IT Asset Management

Adding DDMi Inventory Attributes to AssetCenter/Asset Manager

# DDMi MS Windows Default User Name & AIX Inventory Mapping

**Version 1.0**
**August 20, 2008**

## TABLE OF CONTENTS



## TABLE OF FIGURES

# 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 |
| | | | |
| | | | |
| | | | |
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# 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**

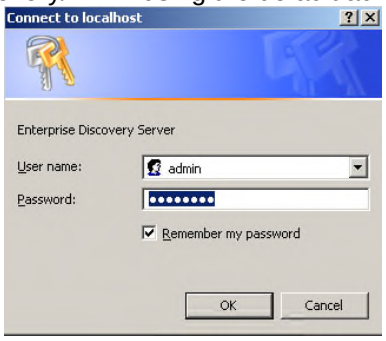
This field is automatically captured by default within Windows operating systems.

## *2.2 Capturing the Default User Name within DDMi*

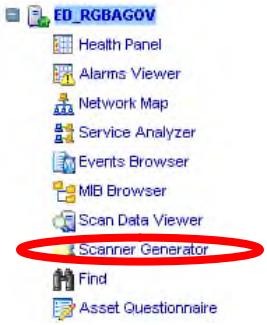
As the Default User Name is captured within Windows, DDMi does not capture the registry entry by default. Hence, the following steps are required when creating a DDMi scan file for a Windows operating system. The steps are as follows:

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

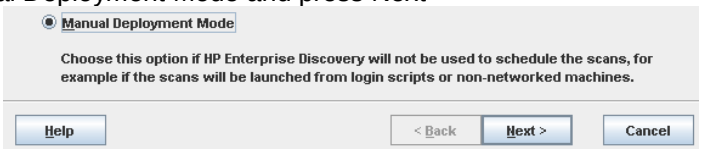

2. Log into Enterprise Discovery/DDMi using the default administrative ID



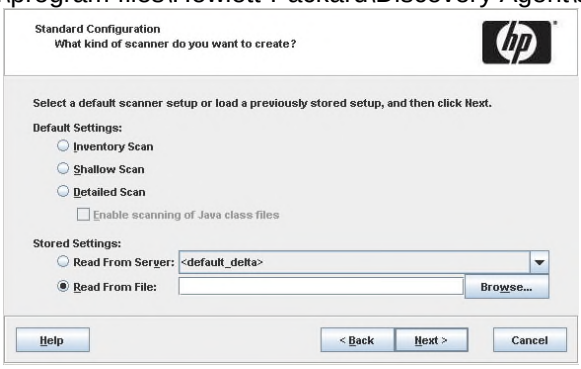
3. Go to the Scanner Generator within the ED/DDMi Administration panel



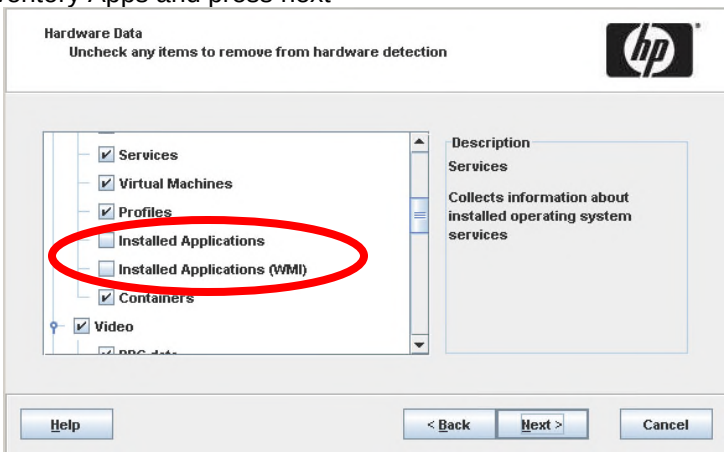

4. Select Manual Deployment Mode and press Next



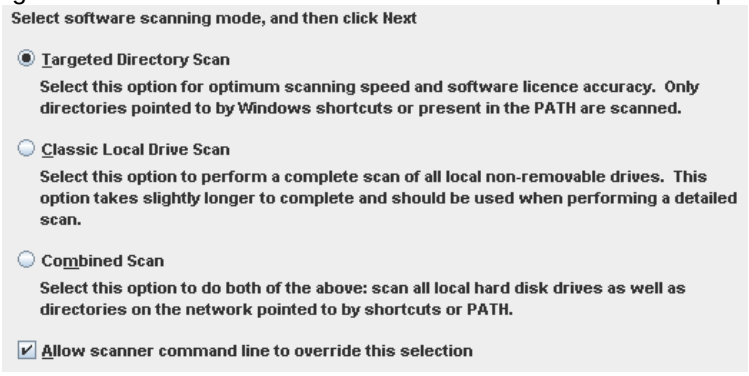

5. Read from file – c:\program files\Hewlett-Packard\Discovery Agent\scan.exe and press Next



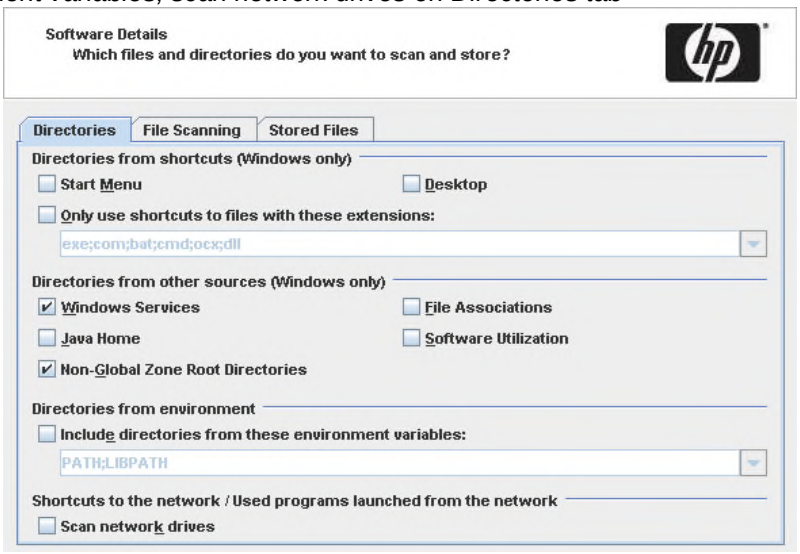

6. Do not change any options on page and press next
7. Unselect Inventory Apps and press next



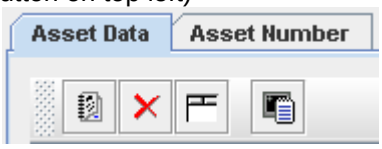
8. Confirm Targeted Scan and check box at bottom are both selected and press next



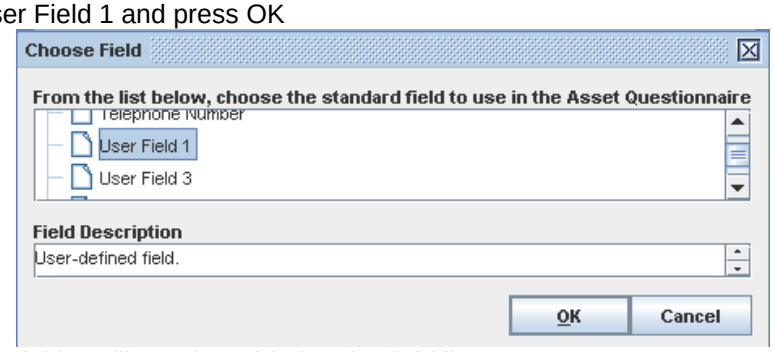

9. Uncheck the options as identified below: *Start Menu, Desktop, Only use shortcuts; include environment variables; scan network drives on Directories tab*




