



i n v e n t

IT Asset Management

Adding DDMi Inventory Attributes to AssetCenter/Asset Manager

DDMi MS Windows Default User Name & AIX Inventory Mapping

Version 1.0
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1 INTRODUCTION

This document was created to help capture the Windows Default User Registry and AIX inventory attributes obtained by DDMi and place them within AssetCenter/Asset Manager. This document is intended for the BlueCross BlueShield of Tennessee (BCBST) staff and others that would be involved in any changes or understanding of the BCBST DDMi and AssetCenter/Asset Manager installations. This is the result of the two mappings discussed over the previous few weeks with HP Software Customer Support, Product Management, and PSO Global Practices. The items within this document are supported by HP Software Customer Support.

1.1 Document Version Control

| Version | Version Date | Reason for Version Release | Prepared By |
|---------|--------------|----------------------------|----------------------|
| 1.0 | Aug 22, 2008 | New Document | HP/ Global Practices |
| | | | |
| | | | |
| | | | |
| | | | |

2 Windows Default User Login

The Default User Login Windows registry entry captures the User ID of the last user logged into a BCBST workstation. The steps below show how the assumptions used for the mapping, the tailor required within Enterprise Discovery or DDMInventory, and the Connect-It data mapping to AssetCenter/Asset Manager.

2.1 Inventory Assumptions

The following Figure represents the how the Default User Login is captured within the Windows Registry `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon\DefaultUserName`.

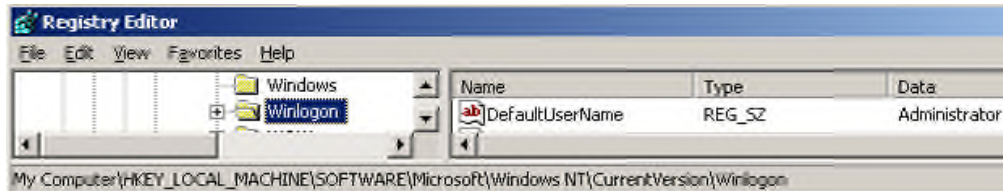


Figure 1 – Windows Default User Name Registry Entry

This field is automatically captured by default within Windows operating systems.

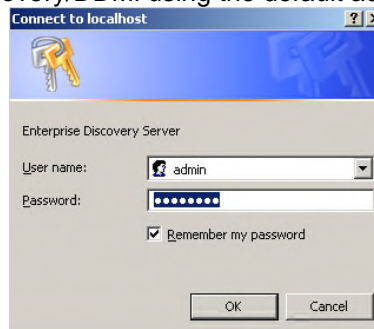
2.2 Capturing the Default User Name within DDMi

As the Default User Name is captured within Windows, DDMi does not capture the registry entry by default. Hence, the following steps are required when creating a DDMi scan file for a Windows operating system. The steps are as follows:

1. Open the DDMi Administrator on a workstation or server where the inventory scanners are created.

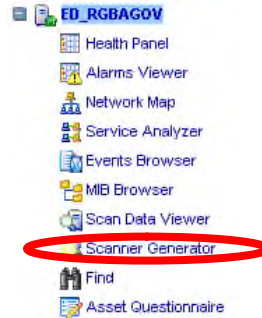


2. Log into Enterprise Discovery/DDMi using the default administrative ID

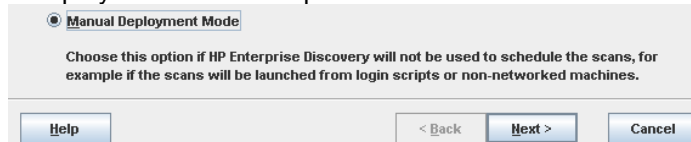




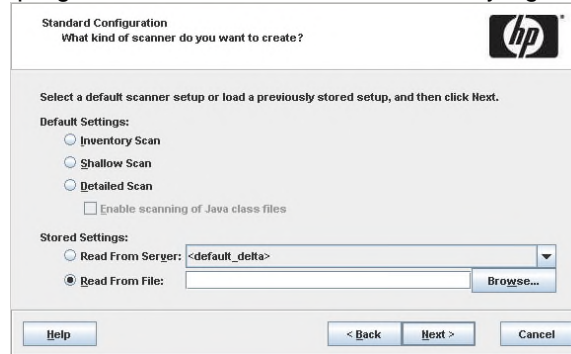
3. Go to the Scanner Generator within the ED/DDMi Administration panel



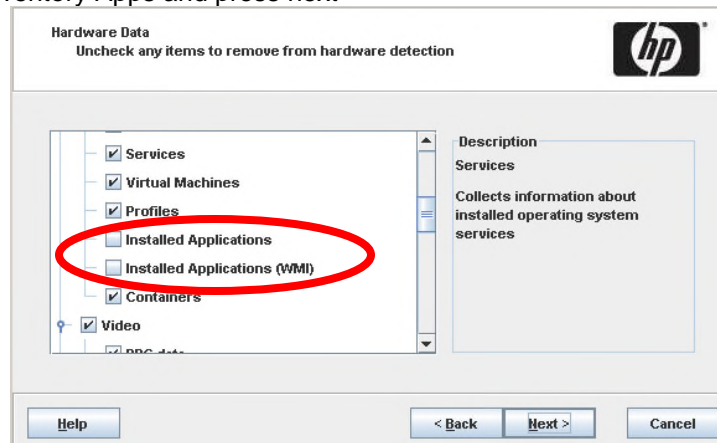
4. Select Manual Deployment Mode and press Next



5. Read from file – c:\program files\Hewlett-Packard\Discovery Agent\scan.exe and press Next



6. Do not change any options on page and press next
7. Unselect Inventory Apps and press next





- 8. Confirm Targeted Scan and check box at bottom are both selected and press next

Select software scanning mode, and then click Next

Targeted Directory Scan
 Select this option for optimum scanning speed and software licence accuracy. Only directories pointed to by Windows shortcuts or present in the PATH are scanned.

Classic Local Drive Scan
 Select this option to perform a complete scan of all local non-removable drives. This option takes slightly longer to complete and should be used when performing a detailed scan.

Combined Scan
 Select this option to do both of the above: scan all local hard disk drives as well as directories on the network pointed to by shortcuts or PATH.

Allow scanner command line to override this selection

- 9. Uncheck the options as identified below: Start Menu, Desktop, Only use shortcuts; include environment variables; scan network drives on Directories tab

Software Details
Which files and directories do you want to scan and store?

