



CHAPTER 4

Configuring NAM -WAAS Integration

This chapter contains the following sections:

- [Configuring WAAS to Send Flow Information to NAM VSB](#)
- [Configuring WAAS Data Source in NAM, page 4-2](#)
- [Configuring WAAS Monitored Servers in NAM VSB, page 4-4](#)

It describes how to enable WAAS to send flow information to the NAM VSB, how to configure WAAS data source in NAM, and configure WAAS monitored servers in the NAM VSB.

Configuring WAAS to Send Flow Information to NAM VSB

Before you can monitor WAAS traffic, you must first configure the WAAS device to export WAAS flow record data to the NAM VSB.

Using the CLI

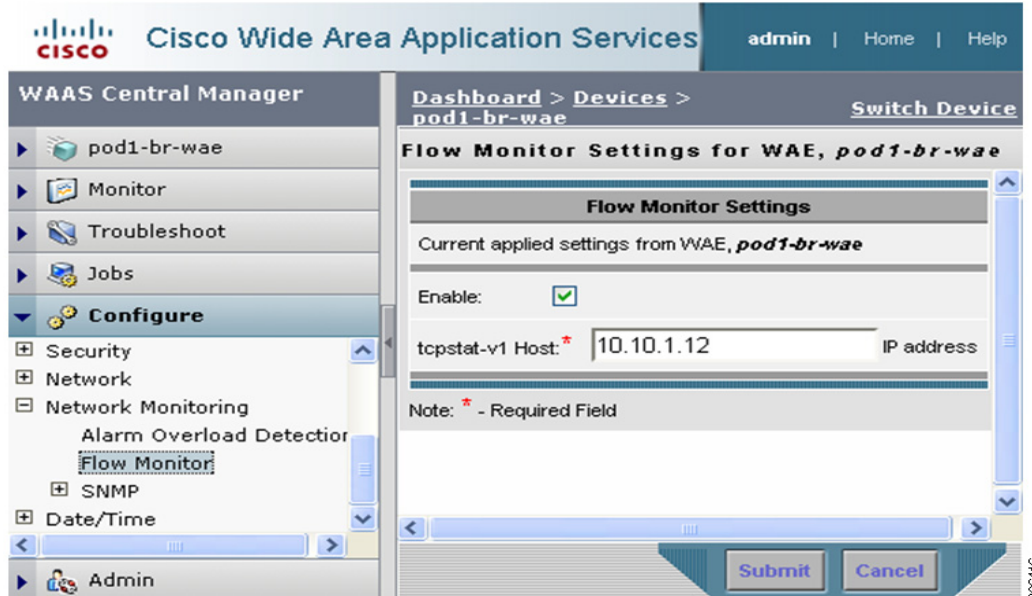
Use the following WAAS CLI **flow monitor** commands as follows:

```
config t
no flow monitor tcpstat-v1 enable
flow monitor tcpstat-v1 host <NAM-IP-ADDRESS>
flow monitor tcpstat-v1 enable
end
```

Using the WAAS Central Manager GUI

Choose **Configure** -> **Network Monitoring** -> **Flow Monitor** and enter the NAM-IP-ADDRESS, then click **Enable** to enable Flow Monitoring shown in [Figure 4-1](#).

Figure 4-1 Flow Monitor Settings



After you enable flow export to the NAM using WAAS CLI commands like those above, WAAS devices will be detected and automatically added to the NAM's WAAS device list. These commands can be configured on the Branch side WAE for client side response time analysis.

Configuring WAAS Data Source in NAM

The NAM uses WAAS data sources to monitor traffic collected from different WAAS segments: Client, Client WAN, Server WAN, and Server. Each WAAS segment is represented by a data source. You can set up the NAM to monitor and report other traffic statistics of the WAAS data sources such as application, host, and conversation information in addition to the monitored Response Time metrics.

Follow these instructions to configure WAAS Data Sources in the NAM VSB.

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- Step 1** Log into the NAM VSB GUI.
 - Step 2** Choose **Setup > Traffic > NAM Data Sources**.
 - Step 3** Click **Create**
The NAM Data Source Configuration Dialog appears.
 - Step 4** Choose "WAAS" device from the list of Types.
 - Step 5** Enter the device IP address in the IP field.
 - Step 6** Check the check boxes for the appropriate WAAS Segments. See [WAAS Data Sources \(Data Collection Points\)](#), page 4-3 for more details on WAAS Segments.



Note

The following step is optional and applies only when the NAM is configured to export data to an External Response Time Reporting Console, such as the NetQos Super Agent.

- Step 7** To export WAAS passthrough data to the External Response Time Reporting Console, check the Passthrough Response Time check box.



Note WAAS passthrough data is not analyzed by the NAM.

See [Figure 4-2](#), for a WAAS device.

