

Quick Reference Guide

SAP GRC Access Control – Compliant User Provisioning (formerly Virsa Access Enforcer): HR Triggers

- Purpose:** Perform configuration steps for HR Triggers used in GRC Access Control – Compliant User Provisioning (Access Enforcer).
- Why:** In general, all master data is maintained in a specific SAP HR system. Once a change occurs in this system, the data needs to be disseminated to other associated SAP HR systems. HR Triggers in Access Enforcer provide the means to automatically transfer the changes from the SAP HR system to other systems.
- When an event is triggered in the SAP HR system, such as hiring a new employee, rules are applied along with its corresponding HR Triggers. The rule and HR Triggers initiate an “action” for Access Enforcer to create a request.
- The request can be processed through Access Enforcer’s workflow or not, depending on business policies. The frequency of when a request is processed can be specified by configuring a job schedule.
- When:** Perform these tasks during initial Access Enforcer system configuration setup.
- How often:** One time only. May require periodic updating.
- Main Tasks:**
- Configure Actions
 - Create Rules and Assign Actions
 - Assign Field Mapping
 - Map SAP HR fields to Access Enforcer
 - Schedule background jobs
 - View Process Log



As an Access Enforcer Administrator, it is highly recommended that you have a working knowledge of the SAP HR system so that you can configure the HR Triggers to reflect your business policies and procedures.

Getting Started

To display the four HR Trigger configuration actions:

1. Log in to Access Enforcer as an administrator. Click on the **Configuration** tab.
2. Click the **HR Triggers** link in the left-side navigation pane. The option expands to display the four configuration actions:
 - Actions
 - Rules
 - Field Mapping
 - Process Log

Task 1: Configure Actions

Actions determine what to do when a rule is encountered, such as create or modify.

To create an Action:

1. Click the **Actions** configuration option. The **Actions** page appears.

The screenshot displays the SAP Virsa Access Enforcer configuration interface. The top navigation bar includes the SAP logo, the product name 'Virsa Access Enforcer', and user information. The main interface is divided into a sidebar menu and a central configuration area. The sidebar menu lists various configuration options, with 'Actions' selected under the 'HR Trigger' category. The central area is titled 'Actions' and contains the following fields:

- Action ID***: POSITIONCHANGE
- Short Description***: Position Change
- Description**: Action for Position Change
- Type***: Change Account (selected from a dropdown menu)
- Priority***: High (selected from a dropdown menu)

Below the fields is a table with the following structure:

System	Address	Parameter ID	Default	User Group
ECC 50		Valid From		Valid From
		03/02/2007		12/31/9999

At the bottom of the configuration area, there are '+', '-' icons and 'Save' and 'Cancel' buttons.

2. In the **Action ID** field, enter the name of your action. In this example, POSITIONCHANGE is entered.
3. In the **Short Description** field, enter an abbreviated description of the action. This may be the same as the Action ID.
4. In the **Description** field, enter the full description of the action.
5. In the **Type** field, click the drop-down menu to select the appropriate type. This field is actually the request types which are: New, Change, Lock, Unlock, Delete, or Information. In this example, Change is used.
6. In the **Priority** field, click the drop-down menu to select the priority of the action.
7. In the **System** tab, click the **plus (+) icon** to add a new field. Under the System column a blank field is activated. Click the drop-down menu to select the system that you want to update with the change.
8. In the **Valid From**, click on the calendar icon to select a date you want to start the validation.

9. In the **Valid To**, click on the calendar icon to select a date you want to end the validation.
10. Click the **plus (+) icon** to add additional systems. Otherwise, click **Save**.
11. Click the **Address** tab, then click the drop-down menu to select **Yes** or **No** for each of the field you want to update with the change data. The fields are:
 - Name
 - Email
 - Telephone
12. Click the **Parameter ID** tab.
In the **Parameter ID** field, click on the drop-down menu to select **Yes** or **No** to update this field with the data change.
13. Click the **Default** tab.
In the **Default** field, click on the drop-down menu to select **Yes** or **No** to update this field with the data change.
14. Click the **User Group** tab.
In the **User Group** field, click on the drop-down menu to select **Yes** or **No** for each of the field you want to update with the change data. The fields are:
 - User Group
 - User Group Name
15. Click **Save**.

Note: To change your Action ID, select the **Action ID** then click **Change**. The fields become active to make your modifications.

