

Acer Management Solution

Acer Server Manager Version 5.3

User's Manual

April 28, 2003

Revision History

Revision	Revision History	Date
0.1	ASM Console version 1.0	06/02
0.2	Add new features: Discovery, Alert, OS info, Power On/Off	08/02
0.3	New screenshot	09/05
0.4	Revised for demo version	10/05/02
0.5	Further revisions for demo version	10/25/02
0.6	Modified for ASM Version 5.2	12/03/02
0.7	Add HP OpenView NNM integration section Add ASF configuration section	12/05/02
0.8	Modification for ASM Version 5.3	04/28/03

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1 Introduction

1.1 Acer Server Manager Version 5.3 Overview

The Acer Server Manager Version 5.3 is one of Acer Technologies' Server Management Solutions. With this management software, administrators can monitor the health and utilization of server systems, locally and remotely. A Console GUI is provided to monitor critical indicators, including but not limited to: processor utilization, memory usage, events and sensors. On Platforms that support IPMI 1.5, administrators can monitor servers even when the OS is inactive. Further, administrators can shutdown processes, reset Run Time Monitors (Watch Dog Timers), and perform power on/off operations remotely. The new features for this version are remote console access via Intranet and Internet (SSL encryption support), HP OpenView integration and ASF platform event trap management.

From a Console, the system administrator can monitor any designated server on the network with a Management Server, given an Agent has been properly installed on that server. When the system administrator selects a computer from the console, the Console will connect to the Management Server, then the Management Server will communicate with the Agent on that node, retrieve the system's hardware information that is available, perform data process and analysis in the Management Server, and expose to the administrator.

The Server Manager software consists of three components:

- **Console**

The Console offers a standard MMC (Microsoft Management Console) GUI. This allows the system administrator to access the remote Management Server to manage the Agent.

The Console runs as a Management Client, currently supporting Windows 2000 Professional, Windows 2000 Server, Windows 2000 Advanced Server, Windows Server 2003 and Windows XP Professional.

- **Server**

The Server runs on the management server. It extends the standard WMI software, which is available by default with the installation of a Windows Operating System.

Server evaluates requests for information from the WMI consumer (in this case, the Console), identifies which WMI provider has the information, retrieves the system information and perform data process and analysis, then returns the data to the consumer.

OS supported: Windows 2000 Server, Windows 2000 Advanced Server, and Windows Server 2003.

