Acer Server Management Solution

Acer Server Manager Version 5.1

User's Manual

Sep 5, 2002

Revision History

Revision	Revision History	Date
0.1	ASM Console version 1.0	06/02
0.2	Add new features: Discovery, Alert, OS info, PowerOn/Off	08/02
0.3	New screenshot	09/05

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1 Introduction

1.1 Acer Server Manager Version 5.1 Overview

The Acer Server Manager Version 5.1 is one of Acer's Server Management Solutions. With this management software, administrators can monitor system utilization such as processor performance, memory usage, events, sensors, and etc., via an intuitive Console GUI. On Platforms that support IPMI 1.5, administrators can monitor servers even when the OS is inactive. Further, administrators can shutdown processes, reset Watch Dog Timers, and perform power on/off operations remotely.

From an ASM Console, the system administrator can monitor any designated server on the network, given the ASM agent has been properly installed on that server. When the system administrator selects a computer from the console, ASM Console will then connect to the Agent on that node, retrieve the system's hardware information that is available, and expose to the administrator.

The ASM software consists of two components:

- **ASM Console**

  The ASM Console offers a standard MMC (Microsoft Management Console) GUI. This allows the system administrator to access ASM agent on a remote server.

  The ASM Console runs as a Management Client, currently supporting Windows 2000 Professional, Windows 2000 Server and Window 2000 Advanced Server.

- **ASM agent**

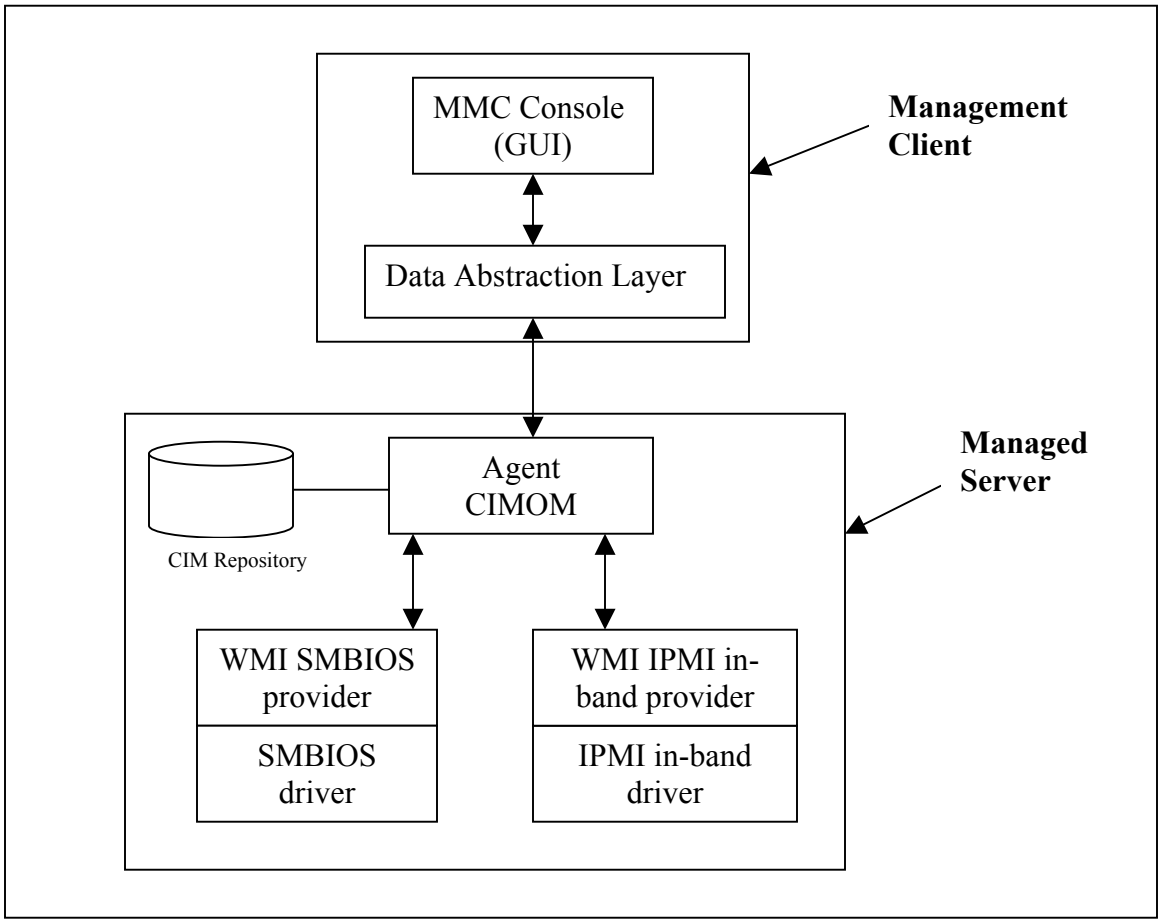
  The ASM agent runs on the managed server (or managed node). It extends the standard Windows Agent, which is available by default with the installation of a Windows Operating System.

  Agent evaluates requests for information from the WMI consumer (in this case, the ASM Console), identifies which WMI provider has the information, and returns the data to the consumer. Acer Server Manager extends the standard Agent with 2 WMI providers, the SMBIOS provider and the IPMI provider.

  OS supported: Windows 2000 Server, Windows 2000 Advanced Server and Windows NT 4.0.

  Hardware Platform Supported: G300, G700, G900, Jaguar 2.0, Cheetah 2.0.

An example configuration of these 2 components is displayed in the following figure



1.2 Using This Guide

The purpose of this guide is to help the reader understand and use Acer Server Manager Version 5.1. The guide is divided into five sections as follows:

- **Introduction**
  Overview of Acer Server Manager components and high-level description of ASM features
- **Installing ASM**
  Installation procedures for the Acer Server Manager
- **Configuring and Running ASM**
  Description of the ASM Console GUI
- **Uninstalling ASM**
  Procedures to uninstall Acer Server Manager
- **Frequently Asked Questions (FAQ)**
  Answers to frequently asked questions regarding ASM capabilities, installation, configuration, or use

After reviewing this guide, the reader should be comfortable with deploying and using ASM 5.1 to manage servers and should have a good understanding of the product's capabilities and benefits.

For the user's reference, the terminology used throughout this guide is presented below:

WMI
Windows Management Instrumentation (WMI) technology is an implementation of the Desktop Management Task Force's (DMTF) Web-based Enterprise Management (WBEM) initiative for Microsoft® Windows® operating systems. It takes advantage of the DMTF Common Information Model (CIM) to represent managed objects in Windows-based environments.

Common Information Model (or CIM)
CIM is a data model, a conceptual view of the environment, which unifies and extends existing instrumentation and management standards (SNMP, DMI, CMIP, and so on) using object-oriented constructs and design.

CIMOM (Common Information Model Object Manager) and CIMOM Repository
The WMI infrastructure consists of the CIMOM and a CIMOM repository. Applications depend on the CIMOM to handle the interface between WMI consumers and WMI providers. CIMOM facilitates these communications by providing a common programming interface, using COM, to WMI. The CIMOM repository holds the CIM and extension schemas and data information or data source details.

WMI Provider
WMI providers function as intermediaries between CIM Object Manager and the actual managed objects. A provider supplies instrumentation data for parts of the CIM schema, and retrieves information from WMI-enabled drivers.

WMI Consumer (or WMI Client)
The management application

Acer Server Management (ASM)
The System Management Software referred to in this guide. It includes 2 independent components: the ASM Console, and the ASM agent. The ASM Console presents a standard MMC GUI, and connects to the ASM agent running on a managed server to request data, whereupon the ASM agent will retrieve the data from the appropriate WMI Providers.

Managed Node (or Managed Server or ASM Node)
The server system on which the ASM agent is deployed

Management Client
The system on which the ASM Console is deployed

SMBIOS
System Management BIOS

IPMI
Intelligent Platform Management Interface

CONSOLE TREE
Left pane of the ASM Console GUI, which allows the user to browse and select from various categories of the hardware information of the managed server.

DISPLAY PANE
Right pane of the ASM Console GUI, which displays detailed information selected on the Console Tree

ASM
Short for Acer Server Manager

SMART
Short for Self Monitoring, Analysis and Reporting Technology. In some devices, there are health indicators and thresholds in the hardware to predict impending failures. ASM reports these predictions for IDE disk drives as alerts. Two kinds of predictions are reported: Pre-failure predictions and Critical predictions. ASM simply reports these predictions. The types of health indicators and their thresholds are determined by the disk manufacturer.

1.3 ASM Features

At present, the main features of ASM are:

- **Retrieve System Information**----ASM allows the user to view hardware, OS and Events information about the node under management.

  A complete list of Information provided by ASM:

  Hardware:
  - Watch Dog Timer
  - System Information
  - Baseboard
  - BIOS Information
  - Processor Information
  - CPU Cache Information
  - Port Connector Information
  - Memory Information
  - Slot Information
  - Onboard Device Information
  - IPMI Device Information
  - Environmental Monitoring Sensors
  - Other Sensors

  OS:
  - System Information
  - Disk Information
  - Process
  - Performance

  Events:
  - IPMI SEL
  - Application
  - Security
  - System

- **Alerts** ----The ASM Console serves as an alert center. Pre-defined events that occur on all managed nodes would be forwarded to the ASM Console. Pre-defined actions can also be assigned to alerts. Actions include: Pop-up a Window on the ASM Console, Send email messages to a list of recipients, and Execute a program on the ASM Console.
- **Discovery** ---- The administrator can specify an IP range, and ASM's discovery tool will search for available IN_Band and OOB computers in the scope, so that administrator can select his desired nodes from them.
- **Remote Management**: ----The administrator can terminate processes that are running on managed nodes. The administrator can shutdown, power down, reset, and power-on managed nodes. Watch Dog Timer values can also be retrieved and reset.
- **Unified User Interface**----The ASM Console user interface provides a dynamic display of related menu items and console tree branches, in order to allow the user to easily switch views from various nodes with different management capabilities.

2 Installing ASM

Two steps need to be followed to complete the installation of ASM.

- Install the ASM agent on managed nodes
- Install the ASM Console on the management client

This section will detail the installation procedures.

2.1 Installing the ASM agent

The ASM agent needs to be installed on each system to be managed. This section will cover the step-by-step installation procedure for managed nodes running Windows 2000.

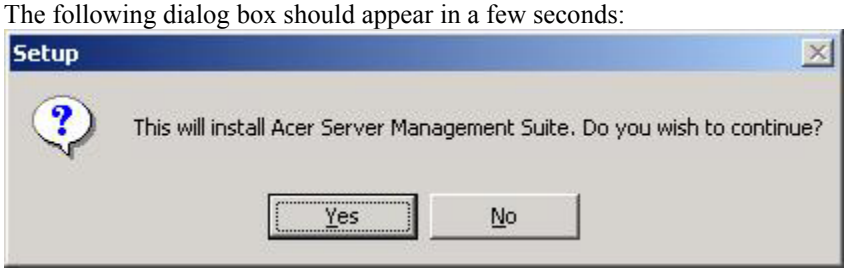
2.1.1 System Requirements

The ASM agent can be installed on Acer servers that meet the following requirements:

	Hardware and Software Requirements
CPU	Intel Pentium III, 500 MHz or faster.
Memory	128 MB RAM
Operating system	Windows NT 4.0 Windows 2000 • Server • Advanced Server
Network card	Ethernet
Hard disk	SCSI / IDE hard drive with at least 100 MB disk space available
CD-ROM drive	SCSI or IDE CD-ROM drive

2.1.2 Installation Instructions

1. Make sure Windows 2000 is installed successfully, and the server is connected to the network. This procedure will allow you to diagnose and resolve networking issues before you start to configure ASM agent.
2. Logon to Windows 2000 using the Administrator account
3. Insert Acer Server Manager Version 5.1 CD into CD-ROM drive
   The following dialog box should appear in a few seconds:

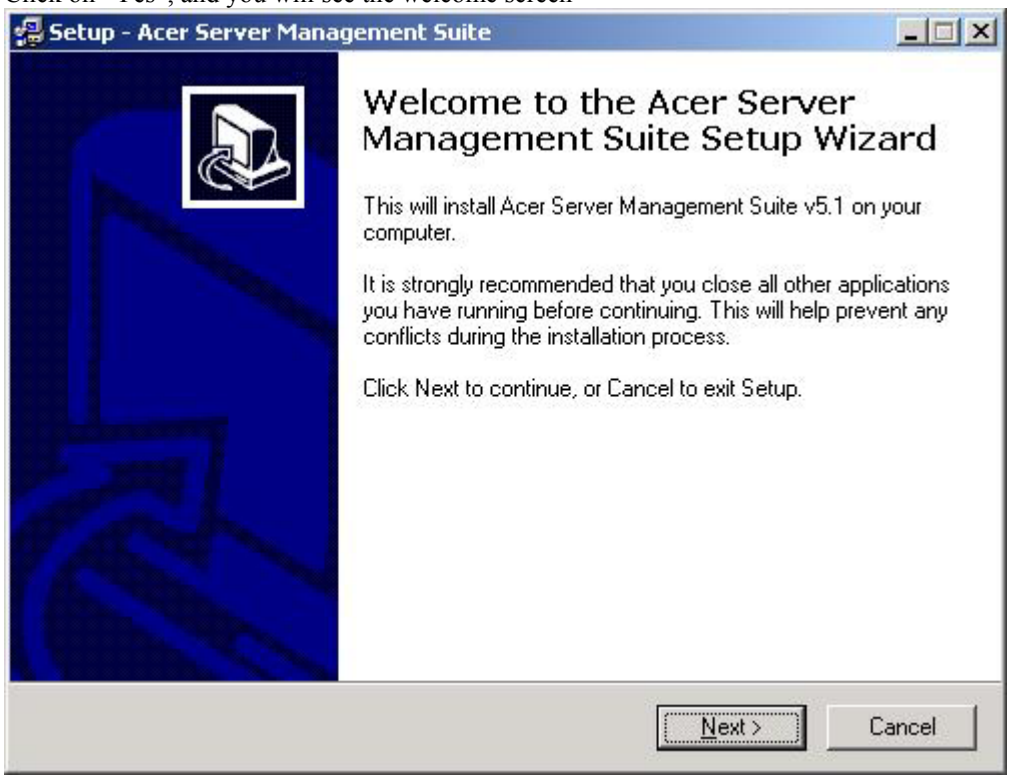


   If the dialog box does not appear, in Windows Explorer, double-click on

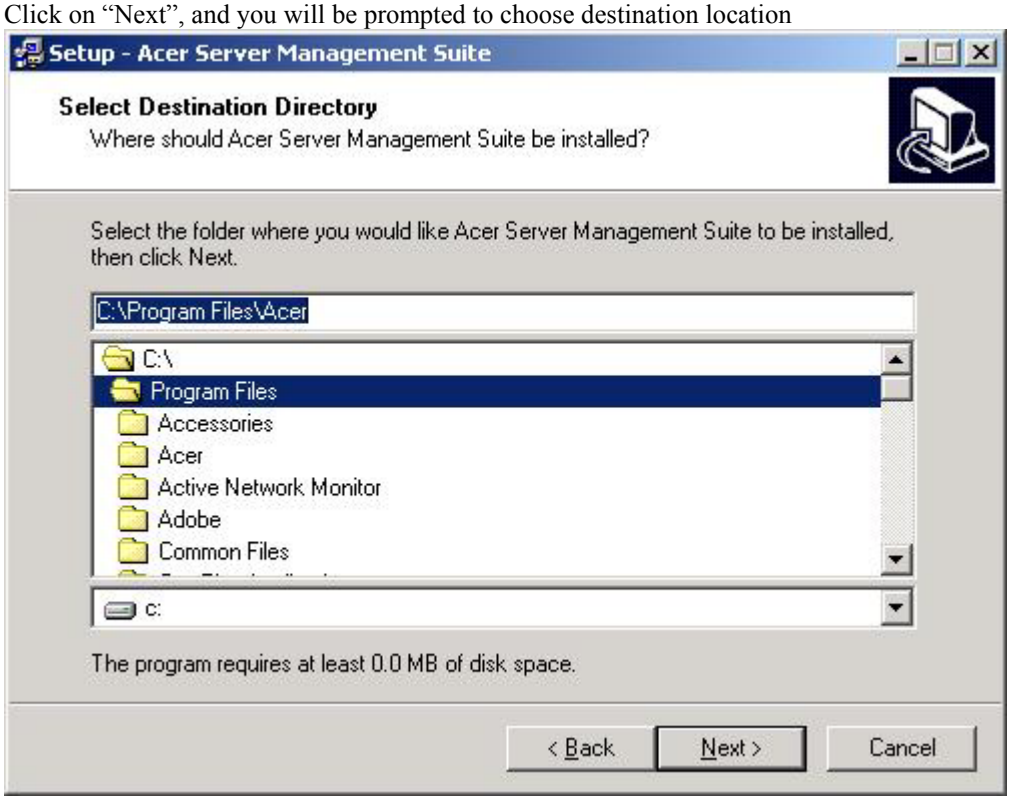
   <CDROM Drive Letter>:\setup.exe

   This will bring up the Setup Dialog box

4. Click on "Yes", and you will see the welcome screen



5. Click on "Next", and you will be prompted to choose destination location

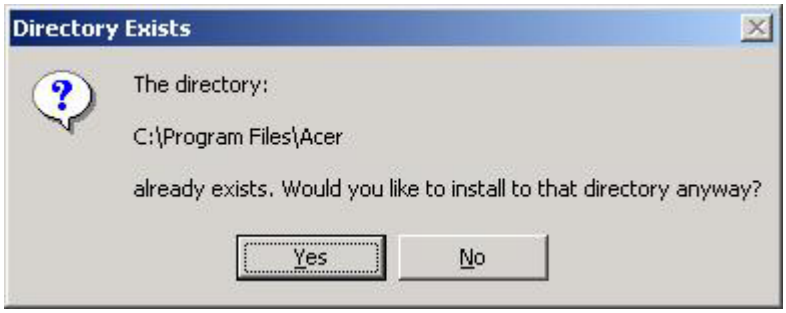


6. Specify the destination directory where you want to install Acer Server Manager, and click "Next" to continue. As an example in this manual, we choose the default directory:

   C:\Program Files\Acer

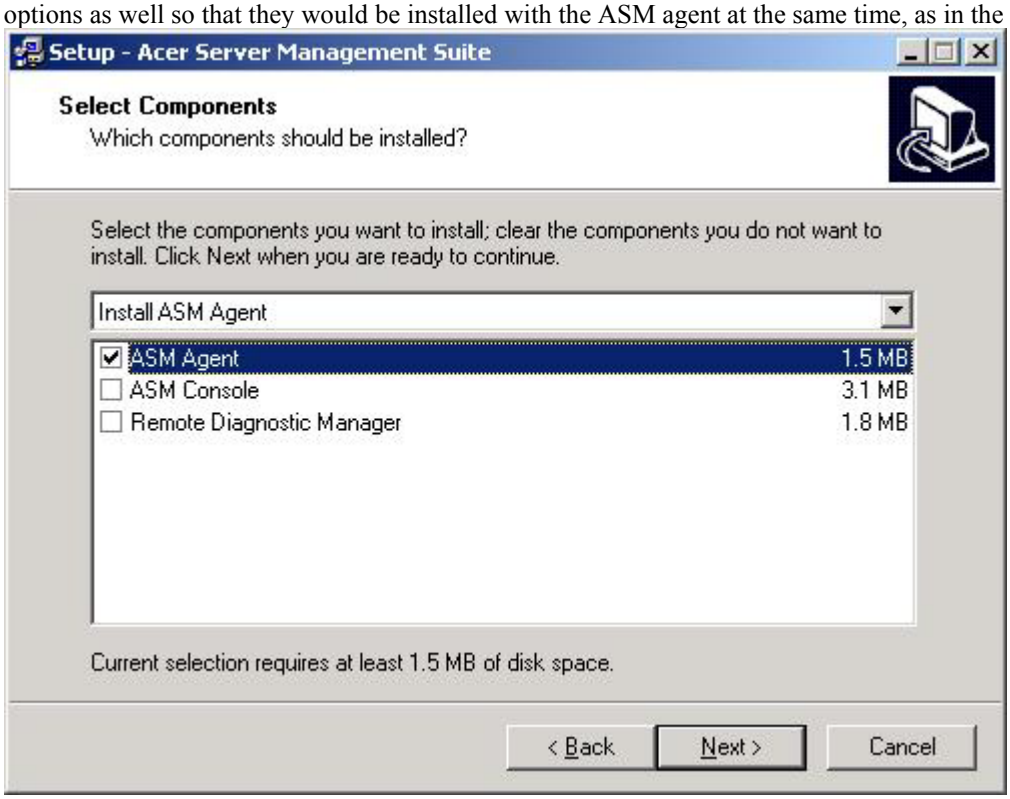
Note: ASM installation may encounter conflicts if you install the ASM into a directory that contains ASM files from previous installs.

If the directory you specified exists, you will see next dialog box asking for a confirmation.



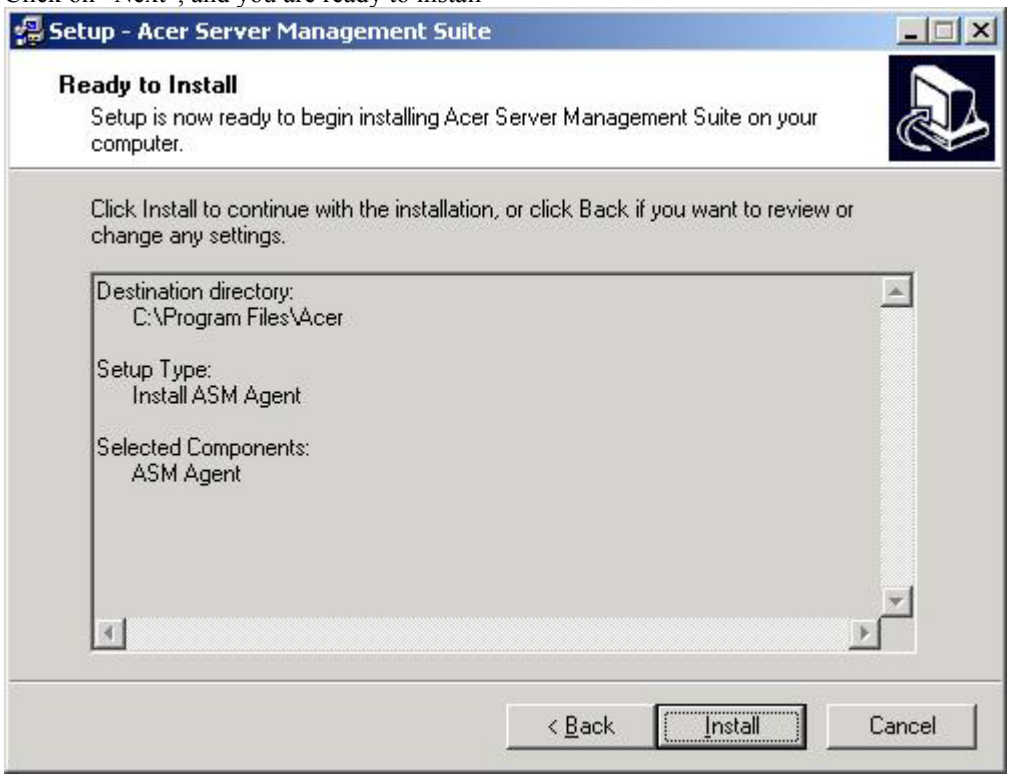
Click on "Yes" to continue, "No" to go back and reset the destination directory

7. Next screen allows you to choose proper install options. To install ASM Agent on either G300 or G700 platform, select "Install ASM Agent" from the drop-down list box. You may check the ASM Console and RDM options as well so that they would be installed with the ASM agent at the same time, as in the following figure

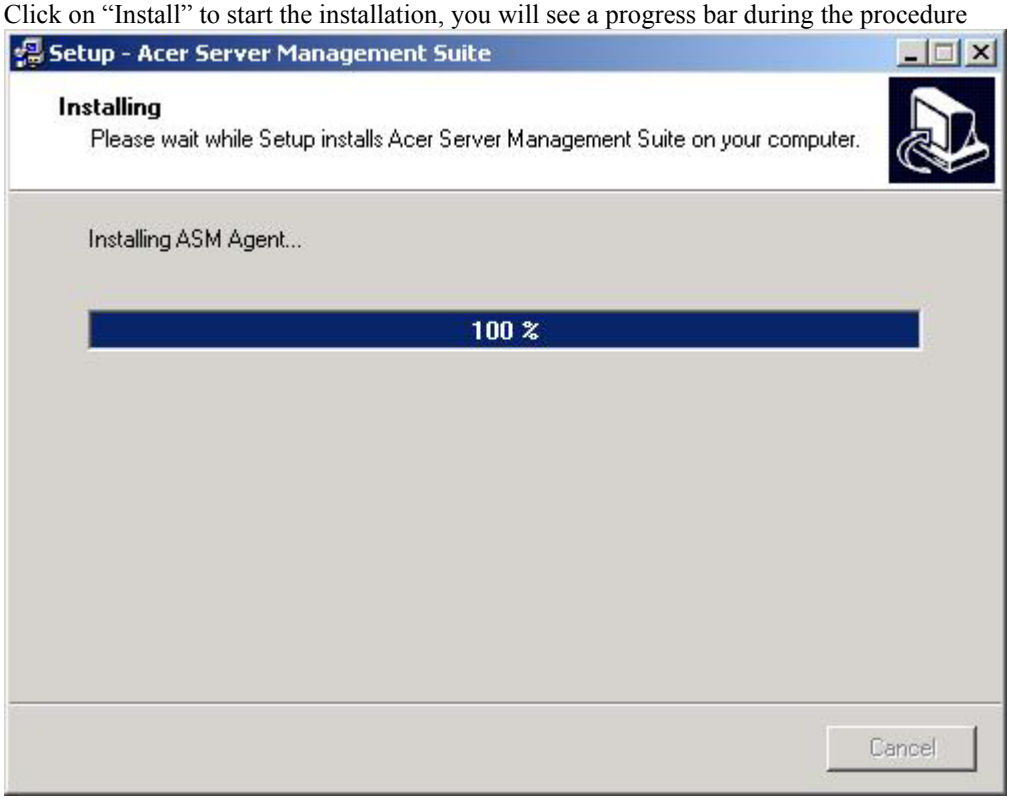


Our installation program will auto detect the server model (i.e., G300 or G700), and install proper software. So you don't need to specify the underlying platform,

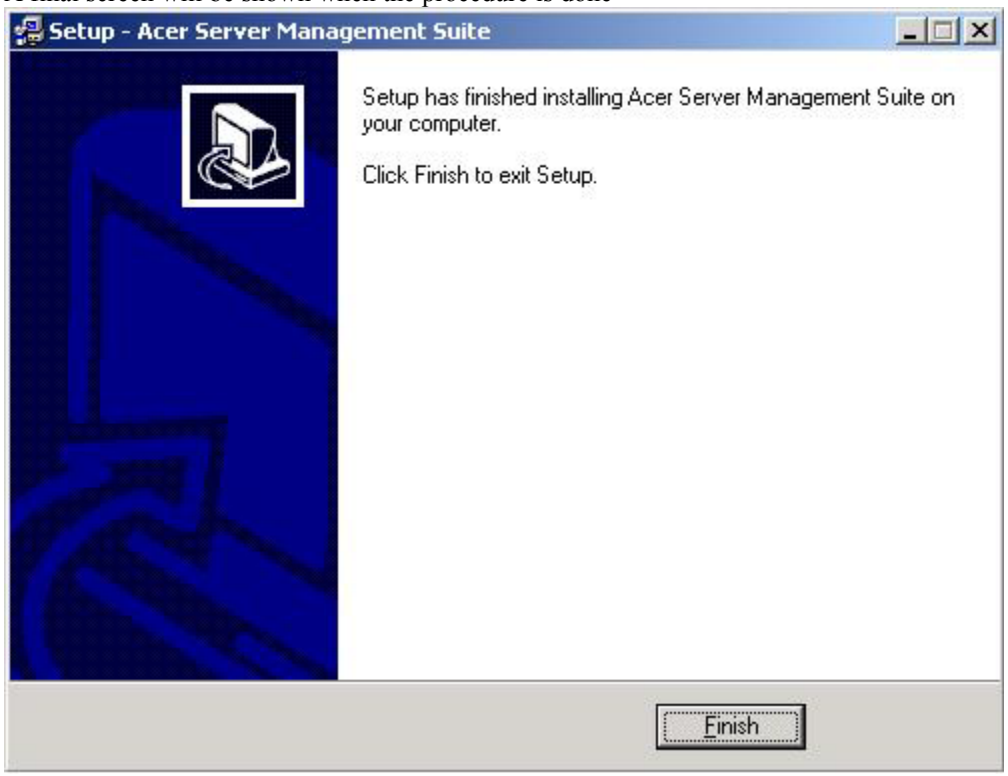
8. Click on "Next", and you are ready to install



9. Click on "Install" to start the installation, you will see a progress bar during the procedure



10. A final screen will be shown when the procedure is done



Click on "finish" to complete the installation.

2.2 Installing the ASM Console

The ASM Console needs to be installed on the system intended to be an ASM Management Client.

2.2.1 System Requirements

The ASM Console can be installed on any computer meeting the following requirements:

	Hardware and Software Requirements
CPU	Intel Pentium III, 500 MHz or faster.
Memory	128 MB RAM
Operating system	Windows 2000 • Professional • Server • Advanced Server
Network card	Ethernet
Hard disk	SCSI / IDE hard drive with at least 100 MB disk space available
CD-ROM drive	SCSI or IDE CD-ROM drive

2.2.2 Installation Instructions

The installation procedure for the ASM Console is the same as installing the ASM agent, expect for choosing ASM Console instead of other options in step 7.

3 Starting and Using ASM

This section will step the user through the process of starting and using Acer Server Manager, with details on the following 3 basic steps, after which the ASM Console GUI and functionality is described.

1. Start ASM agent on managed nodes
2. Start ASM Console on the management client
3. Access ASM agent through the Console

3.1 Starting ASM agent

On the managed node, start ASM agent by Clicking:

`Start → Programs → Acer Server Management Suite → Start ASM agent`

To generate alerts, a Service— asmagent —has been added to Windows. asmagent will start 3 additional processes: osa_discoveryAgent.exe, wmiEventNode.exe, and wmiEventNodeNonSink.exe. No action is required of the user to start/stop these processes. Optionally, the user can choose to stop these processes by stopping the ASM agent from the Program Menu. The service, and the processes will restart when you start the ASM agent from the Program menu or when you restart Windows.

Stop ASM agent by Clicking:

`Start → Programs → Acer Server Management Suite → Start ASM agent`

Stopping the ASM agent will stop the generating of alerts from the corresponding node.

3.2 Starting ASM Console

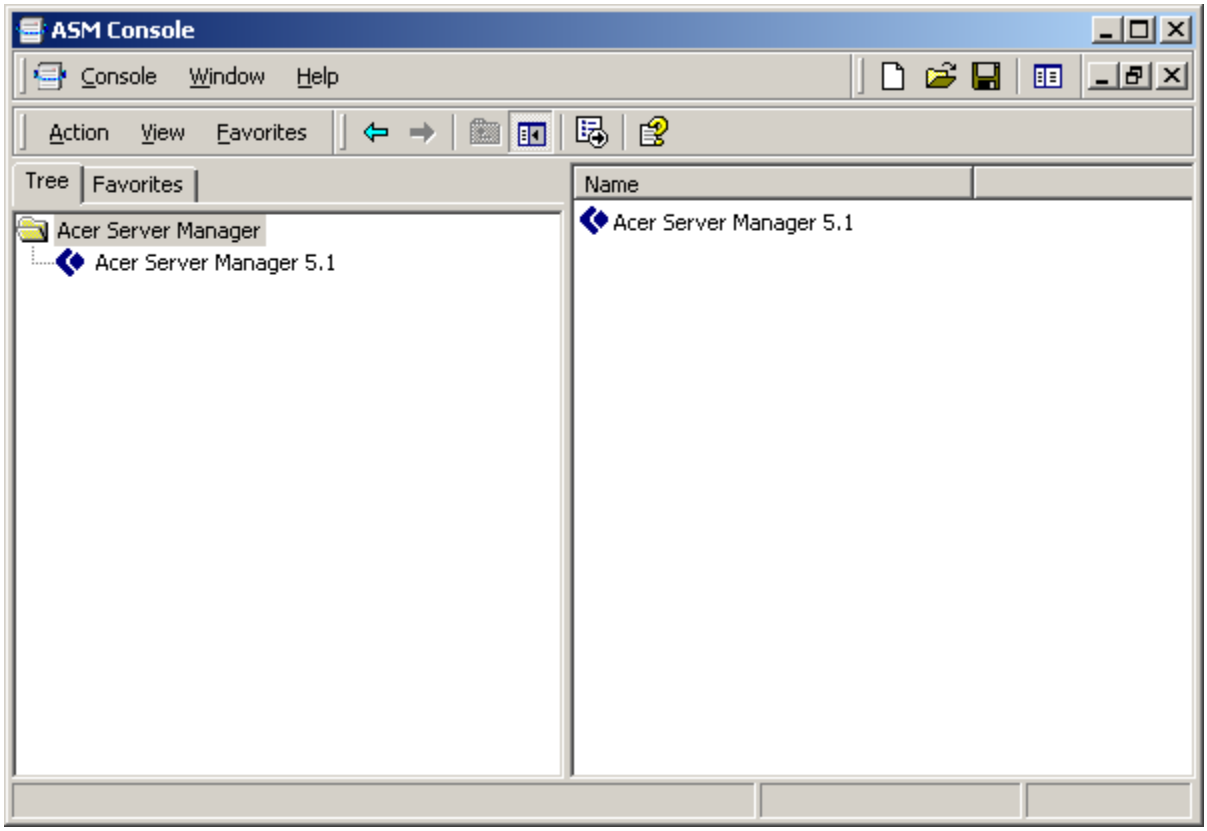
On the management client, start ASM Console by clicking

`Start → Programs → Acer Server Management Suite → Launch ASM Console`

You will be prompted for ASM Username/Password.

Note: The default password is "admin". It is suggested that the user changes the default password after first login to prevent unauthorized access.

After the login, if the screen displays a window similar as the following, it means the ASM Console has started successfully.



Launching the ASM console will also start two processes: OSA_server.exe and wmiEventStation.exe. These processes will remain active even if you close down the ASM Console. Optionally, you can close them down manually. You can Launch ASM Console again with these processes active.

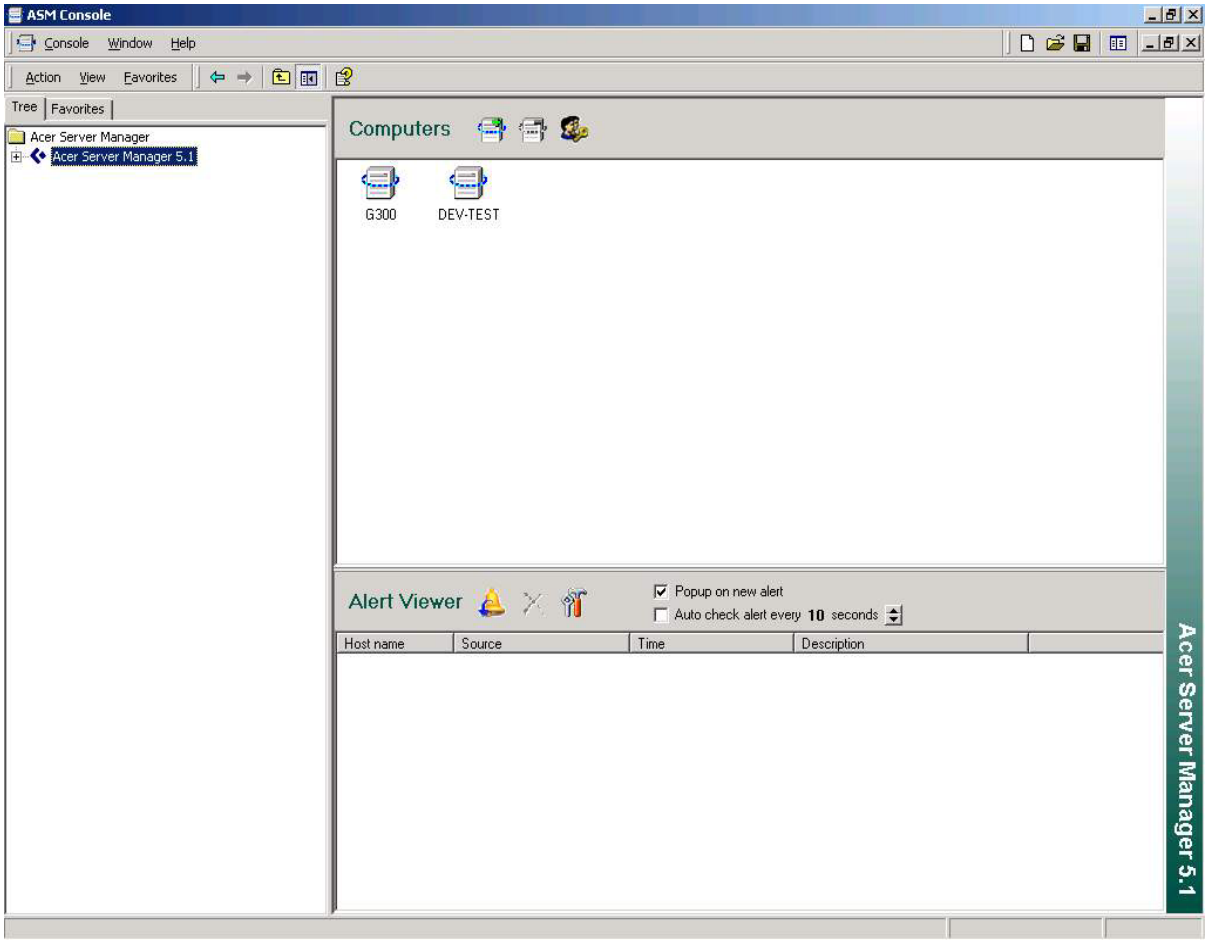
3.3 ASM Console GUI Introduction

The ASM Console GUI is the primary user interface for managers to carry out numerous management tasks.

