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Legend

- **WARNING**: A WARNING icon indicates a potential for property damage, personal injury, or death.

- **CAUTION**: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

- **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO**: An information icon indicates supporting information.

One Identity Manager Target System Base Module Administration Guide
Updated - August 2019
Version - 8.1.1
Basic mechanisms for employee and user account administration

The central component of the One Identity Manager is to map employees and their master data with permissions through which they have control over different target systems. For this purpose, information about user accounts and permissions can be read from the target system into the One Identity Manager database and linked to employees. This gives an overview of the permissions for each employee in all of the connected target systems. One Identity Manager provides the possibility to manage user accounts and their permissions. You can provision modifications in the target systems. Employees are supplied with the necessary permissions in the connected target systems according to their function in the company. Regular synchronization keeps data consistent between target systems and the One Identity Manager database.

Because requirements vary between companies, the One Identity Manager offers different methods for supplying user accounts to employees. One Identity Manager supports the following method for linking employees and their user accounts.

- Employees can automatically obtain their user accounts through One Identity Manager account definitions.
- When user accounts are inserted in One Identity Manager, they can be automatically assigned to an existing employee or a new employee can be created if necessary.
- Employee and user account data in One Identity Manager can be manually entered and assigned to each other.

Employee and user account administration

The requirements of a company’s user administration are often different not only in the existing target system types, but also in the individual target systems of a target system type.

Requirements for user account administration might be, for example:
Target system type Active Directory with Microsoft Exchange
In domain A, a user account should be automatically created for each internal employee. The information for the container and home server are based on the department and the location of the person. Each user account in the domain is automatically allocated a Microsoft Exchange mailbox.

In domain B, the user accounts are administrated independently of the employee data. Microsoft Exchange mailboxes can only be allocated by requesting them in the IT shop.

Target system type IBM Notes

- All members of the sales department are automatically allocated an IBM Notes mailbox. Members of other departments can request an IBM Notes mailbox. The attributes of the IBM Notes mailbox are determined depending on the member’s department.

Target system type SAP R/3

- All members of the personnel department are automatically allocated a user account in an SAP Client 101.
- The members of the purchasing department are automatically allocated a user account in the SAP Client 102 the moment they are assigned the appropriate role.
- The user accounts for the SAP Client 103 are allocated exclusively through a request process.

One Identity Manager uses different mechanisms to assign user accounts to employees.

**Initial assignment of user accounts**

The user accounts are initially read into One Identity Manager from a target system through synchronization. In doing so, the existing employees can automatically be assigned to the user accounts. New employees can be created and assigned to user accounts if necessary. The criteria for these automatic assignments are defined on a company-specific basis. The extent of the attributes an employee inherits on their user account through account definitions can be changed after checking the user accounts. The loss of user accounts through system changes can therefore be avoided. User account verification can be carried out manually or by using scripts.

**Assigning user accounts during work hours**

One Identity Manager uses special account definitions for allocating user accounts to employees during working hours. Account definitions can be created for each target system of the appointed target system type, for example, the different domains of an Active Directory environment or the individual clients of an SAP R/3 system. A priority is applied to the account definitions in order to ensure that a Microsoft Exchange mailbox, for instance, is only created when an Active Directory user account is available.

An employee can obtain a user account though the integrated inheritance mechanism by either direct assignment of account definitions to an employee, or by assignment of account definitions to departments, cost centers, locations or business roles. All company employees can be allocated special account definitions independent of their affiliation to the departments, cost centers, locations or business roles. It is possible to assign account
definitions to the One Identity Manager as requestable items in the IT Shop. A department manager can then request user accounts from the Web Portal for his staff.

**Treatment of user accounts and personal data during disabling**

The handling of personal data, particularly during long-term or temporary absence of an employee, is dealt with differently in each company. Some companies never delete personal data, but just disabled it when the person leaves the company. Other companies delete the personal data but only after they are sure that all the user accounts have been deleted.

**Handling employees and user accounts**

The requirements of a company’s user administration are often different not only in the existing target system types, but also in the individual target systems of a target system type. Even within a target system, there may be different rules for different user groups. For example, different rules for allocating user accounts can apply in the individual domains within an Active Directory environment.

A requirement could look like the following, for example:

- In domain A, the user accounts are administrated independently of employee data.
- In domain B, the user accounts are linked to an employee. However, employee master data should not be transferred to the user accounts.
- In domain C, a user account should be automatically created for each internal employee. The information for the container, home server and profile server are based on the employee’s department and location.

In order to fulfill the individual requirements of user administration, users can be divided into categories:

- **Unlinked**: The user account is not linked to an employee.
- **Linked**: The user account is linked to an employee.
- **Linked configured** (linked with configuration of the connection): The user accounts are linked to the employee. The effect of the link and the scope of the employee’s inherited properties on the user accounts can be configured through an account definition and its manage levels.
- The One Identity Manager supplies a default configuration with the manage levels:
  - **Unmanaged**: The user accounts are assigned to the employee, but do not have any further properties of that employee.
  - **Full managed**: The user accounts have an assignment to the employee and inherit the properties of the employees.

The following visual is designed to make user account transitions clearer. The default mechanisms integrated in One Identity Manager about employee and user account administration are shown.
Manually adding a user account

- Case 1: In order to manage a user account independently from employee data, the user account is added manually and is not assigned to an employee. The user account is not linked to an employee and therefore has the status Unlinked.

- Case 2: If the user account is already linked to an employee when inserted manually, the user account changes to Linked status.

- Case 3: If an employee is already assigned when the user account is added and an account definition is assigned at the same time, the user account assumes the Linked configured status. Depending on the applicable manage level, the state Linked configured: Unmanaged or Linked configured: Full managed is attained.

Editing an existing user account

- Case 4: If an existing user account is manually assigned to an employee, the status of the user account changes from Unlinked to Linked.

- Case 5: If an existing user account is manually assigned to an employee and an account definition is assigned at the same time, the status of the user account changes from Unlinked to Linked configured. Depending on the applicable manage level, the state Linked configured: Unmanaged or Linked configured: Full managed is attained.

- Case 6: When the One Identity Manager goes live, you can create IT Shop requests for existing user accounts, which are linked with employees (status Linked). This assigns an account definition and the user account changes to the Linked configured state. Depending on the applicable manage level, the state Linked configured: Unmanaged or Linked configured: Full managed is attained.
Changing the manage level

- Cases 7 and 8: By changing the manage level, an existing user account can change from **Linked configured: Unmanaged** status to **Linked configured: Full managed** status and vice versa. The manage level can only be changed for user accounts that are associated with an employee.

Removing employee assignments

- Case 9: By deleting the employee entry in a linked user account (**Linked**), the user account changes to **Unlinked** status.

**NOTE:** The employee entry cannot be removed from user accounts in the **Linked configured** state as long as the employee owns an account definition. Removing an employee's account definition results immediately in deleting the user accounts.

Handling user accounts during synchronization

- Case 10: When a database is synchronized with a target system, the user accounts are always added without an associated employee and therefore, have an initial state of **Unlinked**. An employee can be assigned afterwards. This can be done manually or through automated employee assignment using process handling.

Assigning employees automatically to existing user accounts

- Case 11: One Identity Manager can automatically assign employees to user accounts in the **Unlinked** state. If the target system is assigned an account definition, this account definition is automatically assigned to the employees. Depending on the applicable manage level, the state **Linked configured: Unmanaged** or **Linked configured: Full managed** is attained. Automatic employee assignment can follow on from adding or updating user accounts through synchronization or through manually adding a user account. For more information, see Automatic assignment of employees to user accounts on page 20.

