

1.1.0

*IBM Tivoli Monitoring - Tivoli Enterprise
Portal Server Container
Deployment Guide*



Note

Before using this information and the product it supports, read the information in [Appendix A, “Notices,”](#) on page 27.

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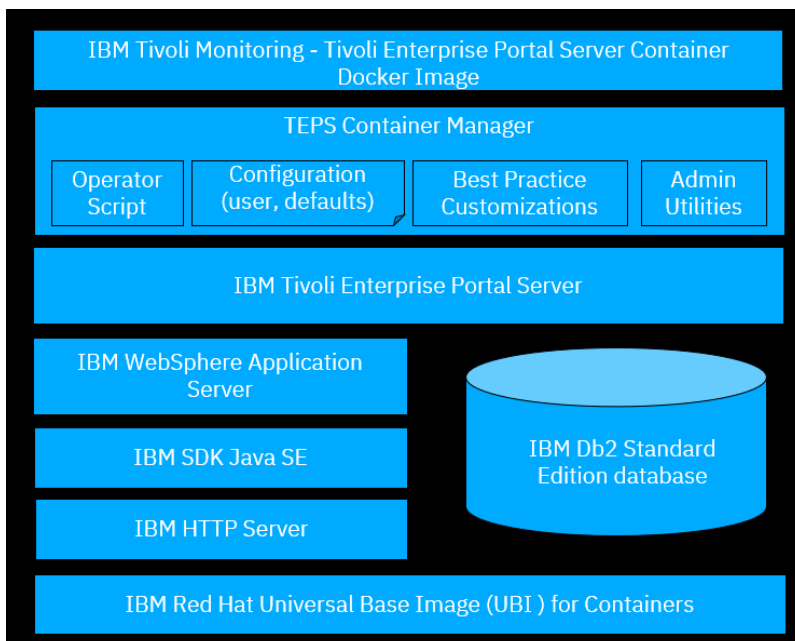
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Overview

Starting from IBM® Tivoli® Monitoring 6.3.0.7, Docker technology is introduced to reduce the time and effort in installing the Tivoli Enterprise Portal Server. You can now run IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container in a Docker runtime environment on Linux® on System z® or on z/OS® using z/OS Container Extensions.

Docker is an alternative to the classic installation package. The Docker image installs and configures everything that you need to run IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container 1.1.0:

- IBM Tivoli Monitoring Tivoli Enterprise Portal Server 6.3.0.7 Service Pack 13 with IBM WebSphere® Application Server 8.5.5.22 and IBM HTTP Server 8.5.5.22
- IBM Red Hat® Universal Base Image (UBI) for Containers 8.0
- IBM Db2® Standard Edition database 11.5.8.0



You can continue to configure and customize IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container after the installation.

Benefits

IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container saves time and simplifies maintenance by removing the need to manually install, configure, start, stop, and maintain the Tivoli Enterprise Portal Server and all the software prerequisites.

Planning for deployment

Effective preparation and planning can make the deployment process go more quickly and smoothly. To prepare for deployment, familiarize yourself with the product components and architecture, and then review the requirements that are listed in this topic.

Linux on System z and Docker prerequisite

IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container supports the S/390x architecture. You have two options to install and run IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container:

- Install Docker 19.x or later on Linux on System z. For more information, see [Install Docker Engine on RHEL](#).

Tip: To install Docker Enterprise, you will need the URL of the Docker Enterprise repository that is associated with your trial or subscription. Follow the steps below to find the URL:

1. Go to <https://hub.docker.com/my-content> and sign in with your user ID and password. All of your subscriptions and trials will be listed.
 2. Click **Setup** for **Docker Enterprise Edition for Red Hat Enterprise Linux**.
 3. Copy the URL from **Copy and paste this URL to download your Edition** and save it for later use.
- Use the preinstalled Linux on System z and Docker in IBM z/OS 2.4 (or later) z/OS Container Extensions.

Software inside and installed with container

The provided Docker image includes all the prerequisite software that you need to run IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container 1.1.0:

- IBM Tivoli Monitoring Tivoli Enterprise Portal Server 6.3.0.7 Service Pack 13 with IBM WebSphere Application Server 8.5.5.22 and IBM HTTP Server 8.5.5.22
- IBM Red Hat Universal Base Image (UBI) for Containers 8
- IBM Db2 Standard Edition database 11.5.8.0

Note:

- You must use IBM Db2 as the Tivoli Enterprise Portal Server database. A Derby database is not supported.
- IBM Db2 uses a non-standard port (25010) rather than the standard port (50000).
- IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container doesn't support Tivoli Data Warehouse (TDW) for historical data collection.