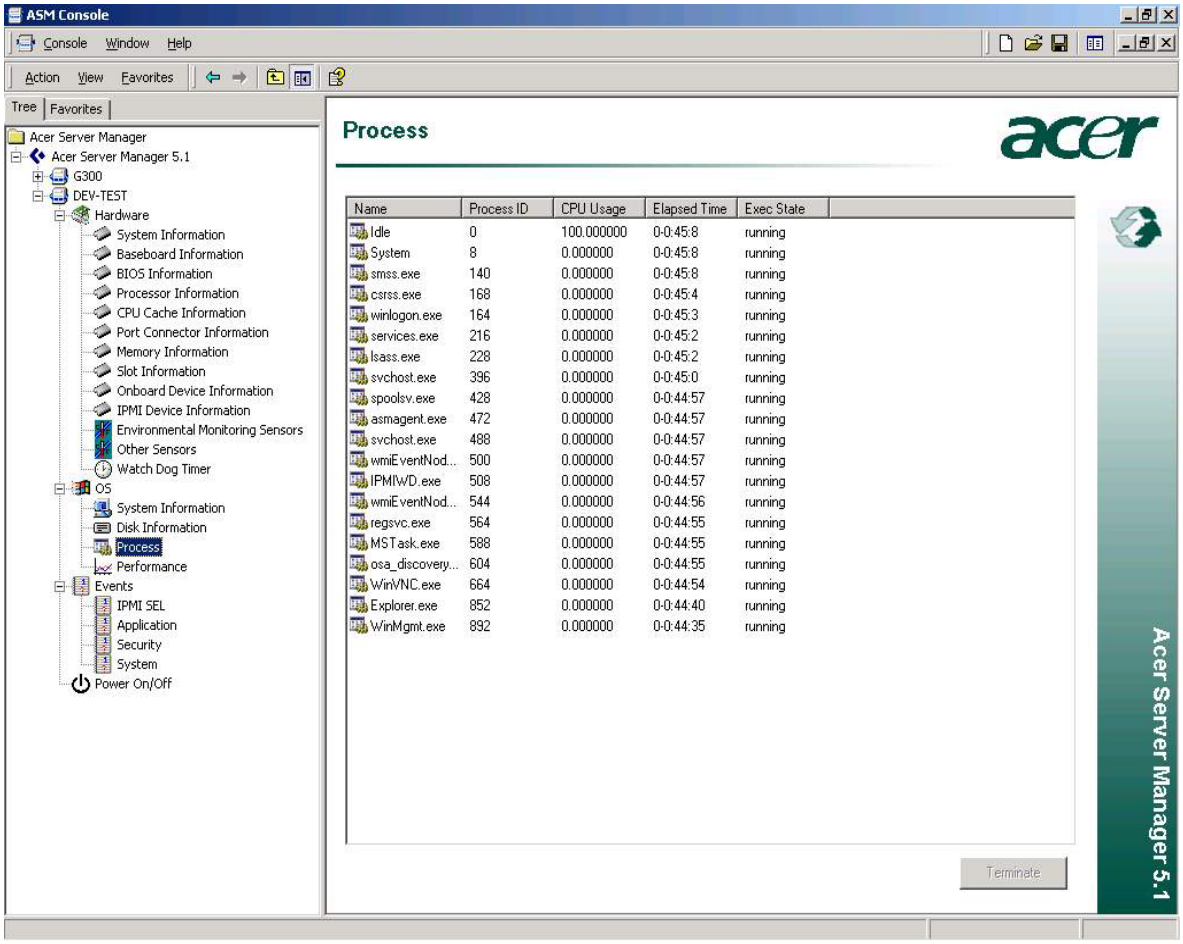
The User Interface presents in a 2-pane window. The **left** pane is known as the **Console Tree,** which provides a tree view of the hierarchy of all information items that can currently be viewed.

When the ROOT of the **Console Tree --** "Acer Server Manager 5.1" is selected, the display of the **right** pane will be divided into 2 areas, the **upper** area could be called as "**Discovery panel**", in this panel, you will be able to add a managed computer manually by its hostname or OOB IP, or batch add managed computers from a list of available nodes provides by our auto-discovery tool. The **lower** area could be called as "**Alert panel**", here you will be able to customize alert filters, add user-defined actions, and apply pre-defined actions to alerts.

Discovery and **Alert** are the 2 major new features we have added to ASM 5.1 since last release of "Acer Server Manager 5.0", enjoy!!!



When a specific managed node in the **left** pane's **Console Tree** hierarchy is selected or expanded, the right pane is known as the **Display Pane** and shows the descriptive information retrieved from that node according to user's selection.



CONSOLE TREE: Within the user interface, the left pane provides a tree view of the namespace as a hierarchy of all items that can be displayed. The Tree Root is named as "Acer Server Manager 5.1".

DISPLAY PANE: The right pane displays data according to the user's selections in console tree.

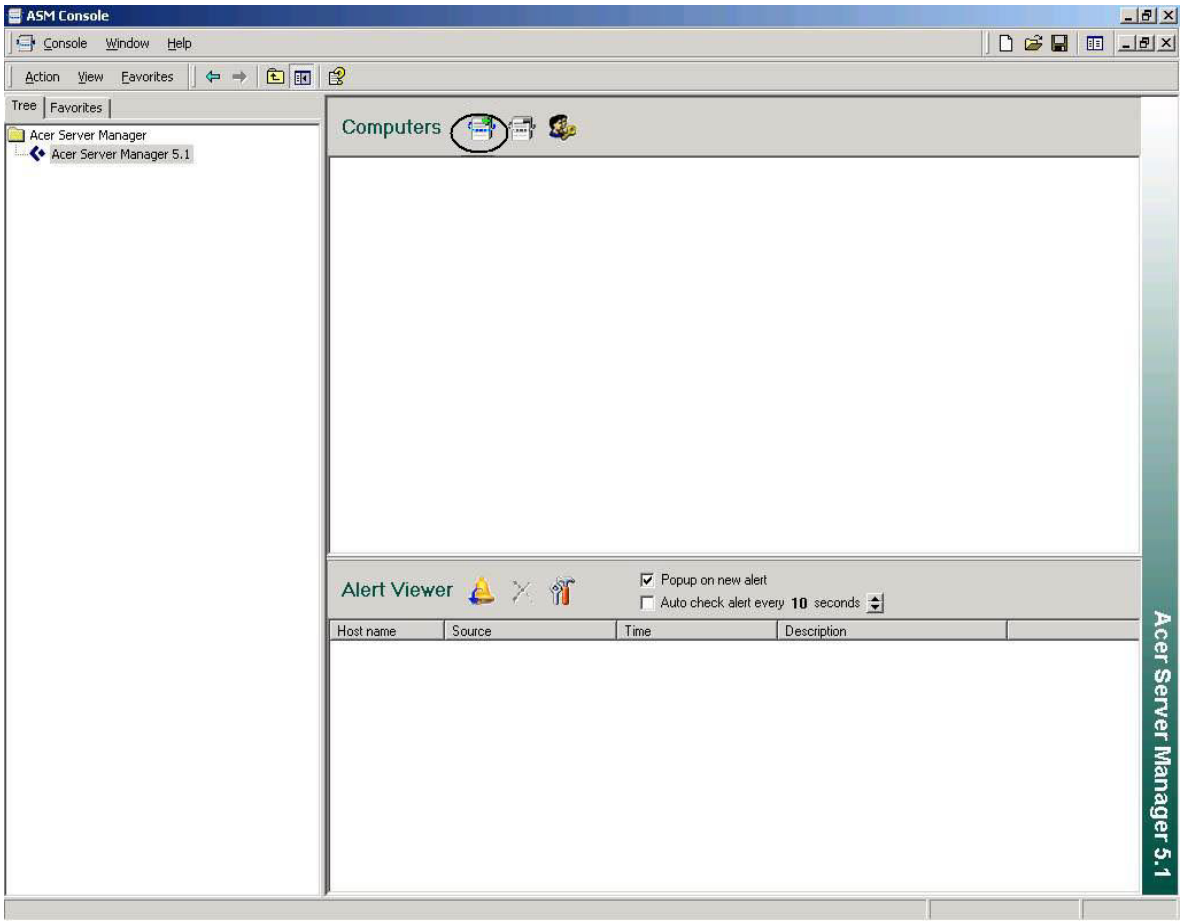
3.4 Adding and deleting a Managed Node

With ASM console, you can choose to add a computer to be managed manually by its hostname, or from a computer list result from our automatic discovery process.

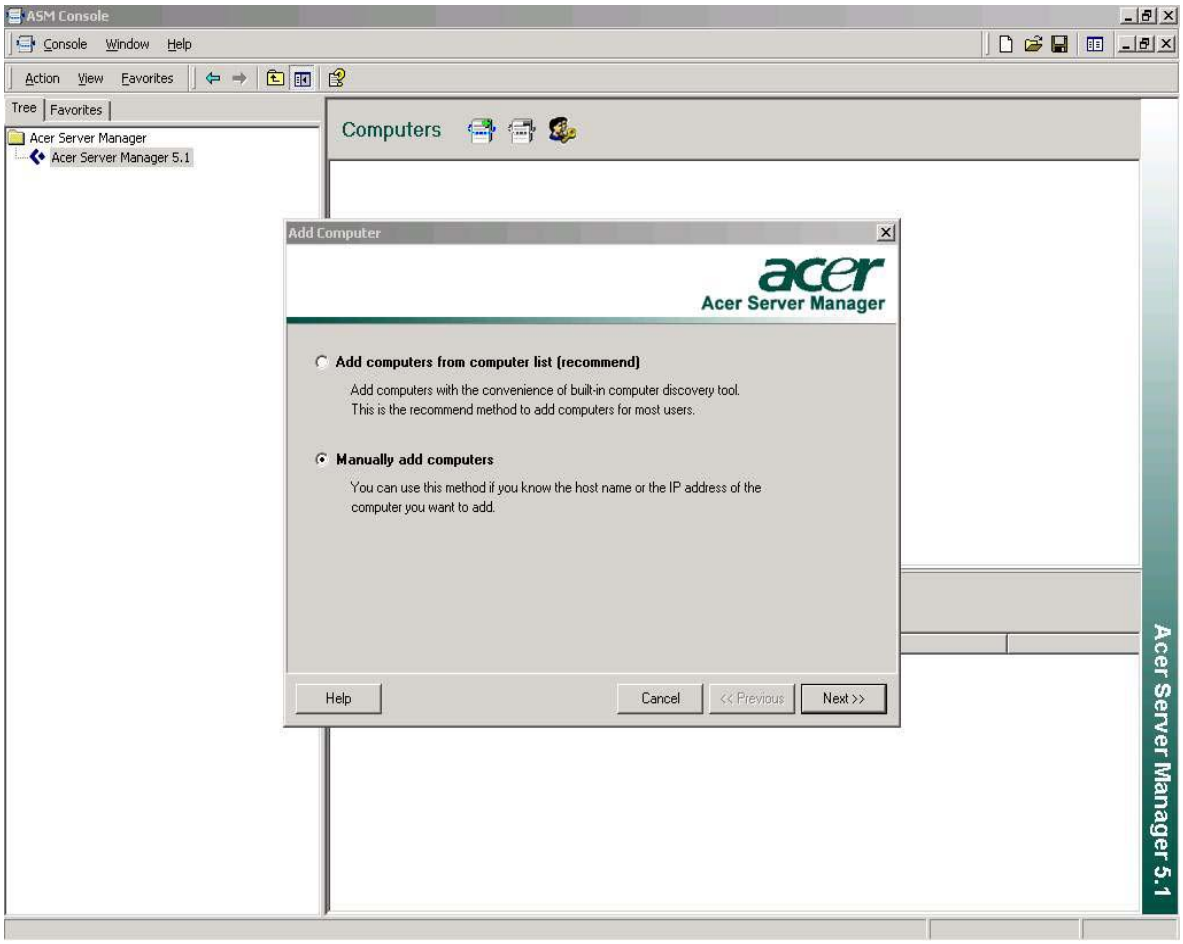
3.4.1 Add a Managed Computer Manually

Start ASM Console from Start Menus, and you will be asked for username and password as usual, this username/password pair will be verified every time you bring up the ASM Console.

After login, highlight "Acer Server Manager 5.1", and you will have an application window similar to this one:



In the "**Discovery Panel**", Click on the icon of a computer with a "+" sign, it will bring up the "add computer" dialog.

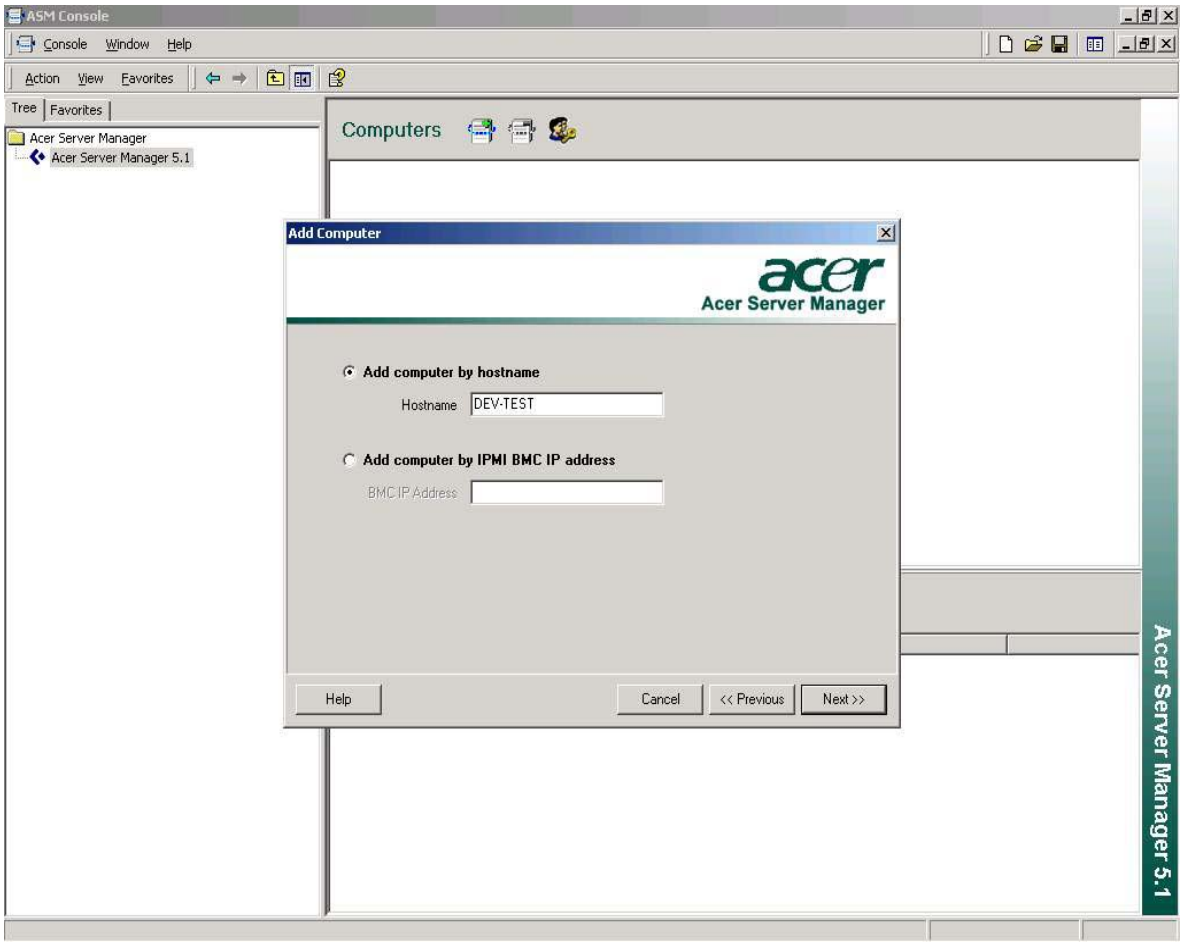


Select the option "Manually add computers", and click on "Next".

You can now add an IN_BAND managed node by its hostname, or an OOB node by its OOB IP. We will show you both.

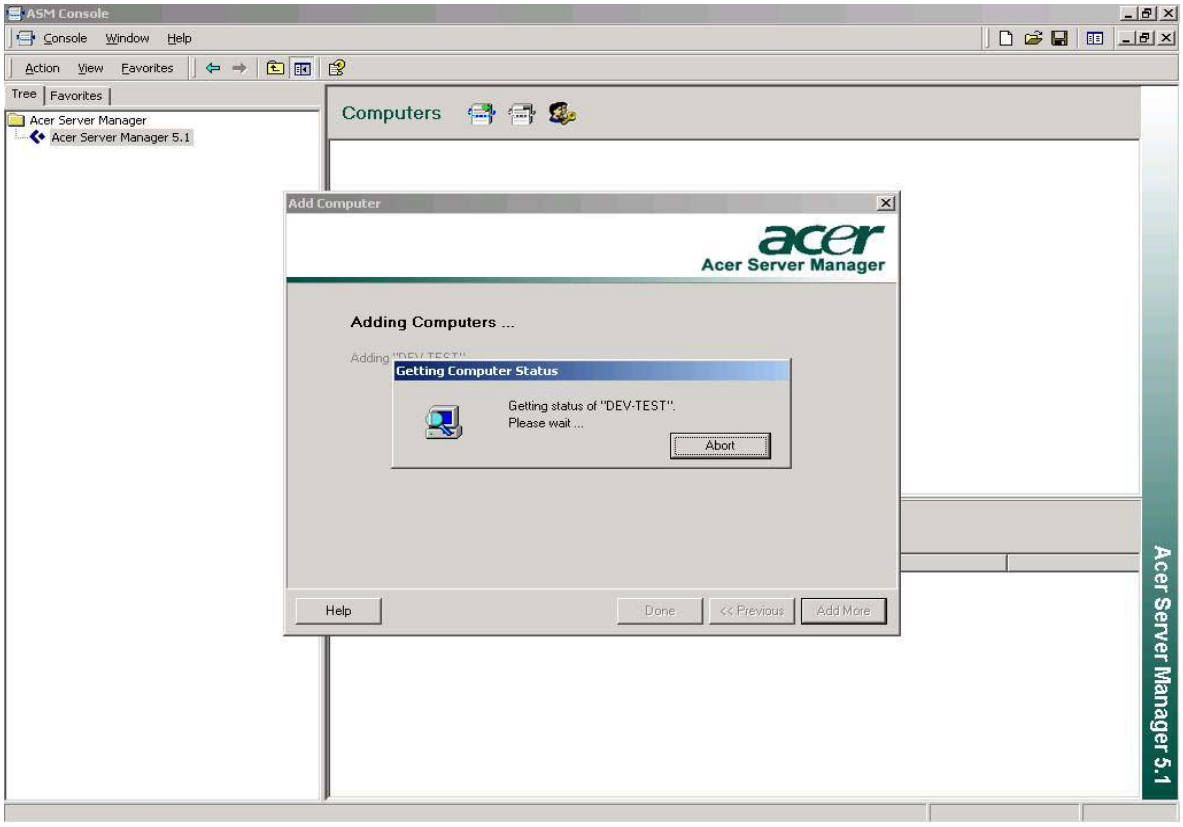
3.4.1.1 Adding an IN-Band node

Firstly, we will add an IN_BAND node with hostname "DEV-TEST". Fill in the hostname and click on "Next".

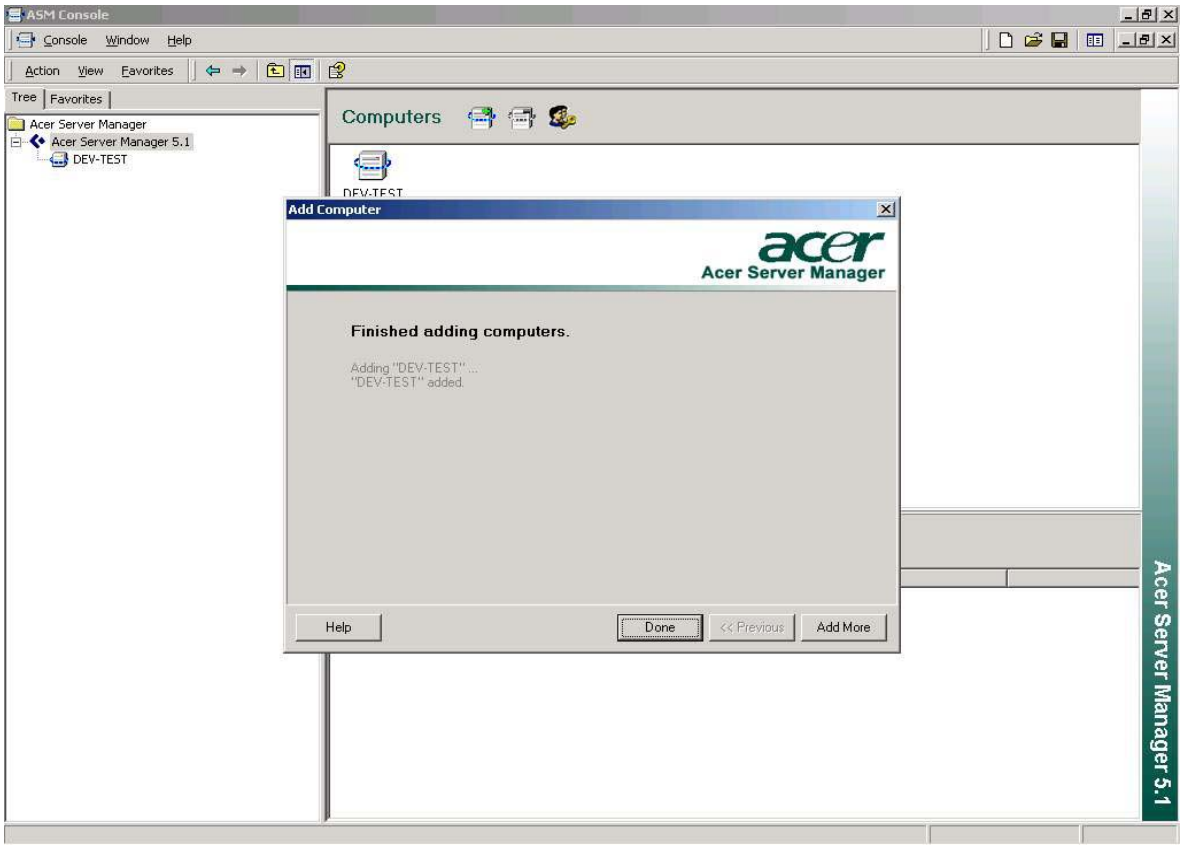


You will need to have an authorized account to access the WMI services on a node so that you can manage it IN_BAND. (If you don't how to set up an authorized account, Please refer to Section 3.7). To verify your identity, ASM Console will ask you to enter Username/Password for DEV-TEST.

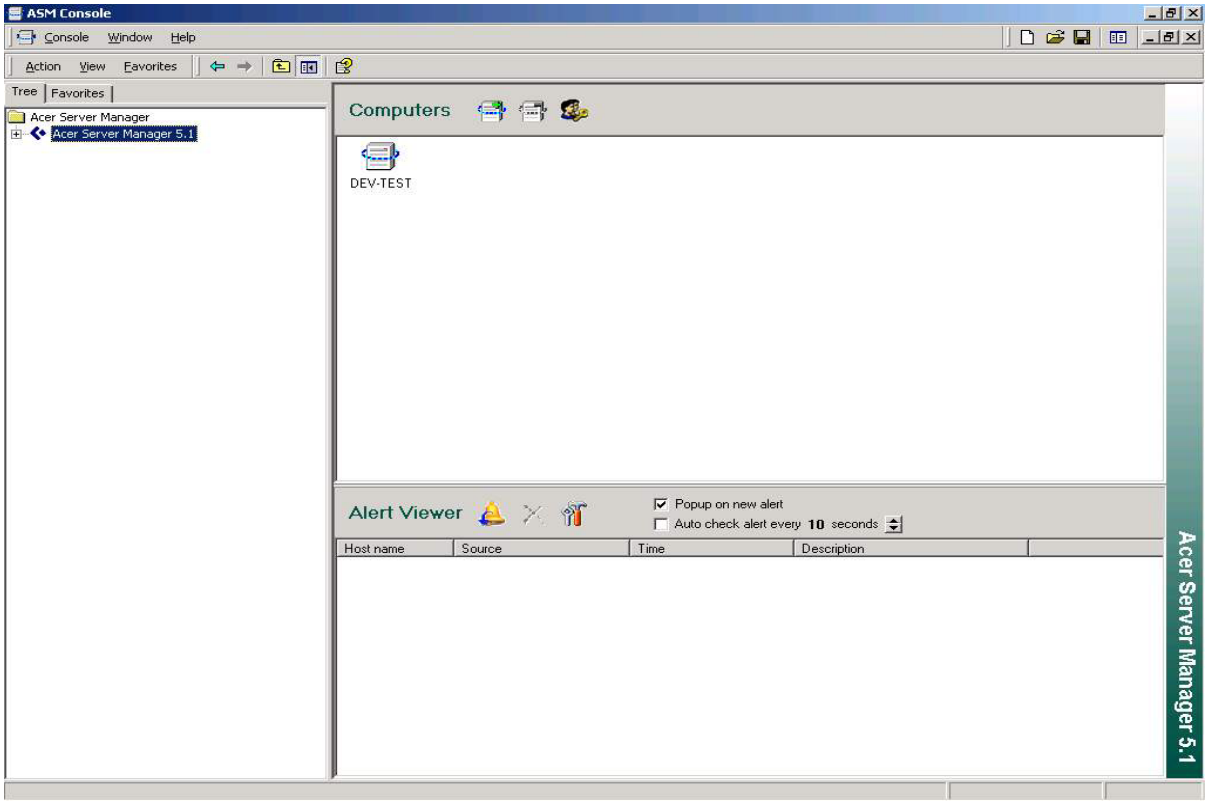
Enter Username/Password, and click on "OK", if you have entered correctly, Console will then take a few seconds to collect initial status information from DEV-TEST.



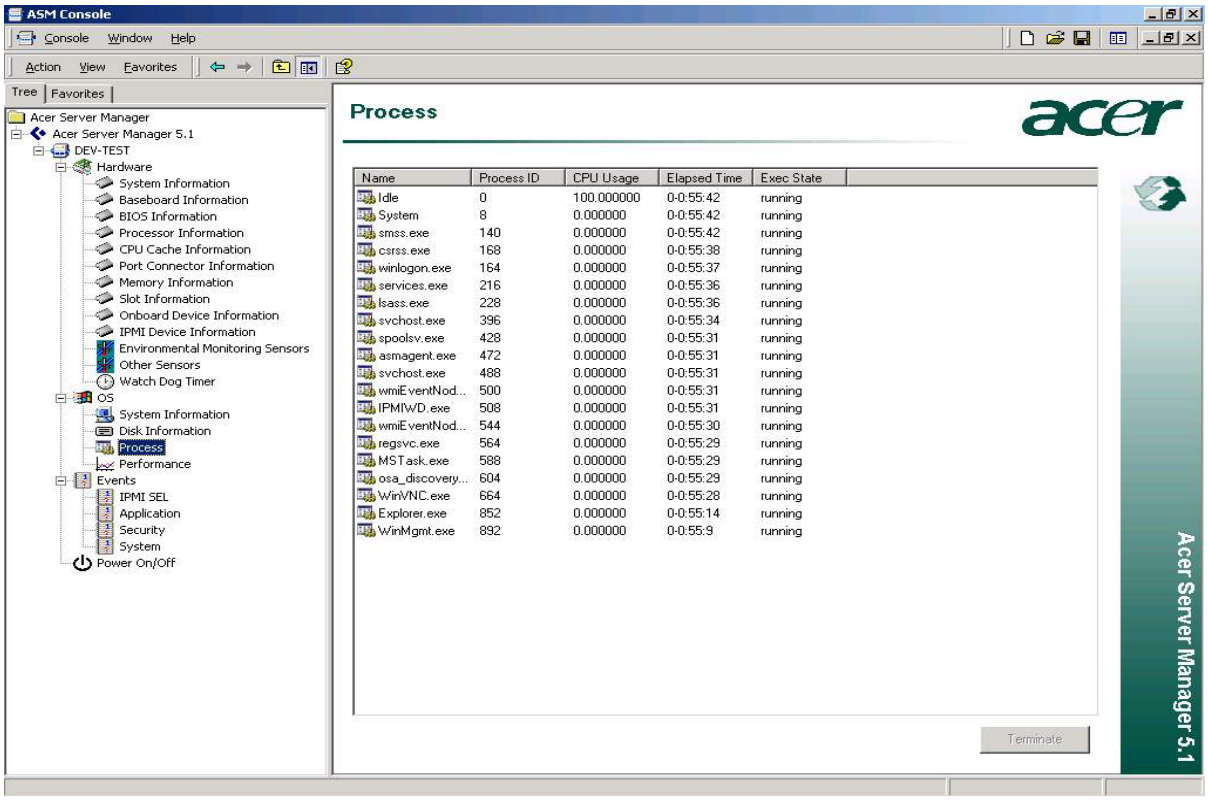
After that is completed, you will see a finish screen.



Click on "Done" to close the dialog box, and "DEV-TEST" is ready to be managed.



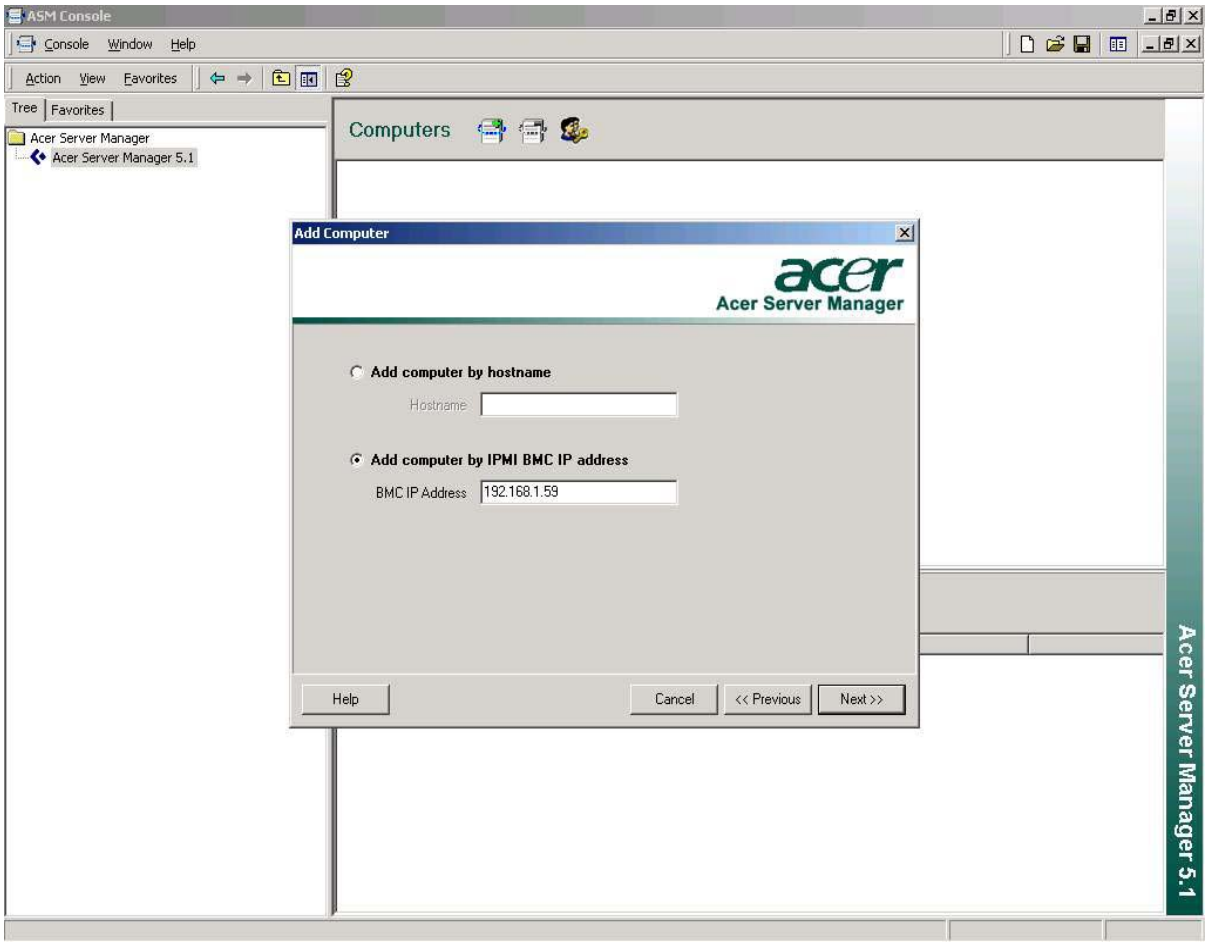
You can now expand the **Console Tree** in the left pane to manage DEV-TEST.



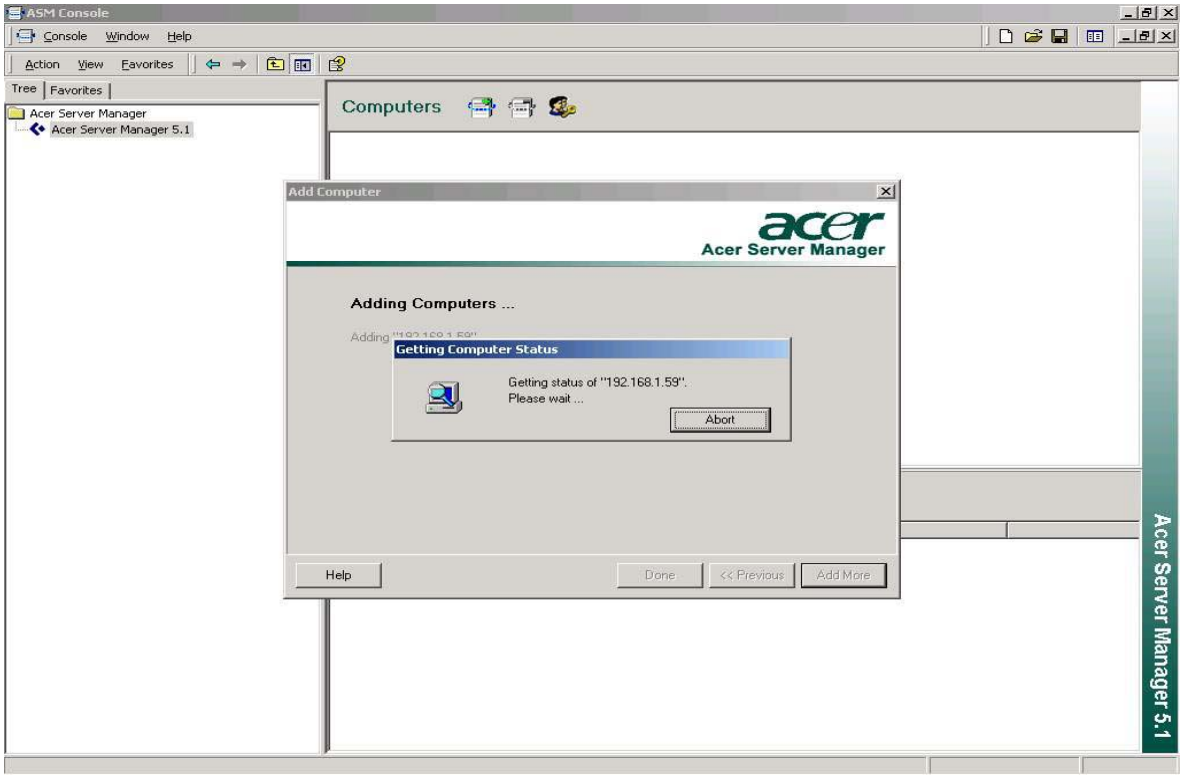
3.4.1.2 Adding an OOB node

We could also add an OOB node by its OOB IP.

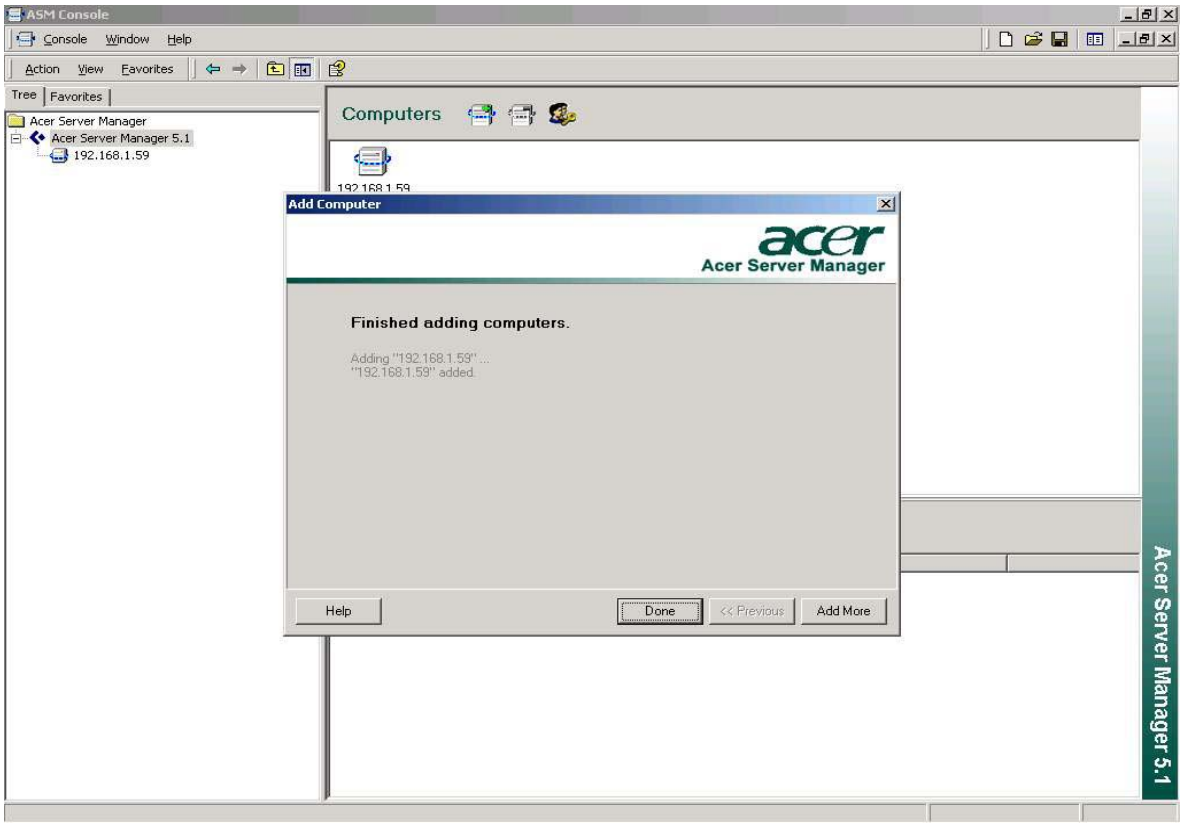
Select "Add computer by IPMI BMI IP address", and input the target IP. Click on "Next"



ASM Console will then try to get computer status. An anonymous user id with blank password might have been set at the factory. If no userid/password has been explicitly set by the administrator, ASM console would not prompt for user id/password. If the user has set userid/password, then we would prompt for userid/password.



