CAMEO ENTERPRISE
DATA WAREHOUSE

18.2
user guide

No Magic, Inc.
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1. Purpose

The purpose of this user guide is to provide general information about Cameo Enterprise Data Warehouse to the users regarding the objectives, system architecture and design, and the features of Cameo Enterprise Data Warehouse. This user guide also covers the basic procedures for installing and running Cameo Enterprise Data Warehouse.

2. Getting Started

To start using Cameo Enterprise Data Warehouse Admin, you need to understand what Cameo Enterprise Data Warehouse (Cameo EDW) is and what it can do. This section aims to achieve two objectives: (i) to explain you Cameo EDW in a compact but thorough manner and (ii) to describe detailed instructions for installing, configuring, and running both the Cameo EDW server and admin.

2.1 Introducing Cameo Enterprise Data Warehouse

Cameo EDW is a new generation server that is designed to work with large amounts of data. The goal of Cameo EDW is to provide our clients with a modeling repository standard that can transparently scale from a single workstation to hundreds of servers. It enables multiple servers to interconnect and share resources that are accessible by clients from different sites working on a different or the same project.

Cameo EDW allows team members to collaborate on a project regardless of locations and data size. The Cameo EDW stores all projects in a single repository and allows several team members to open the same project on multiple workstations and manipulate it.

Architects, engineers, and modelers can work on the same project and merge the works of each team member effortlessly with version control. The Cameo EDW server stores large projects and allows team members to work on them concurrently (several members can download the same project). You can check out a project, open and edit it locally on your machine, save, and commit it to the server.

2.1.1 System Architecture and Design

The focus of architecture concepts and design principles of Cameo EDW is on the capability to create a highly scalable system and collaborative modeling environment. Scalability refers to the ability of Cameo EDW to support any number or type of internal or external users with larger volumes of data and applications. The purpose of scalability is to support potential growth of storage within the business without impacting on the performance. Cameo EDW is also dedicated to effectively integrate with MagicDraw by extending all of the capabilities of Teamwork Server to provide a collaborative modeling environment where multiple users across different platforms will be able to work on a model at the same time without concerns about data inconsistency and unavailability.

The Cameo EDW is a model repository with clustering support. It can be deployed as a single-node server (Figure 1) or as a multi-node cluster (Figure 2). A cluster is a group of servers working as a single consistent model repository. Clustering is transparent to the clients of the repository.
Compared with single node deployments, a cluster deployment has higher capacity, or improved reliability, or both. A cluster can either use replication to increase reliability and enable failover, or it can simply increase the storage and processing capacity of the cluster.

A cluster consists of multiple Cameo EDW servers connected through LAN, acting as a single repository. A server is a single computer which is part of a cluster and a client is a computer running, for example, MagicDraw, that accesses data in a repository, but is not part of the cluster.
2.1.2 Key Features

The following are the main features of Cameo EDW:

(i) Based on the EMF standard to support a wide and extensible range of modeling languages.
(ii) Built on top of a distributed database with proven big data capabilities and enterprise class robustness.
(iii) Supports clustering and failover clustering to ensure scalability, reliability, and performance.
(iv) A scalable model repository with collaboration support, with plug-in API for customized scalable extensions.
(v) Leverages grid processing power to simulate complex models.

The current release of Cameo EDW includes the following features:

(i) A symmetric distributed clustering support.
(ii) The capability of accommodating high volumes of concurrent usage. Users connected to a dead node are automatically reconnected to another node.
(iii) Online load balancing. When a user connects to a Cameo EDW repository, the server gives him or her a session on the server with the fewest connected users.
(iv) Technology Preview MagicDraw Integration:
   - Versioned storage of MagicDraw projects.
   - Simple lock-based collaboration support.

2.2 System Requirements

You need to install both Cameo EDW and Cassandra to run Cameo EDW. The following are the system requirements for your machine to install both Cameo EDW and Cassandra.

2.2.1 Cameo Enterprise Data Warehouse

Cameo EDW has been tested on a machine with the following specifications:

- Intel Xeon CPU E31230 @ 3.20GHz
- 16 GB RAM
- Linux (CentOS release 6.6 64-bit is recommended)
- Cassandra 2.0.11
- Oracle JDK 1.8.0_45
- Open ports 2552 and 2900 between servers in a cluster, and open port 3579 (default) to clients
- Static IP address for the node

2.3 Cameo EDW Server Installation

The current release of Cameo EDW supports two types of installation namely single-server installation and cluster installation, which will be explained in details in the following first two sections. You need to install Cassandra on your machine prior to installing Cameo EDW.

There are several options available for the deployment of Cameo EDW server. You can deploy it to a single server on a simple computer or to large clusters of servers on HPC (High Performance Computer). Different types of deployment scales have different impacts on the performance of Cameo EDW server.
Scaling out Cameo EDW by adding more servers into the clusters increases the storage capacity, extends the number of concurrent connected users without slowing down the system, and improves its performance in various ways such as read and write operations.

This release of Cameo EDW supports single server and cluster deployment only.

### 2.3.1 Single Server Installation

A single server or a single node can serve a limited number of users with a limited storage and limited performance. You need a static IP address for the server if you want to install Cameo EDW on a single server. You need to install Cassandra prior to installing Cameo EDW. This section provides two methods to install Cameo EDW on a single server: (i) by using a zip file and (ii) by using an installer file.

To install Cassandra:

1. Check which version of Java is installed by running the following command:

   ```
   $ java -version
   ```

2. Add a yum repository specification for the Datastax repository in `/etc/yum.repos.d`

   ```
   $ vi /etc/yum.repo.d/datastax.repo
   ```

   In this file, add the following lines for the Datastax repository:

   ```
   [datastax]
   name = DataStax Repo for Apache Cassandra
   baseurl = http://rpm.datastax.com/community
   enabled = 1
   gpgcheck = 0
   ```

3. Install the packages by using the following command line:

   ```
   $ sudo yum install dsc20-2.0.11-1cassandra20-2.0.11-1
   ```

4. Configure Cassandra:

   4.1 Locate the keys ‘- seeds’ and ‘listen_address:’ in the file in `/etc/cassandra/conf/cassandra.yaml` (they are at different locations in the file). If, for example, the node’s IP address was `10.1.1.123`, the following values would apply:

   ```
   - seeds: "10.1.1.123"
   ```

   ```
   **NOTE** When installing Cameo EDW on a single server, you will not see the option to install Administrator Console (Cameo EDW Admin) because the console will be included in the installation by default.
   ```

   **NOTE** Use Oracle JDK 1.8.0_45.
listen_address: 10.1.1.123

| NOTE | Cassandra nodes exchange information about one another using a mechanism called Gossip. A Seed is a node used as a Gossip contact point for information regarding ring topology. There must be one or more Seed elements for a working cluster. |

4.2 Use the following keys’ values to change the existing ones:

- read_request_timeout_in_ms: 60000
- write_request_timeout_in_ms: 60000
- thrift_framed_transport_size_in_mb: 100
- rpc_address:0.0.0.0

5. Verify the installation of Cassandra.

5.1 When installed as above, you can start Cassandra using the following command:

$ sudo service cassandra start

5.2 Issue the following command to verify that Cassandra is ready:

$ tail /var/log/cassandra/cassandra.log

5.3 Verify that it contains lines similar to the following:

INFO 15:51:58,644 Node/10.1.1.123 state jump to normal
INFO 15:51:58,650 Waiting for gossip to settle before accepting client requests...
INFO 15:52:06,650 No gossip backlog; proceeding

| NOTE | If you get an out of memory error when starting Cassandra, you need to increase the Java stack size. The instructions for increasing the stack size are given in step 1.4 in the section 2.6.1 Starting Server. |

6. Verify that Cassandra is running:

$ nodetool status

![Figure 3 -- Verifying Cassandra](image)

(i) To install Cameo EDW by unzipping the file to a directory.

1. Verify, with `java --version` that the active version of Java is Oracle JDK 1.8.0_45.
2. Next, open the server configuration file `<Cameo EDW installed folder>/cedw.ini` and edit the following line to use the node’s own IP address (see Figure 4 for example).
-Desi.cluster.seed-nodes=akka.tcp://CedwServer@10.1.2.3:2552

-startup
plugins/org.eclipse.equinox.launcher_1.3.0.v20140415-2008.jar
--launcher.library
plugins/org.eclipse.equinox.launcher.gtk.linux.x86_64_1.1.200.v20140603-1326
-vargs
-Xmx4096m
-Declipse.ignoreApp=true
-Desgi.noShutdown=true
-Desi.cluster.seed-nodes=akka.tcp://CedwServer@10.1.2.3:2552
-DdcxtfileRealm=off
-Ddcxt.console.ssh=40022
-Desi.system.config=configuration/application.conf
-Dlogback.configurationFile=configuration/logback.xml
-Desi.shiro.config=configuration/shiro.ini
-Djava.security.auth.login.config=configuration/equinox-console-auth.conf

Figure 4 -- Editing File cedw.ini

(ii) To install Cameo EDW by using the installer file:

1. Run the file cedw_installer.bin. The Introduction section will appear (Figure 5).

2. Press **Enter** to continue. The License Agreement section will appear.
3. Press **Enter** to go through the license agreement.
4. Enter ‘y’ to accept the license agreement. The server mode selection will appear (Figure 6).
5. Type 1 to install Cameo EDW on a single server.
6. Select a location to install Cameo EDW (the default install folder is the <user’s home>/CameoEDW). The Pre-Installation Summary section will appear.
7. Press Enter to continue.
8. Press Enter to start installing Cameo EDW. Once Cameo EDW has been successfully installed, the installation complete message will appear (Figure 7).

9. Press Enter to exit the installer.
Next with your administrator account, you can create other user accounts by using the Cameo EDW Admin. See 3.5.2 Creating a User for the instructions to add user accounts.

### 2.3.2 Cluster Installation

A single cluster represents multiple servers grouped together to work on the same data set. The number of server in the cluster is theoretically unlimited. You need to choose a seed node to install Cameo EDW on a cluster. The node can be any machine. You need to install Cassandra prior to installing Cameo EDW. This section provides two methods to install Cameo EDW on a cluster: (i) by using a zip file and (ii) by using an installer file.

To install Cassandra:

1. Check which version of Java is installed by running the following command:
   
   ```
   $ java -version
   ```

2. Add a yum repository specification for the Datastax repository in `/etc/yum.repos.d`.
   
   ```
   $ vi /etc/yum.repos.d/datastax.repo
   ```
   
   In this file, add the following lines for the Datastax repository:
   
   ```
   [datastax]
   name = DataStax Repo for Apache Cassandra
   baseurl = http://rpm.datastax.com/community
   enabled = 1
   gpgcheck = 0
   ```
   
3. Install the packages by using the following command line:
   
   ```
   $ sudo yum install dsc20-2.0.11_1_cassandra20-2.0.11-1
   ```

4. Configure Cassandra for each node in the cluster.
   
   4.1 Locate the keys `- seeds` and `listen_address:` in the file in `/etc/cassandra/conf/cassandra.yaml`. If the seed node was 10.1.1.123 and we were configuring the node 10.1.1.124, the following values would apply:
   
   ```
   - seeds: "10.1.1.123"
   listen_address: 10.1.1.124
   ```

   4.2 Use the following keys` values to change the existing ones:
   
   ```
   read_request_timeout_in_ms: 60000
   write_request_timeout_in_ms: 60000
   thrift_framed_transport_size_in_mb: 100
   rpc_address:0.0.0.0
   ```

   **NOTE** When installing Cameo EDW on a cluster, you may also select the option to install Administrator Console (Cameo EDW Admin).