- **Agent**

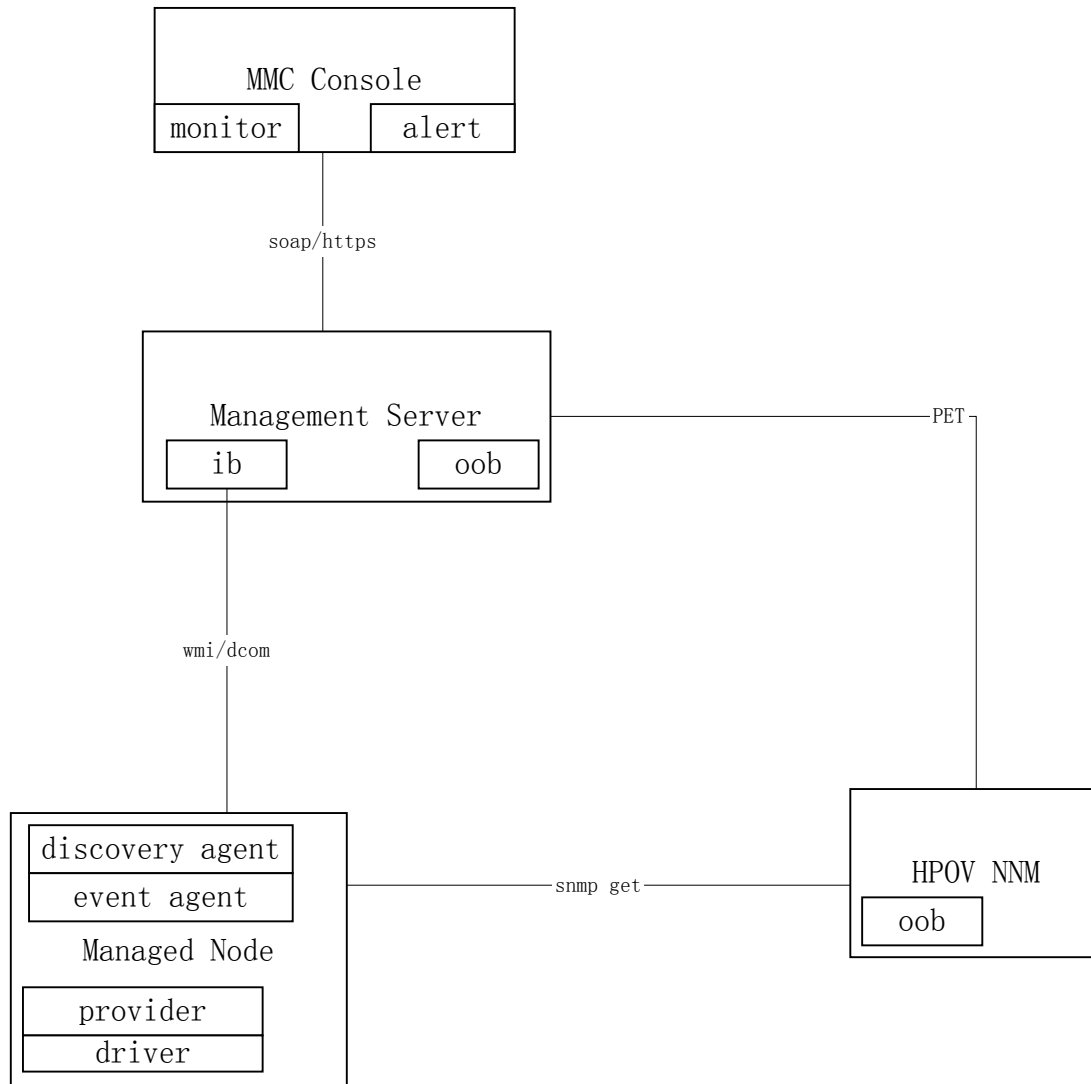
The Agent runs on the managed node. It extends the standard WMI software, which is available by default with the installation of a Windows Operating System.

Agent catches requests for information from the WMI consumer (in this case, the Server), getting the data by executing WMI provider, and sends the data to the consumer. Acer Server Manager extends the standard Windows software with 2 WMI providers, the SMBIOS provider and the IPMI provider.

OS supported: Windows 2000 Server, Windows 2000 Advanced Server, Windows Server 2003 and Windows NT 4.0.

Hardware Platform Supported: R300, G300, G301, G700, G701 and G510.

An example configuration of these 3 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 the Acer Server Manager Version 5.3. The guide is divided into seven sections as follows:

- **Introduction**
Overview of Acer Server Manager components and high-level description of features
- **Installing the Acer Server Manager**
Installation procedures for the Acer Server Manager
- **Configuring and Running Acer Server Manager**
Description of the Console GUI
- **Uninstalling Acer Server Manager**
Procedures to uninstall Acer Server Manager
- **Browsing a Managed Node by HP OpenView NNM**
Procedures to view SMBIOS/IPMI/OS information via HP OpenView NNM
- **ASF Configuration**
Procedures to install ASF firmware and configure ASF
- **Frequently Asked Questions (FAQ)**
Answers to frequently asked questions regarding capabilities, installation, configuration, or use

After reviewing this guide, the reader should be comfortable with deploying and using Acer Server Manager 5.3 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:

Baseboard Management Controller (or BMC)

The Baseboard Management Controller is a microcontroller that provides the intelligence behind Intelligent Platform Management.

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.

CONSOLE TREE

Left pane of the 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 Console GUI, which displays detailed information selected on the Console Tree.

Acer Server Management

The System Management Software referred to in this guide. It consists of 3 components: the Console, the Management Server, and the Agent. The Console presents a standard MMC GUI, and connects to the Management Server, which in turn requests information from Agents running on managed servers.

In-Band

OS-present management scheme. The BMC allows the retrieval of firmware information, and performs shutdown and reboot functions in the presence of an OS, responding to commands issued by system management software.