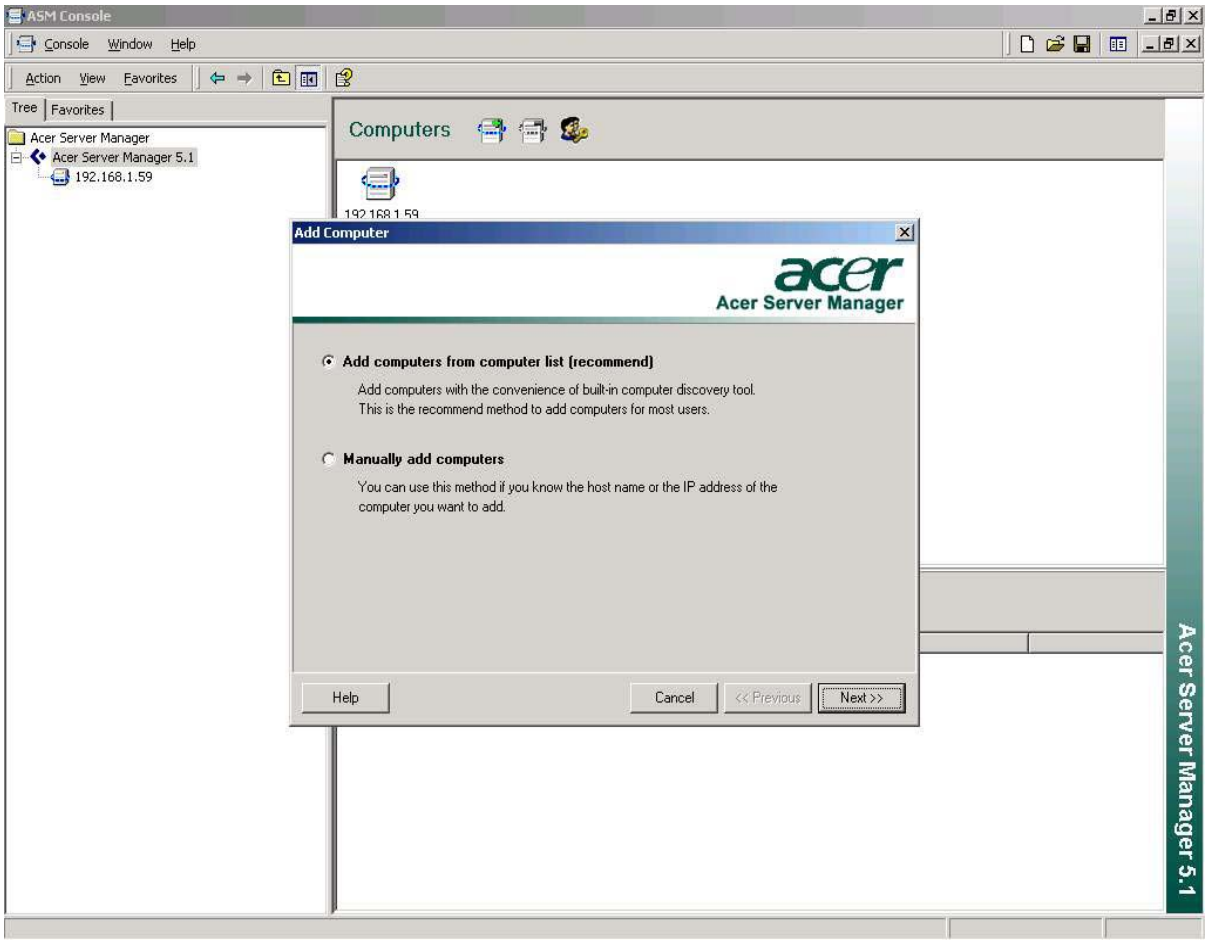
After the process is completed, you will again see a finish screen, which reports whether you have succeeded in adding that computer.



3.4.2 Add Managed Computers via Assisted-Discovery

For every IP address within a user-specified range, the Discovery component will look for servers that have been installed with the ASM Agent and for servers that are equipped with the Out-Of-Band facility. Two lists will be presented to the user: IN-Band and OOB. (Note that if a server is installed with an ASM Agent and the OS is running, it would only appear on the In-Band list, even if it has been equipped with the OOB facility.) The user can then select servers from these two lists to add to the "managed-nodes" tree.

In the "**Discovery Panel**", Click on the icon of a computer with a "+" sign, it will bring up the "add computer" dialog. Select option "Add computers from computer list (recommend)" instead of "Manually add computers".

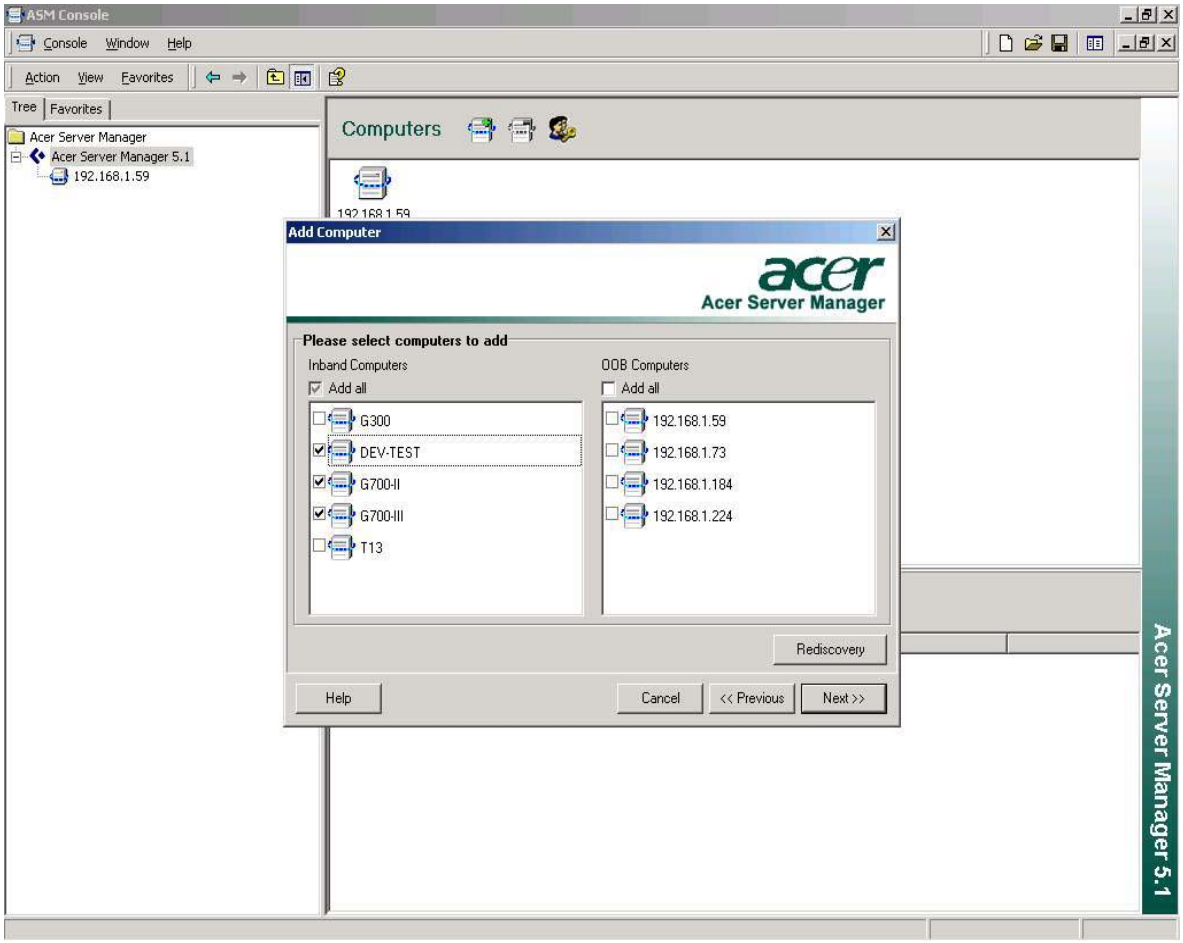


Click on "Next", if you have performed a discovery before, you will see a dialog box with previously discovered nodes listed, otherwise, you will get an empty list.

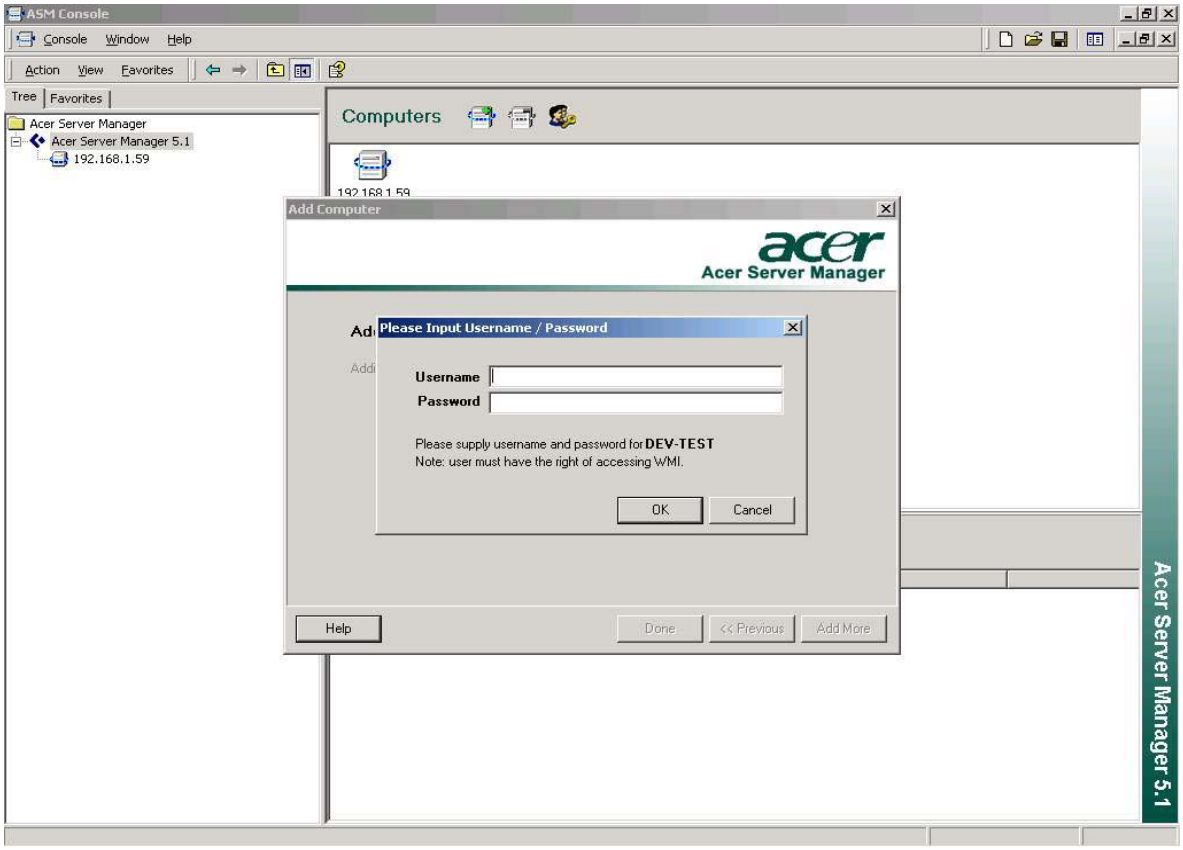
In the first case, you can simply select a number of IN_BAND or OOB nodes from the list box, and click on "Next".

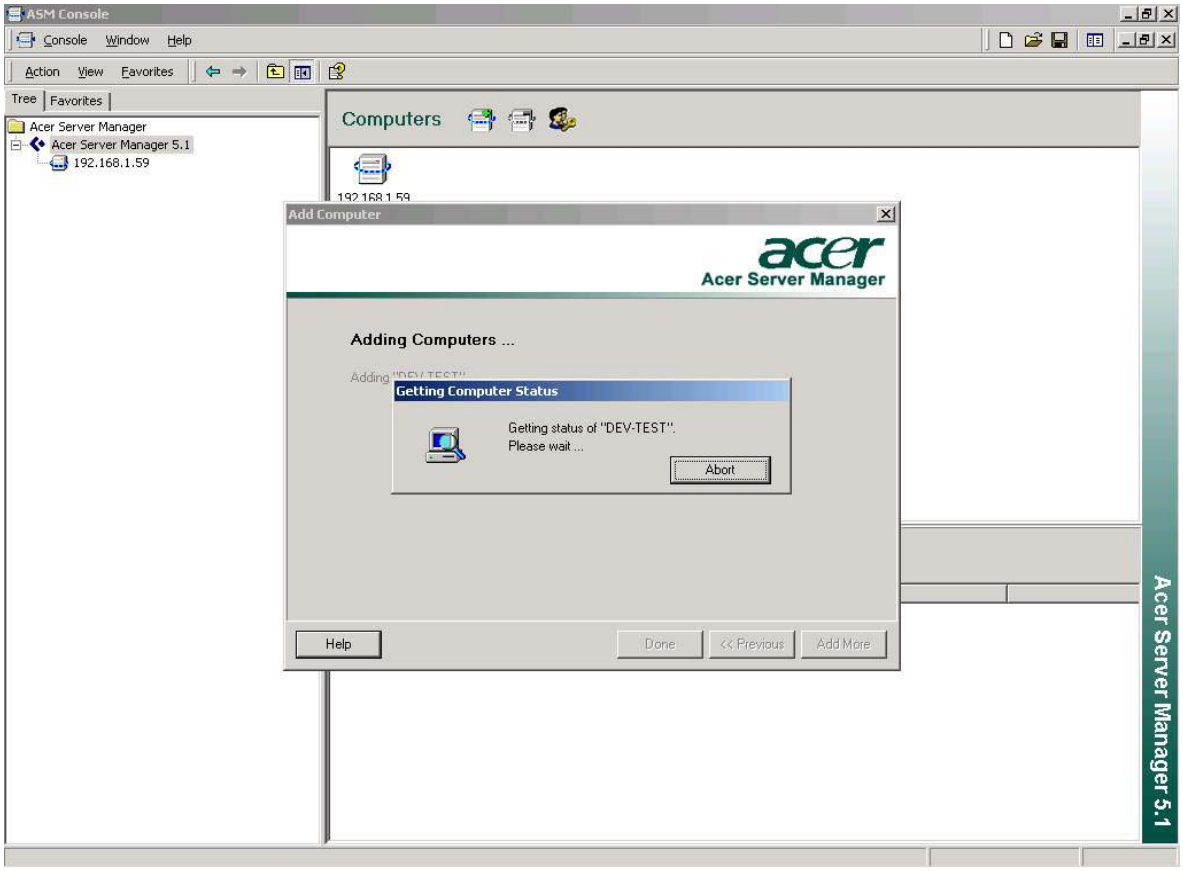
In the second case, or if you want to do a rediscovery anyway, please Click on "Rediscovery".

Case 1: Adding nodes from existing lists

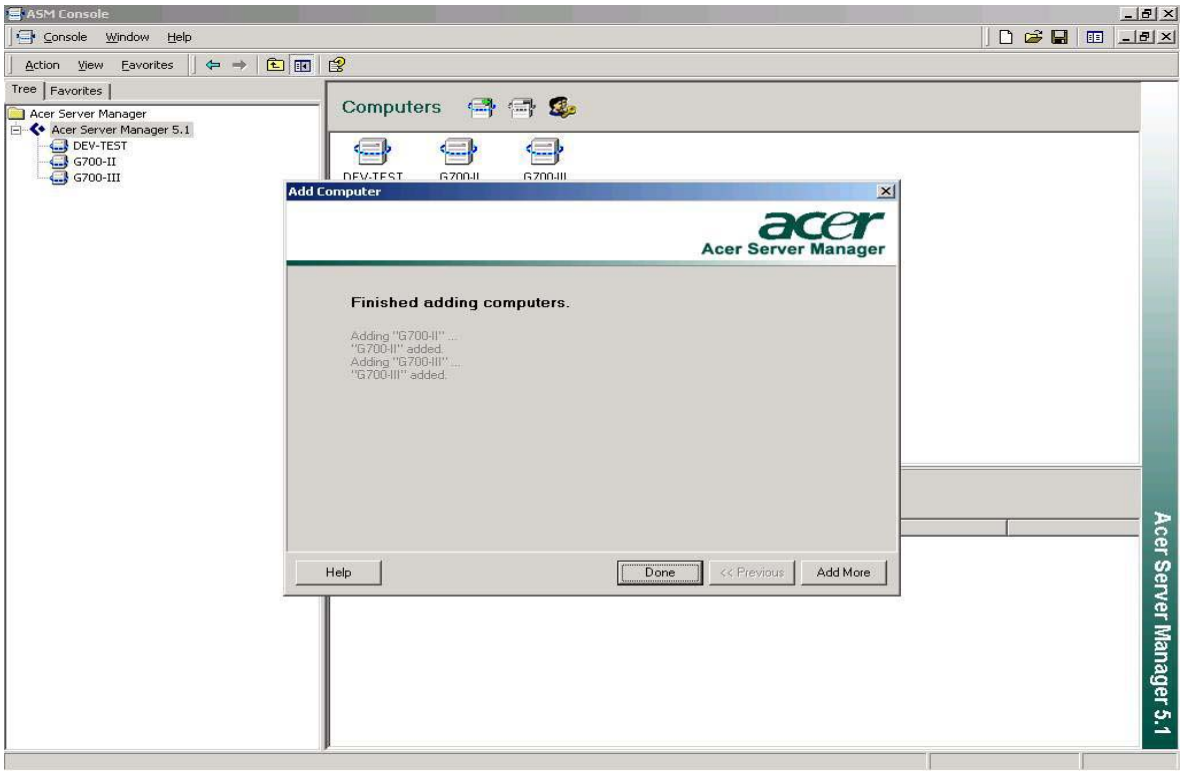


Check the desired nodes from the list box as shown above, and click on "Next", you will then be asked for Username/Password for every selected node, and if you pass the verification, ASM Console will collect initial status information from nodes.

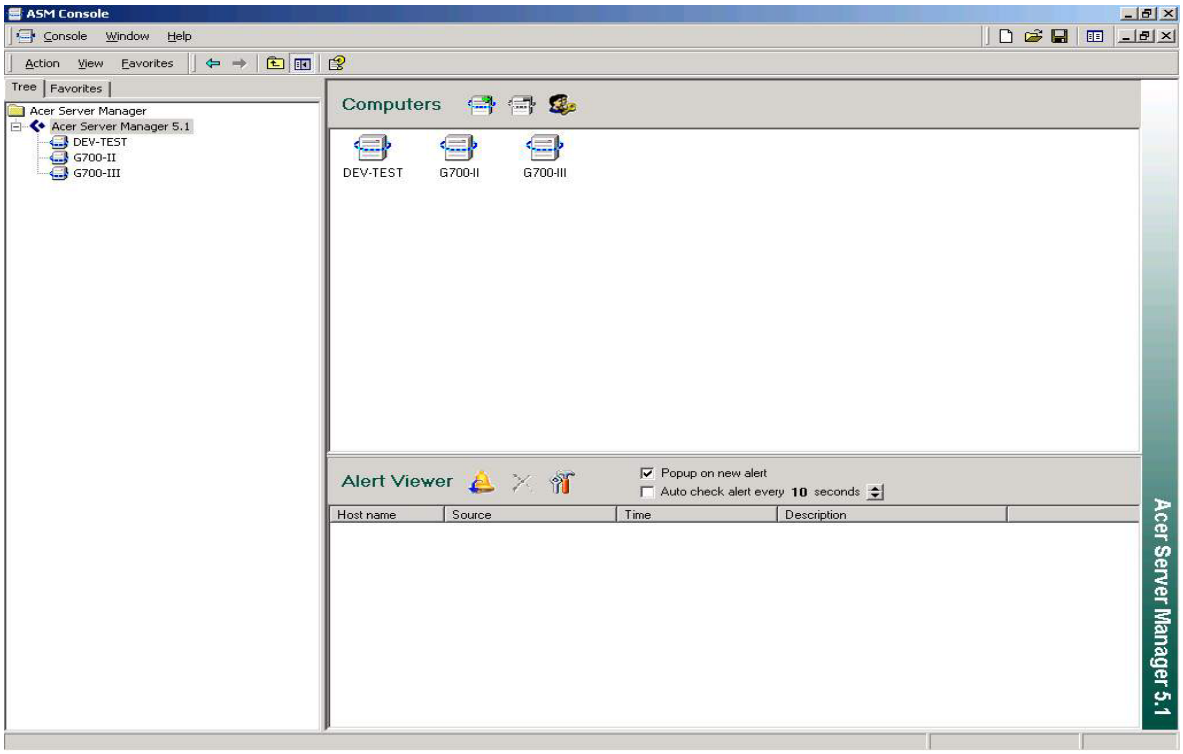

ASM Console
Console Window Help
Action View Favorites
Tree Favorites
Acer Server Manager
Acer Server Manager 5.1
192.168.1.59
Computers
Add Computer
acer
Acer Server Manager
Please Input Username / Password
Username
Password
Please supply username and password for DEV-TEST
Note: user must have the right of accessing WMI.
OK
Cancel
Help
Done
<< Previous
Add More
Acer Server Manager 5.1


ASM Console
Console Window Help
Action View Favorites
Tree Favorites
Acer Server Manager
Acer Server Manager 5.1
192.168.1.59
Computers
Add Computer
acer
Acer Server Manager
Adding Computers ...
Getting Computer Status
Getting status of "DEV-TEST".
Please wait ...
Abort
Help
Done
<< Previous
Add More
Acer Server Manager 5.1

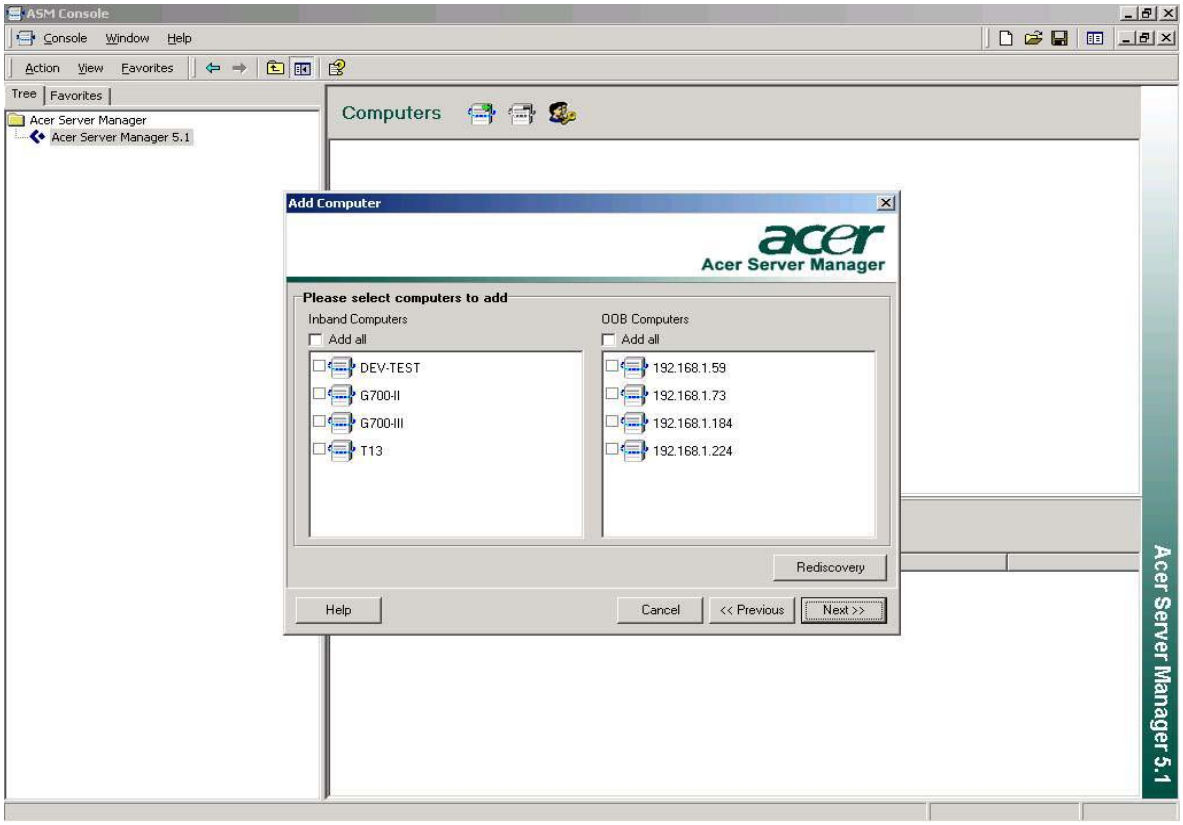
When every thing is finished, you will get a finish dialog, it reports whether you have succeeded or failed for every individual node you have selected.



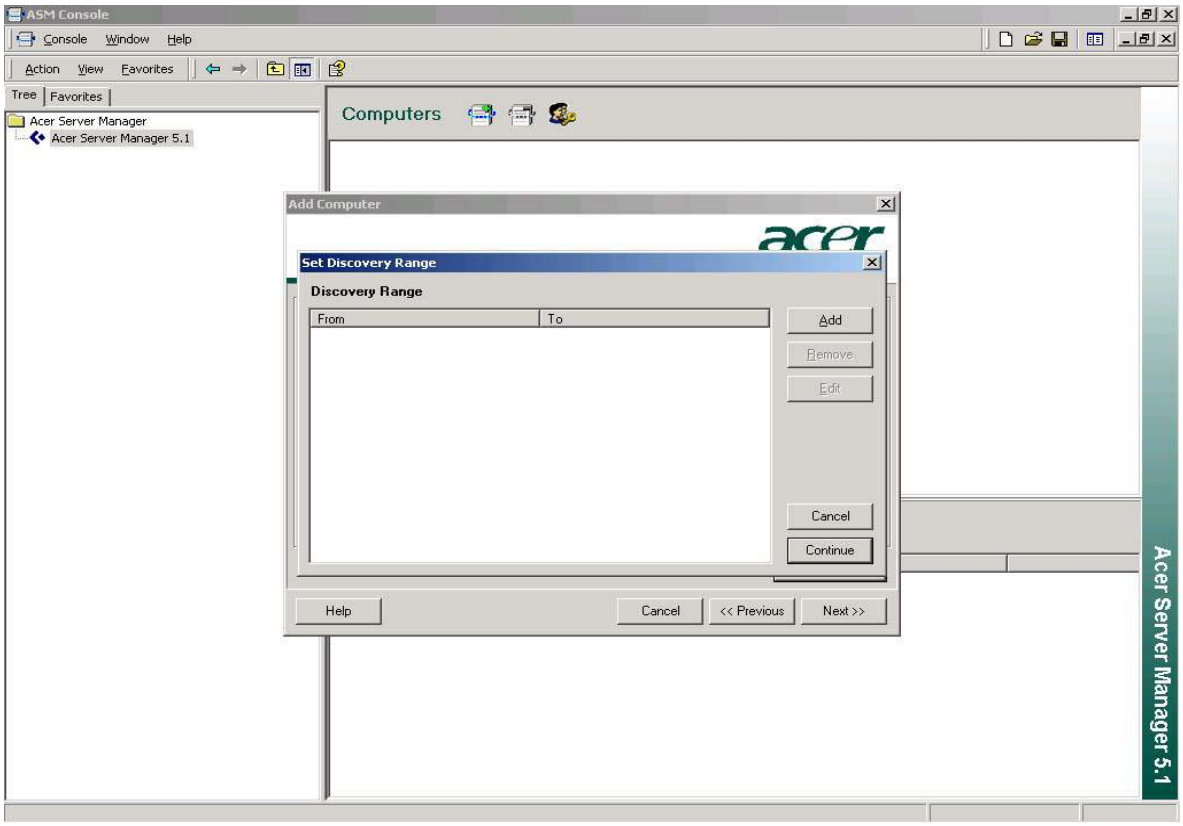
Close the dialog, G700-II and G700-III were added successfully.



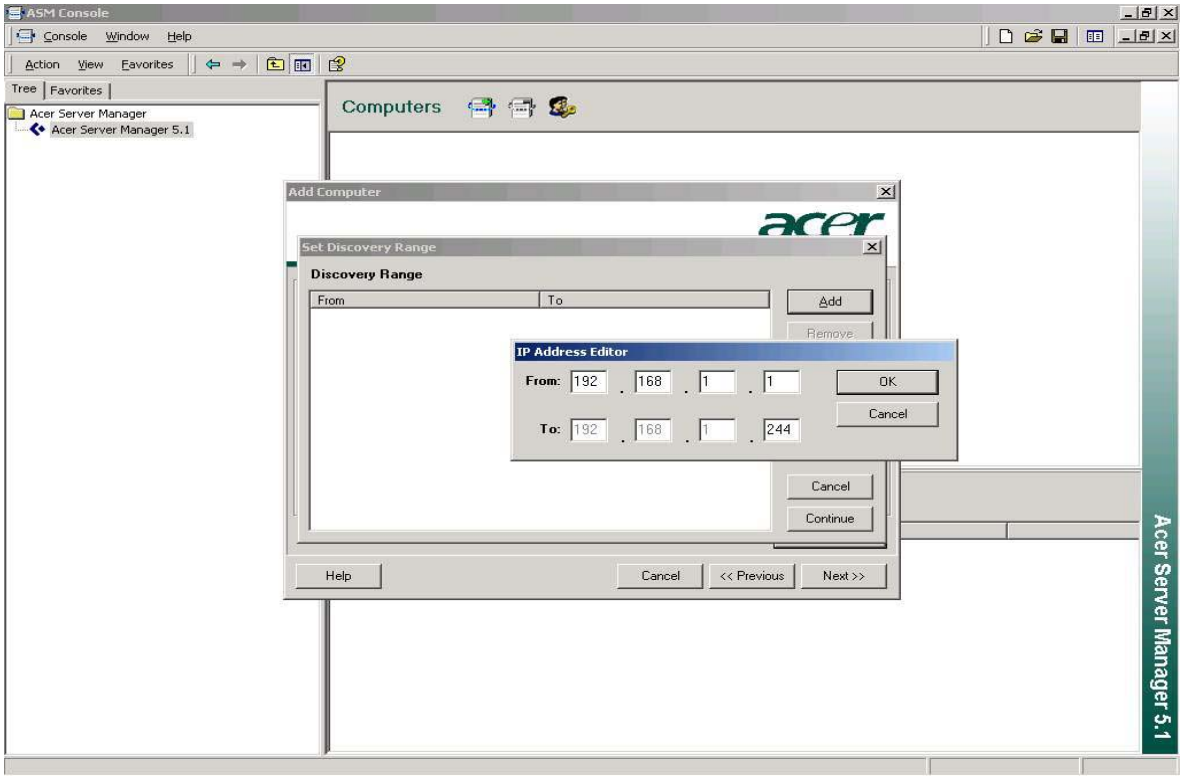
Case 2: If you didn't do any discovery before, or you did, but you want to redo it, click on "Rediscovery"



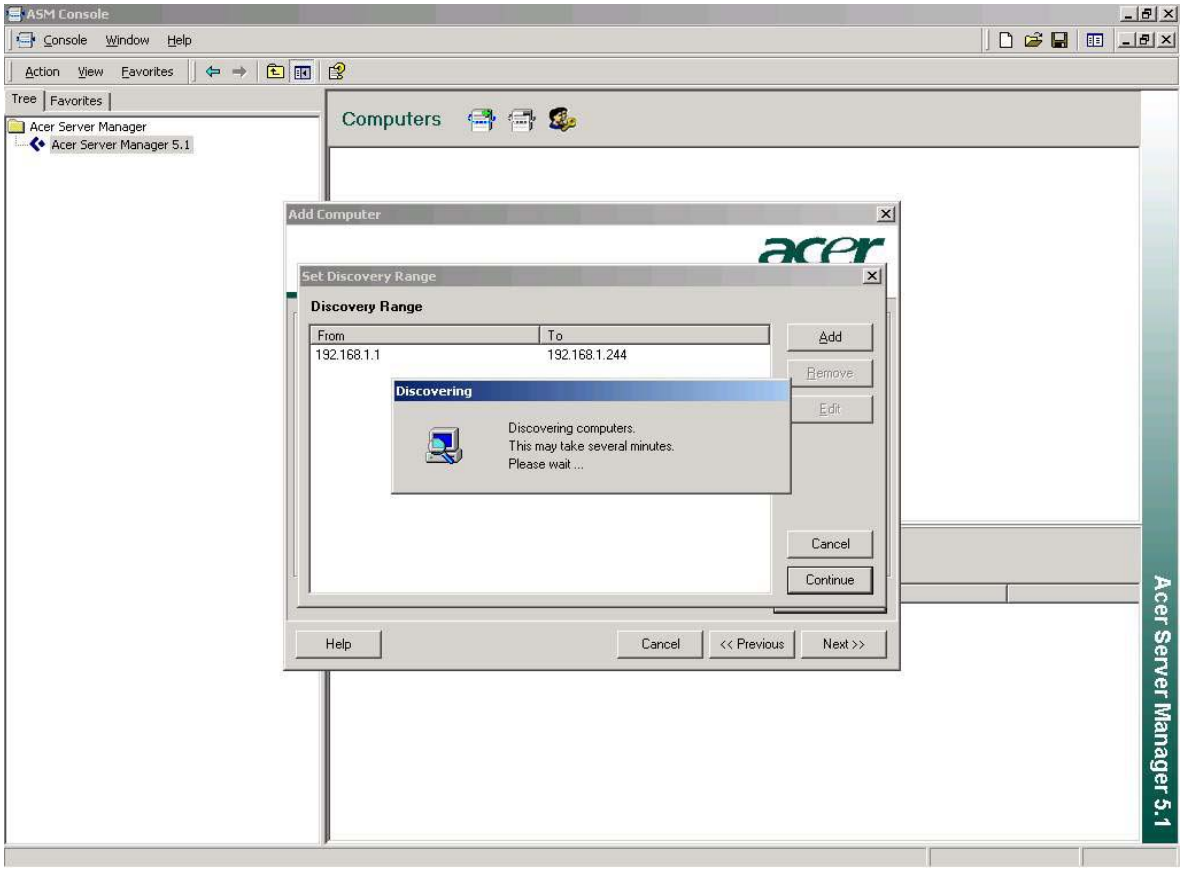
It brings up a "Set Discovery Range" dialog, Click on "Add" if you want to set a new Search Range



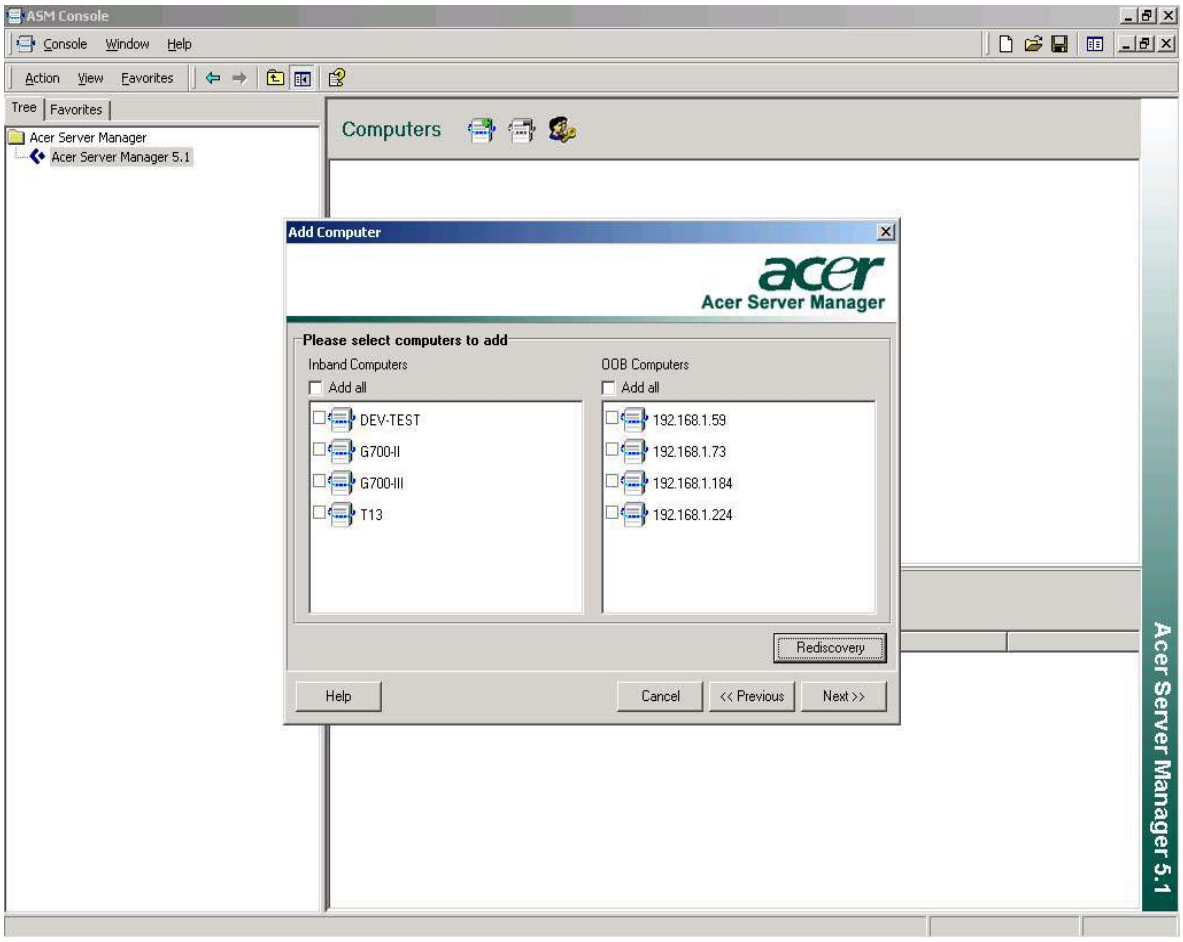
Set your search range, click on "OK" to save



Click on "Continue", it will take a few minutes



After the search is done, all of the discovered IN_BAND and OOB nodes will be listed, you can follow the procedure illustrated in Case 1 to add your desired nodes.

