

One Identity Manager and Epic Integration 9.2.1

Administration Guide for Connecting to Epic Target System

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Legend

- **WARNING:** A WARNING icon highlights a potential risk of bodily injury or property damage, for which industry-standard safety precautions are advised. This icon is often associated with electrical hazards related to hardware.
- **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

Contents

Managing an Epic health care system	7
Architecture overview	7
One Identity Manager users for managing an Epic health care system	8
Setting up synchronization with an Epic health care system	10
Setting up the synchronization server	12
Creating a synchronization project for initial synchronization of an Epic health care	
system	
Displaying synchronization results	
Customizing synchronization configuration	
Updating Schemas	
Post-processing outstanding objects	
Help for the analysis of synchronization issues	
Deactivating synchronization	28
Basic Data for managing an Epic health care system	30
Account definition for Epic EMP user account and Epic SER provider account	31
Creating Account Definitions - Master data for an Account Definition	32
Creating manage level - Master data for manage level	34
Master data for a manage level	35
Creating mapping rules for IT operating data	37
Entering IT operating data	38
Modifying IT operating data	39
Assigning account definition to identities	40
Assigning account definitions to departments, cost centers, and locations	41
Assigning an account definition to business roles	41
Assigning account definitions to all identities	42
Assigning account definitions directly to identities	42
Assigning account definitions to system roles	43
Adding account definitions in the IT Shop	43
Assigning account definitions to a target system	45
Deleting an account definition	45
Password policies for Epic EMP user account	47
Predefined password policies	48
Applying password policies	49
Editing password policies	50
General master data for a password policy	51

Policy settings	51
Character classes for passwords on page	52
Custom scripts for password requirements	53
Script for checking a password on page	54
Script for generating a password	55
Excluded list for passwords	56
Checking Passwords	56
Initial password for Epic EMP user account	57
Email notification about login data	57
Target system managers	59
Editing a server	61
Master data for jobserver	62
Specifying server functions	64
Epic Connection	66
General Master Data for Epic Connection	66
Assign Epic EMP Template Matrix Property Mapping	68
Define Search criteria for Identity assignment	68
View Epic Security Matrix for Epic EMP template	69
Assign Epic EMP Subtemplate Matrix Property Mapping	69
View Epic Security Matrix for Epic EMP subtemplate	69
Configure settings for Epic EMP Subtemplate Index	70
Epic EMP User Accounts	. 71
Linking Epic EMP user account to identities	75
Editing master data for Epic EMP user account	76
General master data for Epic EMP user account	77
Demographic data for Epic EMP user account	80
Password data for Epic EMP user account	81
Template data for Epic EMP user account	81
Additional tasks for managing Epic EMP user account	82
Overview of Epic EMP user account	82
Managing IdentityIDs for Epic EMP user account	83
Managing External Identifiers for Epic EMP user account	83
Managing Epic EMP user account managers	84
Managing Demographics for Epic EMP user account	84
Automatic assignments of identities to Epic EMP user accounts	85
Editing search criteria for automatic identity assignment	86
Disabling Epic EMP user account	89
Deleting and restoring Epic EMP user accounts	90

Setting External User ID on Epic EMP user creation	91
Epic EMP template	92
Editing Epic EMP template	93
Assigning the Epic EMP template to Epic EMP User	93
Assigning Epic EMP template directly to the Epic EMP User	94
Assigning Epic EMP template to the department, cost center, and locations	94
Assigning Epic EMP template to the business roles	95
Assigning Epic EMP template to the IT shop	96
Deleting Epic EMP template	97
Epic EMP subtemplate	98
Editing the Epic EMP subtemplate	99
Assigning the Epic EMP subtemplate to Epic EMP user	100
Assigning the Epic EMP subtemplate directly to the Epic EMP user	100
Assigning Epic EMP subtemplate to the department, cost center, and locations .	101
Assigning Epic EMP subtemplate to the business roles	102
Assigning Epic EMP subtemplate to IT shop	102
Deleting the Epic EMP subtemplate	103
Epic SER Items	104
Overview of Epic SER item	105
Master data for Epic SER item	105
Epic SER categories	105
Epic SER Provider accounts	108
Linking Epic SER provider account to identities	109
Editing master data for Epic SER provider account	110
General master data for an Epic SER provider account	110
Epic SER provider data based on Epic SER items	113
Additional tasks for managing Epic SER provider account	125
Overview of Epic SER provider account	125
Automatic assignments of identities to Epic SER provider accounts	125
Editing search criteria for automatic identity assignment	127
Provisioning Epic SER provider onto Epic	129
Provisioning process overview	130
Disabling Epic SER provider account	132
Deleting and restoring Epic SER provider accounts	133
Epic SER Blueprints	135
Overview of Epic SER blueprint	136
Master data for Epic SER blueprint	136

SER items for Epic SER blueprint	
Applying Epic SER blueprint to Epic SER provider	
Direct Application	
IT Operating Data	
Deleting an Epic SER blueprint	138
Epic SER Template	
Overview of Epic SER template	141
Master data for Epic SER template	
SER items for Epic SER template	
Applying Epic SER template to Epic SER provider	
Direct Application	
IT Operating Data	143
Deleting Epic SER template	143
Security Matrix	
Security Matrix for Epic EMP template	145
Configuring SecurityMatrix for Epic EMP template	145
Importing SecurityMatrix for Epic EMP template	
Importing the matrix using CSV import Synchronization Project	146
Importing the matrix directly into One Identity Manager Table	
Viewing the Epic EMP template Security Matrix	
Assignment of the Epic EMP template to Epic EMP user accounts	149
Security Matrix for Epic EMP subtemplate	
Configuring SecurityMatrix for Epic EMP subtemplate	
Importing SecurityMatrix for Epic EMP subtemplate	150
Importing the matrix using CSV import Synchronization Project	150
Importing the matrix directly into One Identity Manager Table	
Viewing the Epic EMP Subtemplate Security Matrix	
Assignment of the Epic EMP subtemplate to Epic EMP user accounts	
Customizing Security Matrix	
Appendix: Configuration parameters for managing Epic health care system	
Appendix: Default project template for Epic	
About us	161
Contacting us	
Technical support resources	

Managing an Epic health care system

One Identity Manager Epic health care system module provides the ability to connect to Epic health care systems and help manage the health care system identities and their access policies from One Identity Manager. Identity and Access Governance processes such as attesting, Identity Audit, user account management and system entitlements, IT Shop, or report subscriptions can be used for Epic health care systems. The integration provides a one stop shop for managing Epic health care identities, their access policies and ensures a strong identity governance.

One Identity Manager provides company identities with the necessary user accounts that include Epic EMP user accounts and Epic SER provider accounts. You can use different mechanisms to connect identities to their user accounts. You can also manage user accounts independently of identities.

Architecture overview

To access Epic health care system data, the Epic health care system connector is installed on a synchronization server. The synchronization server ensures that the data is compared between the One Identity Manager database and Epic health care system. The Epic health care system connector uses the Epic web services and csv reports for accessing Epic health care system data.

At a high level, the Epic health care module provides the following two features leveraging the Epic web services and csv reports.

Provisioning

- Provision Epic EMP user accounts along with their entitlements (Epic EMP template and Epic Epic EMP subtemplate) created in One Identity Manager on to the target Epic health care system.
- Provision Epic SER provider accounts created in One Identity Manager on to the target Epic health care system



• Synchronization

- Synchronize Epic EMP user accounts along with their entitlements including Epic EMP templates and Epic EMP subtemplates into One Identity Manager.
- Synchronize Epic SER provider accounts, Epic SER blueprints, Epic SER templates and category list into One Identity Manager.

One Identity Manager users for managing an Epic health care system

The following users are used in Epic health care system administration.

Users	Task
Target system administrators	Target system administrators must be assigned to the Target systems Administrators application role.
	Users with this application role
	 Administrate application roles for individual target systems types
	 Specify the target system manager
	 Set up other application roles for target system managers if required
	 Specify which application roles are conflicting for target system managers
	 Authorize other identity to be target system administrators
	 Do not assume any administrative tasks within the target system
Target system managers	Target system managers must be assigned to Target systems Epic or a sub-application role.
	Users with this application role
	 Assume administrative tasks for the target system
	 Create, change or delete target system objects, like user accounts (Epic EMP user accounts and Epic SER provider accounts)
	 Edit password policies for the target system
	 Prepare Epic EMP template and Epic EMP subtemplate for adding to the IT Shop

Table 1: Users used in Epic health care system administration



	 Configure synchronization in the Synchronization Editor and define the mapping for comparing target systems and One Identity Manager Edit the synchronization's target system types and outstand- ing objects Authorize other identities within their area of responsibility as target system managers and create child application roles if required
One Identity Manager admin- istrators	 Create customized permissions groups for application roles for role-based login to administration tools in Designer as required
	 Create system users and permissions groups for nonrole- based login to administration tools in Designer as required
	 Enable or disable additional configuration parameters in Designer as required
	 Create custom processes in Designer as required
	 Create and configures schedules as required
	 Create and configure password policies as required
Administrators for the IT Shop	Administrators must be assigned to the Request & Fulfillment IT Shop Administrators application role.
	Users with this application role
	Users with this application roleAssign to IT Shop structures
Product owner for the IT Shop	
	Assign to IT Shop structures Product owners must be assigned to the Request & Fulfillment IT Shop Product owner application role or a child application
	 Assign to IT Shop structures Product owners must be assigned to the Request & Fulfillment IT Shop Product owner application role or a child application role.
	 Assign to IT Shop structures Product owners must be assigned to the Request & Fulfillment IT Shop Product owner application role or a child application role. Users with this application role
	 Assign to IT Shop structures Product owners must be assigned to the Request & Fulfillment IT Shop Product owner application role or a child application role. Users with this application role Approve through requests Edit service items and service categories under their
the IT Shop Administrators for	 Assign to IT Shop structures Product owners must be assigned to the Request & Fulfillment IT Shop Product owner application role or a child application role. Users with this application role Approve through requests Edit service items and service categories under their management Administrators must be assigned to the application role Identity
the IT Shop Administrators for	 Assign to IT Shop structures Product owners must be assigned to the Request & Fulfillment IT Shop Product owner application role or a child application role. Users with this application role Approve through requests Edit service items and service categories under their management Administrators must be assigned to the application role Identity Management Organizations Administrators.
the IT Shop Administrators for	 Assign to IT Shop structures Product owners must be assigned to the Request & Fulfillment IT Shop Product owner application role or a child application role. Users with this application role Approve through requests Edit service items and service categories under their management Administrators must be assigned to the application role Identity Management Organizations Administrators. Users with this application role
the IT Shop Administrators for Organizations Business roles	 Assign to IT Shop structures Product owners must be assigned to the Request & Fulfillment IT Shop Product owner application role or a child application role. Users with this application role Approve through requests Edit service items and service categories under their management Administrators must be assigned to the application role Identity Management Organizations Administrators. Users with this application role Assign to departments, cost centers and locations Administrators must be assigned to the application role Identity



Setting up synchronization with an Epic health care system

Epic health care system prerequisites

The following are the Epic health care system EMP connection prerequisites

Epic version supported: May 2019, August 2020, May 2020, February 2020, November 2020, February 2021, May 2021, August 2021, November 2021, February 2022, May 2022, November 2022, February 2023, May 2023, August 2023, November 2023.

NOTE: Prior Epic versions should also be supported but not officially tested against those versions.

Epic web services: Epic's SOAP 1.1 version of web services should be enabled and accessible. Epic system's Personnel management and demographics (user) web services should be enabled for access

Epic web services credentials: Valid credentials that has access to the Epic web services

Client ID: Valid Epic Client ID that has access to the Epic's personnel management and demographics (user) web services. One Identity's Production and Non-Production Epic Client IDs can be used if they are enabled for accessing the Epic web services. One Identity's Epic Client IDs can be found in the **EPCEpicConfig.xml** file in One Identity Manager workstation.

Epic EMP user, Epic EMP template, Epic EMP subtemplate reports: The master list of all Epic EMP user, Epic EMP template and Epic EMP subtemplate need to be exported from Epic in to separate CSV files and provided to Epic connector. Please contact Epic on how to automate the report generation process.

Epic EMP Items need to be un-locked: Epic EMP user attributes that need to be managed from One Identity Manager need to be un-locked by Epic's Data Courier team. The list of attributes along with the EMP item number are provided in the section Epic EMP User Accounts. Un-lock the EMP user items that you want serviced from One Identity Manager.

The following are the Epic health care system SER connection prerequisites -

Epic SER provider, Epic SER blueprint, Epic SER template, and Epic SER item reports.



- **Epic SER provider report**: The master list of Epic SER provider need to be exported from Epic into separate CSV files and provided to Epic connector. Please contact Epic on how to automate the report generation process.
- **Epic SER blueprint report**: Epic SER blueprints are like templates from which Epic SER provider record could be built. If you want to build Epic SER provider records from an Epic SER blueprint, a CSV report needs to be generated and provided to Epic connector. Please contact Epic on how to automate the report generation process.
- Epic SER template and Epic SER item reports: The Epic SER template provides a custom way to build an Epic SER provider record. The report is modeled like Epic SER blueprint. The EPC module's Miscellaneous folder contains an example Epic SER template report. The Epic SER item contains the list of Epic SER items managed from One Identity Manager. The EPC module's Miscellaneous folder contains an example Epic SER items report. Make sure the item number and field number present in the file matches your Epic installation.
- **Epic SER categories report**: In the One Identity Manager designer's SERProvider schema, SER columns can be optionally designated as being populated from a *limited set of values* by checking the *defined list of values option*. For the columns that has been designated as limited set of values, the actual values could be optionally synchronized from external files. The categories report must be generated for the same and provided to Epic connector. The EPC module's Miscellaneous folder contains categories for all supported Epic SER items. These categories can be used if it satisfies the requirement or contact Epic to automate the report generation process.

For more information about report format, see

- Epic EMP template
- Epic EMP subtemplate
- Epic EMP User Accounts
- Epic SER provider
- Epic SER blueprint
- Epic SER template
- Epic SER items
- Epic SER categories

To load One Epic EMP users, Epic EMP templates, Epic Sub templates, Epic SER providers, Epic SER blueprints, Epic SER templates and Epic SER items into the One Identity Manager database for the first time

- 1. Make sure Epic health care system prerequisites are met
- 2. The **One Identity Manager** components for managing Epic health care system are available if the **TargetSystem | Epic configuration parameter** is set.
 - Check whether the configuration parameter is set in the **Designer**. Otherwise, set the configuration parameter and compile the database.



- Check the configuration parameters and modify them as necessary to suit your requirements.
- 3. Install and configure a synchronization server and declare the server as Job server in **One Identity Manager**.

NOTE: Ensure that the Job server has the machine role of Epic and job server function of Epic connector.

4. Create a synchronization project with the **Synchronization Editor**.

For more information, see

- Setting up the synchronization server
- Creating a synchronization project for initial synchronization of an Epic health care system
- Deactivating synchronization
- Customizing synchronization configuration
- Configuration parameters for managing Epic health care system
- Default project template for Epic

Setting up the synchronization server

To set up synchronization with an Epic health care system, a server must be available with the following software installed on it

• Windows operating system

Versions supported

- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2 (non-Itanium based 64-bit) Service Pack 1 or later
- Microsoft .NET Framework Version 4.8 or later
- Windows PowerShell version 5.0 or later

NOTE: Take the target system manufacturer's recommendations into account.

- One Identity Manager Service, Epic connector
- Install **One Identity Manager** components with the installation wizard.
 - 1. Select installation modules with existing database.
 - 2. Select the machine role **Server | Job server | Epic**.

All **One Identity Manager Service** actions are run against the target system environment on the synchronization server. Data entries required for synchronization and



administration with the One Identity Manager database are processed by the synchronization server. The synchronization server must be declared as a Job server in One Identity Manager.

NOTE: If several target system environments of the same type are synchronized under the same synchronization server, it is useful to set up a Job server for each target system on performance grounds. This avoids unnecessary swapping of connections to target systems because a Job server only has to process tasks of the same type (re-use of existing connections).

Use the Server Installer to install the One Identity Manager Service. The program runs the following steps:

- Setting up a Job server.
- Specifying machine roles and server function for the Job server.
- Remote installation of One Identity Manager Service components corresponding to the machine roles.
- Configuration of **One Identity Manager Service**.
- Starts the One Identity Manager Service.

NOTE: The program runs remote installation of the **One Identity Manager Service**. Local installation of the service is not possible with this program. Remote installation is only supported within a domain or a trusted domain.

For remote installation of **One Identity Manager Service**, you require an administrative workstation on which the **One Identity Manager** components are installed. For detailed information about installing a workstation, see the *One Identity Manager Installation Guide*.

To install and configure One Identity Manager Service remotely on a server

- 1. Start the program Server Installer on your administrative workstation.
- 2. Enter the valid connection credentials for the **One Identity Manager** database on the **Database connection** page.
- 3. Specify the server on which you want to install **One Identity Manager Service** on the **Server properties** page.

Select a **Job server** from the **Server** menu.

- OR -

To create a new Job server, click Add.

Enter the following data for the Job server.

Table 2: Job Server Properties

Property	Description	
Server	Job server name.	
Queue	Name of the queue to handle the process steps.	



Each **One Identity Manager Service** within the network must have a unique queue identifier. The process steps are requested by the job queue using exactly this queue name. The queue identifier is entered in the **One Identity Manager Service** configuration file.

Full server Full server name in accordance with DNS syntax. name Example: <Name of servers>.<Fully qualified domain name>

NOTE: You can use the Extended option to make changes to other properties for the Job server. You can also edit the properties later with **Designer**.

- 4. Select **Epic** on the **Machine roles** page.
- 5. Select **Epic** connector on the **Server functions** page.
- 6. Check the **One Identity Manager Service** configuration on the **Service settings** page.

NOTE: The initial service configuration is predefined already. If further changes need to be made to the configuration, you can do this later with the **Designer**. For more information about configuring the service, see the *One Identity Manager Configuration Guide*.

- 7. To configure remote installations, click **Next**.
- 8. Confirm the security prompt with **Yes**.
- 9. Select the directory with the install files on Select installation source.
- 10. Select the file with the private key on the page Select private key file.

NOTE: This page is only displayed when the database is encrypted.

11. Enter the service's installation data on the Service access page.

Data	Description
Computer	Server on which to install and start the service from.
	To select a server
	Enter a name for the server.
	- OR -
	Select a entry from the list.
Service Account	User account data for the One Identity Manager Service.
	<i>To enter a user account for the One Identity Manager</i> <i>Service</i>
	Set the option Local system account. This starts the One Identity Manager Service under the NT

Table 3: Installation Data



AUTHORITY\SYSTEM account.

- OR -

Enter user account, password and password confirmation.Installation
accountData for the administrative user account to install the service.To enter an administrative user account for
installationEnable Advanced. I Enable Current user. This uses the user
account of the current user.
- OR -
Enter user account, password and password confirmation.

12. Click **Next** to start installing the service.

Installation of the service occurs automatically and may take some time.

13. Click **Finish** on the last page of **Server Installer**.

NOTE: The service is entered with the name **One Identity Manager Service** in the server service management.

Creating a synchronization project for initial synchronization of an Epic health care system

Use **Synchronization Editor** to configure synchronization between the **One Identity Manager** database and Epic health care system. The following describes the steps for initial configuration of a synchronization project. For more information about setting up synchronization, see the *One Identity Manager Target System Synchronization Reference Guide*.

After the initial configuration, you can customize and configure workflows within the synchronization project. Use the workflow wizard in the **Synchronization Editor** for this. The **Synchronization Editor** also provides different configuration options for a synchronization project.

The following information is required for setting up a synchronization project.

Table 4: Information Required for Setting up a Synchronization Project

Data	Explanation
Client Name	Client name who is using Epic
Environment Name	Epic instance's environment being connected to. Example:



	TEST, PROD
Connection display	Provide a display name for the Epic connection
Epic Connection Type	Select whether you are setting up EMP, SER or EMP $\&$ SER connection
Client ID	Valid Epic Client ID for authenticating against the Epic web services. For more information, see Epic health care system prerequisites for using One Identity Client ID.
	NOTE: Production Client ID must be used to connect to Epic's Production environment and Non-Production Client ID must be used to connect to Epic's Non-Produc- tion environments
Username	User that has access to the Epic web services
	 If the username is an EMP user account, then prefix the username with emp: Example: If username is webServiceAccount, then enter the username as emp:webServiceAccount
	 If the username is an Active directory user account then prefix the username with windows: Example: If username is webServiceAccount, then enter the username as windows:webServiceAccount
Password	Password of the user who has access to the Epic web services
Audit user id	Epic EMP user id that should be used for auditing the web service calls being made. The user needs to be active.
	IMPORTANT: The EMP user id supplied should be the External ID of the user.
	NOTE: It is highly recommended that an exclusive Epic EMP service account is created and used as the Audit user id
Audit user password	Audit user password needs to be supplied only on Epic versions prior to Epic 2018
Personnel Management	Epic's Personnel management web services URL.
Webservice URL	NOTE: Only one connection is allowed to a particular Epic environment. So the Personnel Management Webservice URL needs to be unique across synchron- ization projects.
Demographic (User) Webser-	Epic's demographics (User) web services URL
vice URL	NOTE: Only one connection is allowed to a particular Epic environment. So the Demographics (User) Webser-



	vice URL needs to be unique across synchronization projects.
CSV import directory	The directory from which the Epic EMP user, Epic EMP template, Epic Sub template, Epic SER provider, Epic SER blueprint, Epic SER template and Epic SER item CSV reports should be fetched. This directory can be local folder or a network share.
	IMPORTANT: Important If local folder is used, make sure to set up the local folder on the synchronization server and One Identity Manager workstation. If network shared path is used provide the UNC path to the network share.
CSV import directory Creden- tial	If the CSV import directory is a network share click this check box to optionally enter the credentials.
	NOTE: Not applicable for a local folder.
UserName	If the CSV import directory is a network share optionally enter the username to access the network share. Enter the username in the following format Domain Name\Username.
Password	If the CSV import directory is a network share optionally enter the password to access the network share.
IsNativeEpicAuthentication	Click this checkbox if the Epic environment is configured to use native Epic authentication. This value determines whether the Epic EMP user account password changes are propagated to the target system or not. Password updates to Epic EMP user accounts take place only if native Epic authentication is configured.
Use Custom PowerShell Script for User Import	If the Epic EMP user report generated out of Epic needs to be customized even further before it is used by the Epic connector check this check box. Copy the <i>EpicUserReportFilterScript.ps1</i> from the One Identity Manager installer's dvd/Addon folder to the CSV import directory. Customize the PowerShell script according to the requirements. Now, the Epic connector would use the data returned by the PowerShell script rather than the EMP user report CSV file.
	IMPORTANT: If local folder is used, make sure to copy the PowerShell script to the job server's local folder and One Identity Manager workstation's local folder. If the PowerShell script execution policy on job server or One Identity Manager workstation is set to AllSigned, then the PowerShell script has to be signed after modification or change the script execution policy on the server to be less restrictive for the script to run.



Synchronization server for Epic health care system	All One Identity Manager Service actions are run against the target system environment on the synchronization server. Data entries required for synchronization and administration with the One Identity Manager database are processed by the synchronization server. The One Identity Manager Service with the Epic connector must be installed on the synchronization server. The synchronization server must be declared as a Job server in One Identity Manager. Use the following properties when you set up the Job server. Property Value Server function Epic connector Machine role Server Job
	server Additional properties for the Job server. For more
	information, see Setting up the synchronization server.
One Identity Manager	Database server
database connection data	• Database
	SQL Server Login and password
	Specifies whether integrated Windows authentication is used. This type of authentication is not recommended. If you decide to use it anyway, ensure that your environment supports Windows authentication.
Remote connection server	To configure synchronization with a target system, One Identity Manager must load the data from the target system. One Identity Manager communicates directly with target system to do this. Sometimes direct access from the workstation on which the Synchronization Editor is installed is not possible, because of the firewall configuration, for example, or because the workstation does not fulfill the necessary hardware and software requirements. If direct access to the workstation is not possible, you can set up a remote connection. The remote connection server and the workstation must be in the same Active Directory domain.
	Remote connection server configuration
	One Identity Manager Service is started
	RemoteConnectPlugin is installed
	Epic connector is installed



The remote connection server must be declared as a Job server in **One Identity Manager**. The Job server name is required.

NOTE: The remote connection server requires the same configuration as the synchronization server (with regard to the installed software and entitlements). Use the synchronization as remote connection server at the same time, by simply installing the RemoteConnectPlugin as well. For more information about setting up a remote connection, see the *One Identity Manager Target System Synchronization Reference Guide.*

NOTE: The following sequence describes how you configure a synchronization project if **Synchronization Editor** is both

- Run in default mode, and
- Started from the launchpad

If you run the project wizard in expert mode or directly from **Synchronization Editor**, additional configuration settings can be made. Follow the project wizard instructions through these steps.

To set up an initial synchronization project for Epic health care system

1. Start the Launchpad and log on to the One Identity Manager database.

NOTE: If synchronization is run by an application server, connect the

database through the application server.

2. Select **Target system type Epic** and click **Start**.

This starts the Synchronization Editor's project wizard.

- 3. Specify how **One Identity Manager** can access the target system on the **System access** page.
 - If access is possible from the workstation on which you started **Synchronization Editor**, you do not need to make any settings.
 - If access is not possible from the workstation on which you started **Synchronization Editor**, you can set up a remote connection.

Enable the **Connect using remote connection server** option and select the server to be used for the connection under **Job server**.

- 4. Enter the system connection details for your client.
- 5. Enter the advance settings details if the option has been chosen.
- On the One Identity Manager Connection tab, test the data for connecting to the One Identity Manager database. The data is loaded from the connected database. Reenter the password.

NOTE: If you use an unencrypted **One Identity Manager** database and have not yet saved any synchronization projects to the database, you need to enter all



connection data again. This page is not shown if a synchronization project already exists.