Task 2: Create Rules and Assign Actions

1. Click **Rules > Create**. The **Rules** page displays.

Info Type	Sub Type	Field	Operator	Value	And/Or/Not
0001		PLANS	<>	\$PLANS	AND
0000		MASSN	=	02	AND
0000		MASSG	=	12	AND

2. In the **HR Systems** field, click the drop-down menu to select the appropriate HR system where you want to define a rule. You need to define rules for all HR Systems, individually.
3. In the **Rule ID** field, enter the name of the rule ID. This is the same name you entered using the **Actions** page.
4. In the **Effective From** field, click on the calendar icon to select the date you want the rule to take effect.
5. In the **Rule Short Description** field, enter a brief description of the rule.
6. In the **Rule Description** field, enter a description of the rule.
7. In the **Action** field, click the **arrow** to select the appropriate available actions that you want to apply to the HR system. The available actions are created in the **Actions** page.
8. In the **Attribute** tab, click the **plus (+) icon** to add a new attribute. Under the **Info Type**, **Sub Type**, **Field**, **Operator**, **Value**, and **And/Or/Not** columns, blank fields become activate.
9. In the **Info Type** field, click on the **search icon** to select the appropriate available **Info Type**, **Sub Type** (if applicable), and **Field**.

In the first example above, Info Type = **0001 – Organization Assignment** and Field = **PLANS**.

10. Click **Continue**.

Note: When creating a rule, it is important that an SAP HR system expert help choose the Info Type and Sub Type. The Info Type and Sub Type combination points to a specific field in the SAP HR system's database.

The example in the **Rules** page is an actual rule for position change.

11. In the **Operator** field, click the drop-down menu to select the appropriate operator you want for your rule. The possible values are: =, <>, <, >.
12. In the **Value** field, enter the field name (or position change) where the change is reflected. In this example, the Info Type is 0001 and the **PLANS** field is modified, it is not equal to the corresponding field, **\$PLANS**. In the other rules, where the Info Type is 0000 and the MASSN and MASSG are equal to the corresponding Value field 02 and 12, respectively. These Value fields correspond to the **Action Type** and **Reason for Action** fields in the SAP HR system.

Note: If the '\$' symbol precedes the field value, then it denotes the previous value for this field.

13. In the **And/Or/Not** field, click the drop-down menu to select the appropriate logical operator for your rule.
14. Click the **plus (+) icon** to add additional systems. Otherwise, click **Save**.

Task 3: Field Mapping

1. Click **Field Mapping**. The **Field Mapping** page appears.

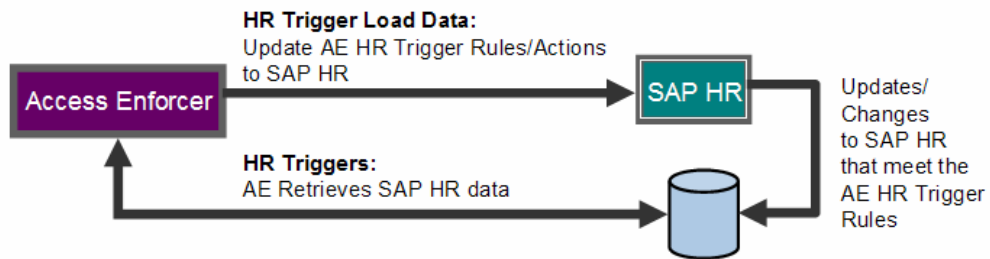
Field Name	Type	ID	Target Field
Manager FName	Standard	0002	VORNA
Manager LName	Standard	0002	NACHN
Manager Telephone	Standard	0105	USRID_LONG
Org. Unit	Standard	0001	ORGEH
Personnel Number	Standard	0003	PERNR
Position	Standard	0001	PLANS
Telephone Number	Standard	0105	USRID_LONG
User ID	Standard	0105	USRID
User FName	Standard	0002	VORNA
User LName	Standard	0002	NACHN
Usr Start Valid date	Standard	0002	BEGDA
Usr End Valid date	Standard	0002	ENDDA
Select	Select		

2. In the **SAP HR System** field, click the drop-down menu to select the desired system.
3. Click **Load Standard Field Mapping**.
Information for the selected fields is displayed. All of these fields are used as general information for the request in Access Enforcer.
4. Click the **plus (+) icon** to add a row and show all available fields in the SAP HR system.
5. Click **Save**.