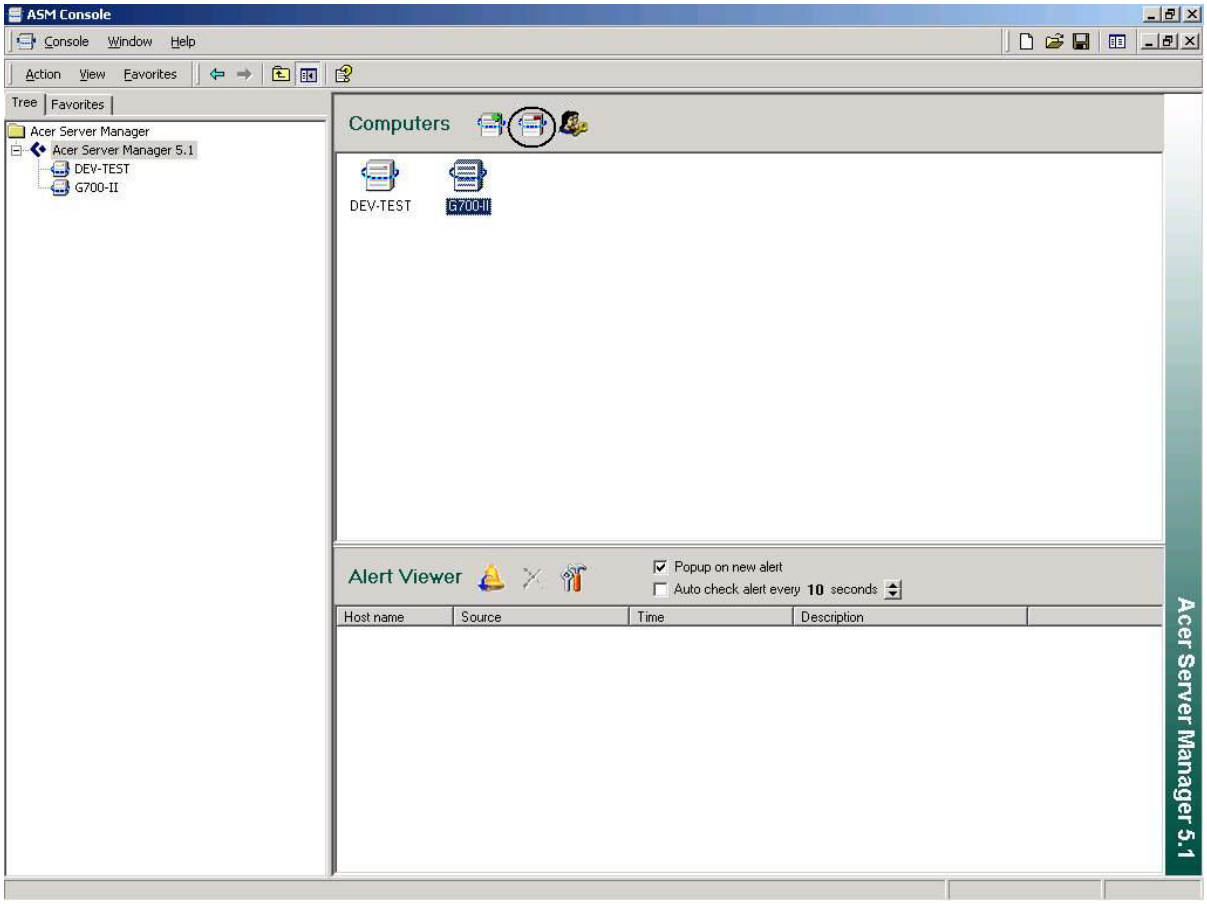


Hints on assisted Discovery:

1. To ensure proper pairing of host names with IP addresses, run assisted-Discovery periodically with an IP address range of 1 – 244
2. In general, if a server is selected from the In-Band list, we can always pair the hostname with its OOB IP address.
3. If a server is selected from the OOB list, we may not always be able to pair the OOB with its hostname, i.e., the same server may appear on the "managed-node tree" twice, once as its hostname, the other as its IP address.

3.4.3 Delete a Managed Node

In the **Discovery Panel**, select a managed node, "SMS-test06" in our example, click on the icon of an computer with a red "-" on it.

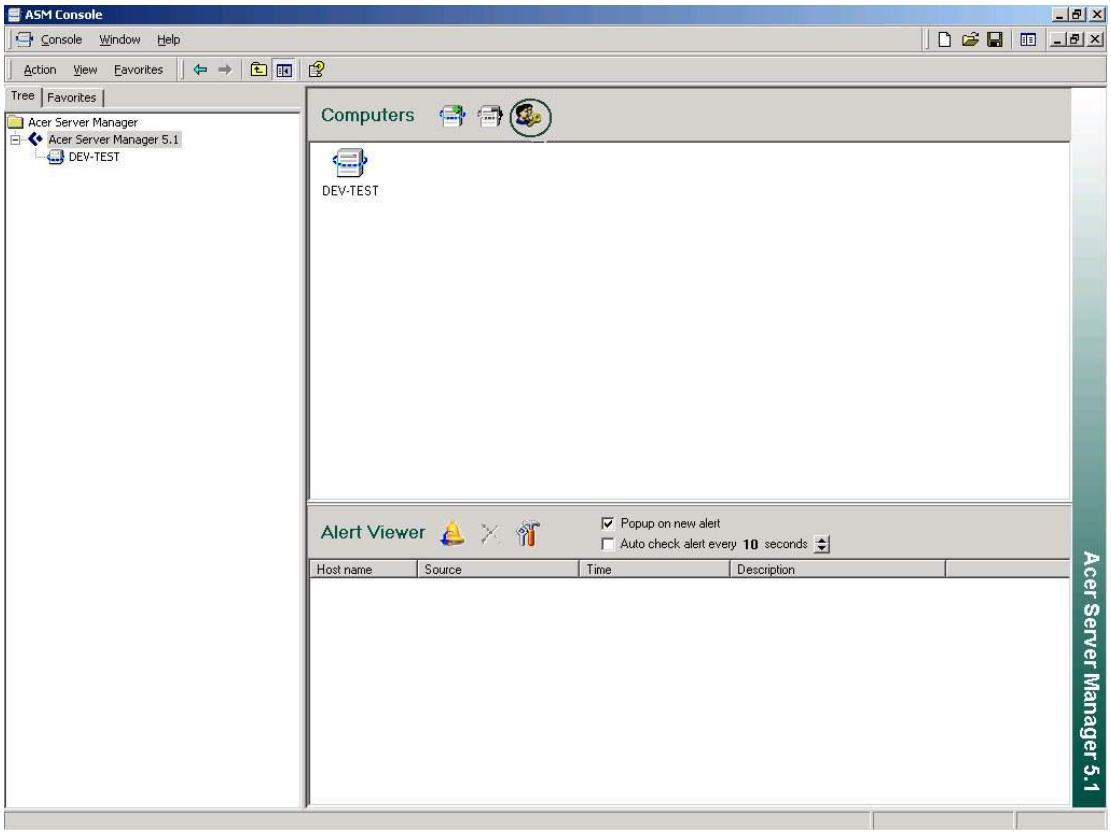


You will be asked for a confirmation

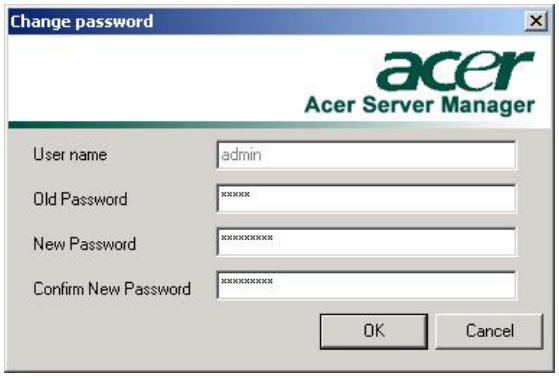
Click on "Yes", and "SMS-TEST06" will be removed from both the **Discovery Panel** and **Console Tree**

3.4.4 Change ASM Password

Every time you start the ASM Console, you will be asked for ASM Username/password to login. You can change your password after a success login.



Click to the "Change ASM Password" icon in the **Discovery Panel** as shown in the above screenshot.



Enter your new password twice, and click on "OK", if you have input everything correctly, a message box will report a successful password change. **Notice:** a valid password should be no longer than 48 characters.

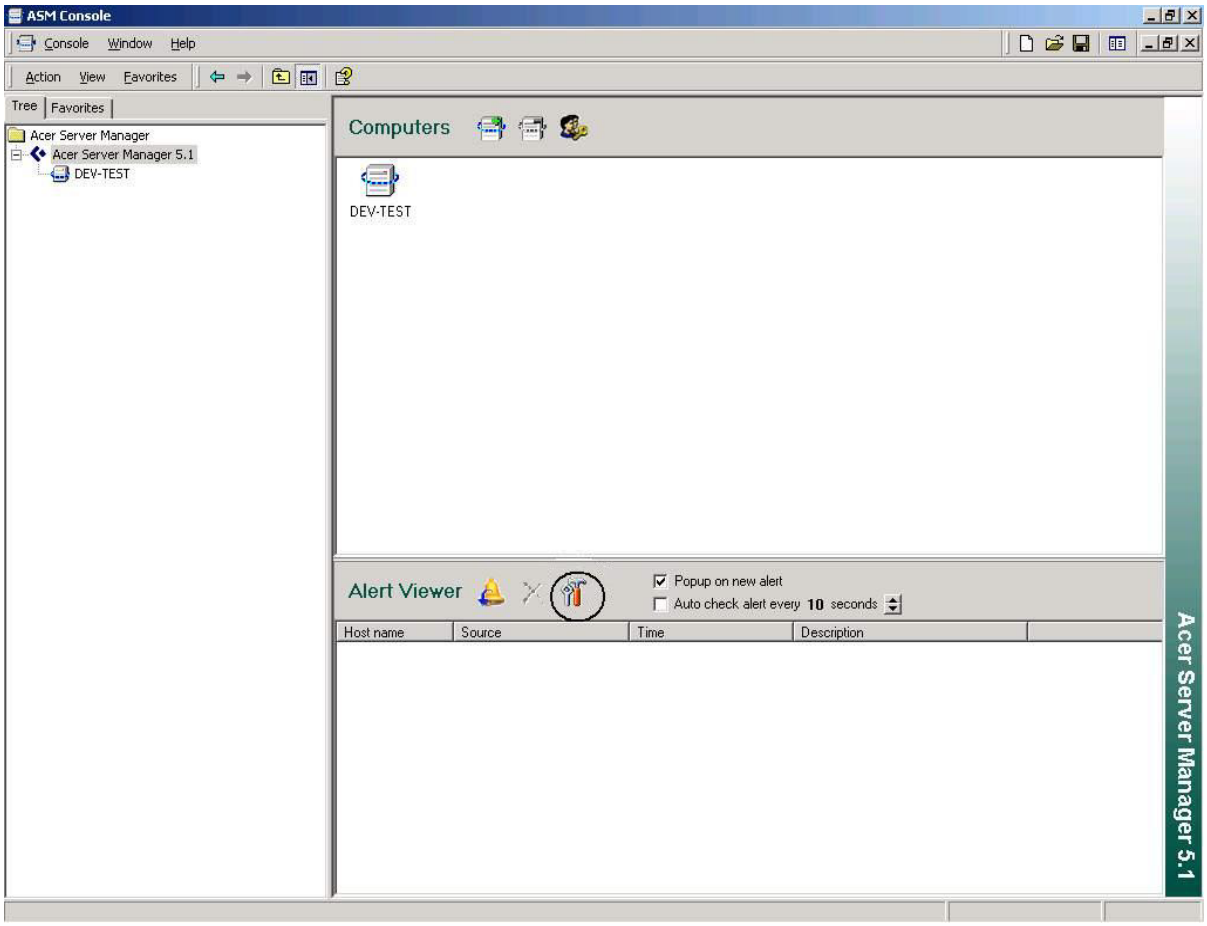
3.5 Alert

ASM 5.1 Console can be configured to perform pre-defined **Actions** upon the occurrence of user-specified **Alerts**. With alert support, Administrators are able to monitor and respond to sudden and critical system issues in a more timely fashion.

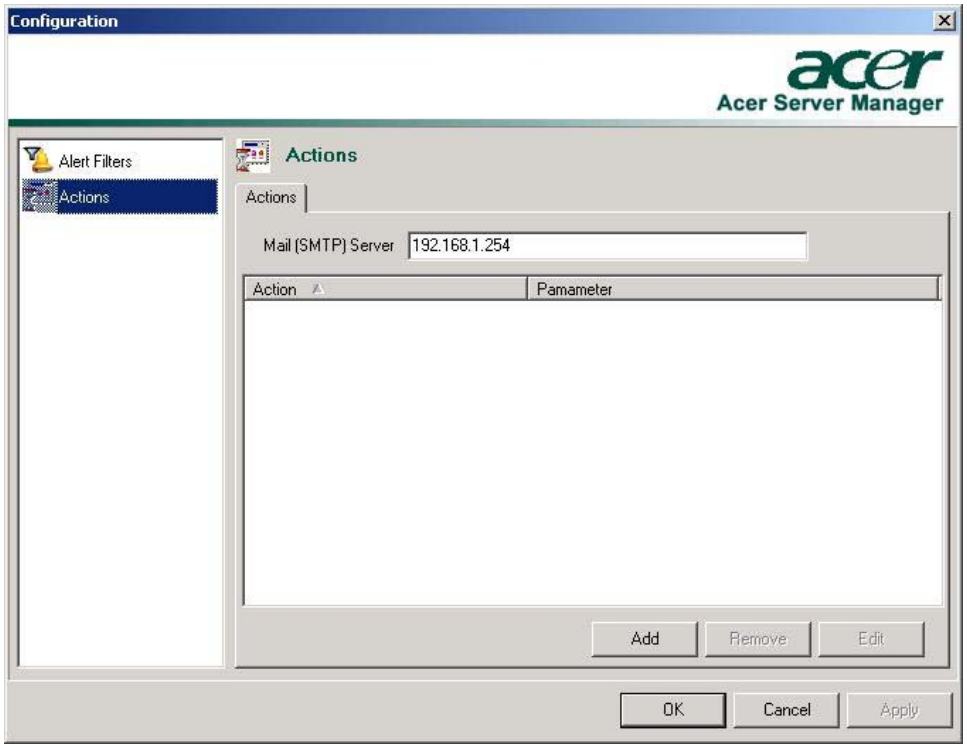
3.5.1 Add pre-defined Actions

To define an action to be performed in case of an alert, take the following procedure:

Click on the "Configurate" button in the **Alert Panel**



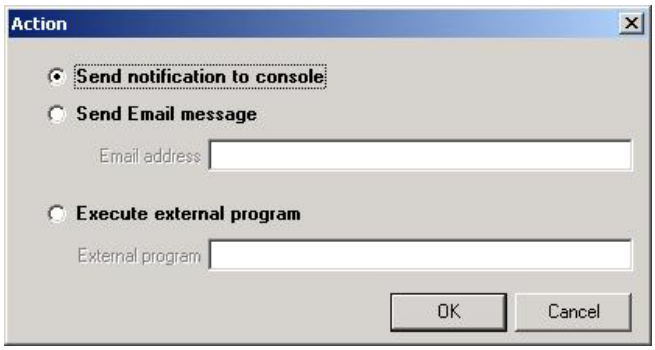
That brings up the "Configuration" dialog, in which you can set up for both **Actions** and **Alert Filters**,



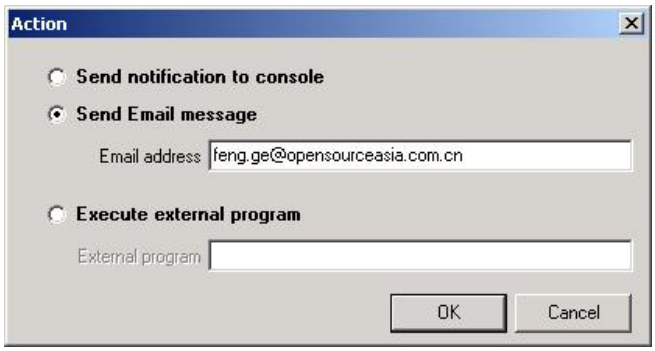
Highlight Actions, the list box on the right will display all the Actions you have already defined.

ASM 5.1 support 3 types of actions, i.e., Console notification, Email notification, External program execution. Click on "Add" to add your preferred actions.

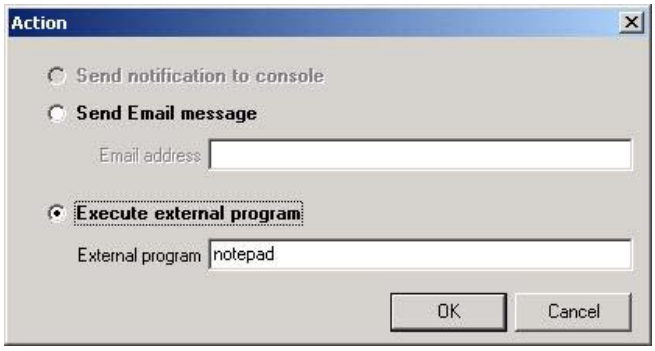
To receive a pop up message in case of an Alert, enable Console notification:



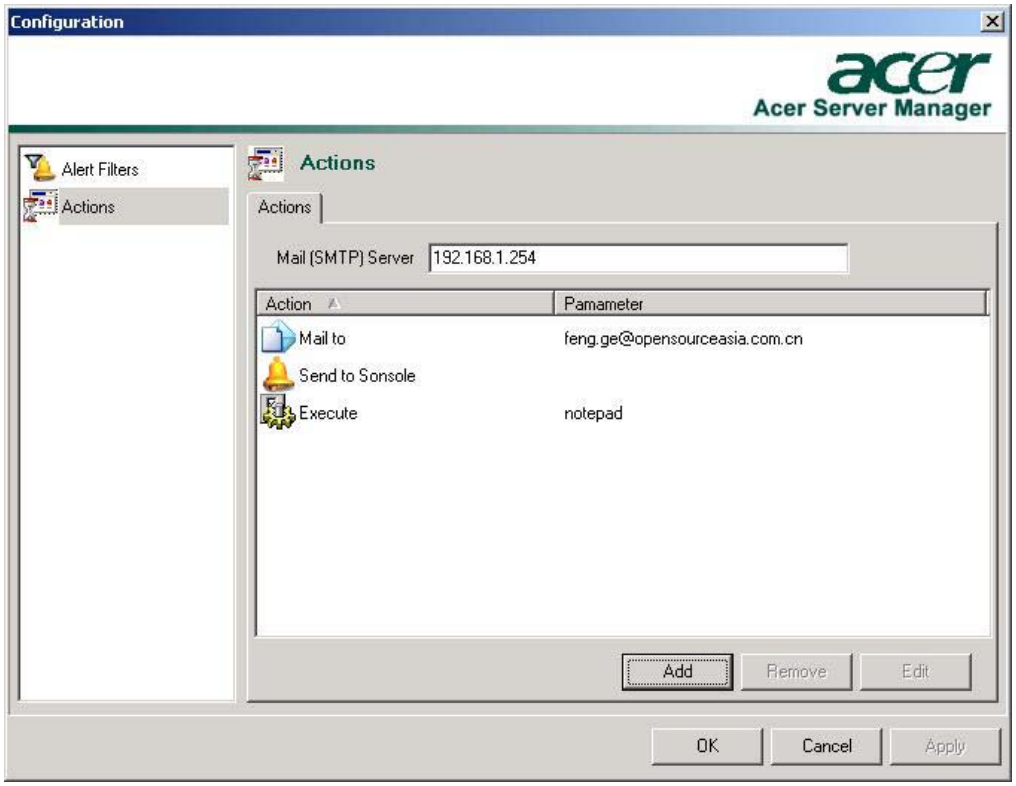
To enable Email notifications, you have to specify a Mail (SMTP) server, and fill in Email addresses. You can enter multiple email addresses separated by semicolons, but the total length should be less than or equal to 255.



Or you can specify a program to be executed in case of certain alerts.



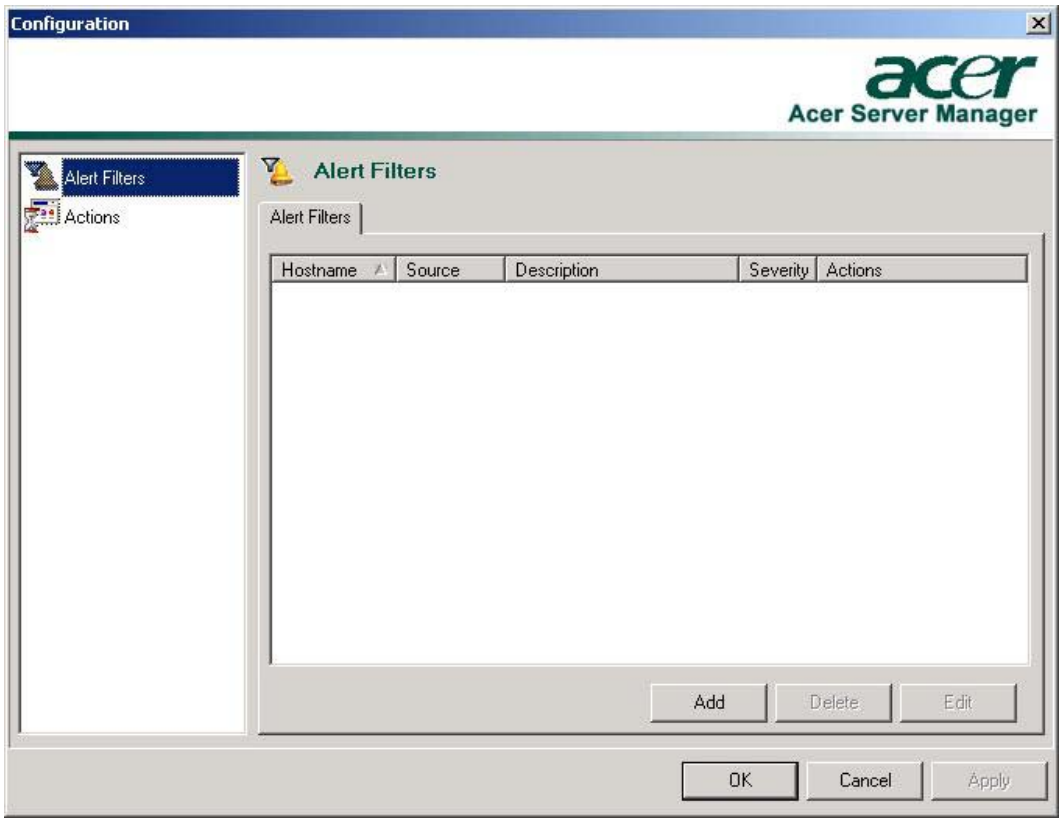
Click on "OK" and return to the "Configuration" dialog



All the configured Actions are displayed. You can select one and Click on "Edit" to modify.

3.5.2 Add Alert Filters

To add a new Alert Filter, highlight "Alert Filters" in the "Configuration" dialog, and the list box on the right will display all of the existing Alert Filters. You can select one and modify, or add new alerts.



Click on "Add", you can define the properties of your new alert filter, i.e., "Hostname", "Severity", and "Source". The Action list box lists available Actions you can apply to this new filter. As an example, we applied all 3 actions available.

Hostname: select the host(s) where alerts would be generated.

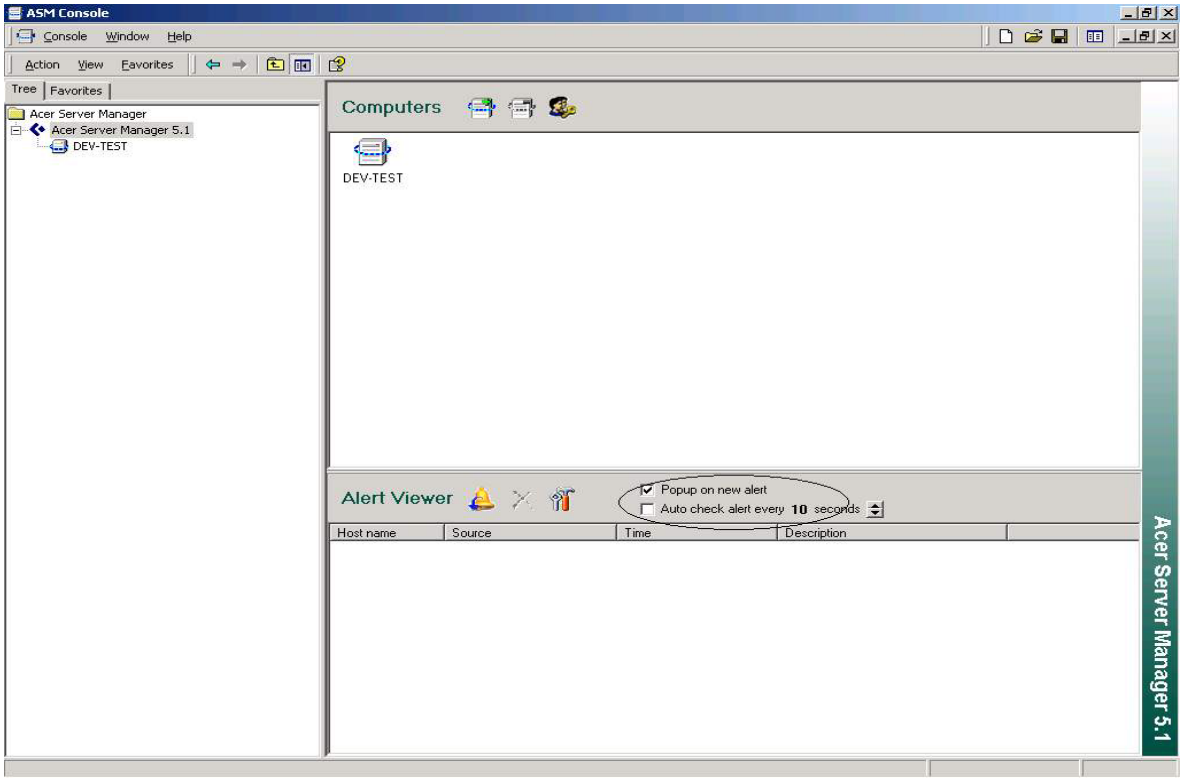
Source: This is a list of all the events upon the occurrence of which alerts would be generated. There are four categories**:**

- SMBIOS events or logical groupings
- IPMI events or logical groupings
- SMART Alerts: Predictions generated by IDE Self Monitoring Analysis and Reporting Technology.
- Acer Defined Events:
    - CPU Usage: An alert would be generated if long term CPU usage is over 90%. (10 seconds samples would be taken. If 10 out of the last 12 samples are over 90, then an alert will be issued.)
    - Memory Usage: An alert would be generated if long term Memory usage is over 90%. (10 seconds samples would be taken. If 10 out of the last 12 samples are over 90, then an alert will be issued.)
    - Disk Usage: An alert would be generated if the usage of any hard disk exceeds 90%.
    - SEL Full: An alert would be generated if the System Event Log in the BMC is full.

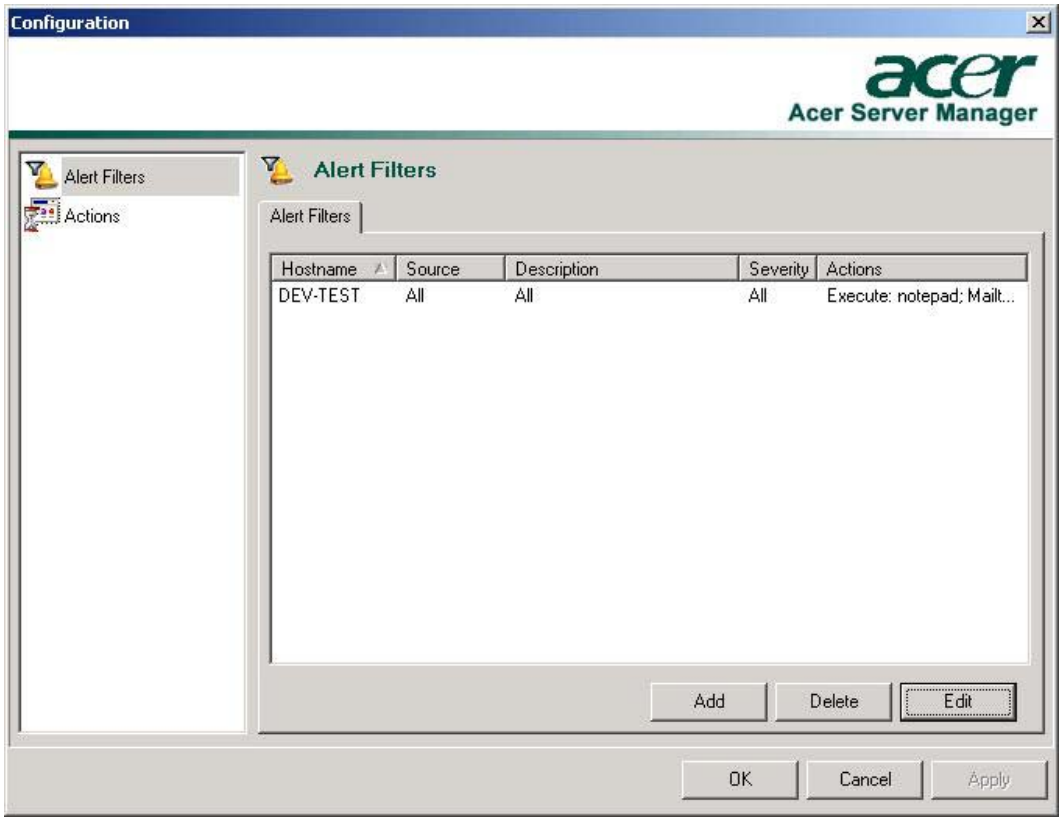
Notice: The maximum number of alerts generated per event type is 1 per minute.

Notice:

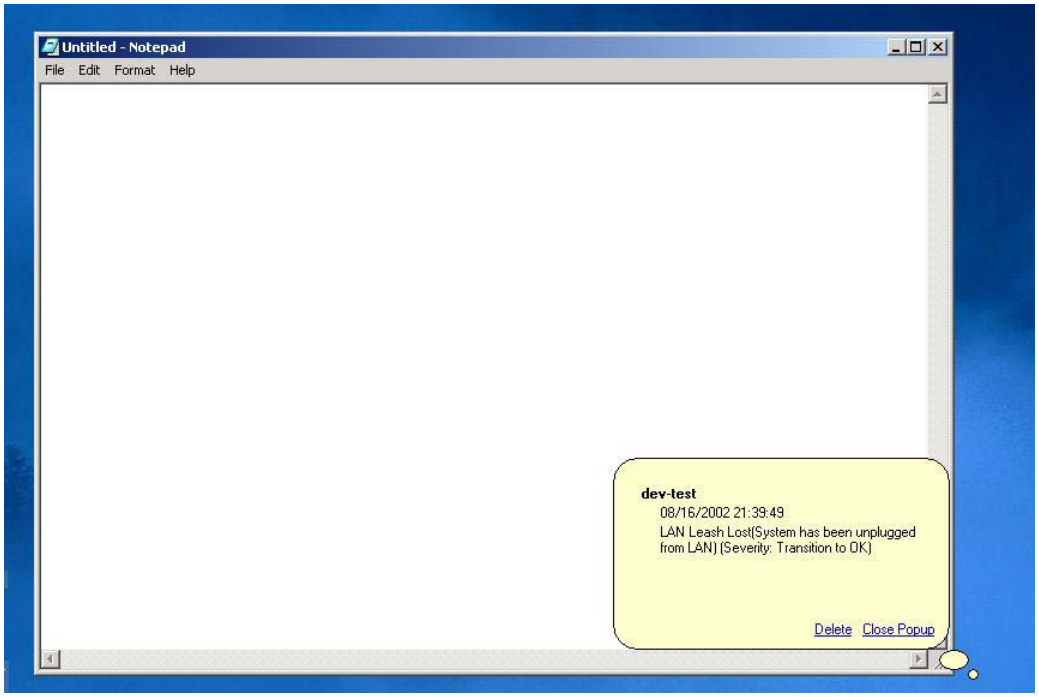
Though you may have chosen to apply "Send to Console" Action on your filter, in order to receive pop-up Alerts messages, you will have to check "**Popup on new alert**" option in the **Alert Panel** as well, so that your setting becomes effective, as indicated in the following screen shot. Also, to enable auto-alerting, check the "**Auto check alert every 10 seconds**" option.



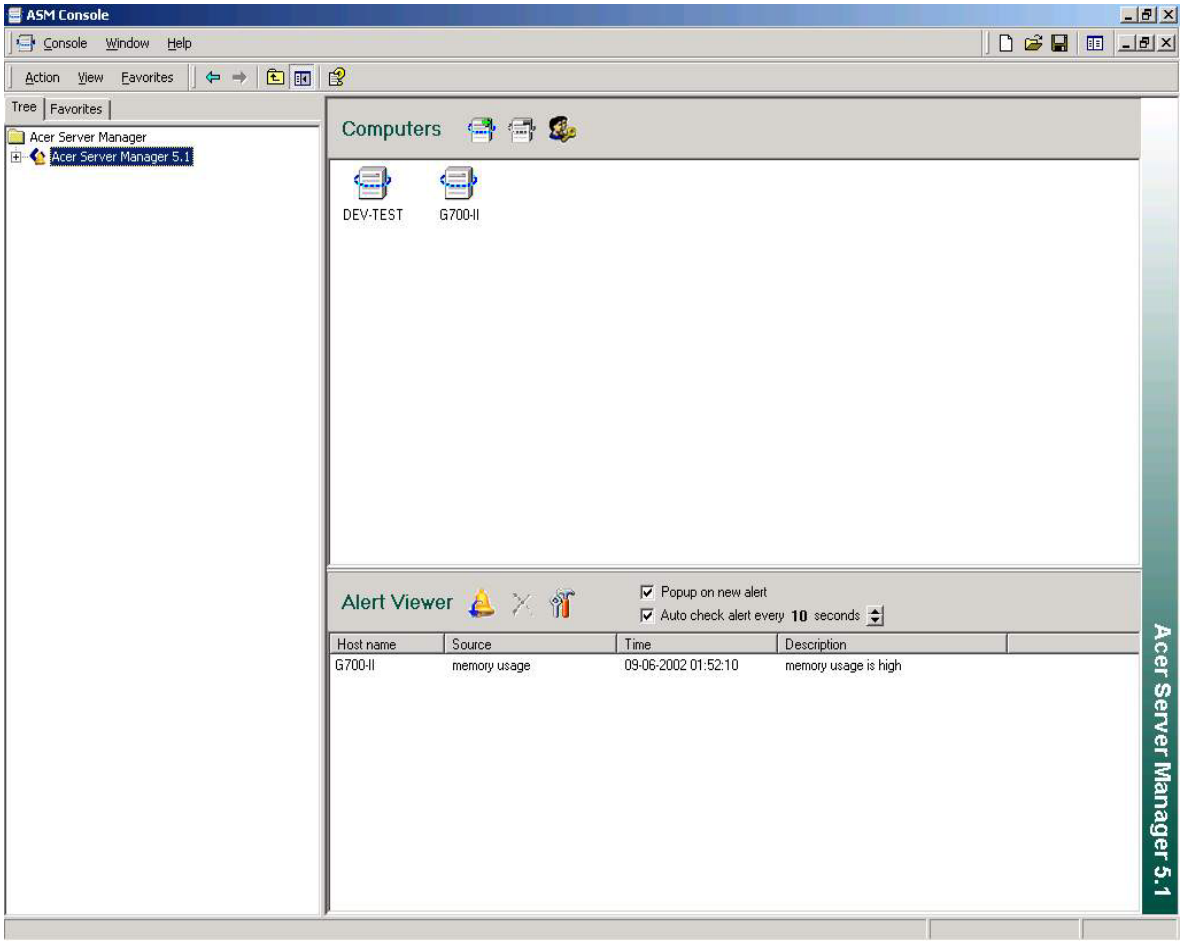
Click on "OK", and new alert is added successfully



When alert occurs, all the Actions configured for that alert are performed. As shown in the following screen.