- 7. The wizard loads the target system schema. This may take a few minutes depending on the type of target system access and the size of the target system.
- 8. On the Restrict target system access page, you specify how system access should work. You have the following options

Option	Meaning		
Read-only access to target system	Specifies whether a synchronization workflow is only to be set up for the initial loading of the target system into the One Identity Manager database.		
	The synchronization workflow has the following characteristics		
	 Synchronization is in the direction of One Identity Manager. 		
	 Processing methods in the synchronization steps are only defined for synchronization in the direction of One Identity Manager. 		
Read/write access to target system.	Specifies whether a provisioning workflow is to be set up in addition to the synchronization workflow for the initial loading of the target system.		
Provisioning available.	The provisioning workflow displays the following characteristics		
avallable.	 Synchronization is in the direction of the Target system. 		
	 Processing methods are only defined in the synchronization steps for synchronization in the direction of the Target system. 		
	 Synchronization steps are only created for such schema classes whose schema types have write access. 		

 Table 5: Specify target system access

9. Select the synchronization server to run synchronization on the **Synchronization** server page.

If the synchronization server is not declared as a Job server in the One Identity Manager database yet, you can add a new Job server.

- a. Click to add a new Job server.
- b. Enter a name for the Job server and the full server name conforming to DNS syntax.
- c. Click OK.

The synchronization server is declared as Job server for the target system in the **One Identity Manager** database.



NOTE: After you save the synchronization project, ensure that this server is set up as a synchronization server.

10. To close the project wizard, click **Finish**.

This creates and allocates a default schedule for regular synchronization. Enable the schedule for regular synchronization.

The synchronization project is created, saved and enabled immediately.

NOTE:

- If you do not want the synchronization project to be activated immediately, disable the Activate and save the new synchronization project automatically option. In this case, save the synchronization project manually before closing the Synchronization Editor.
- The connection data for the target system is saved in a variable set and can be modified under **Configuration | Variables** in **Synchronization Editor**.

Configure the created initial synchronization project for Epic health care system

Configure the following variables of the synchronization project

- 1. **Locale**: The locale that is used in Epic. Date time values are formatted based on the locale. Contact your Epic administrator to get the locale. Default locale is **en-US**.
- 2. **EpicVersion**: Epic deployment version should be entered in "Month Year" format. For example, to indicate Epic version May 2020, enter as May 2020. This variable would be used for futuristic version specific implementation for any API upgrades.
- 3. **LinkedProviderIDType**: Epic EMP-SER Link Provider ID Type that the customer would like to use. Once synchronization has been run after configuring the ID Type it should not be changed to avoid data inconsistency or potential data loss.

Configure the following fields under the Mappings section of the synchronization project

1. User Mappings

a. **vrtDateFormat**: Configure the date format that you want to use based on the locale. If the locale is en-US, the configuration is already done and you need not to do anything more.

2. UserHasEMPTemplate Mappings

a. **vrtDateFormat**: Configure the date format that you want to use based on the locale. If the locale is en-US, the configuration is already done and you need not to do anything more.

3. SER Categories Mapping

a. **vrtDialogColumn**: In write script, to allow an SER column to auto populate from Limited set of values, uncomment the section of code that automatically updates SER column and marks it as limited set of values.



To configure the content of the synchronization log

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. To configure the synchronization log for target system connection, select the category **Configuration | Target system**.
- 3. To configure the synchronization log for the database connection, select **Configuration | One Identity Manager** connection.
- 4. Select the **General view** and click **Setup**.
- 5. Select the **Synchronization log** view and set **Create synchronization log**.
- 6. Enable the data to be logged.

NOTE: Some content generates a particularly large volume of log data. The synchronization log should only contain data required for troubleshooting and other analyses.

7. Click **OK**.

To synchronize on a regular basis

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select the category **Configuration | Start up configurations**.
- 3. Select a start up configuration in the document view and click **Edit schedule**.
- 4. Edit the schedule properties.
- 5. To enable the schedule, click **Activate**.
- 6. Click **OK**.

To start initial synchronization manually

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select the category **Configuration | Start up configurations**.
- 3. Select a start up configuration in the document view and click **Execute**.
- 4. Confirm the security prompt with **Yes**.

NOTE: Following a synchronization, identities are automatically created for the Epic EMP user accounts and Epic SER provider accounts in the default installation. If an account definition for the client is not yet known at the time of synchronization, both user accounts are linked with identities. 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 Epic EMP user accounts through account definitions

- 1. Create an account definition.
- 2. Assign an account definition to the client.



- 3. Assign the account definition and manage level to user accounts in linked status.
 - a. In **One Identity Manager**, select **Epic Healthcare | User accounts |** Linked but not configured | <Client>.
 - b. Select Assign account definition to linked accounts.

To select Epic SER provider accounts through account definitions

- 1. Create an account definition.
- 2. Assign an account definition to the client.
- 3. Assign the account definition and manage level to user accounts in linked status.
 - a. In **One Identity Manager**, select **Epic Healthcare | SER providers |** Linked but not configured | <Client>.
 - b. Select Assign account definition to linked accounts.

Related Topics

- Setting up the synchronization server
- Displaying synchronization results
- Customizing synchronization configuration
- Configuration parameters for managing Epic health care system
- Default project template for Epic

Displaying synchronization results

Synchronization results are summarized in the synchronization log. You can specify the extent of the synchronization log for each system connection individually. **One Identity Manager** provides several reports in which the synchronization results are organized under different criteria.

To display a synchronization log

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select Logs.
- 3. Click in the navigation view toolbar.

Logs for all completed synchronization runs are displayed in the navigation view.

4. Select a log by double-clicking on it.

An analysis of the synchronization is shown as a report. You can save the report.

To display a provisioning log

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select Logs.



23

3. Click in the navigation view toolbar.

Logs for all completed provisioning processes are displayed in the navigation view.

- 4. Select a log by double-clicking on it. An analysis of the provisioning is show as a report. You can save the report.
- 5. The log is marked in color in the navigation view.

This mark shows you the execution status of the synchronization/provisioning.

6. Synchronization logs are stored for a fixed length of time.

To modify the retention period for synchronization logs

• In **Designer**, enable the **DPR | Journal | LifeTime** configuration parameter and enter the maximum retention period.

Customizing synchronization configuration

You have used the **Synchronization Editor** to set up a synchronization project for synchronization of an Epic health care system. If you manage user accounts and their authorizations with One Identity Manager, changes are provisioned in the Epic health care system. You can customize the synchronization as required by updating the synchronization project's workflow, mappings, variables and start up configurations

IMPORTANT: As long as synchronization is running, you must not start another synchronization for the same target system. This applies especially, if the same synchronization objects would be processed.

- If another synchronization is started with the same start up configuration, this process is stopped and is assigned the **Frozen** execution status. An error message is written to the **One Identity Manager Service** log file.
- If another synchronization is started with another start up configuration, that addresses same target system, it may lead to synchronization error or loss of data. Specify **One Identity Manager** behavior in this case, in the start up configuration. Group start up configurations with the same start up behavior.

For detailed information about configuring synchronization, see the *One Identity Manager Target System Synchronization Reference Guide*.

Updating Schemas

All the schema data (schema types and schema properties) of the target system schema and the **One Identity Manager** schema are available when you are editing a synchronization project. Only a part of this data is really needed for configuring synchronization. If a synchronization project is finished, the schema is compressed to



remove unnecessary data from the synchronization project. This can speed up loading the synchronization project. Deleted schema data can be added to the synchronization configuration again at a later point. If the target system schema or the One Identity Manager schema has changed, these changes must also be added to the synchronization configuration. Then the changes can be added to the schema property mapping.

To include schema data that have been deleted through compressing and schema modifications in the synchronization project, update each schema in the synchronization project.

This may be necessary if

- A schema was changed by
 - Changes to a target system schema
 - Customizations to the One Identity Manager schema
 - A One Identity Manager update migration
 - A schema in the synchronization project was shrunk by
 - Enabling the synchronization project
 - Saving the synchronization project for the first time
 - Compressing a schema

To update a system connection schema

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select the category **Configuration | Target systems**.
 - OR -

Select the category **Configuration | One Identity Manager connection**.

- 3. Select the view **General** and click **Update schema**.
- 4. Confirm the security prompt with **Yes**. This reloads the schema data.

To edit a mapping

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select the category Mappings.
- 3. Select a mapping in the navigation view.

The **Mapping Editor** is displayed.

For more detailed information about mappings, see the *One Identity Manager Target System Synchronization Reference Guide*.

NOTE: The synchronization is deactivated if the schema of an activated synchronization project is updated. Reactivate the synchronization project to synchronize.



Post-processing outstanding objects

Objects, which do not exist in the target system, can be marked as outstanding in **One Identity Manager** by synchronizing. This prevents objects being deleted because of an incorrect data situation or an incorrect synchronization configuration.

Outstanding objects

- Cannot be edited in One Identity Manager
- Are ignored by subsequent synchronization
- Are ignored by inheritance calculations

This means, all memberships and assignments remain intact until the outstanding objects have been processed. Start target system synchronization to do this.

To post-process outstanding objects

1. In **One Identity Manager**, select the **Epic health care | Target system synchronization: Epic** category.

All tables assigned to the target system type Epic as synchronization tables are displayed in the navigation view.

All objects that are marked as outstanding are shown. The **Last log entry** and **Last method run** columns display the time at which the last entry was made in the synchronization log and which processing method was run. The **No log available** entry can mean the following

• The synchronization log has already been deleted.

- OR -

• An assignment from a member list has been deleted in the target system.

The base object of the assignment has been updated during the

synchronization. A corresponding entry appears in the synchronization log. The entry in the assignment table is marked as outstanding, but there is no entry in the synchronization log.

• An object that contains a member list has been deleted in the target system.

During synchronization, the object and all corresponding entries in assignment tables are marked as outstanding. However, an entry in the synchronization log appears only for the deleted object.

NOTE:

To display object properties of an outstanding object

- a. Select the object on the target system synchronization form.
- b. Open the context menu and click Show object.
- 2. Select the objects you want to rework. Multi-select is possible.



3. Click one of the following icons in the form toolbar to run the respective method.

Icon	Method	Description
	Delete	The object is immediately deleted in the One Identity Manager database. Deferred deletion is not taken into account. The Outstanding label is removed for the object. Indirect memberships cannot be deleted.
R	Publish	The object is added in the target system. The Outstanding label is removed for the object. The method triggers the HandleOutstanding event. This runs a target system specific process that triggers the provisioning process for the object. Prerequisites
		 The table containing the object can be published.
		 The target system connector has write access to the target system.
5 ≡	Reset	The Outstanding label is removed for the object.

Table 6: Methods for handling outstanding objects

4. Confirm the security prompt with **Yes**.

NOTE:

- By default, the selected objects are processed in parallel, which speeds up execution of the selected method. If an error occurs during processing, the action is stopped and all changes are discarded.
- Bulk processing of objects must be disabled if errors are to be localized, which means the objects are processed sequentially. Failed objects are named in the error message. All changes that were made up until the error occurred are saved.

To disable bulk processing

• Deactivate in the form toolbar.

You must customize synchronization to synchronize custom tables.

To add custom tables to the target system synchronization

- 1. In the result list, select the target system type **Epic**.
- 2. Select Assign synchronization tables.
- 3. Assign custom tables whose outstanding objects you want to handle in **Add assignments**.
- 4. Save the changes.
- 5. Select **Configure tables** for publishing.
- 6. Select custom tables whose outstanding objects can be published in the target system and set **Publishable**.
- 7. Save the changes.



NOTE: The target system connector must have write access to the target system in order to publish outstanding objects that are being post-processed. This means that the **Connection is read only** option is not set in the target system connection.

Help for the analysis of synchronization issues

You can generate a report for analyzing problems which occur during synchronization, for example, insufficient performance.

The report contains information such as

- Consistency check results
- Revision filter settings
- Scope applied
- Analysis of the synchronization buffer
- Object access times in the One Identity Manager database and in the target system

To generate a synchronization analysis report

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select the menu **Help | Generate** synchronization analysis report and answer the security prompt with **Yes**.

The report may take a few minutes to generate. It is displayed in a separate window.

3. Print the report or save it in one of the available output formats.

Deactivating synchronization

Regular synchronization cannot be started until the synchronization project and the schedule are active.

To prevent regular synchronization

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select the start up configuration and deactivate the configured schedule.

Now you can only start synchronization manually.

An activated synchronization project can only be edited to a limited extent. The schema in the synchronization project must be updated if schema modifications are required. The synchronization project is deactivated in this case and can be edited again. Furthermore, the synchronization project must be deactivated if synchronization should not be started by any means (not even manually).



To deactivate the synchronization project

- 1. Open the synchronization project in the **Synchronization Editor**.
- 2. Select **General** on the start page.
- 3. Click **Deactivate project**.

Related Topics

• Creating a synchronization project for initial synchronization of an Epic health care system



Basic Data for managing an Epic health care system

To manage an Epic health care system environment in One Identity Manager, the following basic data is relevant.

Configuration parameters

Use configuration parameters to configure the behavior of the system's basic settings. One Identity Manager provides default settings for different configuration parameters. Check the configuration parameters and modify them as necessary to suit your requirements. Configuration parameters are defined in the One Identity Manager modules. Each One Identity Manager module can also install configuration parameters. You can find an overview of all configuration parameters in Base data | General | Configuration parameters in Designer.

For more information, see Configuration parameters for managing Epic health care system.

Account definitions

One Identity Manager has account definitions for automatically allocating Epic EMP user accounts and Epic SER provider accounts to identities. You can create account definitions for every target system. If an identity does not yet have an Epic EMP user account or Epic SER provider account in a target system, a new user account is created. This is done by assigning account definitions to an identity. For more information, see Account definition for Epic EMP user account and Epic SER provider account.

Password policies

One Identity Manager provides you with support for creating complex password policies, for example, for system user passwords, the identities' central password as well as passwords for individual target systems. Password polices apply not only when the user enters a password but also when random passwords are generated.

Predefined password policies are supplied with the default installation that you can user or customize if required. You can also define your own password policies.

For more information, see Password policies for Epic EMP user account.



Initial password for new user accounts

You have the different options for issuing an initial password for Epic EMP user accounts. The central password of the assigned identity can be aligned with the Epic EMP user account password, a predefined, fixed password can be used, or a randomly generated initial password can be issued.

For more information, see Initial password for Epic EMP user account.

NOTE: Password is applicable to only Epic EMP user accounts.

Email notifications about login data

When a new Epic EMP user account is created, the login data are sent to a specified recipient. In this case, two messages are sent with the username and the initial password. Mail templates are used to generate the messages. For more information, see Email notifications about login data.

Target system types

Target system types are required for configuring target system comparisons. Tables containing outstanding objects are maintained on target system types. For more information, see Post-processing outstanding objects.

Target system managers

A default application role exists for the target system manager in One Identity Manager. Assign the identities who are authorized to edit all tenants in One Identity Manager to this application role. Define additional application roles if you want to limit the edit permissions for target system managers to individual tenants. The application roles must be added under the default application role. For more information, see Target system managers.

Server

Servers must know your server functionality in order to handle Epic specific processes in One Identity Manager. For example, the synchronization server.

For more information, see Editing a server.

Account definition for Epic EMP user account and Epic SER provider account

One Identity Manager has account definitions for automatically allocating Epic EMP user accounts and Epic SER provider accounts to identities during working hours. You can create account definitions for every target system. If an identity does not yet have an Epic EMP user account or Epic SER provider account in a target system, a new user account is created. This is done by assigning account definitions to an identity.



The data for the user accounts in the respective target system comes from the basic identity data. The identities must have a central user and provider account. The assignment of the IT operating data to the identity's account is controlled through the primary assignment of the identity 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 and provider accounts included in the default installation. You can customize templates as required. For detailed information about account definitions, see the One Identity Manager Target System Base Module Administration Guide.

The following steps are required to implement an account definition

- Creating account definitions
- Creating manage levels
- Creating mapping rules for IT operating data
- Entering IT operating data
- Assigning account definitions to identities
- Assigning account definitions to a target system

Creating Account Definitions - Master data for an Account Definition

To create a new account definition

1. In **One Identity Manager**, select **Epic healthcare | Basic configuration data |** Account definitions | Account definitions.

2. Select an account definition in the result list. Select Change master data.

- OR -

Click in the result list toolbar.

- 3. Enter the account definition's master data.
- 4. Save the changes

For more information, see Master data for an account definition.

Table 7: Master data for an account definition

Property	Description
Account defin- ition	Account definition name.
User account table	Table in the One Identity Manager schema that maps user accounts.
Target system	Target system to which the account definition applies.



Required account defin- ition	Required account definitions. Define the dependencies between account definitions. When this account definition is requested or assigned, the required account definition is automatically requested or assigned with it.	
Description Spare text box for additional explanation.		
Manage level (initial)	Manage level to use by default when you add new user accounts.	
Risk index	Value for evaluating the risk of account definition assignments to identities. Enter a value between 0 and 1. This input field is only visible if the configuration parameter QER CalculateRiskIndex is activated. For more detailed information, see the <i>One Identity Manager Risk Assessment Administration Guide</i> .	
Service item	Service item Service item through which you can request the account definition in the IT Shop. Assign an existing service item or add a new one.	
IT Shop	Specifies whether the account definition can be requested through the IT Shop. The account definition can be ordered by an identity over the Web Portal and distributed using a defined approval process. The account definition can also be assigned directly to identities and roles outside of IT Shop.	
Only for use in IT Shop	Specifies whether the account definition can only be requested through the IT Shop. The account definition can be ordered by an identity over the Web Portal and distributed using a defined approval process. This means, the account definition cannot be directly assigned to roles outside the IT Shop.	
Automatic assignment to identities	Specifies whether the account definition is assigned automatically to all internal identities. The account definition is assigned to every identity not marked as external, on saving. New identities automatically obtain this account definition as soon as they are added.	
	IMPORTANT: Only set this option if you can ensure that all current internal identities in the database and all pending newly added internal identities obtain a user account in this target system. Disable this option to remove automatic assignment of the account definition to all identities. The account definition cannot be reassigned to identities from this point on. Existing account definition assignments remain intact.	
Retain account definition if permanently disabled	Specifies the account definition assignment to permanently disabled identities. Option set: The account definition assignment remains in effect. The user account stays the same. Option not set: The account definition assignment is not in effect. The associated user account is deleted.	



Retain account definition if temporarily disabled	Specifies the account definition assignment on deferred deletion of identities. Option set: The account definition assignment remains in effect. The user account stays the same. Option not set: The account definition assignment is not in effect. The associated user account is deleted.	
Retain account Specifies the account definition assignment to identities posing a security risk. Option set: The account definition assignment remains i effect. The user account stays the same. Option not set: The account definition assignment is not in effect. The associated user account is deleted.		
Resource type	Resource type Resource type for grouping account definitions.	
Spare field 01 - spare field 10	Additional company specific information. Use Designer to customize display names, formats and templates for the input fields	

Creating manage level - Master data for manage level

Specify the manage level for an account definition for managing user accounts. The user account's manage level specifies the extent of the identity's properties that are inherited by the user account. This allows an identity to have several user accounts in one target system, for example:

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

One Identity Manager supplies a default configuration for manage levels

• **Unmanaged**: User accounts with the **Unmanaged** manage level are linked to the identity but they do not inherit any further properties. When a new user account is added with this manage level and an identity is assigned, some of the identity's properties are transferred initially. If the identity 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 identity. When a new user account is created with this manage level and an identity is assigned, the identity's properties are transferred in an initial state. If the identity properties are changed later, the changes are passed onto the user account.

NOTE: The Full managed and Unmanaged are analyzed in templates. You can define other manage levels depending on your requirements. You need to amend the templates to include manage level approaches.

Specify the effect of temporarily or permanently disabling, deleting or the security risk of an identity on its user accounts and group memberships for each manage level. For



detailed information about manage levels, see the One Identity Manager Target System Base Module Administration Guide.

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

To assign manage levels to an account definition

1. In **One Identity Manager**, select **Epic healthcare | Basic configuration data |** Account definitions | Account definitions.

2. Select an account definition in the result list.

- 3. Select Assign manage level.
- 4. Assign the manage levels in **Add assignments**.

- OR -

Delete the manage levels in Remove assignments.

5. Save the changes.

IMPORTANT: The Managed manage level is assigned automatically when you create an account definition and it cannot be removed.

To edit a manage level

1. Select Epic healthcare | Basic configuration data | Account definitions | Manage levels.

2. Select the manage level in the result list. Select Change master data.

- OR -

Click in the result list toolbar.

3. Edit the manage level's master data.

4. Save the changes.

Related Topics

• Master data for a manage level

Master data for a manage level

Enter the following data for a manage level.



Manage level	Name of the manage level.	
Description	Spare text box for additional explanation.	
IT operating data overwrites	Specifies whether user account data formatted from IT operating data is automatically updated. Permitted values are:	
	Never: Data is not updated.	
	 Always: Data is always updated. 	
	 Only initially: The data is only determ- ined at the start. 	
Retain groups if temporarily disabled	Specifies whether user accounts of tempor- arily disabled identities retain their group memberships.	
Lock user accounts if temporarily disabled	Specifies whether user accounts of tempor- arily disabled identities retain their group memberships.	
Retain groups if permanently disabled	Specifies whether user accounts of perman- ently disabled identities retain group memberships.	
Lock user accounts if permanently disabled	Specifies whether user accounts of permanently disabled identities are locked.	
Retain groups on deferred deletion	Specifies whether user accounts of identit- ies marked for deletion are locked.	
Lock user accounts if deletion is deferred	Specifies whether user accounts of identit- ies marked for deletion are locked.	
Retain groups on security risk	Specifies whether user accounts of identit- ies posing a security risk retain their group memberships	
Lock user accounts if security is at risk	Specifies whether user accounts of identit- ies posing a security risk are locked.	
Retain groups if user account disabled	Specifies whether locked user accounts retain their group memberships.	

Table 8: Master data for a manage level



Creating mapping rules for IT operating data

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 identity's primary roles. The following IT operating data is used in the One Identity Manager default configuration for automatic creating and modifying of user accounts for an identity in the target system.

The following IT operating data is used in the One Identity Manager default configuration for automatic creating and modifying of user accounts for an identity in

the target system.

For Epic EMP user accounts:

- Epic EMP template can be inherited
- Epic Sub template can be inherited
- Privileged user account

For Epic SER provider accounts:

- Epic SER Blueprint can be applied
- Epic SER Template can be applied
- Update Configuration value (Do not update)

To create a mapping rule for IT operating data

1. In **One Identity Manager**, select **Epic healthcare | Basic configuration data |** Account definitions | Account definitions.

2. Select **Edit IT operating data mapping** and enter the following data.

Table 9: Create a mapping rule for IT operating data

Property	Description
Column	User account property for which the value is set. In the menu, you can select the columns that use the TSB_ITDataFromOrg script in their template. For detailed information, see One Identity Manager Target System Base Module Administration Guide
Source	 Specifies which roles to use in order to find the user account properties. You have the following options: Primary department Primary location Primary cost center Primary business roles



	NOTE: Only use the primary business role if the Business Roles Module is installed
	• Empty If you select a role, you must specify a default value and set the option Always use default value .
Default value	Default value of the property for an identity's user account if the value is not determined dynamically from the IT operating data.
Always use default value	Specifies whether user account properties are always filled with the default value. IT operating data is not determined dynamically from a role.
Notify when applying the standard	Specifies whether email notification to a defined mailbox is sent when the default value is used. The Identity - new user account with default properties created mail template is used. To change the mail template for Epic EMP user accounts, adjust the TargetSystem EPC Accounts MailTemplateDefaultValues configuration parameter and to change the mail template for Epic SER provider accounts, adjust the TargetSystem EPC SER Accounts MailTemplateDefaultValues configuration parameter.

3. Save the changes.

Related Topics

• Entering IT operating data

Entering IT operating data

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 identity with IT resources is shown in the departments, locations, cost centers, and business roles. An identity is assigned to one primary location, one primary department, one primary cost center or one primary business role. 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. You can also specify IT operating data directly for a specific account definition.

Example

Normally, each identity in department A obtains a default user account in the connection A. In addition, certain identities in department A obtain administrative user accounts in the connection A. Create an account definition A for the default user account of the connection A and an account definition B for the administrative user account of connection A. Specify the "Department" property 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 connection 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.



To define IT operating data

1. In **One Identity Manager**, select the role in the **Organizations or Business** roles category.

2. Select the Edit IT operating data task.

3. Click **Add** and enter the following data.

Table 10: IT operating data

Property	Description
Effects on	IT operating data application scope. The IT operating data can be used for a target system or a defined account definition.
	To specify an application scope
	a. Click next to the field.
	b. Under Table, select the table that maps the target system for select the TSBAccountDef table for an account definition.
	c. Select the specific target system or account definition under Effects on.
	d. Click OK.
Column	User account property for which the value is set. In the menu, you can select the columns that use the TSB_ITDataFromOrg script in their template. For more information, see the <i>One Identity Manager Target System Base Module Administration Guide</i> .
Value	Concrete value which is assigned to the user account property

4. Save the changes.

Related topics

- Creating mapping rules for IT operating data
- Modifying IT operating data

Modifying IT operating data

If IT operating data changes, you must transfer the changes to the existing user accounts. To do this, templates must be rerun on the affected columns. Before you can run the templates, you can check what effect a change to the IT operating data has on the existing user accounts. You can decide whether the change is transferred to the One Identity Manager database in the case of each affected column in each affected database.

Prerequisites

• The IT operating data of a department, a cost center, a business role, or a location have been changed.



- OR -

• The default values in the IT operating data template were modified for an account definition.

NOTE: If the assignment of an identity to a primary department, cost center business role or to a primary location changes, the templates are automatically run.

To run the template

1. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data | Account definitions | Account definitions** category.

2. Select an account definition in the result list.

3. Select the **Run templates** task.

This displays a list of all user account, which are created through the selected account definition and whose properties are changed by modifying the IT operating data.

Old value: Current value of the object property.

New value: Value that the object property would have following modification of the IT operating data.

Selection: Specifies whether the modification shall be adopted for the user account.

4. Mark all the object properties in the selection column that will be given the new value.

5. Click **Apply**.

The templates are applied to all selected user accounts and properties.

Assigning account definition to identities

Account definitions are assigned to company identities. Indirect assignment is the default method for assigning account definitions to identities. Account definitions are assigned to departments, cost centers, locations, or roles. The identities 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 identities. You can automatically assign special account definitions to all company identities. 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 identities through hierarchical roles or directly or added as products in the IT Shop. In the One Identity Manager default installation, the processes are checked at the start to see if the identity 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 must alter the user account manage level afterward in this case.



