HP SIM Discovery Cases for c-Class BladeSystems in HP BladeSystem Integrated Manager

Introduction

This white paper is intended to assist a user in identifying c-Class enclosures with its contained devices discovered in HP SIM 5.2.

Getting started

Target audience

It is assumed that readers of this document have an excellent understanding of the following concepts and services:

- Manual and Automatic Discovery of devices in HP SIM

- Usage of Configure general settings in SIM for device discovery

In addition, readers must be familiar with installing and administering:

- HP SIM 5.x

- HP BladeSystem Integrated Manager

HP SIM Discovery cases for c-Class BladeSystem in HP BladeSystem Integrated Manager

Pre-requisites:

This section assumes you have already configured the following:

- Source central management server (CMS) - The system where HP SIM 5.x is installed with any supported database.

- On-board Administrator (OA) - The management module of an On-Board Administrator Enclosure having the latest management firmware.

- c-Class Servers – The servers sitting in the On-Board Administrator enclosure to be identified in the HP SIM to manage having the latest Integrated Lights Outs 2 (iLO 2) firmware.

For more details about HP SIM 5.x prerequisites, refer to the *HP SIM User Guide* and *HP SIM Release Notes* located on the HP Management CD.

Software Compatibility:

Onboard Administrator	V1.20
iLO2	v1.24 or higher
HP BladeSystem Integrated Manager in HP Systems Insight Manager	v3.2
HP Systems Insight Manager	v5.2 upgraded with "HP BladeSystem Integrated Manager v3.2"
HP Insight Control Data Center Edition	v1.1 upgraded with "HP BladeSystem Integrated Manager v3.2"

Server Blade Software & Drivers:

BL460c	version 2006.09.18 or later
BL480c	version 2006.09.18 or later
BL465c	version 2006.08.24A or later
BL685c	version 2006.10.20 or later

Discovery Scenarios

This section consists of two identification methods to identify the c-Class enclosure in HP-SIM "All Enclosures collection":

- **Discovery Scenario 1:** Onboard Administrator discovered first and then the servers, servers associated iLO2, and switches.

- **Discovery Scenario 2:** The servers, servers associated iLO2, and switches are discovered first and then the Onboard Administrator.

Discovery Scenario 1: Onboard Administrator discovered first and then the servers, servers associated iLO2, and switches.

There are two discovery cases under this scenario namely,

- Case 1: The discovery/configuration option **Discover systems in an Enclosure when Onboard Administrator is discovered** deselected.
- Case 2: The discovery/configuration option **Discover systems in an Enclosure when Onboard Administrator is discovered** selected.

Case 1: The discovery/configuration option **Discover systems in an Enclosure when Onboard Administrator is discovered** deselected.

The following steps guide you to discover the On-board Administrator for Case 1:

1. Go to **Options→Discovery**.
2. Click the **Configure general settings** link.

3. Under **General Settings for All Discoveries**, deselect **Discover systems in an enclosure when Onboard Administrator is discovered** as shown.

4. Go to the bottom of the page and click **OK** to save the settings. The **Discovery** page appears.

5. Click the **Manual** tab and provide the Onboard Administrator system name or IP address for the text field named **Enter the system's name or IP address**.