Directories | File Scanning | Stored Files

Directories from shortcuts (Windows only)

Start Menu Desktop

Only use shortcuts to files with these extensions:

Directories from other sources (Windows only)

Windows Services File Associations

Java Home Software Utilization

Non-Global Zone Root Directories

Directories from environment

Include directories from these environment variables:

Shortcuts to the network / Used programs launched from the network

Scan network drives

- 10. The options on the File Scanning and Stored Files tabs are to remain
- 11. Press Create New Field (button on top left)

Asset Data | Asset Number

[Create New Field] [Delete] [Refresh] [Print]

- 12. Select User Field 1 and press OK

Choose Field

From the list below, choose the standard field to use in the Asset Questionnaire

- Telephone Number
- User Field 1
- User Field 3

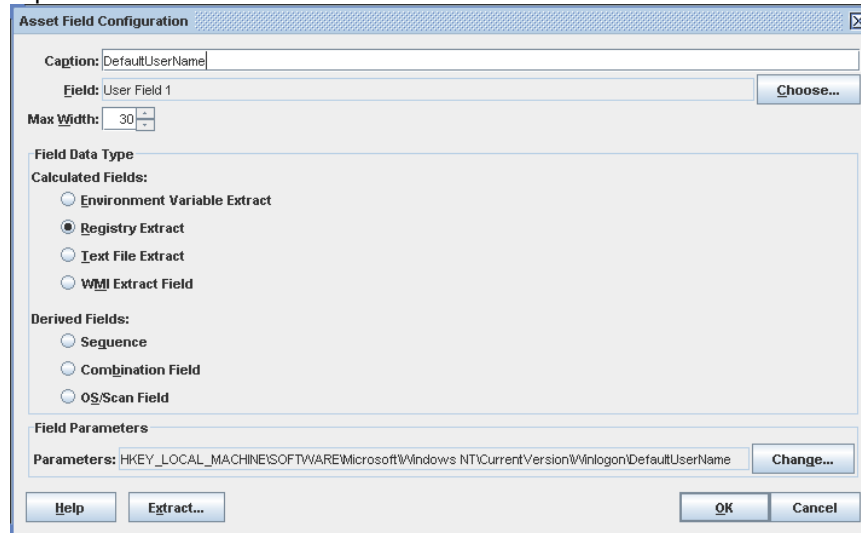
Field Description

OK Cancel

- 13. The User Field 1 will now be added to the field list.
- 14. Double click User Field 1 to configure

| Description | Description | Combination Field |
|--------------|--------------|------------------------------|
| User Field 1 | User Field 1 | Environment Variable Extract |

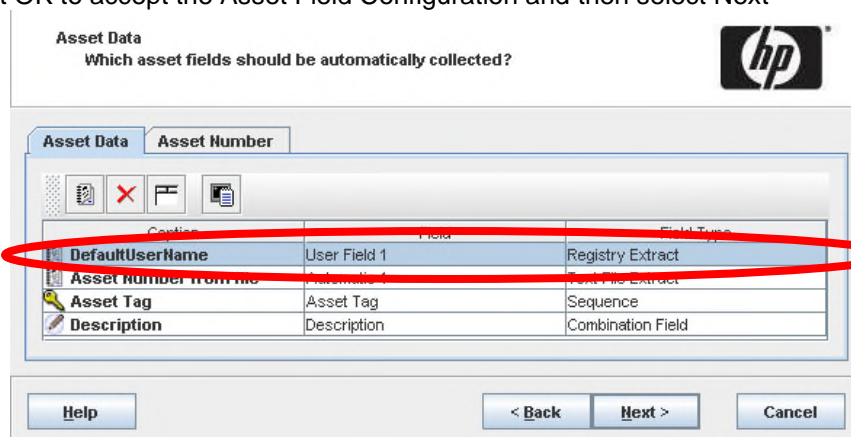
15. Change the parameters to the field as defined below:



The dialog box 'Asset Field Configuration' shows the following settings:

- Caption: DefaultUserName
- Field: User Field 1
- Max Width: 30
- Field Data Type:
 - Calculated Fields:
 - Environment Variable Extract
 - Registry Extract
 - Text File Extract
 - WMI Extract Field
 - Derived Fields:
 - Sequence
 - Combination Field
 - OS/Scan Field
- Field Parameters: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon\DefaultUserName

- Change caption to DefaultUserName and leave default field length at 30
 - Select Registry Extract
 - Select Change button next to parameters
 - Set the Default User Registry Field to HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon\DefaultUserName
 - Select OK to accept the changes to the User Field 1 parameters
16. Select OK to accept the Asset Field Configuration and then select Next



The 'Asset Data' dialog box shows a table of asset fields. The first row is highlighted with a red oval:

| Asset Data | Asset Number | Field | Field Type |
|------------------------|--------------|-------|-------------------|
| DefaultUserName | User Field 1 | | Registry Extract |
| Asset number from file | Asset Tag | | Text File Extract |
| Asset Tag | Asset Tag | | Sequence |
| Description | Description | | Combination Field |



17. Change "Windows Save Path" to c:\ and select OK

Scanner Options
Where should the scan file be saved? How should the scanner behave when running?

Saving Settings Miscellaneous Troubleshooting

Define which scan files should be saved, and where they should be saved.

Save result locally
 Enable delta scan files

Save result to network (off-site)

Windows Save Path: Advanced...

UNIX / MacOS X Save Path: Advanced...

Path to Original Off-Site Scan Files:

Always create log file
If checked, the scanner will always create a log file. If unchecked, a log file will only be saved when an error occurs.

Help < Back Next > Cancel

18. Change Settings tab to Normal speed (leave other tabs alone) – press next

Scanner Options
Where should the scan file be saved? How should the scanner behave when running?

Saving Settings Miscellaneous Troubleshooting

Define how fast the scanner should run:

Run scanners at low priority

Slow Normal Speed

Increase scanning speed when the screen saver is running (Windows)

Define various time-outs used by the scanner by changing the values below:

