

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Configuration Guide

Projects Activity Trigger using SAP Build Process Automation or SAP Workflow Management

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Overview

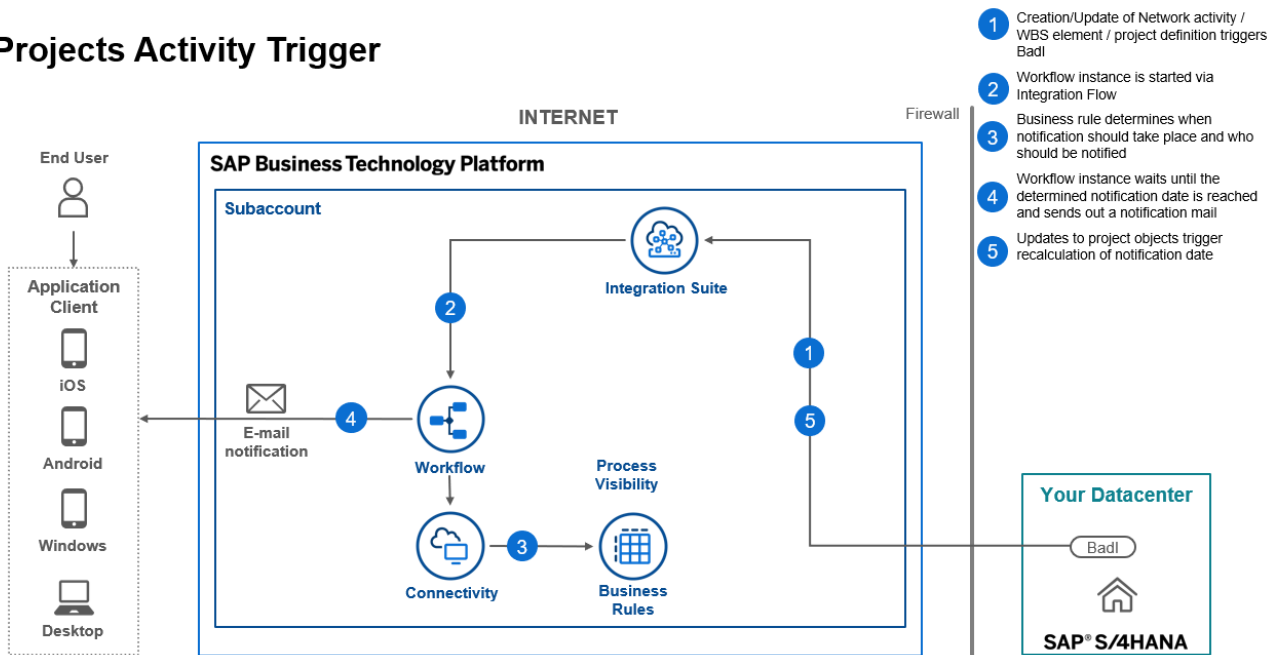
This document provides information about configuration steps to consume the package 'Project Activity Trigger'. The main audience of this document are project members and project managers.

This package enables sending notifications to the responsible users assigned to elements in the SAP Project System. It is possible to configure the lead time before the configured start date of the elements. The notification can be based on WBS elements, project definitions and network activities. The notification can be triggered immediately based on configurable user or system status values or just based on the configured date and lead time.

The Projects Activity Trigger package supports the following features

- Send notifications based on WBS elements, project definitions and network activities
- Immediately trigger notifications based on certain configurable user or system status
- Automatically trigger notifications once an element's date reaches the configurable lead time
- Determine notification recipient based on the assigned responsible person or the assigned work center

Projects Activity Trigger



Artifacts

A package consists of process templates, process steps, process variants, decisions, and process visibility models. Please refer [help documentation](#) about these artifacts.

Process

A process template is a set of business activities and tasks that, once completed, fulfills an organization goal. The **Projects Activity Trigger** package contains the following process template:

Projects Activity Trigger Template – Contains the timer step, the notification steps, and the referenced workflows.

A business process can be broken down logically into smaller parts or steps. Each process step is a collection of activities to perform a specific task. For example, an approval process step can contain activity to determine the approvers, approval task, notifications, and handle the approval result. **Table 1** represents the list of process steps/sub flows available to be used in **Projects Activity Trigger**.