You can also view all the past alerts from the **Alert panel**

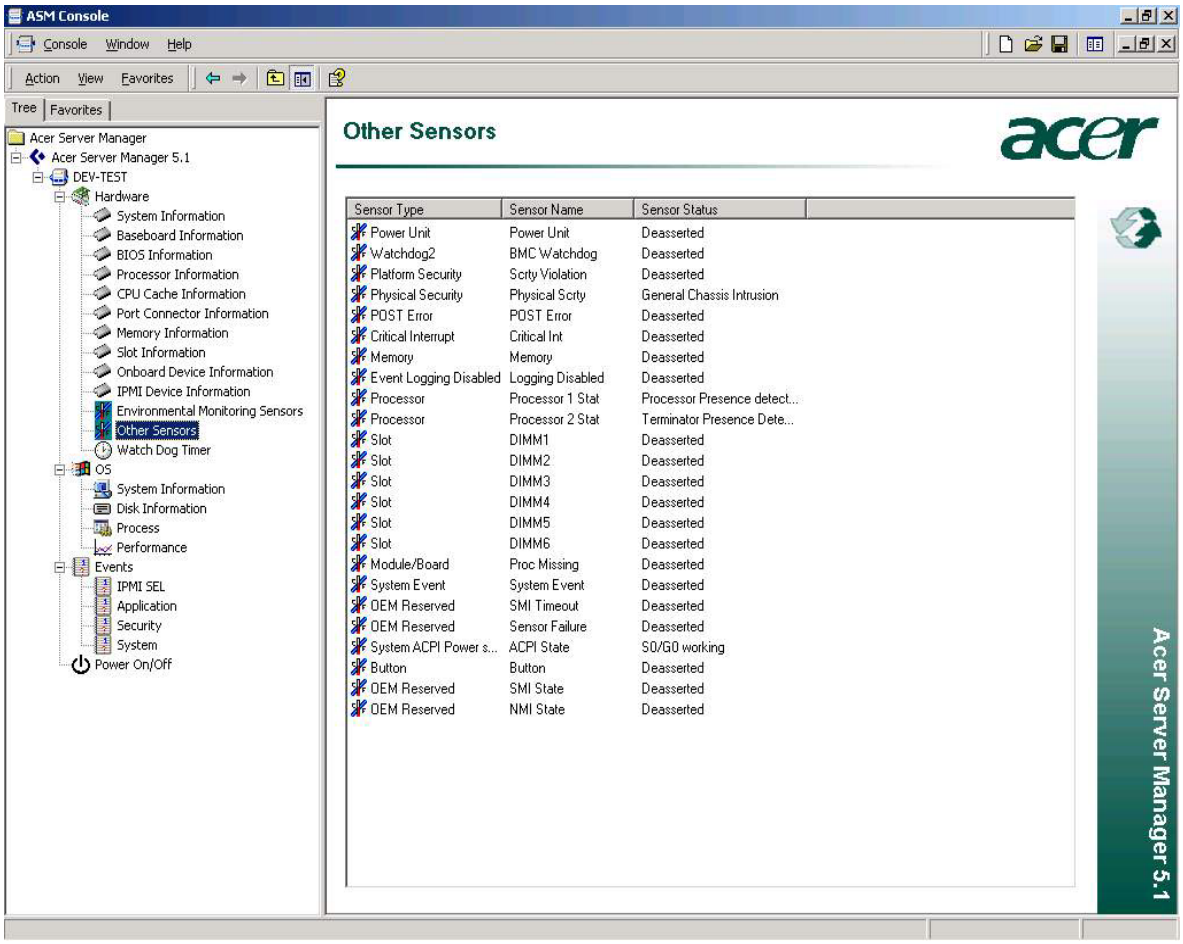


3.6 Managing a Managed Node

When a node is selected, user can retrieve Hardware, OS, or Events information from the target node. User may also perform more complicated tasks such as Remote Power On/Off, OS shutdown and reboot, terminating processes, and setting the watchdog timer.

3.6.1 Retrieving information from a Managed node

The information ASM console may retrieve from a managed node falls into 3 categories: Hardware, OS and Events. A fully expanded node looks like the one shown in the following screen. The right pane (**display pane**) displays data according to the user's selections in left pane (**console tree**). Generally, the information in the **display pane** could be **sorted on each column in ascending or descending orders** by clicking on the column headers. There is a **refresh** button on the right upper corner of the **display pane**, click **refresh** to retrieve the latest data.

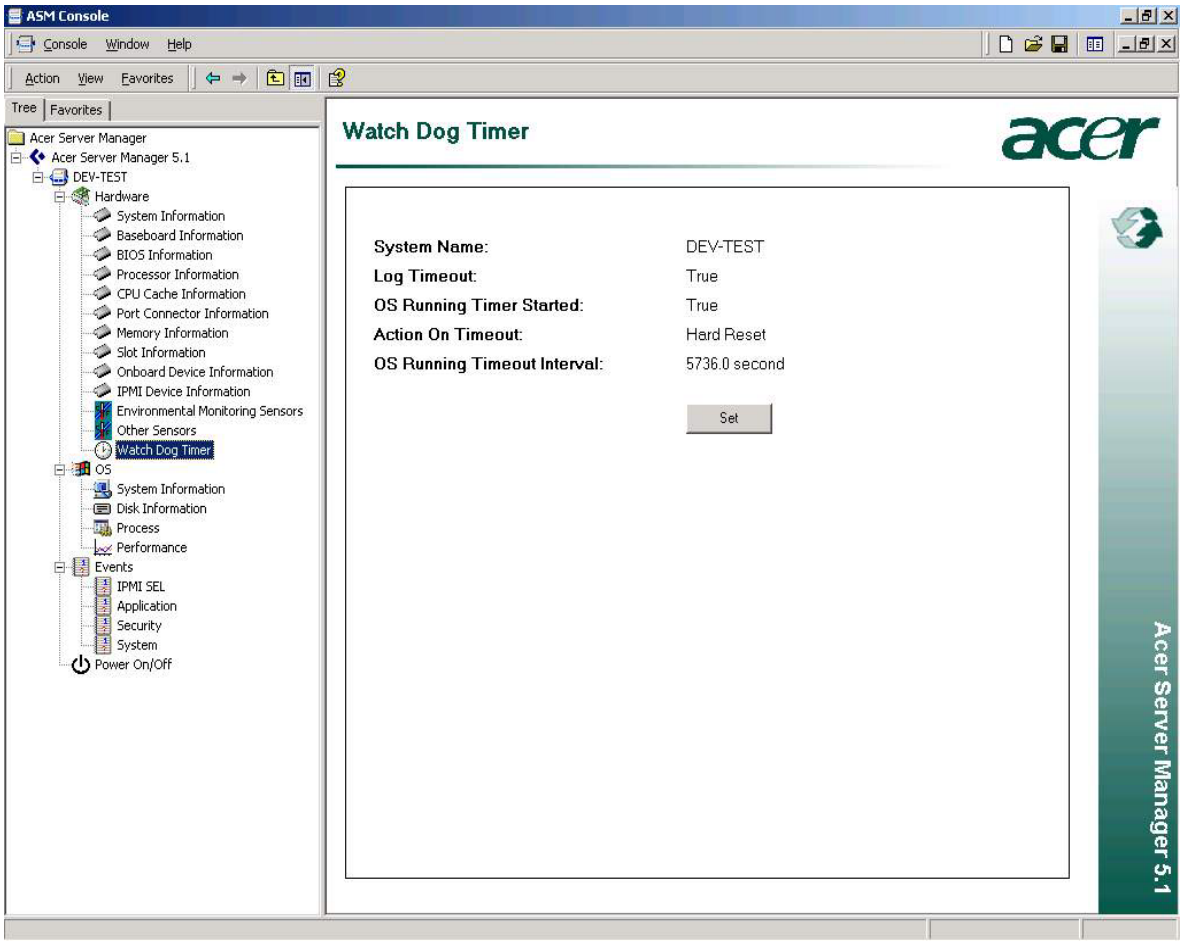


3.6.1.1 Hardware information

- ***Watch Dog Timer***

The Watch Dog timer is an "alarm clock" to ensure that an event completes in a reasonable amount of time (the Time Out Value). For example, when BIOS begins running, it sets the BIOS Post Timer ("alarm clock") to sound in 300 seconds. When the alarm clock sounds, predefined actions can be taken. If BIOS Post complete in less than 300 seconds, no action will be taken since the alarm clock has not sounded yet. After BIOS Post, the OS will be loaded. The OS Load logic would turn off the BIOS Post Timer and sets the OS Load Timer. When the OS completes loading, and starts running, it would turn off the OS Load Timer and starts the OS Running Timer. The OS Running timer is an OS "heart beat". It is reset by a system service every Time Out Interval. If the OS Running Timer goes off, it means that the system service has not reset the timer, indicating that the OS has stopped running.

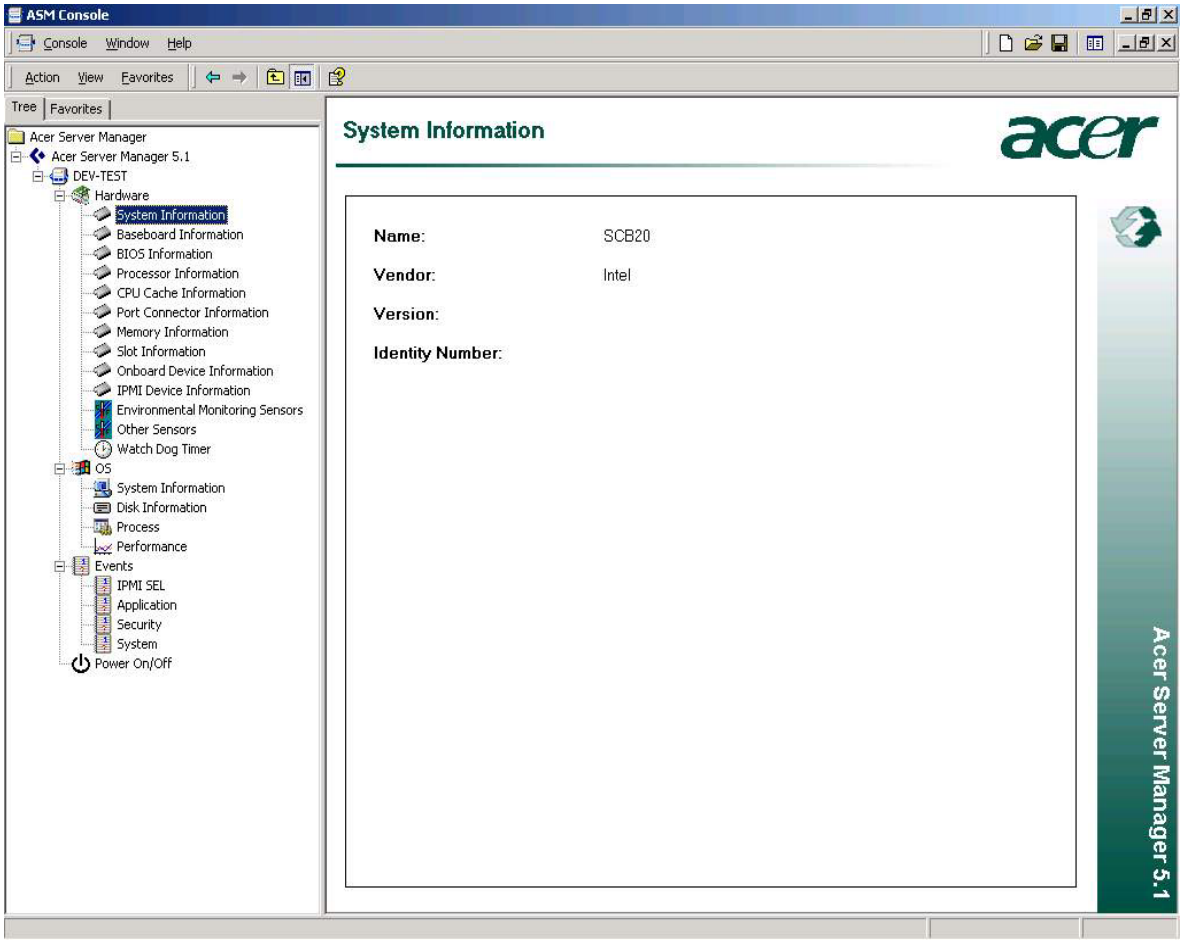
Selecting "Watchdog" will show the settings of the Watchdog Timer. The display pane for the watchdog timer displays the following information: 1) watchdog timer event source. 2) Watchdog timer event source enabled/disabled 3) timer setting 4) action selected. There are two "SET" buttons, one to set the OS Running Timer, and the other to set the other Timers.



This item is not available if underlying platform is G300.

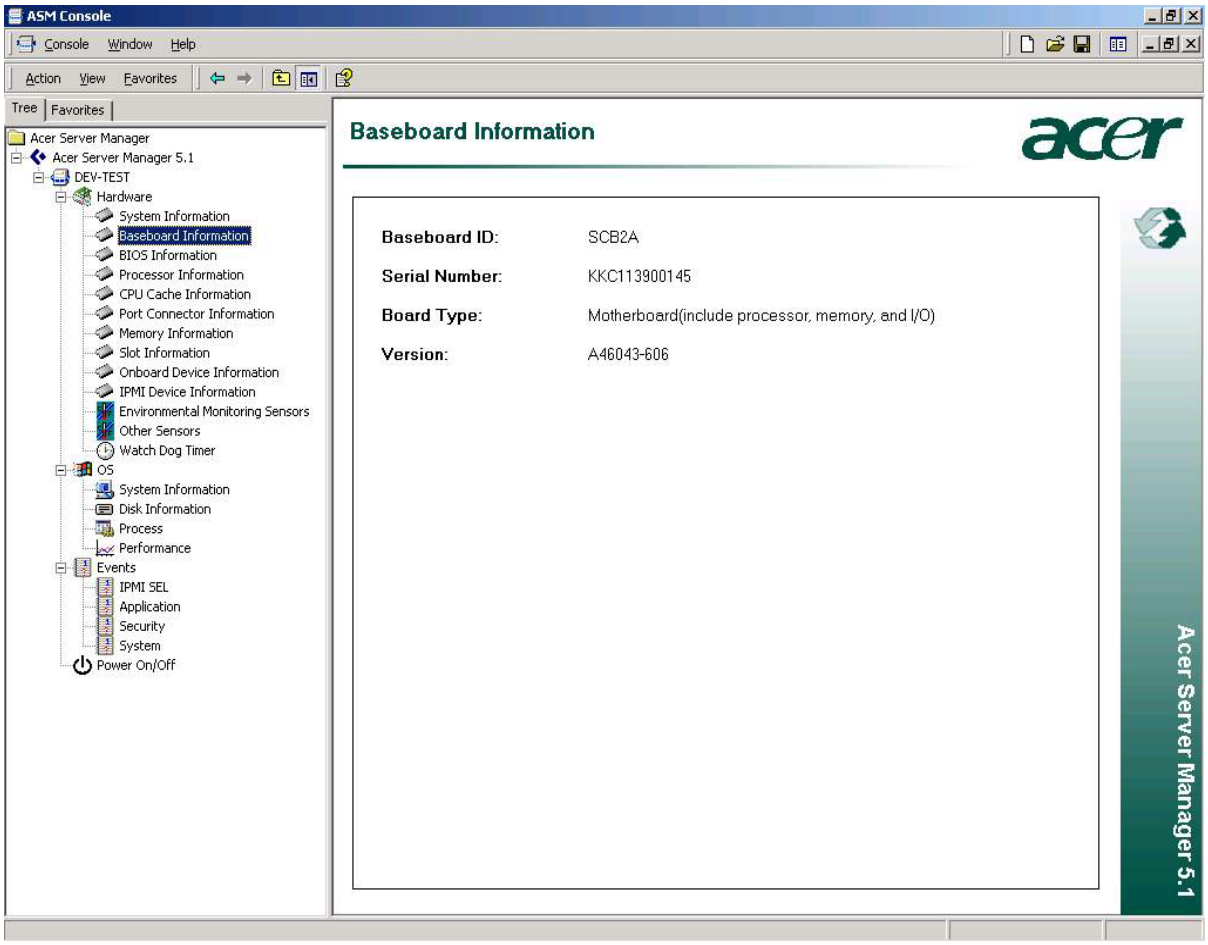
- ***System Information***

"System Information" gives you general system information about the system manufacturer, model, serial number, etc.



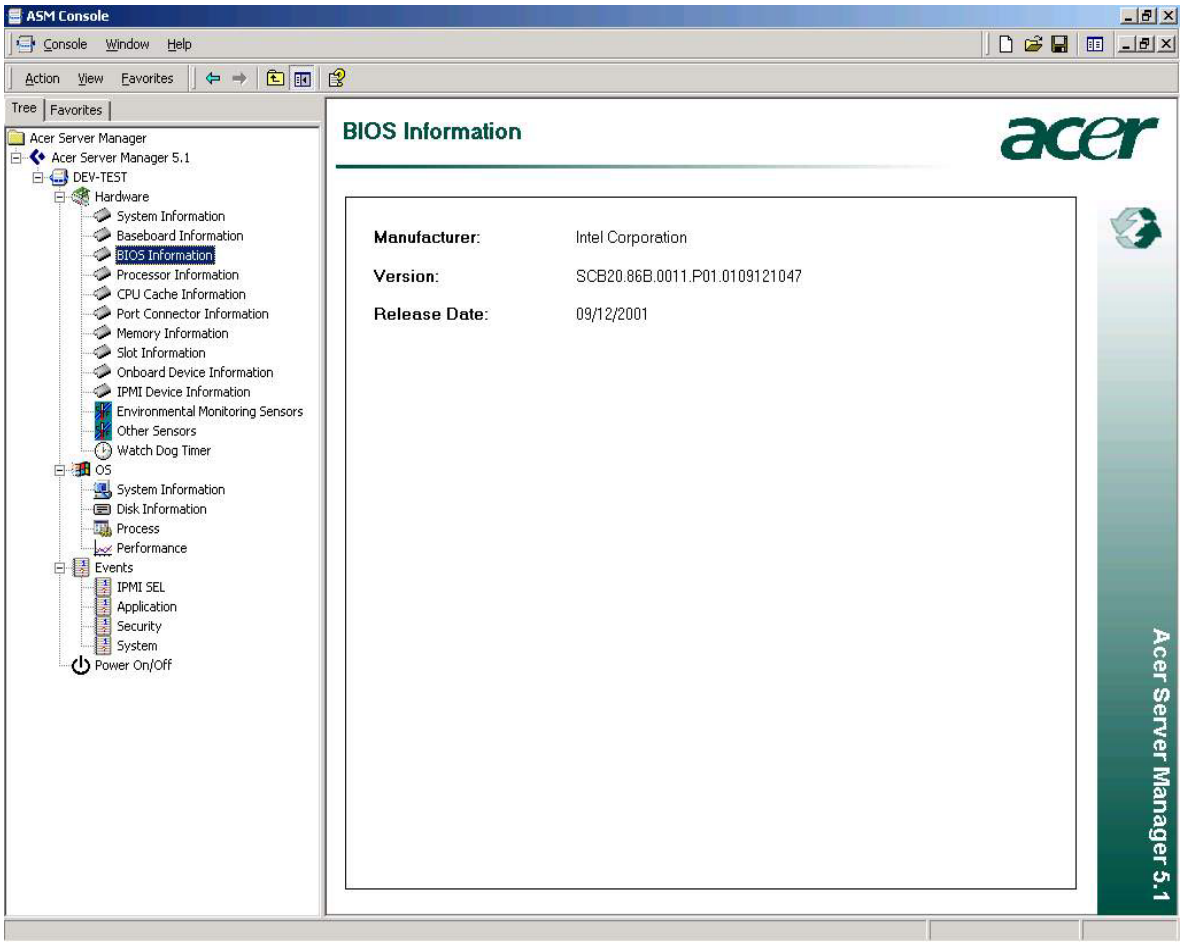
- ***Baseboard***

"Baseboard" lists Baseboard ID, Serial Number, Board Type and Version.



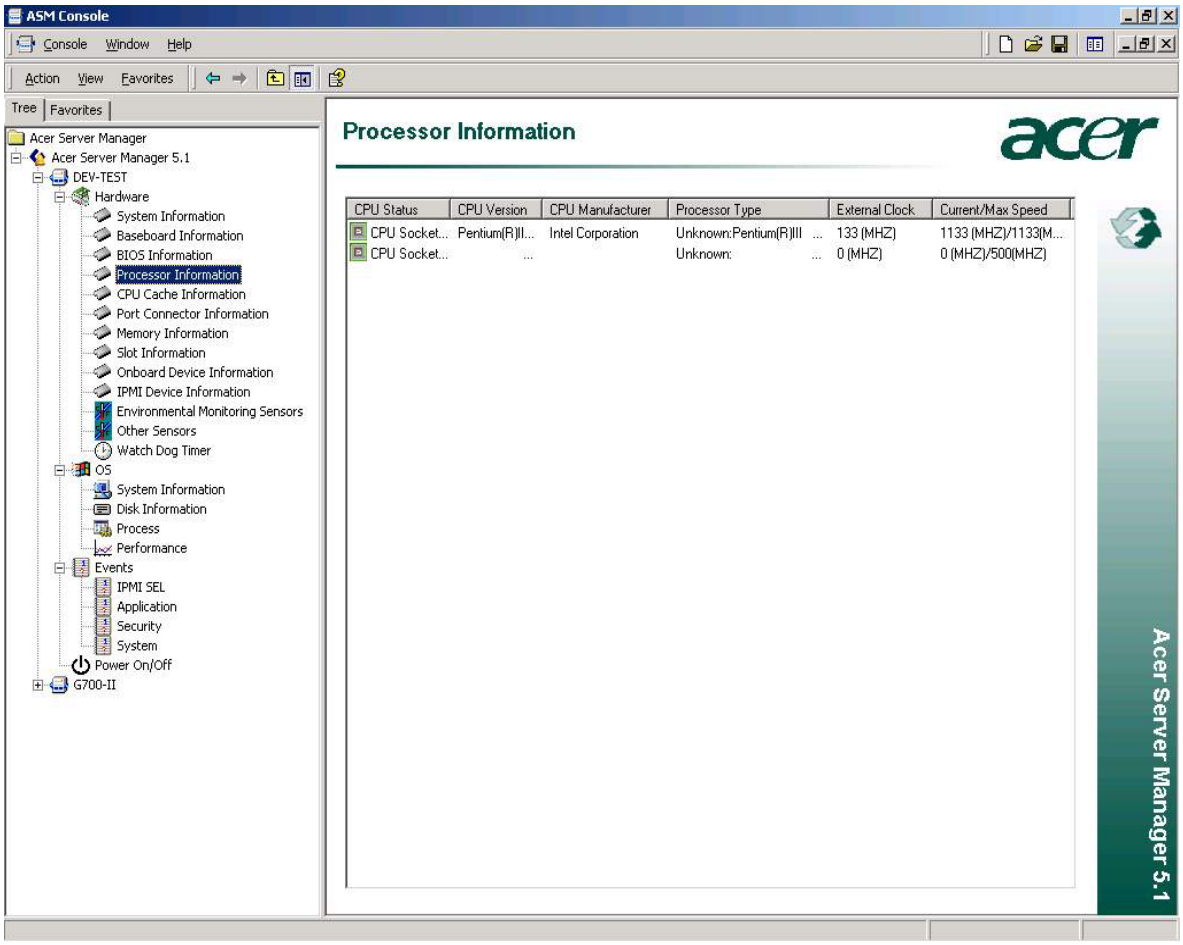
- ***BIOS Information***

"BIOS Information" will provide information about the BIOS manufacturer, version, etc.



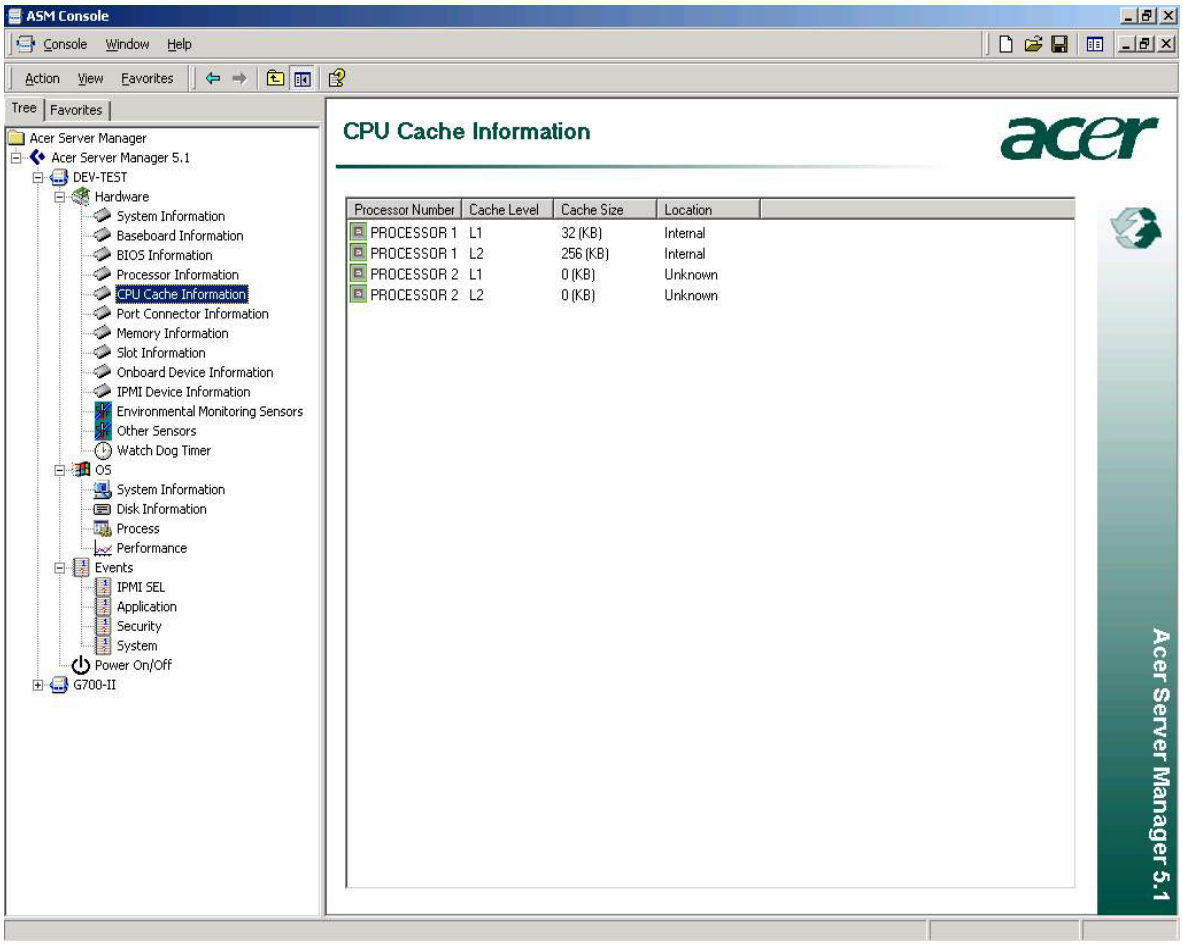
- ***Processor Information***

"Processor Info" provides information about the CPUs of a managed node.



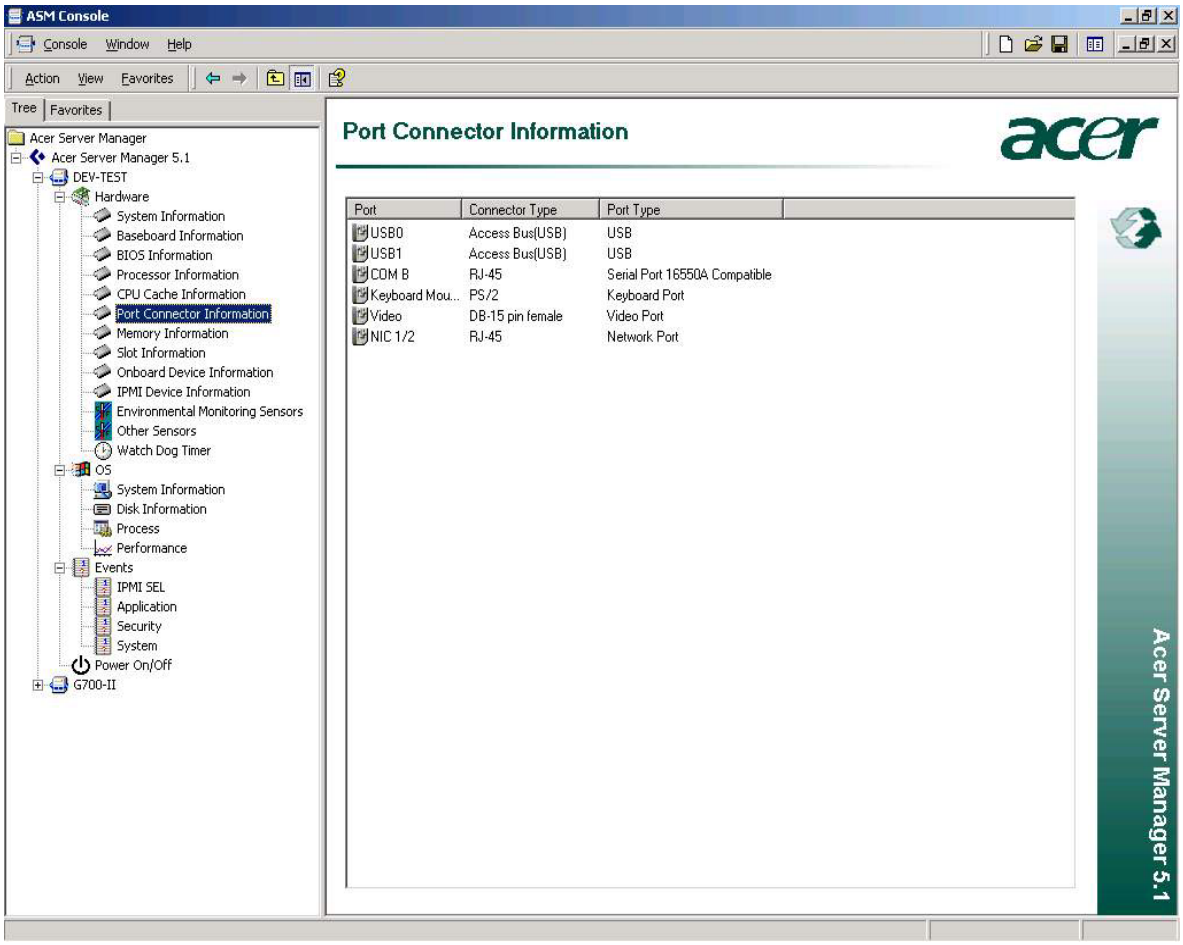
- ***CPU Cache Information***

"CPU Cache Information" displays CPUs' cache information



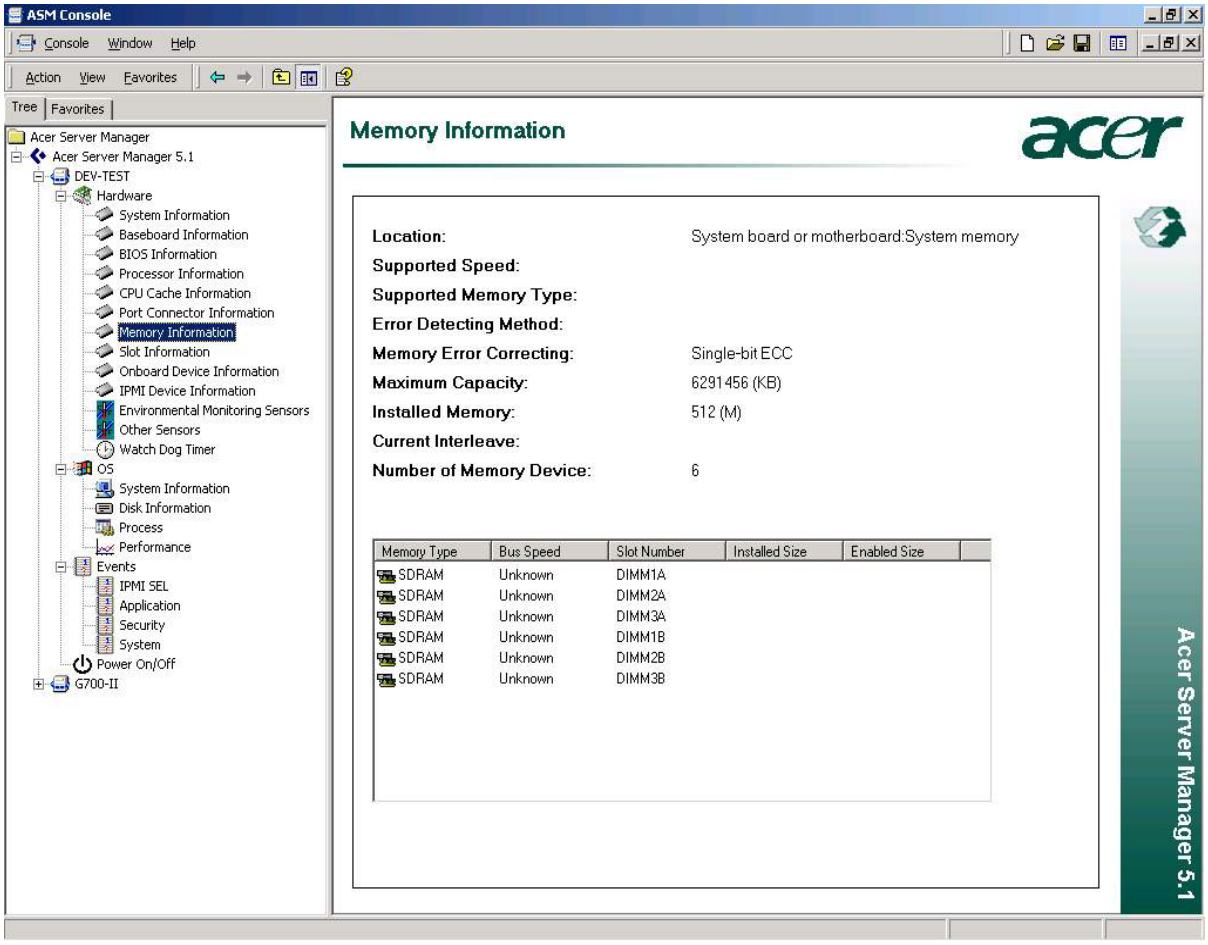
- ***Port Connector Information***

"Port Connector Information" lists information of the target system's USB, COM Port, etc.



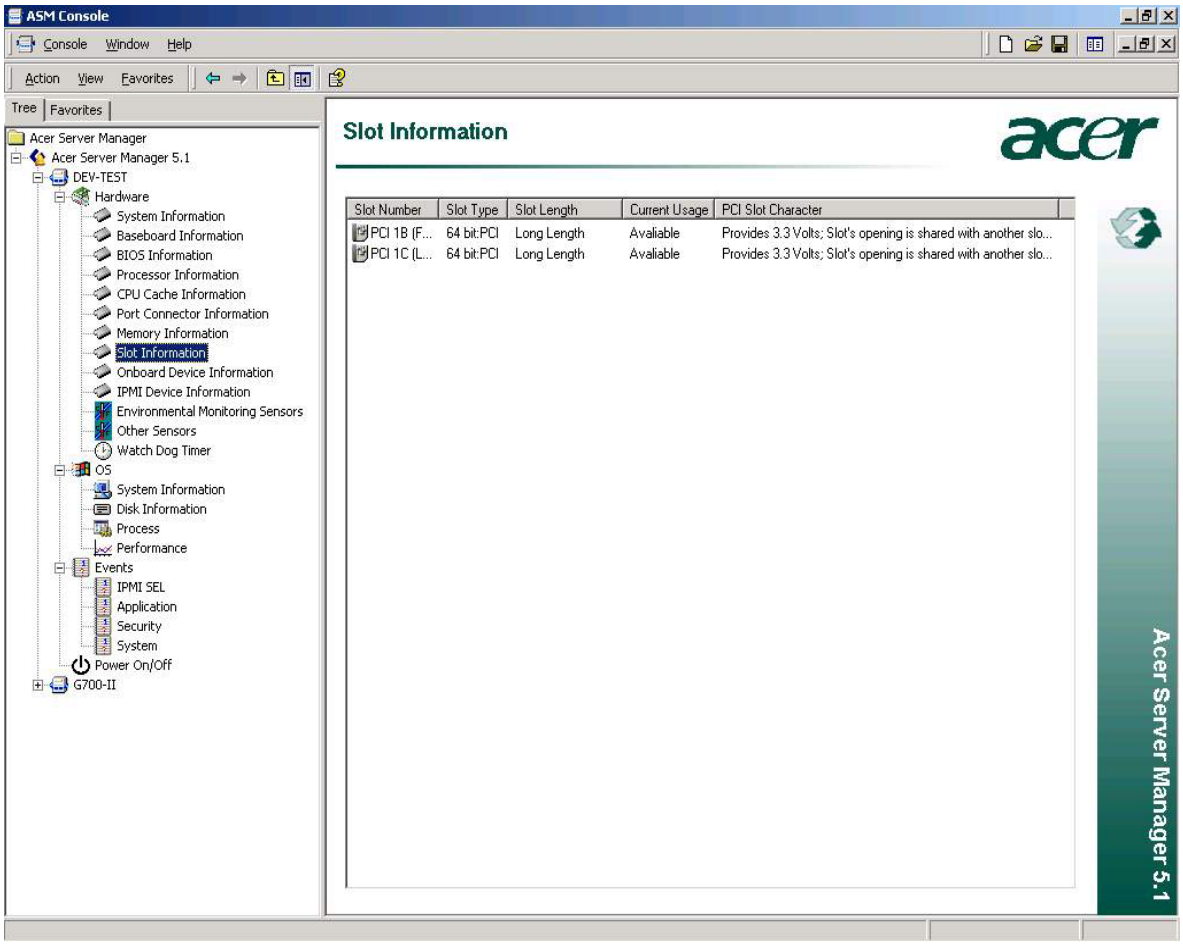
Memory Information

"Memory Information" will provide information about the system memory controller and the memory modules, which belong to that controller.



