



# Cisco WAE Modeling Daemon (WMD) Configuration

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The Cisco WMD provides a real-time network model in memory. DARE receives network changes (from NIMOs and the XATP module) and sends a patch with these changes to Cisco WMD. For more information on how Cisco WMD and DARE works, see the [Overview](#) chapter.

To configure DARE, WMD, and the XATP module, see the following topics:

- [NIMO Collection Consolidation](#)
- [Configure the WAE Modeling Daemon \(WMD\), on page 1](#)
- [Configure the XTC Agent to Patch Module, on page 2](#)

## Configure the WAE Modeling Daemon (WMD)

WMD provides a near real-time representation (model) of the network in memory so that applications can get access to that model. It gets changes from DARE, the XTC Agent to Patch module, and also any scheduled feeds from NIMOs.

This procedure describes how to configure WMD using the Expert Mode. However, you can also configure WMD using the WAE UI ([Cisco WAE UI Overview](#)).

### Before you begin

The following information should be on hand or configured:

- Final network model name
- Design RPC
- If using continuous polling, name of traffic-poll-nimo network

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- Step 1** From the Expert Mode, navigate to `/wae:wae/components/wmd:wmd` and click **config**.
  - Step 2** From the network-name drop-down list, select the final network model.
  - Step 3** From the enable drop-down list, select **true** to enable WMD.
  - Step 4** Click **rpc-connection** and enter Design RPC values.

- Step 5** Click **app-subscriber-connections** and enter host and port information for all automation application connections.
- Step 6** Click **measured-traffic-source** and enter continuous polling information.
- Step 7** Click **dare** and enter the following values.
- **dare-destination**—Select the final network model.
  - **connection-attempts**—Enter the number of times to try to reconnect until the connection is reestablished.
  - **connection-retry-delay**—Enter the interval (in seconds) between connection attempts.
- Step 8** (Optional) To enable demand mesh and deduction, click **demands** and enter the following values.
- **add-demands**—Select true to enable demands. When enabled, WMD is set up to run demand mesh and demand deduction for all applications using WMD. So, when the continuous poller updates WMD, WMD triggers demands.
  - **demand-mesh-config**—Enter the applicable demand mesh options. For more information on fields, see [Demand Mesh Creation](#).
  - **demand-deduction-config**—Enter the applicable demand mesh options. For more information on fields, see [Demand Deduction](#).

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### Example

WAE CLI (in config mode) example:

```
# wae components wmd config network-name <final_model_name> dare dare-destination
<final_model_name>
# wae components wmd config network-name <final_model_name> demands add-demands true
demand-mesh-config dest-equals-source true
```

## Configure the XTC Agent to Patch Module

The XTC Agent to Patch (XATP) module connects to the XTC agent and sends any XTC changes or PCEP/LSPs as a patch to DARE. As part of the configuration you need to point to WMD to get the latest WAE model.

This procedure describes how to configure XATP using the Expert Mode. However, you can also configure XATP using the WAE UI ([Cisco WAE UI Overview](#)).

### Before you begin

The following information should be on hand or configured:

- Final network model name
- XTC agent
- WMD

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- Step 1** From the Expert Mode, navigate to `/wae:wae/components/xatp:xatp` and click **config**.
- Step 2** From the enable drop-down list, select **true** to enable XATP.
- Step 3** From the xtc-agent drop-down list, select the source XTC agent.

**Step 4** Click **WMD** and enter the following values.

- **host**—Enter the associated WMD instance.
- **port**—Enter the WMD port.
- **connection-attempts**—Enter the number of times XATP should try to reconnect to WMD if the connection is lost. If 0 is entered, XATP will try to reconnect until the connection is reestablished.
- **connection-retry-delay**—Enter the interval (in seconds) between connection attempts.

**Step 5** Click **dare**. Select the final network model that patches will be sent to and the source NIMOs.

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### Example

WAE CLI (in config mode) example:

```
# wae components xatp config wmd connection-attempts 0
# wae components xatp config xtc-agent <xtc-agent-name>
# wae components xatp config dare aggregator-network <aggregator-network-name>
# wae components xatp config dare topo-bgppls-xtc-nimo-network
<topo-bgppls-xtc-nimo-network-name>
# wae components xatp config dare pcep-lsp-xtc-nimo-network <pcep-lsp-xtc-nimo-network-name>
# wae components xatp config enable true
```

Configure the XTC Agent to Patch Module