Retry Offsite Save After Error: Times

Delay Before Retrying Offsite Save: hh:mm:ss

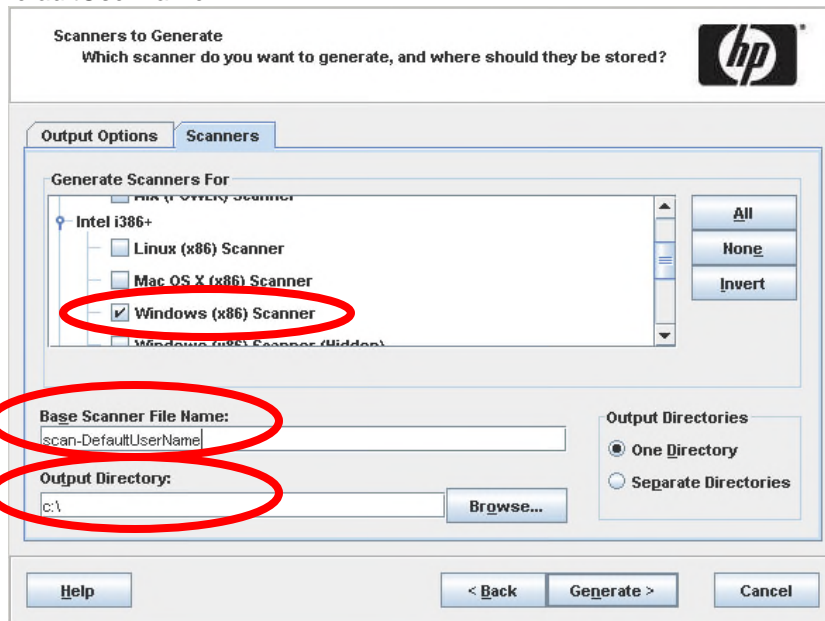
Maximum Random Delay Before Scan: hh:mm:ss

Help < Back Next > Cancel

19. Press Next
20. Change Scanner Description to Scanner – DefaultUserName (output options)



- 21. Within the Scanners tab only have the Windows (x86) scanner selected and rename to *Scan-DefaultUserName*



- 22. Press the Generate button to create the newly defined scanner
- 23. Look within the c:\ directory for the newly defined scanner.

Run Scanner and Review Results

- 1. Run the scanner on the local machine
- 2. Upon completion, place the xsf file within the incoming directory on the ED/DDMi server (typically found at \Documents and Settings\All Users\Application Data\Peregrine\Enterprise Discovery\scans\Incoming)
- 3. View the results within the ED/DDMi viewer. (Specifically look within the ...)

To place the new enhancements within a production scanner:

- 1. Follow steps above, but –
 - a. Create a scanner in Enterprise Deployment mode (step 4)
 - b. Use the parameters defined within your current production scanner (step 5)
 - c. Do not change parameters defined within steps 7, 8, 9, 17, 18, 20, 21, and 23.
 - d. Replace your production windows scanners with the new scanner parameters.

2.3 Modifying Connect-It to place DDMi change into AssetCenter

The following tasks will confirm that the newly discovered ED/DDMi field is placed within AssetCenter/Asset Manager.

- 1. Open Connect-It with the current production scenario
- 2. Open the mapping within the *Devices(Scanned-Computers)*



- 3. Change the script to the *amComputer.amPortfolio.User* link to:


```
if [hwAssetData.hwAssetUserField1] = "" then
  pifignorenodemapping("The User Login is empty")
end if
```



4. Change the script within the *amComputer.amPortfolio.User.IDNo* field to:
[hwAssetData.hwAssetUserField1]
5. Press the OK Button
6. Save the scenario as a new name (*to not overwrite previous scenario until testing is complete*)
7. Perform testing within test environment prior to placing within production.

3 DDMI AIX Inventory Mapping

DDMi discovers AIX devices. This is to define the mapping required to identify the LPARs inventoried by ED/DDMi and to associate it/them to the parent AIX device.

3.1 AIX Inventory captured by DDMI

The following screens identify the key data attributes captured by DDMI that identify the links between the parent AIX asset and its LPAR.

Below are the AIX LPARs being captured by DDMI:

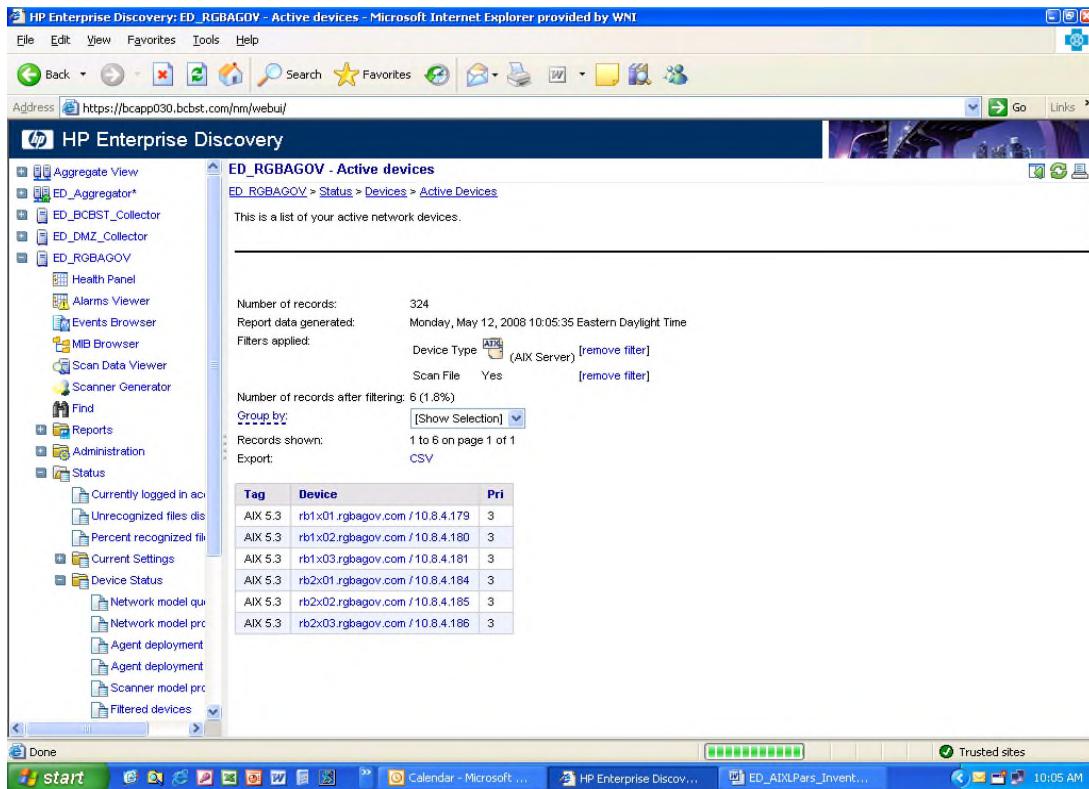


Figure 2 – AIX Inventories captured by DDMI



Below are the details of server RB1X01 inventoried by DDMI:

Unmanaged device: AIX Server (AIX 5.3)
rb1x01.rgbagov.com / 10.8.4.179
priority 3

| Parameter | Value |
|--|--|
| UNSPSC description: | Computer servers |
| Model: | IBM p5 52A (9131-52A) / http://www-03.ibm.com/systems/p/hardware/entry/550/index.html |
| Model current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC model: | Computer servers |
| Operating system: | AIX Version 5.3 / http://www-1.ibm.com/servers/iaix/os/index.html |
| Operating system current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC operating system: | Operating environment software |
| Hardware manufacturer: | Locally Administered MAC Address (Locally Administered MAC Addresses have the form X[26AE]-XX-XX XX-XX-XX) / ftp://ftp.rfc-editor.org/in-notes/rfc1112.txt |
| Asset tag: | 1564 |
| BIOS product name: | IBM,9131-52A |
| CPU: | Power5 1648 MHz (IBM) |
| NetBIOS name (scan): | a0804b3 |
| Memory (MB): | 4096 |

Asset Data:

| Parameter | Value |
|--------------|---------------------------|
| Description: | - Power5, 1648MHz, 4096Mb |
| Asset Tag: | 1564 |

Addresses:

| Port Index | MAC/IP | OUI/Netmask | Manufacturer/Domain Name |
|--|---------------|-------------|--------------------------|
| Device | 10.8.4.179 | | rb1x01.rgbagov.com |
| 0.0 / Virtual I/O Ethernet Adapter (I-lan) | 4A4660 001002 | | |
| | 10.8.4.179 | 255.255.0.0 | |

Report as of: Monday, May 12, 2008 10:07:44 Eastern Daylight Time

Figure 3 – AIX Inventory Results Details (RB1X01) within DDMI

Below is an example of the BIOS Data for RB1X01 captured by DDMI:

Title: rb1x01.rgbagov.com
IP address: 10.8.4.179
Asset tag: 1564

OS: AIX 5.3.0.0
CPU: Power5 1648 MHz (IBM)
Memory: 4,096 Mbytes
Disk: n/a

| Item Name | Item Value |
|--------------------------------|---------------|
| BIOS Source | IBM,SF240_332 |
| BIOS ROM Date | |
| BIOS Date | |
| BIOS Revision | |
| BIOS Machine ID | IBM,03108964G |
| SMBIOS Version | |
| SMBIOS Structure Table Address | |
| Plug and Play Version | |
| Compaq Asset Tag | |
| Asset Tag/ID | |
| BIOS Version | |
| Boot PROM Version | |
| BIOS Serial Number | |
| Machine Model | IBM,9131-52A |
| Machine Architecture | chrp |
| Manufacturer | IBM |
| ACPI Supported | |
| ACPI Version | |

BIOS Data: BIOS stands for Basic Input/Output System. The system BIOS is the lowest-level software in the computer, it acting as an interface between the hardware (especially the chipset and processor) and the operating system. The BIOS is also responsible for allowing you to control your computer's hardware settings, for booting up the machine when you turn on the power or hit the reset button, and various other system functions.

Scan date: Sunday, May 11, 2008 21:10:30 EDT
Scanner version: 2.50.000 build 7199

Figure 4 – AIX BIOS Data Inventory Results (RB1X01) within DDMI



Below are the details of server RB1X02 inventoried by DDMI:

Unmanaged device: AIX Server (AIX 5.3)
rb1x02.rgbagov.com / 10.8.4.180
priority 3

| Parameter | Value |
|--|--|
| LINSPSC description: | Computer servers |
| Model: | IBM p5 52A (9131-52A) / http://www-03.ibm.com/systems/p/hardware/entry/550/index.html |
| Model current manufacturer: | IBM Corp / http://www.ibm.com/ |
| LINSPSC model: | Computer servers |
| Operating system: | AIX Version 5.3 / http://www-1.ibm.com/servers/aix/os/index.html |
| Operating system current manufacturer: | IBM Corp / http://www.ibm.com/ |
| LINSPSC operating system: | Operating environment software |
| Hardware manufacturer: | Locally Administered MAC Address (Locally Administered MAC Addresses have the form X[28AE]-XX-XX-XX-XX-XX) / ftp://ftp.rfc-editor.org/in-notes/rfc1112.txt |
| Asset tag: | 1562 |
| BIOS product name: | IBM,9131-52A |
| CPU: | Power5 1648 MHz (IBM) |
| NetBIOS name (scan): | a0804b4 |
| Memory (MB): | 4096 |

Asset Data:

| Parameter | Value |
|--------------|---------------------------|
| Description: | - Power5, 1648MHz, 4096Mb |
| Asset Tag: | 1562 |

Addresses:

| Port Index | MAC/IP | OUI/Netmask | Manufacturer/Domain Name |
|---|---------------|-------------|--------------------------|
| Device | 10.8.4.180 | | rb1x02.rgbagov.com |
| 0.0 / Virtual I/O Ethernet Adapter (-lan) | 4A4660 002002 | | |
| | 10.8.4.180 | 255.255.0.0 | |

Report as of: Monday, May 12, 2008 10:10:00 Eastern Daylight Time

Figure 5 – AIX Inventory Results Details (RB1X02) within DDMI

Below is an example of the BIOS Data for RB1X02 captured by DDMI:

Title: rb1x02.rgbagov.com
IP address: 10.8.4.180
Asset tag: 1562

OS: AIX 5.3.0.0
CPU: Power5 1648 MHz (IBM)
Memory: 4,096 Mbytes
Disk: n/a

Hardware and Configuration

BIOS Data

| Item Name | Item Value |
|--------------------------------|---------------|
| BIOS Source | IBM_SF240_332 |
| BIOS ROM Date | |
| BIOS Date | |
| BIOS Revision | |
| BIOS Machine ID | IBM_03108964C |
| SMBIOS Version | |
| SMBIOS Structure Table Address | |
| Plug and Play Version | |
| Compaq Asset Tag | |
| Asset TagID | |
| BIOS Version | |
| Boot PROM Version | |
| BIOS Serial Number | |
| Machine Model | IBM,9131-52A |
| Machine Architecture | chrp |
| Manufacturer | IBM |
| ACPI Supported | |
| ACPI Version | |

BIOS Data: BIOS stands for Basic Input/Output System. The system BIOS is the lowest-level software in the computer, it acting as an interface between the hardware (especially the chipset and processor) and the operating system. The BIOS is also responsible for allowing you to control your computer's hardware settings, for booting up the machine when you turn on the power or hit the reset button, and various other system functions.

