

Overview

HP Systems Insight Manager (HP SIM) is an application that is used by customers to manage their infrastructure elements, such as servers, storage, blades, and networking devices.

The current HP SIM version directly supports embedded HP BLADE switches. For example, HP SIM provides a basic set of BLADE switch management features, such as basic discovery, fault management, data collection/reporting, and configuration.

To further enhance management of BLADE switches with HP SIM, integration with BLADEHarmony Manager is now available. This paper explains how to integrate HP SIM with BLADEHarmony Manager.

The integration consists of:

- This technical brief, which explains the integration steps.
- The XML files that are required for the integration. These files can be found on the BLADE Network Technologies website:http://www.bladenetwork.net/pages/products_blade_harmony.html

HP SIM 5.x

HP SIM is built on Web-based client-server architecture. The client Graphical User Interface (GUI) can be launched from any standard Web browser. In addition, the architecture is flexible enough to allow users to integrate off-the-shelf or custom tools and applications.

References for HP SIM 5.1:

- [Creating custom tool definition files for HP Systems Insight Manager 5.1](http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00809565/c00809565.pdf)
<http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00809565/c00809565.pdf>
- [HP Systems Insight Manager 5.1 User Guide](http://h10018.www1.hp.com/wwsolutions/misc/hpsim-helpfiles/hpsim_userguide_51.pdf)
http://h10018.www1.hp.com/wwsolutions/misc/hpsim-helpfiles/hpsim_userguide_51.pdf

Adding BLADEHarmony Manager Support

Because BLADEHarmony Manager is web-based, we can add additional tools to launch to BLADEHarmony Manager directly from HP SIM.

Add Tools to Launch to BLADEHarmony Manager Web Server

The following is an example that shows how the integration adds customized web-launch features to the HP SIM menus. One component of the integration adds the ability to launch to the BLADEHarmony Manager main console. The other component gives you the option to launch in-context to a specific device's summary page within BLADEHarmony Manager.

Integration Guidelines and Requirements

- BLADEHarmony Manager must be running before HP SIM can access it.
- Before you can run the integration utility:
 - You must know the BLADEHarmony Manager http server address
 - You must know if the BLADEHarmony Manager is enabled for https access
- BLADEHarmony Manager and HP SIM must have discovered the same switches
- You must know the BLADEHarmony Manager administrator user ID and password
- HP SIM administrators have access to all BLADEHarmony Manager features
- You must have the correct privileges on the HP SIM server to run the integration utility, such as root on Linux or administrator on Windows
- You can install BLADEHarmony Manager on a different server than the HP SIM server
- The BLADEHarmony Manager license must allow for all the discovered switches in HP SIM. For example, if the HP SIM has discovered 200 switches, and the BLADEHarmony Manager license only accommodates 100 switches, then there will have to be a license update before the HP SIM administrator can launch in-context to each device in BLADEHarmony Manager.
- You can select a particular switch in HP SIM and then administer that switch using BLADEHarmony Manager tools, but that switch has to first be discovered in BLADEHarmony Manager.
- After you install the integration, you must log out of HP SIM and log back to use the integration.
- BLADEHarmony Manager requires the following browser versions and settings:
 - Microsoft Internet Explorer version 6.x and 7.x with JavaScript enabled
 - Mozilla Firefox version 2.x and 3.x with JavaScript enabled

Accessing BLADEHarmony Manager

This section describes how to access BLADEHarmony Manager from HP SIM after you perform the integration.

You can access the BLADEHarmony Manager console home page by clicking **Tools > Integrated Consoles > BladeHarmony Manager > BladeHarmony Manager Console** (see Figure 1).

