IBM Network Performance Insight 1.1.1
Document Revision R2E1

Release summary
Note

Before you use this information and the product it supports, read the information in "Notices" on page 13.

This edition applies to version _1_, release _1_, modification _1_ of IBM Network Performance Insight and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this information

Describes issues of importance to users of IBM® Network Performance Insight, Version 1.1.1 system.

Get familiar with what’s new in the release and access valuable release resources.

Intended audience

The audience for this information is the network administrator or operations specialist. You must have a thorough understanding of the following subjects:

• Basic principles of networks and network management
• Administration of the Linux
• IBM Network Performance Insight
• IBM Netcool® Operations Insight
• IBM Tivoli® Network Manager
• IBM Tivoli Netcool/OMNibus
• Jazz™ for Service Management

Network Performance Insight overview

IBM Network Performance Insight is a flow-based network traffic performance monitoring system.

Network Performance Insight provides comprehensive, flexible, and scalable traffic data management with visualization and reporting to support complex, multi-vendor, multi-technology networks. It offers a range of dashboard views with robust security features that are designed to meet the needs of executive management and converging network and IT operations teams.

Network Performance Insight offers near real-time and interactive view on the traffic data that helps in reduced network repair times and optimized network performance.

Network Performance Insight provides IBM Netcool Operations Insight with network performance monitoring capabilities to address modern network management challenges around application-oriented, software-defined-networks in the enterprise data centers and intranet.

The following diagram shows how data is flowing through the various components in Network Performance Insight:
The flow records that are sent by the configured flow exporters are collected by Collector, and sent to Inventory or Analytics component based on the information that they contain.

Analytics component performs flow data aggregation. These results are then stored in Network Performance Insight database.

Additionally, you can enable or disable the processing of flow records on each flow interface on Dashboard Application Services Hub portal. The dashboards provide up-to-date actionable information to provide an insight into network problems and streamline root cause analysis.

The data from the Storage component can be queried to display the results on Network Health Dashboard or OMNIbus Web GUI from Active Event List or Event Viewer.

You must integrate Network Performance Insight with IBM Tivoli Network Manager and Tivoli Netcool/OMNIbus components of IBM Netcool Operations Insight to take advantage of its network topology views and fault management capabilities.

Network Performance Insight includes the following documents:
- Release summary
- Quick Start Guide
- Installing Network Performance Insight
- Configuring Network Performance Insight
- Integrating with Netcool Operations Insight
- Getting Started with Network Performance Insight
- Troubleshooting Network Performance Insight
- References
Related information:

IBM Network Performance Insight on IBM Knowledge Center

Network Performance Insight technical training

For Tivoli technical training information, see the following Network Performance Insight Training website at [https://tnpmsupport.persistentsys.com/updated_trainings](https://tnpmsupport.persistentsys.com/updated_trainings).

Support information

If you have a problem with your IBM Software, you want to resolve it quickly. IBM provides the following ways for you to obtain the support you need:

Online


IBM Support Assistant

The IBM Support Assistant is a free local software serviceability workbench that helps you resolve questions and problems with IBM Software products. The Support Assistant provides quick access to support-related information and serviceability tools for problem determination. To install the Support Assistant software, go to [http://www.ibm.com/software/support/isa](http://www.ibm.com/software/support/isa).

Troubleshooting Guide

For more information about resolving problems, see the problem determination information for this product.

Conventions used in this publication

Several conventions are used in this publication for special terms, actions, commands, and paths that are dependent on your operating system.

Typeface conventions

This publication uses the following typeface conventions:

**Bold**

- Lowercase commands and mixed case commands that are otherwise difficult to distinguish from surrounding text
- Interface controls (check boxes, push buttons, radio buttons, spin buttons, fields, folders, icons, list boxes, items inside list boxes, multicolumn lists, containers, menu choices, menu names, tabs, property sheets), labels (such as **Tip**; and **Operating system considerations**)
- Keywords and parameters in text

**Italic**

- Citations (examples: titles of publications, diskettes, and CDs)
- Words defined in text (example: a nonswitched line is called a **point-to-point line**)
- Emphasis of words and letters (words as words example: "Use the word that to introduce a restrictive clause."); letters as letters example: "The LUN address must start with the letter L.")
- New terms in text (except in a definition list): a *view* is a frame in a workspace that contains data.
- Variables and values you must provide: ... where *myname* represents....

**Monospace**

- Examples and code examples
- File names, programming keywords, and other elements that are difficult to distinguish from surrounding text
- Message text and prompts addressed to the user
- Text that the user must type
- Values for arguments or command options

**Bold monospace**

- Command names, and names of macros and utilities that you can type as commands
- Environment variable names in text
- Keywords
- Parameter names in text: API structure parameters, command parameters and arguments, and configuration parameters
- Process names
- Registry variable names in text
- Script names
Chapter 1. IBM Network Performance Insight release information

Network Performance Insight 1.1.1 is available. New product features, compatibility, known problems, installation, and other getting-started issues are addressed in this release summary.