Prerequisites for indirect assignment of account definitions to identities

• Assignment of identities and account definitions is permitted for role classes (departments, cost centers, locations, or business roles).

NOTE: As long as an account definition for an identity is valid, the identity retains the user account that was created by it. If the assignment of an account definition is removed, the user account that was created from this account definition is deleted. For detailed information about preparing role classes to be assigned, see the *One Identity Manager Identity Management Base Module Administration Guide*.

Detailed information about this topic

- Assigning account definitions to departments, cost centers, and locations
- Assigning an account definition to business roles
- Assigning account definitions to all identities
- Assigning account definitions directly to identities
- Assigning account definitions to system roles
- Assigning account definitions to a target system

Assigning account definitions to departments, cost centers, and locations

To add account definitions to hierarchical roles

1. In the Manager, select the Epic healthcare | Basic configuration data | Account definitions | Account definitions category.

2. Select an account definition in the result list.

- 3. Select the Assign organizations task.
- 4. Assign organizations in Add assignments.
 - Assign departments on the Departments tab.
 - Assign locations on the Locations tab.
 - Assign cost centers on the Cost centers tab.

NOTE: In **Remove assignments**, you can remove the assignment of organizations. To remove an assignment, select the organization and double-click .

5. Save the changes.

Assigning an account definition to business roles

Installed modules: Business Roles Module



To add account definitions to hierarchical roles

1. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data | Account definitions | Account definitions** category.

2. Select an account definition in the result list.

- 3. Select the **Assign business roles** task.
- 4. Assign business roles in **Add assignments**.

NOTE: In **Remove assignments**, you can remove the assignment of business roles. To remove an assignment, select the business role and double-click .

5. Save the changes.

Assigning account definitions to all identities

To assign an account definition to all identities

1. In **One Identity Manager**, select the **Epic healthcare** | **Basic configuration data** | **Account definitions** | **Account definitions** category.

2. Select an account definition in the result list.

3. Select the Change master data task.

4. On the **General** tab, enable the Automatic assignment to identities option.

NOTE: Only set this option if you can ensure that all current internal identities in the database and all pending newly added internal identities obtain a user account in this target system.

5. Save the changes.

The account definition is assigned to every identity that is not marked as external. New identities automatically obtain this account definition as soon as they are added. The assignment is calculated by the DBQueue Processor.

NOTE: Disable Automatic assignment to identities to remove automatic assignment of the account definition to all identities. The account definition cannot be reassigned to identities from this point on. Existing assignments remain intact.

Assigning account definitions directly to identities

To assign an account definition directly to identities

1. In **One Identity Manager**, select the **Epic healthcare** | **Basic configuration data** | **Account definitions** | **Account definitions** category.

2. Select an account definition in the result list.



- 3. Select the Assign to identities task.
- 4. Assign identities in **Add assignments**.

NOTE: In **Remove assignments**, you can remove the assignment of identities. To remove an assignment, select the identity and double-click .

5. Save the changes.

Assigning account definitions to system roles

Installed modules: System Roles Module

NOTE: Account definitions with the Only use in IT Shop option can only be assigned to system roles that also have this option set.

To add account definitions to a system role

1. In **One Identity Manager**, select the **Epic healthcare** | **Basic configuration data** | **Account definitions** | **Account definitions** category.

2. Select an account definition in the result list.

3. Select the Assign system roles task.

4. Assign system roles in **Add assignments**.

NOTE: In Remove assignments, you can remove the assignment of system roles. To remove an assignment, select the system role and double-click .

5. Save the changes

Adding account definitions in the IT Shop

A account definition can be requested by shop customers when it is assigned to an IT Shop shelf. To ensure it can be requested, further prerequisites need to be guaranteed.

- The account definition must be labeled with the IT Shop option.
- The account definition must be assigned to a service item.

NOTE: In the Web Portal, all products that can be requested are grouped together by service category. To make the account definition easier to find in the Web Portal, assign a service category to the service item.

• If the account definition is only assigned to identities using IT Shop assignments, you must also set the Only for use in IT Shop option. Direct assignment to hierarchical roles may not be possible.

NOTE: IT Shop administrators can assign account definitions to IT Shop shelves if login is role-based. Target system administrators are not authorized to add account definitions in the IT Shop.



To add an account definition to the IT Shop

1. In **One Identity Manager**, select the **Epic healthcare| Basic configuration data |** Account definitions | Account definitions (non role-based login) category.

- OR -

In **One Identity Manager**, select the **Entitlements | Account definitions (role-based login)** category.

- 2. Select an account definition in the result list.
- 3. Select the Add to IT Shop task.
- 4. Assign the account definitions to the IT Shop shelves in **Add assignments**.
- 5. Save the changes.

To remove an account definition from individual IT Shop shelves

1. In **One Identity Manager**,, select the **Epic healthcare| Basic configuration data |** Account definitions | Account definitions (non role-based login) category.

- OR -

In **One Identity Manager**, select the **Entitlements | Account definitions (role-based login)** category.

- 2. Select an account definition in the result list.
- 3. Select the **Add to IT Shop** task.
- 4. Remove the account definitions from the IT Shop shelves in **Remove assignments**.
- 5. Save the changes.

To remove an account definition from all IT Shop shelves

1. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data | Account definitions | Account definitions (non role-based login)** category.

- OR -

In **One Identity Manager**, select the **Entitlements | Account definitions (role-based login)** category.

- 2. Select an account definition in the result list.
- 3. Select the Remove from all shelves (IT Shop) task.
- 4. Confirm the security prompt with **Yes**.
- 5. Click **OK**.

The account definition is removed from all shelves by One Identity Manager Service. All requests and assignment requests with this account definition are canceled in the process.

Related topics

- Master data for an account definition
- Assigning account definitions directly to identities
- Assigning account definitions to a target system



EPC 9.2.1 Administration Guide for Connecting to Epic Target System

- Assigning account definitions to all identities
- Assigning account definitions to departments, cost centers, and locations
- Assigning account definitions to system roles
- Assigning an account definition to business roles

Assigning account definitions to a target system

The following prerequisites must be fulfilled if you implement automatic assignment of user accounts and identities resulting in administered user accounts.

- The account definition is assigned to the target system.
- The account definition has the default manage level.

User accounts are only linked to the identity (Linked state) if no account definition is given. This is the case on initial synchronization, for example.

To assign the account definition to a target system

1. In **One Identity Manager**, select the connection in the **Epic healthcare | Connections**.

- 2. Select the **Change master data** task.
- 3. Select the account definition for user accounts from the Account definition (initial) menu.
- 4. Save the changes.

Related topics

- Automatic assignments of identities to Epic EMP user accounts
- Automatic assignments of persons to Epic SER provider accounts
- Master data for a manage level

Deleting an account definition

You can delete account definitions if they are not assigned to target systems, identities, hierarchical roles or any other account definitions.

To delete an account definition

1. Remove automatic assignments of the account definition from all identities.

a. In **One Identity Manager**, select the **Epic healthcare| Basic configuration data |** Account definitions | Account definitions category.

b. Select an account definition in the result list.



c. Select the **Change master data** task.

d. Disable the **Automatic assignment to identities** option on the **General** tab.

e. Save the changes.

2. Remove direct assignments of the account definition to identities.

a. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data | Account definitions | Account definitions** category.

b. Select an account definition in the result list.

- c. Select the **Assign to identities** task.
- d. Remove identities from **Remove assignments**.
- e. Save the changes.

3. Remove the account definition's assignments to departments, cost centers, and locations.

a. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data | Account definitions | Account definitions** category.

b. Select an account definition in the result list.

c. Select the **Assign organizations** task.

d. In **Remove assignments**, remove the relevant departments, cost centers, and locations.

e. Save the changes.

4. Remove the account definition's assignments to business roles.

a. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data | Account definitions | Account definitions** category.

b. Select an account definition in the result list.

c. Select the Assign business roles task.

Remove the business roles in Remove assignments.

d. Save the changes.

5. If the account definition was requested through the IT Shop, it must be canceled and removed from all IT Shop shelves.

For more detailed information about unsubscribing requests, see the One Identity Manager Web Portal User Guide.

To remove an account definition from all IT Shop shelves

a. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data |** Account definitions | Account definitions (non role-based login) category.

- OR -

In **One Identity Manager**, select the **Entitlements | Account definitions (role-based login)** category.

b. Select an account definition in the result list.

c. Select the Remove from all shelves (IT Shop) task.



- d. Confirm the security prompt with **Yes**.
- e. Click **OK**.

The account definition is removed from all shelves by **One Identity Manager Service**. All requests and assignment requests with this account definition are canceled in the process.

6. Remove the account definition assignment as required account definition for another account definition. As long as the account definition is required for another account definition, it cannot be deleted. Check all the account definitions.

a. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data | Account definitions | Account definitions** category.

b. Select an account definition in the result list.

- c. Select the Change master data task.
- d. Remove the account definition in the **Required account definition** menu.
- e. Save the changes.
- 7. Remove the account definition's assignments to target systems.

a. In **One Identity Manager**, select the client in the **Epic healthcare | Connection**.

- b. Select the **Change master data** task.
- c. Remove the assigned account definitions on the **General** tab.
- d. Save the changes.

8. Delete the account definition.

a. In **One Identity Manager**, select the **Epic healthcare | Basic configuration data | Account definitions | Account definitions** category.

- b. Select an account definition in the result list.
- c. Click to delete an account definition.

Password policies for Epic EMP user account

One Identity Manager provides you with support for creating complex password policies, for example, for system user passwords, the identities' central password as well as passwords for individual target systems. Password polices apply not only when the user enters a password but also when random passwords are generated.

Predefined password policies are supplied with the default installation that you can user or customize if required. You can also define your own password policies.

NOTE: Password is only applicable to Epic EMP user accounts and not to Epic SER provider accounts. To set password for Epic EMP user accounts, the target Epic system should be using Epic Native authentication



Detailed information about this topic

- Predefined password policies
- Predefined password policies
- Editing password policies
- Initial password for Epic EMP user account

Predefined password policies

You can customize predefined password policies to meet your own requirements, if necessary.

Password for logging in to One Identity Manager

The **One Identity Manager** password policy is applied for logging in to One Identity Manager. This password policy defined the settings for the system user passwords (DialogUser.Password and Person.DialogUserPassword) as well as the access code for a one off log in on the Web Portal (Person.Passcode).

NOTE: The **One Identity Manager password policy** is marked as the default policy. This password policy is applied if no other password policy can be found for identities, user accounts or system users. For detailed information about password policies for identities, see the *One Identity Manager Identity Management Base Module Administration Guide*.

Password policy for forming identities' central passwords

An identity's central password is formed from the target system specific user accounts by respective configuration. The Identity central password policy password policy defines the settings for the (Person.CentralPassword) central password. Members of the Identity Management | Identities | Administrators application role can adjust this password policy.

IMPORTANT: Ensure that the Identity central password policy password policy does not violate the system-specific requirements for passwords. For detailed information about password policies for identities, see the *One Identity Manager Identity Management Base Module Administration Guide*.

Password policies for user accounts

Predefined password policies are provided, which you can apply to the user account password columns of the user accounts.

IMPORTANT: If you do not use password policies that are specific to the target system, the One Identity Manager password policy standard policy applies. in this case, ensure that the default policy does not violate the target systems requirements.

The Epic password policy is predefined for Epic. You can apply this password policy to Epic EMP user accounts (EPCUser.Password) of an Epic connection.



If the clients' password requirements differ, it is recommended that you set up your own password policies for each client.

Furthermore, you can apply password policies based on the account definition of the user accounts or based on the manage level of the user accounts.

Applying password policies

The Epic password policy is predefined for Epic.

You can apply this password policy to Epic EMP user accounts (EPCUser.Password) of an Epic Connection. If the clients' password requirements differ, it is recommended that you set up your own password policies for each client. Furthermore, you can apply password policies based on the account definition of the user accounts or based on the manage level of the user accounts.

The password policy that is to be used for a user account is determined in the following sequence

- 1. Password policy of the account definition of the user account
- 2. Password policy of the manage level of the user account
- 3. Password policy for the client of the user account
- 4. Password policy One Identity Manager password policy (default policy)

IMPORTANT: If you do not use password policies that are specific to the target system, the One Identity Manager password policy standard policy applies. in this case, ensure that the default policy does not violate the target systems requirements.

To reassign a password policy

1. Select Epic healthcare | Basic configuration data | Password policies in One Identity Manager.

- 2. Select the password policy in the result list.
- 3. Select Assign objects.
- 4. Click Add in the Assignments section and enter the following data

Table 11: Cap

Property	Description
Apply to	Application scope of the password policy.
	To specify an application scope
	a. Click next to the text box.
	b. Select one of the following references under
	Table:
	The table that contains the base objects of synchronization.



	Select the TSBAccountDef table to apply the password policy based on the account definition.
	Select the TSBBehavior table to apply the password policy based on the manage level.
	c. Select the table that contains the base objects under Apply to.
	 If you have selected the table containing the base objects of synchron- ization, next select the specific target system.
	 If you have selected the TSBAccountDef table, next select the specific account definition.
	 If you have selected the TSBBehavior table, next select the specific manage level.
	d. Click OK.
Password column	The password column's identifier.
Password policy	The identifier of the password policy to be used.

5. Save the changes.

To change a password policy's assignment

1. Select Epic healthcare | Basic configuration data | Password policies in One Identity Manager.

- 2. Select the password policy in the result list.
- 3. Select Assign objects.
- 4. Select the assignment you want to change in Assignments.
- 5. Select the new password policy to apply from the **Password Policies** menu.
- 6. Save the changes.

The Epic EMP template is deleted from the One Identity Manager database and all the associated Epic EMP template to the Epic EMP user.

Editing password policies

To edit a password policy

1. Select Epic healthcare | Basic configuration data | Password policies in One Identity Manager.

2. Select the password policy in the result list and select Change master data.

- OR -

Click in the result list toolbar.



- 3. Edit the password policy's master data.
- 4. Save the changes.

Detailed information about this topic

- General master data for a password policy
- Policy settings
- Character classes for passwords on page
- Custom scripts for password requirements

General master data for a password policy

Enter the following master data for a password policy.

Property	Meaning
Display name	Password policy name. Translate the given text using the [©] button.
Description	Spare text box for additional explanation.Translate the given text using the [©] button.
Error Message	Custom error message outputted if the policy is not fulfilled. Translate the given text.
Owner (Application Role)	Application roles whose members can configure the password policies.
Default policy	Mark as default policy for passwords. NOTE: The One Identity Manager password policy is marked as the default policy. This password policy is applied if no other password policy can be found for identities, user accounts or system users.

Table 12: Table Master data for a password policy

Policy settings

Define the following settings for a password policy on the Password tab.

Table 13: Table Policy Settings

Property	Meaning
Initial password	Initial password for newly created user accounts. If a password is not entered or if a random password is not generated when a user



	account is created, the initial password is used.
Password confirm- ation	Reconfirm password.
Min. length	Minimum length of the password. Specify the number of charac- ters a password must have.
Max. length	Maximum length of the password. Specify the number of charac- ters a password can have.
Max. errors	Maximum number of errors. Set the number of invalid passwords. Only taken into account when logging in to One Identity Manager. If a user has reached the number of maximum failed logins, the identity or system user can no longer log in to One Identity Manager. You can reset the passwords of identities and system users who have been blocked in Password Reset Portal. For more detailed information, see the <i>One Identity Manager Web Portal</i> <i>User Guide</i> .
Validity period	Maximum age of the password. Enter the length of time a password can be used before it expires.
Password history	Enter the number of passwords to be saved. If, for example, a value of 5 is entered, the user's last five passwords are stored.
Min. password strength	Specifies how secure the password must be. The higher the password strength, the more secure it is. The value 0 means that the password strength is not tested. The values 1, 2, 3 and 4 specify the required complexity of the password. The value 1 represents the lowest requirements in terms of password strength. The value 4 requires the highest level of complexity.
Name properties denied	Specifies whether name properties are permitted or not permitted in the password. If this option is enabled, name properties are not permitted in passwords. The values of the columns for which the Contains name properties for password check option is set are taken into account. Adjust this option in the column definition in Designer

Character classes for passwords on page

Use the Character classes tab to specify which characters are permitted for a password. Table Character classes for passwords

Table 14: Table Character classes for passwords

Character classes Description



Min. number letters	Specifies the minimum number of alphabetical characters the password must contain.
Min. number lowercase	Specifies the minimum number of lowercase letters the password must contain.
Min. number uppercase	Specifies the minimum number of uppercase letters the password must contain.
Min. number digits	Specifies the minimum number of digits the password must contain.
Min. number special characters	Specifies the minimum number of special characters the password must contain.
Permitted special charac- ters	List of permitted characters.
Max. identical characters in total	Maximum number of identical characters that can be present in the password in total.
Max. identical characters in succession	Maximum number of identical character that can be repeated after each other.
Denied special characters	List of characters, which are not permitted. Specifies whether the password can contain lower case letters. This setting is only applies when passwords are generated.
Lowercase not allowed	Specifies whether the password can contain lower case letters. This setting is only applies when passwords are generated.
Uppercase not allowed	Specifies whether the password can contain upper case letters. This setting is only applies when passwords are generated.
Digits not allowed	Specifies whether the password can contain digits. This setting is only applies when passwords are generated.
Special characters not allowed	Specifies whether the password can contain special charac- ters. This setting is only applies when passwords are generated.

Custom scripts for password requirements

You can implement custom scripts for testing and generating password if the password requirements cannot be mapped with the existing settings options. Scripts are applied in addition to the other settings.

For more information see



- Script for checking a password on page
- Script for generating a password

Script for checking a password on page

You can implement a check script if additional policies need to be used for checking a password, which cannot be mapped with the available settings. Syntax for Check Scripts Public Sub CCC_CustomP Script for checking a password.

You can implement a check script if additional policies need to be used for checking a password, which cannot be mapped with the available settings.

Syntax for Check Scripts

Public Sub CCC_CustomPwdValidate(policy As VI.DB.Passwords.PasswordPolicy, spwd As System.Security.SecureString) With parameters: policy = password policy object spwd = password to test NOTE: To use a base object, take the property Entity of the PasswordPolicy class.

Example for a script for testing a password

A password cannot start with ? or !. The script checks a given password for validity. Public Sub CCC_PwdValidate(policy As VI.DB.Passwords.PasswordPolicy, spwd As System.Security.SecureString) Dim pwd = spwd.ToInsecureArray() If pwd.Length>0 If pwd(0)="?" Or pwd(0)="!" Throw New Exception(#LD("Password can't start with '?' or '!'")#) End If End If If pwd.Length>2 If pwd(0) = pwd(1) AndAlso pwd(1) = pwd(2) Throw New Exception(#LD("Invalid character sequence in password")#) End If End If

To use a custom script for checking a password

1. Create your script in the category **Script Library** in the **Designer**.



2. Edit the password policy.

a. Select Epic healthcare| Basic configuration data | Password policies in One Identity Manager.

b. Select the password policy in the result list.

c. Select Change master data.

d. Enter the name of the script to be used to check a password in the **Check script input field** on the **Scripts** tab.

e. Save the changes.

Related Topics

Script for generating a password

Script for generating a password

You can implement a generating script if additional policies need to be used for generating a random password, which cannot be mapped with the available settings.

Syntax for generating script

Public Sub CCC_PwdGenerate(policy As VI.DB.Passwords.PasswordPolicy, spwd As System.Security.SecureString) With parameters: policy = password policy object spwd = generated password NOTE: To use a base object, take the property Entity of the PasswordPolicy class.

Example for a script to generate a password

In random passwords, the script replaces the ? and ! characters, which are not permitted. Public Sub CCC_PwdGenerate(policy As VI.DB.Passwords.PasswordPolicy, spwd As System.Security.SecureString) Dim pwd = spwd.ToInsecureArray() If pwd.Length>0 If pwd(0)="?" Or pwd(0)="!" Throw New Exception(#LD("Password can't start with '?' or '!'")#) End If End If



```
If pwd.Length>2
If pwd(0) = pwd(1) AndAlso pwd(1)
= pwd(2)
Throw New
Exception(#LD("Invalid character sequence in password")#)
End If
End If
End If
End Sub
```

Excluded list for passwords

You can add words to a list of restricted terms to prohibit them from being used in passwords.

NOTE: The restricted list applies globally to all password policies.

To add a term to the restricted list

- 1. Select **Base Data | Security settings | Restricted passwords** in **Designer**.
- 2. Create a new entry with **Object | New** and enter the term to excluded to the list.
- 3. Save the changes.

Checking Passwords

When you test a password, all the password policy settings, custom scripts and the restricted passwords are taken into account.

To test whether a password conforms to the password policy

1. Select Epic healthcare | Basic configuration data | Password policies in One Identity Manager.

- 2. Select the password policy in the result list.
- 3. Select Change master data.
- 4. Select the **Test** tab.
- 5. Select the table and object to be tested in Base object for test.
- 6. Enter a password in **Enter password to test**.
- A display next to the password shows whether it is valid or not

Testing generation of a password

When you generate a password, all the password policy settings, custom scripts and the restricted passwords are taken into account.



To generate a password that conforms to the password policy

1. Select Epic healthcare | Basic configuration data | Password policies in One Identity Manager.

- 2. Select the password policy in the result list.
- 3. Select Change master data.
- 4. Select the **Test** tab.
- 5. Click Generate.

This generates and displays a password.

Initial password for Epic EMP user account

You have the following possible options for issuing an initial password for a new Epic EMP user account.

- Create user accounts manually and enter a password in their master data.
- Assign a randomly generated initial password to enter when you create Epic EMP user accounts.
 - 1. Enable the TargetSystem | EPC | Accounts | InitialRandomPassword configuration parameter in Designer.
 - 2. Apply target system specific password policies and define the character sets that the password must contain.
 - 3. Specify which identity will receive the initial password by email.
- User the identity's central password. The identity's central password is mapped to the Epic EMP user account password. For more information about an identity's central password, see *One Identity Manager Identity Management Base Module Administration Guide*.

Related Topics

- Email notification about login data
- Password policies for Epic EMP user account

Email notification about login data

You can configure the login information for new user accounts to be sent by email to a specified person. In this case, two messages are sent with the user name and the initial password. Mail templates are used to generate the messages. The mail text is defined in



several languages in a mail template. which means the recipient 's language can be taken into account when the email is generated. Mail templates are supplied in the default installation with which you can configure the notification procedure.

Prerequisites

The following prerequisites must be fulfilled in order to use notifications

1. Ensure that the email notification system is configured in One Identity Manager. For more information, see the *One Identity Manager Installation Guide*.

2. In **Designer**, enable the **Common | MailNotification | DefaultSender configuration parameter** and enter the sender address for sending the email notifications.

3. Ensure that all identities have a default email address. Notifications are sent to this address. For more information, see the *One Identity Manager Identity Management Base Module Administration Guide*.

4. Ensure that a language can be determined for all identities. Only then can they receive email notifications in their own language. For more information, see the *One Identity Manager Identity Management Base Module Administration Guide*.

When a randomly generated password is issued for the new user account, the initial login data for an Epic EMP user account is sent by email to a previously specified person.

To send initial login data by email for Epic EMP user account

1. In the **Designer**, activate the configuration parameter **TargetSystem | Epic** healthcare | Accounts | InitialRandomPassword.

2. In the **Designer**, activate the configuration parameter **TargetSystem | Epic healthcare | Accounts | InitialRandomPassword | SendTo** and enter the recipient of the notification as a value.

3. In the **Designer**, activate the configuration parameter **TargetSystem | Epic** healthcare | Accounts | InitialRandomPassword | SendTo | MailTemplateAccountName.

By default, the message sent uses the mail template Identity - new user account created. The message contains the name of the user account.

4. In the **Designer**, activate the configuration parameter **TargetSystem | Epic** healthcare | Accounts | InitialRandomPassword | SendTo | MailTemplatePassword.

By default, the message sent uses the mail template Identity - initial password for new user account. The message contains the initial password for the user account.

NOTE: Change the value of the configuration parameter in order to use custom mail templates for these mails.

To send initial login data by email for Epic SER provider account

1. In the **Designer**, activate the configuration parameter **TargetSystem | Epic** healthcare | SER| Accounts | InitialRandomPassword.



- In the Designer, Activate the configuration parameter TargetSystem | Epic healthcare | SER | Accounts | InitialRandomPassword | SendTo and enter the recipient of the notification as a value.
- 3. In the **Designer**, activate the configuration parameter **TargetSystem | Epic** healthcare | SER | Accounts | InitialRandomPassword | SendTo | MailTemplateAccountName.

By default, the sent message uses the mail template Identity - new Epic SER provide account created.

The message contains the name of the Epic SER provider account.

NOTE: Change the value of the configuration parameter in order to use custom mail templates for these mails.

Target system managers

A default application role exists for the target system manager in One Identity Manager.

Assign the identities who are authorized to edit all tenants in One Identity Manager to this application role.

Define additional application roles if you want to limit the edit permissions for target system managers to individual tenants. The application roles must be added under the default application role.

For more information about implementing and editing application roles, see the *One Identity Manager Authorization and Authentication Guide*.

Implementing application roles for target system managers

1. The **One Identity Manager** administrator assigns identities to be target system managers.

2. These target system managers add identities to the default application role for target system managers.

Target system managers with the default application role are authorized to edit all tenants in **One Identity Manager**.

3. Target system managers can authorize other identities within their area of responsibility as target system managers and if necessary, create additional child application roles and assign these to individual connections.

Default Application Roles for Target System Managers

Table 15: Default Application Roles for Target System Managers

Users	Tasks
Target system	Target system managers must be assigned to Target systems Epic or



managers a sub-application role.

Users with this application role:

- Assume administrative tasks for the target system.
- Create, change or delete target system objects, like user accounts and update the Epic EMP templates or Epic Sub templates.
- Edit password policies for the target system.
- Prepare groups for adding to the IT Shop.
- Can create identities with an identity that differs from the Primary identity.
- Configure synchronization in the Synchronization Editor and defines the mapping for comparing target systems and One Identity Manager.
- Edit the synchronization's target system types and outstanding objects.
- Authorize other identities within their area of responsibility as target system managers and create child application roles if required.

To initially specify identities to be target system administrators

1. Log in to **One Identity Manager** as **Manager administrator (Base role |** Administrators).

- 2. Select One Identity Manager Administration | Target systems | Administrators.
- 3. Select Assign identities.
- 4. Assign the identity you want and save the changes.

