

Training Labs

HelloID Provisioning Application Management



Index

Lab 1 – Local HelloID provisioning Agent installation	3
Lab 2 - Adding and Configuring source systems.....	4
Part 1: (extend the source mapping containing a default field)	4
Part 2: (extend the source mapping containing a custom field).....	4
Lab 3 – Change the HelloID general DisplayName Configuration.....	5
Part 1: (configuring the general display name configuration)	5
Lab 4 - Change the primary contract determination.....	6
Part 1: (configuring and analyzing the primary contract determination).....	6
Lab 5 - Adding and Configuring target systems.....	7
Part 1: (configure a custom target field mapping).....	7
Part 2: (Change the default mapping).....	7
Part 3: (Preparing Active Directory)	8
Part 4: (General Active Directory target configuration)	8
Lab 6 – Create and Configure Business Rules	9
Part 1: (create a business rule for granting accounts to the user’s)	9
Part 2: (create a business rule to grant account enable permissions to the user’s account)	9
Part 3: (create a business rule to grant default membership permissions)	10
Lab 7 – Create and Manage Notifications	11
Part 1: (Account details notification when a new account is created).....	11
Part 2: (Evaluation Summary notification)	12
Part 3: (Blocked Actions Summary notification).....	12





Lab 1 – Local HelloID provisioning Agent installation

Before we start using HelloID provisioning to contact on-premise systems, we need to have the local HelloID Provisioning Agent services installed and running on our local training server.

In production environments, its services must be run with a domain account(s), running them with a local system account(s) can cause logon problems for end users or failed tasks. Furthermore, the service account used should have local admin rights or the Agent will fail to install or update correctly.

The permissions required for the domain account depend on the operations that the Agent will perform in your environment. For example, if the Agent will run tasks to create AD users and add them to groups, the account will need the corresponding permissions. All actions happen within the context of the assigned account.

A complete overview of HelloID requirements is available from following article:

- https://docs.helloid.com/en/requirements,-licensing,-policies/requirements.html#agent-requirements_body

A step-by-step guide on how to install the HelloID Agent is available from the following article:

- <https://docs.helloid.com/en/agent/install-the-on-premises-agent-services.html>





Lab 2 - Adding and Configuring source systems

Source systems are the start of all provisioning processes. They are where personnel records come from, which are then used by HelloID to create and manage accounts, accesses, and permissions.

Because the source within each organization is different, we are going to use the default “**HR Generator**” sample system from the source system catalog in this exercise.

Please use the following manual to add the HR Generator system:

<https://docs.helloid.com/en/provisioning/source-systems/hr-generator-source-systems.html>

As a generic reference guide we can use the following article:

<https://docs.helloid.com/en/provisioning/source-systems/add,-edit,-or-remove-a-source-system.html>

Part 1: (extend the source mapping containing a default field)

- Change the default [source mapping](#) for each person so they will be located in **Baarn**, to set this make sure to use the **Location.Name** field of the person mapping.
- For these changes to take effect, a new source import is needed before the results will be visible in the UI **Persons (overview) → Information (tab - general section) → Location (field)**.

Part 2: (extend the source mapping containing a custom field)

- Create a new [custom field](#) called **CompanyName** to extend the HelloID person model.
- To add a new custom field please use the “**Custom Fields**” section on the general “**Source configuration**” and extend the **person** object with a **CompanyName** field.
- Once the new field is created successfully, assign this field with a fixed value corresponding to your own company name (e.g. Tools4ever) from the **person** mapping screen of the source connector.
- For these changes to take effect, a new source import is needed before the results will be visible in the UI **Persons (overview) → Information (tab - general section) → Custom (field)**.





Lab 3 – Change the HelloID general DisplayName Configuration

HelloID supports different display name patterns for source systems. Each is denoted by one of the following abbreviations.

- **B:** Birth name
- **P:** Partner name
- **BP:** Birth name - Partner name
- **PB:** Partner name - Birth name

Part 1: (configuring the general display name configuration)

In this exercise we are extending the default Display Name logic to include our previous configured location mapping.