Scan date: Sunday, May 11, 2008 16:22:27 EDT
Scanner version: 2.50.000 build 7199

Figure 6 – AIX BIOS Data Inventory Results (RB1X02) within DDMI



Below are the details of server RB1X03 inventoried by DDMI:

Unmanaged device: AIX Server (AIX 5.3)
rb1x03.rgbagov.com / 10.8.4.181
priority 3

| Parameter | Value |
|--|--|
| UNSPSC description: | Computer servers |
| Model: | IBM p5 52A (9131-52A) / http://www-03.ibm.com/systems/p/hardware/entry/550/index.html |
| Model current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC model: | Computer servers |
| Operating system: | AIX Version 5.3 / http://www-1.ibm.com/servers/aix/os/index.html |
| Operating system current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC operating system: | Operating environment software |
| Hardware manufacturer: | Locally Administered MAC Address (Locally Administered MAC Addresses have the form X[26AE]-XX-XX-XX-XX-XX) / http://ftp.rfc-editor.org/notes/rfc1112.txt |
| Asset tag: | 1561 |
| BIOS product name: | IBM_9131-52A |
| CPU: | Power5 1648 MHz (IBM) |
| NetBIOS name (scan): | a0804b5 |
| Memory (MB): | 4096 |

Asset Data:

| Parameter | Value |
|--------------|---------------------------|
| Description: | - Power5, 1648MHz, 4096Mb |
| Asset Tag: | 1561 |

Addresses:

| Port Index | MAC/IP | OUI/Netmask | Manufacturer/Domain Name |
|--|---------------|-------------|--------------------------|
| Device | 4A4660 003002 | | |
| | 10.8.4.181 | | rb1x03.rgbagov.com |
| 0.0 / Virtual I/O Ethernet Adapter (I-lan) | 4A4660 003002 | | |
| | 10.8.4.181 | 255.255.0.0 | |

Report as of: Monday, May 12, 2008 10:12:04 Eastern Daylight Time

Figure 7 – AIX Inventory Results Details (RB1X03) within DDMI

Below is an example of the BIOS Data for RB1X03 captured by DDMI:

Title: rb1x03.rgbagov.com
IP address: 10.8.4.181
Asset tag: 1561

OS: AIX 5.3.0.0
CPU: Power5 1648 MHz (IBM)
Memory: 4,096 Mbytes
Disk: n/a

Hardware and Configuration

| Item Name | Item Value |
|--------------------------------|---------------|
| BIOS Source | IBM_SF240_332 |
| BIOS ROM Date | |
| BIOS Date | |
| BIOS Revision | |
| BIOS Machine ID | IBM_03108964G |
| SMBIOS Version | |
| SMBIOS Structure Table Address | |
| Plug and Play Version | |
| Compaq Asset Tag | |
| Asset TagID | |
| BIOS Version | |
| Boot PROM Version | |
| BIOS Serial Number | |
| Machine Model | IBM_9131-52A |
| Machine Architecture | chrp |
| Manufacturer | IBM |
| ACPI Supported | |
| ACPI Version | |

BIOS Data: BIOS stands for Basic Input/Output System. The system BIOS is the lowest-level software in the computer, it acting as an interface between the hardware (especially the chipset and processor) and the operating system. The BIOS is also responsible for allowing you to control your computer's hardware settings, for booting up the machine when you turn on the power or hit the reset button, and various other system functions.

Scan date: Sunday, May 11, 2008 06:46:24 EDT
Scanner version: 2.50.000 build 7199

Figure 8 – AIX BIOS Data Inventory Results (RB1X03) within DDMI



Below are the details of server RB2X01 inventoried by DDMi:

Unmanaged device: AIX Server (AIX 5.3)
rb2x01.rgbagov.com / 10.8.4.184
priority 3

| Parameter | Value |
|--|--|
| UNSPSC description: | Computer servers |
| Model: | IBM p5 52A (9131-52A) / http://www-03.ibm.com/systems/p/hardware/entry/550/index.html |
| Model current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC model: | Computer servers |
| Operating system: | AIX Version 5.3 / http://www-1.ibm.com/servers/aix/ios/index.html |
| Operating system current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC operating system: | Operating environment software |
| Hardware manufacturer: | Locally Administered MAC Address (Locally Administered MAC Addresses have the form X[26AE]-XX-XX XX-XX-XX) / ftp://ftp.rfc-editor.org/in-notes/rfc1112.txt |
| Asset tag: | 1563 |
| BIOS product name: | IBM,9131-52A |
| CPU: | Power5 1648 MHz (IBM) |
| NetBIOS name (scan): | a0804b8 |
| Memory (MB): | 4096 |

Asset Data:

| Parameter | Value |
|--------------|---------------------------|
| Description: | - Power5, 1648MHz, 4096Mb |
| Asset Tag: | 1563 |

Addresses:

| Port Index | MAC/IP | OUI/Netmask | Manufacturer/Domain Name |
|--|---------------|-------------|--------------------------|
| Device | 10.8.4.184 | | rb2x01.rgbagov.com |
| 0.0 / Virtual I/O Ethernet Adapter (I-lan) | 76A7F0 001002 | | |
| | 10.8.4.184 | 255.255.0.0 | |

Report as of: Monday, May 12, 2008 10:12:47 Eastern Daylight Time

Figure 9 – AIX Inventory Results Details (RB2X01) within DDMi

Below is an example of the BIOS Data for RB2X01 captured by DDMi:

Title: rb2x01.rgbagov.com
IP address: 10.8.4.184
Asset tag: 1563

OS: AIX 5.3.0.0
CPU: Power5 1648 MHz (IBM)
Memory: 4,096 Mbytes Disk: n/a

BIOS Data

| Item Name | Item Value |
|--------------------------------|---------------|
| BIOS Source | IBM,SF240_332 |
| BIOS ROM Date | |
| BIOS Date | |
| BIOS Revision | |
| BIOS Machine ID | IBM,03108963C |
| SMBIOS Version | |
| SMBIOS Structure Table Address | |
| Plug and Play Version | |
| Compaq Asset Tag | |
| Asset Tag/ID | |
| BIOS Version | |
| Boot PROM Version | |
| BIOS Serial Number | |
| Machine Model | IBM,9131-52A |
| Machine Architecture | chrp |
| Manufacturer | IBM |
| ACPI Supported | |
| ACPI Version | |

BIOS Data: BIOS stands for Basic Input/Output System. The system BIOS is the lowest-level software in the computer, it acting as an interface between the hardware (especially the chipset and processor) and the operating system. The BIOS is also responsible for allowing you to control your computer's hardware settings, for booting up the machine when you turn on the power or hit the reset button, and various other system functions.

