

Using Rules in a Gateway



Applies to:

SAP NetWeaver CE 7.11 Release. For more information, visit the [Business Process Modeling homepage](#)

Summary

Rules can be also be evaluated directly in a Gateway. This document shows how to do this using a sample scenario.

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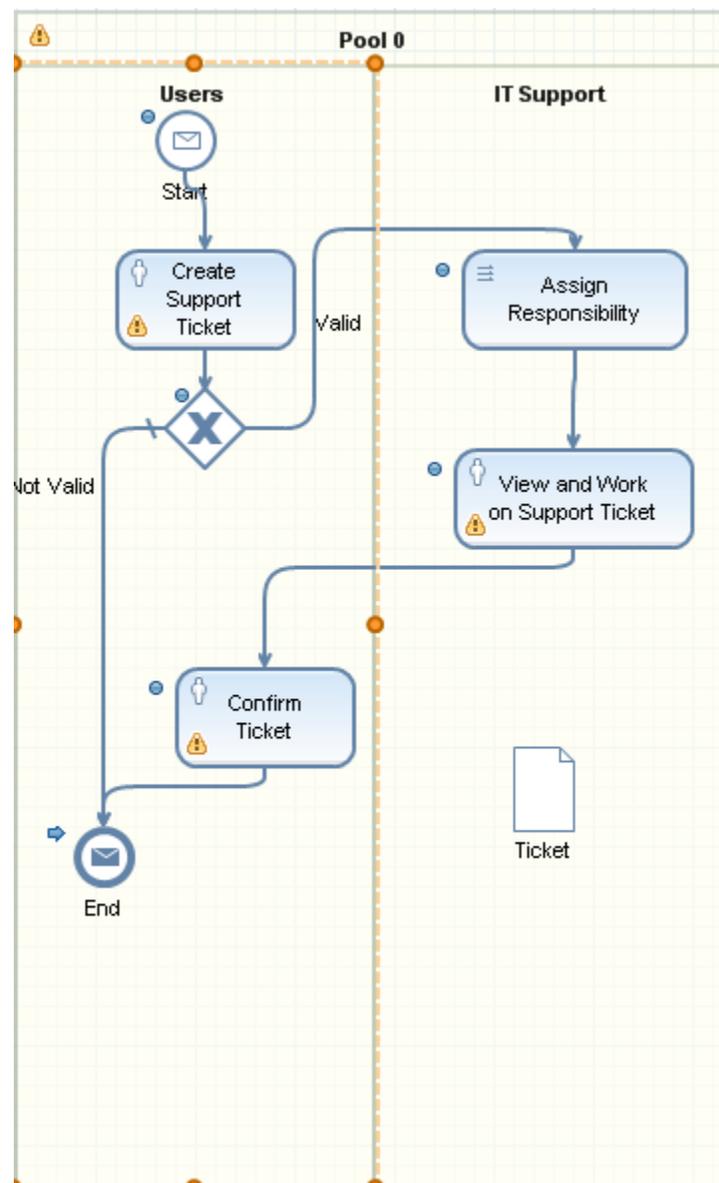
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Sample Scenario

Consider a scenario where IT support tickets were created by the users. Based on the component of the IT support ticket, it is assigned to a corresponding IT group to handle it. If the component of the IT support ticket is not entered by the user, the system will fail as it won't know which group to assign it to. So we can create a Ruleset that validates the support ticket and use this Ruleset in a Gateway where validation of the support ticket is done. If the support ticket is valid, the system can continue with assignment. Otherwise, we can assign a default group or ask for more information. In the following sample process, we connect the invalid ones to end for simplicity.

Here is the sample process flow:



Sample Ruleset

The Ruleset in the above scenario validates the ticket. Simple validation checks can be done in this Ruleset like all the values are entered, the components entered are correct etc.

This Ruleset takes the TicketType as parameter and returns a boolean (true if valid and false if invalid). Create a definition of type boolean and set the result of the Ruleset to the definition.

The screenshot shows the 'Signature' section of a Ruleset configuration. The 'Namespace' is 'demo.sap.com/itsupport' and the 'Return type' is 'boolean - http://www.w3.org/2001/XMLSchema'. A table lists parameters, with 'arg1' having a type of 'TicketType - http://www.example.or...' and 'Multiple Occurrences' set to false. The 'Result' field is set to 'valid'.

Name	Type	Multiple Occurrences
arg1	TicketType - http://www.example.or...	<input type="checkbox"/>

valid in the Result part of the above screenshot is the variable definition of type boolean. In the rules where we do validation checks, we set the valid to *true/false*.

```

Rule : Valid
Priority : 50000

<Click to enter comments>

Preconditions :
+

If
arg1/Component Not Equals null
+

Then
Assign :: valid = Boolean.TRUE
+

```

So this Ruleset effectively takes Ticket as a parameter, does the validations needed, sets the validity in the variable definition *valid* and returns it as output.

Configuring Gateway to evaluate a Ruleset

Once the Ruleset is created in the Process, modify the conditions of the gateway to evaluate the new Ruleset.

The screenshot displays the SAP Business Process Manager interface. The main window shows a process diagram with two lanes: 'Users' and 'IT Support'. In the 'Users' lane, there is a 'Start' event followed by a 'Create Support Ticket' activity. This activity leads to an 'Exclusive Choice' gateway. The 'Valid' path of the gateway leads to the 'Assign Responsibility' activity in the 'IT Support' lane, which then leads to the 'View and Work on Support Ticket' activity. The 'Not Valid' path of the gateway leads to a 'Terminate' event. A 'Condition Expression' dialog box is open, showing the expression 'ValidIssue(Ticket)'. Below the dialog, the 'Rules and Functions' list includes 'ValidIssue(TicketType arg1)'. At the bottom, the 'Exclusive Choice 0' configuration window is visible, showing the 'Condition Evaluation' table.

Order	Name	Condition	Default Gate
1	Valid	ValidIssue(Ticket)	<input type="checkbox"/>
2	Not Valid	<no condition>	<input checked="" type="checkbox"/>

If the support ticket passes the validation checks and the Ruleset returns *true*, the *Valid* condition of the Gateway passes and the corresponding path is taken. Otherwise, the flow ends.

Related Content

1. Rules Tutorial Center - <https://www.sdn.sap.com/irj/sdn/nw-rules-management?rid=/webcontent/uuid/f066ec08-474b-2b10-4a97-b66d605de037>
2. Business Process Modeling – <https://www.sdn.sap.com/irj/sdn/nw-processmodeling>
3. For more information, visit the [Business Process Modeling homepage](#).

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