   **NOTE** Use Oracle JDK 1.8.0_45 on all nodes.
5. Configure the firewall port access.
   If you have a firewall running on the nodes in your cluster, you must open up specific ports
   according to this document: http://docs.datastax.com/en/cassandra/2.0/cassandra/security/
   secureFireWall_r.html

6. Verify the installation of Cassandra.
   6.1 When installed as above, you can start Cassandra using the following command:
   
   $ sudo service cassandra start

   6.2 Issue the following command to verify that Cassandra is ready:
   
   $ tail /var/log/cassandra/cassandra.log

   6.3 Verify that it contains lines similar to the following:
   
   INFO 15:51:58,644 Node/10.1.1.123 state jump to normal
   INFO 15:51:58,650 Waiting for gossip to settle before accepting client requests...
   INFO 15:52:06,650 No gossip backlog; proceeding

7. To verify that Cassandra is set up correctly, start it on each node and issue the following
   command:
   
   $ nodetool status

   This should display the status of each node in the cluster. Each node should show the same
   result, that is, show the status of all other nodes (Figure 8).

   ![Figure 8 -- Verifying Cassandra Installation]

   **NOTE**
   
   - It may take a few minutes for the cluster to be properly initialized
     when first started.
   - Please make sure that the Cassandra service on the seed node is
     up and running before starting the Cassandra service on the other
     nodes.

(i) To install Cameo EDW by unzipping the file to a directory.

1. Verify, with `java --version` that the active version of Java is Oracle JDK 1.7.0_45.
2. In the file `<Cameo EDW installed folder>/cedw.ini` for each node, use the seed node's IP
   address instead of the node's own IP address:
-Desi.cluster.seed-nodes=akka.tcp://Ced-wServer@10.1.1.123:2552

-Desi.cluster.seed-nodes=akka.tcp://Ced-wServer@10.1.1.123:2552
-Desi.cluster.seed-nodes=akka.tcp://Ced-wServer@10.1.1.123:2552

(i) To install Cameo EDW by using the installer file:

1. Run the file cedw_installer.bin. The Introduction section will appear.
2. Press Enter to continue. The License Agreement section will appear.
3. Press Enter to go through the license agreement.
4. Enter “y” to accept the license agreement. The server mode selection will appear.
5. Type 2 to install Cameo EDW on a cluster (Figure 10).
6. Enter the server name or IP of the cluster seed node (Figure 10).
7. Type "y" if you want to install Administrator Console (Figure 10).
8. Select a location to install Cameo EDW (the default install folder is the <user’s home>/CameoEDW/). The Pre-Installation Summary section will appear.
9. Press Enter to continue.
10. Press Enter to start installing Cameo EDW. Once Cameo EDW has been successfully installed, the installation complete message will appear (Figure 11).
11. Press **Enter** to exit the installer.

Once you finish installing Cameo EDW, using your administrator account you can create user accounts through the Cameo EDW Admin. See 3.5.2 Creating a User for the instructions to add user accounts.

### 2.3.3 Uninstallation

This section provides two methods to uninstall Cameo EDW from both single server and cluster.

(i) To uninstall Cameo EDW:

1. Stop the server by pressing **Ctrl + C** in Linux console or close the terminal.
2. Delete the directory in which the Cameo EDW is installed.
3. Uninstall Cassandra using the following commands:

   ```bash
   $ service cassandra stop
   $ yum remove cassandra12-1.2.3
   ```

(ii) To uninstall Cameo EDW using the uninstaller file:

1. Run the file **Uninstall_CameoEDW.bin** (Figure 12).
2. Press **Enter** to continue. **Uninstall Options** will appear (Figure 13).
3. Select either (i) option 1 to remove all features and components or (ii) option 2 to remove specific features.

2.4 Running Cameo EDW Server as a Service

In order to run the Cameo EDW server as a service, you must take a number of extra steps in addition to normal installation. Before proceeding, it is important on both Linux and Windows that the server’s log configuration points to file location that is writeable. You can find the log config in the file `CameoEnterpriseDataWarehouse/configuration/logback.xml`. Next you need to edit the lines containing `<file>...</file>` so that it contains full (absolute) paths to the files where log entries should be written to.

2.4.1 On Linux

To run Cameo EDW server as a service on Linux:

1. Choose or create a user dedicated to running the server, for example, cedw.
2. Set the necessary environment variables in /etc/cedw/cedw-env:

CEDW_HOME=/home/admin/CameoEnterpriseDataWarehouse/
CEDW_OWNR=root
CEDW_LOCAL_IP=192.168.1.10
JAVA_HOME=/usr/java/jdk1.7.0_76/

<table>
<thead>
<tr>
<th>Environment Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDW_HOME</td>
<td>Points to the directory where Cameo EDW was installed.</td>
</tr>
<tr>
<td>CEDW_OWNR</td>
<td>The user account under which Cameo EDW will run.</td>
</tr>
<tr>
<td>CEDW_LOCAL_IP</td>
<td>The IP address on which Cameo EDW should accept connections.</td>
</tr>
<tr>
<td>JAVA_HOME</td>
<td>A directory containing a Java JDK or JRE.</td>
</tr>
</tbody>
</table>

3. Copy the service startup script into the init.d directory, for example:

```
# sudo cp /opt/cedw/scripts/linux/cedw-svc /etc/init.d
```

4. Start the service.

```
# sudo service cedw-svc start
```

To stop the service:

```
# sudo service cedw-svc stop
```

To uninstall the service:

```
# sudo rim /etc/init.d/cedw-svc
```

2.4.2 On Windows

To run the Cameo EDW server as a service on Windows:

1. Set the necessary environment variables in the shell that will execute the service installation script, where:
   - CEDW_HOME is the path that points to the directory where Cameo EDW was installed.
   - CEDW_OWNR is the user account under which Cameo EDW will run.
   - CEDW_LOCAL_IP is the IP address on which Cameo EDW should accept connections.
   - JAVA_HOME is a directory containing a Java JDK or JRE.
2. Run the service installation script, for example:
   
   `C:\CEDW\scripts\windows\installService.bat`

**NOTE**
It is best to run the script from a Command Prompt so that it will be possible to read any errors that may be reported.

3. Open the Windows Services panel.
4. Locate the Cameo EDW server, select it, and click **Start**. (As with normal startup, Cassandra must already be running.)

**NOTE**
On Windows, the values of the environment variables are evaluated only once, when the service is installed. Subsequent changes to these variables will not affect service startup. Therefore, if the values are modified and the service must use the new values, the service must be re-installed, that is uninstall it and then install it anew.

To stop the service:

1. Open the Windows Services panel.
2. Locate the Cameo EDW server, select it, and click **Stop**.

To uninstall the service:

- Run the service uninstall script:
  
  `C:\CEDW\scripts\windows\uninstallService.bat`

### 2.5 Cameo EDW Admin Installation

#### 2.5.1 Installation

If you install Cameo EDW from an installer file, in the case of a single server installation, the Cameo EDW Admin is automatically installed with the server. However, for a cluster installation, you can select to install it on any node of your choice. You only need to install it on one node.

Otherwise, you can install Cameo EDW Admin by unzipping the zip file to a directory.

#### 2.5.2 Configuration

You can open the Cameo EDW server configuration file, located in the directory where you unzipped the Cameo EDW install file, and configure the server’s environment parameters. Once you have installed Cameo EDW, you need to configure the system because all values in the configuration file are default values. By configuring the system, you can create user accounts to access the server.
The server will load the configuration file every time the server’s repository starts. Therefore, changes made to the configuration file will be applied once you restart the server.

| NOTE | The current release of Cameo EDW does not support GUI for configuring the server values. |

### 2.5.2.1 Setting Server Protocol

Cameo EDW Admin is a web server. You can select the protocol settings between http and https by configuring the parameter "protocol". To change the setting, search for the text "protocol =" and select either http or https as the valid value. For example, protocol = "https".

### 2.5.2.2 Setting Server Port

The default port of Cameo EDW Admin is 8111. You can change it by changing the value of the parameter "port". For example,

```
port = 8112.
```

### 2.5.2.3 Setting Cameo EDW Server IP(s)

By default, Cameo EDW Admin will connect to a Cameo EDW server on the same machine. However, you can configure it to connect to another Cameo EDW server by changing the value of the parameter "cedw-servers". If you want to connect to another server, search for the text "cedw-servers =" and change the value, for example, to

```
cedw-servers = ["10.1.1.123"].
```

If you set up Cameo EDW as a cluster of two or more servers, you can specify a list of values, for example,

```
cedw-servers = ["10.1.1.123", "10.1.1.124", "10.1.1.125"].
```

### 2.5.2.4 Starting and Stopping Cameo EDW Admin

You can use the following script to start Cameo EDW Admin. You can find the script in your Cameo EDW Admin installed folder.

```
$ cd <Cameo EDW Admin folder>
$ ./cedw_admin
```

Service will start in the foreground and log gratuitously to the console. To stop the server, press Ctrl + C or close the terminal to shut it down.

### 2.5.2.5 Accessing Cameo EDW Admin

You need a web browser to access the Cameo EDW Admin's user interface. If you do not change the default configuration, the IP of the machine on which you installed Cameo EDW Admin is 10.1.1.123. You can access the Cameo EDW Admin from https://10.1.1.123:8111. The default administrator’s username and password is both Administrator.

---

NOTE: The current release of Cameo EDW does not support GUI for configuring the server values.
2.6 Server Management

2.6.1 Starting Server

You must start and run Cameo EDW properly in order to connect your client to the server and work on your project. You need to start Cassandra first before you start the server.

To start the server:

1. Start Cassandra (Figure 14).
   1.1 You can start Cassandra using the following command:

   $ service cassandra start

   ![Figure 14 -- Starting Cassandra](image)

   Figure 14 -- Starting Cassandra

   1.2 Issue the following command to verify that Cassandra is ready:

   $ tail /var/log/cassandra/cassandra.log

   1.3 Verify that it contains a line similar to the following:

   INFO 16:12:17,002 Startup completed! Now serving reads.

1.4 If you get an out of memory error when starting Cassandra (Figure 15), you need to open the file /etc/cassandra/conf/cassandra-env.sh and increase the Java stack size from JVM_OPTS="$JVM_OPTS -Xss180k" to JVM_OPTS="$JVM_OPTS -Xss228k" (Figure 16).

   ![Figure 15 -- Out of Memory Error when Starting Cassandra](image)

   Figure 15 -- Out of Memory Error when Starting Cassandra

   ![Figure 16 -- Increasing Java Stack Size](image)

   Figure 16 -- Increasing Java Stack Size
2. Start Cameo EDW as a foreground process. You can start Cameo EDW using the following `cedw` script in your Cameo EDW installed folder:

```
$ cd <Cameo EDW installed folder>
$ ./cedw
```

Service will start in the foreground and log gratuitously to the console (Figure 17).

![Figure 17 -- Service Starts](image)

2.6.2 Stopping Server

Stopping the Cameo EDW server will cause any other users or clients’ sessions to become unresponsive and therefore, they can no longer access the server and perform all operations such as check out projects, commit and update changes.

To stop the server either:

- Press `Ctrl + C` in Linux console or close the terminal to shut the server down.

2.7 License Management

This section explains everything you need to know to activate and/or update the license required to access and use the features of the Cameo EDW system. Upon installing Cameo EDW on either a single or cluster server, you need to first install a FLEXnet License Server before activating the Cameo EDW license. Cameo EDW uses FLEXnet License server to protect its licenses and help manage the number of Cameo EDW licenses used by concurrent clients. You need to import a floating license key of Cameo EDW to FLEXnet License Server before you can activate it from the Cameo EDW Admin.

2.7.1 Activating a Cameo EDW License

Upon a successful installation, only the administrator account is available and required for you to activate the Cameo EDW license for the first time. When you log in to the Cameo EDW system for the first time, it is necessary that you accept the license agreement before you can select and activate your license on the license activation page. The license activation page will also open if your license expires.

**NOTE**
- You can only activate a Cameo EDW license once per session.
- An administrator account is required only for first time license activation. In subsequent license updates, any user who has been assigned a server administrator role can activate the Cameo EDW license through the Cameo EDW Admin.
The license activation page prompts you to specify the address of FLEXnet License Server where you store your license(s). If you do not specify any port, 1101 will be the default port. When entering the port, you need to use quotation marks at the beginning and end of the server’s address. If you enter a wrong address, an error message will open for you to report the problem.