Scan date: Sunday, May 11, 2008 16:22:27 EDT
Scanner version: 2.50.000 build 7199

Figure 10 – AIX BIOS Data Inventory Results (RB2X01) within DDMi



Below are the details of server RB2X02 inventoried by DDMI:

Unmanaged device: AIX Server (AIX 5.3)
rb2x02.rgbagov.com / 10.8.4.185
priority 3

| Parameter | Value |
|--|--|
| UNSPSC description: | Computer servers |
| Model: | IBM p5 52A (9131-52A) / http://www-03.ibm.com/systems/p/hardware/entry/550/index.html |
| Model current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC model: | Computer servers |
| Operating system: | AIX Version 5.3 / http://www-1.ibm.com/servers/aix/ios/index.html |
| Operating system current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC operating system: | Operating environment software |
| Hardware manufacturer: | Locally Administered MAC Address (Locally Administered MAC Addresses have the form X[26AE]-XX-XX-XX-XX-XX) / ftp://ftp.rfc-editor.org/in-notes/rfc1112.txt |
| Asset tag: | 1559 |
| BIOS product name: | IBM,9131-52A |
| CPU: | Power5 1648 MHz (IBM) |
| NetBIOS name (scan): | a0804b9 |
| Memory (MB): | 4096 |

Asset Data:

| Parameter | Value |
|--------------|---------------------------|
| Description: | - Power5, 1648MHz, 4096Mb |
| Asset Tag: | 1559 |

Addresses:

| Port Index | MAC/IP | OUI/Netmask | Manufacturer/Domain Name |
|---|---------------|-------------|--------------------------|
| Device | 10.8.4.185 | | rb2x02.rgbagov.com |
| 0.0 / Virtual IO Ethernet Adapter (I-lan) | 76A7F0 002002 | | |
| | 10.8.4.185 | 255.255.0.0 | |

Report as of: Monday, May 12, 2008 10:13:44 Eastern Daylight Time

Figure 11 – AIX Inventory Results Details (RB2X02) within DDMI

Below is an example of the BIOS Data for RB2X02 captured by DDMI:

Scan Data Viewer - ED_RGBAGOV
rb2x02.rgbagov.com

Title: rb2x02.rgbagov.com
IP address: 10.8.4.185
Asset tag: 1559

OS: AIX 5.3.0.0
CPU: Power5 1648 MHz (IBM)
Memory: 4,096 Mbytes
Disk: n/a

Hardware and Configuration | Software Applications

BIOS Data

| Item Name | Item Value |
|--------------------------------|---------------|
| BIOS Source | IBM_SF240_332 |
| BIOS ROM Date | |
| BIOS Date | |
| BIOS Revision | |
| BIOS Machine ID | IBM_03108963G |
| SMBIOS Version | |
| SMBIOS Structure Table Address | |
| Plug and Play Version | |
| Compaq Asset Tag | |
| Asset TagID | |
| BIOS Version | |
| Boot PROM Version | |
| BIOS Serial Number | |
| Machine Model | IBM_9131-52A |
| Machine Architecture | chrp |
| Manufacturer | IBM |
| ACPI Supported | |
| ACPI Version | |

BIOS Data: BIOS stands for Basic Input/Output System. The system BIOS is the lowest-level software in the computer, it acting as an interface between the hardware (especially the chipset and processor) and the operating system. The BIOS is also responsible for allowing you to control your computer's hardware settings, for booting up the machine when you turn on the power or hit the reset button, and various other system functions.

Scan date: Sunday, May 11, 2008 06:46:25 EDT
Scanner version: 2.50.000 build 7199

Figure 12 – AIX BIOS Data Inventory Results (RB2X02) within DDMI



Below are the details of server RB2X03 inventoried by DDMI:

Unmanaged device: AIX Server (AIX 5.3)
rb2x03.rgbagov.com / 10.8.4.186
priority 3

| Parameter | Value |
|--|---|
| UNSPSC description: | Computer servers |
| Model: | IBM p5 52A (9131-52A) / http://www-03.ibm.com/systems/p/hardware/entry/550/index.html |
| Model current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC model: | Computer servers |
| Operating system: | AIX Version 5.3 / http://www-1.ibm.com/servers/aix/os/index.html |
| Operating system current manufacturer: | IBM Corp / http://www.ibm.com/ |
| UNSPSC operating system: | Operating environment software |
| Hardware manufacturer: | Locally Administered MAC Address (Locally Administered MAC Addresses have the form X[26AE]-XX-XX-XX-XX-XX) / ftp://ftp.rtc-editor.org/notes/rfc1112.txt |
| Asset tag: | 1560 |
| BIOS product name: | IBM_9131-52A |
| CPU: | Power5 1648 MHz (IBM) |
| NetBIOS name (scan): | a0804ba |
| Memory (MB): | 4096 |

Asset Data:

| Parameter | Value |
|--------------|---------------------------|
| Description: | - Power5, 1648MHz, 4096Mb |
| Asset Tag: | 1560 |

Addresses:

| Port Index | MAC/IP | OUI/Netmask | Manufacturer/Domain Name |
|--|---------------|-------------|--------------------------|
| Device | 76A7F0 003002 | | rb2x03.rgbagov.com |
| | 10.8.4.186 | | |
| 0.0 / Virtual I/O Ethernet Adapter (4-Jan) | 76A7F0 003002 | | |
| | 10.8.4.186 | 255.255.0.0 | |

Report as of: Monday, May 12, 2008 10:17:23 Eastern Daylight Time

Figure 13 – AIX Inventory Results Details (RB2X03) within DDMI

Below is an example of the BIOS Data for RB2X03 captured by DDMI:

Title: rb2x03.rgbagov.com
IP address: 10.8.4.186
Asset tag: 1560

OS: AIX 5.3.0.0
CPU: Power5 1648 MHz (IBM)
Memory: 4,096 Mbytes
Disk: n/a

| Item Name | Item Value |
|--------------------------------|---------------|
| BIOS Source | IBM_SF240_332 |
| BIOS ROM Date | |
| BIOS Date | |
| BIOS Revision | |
| BIOS Machine ID | IBM_03108963G |
| SMBIOS Version | |
| SMBIOS Structure Table Address | |
| Plug and Play Version | |
| Compaq Asset Tag | |
| Asset TagID | |
| BIOS Version | |
| Boot PROM Version | |
| BIOS Serial Number | |
| Machine Model | IBM_9131-52A |
| Machine Architecture | chrp |
| Manufacturer | IBM |
| ACPI Supported | |
| ACPI Version | |

BIOS Data: BIOS stands for Basic Input/Output System. The system BIOS is the lowest-level software in the computer, it acting as an interface between the hardware (especially the chipset and processor) and the operating system. The BIOS is also responsible for allowing you to control your computer's hardware settings, for booting up the machine when you turn on the power or hit the reset button, and various other system functions.