Task 4: Schedule Background Jobs

To get information from the SAP HR system to Access Enforcer, you need to configure the background daemons for scheduling jobs. There are two jobs you need to schedule:

- **HR Triggers Load Data** – schedule job for every **60 seconds**
 - Schedule to retrieve HR data resulting from trigger rules/actions updated to SAP HR
 - Update AE HR Trigger rules and actions to SAP HR
- **HR Triggers** – schedule job for every **80 seconds**
 - Schedule time for the HR Trigger rules to perform the actions to the request
 - Synchronize the rules/actions



1. Log in to Access Enforcer with AE administrator privileges.
2. Go to **Configuration > Background Job**.
3. From the Task Name pull down menu, select **HR Triggers**.
4. Select the **Schedule** type.
5. Set Task Recurrence to **60** seconds.

Schedule Service

✓ **Action successful**

Configure HR TRIGGERS

Task Name:

Description:

Schedule Type:

Task Recurrence

Start Time: Start Date:

Between: AND:

Every Seconds:

Sunday
 Monday
 Tuesday
 Wednesday
 Thursday
 Friday
 Saturday

6. Repeat scheduling tasks for the **HR Triggers Load Data** task. Set Task Recurrence to **80** seconds.



To set a background job task recurrence to a specified number of seconds, the Background Job Time Intervals in Minutes option under **Miscellaneous** Configuration must be set to one (1) minute.

Task 5: View Process Log

1. Click **Process Log**. The **Process Log** page appears.
2. This page shows all HR Triggers-related requests. If the request has a Request Number, then it is processed. However, if no request number is displayed, then there is a pending error or it has not processed. The comments field has a brief explanation of the request and its status.

The screenshot shows the 'Access Enforcer Process Log' window in the SAP NetWeaver Continuous Compliance Suite. The interface includes a navigation menu on the left with categories like 'Request Configuration', 'Risk Analysis', and 'HR Triggers'. The main area displays a table of process log details.

Request No	Trigger Id	Rule Id	Process Status	Comments
9005660	100310	POSITIONCHANGE	Processed	Request created . Trigger from VD3100 processed on 2/28/2006 3:02 PM PST
	100311	POSITIONCHANGE	Pending On Error	Cannot assign NULL to host variable 5. setNull() can only be used if the corresponding column is nullable . . . Trigger from VD3100 processed on 2/28/2006 3:02 PM PST
	100312	POSITIONCHANGE	Pending On Error	Cannot assign NULL to host variable 5. setNull() can only be used if the corresponding column is nullable . . . Trigger from VD3100 processed on 2/28/2006 3:02 PM PST
	100313	POSITIONCHANGE	Pending On Error	Cannot assign NULL to host variable 5. setNull() can only be used if the corresponding column is nullable . . . Trigger from VD3 processed on 2/28/2006 3:29 PM PST
9005661	100314	POSITIONCHANGE	Processed	Request created . Trigger from VD3 processed on 2/28/2006 3:29 PM PST
	100315	POSITIONCHANGE	Pending On Error	Cannot assign NULL to host variable 5. setNull() can only be used if the corresponding column is nullable . . . Trigger from VD3100 processed on 2/28/2006 3:29 PM PST
9005662	100316	POSITIONCHANGE	Processed	Request created . Trigger from VD3100 processed on 2/28/2006 3:29 PM PST
	100317	RULEQAHR	Not Processed	
	100318	TESTRULE	Pending On Error	No approvers found for req no : 9005663, for path, POSITION_CHANGE and approver determinator : Manager. Trigger from VD3 processed on 2/28/2006 4:32 PM PST
	100319	RULEQAHR	Not Processed	
	100320	TESTRULE	Pending On Error	No approvers found for req no : 9005663, for path, POSITION_CHANGE and approver determinator : Manager. Trigger from VD3100 processed on 2/28/2006 4:32 PM PST
	100321	RULEQAHR	Not Processed	
	100322	POSITIONCHANGE	Pending On Error	No approvers found for req no : 9005663, for path, POSITION_CHANGE and approver determinator : Manager. Trigger from VD3 processed on 2/28/2006 4:45 PM PST
	100323	RULEQAHR	Not Processed	
	100324	POSITIONCHANGE	Pending On Error	No approvers found for req no : 9005663, for path, POSITION_CHANGE and approver determinator : Manager. Trigger from VD3100 processed on 2/28/2006 4:45 PM PST

Page 1 of 9

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