To activate the Cameo EDW system with a floating license:

1. Start the Cameo EDW server. Make sure that there is no master node in the cluster, FLEXnet License Server has been installed, and you have imported a floating license into it.
2. Log in to the Cameo EDW Admin with your server administrator account. The License Agreement dialog will open.

3. Click I Agree. The Cameo EDW license activation page will open.
Your CEDW needs to be activated

Your CEDW is unavailable now. Please make sure the license key is available for use or it is not expired. Before activating the CEDW, you would rather need to do the following steps:
1. Install the FLEXnet license server.
2. Import the CEDW license key to the FLEXnet license server.
3. Specify the license server address and port via below fields.
4. Select the license edition.

4. Enter the FLEXnet License Server address and port number in the License Server text box.
5. Click the Show Licenses button. A table that contains information about all licenses that are available on the license server including the version number and expiration date will appear at the lower part of the page.
6. Select the button of a floating license that you want to use from the table.
7. Click the Use License button. A dialog will open to inform you that the license key has been successfully applied.
8. Click **OK**. You will be directed to the first page of Cameo EDW Admin (the first page that opens after the license has been applied varies according to your role).

Once you have applied the license, the Cameo EDW Admin will refresh the license information for you and it will contain the following details (Figure 22).

![Figure 22 -- Applied License Information](image)

**Figure 21 -- The Cameo EDW License has been Applied**

**Figure 22 -- Applied License Information**
Whenever you connect to FLEXnet License Server and retrieve (lease) a license, the number of available licenses will decrease. If all available licenses from the server are leased, the next client who wants to obtain a license must wait until one of the other client users return the license, then the license count will be increased and available for lease again.

If your FLEXnet License Server is down, the server capacity shall be set to zero. Only one connection is allowed at that time. All currently active users can continue working but they cannot log in again once they log out for as there is no user can log into the server at that time. The server administrator can log into the Cameo EDW Admin to select a new license server.

You can see information about your current license on the Settings page of the Cameo EDW Admin. The information includes the owner of the license, the user profile ID of the owner, the license's edition and expiration date, the license's version, and the connection limit. See section 2.7.2 Changing a Cameo EDW License to change or update your license.

### 2.7.2 Changing a Cameo EDW License

You can also change your license to another one or updating it through the License Information section on the Settings page of Cameo EDW Admin. Changing a license means returning the current one to FLEXnet License Server, setting the server capacity back to zero, and then leasing a new one. You cannot undo your action after clicking the Update License button.

The License Information section contains the details about the license server and the license key that is currently in use, and the Update License button that you can click to go see all available licenses that you can select. This information is hidden by default from the License Information section. It will appear only if you click the Update License button. It contains the same information as the activation page does.

To get a new Cameo EDW license from the current license server:

1. Click Settings to open the Settings page.
2. Click the **Update License** button. A dialog informing that you are about to delete the license you are currently using will open.
3. Click **Yes**.

4. Enter your license server’s address in the **License Server** box.
5. Click **Show Licenses**. Cameo EDW Admin will refresh the information and show all available license keys on the current license server in tabular form (Figure 26).
6. Select a new license key from the table and click the **Use License** button. A dialog informing that the license key has been successfully applied will open.

7. Click **OK**.

To get a new Cameo EDW license from another license server:

1. Log into the Cameo EDW Admin with an Administrator account.
2. Click **SETTINGS** to open the **Settings** page.
3. Click the **Update License** button. A dialog informing that you are about to delete the license you are currently using will open.
4. Click Yes.
5. Type the address and port of another license server in the **License Server** box.
6. Click the **Show Licenses** button. All available license keys on the new license server will appear in tabular form.
7. Select a new license key from the table and click the **Use License** button. A dialog informing that the license key has been successfully applied will open.
8. Click **OK**.

### 2.8 Technical Support

Our Technical Support Team will help you get prompt service and answers to any questions you may have for the product. Simply send your e-mail to support@nomagic.com.

### 3. Using Cameo EDW Admin

The objective of this section is twofold: (i) to help you understand how the Cameo EDW Admin works and (ii) to provide detailed instructions for using the Cameo EDW Admin.

Cameo Enterprise Data Warehouse Admin (Cameo EDW Admin) is a web interface that allows you to work with Cameo EDW effectively. The web interface or Cameo EDW Admin is accessible through a web browser. It provides you with access to the Cameo Enterprise Data Warehouse application and content. With Cameo EDW Admin, you can visually manage users, roles, and project assignments. The layout of the web interface or Cameo EDW Admin is designed for simplicity so that it is easy to understand and use.

The following sections describe the system security and access control to allow and restrict access to resources on the Cameo EDW system, and step-by-step instructions on how to use the Cameo EDW Admin to work with projects and manage users who access the admin to accomplish tasks assigned to them.

### 3.1 Role Based Access Control (RBAC) Overview

Cameo EDW is purposely designed to handle large data and multi users using one or more interconnecting servers. One of the great benefits of Cameo EDW system is to control how and what user can access the system. A good management is essential for this large and complex system so that it can cater for a high number of users who want to access the system and use its resources at the same time. For this purpose, Cameo EDW uses role based access control (RBAC) to regulate permissions and access to its system resources based on the roles of individual users. RBAC is a method to provide quick access and at the same time control over actions a user can perform based on the premise of roles. With RBAC, you can assign general permissions quickly through the use of roles. There are several pre-existing roles that you can use or modify. You can also create custom roles for user with particular needs.

Your password and username are associated with your role in the Cameo EDW system, meaning that your user account comes with role-specific authorizations. Authorizations are permissions that enable a role or a user to accomplish a course of actions. Permissions vary according to the role. Some permissions, for example, enable a user or a role to:

- create a user account, assign roles and permissions, and assign projects to each role.
- modify user information and password.
- configure the Cameo EDW server settings.
- assign projects to specific users.
- allow and deny user login to Cameo EDW Admin.
3.1.1 User Categories

There are two categories of users in the Cameo EDW system: (i) internal and (ii) external. The following sections explain the differences between them.

3.1.1.1 Internal Users

Internal users are users who you originally created in the Cameo EDW system and therefore, their usernames, passwords, and other data are stored on the Cameo EDW server. You can edit an internal user’s username, password, and other data if you are authorized to do so.

3.1.1.2 External Users

Users belong to this category are LDAP users or users created on LDAP servers who have been imported into the Cameo EDW system. Once LDAP users are imported, they become external users. Their usernames, passwords, and other data are stored on both the LDAP servers and Cameo EDW system. You cannot edit an external user’s username, password, and other data until you convert the user into an internal user.

For more information on how to convert users from external to internal and vice versa, see section 3.5.5 Converting Users to External or Internal.

3.1.2 User Roles and Permissions

A role is an identity that distinguishes a user’s rights from others’ and determines different job functions a user has in Cameo EDW system. A role gives a set of permissions to a user to perform one or more operations within the Cameo EDW system. New permissions can be added as new projects or tasks are created. You assign a role to a user when you want that user to accomplish some tasks or work on a project. Not every user has a role. You may create a user without giving the user any role. You may also, create a new role first and assign it to a user later. The Cameo EDW Admin displays all roles on the Roles Management page (Figure 27). You can also see these roles when you are creating a new user on the Create a new user account page (you can see these roles on the User Details page).

An authorized user like a User Manager (role) can create a new user account on the Cameo EDW Admin. When you create a new user, you can also assign him or her a role and permissions to access and work on a particular project. A user can have more than one role and handle more than one project. Creating a new user and assigning a role or a project to the user can be done at the same time. In the Cameo EDW Admin, you can assign a role to more than one user at the same time. Users can be reassigned from one role to another. Users who have the same role assume the same tasks within that role.

3.1.2.1 Types of Roles

There are two role types in Cameo EDW: (i) pre-existing type and (ii) custom type. A pre-existing role is a default and ready-to-use role that an authorized user can assign to other users while a custom role is a role that users can create and assign to other users.

(i) Pre-existing Roles

Pre-existing-type roles are default roles that have been created in the Cameo EDW system. They are ready-to-use roles that you can select and assign to one or more users (Figure 27). Each pre-existing role comes with its default permissions, which you can see in the role details page. Unlike a custom role that is editable, you cannot delete a pre-existing role, add, or delete its permission.
Table 1 provides the description of the pre-existing roles in the Cameo EDW system.

Table 1 -- Pre-existing Roles in Cameo EDW System

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Contributor</td>
<td>This project-specific role can modify project contents.</td>
</tr>
<tr>
<td>Project Creator</td>
<td>This global or category-specific role can add projects to the server, categorize them, create new categories or manage existing ones.</td>
</tr>
<tr>
<td>Project Locks Administrator</td>
<td>This project-specific role can release other users' locks in a selected project.</td>
</tr>
<tr>
<td>Project Manager</td>
<td>This project-specific role can manage projects and grant permissions to other users to access projects.</td>
</tr>
<tr>
<td>Project Reviewer</td>
<td>This project-specific role can open and review projects.</td>
</tr>
<tr>
<td>Security Manager</td>
<td>This global role can grant permissions to other users and specify the scope.</td>
</tr>
<tr>
<td>Server Administrator</td>
<td>This global role can configure server settings, LDAP integration, secure connection, and server licenses.</td>
</tr>
<tr>
<td>User Manager</td>
<td>This global role can create and manage users.</td>
</tr>
</tbody>
</table>
(ii) Custom Roles

You can create a new role and add it to the Cameo EDW system. This type of role is called custom role. You can edit or delete custom-type roles. Users whose permission is Manage Security Role can create a custom role and assign permissions to the role through the Roles Management page of Cameo EDW Admin. You can add more permissions to a custom role or delete them. But, you can add only project-specific permissions to a custom role.

A role name is unique but it may have the same permissions as those of the other roles. When creating a custom role, you can assign it to one or more users at the same time and select a project(s) for the role.

3.1.2.2 Scopes of Roles

The scope of a role in Cameo EDW system is the extent of the area the role is relevant. There are two scopes of roles: (i) global scope and (ii) project-specific scope. A role whose scope is global does not need a project assignment in order to accomplish the tasks, for example, a Project Creator is considered as a role that is involved in all current and incoming projects including adding and categorizing projects. Therefore, a Project Creator can exercise its permissions in any projects by default. A project-specific scope is usually created to work on a particular project, for example, Project Reviewer.

(i) Global Scope

A user with a global-scope role can access either general or specific information in Cameo EDW system, for example, view user’s profile or remove roles from a user. The permissions extend across all projects or users. A global role does not need to be assigned a project to perform the tasks for example a user manager does not need to have a project to be able to create a new user.

Users with a global role are authorized to carry out their tasks (aligned with the permissions) anywhere within the Cameo EDW system. For example, a User Manager who maintains and manages all user accounts on the Cameo EDW system. There is no need to assign projects to this role.

The following are the pre-existing-type roles whose scope is global in the Cameo EDW system:

- Project Creator
- Security Manager
- Server Administrator
- User Manager

(ii) Project-Specific Scope

A user whose role’s scope is project-specific needs a project in order to work. The role’s permissions apply only to a specific project. A project-specific role needs a project in order to perform a class of actions as what the permissions enable the role to do so.

A project-specific role is a pre-existing role that allows a user to work based on project-specific needs. The permissions of this role are on a project basis. Users with a project-specific role have to work on project specific matters, for example, reviewing a project. One user can have more than one project-specific roles, for example, user A can be both Project Contributor in Project A and Project Manager in Project B. This supports the working concept of different roles in each project in an organization.

It is also possible to assign every project (a global scope) in the repository to a user by selecting the Global button.

The project-specific roles with global scope in the Cameo EDW are as follows:

- Project Owner
- Project Member
3.1.2.3 Permissions

A permission in the Cameo EDW Admin means an approval to do a particular task or access one or more objects in the system. Objects are data objects or resource objects within the system. Permissions are associated with roles. A role is a set of permissions that allow the user with that role to perform specific tasks or work on a project. For example, a project member (Role) has permissions to create, edit, read a project, or edit the project properties. The permissions enable that role to perform specific operations that are otherwise forbidden to other users.