Automatically creating user account through account definitions

- Case 12: Account definitions are implemented to automatically assign user accounts to employees during normal working hours. If an employee does not have a user account in the target system, a new user account is created. This is done by assigning account definitions to an employee using the integrated inheritance mechanism followed by process handling. The manage level is modified to suit the default manage level and the user account has the state **Linked configured**. Depending on the applicable manage level, the state **Linked configured: Unmanaged** or **Linked configured: Full managed** is attained. For more information, see Account definitions and manage levels on page 10.
Using account definitions to create user accounts

One Identity Manager has account definitions for automatically allocating user accounts to employees during working hours. You can create account definitions for every target system. If an employee does not yet have a user account in a target system, a new user account is created. This is done by assigning account definitions to an employee.

The data for the user accounts in the respective target system comes from the basic employee data. The employee must own a user account. The assignment of the IT operating data to the employee’s user account is controlled through the primary assignment of the employee to a location, a department, a cost center, or a business role (template processing). Processing is done through templates. There are predefined templates for determining the data required for user accounts included in the default installation. You can customize templates as required.

Account definitions and manage levels

An account definition specifies which rules are used to form the IT operating data and which default values will be used if no IT operating data can be found through the employee's primary roles.

Account definitions can be created for each target system of the appointed target system type, for example, the different domains of an Active Directory environment or the individual clients of an SAP R/3 system. An account definition is always valid for a target system. You can, however, define several account definitions for one target system. Which account definition will be used is decided when creating an employee's user account. To ensure that a Microsoft Exchange mailbox, for example, is not created until an Active Directory user account exists, you can define dependencies between account definitions.

The manage levels that may be used are specified in the account definition. You can create more than one manage level. The manage level determines the scope of the properties that an employee’s user account can inherit. This allows an employee to have several user accounts in one target system, for example:

- Default user account that inherits all properties from the employee
- Administrative user account that is associated to an employee but should not inherit the properties from the employee.

One Identity Manager supplies a default configuration for manage levels:

- **Unmanaged**: User accounts with the **Unmanaged** manage level are linked to the employee but they do no inherit any further properties. When a new user account is added with this manage level and an employee is assigned, some of the employee's properties are transferred initially. If the employee properties are changed at a later date, the changes are not passed onto the user account.
- **Full managed**: User accounts with the **Full managed** manage level inherit defined
properties of the assigned assigned employee. When a new user account is created with this manage level and an employee is assigned, the employee’s properties are transferred in an initial state. If the employee properties are changed at a later date, the changes are passed onto the user account.

**NOTE:** The **Full managed** and **Unmanaged** are analyzed in templates. You can customize the supplied templates in the Designer.

You can define other manage levels depending on your requirements. You need to amend the templates to include manage level approaches.

A default manage level is defined for every account definition. This manage level is used to determined the valid IT operating data when a user account is created automatically. In the One Identity Manager default installation, the processes are checked at the start to see if the employee already has a user account in the target system that has an account definition. If no user account exists, a new user account is created with the account definition’s default manage level.

**NOTE:** If a user account already exists and is disabled, then it is re-enabled. You have to alter the user account manage level afterwards in this case.

The effects on account definition inheritance of temporary disabling, permanent disabling, deletion, and security risk to employees is specified for each account definition.

- As long as an account definition applies to an employee, this employee keeps its linked user accounts. You may want employees that are disabled or marked for deletion to inherit account definitions to ensure that all necessary permissions are made immediately available when the employee is reactivated at a later time.
- If the account definition assignment no longer applies or is removed from the employee, the user account created through this account definition, is deleted.

In addition, you can specify the effect of temporarily or permanently disabling, deleting or the security risk of an employee on its user accounts and group memberships for each manage level.

- Employee user accounts can be locked when they are disabled, deleted or rated as a security risk so that permissions are immediately withdrawn. If the employee is reinstated at a later date, the user accounts are also reactivated.
- You can also define group membership inheritance. Inheritance can be discontinued if desired when, for example, the employee’s user accounts are disabled and therefore cannot be members in groups. During this time, no inheritance processes should be calculated for this employee. Existing group memberships are deleted!

### Assigning account definitions to employees

Account definitions are assigned to company employees.

Indirect assignment is the default method for assigning account definitions to employees. Account definitions are assigned to departments, cost centers, locations or roles. The employees are categorized into these departments, cost centers, locations or roles.
depending on their function in the company and thus obtain their account definitions. To react quickly to special requests, you can assign individual account definitions directly to employees.

You can automatically assign special account definitions to all company employees. It is possible to assign account definitions to the IT Shop as requestable products. A department manager can then request user accounts from the Web Portal for his staff. It is also possible to add account definitions to system roles. These system roles can be assigned to employees through hierarchical roles or directly or added as products in the IT Shop.

**Determining valid IT operating data for the target systems**

To create user accounts with the **Full managed** manage level, the required IT operating data must be determined. The operating data required to automatically supply an employee with IT resources is shown in the business roles, departments, locations or cost centers. An employee is assigned a primary business role, primary location, primary department or primary cost center. The necessary IT operating data is ascertained from these assignments and used in creating the user accounts. Default values are used if valid IT operating data cannot be found over the primary roles.

The process sequence for automatically assigning IT operating data to the employee’s user account within the One Identity Manager should be made clearer with the help of the following diagram.
You can also specify IT operating data directly for a specific account definition.

**Example**

Normally, each employee in department A obtains a default user account in the domain A. In addition, certain employees in department A obtain administrative user accounts in the domain A.

Create an account definition A for the default user account of the domain A and an account definition B for the administrative user account of domain A. Specify the property "Department" in the IT operating data formatting rule for the account definitions A and B in order to determine the valid IT operating data.

Specify the effective IT operating data of department A for the domain A. This IT operating data is used for standard user accounts. In addition, specify the effective account definition B IT operating data for department A. This IT operating data is used for administrative user accounts.
**IT operating data for the One Identity Manager default configuration**

The IT operating data necessary in the One Identity Manager default configuration for automatically creating or changing employee user accounts and mailboxes in the target system is itemized in the following table.

NOTE: IT operating data is dependent on the target system and is contained in One Identity Manager modules. The data is not available until the modules are installed.

<table>
<thead>
<tr>
<th>Target system type</th>
<th>IT operating data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory</td>
<td>Container</td>
</tr>
<tr>
<td></td>
<td>Home server</td>
</tr>
<tr>
<td></td>
<td>Profile server</td>
</tr>
<tr>
<td></td>
<td>Terminal home server</td>
</tr>
<tr>
<td></td>
<td>Terminal profile server</td>
</tr>
<tr>
<td></td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td>Microsoft Exchange</td>
<td>Mailbox database</td>
</tr>
<tr>
<td>LDAP</td>
<td>Container</td>
</tr>
<tr>
<td></td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td>IBM Notes</td>
<td>Server</td>
</tr>
<tr>
<td></td>
<td>Certificate</td>
</tr>
<tr>
<td></td>
<td>Template for mail file</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td>SharePoint</td>
<td>Authentication mode</td>
</tr>
<tr>
<td></td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td><strong>Target system type</strong></td>
<td><strong>IT operating data</strong></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SharePoint Online</td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td></td>
<td>Authentication mode</td>
</tr>
<tr>
<td>Custom target systems</td>
<td>Container (per target system)</td>
</tr>
<tr>
<td></td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td>Azure Active Directory</td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td></td>
<td>Change password at next login</td>
</tr>
<tr>
<td>Cloud target system</td>
<td>Container (per target system)</td>
</tr>
<tr>
<td></td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td>Unix-based target system</td>
<td>Login shell</td>
</tr>
<tr>
<td></td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td>Oracle E-Business Suite</td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
<tr>
<td>Exchange Online</td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td>Privileged Account Management</td>
<td>Authentication provider</td>
</tr>
<tr>
<td></td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>Groups can be inherited</td>
</tr>
<tr>
<td></td>
<td>Privileged user account</td>
</tr>
</tbody>
</table>
### Employee's central user account

#### Table 2: Configuration parameter for forming the central user accounts

<table>
<thead>
<tr>
<th>Configuration parameter</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>QER</td>
<td>Person</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The employee’s central user account is used to form the user account login name in the active system. The central user account is still used for logging into the One Identity Manager tools. In One Identity Manager default installation, the central user account is made up of the first and the last name of the employee. If only one of these is known, then it is used for the central user account. One Identity Manager checks to see if a central user account with that value already exists. If this is the case, an incremental number is added to the end of the value.