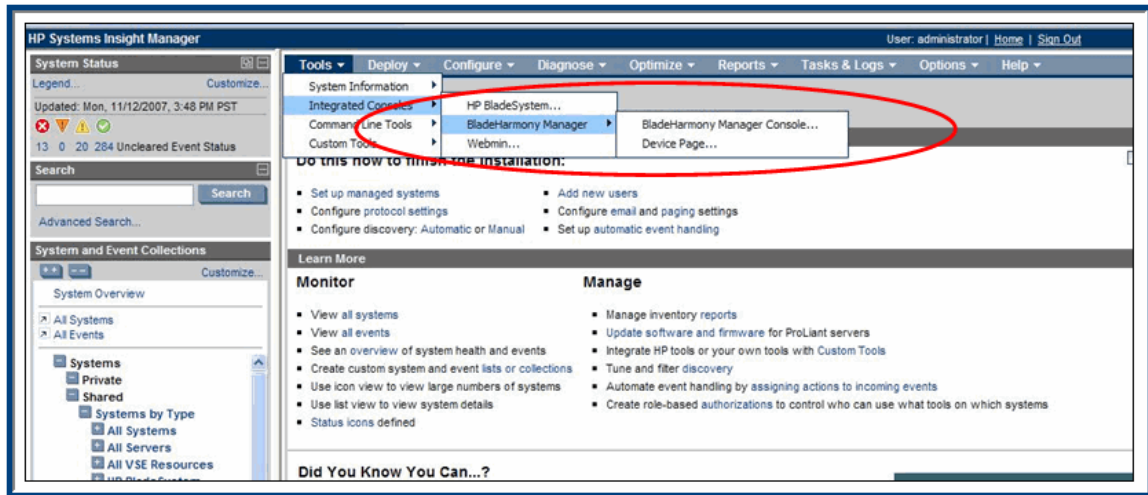


Figure 1. BLADEHarmony Manager Tools

In-Context to the Device Page within BLADEHarmony Manager

You can launch to a specific device's summary page within BLADEHarmony Manager. This utilizes BLADEHarmony Manager URLs that allow parameters that specify the context, or page, that will be displayed. In the figure below, note the link under the category "BLADEHarmony Manager Pages".

Also, note the link "Web Server: Default Home Page". This is the link that HP SIM provides by default to launch to the Browser-Based-Interface for a selected switch. HP SIM also provides a means to launch a telnet session to the selected device. This is not shown in the figure below and one must use a Mozilla-based browser (since IE does not support telnet).

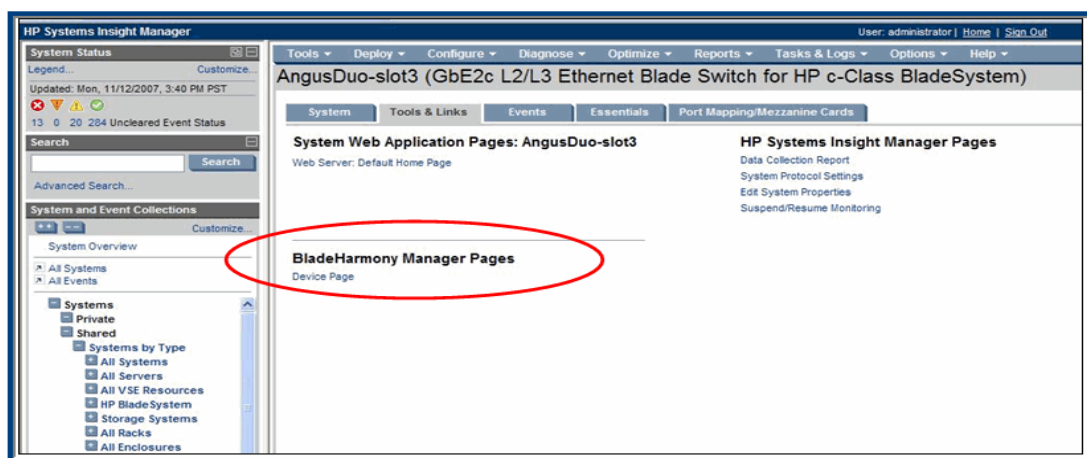


Figure 2. BLADEHarmony Manager In-Context Device Page Launch Window

Web-Launch Tool Details

The following XML file defines the web-launch tool that will allow the user to launch from HP-SIM to BLADEHarmony Manager. Note the text in red below needs to be customized to specify the URL of the BLADEHarmony Manager server IP address or DNS Name.