Some permissions can only be used once a role has been assigned a project, for example, a project reviewer role whose permission allows him to view or read data in a project. If no project is assigned to this role, the project reviewer cannot accomplish anything. You can assign one or more permissions to a custom role.

The Roles details page in Cameo EDW Admin allows you to see all permissions of each role. Figure 28, for example, shows the permissions of the User Manager role such as create, edit, or remove users.

![Figure 28 -- The Permissions Associated with a Pre-Existing Role](image)

Table 2 lists all permissions of each pre-existing role in the Cameo EDW system.
Table 2 -- The Permissions Associated with the Pre-existing Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Permissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Contributor</td>
<td>• Edit project properties.&lt;br&gt;• Edit projects.&lt;br&gt;• Read projects.</td>
</tr>
<tr>
<td>Project Creator</td>
<td>• Categorize projects.&lt;br&gt;• Create projects.&lt;br&gt;• List all projects.</td>
</tr>
<tr>
<td>Project Locks Administrator</td>
<td>• Release project locks.</td>
</tr>
<tr>
<td>Project Manager</td>
<td>• Edit project properties.&lt;br&gt;• Edit projects.&lt;br&gt;• List all users.&lt;br&gt;• Manage owned project access right.&lt;br&gt;• Read projects.&lt;br&gt;• Release project locks.&lt;br&gt;• Remove projects.</td>
</tr>
<tr>
<td>Project Reviewer</td>
<td>• Read projects.</td>
</tr>
<tr>
<td>Security Manager (Global role)</td>
<td>• List all projects.&lt;br&gt;• List all users.&lt;br&gt;• Manage security roles.&lt;br&gt;• Manage user permissions.</td>
</tr>
<tr>
<td>Server Administrator</td>
<td>• Configure server.</td>
</tr>
<tr>
<td>User Manager (Global role)</td>
<td>• Create users.&lt;br&gt;• Edit user properties.&lt;br&gt;• List all users.&lt;br&gt;• Remove users.</td>
</tr>
</tbody>
</table>

NOTE: A user who created a project will be assigned a project manager role automatically.

We use permissions to protect data such as files or information in Cameo EDW Admin and to limit what a user can read, write, and execute within the system. You need to first assign a role to a user before the permissions associated with that role can be granted. A user can have many roles and a role can have many users.

3.2 Logging into Cameo EDW Admin

While the Cameo EDW server is running, you can log in to the Cameo EDW Admin by entering your username and password. Once you are logged in, you can start utilizing the system according to the permissions granted to you such as managing user accounts or projects.

The login page also contains the links that open Terms of Use dialog, provide information about the Cameo EDW Admin version, and send emails for inquiries and support (Figure 29).

Table 3 describes UI components of the login page.
Table 3 -- The Login Page Fields and Links

<table>
<thead>
<tr>
<th>UI Component</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username</td>
<td>To enter a valid username (case-sensitive).</td>
</tr>
<tr>
<td>Password</td>
<td>To enter a valid password (case-sensitive).</td>
</tr>
<tr>
<td>Log In button</td>
<td>To submit a username and a password for verification.</td>
</tr>
<tr>
<td>Terms of Use</td>
<td>To open the Terms of Use dialog that contains the end user license agreement for Cameo EDW Admin.</td>
</tr>
<tr>
<td>About</td>
<td>To open the About dialog that contains brief information about the current version of Cameo EDW Admin and the names of libraries used.</td>
</tr>
<tr>
<td>Contact Us</td>
<td>To send an email to No Magic, Inc.</td>
</tr>
<tr>
<td>Help</td>
<td>To send an email to <a href="mailto:support@nomagic.com">support@nomagic.com</a> if you need help using Cameo EDW Admin.</td>
</tr>
</tbody>
</table>

To log in to Cameo EDW Admin:

1. Open a web browser.
2. Type the url of the Cameo EDW Admin, for example, https://<urlname>:<portname>. The Login page of Cameo EDW Admin will open (Figure 29).

3. Type your username and password.
4. Click the Log In button. Upon your successful login to the server, the first page will open (Figure 30).
If your Cameo EDW license expires, you will get the following screen notification window appear on your screen after logged in to the Cameo EDW admin.

If your Cameo EDW license expires, you will get the following screen notification window appear on your screen after logged in to the Cameo EDW admin.
To log out of the Cameo EDW Admin:

1. Click the arrow button next to your user icon on the top right-hand side of the Admin page and select **Log out** (Figure 32). The **Log out** dialog will open (Figure 33).

   ![Figure 32 -- The Logout Button](image)

   **Figure 32 -- The Logout Button**

   ![Figure 33 -- Log Out Message](image)

   **Figure 33 -- Log Out Message**

2. Click **Yes**.

Once you are logged in, you will see the first page of Cameo EDW Admin. Your landing page depends on your role/permissions. On the upper part of the page, you will see the main menu bar that contains the Cameo EDW Admin main menus: (i) **USERS**, (ii) **PROJECTS**, (iii) **ROLES**, (iv) **LDAP**, and (v) **SETTINGS** (Figure 34). The menu bar allows you to navigate through the functionality of Cameo EDW easily. Depending on your role in Cameo EDW Admin, you may see all or some of the menus. Not every user can see the page as shown in Figure 34 because it is open for authorized users only.
3.2.1 Unauthorized User Access

Some users may not be able to access specific content in the Cameo EDW system or view the content, or see all of the main menus due to insufficient permissions.

3.3 Connecting to LDAP Servers

LDAP stands for Lightweight Directory Access Protocol. It is an open standard protocol used over an IP network to locate and access directory servers. Cameo EDW Admin makes use of LDAP to access data, in this case users, on LDAP servers. Therefore, with Cameo EDW Admin, you can easily import users from other external databases or LDAP servers into Cameo EDW Admin. After you import users, you can assign them some roles or projects and even convert them into internal users. Cameo EDW Admin uses LDAP to import users only. The users’ data are still stored on the LDAP servers. You cannot edit information or profiles of the users imported from LDAP servers.

The main menu LDAP on Cameo EDW Admin opens the LDAP User Directories page. This page allows you to add LDAP servers before you can import users from them. It also shows information about LDAP servers that are external but configured for the Cameo EDW server. Cameo EDW Admin’s user authentication during login also searches for the user in those directories. The authentication process starts from the first LDAP server on the directory list. You can, however, select which server gets authenticated first by changing the order using the up and down arrow buttons.

TIP

Alternatively, you can click the Manage LDAP directories icon on the User Management page to open the LDAP User Directories page.
3.3.1 Adding an LDAP Server to the Cameo EDW System

You may add as many LDAP servers as needed. Depending on your permission, you may edit a server’s configuration, disconnect a server, or delete it. Once you have added the LDAP servers and successfully connected to them, Cameo EDW Admin will store these servers on the LDAP User Directories page.

When adding an LDAP server, you need to input the LDAP server’s configuration properties such as the connection settings, server address, server timeout, and encryption protocol that will be used to connect to the LDAP server. Each LDAP server has its own setting properties. The configuration settings are categorized into three groups: (i) Connection, (ii) Encryption, and (iii) Authentication.
Figure 35 -- The LDAP Server’s Configuration Properties

Table 5 shows the UI components of the LDAP server’s configuration properties.
### Table 4 -- The UI Components of the LDAP Configuration Settings

<table>
<thead>
<tr>
<th>UI Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connection</strong></td>
<td></td>
</tr>
<tr>
<td>Server Address</td>
<td>To enter the server address/DNS name and server port. This is a mandatory field and is not editable once created. You will get an error message if you enter a duplicate server address or DNS.</td>
</tr>
<tr>
<td>Port</td>
<td>To enter the port field for the server address. The default value for None encryption protocol is 389. If the SSL protocol is selected, the default value for empty fields is 636.</td>
</tr>
<tr>
<td>Connection Name</td>
<td>To enter the connection name of the LDAP server. A duplicate name is not allowed.</td>
</tr>
<tr>
<td>Server Timeout</td>
<td>The maximum amount of time in milliseconds for the system to successfully authenticate a single server. If authentication fails, the system will query the next server in queue.</td>
</tr>
<tr>
<td>Enable</td>
<td>The option to enable a connection with the LDAP server.</td>
</tr>
<tr>
<td>Anonymous Bind</td>
<td>A mode of bind specifying whether a user connects to the LDAP server with a specific username or anonymously for being able to find the user DN that corresponds to the user trying to log into the Cameo EDW system. If you select this check box, the Bind password is not required and the system password will be disabled.</td>
</tr>
<tr>
<td>System Username</td>
<td>The User DN to connect to the LDAP server and perform queries. This is active even though the Anonymous Bind check box is not selected.</td>
</tr>
<tr>
<td>System Password</td>
<td>The system password to connect to the LDAP server and perform queries.</td>
</tr>
<tr>
<td><strong>Encryption</strong></td>
<td></td>
</tr>
<tr>
<td>Encryption Protocol</td>
<td>The SSL and TLS protocols for encryption. If you select None, it means you do not need to use an encryption protocol.</td>
</tr>
<tr>
<td>LDAP Server Certificate</td>
<td>The option to select the JKS file.</td>
</tr>
<tr>
<td>JKS Password</td>
<td>The password required to access the Edit LDAP Configuration page.</td>
</tr>
</tbody>
</table>
To add and configure an LDAP server:

1. Click the main menu LDAP to open the LDAP User Directories page.

2. Click the Create LDAP directory button. The Create LDAP directory page will open for you to configure the LDAP server settings (Figure 38).
3. Input the configuration properties to connect to the LDAP server.
4. Click Create. The LDAP server's address and name will added to the directory.

3.3.2 Testing Connectivity

Upon adding and configuring the LDAP server, you may want to test whether your connection to the LDAP server works. If the test is not successful, you need to make necessary changes to the settings, save the changes, restart the Cameo EDW server, and retest the connection.
To test the connection to an LDAP server:

1. On the **LDAP User Directories** page, select an LDAP server whose connection you want to test and click the submenu button.

2. Select **Test**. The login dialog will open.

3. Type the username and password.

4. Click **Test**. If the connection works, you will get a successful message dialog (Figure 40), otherwise you will get a connection failed message (Figure 41).
3.3.3 Editing an LDAP Server Configuration Properties

You can change the configuration properties of an LDAP server that is connected to Cameo EDW system. The configuration properties will be updated with the new values after you restart the Cameo EDW server.

To edit the configuration properties of an LDAP server:

1. On the LDAP User Directories page, select an LDAP server whose configuration properties you want to edit and click the Edit button.
2. Edit the values.
3. Click Save.
4. Restart the Cameo EDW server.

3.3.4 Importing Users from an LDAP Server

You can import users from an LDAP server that you have configured for the Cameo EDW system. The imported users from the LDAP server are called external users (see 3.1.1 User Categories). You can also assign roles to those external users.

This section shows you how to import a user through the LDAP User Directories page. For more information about importing users from an LDAP server through the User Management page, see section 3.5.3 Importing Users.

**NOTE**
You cannot import a duplicate username into the Cameo EDW system.

To import a user through the LDAP User Directories page:

1. Click the main menu LDAP to open the LDAP User Directories page.
2. Select an LDAP server from the directory list and click the submenu button and select Import (Figure 42). The Import users page will open.
3. Type a username in the Query box and press Enter. The login to LDAP server dialog will open and Cameo EDW system will auto-fill the username (Figure 44).
4. Enter your password and click **Search** or press **Enter**. All usernames that match the selected LDAP users will appear.
5. Select one or several users by selecting the check boxes next to the usernames.
6. Click the **Import** button.

### 3.3.5 Disabling or Deleting an LDAP Server

You can disable a connection to an LDAP server or remove the LDAP server from Cameo EDW system. External users from the LDAP server that has been disabled will not be able to log into the Cameo EDW Admin. But those who are in the system when you disable the connection can still access and perform all operations as normal, however as soon as they log out from the Cameo EDW Admin, their status will change to be disable and they cannot log into the Cameo EDW Admin until the LDAP server connection is enabled. You still can import users from the LDAP server even though it has been disabled.

If you remove or delete an LDAP server from the LDAP user directories list, access to the Cameo EDW system will be permanently removed, and all external users imported from that LDAP server can no longer log into Cameo EDW Admin and access the system. Only external users who have been converted internal can log in to the Cameo EDW Admin.

