

eQube®-CLM Software on AWS Marketplace

Quick Start Guide

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1. Deployment Instructions

Choosing the right deployment size

Select the appropriate deployment size based on the expected number of transactions:

1-10000: Optimal for executing up to 10000 transactions per day

10001-21000: Recommended for executing up to 21000 transactions per day

21000-50000: Recommended for executing up to 50000 transactions per day

Providing the Admin E-mail Address

Enter an E-mail address for the first administrator account in the eQube-MI system to be created during this deployment.

Requesting a temporary license for initial set up

To obtain a temporary license for the initial setup, follow these steps:

Request a temporary license from here.

Upon receiving the license file, upload it to an S3 bucket within your AWS account.

Specify the path of the license file in the S3 bucket using the following format:

s3://your-bucket-name/path/to/license-file

Ensure that you provide the correct path of the license file to facilitate the licensing process effectively.

Setting up the Software

The software setup process typically takes around 45 min - 1 hour to complete.

Once the cloud formation stack status is "CREATE_COMPLETE", the URLs to access the application will be available as stack output.

Updating to a final MAC based License

After the initial setup, obtain a final MAC based license by contacting here.

The instructions for updating the license are provided further in this document.

Note 1: The Cloud Formation stack collects the following information

User E-mail address: The E-mail address provided during the subscription will serve as the default administrator account for the software deployed through this process.

S3 URL: A path to the Bring Your Own License (BYOL) file which will be utilized to retrieve the license for the software to operate.

Note 2: The Cloud formation stack automatically generates a new role (\${AWS::StackName}-ec2-instance-role) which is then assigned the following policies:

AmazonS3ReadOnlyAccess – This policy enables access to the license path provided by the user during stack creation.



AmazonSSMManagedInstanceCore – This policy facilitates EC2 access via Sessions Manager which is necessary for obtaining the MAC address required for requesting the MAC-based license file.

BIEC2Policy (Custom Inline Policy) – This policy includes following permissions:

secretsmanager:GetRandomPassword

Allows generating random string values for the product metadata username, product metadata user password, and OS user's passwords.

secretsmanager:PutSecretValue

Enables storing the product metadata username, product metadata user password, and OS user passwords

secretsmanager:DescribeSecret

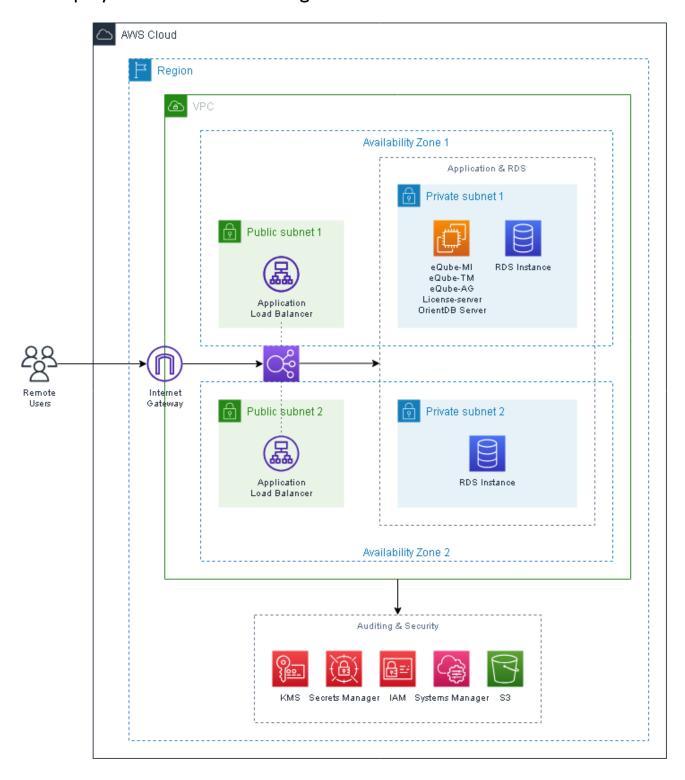
Permits reading details of the secrets created by the software

secretsmanager:GetSecretValue -

Allows accessing the values stored in the secrets for product metadata username and password.



2. Deployment Architecture Diagram





3. Getting Started

Accessing the User Interfaces

• eQube®-MI provides two user interfaces for different purposes:

Designer Interface:

The Designer Dashboard is the landing page by default. You can see the existing Projects, Connections, and Transactions. You can also create new Projects on this interface.

Access Designer using the URL: http://<lb_cname>/eQubeMI/Designer

Admin Console Interface:

The Admin Console interface is used for the administration of the eQube®-MI instance. You can monitor and administrate Health of eQube-MI, Application Connections, Servers, Users, and Licenses.