The administrator must run the following HP SIM command-line tool to add the tool:

```
mxtool -a -f bhm_tools.xml
```

The administrator must run the following HP SIM command-line tool to remove the tool:

```
mxtool -r -f bhm_tools.xml
```

Sample *bhm_tools.xml* file contents:

```
<!-- Launch to the BHM default main page -->
<web-launch-tool name="Console">
  <description>BHM Homepage</description>
  <execute-as-user>root</execute-as-user>
  <toolbox-enabled value="true" />

  <web-block accepts-targets="false">
    <!-- put URL to BHM system here -->
    <main-url>http://<BHMServerName>:40080/bhm/</main-url>
  </web-block>

  <attribute name="menu-path">Tools | Integrated Consoles | BladeHarmony
Manager</attribute>
  <attribute name="target-frame">BHMFrame</attribute>
</web-launch-tool>

<!-- In-context Launch to a device page in BHM given the IP address-->
<web-launch-tool name="Device Page" max-targets="1">
  <description>Launch to associated BHM device page</description>
  <execute-as-user>root</execute-as-user>
  <toolbox-enabled value="true" />

  <!-- Make available for BLADE switches only -->

  <include-filter type="hardware">
    <node-filter name="DeviceType" operator="eq" value="Switch"/>
    <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class GbE2
Interconnect Switch A"/>
  </include-filter>
  <include-filter type="hardware">
    <node-filter name="DeviceType" operator="eq" value="Switch"/>
    <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class GbE2
Interconnect Switch B"/>
  </include-filter>
  <include-filter type="hardware">
    <node-filter name="DeviceType" operator="eq" value="Switch"/>
    <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class GbE2
Interconnect Switch C"/>
  </include-filter>
  <include-filter type="hardware">
    <node-filter name="DeviceType" operator="eq" value="Switch"/>
    <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class GbE2
Interconnect Switch D"/>
```



```

    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class C-GbE2
Interconnect Switch H"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class C-GbE2
Interconnect Switch I"/>
    </include-filter>

    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch A"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch B"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch C"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch D"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch E"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch F"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch G"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch H"/>
    </include-filter>
    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="HP ProLiant BL p-Class F-GbE2
Interconnect Switch I"/>
    </include-filter>

    <include-filter type="hardware">
      <node-filter name="DeviceType" operator="eq" value="Switch"/>
      <node-filter name="Model" operator="eq" value="GbE2c Ethernet Blade Switch for HP c-
Class BladeSystem"/>
    </include-filter>

```

```

<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="GbE2c Ethernet Blade Switch for HP c-
Class BladeSystem, SmartConnect"/>
</include-filter>

<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="GbE2c L2/L3 Ethernet Blade Switch for
HP c-Class BladeSystem"/>
</include-filter>

<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="HP 1:10Gb Ethernet Blade Switch"/>
</include-filter>
<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="HP 1:10Gb Ethernet Blade Switch,
SmartConnect, Stack"/>
</include-filter>
<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="HP 1:10Gb Ethernet Blade Switch,
SmartConnect, Non Stack"/>
</include-filter>

<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="HP 10Gb Ethernet BL-c Switch"/>
</include-filter>
<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="HP 10Gb Ethernet BL-c Switch,
SmartConnect, Stack"/>
</include-filter>
<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="HP 10Gb Ethernet BL-c Switch,
SmartConnect, Non Stack"/>
</include-filter>

<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="BNT RackSwitch G8000"/>
</include-filter>
<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="BNT RackSwitch G8100"/>
</include-filter>
<include-filter type="hardware">
  <node-filter name="DeviceType" operator="eq" value="Switch"/>
  <node-filter name="Model" operator="eq" value="BNT RackSwitch G8124"/>
</include-filter>

<web-block accepts-targets="true">
  <!-- put URL to BHM system here -->
<main-url>http://<BHMServerName>:40080/bhm/jsp/Main.jsp?IPAddress=%a</main-url>

</web-block>

```

```
    <attribute name="menu-path">Tools | Integrated Consoles | BladeHarmony
Manager</attribute>
    <attribute name="target-frame">BHMFrame</attribute>

    <!-- Put on the Tools and Links tab of the System Page -->
    <attribute name="system-page-link-group-title">BladeHarmony Manager Pages</attribute>
</web-launch-tool>
</tool-list>
```

Note that if you want to use HTTPs to launch to BLADEHarmony Manager, substitute the following URLs as the <main-url> respectively:

Main launch:

```
<main-url>https://<BHMServerName>:40443/bhm/</main-url>
```

In-context launch:

```
<main url>https://<BHMServerName>:40443/bhm/jsp/Main.jsp?IPAddress=%a</main-url>
```

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