To disable or delete an LDAP server:

1. On the **LDAP User Directories** page, select an LDAP server you want to delete and click the submenu button.
2. Select either **Disable** to temporary disable the connection or **Delete** to permanently delete the LDAP server from the system. A confirmation dialog will open.

3. Click **Yes**.

An LDAP server that is disabled has a disable icon appears in the **Status** column on the **LDAP User Directories** page. You can enable this server by clicking the submenu and select the **Enable** button.

### 3.4 Enabling a Secure Connection

Cameo EDW Admin uses SSL (Secure Socket Layer) as the security protocol to keep any information you enter on the Cameo EDW Admin private and secure. You can see this option on the **Server settings** page. This page also allows you to disable the option if you do not need to use a secure connection (Figure 46). You can always enable it whenever working on a confidential document or information or whenever you think it is necessary.

To enable a secure connection using the SSL protocol:

1. Click the main menu **SETTINGS**. The **Server Settings** page will open (Figure 46).
2. Click the **Use SSL** button to enable the SSL protocol. The SSL option will be enabled (Figure 47).

3. Input the port, Java key store, and password.

4. Click **Save**.
3.5 Managing Users

3.5.1 User Management Page

The main menu USERS links to the User Management page (Figure 48). This page contains a list of all users of Cameo EDW both online and offline, including their usernames, full names, and their login status (enable or disable) in tabular form.

This page is hidden from unauthorized users or users who do not have the permission to view all users in the Cameo EDW system. Cameo EDW classifies users into external and internal users. External users are users who are imported from external LDAP servers. Internal users are users that are created on the Cameo EDW server. Find out more about internal and external users in section 3.1.1 User Categories.

The User Management page allows you to:

- Create new users.
- Import users.
- Disable or enable users’ login access.
- Search for users.
- View a user’s information including the profile and the role(s) and assigned project(s).
- Manage user directories.
- Change or reset users’ passwords.

NOTE

Only a User Manager can create a new user and/or change a user’s password.
TIP

You can also enable or disable a user’s login access on the User Details page. The User Details page is accessible by clicking the username on the User Management page.

Table 5 describes the UI components on the User Management page (Figure 48).

Table 5 -- The UI Components of the User Management Page

<table>
<thead>
<tr>
<th>UI Components</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online column</td>
<td>A green icon in front of a username means that the user is currently online and connected to the Cameo EDW system.</td>
</tr>
<tr>
<td>Username column</td>
<td>This column shows a username that is used to log in to the Cameo EDW Admin. A username is a hyperlink that you can click to view the user’s details, edit the user’s data, or manage the user’s role or project assignments. See 3.5.1 User Management Page for more information.</td>
</tr>
<tr>
<td>Full Name column</td>
<td>This column shows a user’s full name. When creating a new user, you may type the full name or leave it blank (optional).</td>
</tr>
</tbody>
</table>
| Status column     | This column shows a user’s login status in the Cameo EDW Admin is either: (i) Enable, or (ii) Disable  
|                   | Enable means the user can use his user account (username and password) to log into Cameo EDW Admin.  
|                   | Disable means the user is not allowed to log into the Cameo EDW Admin and Cameo EDW in MagicDraw.                                                                 |
| Action column     | The Edit button in the Action column allows you to edit a user’s information and change the user’s login access (enable or disable) by selecting either option from the drop-down menu.  
|                   | The Disable button in the submenu item allows you to disable a selected user whose current login access is Enable. The button will be enabled once you select a user from the User page. |
|                   | The Enable button in the submenu item allows you to enable a selected user whose current login access is Disable. The button will be enabled once you select a user from the User page. |
|                   | The Create button is to open the create user page to allow you to create a new Cameo EDW user. See 3.5.2 Creating a User for more information. |
|                   | The Import button is to import a user from an LDAP server.                                                                                                          |
|                   | The Manage LDAP directories button allows you to manage LDAP user directories.                                                                                   |
3.5.2 Creating a User

You should create a user account for people who will be assigned a role or tasks in the Cameo EDW system. You can create a new user by clicking the Create new user button on the User Management page. The button opens a page that contains two sections: (i) Create a new user account and (ii) Role Assignments. You can assign one or more roles and projects to the user in the Role Assignments section. The content of this page is quite similar to that of the User Details page. Figure 49 and Figure 50 shows the sections respectively.

Table 6 lists the UI components of the create a new user account section (Figure 49).

<table>
<thead>
<tr>
<th>UI Components</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search by username</td>
<td>You can use this search box to find a username by typing a keyword and Cameo EDW Admin will run the search and find matching usernames.</td>
</tr>
</tbody>
</table>
Table 6 -- The UI Components of the Create a New User Account Section

<table>
<thead>
<tr>
<th>UI Components</th>
<th>Description</th>
</tr>
</thead>
</table>
| Username            | A username to log into Cameo EDW. This is mandatory. You can enter ONLY or at least one of the following:  
|                     | • Characters Aa-Zz.  
|                     | • Numbers 0-9.  
|                     | • dash.  
|                     | • period.  
|                     | • underscore.  
|                     | • symbol @.  
| Password            | A password to log into Cameo EDW. This is mandatory. You can enter ANY character or symbol.                                                                                                                |
| Confirm Password    | A password confirmation. This is mandatory.                                                                                                                                                                |
| Full Name           | A user’s full name. This is optional.                                                                                                                                                                       |
| Email               | A user’s email account. This is optional.                                                                                                                                                                   |
| Department          | A department where the user works. This is optional.                                                                                                                                                       |
| Mobile              | A user’s mobile phone number. This is optional.                                                                                                                                                            |
| Enable              | The option to enable or disable user login to the Cameo EDW Admin and Cameo EDW in MagicDraw. It is selected by default.                                                                                  |
| Create              | This button allows you to save a user’s information and create a username for the user.                                                                                                                     |

You can click the Role Assignment arrow button to expand it and select what role(s) or assignment(s) that you want to assign to the user (Figure 50). For more information on how to assign roles or projects to a user, see section 3.6.4.1 Assigning Roles.
To create a new user account:

1. Click the **Create** button on the **User Management** page (Figure 51). The Create a new user form will open (Figure 52).
2. Specify a username and other information about the user. A text box with a red asterisk (*) means that the information is compulsory (Figure 52).
3. Select or clear the **Enable** check box. It is selected by default.
4. Click the **Create** button. You will see the new username you have just added appear on the **User Management** page.

When you create a new user or edit a user information, you may select to either **Enable** or **Disable** their access. If you want them to access the Cameo EDW system and carry out the tasks according to the role assigned once you create them, you need to select the **Enable** check box (selected by default). If you clear the **Enable** check box, the user’s status will be **Disable** and thus he or she cannot log into the Cameo EDW Admin and Cameo EDW in MagicDraw.

**NOTE**

- Users with a global role such as User Manager do not need a project to carry out the role’s tasks.
- **Global** role means that the scope of permissions is global. Therefore, when the scope of the role is **Global**, selecting individual projects is not required.
- **Custom** role allows you to select what projects you want to assign to the user.
- The **Create** button will be enabled if you type the same valid password in both the **Password** and **Confirm password** text boxes.
For more information about assigning roles and projects, see section 3.6.4 Managing Role Assignments and Permissions and section 3.7.3 Assigning Projects.

### 3.5.3 Importing Users

You can import one or several users from an LDAP server to the Cameo EDW system through the Cameo EDW Admin. The users you are imported are called external users because their data and information are stored on the external servers or LDAP servers. The import button to import a user is available on the User Management page and the LDAP User Directories page. This section shows how to import a user through the User Management page. To import a user through the LDAP User Directories page, see section 3.3.4 Importing Users from an LDAP Server.

To import a user through the User Management page:

1. Click the main menu USERS to open the User Management page.

```
Figure 53 -- Importing a User on the User Management Page
```

2. Click **Import** (Figure 53) to open the **Import users** page.
3. In the **Query** box, type a username or a keyword and press **Enter** (Figure 54). A dialog to log in to the LDAP server will open (Figure 56).

4. Type a password and click **Search** or press **Enter**. A list of usernames that match the keyword will appear (Figure 57).
5. Select one or more usernames by selecting the check boxes (Figure 56).
6. Click the **Import** button.

Upon importing users, you can assign roles to them. See section 3.6.4.1 Assigning Roles for more information about assigning roles to users.

![Figure 56 -- Selecting and Importing LDAP Users to Cameo EDW Systems](image)

**TIP**

Alternatively, you can click the **Manage LDAP directories** icon on the **User Management** page to open the **LDAP User Directories** page.

### 3.5.4 Editing User Information

If you have an Administrator account, you may edit a user’s data for example, the username and password. Every username on the User Management page links to a page where you can see more information about a
user (Figure 57). Therefore, if you have the right permission, once you click the username, you will be able to edit the user’s information.

**TIP**

You can also click the username’s **Edit** button to edit a user’s information on the **User detail** page.

Figure 57 -- The User Detail Page

Table 7 lists the UI components of the **User detail** page (Figure 57).
**Table 7 -- The UI Components of User Details**

<table>
<thead>
<tr>
<th>UI Components</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username</td>
<td>A username to log into Cameo EDW.</td>
</tr>
<tr>
<td>Full Name</td>
<td>A user’s full name. This is optional.</td>
</tr>
<tr>
<td>Email</td>
<td>A user’s email account. This is optional.</td>
</tr>
<tr>
<td>Department</td>
<td>A department where the user works. This is optional.</td>
</tr>
<tr>
<td>Mobile</td>
<td>A user’s mobile phone number. This is optional.</td>
</tr>
<tr>
<td><strong>Enable</strong></td>
<td>The option to enable or disable user login to Cameo EDW Admin and Cameo EDW in MagicDraw. It is selected by default.</td>
</tr>
<tr>
<td><strong>Save</strong></td>
<td>This button allows you to save changes to a user’s details.</td>
</tr>
<tr>
<td>Reset Password</td>
<td>The Reset Password menu opens the Reset Password dialog box that allows you to reset a user’s password.</td>
</tr>
<tr>
<td>Convert to External</td>
<td>The Convert to External menu converts an internal user to external.</td>
</tr>
</tbody>
</table>

You can click the Role Assignment arrow button to expand it and see the user’s role(s) or assignment(s) or select what role(s) or project(s) that you want to assign to the user. For more information on how to assign a role/project to a user, see section 3.6.4.1 Assigning Roles.

**NOTE**

If your role is not User Manager, you will not be able to open the Reset Password form.

You can edit your own username, name, password, and other information. However, only an authorized user with the right permission can edit another user’s profile. You can change or modify all information but a username, because it is not editable. It is possible for users who do not have any role in Cameo EDW Admin to edit their own profile such as full name, email, department, and mobile phone number, and download log files.

You can enable or disable user login if you are authorized to do so. You can edit a user’s login status by selecting or clearing the Enable check box on the user’s details page.

**To edit a user’s information:**

1. On the User Management page, select and click a username whose information you want to edit. A page that will allow you to edit the selected user’s information will open (Figure 58).
Figure 58 -- Selecting a User
2. Edit or enter the user’s information such as full name, email address, and so on (Figure 59).
3. Select or clear the Enable check box.
4. If you want to edit the user’s role or project assignments, select or clear the role check boxes, or click the Add or Remove button to add or delete projects respectively.
5. Click the Save button to apply your changes.
3.5.5 Converting Users to External or Internal

There are two types of users in the Cameo EDW system (see 3.1.1.1 Internal Users and 3.1.1.2 External Users). Internal users are users created in the Cameo EDW system. External users are users imported from LDAP servers. An authorized user can convert an external user to be an internal user and vice versa.

Upon converting a user from external (LDAP server) to internal (Cameo EDW system), you can edit the username, roles, or project assignments. However, the username and password is still stored on the LDAP server and the system will use it for user authorization.

When you convert a user from internal to external, the user’s username, password, and other information will be moved to an LDAP server (if there are several LDAP servers, the system will select it randomly). The Cameo EDW system only keeps the username.