To add the first identities to the default application as target system managers

1. Log into **One Identity Manager** as **Target System Administrator (Target systems | Administrators)**.

2. Select **One Identity Manager Administration | Target systems | Epic** healthcare.

3. Select **Assign identities** in the **Task** view.

4. Assign the identities you want and save the changes.

To authorize other identities as target system managers when you are a target system manager

1. Log into **One Identity Manager** as target system manager.

2. Select the application role in **Epic healthcare | Basic configuration data | Target system managers**.

3. Select Assign identities.

4. Assign the identities you want and save the changes.

To specify target system managers for individual clients

1. Log into **One Identity Manager** as target system manager.



- 2. Select Epic healthcare | Connections.
- 3. Select the client from the result list.
- 4. Select Change master data.
- 5. On the General tab, select the application role in the Target system manager menu.
- Next to the **Target system manager** menu, click to create a new application role.
- a. Enter the application role name and assign the **Target systems | Epic healthcare** parent application role.
- b. Click **OK** to add the new application role.
- 6. Save the changes.
- 7. Assign identities to this application role who are permitted to edit the client in **One Identity Manager**.

Related Topics

One Identity Manager users for managing an Epic health care system

Editing a server

Servers must know your server functionality in order to handle Epic specific processes in One Identity Manager. For example, the synchronization server.

You have several options for defining a server's functionality:

• Create an entry for the Job server in Designer under Base Data | Installation | Job server. For more information, see the *One Identity Manager Configuration Guide*.

Use this task if the Job server has already been declared in One Identity Manager and you want to configure special functions for the Job server.

NOTE: One Identity Manager must be installed, configured, and started in order for a server to run its function in the One Identity Manager Service network. Proceed as described in the *One Identity Manager Installation Guide*.

To edit a Job server and its functions

1. In **One Identity Manager**, select the category **Epic healthcare | Basic configuration data | Server**.

- 2. Select the Job server entry in the result list.
- 3. Select Change master data.
- 4. Edit the Job server's master data.
- 5. Select **Assign server functions** in the task view and specify server functionality.
- 6. Save the changes.

For more information, see



- Master data for jobserver
- Specifying server functions

Master data for jobserver

NOTE:

- All editing options are also available in **Designer** under **Base Data | Installation** | **Job server**.
- More properties may be available depending on which modules are installed.

Property	Meaning
Server	Job server name.
Full server name	Full server name in accordance with DNS syntax. Example: .
Target system	Computer account target system.
Language	Language of the server.
Server is cluster	Specifies whether the server maps a cluster.
Server belongs to cluster	Cluster to which the server belongs.
	NOTE: The properties Server is cluster and Server belongs to cluster are mutually exclusive
IP address (IPv6)	Internet protocol version 6 (IPv6) server address.
IP address (IPv4)	Internet protocol version 4 (IPv4) server address.
Copy process (source	Permitted copying methods that can be used when this server
server)	is the source of a copy action. At present, only copy methods that support the Robocopy and rsync programs are supported. If no method is given, the One Identity Manager Service determines the operating system of the server during runtime. Replication is then performed with the Robocopy program between servers with a Windows operating system or with the rsync program between servers with a Linux operating system. If the operating systems of the source and destination servers differ, it is important that the right copy method is applied for successful replication. A copy method is chosen that supports both servers.
server) Copy process (target server)	is the source of a copy action. At present, only copy methods that support the Robocopy and rsync programs are supported. If no method is given, the One Identity Manager Service determines the operating system of the server during runtime. Replication is then performed with the Robocopy program between servers with a Windows operating system or with the rsync program between servers with a Linux operating system. If the operating systems of the source and destination servers differ, it is important that the right copy method is applied for successful replication. A copy method is

Table 16: Job Server Properties table



Parent Job server	Name of the parent Job server.
Executing server	Name of the executing server. The name of the server that exists physically and where the processes are handled. This input is evaluated when One Identity Manager Service is automatically updated. If the server is handling several queues the process steps are not supplied until all the queues that are being processed on the same server have completed their automatic update.
Queue	Name of the queue to handle the process steps. Each One Identity Manager Service within the network must have a unique queue identifier. The process steps are requested by the job queue using exactly this queue name. The queue identifier is entered in the One Identity Manager Service configuration file.
Server operating system	Operating system of the server. This input is required to resolve the path name for replicating software profiles. The values Win32, Windows, Linux and Unix are permitted. If no value is specified, Win32 is used.
Service account data	One Identity Manager Service user account information. In order to replicate between non-trusted systems (non-trusted domains, Linux server) the One Identity Manager Service user information has to be declared for the servers in the database. This means that the service account, the service account domain and the service account password have to be entered for the server.
One Identity Manager Service installed	Specifies whether a One Identity Manager Service is installed on this server. This option is enabled by the procedure QBM_ PJobQueueLoad the moment the queue is called for the first time. The option is not automatically removed. If necessary, you can reset this option manually for servers whose queue is no longer enabled
Stop One Identity Manager Service	Specifies whether the One Identity Manager Service has stopped. If this option is set for the Job server, the One Identity Manager Service does not process any more tasks. You can make the service start and stop with the appropriate administrative permissions in the program "Job Queue Info". For more detailed information, see the One Identity Manager Process Monitoring and Troubleshooting Guide.
No automatic software update	Specifies whether to exclude the server from automatic software updating. NOTE: Servers must be manually updated if this option is set.



Software update running	Specifies whether a software update is currently being run.
Server function	Server functionality in One Identity Manager. One Identity Manager processes are handled depending on the server function.

Related Topics

Specifying server functions

Specifying server functions

NOTE:

- All editing options are also available in **Designer under Base Data** | **Installation | Job server**. The server function defines the functionality of a server in One Identity Manager. One Identity Manager processes are handled depending on the server function.
- More server functions may be available depending on which modules are installed.

Table 17: Table

Server Function	Remark
Update Server	This server runs automatic software updating of all other servers. The server requires a direct connection to the database server that One Identity Manager database is installed on. The server can run SQL tasks. The server with the installed One Identity Manager database, is labeled with this functionality during initial installation of the schema.
SQL processing server	The server can run SQL tasks. Several SQL processing servers can be set up to spread the load of SQL processes. The system distributes the generated SQL processes throughout all the Job servers with this server function.
CSV script server	The server can process CSV files using the ScriptComponent process component.
One Identity Manager Service installed	Server on which a One Identity Manager Service is installed
SMTP host	Server from which One Identity Manager Service sends email notifications. Prerequisite for sending mails using One Identity Manager Service is SMTP host configuration.
Default report server	Server on which reports are generated.
One Identity Epic Connector	Server on which the One Identity Epic connector is installed. This server runs synchronization with the One Identity Epic target system.



Related topics

Master data for jobserver



66

Epic Connection

Epic connection contains the details about the target Epic system. The Creating a synchronization project for initial synchronization of an Epic health care system section provides the necessary per-requisites to connect to the target Epic system. Refer to the section for details.

General Master Data for Epic Connection

Enter the following data on General

Table 18: General Master Data for Epic Connection

Display Name	The Epic connection's display name
EMP account definition (initial)	Initial account definition for creating Epic EMP user accounts. This account definition is used if automatic assignment of identities to Epic EMP user accounts is used for this Epic connection and Epic EMP user accounts should be created which are already managed (Linked configured state). The account definition's default manage level is applied. EPIC EMP user accounts are only linked to the identity (Linked) if no account definition is given. This is the case on initial synchron- ization, for example.
Target system managers	Application role in which target system managers are specified for the client. Target system managers only edit objects of the client to which they are assigned. Each Epic connection can have a different target system manager assigned to it. Select the One Identity Manager application role whose members are responsible for administration of this Epic connection. Use the button to add a new application role.
Synchronized By	Type of synchronization through which the data is



synchronized between the Epic and One Identity Manager. You can no longer change the synchronization type once objects for this tenant are present in One Identity Manager. Use One Identity Manager when you create a Epic connection with the Synchronization Editor.

	Value	Synchronization by	Provisioned by	
	One Identity Manager	Epic Connector	Epic Connector	
	No Synchron- ization	None	None	
SER provider acccount definition(initial)	Initial account definition for creating Epic SER provider accounts. This account definition is used if automatic assignment of identities to Epic SER provider accounts is used for this Epic connection and Epic SER provider accounts should be created which are already managed (Linked configured state).			
	The account definition's default manage level is applied.			
	Epic SER provider accounts are only linked to the identity (Linked) if no account definition is given. This is the case on initial synchronization, for example.			
Override Items	Determines whether Epic SER provider item values are overridden with the Epic SER blueprint item values / Epic SER template item values when an Epic SER blueprint / Epic SER template is applied.			
	If the configuration is not set, then the value of an item is only updated with the value from the applied Epic SER blueprint / Epic SER template corresponding to that item if the item currently has a non-null value and the applied Epic SER blueprint or Epic SER template has a non-null value corresponding to that item.			
	updated with the va Epic SER template of	is set, then the value lue from the applied E corresponding to that i pic SER blueprint / Ep	pic SER blueprint / tem if the value	
SER blueprint preferred over SER template	SER blueprint and a	ontrols how an item is n Epic SER template a ecord belonging to this	ire applied on an	

Table 19: Table Permitted values



It is only used if override items configuration is enabled for the Epic connection.

If there is no non-null value for an item associated with the Epic SER blueprint but there is a non-null value for that item associated with the Epic SER template, then the item is set with the value from the Epic SER template.

If there is no non-null value for an item associated with the Epic SER template but there is a non-null value for that item associated with the Epic SER blueprint, then the item is set with the value from the Epic SER blueprint.

If there is a non-null value for an item associated with the blueprint and there is a non-null value for that item associated with the Epic SER template, then, if this configuration is enabled the item is set with the value from the Epic SER blueprint, else it is set with the value from the Epic SER template.

Related Topics

- Automatic assignments of identities to Epic EMP user accounts
- Target system managers

Assign Epic EMP Template Matrix Property Mapping

A mapping must be established between the Person Identity attributes and the Epic EMP template security matrix attributes to group the Epic EMP template with one or more attributes of the Identity. Refer to the section Configuring SecurityMatrix for Epic EMP template for configuration details.

Related Topics

- Epic EMP template
- Security Matrix for Epic EMP template

Define Search criteria for Identity assignment

The criteria for matching Epic EMP user accounts and Epic SER provider accounts to Identity is defined for an Epic connection. For Epic EMP user accounts, refer to the section



Editing search criteria for automatic identity assignment and for Epic SER provider accounts, refer to the section Editing search criteria for automatic identity assignment.

Related Topics

- Automatic assignments of identities to Epic EMP user accounts
- Automatic assignments of persons to Epic SER provider accounts

View Epic Security Matrix for Epic EMP template

The **Security Matrix** for **Epic EMP template** once imported could be viewed using **One Identity Manager**. Refer to the section Viewing the Epic EMP template Security Matrix for details.

Related Topics

- Epic EMP template
- Security Matrix for Epic EMP template

Assign Epic EMP Subtemplate Matrix Property Mapping

A mapping must be established between the Person Identity attributes and Epic EMP Subtemplate security matrix attributes, in order to group the Epic EMP Subtemplate with one or more attributes of the Identity. Refer to the section Configuring SecurityMatrix for Epic EMP subtemplate for configuration details.

Related Topics

- Epic EMP subtemplate
- Security Matrix for Epic EMP subtemplate

View Epic Security Matrix for Epic EMP subtemplate

The **Security Matrix** for **Epic EMP Subtemplate** once imported could be viewed using **One Identity Manager**. Refer to the section Viewing the Epic EMP Subtemplate Security Matrix for details.

Related Topics



- Epic EMP subtemplate
- Security Matrix for Epic EMP subtemplate

Configure settings for Epic EMP Subtemplate Index

Epic EMP Subtemplate assigned to an Epic EMP user must have a priority (also called index). The default Epic EMP Subtemplate priority for different OneIM organizations and business roles can be configured. When an user receives a Epic EMP Subtemplate through base tree based inheritance, the configured Epic EMP Subtemplate priority for the organization is automatically applied.

To configure the Epic EMP Subtemplate settings follow the below mentioned steps:

- 1. In **One Identity Manager**, select the appropriate Epic connection that has been created.
- 2. In the Tasks section, select the link Configure settings for Epic EMP Subtemplate Index.
- 3. Update the **Epic EMP Subtemplate Index** for the organization or business role
- 4. Save the settings.

Related Topics

- Epic EMP subtemplate
- Configuration parameters for managing Epic health care system



Epic EMP User Accounts

Epic EMP user accounts can be managed from One Identity.

User Report

The master list of Epic EMP user accounts that should be managed from One Identity Manager should be exported from Epic and provided in a CSV file. The name of the CSV file should be **Users.csv**. This is called the user report and the generated report should be copied to the configured CSV import directory (The CSV import directory was configured when you created the synchronization project).

NOTE:

• Contact Epic regarding on how to automate the user report generation and dropping the report generated to the CSV import directory.

If the CSV import directory is a local folder on the job server and One Identity Manager workstation, make sure to copy the user report to both the job server's and One Identity Manager workstation's local folder

If the CSV import directory is a network share, make sure it is accessible from both the job server and One Identity Manager workstation.

The **Users.csv** report has a specific format. It should contain the following fields and the order should be maintained.

- User Number (Local ID or External ID): The Epic Emp user's External ID.
- System Login: The Epic EMP user's System Login ID.
- **UserName**: The Epic EMP user's name.
- User Record Status: The Epic EMP user's status (Active / InActive).

IMPORTANT:

- The first line in the **Users.csv** report should be the header row with the fields specified above.
- Field ordering in the **Users.csv** report should be maintained.
- The user number provided should be the Epic EMP user's External ID.
- If any of the field has a comma it should be escaped properly with double quotes.



• The user report should contain only the list of Epic EMP user accounts that need to be managed from One Identity Manager. Epic EMP user accounts such as service user accounts or In-Active accounts or any other user accounts that do not need to be managed from One Identity Manager should not be there in the user's report and these users can be filtered out when the report is generated in Epic.

User Report customization

Epic connector uses the user report to get the master list of Epic EMP user accounts. Sometimes additional customization might need to be done to the user report generated. For example, we might want to remove certain Epic EMP user accounts such as contractors from the user report, which could have not been possible when the report is generated in Epic. To address these use cases, Epic connector provides the ability to perform additional customization to the user report generated from Epic. The Epic report customization is done in a PowerShell script named **EPCUserReportFilterScript.ps1**.

The Epic connector now uses the Epic EMP user data returned by the **EPCUserReportFilterScript.ps1** PowerShell script as the master list of Epic EMP users and does not use the user data from the **Users.csv** file.

To perform additional user report customization

- 1. In the synchronization project choose advance settings
- 2. Select the option **Use Custom PowerShell Script for User Import**. Save the synchronization project changes.
- Copy the EPCUserReportFilterScript.ps1 PowerShell script from installer's EPC Module dvd/Addon folder to the configured CSV import directory in synchronization project.

NOTE: If the CSV import directory is configured as a local folder then the Power-Shell script must be copied to the local folder in job server and OneIM workstation.

4. The Epic connector calls the PowerShell script's **Get-OneIMEpicUsers function** to get the list of Epic EMP users. Customize the function according to the requirements.

IMPORTANT: The data must be returned in the format as documented in the function.

Testing the changes

Once the PowerShell script has been customized it must be tested.

 Update the Test-Get-OneIMEpicUsers function in the PowerShell script and run the script. This is a test function that validates the data returned by the Get-OneIMEpicUsers function. Make sure the data is returned is correct

NOTE: The PowerShell script can be run from the OneIM workstation.

2. Open the synchronization project and navigate to the start up configuration. Run a simulation. Make sure the data returned is correct. This test makes sure that the Epic connector can invoke the PowerShell script and load the data returned by the PowerShell script.

NOTE:



- If the PowerShell script execution policy on job server or One Identity Manger workstation dictates that it needs to be signed, then the PowerShell script has to be signed after modification or change the script execution policy on the server to be less restrictive for the script to run.
- For more information on PowerShell script execution policy refer to https://docs.microsoft.com/enus/powershell/module/microsoft.powershell.core/about/about_execution_ policies?view=powershell-5.1.

Epic EMP user account attribute un-locking

Epic EMP user account attributes need to be un-locked in Epic in order to manage them from One Identity. The following table provides the list of Epic EMP attributes along with the EMP item number. Contact the Epic data courier team and un-lock attributes that you want to manage from One Identity.

EMP item number	EMP attribute name	Comments
.1	User Number	
.2	UserName	
23	Contact Comment	
35	User Name	
36	User Name Over Time	
45	System Login	
50	Status	
55	User Login Blocked	
180	User Alias	
720	Effective From Date	
730	Effective To Date	
14100	Notes	
14700	Sex	
20414	Primary Manager	
198	Applied Linkable Template	
.198	Applied Linkable Template Record Name	
1101	Default Linkable Template	

Table 20: Epic EMP attributes



.1101	Default Linkable Template Record Name	
40	Password	Applicable only if Native authen- tication has been enabled in Epic
20415	Additional Managers	
1110	Linkable Templates	
1111	Linkable Templates Effective from Date	
1112	Linkable Templates Effective to Date	
1115	Linkable Templates Login Types	
9205	Linked Subtemplates	
20701	User MPI ID	
20700	User MPI ID Type	
2401	Type of External ID	
2402	External User ID	
2405	External ID Active	
14150	Identity Demographic 1	
14151	Identity Demographic 2	
14152	Identity Demographic 3	
100	Address	
110	City/Locality	
112	County	
135	Country	
120	State/Province	
130	Zip Code	
140	Phone Number	
150	Email Address	
114	District	
102	House Number	
17500	LinkedProviderID	



Linking Epic EMP user account to identities

The central component of One Identity Manager is to map identities 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 identities. This gives an overview of the permissions for each identities in all of the connected target systems. One Identity Manager provides the possibility to manage Epic EMP user accounts and their permissions. You can provision modifications in the target systems. Identities 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, One Identity Manager offers different methods for supplying Epic EMP user accounts to identities.

One Identity Manager supports the following method for linking identities and their Epic EMP user accounts.

- Identities can automatically obtain their Epic EMP user accounts using account definitions. If an identity does not yet have an Epic EMP user account in Epic, a new Epic EMP user account is created. This is done by assigning account definitions to an identity using the integrated inheritance mechanism and subsequent process handling. When you manage Epic EMP user accounts through account definitions, you can specify the way Epic EMP user accounts behave when identities are enabled or deleted.
- When Epic EMP user accounts are inserted, they can be automatically assigned to an existing identity or a new identity can be created if necessary. In the process, the identity master data is created on the basis of existing Epic EMP user account master data. This mechanism can be implemented if a new Epic EMP user account is created manually or by synchronization. Define criteria for finding identities for automatic identity assignment.
- Identities and Epic EMP user accounts can be entered manually and assigned to each other.

For more information, see

- Editing master data for Epic EMP user account
- Account definition for Epic EMP user account and Epic SER provider account
- Automatic assignments of identities to Epic EMP user accounts
- For detailed information about handling and administration of identities and user accounts, see the One Identity Manager Target System Base Module Administration Guide.



Editing master data for Epic EMP user account

An Epic EMP user account can be linked to an identity in One Identity Manager. You can also manage Epic EMP user accounts separately from identities.

NOTE:

- It is recommended to use account definitions to set up Epic EMP user accounts for company identities. In this case, some of the master data described in the following is mapped through templates from identity master data.
- If identities are to obtain their Epic EMP user accounts through account definitions, the identities must own a central Epic EMP user account and obtain their IT operating data through assignment to a primary department, a primary location or a primary cost center.

To create an Epic EMP user account

1. In One Identity Manager, select Epic health care | EMP users.

- 2. Click in the result list toolbar.
- 3. On the master data form, edit the master data for the Epic EMP user account.
- 4. Save the changes.

To edit master data for an Epic EMP user account

1. In **One Identity Manager**, select **Epic health care | EMP users**.

- 2. Select the Epic EMP user account in the result list and run Change master data.
- 3. Edit the Epic EMP user account's resource data.
- 4. Save the changes.

For more information, see

- General master data for Epic EMP user account
- Demographic data for Epic EMP user account
- Password data for Epic EMP user account
- Template data for Epic EMP user account

Related Topics

Account definition for Epic EMP user account and Epic SER provider account



General master data for Epic EMP user account

General master data for an Epic EMP user account

Enter the following data on General tab

Table 21: Additional Master Data for an Epic EMP User Account

Property	Description
Identity	Identity that uses this Epic EMP user account. An identity is already entered if the Epic EMP user account was generated by an account definition. If you create the Epic EMP user account manually, you can select an identity in the menu. If you are using automatic identity assignment, an associated identity is found and added to the Epic EMP user account when you save the Epic EMP user account.
	For an Epic EMP user account with an identity of type Organizational identity, Personalized administrator identity, Sponsored identity, Shared identity or Service identity, you can create a new identity.
	To do this, click Next to the input field and enter the required identity master data. The login data required depends on the selected Employee type.
Account Definition	Account definition through which the Epic EMP user account was created. Use the account definition to automatically fill Epic EMP user account master data and to specify a manage level for the Epic EMP user account. The One Identity Manager finds the IT operating data of the assigned identity and enters it in the corresponding fields in the Epic EMP user account.
	NOTE: The account definition cannot be changed once the Epic EMP user account has been saved.
Manage Level	Manage level of the Epic EMP user account. Select a manage level from the menu. You can only specify the manage level if you have also entered an account defin- ition. All manage levels of the selected account definition are available in the menu.
Account Name	Template calculated value that is set to Epic EMP user's Name.
User Account is Blocked	Check this check box if Epic EMP user account is blocked.
Block status reason	Optionally select the reason why the Epic EMP user's



	account is blocked. NOTE: Block status reason is a defined list of values and can be customized in the Designer
Block status comment	Optional comment on why the Epic EMP user account is blocked.
First Name	The first name of the Epic EMP user. If you have assigned an account definition, the input field is automatically filled with the manage level.
Last Name	The last name of the Epic EMP user. If you have assigned an account definition, the input field is automatically filled with the manage level.
Middle Name	The middle name of the Epic EMP user. If you have assigned an account definition, the input field is automat- ically filled with the manage level.
Gender	Select the gender of the Epic EMP user. If you have assigned an account definition, the input field is automat- ically filled with the manage level.
UserExternalID	Read only field. The Epic EMP user's external id is created in Epic and synchronized back in to OneIM database.
Community ID	Read only field. The Epic EMP user's community id is created in Epic and synchronized back in to OneIM database.
Internal ID	Read only field. The Epic EMP user's internal id is created in Epic and synchronized back in to OneIM database.
System Login ID	The Epic EMP user's system login id.
Display Name	Template calculated value that is set to Epic EMP user's Name.
Name	Template calculated value that is set to Epic EMP user's Name. Once synchronization runs for the Epic EMP user, the user's External ID is appended to the name.
User Alias	The Epic EMP user's alias.
User Notes	Any notes about the Epic EMP user.
Start Date	The date on which the Epic EMP user becomes active. On object creation, if you have assigned an account definition, the input field is automatically filled with the manage level.
End Date	The date at which the Epic EMP user becomes inactive. If you have assigned an account definition, the input field is automatically filled with the manage level.



Contact Comment	Contact comment for the Epic EMP user. This is a Template calculated value. NOTE: • The template can be customized in the Designer according to customer requirements. • The contact comment for Epic EMP User would be set only on user input and no default value would be applied.
Primary Manager	The user's primary manager. NOTE: Primary manager can be chosen only from the list of managers assigned to the user
Category	Categories for the inheritance
Epic EMP template can be inherited	Specifies whether the Epic EMP user can inherit Epic EMP template through Base tree inheritance via Organizations, Business Roles and ITShop.
Epic EMP Subtemplate can be inherited	Specifies whether the Epic EMP user can inherit Epic EMP Subtemplate through Base tree inheritance via Organ- izations, Business Roles and ITShop.
IsTemplateUpdateDisabled	Specifies whether the Epic EMP template and Epic EMP Subtemplate can be inherited through SecurityMatrix approach. Select this option if Epic EMP template and Epic EMP Subtemplate inheritance should NOT happen for the user. NOTE: Only applicable for SecurityMatrix inheritance.
DoNotSync	Specifies whether the Epic EMP user information should NOT be synchronized from the target Epic system in to One Identity Manager. Select this option if Epic EMP user information should NOT be synchronized.
Privileged User Account	Specifies whether this account is a Privileged User Account. NOTE: This option is only for governance. Setting this option does not have any impact of the target Epic system.
User account is disabled	This is a Template calculated value. Specifies whether the user account is disabled. NOTE: The template can be customized in the Designer according to customer requirements
EMP SER Link	This field specifies the link between the Epic EMP user record and Epic SER provider record.



NOTE: The prerequisite for provisioning this field is to have the LinkedProviderIDType to be configured in the respective targets synchronization project.

Related topics

- Account definition for Epic EMP user account and Epic SER provider account
- Linking Epic EMP user account to identities
- Disabling Epic EMP user account

Demographic data for Epic EMP user account

Enter the following Demographic data on the **Demographics** tab. The demographic information listed here can be provisioned on to the target Epic system. This information is not synchronized from the target Epic system on to One Identity Manager.

Property	Description
Phone	The Epic EMP user's phone number. If you have assigned an account definition, the input field is automatically filled with the manage level.
Phone extension	The Epic EMP user's phone extension. If you have assigned an account definition, the input field is automatically filled with the manage level.
Contact Email	The Epic EMP user's contact Email. If you have assigned an account definition, the input field is automatically filled with the manage level.
House Number	The Epic EMP user's house number. If you have assigned an account definition, the input field is automatically filled with the manage level.
Street	The Epic EMP user's street. If you have assigned an account definition, the input field is automatically filled with the manage level.
City	The Epic EMP user's city. If you have assigned an account definition, the input field is automatically filled with the manage level.
County	The Epic EMP user's county. If you have assigned an account definition, the input field is automatically filled with the manage level.
District	The Epic EMP user's district. If you have assigned an account definition, the input field is automatically filled with the manage level.
State	The Epic EMP user's state. If you have assigned an account definition, the input field is automatically filled with the manage level.
Country	The Epic EMP user's country. If you have assigned an account defin- ition, the input field is automatically filled with the manage level.

