

## Managing Cloud HR Systems

The Cloud HR Systems (CHS) module provides synchronization templates for the System for Cross-domain Identity Management (SCIM) connector to connect to available cloud HR systems such as SuccessFactors, Workday, and Dayforce.

SCIM templates are used to get the account information linked to the identities in One Identity Manager. The Cloud HR Systems module template enables you to:

- Fetch the HR data from various cloud systems and create corresponding identities in One Identity Manager.
- Update the basic identity information to the cloud systems.

This integration works inline with the One Identity Starling Connect platform. This platform provides connectors to third-party cloud systems such as SAP SuccessFactors, Workday and Dayforce. For more information on Starling Connect, see the **Starling Connect Hosted One Identity Manager Administration Guide** on the [Support site](#).

## Technical overview

This section provides an overview of the technical aspects of the Cloud HR Systems module.

- Cloud HR Systems module provides SCIM template to synchronize data from a cloud HR provider.
- This module works in conjunction with One Identity Starling Connect. Starling Connect provides connectors to HR systems such as SAP SuccessFactors and Workday. A SCIM endpoint must be configured for the respective Starling connector.
- This module processes the non-standard SCIM object types such as Identities, Departments, Cost Centers, and so on.

**NOTE:** The existing CSM or UCI modules can process only the standard SCIM object types such as Users, Groups, or Roles.

- This module provides the templates required for configuring the One Identity Manager synchronization with all the mapping rules.
- The HR data gets synchronized directly to the core One Identity Manager objects such as Person, Departments, Locations, and ProfitCenters.
- The Update operation is supported only for Identity object type for basic attributes

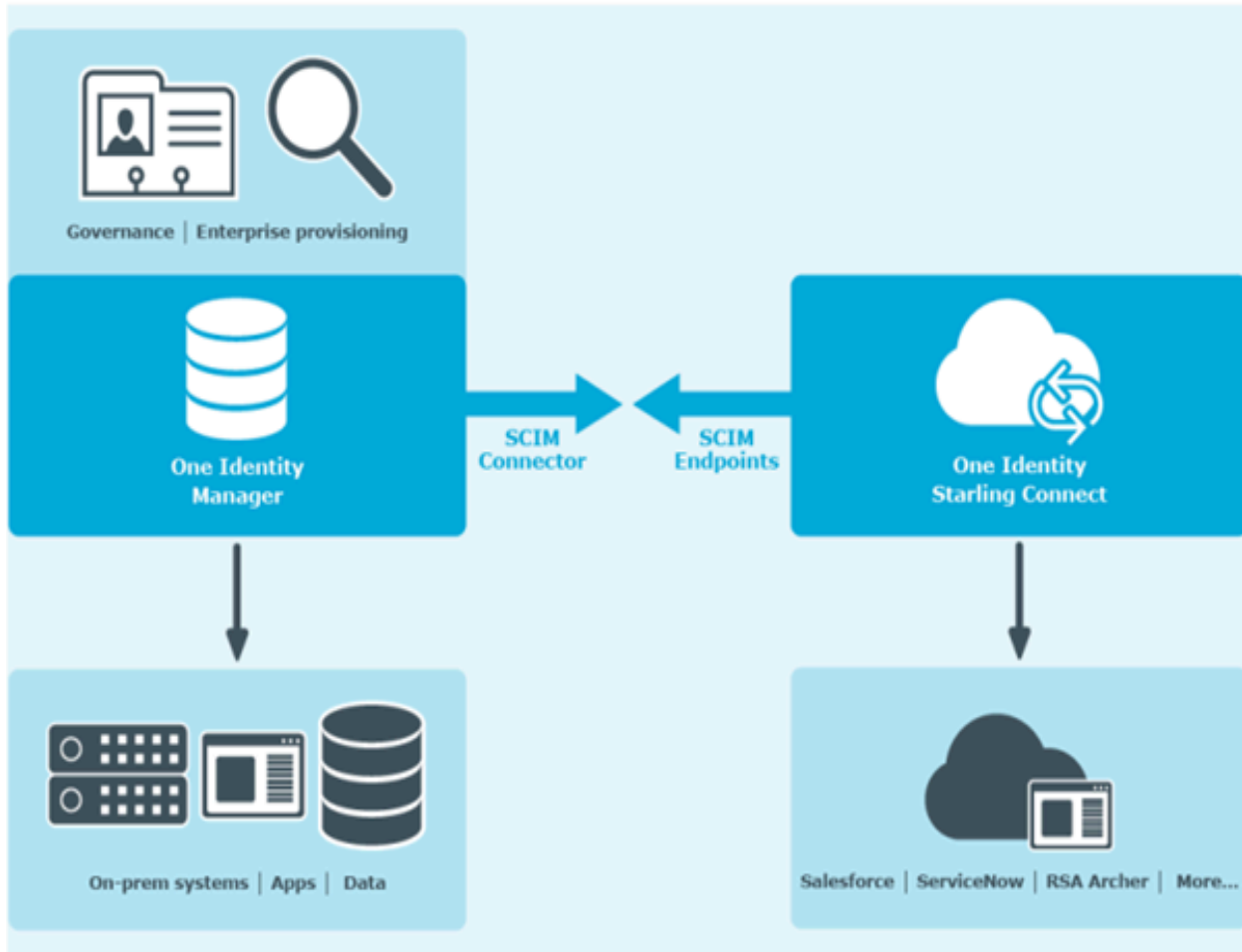
such as Phone, PhoneMobile and DefaultEmailAddress.

