HP Business Service Management

For the Windows, Linux operating systems

Software Version: 9.20

BSM - NNMi Integration Guide

Document Release Date: September 2012

Software Release Date: August 2012

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Acknowledgements

This product includes software developed by the Apache Software Foundation (www.apache.org).

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Contents

BSM - Network Node Manager i Integration Overview

Tip: The following is a high-level overview of the BSM-NNMi integration. You can find comprehensive details on NNMi integrations in the NNMi 9.21 version of the BSM-NNMi Integration guide, located at http://support.openview.hp.com/selfsolve/document/KM00200716/binary/nnmi_integration_business_service_mgmt_9.21.pdf.

You can integrate Network Node Manager i (NNMi) with Business Service Management (BSM) to provide the following capabilities:

- **NNMi topology > BSM RTSM topology.** The topology integration populates the BSM Run-time Service Model (RTSM) with the NNMi network topology. BSM stores each device, interface, IP address, and a few other artifacts in the NNMi network topology as a Configuration Item (CI) and includes it in the relevant views. For details, see the *HP NNMi – HP BSM Topology Integration Best Practices*.
- **NNMi events > Operations Management events.** If you have an Event Management Foundation license, NNMi events are displayed in the Event Browser in Operations Management. You can also access the NNMi console from the Operations Management Event Browser.

  The NNMi events are sent to BSM using the BSM Integration Adapter. For details, see the *HP Network Node Manager i Software—HP Business Service Management Integration Guide*.

  This integration is item 344 in the Integrations Catalog (http://support.openview.hp.com/sc/solutions/integrations.jsp?intid=344).
- **NNMi events > BSM health indicators.** After you have set up the above integration, if the NNMi events have corresponding health indicators defined, these health indicators affect the status of the relevant CIs in BSM applications, such as Service Health and Service Level Management.
- **BSM > NNMi drilldown.** Within BSM, you can configure a link to the NNMi management server that enables you to drill down from various EUM reports, MyBSM, and other locations, to NNMi, to view trace route information between the client and the destination machine. You can also use URL tools to launch a browser that enables you to connect to the NNMi Management server and further analyze incoming events in NNMi.

  In addition, certain NNMi user interface components (network maps, items detailed information dialogs, etc.) can be displayed directly within MyBSM.

Note: If the NNMi topology is not synchronized with the BSM RTSM topology, the **Monitored by** property of the BSM CIs corresponding to the NNMi CIs is empty, and these CIs are not displayed in the System Monitors only Perspective, System Hardware Monitoring, and System Software Monitoring views.

How to Integrate NNMi with BSM

This task describes how to integrate NNMi with BSM.

Note: Before performing this integration, read the information located in the HP NNMi – HP BSM Topology Integration Best Practices PDF.

1. ## Prerequisite

   Make sure you have the BSM and NNMi licenses installed. For details, see License Management Overview in the BSM Platform Administration Guide.

2. ## Perform the integration in NNMi

   a. Connect to the RTSM. For details, see "HP Business Service Management Topology" in the *HP Network Node Manager i Software—HP Business Service Management Integration Guide* (http://support.openview.hp.com/selfsolve/document/KM00200716/binary/nnmi_integration_business_service_mgmt_9.21.pdf).

   b. Perform the steps needed to integrate NNMi with BSM in the NNMi application. For details, see "HP BSM Operations Management" in the *HP Network Node Manager i Software—HP Business Service Management Integration Guide*.

3. ## Configure LW-SSO in both BSM and NNMi

   Make sure that LW-SSO is configured in both BSM and NNMi with the same init key. For details on how to configure the init key in BSM, see Authentication Wizard in the BSM Platform Administration Guide. For details on how to configure the init key in NNMi, see "Using Single Sign-On with NNMi" in the *NNMi Deployment Reference* available in the NNMi documentation library or at http://h20230.www2.hp.com/selfsolve/manuals.

4. ## Connect NNMi to another BSM instance

   As NNMi stores the RTSM IDs after the first run of the topology integration, the reconciliation works only partially on the RTSM, and the NNMi log files still include several reconciliation errors, which are caused by the non-existing RTSM IDs. To fix the problem, perform the following steps:

   a. Change the Integration to the new BSM system.

   b. Log on to the NNMi JMX console http://**<NNMi_fqdn_and_port>/jmx-console** using the system account and password.

   c. Go to **mbean NnmBsmModule**.

   d. Run **java.lang.String resetNnmBsmIds()**.