- Please be aware that the HR Generator system is limited to only support the (**B: Birth name abbreviation**)
- Change the default HelloID DisplayName logic to extend the current ExternalId within the brackets having the following example format: *John Doe (654321 - **Baarn**)*.
- Make sure to change this for all the formats, even when there is currently only one abbreviation supported.
- Custom fields can be added by using the drag and drop functionality, or manual typing the reference field name.
- For these changes to take effect, a new source import is needed before the results will be visible in the UI **Persons (overview) → Person list**.

For more information about the HelloID display name use the following article:

<https://docs.helloid.com/en/provisioning/persons/display-names/format-display-names.html>





Lab 4 - Change the primary contract determination

Because employees may work at more than one location at a time, or have more than one contract, it's important that HelloID will be able to determine the person's primary contract. Information from a primary contract can be used in several ways, such as determining which OU an account is created in, the value of a job title attribute, the manager relation, and much more.

Part 1: (configuring and analyzing the primary contract determination)

In this exercise we will change the primary contract determination logic and view the changes after we perform a new import.

- From the main navigation menu select **Persons**, and search for the following person named **Adam Bosco (00248766)**.
- Once Adam is selected, take note of his primary contract as shown in the example below.

Information	Contracts	Rules	Entitlements	Accounts	Audit Logs	History
Active Primary 17-05-2016 - 01-02-2031						
General			Employment			
Source system	HR generator		Title	Investor Configuration Administrator		
ExternalId	C-28758124		Manager			
Type			Department	Music, Health & Garden		
Fte	0		Division			
Hours per week	34		Team			
Percentage	0		Location			
Sequence	0		Cost bearer			
Organization			Cost center			
Employer						

- Go back to the general HelloID Source configuration and select the wrench icon of the **Primary Contract** configuration.
- Change the **start date** to **Descending** and make it the highest sorting priority.
- Please don't forget to save your changes, and perform a manual import by selecting **Start import** on the source system.
- After the import completed successfully, we can look up the results for **Adam Bosco (00248766)** again to see what have changed.

For more information about the HelloID primary contract calculation logic check the following article: <https://docs.helloid.com/en/provisioning/persons/contracts/set-the-primary-contract-determinant.html>





Lab 5 - Adding and Configuring target systems

For HelloID to provisioning to do anything, it must be connected to a target system. It is within that target system that HelloID will create and manage accounts, accesses, and permissions. Target systems can be added from the HelloID catalog.

In this exercise we start connecting the on-premise Active Directory to HelloID using the Agent installed in one of the previous labs. To add the Active Directory target system please use the following article: <https://docs.helloid.com/en/provisioning/target-systems/active-directory-target-systems/add,-edit,-or-remove-an-active-directory-target-system.html#add-an-active-directory-target-system>

For more information about target systems please check the following reference: <https://docs.helloid.com/en/provisioning/target-systems.html>

After the target system is successfully added use the following reference article to configure it properly: <https://docs.helloid.com/en/provisioning/target-systems/active-directory-target-systems/configure-an-active-directory-target-system.html>

Part 1: (configure a custom target field mapping)

- On the target system navigate to **"Fields"**.
- Add a new custom field to the target system mapping, in this example we use the default **"info"** attribute from the Active Directory LDAP schema.
- Fill this attribute with the value from our previous introduced **custom.CompanyName** field of the source system.
- Once you complete these steps successfully, the configuration will automatically be saved.

Part 2: (Change the default mapping)

- On the target system navigate to **"Fields"**.
- Select the **userPrincipalName** attribute edit the complex mapping of the create action. Replace the current value of **'yourdomainhere'** for the **const domain** variable on line 4 corresponding to the correct value of your Active Directory domain name.
- Remove the default mapped **proxyAddresses** field, using the trashcan icon because Exchange isn't part of our current configuration.
- You may also remove the default mapped fields below, using the trashcan icon because we don't need them for this scenario.
 - changePasswordOnNextLogon
 - company
 - description
 - division
 - employeeNumber
 - givenName





- l
- passwordNeverExpires
- physicalDeliveryOfficeName
- sn
- streetAddress
- telephoneNumber
- userCannotChangePassword
- For the mapping on **sAMAccountName** please make sure to enable the toggle **“Store this field in person account data”**.
- Once you complete these steps successfully, the configuration will automatically be saved.