6. Click **Add System** to continue.

7. Click **Tools→Integrated Consoles →HP BladeSystem**. The following page appears as shown.
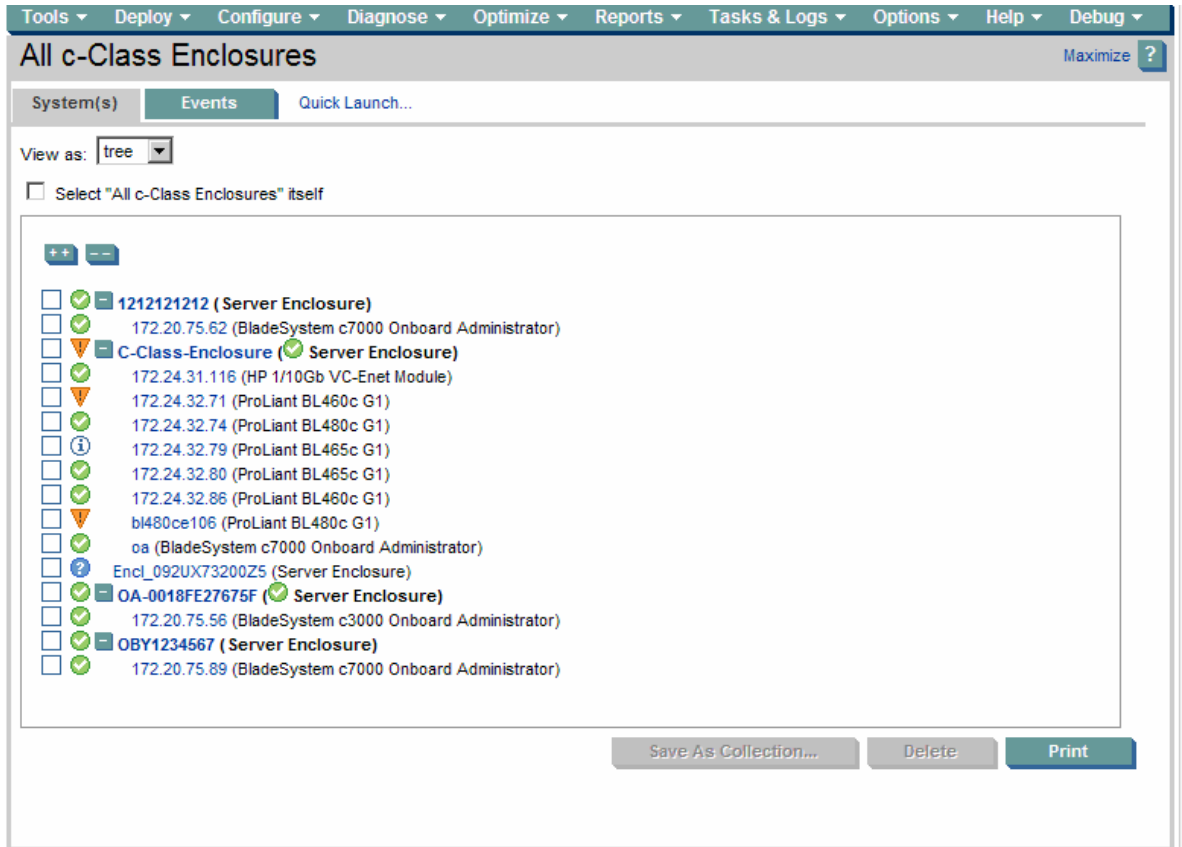
Note that there are no logical nodes created for Servers and switches when OA is discovered in this case. Logical Servers and switches are not the actual servers and switches discovered. The complete discovery of servers and switches takes place with IP Address or the DNS name of the device.

8. To discover the servers & switches, run a Manual/Automatic discovery with the Server, Server iLO2, and Switch DNS name or IP Address. After discovering the servers and switches the associated servers (iLO2→Server, Server→Enclosure) and switches (switches→Enclosure) will appear under "All c-Class Enclosures" collection.

Case 2: The discovery/configuration option **Discover systems in an Enclosure when Onboard Administrator is discovered** selected.

The following steps guide you to discover the On-board Administrator for Case 2:

1. Go to **Options→Discovery.**

2. Click the **Configure general settings** hyperlink.

3. Under **General Settings for All Discoveries**, select **Discover systems in an enclosure when Onboard Administrator is discovered.**

4. Go to the bottom of the page and click **OK** to save the settings. The **Discovery** page appears.

5. Click the **Manual** tab and provide the Onboard Administrator system name or IP address for the text field named **Enter the system's name or IP address**.

6. Click **Add System** to continue.

7. Click **Tools→Integrated Consoles→HP BladeSystem**. The following page appears.

Note that there are Logical nodes created for Servers and switches when OA is discovered in this case. Logical Servers and switches are not the actual servers and switches discovered. The complete discovery of servers and switches takes place with IP Address or the DNS name of the device.

8. To discover the servers and switches, run a Manual/Automatic discovery with the Server, Server iLO2, and Switch DNS name or IP Address. After discovering the servers and switches; the associated servers (iLO2→Server, Server→Enclosure) and switches (switches→Enclosure) will

appear under **All c-Class Enclosures** collection. These servers and switches get merged with the Logical nodes of respective servers and switches created during the OA discovery.

NOTE: The discovery can be executed by providing the IP address of the devices using the **Automatic or Host Files** tab available in the Discovery page. The host file should include the IP address, full DNS name, and the hostname. This option is more suitable when there are multiple devices available in the network. Prefix the (**$)** dollar sign to the host file name while running the Discovery task.

Discovery Scenario 2: The servers, servers associated iLO2, and switches are discovered first and then the Onboard Administrator.

In this case all the servers, iLO2 associated with the servers, and switches are discovered first & then the Onboard Administrator is discovered.

To discover the physical servers & switches; run a Manual/Automatic discovery with the Server, Servers associated iLO2, and Switch DNS name or IP Address. At present these discovered server, switches will not appear under the **All Enclosures** collection since the Onboard Administrator is not discovered yet.

Again there are two discovery cases under this scenario namely,

- Case 1: The discovery/configuration option **Discover systems in an enclosure when Onboard Administrator is discovered** deselected.

- Case 2: The discovery/configuration option is **Discover systems in an enclosure when Onboard Administrator is discovered** selected.

Case 1: The discovery/configuration option **Discover systems in an Enclosure when Onboard Administrator is discovered** deselected.