Hardware requirements

• Processor requirements

Provide two or more virtual processors backed by physical processor hardware like System z Integrated Information Processor (zIIP) or Integrated Facility for Linux (IFL) processor since Tivoli Enterprise Portal Server, IBM Db2, IBM Red Hat Universal Base Image, IBM WebSphere Application Server, and IBM HTTP Server are multithreaded. For large environments, use four or more. For more information, see [Processor requirements](#).

• Memory requirements

Provide at least 8 GB random-access memory (RAM).

• Disk requirements

Provide at least 40 GB hard disk drive (HDD) or solid-state drive (SSD) to store the Docker image file and provide enough space in temporary directories for downloading the tar file and the Docker image. For more information, see [Memory and disk requirements](#).

Gather information about your OMEGAMON® environment

- Tivoli Enterprise Monitoring Server hostname, protocol, and port number.
- Valid user ID and password for your existing Tivoli Enterprise Monitoring Server security configuration

The hub Tivoli Enterprise Monitoring Server is required and needs to be started and running for the Tivoli Enterprise Portal interface to open and work correctly.

When the security feature is turned ON for the Tivoli Enterprise Monitoring Server, you will need a user ID that is defined to the local security facility like Resource Access Control Facility (RACF). If the security feature of the Tivoli Enterprise Monitoring Server has not been turned ON or temporarily turned OFF, you can use the default ID, `sysadmin` with no password. This ID is created by the Tivoli Enterprise Portal Server installer by default.

Obtaining installation files

Visit the download portal to get the Docker installation files of the IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container.

1. Order the product materials via Shopz or you can contact IBM support directly. Make sure to include your IBM customer and contact information when you email IBM.
2. Go to [IBM MRS Tool \(https://www.ibm.com/resources/mrs/assets?source=ibmtivolimonitor&lang=en_US\)](https://www.ibm.com/resources/mrs/assets?source=ibmtivolimonitor&lang=en_US) to download the installation files.

Tip: You need to use IBMid to log in, if you don't have one, access [this website \(https://www.ibm.com/account/us-en/signup/register.html?Target=https://myibm.ibm.com/\)](https://www.ibm.com/account/us-en/signup/register.html?Target=https://myibm.ibm.com/) to sign up.

3. Provide the access key to get the installation files.

The access key is supplied with the product materials on a DVD (form number: LCD7-7811-00) titled "**IBM Tivoli Enterprise Portal Server Container Image**".

4. Select the installation package for IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container and click **Download now** to download `ITM_TEPS_Container_1.1.0.tar` to the system where you run Docker.

Note:

- The maintenance for IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container can also be downloaded with all the software needed for an upgrade or a completely new installation.
- The Docker image contains all the software prerequisites that you need to install IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container.
- The Docker image does not contain or install any other IBM Tivoli Monitoring components such as the Tivoli Enterprise Monitoring Server or Tivoli Data Warehouse.

Installing IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container

Load and run the Docker image to install IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container.

1. The Docker installation package is a compressed file. Run the command to extract the contained files to a target directory:

```
tar -xvf ITM_TEPS_Container_1.1.0.tar --directory <target_dir>
```

Note: The target directory must exist before **tar** can extract the files into it.

2. Go to the directory that you extracted the files into and view the contents of the package:

```
cd <target_dir>  
ls <target_dir>
```

The package contains the following folder and files:

Folder or file name	Description
itmzcx_teps.tar.gz	The Docker image with IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container and all the prerequisite software
tepsdocker.sh	The Linux shell command-line utility script that is used to install, configure, and manage IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container You can run command ./tepsdocker.sh help to get more details. Note: You must run the script with user <i>root</i> .
cq_silent_config.env	The configuration file for IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container This file allows you to define configurations that are needed to install and configure IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container and all the prerequisite software. Note: The <code>cq_silent_config.env</code> file must be in the same directory where <code>tepsdocker.sh</code> is located.
README.md	The readme file with information
Licence	The folder containing license information

3. Load the Docker image into your Docker environment by running the following command:

```
./tepsdocker.sh load
```

4. Start the Docker container by running the following command:

```
./tepsdocker.sh start
```

5. Optional: If you need to change the IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container settings, edit file `cq_silent_config.env` to provide the required configuration settings and then run the command:

```
./tepsdocker.sh configure
```

Available configuration options:

CMSCONNECT=YES

Valid values are: Yes and No.

