	
Description	
Decision Text	Resend
Outcome Name	Resend
▼ Decision Option 2	
Description	
Decision Text	Cancel Process
Outcome Name	Cancel Process



## ■ Use configurable parameters to assign container type “Agent”



## ■ Configure user parameters



# Monitor Processes with User Decision



## ■ Open Workflow Log

The screenshot displays the SAP Workflow Log interface. The main window is titled "Display Workflow Log for 'http://train'" and shows a graphical workflow log with various steps and transitions. A table in the upper right corner provides a summary of the workflow tasks.

Workflow and task	Details	Graphic	Agent	Status	Result	Date	Time
Solution_BPM_new http://train.com/Solution/vor				In Process	Workflow started	05.07.2.	10:08...
Block1				Exception	...	05.07.2.	10:08...
Triggers a process, started in the background				Completed	Step completed	05.07.2.	10:08...
				Ready	Ready	05.07.2.	10:08...

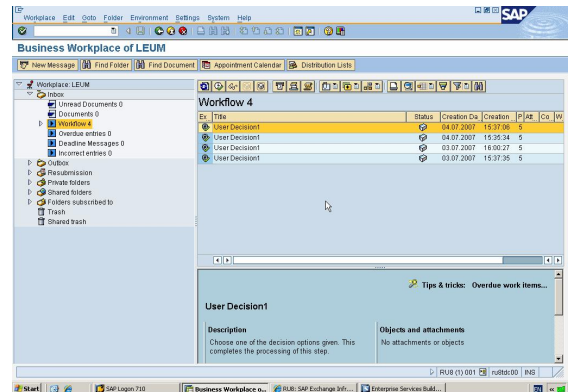
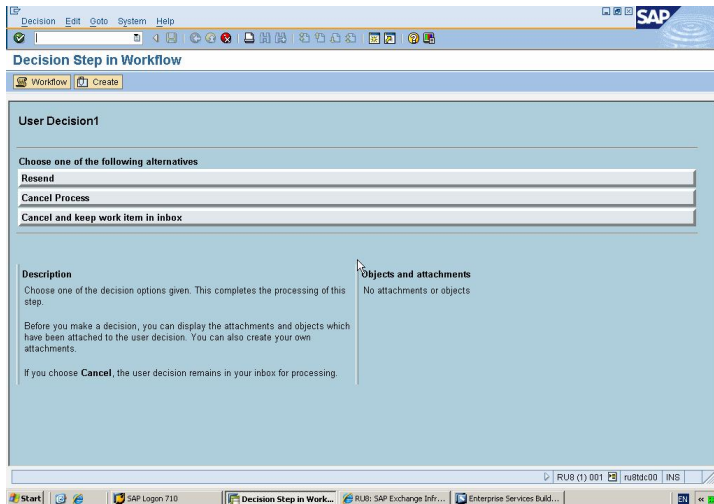
The graphical workflow log shows a process flow starting with "Step complete", followed by "Transformation1 (No agent)", "Exception generation", "Control1 (Workflow System) Completed", "User Decision1 (No agent) Ready", "Cancel Process", and "Control2". A green box highlights the "User Decision1" step in the graphical view.

■ In the Workflow Log the executed process can be monitored.

# User Decision in Business Workplace



- Open Business Workplace
- Enter transaction code SBWP
- Choose one of the configured alternatives for the process flow



- After the execution a new item is created in the inbox of the Business Workplace.
- The user can now choose one of the preconfigured alternatives of the process flow.



No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft, Windows, Excel, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, System i, System i5, System p, System p5, System x, System z, System z9, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, Informix, i5/OS, POWER, POWER5, POWER5+, OpenPower and PowerPC are trademarks or registered trademarks of IBM Corporation.

Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Oracle is a registered trademark of Oracle Corporation.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

MaxDB is a trademark of MySQL AB, Sweden.

SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

The information in this document is proprietary to SAP. No part of this document may be reproduced, copied, or transmitted in any form or for any purpose without the express prior written permission of SAP AG.

This document is a preliminary version and not subject to your license agreement or any other agreement with SAP. This document contains only intended strategies, developments, and functionalities of the SAP® product and is not intended to be binding upon SAP to any particular course of business, product strategy, and/or development. Please note that this document is subject to change and may be changed by SAP at any time without notice.

SAP assumes no responsibility for errors or omissions in this document. SAP does not warrant the accuracy or completeness of the information, text, graphics, links, or other items contained within this material. This document is provided without a warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or non-infringement.

SAP shall have no liability for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials. This limitation shall not apply in cases of intent or gross negligence.

The statutory liability for personal injury and defective products is not affected. SAP has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third-party Web pages nor provide any warranty whatsoever relating to third-party Web pages.