Install a Production EUM Server

You can run the installer in one of three modes. The GUI and silent installation methods are described below. To start the installer in interactive console mode, start the installer with the `-c` switch. The console mode prompts you for the equivalent information that appears in the GUI installer screens, as described below.

In addition, you can run the installer using a Response file (for unattended installations). See Installing with the Silent Installer.

Before Starting

Before starting, download the installer distribution and extract it on the target machine. You can get the EUM installer from the AppDynamics Download Center.

To secure connections from agents to the EUM Server, AppDynamics strongly recommends that SSL traffic is terminated at a reverse proxy that sits in front of the EUM Server in the network path and forwards connections to the EUM Server. If this is not possible in your installation, however, it is possible to connect with HTTPS directly to the EUM Server, as described below. For information on setting up a custom keystore for production, see Secure the EUM Server.

> ⚠️ If you install and configure the Events Service with HTTPS support, you must perform a workaround for your EUM Server installation to complete properly. After the Events Service certificate configuration, install the EUM Server without Analytics enabled. Then install the certificate into the EUM Server keystore following the steps found on Secure the EUM Server. Configure Analytics in the Events Services Properties, and restart the EUM Server.

Note that Linux systems must have the `libaio` library installed before you install the EUM Server. See the EUM Server Requirements for more information.

Install the EUM Server for a Production Deployment with the GUI Installer

Run the on-premises EUM installer on the machine on which you want to install the EUM Server, as follows:

1. Start the installer:
   - On Linux:

     a. From a command prompt, navigate to the directory to which you downloaded the EUM installer.
     b. Change permissions on the downloaded installer script to make it executable, as follows:

     ```
     chmod 775 euem-64bit-linux-4.5.x.x.sh
     ```

     c. Run the script as follows:

     ```
     ./euem-64bit-linux-4.5.x.x.sh
     ```

   - On Windows:

     a. Open an elevated command prompt (run as administrator) and navigate to the directory to which you downloaded the EUM installer.
     b. Run the installer:

     ```
     euem-64bit-windows-4.5.x.x.exe
     ```

2. In the Welcome screen, click **Next**.
3. Scroll to the end of the license agreement, accept the license agreement, and click **Next** to continue.
4. Choose **Product** for the installation mode. This mode installs the EUM Server on this machine. Use this type if AppDynamics End User Monitoring and the AppDynamics Controller are installed on different hosts. Selecting this type will install a separate MySQL instance on this machine. Click **Next**.
5. In the Database Setup screen:
    a. Enter a new **Root User Password** and confirm it.
    b. Enter a new **eum_user Password** and confirm it.
    c. Click **Next.**

> ⚠ Usernames and passwords can only consist of ASCII characters. In addition, passwords cannot include the characters '^', '/', or '$'.