Importing an LDAP user to the Cameo EDW system is allowing that user to access the Cameo EDW system through the Cameo EDW Admin. When the external user logs into the Cameo EDW Admin, the system will search the username and password for authentication on the LDAP server.

To convert a user from external to internal:

1. On the User Management page, click a username or the Edit button of the username you want to convert. The User detail page will open.
2. Click **Convert to Internal** to convert an external user or **Convert to External** to convert an internal user.

### 3.5.6 Changing Passwords

You can change your own password or another user’s password if you are authorized to do so. Changes to a user’s password will apply once the user logs out of Cameo EDW Admin. The new password is required for the next login.

| NOTE | Only a **User Manager** can change another user’s password. Therefore, an unauthorized user cannot see the **Reset Password** section on the User detail page. |

(i) To change your own password:

1. Click your username on the **User Management** page. The **User detail** page will open (Figure 61).

![User detail](image)

*Figure 61 -- The Change Password Button*

2. Click the **Change Password** button (Figure 61). The **Change Password** dialog will open (Figure 62).
3. Type your old password in the **Old password** box.

4. Type your new password in the **New Password** box and retype it in the **Confirm New Password** box.

5. Click the **Change Password** button to apply your new password.

**NOTE**
- The **New Password** and **Confirm New Password** text boxes will be enabled once you click in the **Old password** text box.
- The new password is required the next time you log into Cameo EDW Admin.

(ii) To change another user’s password:

1. Click a username whose password you want to change on the **User Management** page. The **User detail** page will open (Figure 63).

![Figure 63 -- The Reset Password Button](image)
2. Click the **Reset Password** menu. The **Reset Password** dialog will open (Figure 64).

![Reset Password dialog](image)

**Figure 64 -- Changing A User’s Password**

3. Type a new password in the **New Password** box and retype it in the **Confirm New Password** box.
4. Click the **Reset Password** button to save the new password.

### 3.5.7 Enabling or Disabling User Login

Regardless of what roles or projects you assign to the user, if you do not enable their access, they can never perform any operation through the Cameo EDW Admin. Depending on your role, you can enable or disable both existing and new users from accessing the Cameo EDW system.

You can enable or disable the existing user’s access on either the User Management page or the User detail page. By default, the Cameo EDW Admin grants access to a new user. But, you can disable this option whenever you create one.

(i) To disable or enable an existing user’s access on the User Management page:

1. Select a user whose access to the Cameo EDW system you want to disable or enable, and click the submenu drop-down button (Figure 65).
2. Click either (i) the **Disable** button and the **Confirm to disable** dialog will open (Figure 66), or (ii) the **Enable** button (skip step 3) and the **Update was successful** message will appear (Figure 67).

![Figure 66 -- The Confirm to Disable Dialog](image)

3. Click **Yes**. A message informing that disable was successful will appear (Figure 68). You can now see the disable icon in the user’s Status column on the **User Management** page (Figure 69).

![Figure 67 -- The User Login Has Been Successfully Enabled Message](image)
(ii) To disable or enable an existing user’s access through the User detail page:

1. Click a username on the User Management page whose login status you want to disable or enable (Figure 70). The User detail page will open (Figure 71).
Figure 71 -- Disabling or Enabling User Login through the User Details Page

2. Either (i) clear the **Enable** check box to disable the user login or (ii) select it to enable the user to log into the Cameo EDW Admin and Cameo EDW in MagicDraw.

3. Click the **Save** button. If you clear the **Enable** check box in step 2, a **Confirm to disable** dialog will open.

![Confirm to disable dialog](image)

Figure 72 -- The Confirm to Disable Dialog

4. Click **Yes**. A message informing that the user login has been updated successfully will appear. You can now see the user’s login status on the **User** page changes accordingly.

**NOTE**

If you disable a user’s access while he or she is online or logged in, the Cameo EDW Admin will not log them out immediately. The change of access permission applies once the user logs out.

To enable or disable a new user’s access when creating one, see section 3.5.2 Creating a User.
3.5.8 Searching for Users

The Search by username text box on the User Management page allows you search for a user by the username or a keyword. You can type any alphabetic character, numeric value, or symbol (such as @, &, or # for example), or a combination of them in the search box. The search is not case-sensitive. By default, the search result will return all usernames that match the keyword or letter(s) entered and display them on the page.

![Figure 73 -- The Search for Users Text Box](image)

**TIP**
Alternatively, you can use the multi-type search text book on the upper most part of every page that you open. By default, the search results will return all matching keywords or names entered. However, if you want to search for a particular user, you can select the type qualifier to restrict search results to usernames only.

3.5.9 Viewing User Profile

You can view a user’s profile in no time by clicking on a row on the User Management page (do not click the username as it contains a hyperlink that will open the User detail page). A small pane will slide in and show the user’s email, department where the user works, the cell phone number, and so on. The User Profile pane will slide in from the lower part of the page (Figure 74). The pane slides out and closes by itself in five seconds.

![Figure 74 -- The User’s Profile](image)
3.5.10 Sorting Users

The data sort capability of Cameo EDW Admin arranges users in ascending or descending alphabetical order. This is useful especially when you have many rows of usernames. Each column except Action provides you with this capability. For example, you can click the Username column header on the User Management page to sort usernames.

To sort data in individual columns on the User Management page:

- Click a column header, for example, Username, on the User Management page (Figure 75). Data in the column will be sorted in ascending or descending alphabetical order.

![Figure 75 -- Sorting Usernames](image)

TIP You can also sort users by their online status, full name, or access by clicking the respective column header.

3.6 Managing Roles

As previously explained in section 3.1.2 User Roles and Permissions, the scopes of pre-existing roles in the Cameo EDW system are categorized into two: (i) Global and (ii) Project-specific. A role whose scope is global is a role that allows a user to work on a global scope. Which means the permissions coverage is thorough and it is not limited to a specific project. Users whose role’s scope is global are authorized to carry out their tasks (aligned with the permissions) anywhere within the Cameo EDW server. For example, a User Manager who maintains and manages all user accounts on the Cameo EDW system. There is no need to assign projects for this sort of role.

A role whose scope is project-specific is a role that allows a user to work in a local project. The permissions of this role are on a project basis. Users whose role’s scope is project-specific have to work on project specific matters, for example, reviewing a project. A user can have more than one project-specific role, for example, user A can be both Project Member in Project A and Project Owner of Project B. This supports the working concept of different roles in each project in an organization.
3.6.1 Role Management Page

The Role Management page opens whenever you click the main menu ROLES. This page allows you to:

- Create a new role
- View a role in details
- View users or projects assigned to the role
- Assign more users or projects to the role
- Unassign users or projects from the role

This page lists all of the pre-existing roles and the roles that you created or added later within the Cameo EDW system and their description in tabular form (Figure 76). The roles are sortable in ascending or descending alphabetical order. You sort the roles the same way you sort usernames.

There are two types of roles: (i) pre-existing roles and (ii) roles that you create or add later into the Cameo EDW system or custom roles. The pre-existing roles are fixed roles. You cannot delete or edit a pre-existing role. You can however, create a custom role to suit your or your organization’s needs and modify it as desired. When you assign a role to a user, the permissions associated to that role will be automatically given to the user.

Clicking either a role or the Manage Assignment button on the Role Management page will bring you to the Role detail page where you can see the role in details or assign it to a user (you can assign a role to more than one user at the same time). Besides assigning roles to users, you can also filter a project or a username in the Matrix Criteria pane (Figure 77). The search results will appear below the filter boxes in a matrix table.
Figure 77 -- The Username and Project Filter

This contextual matrix is based on the row and column criteria. It means that data in the matrix is arranged based on the project name and the username criteria that you select from the filter box.

Table 8 further explains the UI components of the Role Assignments pane.

Table 8 -- The UI Components of Matrix Criteria

<table>
<thead>
<tr>
<th>Property</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Add</td>
<td>The Assign button opens the Add Users dialog, which contains a list of usernames that you can select and assign to the role.</td>
</tr>
<tr>
<td>Matrix Criteria</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td></td>
</tr>
<tr>
<td>Username</td>
<td></td>
</tr>
<tr>
<td>Scope</td>
<td></td>
</tr>
<tr>
<td>Search</td>
<td></td>
</tr>
<tr>
<td>Clear</td>
<td></td>
</tr>
</tbody>
</table>
3.6.2 Creating Roles

The Role Management page allows you to create a role and select what permissions you want the role to have. As soon as you create the role, you can assign it to a user. You may assign a newly created role to one or more users by clicking the Add button on the Role Assignments section. For more information on how to assign a role to a user, see section 3.6.4.1 Assigning Roles.

<table>
<thead>
<tr>
<th>Property</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project filter box</td>
<td>To allow you to filter projects that match the entered name.</td>
</tr>
<tr>
<td>User directory filter box</td>
<td>To allow you to filter users from a specific user directory or all directories. You can select one out of three available options: All directories. Internal. External.</td>
</tr>
<tr>
<td>Swap</td>
<td>To determines the order of data in a row and column matrix. You can choose either: Project (rows) to All Directories/External/Internal user directory (columns). All Directories/External/Internal user directory (columns) to Project (rows).</td>
</tr>
<tr>
<td>Search</td>
<td>To start searching for a project or a username.</td>
</tr>
<tr>
<td>Clear</td>
<td>To clear search results.</td>
</tr>
<tr>
<td>Username column</td>
<td>To list all internal and external users to whom the role has been assigned together with projects.</td>
</tr>
<tr>
<td></td>
<td>To remove a user from the role that he or she is currently assigned to.</td>
</tr>
<tr>
<td>Scope column</td>
<td>To allow you to select either:</td>
</tr>
<tr>
<td></td>
<td>Global scope: this scope extends the role’s permissions on all server-related resources in the Cameo EDW system.</td>
</tr>
<tr>
<td></td>
<td>Custom scope: the role’s permissions are limited and are valid only for selected projects.</td>
</tr>
<tr>
<td>Project Column</td>
<td>To list all projects in each project directory and check boxes. You can assign a project to a user by selecting the check box. Depending on your role, you may see only the projects in which you have permissions. Unless you select Custom as the scope of the role, you cannot assign users or projects.</td>
</tr>
<tr>
<td>Save</td>
<td>To save changes made to role or project assignments.</td>
</tr>
</tbody>
</table>
To create a custom role:

1. Click the main menu **ROLES** on the Cameo EDW Admin page. The **Role Management** page will open.
2. Click the **Create new role** button to open the **Create a new role** page (Figure 78).

3. Type the name of the role and its description (optional).
4. Select at least one permission to give to the role.
5. Click **Create**. The Role Management page will open and you can see the newly created role there.
6. You can assign the newly created role to one or more users by clicking the Add button and select the check boxes in the matrix table.

You can assign projects or remove projects from a role using the Role Assignments pane. Assign a project to a role is also possible while you are creating or editing a user or a role. To create and import MagicDraw projects to Cameo EDW Admin, please see section 3.7 Working with Projects.

### 3.6.3 Viewing Role Details

You can click a role on the Role Management page to see the description of the role and the permissions associated with that role. Only authorized users, for example, a User Manager can see complete information about the role on the **Role detail** page (Figure 79).

![Role detail page](image)
3.6.4 Managing Role Assignments and Permissions

You cannot edit pre-existing roles information nor assign more permissions to them. You can, however, assign a user or a project to that role. Roles that you can create and add to the Cameo EDW system are editable, and therefore they are called custom roles.

On the lower part of the Role detail page contains the Role assignments section, which allows you to:

- Assign a user or a project to the role.
- Delete a user from the role.
- See all users assigned to the role.

Table 9 lists the UI components of the Role Assignment section (Figure 81).