Part 3: (Preparing Active Directory)

As preparation on our **Create and Configure Business Rules** lab, in which we eventually start creating and enabling accounts. Please make sure your Active Directory contains the following structure.

OU structure:

- Domain.local (*your current local Active Directory domain name*)
 - HelloID Training.
 - Users.
 - Disabled users.
 - Groups.

AD Security group(s):

- Create a few random AD security groups inside the **HelloID Training -> Groups** OU.

Part 4: (General Active Directory target configuration)

Specifying the general Active Directory target connector configuration within HelloID:

- On the target system navigate to the **“Administration”** tab.
- For the Initial container, the container in which the accounts initially get created select the following path: **<your domain name>/HelloID Training/Disabled users**.
- Enable the toggle option for Move account on enable.
- For this Move account on enable, select the following path: **<your domain name>/HelloID Training/Users**.
- Enable the toggle option for Move account on disable.
- For this Move account on disable, select the following path: **<your domain name>/HelloID Training/Disabled users**.





Lab 6 – Create and Configure Business Rules

Business rules are what tell HelloID's provisioning processes what to do and when. Whether you want to grant accounts to new employees five days before they arrive, assign group memberships, or even terminate accounts when employees leave, business rules are how you go about it.

In this exercise we create 3 different business rules, one responsible for creating the Active Directory user account, the other responsible for activating the user account, and the last one will be responsible granting the default security group permissions to the newly created account.

Part 1: (create a business rule for granting accounts to the user's)

- From the navigation menu select **Business -> Rules**.
- Add a new rule meeting the following conditions.
 - Create the Active Directory account 14 days before the contract start date.
 - The account needs to stay in Active Directory for a period of 90 days after the contract end date.
 - The business rule should only apply to 1 person.
 - The person meeting this rule needs to get an Active Directory account.
 - The account must be created in a **disabled** state.
 - Name the rule **Pre and Post account** and make sure the **account** entitlement is part of this business rule.
- After the configuration is complete, the rule needs to be saved & published.
- Before the new rule is enforced, we need to check the result by running an evaluation.
- If the evaluation result looks correct, we can enforce it and double check the result in Active Directory.

Part 2: (create a business rule to grant account enable permissions to the user's account)

- From the navigation menu go back to **Business -> Rules** and create a new rule by using the **Clone rule** functionality on the previous created **Business Rule**.
- Change the configuration of this rule to meet the following conditions.
 - Enable the Active Directory account on the contract start date.
 - Disable the Active Directory account when the contract end date is reached.
 - Move the enabled account to another OU within your Active Directory (this is configured in lab 5 with the "move on Enable" configuration).
 - The business rule should only apply to the same person as specified in part 1.
- Rename the rule into **Active account**, and make sure the **account access** entitlement is part of this business rule.
- After the configuration is complete, this rule also needs to be saved & published.
- Before the new rule is enforced, we need to check the result by running an evaluation.
- If the evaluation result looks correct, we can enforce it and double check the result in Active Directory.



**Part 3: (create a business rule to grant default membership permissions)**

- From the navigation menu go back to **Business -> Rules** and create a new rule meeting the following conditions.
 - Assign the Active Directory memberships on the first day the employment starts.
 - The permissions need to stay on the account in Active Directory until the contract end date is reached.
 - The business rule should only apply to the same person as specified in part 1.
 - Select a few random groups as default entitlements from the **HelloID Training -> Groups OU**.
- Name the rule **Default permissions**.
- After the configuration is complete, this rule also needs to be saved & published.
- Before the new rule is enforced, we need to check the result by running an evaluation.
- If the evaluation result looks correct, we can enforce it and double check the result in Active Directory.

