



## CHAPTER 4

# Configuring NetFlow for Traffic Visibility

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NetFlow records provide an aggregate view of the network traffic. When enabled on the branch router or switch, the NetFlow data source becomes available on the Cisco NAM Virtual Services Blade (VSB). NetFlow provides statistics for applications, hosts, and conversations. You can set up custom data sources for some specific interfaces. NetFlow can be used to identify business critical applications hosted in the Data Center that are used in the branch.

This chapter contains the following sections:

- [Configuring NetFlow on Cisco IOS Routers](#)
- [Configuring NetFlow Data Source on the NAM VSB, page 4-2](#)
- [Configuring NetFlow Reports on the NAM VSB, page 4-3](#)

## Configuring NetFlow on Cisco IOS Routers

Configure NetFlow traffic on the Branch edge router. You must enable NetFlow on both the WAN and LAN interface to provide visibility into traffic flows entering and leaving the branch.

```
config t
interface <interface>
    ip route-cache flow
    exit
ip flow-export version 5
ip flow-export destination <NAM-IP-Address> 3000
```



### Note

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The UDP port number must be set to 3000.

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Also make sure the SNMP Read Only community string is configured on the device.

```
snmp-server community <RO-string> RO
```

# Configuring NetFlow Data Source on the NAM VSB

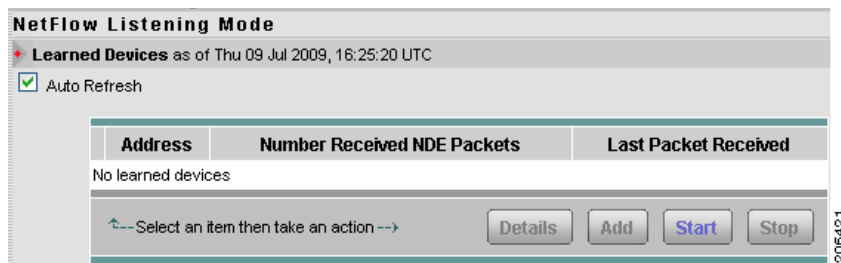
Use the NAM Traffic Analyzer GUI to enable additional NetFlow monitoring devices.

**Step 1** Log in to the NAM GUI and choose **Setup > Data Sources**.

**Step 2** In the Content menu, click **NetFlow -- Listening Mode**.

The NetFlow Listening Mode window displays as shown in [Figure 4-1](#).

**Figure 4-1** NetFlow Listening Mode Window



**Step 3** Click **Start**.

This enables the Cisco NAM VSB to listen to any NetFlow packets being sent to it.

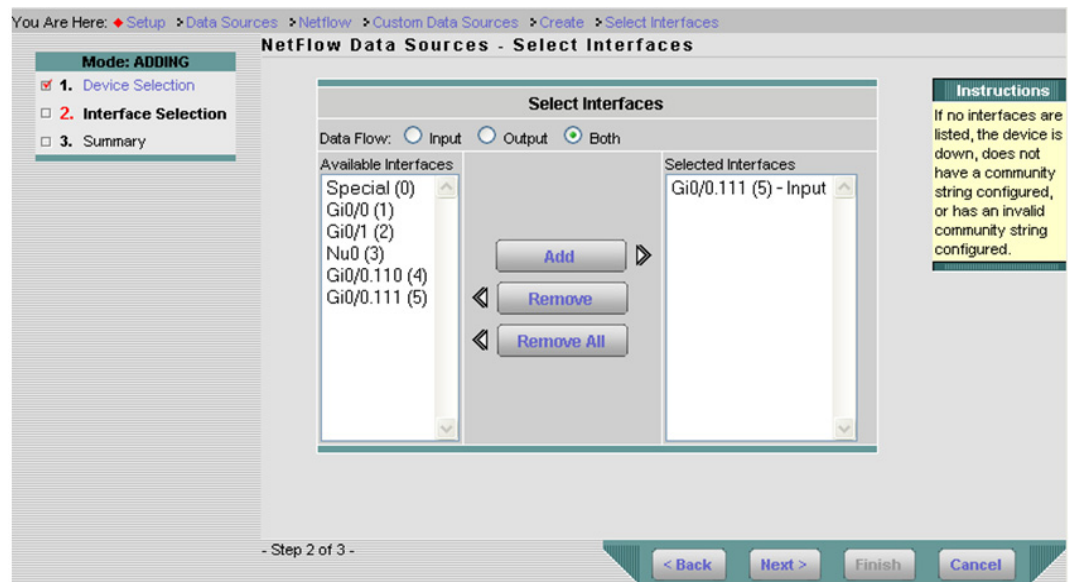
**Step 4** As you see the IP addresses begin to list, select and add the device or devices, and provide the SNMP read community string.

**Step 5** Test for connectivity and SNMP community string from **Setup > Data Sources > NetFlow -- Devices**, then click **Test**.

**Step 6** Add the NetFlow data sources by selecting **Setup > Data Sources > NetFlow -- Custom Data Sources**, then choose a NetFlow device, provide a name, and click **Next**.

**Step 7** Add the interfaces to monitor in this data source as shown in [Figure 4-2](#).

**Figure 4-2** NetFlow Data Sources - Select Interfaces



- Step 8** Click **Next** and review the settings, then click **Finish**.
- Step 9** Click **Setup > Monitor > Core Monitoring**.
- Step 10** Choose the desired data sources with a prefix NDE as NetFlow data sources, and enable collections by clicking **Apply**.

**Figure 4-3 Core Monitoring Functions**

Monitoring Function	Max Entries
<input checked="" type="checkbox"/> Application Statistics	Not applicable
<input checked="" type="checkbox"/> Host Statistics (Network & Application layers)	1000
<input checked="" type="checkbox"/> Conversation Statistics (Network & Application layers)	5000
<input checked="" type="checkbox"/> TCP/UDP Port Table	Not applicable

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## Configuring NetFlow Reports on the NAM VSB

To gain visibility into the top applications and those individuals creating a significant amount of IP phone traffic, you can create Top Applications and Top Hosts reports. Reports like these enable you to view trending of top applications and most active hosts for a particular branch over a period of time.

- Step 1** Log in to the NAM VSB GUI, and click **Reports > Basic Reports**.  
The Basic Historical Reports window displays and lists any currently configured basic reports.
- Step 2** Click **Create** to create a new basic report.
- Step 3** Choose Applications from the list of report types, then click **Next**.
- Step 4** Click to choose Top Applications as shown in [Figure 4-4](#), then choose the NetFlow Data Source and click **Finish**.

Figure 4-4 Setup Report Parameters

**Setup Report Parameters**

Application:  
Encapsulation: IP  
Protocol: 3gpp2-a10

Top Applications

Top Application TCP/UDP Ports

**Report Settings**

Report Name: Top Applications - Bytes  Customized

Data Type: Bytes/sec

Polling Interval: 15 minutes

Data Source: NDE-br-rtr

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**Step 5** Click **Create** again to create another new basic report.

**Step 6** Choose Hosts from the list of report types, then click **Next**.

**Step 7** Click to choose Top N Hosts as shown in [Figure 4-5](#), then choose the NetFlow Data Source and click **Finish**.

Figure 4-5 Setup Host Report Parameters

**Setup Host Report Parameters**

Host Name / IP Address:

Host Application:  
Encapsulation: IP  
Protocol: 3gpp2-a10

Top N Hosts

**Report Settings**

Report Name: Top Hosts - Bytes In  Customized

Data Type: Bytes In/sec

Polling Interval: 15 minutes

Data Source: NDE-br-rtr

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