Table 1. Process Steps

Process Steps	Cardinality	Detailed Description
Timer	1..1	Mandatory step that must be placed at the beginning of the variant. It determines if the notification has to wait and - if so - waits until the specified time has come and sets a confirmation flag to trigger the notifications
Notify Network Responsible	0..1	Optional step that must be placed after the Timer step. If removed, no update will be sent to the work center responsible for a network activity.
Notify WBS Responsible	0..1	Optional step that must be placed after the Timer step. If removed, no update will be sent to the assigned Responsible for the WBS element
Notify Project Manager	0..1	Optional step that must be placed after the Timer step. If removed, no update will be sent to the assigned Responsible for the Project definition

The process has attributes, and these attributes are available in process visibility to search approval process instances and to define process performance indicators. Please see Table 2 for more details.

Table 2. Process Attributes.

Process Attributes	Detailed Description
Type	Type of triggering element
Receiver	Determined notification receiver
ResponsibleAdmin	Responsible Admin
ImmediateNotification	Immediate Notification derived from Status
NotifDateIsInThePast	Notification date was in the past

Process Variants

A process variant consists of multiple process steps configured by a line of business expert. It is possible to create multiple variants of the same process. For example, you can decide to activate all types not notifications or just the notifications for project managers.

Please refer [help documentation](#) about how to import content packages and configure a process variant.

The screenshot displays a process configuration interface for a process named "Default Projects Activity Trigger". At the top right, there are buttons for "Undo", "Redo", "Save", and "Activate".

On the left, a panel titled "Available Steps (6)" lists the following steps:

- Notify Network... (Send a notification to the responsible person of the...)
- Notify Project Manager (Send a notification to the responsible person of the...)
- Notify WBS Responsible (Send a notification to the responsible person of the WBS...)
- Start Variant PS... (Start Variant)
- TerminatelInstances (TerminatelInstances)
- Timer (Timer)

The central workspace shows a vertical flowchart starting with a green circle, followed by a "Timer" step (locked), then "Notify Project Manager", "Notify Network Responsible" (with a trash icon), and "Notify WBS Responsible", ending with a red circle.

On the right, the "Step Properties" panel for the selected "Notify Network Responsible" step shows:

- Name*: Notify Network Responsible
- Type: Notify Network Responsible
- Description: Send a notification to the responsible person of the network activity derived from work center and plant

Import Project Activity Trigger and Configure Process Variants with SAP Build Process Automation

1. In the [SAP Build Process Automation Store](#), search for live process package Project Activity Trigger and import the same. This content package has one process template and process variant(s) for that template.
2. In the Application Development [Lobby](#), click to open the package with name Project Activity Trigger. This opens the package in a new tab/window.
3. Click the + icon next to the process template to create a new process variant.
4. Enter Name of the new Process Variant (ex, Two Step Approval).
5. Click the newly created Process Variant tile to save and activate the process variant.
6. The process variant has a default implementation with two steps and at least one level of approval.
7. It is possible to remove steps like “Approval for Project Activity Trigger” from a process variant only if there are multiple approvals. Please note that whether a step is mandatory or optional, and how many a times any step can be used within a variant, are dependent on the constraints defined on the process steps.
8. Save and activate the variant. A successful activation will create a new workflow definition in the account that can be viewed in the [Monitor Processes and Workflows app](#).

Import Projects Activity Trigger Content and Configure Process Variants with SAP Workflow Management

1. In Process Flexibility Cockpit app, search for content package Projects Activity Trigger. and import the same. Please refer the standard help document about [how to import a content package](#). This content package has one process template and process variant(s) for that template are required.
2. Open content package in Flexibility Cockpit and click Process Variants tile.
3. Click New Process Variant.
4. Enter Name of the new Process Variant (ex, default) and select “Projects Activity Trigger Template” as Process.
5. Click the newly created Process Variant tile to save and activate the process variant.
6. The process variant has a default implementation with four steps.
7. It is possible to remove the notification steps from a process variant. Please note that whether a step is mandatory or optional, and how many a times any step can be used within a variant, are dependent on the constraints defined on the process steps.
8. Save and activate the variant. A successful activation will create a new workflow definition in the account that can be viewed in the Monitor Workflows – Workflow Definition app in SAP Fiori Launchpad.
9. Update the Determine Process Variant Policy and include the newly created workflow definition ID in the rule

Timer

Mandatory step that must be placed at the beginning of the variant. It determines if the notification has to wait and - if so - waits until the specified time has come and sets a confirmation flag to trigger the

notifications

1. Drag and drop the step to the start of the variant. This step is mandatory and has no additional inputs

Notify Network Responsible

Optional step that must be placed after the Timer step. If removed, no update will be sent to the work center responsible for a network activity.