**NOTE:** The templates bundled with the module have been tested against the One Identity Starling Connect SuccessFactors HR, Workday HR and Dayforce connectors.

The Cloud HR Systems module is used for synchronization of HR system data with One Identity Manager, using the existing One Identity Manager SCIM connector.

The diagram here explains the working of One Identity Manager with various connectors.

Figure 1: Architecture of One Identity Manager and the connectors configuration



The Starling Connect platform enables you to create connectors to the available cloud systems. A SCIM endpoint is created that can be used by One Identity Manager through the corresponding connector.

The Identity Manager SCIM connector connects to the endpoint created on Starling Connect. An interface is provided to create a channel for data synchronization and to provision updates back to the cloud systems.

After establishing the connection, you can choose a template based on the data that needs to be synchronized. The Cloud HR Systems module has templates for creation of identities directly on One Identity Manager.

# Installing Cloud HR Systems module

The Cloud HR Systems module installation procedure is similar to installation procedures of other One Identity Manager modules. To install the Cloud HR Systems module, 9.2.1 or a later version of One Identity Manager is required.

## NOTE:

- Before updating the default mapping sets, it is recommended to take a backup of the One Identity Manager database.

For information on installing Cloud HR systems module, refer to the *Installing One Identity Manager Components* section of the *One Identity Manager Installation Guide*.

## CloudHR Systems templates

The CHS Module provides default templates for the following cloud target systems:

- SuccessFactors HR  
For more information, see [SuccessFactors HR connector template](#)
- Workday HR  
For more information, see [Workday HR connector template](#).
- Dayforce  
For more information, see [Dayforce Connector Template](#).

The following sections further explain the corresponding templates with use cases:

- Configuring the synchronization project for SuccessFactors HR target system  
For more information about use cases, see:
  - [Creating a synchronization project and running the initial synchronization for SuccessFactors HR](#)
  - [Updating attributes for identities of SuccessFactors HR](#)
- Configuring the synchronization project for Workday target system  
For more information, see:
  - [Creating a synchronization project and running the initial synchronization for Workday HR](#)
  - [Synchronizing CustomOrgs object type with different subtypes for Workday HR](#)
  - [Updating attributes for identities of Workday HR](#)
- Configuring the synchronization project for Dayforce target system  
For more information about use cases, see:
  - [Creating a synchronization project and running the initial synchronization for Dayforce](#)
  - [Updating attributes for identities of Dayforce](#)

# SuccessFactors HR connector template

The SuccessFactors HR connector template provides object mapping and workflows for configuring Synchronization with SuccessFactors HR target system object types such as Identities, Cost Centers, Departments, and Location.

The name of the SuccessFactors HR connector template, provided as part of the Cloud HR Systems module, is **One Identity Starling Connect SuccessFactors HR**. This template consists of the following mapping sets.

**Table 1: Mapping sets for SuccessFactors HR**

Starling SuccessFactors HR endpoint	One Identity Manager table
Identities	Person
CostCenters	ProfitCenter
Departments	Department
Locations	Locality

For more information on configuration and mapping rules, see the [Starling Connect administration guide](#).

## Use case scenarios for SuccessFactors HR

This section provides details on the two use cases related to the Cloud HR Systems module. These use cases can be tested on the installation of the Cloud HR Systems module

- [Creating a synchronization project and running the initial synchronization for SuccessFactors HR](#)
- [Updating attributes for identities of SuccessFactors HR](#)

### Creating a synchronization project and running the initial synchronization for SuccessFactors HR

This use case scenario creates the SCIM connector using the synchronization editor and runs the **Initial Synchronization** workflow.

#### ***To create a synchronization project and run the initial synchronization***

1. Open the **Synchronization Editor**. On the **Start** page, select **Start a new Synchronization Project**.
2. On the **Choose target system** page, select the SCIM connector as the target system.
3. If you want to use the remote connection server, on the **System access** page, select **Remote Connection Server** and click **Next**.