   You should see a list of devices from which the RTSM ID has been removed.

   e. Disable and enable the topology Integration to get the CIs into RTSM.

5. ## Configure BSM to display NNMi data

   To display NNMi data in BSM and to access the NNMi components in MyBSM, select **Admin**

> Platform > Setup and Maintenance > Infrastructure Settings:

a. Select **Foundation**.

b. Select **Integration with other applications**.

c. In the **Integrations with other applications - HP NNM** table, locate and modify the following parameters:

- **HP NNM Integration URL.** The NNMi host and port number (protocol://host:port/nnm).
- **HP NNM User name.** The user name that is used for log on to NNMi.
- **HP NNM User password.** The user password that is used for log on to NNMi.

6. ## Results

You can view NNMi data in MyBSM and EUM, as described in "NNMi Components in MyBSM" on next page and "Viewing NNMi Data From End User Management" on page 10

If NNMi events have corresponding health indicators, the health indicators affect the status of the relevant CIs in applications such as Service Health and Service Level Management.

NNMi Components in MyBSM

If you have set up an integration between NNMi and BSM, you can view the following NNMi components in MyBSM.

To access the NNMi components, you must have the appropriate licenses installed. NNMi components are only displayed if you have configured a connection to an NNM server (**Admin > Platform > Setup and Maintenance > Infrastructure Settings > Foundations > Integrations with other applications > HP NNM**).

Component Name	Description
Layer 2 Neighbor View	Shows a map view of a selected device and its connector devices within a specified number of hops from the selected device. This view is useful for understanding the switch connectivity between devices.
Layer 3 Neighbor View	Shows a map view of a selected device and its connector devices within a specified number of hops from the selected device. This view is useful for understanding the router connectivity between devices.
MPLS VPN Inventory	This is an enterprise customer view of how their sites are connected via service -provided MPLS networks.
Open Key Incidents	Shows the incidents that are most important to network operators, and that often require more immediate action.
Overall Network Health (Node Group Overview)	Displays a map containing all (top-level) Node Groups that do not have parent Node Groups.
Overall Network Health - Routers	Displays a Node Group Map of the Router connectivity in your network.
Overall Network Health - Switches	Displays a Node Group map of the Switches connectivity in your network.
Router Redundancy Groups Inventory	Shows the available Router Redundancy Groups created by the NNMi administrator. Each Router Redundancy Group is a set of two or more routers that use one or more virtual IP addresses to help ensure that information packets reach their intended destination.

Viewing NNMi Data From End User Management

If you have configured a link in BSM to an NNMi server, you can drill down to view NNMi data from some of the End User Management (EUM) reports. In NNMi, you can see trace route information between a source (client) machine and destination (server) machine, which can help you identify the root cause of network problems and pinpoint common network problems.

The following table lists the EUM reports from which you can drill down to view NNMi data and describes the relevant source and destination machines for which trace route data is displayed. For details on the EUM reports, see Analysis Reports in the *BSM User Guide*.

End User Management Report	Source and Destination Machines
Action Over Time Report	The source and destination IP addresses with the worst network time for the selected action. If more than one action is included in the filter, the first action is used.
Action Raw Data Report	The source and destination IP addresses with the worst network time for the selected action.
RUM Action Summary Report	The source and destination IP addresses with the worst network time for the selected action.
RUM End User Group Over Time Report	The source and destination IP addresses for the request-response with the worst network time in the selected application. If more than one end-user group is included in the filter, the first end-user group is used. **Note:** You can drill down to NNMi from this report only when it is generated for TCP applications, or Web applications with TCP data.
RUM End User Group Summary Report	The source and destination IP addresses for the request-response with the worst network time from the selected application. **Note:** You can drill down to NNMi from this report only when it is generated for TCP applications, or Web applications with TCP data.
RUM Tier Summary Report	The source and destination IP addresses for the request-response with the worst network time in the selected application.
RUM Transaction Summary Report	The source and destination IP addresses with the worst network time for the selected transaction.

End User Management Report	Source and Destination Machines
Session Details Report	The action server and session client IP addresses.
Tiers Over Time Report	The source and destination IP addresses for the request-response with the worst network time in the selected application.
Transaction Over Time Report	The source and destination IP addresses with the worst network time for the selected transaction. If more than one transaction is included in the filter, the first transaction is used.