



Cisco IOS NetFlow Services

This appendix briefly describes the functional capabilities embedded within Cisco IOS NetFlow Services software that provide the underlying support for exporting traffic data from Cisco NetFlow export-enabled and TMS export-enabled devices in your network.

Cisco IOS NetFlow Services is a traffic monitoring and data exporting facility that is typically used on the “input” side of edge access routers or WAN access routers in a network to provide a comprehensive view of originating and terminating traffic in the network.

Cisco IOS NetFlow Services software functionality can be deployed incrementally on an interface-by-interface basis on edge access devices, aggregation devices, or WAN access devices. You can deploy these services in your network wherever desired.

Cisco IOS NetFlow Services software is part of a larger family of products, management utilities, and partner applications that have been designed to help you

- Gather and export detailed information about traffic flows between source and destination nodes in a network.
- Process access control lists (ACLs) efficiently, enabling packet filtering applications (such as the NetFlow FlowCollector) to base their functions on source and destination IP addresses, IP protocols, and device interfaces.
- Apply filters and data aggregation schemes selectively to reduce the volume of collected data and to present the data in a selected format.

The Cisco IOS NetFlow Services functionality can be used to advantage for a variety of purposes, such as

- Network traffic data analysis (the focus of this document)
- Network monitoring, planning, and troubleshooting
- Accounting and billing

Cisco IOS NetFlow Services functionality enables you to accomplish these objectives with minimal impact on the data exporting devices in your network.

Cisco routers and switches identify flows by looking for the following fields within IP packets:

- Source IP address
- Destination IP address
- Source port number
- Destination port number
- Protocol type

- Type of Service (ToS)
- Input interface