IPMI

Intelligent Platform Management Interface.

Managed Node (or Managed Server or Node)

The server system on which the Agent is deployed

Management Client

The system on which the Console is deployed.

Out-Of-Band (or OOB)

Pre-OS or OS-absent management scheme. The BMC allows the retrieval of firmware information, and performs shutdown and reboot functions in the absence of an OS.

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. Acer Server Manager reports these predictions for IDE disk drives as alerts. Two kinds of predictions are reported: Pre-failure predictions and Critical predictions. Acer Server Manager simply reports these predictions. The types of health indicators and their thresholds are determined by the disk manufacturer.

SMBIOS

System Management BIOS

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.

WMI Consumer (or WMI Client)

The management application.

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.

HP OpenView NNM

HP OpenView Network Node Manager is an industry-leading network management solution.

1.3 Acer Server Manager Features

At present, the main features of Acer Server Manager are:

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

A complete list of Information provided by Acer Server Manager:

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
- POST/BOOT/Runtime Monitors

OS:

- System Information
- Disk Information
- Process
- Performance

Events:

- IPMI SEL
- Application
- Security
- System

- **Alerts ----**The Console serves as an alert center. Pre-defined events that occur on all managed nodes would be forwarded to the Console. Pre-defined actions can also be assigned to alerts. Actions include: pop-up a Window on the Console, send email messages to a list of recipients, execute a program on the Console, and generate a SNMP trap.
- **Discovery ----** The administrator can specify an IP range, and Acer Server Manager '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 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 Acer Server Manager

Three steps need to be followed to complete the installation of Acer Server Manager.

- Install the Agent on the managed nodes
- Install the Server on the management server
- Install the Console on the management client

This section will detail the installation procedures.

2.1 Installing the Agent

The 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.

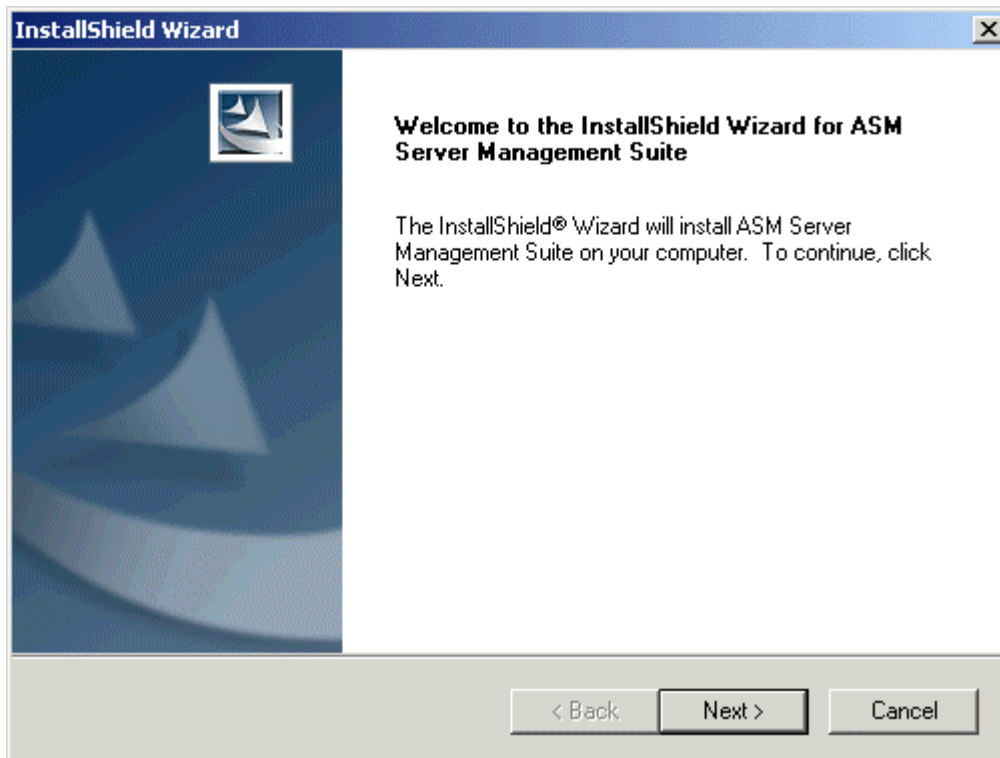
2.1.1 System Requirements

The Agent can be installed on a server 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 <ul style="list-style-type: none">• Server• Advanced Server Windows Server 2003
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 Agent.
2. Logon to Windows 2000 using the Administrator account
3. Make sure Windows SNMP component is installed if you want to install ASM Agent and ASM Management Server
4. Insert Acer Server Manager Version 5.3 CD into CD-ROM drive
The following welcome screen should appear in a few seconds:

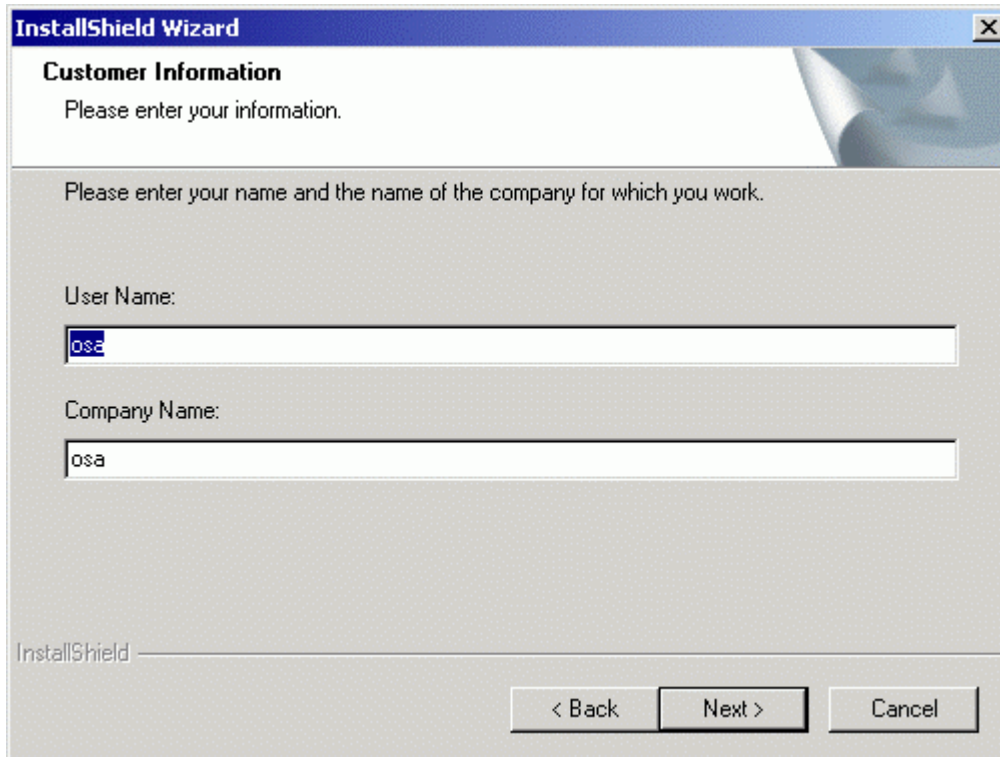


If it does not appear, in Windows Explorer, double-click on

<CDROM Drive Letter>:\setup.exe

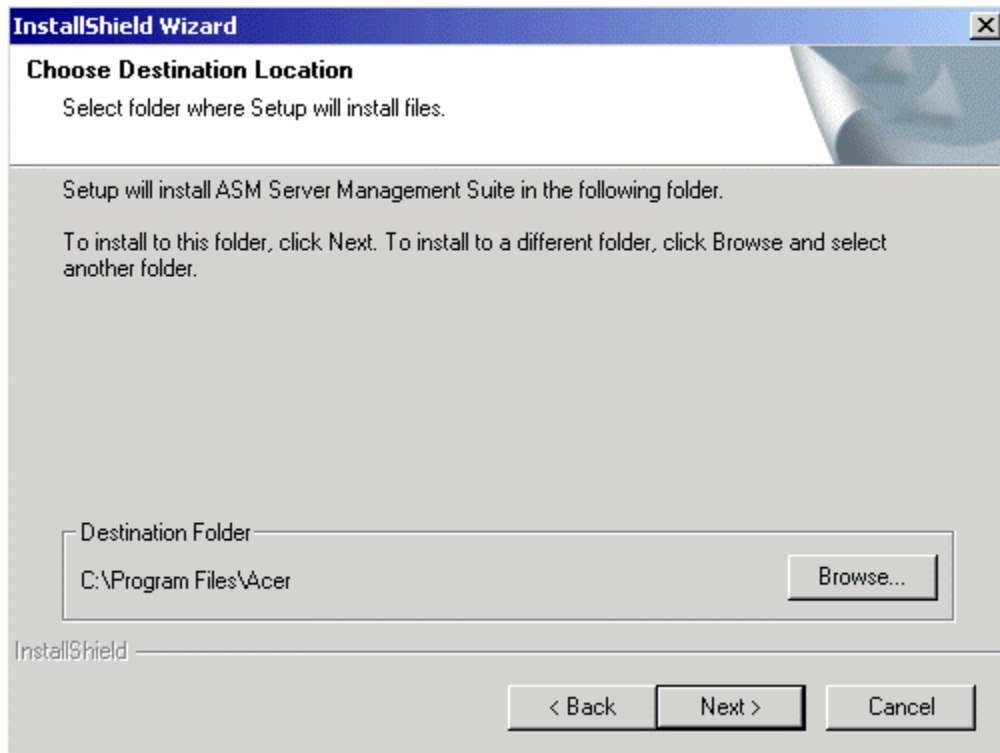
This will bring up the Welcome screen.

5. Click on “Next”, and you will be prompted to enter customer information



The screenshot shows the 'InstallShield Wizard' window with the title bar 'InstallShield Wizard' and a close button. The main heading is 'Customer Information' with a subtext 'Please enter your information.' Below this, a message says 'Please enter your name and the name of the company for which you work.' There are two text input fields: 'User Name:' with the text 'osa' and 'Company Name:' with the text 'osa'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a black border. The 'InstallShield' logo is visible in the bottom left corner.