Access the Admin Console using the URL: http://<lb cname>/eQubeMI/admin

- Use the default login credentials: Username <your-email-id>. The initial password will be available as the Cloud Formation stack output under 'TemporaryAdminPassword'.
- Upon first login, you are required to update the password for security reasons.
- Additional user accounts can be created through the Admin Console interface based on your license limits.

4. Updating the MAC License

The MAC (Machine Access Control) license is required for accessing and using eQube[®]-MI.

By default, eQube®-MI is started with a MAC independent temporary license provided in the CloudFormation Template (CFT).

Users are expected to request a MAC license by checking the MAC address of the EC2 instance created in their AWS account by the AMI.

Upon receiving the new license file from eQ Technologic Inc, users can upload the license through the Admin Console interface.

4.1. Steps to Obtain MAC Address of EC2 Instance

1. Locate the EC2 instance

- i. In the EC2 Dashboard, select **Instances** from the navigation pane on the left.
- ii. Identify the EC2 instance associated with eQube®-MI from the list of available instances.
- iii. The EC2 instance created for eQube®-MI is typically named as <Stack_name>eQubeMI

2. Connect to the EC2 Instance

- i. Select the EC2 instance and click **Connect**.
- ii. Select the **Session Manager** tab to open the terminal.



3. Retrieve MAC Address

i. Once connected to the EC2 instance, execute the following command in the terminal:

ip addr show

This command displays detailed information about all network interfaces, including their MAC addresses.

ii. Identify the MAC address associated with the primary network interface of the EC2 instance, typically labeled as eth0 or ens3.

4.2. Steps to Upload MAC License

1. Login to Admin Console

Access the URL: http://<lb/>
cname>/eQubeMI/admin.

2. Access License Management

Within the Admin Console interface, navigate to the License Management section

3. View License Information

Click on the License information icon to view the existing licenses.

- 4. Upload New License
 - i. In the License Management section, locate the License summary icon (available on the top right corner of the table).
 - ii. Click on the Upload license button to initiate the license upload process.

4.3. Activation and Validity

- 1. The uploaded license is automatically activated on its start date.
- 2. Ensure that the uploaded license file is valid and corresponds to the correct EC2 instance's MAC address.
- 3. The license validity period and any restrictions are governed by the terms specified in the license agreement.

5. Additional configuration for eQube®-CLM Solution

5.1. Configuring Application Connections

The eQube®-CLM solution for Windchill-Solumina integration includes pre-configured dummy connections for Windchill and Solumina. eQube® can seamlessly connect to applications hosted either in the cloud or on-premises within your network. To ensure the solution functions correctly, verify that the EC2 instance running the eQube®-MI server has network access to the Windchill and Solumina applications.



You can configure the connection details for your Windchill and Solumina applications by following the steps outlined below.

5.1.1. Setting up Windchill connection

- Log in to the eQube-MI Admin Console via its web URL: `http://<eQube®-MI hostname>:<port>/<ContextName>/AdminConsole`.
- 2. Navigate to Configure > Application Connections.
- 3. On the Windchill Connection page, provide the following details. Most of the configurations are preset; update the following fields to connect to your application:
 - Version: Select the appropriate version of your Windchill connection from the available options.
 - Instance: Leave this field as "NA."
 - Windchill URL: Enter the URL of your Windchill application
 - Customization Path: Specify the path to the customization XML files. Use the format <windchill-folder>\tasks, replacing <windchill-folder> with the actual directory path.
 - Username: Enter your Windchill username in the Username field.
 - Password: Provide the corresponding Windchill password.
 - Status: Set the status to "Enabled".
- 4. After updating these fields, test and save the connection to ensure it is correctly configured. After saving the connection, the system will automatically build the connection model, which may take several minutes. Please verify that the model has been built successfully by using the "Edit Model" option. This step ensures that the connection is properly configured and ready for use.
- 5. Next, select the Windchill connection on the Application Connections page and open its properties. Search for the property <code>global-default-file-path</code> and add the desired file path. If this property is not present, create it manually. For example, you can set it to <code>/eg/Windchilldownloads</code>. Save the changes to finalize the configuration.