This parameter is required for connecting to a hub Tivoli Enterprise Monitoring Server.

HOSTNAME=host_name or IP_Address

Specify the hostname or the IP address of the hub Tivoli Enterprise Monitoring Server.

This parameter is required for connecting to a hub Tivoli Enterprise Monitoring Server.

NETWORKPROTOCOL=ip.pipe

Valid values are: ip, sna, ip.pipe, or ip.spipe.

The default network protocol used is ip.pipe.

IPPIPEPORTNUMBER=nnnnn

If you don't specify a value for this parameter, the default port number 1918 will be used.

6. Verify that IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container is started correctly:

```
./tepsdocker.sh status
```

Sample output:

```
+++++
+          IBM Tivoli Enterprise Portal Server Docker Command Line Utility          +
+++++
      Executing command status ...

      TEPS Docker image ----- Loaded.
      TEPS Docker container ----- Available.
      Status of TEPS Docker container ----- Started.
```

IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container, IBM Db2, IBM HTTP Server, and IBM WebSphere Application Server are all automatically started.

If the load is successful, you can delete the `itmzcx_teps.tar.gz` file because it is not needed anymore.

Now, you have successfully installed and started IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container. By default, the self-describing agent feature is enabled (`TEPS_SDA=Y`). After the installation is complete and the Tivoli Enterprise Portal Server connects to the z/OS hub Tivoli Enterprise Monitoring Server, the application support files will be downloaded from the hub Tivoli Enterprise Monitoring Server, and then automatically installed and configured in the Tivoli Enterprise Portal Server

Note: You need to ensure that the hub Tivoli Enterprise Monitoring Server and the agents have their respective SDA settings set to 'Y'.

If you want to further configure and customize the Tivoli Enterprise Portal Server, see [Configuring components with a response file](#).

Uninstalling IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container

To uninstall IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container, remove the Docker image and the container from the host system.

1. Run the following command to stop the running container:

```
./tepsdocker.sh stop
```

2. Run the following command to remove Docker container and Docker image:

```
./tepsdocker.sh remove
```

Tip: You can still use the Docker image to start a completely new container. Otherwise, if you no longer need this image, you can run the following command to delete it:

```
docker rmi <image id>
```

IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container is successfully removed from your server.

Starting the Tivoli Enterprise Portal client using Java Web Start for each user

Use Java™ Web Start to download and start the Tivoli Enterprise Portal client.

A desktop client connected to the Tivoli Enterprise Portal Server using Java benefits from centralized administration from the server. It is automatically configured with the latest updates each time you start the client, and there is no need to configure application support.

Java Web Start applications are started by using the Java Network Launch Protocol (JNLP). Hence, you must have a JNLP file to deploy the application. A JNLP file is a Java Web Start (JWS) file that contains XML information that is used to start and manage a Java program over a network. For more information, see [Java Web Start clients](#).

Note:

- Open Web Launch (OWL) is not supported for launching the Tivoli Enterprise Portal client.
- Desktop client is also not supported.
- HTTPS with port 15201 is not supported. You must use HTTP with port 15200 as instructed in the following steps.

1. To run Java Web Start, you must have Java 8 installed on your system.

You can obtain Java 8 from the IBM Tivoli Monitoring Tivoli Enterprise Portal Server installation by entering the following address in your browser and following instructions to download and install Java:

```
http://<teps_hostname>:15200/java/ibm-java8.exe
```

For example (Windows):

```
http://aws-itm-rhel841.fyre.ibm.com:15200/java/ibm-java8.exe
```

Tip: You can run the following command to detect the IP address of the Tivoli Enterprise Portal Server container:

```
docker inspect -f '{{range.NetworkSettings.Networks}}{{.IPAddress}}{{end}}' itmzcx_teps
```

2. After you have Java 8 installed on your system, execute Java Web Start with the URL of your Tivoli Enterprise Portal Server:

```
<jre_install_dir>\bin\javaws http://<teps_hostname>:15200/tep.jnlp
```

- For example (Windows):

```
C:\Program Files (x86)\IBM\Java71\jre\bin\javaws http://AWS-ITM-RHEL841.fyre.ibm.com:15200/tep.jnlp
```

- For example (Linux):

```
./install_dir/jre/platform/bin/javaws http://AWS-ITM-RHEL841.fyre.ibm.com:15200/tep.jnlp
```

Note: It is recommended that you uninstall applications, clear the cache, and then run Java Web Start in offline mode (nosplash).

```
javaws.exe -uninstall
javaws.exe -clearcache
javaws.exe -Xnosplash http://<your docker server hostname>:15200/tep.jnlp
```

For more information about the usage of the Java Web Start tool, see [javaws](#).