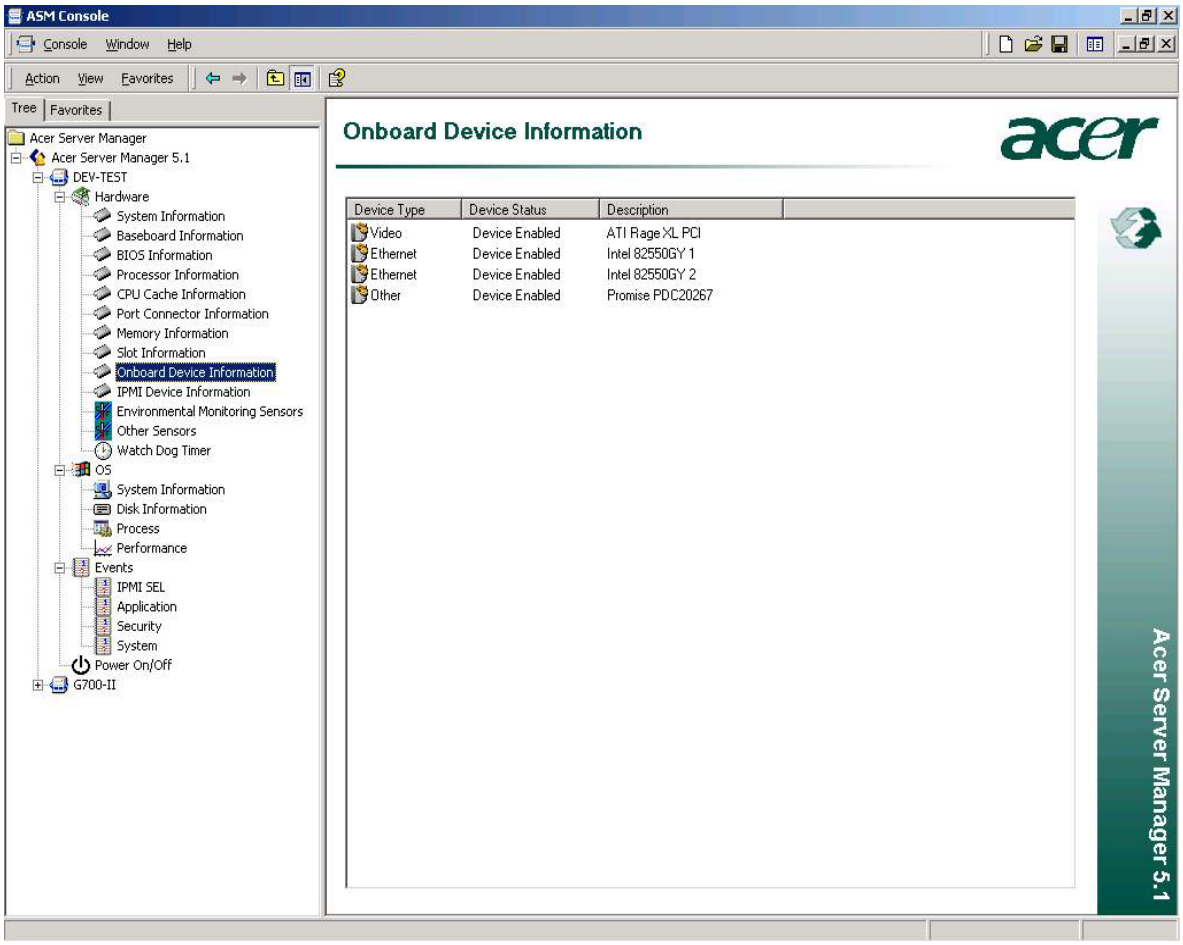
- ***Slot Information***

"Slot Information" lists characteristics of system slots



- ***Onboard Device Information***

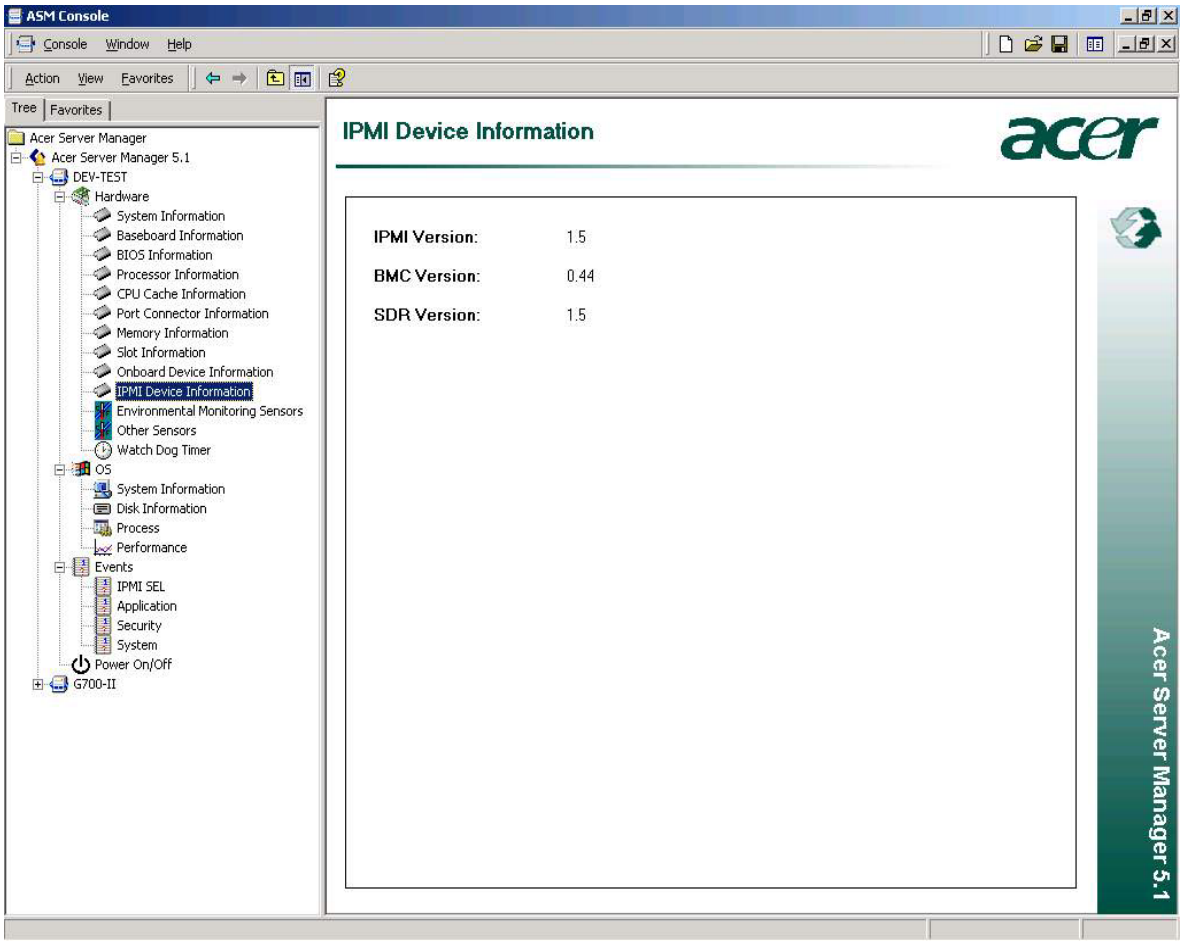
"Onboard Device Information" gives the attributes of devices that are on the system baseboard.



- ***IPMI Device Information***

"IPMI Device Information" will provide version information of the node IPMI, BMC, and SDR.

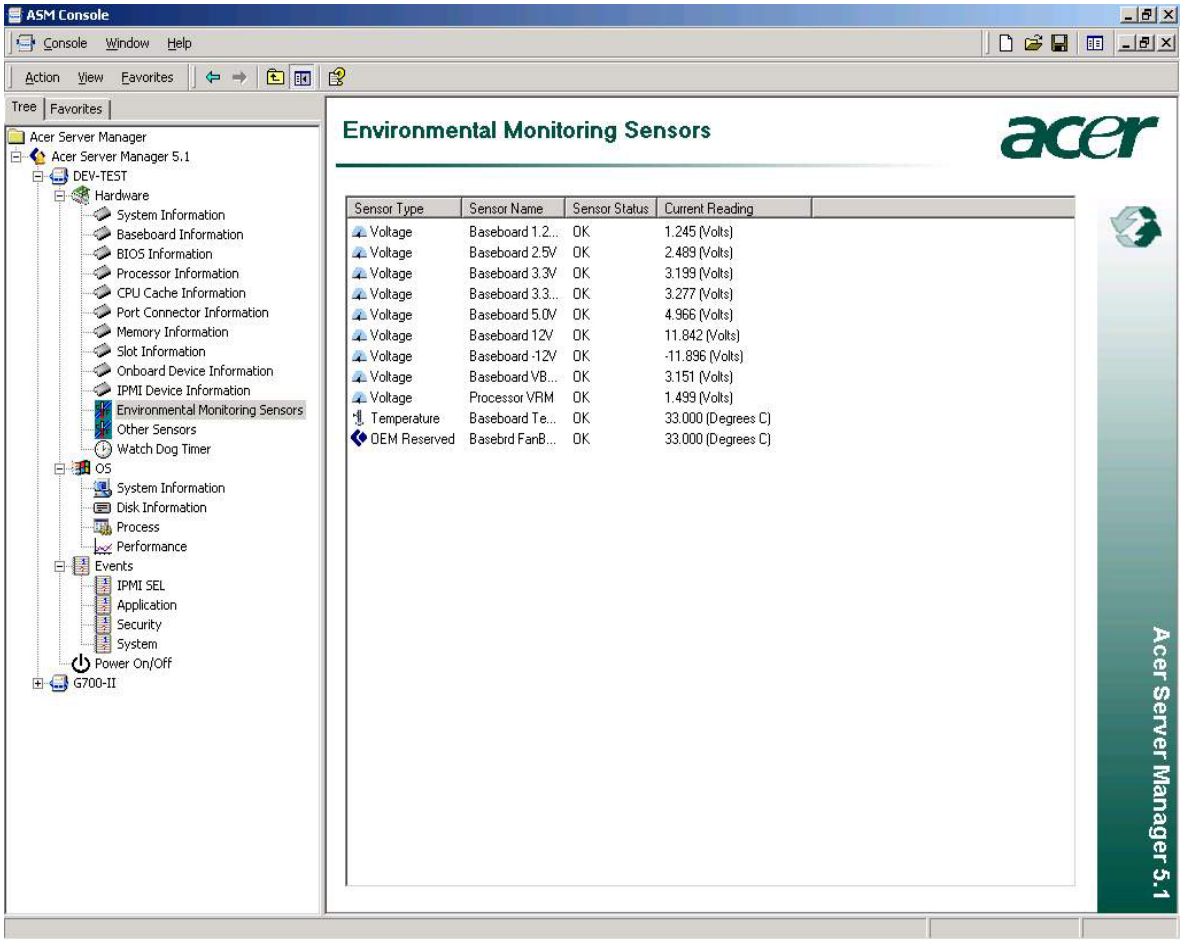
This item is not available for G300 platform.



- ***Environmental Monitoring Sensors***

When "Environmental Monitoring Sensors" category is selected in the Console Tree, general sensor information, such as sensor Name, Type, Status, and Current Reading, are displayed in the right pane.

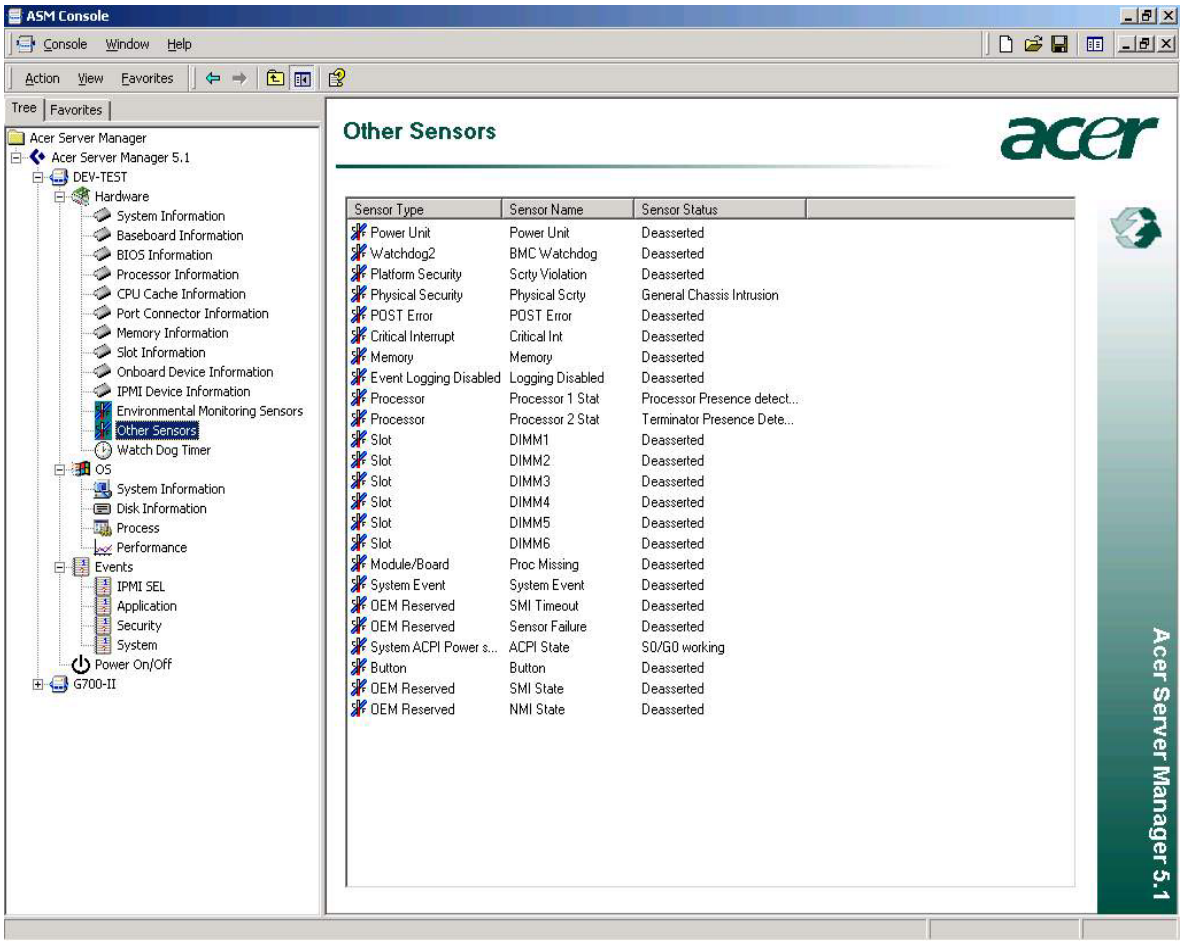
Sensors that fall in this category are generally numeric sensors, whose readings are continuous values, such as Temperature, Voltage, Fan, etc.



- ***Other Sensors***

When "Other Sensors" is selected in the Console Tree, the discrete sensors' information ig displayed in the right pane. As name suggested, a discrete sensor has only 2 statuses.

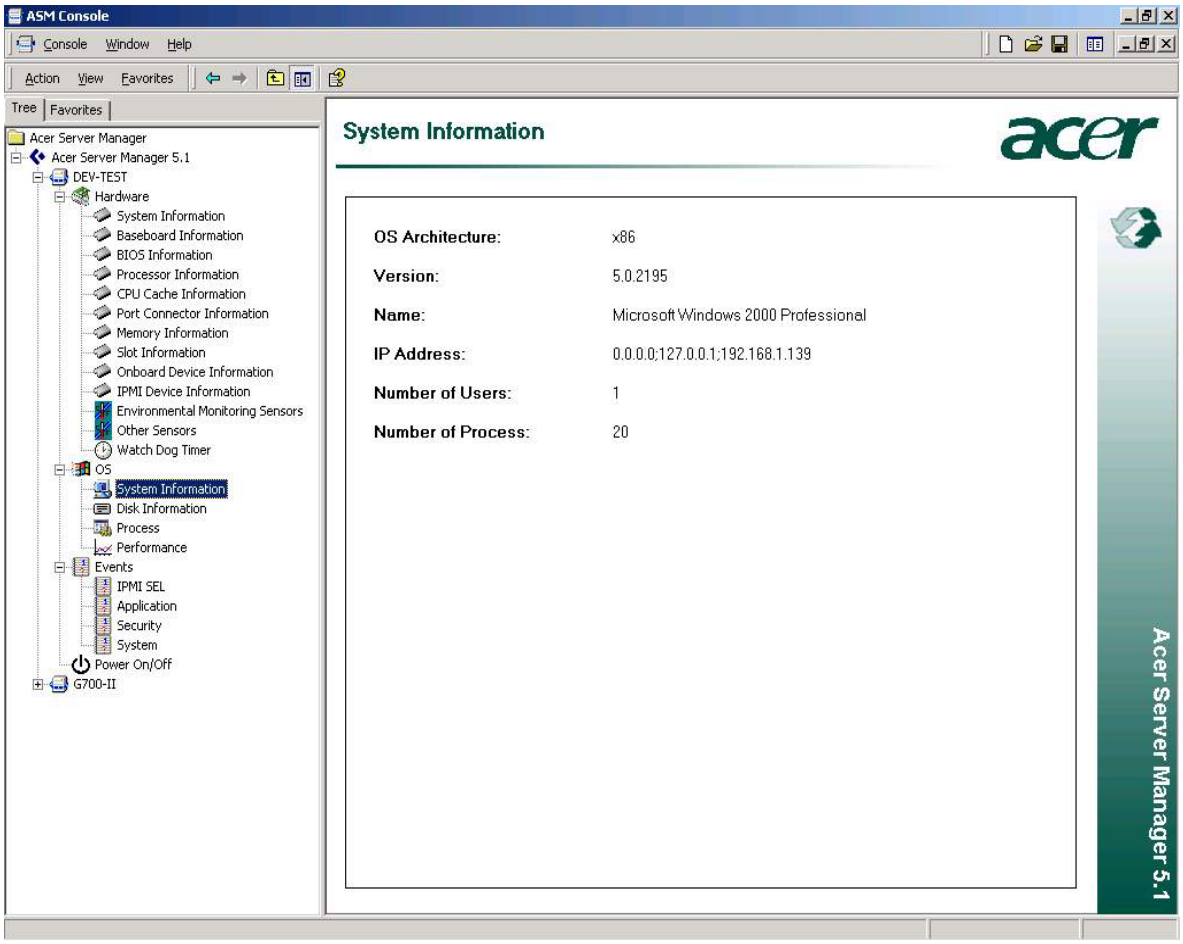
This item is not available for G300 platform.



3.6.1.2 Get OS information of a Managed node

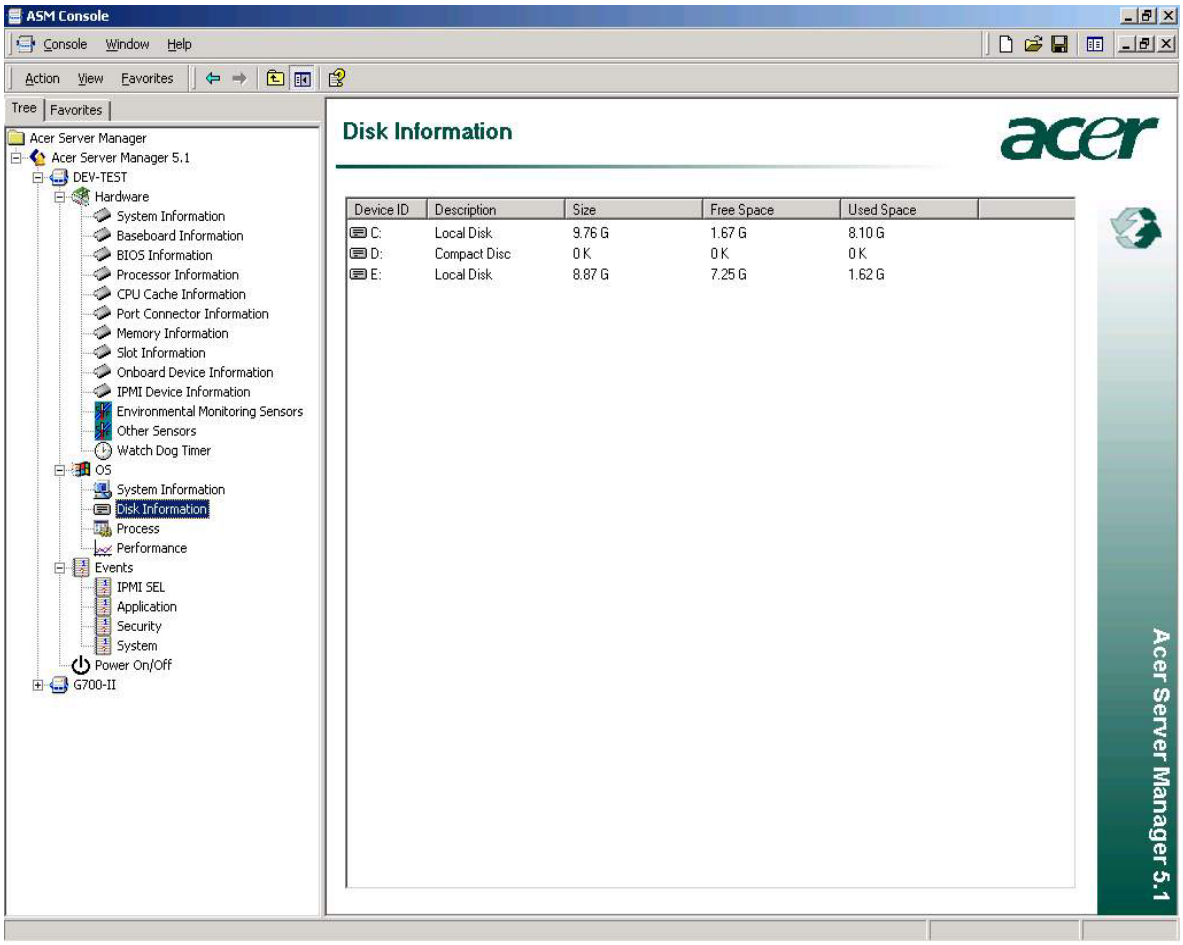
- ***System Information***

"System Info" shows elementary system information such as OS architecture, OS version, system IP, etc.



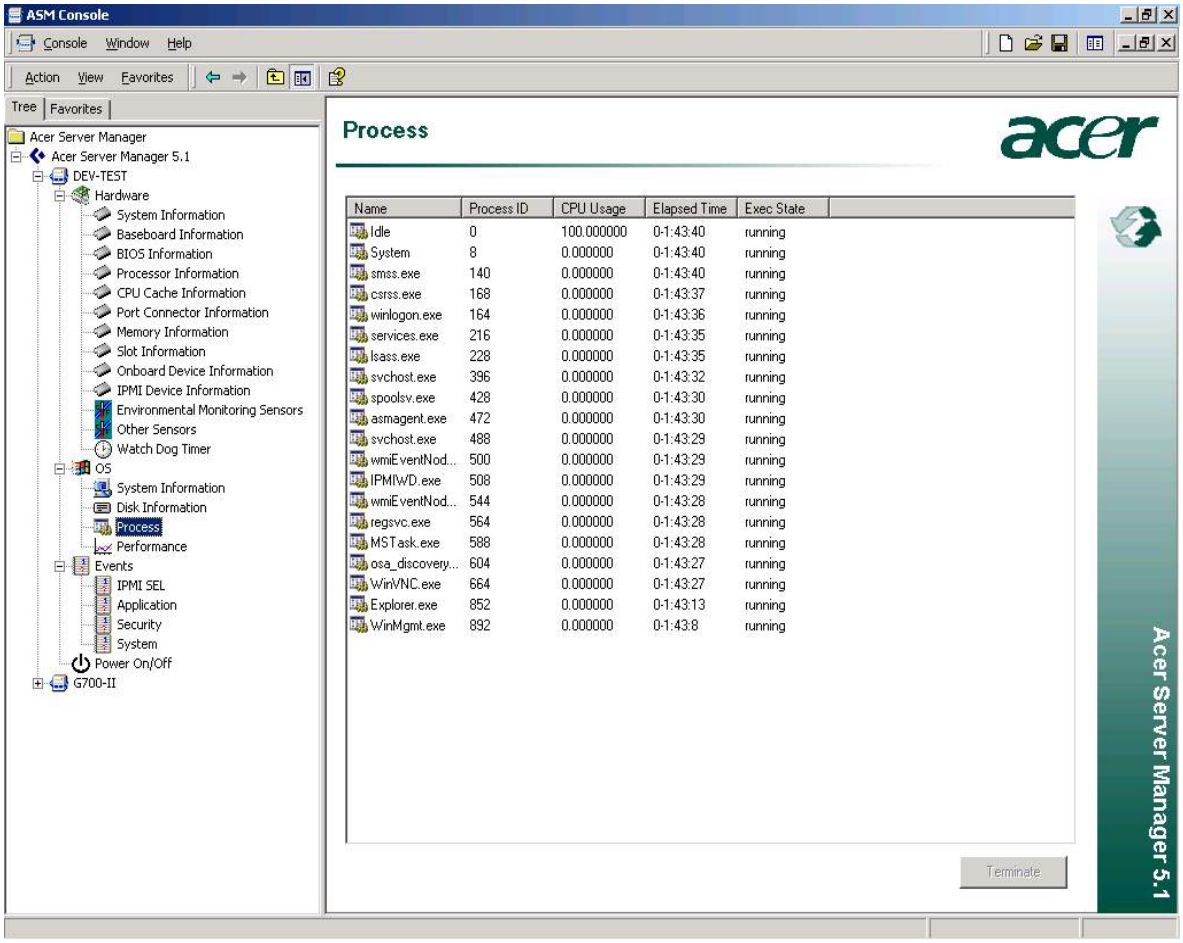
- ***Disk Information***

"Disk Information" displays information such as deviceID, description, size, etc.



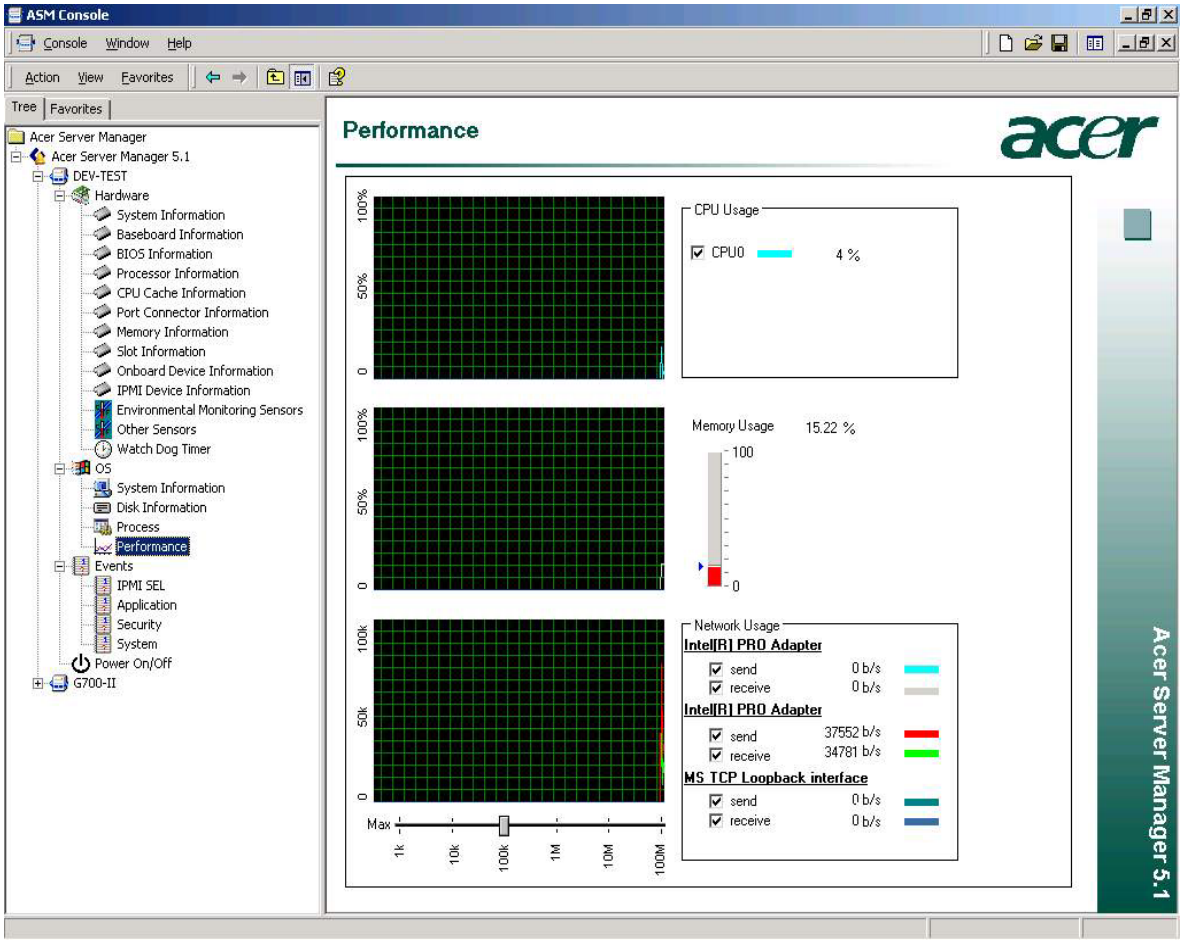
- ***Process***

"Process" lists all the currently active processes with their name, processeID, cpuUsage, elapsedTime, and Status



- ***Performance***

Administrator can monitor the node's CPU, Memory, and Network Usage dynamically. Click on the button located on the upper right corner of the display pane to START or STOP real-time monitoring.

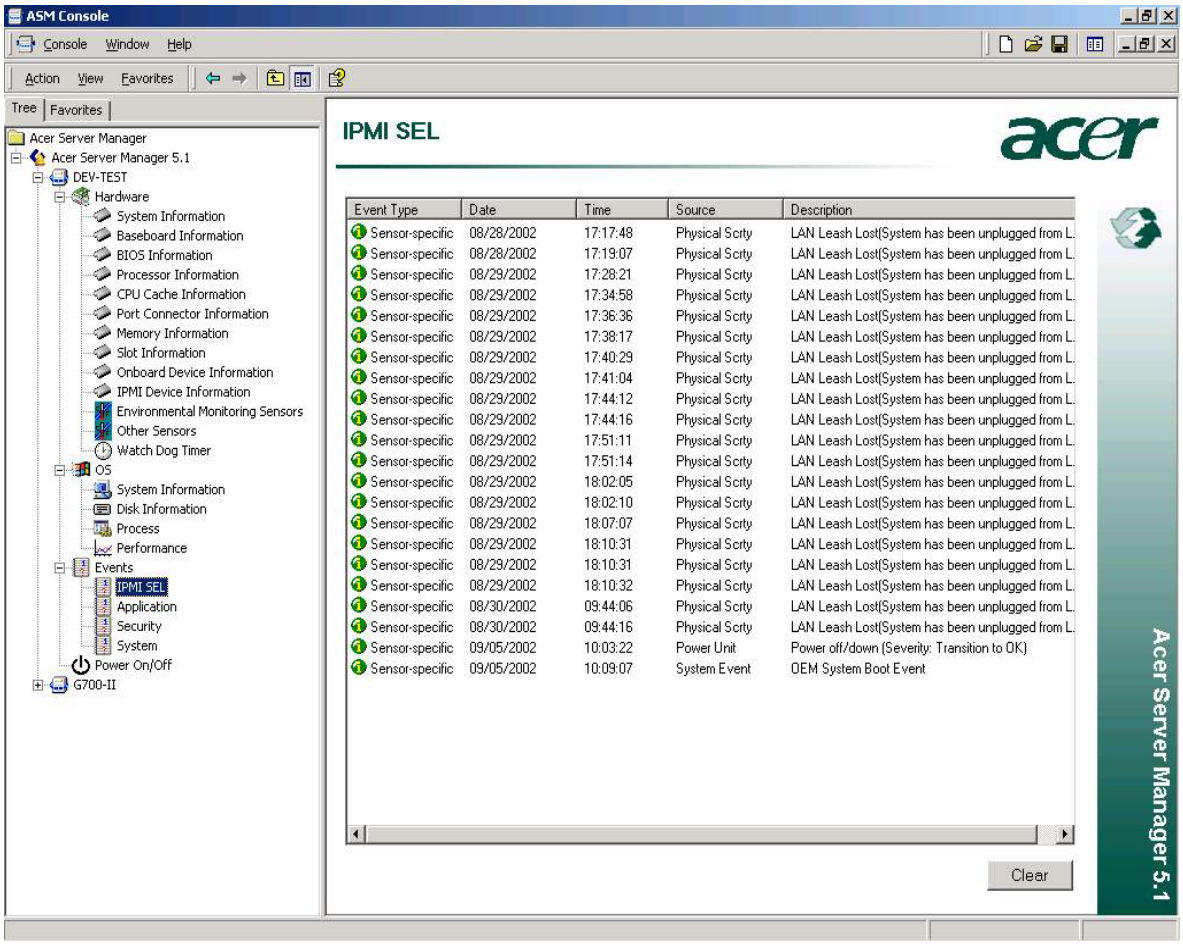


3.6.1.3 Get Events information of a Managed node

Selecting "Events" will show the contents of the target system's Event Log. The events table could be sorted in ascending or descending order by clicking on the column header.

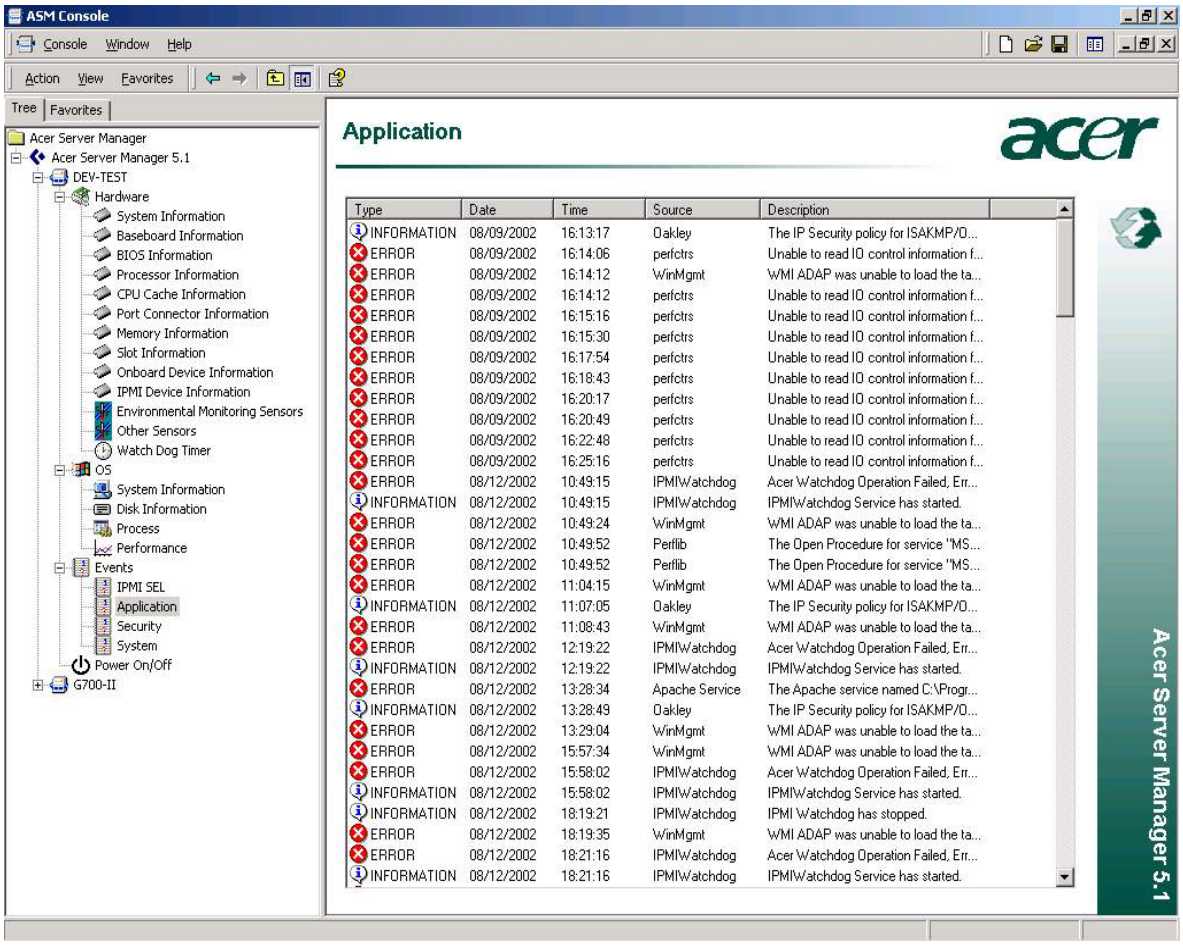
- ***IPMI SEL***

"IPMI SEL" retrieves event log related to IPMI

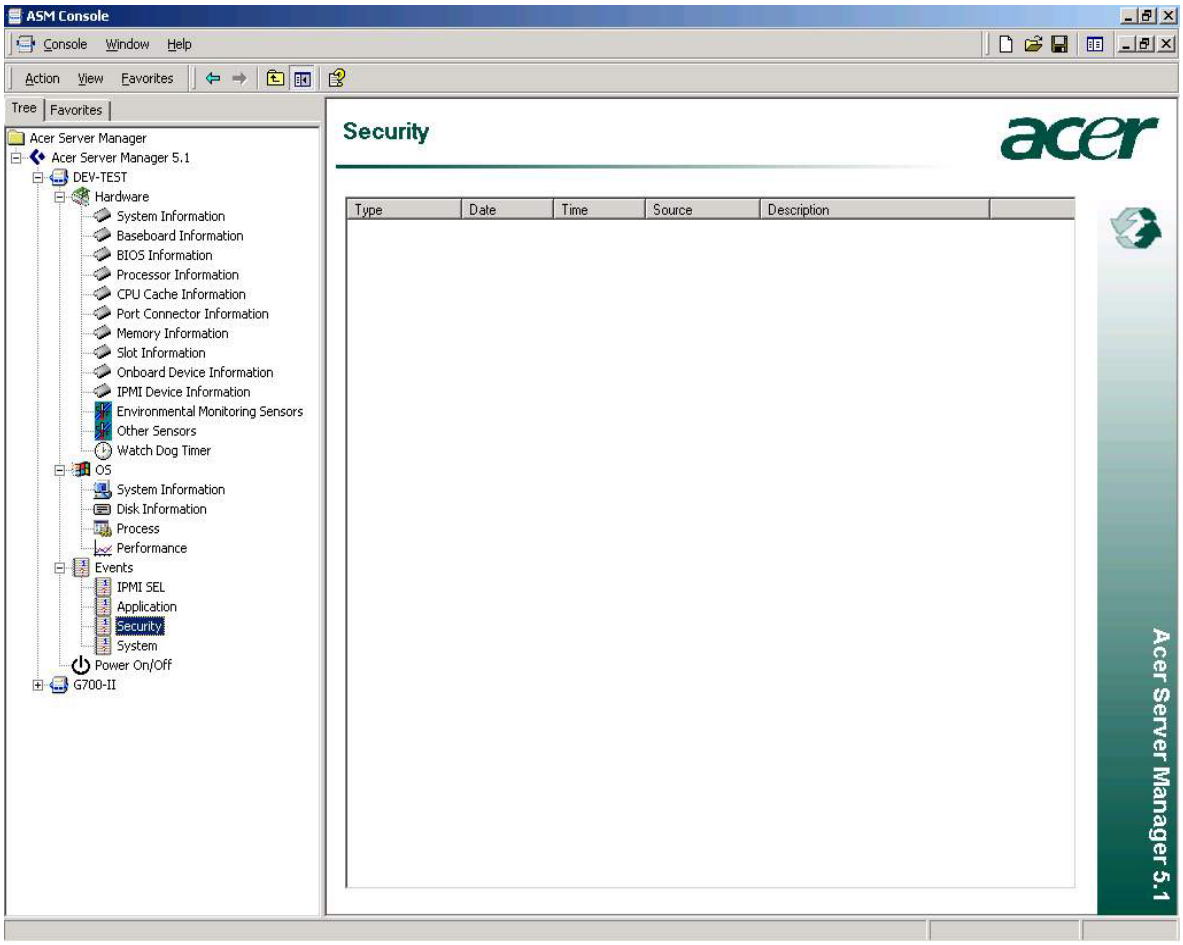


- ***Applications***

This item gets application event log.