Attention: Network Performance Insight is available as part of IBM Netcool Operations Insight solution only.

Table 1. Release update

<table>
<thead>
<tr>
<th>Version</th>
<th>Type of Release</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1</td>
<td>Availability of Network Performance Insight 1.1.1.</td>
<td>February, 2016</td>
</tr>
</tbody>
</table>

CAUTION: Before attempting an installation of Network Performance Insight, you are advised to read these release notes. Failure to consult these release notes might result in a corrupted, incomplete, or failed installation.

Compatibility with Netcool Operations Insight

Integrated components and their supported versions in Netcool Operations Insight.

Compatibility between Network Performance Insight and Netcool Operations Insight solution:

<table>
<thead>
<tr>
<th>Network Performance Insight versions</th>
<th>Netcool Operations Insight versions</th>
<th>Integrated components</th>
</tr>
</thead>
</table>
| 1.1.1                               | 1.4                               | • Tivoli Network Manager 4.2.0  
|                                     |                                   | • Tivoli Netcool/OMNIbus core 8.1.0.5  
|                                     |                                   | • Tivoli Netcool/OMNIbus Web GUI 8.1.0.4  |
| 1.1.0                               | 1.3.1                             | • Tivoli Netcool/OMNIbus core 8.1.0.5  
|                                     |                                   | • Tivoli Netcool/OMNIbus Web GUI 8.1.0.4  |
What's new in Network Performance Insight 1.1.1

Network Performance Insight 1.1.1 introduces the following new features:

Tight integration with more components of IBM Netcool Operations Insight 1.4

Network Performance Insight is available for IBM Netcool Operations Insight entitled customers only. Network Performance Insight exists as a feature of Netcool Operations Insight.

It integrates with the following components of Netcool Operations Insight:

- Integration with IBM Tivoli Network Manager for network topology visualizations that enriches the flow network traffic monitoring visualizations.
  - Uses Network Manager discovered SNMP information to enrich Flow data. For example, Interface name, Interface speed and Interface Index can be displayed on Traffic Details dashboards.
  - Traffic Details dashboard can be started from Network Health Dashboard that is available in Tivoli Network Manager 4.2.
- Integration with IBM Tivoli Netcool/OMNIbus
  - Sends events that cross threshold violations to OMNIbus ObjectServer.

Installation by using IBM Installation Manager

Network Performance Insight provides a simple and fast installation experience with the help of IBM Installation Manager. Additionally, the npi process can be started as a service on system startup. For more information, see the following topics:

- Installing Network Performance Insight
- Starting the npi process on system startup in Installing Network Performance Insight

Tivoli Netcool/OMNIbus Standard Input Probe for sending events

The Standard Input Probe connects to the Network Performance Insight event source, detects and acquires event data, and forwards the data to the ObjectServer as alerts. Standard Input Probe uses the logic that is specified in a rules file to manipulate the event elements before it converts them into fields of an alert in the alerts.status table. The latest version of the probe is bundled with Network Performance Insight package and is installed along with it.

See Configuring the OMNIbus Standard Input probe to work with Network Performance Insight in Configuring Network Performance Insight.

Unsupported features

Traffic Overview Dashboard is removed from Network Performance Insight visualizations. Due to the tight integration with IBM Tivoli Network Manager where the Traffic Details dashboard can be started from the Network Health Dashboard. Network Health Dashboard is available if you have Tivoli Network...
Manager as part of Netcool Operations Insight solution.

**Deprecated features**

The following feature is deprecated from the previous version for enhanced functionality:

- REST API configurations in Network Performance Insight are deprecated and it is recommended to use Standard Input probe for event processing. You can continue to use your existing REST APIs settings if you want.

See the following topics:

- Configuring the OMNIbus Standard Input probe to work with Network Performance Insight in Integrating Network Performance Insight
- Configuring the OMNIbus REST APIs in Network Performance Insight in Integrating Network Performance Insight

**Related concepts:**

“Top features of Network Performance Insight”

IBM Network Performance Insight, Version 1.1.1 offers the following features:

**Top features of Network Performance Insight**

IBM Network Performance Insight, Version 1.1.1 offers the following features:

Some of the top features of Network Performance Insight:

Features and functions available in Network Performance Insight are as follows:
• Supported on Red Hat Enterprise Linux 6.x.
• Simple and fast installation. Network Performance Insight has a smaller footprint in terms of sizing and deployment.
• Interactive dashboards with drill-down support to network and interface level that can display near real-time data. These dashboards are supported on Dashboard Application Services Hub portal on Jazz for Service Management.
• New storage technology based on columnar storage. The in-house Network Performance Insight database supports standard SQL queries for analysis. The database has a built-in storage optimizer for I/O and query performance.
• Flexible retention periods and raw and aggregated data - able to support smaller storage capacity versus longer analysis period.
• DNS lookup for inventory data
• Traffic data that can be categorized by the domain observation points or interfaces and aggregated up to 1 min granularity.
• Indigenously developed database. Traffic flow profiling requires advanced database technology to handle high flow volumes in large enterprise and service provider infrastructures. Network Performance Insight uses a fast database with efficient management of memory usage.
• Efficient database backup and restore options.
• Integrated with Tivoli Netcool/OMNibus component of Netcool Operations Insight for monitoring network traffic data violations.

Related information:
[Jazz for Service Management Version 1.1.2.1 Readme]

Product description

IBM® Network Performance Insight is a flow-based network traffic performance monitoring system. It provides comprehensive and scalable visibility on network traffic with visualization and reporting of network performance data for complex, multivendor, multi-technology networks.

For more information about Network Performance Insight 1.1.1 product description, see Network Performance Insight overview.

System requirements

The system requirements for the IBM Network Performance Insight, Version 1.1.1 installations.

For information about system requirements for the IBM Network Performance Insight, Version 1.1.1, see Requirements.

See the Detailed System Requirement for Network Performance Insight technical note that is created from Software Product Compatibility Reports (SPCR) from here:


Note: For sizing information, contact IBM Support.
Media content

The IBM Network Performance Insight, Version 1.1.1 media listing.

For information about the part numbers for all the components in Network Performance Insight, see Download IBM Network Performance Insight Version 1.1.1.

Network Performance Insight consists of the following general media packages:

**Important:** IBM Network Performance Insight is referred to as IBM Netcool Operations Insight - Performance Management in the media and they both refer to the same product capability.

<table>
<thead>
<tr>
<th>Component description</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netcool Operations Insight - Performance Management v1.1.1 Linux Multilingual Base eAssembly</td>
<td>CRYY0ML</td>
</tr>
<tr>
<td>Netcool Operations Insight - Performance Management V1.1.1 Linux Multilingual</td>
<td>CN92KML</td>
</tr>
<tr>
<td>Netcool Operations Insight - Performance Management Quick Start Guide V1.1.1 Multilingual</td>
<td>CN92LML</td>
</tr>
</tbody>
</table>

For other integrated IBM Netcool Operations Insight 1.4 components, see Netcool Operations Insight download document.

**Installing Network Performance Insight**

Locating installation instructions for Network Performance Insight.

Network Performance Insight 1.1.1 is a simple installation that uses IBM Installation Manager.

For step-by-step installation instructions, see *Installing Network Performance Insight*.

**Deployment scenarios**

How to decide on the different installation scenarios and server setup recommendations.

For more information about the deployment scenarios in Network Performance Insight v1.1.1, see *Installation decision maps* in *Installing Network Performance Insight*. 
Chapter 2. Known problems

Provides the list of all current known problems with IBM Network Performance Insight, Version 1.1.1.

For a list of known issues and resolutions for IBM Network Performance Insight, Version 1.1.1, see Troubleshooting Network Performance Insight.

Support

IBM Electronic Support offers a portfolio of online support tools and resources that provides comprehensive technical information to diagnose and resolve problems and maintain your IBM products.

IBM developed many smart online tools and proactive features that can help you prevent problems from occurring in the first place, or quickly and easily troubleshoot problems when they occur. IBM’s improved personalization of support resources helps you focus on and be alerted to exactly the information and resources needed for efficient and effective problem prevention and resolution. For more information, see: [http://www.ibm.com/support/electronicsupport/about.html](http://www.ibm.com/support/electronicsupport/about.html)
Chapter 3. Service Management Connect

Connect, learn, and share with Service Management professionals: product support technical experts who provide their perspectives and expertise.


- Become involved with transparent development, an ongoing, open engagement between other users and IBM developers of Tivoli products. You can access early designs, sprint demonstrations, product roadmaps, and prerelease code.
- Connect one-on-one with the experts to collaborate and network about Tivoli and the Network and Service Assurance community.
- Read blogs to benefit from the expertise and experience of others.
- Use wikis and forums to collaborate with the broader user community.

Related information:

- IBM Network Performance Insight community on developerWorks
Chapter 4. Technical information PDF library

Provides link to the product documentation in PDF format for convenient printing.

Documentation in PDF format for Network Performance Insight is available from here:
PDF documents for download
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