#### Table 3: Example of forming of central user accounts

<table>
<thead>
<tr>
<th>First name</th>
<th>Last name</th>
<th>Central user account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clara</td>
<td></td>
<td>CLARA</td>
</tr>
<tr>
<td></td>
<td>Harris</td>
<td>HARRIS</td>
</tr>
<tr>
<td>Clara</td>
<td>Harris</td>
<td>CLARAH</td>
</tr>
<tr>
<td>Clara</td>
<td>Harrison</td>
<td>CLARAH1</td>
</tr>
</tbody>
</table>
Employee's default email address

The employee’s default email address is displayed on the mailboxes in the activated target system. In the One Identity Manager default installation, the default email address is formed from the employee’s central user account and the default mail domain of the active target system.

The default mail domain is determined using the QER | Person | DefaultMailDomain configuration parameter.

- Set the configuration parameter in Designer and enter the default mail domain name as a value.

Related topics
- Employee’s central user account on page 16
- Changing employee master data on page 17

Changing employee master data

The following covers only the employee master data that affects the user account of an employee with the manage level Full managed when it is changed in the One Identity Manager default installation.

General changes

General changes refer to data changes relating to an employee’s telephone number, fax number, mobile telephone, street, postal or ZIP code. This process changes the data in the target system to which the employees are assigned, assuming this data is mapped in the respective target systems.

Changing an employee’s name

Changes to an employee’s name influence how an employee’s central user account is set up. The central user account is made up of the employee’s first and last names according to the formatting rules. The central user account is used as a template for formatting user account login names in some target systems. When a user account is added, other overriding formatting rules control how, for example, the home and profile directories are formatted up from the central user account.
Employee job rotation inhouse

Job rotation is affected by changes to the company data location or department. In One Identity Manager, the administrative tasks for changing the target-system-specific IT operating data, for example, domains, home servers, or profile servers, are automated. There are other sub-processes for each target system due to system-dependent differences in the actions necessary for changing departments.

Related topics

- Employee’s central user account on page 16
- Employee’s default email address on page 17

Templates and processes for implementing account definitions

Only user account properties used in the script template TSB_ITDataFromOrg are available. Create custom templates using this script if you want to use different or additional properties than those in the default installation.

In the One Identity Manager default installation there is one process per target system type for creating user accounts through account definitions. These can be used as templates for the company-specific implementation of the method.

**NOTE:** Processes are defined in the One Identity Manager modules and are not available until the modules are installed.

The name of the process is formatted as follows:

```
<MMM>_PersonHasTSBAccountDef_Autocreate_<user account table>
```

where:

- `<MMM>` = module ID
- `<user account table>` = Table, in which the user account of the target system type is mapped.

Examples for implementing several account definitions within a target system type

If several target systems are managed using account definitions in a target system type, a separate account definition must be set up for each target system. When the employee is assigned both account definitions, subsequent script and process handling ensure that the employee obtains the user accounts in both target systems.
Example 1

There are two domains in an Active Directory environment. The employees can only have a user account in one of the domains. The department operational data is used to determine whether the user account is created in domain A or domain B.

Create an account definition A for domain A and an account definition B for domain B and assign them the **Full managed** manage level. This manage level uses the One Identity Manager default templates to determine the IT operating data. In the IT operating data formatting rule, specify the "department" property for both account definitions for finding the valid IT operating data.

If the employee belongs to department A, they receive (for example by dynamic assignment) the account definition A and as a result, a user account in domain A. If the employee belongs to department B, they are assigned the account definition B and they receive a user account in domain B.

Figure 3: Creating User Accounts based on Account Definitions

Example 2

There are two domains in an Active Directory environment. The employees can have a user account in both of the domains. The user account in domain A is allocated IT operating data through the employee’s department. The user account in domain B is allocated IT operating data through the employee’s primary business role.

Create an account definition A for domain A and an account definition B for domain B and assign them the **Full managed** manage level. The **Full managed** manage level uses One Identity Manager default templates to determine the IT operating data. Specify the property "department" for account definition A in the IT operating data formatting rule for
finding the valid IT operating data. Specify the property "business role" for account definition B in the IT operating data formatting rule for finding the valid IT operating data.

Figure 4: Creating User Accounts based on Account Definitions

Automatic assignment of employees to user accounts

Automatic employee assignment is used to:

- Assign existing employees to user accounts
- Create employee master data based on existing user accounts

Through synchronization user accounts are initially loaded from the target system into One Identity Manager. Automatic assignment of user accounts to existing employees can take place by subsequently modifying scripts and processes. If necessary, new employees can be created based on existing user accounts to which they are then assigned. However, this is not the One Identity Manager default method. You can also use this procedure to create employee data from existing target system user accounts during synchronization.

If you run this procedure during working hours, automatic assignment of employees to user accounts takes place from that moment onwards. If you disable the procedure again
later, the changes only affect user accounts added or updated after this point in time. Existing employee assignment to user accounts remain intact.

The criterion for automatically assigning employees to user accounts can be customized to meet the company’s needs. Employees can be directly assigned to existing user accounts as required, based on a suggestion list.

Run the following tasks to assign employees automatically.

- Set the configuration parameter for automatic assignment of employees to user accounts in Designer and select the desired mode.
- Define search criteria for the employee assignment.
- If managed user accounts should arise through automatic employee assignment (status **Linked configured**), assign an account definition to the target system. Ensure that the manage level to be used is entered as the default manage level.

If no account definition is provided in the target system, the user accounts are only linked to the employee (state **Linked**). This is the case on initial synchronization, for example.

Related topics

- Handling employees and user accounts on page 7
- Configuring automatic employee assignment on page 21
- Editing search criteria for automatic employee assignment on page 23
- Modifying scripts for automatic employee assignment on page 28

## Configuring automatic employee assignment

In the One Identity Manager default installation, the automatic assignment of employees to user accounts is controlled via configuration parameters and therefore globally effective for a target system type. A distinction is made here between the synchronization and the default methods.

**NOTE:**
The following applies for synchronization:

- Automatic employee assignment takes effect if user accounts are added or updated.

The following applies outside synchronization:

- Automatic employee assignment takes effect if user accounts are added.

**NOTE:** The configuration parameters are included in the One Identity Manager modules and are available once the modules are installed.

Configuration parameters for automatic employee assignment:
- TargetSystem | <Target system type> | PersonAutoDefault
- TargetSystem | <Target system type> | PersonAutoFullSync

Each configuration parameter has one of the permitted modes:

- **NO**: There is no automatic assignment of a person to the user account. This is the default value that is also displayed when the configuration parameter is not active.
- **SEARCH**: If no employee is assigned to the user account, the system searches for the appropriate employee based on defined criteria and assigns the employees found to the user account. If an employee is not found, no new employee is added.
- **CREATE**: If no employee is assigned to the user account, a new employee is always created, some properties are initialized, and the employee is assigned to the user account.
  