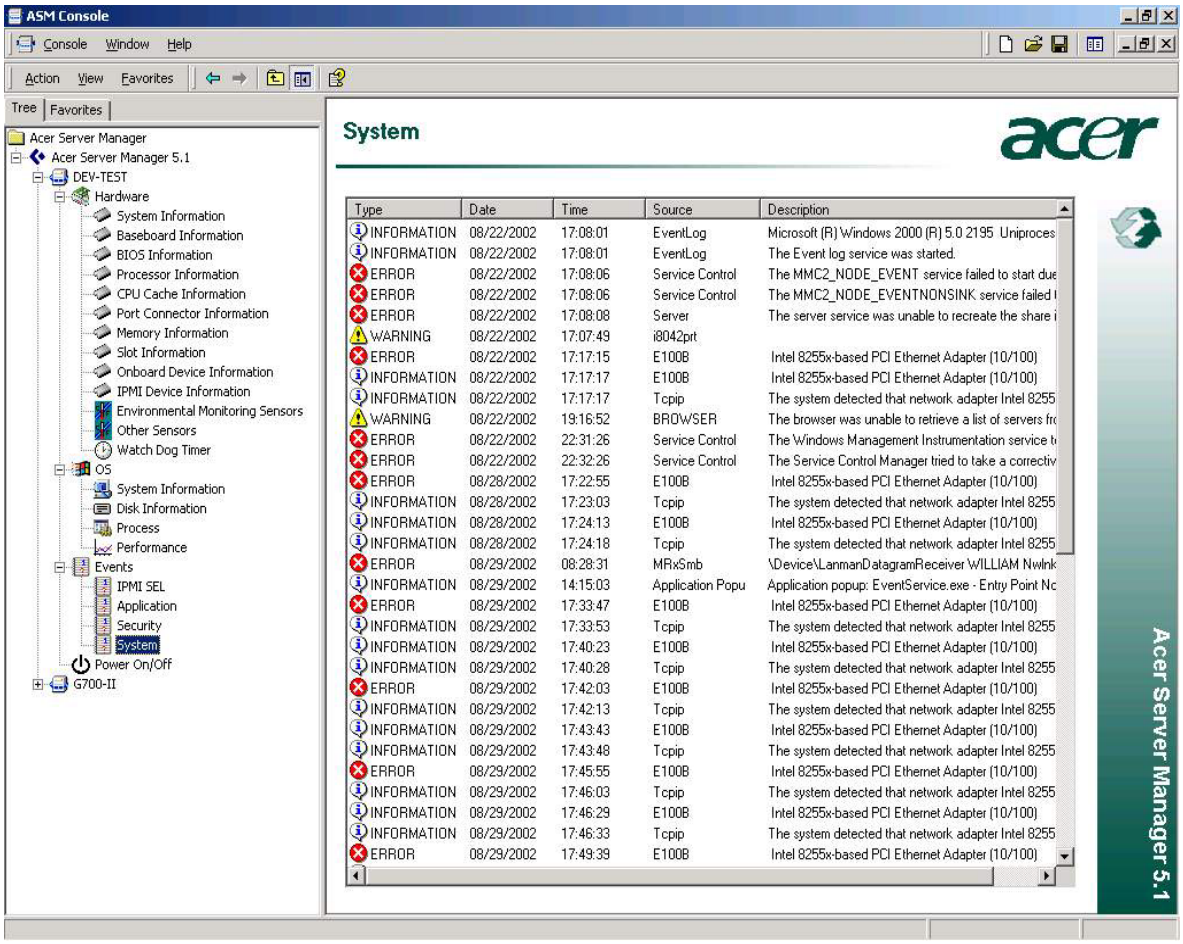


- ***Security***


ASM Console
Console
Window
Help
Action
View
Favorites
Tree
Favorites
Acer Server Manager
Acer Server Manager 5.1
DEV-TEST
Hardware
System Information
Baseboard Information
BIOS Information
Processor Information
CPU Cache Information
Port Connector Information
Memory Information
Slot Information
Onboard Device Information
IPMI Device Information
Environmental Monitoring Sensors
Other Sensors
Watch Dog Timer
OS
System Information
Disk Information
Process
Performance
Events
IPMI SEL
Application
Security
System
Power On/Off
G700-II
Security
acer
Type
Date
Time
Source
Description
Acer Server Manager 5.1

- ***System***

The System Event Log was retrieved via SMBIOS on the G300, and from the BMC on each of the other server models supported by Acer Server Manager. Color-coded icons are used to denote the severity (non-recoverable/critical/non-critical) of the respective events.



3.6.2 Settings

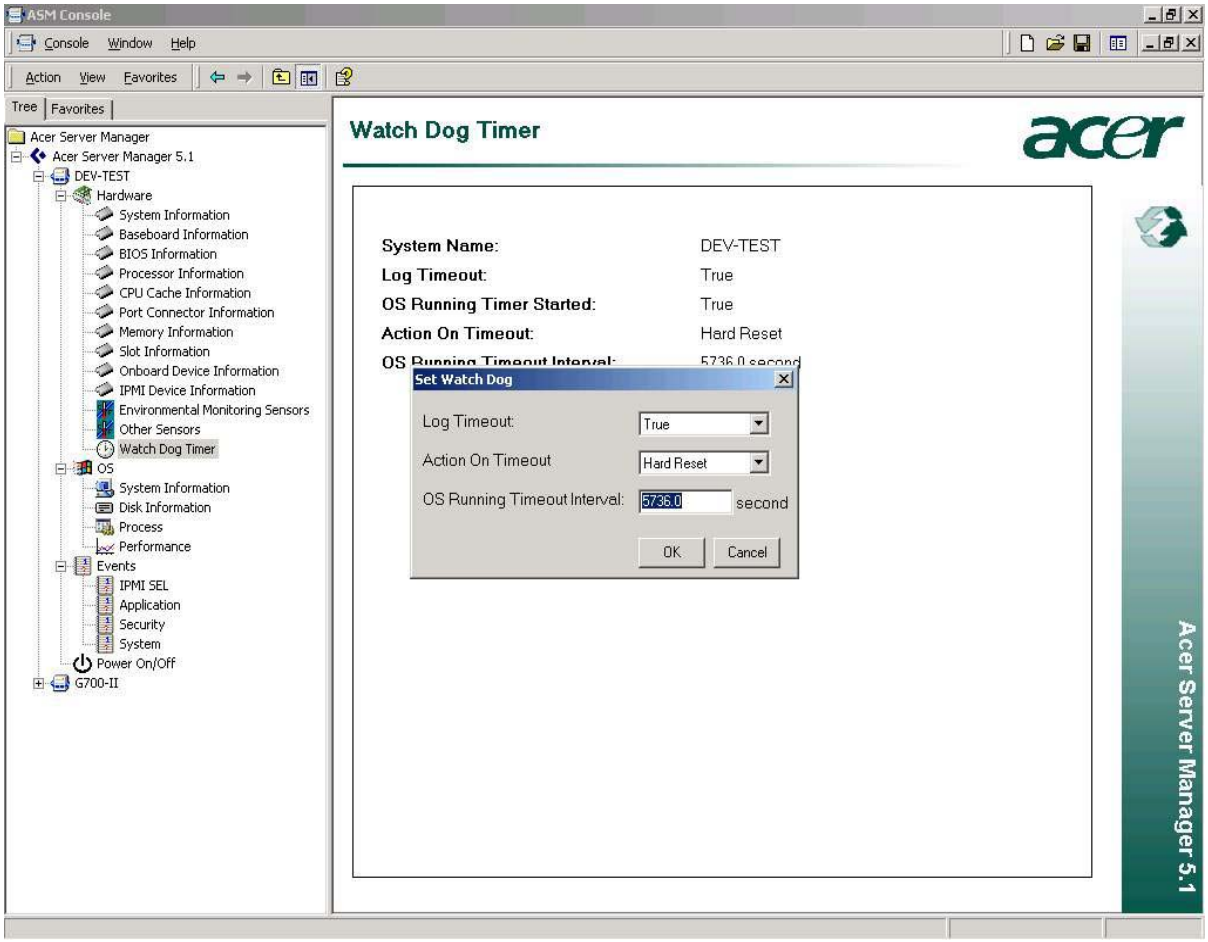
With ASM Console, administrators may also perform more complicated tasks such as Remote Power On/Off, OS shutdown and reboot, terminating processes, and setting the watchdog timer.

- ***Set Watch Dog Timer***

User may remotely set IPMI Watchdog timer via ASM Console.

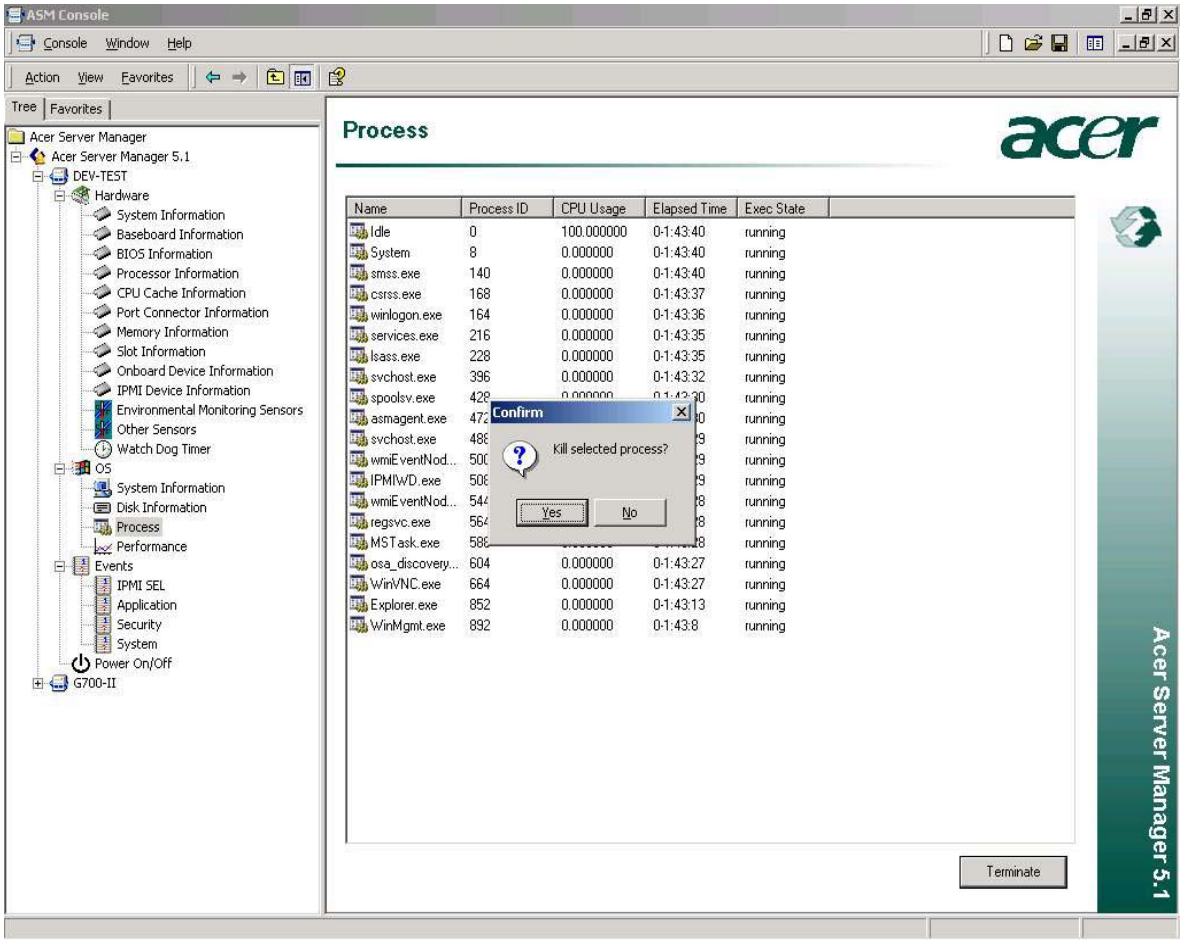
When "Watch Dog Timer" is selected, Click on "Set" button in the display pane, it brings up a dialog where user may input his configuration. Clicking on "OK".

You may also Set Acer Watchdog timer if it is present



- ***Terminating a Process***

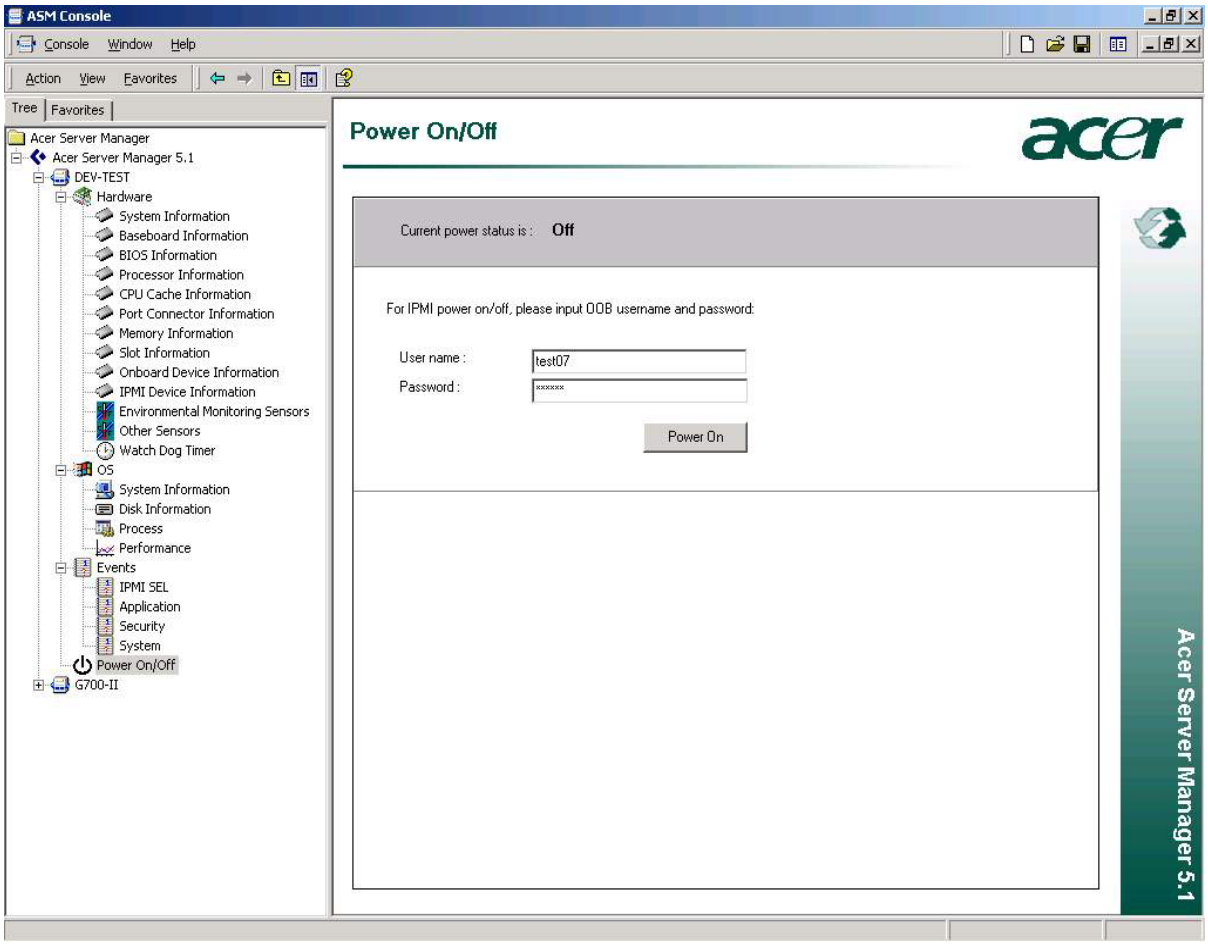
Within ASM Console, user can highlight a process, and click on the "Terminate" button to kill that process remotely.



3.6.3 Power On/Off

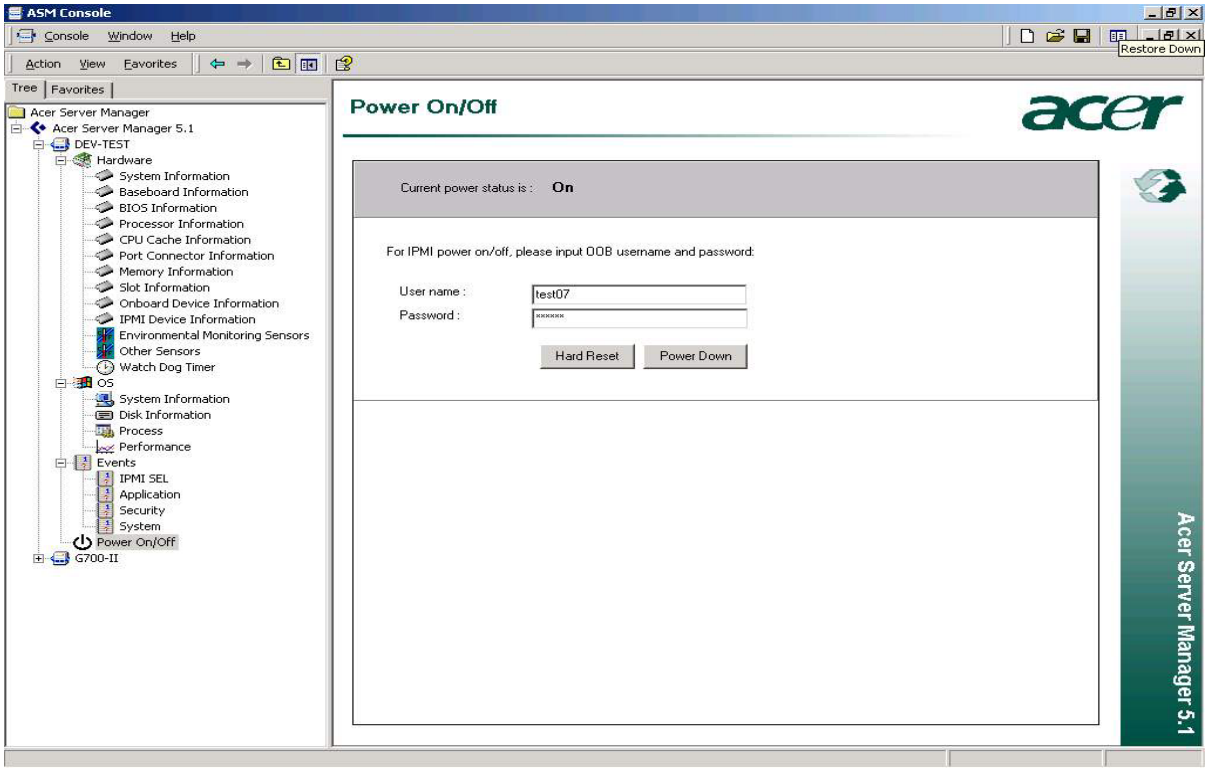
When Power On/Off is selected in the **Console Tree**, ASM console will first of all get the latest status of target computer. This will take a few seconds.

If the target node is off, but with OOB available, you can input OOB username and password to power it on.

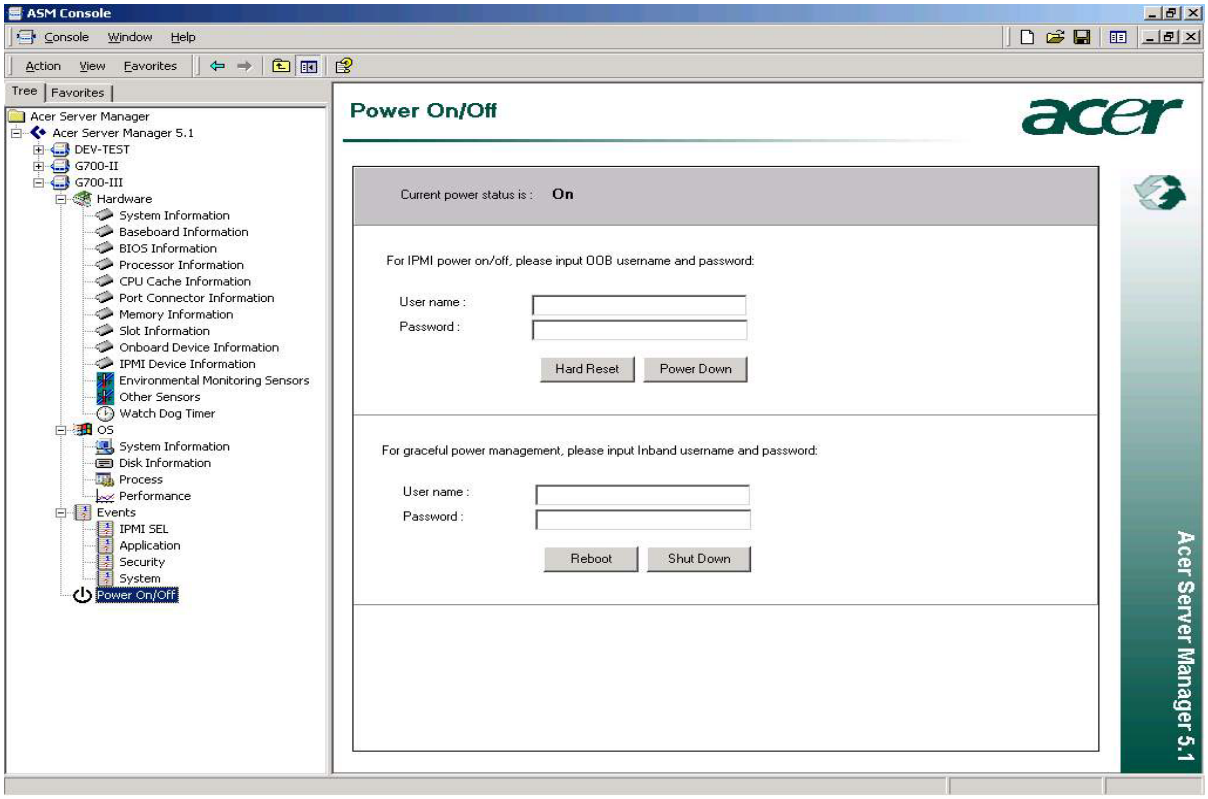


Click on "Yes" of the "Confirm" message box.

If the Power On was successful, "Current power status" in the display pane will be updated to "On". And User can now perform a "Hard Reset" or "Power Down" with IPMI OOB support.

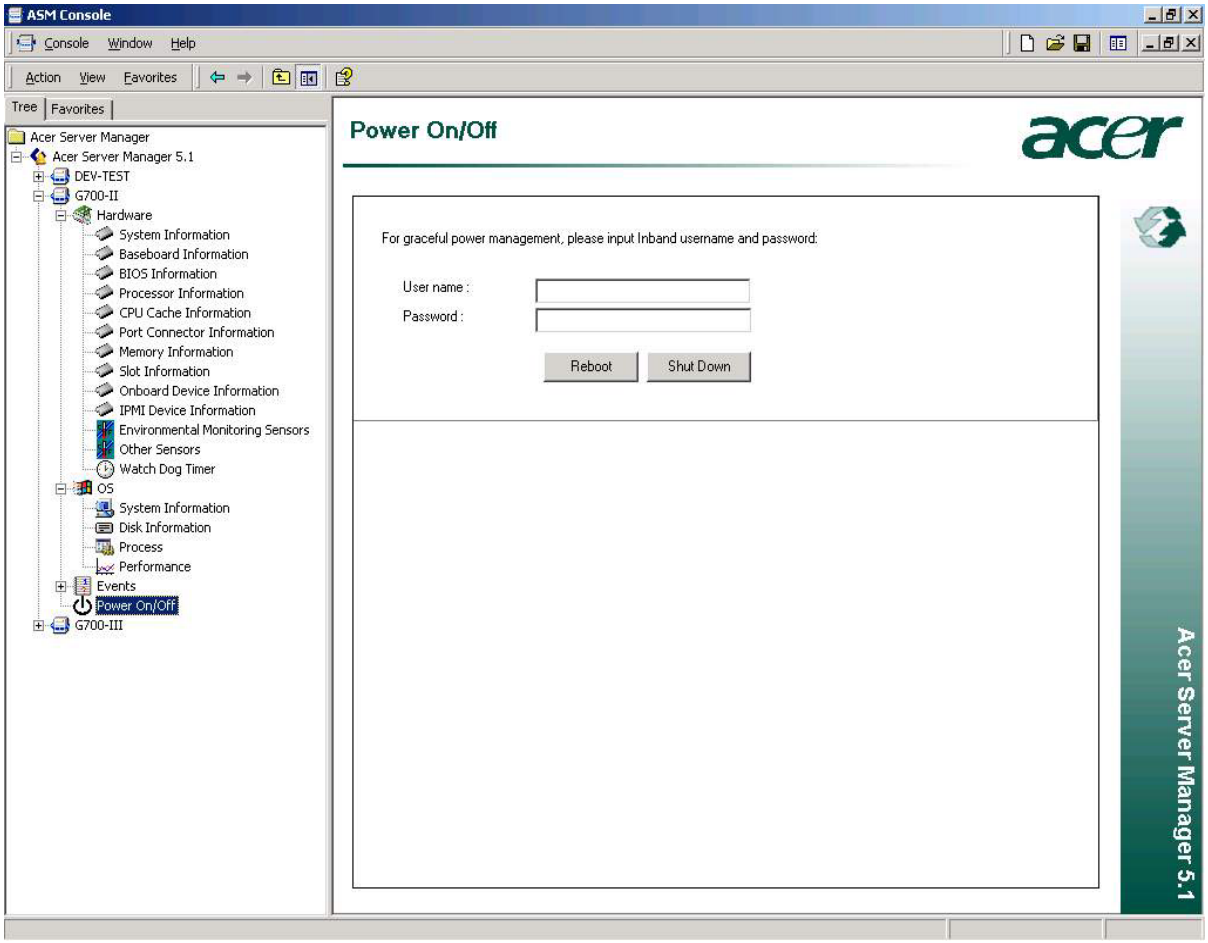


Refresh "Power On/Off" page after the OS is up and running. ASM Console will also allow user to perform IN-Band "Reboot" or "Shut Down" in addition to OOB "Hard Reset" and "Power Down".



Notice:

Since there is no IPMI support on platform G300, user can only do IN-Band "Reboot" or "Shut Down.



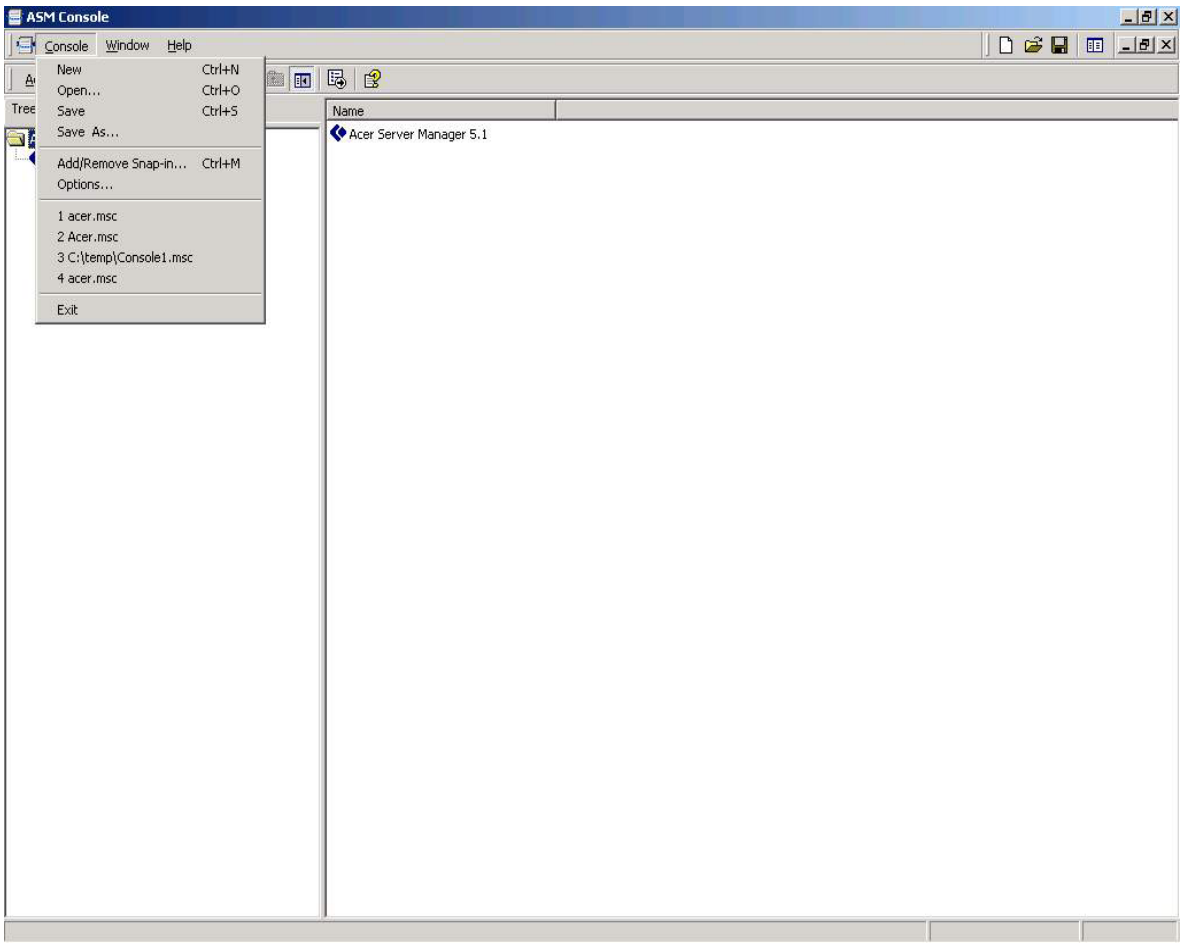
3.7 Setting up an Authorized account

When trying to add an IN_Band node, User will be prompted for username/password. This username/password pair is used to access the ASM agent, which is a WMI services, on that node.

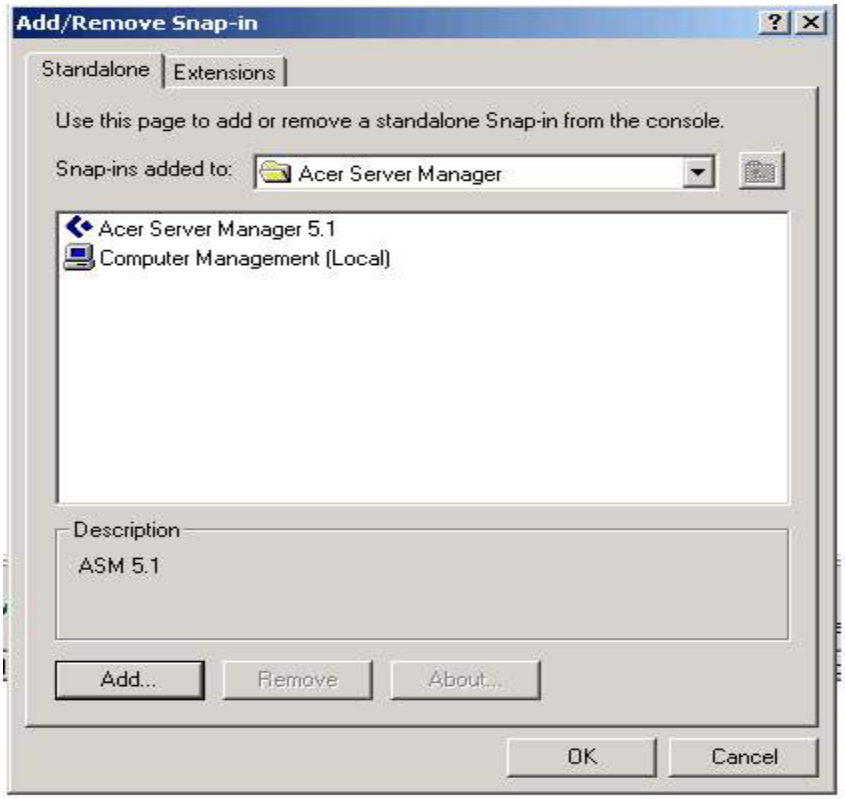
You surely can use the Administrator's account when prompted for user name and password. You can also add an ordinary user account to the Administrator's Group, so that the user has access to ASM agent on your server, as well as anything else you as an administrator can do.

However, if you want to grant a normal user account only the permission to access ASM agent on your server, you can take the following approach.