Table 22: Demographics data



Password data for Epic EMP user account

Enter the following Password data on the **Password** tab.

Table 23: Password data

Property	Description
Password	Enter the password
Confirmation	Renter the password for confirmation

NOTE: The password data is applicable only if Epic Native Authentication has been enabled in the Target Epic system. Password updates in the target Epic system take place only if Epic Native authentication has been enabled in Epic and Epic Native authentication option is selected in the synchronization project.

Template data for Epic EMP user account

The templates data tab is used to configure the Default and Applied Epic EMP Templates for the user.

Table 24:	Template	data for	Epic EMP	user account	
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Property	Description
Default EMP Template inherited	This is a read only calculated field. If the Designer configuration parameter AutoSetAppliedEMPTemplate option has been selected, then whenever a Epic EMP user inherits an Epic EMP Template either through Base tree or Security matrix it is automatically set as the Default Epic EMP Template for the Epic EMP user in the target Epic system.
	pliedEMPTemplate is NOT selected by default.
Default EMP Template	This option allows you to manually set the default EMP Epic EMP Template for an Epic EMP user.
	NOTE: The Default Epic EMP Template set in the target Epic system is always synchronized back to this field
Applied EMPTem- plate inherited	This is read only calculated field. If the Designer configuration parameter AutoSetAppliedEMPTemplate option has been selected,



81

	then whenever a Epic EMP user inherits an Epic EMP Template either through Base tree or Security matrix it is automatically set as the Applied Epic EMP Template for the Epic EMP user in the target Epic system.
	NOTE: The Designer configuration parameter AutoSetAppliedEMPTemplate is NOT selected by default.
Applied EMP Template	This option allows you to manually set the Applied Epic EMP Template for a Epic EMP user.
	NOTE: The Applied Epic EMP set in the target Epic system is always synchronized back to this field

NOTE: If a user has only one Epic EMP Template assigned either through direct or indirect assignment, it is automatically set as the Default and Applied Epic EMP Template for the Epic EMP user.

Additional tasks for managing Epic EMP user account

Overview of Epic EMP user account

Use this task to obtain an overview of the most important information about an Epic EMP user account.

To obtain an overview of a user account

- 1. Select Epic health care | EMP users.
- 2. Select the Epic EMP user account in the result list.
- 3. Select **Epic EMP account**.

Changing the manage level of Epic EMP user accounts

The default manage level is applied if you create Epic EMP user accounts using automatic identity assignment. You can change a Epic EMP user account manage level later.

To change the manage level for an Epic EMP user account

- 1. In **One Identity Manager**, select **Epic health care | EMP users**.
- 2. Select the Epic EMP user account in the result list.
- 3. Select Change master data.
- 4. On the **General** tab, select the manage level in the **Manage level** menu.
- 5. Save the changes.



Related Topics

Editing master data for Epic EMP user account

Managing IdentityIDs for Epic EMP user account

Identity IDs are additional identities an Epic EMP user can have on the target Epic system.

To assign an Identity ID for an Epic EMP user

- 1. In One Identity Manager, select Epic health care | EMP users.
- 2. Select the Epic EMP user account in the result list.
- 3. In Tasks, select Manage IdentityIDs.
- 4. Click Add.
- 5. Enter the System User ID and System type.
- 6. Click Save.

NOTE:

- The system type needs to be valid and depends on customer configuration
- The system type could be set to a pre-defined list of values in the Designer depending on customer requirements
- Once an Identity has been created only the System User ID can be changed
- Identity ID cannot be removed from One Identity Manager

Managing External Identifiers for Epic EMP user account

These are the external identifiers that an Epic EMP user can have on the target Epic system.

To assign an external identifier for an Epic EMP user

- 1. In One Identity Manager, select Epic health care | EMP users.
- 2. Select the Epic EMP user account in the result list.
- 3. In Tasks, select Manage External IDs.
- 4. Click Add.
- 5. Enter the System User ID, System type and select the **IsActive** option.
- 6. Click **Save**.

NOTE:



- The system type needs to be valid and depends on customer configuration
- The system type could be set to a pre-defined list of values in the Designer depending on customer requirements
- Once an external identifier has been created, the IsActive option can be toggled as required

Managing Epic EMP user account managers

An Epic EMP user can contain multiple managers and these managers can be assigned here.

To assign a manager for an Epic EMP user

- 1. In One Identity Manager, select Epic health care | EMP users.
- 2. Select the Epic EMP user account in the result list.
- 3. In Tasks, select Assign Epic User managers.
- 4. Select the Epic EMP user managers in **Add assignments**.
- 5. Click **Save**.

Managing Demographics for Epic EMP user account

Epic EMP user demographic information can be managed from One Identity Manager.

To assign Demographic information for an Epic EMP user

- 1. In One Identity Manager, select Epic health care | EMP users.
- 2. Select the Epic EMP user account in the result list.
- 3. In Tasks, select Manage Demographics.
- 4. Click Add.
- 5. Enter the UserDemographic1, UserDemographic2, UserDemographic3.
- 6. Click Save.

NOTE:

- DemographicsIndex represents a row number and is automatically incremented when a record is created
- In case of deletion, higher order DemographicsIndex record must first be deleted prior to removing lower order DemographicsIndex record.



• The captions UserDemographic1, UserDempgraphic2 and UserDemographic3 can be updated in the Designer depending on what the attribute has been mapped to in the customer's Epic environment

Automatic assignments of identities to Epic EMP user accounts

When you add an Epic EMP user account, an existing identity can be assigned automatically or added if necessary. In the process, the identity master data is created based for existing user master data. This mechanism can follow after a new Epic EMP user account has been created manually or through synchronization. Define criteria for finding identities to apply to automatic identity assignment. If an Epic EMP user account is linked to an identity through the current mode, the Epic EMP user account is given, through an internal process, the default manage level of the account definition entered in the Epic EMP user account's target system. You can customize Epic EMP user account properties depending on how the behavior of the manage level is defined.

If automatic identity assignment to Epic EMP user accounts is enabled, automatic assignment of identities to Epic EMP user accounts takes place from that moment onwards. If you disable the automatic identity assignment to Epic EMP user accounts later, the changes only affect Epic EMP user accounts added or updated after this point in time. Existing identity assignment to Epic EMP user accounts remain intact.

Perform the following tasks to assign identities automatically

- If you want identities to be assigned during the synchronization of Epic EMP user accounts, in the Designer, enable the configuration parameter TargetSystem | Epic | PersonAutoFullsync and select the required mode.
- If you want identities to be assigned outside synchronization, in the Designer activate the TargetSystem | Epic | PersonAutoDefault configuration parameter and select the required mode.
- Use the TargetSystem | Epic | PersonAutoDisabledAccounts configuration parameter to specify whether identities can be automatically assigned to disabled Epic EMP user accounts. User accounts do not obtain an account definition.
- Assign an account definition to the client. Ensure that the manage level to be used is entered as the default manage level.
- Define the search criteria for assigning identities to the client.

NOTE:

The following applies for synchronization

• Automatic identity assignment takes effect if Epic EMP user accounts are added or updated.

The following applies outside synchronization



• Automatic identity assignment takes effect if Epic EMP user accounts are added.

NOTE: Following a synchronization, identities are automatically created for the Epic EMP user accounts in the default installation. If an account definition for the client is not yet known at the time of synchronization, Epic EMP user accounts are linked with identities. However, account definitions are not assigned. The Epic EMP user accounts are therefore in a Linked state.

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

To select Epic EMP user accounts through account definitions

- 1. Create an account definition.
- 2. Assign an account definition to the client.
- 3. Assign the account definition and manage level to Epic EMP user accounts in linked status.
 - a. In **One Identity Manager**, select **Epic health care | User accounts |** Linked but not configured | <Client>.
 - b. Select Assign account definition to linked accounts.

For detailed information about assigning identities automatically, see the One Identity Manager Target System Base Module Administration Guide.

Related Topics

- Creating Account Definitions Master data for an Account Definition
- Assigning account definition to identities
- Editing search criteria for automatic identity assignment

Editing search criteria for automatic identity assignment

The criteria for identity assignment are defined for the client. In this case, you specify which Epic EMP user account properties must match the identity's properties such that the identity can be assigned to the Epic EMP 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 identity assignment column(AccountToPersonMatchingRule) in the EPCRoot table. Search criteria are evaluated when identities are automatically assigned to Epic EMP user accounts. Furthermore, you can create a suggestion list for assignments of identities to Epic EMP user accounts based on the search criteria and make the assignment directly.

NOTE: When the identities are assigned to Epic EMP user accounts on the basis of search criteria, Epic EMP user accounts are given the default manage level of the account definition entered in the Epic EMP 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 identities to administrative Epic EMP user account for the respective Epic EMP user account.

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

To specify criteria for identity assignment

- 1. Select Epic health care | Clients.
- 2. Select the client from the result list.
- 3. Select **Define search criteria for identity assignment** in the task view.
- 4. Specify which Epic EMP user account properties must match with which identity so that the identity is linked to the Epic EMP user account.

Table 25: : Standard search criteria for Epic EMP user accounts and contacts

Apply to	Column for Identity	Column for user account
Epic EMP User accounts	FirstName	FirstName
	LastName	LastName
	MiddleName	MiddleName

5. Save the changes.

Direct assignment of identities to Epic EMP user accounts based on a suggestion list

In **Assignments**, you can create a suggestion list for assignments of identities to Epic EMP user accounts based on the search criteria and make the assignment directly. Epic EMP user accounts are grouped in different views for this.

Table 26: : Manual Assignment View

View	Description
Suggested assignments	This view lists all Epic EMP user accounts to which One Identity Manager can assign an identity. All identities are shown who were found using the search criteria and can be assigned.
Assigned user accounts	This view lists all Epic EMP user accounts to which an identity is assigned.
Without identity assign-	This view lists all Epic EMP user accounts to which no identity



ment is assigned and for which no identity was found using the search criteria.

NOTE: By double-clicking on an entry in the view, you can view the Epic EMP user account and identity master data.

To apply search criteria to user accounts

• Click Reload.

All possible assignments based on the search criteria are found in the target system for all Epic EMP user accounts. The three views are updated.

To assign identities directly over a suggestion list

1. Click Suggested assignments.

- a. Click **Select** for all user accounts to which you want to assign the suggested identities. Multi-select is possible.
- b. Click Assign selected.
- c. Confirm the security prompt with Yes.

The identities determined using the search criteria are assigned to the selected Epic EMP user accounts.

– OR –

2. Click No identity assignment.

- a. Click **Select** identity for the Epic EMP user account to which you want to assign an identity. Select an identity from the menu.
- b. Click **Select** for all Epic EMP user accounts to which you want to assign the selected identities. Multi-select is possible
- c. . Click **Assign selected**.
- d. Confirm the security prompt with **Yes**.

The identities displayed in the Identity column are assigned to the selected Epic EMP user accounts.

To remove assignments

- 1. Click Assigned user accounts.
 - a. Click **Select** for all Epic EMP user accounts for which you want to delete the identity assignment. Multi-select is possible.
 - b. Click **Remove selected**.
 - c. Confirm the security prompt with **Yes**.

The assigned identities are removed from the selected Epic EMP user accounts.

For detailed information about defining search criteria, see the One Identity Manager Target System Base Module Administration Guide.



Automatic assignments of identities to Epic EMP user accounts

Disabling Epic EMP user account

The way you disable user accounts depends on how they are managed.

Scenario

The user account is linked to identities and is managed through account definitions. Epic EMP user accounts managed through account definitions are disabled when the identity is temporarily or permanently disabled. The behavior depends on the Epic EMP user account manage level. Accounts with the manage level Full managed manage level are disabled depending on the account definition settings. For Epic EMP user accounts with a manage level, configure the required behavior using the template in the EPCUser.AccountDisabled column

Scenario

Epic EMP user accounts are linked to identities. No account definition is applied. Specify the desired behavior using the QER | Person | TemporaryDeactivation configuration parameter. If the configuration parameter is set, the identity's user accounts are locked if the identity is permanently or temporarily disabled. If the configuration parameter is not set, the identity's properties do not have any effect on the associated user accounts.

To disable the user account when the configuration parameter is disabled.

- 1. In **One Identity Manager**, select **Epic Healthcare | EMP users**.
- 2. Select the Epic EMP user account in the result list.
- 3. Select Change master data.
- 4. Enable **Account is disabled** on the **General** tab.
- 5. Save the changes.

Scenario

User accounts not linked to identities.

To disable an Epic EMP user account that is no longer linked to an identity.

- 1. In One Identity Manager, select Epic Healthcare | EMP users.
- 2. Select the Epic EMP user account in the result list.
- 3. Select Change master data.



- 4. Enable **Account is disabled** on the **General** tab.
- 5. Save the changes.

Related Topics

- Account definition for Epic EMP user account and Epic SER provider account
- Creating manage level Master data for manage level
- Deleting and restoring Epic EMP user accounts

For detailed information about disabling and deleting identities and user accounts, see the One Identity Manager Target System Base Module Administration Guide.

Deleting and restoring Epic EMP user accounts

NOTE: As long as an account definition for an identity is valid, the identity retains the Epic EMP user account that was created by it. If the assignment of an account definition is removed, the Epic EMP user account that was created from this account definition is deleted.

To delete a user account

- 1. Select **Epic health care | EMP users**.
- 2. Select the Epic EMP user account in the result list.
- 3. Delete the Epic EMP user account.
- 4. Confirm the security prompt with **Yes**.

To restore a user account

- 1. Select **Epic health care | EMP users**.
- 2. Select the Epic EMP user account in the result list.
- 3. Click **Undo delete** in the result list toolbar.

Configuring deferred deletion

By default, Epic EMP user accounts are finally deleted from the database after 30 days. The Epic EMP user accounts are initially disabled. You can re-enable the Epic EMP user accounts until deferred deletion is run. After deferred deletion is run, the Epic EMP user account are deleted from the database and cannot be restored anymore. The deferred deletion days can be configured to a value other than the default value, which is 30 days.



Setting External User ID on Epic EMP user creation

The External User ID can be set either by letting Epic autogenerate the ID or the customer can manually set the ID.

If the ID needs to be autogenerated by Epic, then a temporary unique id of the format *OneIM_Autogenerated_GUID* is automatically created on Epic EMP user account creation. The connector reads the ID and checks if it is an auto generated string of the format *OneIM_Autogenerated_GUID*. If that is the case, it lets Epic generate the ID for the Epic EMP user. The Epic generated ID is then resynched back in to OneIM.

If the Epic Admin needs to enter the ID manually on user creation, admin can disable the UserExternalID column's value template that generates the unique id in the designer. The admin can then manually set the ID on Epic EMP user creation.



Epic EMP template

Epic EMP template determines the access rights that a user has on an Epic System. The list of Epic EMP template are exported from the target system to the file **EMPTemplate.csv**.

Epic EMP template is loaded into the One Identity Manager by synchronization. You can assign and remove Epic EMP template from an user in One Identity Manager. However, you cannot edit the Epic EMP template in One Identity Manager.

To add Epic EMP template to a user, you can assign the Epic EMP template directly to the users. Or it can be added indirectly to departments, cost centers, location, business roles, or to the IT Shop.

After an Epic EMP template is assigned to a user, the following additional optional properties can be assigned to the Epic EMP template.

To add EMPTemplate to an user, you can assign the EMPTemplate directly to the users. Or it can be added indirectly to departments, cost centers, location, business roles, or to the IT Shop.

After an EMPTemplate is assigned to an user, the following additional optional properties can be assigned to the EMPTemplate.

Table 27: Additional optional properties that can be assigned to the Epic	EMP
template	

Property	Description
LoginType	The applications for which this template should be applied automat- ically.
StartDate	The date from which the user should begin to have access to this template.
EndDate	The date after which the user should no longer have access to this template.

Format of the CSV file EMPTemplate.csv

The CSV file **EMPTemplate.csv** has a specific format with the columns **TemplateID** and **TemplateName**.

The columns in the **EMPTemplate.csv** file are



Table 28: Columns in the EMPTemplate.csv file

Column name	Description
TemplateID	Epic EMP template's External ID
	IMPORTANT:
	Only ExternalID should be used.
TemplateName	Describes the Epic EMP Template name

NOTE:

- If the **TemplateName** or **TemplateID** field has comma (,), it must be properly escaped with double quotes.
- Sample Epic EMP template report can be found in the EPC module's Miscellaneous folder.

Editing Epic EMP template

Epic EMP template is loaded into the One Identity Manager by synchronization.

The CSV file allows you to

- Add new Epic EMP templates
- Update the Epic EMP templates
 NOTE: You can update only Template Name.

To edit the Epic EMP template

- 1. In **EMPTemplate.csv**, modify the rows.
- 2. In the **Synchronization Editor**, run the Synchronization project.
- 3. **Epic EMP template** data will be synchronized based on the operation performed on the **EMPTemplate.csv**.

Assigning the Epic EMP template to Epic EMP User

Epic EMP template can be assigned directly or indirectly to Epic EMP user. For indirect assignment, identities are assigned to hierarchical roles, such as, departments, cost centers, locations, or business roles.

Prerequisite for the indirect assignment of Epic EMP template to the identities.



- 1. Assignment of Epic EMP template is permitted for role classes (departments, cost centers, locations, or business roles).
- 2. Epic EMP user accounts are marked with the Epic EMP template can be inherited option.

Epic EMP template can also be assigned to Epic EMP user using IT shop.

Assigning Epic EMP template directly to the Epic EMP User

Epic EMP template can be assigned to the Epic EMP user directly.

To assign an Epic EMP template directly to the Epic EMP user

- 1. In **One Identity Manager**, navigate to **Epic Health care**.
- 2. Select the **User** account to which the Epic EMP template must be assigned.
- 3. Select Assign Epic EMP templates from Tasks .
- 4. To add the Epic EMP template, click **Add** in the form.
- 5. Select the Epic EMP template from the dropdown list.
- 6. Select LoginType, StartDate and EndDate according to the requirement.
- 7. Save the changes.

Assigning Epic EMP template to the department, cost center, and locations

Assign Epic EMP template to departments, cost centers, or locations so that the Epic EMP template can be assigned to Epic User through these organisations.

To assign an Epic EMP template to departments, cost centers, or locations (non rolebased login)

- 1. In **One Identity Manager**, select the **Epic Healthcare | Epic EMPTemplates** category.
- 2. Select the Epic EMP template in the result list.
- 3. Select the Assign organizations task.
- 4. Assign organizations in **Add assignments**.
 - Assign departments on the **Departments** tab.
 - Assign locations on the **Locations** tab.
 - Assign cost centers on the **Cost centers** tab.



NOTE:

- You can remove the assignment of organizations in **Remove** assignments.
- To remove an assignment, select the organization and double-click .
- 5. Save the changes.

To assign Epic EMP template to a department, cost center, or location (rolebased login)

In One Identity Manager, select the Organizations | Departments category.
 -OR-

In **One Identity Manager**, select the **Organizations | Cost centers** category. -OR-

In **One Identity Manager**, select the **Organizations | Locations** category.

- 2. Select the **department**, **cost center**, or **location** in the **result** list.
- 3. Select the Assign Epic EMPTemplates task.
- 4. Assign Epic EMP template in Add assignments.

NOTE:

- You can remove the assignment of **Epic EMP template** in **Remove** assignments.
- To remove an assignment, select the Epic EMP template and double-click .
- 5. Save the changes.

Assigning Epic EMP template to the business roles

Assign Epic EMP template to Business roles so that the Epic EMP template can be assigned to Epic EMP user through these business roles.

To assign a Epic EMP template to a business role (non role-based login)

- 1. In the **One Identity Manager**, select the **Epic Healthcare | Epic EMP templates** category.
- 2. Select the Epic EMP template in the result list.
- 3. Select the **Assign business roles** task.
- 4. Assign business roles in **Add assignments**.

NOTE:

- You can remove the assignment of business roles in **Remove** assignments.
- To remove an assignment, select the business role and double-click .
- 5. Save the changes.



To assign Epic EMP template to a business role (role-based login)

- 1. In **One Identity Manager**, select the **Business roles** category.
- 2. Select the business role in the result list.
- 3. Select the **Assign Epic EMP Templates** task.
- 4. Assign EMPTemplates in **Add assignments**.

NOTE:

- You can remove the assignment of Epic EMP template in **Remove** assignments.
- To remove an assignment, select the Epic EMP template and double-click.
- 5. Save the changes.

Assigning Epic EMP template to the IT shop

When you assign an Epic EMP template to an IT Shop shelf, it can be requested by the shop customers.

Prerequisites

To ensure that an Epic EMP template can be requested, the following prerequisites are required

- The Epic EMP template must be marked with the IT Shop option.
- The Epic EMP template must be assigned a service item.

NOTE: In the web portal, all products that can be requested are grouped together by service category. To make the Epic EMP template easier to find in the web portal, assign a service category to the service item.

• If you only want it to be possible for the Epic EMP template to be assigned to identities through IT Shop requests, the Epic EMP template must also be labeled with the Use only in IT Shop option. Direct assignment to hierarchical roles or user accounts is no longer permitted.

NOTE: With role-based login, the IT Shop administrators can assign EMPTemplates to IT Shop shelves.

To add an Epic EMP template to IT Shop

1. In **One Identity Manager**, select the **Epic HealthCare | Epic EMP template** category.

- 2. In the result list, select the **Epic EMP template**.
- 3. Select the **Add to IT Shop** task.
- 4. In **Add assignments**, assign the Epic EMP template to the IT Shop shelves.
- 5. Save the changes.



Deleting Epic EMP template

To delete the EMPTemplate

- 1. Remove the Epic EMP template from the **EMPTemplate.csv** file.
- 2. In **Synchronization Editor**, run the Synchronization project.

The Epic EMP template is marked as outstanding in **One Identity Manager**.

- 3. Remove the Epic EMP template assignment from the Epic EMP user in One Identity Manager.
- 4. Delete the Epic EMP template from the outstanding object

The Epic EMP template is deleted from the One Identity Manager database and all the associated Epic EMP template to the Epic EMP user.



Epic EMP subtemplate

Epic EMP subtemplate determines the access rights that a user has on an Epic System. The list of Epic EMP subtemplates are exported from the target system to the file **SubTemplate.csv**.

Epic EMP subtemplate is loaded into **One Identity Manager** by synchronization. You can assign and remove Epic EMP subtemplate from an user in **One Identity Manager**. However, you cannot edit the Epic EMP subtemplate in **One Identity Manager**.

To add Epic EMP subtemplate to Epic EMP users, you can assign the Epic EMP subtemplate directly to the Epic EMP users. This can be assignments of Epic EMP subtemplate to departments, cost centers, location, business roles, or to the IT Shop.

Epic EMP subtemplate assigned to an Epic EMP user must have a priority (also called index). Epic EMP subtemplates with lower priority take precedence over higher priority. Epic EMP users can be assigned a maximum of seven Epic EMP subtemplates with priority ranging from 1-7.

In case of conflicting priority in the new assignment, **One Identity Manager** resolves the conflict by maintaining the priority of the newly created Epic EMP subtemplate while incrementing the priority of all existing Epic EMP subtemplate by 1 starting from the conflicting priority.

To add Epic EMP subtemplate to users, you can assign the Epic EMP subtemplate directly to the users. This can be assignments of Epic EMP subtemplate to departments, cost centers, location, business roles, or to the IT Shop.

Epic EMP subtemplate assigned to an Epic EMP user must have a priority (also called index). Epic EMP subtemplates with lower priority take precedence over higher priority. Epic EMP users can be assigned a maximum of seven Epic EMP subtemplates with priority ranging from 1-7.

In case of conflicting priority in the new assignment, **One Identity Manager** resolves the conflict by maintaining the priority of the newly created Epic EMP subtemplate while incrementing the priority of all existing Epic EMP subtemplate by 1 starting from the conflicting priority.

The default value of **IndexPriority** can be set in **One Identity Designer |Edit Configuration parameters**.



Table 29: Default values of IndexPriority

Default value	Description
SubTemplateDefaultPriority	This default value is used for indirect assignment
SubTemplateMatrixPriority	This default value is used for SecurityMatrix Epic EMP subtemplate assignment

Edit default values of IndexPriority

To edit the default values of IndexPriority

- 1. In **Designer**, navigate to **Edit Navigation Parameter**.
- 2. Expand **Target Systems** and navigate to **EPC**.
- 3. Update the **Default Values**.

Format of the CSV file SubTemplate.csv

The CSV file **SubTemplate.csv** has a specific format with the following columns **TemplateID** and **TemplateName**.

The columns in the **SubTemplate.csv** file are

Table 30: Columns in the SubTemplate.csv file

Column name	Description
TemplateID	Epic EMP subtemplate's External ID
	IMPORTANT:
	Only External ID should be used.
TemplateName	Describes the Epic EMP subtemplate name

NOTE:

- If the **TemplateName** or **TemplateID** field has comma (,), it must be properly escaped with double quotes.
- Sample **Epic EMP SubTemplate** report can be found in the EPC module's Miscellaneous folder.

Editing the Epic EMP subtemplate

Epic EMP subtemplate is loaded into **One Identity Manager** by synchronization.

Only **TemplateName** can updated in the csv file. If **TemplateID** is updated it will be considered as new Template in the One Identity Manager.



To edit the Epic EMP subtemplate

- 1. In **SubTemplate.csv**, modify the rows.
- 2. In the **Synchronization Editor**, run the Synchronization project.
- 3. Epic EMP subtemplate data will be synchronized based on the operation performed on the **SubTemplate.csv**.

Assigning the Epic EMP subtemplate to Epic EMP user

Epic EMP subtemplate can be assigned directly or indirectly to Epic EMP user. For indirect assignment, identities are assigned to hierarchical roles, such as, departments, cost cent res, locations, or business roles.

Prerequisite for the indirect assignment of Epic EMP subtemplate to the identities.

- 1. Assignment of Epic EMP subtemplate is permitted for role classes (departments, cost centers, locations, or business roles).
- 2. Epic User accounts are marked with the Epic EMP subtemplate can be inherited option.

NOTE: Epic EMP subtemplate can also be assigned to Epic user through IT shop.

Assigning the Epic EMP subtemplate directly to the Epic EMP user

Epic EMP subtemplate can be assigned to the Epic EMP user directly.