3. In the prompt security alert, accept the certificate.

The Tivoli Enterprise Portal client is started.

Logging in to the Tivoli Enterprise Portal client

Log in to the Tivoli Enterprise Portal client by either using the user ID `sysadmin` without a password or by adding an existing Tivoli Enterprise Monitoring Server user ID to Tivoli Enterprise Portal Server.

Ensure that the Tivoli Enterprise Monitoring Server is running.

When the Tivoli Enterprise Portal client is started and the login window is displayed, provide the user ID and password and click **OK** to log in to the client.

- If the security setting of the monitoring server is temporarily turned off (with **Security: Validate User** setting to **NO**), you can use the installer's default user ID `sysadmin` without a password to log in. For more information about how to turn off the security setting, see step 13 in [Configuring the hub monitoring server](#).
- If you don't want to temporarily turn off the security setting, you can create a valid user ID for Tivoli Enterprise Portal Server. For more information, see [“Adding a user ID for the Tivoli Enterprise Portal Server”](#) on page 19.

Note:

- Typically, access to the Tivoli Enterprise Portal is restricted to remote LDAP user IDs that are defined in your environment. For more information, see [IBM Tivoli Monitoring Administration Guide](#).
- LDAP integration is not supported by default in the Tivoli Enterprise Portal container. The administrator can follow the steps as described in [Enable and configure LDAP user authentication for the portal server, if desired](#) to customize the Tivoli Enterprise Portal container by configuring LDAP.

Administering

After you complete the initial installation and verification steps, you might need to complete further administration tasks. This section provides typical administration tasks for your reference.

Note: By default, Transport Layer Security (TLS) 1.2 is not enabled by IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container. If you want to implement TLS 1.2 only for the Tivoli Enterprise Portal Server, see [TLS 1.2 only configuration for TEP, IHS, TEPS, TEPS e/WAS components and e/WAS default certificate renewal](#).

IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container does not install the https support out of the box. For information on how IBM Tivoli Monitoring infrastructure can be secured, see [Securing communications](#).

Information for administering the Tivoli Enterprise Portal Server

IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container creates two user IDs:

- Db2 administrator ID: db2inst1
- Portal server database user ID: itmuser

You can find the corresponding password defined in the `cq_silent_config.env` file. Update the password as needed. Your password must consist of at least 8 characters.

Adding a user ID for the Tivoli Enterprise Portal Server

Follow the steps to add a user ID for the Tivoli Enterprise Portal Server.

1. Temporarily turn off the security setting on the hub Tivoli Enterprise Monitoring Server (with **Security: Validate User** setting to **NO**) or add the user ID and password for sysadmin to RACF or other SAF facility that you use.
2. If the security is turned off, log in to the Tivoli Enterprise Portal Server using the sysadmin user ID with no password; otherwise, provide the RACF password to log in.
3. Click **Administer Users**. From the **Users** list, right-click the pre-defined user ID sysadmin and select **Create Another User** to add a new TSO users ID using sysadmin as a template.
4. In the **Create New User** window, provide the user information.
5. After you have added the new user ID, you can turn on the security setting on the hub Tivoli Enterprise Monitoring Server (with **Security: Validate User** setting to **YES**).

Replicating the Tivoli Enterprise Portal Server database

Follow the steps in this topic to backup the Tivoli Enterprise Portal Server database from the Docker container to the underlying host system so that it can be restored later.

Backing up the Tivoli Enterprise Portal Server database regularly allows you to move the Tivoli Enterprise Portal Server to a new system, or restore the Tivoli Enterprise Portal Server if anything fails, and lets you restore if an upgrade fails for any reason.

Backing up the Tivoli Enterprise Portal Server database

Export the Tivoli Enterprise Portal Server to create a copy of the Tivoli Enterprise Portal Server database for applying to another computer or to keep as a backup.