6. In the AppDynamics End User Monitoring Setup screen:

    a. Enter a new **key store password** and confirm it.
    b. Click **Next**, then click **Finish**.
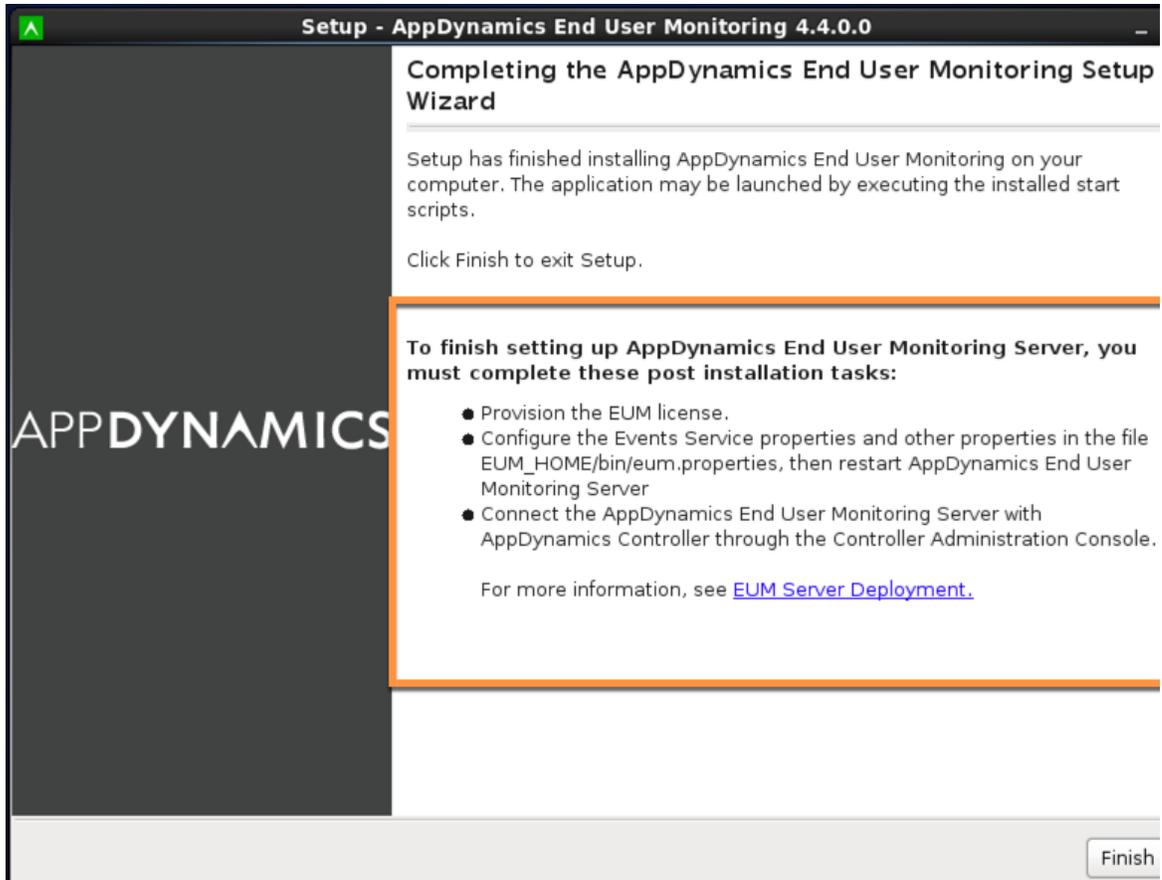
With the initial configuration information gathered, the installer completes the setup of the EUM Server. When finished, the EUM Server is running.

Post-installation Tasks

After installing the EUM Server, you must perform the additional post-installation tasks:

- Configure JVM options
- Provision the EUM license
- Configure the Events Services properties in the `eum.properties` file
- Connect the EUM Server with the AppDynamics Controller
- Secure the EUM Server by setting up a custom keystore

> ⓘ The EUM Server Installer only configures the HTTP port. If you are installing the 4.5 EUM Server or upgrading to the 4.5 EUM Server, you'll need to configure the EUM Server and update the AppDynamics Controller settings to connect to the HTTPS port. See Configure the HTTPS Port for the 4.5 EUM Server for instructions.

Configure JVM Options

Windows

Update the JVM options in the `$APPDYNAMICS_HOME\EUM\eum-processor\bin\eum-processor-launcher.vmoptions` file.

```
-XX:+UseConcMarkSweepGC
-XX:+HeapDumpOnOutOfMemoryError
-XX:CMSInitiatingOccupancyFraction=50
-XX:NewRatio=1
-Xms4096m
-Xmx4096m
-DEUM_COMPONENT=processor
-Dlogback.configurationFile=bin/logback.xml
-Dcom.mchange.v2.c3p0.cfg.xml=bin/c3p0.xml
```

Linux

Update the JVM options in the `$APPDYNAMICS_HOME/EUM/eum-processor/bin/eum-processor` file.

```
# Add default JVM options here. You can also use JAVA_OPTS and EUM_PROCESSOR_OPTS to pass JVM
options to this script.
DEFAULT_JVM_OPTS="\
\"-server\" \
\"-XX:+UseConcMarkSweepGC\" \
\"-XX:CMSInitiatingOccupancyFraction=50\" \
\"-XX:+HeapDumpOnOutOfMemoryError\" \
\"-XX:NewRatio=1\" \
\"-Xms4096m\" \"-Xmx4096m\" \
\"-DEUM_COMPONENT=processor\" \
\"-Dlogback.configurationFile=bin/logback.xml\" \
\"-Dcom.mchange.v2.c3p0.cfg.xml=bin/c3p0.xml\""
```

Provision the EUM License

Follow the provision instructions for your deployment:

- Provision Single-Tenant EUM Licenses
- Provision EUM Licenses for Multi-Tenant Controllers
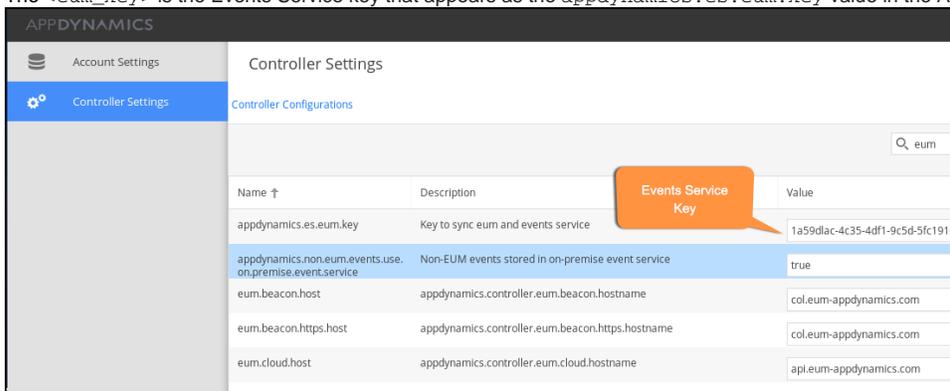
Configure the Events Services Properties

To configure the Events Services properties in the `eum.properties` file:

1. Make sure Events Services is running.
2. Using the CLI, navigate to `bin` in the `EUM/eum-processor` directory.
3. Open the `eum.properties` file for editing.
4. In the `eum.properties` file, enter the values as follows:

Sample

```
analytics.enabled=true
analytics.serverScheme=http
analytics.serverHost=events.service.hostname
analytics.port=9080
analytics.accountAccessKey=1a59d1ac-4c35-4df1-9c5d-5fc191003441
```

The `<eum_key>` is the Events Service key that appears as the `appdynamics.es.eum.key` value in the Administration Console:

The configuration should appear similar to the following example:

```
# Credential Key Store Information
onprem.useEncryptedCredentials=true
onprem.credentialKey=s_-001-12-F+ddxp+nzHI=dwDynZje09g=


# Web server properties
processorServer.httpPort=7001
processorServer.httpsPort=7002
processorServer.httpsProduction=true
processorServer.keyStorePassword=1wnl1u

# Analytics server properties
analytics.enabled=true
analytics.serverScheme=http
analytics.serverHost=events.service.hostname
analytics.port=9080
analytics.accountAccessKey=1a59d1ac-4c35-4df1-9c5d-5fc191003441

# Session properties
collection.sessionEnabled=true
crashProcessing.sessionEnabled=true
```

5. After updating the `eum.properties` file, restart the EUM Server.

Connect the EUM Server with the AppDynamics Controller

To connect the EUM Server with the AppDynamics Controller:

1. Log in to the Administration Console.
2. Set the following Controller properties:
   a. `eum.cloud.host: http://eum-host-name:7001` – This tells you where the controller will poll for EUM metrics.
   b. `eum.beacon.host: eum-host-name:7001` – This tells you where the JavaScript Agent will be configured to send out the beacons over the HTTP protocol.
   c. `eum.beacon.https.host: https://eum-host-name:7002` – This tells you where JavaScript Agent will be configured to send out the beacons over the HTTPS protocol.
   d. `eum.mobile.screenshot.host: eum-host-name:7001` – This tells you where the Controller will look for mobile screenshots.

Installing with the Silent Installer

Instead of using the installer in GUI mode, you can use the silent installer to perform an unattended installation. The silent installer takes a response file as a source for the initial configuration settings. It's useful for scripting installation or performing large scale deployments.

To use a response file for installation:

1. Create a file named `response.varfile` on the machine on which you will run EUM installer with the following:

```
sys.adminRights$Boolean=false
sys.languageId=en
sys.installationDir=/AppDynamics/EUM
euem.InstallationMode=split
euem.Host=eumhostname
euem.initialHeapXms=1024
euem.maximumHeapXmx=4096
euem.httpPort=7001
euem.httpsPort=7002
mysql.databasePort=3388
mysql.databaseRootUser=root
mysql.dbHostName=localhost
mysql.dataDir=/usr/local/AppDynamics/EUM/data
mysql.rootUserPassword=singcontroller
mysql.rootUserPasswordReEnter=singcontroller
eumDatabasePassword=secret
eumDatabaseReEnterPassword=secret
keyStorePassword=secret
keyStorePasswordReEnter=secret
eventsService.isEnabled$Boolean=true
eventsService.serverScheme=http
eventsService.host=eventsservice_host
eventsService.port=9080
eventsService.APIKey=1a234567-1234-1234-4567-ab123456
```

2. Modify values of the installation parameters based on your own environment and requirements. Particularly ensure that the directory paths and passwords match your environment.
3. Run the installer with the following command:

```
./euem-64bit-linux-4.5.x.x.sh -q -varfile response.varfile
```

On Windows, use:

```
euem-64bit-windows-4.5.x.x.exe -q -varfile response.varfile
```