4. Select **Create a new system connection**.
5. In the **Create a new connection** wizard, add the connection data to the **SuccessFactors HR** Starling connector.
6. In the displayed fields, enter the server parameters, authentication type, and the credentials for accessing the **SuccessFactors HR** Starling connector.
7. After testing the connection and the endpoint configuration, if required, configure the schema extensions on the **Schema Extensions** page.
8. On the **Target product** selection page, select the appropriate target product.
9. On the **Display Title** page, enter an appropriate title and select the **Save the connection locally** check box.
10. After the schema is loaded, select the appropriate **Cloud HR** system template, change the filters over the mappings if required, and enter a display name and description.
11. On the **Quit the project wizard** page, click **Finish**.
12. After the completion of the configuration, in the bottom left corner of the page, click **Configuration**.
13. On the **Navigation** menu, select **Start up configurations**.
14. Click **Execute** to run the initial synchronization workflow.

## Updating attributes for identities of SuccessFactors HR

The template enables you to update the following attributes:

- Phone
- PhoneMobile
- DefaultEmailAddress
- Username

### *To update attributes for an identity*

1. Open the Manager.
2. Navigate to the **Identities** section and select the identity.
3. In the task view, select **Change master data**.
4. Initiate and complete the necessary changes on the supported attributes.
5. Click **Save** to save the changes.

**NOTE:** A process is introduced to handle the update scenario. This process is triggered when an update operation is performed on the `Person` table.

**NOTE:** It is recommended to not have additional bidirectional mapping sets for unsupported attributes. If updates to other attributes are required, contact the One Identity support for a new enhancement request.

## Workday HR connector template

The Workday HR connector template provides object mapping and workflows for configuring Synchronization with Workday target system object types such as Identities, CustomOrgs

and Location.

The name of the Workday HR connector template, provided as part of the Cloud HR Systems module, is **One Identity Starling Connect Workday HR**. This template consists of the following mapping sets.

**Table 2: Mapping sets for Workday HR**

Starling Workday HR endpoint	One Identity Manager table
Identities	Person
CustomOrgs	ProfitCenter
CustomOrgs	Department
Locations	Locality

For more information on configuration and mapping rules, see the [Starling Connect administration guide](#).

## Use case scenarios for Workday HR

This section provides details on the two use cases related to the Cloud HR Systems module. These use cases can be tested on the installation of the Cloud HR Systems module

- [Creating a synchronization project and running the initial synchronization for Workday HR](#)
- [Synchronizing CustomOrgs object type with different subtypes for Workday HR](#)
- [Updating attributes for identities of Workday HR](#)

### Creating a synchronization project and running the initial synchronization for Workday HR

This use case scenario creates the SCIM connector using the synchronization editor and runs the **Initial Synchronization** workflow.

#### ***To create a synchronization project and run the initial synchronization***

1. Open the **Synchronization Editor**. On the **Start** page, select **Start a new Synchronization Project**.
2. On the **Choose target system** page, select the SCIM connector as the target system.
3. If you want to use the remote connection server, on the **System access** page, select **Remote Connection Server** and click **Next**.
4. Select **Create a new system connection**.
5. In the **Create a new connection** wizard, add the connection data to the **Workday HR Starling** connector.
6. In the displayed fields, enter the server parameters, authentication type, and the credentials for accessing the **Workday HR Starling** connector.

7. After testing the connection and the endpoint configuration, if required, configure the schema extensions on the **Schema Extensions** page.
8. On the **Target product selection** page, select the appropriate target product.
9. On the **Display Title** page, enter an appropriate title and select the **Save the connection locally check box**.
10. After the schema is loaded, select the **One Identity Connect for Cloud Workday HR** template, change the filters over the mappings if required, and enter a display name and description.
11. On the **Quit the project wizard** page, click **Finish**.
12. After the completion of the configuration, in the bottom left corner of the page, click **Configuration**.
13. On the **Navigation** menu, select **Start up configurations**.
14. Click **Execute** to run the initial synchronization workflow.

## Synchronizing CustomOrgs object type with different subtypes for Workday HR

Workday HR object types such as Department, Division, Subdivisions, Desk and so on, are returned by a single Starling Connect endpoint namely, CustomOrgs.

This is inline with how the WORKDAY API works to retrieve the data from Get\_Organizations. (In Starling Connect, it is renamed to CustomOrgs).

CustomOrgs endpoint has a **Type** attribute, which specifies the type of Workday HR object that is being synchronized, such as, Department, Division etc. This attribute is used to filter and synchronize the data into the extended tables or custom tables as per the requirement.