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

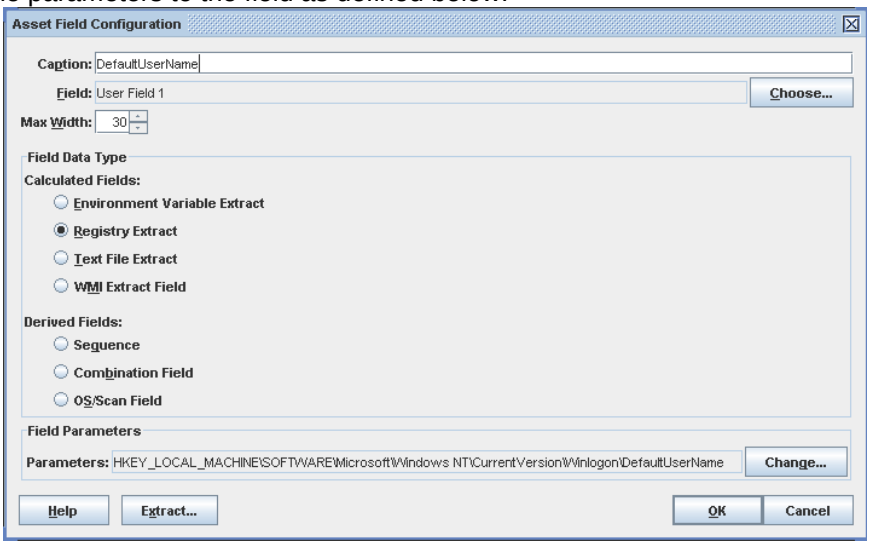



12. Select User Field 1 and press OK



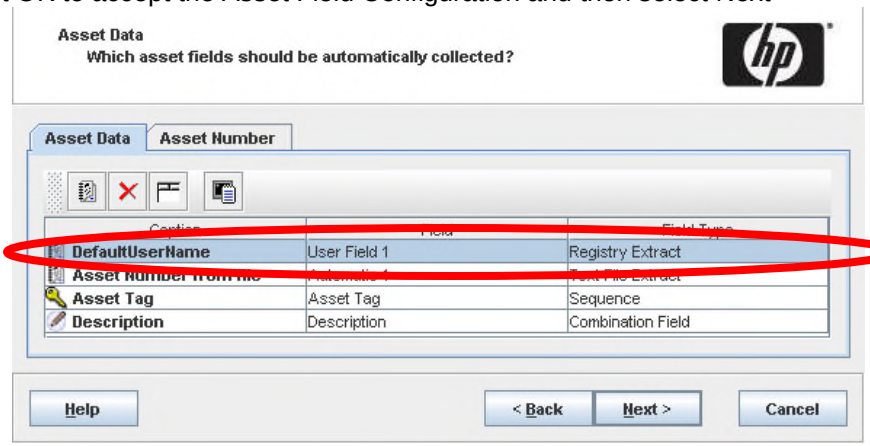

13. The User Field 1 will now be added to the field list.
14. Double click User Field 1 to configure

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

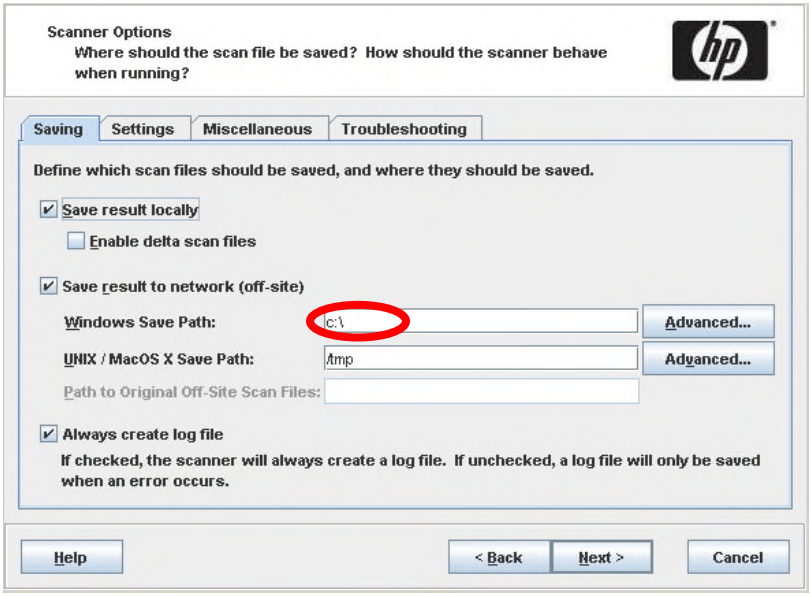



a. Change caption to DefaultUserName and leave default field length at 30
b. Select Registry Extract
c. Select Change button next to parameters
d. Set the Default User Registry Field to
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon\DefaultUserName
e. Select OK to accept the changes to the User Field 1 parameters

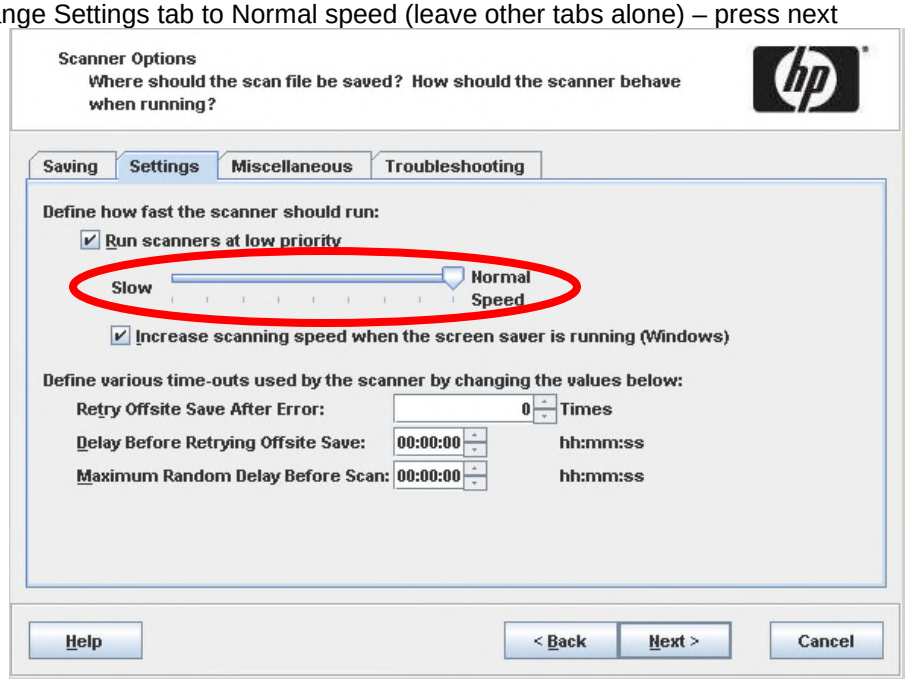
16. Select OK to accept the Asset Field Configuration and then select Next