  **NOTE**: This mode is not available for all target system types.

- **SEARCH AND CREATE**: If no employee is assigned to the user account, the system searches for the appropriate employee based on defined criteria and assigns the employees found to the user account. If no employee is found, a new one is added, some of the properties are initialized, and the employee is assigned to the user account.
  
  **NOTE**: This mode is not available for all target system types.

If a user account is linked to an employee through the current mode, the user account is given, through an internal process, the default manage level of the account definition entered in the user account’s target system. You can change this manage level later.

**NOTE:**

Following a synchronization, employees are automatically created for the user accounts in the default installation. If an account definition for the target system is not yet known at the time of synchronization, user accounts are linked with employees. However, account definitions are not assigned. The user accounts are therefore in a **Linked** state.

To manage the user accounts using account definitions, assign an account definition and a manage level to these user accounts.

**To select user accounts through account definitions**

1. Create an account definition.
2. Assign an account definition to the target system.
3. Assign the account definition and manage level to user accounts in **linked** status.
   
   a. In Manager, select **Custom target systems** | <target system> | **User accounts** | **Linked but not configured** | <target system>.
   
   b. Select **Assign account definition to linked accounts**.

In the target-system-dependent Insert/Update processes of the One Identity Manager default installation, the configuration parameters are evaluated and the execution mode is
determined. The names of the corresponding process steps are Search and Create Person for Account and Search and Create Person for Account (Fullsync). Process steps can be used as templates to put into effect the automatic employee assignment in different areas of a target system, such as, the separate domains of an Active Directory environment.

Editing search criteria for automatic employee assignment

The criteria for employee assignment are defined for the target system. In this case, you specify which user account properties must match the employee’s properties such that the employee can be assigned to the user account. You can limit search criteria further by using format definitions. The search criterion is written in XML notation to the Search criteria for automatic employee assignment column (AccountToPersonMatchingRule) in the target system table.

Search criteria are evaluated when employees are automatically assigned to user accounts. Furthermore, you can create a suggestion list for assignments of employees to user accounts based on the search criteria and make the assignment directly.

**NOTE:** When the employees are assigned to user accounts on the basis of search criteria, user accounts are given the default manage level of the account definition entered in the user account's target system. You can customize user account properties depending on how the behavior of the manage level is defined.

It is not recommended to make assignment to administrative user accounts based on search criteria. Use Change master data to assign employees to administrative user account for the respective user account.

Detailed information about this topic

- Defining search criteria for employee assignment on page 24
- Finding employees and directly assigning them to user accounts on page 26
Defining search criteria for employee assignment

Figure 5: Search criteria for employee assignment

NOTE: One Identity Manager supplies a default mapping for employee assignment. Only carry out the following steps when you want to customize the default mapping.

To define search criteria for employee assignment

1. Select **Target system type | <Target system>**.
2. Select the target system in the result list and run **Define search criteria for employee assignment** in the task view.
3. Select the object type for the mapping.
   - Object types are user accounts with particular characteristics, for example, Active Directory contacts or active Notes user accounts.
   - To add a new object type, click **Add | Criteria**. Select the object type for which to define the search criteria using **Apply to**.
     - The search criteria is applied to all user accounts if no object type is selected.
   - To change the object type of an existing search criterion, select the search criterion in the **Search criteria** view. Select the object type for which to define the search criteria using **Apply to**.
     - If the existing selection is deleted, the search criterion is applied to all user accounts.
4. Select the object properties to map.
   - Column for employee
     - Select the column in the **Employee** table on which the search is executed.
   - Column for user account
Select the column in the user account table that supplies the value for searching for a person.

5. Define the formatting rule to limit the search criteria.
   In the **Add format** menu, select a format template. Define the formatting rule to apply to the search string. You can combine different format templates.

### Table 4: Format templates

<table>
<thead>
<tr>
<th>Format template</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character range</td>
<td>Characters in the character string to be used as the search criterion.</td>
</tr>
<tr>
<td>Crop to fixed length</td>
<td>Defines the length of the character string to search for. Use fill characters at the beginning or end of the string to ensure it reaches the fixed length.</td>
</tr>
<tr>
<td>Remove leading or trailing characters</td>
<td>Characters that are to be removed at the start or end of the character string. The remaining string forms the search criteria.</td>
</tr>
<tr>
<td>Split value</td>
<td>Characters for which the character string should be split and for which the remaining parts should be used as a search criterion.</td>
</tr>
</tbody>
</table>

6. Test the format rules.
   In the **Format preview** view, enter a character string to which the formatting is applied. Use this to test the effects of your search criteria formatting.

7. Apply the formatting rules.
   Enable **Use format** on the columns on which to limit the search criteria.

8. Save the changes.

Different object properties can be joined for search criteria. Both AND and OR operators can be used.

### Example for AND

To assign employees to Notes user accounts, the surname as well as first name must be the same for the employee and the user account. The following table columns are mapped:

<table>
<thead>
<tr>
<th>AND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person.Firstname - NotesUser.Firstname</td>
</tr>
<tr>
<td>Person.LastName - NotesUser.LastName</td>
</tr>
</tbody>
</table>
Example for an OR operation.

To assign employees to Active Directory user accounts, either the employee's central user account and the user account's login name must be identical or the employee's full name and the user account's display name. The following table columns are mapped:

<table>
<thead>
<tr>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person.CentralAccount – ADSAccount.SAMAccountName</td>
</tr>
<tr>
<td>Person.InternalName – ADSAccount.DisplayName</td>
</tr>
</tbody>
</table>

To link object properties in search criteria

1. In the Search criteria view, select the operator to which you want to add another object property. Click Change operator to select the operator for the link.
2. Click Add | Criteria.
3. Select the object properties to map.
4. Select the object properties to be mapped.
5. If you want to nest links, click Add | AND operator or Add | OR operator and rerun steps 2 to 4.
6. Save the changes.

To delete search criteria

1. Mark the search criteria and click Delete.
2. Save the changes.

Finding employees and directly assigning them to user accounts

Based on the search criteria, you can create a suggestion list for the assignment of employees to user accounts and make the assignment directly. User accounts are grouped in different views for this.

Table 5: Manual Assignment View

<table>
<thead>
<tr>
<th>View</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggested assignments</td>
<td>This view lists all user accounts to which One Identity Manager can assign an employee. All employees are shown who were found using the search criteria and can be assigned.</td>
</tr>
<tr>
<td>Assigned</td>
<td>This view lists all user accounts to which an employee is assigned.</td>
</tr>
</tbody>
</table>
**View** | **Description**
---|---
user accounts | This view lists all user accounts to which no employee is assigned and for which no employee was found using the search criteria.

**To apply search criteria to user accounts**

- At the bottom of the **Define search criteria for employee assignment** form, click **Reload**.
  
  All possible assignments based on the search criteria are found in the target system for all user accounts. The three views are updated.

**TIP:** By double-clicking on an entry in the view, you can view the user account and employee master data.

The assignment of employees to user accounts creates connected user accounts (status **Linked**). To create managed user accounts (status **Linked configured**), you can assign an account definition at the same time.

**To assign employees directly over a suggestion list**

- Click **Suggested assignments**.
  
  1. Click **Selection** for all user accounts to which you want to assign the suggested employees. Multi-select is possible.
  2. (Optional) Select an account definition in the **Assign this account definition** menu, and select a manage level in the **Assign this account manage level** menu.
  3. Click **Assign selected**.
  4. Confirm the security prompt with **Yes**.

  The employees determined using the search criteria are assigned to the selected user accounts. If an account definition was selected, this is assigned to all selected user accounts.