To assign a Epic EMP subtemplate directly to the Epic EMP user

- 1. In One Identity Manager, navigate to Epic Health care.
- 2. Select the **Epic EMP User** account to which the Epic EMP subtemplate must be assigned.
- 3. Select Assign Epic EMP subtemplate from Tasks .
- 4. To add the Epic EMP subtemplate, click **Add** in the form.
- 5. Select the priority Index options from the dropdown.
- 6. Save the changes.



Assigning Epic EMP subtemplate to the department, cost center, and locations

Assign Epic EMP Subtemplate to departments, cost centers, or locations so that the Epic EMP Subtemplate can be assigned to Epic EMP User through these organizations.

To assign a Epic EMP Subtemplate to departments, cost centers, or locations (non rolebased login)

- 1. In One Identity Manager, select the **Epic Healthcare | Epic EMP Subtemplate** category.
- 2. Select the Epic EMP Subtemplate in the result list.
- 3. Select the **Assign organizations** task.
- 4. Assign organizations in **Add assignments**.
 - Assign departments on the **Departments** tab.
 - Assign locations on the **Locations** tab.
 - Assign cost centers on the **Cost centers** tab.

NOTE:

- You can remove the assignment of organizations in **Remove** assignments.
- To remove an assignment, select the organization and double-click .
- 5. Save the changes.

To assign Epic EMP Subtemplate to a department, cost center, or location (rolebased login)

In One Identity Manager, select the **Organizations | Departments** category.
 OR –

In One Identity Manager, select the ${\bf Organizations}$ | Cost centers category. - OR –

In One Identity Manager, select the **Organizations | Locations** category.

- 2. Select the **department**, **cost center**, or **location** in the result list.
- 3. Select the Assign Epic SubTemplates task.
- 4. Assign Epic EMP Subtemplate in **Add assignments**.

NOTE:

- You can remove the assignment of Epic EMP Subtemplate in **Remove** assignments.
- To remove an assignment, select the Epic EMP Subtemplate and double-click .
- 5. Save the changes.



Assigning Epic EMP subtemplate to the business roles

Assign Epic EMP subtemplate to **Business roles** so that the Epic EMP subtemplate can be assigned to Epic EMP User through these business roles.

To assign an Epic EMP subtemplate to a business role (non role-based login)

- 1. In **One Identity Manager**, select the **Epic Healthcare | Epic EMP subtemplates** category.
- 2. Select the Epic EMP subtemplate in the result list.
- 3. Select the **Assign business roles** task.
- 4. Assign business roles in **Add assignments**.

NOTE:

- You can remove the assignment of business roles in **Remove** assignments.
- To remove an assignment, select the business role and double-click .
- 5. Save the changes.

To assign an Epic EMP subtemplate to a business role (role-based login)

- 1. In **One Identity Manager**, select the **Business roles** category.
- 2. Select the business role in the result list.
- 3. Select the Assign Epic Sub Templates task.
- 4. Assign Epic EMP subtemplate in **Add assignments**.

NOTE:

- You can remove the assignment of Epic EMP subtemplate in **Remove** assignments.
- To remove an assignment, select the Epic EMP subtemplate and double-click .
- 5. Save the changes.

Assigning Epic EMP subtemplate to IT shop

When you assign an Epic EMP subtemplate to a IT Shop shelf, it can be requested by the shop customers.

Perquisites

To ensure it can be requested, the following prerequisites are required



- The Epic EMP subtemplate must be marked with the IT Shop option.
- The Epic EMP subtemplate must be assigned a service item.

NOTE: In the web portal, all products that can be requested are grouped together by service category. To make the Epic EMP subtemplate easier to find in the web portal, assign a service category to the service item.

• If you only want it to be possible for the Epic EMP subtemplate to be assigned to identities through IT Shop requests, the Epic EMP subtemplate must also be labeled with the **Use only in IT Shop** option. Direct assignment to hierarchical roles or user accounts is no longer permitted.

NOTE: With role-based login, the IT Shop administrators can assign Epic EMP subtemplate to IT Shop shelves.

To add an Epic EMP subtemplate to IT Shop

1. In **One Identity Manager**, select the **Epic HealthCare | Epic EMP subtemplate** category.

- 2. In the result list, select the Epic EMP subtemplate.
- 3. Select the Add to IT Shop task.
- 4. In **Add assignments**, assign the Epic EMP subtemplate to the IT Shop shelves.
- 5. Save the changes.

Deleting the Epic EMP subtemplate

To delete the Epic EMP subtemplate

- 1. Remove the Epic EMP subtemplatefrom the **SubTemplate.csv** file
- 2. In Synchronization Editor, run the synchronization project

The Epic EMP subtemplate is marked as outstanding in **One Identity Manger**.

- 3. Remove the Epic EMP subtemplate assignment from the Epic EMP user in One Identity Manager.
- 4. Delete the Epic EMP subtemplate from the outstanding object

The Epic EMP subtemplate is deleted from the **One Identity Manager** database and all the associated Epic EMP subtemplate to the Epic EMP User.



Epic SER Items

Epic SER items are the fields (or attributes) that each Epic SER provider account has in Epic target system. The Epic SER item values can be non-complex and complex. The non-complex values are simple or single-valued whereas complex values are multivalued or relational groups. The SERItems.csv file found in the EPC module's miscellaneous folder contains the supported list of SER items.

Format of the CSV file SERItems.csv

The CSV file SERItems.csv has a specific format with the columns SER Item Number, SER Field Number and SER Item Name.

The columns in the SERItems.csv file are:

Property	Description
SER Item Number	The SER Item Number
SER Field Number	The SER Field Number
SER Item Name	The SER Item Name

Table 31: CSV fields

Editing SER items

The SER Field Number that corresponds to the SER Item Number needs to be checked and updated if necessary, as related to the Epic installation. The updated SERItems.csv file should be part of the configured CSV import directory (The CSV import directory was configured when you created the synchronization project). The SER Items is loaded in to the One Identity Manager by synchronization.

If the CSV import directory is a local folder on the job server and One Identity Manager workstation, make sure to copy the SERItems.csv file to both the job server's and One Identity Manager workstation's local folder.

If the CSV import directory is a network share, make sure it is accessible from both the job server and One Identity Manager workstation.



Overview of Epic SER item

Use this task to obtain an overview of the Epic SER item.

To obtain an overview of an Epic SER item

- 1. Select Epic health care | SER items.
- 2. Select the Epic SER item in the result list.
- 3. Select the task **Epic SER item overview**.

The overview of Epic SER item displays information for the Epic SER item which includes display name, Epic SER field number, Epic SER item number and Epic SER provider column.

Master data for Epic SER item

Use this task to view the master data for the Epic SER item.

To view master data of an Epic SER item

- 1. Select Epic health care | SER items.
- 2. Select the Epic SER item in the result list.
- 3. Select the task **Epic SER item master data**.

Table 32: Master data for Epic SER item

Property	Description
Display name	Display name of the Epic SER item
Epic SER item number	Epic SER item's field number
Epic SER field number	Epic SER item's item number.

Epic SER categories

Many Epic SER Provider item's (fields or attributes) values could be a pre-defined limited set of values, and these are called the category list. The default out of box configuration for Epic SER Provider item's is NOT a category list. Before running the first synchronization, review each of the SER Provider item and mark them as a defined list of values as explained in the following steps.



- a. Open the **One Identity Manager Designer**.
- b. Navigate to One Identity Manager Schema. Select **Tables** and click on **Type: Tables**.
- c. Navigate to **EPCSERProvider Table definition**.
- d. Review each of the EPCSERPRovider table columns. Select the column that needs to be pre-defined limited set of values and mark them as defined list of values under value settings.
- e. Commit the changes to the database.

Once the Epic SER Provider column has been marked as a defined list of values, the category list could be optionally manually set.

NOTE: Marking a SERProvider column as defined list of values could be automatically done when synchronizing the SER Categories values if the synchronization project is used to sync the SER category values.

Refer SER Categories Mapping for details.

The EPC module's miscellaneous folder contains category list for many SER provider items. The category list for each of the SER item can be reviewed and used. The categories list could also be exported from Epic and used. The format of the category file is mentioned below. The final category list should be placed under categories folder under the configured CSV import directory (The CSV import directory was configured when you created the synchronization project). Example: If the configured CSV import directory is C:\EPCCSV, categories folder would be C:\EPCCSV\Categories. All the category files should reside in the categories folder. Customers can contact Epic technical support regarding details on export of categories from Epic.

NOTE:

- Please contact Epic to know about automating the categories report generation and dropping the report generated to the CSV import directory.
- If the CSV import directory is a local folder on the job server and One Identity Manager workstation, ensure to copy the categories report to both the job server's and One Identity Manager workstation's local folder.
- If the CSV import directory is a network share, make sure it is accessible from both the job server and One Identity Manager workstation.

Format of the *.cat categories file

Name of the file: The file name should be of the format *-SERItemNumber.cat. Example: SER-CAT-30.CAT, where 30 is the item number. This item number is used in the resolution of the Epic SER provider column and populating the limited list of values

The records in the file should be of the format

Display Value^Display String^Alternate Display String One^Alternate Display String Two

Example:

0^No^N^DISALLOW~FALSE^



IMPORTANT: The Epic SER provider export should contain the values and not the display strings for the items marked as a category list.



EPC 9.2.1 Administration Guide for Connecting to Epic Target System

9

Epic SER Provider accounts

Epic SER provider accounts can be managed from One Identity Manager.

SER provider report

The master list of Epic SER provider accounts that should be managed from One Identity Manager should be exported from Epic and provided in a CSV file. The name of the CSV file should be SERProviders.csv. This is called the Epic SER provider report and the generated report should be copied to the configured CSV import directory (The CSV import directory was configured when you created the synchronization project).

NOTE:

- Please contact Epic to know about automating the SER provider report generation and dropping the report generated to the CSV import directory.
- If the CSV import directory is a local folder on the job server and One Identity Manager workstation, ensure to copy the Epic SER provider report to both the job server's and One Identity Manager workstation's local folder.
- If the CSV import directory is a network share, make sure it is accessible from both the job server and One Identity Manager workstation.

The SERProviders.csv report has a specific format and report should be exported in this format.

The first line in the report should be the Epic SER Item Numbers with each field delimited by the pipe (|) symbol. The first column should be the ID and second column should be the Name. The rest of the items could be in any order.

Starting from the second line the actual Epic SER providers need to be present with each field delimited by the pipe (|) symbol. For SER items that are multi valued, they need to be separated by a comma (,).

IMPORTANT

- If a field value contains pipe (|), the entire field value needs to be escaped properly with double quotes (")
- If a multi valued field value contains comma (,) the entire field value needs to be escaped properly with double quotes (")

The EPC module's miscellaneous folder contains sample SER Provider csv file for reference.



Linking Epic SER provider account to identities

The central component of One Identity Manager is to map identities and their master data with permissions through which they have control over different target systems. For this purpose, information about Epic SER provider accounts and permissions can be read from the target system into the One Identity Manager database and linked to identities. This gives an overview of the permissions for each identity in all of the connected target systems. One Identity Manager provides the possibility to manage Epic SER provider accounts and their permissions.

You can provision modifications in the target systems. Identities 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, One Identity Manager offers different methods for supplying Epic SER provider accounts to identities.

One Identity Manager supports the following method for linking identities and their Epic SER provider accounts.

- Identities can automatically obtain their Epic SER provider accounts using account definitions. If an identity does not yet have a user account in Epic, a new Epic SER provider account is created. This is done by assigning account definitions to an identity using the integrated inheritance mechanism and subsequent process handling. When you manage Epic SER provider accounts through account definitions, you can specify the way Epic SER provider accounts behave when identities are enabled or deleted.
- When Epic SER provider accounts are inserted, they can be automatically assigned to an existing identity or a new identity can be created if necessary. In the process, the identity master data is created on the basis of existing Epic SER provider account master data. This mechanism can be implemented if a new Epic SER provider account is created manually or by synchronization. Define criteria for finding identities for automatic identity assignment
- Identities and Epic SER provider accounts can be entered manually and assigned to each other.

For more information, see:

- Editing master data for Epic SER provider account
- Account definition for Epic EMP user account and Epic SER provider account
- Automatic assignments of persons to Epic SER provider accounts
- For detailed information about handling and administration of identities and user accounts, see the One Identity Manager Target System Base Module Administration Guide.



Editing master data for Epic SER provider account

An Epic SER provider account can be linked to an identity in One Identity Manager. You can also manage Epic SER provider accounts separately from identities.

NOTE:

- It is recommended to use account definitions to set up Epic SER provider accounts for company identities. In this case, some of the master data described in the following is mapped through templates from identity master data.
- If identities are to obtain their Epic SER provider accounts through account definitions, the identities must own a central user account and obtain their IT operating data through assignment to a primary department, a primary location or a primary cost center.

To create an Epic SER provider account

- 1. In **One Identity Manager**, select **Epic health care | SER providers**.
- 2. Click Add in the result list toolbar.
- 3. On the master data form, add the master data for the Epic SER provider account.
- 4. Save the changes.

To edit master data for an Epic SER provider account

- 1. In **One Identity Manager**, select **Epic health care** | **SER providers**.
- 2. Select the Epic SER provider account in the result list and run Change master data.
- 3. Edit the Epic SER provider account's data.
- 4. Save the changes.

For more information, see:

- General master data for Epic SER provider account
- Epic SER provider data based on SER item number

Related topics

• Account definition for Epic EMP user account and Epic SER provider account

General master data for an Epic SER provider account

Enter the following data on General tab:



Property	Description
Identity	Identity that uses this Epic SER provider account. An identity is already entered if the Epic SER provider account was generated by an account definition. If you create the user account manually, you can select an identity in the menu. If you are using automatic identity assignment, an associated identity is found and added to the Epic SER provider account when you save the Epic SER provider account.
	For a Epic SER provider account with an identity of type Organizational identity, Personalized administrator identity, Sponsored identity, Shared identity or Service identity, you can create a new identity.
	To do this, click Next to the input field and enter the required identity master data. The login data required depends on the selected identity type.
Account Definition	Account definition through which the Epic SER provider account was created. Use the account definition to automatically fill Epic SER provider account master data and to specify a manage level for the Epic SER provider account.
	The One Identity Manager finds the IT operating data of the assigned identity and enters it in the corresponding fields in the Epic SER provider account.
	NOTE: The account definition cannot be changed once the Epic SER provider account has been saved.
Manage Level	Manage level of the Epic SER provider account. Select a manage level from the menu. You can only specify the manage level if you have also entered an account definition. All manage levels of the selected account definition are available in the menu.
Account Name	Template calculated value that is set to user's Name.
First Name	The first name of the Epic SER provider. If you have assigned an account definition, the input field is automatically filled with the manage level.
Last Name	The last name of the Epic SER provider. If you have assigned an account definition, the input field is automatically filled with the manage level.

Table 33: Additional Master Data for an Epic SER provider account



Middle Name	The middle name of the Epic SER provider. If you have assigned an account definition, the input field is automatically filled with the manage level.
Display Name	Template calculated value that is set to user's Name.
Update configuration	This field (also known as DoNotUpdate) controls how the value of the fields Applied Epic SER blueprint or Applied Epic SER template of an existing Epic SER provider record are updated upon application of an Epic SER blueprint or an Epic SER template using IT operating data. This in turn controls how items of an existing Epic SER provider record are updated upon application of an Epic SER blueprint or an Epic SER template using IT operating data.
	Update configuration values:
	0 - Apply only if null: Apply the Epic SER blueprint (or Epic SER template) only if the Applied Epic SER blueprint (or Applied Epic SER template) field of the Epic SER provider is null
	1 - Never apply: Never apply the Epic SER blueprint or Epic SER template
	2 - Always apply: Always apply the Epic SER blueprint or Epic SER template
	NOTE: This field is not used if an Epic SER blueprint or an Epic SER template is manually or directly applied on the Epic SER provider. It is not applic- able for newly created Epic SER providers.
Account expiry date	Template calculated value based on Identity's Date Last worked
One Identity ID	Read only field. Identifier assigned to a newly created Epic SER provider account by One Identity Manager.
Applies SER blueprint	The last Epic SER blueprint applied on the Epic SER provider account.
Applies SER template	The last Epic SER template applied on the Epic SER provider account.
SER blueprint update time	The time at which the Epic SER blueprint was updated last.
	NOTE: Null indicates no Epic SER blueprint applied.
SER template update time	The time at which the Epic SER template was updated last. NOTE: Null indicates no Epic SER template applied.



User account is disabled

Specifies whether the Epic SER provider account is disabled.

Related topics

- Account definition for Epic EMP user account and Epic SER provider account
- Linking SER provider account to identities
- Disabling Epic SER provider account

Epic SER provider data based on Epic SER items

Enter the following data for various tabs grouped on the basis of $\ensuremath{\mathsf{Epic}}$ SER item number range

Table 34: Epic SER items 0-1900

Property (SER Item : SER Item Number)	Description
ID:.1	The SER provider ID. For new SER provider records, this can be manually set. If you want Epic to autogenerate the ID leave this field blank
External name : 1	The Epic SER provider's name that will be used on reports and letters sent to the patient.
Is verified? : 6	Specifies if the Epic SER provider is verified or not. Which implies the if quality of data is assessed and verification process is done.
Is generic? : 13	Specifies if the Epic SER provider is verified or not. A generic provider is primarily used for scheduling appointments or cases before the actual provider is known. Setting this item may allow the system to automatically replace this
Abbreviation : 25	Abbreviation for Epic SER provider. NOTE: Abbreviations are used on many standard reports.
Clinician title : 26	The Epic SER provider's title.
Type of resource : 30	The Epic SER provider's record type for the SER Masterfile.
Status : 35	The Epic SER provider's status. The item can have



	 three values. Blank 1- Active to allow this provider to be selected in most clinical, scheduling, and referral workflows. 2- Inactive to suppress this provider in these
Contact comment : 38	workflows. The comments to reflect any updates on Epic SER provider. NOTE:The value entered in the field appears on the contact selection screen when selecting a provider.
Referral source type : 45	The Epic SER provider's referral source type
Internal or external : 190	Specifies whether the Epic SER provider is internal or external to the facility. NOTE: If left blank, the Epic SER provider is marked as Internal.
Deficiency track : 561	Specifies whether the Epic SER provider is a deficiency tracking provider. NOTE: If set to No, deficiencies will not be allowed to be assigned to the.
Letter preference : 590	The epic SER provider's preferred method for receiving deficiency warning letters. NOTE: If an Epic SER provider doesn't have a specific letter preference, the default value is 1 - Printed Letter.
Default service : 800	The Epic SER provider's service that will be used as the default service on the ADT accommodations form. When the Epic SER provider is the admitting provider and no service has been specified, this service will be defaulted into the service field.
Record state : 1000	The Epic SER provider's state. Indicates whether the record is active or inactive. *I indicates record is inactive and *A indicates record is active NOTE: This field is read-only and automatically set.
Provider name : 1021	The Epic SER provider's name. The name is either in "Last [Suffix], First [MI]" or "Last, First [MI] [Suffix]" format.



Provider type: 1041	The Epic SER provider's type.
Provider degree : 1061	The Epic SER provider's degree.
Is encounter provider? : 1081	Specifies whether the Epic SER provider can default be an encounter provider for a quick encounter in an ambulatory context.
	NOTE: A quick encounter is an encounter where the New Contacts window doesn't appear because the type of encounter is defined, and other default values have been specified in the user's compiled profile. the default is Yes.
Can be supervisor? : 1082	Specifies whether the Epic SER provider can be used as an encounter supervising provider.
	NOTE: Encounter supervising provider is required when billing for the services of physician extenders like residents and PAs. The default is No.
Needs supervision? : 1083	Specifies whether the Epic SER provider is required to enter an encounter supervising. NOTE: The default is No.
Is a resident? : 1120	Specifies whether the Epic SER provider is a resident. NOTE: The default is No.
Beeper phone : 1220	The Epic SER provider's primary pager number.
DEA number : 1310	The Epic SER provider's Drug Enforcement Agency number used for prescribing controlled medications.
Sex : 1340	The Epic SER provider's sex.
Date of birth : 1360	The Epic SER provider's birth date.
UPIN: 1740	The Epic SER provider's Unique Physician Identification Number.

Table 35: Epic SER items 2000-2900

Property (SER Item : SER Item Number)	Description
Employed CRNA? : 2100	Specifies whether the Epic SER provider is an employed Certified Registered Nurse Anaesthetist (CRNA) by default.



Default treatment rel. : 2600 The Epic SER provider's default treatment to be used on the ADT Providers form and for ED patients on the Treatment Team Assignment activity.

Table 36: Epic SER items 2900-2950

· Property (SER Item : SER Item Number)	Description
Group 1 : 2900	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This is a free-text field.
Group 2 : 2901	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This is a free-text field.
Group 3 : 2902	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This is a free-text field.
Group 4 : 2903	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This is customer definable category list.
Group 5 : 2904	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This is a free-text field.
Group 6 : 2905	 Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This grouper is also used when searching for an Epic SER provider using the Provider Finder module in Call Management. This is a customer defined category list.
Group 7 : 2906	 Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This grouper is also used when searching for an Epic SER provider using the Provider Finder module in Call Management. This is a customer defined category list.
Group 8 : 2907	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This grouper is also used when searching for



	an Epic SER provider using the Provider Finder module in Call Management. This is a customer defined category list.
Group 9 : 2908	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This grouper is also used when searching for an Epic SER provider using the Provider Finder module in Call Management.
	This is a customer defined category list.
Group 10 : 2909	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This grouper is also used when searching for an Epic SER provider using the Provider Finder module in Call Management.
	This is a customer defined category list.
Group 11 : 2910	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This is customer definable category list.
Group 12 : 2911	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This is customer definable category list.
Group 13 : 2912	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This is customer definable category list.
Group 14 : 2913	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This is customer definable category list.
Group 15 : 2914	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This is customer definable category list.
Group 16 : 2915	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This is customer definable category list.
Group 17 : 2916	Grouper that can be used when doing SQL or Report Generator reporting on this master file.
	NOTE: This is customer definable category list.



Group 18 : 2917	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This is customer definable category list.
Group 19 : 2920	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This is customer definable category list.
Group 20 : 2919	Grouper that can be used when doing SQL or Report Generator reporting on this master file. NOTE: This is customer definable category list.

Property Description (SER Item : SER Item Number) Revenue department : 2952 The department to which revenue generated by The Epic SER provider should be attributed. License display : 6001 The Epic SER provider's license for display NOTE: This license is for display purposes only. Photo : 6002 The path to the Epic SER provider's photgraph. **NOTE:** If the value is set, this photograph overrides the one set in item SER-32050 (Photo - URL). If a URL address is entered, it must start with https:// so it can be accessed securely. If just the file name is entered, the path for the file name needs to be defined in item LWS-35100 (Provider Photo Path). If the full file path is entered, the path must be accessible by the Web Blob Service (WBS), unless item LSD-15177 (Display Provider Photos Without Using Blob Service?) is set to Yes. The photograph should not exceed 1000 pixels by 1000 pixels and no more than 6MB. URL of photo: 32050 The URL of the Epic SER provider's photograph. NOTE: If a URL address is entered, it must start with https:// so it can be accessed securely. Otherwise, the file name or full file path entered must be accessible by the Web Blob Service (WBS). The photograph should not exceed 1000 pixels by 1000 pixels and no more than 6MB.

Table 37: Epic SER items 2950-28000



Allow refer to provider : 6550	Specifies whether the Epic SER provider is selected as a Referred To Provider. NOTE: Default is Yes.
Is EMR provider? : 8020	Specifies whether the Epic SER provider is actively using the clinical applications. NOTE: Default value is No.
Results type : 8114	Specifies for which encounter types an Epic SER provider receives messages.
	NOTE: This setting treats results from hospital outpatient visits as both IP and OP encounters. Messages will route for HOVs unless set to None.
	The default value for this item is 1- for both Outpa- tient and Inpatient.
Results routing dept : 8115	The department used for overdue results routing.
	NOTE: The overdue results routing department override setting (I LSD 3204) in EMR System Defin- itions can override this setting and determines the default behavior if nothing is populated here. The department can be either the provider's primary department or the encounter department. The encounter department is from the encounter where the order was placed.
Can receive refill request IB : 8140	Specifies whether an Epic SER provider can receive refill request (Rx Auth) messages from the outpatient pharmacy application via In Basket.
	NOTE: If set to "Yes" or left blank, the provider can receive these messages (if the provider's In Basket security permits it).
Med. authorizing provider : 8210	Specifies whether the Epic SER provider can authorize medications.
	NOTE: Default is No.
Second sign IB messages : 8211	Specifies whether the Epic SER the provider can have its second sign In Basket messages sent to an override pool set in the profile. NOTE: Default is No.
Is pharmacist? : 8215	Specifies whether the Epic SER provider can be used as a pharmacist. NOTE: Default is No.
Order auth. provider : 8220	Specifies whether the Epic SER provider is authorized



	to place orders in the system. NOTE: The default is to not allow orders to be authorized by this provider.
Treatment plan provider : 8225	Specifies whether the Epic SER provider can be selected as the treatment plan provider managing a treatment plan, or the lead provider managing a therapy plan when associating a plan with a patient. NOTE: The default value is No.
Pref. comm. method : 8350	The Epic SER provider's preferred method for sending chart copies, letters, and result reports from the Communication Management section.
	NOTE: If System Definitions is configured to route results by communication preference using the Route by Communication Preference item (I LSD 3187), then all results for this provider will be sent by this method. If this item is left blank, then the defaults below will be used.
	For Communication Management:
	The default routing method will be the first method listed in the routing method table in System Defin- itions (I LSD 5700) or on the Communication Management Setup screen in the department record (I DEP 17570) that is available to that Epic SER provider.
	For Results Routing:
	The default routing method will be In Basket.
	For Transitions of Care:
	The default routing method will be the first method that can succeed from the methods listed in the profile for Summary of Care Non-Electronic Default Methods (I LPR 5520).
Is e-prescribing provider? : 8400	Specifies whether the Epic SER provider is an Electronic-Prescribing Provider. Order transmittal uses this flag to send med orders to an interface instead of printing. NOTE: The default value is No.
Prop. sec. ctrl. substances : 8421	The proposed change to an Epic SER provider's security to electronically prescribe or dispense controlled substances.



	request will be sent out for approval. When the request is approved by a second person, SER 8420 "E-PRESCRIBING CONTROLLED SUBSTANCES?" will be updated.
Ext. cal. enable integration? : 14480	Specifies whether the Outlook integration is enabled for the Epic SER provider. NOTE: The default is No.
Home health verbal order : 27010	Specifies whether the Epic SER provider uses In Basket to sign home health orders. NOTE: If this is left blank, the default will be the value in the "EpicCare Prov" field (SER 8020 item) if the provider has a user record that is active and In Basket security. If this is left blank and any of the three checks above fail, it is assumed that the provider is not an In Basket provider for home health orders.