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

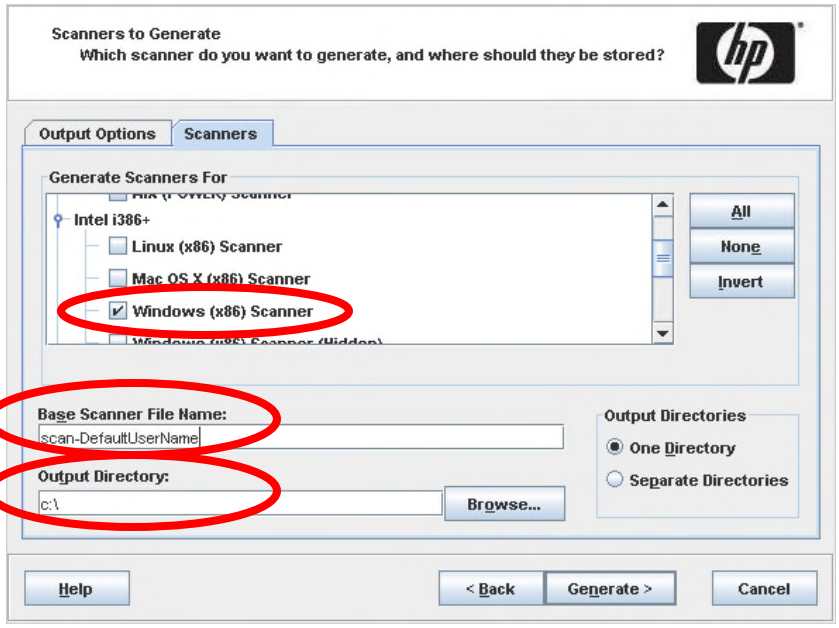



18. Change Settings tab to Normal speed (leave other tabs alone) – press next




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 …)

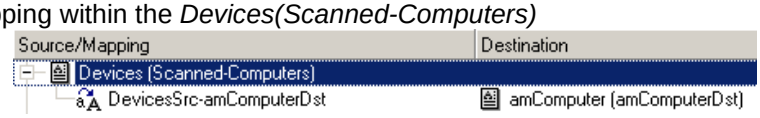
To place the new enhancements within a production scanner:

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:

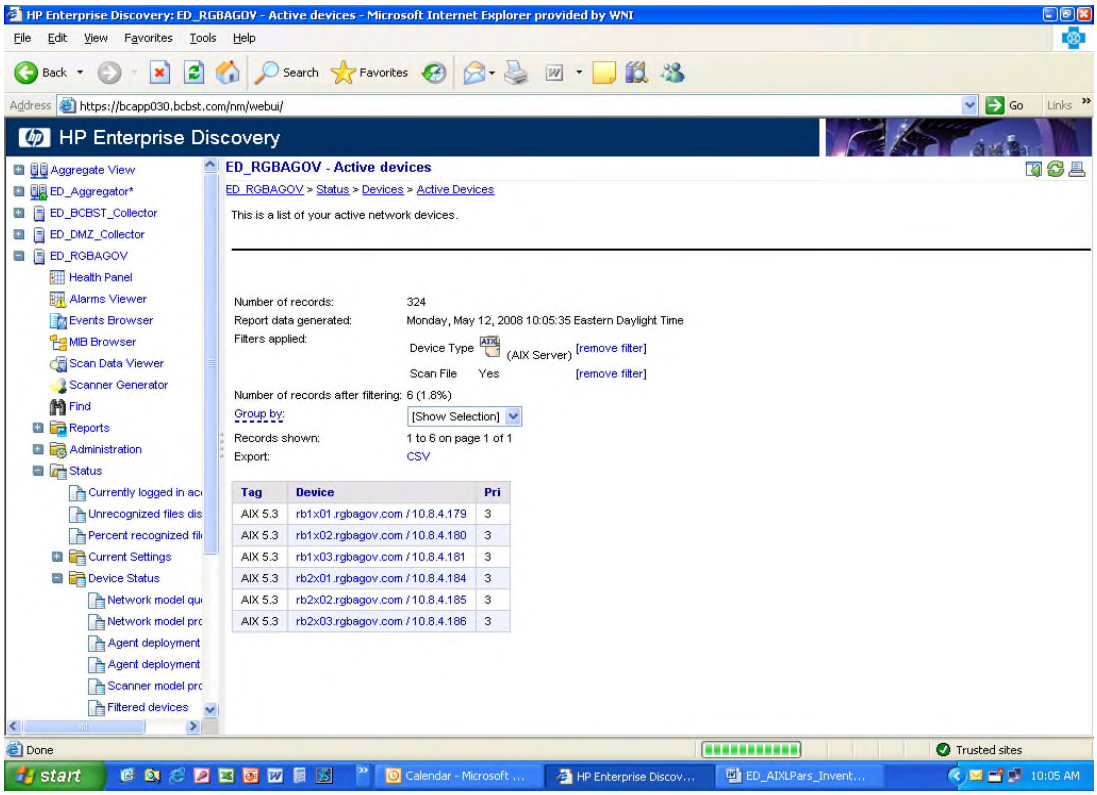



**Figure 2 – AIX Inventories captured by DDMi**

Below are the details of server RB1X01 inventoried by DDMi:

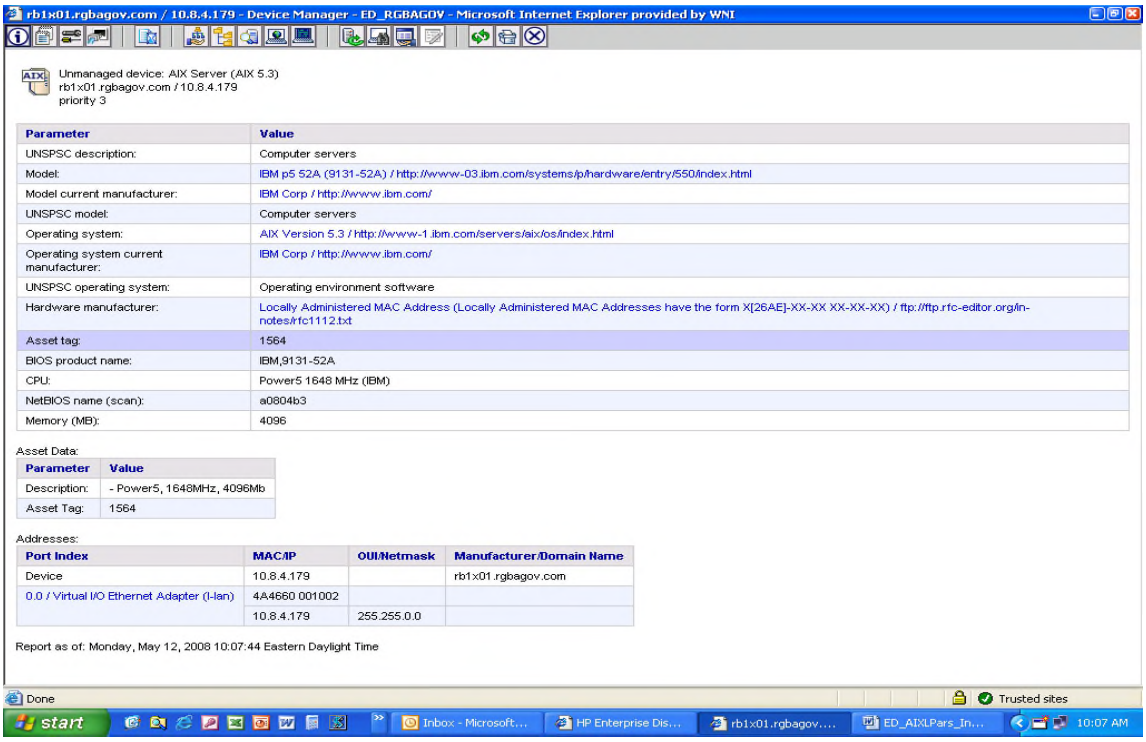



**Figure 3 – AIX Inventory Results Details (RB1X01) within DDMi**

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

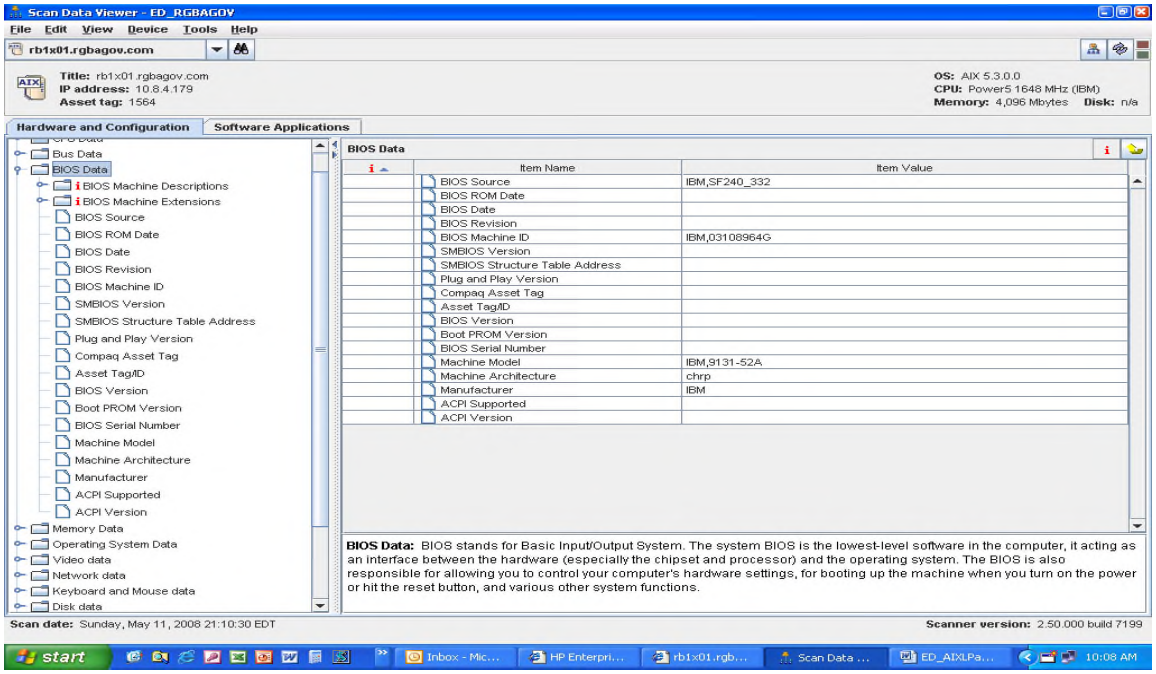



**Figure 4 – AIX BIOS Data Inventory Results (RB1X01) within DDMi**

Below are the details of server RB1X02 inventoried by DDMi:

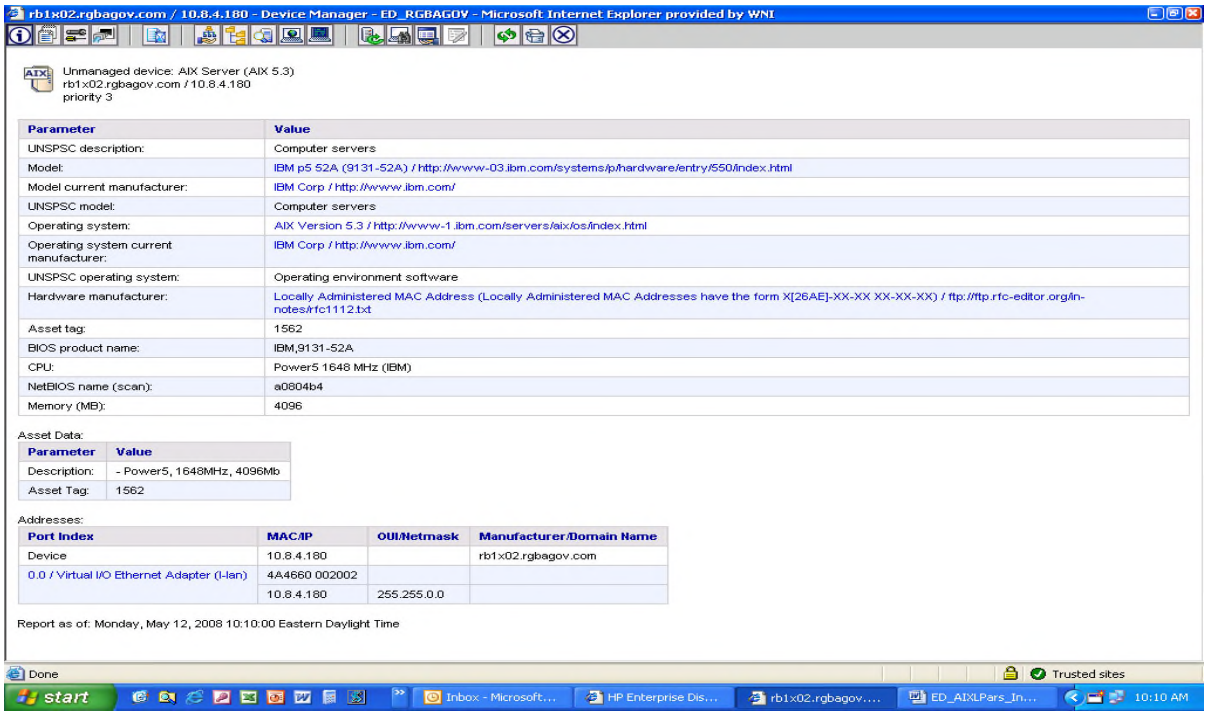



**Figure 5 – AIX Inventory Results Details (RB1X02) within DDMi**

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

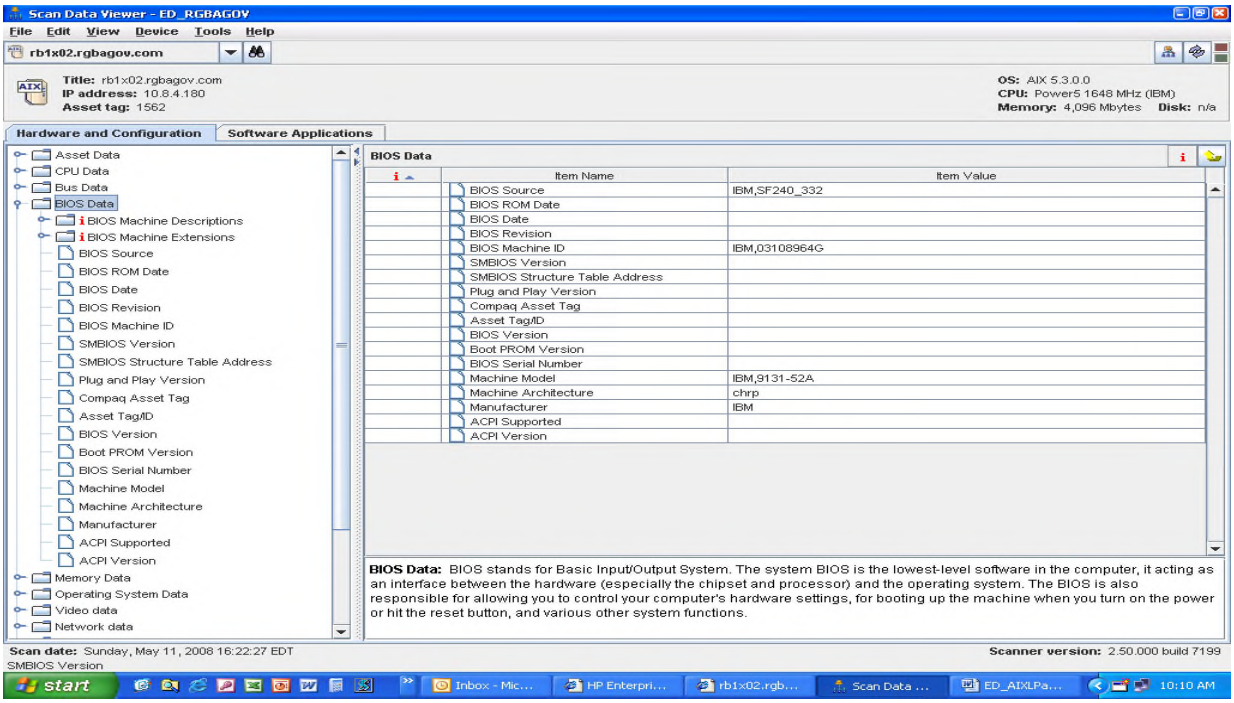



**Figure 6 – AIX BIOS Data Inventory Results (RB1X02) within DDMi**

Below are the details of server RB1X03 inventoried by DDMi:

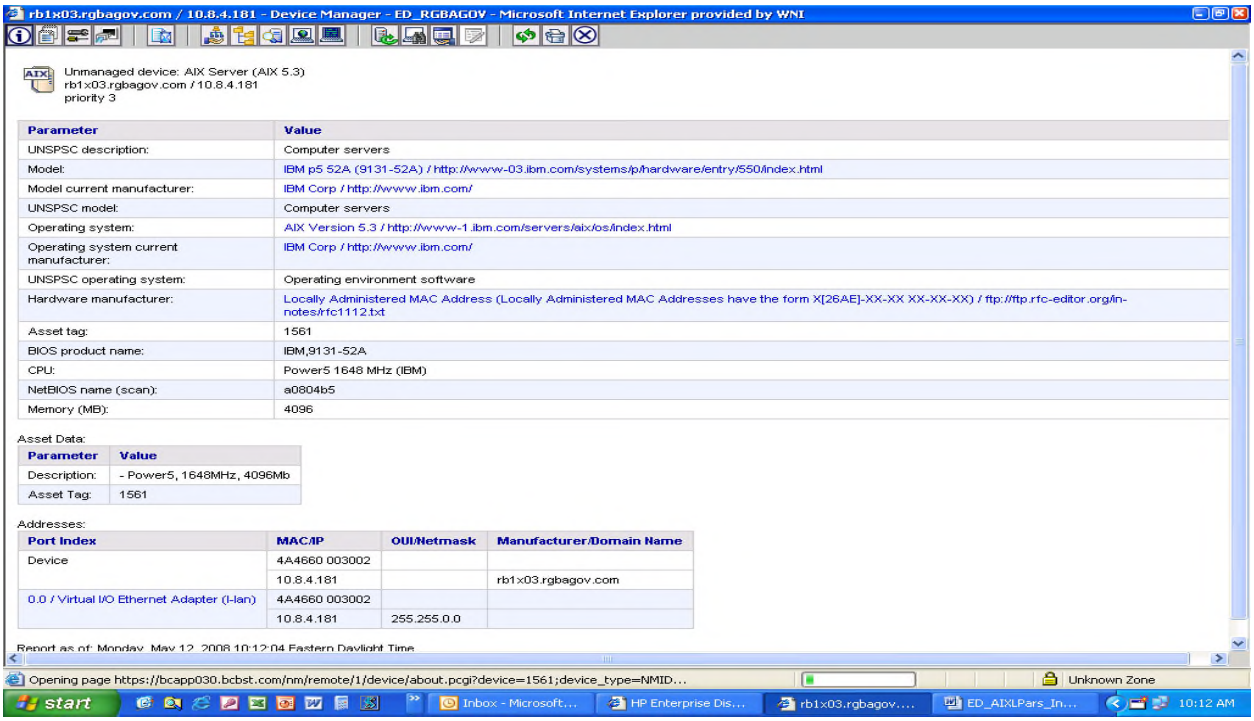



**Figure 7 – AIX Inventory Results Details (RB1X03) within DDMi**

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

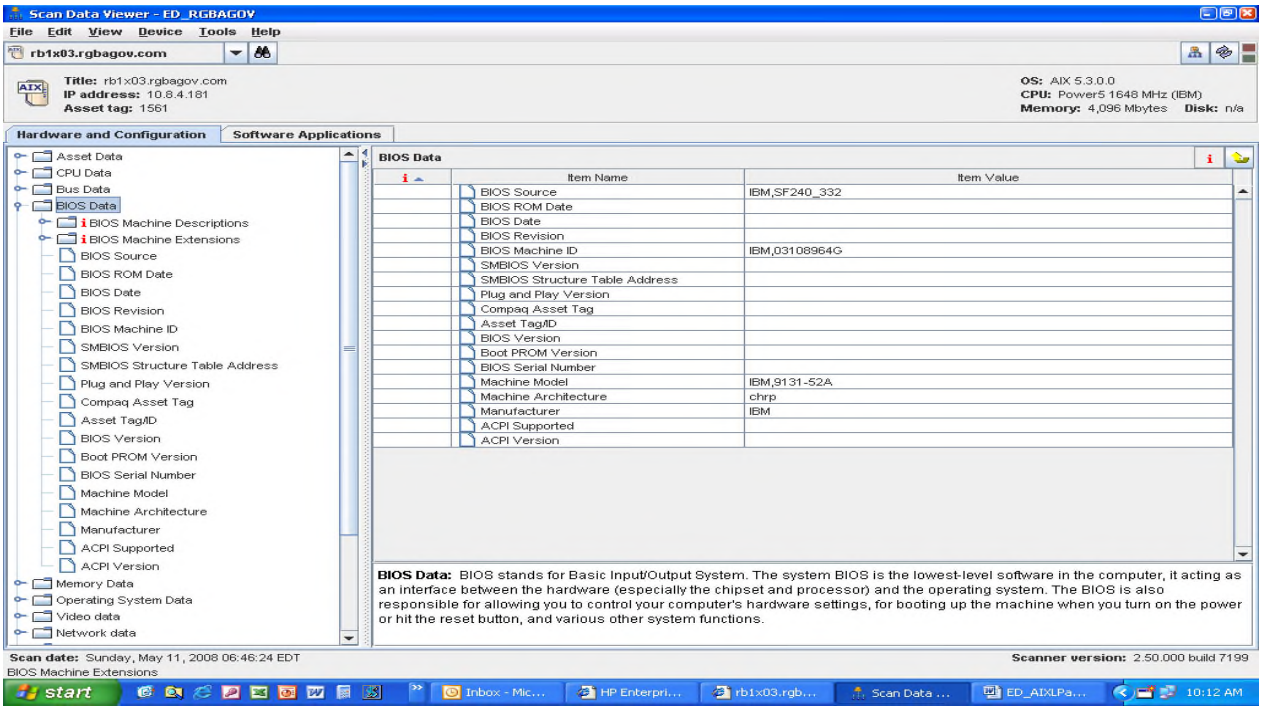



**Figure 8 – AIX BIOS Data Inventory Results (RB1X03) within DDMi**

Below are the details of server RB2X01 inventoried by DDMi:

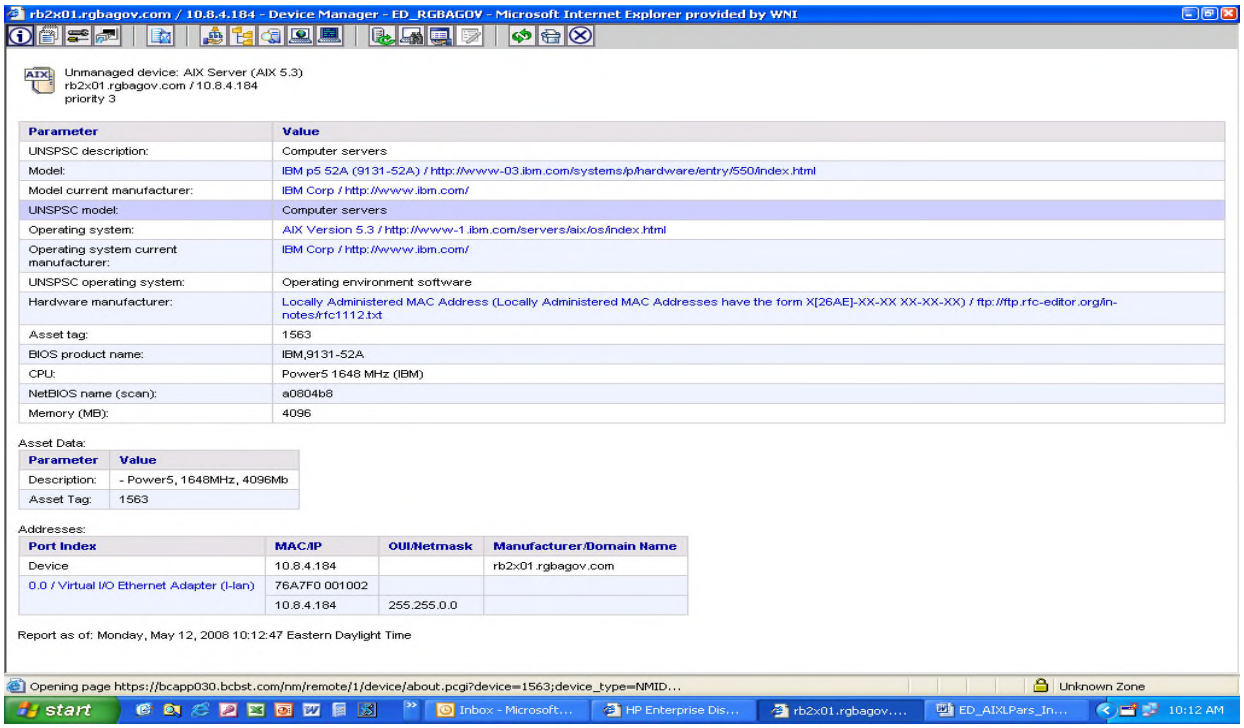



**Figure 9 – AIX Inventory Results Details (RB2X01) within DDMi**

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

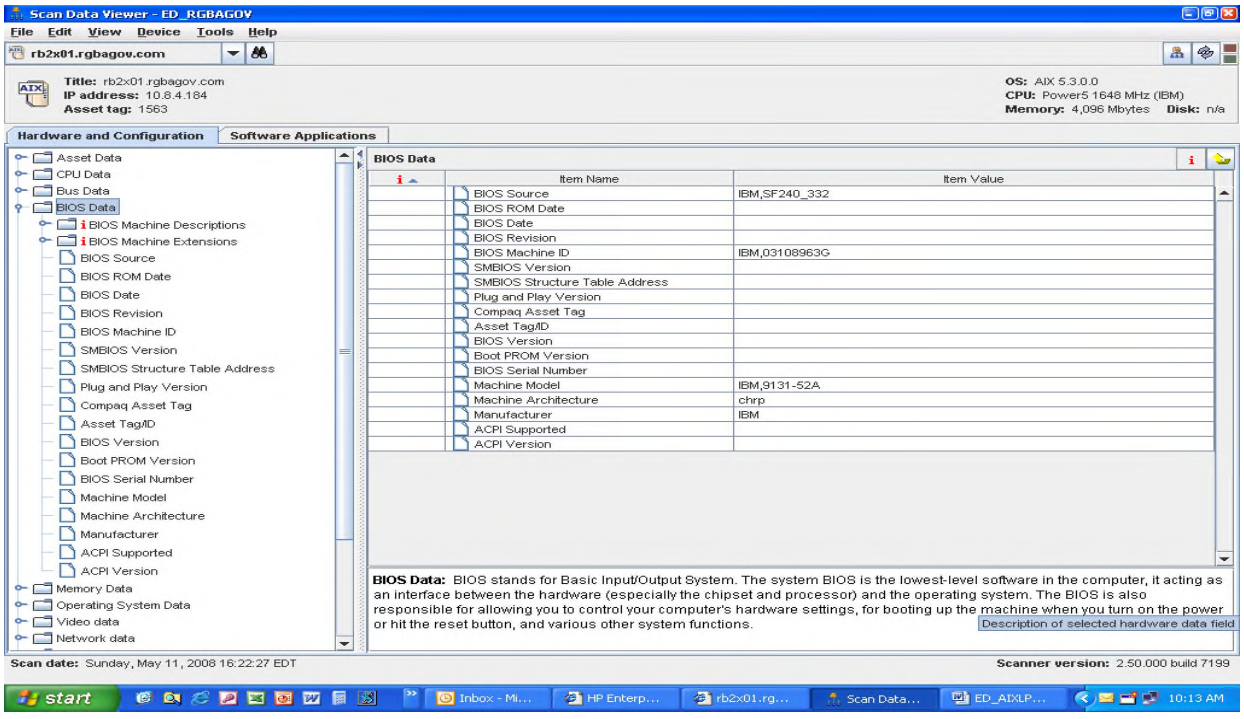



**Figure 10 – AIX BIOS Data Inventory Results (RB2X01) within DDMi**

Below are the details of server RB2X02 inventoried by DDMi:

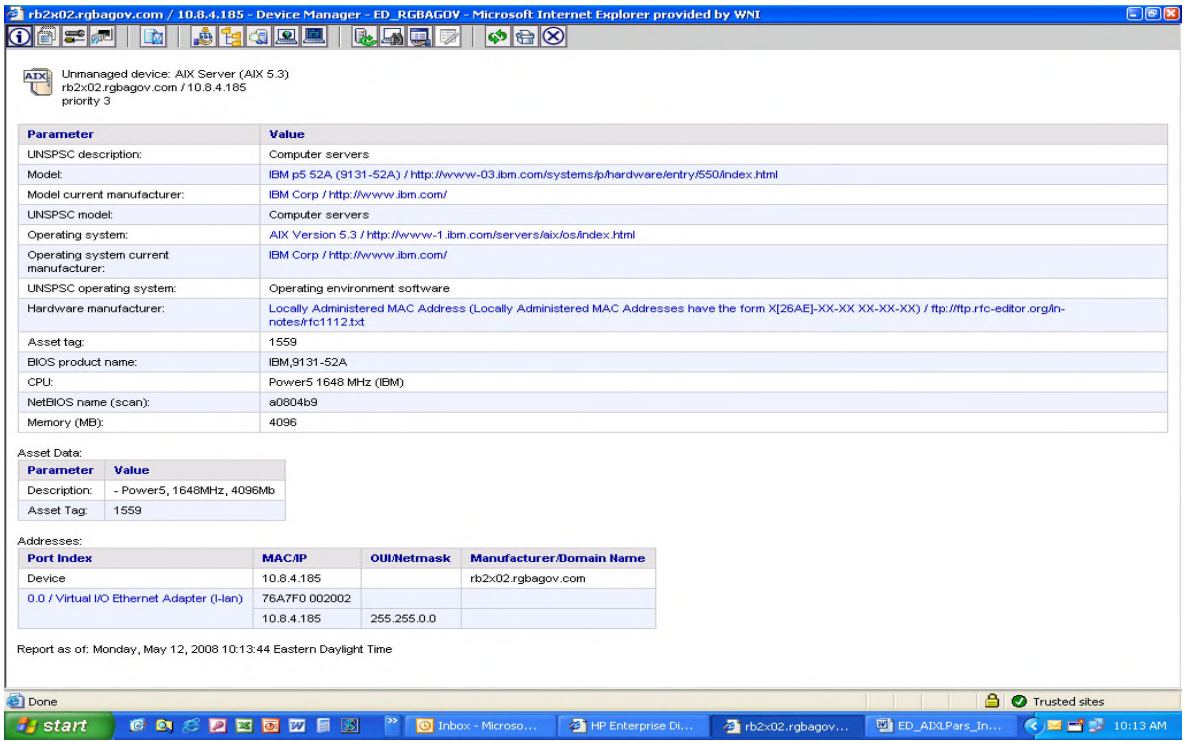



**Figure 11 – AIX Inventory Results Details (RB2X02) within DDMi**

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

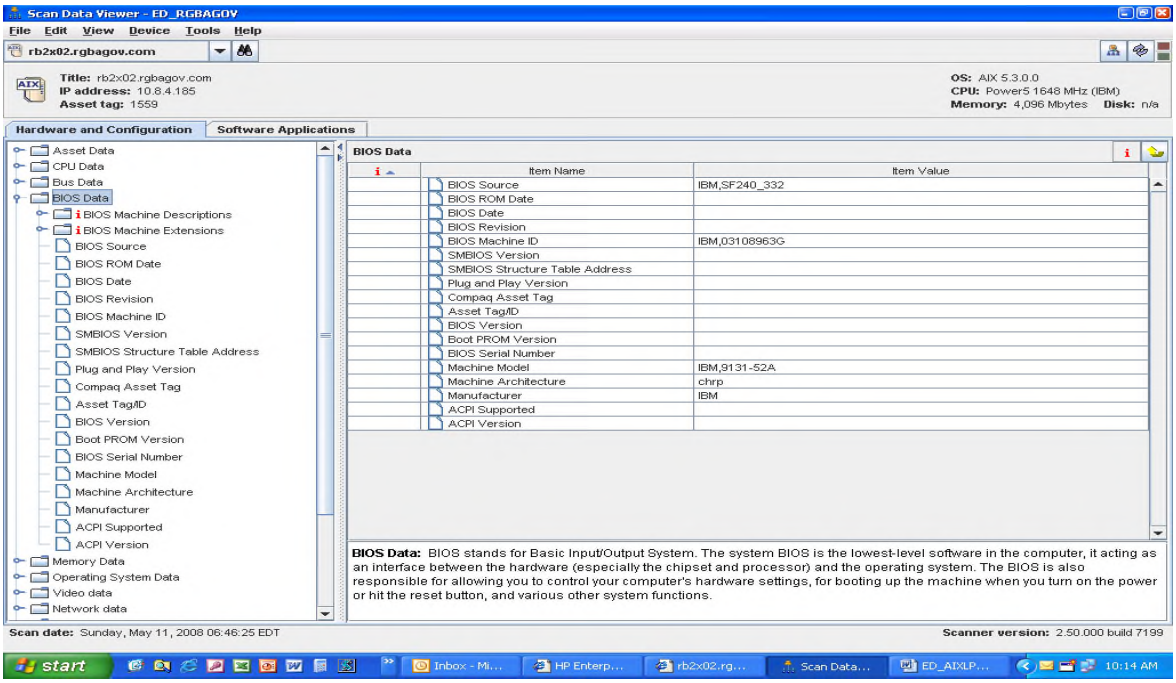



**Figure 12 – AIX BIOS Data Inventory Results (RB2X02) within DDMi**

Below are the details of server RB2X03 inventoried by DDMi:

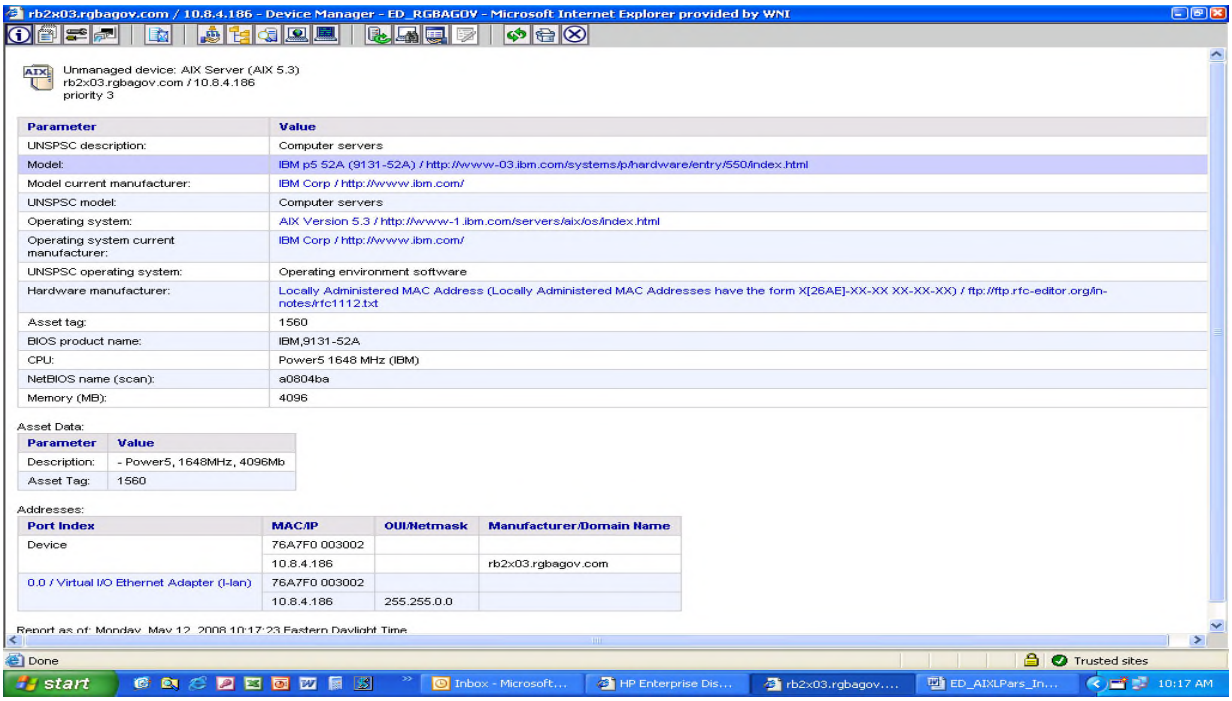



**Figure 13 – AIX Inventory Results Details (RB2X03) within DDMi**

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

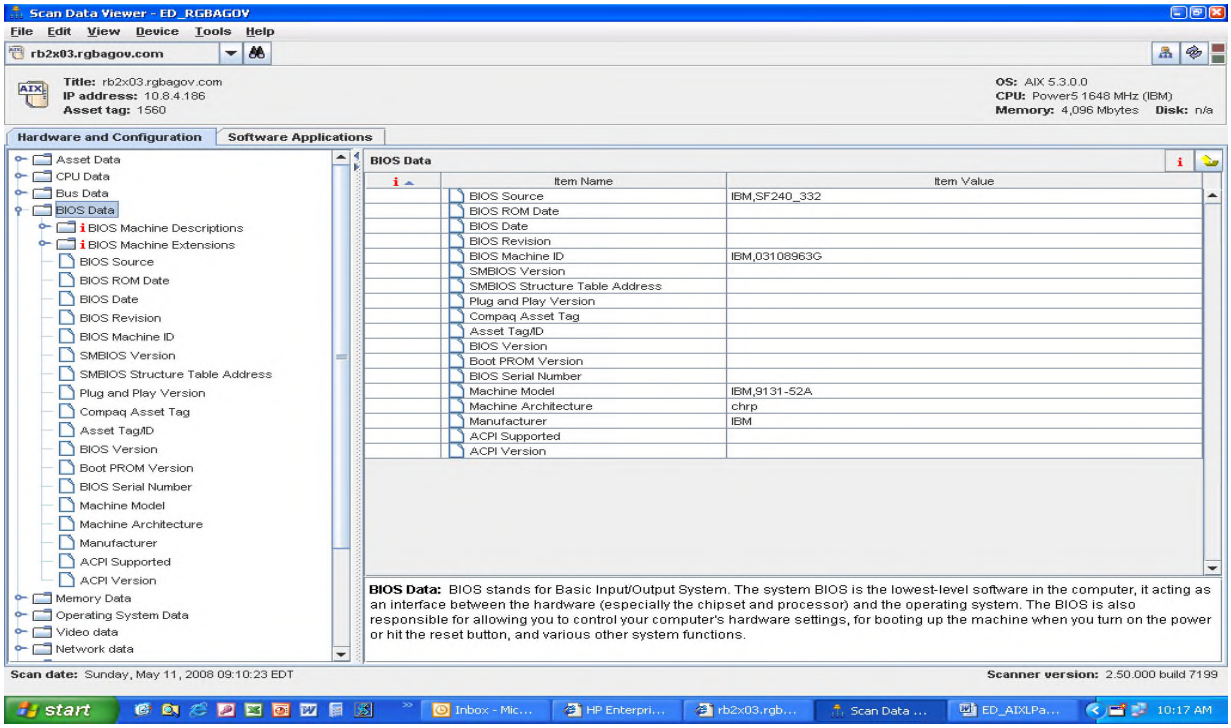



**Figure 14 – AIX BIOS Data Inventory Results (RB2X03) within DDMi**

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

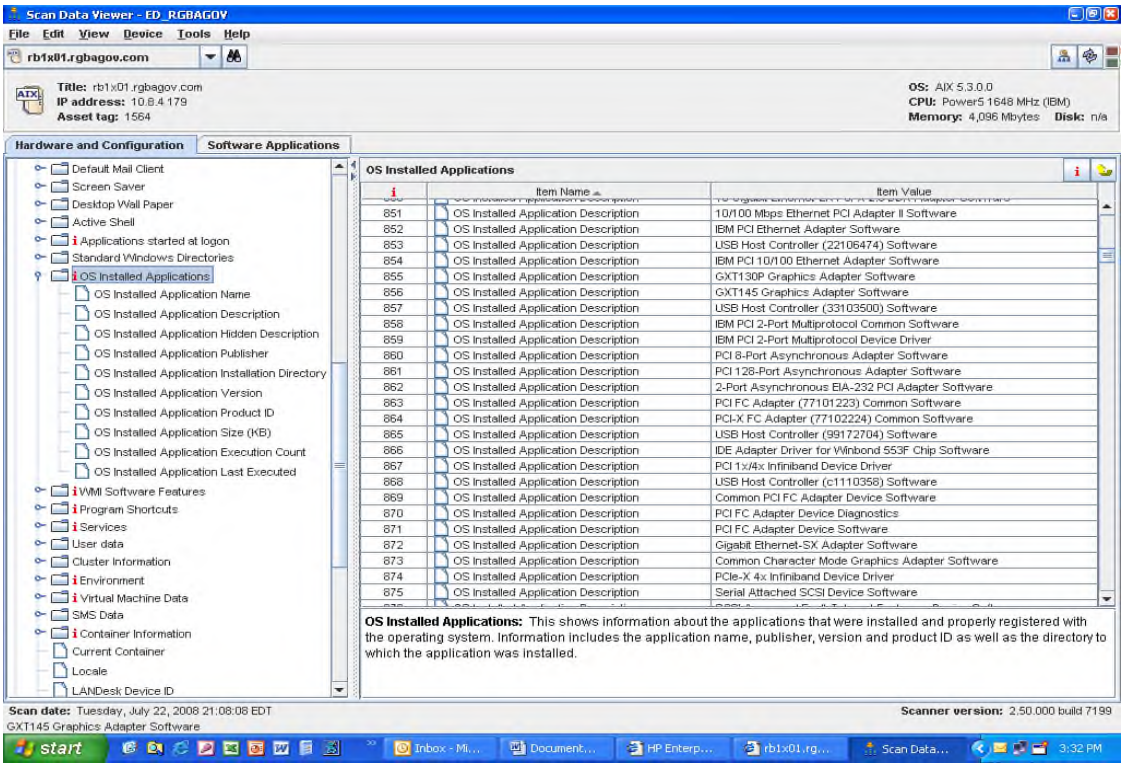



**Figure 15 – OS Installed Applications Results within DDMi**

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 acccount 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.hwBiosMachineId],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(EDDIGetACAssetTag ([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(EDDIGetACAssetTag ([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.