<table>
<thead>
<tr>
<th>UI Components</th>
<th>Description</th>
</tr>
</thead>
</table>
| Role Assignment table       | (i) **Assign**  
This column contains check boxes that you can select for every role in the Role column.  
(ii) **Role**  
This column contains the role names and descriptions.  
(iii) **Scope**  
This column contains the Global and Custom buttons. You can select either one of them as the scope of the role. |
| Name column                 | If you select Custom (as the scope of the role), you can see all projects assigned to the user in the Name column and the Add button will be enabled for you to add/select any project and assign it to the role. |
| ![Add](add.png)             | This button allows you to assign projects to a selected role.               |

3.6.4.1 Assigning Roles

You can assign a pre-existing or a custom role to a user, and create a new custom role and assign it to a user simultaneously. You cannot assign a project to a user who does not have a role. This section provides two methods to assign roles to a user: (i) from the User Management page and (ii) from the Role Management page.

**TIP** You can assign a role to a user through the Role Assignments section in either User detail or Role detail page.
(i) To assign a role while creating a new user through the User Management page:

1. On the User Management page, click the Create button to create new user.
2. Fill in the username, password, and other information about the user.
3. Expand the Role Assignments section (Figure 80).

4. Select the check box(es) of the role(s) that you want to assign to the user.
5. Click the **Create** button. The create user was successful message and the new user will appear on the **User Management** page (Figure 82).
To assign a role to an existing user through the User Management page:

1. On the User Management page, click a username to whom you want to assign a role. The User detail page of the selected username will open (Figure 83).

---

**NOTE**

- Once you have created a new user and selected a role for the user, before clicking the Create button to save the changes, you may click the Add button and to assign projects to the user.
- You can only assign a project to a project specific-role. The scope of the role is Custom by default.
- For more information about assigning projects to a role, see section 3.7.3 Assigning Projects.
2. Click the **Role Assignment** arrow button to expand it.
3. Select the Role check box(es) to assign one or more roles to the user.
4. Click the **Save** button.

(iii) To assign a role to a user while creating it through the Role Management page:

1. On the **Role Management** page, click the **Create new role** button.
2. Type the name of the role and its description (optional).
3. Assign permissions by selecting their respective check boxes.
4. Click the Add button (Figure 84). The Add Users dialog will open (Figure 85).
5. Select a user and click Add. The user will be added to the Role Assignments list (Figure 86).

**TIP**
To assign a role to multiple users in the Add Users dialog, you can press the key Ctrl on your keyboard and select the usernames.

6. Click Create. The Role Management page will open and the new role will appear (Figure 87).
3.6.4.2 Unassigning Users from Roles

You can unassign a user from a role and you can do it on either the User detail page or the Role detail page. When you unassign a user from a role, you take away the permissions associated with the role, which will cause any projects assigned to the role be removed as well.

(i) To unassign user from a role through the User detail page:

1. On the User Management page, click either (i) a username whose role(s) you want to remove or (ii) the Edit button on the same row.
2. On the User detail page (Figure 89), expand the **Role Assignments** section.
3. Clear the check box(es) of the role(s) you want to remove from the user.
4. Click **Save**. A confirmation message of the successful update will open (Figure 90).

**Figure 89 -- Unassigning Role through the User Details Page**

**Figure 90 -- Unassigning Role was Successful**
(ii) To unassign a user from a role through the Role detail page:

1. On the **Role Management** page, click any of the following: (i) a role you want to unassign, (ii) the **Edit** button if it is a custom role, or (iii) the **Manage Assignment** button if it is a pre-existing role. The Role detail page will open (Figure 91).

---

**Figure 91 -- Removing a Role from a User**
2. Select a user you want to remove in the **Username** column and click the **Remove** user button (Figure 92). The selected user will be deleted from the list.

3. Click **Save** to save the changes.

### TIP
Besides assigning more users to the role and unassigning users from the role, you can also add or delete one or more projects to or from the role by selecting or clearing the project name check box(es) in the column project.

### NOTE
Removing a user from a role will also remove him or her from any project associated with the role. Changes to the role assignment will take effect only after the user logs out of the Cameo EDW system.

### 3.6.4.3 Adding and Deleting Permissions
You can add more or delete some permissions from a role that you have created (custom role).

To add or delete permissions from a custom role:

1. On the **Role Management** page, click either the role or the **Edit** button. The **Role detail** page will open.
2. Select the check box of the permission you want to add or clear it to remove it from the role.
3. Click **Save**.
### 3.6.5 Searching for Roles

You can use the search function on the Role Management page to search for a specific role on Cameo EDW Admin. You can type a role name or a keyword in the Search for role name box. If you enter a partial name, all names that match the partial will be retrieved. The search result shows all matching role names on a drop-down list.

To search for a role:

1. On the Role Management page, type the name of a role you want to find in the Search by role name box (Figure 93).

![Figure 93 -- Searching for Roles](image)

2. Press Enter or click the Search button.

### 3.6.6 Removing Roles

You can remove or delete custom roles from Cameo EDW Admin through the Role Management page. Removing a custom role will cause the user, who has been assigned to that role, to be unable to use the permissions associated with that role to work on any project. However, these changes will only be effective once the user logs out from Cameo EDW Admin. Meaning that even though the role has been deleted, the user can still exercise the permissions as long as they stay in the system. But as soon as they log out, the changes apply.
To remove a custom role:

1. On the Role Management page, select a role you want to delete and click the submenu button (Figure 94).

![Role Management](image)

Figure 94 -- Deleting a Custom Role

2. Click Delete. The role will be deleted and the message confirming that the role has been deleted successfully will appear.

![Delete Success](image)

Figure 95 -- The Role was Successfully Deleted

### TIP
You can also delete a custom role by clicking the Delete button on the Role detail page.

3.7 Working with Projects

One of the goals of Cameo EDW system is to allow multiple users across different locations to access the same project and work on it concurrently. To share files and work on them with the other team members simultaneously, you have to first import them to the server and then open them on Cameo EDW Admin. Projects listed on the Project Management page in the Cameo EDW Admin are either newly created or imported ones. With the
project management capability, you can assign them to users, monitor their progress, and edit the project properties such as rename and edit its category.

You can import a project to a specific project category or you may import it first and create a category for that project later.

The Project Management page on Cameo EDW Admin allows you to:

- Assign projects to users.
- See all available project categories, project versions and branches.
- Create, edit, or delete a project category.
- Delete a project.
- Move a project from one category to another.
- Search for a project.

### 3.7.1 Project Management Page

The **Project Management** page (Figure 96) is accessible by clicking the main menu **PROJECTS**. An authorized user or a project owner can use this page to see all projects in the Cameo EDW system. They can also organize projects into categories to make navigating a long list of projects easier. You can create as many categories as desired. Projects that are not grouped into categories are stored under the **No Category** group.

Besides creating categories, you can use the Project Management page to remove a project, edit properties of a project for example, category, name, and description, or and move a project from one project category to another. Changes you make to a project or a project category through Cameo EDW Admin will directly impact on the related project on the Cameo EDW server. Meaning that removing a project from the **Project Management** page will also remove it from the server.

An authorized user can rename a project. A duplicate project name with a different description is allowed. Renaming a project does not affect other users who are currently working on the project. Project properties such as name, category, and description are editable.

The **Project Management** page shows the category names and the projects in each category name including the details such as the last committed date, the author, comments, and the **Edit** button. If you click a category name, all projects in that particular category will appear in tabular form.
Table 10 shows the UI components of the Project Management page.

Table: UI Components of the Project Management Page

<table>
<thead>
<tr>
<th>Name</th>
<th>Last commit</th>
<th>Author</th>
<th>Comment</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denote</td>
<td>02/23/15 02:18 PM</td>
<td>book</td>
<td><strong>no message</strong></td>
<td>Edit</td>
</tr>
<tr>
<td>NewProject</td>
<td>03/03/15 11:53 AM</td>
<td>Administrator</td>
<td><strong>no message</strong></td>
<td>Edit</td>
</tr>
<tr>
<td>P2</td>
<td>03/02/15 11:53 AM</td>
<td>p2</td>
<td><strong>no message</strong></td>
<td>Edit</td>
</tr>
<tr>
<td>Test</td>
<td>03/02/15 10:27 AM</td>
<td>book</td>
<td><strong>no message</strong></td>
<td>Edit</td>
</tr>
<tr>
<td>Test1</td>
<td>03/03/15 11:57 AM</td>
<td>Administrator</td>
<td><strong>no message</strong></td>
<td>Edit</td>
</tr>
<tr>
<td>Test3</td>
<td>03/02/15 12:13 PM</td>
<td>Administrator</td>
<td><strong>no message</strong></td>
<td>Edit</td>
</tr>
<tr>
<td>Untitled</td>
<td>03/03/15 11:25 AM</td>
<td>Administrator</td>
<td><strong>no message</strong></td>
<td>Edit</td>
</tr>
<tr>
<td>class diagram</td>
<td>03/02/15 10:32 AM</td>
<td>book</td>
<td><strong>no message</strong></td>
<td>Edit</td>
</tr>
</tbody>
</table>

Figure 96 -- The Project Management Page
**Table 10 -- UI Components of the Project Table**

<table>
<thead>
<tr>
<th>UI Components</th>
<th>Function</th>
</tr>
</thead>
</table>
| **Categories pane**               | The **Categories** pane displays all project categories in ascending order and the number of projects in each category. This button allows you to:  
• create a new project category.  
• edit a project category name.  
• remove a project from a particular category (the project will then belong to the **No Category** list). |
| **Name**                          | This column contains project names which are sortable in ascending or descending alphabetical order.                                      |
| **Last commit**                   | This column displays the date and time of the most recent entry or change to the project a user has committed in the system. The dates and times are sortable in ascending or descending numerical order. |
| **Author**                        | This column lists a user who made an entry or change to a specific project. The usernames are sortable in ascending or descending alphabetical order. |
| **Comment**                       | This column shows commit messages written by authors. The messages are sortable in ascending or descending alphabetical order.              |
| **Action**                        | The **Action** column allows you to:  
• Unlock one or several project branches.  
• Delete a project.                                                                     |
| **Delete**                        | To delete a project. Deleting a project will also remove it from the category the project is grouped into. This button will be enabled if you select a project from the project list table. |
| **Category drop-down menu**       | To move a project from one category to another. The drop-down menu lists all available categories that you can select. This menu will be enabled if you select a project from the project list table.  
Alternatively, you can drag a project from the project list to a category in the **Category name** column. |
| **Search by project name text field** | To allow you to type a project name and search for it. This search box will be enabled if you click it. There are two buttons in the search box:  
(i) **Clear** button is to delete text from the search box.  
(ii) **Search** button is to start searching for a specific project name. |
Every project in the table links to a page that provides information about the project details on a new page (Figure 97). The Project details page consists of three parts: (i) Project Details, (ii) History and (iii) Role Assignments.

(i) Project Details

![Project Details](image)

You can see complete information about a project in the Project Information part. Here, you can move a project from one category to another, rename it, or edit the description.

(ii) History

![Project History](image)

You can expand History and see all of a particular project’s versions, who committed them, and when. History allows you to track changes made to the project. You will be able to see when someone changed the project and committed it. A commit will also include a description of the changes that tells you what has been changed in the project.
The **Project Version** pane provides a filter function to allow you to filter a project version by branch either (i) all or (ii) master. If you select all, Cameo EDW Admin will filter all committed versions of that particular project from all branches. If you select **master**, it will filter out committed versions from a master branch only.

(iii) **Role Assignments**

![Role Assignments](image)

*Figure 99 -- Roles Assigned to Projects*

### 3.7.2 Creating a Project and Import it to the Cameo EDW Server

Projects on the Cameo EDW Admin are projects that are created in MagicDraw and added to the Cameo EDW server. It is necessary that you start your Cameo EDW server and log into it before importing those projects from MagicDraw.

#### 3.7.2.1 Logging onto the Cameo EDW Server

To log into the Cameo EDW server:

1. In MagicDraw, log into the Cameo EDW server by clicking **Collaborate > Login**. The **Login** dialog will open (Figure 111).
2. Log into the Cameo EDW server by typing your username, password, and server’s name and type.

3. Click OK. Login confirmation will appear in the lower left corner of the MagicDraw screen after a successful login.
3.7.2.2 Creating and Importing a Project

Projects on the Cameo EDW Admin are created in MagicDraw and imported from the Cameo EDW server because you cannot create a project on the Cameo EDW Admin. This section shows how you can create a new project in MagicDraw and import it to Cameo EDW server, and access it using the Cameo EDW Admin.