- OR -

- Click **No employee assignment**.
  
  1. Click **Select employee** for the user account to which you want to assign an employee. Select an employee from the menu.
  2. Click **Selection** for all user accounts to which you want to assign the selected employees. Multi-select is possible.
  3. (Optional) Select an account definition in the **Assign this account definition** menu, and select a manage level in the **Assign this account manage level** menu.
  4. Click **Assign selected**.
5. Confirm the security prompt with Yes.
The employees displayed in the Employee column are assigned to the selected user accounts. If an account definition was selected, this is assigned to all selected user accounts.

To remove assignments

- Click Assigned user accounts.
  1. Click Selection for all user accounts for which you want to delete the employee assignment. Multi-select is possible.
  2. Click Remove selected.
  3. Confirm the security prompt with Yes.
   The assigned employees are removed from the selected user accounts.

Related topics

- Handling employees and user accounts on page 7

Modifying scripts for automatic employee assignment

Automatic employee assignments are controlled through scripts. In SEARCH mode, these scripts assign existing employees to the user accounts based on the defined search criteria. The scripts for CREATE mode also define the properties that are initialized when a new person is generated. These scripts are implemented in a default One Identity Manager installation for each target system type. The name of this script is:

<target system type>_PersonAuto_Mapping_<account type>

where:

- <target system type> = short name of the addressed target system type
- <account type> = Table containing the user accounts

**TIP:** You can customize scripts to extend search criteria for automatic employee assignment or the properties of new employees. The scripts can be overwritten. To do this, create a copy of the existing script and customize the copy.

In automatic employee assignment in CREATE mode, some properties of the user account are transferred to the new employee object. Initializing the employee properties is done using "VI_PersonAuto_<targetsystem>". Initializing the properties when an employee is being created for a user account is done by evaluating the entry in the table DialogNotification. In this table the connected properties are mapped as a bidirectional pair through the formatting rules. Evaluation of entries in DialogNotification are exemplified in the following by showing initialization of an employee’s surname:
Example

The last name of an Active Directory user account is made up of the surname of the employee.

Value template for ADSAccount.Surname:
Value = $FK(UID_Person).Lastname$

If the employee’s surname changes, the last name of the Active Directory user changes, too. The column Person.Lastname is therefore the sender and the column ADSAccount.Surname is the receiver.

Relationship as in the table DialogNotification:
Person.Lastname -- > ADSAccount.Surname

The table DialogNotification can be used to help with the initialization of the properties for a new employee in that the relationships can be removed in reverse. The surname of an employee can be replaced with the surname of the Active Directory user. Thus, certain presets for the employee object can be automatically generated. However, only explicit relationships can be removed.

Example

The display name of an Active Directory user account should be made up of the surname and the first name of an employee.

Relationships as in the table DialogNotification:
Person.Lastname -- > ADSAccount.Displayname
Person.Firstname -- > ADSAccount.Displayname

The Person.Firstname and Person.Lastname cannot be determined from the ADSAccount.Displayname, since this is a compound value.

You can use the script TSB_PersonAuto_GetPropMappings to make it easier to map employee properties to user account properties. This script evaluates the relationship of the properties as used in the table DialogNotification. The script creates a VB.Net script code and the possible assignments, when it is run by the System Debugger. This code can subsequently be inserted into the script <target system type>_PersonAuto_Mapping_<account type>.

Example version of the TSB_PersonAuto_GetPropMappings script

' PROPERTY MAPPINGS ADSAccount - Person
' ADSAccount.Initials -- > Person.Initials
' ADSAccount.Locality-- > Person.City
...
Try
Catch ex As Exception
End Try
Try
    myPers.PutValue("City", myAcc.GetValue("Locality").String)
Catch ex As Exception
End Try
...

Disabling and deleting employees and user accounts

How employees are handled, particularly in the case of permanent or partial withdrawal of an employee, varies between individual companies. There are companies that never delete employees, and only disable them when they leave the company. Other firms delete the employee, but only after they have ensured that all the user accounts are removed.

How employees are handled when they are disabled or deleted depends on the type of user account management. The following scenarios apply:

1. User accounts are linked to employees and managed through account definitions.
2. User accounts are linked to employees. No account definition is applied.

The following methods are available in the One Identity Manager standard version:

- Temporarily deactivating employees
- Permanently deactivating employees
- Deferred deletion of an employee
- Disabling and deleting using account definitions

Temporarily deactivating employees

The employee has temporarily left the company and is expected to return at a predefined date. The desired course of action could be to disable the user account and remove all group memberships. Or the user accounts could be deleted and reestablished with the employee’s return, even if it is with a new system identification number (SID).

Temporary disabling of an employee is triggered by:

- **The** Temporary disabled **option**
- The start and end date for deactivation (**Temporary disabled from** and **Temporary disabled until**)
NOTE:

- Configure the **Lock accounts of employees that have left the company** schedule in Designer. This schedule checks the start date for disabling and sets **Temporarily disabled** when it is reached.
- Configure the **Enable temporarily disabled accounts** schedule in Designer. This schedule monitors the end date of the disabled period and enables the employee with their user accounts when the date expires. Employee’s user accounts that were disabled before the period of temporary absence are also re-enabled once the period has expired.

Scenario: user accounts are linked to employees and are managed through account definitions.

- Specify in the account definitions, how temporary disabling of an employee affects the user account.

Scenario: user accounts are linked to employees. No account definition is applied.

- Specify the desired behavior using the **QER | Person | TemporaryDeactivation** configuration parameter. If the configuration parameter is set, the employee’s user accounts are locked if the employee is permanently or temporarily disabled. If the configuration parameter is not set, the employee’s properties do not have any effect on the associated user accounts.

**Related topics**

- **Disabling and deleting using account definitions** on page 33

**Permanently deactivating employees**

Employees can be disabled permanently when, for example, they leave the company. It might be necessary, to remove access to this employee’s entitlements in connected target systems and their company resources.

Effects of permanent disabling of an employee are:

- The employee cannot be assigned to employees as a manager.
- The employee cannot be assigned to roles as a supervisor.
- The employee cannot be assigned to attestation policies as an owner.
- There is no inheritance of company resources through roles, if the additional option **No inheritance** is set for an employee.
- Employee user accounts are locked or deleted and then removed from group memberships.

Trigger permanent deactivation through:
The **Disable employee permanently** task

This task ensures that the **Permanently disabled** option is enabled and that the leaving date and the date of the last working day are set to the current date.

The arrival of the leaving date

**NOTE:** Check the **Lock accounts of employees** that have left the company schedule in Designer. This schedule regularly checks the leaving date and sets the option **Permanently disabled** on reaching the date.

**NOTE:** The **Re-enable employee** task ensures that the employee is re-enabled.

The **Denied** certification status

If an employee's certification status is set to **Denied** through attestation or manually, the employee is permanently disabled with immediate effect. When the employee's certification status is changed to **Certified** the employee is activated again.

**NOTE:** This function is only available if the Attestation Module is installed.

Scenario: user accounts are linked to employees and are managed through account definitions.

- Specify in the account definitions, how temporary disabling of an employee affects the user account.

Scenario: user accounts are linked to employees. No account definition is applied.

- Specify the desired behavior using the **QER | Person | TemporaryDeactivation** configuration parameter. If the configuration parameter is set, the employee’s user accounts are locked if the employee is permanently or temporarily disabled. If the configuration parameter is not set, the employee’s properties do not have any effect on the associated user accounts.

