eQube®-MI Software on AWS Marketplace

Quick Start Guide

Aug 29, 2025

Table of Contents

1. Deployment Instructions

Choosing the right deployment size

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

Small: Optimal for executing up to 20000 transactions per day

Medium: Suitable for executing up to 50000 transactions per day

Large: Recommended for executing up to 200000 transactions per day

Extra Large: Recommended for executing up to 500000 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.

Setting Up the S3 Bucket for Product Installation: Before initiating the installation, you must prepare an S3 bucket that will store all the required inputs in a predefined folder structure. The installation scripts depend on this structure to correctly locate and process the files. All files related to licensing and certificates must be placed in the S3 bucket in the exact format shown below

```
s3://<your-bucket-name>/
        └── <your-folder>/
                ├── Licenses/
                        ├──<License File>
                ├──Certificate/
                        ├──<.pem or .crt 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.

Custom Policy: S3PutObjectPolicy
The S3PutObjectPolicy is a custom IAM policy that allows an EC2 instance, via its role, to upload logs (s3:PutObject) to a specific S3 location defined by the user-provided S3URI parameter.

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

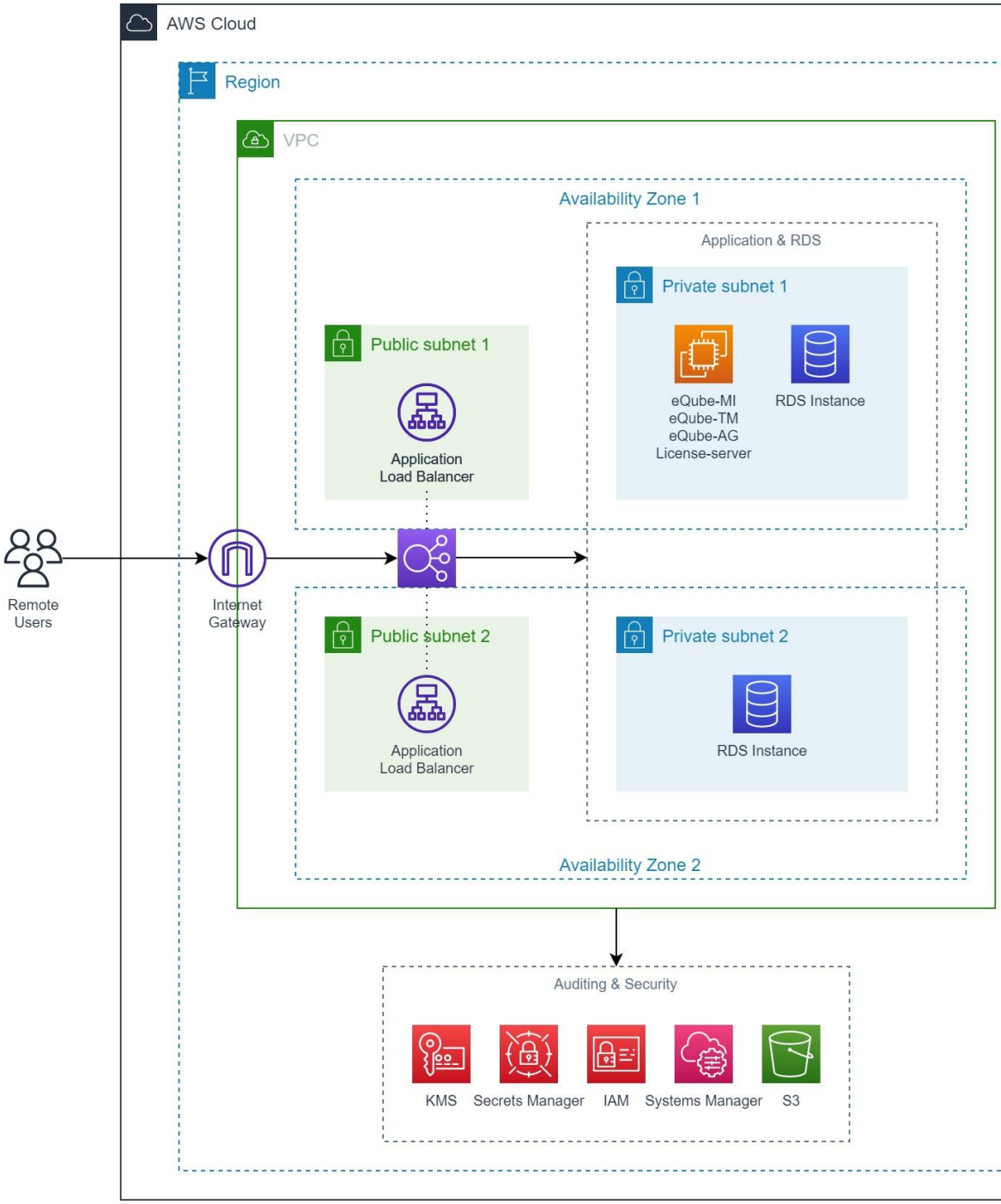
secretsmanager:DescribeSecret

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

  The URL is also available as the output of the Cloud formation stack under 'eQubeMIURL;

  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

  The URL is also available as the output of the Cloud formation stack under 'eQubeMIAdminConsoleURL;

- 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. 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.

6. Adding Certificates (If Required)

6.1.1. Prerequisites

- Upload the certificate file (`.pem` or `.crt`) to the S3 folder specified in the Deployment Instructions under **Setting up License and Certificate**.

```
s3://<your-bucket-name>/
└── <your-folder>/
  ├──Certificate/
      ├──<.pem or .crt file>
```

6.1.2. Step By Step to add certificate to local trust store

- Login To AWS Account -> Connect to the launch instance using Session Manager
- Navigate to the certificate script directory

```
cd /eq/shell-scripts/cloud-api/common/certificate/
```

- Set the script directory environment variable. Variable name is case-sensitive.

```
export ScriptsDir=/eq/shell-scripts/
```

- Execute the startup script

```
sh startup.sh
```

- Example output:

```
Download from AWS S3...
```

```
File downloaded from AWS S3.

Certificate was added to keystore
```

7. Configuring SAP Connections

The additional connector files, sapjco3.jar and libsapjco3.so, can be downloaded from the official SAP website.
The SAP connection requires the .so file to be placed in the plugin/lib directory.

7.1.1. Prerequisites

Upload .so file to s3

```
s3://<your-bucket-name>/

└── <your-folder>/

    └──ConnectionConfig/

          └── sap/

               └──<.so file>
```

7.1.2. Step By Step to add .so for connection

- Login To AWS Account -> Connect to the launch instance using Session Manager
- Download from s3 bucket

```
sudo su

aws s3 cp s3://<bucket-
name>/<path>/ConnectionConfig/sap/libsapjco3.so
/tmp/libsapjco3.so

cp /tmp/libsapjco3.so /eq/mi-tomcat/webapps/eQubeMI/WEB-
INF/plugins/sap/ver_NA_<instance>/lib/sapjco3.so
```

- Set permission and ownership

```
chown mi_tomcat_user:mi_tomcat_user /eq/mi-
tomcat/webapps/eQubeMI/WEB-
INF/plugins/sap/ver_NA_<instance>/lib/sapjco3.so
```

- Restart MI context

- Refer Maintaining the eQube®-MI server instance by restarting ec2.

7.1.3. Notes

- Replace `<bucket-name>` and `<path>` with the correct S3 location.
- Replace `<instance>` with the instance number shown on the SAP Connection Admin page.

  ⚠️ The same instance number **must** be used in the directory path.
- The `.so` file must be placed in the `lib` directory for the SAP plugin to work correctly.