Figure 4-2 WAAS Devices

Device	Type	Activity	Status	Data Source	Data Source Details
	WAAS				
172.20.110.245	WAAS	nam-auto-Core-WAE (00:1da2:...	ACTIVE	WAE-172.20.110.245-Passthru, WAE-172.20.110.245-Client, WAE-172.20.110.245-ClrWAN, WAE-172.20.110.245-SvrWAN, WAE-172.20.110.245-Server	
172.20.110.246	WAAS	nam-auto-Edge-WAE (00:1e7a:...	ACTIVE	WAE-172.20.110.246-ClrWAN, WAE-172.20.110.246-Client, WAE-172.20.110.246-Passthru	
172.20.103.29	WAAS	No information	INACTIVE	WAE-172.20.103.29-Client	

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WAAS Data Sources (Data Collection Points)

You can configure the WAAS data sources to monitor the following WAAS segments:

- **Client**—This setting configures the WAE device to export the original (LAN side) TCP flows originated from its clients to the NAM VSB to monitor.
- **Client WAN**— This setting configures the WAE device to export the optimized (WAN side) TCP flows originated from its clients to the NAM VSB to monitor.
- **Server WAN**—This setting configures the WAE device to export the optimized (WAN side) TCP flows from its servers to the NAM VSB to monitor.
- **Server**—This setting configures the WAE device to export the original (LAN side) TCP flows from its servers to the NAM to monitor.
- **Passthrough**—This setting configures the WAE device to export passthru (non-optimized) TCP flows from its servers/clients.

Monitoring Client Data Sources

By monitoring the TCP connections between the client and the WAE device, you can measure the following ART metrics:

- Total Response Time as experienced by the client
- Total Transaction Time as experienced by the client
- Bandwidth usage (bytes/packets) before optimization
- Number of transactions and connections.
- Network Time broken down into two segments: client-edge and edge-server

Monitoring WAN Data Sources

By monitoring the TCP connections between the edge and core WAE devices, you can measure the following:

- Bandwidth usage (bytes/packets) after optimization
- Network Time of the WAN segment

Monitoring Server Data Sources

By monitoring the TCP connections between the core WAE devices and the servers, you can measure the following ART metrics:

- Server Response Time (without proxy acceleration/caching server)
- Network Time between the core WAE device and the servers

You can also set up Data Sources from the Core-WAE. You can add the Server, Server-WAN, and Passthrough data sources to provide insights into the application performance analytics as observed from the server LAN, WAN, and the client LAN.

**Note**

NAM will not receive any flows from the WAE until Monitored Servers are configured.

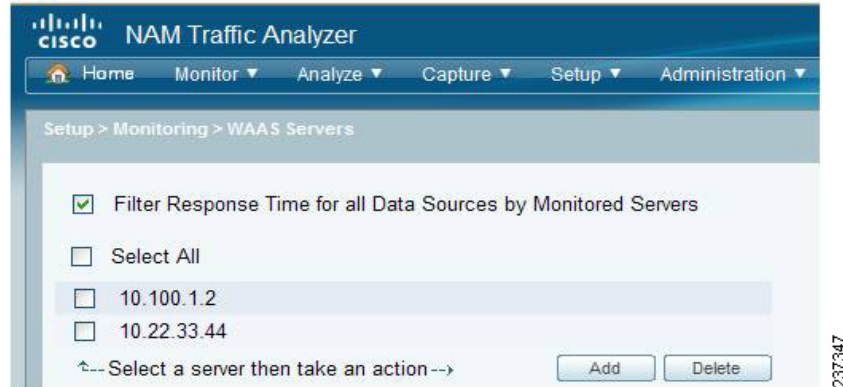
Configuring WAAS Monitored Servers in NAM VSB

WAAS needs to know which flows it must export to the NAM VSB. By entering Server IP addresses in the server address field, you enable the WAAS to export flows related to those servers to the NAM VSB. This enables the NAM VSB to monitor the response time for the given servers.

To configure a WAAS monitored server:

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- Step 1** Log into the NAM VSB GUI.
- Step 2** Choose **Setup > Monitoring > WAAS Servers**. The WAAS Servers page displays.
- Check the “Filter Response Time for all Data Sources by Monitored Servers” check box if you want the NAM to compute response time data only for the servers from this list for all data sources, including non-WAAS data sources. All other servers will be ignored in response time monitoring views. This enables you to reduce NAM workload and to improve NAM overall performance.
- Step 3** Click **Add**.
- The Add WAAS Server(s) dialog box displays.
- Step 4** Enter the server IP address in the Server Address field. You can paste multiple IP addresses here as well.
- Step 5** Click **Submit**.

[Figure 4-3](#) shows an example of the Monitoring WAAS Servers window.

Figure 4-3 Monitoring WAAS Servers

Deleting a WAAS Monitored Server

To delete a WAAS monitored server data source:

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- Step 1** Choose **Setup > Monitoring > WAAS Servers**.
The WAAS Servers page displays any WAAS monitored servers.
 - Step 2** Choose the monitored WAAS server to delete, then click **Delete**.
A confirmation dialog displays to ensure you want to delete the selected WAAS monitored server.
 - Step 3** Click **OK** to delete the WAAS monitored server.
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