**Related topics**

- Disabling and deleting using account definitions on page 33

**Deferred deletion of an employee**

When an employee is deleted, they are tested to see if user accounts and company resources are still assigned, or if there are still pending requests in IT Shop. The employee is marked for deletion and therefore locked out of further processing. Before an employee can finally be deleted from the One Identity Manager database, you need to delete all company resource assignments and close all requests. You can do this manually or implement custom processes to do it. All the user accounts linked to one employee could be deleted by default by One Identity Manager once this employee has been deleted. If no more company resources are assigned, the employee is finally deleted.
Scenario: user accounts are linked to employees and are managed through account definitions.

- Specify in the account definitions, how deletion of an employee affects their user accounts. The user accounts can be locked or enabled for the period that deletion is deferred. In any case, the user accounts are deleted from the One Identity Manager database once the deferred deletion period has expired.

Scenario: user accounts are linked to employees. No account definition is applied.

- Implement custom processes to delete linked user accounts. The employee stays marked for deletion until all user accounts are deleted and assignments to company resources have been removed. The user accounts remain enabled with deferred deletion until they are physically deleted.

Related topics

- Disabling and deleting using account definitions on page 33

Disabling and deleting using account definitions

If user accounts are managed through account definitions, you can specify the desired behavior for handling user accounts and group memberships through account definitions and manage levels for temporary disabling, permanent disabling, deletion, and security risk to employees.

You can define special handling for each target system belonging to a target system type, through the relationship between the target system and account definition. For more information, see Using account definitions to create user accounts on page 10.

You can configure the following behavior:

1. Assigning account definitions to employees

   The effects on account definition inheritance of temporary disabling, permanent disabling, deletion, and security risk to employees is specified for each account definition. The settings of previous account definitions are overwritten.

   You may want employees that are disabled or marked for deletion to inherit account definitions to ensure that all necessary permissions are made immediately available when the employee is reactivated at a later time.

   **IMPORTANT:** As long as an account definition applies to an employee, this employee keeps its linked user accounts. If the account definition assignment no longer applies, the user account created through this account definition is deleted.

   The following user account definition options are available for mapping behavior.
Table 6: Master data for an account definition for the assignment behavior of the account definition

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retain account definition if permanently disabled</td>
<td>Specifies the account definition assignment to permanently disabled employees.</td>
</tr>
<tr>
<td></td>
<td>Option set: the account definition assignment remains in effect. The user account stays the same.</td>
</tr>
<tr>
<td></td>
<td>Option not set: the account definition assignment is not in effect. The associated user account is deleted.</td>
</tr>
<tr>
<td>Retain account definition if temporarily disabled</td>
<td>Specifies the account definition assignment to temporarily disabled employees.</td>
</tr>
<tr>
<td></td>
<td>Option set: the account definition assignment remains in effect. The user account stays the same.</td>
</tr>
<tr>
<td></td>
<td>Option not set: the account definition assignment is not in effect. The associated user account is deleted.</td>
</tr>
<tr>
<td>Retain account definition on deferred deletion</td>
<td>Specifies the account definition assignment on deferred deletion of employees.</td>
</tr>
<tr>
<td></td>
<td>Option set: the account definition assignment remains in effect. The user account stays the same.</td>
</tr>
<tr>
<td></td>
<td>Option not set: the account definition assignment is not in effect. The associated user account is deleted.</td>
</tr>
<tr>
<td>Retain account definition on security risk</td>
<td>Specifies the account definition assignment to employees posing a security risk.</td>
</tr>
<tr>
<td></td>
<td>Option set: the account definition assignment remains in effect. The user account stays the same.</td>
</tr>
<tr>
<td></td>
<td>Option not set: the account definition assignment is not in effect. The associated user account is deleted.</td>
</tr>
</tbody>
</table>

2. Handling employee user accounts

The effects on user accounts of temporary disabling, permanent disabling, deletion, and security risk of an employee is specified for each manage level.

In order to remove permissions from an employee when they are being disabled or deleted, the employee’s user accounts can be locked. If the employee is reinstated at a later date, the user accounts are also reactivated.

The following options are available for each manage level on an account definition for handling user accounts:
Table 7: Master data for a manage level for handling user accounts

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock user accounts if temporarily disabled</td>
<td>Specifies whether user accounts of temporarily disabled employees are locked.</td>
</tr>
<tr>
<td>Lock user accounts if permanently disabled</td>
<td>Specifies whether user accounts of permanently disabled employees are locked.</td>
</tr>
<tr>
<td>Lock user accounts if deletion is deferred</td>
<td>Specifies whether user accounts of employees marked for deletion are locked.</td>
</tr>
<tr>
<td>Lock user accounts if security is at risk</td>
<td>Specifies whether user accounts of employees posing a security risk are locked.</td>
</tr>
</tbody>
</table>

3. Inheritance of group memberships to employees’ user accounts

The effects on the group memberships of user accounts in the event of temporary disabling, permanent disabling, deletion, and security risk of an employee is specified for each manage level.

If an employee is deactivated or marked for deletion, inheritance of group memberships can be suppressed for the account definition target system. You might want this behavior if an employee's user accounts and mailboxes are locked and therefore cannot be included in distribution lists. During this deactivation period, no inheritance processes should be calculated for this employee. Existing group memberships are deleted.

The following options are available for each manage level on an account definition for handling group memberships:

Table 8: Master data for a manage level for handling group memberships

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retain groups if temporarily disabled</td>
<td>Specifies whether user accounts of temporarily disabled employees retain their group memberships.</td>
</tr>
<tr>
<td>Retain groups if permanently disabled</td>
<td>Specifies whether user accounts of permanently disabled employees inherit group memberships.</td>
</tr>
<tr>
<td>Retain groups on deferred deletion</td>
<td>Specifies whether user accounts of employees marked for deletion retain their group memberships.</td>
</tr>
<tr>
<td>Retain groups on security risk</td>
<td>Specifies whether user accounts of employees posing a security risk retain their group memberships.</td>
</tr>
<tr>
<td>Retain groups if user account disabled</td>
<td>Specifies whether locked user accounts retain their group memberships.</td>
</tr>
</tbody>
</table>
The Unified Namespace

The Unified Namespace is a virtual system in which different target systems can be mapped with their structures, user accounts, system entitlements and memberships. The Unified Namespace allows a general, cross-target system mapping of all connected target systems. This means that target systems like Active Directory domains can be mapped just the same as custom target systems.

You can use other One Identity Manager core functionality across target systems by mapping target systems in the Unified Namespace, such as identity audit, attestation or report functions. You are supplied with several reports by default.

Mapping target system objects in Unified Namespace

Each Unified Namespace object type joins the various tables of the One Identity Manager data model required for mapping connected target systems. The various target system tables are joined in database layers. This allows different object properties to be mapped uniformly.

Use the following database views to execute compliance checks or attestation across target systems and also to create reports across target systems.

Target systems (UNSRoot)

The UNSRoot view maps the base objects of target system synchronization.

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory</td>
<td>ADSDomain</td>
</tr>
<tr>
<td>Microsoft Exchange</td>
<td>EX0Organization</td>
</tr>
<tr>
<td>SharePoint</td>
<td>SPSSite</td>
</tr>
</tbody>
</table>
### Target system type

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>SharePoint Online</td>
<td>O3SSite</td>
</tr>
<tr>
<td>IBM Notes</td>
<td>NotesDomain</td>
</tr>
<tr>
<td>SAP R/3</td>
<td>SAPMandant</td>
</tr>
<tr>
<td>LDAP</td>
<td>LDPDomain</td>
</tr>
<tr>
<td>Custom target systems</td>
<td>UNSRootB</td>
</tr>
<tr>
<td>Unix</td>
<td>UNXHost</td>
</tr>
<tr>
<td>Azure Active Directory</td>
<td>AADOrganization</td>
</tr>
<tr>
<td>G Suite</td>
<td>GAPCustomer</td>
</tr>
<tr>
<td>Cloud target systems</td>
<td>CSMRoot</td>
</tr>
<tr>
<td>Oracle E-Business Suite</td>
<td>EBSSystem</td>
</tr>
<tr>
<td>Privileged Account Management</td>
<td>PAGAppliance</td>
</tr>
</tbody>
</table>

### Container (UNSContainer)

The UNSContainer view maps the target system's container structures.