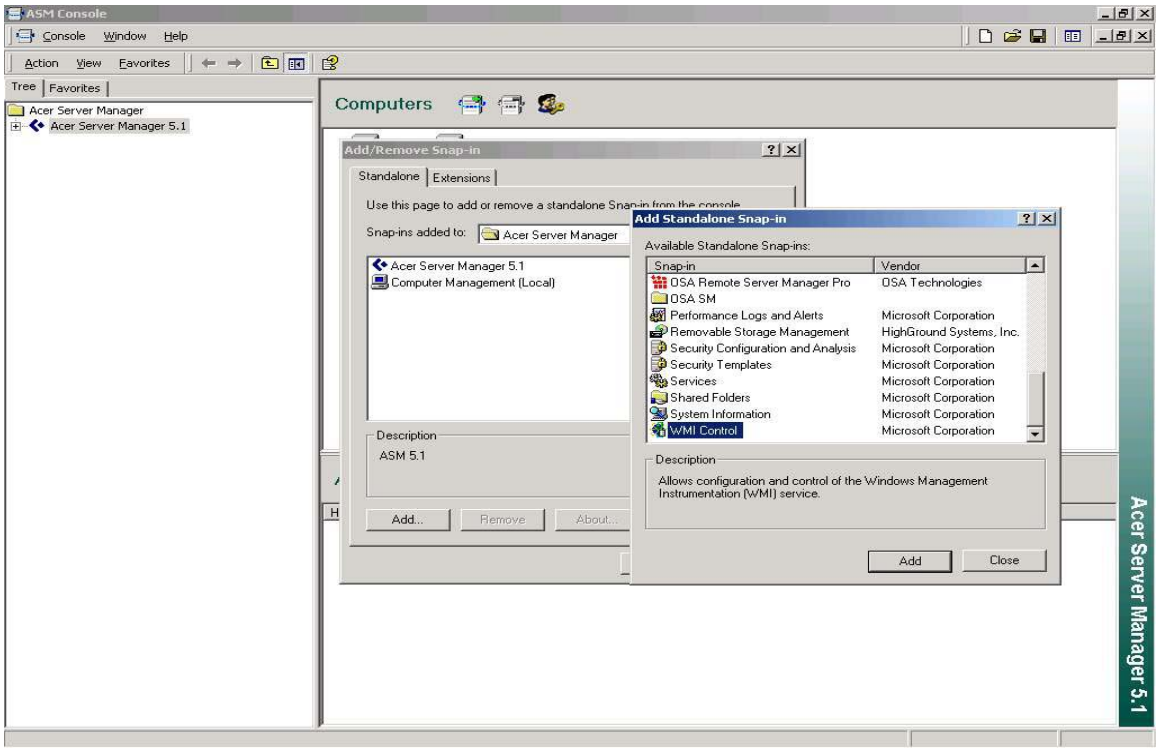
1. In the ASM Console application window. Click on Menu "Console", then on "Add/Remove Snap-in…"



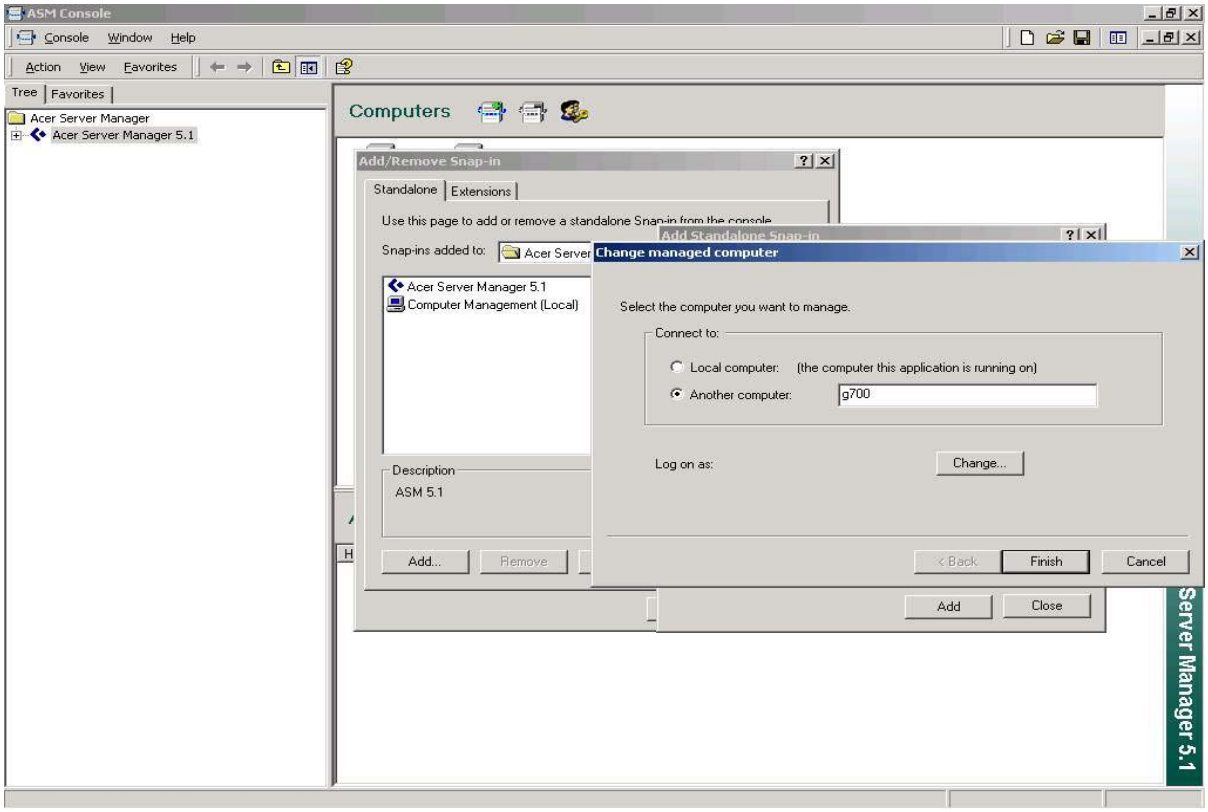
2. Click on "Add" button of the "Add/Remove Snap-in…" dialog box



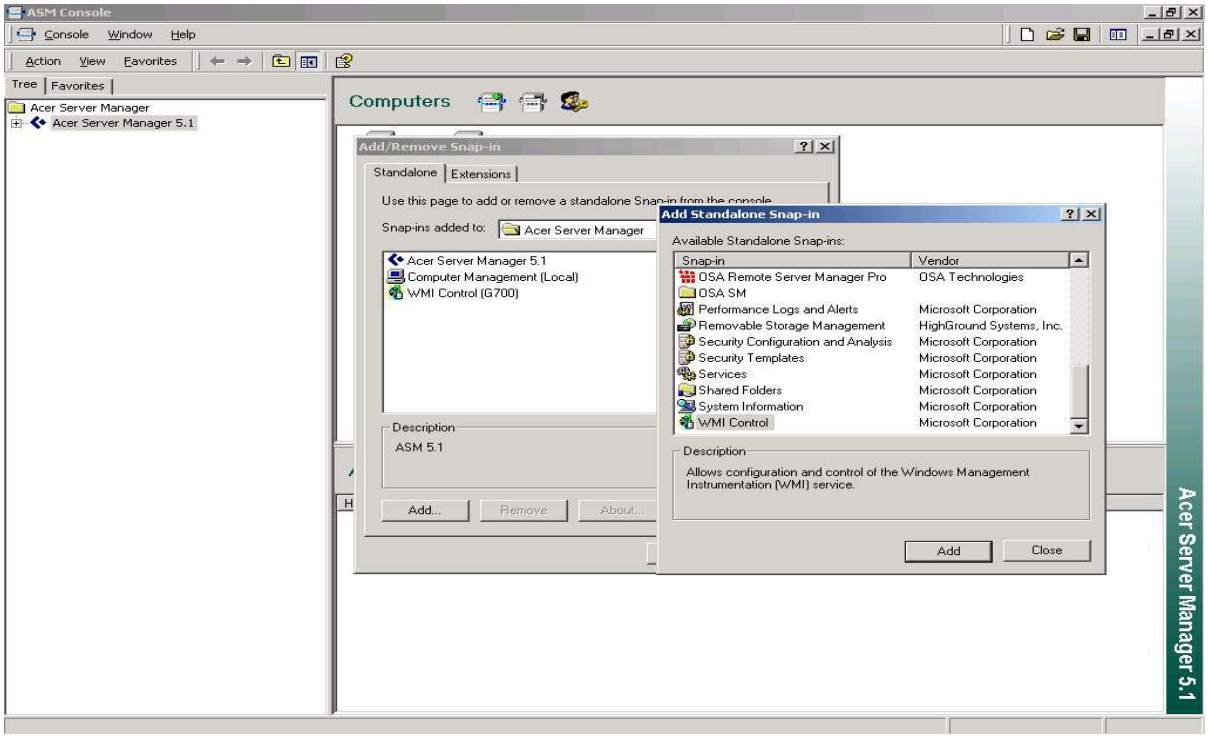
3. As the "Add Standalone Snap-in" dialog box pops up, select "WMI Control" from the list box, and Click on "Add"



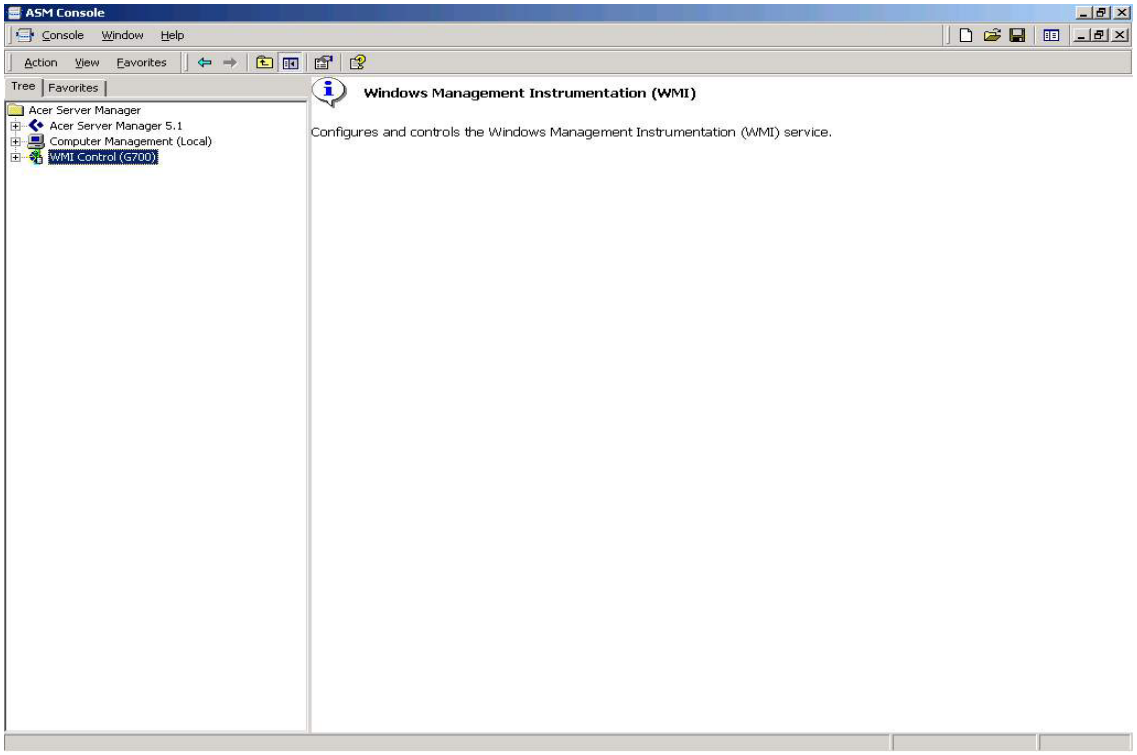
4. This brings up a "Change managed computer" dialog box. In this example, we show how to set up the permission for user "DEV-TEST\ice" so that he can access ASM Agent on server "DEV-TEST" from this local system. So select "Another computer" and type the server name "DEV-TEST", and click on "Finish".



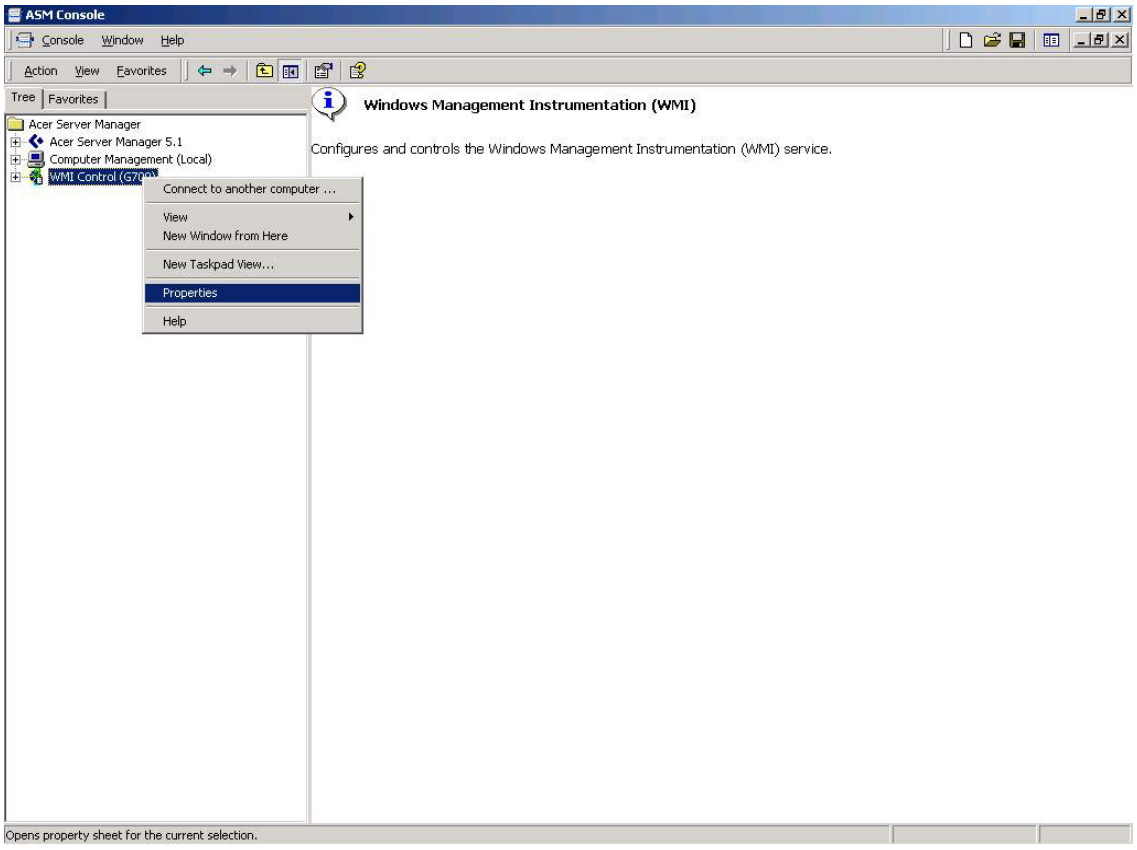
5. You can observe from the "Add/Remove Snap-in" dialog box that the WMI Control [DEV-TEST] has been added.



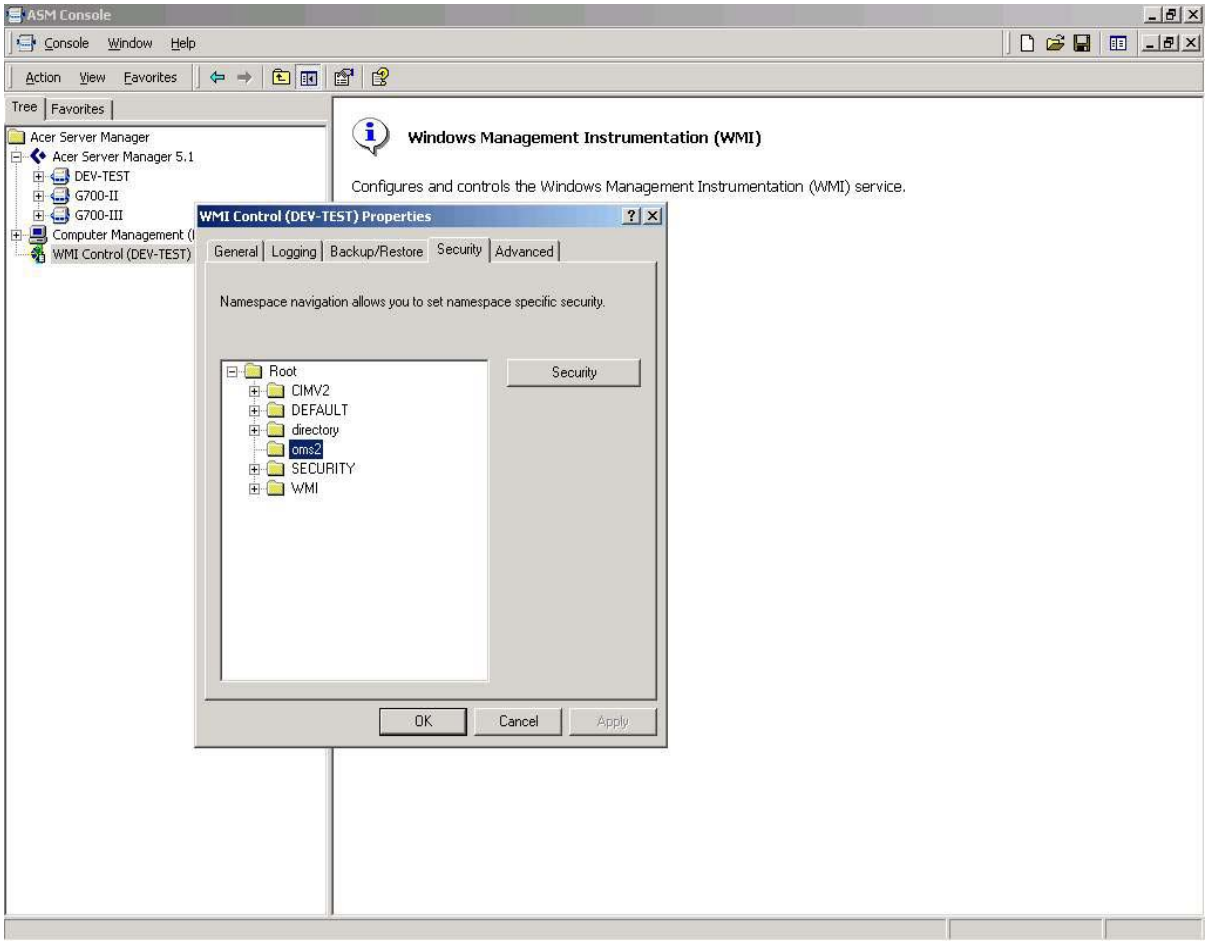
6. Close all dialog boxes, and you have a screen looks like this



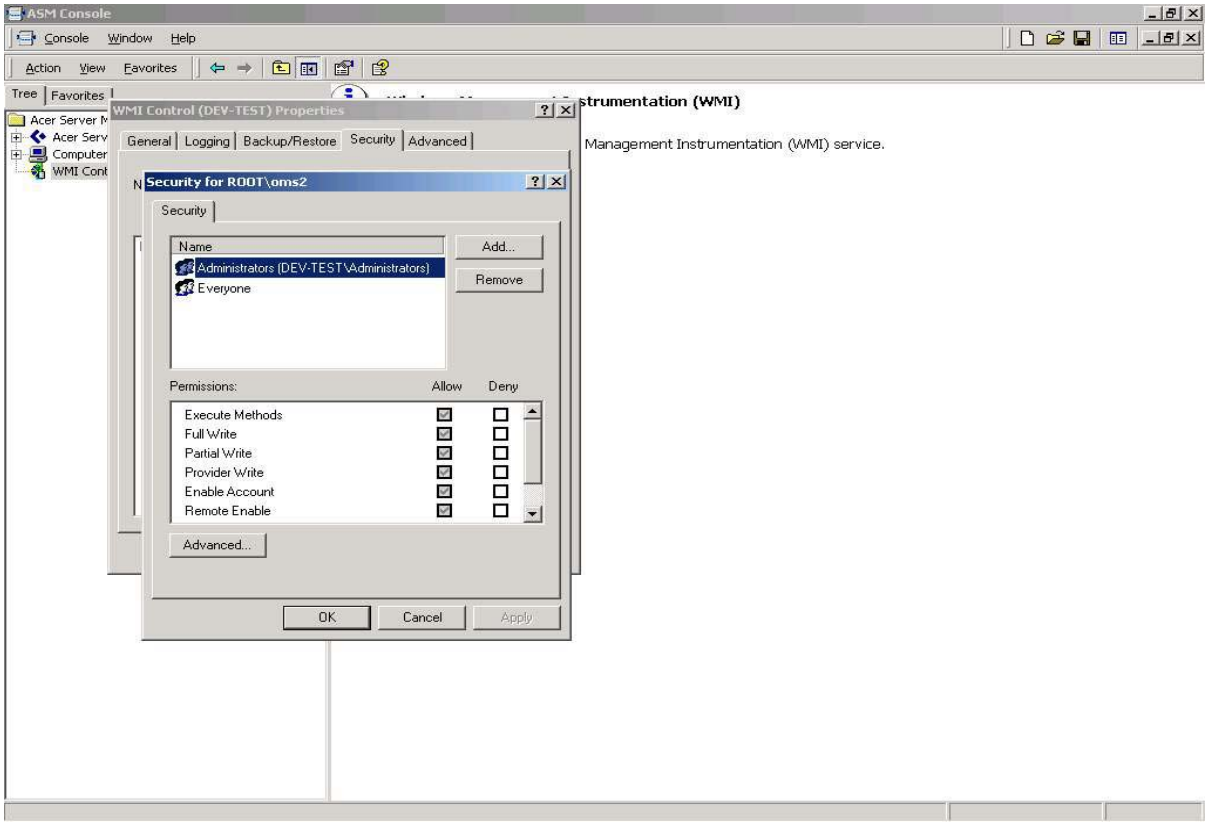
7. Right Click on the "WMI Control (DEV-TEST)", and select "Properties" from the pop up menu



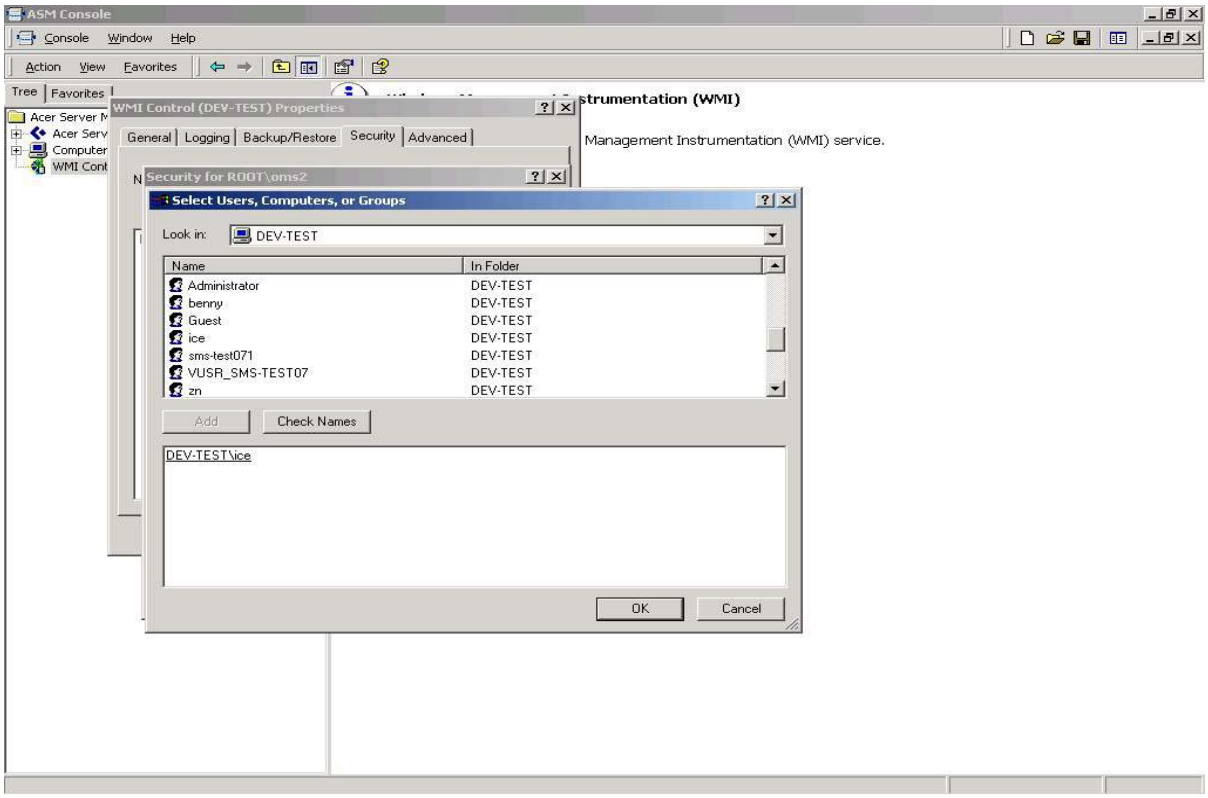
8. Select Tab "Security", highlight "\Root\oms2" in the browse window, and click on button "Security"



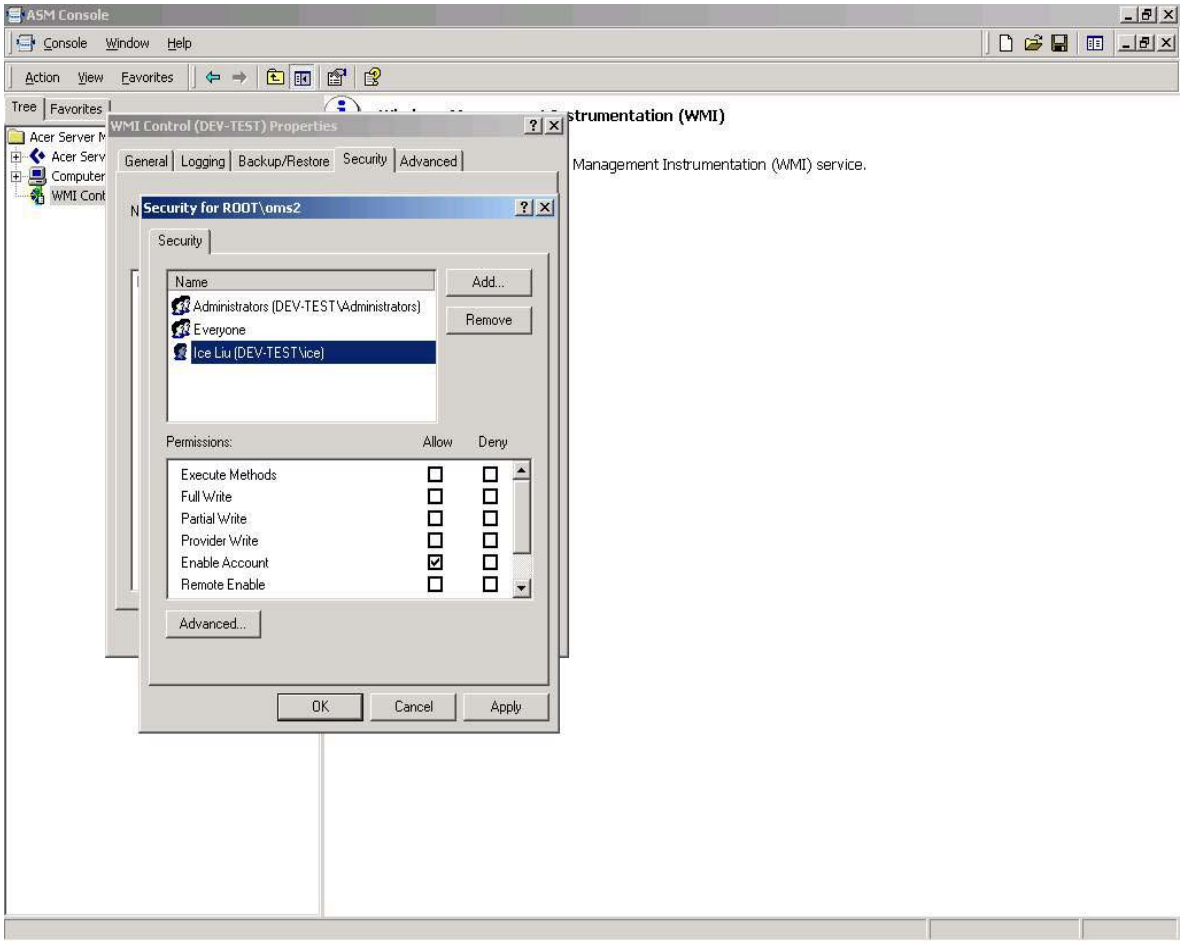
9. As the "Security for ROOT\oms2" dialog box appears, Click on "Add" button



10. It brings up a "Select Users, Computers, or Groups" window, Select the user you want to grant permission, click on "Add". As an example, we added user "DEV-TEST\ice".



11. Click on "OK", and you are back to the "Security for ROOT\oms2" dialog box, when the newly added "Ice Liu [DEV-TEST\ice]" is highlighted, you are able to set the permissions for this user. The permissions you should allow for user "ice": "Enable Account", "Remote Enable", and "Read Security". Click on "OK" to confirm.



You are all set now. User "Ice Liu" should be able to access ASM agent on Server "DEV-TEST" remotely via an ASM Console.

4 Uninstalling ASM

During installation, some files will be copied to the hard disk directory you specified. You may wish to remove these files some time in the future to retrieve hard drive space. In addition, you have to uninstall before you reinstall / upgrade the ASM software.

4.1 Uninstalling ASM agent

To uninstall ASM agent, click

`Start → Programs → Acer Server Management Suite → Uninstall ASM agent`

If ASM agent is still running, it should be stopped before you can uninstall it. Click

`Start → Programs → Acer Server Management Suite → Stop ASM agent`

4.2 Uninstalling ASM Console

To uninstall ASM Console, click

`Start → Programs → Acer Server Management Suite → Uninstall ASM Console`

Delete the directory where you installed ASM software: This is just for what you have changed some files in this directory and uninstall program can't delete this kind of changed files.

5 Frequently Asked Questions

5.1 General

5.1.1 What is ASM? How is it used?

The Acer Server Manager Version 5.1 is one of the Acer's Server Management Solutions. With this management software, administrators can monitor system utilization such as processor performance, memory usage, events, sensors, and etc., via an intuitive Console GUI.

The ASM software consists of two components:

- **ASM Console**

The ASM Console offers a standard MMC (Microsoft Management Console) GUI. This allows the system administrator to access ASM agent on a remote server.

- **ASM Agent**

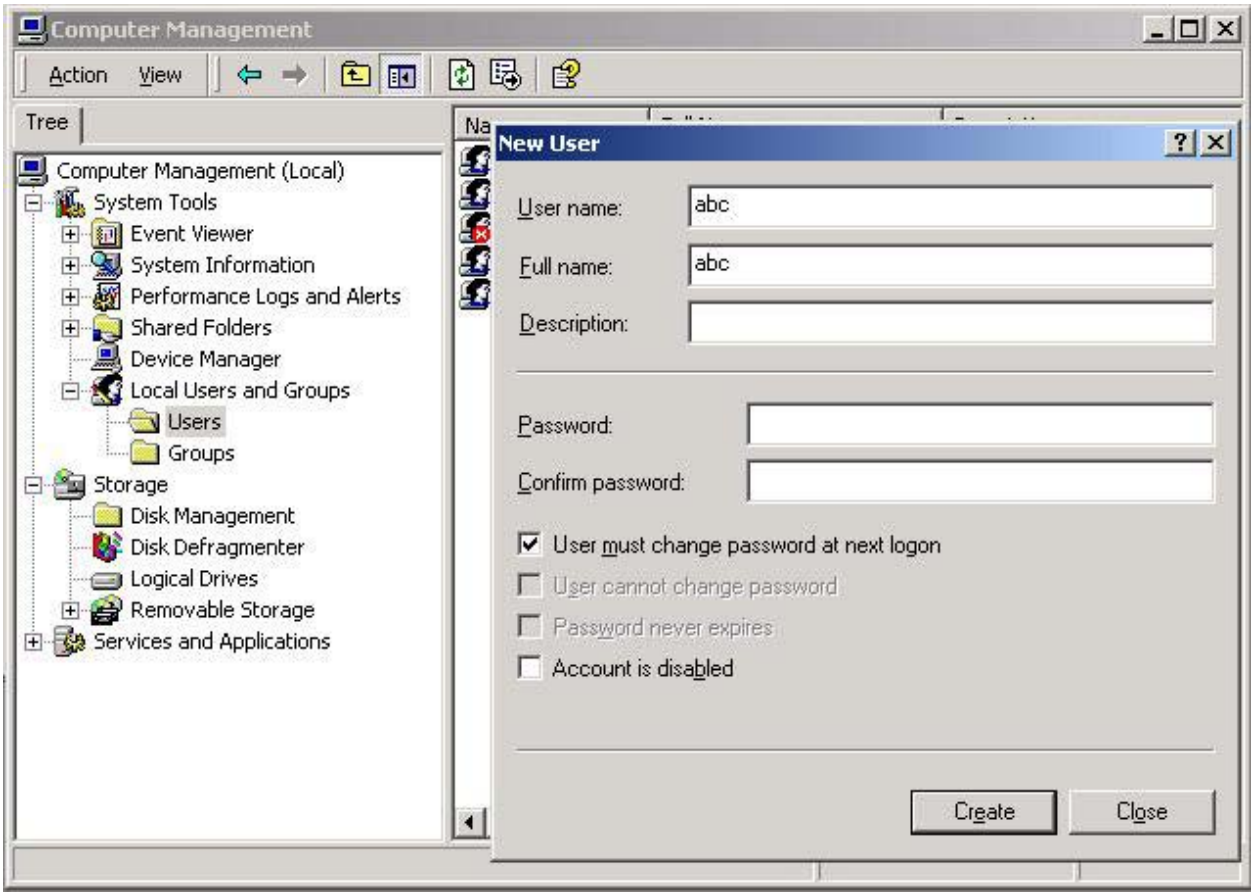
The ASM agent runs on the managed server (or managed node). It extends the standard Windows WMI services, which is available by default with the installation of a Windows Operating System. When ASM agent receives a request for information from the ASM Console, it retrieves data from the SMBIOS provider and the IPMI provider, and returns the data to the Console.

5.2 Installation and Configuration

5.2.1 Can't access ASM agent with a newly added user account.

Q: I added a new user account and set up its permission to access the ASM agent following the procedure in this manual, but I failed to use this new account to access ASM Agent remotely.

A: When you are adding a new user account, the option "User must change password at next logon" might be checked. If so, you have to logon to the server and change your password before you can use that Account/Password to access the ASM agent remotely, or you can start Control Panel -> Administrative Tools -> Computer Management, and find this user under \Computer Management (local)\System Tools\Local Users and Groups\Users, right click on the user, and select "Properties", and set the account properties there.



5.2.2 ASM reports "IPMI does not exist" while BMC is available

Q: I installed ASM Agent on a platform with BMC and IPMI support, but error message "IPMI does not exist" was reported when I was trying to access the "Management Controller Information".

A: ASM Agent tries to detect BMC and IPMI support only during the installation procedure. Please make sure the BMC card was plugged firmly and configured properly at that time, otherwise, ASM would fail to find IPMI. If BMC is present and ASM console reports "IPMI does not exist", please make sure BMC is alive, and reinstall ASM Agent.

5.2.3 Why is it that sometimes I can see IPMI SEL on the tree and sometimes I don't?

Q: On the "hardware" node on the g700, I see a node for "IPMI SEL" but I cannot find a node for "SMBIOS SEL" On the g300, it is the other way around. Why?

A: ASM keeps track of the hardware capability of each managed node. On the g700, ASM knows that a BMC is available. So retrieves system event log entries (SEL) from the BMC. On the g300, it knows that BMC is not available.

5.2.4 Why is it that on a g700, I do not see the node for OS

Q: I can normally retrieve OS information from the OS node on the tree. But sometimes, the OS node would not appear.

A: The OS node would not appear if you added the g700 to the tree using its OOB IP address, and the OS on the g700 was not active when the addition is made. Delete the computer and add it back, or run Discovery again.

5.2.5 Why is it that I keep getting an error when I tried to retrieve OS data?

Q: I can normally retrieve OS information fro the OS node of the tree. But sometimes, I keep receiving an error message.

A: Check to see if the OS is active. One way to find out is that if you run Discovery again, if the OS is not active, it would not appear on your In-Band list.

5.2.6 Out-Of-Band UserID/Password

Q: How do I set up OOB userid/password? When do I need one?

A: ASM v5.1 does not provide the facility to set OOB userid/password. You would need an OOB userid/password when you add a new server to your managed tree, or when you perform Power On/Off functions. Some manufacturers preinstall an "anonymous" userid with no password at the factory.

5.2.7 Cannot add a server to the Managed-node tree

Q: I run discovery and found this server on the In-Band list. But I cannot add it to the tree.

A: Please make sure that this server is on the same LAN segment or in the same Windows workgroup. The easiest way to do this is to check "My Network Places" in Windows. Our discovery logic crosses LAN segments and Windows workgroups. But WMI has limitations. We do depend on WMI on a lot of our operations. Move the server to the same LAN segment/workgroup.

5.2.8 Auto-Discovery

Q: I added a new server, installed with an ASM agent to my network. Will it automatically appear on my Managed tree?

A: No. We do not perform auto discovery in ASM 5.1. You need to add it manually, or run Discovery.

5.2.9 Configurations for Alerts

Q: Can I change the alert settings?

A: In the Alert component, you can change the filters, and the corresponding actions. In ASM 5.1, we do not allow the user to change the other settings.

5.2.10 CPU Usage Alerts

Q: I have a workload that occasionally drives the CPU to run at 100% busy? Would I receive CPU Usage alerts continually?

A. No. We take samples on CPU busy once every 10 seconds. Only if 10 of the last 12 samples exceed 90% would a CPU Usage alert be generated. Furthermore, we do not alert the user for the same event more than once per minute. The most CPU Usage alert that you would get is 1 per minute.

5.3 What is planned for future releases of ASM?

The following features are planned for future releases of ASM:

- Support for additional operating systems (Linux, Netware, SCO)
- SNMP trap support
- SNMP MIB support
- System resources management
- Additional system information
- Out-of-band management through serial port
- Automatic server restart
- Remote management over the Internet
- Console redirect

Appendix A: Acer Server Manager Version 5.1 Quick Installation Guide

System Requirements

ASM agent

- Intel Pentium III, 500 MHz
- 128MB of RAM
- SCSI/IDE hard drive with at least 100MB Disk space available
- Microsoft Windows NT 4.0, Windows 2000 Server/Advanced server

ASM Console

- Intel Pentium III, 500 MHz or faster
- 128MB of RAM
- SCSI/IDE hard drive with at least 100MB Disk space available
- Microsoft Windows 2000 Professional/Server/Advanced Server
- Ethernet Card

System Setup

Installing ASM agent

1. Make sure Windows 2000 is installed successfully, and the server is connected to the network. This procedure will allow you to diagnose and resolve networking issues before you start to install and configure ASM agent.
2. Logon to Windows 2000 using the Administrator account
3. Insert Acer Server Manager Version 5.1 CD into CD-ROM drive, the installation program will run automatically, if it does not, in Windows Explorer, double-click on "<CDROM Drive Letter>:\setup.exe". This will bring up the installation program.
4. Follow the installation wizard until you are prompted to choose a destination directory. You can choose the default location "C:\Program Files\Acer", or specify another location.

Note: ASM installation may encounter conflicts if you install the ASM into a directory that contains ASM files from previous installs.

5. Next screen allows you to choose the proper components you want to install, Choose the "Install ASM agent" from the drop-down list box.
6. Click on "next", and follow the wizard to finish the procedure.

Installing ASM Console

The installation procedure for the ASM Console is the same as installing the ASM agent, expect for choosing ASM Console instead on step 5.