1. Access the Tivoli Enterprise Portal Server Docker container:

```
docker exec -it itmzcx_teps bash
```

2. Run the **migrate-export** script to generate a file named `saveexport.sql` in the `install_dir/$platform/cq/sqllib` subdirectory. It contains all the Tivoli Enterprise Portal Server data.

```
/opt/IBM/ITM/bin/itmcmd execute cq "runscript.sh migrate-export.sh"
```

3. Exit the container.

```
exit
```

4. Obtain the Tivoli Enterprise Portal Server Docker *Container_ID*:

```
docker ps
```

5. Copy the files from the Docker container to the current directory on the zCX host system, for example,

```
docker cp Container_ID:/opt/IBM/ITM/1s3266/cq/sqllib/saveexport.sql ./saveexport.sql
```

Ensure to replace **Container_ID** in the command with the value returned from the **docker ps** command.

Restoring the Tivoli Enterprise Portal Server database

Import a copy of the Tivoli Enterprise Portal Server database.

1. Obtain the Tivoli Enterprise Portal Server Docker *Container_ID*:

```
docker ps
```

2. Copy the files from the zCX host system to the container, for example,

```
docker cp ./saveexport.sql Container_ID:/opt/IBM/ITM/1s3266/cq/sqllib/saveexport.sql
```

Ensure to replace **Container_ID** in the command with the value returned from the **docker ps** command.

3. Access the Tivoli Enterprise Portal Server Docker container:

```
docker exec -it itmzcx_teps bash
```

4. Run the script to process file `saveexport.sql` in the `install_dir/$platform/cq/sqllib` directory. Depending on the contents of the `saveexport.sql` file, this process can completely replace the existing portal server data.

```
/opt/IBM/ITM/bin/itmcmd execute cq "runscript.sh migrate-import.sh"  
exit
```

5. Stop and restart the Tivoli Enterprise Portal Server.

```
/opt/IBM/ITM/bin/itmcmd agent stop cq  
/opt/IBM/ITM/bin/itmcmd agent start cq
```

6. Exit the container.

```
exit
```

Resigning application support JAR files

You need to resign your application support JAR files if they are expired or unsigned.

1. Go to directory `<InstallDirectory>/<Architecture>/cw/classes` where the files are located, for example, `/opt/IBM/ITM/1x8266/cw/classes`.
2. Extract the JAR files.

```
tar -cvf /tmp/classes.tar *.jar *.zip
```

3. Open an IBM Support ticket and provide the file for resigning.
The files will be resigned and returned via a download link with instructions.

Troubleshooting

This topic provides problem determination and resolution information for common issue.

Network issues

If you have connection errors to IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container, you need to verify the following issues:

- You have ports that are opened to run the Tivoli Enterprise Portal Server.
- Your user ID has access to the Docker host environment.

Disk space issues

If you have disk space errors, you need to make sure that adequate disk space is available for downloading the package file and for the installation process. For more information, see [“Planning for deployment”](#) on page 7.

Relevant resources

- [Docker troubleshooting guide](#): The guide covers information about how to diagnose and troubleshoot Docker issues.
- [IBM Tivoli Monitoring troubleshooting guide](#): This guide provides problem determination and resolution information for the issues that are most commonly encountered with IBM Tivoli Monitoring components and related products.
- [Java Web Start clients](#): This topic includes information you might need to deploy the Tivoli Enterprise Portal client via Java Web Start.
- [Windows: Installing the portal server](#): This topic includes information you might need to install the Tivoli Enterprise Portal Server and portal client on a Windows computer.

Collecting log information for IBM support

If you have problems with the Tivoli Enterprise Portal Server Docker container, follow the steps in this topic for troubleshooting and collecting the needed information for IBM support.

1. Check logs of the Tivoli Enterprise Portal Server Docker container to see if any errors or issues occurred during the startup.

```
docker logs itmzcx_teps
```

Expected output:

```
mm/dd/yyyy hh:mm:ss    0  0  SQL1063N DB2START processing was successful.
SQL1063N DB2START processing was successful.
Running Tivoli Enterprise Portal Server configuration...
Agent configuration started...
Tivoli Enterprise Portal server configuration was updated to reflect Eclipse Help Server
configuration changes.
... running InstallPresentation.sh
... InstallPresentation.sh completed
Agent configuration completed...
Processing. Please wait...
Starting Tivoli Enterprise Portal Server ...
Eclipse Help Server is required by Tivoli Enterprise Portal Server (TEPS) and will be
started...
Eclipse Help Server was successfully started
Tivoli Enterprise Portal Server started
```

2. Check the status of all the containers.

```
docker ps -a
```

Ensure the status of the container is UP. If the container is not up and running, it might crashed or failed to start.