Additional information about Business Rules can be found in the following article:

<https://docs.helloid.com/en/provisioning/business-rules.html>





Lab 7 – Create and Manage Notifications

In HelloID we can configure email notifications to be sent in response to events in HelloID Provisioning target systems. For example, when a new account is created, you may wish to notify the end user and/or their direct manager, the IT department, etc.

When a new user account is created, we would like to have the primary login information available for distributing this to the new employee.

Remark: *In this exercise we create a new notification which will be sent to your own email address, because there is no real production environment available during this training. The default from address will accept any email address using the helloid.com domain without additional configuration. However, if you want to specify a custom 'from' address (e.g., using your organization's domain), you must complete the following steps to get the domain verified. <https://docs.helloid.com/en/getting-started.html#configure-a-custom--from--address-for-emails> These steps are not mandatory in a training environment to complete this lab.*

Additional information about Notification variables can be found in the following article: <https://docs.helloid.com/en/provisioning/notifications--provisioning-/notifications-variable-reference--provisioning-.html>

Part 1: (Account details notification when a new account is created)

- The new notification must be sent during the account create event, to trigger this event please add a 2nd person to the scope of the **Pre and Post account** business rule.
- From the navigation menu select Notifications and press the + button to create a new notification.
 - Make sure you use an existing email address to check if the notification has been sent to this mailbox, the email address of this recipient needs to be specified in the notification to field.
 - Use the training@helloid.com as the from (sender address).
 - Keep in mind that the Notification must have the following values in the body of the email:
 - The accounts username (sAMAccountName).
 - Emailaddress (userPrincipalName) of the newly created account.
 - The accounts password as generated during the account create event.
 - Make sure when variables cannot be resolved, a default value is shown.
 - Use the “**{}** Variables” button for a list of all the available variables.

After the configuration is complete, please let HelloID Provision a new account and check if you have received the configured email.

- Triggering the resend of the account create notification can be achieved by simply unmanage the account entitlement from the person entitlement screen, followed by a manual delete of the user account inactive Directory.
- Check the variables in the body of the email. Are they filled with values?





Part 2: (Evaluation Summary notification)

This event is not tied to a particular target system. Rather, it's triggered whenever HelloID runs a business rule evaluation (e.g., after a scheduled import). The **{{SummaryHtml}}** variable will be replaced by a tabulated summary of entitlements that will be granted or revoked during the business rule enforcement.

- From the navigation menu select Notifications and press the + button to create a new notification.
- The new notification must be sent when a new evaluation is executed, to trigger this event please add a 3rd person to the scope of the **Pre and Post account** business rule.
 - Use the **{{SummaryHtml}}** variable to show the summary report in the mail body
 - Make sure you use an existing email address to check if the notification has been sent to this mailbox, the email address of this recipient needs to be specified in the notification to field.
 - Use the training@helloid.com as the from (sender address).

After the configuration is complete, please let HelloID Provision a new account and check if you have received the configured email.

Part 3: (Blocked Actions Summary notification)

This event is not tied to a particular target system. Rather, it's triggered whenever HelloID runs a business rule evaluation (e.g., after a scheduled import). The **{{SummaryHtml}}** variable will be replaced by a tabulated summary of blocked entitlements as being granted or revoked during the business rule enforcement.

- From the navigation menu select Notifications and press the + button to create a new notification.
- The new notification must be sent when a blocked actions summary event occurs, to trigger this event please remove one or more person(s) from the scope of the **Pre and Post account** business rule.
 - Use the **{{SummaryHtml}}** variable to show the summary report in the mail body
 - Make sure you use an existing email address to check if the notification has been sent to this mailbox, the email address of this recipient needs to be specified in the notification to field.
 - Use the training@helloid.com as the from (sender address).

After the configuration is complete, please let HelloID Provision revoke an account and check if you have received the configured email. This email will only be triggered when the correct target system thresholds are in place.





Tools4ever Software BV

Adres Amaliaaan 126c
3743 KJ Baarn
Nederland

Telefoon +31 (0) 35 54 832 55

Website tools4ever.nl

Informatie info@tools4ever.com

Sales sales@tools4ever.com