Table 38: Epic SER items 28000-53000

Property (SER Item : SER Item Number)	Description
Rec. pat. msgs directly : 32000	Determines where the routing messages sent by patients should be directed.
	The available options for this field route in the following manner:
	1. Self. Routes the message directly to the Epic SER provider.
	2. Pool (Default). Routes the message to the pool in the Pool field.
	3. Skip. Proceeds to the department level of routing (step 3).
	4. Pool & CC Self. Route the message to both the pool and the Epic SER provider.
	NOTE: When routing messages sent by patients, a six-step hierarchy is consulted. The steps are divided into three levels - provider (SER), depart- ment (DEP), and system (WDF). This field is used at the starred step to determine where the message should go. When a destination is found, the search stops, and that destination is used.



	 Provider message routing table (SER) Provider default destinations (SER) Department message routing table (DEP) Department default destinations (DEP) System routing table (WDF) System default destinations (WDF) This field is used in routing if the message is one of the clinical message types.
Rec. e-visit msgs : 32015	Specifies whether the Epic SER provider will accept E- Visit messages from patients. NOTE: If the value is not provided, the Epic SER provider will not be included in the E-Visit recipient list.
Rec. clinical update msgs : 32020	Specifies whether the Epic SER provider receives patient clinical update notification messages directly.
Rec. unviewed test results : 32030	 Specifies whether the Epic SER provider receives unviewed test result notification messages directly. NOTE: The default value is No. This field is no longer used if the November 2021 conversion 731040 has completed for the Epic SER provider's record.
Allow my chart scheduling : 32065	Specifies whether the Epic SER provider will be displayed in the schedule list for appointment scheduling for MyChart.
Allow open scheduling : 32068	Specifies whether the Epic SER provider is available for the MyChart Open Scheduling workflow. NOTE: The default value is No.
Allow ticket scheduling : 32070	Specifies whether the Epic SER provider accepts appointments scheduled through MyChart Scheduling Tickets. NOTE: If the value is not specified, the default is determined by the "Allow/include provider by default?" (I WDF 808) setting in MyChart system definitions.
Allow tele. med. sched. : 32075	Specifies whether patient can schedule or request telemedicine appointments with the Epic SER



	provider. NOTE: The default value is No.
Display in med. send list : 32080	Specifies whether the Epic SER provider will be displayed in the send list for Medical Advice Requests.
Display in appt. send list : 32090	Specifies whether the Epic SER provider will be displayed in the send list for appointment requests. NOTE: Used in MyChart. If the value is not specified, the default is determined by the "Allow/include provider by default?" setting (I WDF 808) in MyChart system definitions.
Default notes service : 34700	The Epic SER provider's allowed service to default in when a new note is created. NOTE: Epic SER provider's defaulting should be turned on as a pre-requisite.
Default IP treatment rel. : 34825	The Epic SER provider's default Inpatient treatment team relationship. NOTE: When the quick assignment utilities are used from Patient Lists on patients who are admitted to a non-emergency department, the value here will default as the assigned treatment team relation- ship. When adding a provider to an outpatient care team or an episode case team, the value here will default as the assigned relationship.
IP provider licensure : 34851	The Epic SER provider's Inpatient licensure for display.
IP provider discipline : 34901	The Epic SER provider's associated discipline. NOTE: The Activity Assignment Engine uses this item in conjunction with the staff's licensure and skills to find the most suitable staff to execute the activity.
Is a hospitalist? : 34910	Specifies whether the Epic SER provider acts as a hospitalist. NOTE: The default value is No.
Inpatient ordering : 34920	Specifies whether the Epic SER provider can be entered as an ordering provider for inpatient orders. A provider will be an Inpatient ordering provider if:



	 This provider is linked to a user record The setting for Inpatient ordering provider is Yes. NOTE: The default value is Yes. Make sure to link an Inpatient ordering provider to a user record.
OP ordering provider : 34921	Specifies whether the Epic SER provider can be entered as an ordering provider for outpatient orders.
	A provider will be an outpatient ordering provider if:
	1) The Epic SER provider is linked to a user record
	2) The setting for outpatient ordering provider is not No.
	NOTE: The default value is Yes. Make sure to link an outpatient ordering provider to a user record.
Is ED provider? : 49000	Controls the default ED Provider flag when signing into an ED, and the default value of the ED provider flag in a Treatment Team assignment in non- emergency departments or when the provider is not signed into the patient's department.
ED can be supervisor? : 49100	Specifies whether the Epic SER provider can be used as a supervisor to another Epic SER provider.
	NOTE: This Epic SER Item is not related to SER 1082 supervising provider. The default value if nothing is selected is No.
ED needs supervision? : 49200	Specifies when the Epic SER provider needs supervision. This is applied during sign in to the ED.
	NOTE: This Epic SER Item is not related to SER item 1083 supervision required. The default value if nothing is selected is No.
Imaging IB preference : 52100	The Epic SER provider's imaging procedure In Basket preference.
	For imaging procedures performed in Radiant or Cupid, reading physicians have the option of signing a result either in the Signing Work List or study review activities or in In Basket. Signing a study moves the study status to Final and files any charges that are configured to be filed when a provider finalizes a study.



Additional tasks for managing Epic SER provider account

Overview of Epic SER provider account

Use this task to obtain an overview of the most important information about an Epic SER provider account.

To obtain an overview of an Epic SER provider account

- 1. Select **Epic health care | SER providers**.
- 2. Select the Epic SER provider account in the result list.
- 3. Select Epic SER provider overview.

Changing the manage level of Epic SER provider accounts

The default manage level is applied if you create Epic SER provider accounts using automatic identity assignment. You can change an Epic SER provider account manage level later.

To change the manage level for an Epic SER provider account

- 1. In **One Identity Manager**, select **Epic health care | SER providers**.
- 2. Select the Epic SER provider account in the result list.
- 3. Select Change master data.
- 4. On the **General** tab, select the manage level in the **Manage level** menu.
- 5. Save the changes.

Related Topics

Editing master data for Epic SER provider account

Automatic assignments of identities to Epic SER provider accounts

When you add an Epic SER provider account, an existing identity can be assigned automatically or added if necessary. In the process, the identity master data is created based for existing user master data. This mechanism can follow after a new Epic SER provider account has been created manually or through synchronization. Define criteria for finding identities to apply to automatic identity assignment. If an Epic SER provider account is linked to an identity through the current mode, the Epic SER provider account is given, through an internal process, the default manage level of the account definition entered in



the Epic SER provider account's target system. You can customize Epic SER provider account properties depending on how the behavior of the manage level is defined.

If automatic identity assignment to Epic SER provider accounts is enabled, automatic assignment of identities to Epic SER provider accounts takes place from that moment onwards. If you disable the automatic identity assignment to Epic SER provider accounts later, the changes only affect Epic SER provider accounts added or updated after this point in time. Existing identity assignment to Epic SER provider accounts remain intact.

To assign identities automatically, follow below steps:

- If you want identities to be assigned during the synchronization of Epic SER provider accounts, in the Designer, enable the configuration parameter **TargetSystem** | **Epic** | **SER** | **PersonAutoFullsync** and select the required mode.
- If you want identities to be assigned outside synchronization, in the Designer activate the TargetSystem | Epic | SER | PersonAutoDefault configuration parameter and select the required mode.
- 3. Use the **TargetSystem** | **Epic** | **SER** | **PersonAutoDisabledAccounts** configuration parameter to specify whether identities can be automatically assigned to disabled Epic SER provider accounts. Epic SER provider accounts do not obtain an account definition.
- 4. Assign an account definition to the client. Ensure that the manage level to be used is entered as the default manage level.
- 5. Define the search criteria for assigning identities to the client.

NOTE:

- The following applies for synchronization
 - Automatic identity assignment takes effect if Epic SER provider accounts are added or updated.
- The following applies outside synchronization
 - Automatic identity assignment takes effect if Epic SER provider accounts are added.
- Following a synchronization, identities are automatically created for the Epic SER provider accounts in the default installation. If an account definition for the client is not yet known at the time of synchronization, Epic SER provider accounts are linked with identities. However, account definitions are not assigned. The Epic SER provider accounts are therefore in a Linked state.

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

To select Epic SER provider accounts through account definitions

- 1. Create an account definition.
- 2. Assign an account definition to the client.
- 3. Assign the account definition and manage level to Epic SER provider accounts in linked status.



- a. a. In **One Identity Manager**, select **Epic health care | SER providers |** Linked but not configured | <Client>.
- b. Select Assign account definition to linked accounts.

For detailed information about assigning identities automatically, see One Identity Manager Target System Base Module Administration Guide.

Related Topics

- Creating Account Definitions Master data for an Account Definition
- Assigning account definition to identities
- Editing search criteria for automatic identity assignment

Editing search criteria for automatic identity assignment

The criteria for identity assignment are defined for the client. In this case, you specify which Epic SER provider account properties must match the identity's properties such that the identity can be assigned to the Epic SER provider 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 identity assignment column (AccountToPersonMatchingRule) in the EPCRoot table. Search criteria are evaluated when identities are automatically assigned to Epic SER provider accounts. Furthermore, you can create a suggestion list for assignments of identities to Epic SER provider accounts based on the search criteria and make the assignment directly.

NOTE:

- When the identities are assigned to Epic SER provider accounts on the basis of search criteria, Epic SER provider accounts are given the default manage level of the account definition entered in the Epic SER provider account's target system. You can customize Epic SER provider account properties depending on how the behavior of the manage level is defined. It is not recommended to make assignment to administrative Epic SER provider accounts based on search criteria. Use Change master data to assign identities to administrative user account for the respective Epic SER provider account.
- One Identity Manager supplies a default mapping for identity assignment. Only carry out the following steps when you want to customize the default mapping.

To specify criteria for identity assignment

- 1. Select **Epic health care** | **Clients**.
- 2. Select the client from the result list.
- 3. Select **Define search criteria for identity assignment** in the task view.
- 4. Specify which user account properties must match with which identity so that the identity is linked to the Epic SER provider account and save the changes.



Table 39: Standard search criteria for Epic SER provider accounts andcontacts

Applies to	Column for Identity	Column for Epic SER provider account
Epic SER provider accounts	FirstName	FirstName
	LastName	LastName
	MiddleName	MiddleName

Direct assignment of identities to Epic SER provider accounts based on a suggestion list

In **Assignments**, you can create a suggestion list for assignments of identities to Epic SER provider accounts based on the search criteria and make the assignment directly. Epic SER provider accounts are grouped in different views for this.

Table 40: Manual Assignment View

View	Description
Suggested assignments	This view lists all user accounts to which One Identity Manager can assign an identity. All identities are shown who were found using the search criteria and can be assigned.
Assigned user accounts	This view lists all user accounts to which an identity is assigned.
Without identity assignment	This view lists all user accounts to which no identity is assigned and for which no identity was found using the search criteria.

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

To apply search criteria to user accounts

1. 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.

To assign identities directly over a suggestion list

1. Click Suggested assignments.

a. Click **Select** for all user accounts to which you want to assign the suggested identities. Multi-select is possible.



- b. Click Assign selected.
- c. Confirm the security prompt with **Yes**.
- d. The identities determined using the search criteria are assigned to the selected user accounts.

– OR –

2. Click No identity assignment.

- a. Click **Select** identity for the user account to which you want to assign an identity. Select an identity from the menu.
- b. Click **Select** for all user accounts to which you want to assign the selected identities. Multi-select is possible.
- c. Click **Assign** selected.
- d. Confirm the security prompt with **Yes**.

The identities displayed in the Identity column are assigned to the selected user accounts.

To remove assignments

- 1. Click Assigned user accounts.
 - a. Click **Select** for all user accounts to which you want to delete the identiy assignment. Multi-select is possible.
 - b. Click **Remove selected**.
 - c. Confirm the security prompt with **Yes**.

The assigned identities are removed from the selected user accounts.

For detailed information about defining search criteria, see the One Identity Manager Target System Base Module Administration Guide.

Related Topics

Automatic assignments of persons to Epic SER provider accounts

Provisioning Epic SER provider onto Epic

Pre-requisites

The following are the pre-requisites for provisioning Epic SER provider records into Epic.

- a. The CSV import directory configured while setting up the Synchronization project should contain the following sub directories.
 - **SERProviders** The Epic SER connector creates an intermediate Json file for each SER provider record that is updated and contains all the changes made.



This directory contains all these intermediate Json files.

- SERProviders\Output This directory contains the final Epic SER provider file that can be imported in to Epic using the Epic text console or using the ImportData Api
- **SERProviders\Archive** This directory is an archive directory and contains the intermediate Epic SER provider Json files that have been processed into the final Epic SER provider file
- SERProviders\Output\Provisioned If the ImportData Api is used to provision the Epic SER provider records, then this directory is needed. It would contain the Epic SER provider records provisioned into Epic using the ImportData Api
- **SERProviders\Output\Logs** If ImportData Api is used to provision the Epic SER provider records, then this directory is needed. It would contain the logs of Epic SER provider records provisioned into Epic.
- b. A new MPI ID called **OneIdentityID** needs to be configured in Epic. This MPI ID would be used when provisioning new Epic SER provider records into Epic.
- c. Access to the ImportData Api and GetImportDataLogs Api if the Api is used for provisioning.

Provisioning process overview

The PowerShell script EPCSERProviderJsonCreationScript.ps1 found under EPC module's PowerShellScript folder can be copied to a local folder on the workstation or job server and then be executed. This script contains the cmdlets and functions for provisioning Epic SER provider records.

Changes to Epic SER provider record are provisioned into Epic as a multi-step process. The Epic SER connector creates an intermediate Json file that contains all the Epic SER provider changes. Executing the Cmdlet New-ProviderFileForImportToEpic found in the script would create the final Epic SER Provider import File that can be imported into Epic. The cmdlet provides the option to either combine the changes in all the intermediate provider json files and create a single final import file for importing to Epic or create a separate import file for each Epic SER Provider record for importing into Epic. The final Epic SER provider import file can be imported into Epic using Epic text console or using the ImportData Api. Customers can contact Epic technical support in case they need assistance to import the Epic SER provider file into Epic.

IMPORTANT:

If ImportData Api is used for provisioning SER provider records in to Epic, then, the Epic import specification used during importing/provisioning the changes from One Identity Manager to the Epic target system requires each item/field to be imported with "Override" and not "Append".

PowerShell script EPCSERProviderJsonCreationScript.ps1 overview



The PowerShell script contains Cmdlets and functions that would create the final import file for importing into Epic. Here is the overview of the Cmdlets and functions.

- New-ProviderFileForImportToEpic Cmdlet: This Cmdlet parses the intermediate SER Provider Json files created by the Epic SER connector and creates the final file for import into Epic. The final SER file can optionally be imported into Epic using ImportData Api by invoking New-ImportSERRecordIntoEpic Cmdlet.
- **Test-New-ProviderFileForImportToEpic function**: This function can be used to test the New-ProviderFileForImportToEpic Cmdlet. To test the cmdlet, uncomment the section of the PowerShell code that calls the New-ProviderFileForImportToEpic Cmdlet in the function and then run with appropriate parameters.
- **New-ImportSERRecordIntoEpic Cmdlet**: This Cmdlet provisions the final Epic SER provider file created by New-ProviderFileForImportToEpic Cmdlet into Epic by invoking the ImportData API.
- **Test-New-ImportSERRecordIntoEpic function**: Test function for Test-New-ImportSERRecordIntoEpic. To test the cmdlet, uncomment the section of the PowerShell code that calls the New-ImportSERRecordIntoEpic Cmdlet in the function and then run with appropriate parameters.
- **ProviderFolderWatcher** function: This function watches for SER Provider Json files in the SER Provider folder and calls the New-ProviderFileForImportToEpic cmdlet to create the final file for import into Epic and optionally import the final SER file into Epic using ImportData Api by invoking New-ImportSERRecordIntoEpic Cmdlet.

PowerShell script EPCSERProviderJsonCreationScript.ps1 customization

- New-ProviderFileForImportToEpic Cmdlet: Ensure the parameters csvProviderFilePath and username & password (username & password to access the file path if secured by the same) are configured properly. If you want to automate provisioning of Epic SER provider records using Epic ImportData Api, supply the other needed parameters and the New-ImportSERRecordIntoEpic cmdlet would be invoked, and the Epic SER record would provisioned in to Epic.
- **ProviderFolderWatcher** function: Ensure the parameters csvProviderFilePath and (userName & password to access the file path if secured by the same) is configured properly. If you want to automate provisioning of SER provider records using Epic ImportData Api, supply the other needed parameters

Automating SER provider records import into Epic

The end-to-end process of provisioning Epic SER provider records into Epic can be automated. The following would be the steps to automate.

- a. In the PowerShell script that has been copied to the workstation or job server, uncomment the execution of ProviderFolderWatcher function (#ProviderFolderWatcher -csvProviderFilePath " -ErrorAction Continue)
- b. Create a windows task scheduler that would run the PowerShell script which would watch for new intermediate Epic SER provider Json files, create the final Epic SER



provider Json file and import it into Epic using the ImportData Api. Steps to setup the windows task scheduler:

- i. Open windows task scheduler. Create a new folder under the task scheduler library called One Identity.
- ii. Create a new task under One Identity folder that would execute the above PowerShell script.
- iii. Under the general tab, make sure to check the option "Run whether user is logged in or not"
- iv. Click on the Actions tab. Create a new Action. Set the following Action : Start a Program/Script: PowerShell. PowerShell.Arguments: -file: <Path to the PowerShell script>ExecutionPolicy Bypass.

NOTE: If the PowerShell script execution policy is restrictive, contact the IT administrator to reduce the strictness or sign the PowerShell script.

For information related to PowerShell execution policy refer to the article https://learn.microsoft.com/enus/powershell/module/microsoft.powershell.core/about/about_execution_ policies?view=powershell-7.4

For information related to signing PowerShell script refer to the article https://learn.microsoft.com/enus/powershell/module/microsoft.powershell.core/about/about_ signing?view=powershell-7.4.

- v. Under settings make sure "Allow task to be run on demand" is checked and "Do not start a new instance" is selected
- vi. Run the Task. Once the task is started, it keeps executing until it is stopped. The task watches the Epic SER folder for intermediate Epic SER provider Json files and creates final Epic SER provider Json file. If the script has been configured to use the ImportData Api for import into Epic, it would invoke the Api and provision the Epic SER provider record into Epic.

Disabling Epic SER provider account

The way you disable Epic SER provider accounts depends on how they are managed.

Scenario

The Epic SER provider account is linked to identities and is managed through account definitions. Epic SER provider accounts managed through account definitions are disabled when the identity is temporarily or permanently disabled. The behavior depends on the Epic SER provider account manage level. Accounts with the manage level Full managed manage level are disabled depending on the account definition settings. For Epic SER provider accounts with a manage level, configure the required behavior using the template in the EPCSERProvider.AccountDisabled column

Scenario



Epic SER provider accounts are linked to identities. No account definition is applied. Specify the desired behavior using the QER | Person | TemporaryDeactivation configuration parameter. If the configuration parameter is set, the identity's Epic SER provider accounts are locked if the identity is permanently or temporarily disabled. If the configuration parameter is not set, the identity's properties do not have any effect on the associated Epic SER provider accounts.

To disable the Epic SER provider account when the configuration parameter is disabled.

- 1. In **One Identity Manager**, select **Epic Healthcare | SER providers**.
- 2. Select the Epic SER provider account in the result list.
- 3. Select Change master data.
- 4. Enable **Account is disabled** on the **General** tab.
- 5. Save the changes.

Scenario: User accounts not linked to identities.

To disable an Epic SER provider account that is no longer linked to an identity.

- 1. In **One Identity Manager**, select **Epic Healthcare** | **SER providers**.
- 2. Select the Epic SER provider account in the result list.
- 3. Select Change master data.
- 4. Enable **Account is disabled** on the **General** tab.
- 5. Save the changes.

Related Topics

- Account definition for Epic EMP user account and Epic SER provider account
- Creating manage level Master data for manage level
- Deleting and restoring Epic SER provider accounts

For detailed information about disabling and deleting identities and user accounts, see the One Identity Manager Target System Base Module Administration Guide.

Deleting and restoring Epic SER provider accounts

NOTE: As long as an account definition for an identity is valid, the identity retains the Epic SER provider account that was created by it. If the assignment of an account definition is removed, the Epic SER provider account that was created from this account definition is deleted.



To delete an Epic SER provider account

- 1. Select Epic health care | SER providers.
- 2. Select the Epic SER provider account in the result list.
- 3. Delete the Epic SER provider account.
- 4. Confirm the security prompt with **Yes**.

To restore an Epic SER provider account

- 1. Select **Epic health care** | **SER providers**.
- 2. Select the Epic SER provider account in the result list.
- 3. Click **Undo delete** in the result list toolbar.

Configuring deferred deletion

By default, Epic SER provider accounts are finally deleted from the database after 30 days. The Epic SER provider accounts are initially disabled. You can re-enable the Epic SER provider accounts until deferred deletion is run. After deferred deletion is run, the Epic SER provider accounts are deleted from the database and cannot be restored anymore. The deferred deletion days can be configured to a value other than the default value, which is 30 days.



Epic SER Blueprints

Epic provides a standardized templates called Epic SER blueprints, which are a predefined set of configurations that could be used to build an Epic SER provider record. When an Epic SER blueprint is applied to an Epic SER provider record, the Epic SER blueprint configurations (Epic SER item values) are copied over to the Epic SER provider.

Epic SER blueprint report

The list of Epic SER blueprints along with the configurations (SER item values) can be exported from the target Epic system to a called file SERBlueprint.csv. This is called the Epic SER blueprint report. The generated report should be copied to the configured CSV import directory (The CSV import directory is configured when you created the synchronization project). Epic SER blueprints are loaded into the One Identity Manager by synchronization.

NOTE:

- For more information on how to automate Epic SER blueprint report generation and export them as CSV, contact Epic technical support.
- If the CSV import directory is a local folder on the job server and One Identity Manager workstation, make sure to copy the SER provider report to both the job server's and One Identity Manager workstation's local folder.
- If the CSV import directory is a network share, make sure it is accessible from both the job server and One Identity Manager workstation.

Format of the SERBlueprint.csv file

One Identity Manager requires the Epic SERblueprint.csv reports to be exported in the following format.

The first line in the report should be the SER Item Numbers with each field delimited by the pipe (|) symbol. The first column should be the blueprint Id and the second column should be the Name. The rest of the items could be in any order.

Starting from the second line the actual Epic SER blueprints need to be present with each field delimited by the pipe (|) symbol. For SER items that are multi-valued, they need to be separated by a comma (,).

IMPORTANT:



- If a field value contains pipe (|), the entire field value needs to be escaped properly with double quotes (")
- If a multivalued field value contains comma (,) the entire field value needs to be escaped properly with double quotes (")

NOTE:

• The EPC module's miscellaneous folder contains sample SER blueprint csv file for reference.

Editing an Epic SER blueprint

Epic SER blueprint is loaded into the One Identity Manager by synchronization. The CSV file allows you to

- Add new Epic SER blueprints.
- Update the SER blueprint item values.

To edit an Epic SER blueprint

- 1. In SERBlueprint.csv, modify the rows.
- 2. Run synchronization in One Identity Manger Synchronization Editor.
- 3. Epic SER blueprint data will be synchronized based on the operation performed on the SERBlueprint.csv.

Overview of Epic SER blueprint

Use this task to obtain an overview of the Epic SER blueprint.

To obtain an overview of an Epic SER blueprint

- 1. Select Epic health care | SER blueprints.
- 2. Select the Epic SER blueprint in the result list.
- 3. Select the task **Epic SER blueprint overview**.

The overview of Epic SER blueprint displays information for the Epic SER blueprint which includes display name, Epic SER blueprint ID and Epic connection to which Epic SER blueprint belongs.

Master data for Epic SER blueprint

Use this task to view the master data for an Epic SER blueprint.



To view master data of an Epic SER blueprint

- 1. Select **Epic health care | SER blueprints**.
- 2. Select the Epic SER blueprint in the result list.
- 3. Select the task **Epic SER blueprint master data**.

Table 41: Master data for Epic SER blueprint

Field	Description
Display name	Display name of the Epic SER item
Epic SER blueprint ID	Epic SER blueprint identifier from Epic target system.
Description	Epic SER blueprint description.

SER items for Epic SER blueprint

Use this task to view Epic SER items for the Epic SER blueprint.

To view Epic SER items of an Epic SER blueprint

- 1. Select Epic health care | SER blueprints.
- 2. Select the Epic SER blueprint in the result list.
- 3. Select the task **Epic SER blueprint SER items**.

The loaded form displays the list of Epic SER items corresponding to the selected Epic SER blueprint. It displays the Epic SER item name along with Epic SER item number and Epic SER item value.

Applying Epic SER blueprint to Epic SER provider

When an Epic SER blueprint is applied to an Epic SER provider, the Epic SER item values from the Epic SER blueprint are copied over to the corresponding Epic SER items on the Epic SER provider. The SER item values applied to the provider is governed by the configuration of **override items flag and SER blueprint preferred over SER template flag** on the Epic connection.

An Epic SER blueprint can be applied to the Epic SER provider in following two ways:

- Direct Application
- IT Operating Data



Direct Application

An Epic SER blueprint can be directly applied to an Epic SER provider either on creation or while updating the Epic SER provider.

To apply Epic SER blueprint directly to Epic SER provider

- 1. Select Epic health care | SER providers.
- 2. Select the Epic SER provider in the result list.
- 3. Select the task **Change master data**.
- 4. From **General** tab, select the Epic SER blueprint for the field **Applied SER** blueprint.
- 5. Click Save.

The selected Epic SER blueprint will populate all the corresponding Epic SER items.