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory</td>
<td>ADSContainer</td>
</tr>
<tr>
<td>SharePoint</td>
<td>SPSWeb</td>
</tr>
<tr>
<td>SharePoint Online</td>
<td>O3SWeb</td>
</tr>
<tr>
<td>LDAP</td>
<td>LDAPContainer</td>
</tr>
<tr>
<td>Custom target systems</td>
<td>UNSContainerB</td>
</tr>
<tr>
<td>Cloud target systems</td>
<td>CSMContainer</td>
</tr>
<tr>
<td>G Suite</td>
<td>GAPOrgUnit</td>
</tr>
</tbody>
</table>

### User accounts (UNSAccount)

The UNSAccount view maps the user accounts of target system.

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory</td>
<td>ADSAccount, ADSContact</td>
</tr>
<tr>
<td>Microsoft Exchange</td>
<td>EX0MailUser, EX0MailContact, EX0Mailbox</td>
</tr>
</tbody>
</table>
## Target system type

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>SharePoint</td>
<td>SPSUser</td>
</tr>
<tr>
<td>SharePoint Online</td>
<td>O3SUser</td>
</tr>
<tr>
<td>IBM Notes</td>
<td>NotesUser</td>
</tr>
<tr>
<td>SAP R/3</td>
<td>SAPUser, SAPBWUser, SAPUserMandant</td>
</tr>
<tr>
<td>LDAP</td>
<td>LDAPAccount</td>
</tr>
<tr>
<td>Custom target systems</td>
<td>UNSAccountB</td>
</tr>
<tr>
<td>Unix</td>
<td>UNXAccount</td>
</tr>
<tr>
<td>Azure Active Directory</td>
<td>AADUser</td>
</tr>
<tr>
<td>Exchange Online</td>
<td>O3EMailbox, O3EMailContact, O3EMailUser</td>
</tr>
<tr>
<td>G Suite</td>
<td>GAPUser</td>
</tr>
<tr>
<td>Cloud target systems</td>
<td>CSMUser</td>
</tr>
<tr>
<td>Oracle E-Business Suite</td>
<td>EBSUser</td>
</tr>
<tr>
<td>Privileged Account Management</td>
<td>PAGUser</td>
</tr>
</tbody>
</table>

### System entitlements (UNSGroup)

The UNSGroup view maps the target system’s system entitlements, such as groups, role, or profiles.

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory</td>
<td>ADSGroup</td>
</tr>
<tr>
<td>Microsoft Exchange</td>
<td>EX0DL</td>
</tr>
<tr>
<td>SharePoint</td>
<td>SPSGroup, SPSRLAsgn</td>
</tr>
<tr>
<td>SharePoint Online</td>
<td>O3SGroup, O3SRLAsgn</td>
</tr>
<tr>
<td>IBM Notes</td>
<td>NotesGroup</td>
</tr>
<tr>
<td>SAP R/3</td>
<td>SAPGrp, SAPPprofile, SAPRole, SAPHRP, SAPBWP</td>
</tr>
<tr>
<td>LDAP</td>
<td>LDAPGroup</td>
</tr>
<tr>
<td>Custom target systems</td>
<td>UNSGroupB</td>
</tr>
<tr>
<td>Unix</td>
<td>UNXGroup</td>
</tr>
<tr>
<td>Azure Active Directory</td>
<td>AADGroup, AADDeniedServicePlan, AADDirectoryRole, AADSubSku</td>
</tr>
<tr>
<td>Exchange Online</td>
<td>O3EDL, O3EUnifiedGroup</td>
</tr>
</tbody>
</table>
### Target system type

<table>
<thead>
<tr>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G Suite</strong> GAPGroup, GAPPaSku</td>
</tr>
<tr>
<td><strong>Cloud target systems</strong> CSMGroup</td>
</tr>
<tr>
<td><strong>Oracle E-Business Suite</strong> EBSResp</td>
</tr>
<tr>
<td><strong>Privileged Account Management</strong> PAGUsrGroup</td>
</tr>
</tbody>
</table>

### Permissions controls (UNSIItem)

The UNSItem view maps the target system's additional permissions controls.

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom target systems UNSItemB</td>
<td></td>
</tr>
<tr>
<td>Cloud target systems CSMItem</td>
<td></td>
</tr>
</tbody>
</table>

### Assignment system entitlements (UNSAccountInUNSGroup)

The UNSAccountInUNSGroup view maps system entitlement assignments to the target system's user accounts.

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory   ADSAccountInADSGroup, ADSContactInADSGroup</td>
<td></td>
</tr>
<tr>
<td>SharePoint         SPSUserInSPSGroup, SPSUserHASSPSRLAsgn</td>
<td></td>
</tr>
<tr>
<td>IBM Notes          NotesUserInGroup</td>
<td></td>
</tr>
<tr>
<td>SAP R/3            SAPUserInSAPGrp, HelperSAPUserInSAPRole, SAPUserInSAPProfile, HelperSAPUserInSAPHRP, SAPBWUserInSAPBWP</td>
<td></td>
</tr>
<tr>
<td>LDAP               LDAPAccountInLDAPGroup</td>
<td></td>
</tr>
<tr>
<td>Custom target systems UNSAccounBInUNSGroupB</td>
<td></td>
</tr>
<tr>
<td>Unix               UNXAccountInUNXGroup</td>
<td></td>
</tr>
<tr>
<td>Azure Active Directory AADUserHasDeniedService, AADUserInDirectoryRole, AADUserInAADGroup</td>
<td></td>
</tr>
<tr>
<td>Exchange Online    O3EAADUserInUnifiedGroup, O3EMailboxInDL, O3EMailContactInDL, O3EMailUserInDL</td>
<td></td>
</tr>
<tr>
<td>G Suite            GAPUserInGroup, GAPUserInPaSku</td>
<td></td>
</tr>
</tbody>
</table>
**Target system type** | **Table**
---|---
Cloud target systems | CSMUserInGroup
Oracle E-Business Suite | EBSUserInRespCompressed
Privileged Account Management | PAGUserInUsrGroup

**Assignment permissions controls (UNSAccAccountHasUNSIItem)**
The UNSAccountHasUNSIItem view maps assignments of additional permissions controls to the target system's user accounts.

**Target system type** | **Table**
---|---
Custom target systems | UNSAccountBHasUNSItemB
Cloud target systems | CSMUserHasItem

**Assignment system entitlements (UNSGGroupInUNSGGroup)**
The UNSGroupInUNSGroup view maps system entitlement assignments to the target system's system entitlements.

**Target system type** | **Table**
---|---
Active Directory | ADSGroupInADSGroup
SharePoint | SPSGroupHasSPSRLAsgn
IBM Notes | NotesGroupInGroup
SAP R/3 | SAPProfileInSAPProfile, SAPRoleInSAPRole, SAPProfileInSAPRole
LDAP | LDAPGroupInLDAPGroup
Custom target systems | UNSGroupBInUNSGroupB
Azure Active Directory | AADGroupInGroup
Exchange Online | O3EDLInDL
G Suite | GAPGroupInGroup
Cloud target systems | CSMGroupInGroup
Assignment permissions controls \((\text{UNSGroupHasUNSItem})\)

The UNSGroupHasUNSItem view maps assignments of additional permissions controls to the target system's system entitlements.