5.1.2. Setting up Solumina Connection

- 1. Log in to the eQube-MI Admin Console via its web URL: `http://eQube®-MI hostname>:<port>/<ContextName>/AdminConsole`.
- 2. Navigate to **Configure > Application Connections**.
- 3. On the Solumina Connection page, provide the following details. Most of the configurations are preset; update the following fields to connect to your application:
 - JMS URL: Enter the connection string in the format tcp://<HOST_IP>:<PORT> to specify the location of your JMS server.
 - JMS Username: Provide the username needed to authenticate with the JMS server.
 - JMS Password: Enter the password associated with the JMS Username for authentication.
 - Configuration Path: /eg/mi-tomcat/webapps/eQubeMI/FilesForSolumina/
 - Status: Set this to Enabled to activate the connection.



6. After updating these fields, test and save the connection to ensure it is correctly configured. After saving the connection, the system will automatically build the connection model, which may take several minutes. Please verify that the model has been built successfully by using the "Edit Model" option. This step ensures that the connection is properly configured and ready for use.

5.2. Setting up CDM

5.2.1. Set up the Common Data Model

The Common Data Model (CDM) is essential for harmonizing data across different systems within the eQube®-CLM solution. It acts as a unified schema that enables consistent data mapping and integration between PLM, MES, and ERP systems. Follow the steps below to set up and synchronize the CDM with your GraphDB instance:

1. Access CDM Management:

- Log in to the eQube®-MI Transformation Modeler (TM) using the provided web URL, such as http://<eQube-MI hostname>:<port>/<ContextName>/TM.
- On the left-hand side panel, click on the "CDM" section to access CDM management options.

2. Synchronize CDM with GraphDB:

- Within the CDM panel, select the appropriate GraphDB connection from the dropdown menu.
- Click on the "Sync" option to synchronize the CDM contents with the selected GraphDB instance.
- Follow the prompts to review the final data set and initiate the synchronization process.
- The synchronization process may take up to an hour, depending on the complexity and volume of the data.

3. Verify CDM Synchronization:

- After synchronization is complete, verify the sync status to ensure that all data has been properly integrated.
- Open the Entity Panel on the left-hand side of the canvas, and search for a key object such as **OOTB_BaseObject** in the Object Section.
- Click on **OOTB_BaseObject** in the list area and ensure that a green dot appears on OOTB BaseObject on the canvas, indicating successful synchronization.

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5.2.2. Refresh GraphDB Model

- 1. Log in to the eQube®-MI Admin Console using its web URL: http://<eQube®-MI_hostname>:<port>/<ContextName>/AdminConsole
- 2. Navigate to the "Configure" menu and select "Application Connections."
- 3. Choose the GraphDB connection from the list of connections.
- 4. Click the option to refresh the model to ensure that the latest changes are reflected in the GraphDB instance.

5.2.3. Release Maps

- 1. Log in to eQube®-MI TM via the web URL: http://<eQube®-MI hostname>:<port>/<ContextName>/TM.
- 2. Click on "Maps" in the Search panel.
- 3. Filter by "Release Status" and select "Unreleased Maps".
- 4. Check out the maps.
- 5. Change the release status to "Release".
- 6. Filter by "State", select "Checkout", and check in the maps.
- 7. Confirm the State filter shows "CHECKED IN" and the Release Status shows "Release".

5.3. Configure Email for notifications

To receive email notifications for sync status in the CLM solution: First, ensure SMTP is configured in the eQube®-MI Admin Console. Here's how to configure SMTP:

- 1. Log in to the eQube®-MI Admin Console via its web URL: http://<eQube®-MI hostname>:<port>/<ContextName>/AdminConsole.
- 2. In the left-hand panel, click "Properties" and then the "Email" tab.
- 3. Enter the SMTP server details, including the server address, port, and authentication credentials if required.
- 4. Specify the "From" email address that will appear on notifications.
- 5. Save the configuration.

Next set up CLM solution administrator email ids.

- 1. In the left-hand panel, click "Properties" and then the "User Defined" tab.
- 2. Populate the fields with appropriate email IDs for CLM solution administrators.

Property Name	Description
eq.solutions.WcToSolumina.admin_emailid	List of comma-separated emails for administrators
eq.solutions.email_from	The "From" field on emails received by end users



eq.solutions.admin_emailid	List of comma-separated emails for
	administrators

3. Save the changes.

Note: Setting up email notifications is optional and not mandatory for the CLM solution to function.

6. Maintaining the eQube®-MI server instance

- The eQube®-MI server can be managed by starting and stopping the associated EC2 instance.
- The detailed steps to start and stop the EC2 instance can be found at https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Stop Start.html#starting-stopping-instances
- The eQube®-MI server typically initializes within 5 minutes, though in some instances, it may require up to 15 minutes to begin servicing requests.

Note: Starting and stopping the EC2 instance affects the availability of the eQube®-MI server. Ensure proper coordination and communication with stakeholders before performing these actions to minimize service disruptions.