Scan date: Sunday, May 11, 2008 09:10:23 EDT
Scanner version: 2.50.000 build 7199

Figure 14 – AIX BIOS Data Inventory Results (RB2X03) within DDMI



Below is an example of the OS Installed Applications being captured by DDMI:

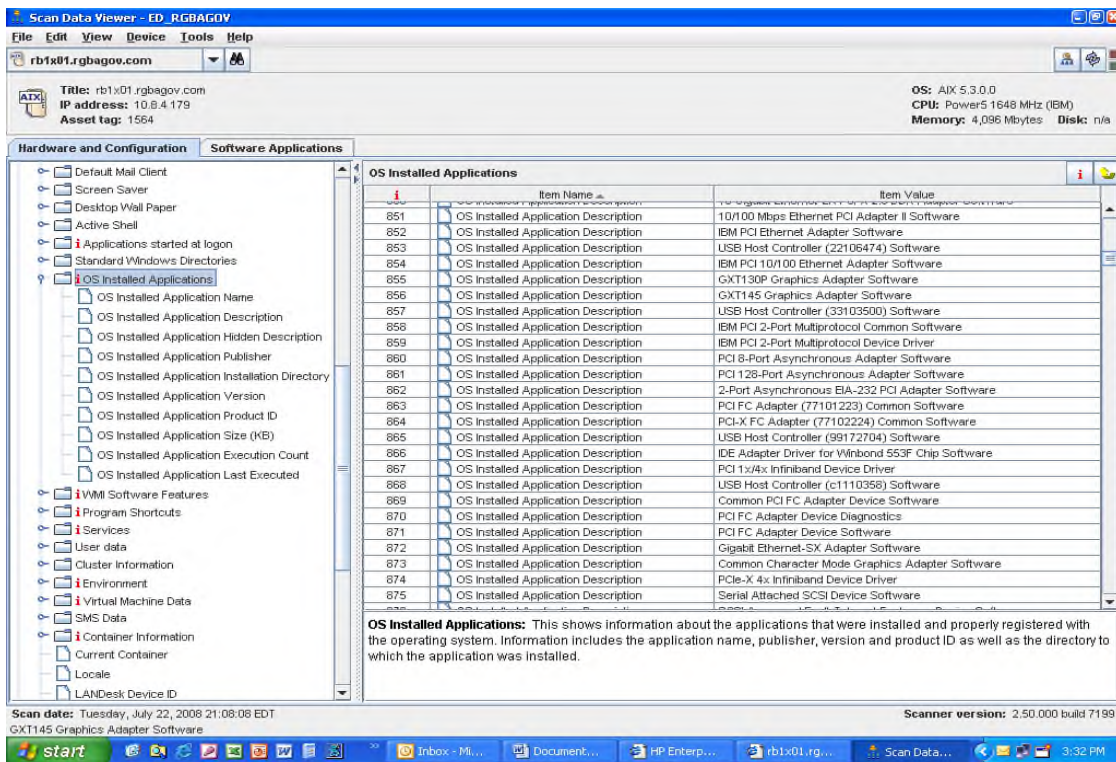


Figure 15 – OS Installed Applications Results within DDMI

Below are details of how the computer name, the serial number, and asset tag are identified within Assetcenter, DDMI/ED, and AIX for the physical AIX Server RB1 on LPAR 01 named rb1x01:

1. Computer Name:
 - ◆ AIX “lsconf” command shows field “LPAR Info” → 1 rb1x01
 - ◆ AssetCenter Computer Table field Name → RB1X01
 - ◆ ED → rb1x01.rgbagov.com
2. Serial Number
 - ◆ AIX “lsconf” command shows field “Machine Serial Number” → 108964G
 - ◆ AIX physical external label from IBM → 10-8964G
 - ◆ AssetCenter Asset Table was entered as → 8964G
 - ◆ ED’s Bios Data field BIOS Machine ID → IBM,03108964G
3. Asset Tag (Number)
 - ◆ AIX “lsconf” command → not displayed via AIX Sys. Administration.
 - ◆ AssetCenter generated (I guess) A/T → MFR100340
 - ◆ ED’s Asset Tag → 1564



3.2 AIX Relationship Assumptions

A summary of the relationship between the LPAR and the parent system:

1. The serial number of the parent machine (hardware) is captured within the BIOS Machine ID (e.g. IBM,031108964G), but the serial number is a subset of the information captured. Otherwise the real serial number should be "108964G" and this can be extracted via Connect-It and mapped to the correct serial number field within AssetCenter.
2. At BCBST I believe the serial number is the same as the asset tag and thus it can also be mapped in a similar to the serial number.
3. The system model captured by ED/DDMi can be mapped in a similar fashion as to that by Wintel machines
4. Since ED/DDMi automatically generate the asset tag field for the AIX systems I recommend for the serial number and asset tag of the LPARS to be "108964-1564"
5. A mapping between the virtual asset and its parent (identified in the first 3 bullets) would represent the LPAR properly within AssetCenter.
6. The additional LPAR hardware and software attributes will be mapped similarly to how Wintel devices are mapped via CIT.



3.3 DDMi AIX Connect-It Scenario

Using the assumptions defined above from the AIX inventory data captured by DDMi, the following scenario mapping changes were made to properly identify the LPAR within AssetCenter/Asset Manager.

Note: The scenario is based upon the Windows Connect-It scenario.

Scenario File Name: edac-aix.scn

Produced SQL Query Change -

Document Type: Devices (Scanned-Computers)

Add Element: Device_AgentOperatingSystem

Where Clause:

```
[DeviceIcon.DeviceIcon_NetworkClassification] <> 'Network Device'  
AND [NMID.NMID_StatusInAppliance] = 'active'  
AND [Device_ManagedCategory] <> 'Cloud'  
AND [Device_LastScanTimeStamp] IS NOT NULL  
AND [Device_AgentOperatingSystem] LIKE 'AIX%'
```

Mapping Change(s) -

Mapping Name: DevicesSrc-amComputerDst

Source document type: Scanned-Computers

Target document type: amComputerDst

Field Mapping Script Change(s) -

Computer.Portfolio.Asset.SerialNo:

```
' Modified by BT @ HP - 2008 Aug 14  
' Changed from default to account for AIX Bios mapping differences from Desktop devices  
' This is the default desktop mapping -> [hwBiosData.hwBiosSerialNumber]  
RetVal = right([hwBiosData.hwBiosMachineID],7)
```

Computer.Name:

```
' Modified by BT @ HP - 2008 Aug 14  
' Changed to IP Hostname that is identical to Windows Computername  
RetVal = [hwNetworkData.hwNetworkTcpip.hwIPHostName]
```

```
' Original Script commented out
```

```
'DIM strName AS String
```

```
'strName = ChooseKey( [hwNetworkData.hwNetworkNames.hwLocalMachineID],  
[Device_NetBIOS] )
```

```
'If strName <> "" Then
```

```
' RetVal = strName & "_" & EDDIGetSCLogicalName ([NMID.Appliance.Appliance_ServerID],  
[NMID.NMID_NMID])
```

```
'Else
```

```
' RetVal = EDDIGetACAssetTag ([hwAssetData.hwAssetTag],
```

```
[hwNetworkData.hwNetworkNames.hwWorkgroupname],
```

```
[hwNetworkData.hwNetworkNames.hwLocalMachineID], [NMID.Appliance.Appliance_ServerID],  
[NMID.NMID_NMID])
```

```
'End If
```