**Target system type** | **Table**
--- | ---
Custom target systems | UNSGroupBHasUnsItemB
Cloud target systems | CSMGroupHasItem

Inheritance exclusion \((\text{UNSGroupExclusion})\)

The UNSGroupExclusion view maps system entitlement definitions that are mutually exclusive.

**Target system type** | **Table**
--- | ---
Active Directory | ADSGroupExclusion
SharePoint | SPSGroupExclusion, SPSRLAsgnExclusion
IBM Notes | NotesGroupExclusion
SAP R/3 | SAPGrpExclusion, SAPProfileExclusion, SAPRoleExclusion
LDAP | LDAPGroupExclusion
Custom target systems | UNSGroupBExclusion
Unix | UNXGroupExclusion
Azure Active Directory | AADGroupExclusion, AADSubSkuExclusion
G Suite | GAPGroupExclusion
Cloud target systems | CSMGroupExclusion
Oracle E-Business Suite | EBSRespExclusion
Privileged Account Management | PAGUsrGroupExclusion

System entitlement hierarchy \((\text{UNSGroupCollection})\)

The UNSGroupCollection view maps hierarchies of system entitlements.

**Target system type** | **Table**
--- | ---
Active Directory | ADSGroupCollection
## Target system type

<table>
<thead>
<tr>
<th>Target system type</th>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>SharePoint</td>
<td>SPSGroupCollection, SPSRLAsgn</td>
</tr>
<tr>
<td>IBM Notes</td>
<td>NotesGroupCollection</td>
</tr>
<tr>
<td>SAP R/3</td>
<td>SAPCollectionRPG</td>
</tr>
<tr>
<td>LDAP</td>
<td>LDAPGroupCollection</td>
</tr>
<tr>
<td>Custom target systems</td>
<td>UNSGroupBCollection</td>
</tr>
<tr>
<td>Unix-based target system</td>
<td>UNXGroupExclusion</td>
</tr>
<tr>
<td>Azure Active Directory</td>
<td>AADGroupCollection</td>
</tr>
<tr>
<td>Exchange Online</td>
<td>O3EDLCollection</td>
</tr>
<tr>
<td>G Suite</td>
<td>GAPGroupCollection</td>
</tr>
<tr>
<td>Cloud target systems</td>
<td>CSMGroupCollection</td>
</tr>
</tbody>
</table>

## Special features for mapping object properties

In certain target systems, assignments of system entitlements to user accounts can have a limited duration.

- The validity period is not mapped in the Unified Namespace.
- The `Marked for deletion` (UNSAccountInUNSGroup.XMarkedForDeletion) ID cannot be set for these assignments. Therefore, in the Unified Namespace, you cannot tell whether an assignment was marked as outstanding by synchronization.

## One Identity Manager users for managing target systems in Unified Namespace

The following users are used for managing target systems in the Unified Namespace.

### Table 9: Users

<table>
<thead>
<tr>
<th>Users</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target system administrators</td>
<td>Target system administrators must be assigned to the **Target systems</td>
</tr>
</tbody>
</table>

One Identity Manager 8.1.1 Target System Base Module Administration Guide
The Unified Namespace
<table>
<thead>
<tr>
<th>Users</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users with this application role:</td>
<td></td>
</tr>
<tr>
<td>• Administrate application roles for individual target systems types.</td>
<td></td>
</tr>
<tr>
<td>• Specify the target system manager.</td>
<td></td>
</tr>
<tr>
<td>• Set up other application roles for target system managers if required.</td>
<td></td>
</tr>
<tr>
<td>• Specify which application roles for target system managers are mutually exclusive.</td>
<td></td>
</tr>
<tr>
<td>• Authorize other employee to be target system administrators.</td>
<td></td>
</tr>
<tr>
<td>• Do not assume any administrative tasks within the target system.</td>
<td></td>
</tr>
<tr>
<td>Target system managers</td>
<td>Target system managers must be assigned to the **Target systems</td>
</tr>
<tr>
<td>Users with this application role:</td>
<td></td>
</tr>
<tr>
<td>• Obtain view of the objects in the connected target systems across all target systems.</td>
<td></td>
</tr>
<tr>
<td>• Can create reports across all target systems.</td>
<td></td>
</tr>
<tr>
<td>If the users are also target system managers of the basic underlying target systems, you can manage these target systems through the Unified Namespace.</td>
<td></td>
</tr>
<tr>
<td>One Identity Manager administrators</td>
<td>• Create customized permissions groups for application roles for role-based login to administration tools in Designer as required.</td>
</tr>
<tr>
<td></td>
<td>• Create system users and permissions groups for non-role-based login to administration tools in Designer as required.</td>
</tr>
<tr>
<td></td>
<td>• Enable or disable additional configuration parameters in Designer as required.</td>
</tr>
<tr>
<td></td>
<td>• Create custom processes in Designer as required.</td>
</tr>
<tr>
<td></td>
<td>• Create and configures schedules as required.</td>
</tr>
<tr>
<td></td>
<td>• Create and configure password policies as required.</td>
</tr>
</tbody>
</table>
Displaying Unified Namespace objects

To display the Unified Namespace objects

- Select Unified Namespace.

User accounts, system entitlements and structure elements of all the connected target systems are displayed hierarchically in the navigation view. This shows the master data and existing assignments of all objects. The object properties and assignments cannot be edited.

NOTE: The object properties and assignments cannot be edited in Unified Namespace.

Use Show base object to change to the connected target system object. As target system administrator, you can edit the objects of your target system as usual.

Reports about the Unified Namespace

One Identity Manager supplies various report with information about all the target systems mapped in the Unified Namespace. The data is combined and grouped by target system type.

Table 10: Data quality analysis report

<table>
<thead>
<tr>
<th>Report</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orphaned user accounts in all target systems</td>
<td>This report shows all user accounts to which no employee is assigned. You can find the report in the category [My One Identity Manager</td>
</tr>
<tr>
<td>Unused user accounts in all target systems</td>
<td>This report contains all user accounts, which have not been used in the last few months. You can find the report in the category [My One Identity Manager</td>
</tr>
<tr>
<td>System entitlement drifts in all target systems</td>
<td>This report shows all system entitlements that are the result of manual operations in the target system rather than using the One Identity Manager provisioning engine. You can find the report in the category [My One Identity Manager</td>
</tr>
<tr>
<td>User accounts with an above average number of system entitlements</td>
<td>This report contains all user accounts with an above average number of system entitlements. You can find the report in the category [My One Identity Manager</td>
</tr>
<tr>
<td>Unified</td>
<td>The report shows an overview of the distribution of user accounts and</td>
</tr>
<tr>
<td>Report</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Namespace user account system entitlements distribution</td>
<td>system authorizations in Unified Namespace. You can find the report in the category **My One Identity Manager</td>
</tr>
<tr>
<td>User account operations across all systems</td>
<td>This report shows modified user accounts from all target systems for a specific time period. You can find the report in the category **My One Identity Manager</td>
</tr>
</tbody>
</table>
About us

One Identity solutions eliminate the complexities and time-consuming processes often required to govern identities, manage privileged accounts and control access. Our solutions enhance business agility while addressing your IAM challenges with on-premises, cloud and hybrid environments.

Contacting us

For sales or other inquiries, visit https://www.oneidentity.com/company/contact-us.aspx or call +1-800-306-9329.

Technical support resources

Technical support is available to One Identity customers with a valid maintenance contract and customers who have trial versions. You can access the Support Portal at https://support.oneidentity.com/.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos at www.YouTube.com/OneIdentity
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product
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