1. Drag and drop the step anywhere after the Timer step. This step is optional and has no additional inputs

Notify WBS Responsible

Optional step that must be placed after the Timer step. If removed, no update will be sent to the responsible for a WBS element.

1. Drag and drop the step anywhere after the Timer step. This step is optional and has no additional inputs

Notify Project manager

Optional step that must be placed after the Timer step. If removed, no update will be sent to the manager of a project definition.

1. Drag and drop the step anywhere after the Timer step. This step is optional and has no additional inputs

Decisions & Policies

Decisions allow to encapsulate the business logic from core applications and supports the reuse of business rules across different business processes. Decisions enable customers to adopt changes in processes without changing the underlying workflows or application logic. SAP Build Process Automation or SAP Workflow Management has business rules capabilities that enables customers to centrally manage all decisions. Please go through the [business rules capabilities](#) in SAP Build Process Automation or SAP Workflow Management.

Projects Activity Trigger enable customers to flexibly configure decisions to gain flexibility to

1. Determine Relevant Status
2. Determine Process Variant
3. Determine Email Address From Work Center
4. Determine Email Address From Responsible Number
5. Determine WBS Lead Time
6. Determine Project Lead Time
7. Determine Network Lead Time

DetermineRelevantStatus

Determines if the status of the project or network indicates that a notification should be triggered immediately

Rule Service Name: Determine Relevant Status

Input: Status and Plant (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
Status	String	String list of assigned status values
Plant	String	Plant

Output: ImmediateNotification (Boolean)

Determines if a notification should be triggered immediately ignoring the timer lead time

Rule Definition

DetermineRelevantStatus

If	Then
Plant =	Immediate Notification
<input type="text" value="'DE01'"/>	<input type="text" value="true"/>
<input type="text"/>	<input type="text" value="false"/>
Status CONTAINS	
<input type="text" value="'REL'"/>	
<input type="text"/>	

Note: Make sure to give the short text of the status in English. Both user and system status are supported

Where used

Step: StartVariant

DetermineProcessVariant

Determines Process Variant based on Project Plant and Duration

Rule Service Name: DetermineProcessVariant

Input Project Definition (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
Duration	String	Duration in days
Plant	String	Plant

Output: ImmediateNotification (Boolean)

Determines if a notification should be triggered immediately

ATTRIBUTE	TYPE	DESCRIPTION
VariantID	String	Variant ID
ResponsibleAdminID	String	Responsible Admin ID
ResponsibleAdminEmail	String	Responsible Admin Email
LeadTime	Number	Default Lead Time in Days

Rule Definition

DetermineProcessVariant

If		Then			
Plant	Duration in days	Default Lead Time in Days	Responsible Admin Email	Responsible Admin ID	Variant ID
<input type="text" value="= 'DE01'"/>	<input ">="" 1000"="" type="text" value=""/>	<input type="text" value="'30'"/>	<input type="text" value="james.nut@de-consulting.de"/>	<input type="text" value="james.nut@de-consulting.de"/>	<input type="text" value="'defaultprojectsactivitytrigger'"/>
<input type="text" value="= 'DE01'"/>	<input type="text"/>	<input type="text" value="'14'"/>	<input type="text" value="james.nut@de-consulting.de"/>	<input type="text" value="james.nut@de-consulting.de"/>	<input type="text" value="'defaultprojectsactivitytrigger'"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="'7'"/>	<input type="text" value="james.nut@de-consulting.de"/>	<input type="text" value="james.nut@de-consulting.de"/>	<input type="text" value="'defaultprojectsactivitytrigger'"/>

Where used

Step: StartVariant

DetermineEmailAddressFromWorkCenter

Determines the email address of the notification receiver based on work center and plant

Rule Service Name: DetermineEmailAddressFromWorkCenter

Input: Work Center (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
WorkCenter	String	Work Center of the network activity
Plant	String	Plant

Output: Email Address (String)