Computer.Portfolio.Asset.Model.Name:

```
' Modified by BT @ HP - 2008 Aug 14
```

```
' Changed to IP Hostname that is identical to Windows Computername
```

```
RetVal = [hwNetworkData.hwNetworkTcpip.hwIPHostName] + "-LPAR"
```



```
' Original Script commented out
'DIM strName AS String
'strName = ChooseKey( [hwNetworkData.hwNetworkNames.hwLocalMachineID],
[Device_NetBIOS] )
'If strName <> "" Then
' RetVal = strName & "_" & EDDIGetSCLogicalName ([NMID.Appliance.Appliance_ServerID],
[NMID.NMID_NMID])
'Else
' RetVal = EDDIGetACAssetTag ([hwAssetData.hwAssetTag],
[hwNetworkData.hwNetworkNames.hwWorkgroupName],
[hwNetworkData.hwNetworkNames.hwLocalMachineID], [NMID.Appliance.Appliance_ServerID],
[NMID.NMID_NMID])
'End If

Computer.Portfolio.Asset.Model.Brand.Name:
' Modified by BT @ HP - 2008 Aug 14
' Changed to send the left 3 characters from the hwBiosMachineModel field
RetVal = left([hwBiosData.hwBiosMachineModel],3)

' Original Script commented out
'EDDIGetACComputerBrand
([hwSMBIOS.hwSmbiosSystemInformation(0).hwsmbiosSystemManufacturer],
[CompanyHW.Company_Name])
Computer.Portfolio.Asset.Parent.Name:
' Modified by BT @ HP - 2008 Aug 14
' Changed to send the right 8 characters from the hwBiosMachineModel field
RetVal = right([hwBiosData.hwBiosMachineModel],8)

'Commented out original script
'Dim strBrand As String
'strBrand = EDDIGetComputerManufacturer
([hwSMBIOS.hwSmbiosSystemInformation(0).hwsmbiosSystemManufacturer],
[CompanyHW.Company_Name])
'If strBrand = "" Then
' strBrand = PifStrVal("UNKNOWN")
'End If
'RetVal = ToSmart(EDDITruncateParentName (strBrand))
BIOSAssetTag:
' Modified by BT @ HP - 2008 Aug 14
'Place the SerialNo within the field if the hwBiosAssetTag field is empty
If [hwBiosData.hwBiosAssetTag]<>"" Then
  RetVal = [hwBiosData.hwBiosAssetTag]
Else
  Retval = right([hwBiosData.hwBiosMachineld],7)
End If
```

Future Mapping Script Changes –**(future for AIX OS Installed Apps –****NOT WITHIN CURRENT SCENARIO DUE TO NEEDED CUSTOMER DISCUSSION)***Note: Add hwOSInstalledApps to the Relational Model within the DDMI connector.*

```
Computer.Portfolio.AddOn:
If trim([hwOSInstalledApps.hwOSInstalledAppInstallDir]) = "" Then
  PifIgnoreNodeMapping
End If

Computer.Portfolio.AddOn.Folder:
[hwOSInstalledApps.hwOSInstalledAppInstallDir]
```



Computer.Portfolio.AddOn.Model.Name:
 ToSmart([hwOSInstalledApps.hwOSInstalledAppDescription] & " " &
 [hwOSInstalledApps.hwOSInstalledAppVersion])
Computer.Portfolio.AddOn.SoftOS:
 [Device_AgentOperatingSystem]
Computer.Portfolio.AddOn.TechnicalInfo:
 [hwOSInstalledApps.hwOSInstalledAppDescription] & "-" &
 [hwOSInstalledApps.hwOSInstalledAppVersion] & "-" &
 [hwOSInstalledApps.hwOSInstalledAppName] & "_" & [Device_AgentOperatingSystem]
Remove following fields/links

- Computer.Portfolio.AddOn.User Link
- Any SoftInstall fields with SWSubComponents within mappingscript

Mapping Change(s) -

Mapping Name: VM-Host Link
Source document type: DevicesSrc
Target document type: amComputerDst4

Field Mapping Script Change(s) -

Computer.AssetTag:
 ' Modified by BT @ HP - 2008 Aug 14
 ' Defaulted to MachineID plus the host machine name of the LPAR
 Retval = right([hwBiosData.hwBiosMachineID],7)+"-"
 "+[hwNetworkData.hwNetworkTcpip.hwIPHostName]
 ' Original Script
 'UCase(EDDIDGetACAssetTag ([hwAssetData.hwAssetTag],
 [hwNetworkData.hwNetworkNames.hwWorkgroupName],
 [hwNetworkData.hwNetworkNames.hwLocalMachineID], [NMID.Appliance.Appliance_ServerID],
 [NMID.NMID_NMID]))
Computer.Portfolio.Parent.AssetTag:
 ' Modified by BT @ HP - 2008 Aug 14
 ' Defaulted to MachineID for the server
 Retval = right([hwBiosData.hwBiosMachineID],7)
 ' Original Script
 'UCase(EDDIDGetACAssetTag ([VMInformation.VMHost.Device.hwAssetData.hwAssetTag],
 [VMInformation.VMHost.Device.hwNetworkData.hwNetworkNames.hwWorkgroupName],
 [VMInformation.VMHost.Device.hwNetworkData.hwNetworkNames.hwLocalMachineID],
 [VMInformation.VMHost.Device.NMID.Appliance.Appliance_ServerID],
 [VMInformation.VMHost.Device.NMID.NMID_NMID]))

Applications Mapping Change(s) -

Mapping Name: VM-Host Link
Source document type: DevicesSrc
Target document type: amComputerDst4

Field Mapping Script Change(s) -

Note: The detailed scenario mapping can be found within Appendix A.



3.4 DDMI AIX Connect-It Scenario Deployment

Using the scenario defined above confirm its data population within Asset Manager by populating a test or development instance of Asset Manager. Once the data placement is confirmed the scenario can be placed within your set of production Connect-It scenarios mapping to your production instance of Asset Manager.

Appendix A – edac-aix.scn Scenario Documentation

Below is the detailed documentation to the DDMI's AIX scenario named edac-aix.

Refer to the file within the DDMI AIX scenario package named edac-aix_v1-0.htm.