NOTE: The overrideitems flag and SER blueprint preferred over SER template flag configured on the Epic connection governs how the SER provider's items values are overridden when a SER blueprint is applied to a SER provider.

Related topics

• General Master Data for Epic Connection

IT Operating Data

An Epic SER blueprint can be applied to an Epic SER provider through IT operating data.

Related topics

- Creating mapping rules for IT operating data
- General master data for an Epic SER provider account

Deleting an Epic SER blueprint

Use this feature to delete Epic SER blueprint.



To delete an Epic SER blueprint

- 1. Select Epic health care | SER blueprint.
- 2. Select the Epic SER blueprint in the result list that you want to delete.
- 3. Select the delete option from the menu item.

NOTE: An Epic SER blueprint cannot be deleted if it is applied to one or more Epic SER providers.



Epic SER Template

Epic SER templates are custom templates which contain predefined set of configurations that could be used to build a SER provider record. When a SER template is applied to a SER provider record, the SER template configurations (SER item values) are copied over to the SER provider.

Epic SER template report

The list of Epic SER templates along with the configurations (SER item values) need to be prepared in a format described below. The name of the file should be SERTemplate.csv. This is called the Epic SER template report. The generated report should be copied to the configured CSV import directory (The CSV import directory is configured when you created the synchronization project). Epic SER templates are loaded into the One Identity Manager by synchronization.

NOTE:

- If the CSV import directory is a local folder on the job server and One Identity Manager workstation, make sure to copy the Epic SER provider report to both the job server's and One Identity Manager workstation's local folder.
- If the CSV import directory is a network share, make sure it is accessible from both the job server and One Identity Manager workstation.

Format of the SERTemplate.csv file

One Identity Manager requires the Epic SERTemplate.csv reports to be prepared in the following format.

The first line in the report should be the SER Item Numbers with each field delimited by the pipe (|) symbol. The first column should be the template Id and the second column should be the Name. The rest of the items could be in any order. Starting from the second line the actual Epic SER templates need to be present with each field delimited by the pipe (|) symbol. For SER items that are multi-valued, they need to be separated by a comma (,).

IMPORTANT:

- If a field value contains pipe (|), the entire field value needs to be escaped properly with double quotes (")
- If a multivalued field value contains comma (,) the entire field value needs to be escaped properly with double quotes (")

NOTE:



• The EPC module's miscellaneous folder contains sample Epic SER template csv file for reference.

Editing Epic SER template

Epic SER template is loaded into the One Identity Manager by synchronization. The CSV file allows you to

- Add new Epic SER templates.
- Update the Epic SER template item values.

To edit an Epic SER template

- 1. In SERTemplate.csv, modify the rows.
- 2. Run synchronization in One Identity Manger Synchronization Editor.
- 3. Epic SER template data will be synchronized based on the operation performed on the SERtemplate.csv.

Overview of Epic SER template

Use this task to obtain an overview of the Epic SER template.

To obtain an overview of an Epic SER template

- 1. Select Epic health care | SER templates.
- 2. Select the Epic SER template in the result list.
- 3. Select the task **Epic SER template overview**.

The overview of Epic SER template displays information for the Epic SER template which includes display name, Epic SER template ID and Epic connection to which Epic SER template belongs.

Master data for Epic SER template

Use this task to view the master data for an Epic SER template.

To view master data of an Epic SER template

- 1. Select Epic health care | SER template.
- 2. Select the Epic SER template in the result list.
- 3. Select the task Epic SER template master data.



141

Field	Description
Display name	Display name of the Epic SER item
Epic SER template ID	Epic SER template identifier from Epic target system.
Description	Epic SER template description.

Table 42: Master data for Epic SER template

SER items for Epic SER template

Use this task to view Epic SER items for the Epic SER template.

To view Epic SER items of an Epic SER template

- 1. Select **Epic health care** | **SER template**.
- 2. Select the Epic SER template in the result list.
- 3. Select the task **Epic SER template SER items**.

The loaded form displays the list of Epic SER items corresponding to the selected Epic SER template. It displays the Epic SER item name along with Epic SER item number and Epic SER item value.

Applying Epic SER template to Epic SER provider

When an Epic SER template is applied to an Epic SER provider, the Epic SER item values from the Epic SER template are copied over to the corresponding Epic SER items on the Epic SER provider. The SER item values applied to the provider is governed by the configuration of **override items flag and SER blueprint preferred over SER template flag** on the Epic connection.

An Epic SER template can be applied to the Epic SER provider in following two ways:

- Direct Application
- IT Operating Data



Direct Application

An Epic SER template can be directly applied to an Epic SER provider either on creation or while updating the Epic SER provider.

To apply Epic SER template directly to Epic SER provider

- 1. Select Epic health care | SER providers.
- 2. Select the Epic SER provider in the result list.
- 3. Select the task **Change master data**.
- 4. From **General** tab, select the Epic SER template from the field **Applied SER template**.
- 5. Click Save.

The selected Epic SER template will populate all the corresponding Epic SER items.

NOTE:

• The **overrideitems flag** and **SER blueprint preferred over SER template flag** configured on the Epic connection governs how the SER provider's items values are overridden when a SER blueprint is applied to a SER provider.

Related Topics

General Master Data for Epic Connection

IT Operating Data

An Epic SER template can be applied to an Epic SER provider through IT operating data.

Related Topics

- Creating mapping rules for IT operating data
- General master data for an Epic SER provider account

Deleting Epic SER template

Use this feature to delete Epic SER template.

To delete an Epic SER template

- Select Epic health care | SER template.
- Select the Epic SER template in the result list that you want to delete.



EPC 9.2.1 Administration Guide for Connecting to Epic Target System

• Select the delete option from the menu item.

NOTE: An Epic SER template cannot be deleted if it is applied to one or more Epic SER providers.



Security Matrix

Entitlements in Epic, including the Epic EMP template and Epic EMP Subtemplates, are assigned to the Epic users based on one or more attributes associated with the Identity. Security matrix is a table that consists of entitlements grouped with one or more attributes of the Identity, which mostly consist of organizational attributes.

One Identity Manager out of the box provides capabilities to assign these entitlements, including the Epic EMP templates and Epic EMP Subtemplates, to organizations or business roles. This allows all user accounts linked to person Identities that belong to these organizations to automatically inherit the respective entitlements. Maintenance of such assignments becomes difficult while dealing with a combination of business roles as dynamic groups. Several dynamic group calculations also degrade the overall performance of assignments. In this scenario, configuring entitlements for the combination of One Identity Manager organizations and business roles in the security matrix makes the process easier to maintain and performance effective.

Security Matrix for Epic EMP template

Security matrix for Epic EMP template is a table that consists of Epic EMP template grouped with one or more attributes of the Identity, which mostly consist of organizational attributes.

Configuring SecurityMatrix for Epic EMP template

A mapping must be established between the Person Identity attributes and the Epic EMP template security matrix attributes to group the Epic EMP template with one or more attributes of the Identity.

This section describes the steps to define such mappings in One Identity Manager.



To define the column mappings between the Person Identity and the Security Matrix for Epic EMP template

- 1. Open **One Identity Manager** and select the appropriate Epic connection that has been created.
- 2. In the **Tasks** section, select the link **Assign Epic EMP template Matrix property mapping**.
- 3. Select the **Person** column and corresponding **Security Matrix** column from the respective drop downs for the mapping.
- 4. Save the mappings.

NOTE: The Epic EMP template security matrix has a maximum of ten Properties that can be mapped with the Person Identity. The security matrix will always apply an AND operation on the combination of properties when assigning the respective Epic EMP template.

Importing SecurityMatrix for Epic EMP template

Epic EMP templates can be assigned automatically to an Epic user account through **SecurityMatrix**. To achieve this, **SeurityMatrix** must be imported into **One Identity Manager**. On subsequent changes to the security matrix, the updates to the matrix must be imported so that the Epic user account to **Epic EMP template** assignments are updated.

You can import the SeurityMatrix using these methods

- Importing the matrix using CSV import Synchronization Project
- Importing the matrix directly into One Identity Manager Table

Importing the matrix using CSV import Synchronization Project

The **SecurityMatrix** for **Epic EMP template** can be imported into **One Identity Manager** using a **SecurityMatrix csv file**.

The csv file is imported into **One Identity Manager** using a CSV synchronization project.

Setup Security Matrix Synchronization Project

This project provides a CSV synchronization workflow which imports the **SecurityMatrixEMPTemplate** into **One Identity Manager**.

Epic EMP template assignments are setup in the file named **SecurityMatrixEMPTemplate.csv**



SecurityMatrixEMPTemplate CSV file configuration

The names of the columns in this file are

- Property01
- Property02
- Property03
- Property04
- Property05
- Property06
- Property07
- Property08
- Property09
- Property10
- EMPTemplateID

Details about the values in the columns in the EMPTemplate csv file

Enter the values mentioned in the following table in the corresponding columns of the \mbox{csv} file.

Table 43: Columns in the csv file

Columns in the csv file	Values
Property01 to Property10	Full name of the One Identity Manager Organization or Business role.
	NOTE: Property01 to Property10 represent the different possible One Identity Manager Built-in Organization or Business role or Identity Attributes like Title.
	Out of box only one business role assignment is supported that is mapped to the value entered in UID_Org in the person table.
EMP Template	EMP Template External ID
	NOTE: Property01 to Property10 represent the different possible One Identity Manager Built-in Organization or Business role or Identity Attributes like Title.

After the Security Matrix CSV files has been setup, the synchronization project can be created using the procedure below.



To create the synchronization project

- 1. In the **Synchronization Editor**, create a new Synchronization Project using the **CSV connector**.
- 2. Select the **SecurityMatrixEMPTemplate csv** file.

NOTE: A sample CSV file can be found in the **Miscellaneous** folder under the EPC module.

- 3. Set the value of the number of lines in header to 1.
- 4. Select the **EPCSecurityMatrix** as the template and create the csv project.
- 5. Update the project variable **UID_EPCROOT** with the **UID** of the **EPCRoot** object that has been created for Epic Synchronization project.
- 6. The value can be obtained from the **One Identity Manager Object Browser** by navigating to the **EPCRoot** table.
- 7. Save changes to database

Importing the matrix directly into One Identity Manager Table

The **SecurityMatrix** for **Epic EMP template** can be populated into the

EPCMatrixEMPTemplate table using a custom solution implemented in the customer environment.

There could be scenarios where the customer would prefer alternate sources for security matrix import other than a csv file, for example a direct interface from the Epic Database or a custom application based on their implementation.

Viewing the Epic EMP template Security Matrix

The **Security Matrix** for **Epic EMP template** once imported could be viewed using **One Identity Manager**.

To view the imported matrix

- 1. In **One Identity Manager** and navigate to the **Epic connection** that was created.
- 2. In the Task menu, click View Security Matrix for Epic EMP template.

A grid is displayed with the **Epic EMP template** and the corresponding **Property values** for Identity.



Assignment of the Epic EMP template to Epic EMP user accounts

The Epic EMP user account can inherit Epic EMP templates from security matrix based on the properties mapped between the Identity and the matrix, provided that the **Is Template Update Disabled** flag for the user account is set to false.

The assignments inherited by the user from the Security Matrix has an **XOrigin** set to **Matrix**.

The User account **Epic EMP template** assignments are updated in the following cases

- 1. An initial import of the data into the **EPCMatrixEMPTemplate** table.
- 2. Subsequent updated to the Security Matrix for **Epic EMP templates**.
- 3. Changes to the property values of the Identity linked to the user account.
- 4. Change of the Identity liked to the Epic EMP user account.

NOTE: Assignment of applied and default **Epic EMP templates** by Security Matrix is disabled by default. To enable it the configuration parameter **AutoSetAp-pliedEMPTemplate** must be enabled.

Security Matrix for Epic EMP subtemplate

Security matrix for Epic EMP subtemplate is a table that consists of Epic EMP subtemplates grouped with one or more attributes of the Identity, which mostly consist of organizational attributes.

Configuring SecurityMatrix for Epic EMP subtemplate

A mapping must be established between the Person Identity attributes and the Epic EMP subtemplate security matrix attributes, in order to group the Epic EMP subtemplate with one or more attributes of the Identity.

This section describes the steps to define such mappings in One Identity Manager.

To define the column mappings between the Person Identity and the Security Matrix for Epic EMP subtemplate, follow the below mentioned steps:

1. In **One Identity Manager**, select the appropriate Epic connection that has been created.



- 2. In the **Tasks** section, select the link **Assign Epic EMP subtemplate Matrix property mapping**.
- 3. Select the **Person** column and corresponding **Security Matrix** column from the respective drop downs for the mapping.
- 4. Save the mappings.

NOTE: The Epic EMP subtemplate security matrix has a maximum of ten Properties that can be mapped with the Person Identity. The security matrix will always apply.

Importing SecurityMatrix for Epic EMP subtemplate

Epic EMP subtemplates can be assigned automatically to an Epic EMP user account via SecurityMatrix.

In order to achieve this, SeurityMatrix must be imported into One Identity Manager.

On subsequent changes to the security matrix the updates to the matrix must be imported in order to have the Epic user account to SubTemplate assignments updated.

The SeurityMatrix can be imported using these methods

- Importing the matrix using CSV import Synchronization Project
- Importing the matrix directly into One Identity Manager Table

Importing the matrix using CSV import Synchronization Project

The **SecurityMatrix** for **SubTemplate** can be imported into **OneIdentity Manager** using a **SecurityMatrix csv** file.

The csv file is imported into **One Identity Manager** using a CSV synchronization project.

Setup Security Matrix Synchronization Project

This project provides a CSV synchronization workflow which imports the **SecurityMatrixSubTemplate** into **One Identity Manager**.

Epic EMP subtemplate assignments are setup in the file named **SecurityMatrixSubTemplate.csv**.

SecurityMatrixSubTemplate CSV file configuration

The names of the columns in this file are



- Property01
- Property02
- Property03
- Property04
- Property05
- Property06
- Property07
- Property08
- Property09
- Property10
- SubTemplateID
- SubTemplateNumber

Details about the values in the columns in the SubTemplate csv file.

Enter the values mentioned in the following table in the corresponding columns of the $\ensuremath{\mathsf{csv}}$ file

Columns in the csv file	Values
Property01 to Property10	Full name of the One Identity Manager Organization or Business role
	NOTE: Property01 to Property10 represent the different possible One Identity Manager Built-in Organization or Business role or Identity Attributes like Title.
	Out of box only one business role assignment is supported that is mapped to the value entered in UID_Org in the person table.
SubTemplateID	Epic EMP Subtemplates External ID
SubTemplateNumber	The SubTemplateNumber and the SubTemplateID form a unique identifier for the Property Columns specified.

Table 44: Columns in the csv file

After the Security Matrix CSV files has been setup, the synchronization project can be created using the below steps.

To create a synchronization project

1. In the **Synchronization Editor**, create a new Synchronization Project using the CSV connector.



2. Select the **SecurityMatrixSubTemplate csv** file.

NOTE: A sample CSV file can be found in the Miscellaneous folder under the EPC module

- 3. Set the value of the number of lines in header to 1.
- 4. Select the **EPCSecurityMatrix** as the template and create the csv project.
- 5. Update the project variable **UID_EPCROOT** with the **UID** of the **EPCRoot** object that has been created for Epic Synchronization project.
- 6. The value can be obtained from the **One Identity Manager Object Browser** by navigating to the **EPCRoot** table.
- 7. Save changes to database.

Importing the matrix directly into One Identity Manager Table

The **SecurityMatrix** for Epic EMP subtemplate can be populated into the **EPCMatrixSubTemplate** table using a custom solution implemented in the customer environment.

There could be scenarios where the customer would prefer alternate sources for security matrix import other than a csv file, for example a direct interface from the Epic Database or a custom application based on their implementation.

Viewing the Epic EMP Subtemplate Security Matrix

The Security Matrix for **Epic EMP subtemplate** once imported could be viewed using **One Identity Manager.**

To view the imported matrix

- 1. In **One Identity Manager** and navigate to Epic connection which was created.
- 2. In the Task menu click on View Epic Security Matrix for Epic EMP subtemplate.

A grid would be displayed with the **Epic EMP subtemplate** and the corresponding Property values for Identity.



Assignment of the Epic EMP subtemplate to Epic EMP user accounts

The Epic EMP user account can inherit **Epic EMP Subtemplates** from security matrix based on the properties mapped between the Identity and the matrix, provided that the **Is Template Update Disabled** flag for the user account is set to false.

The assignments inherited by the user from the Security Matrix has an **XOrigin** set to **Matrix**.

The User account **Epic EMP Subtemplate** assignments are updated in the following cases:

- 1. An initial import of the data into the **EPCMatrixSubTemplate** table.
- 2. Subsequent updated to the Security Matrix for **Epic EMP Subtemplate**.
- 3. Changes to the property values of the Identity linked to the Epic EMP user account.
- 4. Change of the Identity linked to the Epic EMP user account.

Customizing Security Matrix

The security matrix CSV project has two mappings. The **EPCMatrixEMPTemplate** mapping synchronizes the Epic EMP template assignment for Epic EMP users and **EPCMatrixSubtemplate** synchronizes the Epic EMP subtemplate assignment for the Epic EMP user.

The virtual property vrtKey defined on the OneIM side and target system side, does the object matching. The vrtKey is defined as the combination of 10 Properties (script vrtProperties on the OneIM end) along with the EpcRoot.

On the left side of the mapping (OneIM side), virtual script property for each property has been defined. For example, we have a virtual property *vrtProperty01* defined for *Property01* and so on. The Properties (*Property01* to *Property10*) can be mapped to match the Identity's OneIM Org or Identity's simple field (For example - Job Title). Property column mapping is defined in the **EPCMatrixColumnEMPTemplate** and **EPCMatrixColumnSubtemplate** tables. The virtual script properties (*vrtProperty01* to *vrtProperty10*) by default resolves Orgs based on the Org's "Full Path", if the corresponding

vrtProperty10) by default resolves Orgs based on the Org's "Full Path", if the corresponding Property has been mapped to an Org and resolves to the field value in case of simple properties.

If resolution of Orgs based on Org's "Full Path" does not suffice the requirement, customers can resolve it differently. The read and write script of all vrtProperties can be updated according to requirements.



Appendix A

Configuration parameters for managing Epic health care system

The following configuration parameters are additionally available in One Identity Manager after the module has been installed.

Table 45: Additional configuration parameters available in One Identity Manager	
after the module has been installed	

Configuration parameter	Description
TargetSystem Epic Healthcare	Preprocessor relevant configuration parameter for controlling the database model components for the administration of the target system Epic Healthcare.
	If the parameter is set, the target system components are available. Changes to this parameter require the database to be recompiled.
TargetSystem EPC Accounts	This configuration parameter permits config- uration of Epic EMP user account data.
TargetSystem EPC Accounts InitialRandomPassword	This configuration parameter specifies whether a random generated password is issued when a new Epic EMP user account is added.
	The password must contain at least those character sets that are defined in the password policy.
TargetSystem EPC Accounts InitialRandomPassword SendTo	This configuration parameter specifies to which identity the email with the randomly generated password should be sent (manager cost center/department/location/role, identity's manager or XUserInserted).
	If no recipient can be found, the password is sent to the address stored in the TargetSystem



154

	EPC DefaultAddress configuration parameter.
TargetSystem EPC Accounts InitialRandomPassword SendTo MailTemplateAccountName	This configuration parameter contains the name of the mail template sent to provide Epic EMP users with the login data for their Epic EMP user accounts.
	The Identity - new Epic EMP user account created mail template is used.
TargetSystem EPC Accounts InitialRandomPassword SendTo MailTemplatePassword	This configuration parameter contains the name of the mail template sent to provide Epic EMP users with information about their initial password.
	The Identity - initial password for new Epic EMP user account mail template is used.
TargetSystem EPC Accounts MailTemplateDefaultValues	This configuration parameter contains the mail template used to send notifications if default IT operating data mapping values are used for automatically creating an Epic EMP user account.
	The Identity - new Epic EMP user account with default properties created mail template is used.
TargetSystem EPC DefaultAddress	The configuration parameter contains the recip- ient's default email address for sending notific- ations about actions in the target system.
TargetSystem EPC PersonAutoDe- fault	This configuration parameter specifies the mode for automatic identity assignment for Epic EMP user accounts added to the database outside synchronization.
TargetSystem EPC PersonAutoDis- abledAccounts	This configuration parameter specifies whether identities are automatically assigned to disable Epic EMP user accounts. Epic EMP user accounts do not obtain an account definition.
TargetSystem EPC PersonAutoFullSync	This configuration parameter specifies the mode for automatic identity assignment for Epic EMP user accounts added to or updated in the database through synchronization.
TargetSystem EPC PersonEx- cludeList	List of all Epic EMP user accounts for which automatic identity assignment should not take place.
	Names are listed in a pipe () delimited list that is handled as a regular search pattern.



	Example: ADMINISTRATOR
TargetSystem EPC SER	Preprocessor relevant configuration parameter for controlling the database model components for the administration of the Epic SER provider accounts for target system Epic Healthcare.
	If the parameter is set, the target system components with respect to Epic SER provider accounts are available. Changes to this parameter require the database to be recompiled.
TargetSystem EPC SER Accounts	This configuration parameter permits configuration of Epic SER provider account data.
TargetSystem EPC SER Accounts InitialRandomPassword	This configuration parameter specifies whether a random generated password is issued when a new Epic SER provider account is added.
	The password must contain at least those character sets that are defined in the password policy.
TargetSystem EPC SER Accounts InitialRandomPassword SendTo	This configuration parameter specifies to which identity the email with the randomly generated password should be sent (manager costcenter/department/location/role, identity's manager or XUserInserted).
	If no recipient can be found, the password is sent to the address stored in the TargetSystem EPC SER DefaultAddress configuration parameter.
TargetSystem EPC SER Accounts InitialRandomPassword SendTo MailTemplateAccountName	This configuration parameter contains the name of the mail template sent to provide users with the login data for their Epic SER provider accounts.
	The Identity - new Epic SER provider account created mail template is used.
TargetSystem EPC SER Accounts InitialRandomPassword SendTo MailTemplatePassword	This configuration parameter contains the name of the mail template sent to provide users with information about their initial password.
	The Identity - initial password for new Epic SER provider account mail template is used.
TargetSystem EPC SER Accounts MailTemplateDefaultValues	This configuration parameter contains the mail template used to send notifications if default IT operating data mapping values are used for



	automatically creating an Epic SER provider account. The Identity - new Epic SER provider account with default properties created mail template is used.
TargetSystem EPC SER DefaultAddress	The configuration parameter contains the recipient's default email address for sending notifications about actions in the target system.
TargetSystem EPC SER PersonAutoDefault	This configuration parameter specifies the mode for automatic identity assignment for Epic SER provider accounts added to the database outside synchronization.
TargetSystem EPC SER PersonAutoDisabledAccounts	This configuration parameter specifies whether identities are automatically assigned to disable Epic SER provider accounts. Epic SER provider accounts do not obtain an account definition.
TargetSystem EPC SER PersonAutoFullSync	This configuration parameter specifies the mode for automatic identity assignment for Epic SER provider accounts added to or updated in the database through synchronization.
TargetSystem EPC SER	List of all Epic SER provider accounts for which
PersonExcludeList	automatic identity assignment should not take place.
PersonExcludeList	place. Names are listed in a pipe () delimited list that is handled as a regular search pattern.
PersonExcludeList TargetSytem EPC SubTem- plateDefaultPriority	place. Names are listed in a pipe () delimited list that
TargetSytem EPC SubTem-	 place. Names are listed in a pipe () delimited list that is handled as a regular search pattern. Example: ADMINISTRATOR This configuration parameter specifies the SubTemplate default priority to be assigned for direct and base tree assignments. the default
TargetSytem EPC SubTem- plateDefaultPriority TargetSystem EPC SubTem-	 place. Names are listed in a pipe () delimited list that is handled as a regular search pattern. Example: ADMINISTRATOR This configuration parameter specifies the SubTemplate default priority to be assigned for direct and base tree assignments. the default value is set to 4 and can be updated. This parameter specifies the Epic Sub template
TargetSytem EPC SubTem- plateDefaultPriority TargetSystem EPC SubTem-	 place. Names are listed in a pipe () delimited list that is handled as a regular search pattern. Example: ADMINISTRATOR This configuration parameter specifies the SubTemplate default priority to be assigned for direct and base tree assignments. the default value is set to 4 and can be updated. This parameter specifies the Epic Sub template default priority for SecurityMatrix assignments.



TargetSystem | EPC | Accounts | NotRequirePassword This configuration parameter determines whether a password is generated for the user. If this configuration parameter is set to 1 then no password is generated for the user. If this configuration parameter is not set to 1 and the Initial Random Password configuration parameter is enabled, then a password is generated for the user.

The default value of this configuration parameter is set to 1.



Default project template for Epic

A default project template ensures that all required information is added in One Identity Manager. This includes mappings, workflows, and the synchronization base object. If you do not use a default project template, you must declare the synchronization base object in **One Identity Manager**.

Use a default project template for setting up the synchronization project initially. For custom implementations, you can extend the synchronization project with the **Synchronization Editor**.

One Identity Manager accesses the Epic healthcare target system through a web service exposed by Epic.

Description

The various **One Identity Manager** tables that is used for mapping

Table in the One Identity Manager

schema Description	
EPCEMPTemplate	EMPTemplate details
EPCSubTemplate	SubTemplate details
EPCUser	An EPC User details
EPCUserHasEMPTemplate	EMPTemplate assigned to an EPCUser
ECPUserHasSubTemplate	SubTemplate assigned to an EPCUser
EPCUserIdentityID	User IdentityID assigned to an EPCUser
EPCUserExternalID	External Identifiers assigned to an EPCUser
EPCUserManager	EPCUserManager
EPCUser Demographics	Demographics data assigned to an EPCUser
EPCSERProvider	Epic SER provider details
EPCSERBlueprint	Epic SER blueprint details
EPCSERTemplate	Epic SER template details

Table 46: One Identity Manager schema tables for Epic Health care



EPCSERBlueprintHasSERItems	Epic SER Items in Epic SER blueprint
EPCSERTemplateHasSERItems	Epic SER Items in Epic SER template
EPCSERItem	Epic SER Item details



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 and other inquiries, such as licensing, support, and renewals, visit https://www.oneidentity.com/company/contact-us.aspx.

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