### ***To configure OneIM synchronization workflow and mappings to process all the different sub object types returned by single Starling Connect endpoint for CustomOrgs***

1. Extend the One Identity Manager Database to create a new custom table. For example, **CCC\_Division**.

**NOTE:** For more information, see the **Identity Manager 9.2.1 Configuration Guide** in the [Support site](#).

2. Open **Synchronization Editor** and select the Synchronization project.
3. In the **Mapping** section, create a **new mapping** select target system schema class as CustomOrgs, One Identity Manager schema class as the newly created table and enter the appropriate details in the other fields.
4. Under the **Workflow** section, select **Initial synchronization**.
5. Create a **new workflow** and select the mapping created in the earlier step.
6. In the **Processing** tab, select **insert** option and **add a condition** to filter the data that will be inserted into the custom table using **type** attribute in CustomOrgs endpoint. For example : **other.type='Division'**.
7. Click **OK** and **Commit to the Database**.

## Updating attributes for identities of Workday HR

The template enables you to update the following attributes:

- Phone
- PhoneMobile
- DefaultEmailAddress

### **To update attributes for an identity**

1. Open the Manager.
2. Navigate to the **Identities** section and select the identity.
3. In the task view, select **Change master data**.
4. Initiate and complete the necessary changes on the supported attributes.
5. Click **Save** to save the changes.

**NOTE:** A process is introduced to handle the update scenario. This process is triggered when an update operation is performed on the `Person` table.

**NOTE:** It is recommended to not have additional bidirectional mapping sets for unsupported attributes. If updates to other attributes are required, contact the One Identity support for a new enhancement request.

## Dayforce Connector Template

The Dayforce connector template provides object mapping and workflows for configuring Synchronization with Dayforce target system object types such as Identities, Departments and Location. The name of the Dayforce connector template, provided as part of the Cloud HR Systems module, is **One Identity Starling Connect Dayforce**. This template consists of the following mapping sets.

The name of the Dayforce connector template, provided as part of the Cloud HR Systems module, is **One Identity Starling Connect Dayforce**. This template consists of the following mapping sets.

**Table 3: Mapping sets for Dayforce**

Starling Dayforce endpoint	One Identity Manager table
Identities	Person
Departments	Department
Locations	Locality

For more information on configuration and mapping rules, see the [Starling Connect administration guide](#).

## Use case scenarios for Dayforce

This section provides details on the two use cases related to the Cloud HR Systems module. These use cases can be tested on the installation of the Cloud HR Systems module

- [Creating a synchronization project and running the initial synchronization for Dayforce](#)
- [Updating attributes for identities of Dayforce](#)

### Creating a synchronization project and running the initial synchronization for Dayforce

This use case scenario creates the SCIM connector using the synchronization editor and runs the **Initial Synchronization** workflow.

#### *To create a synchronization project and run the initial synchronization*

1. Open the **Synchronization Editor**. On the **Start** page, select **Start a new Synchronization Project**.
2. On the **Choose target system** page, select the SCIM connector as the target system.
3. If you want to use the remote connection server, on the **System access** page, select **Remote Connection Server** and click **Next**.
4. Select **Create a new system connection**.
5. In the **Create a new connection** wizard, add the connection data to the **Dayforce** Starling connector.
6. In the displayed fields, enter the server parameters, authentication type, and the credentials for accessing the **Dayforce** Starling connector.
7. After testing the connection and the endpoint configuration, if required, configure the schema extensions on the **Schema Extensions** page.
8. On the **Target product selection** page, select the appropriate target product.
9. On the **Display Title** page, enter an appropriate title and select the **Save the connection locally check box**.
10. After the schema is loaded, select the **Cloud HR** template, change the filters over the mappings if required, and enter a display name and description.
11. On the **Quit the project wizard** page, click **Finish**.
12. After the completion of the configuration, in the bottom left corner of the page, click **Configuration**.
13. On the **Navigation** menu, select **Start up configurations**.
14. Click **Execute** to run the initial synchronization workflow.

### Updating attributes for identities of Dayforce

The template enables you to update the following attributes:

- Phone
- PhoneMobile
- DefaultEmailAddress
- Username

#### *To update attributes for an identity*

1. Open the Manager.
2. Navigate to the **Identities** section and select the identity.
3. In the task view, select **Change master data**.
4. Initiate and complete the necessary changes on the supported attributes.
5. Click **Save** to save the changes.

**NOTE:** A process is introduced to handle the update scenario. This process is triggered when an update operation is performed on the `Person` table.

**NOTE:** It is recommended to not have additional bidirectional mapping sets for unsupported attributes. If updates to other attributes are required, contact the One Identity support for a new enhancement request.

## Troubleshooting

Troubleshooting issues related to Cloud HR Systems module include checking synchronization logs for inconsistencies after the synchronization is complete. For more details about the log, you can view the jobs server logs, which is assigned to handle Cloud HR System module synchronizations.