Determines the email address of the notification receiver

Rule Definition

DetermineEmailAddressFromWorkCenter

Plant	Work Center	Email Address
<input type="checkbox"/> = 'DE01'	<input type="checkbox"/> = ZPS_ASSE	<input type="text" value="mailto:zps.asse@siemens.com"/>
<input type="checkbox"/> = 'DE01'	<input type="checkbox"/> = ZWC1	<input type="text" value="mailto:zwc1@siemens.com"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text" value="mailto:zwc1@siemens.com"/>

Where used

Step: StartVariant

DetermineEmailAddress

Determines the email address of the notification receiver based on the responsible number if no email can be derived from the assigned user in the system itself

Rule Service Name: DetermineEmailAddressFromResponsibleNo

Input: Responsible Data (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
ResponsibleNo	String	Responsible Number from the system

Output: Email Address (String)

Determines the email address of the notification receiver

Rule Definition

DetermineEmailAddressFromResponsibleNo

Responsible Number (w/o leading 0s) =	Email Address
'54'	larsen@the-consulting.de
'131'	larsen@the-consulting.de
	larsen@the-consulting.de

Where used

Step: StartVariant

DetermineWBSLeadTime

Determines notification lead time for WBS elements

Rule Service Name: DetermineWBSLeadTime

Input Project Definition (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
CompanyCode	String	Company Code
ControllingArea	String	Controlling Area
CostCenter	String	Cost Center
Currency	String	Currency
FunctionalArea	String	Functional Area
Plant	String	Plant
ProfitCenter	String	Profit Center
ProjectType	String	Project Type

Output: Lead Time (Structure)

Determines the lead time number and unit

ATTRIBUTE	TYPE	DESCRIPTION
Number	Number	Number of <Units> lead time for the notification
Unit	String	Unit for notification

Rule Definition

DetermineWBSLeadTime

If								Then	
CompanyCode	ControllingArea	CostCenter	Currency	FunctionalArea	Plant	ProfitCenter	ProjectType	Unit	Number
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	= 'DE01'	<input type="text"/>	<input type="text"/>	'DAYS'	1000
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	'DAYS'	1200

Where used

Step: StartVariant

DetermineProjectLeadTime

Determines notification lead time for project definition

Rule Service Name: DetermineProjectLeadTime

Input Project Definition (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
CompanyCode	String	Company Code
ControllingArea	String	Controlling Area
CostCenter	String	Cost Center
Currency	String	Currency
FunctionalArea	String	Functional Area
Plant	String	Plant
ProfitCenter	String	Profit Center
ProjectType	String	Project Type

Output: Lead Time (Structure)

Determines the lead time number and unit

ATTRIBUTE	TYPE	DESCRIPTION
Number	Number	Number of <Units> lead time for the notification
Unit	String	Unit for notification

Rule Definition

DetermineProjectLeadTime

Decision Table

Decision Table											
If										Then	
BusinessArea	CompanyCode	ControllingArea	FunctionalArea	ObjectClass	Plant	ProfitCenter	ProjectDuration	ProjectStock		Unit	Number
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	'DAYS'	7

Where used

Step: StartVariant

DetermineNetworkLeadTime

Determines the lead time for network update notifications

Rule Service Name: DetermineNetworkLeadTime

Input Network Plan (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
Plant	String	Plant
ActivityPlannedWorkDuration	String	Duration in days for the network activity
ActivityPriority	String	Priority of the activity
ActivityWorkCenter	String	Work Center of the activity

Output: Lead Time Network (Structure)

Determines the lead time number and unit

ATTRIBUTE	TYPE	DESCRIPTION
Number	Number	Number of <Units> lead time for the notification
Unit	String	Unit for notification
Earliest	Boolean	true = take earliest date, false = take latest date
Start	Boolean	true = take start date, false = take finish date

Rule Definition

DetermineNetworkLeadTime

Decision Table

If				Then			
Work Duration	Priority	Work Center	Plant	Start Date	Earliest Date	Unit	Number
= 7	= 'HIGH'	= 'WC'	= 'DE01'	'true'	true	'DAYS'	14
				'true'	true	'DAYS'	7

Where used

Step: StartVariant

Process Visibility

Process Visibility capability in SAP Build Process Automation or SAP Workflow Management enables Process Owners and Process Operators to gain real time visibility on processes and key process performance indicators. It also enables customers gain out of the box process visibility into their deployed processes. Please refer [help documentation](#) for more details.

Projects Activity Trigger process content package provide out of the box visibility on all the process variants in SAP Build Process Automation or SAP Workflow Management. Line of business expert will be able to enhance the visibility scenario to their requirements.