To create a new project in MagicDraw and import it to the Cameo EDW server:

1. Click **Collaborate > Projects**. The **Manage Projects** dialog will open (Figure 103).

2. Click the **Add** button. The **Add Server Project** dialog will open (Figure 104).
3. Type a project name, select a project category, and click **OK**. The project will be created under the selected category on the server (Figure 105).

*Figure 104 -- Adding a New Project to the Cameo EDW Server*
3.7.2.3 Importing an Existing Project

This section shows you how to import an existing project to the Cameo EDW server using MagicDraw.

To import an existing project to the Cameo EDW server:

1. In MagicDraw, click the **Open Project** menu (Figure 106).
Figure 106 -- Opening a Project in MagicDraw

2. Select a local project that you want to open and click Open (Figure 107).

Figure 107 -- Selecting a Project

3. Click Collaborate > Add Project to Server to add the open project to the Cameo EDW server (Figure 108).
4. Type a project name, select a project category, and insert your comment (optional) (Figure 109).

5. Click **Add**.

6. To check if the project has been imported to the Cameo EDW server, click **Collaborate > Projects**.
3.7.3 Assigning Projects

In Cameo EDW Admin, a user can have several roles (global or project-specific roles) and a role can have more than one project. An authorized user can view what roles a user has and which projects the user is assigned to through the User details page. Here you can assign or remove a project from any existing role if you are authorized to do so. Prior to accepting project assignments, a user must have a role. You can however, assign projects while you are creating a role on the Role details page, which has been explained in section 3.6.4.1 Assigning Roles.

The User detail page allows you to assign one or more projects to a project-specific role and/or unassign projects from the role.

To assign a project to a user or a role:

1. Click a username on the User Management page. The User detail page will open.
2. Click the Role Assignments arrow button.
3. Click the row of a role to which you want to assign a project (assigned roles have their check boxes selected) (Figure 111).
4. Click the **Add** button to assign a project to the selected role. The **Add Project** dialog will open (Figure 112).

5. Click a project (you can select multiple projects by pressing the **Ctrl** key while selecting them).
6. Click **Add** (Figure 112). The selected project(s) will appear on the page (Figure 113).
To unassign a project:

1. Click a username on the User Management page. The User details page will open.
2. Click the Role Assignments arrow button to expand the view.
3. Click the row of a role whose project(s) you want to remove.
4. Click the Remove project button to clear the project from the selected role (Figure 114).
5. Click **Save**. The project will be removed from the role and a message informing the update was successful will open.

### 3.7.4 Unlocking Project’s Elements

Elements in a project may be locked by some user to prevent it from being modified. Only users who have a permission to release project lock can unlock the elements of that particular project. As multiple users may work on a single project, they may also locked different elements of the project. Cameo EDW Admin allows you to unlock either (i) elements in a project that are locked by a particular user or (ii) any elements in a project that are locked.

You can click the **Edit** drop-down button of any project in the table on the **Project Management** page and select **Manage Locked Elements** to see if there are user locks in the project. You can see all users who locked some elements of a project in a locked elements management dialog. The dialog provides you two options: (i) **Release** and (ii) **Release all**. The former option allows you to unlock an element in a project that is locked by a particular user while the latter option allows you to unlock all elements in a project.

To unlock elements in a project:

1. Click **Projects** to open the Project Management page.
2. Click the **Edit** drop-down button of a project and select **Manage Locked Elements**. The project’s locked elements management dialog will open.
3. Click either (i) **Release** to unlock a particular user lock or (ii) **Release all** to unlock all user locks. A confirmation dialog will open.

4. Click **Yes**.

### 3.7.5 Deleting a Project

You can delete a project, if you have a permission to do so, from Cameo EDW Admin using the **Delete** button on the Project Management page. Deleting a project from Cameo EDW Admin will cause the project to be deleted from MagicDraw or Cameo EDW server. You cannot delete a project whose element(s) are locked by another user.

To delete a project:

1. Click a category in the **Category** column whose project(s) you want to delete. All projects belongs to the selected category will be listed in tabular form.

2. Either
   - (i) select the check box of a project you want to delete and click the **Delete** button (Figure 116).
   - (ii) click the **Edit** arrow button of a project you want to delete and click the **Delete** button (Figure 116). A confirmation dialog will open (Figure 118).
Figure 116 -- Deleting a Project

Figure 117 -- Deleting a Project
3. Click Yes. The selected project will be deleted from the category.

3.7.6 Searching for Projects

To search a project name:

1. Type a project name or a keyword that matches part of the project name on the Project Management page, for example, diagram, into the Search by project name box (Figure 119).

2. Either click the Search button or press Enter. All projects containing the keyword will appear in the Search result dialog (Figure 120).
3. You can click either a project name or the Edit button to see the project details on the project details page. You can also perform other commands in the Search result dialog as explained in the following section 3.7.6.1 Using the Project Search Result Dialog.

3.7.6.1 Using the Project Search Result Dialog

The project's Search result dialog opens whenever you perform a search for a project on the Project Management page. You can perform several operations in the Search result dialog such as:

- Search for more projects (by typing a keyword in the Search text box).
- Remove a project to another category (by using the Category drop-down menu).
- Open a project details page (by clicking the project name link and the Edit button).
- Delete a project (by clicking either the Delete button or the menu item Delete).
- Unlock elements (by clicking the arrow button and select the menu item Manage Locked Elements).
CAMEO ENTERPRISE DATA WAREHOUSE ADMIN
Using Cameo EDW Admin

Figure 121 -- Move Project to Another Category and Search Options

Figure 122 -- Delete and Manage Locked Elements Options

NOTE
- Cameo EDW Admin enables non case-sensitive keyword search.
- You can type a keyword or only one letter, for example, a, into the Search by project name box and Cameo EDW Admin will find all projects that contains that keyword or letter, and display them to you in the Search result dialog.
- The Search result dialog allows you to continue searching for a project by name or keyword, delete a project, or move it to another category.
3.7.7 Managing Project Categories

You can use a project category to classify projects into groups. Cameo EDW Admin helps you categorize projects through the Project Management page. Project categories are sortable. A user with the role Project Publisher can create project categories. You can create as many categories as desired. A project category enables visual grouping of projects especially if you have a long list of them. It can also help you search for a project faster if you know to which category the project belongs.

If you create a project but you do not specify which category that project belongs to, it will automatically go to the No Category group. All projects in No Category do not belong to any specific category. Therefore, if you delete a particular category, all projects in the deleted category will be moved to the No Category group.

Besides creating and editing a project category, you can also remove or delete one or more projects from a project category and move a project from one category to another.

3.7.7.1 Creating a Project Category

To create a project category:

1. Click the main menu PROJECTS to open the Project Management page (Figure 124).

   ![Image of Project Management page](Figure 124 -- The Manage Categories Button)

2. Click the Manage categories button. The Project Categories dialog will open (Figure 124).
3. Click the **Create new category** button.

4. Name the new category and click **Create**. The new category will be created.
5. Click **Finish** to save the changes.

3.7.7.2 Deleting a Project Category

Deleting a project category will cause all projects in the deleted category to be removed to the **No Category** group.
To delete a project category:

1. Click the **Manage categories** button on the **Project Management** page. The **Project Categories** dialog will open (Figure 128).

2. Click the **Delete** button to the right of the project you want to delete. The **Confirm delete categories** dialog will open (Figure 129).

3. Click **Yes**. The projects will be moved to the **No Category** group.
4. Click Finish to save the changes.

3.7.7.3 Editing a Project Category Name

To edit a project category name:

1. Click the Manage categories button on the Project Management page. The Project Categories dialog will open (Figure 131).
2. Click a category name and rename it, and then click **Update**. The category name will be updated accordingly.

3. Click **Finish** to save the changes.

### 3.7.8 Moving Projects from One Category to Another

You can move a project from one category to another by (i) selecting a new category from the **Category** drop-down menu or (ii) dragging it to another category name.

**(i) To move a project from one category to another by using the **Category** drop-down menu:**

1. Click the main menu **PROJECTS** to open the **Project Management page**.
2. Select a check box of a project you want to move to another category.
3. Click the **Category** drop-down menu button and select a new category for the project (Figure 132).
4. A confirmation dialog will appear. Click Yes (Figure 132). The selected project will be moved to the selected category.

(ii) To move a project from one category to another by dragging it:

1. On the Project Management page, drag a project to a category name (Figure 133).
2. Click and drag a project from the project list to a category in the **Category name** column. Once you drag the project, the check box will be selected by default. A confirm to move dialog will open (Figure 136).

![Figure 136 -- Moving a Project to Another Category Confirmation](image)

3. Click **Yes**. The selected project will be moved to the selected category.

**NOTE**

You can move several projects at the same time to another category by using the **Category** drop-down menu.

**TIP**

Alternatively, you can move a project to another category by clicking the project name and selecting a new category from the **Category** drop-down menu on the **Project details** page, see section 3.7.9 Editing Project Name, Description, and Category.
3.7.9 Editing Project Name, Description, and Category

You can edit a project's name and its description on the Project details page. This page allows you to rename a project, add or edit its description, or change the project's category. You can also filter project versions by project branches, and all users assigned to the project. You can open the Project details page by clicking a project name on the Project Management page.

To rename a project or edit its description:

1. Click the main menu PROJECTS.
2. Click a project name on the Project Management page to see the details.
3. You can (i) rename it, (ii) edit the description, or select a new category from the Category drop-down menu.

4. Click Save.

To filter project versions by its branch:

1. Click the main menu PROJECTS.
2. Click a project name on the Project Management page to open the Project details page.
3. Click the History drop-down button to see its details (Figure 138).
4. Select either (i) **all** or (ii) **trunk** from the **Filter by branch** drop-down list. All project versions belong to the selected branch will appear.

### 3.8 Downloading Log Files

Cameo EDW Admin lists all connecting server nodes in a cluster and their respective log files. Each server node has its own log file. You can see them on the Server settings page.

A log file is a file that records all user activities on Cameo EDW server such as log in, log out, change passwords, and check out projects. You can download a log file by clicking the download icon to the right-hand side of the server node’s IP address. The server nodes are arranged in an ascending numerical order by default. You can change the default order by clicking the **Server Node** column header.

The **Log Files** page provides all available server nodes and log files for download. It lists all server nodes of the cluster a user is connecting to. You can download a log file by clicking the download icon of a server node. You can save the downloaded log file to a local directory.

To download the Log page:

1. Click the main menu **SETTINGS** to open the **Server settings** page.
2. Click the icon of a log file you want to download. The **Log Files Download** page will open (Figure 139).
3. Click the download icon of a specific server node to download the log files. A download file dialog will open (Figure 140).

Figure 139 -- Downloading a Log File

4. Either (i) select a specific application to open the file or (ii) save the file into the folder Downloads of your browser.

5. Click OK. The file will be downloaded and saved on your computer.
3.9 Using Multi-Type Search

Besides allowing you to search for individual types that limit search results to username or project name only, Cameo EDW also provides a multi-type search capability that enables searching for multiple type of contents. The multi-type search box is located in the upper-right corner of the Cameo EDW Admin page. The benefit of this multi-type search is that the search result can return all entries or a specific type containing the character(s) entered.

This multi-type search allows you to select one of the four type qualifiers to limit your search results: (i) All, (ii) Users (iii) Projects, or (iv) Roles.

![Multi-Type Search with Four Type Qualifiers](image)

All matching usernames, projects, roles, or a combination of them will appear as a drop-down list.

To search for a username, a project, or a role that contains a specific keyword or character:

1. Click the **Search** box drop-down menu button and select (i) **All**, (ii) **Users** (iii) **Projects**, or (iv) **Roles**. If you do not select any type, **All** is the default search type.
2. Type the name of the user, the project, or the role, or if you are not sure you can type a keyword or characters that you think the username, the project, or the role may contain.
3. Press **Enter**. The Cameo EDW Admin will display the username, project, role, or all them that match the keyword on a drop-down list in the **Search** box.