3. Check the configuration of the container via command **docker inspect itmzcx_teps** to see if any misconfiguration that might cause problems.

For example, to check the IP address of the container, run the following command:

```
docker inspect -f '{{range.NetworkSettings.Networks}}{{.IPAddress}}{{end}}' itmzcx_teps
```

4. Collect diagnostic information and logs from the container.

```
./tepsdocker.sh pdcollect
```

The command generates and stores its output into the *current_dir*/logs/pdcollect-esyszcx.tar.Z file.

5. Send these logs to IBM support to get help.

Internal Errors occurred when logging in to the Tivoli Enterprise Portal Server

Make security changes to avoid internal errors when you log in to the Tivoli Enterprise Portal Server.

Problem

You receive a message such as "Internal Errors occurred" when you attempt to log in to the Tivoli Enterprise Portal Server.

Cause

The security setting on the hub Tivoli Enterprise Monitoring Server on z/OS is turned on, but the Integrated Cryptographic Service Facility (ICSF) is not installed on that z/OS system. As a result, the monitoring server uses an alternative less secure encryption scheme.

Solution

Since both components, the Tivoli Enterprise Portal Server and the hub Tivoli Enterprise Monitoring Server must use the same scheme, you need to configure the Tivoli Enterprise Portal Server to use the less secure scheme (EGG1).

Make the following changes to the Tivoli Enterprise Portal Server configuration on the container:

1. Run the following command to log in to the container:

```
docker exec -it itmzcx_teps bash
```

2. Edit file `/opt/IBM/ITM/config/cq.ini` and uncomment the following line by removing the preceding '#':

```
USE_EGG1_FLAG=1
```

3. Run the following commands to stop and start the Tivoli Enterprise Portal Server:

```
/opt/IBM/ITM/bin/itmcmd agent stop cq  
/opt/IBM/ITM/bin/itmcmd agent start cq
```

4. Exit to go back to the zCX environment.

```
exit
```


Tivoli Enterprise Portal Server physical tree is not correctly loaded

Access the Tivoli Enterprise Portal Server container after the self-describing agent (SDA) update process is completed, otherwise, the physical tree might not be correctly loaded.

By default, the self-describing agent feature is enabled (TEPS_SDA=Y). After the installation is complete and the Tivoli Enterprise Portal Server connects to the z/OS hub Tivoli Enterprise Monitoring Server, the application support files will be downloaded from the hub Tivoli Enterprise Monitoring Server, and then automatically installed and configured in the Tivoli Enterprise Portal Server.

Problem

The self-describing agent (SDA) doesn't update the Tivoli Enterprise Portal Server physical tree definitions correctly.

Cause

You accessed the Tivoli Enterprise Portal Server before the SDA process was completed. The SDA process updates the tep.jnlp file as it processes the data being sent from the hub Tivoli Enterprise Monitoring Server. Accessing the newly installed Tivoli Enterprise Portal Server via your browser, and selecting the Java Web Start option will download a copy of partially updated tep.jnlp file, which causes the missing workspace definitions.

Solution

After IBM Tivoli Monitoring - Tivoli Enterprise Portal Server Container is started, wait for 10 to 15 minutes, and then access the container.

- For Java Web Start: If the physical tree is not completed correctly, then delete the Java cache and download the tep.jnlp file again.
- For Open Web Launch: If the physical tree is not completed correctly, then delete the directory or directories under C:\Users\yourUserID\AppData\Roaming\Rocket Software\Open Web Launch\cache and download the tep.jnlp file again.

You can also check the tep.jnlp file for the expected files names of the products that the SDA process would have processed from the hub Tivoli Enterprise Monitoring Server system:

1. Log in to the itmzcx_teps Docker container:

```
docker exec -it itmzcx_teps bash
```

2. Verify the contents of the tep.jnlp file:

```
more /opt/IBM/ITM/1s3266/cw/tep.jnlp
```

If you see any expected products are missing, wait for 5 minutes and check the file again.

For more information about the self-describing agent, see [Self-describing agent installation](#).

Appendix A. Notices

This information was developed for products and services offered in the US. This material might be available from IBM in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

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