Configure Visibility Scenarios in SAP Build Process Automation

1. Go to the Application Development Lobby.
2. Select Project Activity Trigger Project.
3. Click to open **Project Activity Trigger** scenario.
4. Click Activate button.

Please go through the [help documentation](#) on how to configure the visibility scenario.

Configure Visibility Scenarios in SAP Workflow Management

1. Go to Process Flexibility Cockpit.
2. Select **Projects Activity Trigger** tile.
3. Click Visibility Scenarios tile.
4. Select Projects Activity Trigger scenario

Please go through [help documentation](#) on how to model a visibility scenario.

Access Process Workspace in SAP Build Process Automation

1. The process visibility scenario can be accessed using SAP Launchpad Service. Refer to the help document for [creating UI applications on central SAP Fiori Launchpad](#) for SAP Build Process Automation.
2. Once you have added the applications process Visibility Scenario Instances (with app ID com.sap.spa.pv.instances) and Visibility Scenario Dashboard (with app ID com.sap.spa.pv.ovp), follow the below steps to add a tile to access the Project Activity Trigger dashboard.
 - a. Navigate into “Visibility Scenario Dashboard”.
 - b. On the screen that opens, choose Create a Local Copy.
 - c. To use custom texts, choose Edit and adapt the texts in the General section.
 - d. You can use a custom title, description, and subtitle for the tile.
 - e. Choose the Navigation tab.
 - f. Under the Intent section, ensure that the value in the Action tab is unique for every application.

g. Under the Parameters section, provide the following:

Parameter Name	Parameter Value
Name	scenariold
Default Value	com.sap.content.projectsactivitytrigger
Required	Toggle to Yes

h. Choose Save.

i. Assign the local copy to a group and make sure that they're visible to users. For more information, see [Assign Apps to a Group and to a Catalog](#) and [Assign Content to a Role](#).

3. Once created, select app that corresponds to "Project Activity Trigger".

4. User will see the process visibility dashboard.

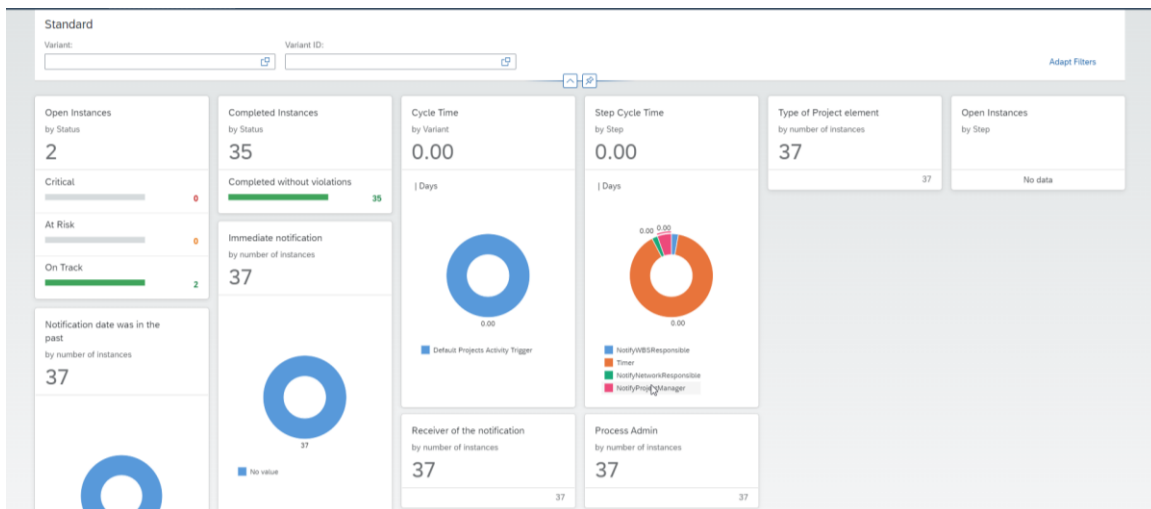
Access Process Workspace in SAP Workflow Management

1. Go to Process Flexibility Cockpit

2. Select **Projects Activity Trigger**

3. Click Live Process Insights **Projects Activity Trigger**

4. User will see the below detailed process visibility dashboard.



Please go through [help documentation](#) on how to access process workspace.