Install Geo Map Resource Files for Offline Use

The network can be visualized on a topology map or on a geographical map (geo map). The geo map enables you to position your network devices on a world map and monitor them within their geographical context.

To display the geo map in the GUI, the system is set up by default to get the map tiles from a specific Mapbox URL through a direct Internet connection from the client or via the EPN Manager server which acts as a proxy. If you do not have an Internet connection, you must install the map resources locally and specify that you want the system to use the local map resources (i.e., offline use).

The topics below explain how to download and install geo maps for offline use in both HA and non-HA environments.

Note Geo map compressed files are very large. We recommend you save the files to a remote repository.

- Install Geo Map Resource Files (Standard Deployment), on page 1
- Install Geo Map Resource Files (High Availability Deployment), on page 4
- Update Geo Map Resource Files After Upgrading to Cisco EPN Manager , on page 4

Install Geo Map Resource Files (Standard Deployment)

Installing geo map resource files for offline use in a standard environment (no high availability) involves the following steps:

1. Place the Geo Map Resource Files on the Cisco EPN Manager Server.
2. Install the Geo Map Resource Files on the Cisco EPN Manager Server .
3. Configure the Cisco EPN Manager Server to Use the Installed Map Resources.
4. Verify that the Geo Maps Files Were Installed Successfully.

Place the Geo Map Resource Files on the Cisco EPN Manager Server

Before You Begin

- If you plan to use a remote repository (because geo map files are very large), make sure a remote repository has been configured. For more information, refer to the topics on using remote FTP backup repositories in the Cisco Evolved Programmable Network Manager User and Administrator Guide .
- Make sure SCP is enabled on your client machine and the required ports are open.

This procedure shows you how to download and copy the geo map resources to the default local repository on the Cisco EPN Manager server.

Procedure

Step 1 Download the geo map compressed files to a client machine.

a. Go to the Software Download site on Cisco.com .
b. Navigate to the files by choosing **All Releases >4.0**.
c. Identify the map you want to download and click **Download**.
d. Follow the instructions to save the file to the client machine.

Step 2 Copy the geo map compressed files from the local machine to the Cisco EPN Manager server's default local repository (/localdisk/defaultRepo).

In the following example, the Russia geo map file was downloaded to a /temp directory on the client machine. The user has logged into the Cisco EPN Manager server as the Linux CLI admin user and is retrieving the file from the client machine and copying it to /localdisk/defaultRepo on the server:

```
scp joesmith@123.456.789.101:/temp/Russia_GeoMap_CEPNM_3_1_0-bundle.tar.gz /localdisk/defaultRepo
```

What to do next

Install the geo map files as described in Install the Geo Map Resource Files on the Cisco EPN Manager Server .

Install the Geo Map Resource Files on the Cisco EPN Manager Server

Before You Begin

The installation process will extract the geo map files and install them in /opt/CSCOlumos/resources/offline_geo. To avoid storage constraints, consider mounting additional storage on the directory by editing the /etc/fstab file after logging in as a Linux CLI admin user. If you have high availability and need to mount additional storage, be sure to edit the /etc/fstab file on both the primary and secondary servers.

Procedure

Step 1 Start an SSH session with the Cisco EPN Manager server and log in as the Cisco EPN Manager CLI admin user.

Step 2 Install the geo map resource file that is located in /localdisk/defaultRepo.

Example:

```
application install filename defaultRepo
```

Where *filename* is the geo map resource file located in /localdisk/defaultRepo (this is the file you copied in Place the Geo Map Resource Files on the Cisco EPN Manager Server). For example:

Example:

```
application install Russia_GeoMap_CEPNM_3_1_0-bundle.tar.gz defaultRepo
Save the current ADE-OS running configuration? (yes/no) [yes] ? yes
Please ensure you have a backup of the system before proceeding.Proceed with the application install
 ? (yes/no) [yes] ? yes
```

The installation takes a few minutes to complete depending on the size of the map resources.

What to do next

Configure Cisco EPN Manager to use the installed geo map files, as described in Configure the Cisco EPN Manager Server to Use the Installed Map Resources.

Configure the Cisco EPN Manager Server to Use the Installed Map Resources

Procedure

Step 1 Choose **Administration** > **Settings** > **System Settings**, then choose **Maps** > **Network Topology**.

Step 2 Check **Enable Geo Maps**.

Step 3 Choose **Installed Map Resources** from the Map Provider drop-down list.

Step 4 Click **Save**.

You do not have to restart the Cisco EPN Manager server to apply your changes. A notification message informs you that the system is now working with the installed map resources.

What to do next

Verify that the geo map files have been installed, as described in Verify that the Geo Maps Files Were Installed Successfully.

Verify that the Geo Maps Files Were Installed Successfully

After installing the geo map files and configuring the system to use these geo map files, check that they have been successfully installed and that they are being displayed in the GUI.

Procedure

Check that the map is being displayed in the GUI:

a. Log in to the Cisco EPN Manager web GUI as a user with Administrator privileges.

b. From the left sidebar menu, choose **Maps** > **Topology Maps** > **Network Topology**.

c. Click the Geographical Map icon at the top right of the topology window to display the geo map.

d. Verify that the desired map is displayed. For example, if you installed the map of Russia, it should be displayed.

Install Geo Map Resource Files (High Availability Deployment)

For a high availability environment, you must install the offline map resources on both the primary and the secondary servers.

Note If a failure occurs on the primary server that requires you to reinstall Cisco EPN Manager on the primary server, you must reinstall the geo map resources on the primary server and restart the server.

Follow this workflow to install geo map files in a high availability deployment:

Procedure

Step 1 Place the geo map files on the primary server and on the secondary server, as described in Place the Geo Map Resource Files on the Cisco EPN Manager Server.

Step 2 Install the geo map files on the primary server, as described in Install the Geo Map Resource Files on the Cisco EPN Manager Server.

Step 3 Install the geo map files on the secondary server, as described in Install the Geo Map Resource Files on the Cisco EPN Manager Server.

Step 4 On the primary server, enable the use of installed map files, as described in Configure the Cisco EPN Manager Server to Use the Installed Map Resources.

Step 5 On the primary server, check that the geo map is displayed, as described in Verify that the Geo Maps Files Were Installed Successfully.

Update Geo Map Resource Files After Upgrading to Cisco EPN Manager

Geo map files must be reinstalled after upgrade.

Procedure

Step 1 Download the required Cisco EPN Manager geo map files and reinstall them.

Step 2 Stop and restart the server(s).

Step 3 Clear the cache.

Step 4 Verify that the geo map files have been installed. See Verify that the Geo Maps Files Were Installed Successfully.