

NetFlow Global View Report Pack

Software Version 2.20

HP Performance Insight 540

User Guide

February 2009



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Contents

1	Overview	9
	PI and Network Flow Data	9
	Folders and Reports	11
	Options for Customizing Reports	13
	Sources for Additional Information	14
2	Performance Considerations	15
	Isolating Routers and Interfaces	15
	Options for Filtering and Aggregating Data	15
3	Upgrading the Report Pack	17
	Guidelines for a Smooth Upgrade	17
	Upgrading to NetFlow Global View 2.20	18
	Package Removal	19
4	Installing the Report Pack	21
	Guidelines for a Smooth Install	21
	Installing NetFlow Global View	22
	TEEL File Directives	24
	IP Address to Node Name Mapping	25
	Accessing Deployed Reports	26
	Package Removal	27
5	Setting Up a Distributed Systems	29
	Correct Package Installation	29
	Configuring the Central Server	30
	Configuring Satellite Servers	32
	System Clocks	32
6	Top Ten Reports	33
7	Application Distribution	39
8	Element Summary: Daily and Monthly	49
A	Editing Tables and Graphs	57
	View Options for Tables	57
	View Options for Graphs	59
	Glossary	65

Index 69

1 Overview

This chapter covers the following topics:

- PI and network flow data
- NetFlow Preprocessor
- NetFlow Global View datapipes
- Folders and reports; generic report types
- Ways to customize reports
- Sources for additional information

PI and Network Flow Data

HP Performance Insight is a performance management and reporting application. Long-term data collection, in-depth analysis, and automated web-based reporting are this application's primary strengths. If desired, PI can be integrated with network management and system management applications, including NNM and HP Operations/OM. Integration enhances fault isolation, problem diagnosis, and capacity planning.

The NetFlow Global View Report Pack installs on PI. This package reveals information about the clients and servers at the end of flows, not the routers situated between flow endpoints. The reports in the package display the following information:

- Number of flows
- Traffic volume
- Average bytes per packet
- Average throughput
- Ranking by total volume, highest to lowest
- Ranking by average throughput, lowest to highest
- Traffic volume and throughput by application for a selected server
- Traffic volume and throughput by application for a selected client-server pair

The NetFlow Preprocessor

A flow is a sequence of packets, of the same protocol, moving in the same direction between two devices. Many routers and switches compile data about the flows that move through their interfaces and forward this data to a flow collector application. The purpose of the NetFlow Preprocessor is to process data collected by the flow collector application. The NetFlow Preprocessor performs the following tasks:

2 Performance Considerations

This chapter covers the following topics:

- Isolating the routers and interfaces that matter
- Options for filtering and aggregating data:
 - Client/Server filtering
 - Application filtering
 - Top X flows
 - Include percentile
 - Minimum BPS

Isolating Routers and Interfaces

The amount of network flow data generated by a single router can be staggering. A router may handle flows from thousands of clients to thousands of servers. If you have hundreds of routers in a network, you can easily image millions or even billions of client/server/application combinations. This is why keeping network flow data to a manageable level is crucial. If you neglect this step, the network flow data generated by just a small subset of interfaces could overwhelm PI.

The purpose of the NetFlow Global View Report Pack is to monitor end-to-end network flow data. Before the report pack can fulfill that purpose, you must do the following:

- Identify the routers that are at the edge of your network
- Identify the interfaces on those routers that function as ingress points
- Enable these interfaces to generate network flow data for the flow collection application

By allowing *only* these interfaces to generate network flow data, you can ensure optimal performance of the NetFlow Global View Report Pack.

Options for Filtering and Aggregating Data

Even when a small subset of interfaces is generating network flow data, the data generated for insignificant flows can overwhelm available resources. To prevent this from happening, you must configure the NetFlow Preprocessor to apply at least one of the filtering and aggregation techniques described below.