The following steps guide you to discover the On-board Administrator for Case 1:

1. Go to **Options→Discovery.**

2. Click the **Configure general settings** link.

3. Under **General Settings for All Discoveries**, deselect **Discover systems in an enclosure when Onboard Administrator is discovered.**

4. Go to the bottom of the page and click **OK** to save the settings. The **Discovery** page appears.

5. Click the **Manual** tab and provide the Onboard Administrator system name or IP address for the text field named **Enter the system's name or IP address**.

6. Click **Add System** to continue.

7. Click **Tools→Integrated Consoles→HP BladeSystem**. The following page appears.

Note that the previously discovered servers, switches appear now under the collection upon discovering the Onboard Administrator.

8. To discover the **more** servers & switches, run a Manual/Automatic discovery with the Server, Server iLO2, and Switch DNS name or IP Address. After discovering the servers and switches; the associated servers (iLO2→Server, Server→Enclosure) and switches (switches→Enclosure) will appear under **All c-Class Enclosures** collection.

Case 2: The discovery/configuration option **Discover systems in an Enclosure when Onboard Administrator is discovered** selected.

The following steps guide you to discover the On-board Administrator for Case 2:

1. Go to **Options→Discovery.**

2. Click the **Configure general settings** link.

3. Under **General Settings for All Discoveries**, select **Discover systems in an enclosure when Onboard Administrator is discovered.**

4. Go to the bottom of the page and click **OK** to save the settings. The **Discovery** page appears.

5. Click the **Manual** tab and provide the Onboard Administrator system name or IP address for the text field named **Enter the system's name or IP address**.

Tools ▾   Deploy ▾   Configure ▾   Diagnose ▾   Optimize ▾   Reports ▾   Tasks & Logs ▾   Options ▾
Help ▾

Discovery
Indicate the systems you want HP Systems Insight Manager to manage.

| Automatic | Manual | Hosts Files |

Add a single system to be managed by HP Systems Insight Manager.

System Information

Required field *

Enter the system's name or IP address: * [   ]

More Settings...   Add System

6. Click **Add System** to continue.

7. Click **Tools→Integrated Consoles →HP BladeSystem**. The following page appears.

Tools ▾   Deploy ▾   Configure ▾   Diagnose ▾   Optimize ▾   Reports ▾   Tasks & Logs ▾   Options ▾   Help ▾

HP BladeSystem

| System(s) | Events | Quick Launch... |

View as: tree ▾

☐ Select "HP BladeSystem" itself

☐ ▼ All e-Class Enclosures
☐ ⊖ All c-Class Enclosures
☐   ⊟ C-Class-Enclosure (Server Enclosure)
☐   172.24.31.105 (ProLiant BL460c G1)
☐   172.24.32.71 (ProLiant BL460c G1)
☐ ⓘ   1Z34AB7890 (ProLiant BL460c G1)
☐   2UX73503C0 (ProLiant BL460c G1)
☐   MY3638018W (GbE2c Ethernet Blade Switch)
☐   MY363801D3 (GbE2c Ethernet Blade Switch)
☐   oa (BladeSystem c7000 Onboard Administrator)
☐   QS75MZ2492 (ProLiant BL465c G1)
☐   TW270700A3 (HP 1/10Gb VC-Enet Module)
☐   USJ708001G (HP 4Gb VC-FC Module)
☐   USM63602R5 (ProLiant BL480c G1)
☐ ⓘ   USM63707EM (ProLiant BL480c G1)
☐   USM63902M2 (ProLiant BL460c G1)
☐   USM642084E (ProLiant BL460c G1)
☐ ⓘ   USM64404DP (ProLiant BL465c G1)
☐   USM71806EW (ProLiant BL465c G1)
☐ ⓧ Encl_091212121212 (Server Enclosure)
☐ ⓧ Encl_099999999999 (Server Enclosure)
☐   ⊞ All D-Class Enclosures

Save As Collection...   Delete   P

Note that the previously discovered servers, switches appear now under the collection upon discovering the Onboard Administrator along with the logical nodes. Some of the logical nodes are merged automatically with the previously discovered servers and switches.

8. To discover the **more** servers & switches, run a Manual/Automatic discovery with the Server, Server iLO2, and Switch DNS name or IP Address. After discovering the servers and switches; the associated servers (iLO2→Server, Server→Enclosure) and switches (switches→Enclosure) will

appear under **All c-Class Enclosures** collection. These servers and switches get merged with the Logical nodes created during the OA discovery.

NOTE: The discovery can be executed by providing the IP address of the devices using the **Automatic or Host Files** tab available in the Discovery page. The host file should contain the IP address, full DNS name and hostname. This option is more suitable when there are multiple devices available in the network. Prefix (**$**) dollar sign to the host file name while running the Discovery task.

For more information

Refer to the following for more information regarding the topics referenced in this paper.
HP Blade System Integrated Manager
http://h18004.www1.hp.com/products/servers/management/bsme/index.html
HP Blade Systems
http://www.hp.com/go/bladesystemupdates/

HP Systems Insight Manager
http://ww.hp.com/go/hpsim

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