6. Specify the user name and the company name. And click on “Next”, you will be prompted to choose destination location

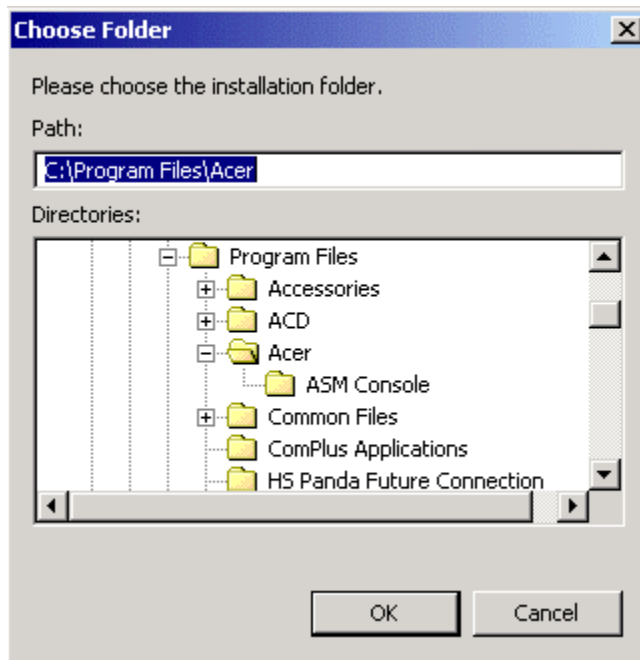


The screenshot shows the 'InstallShield Wizard' window with the title bar 'InstallShield Wizard' and a close button. The main heading is 'Choose Destination Location' with a subtext 'Select folder where Setup will install files.' Below this, a message says 'Setup will install ASM Server Management Suite in the following folder.' followed by 'To install to this folder, click Next. To install to a different folder, click Browse and select another folder.' There is a text input field labeled 'Destination Folder' containing the text 'C:\Program Files\Acer'. To the right of this field is a 'Browse...' button. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a black border. The 'InstallShield' logo is visible in the bottom left corner.

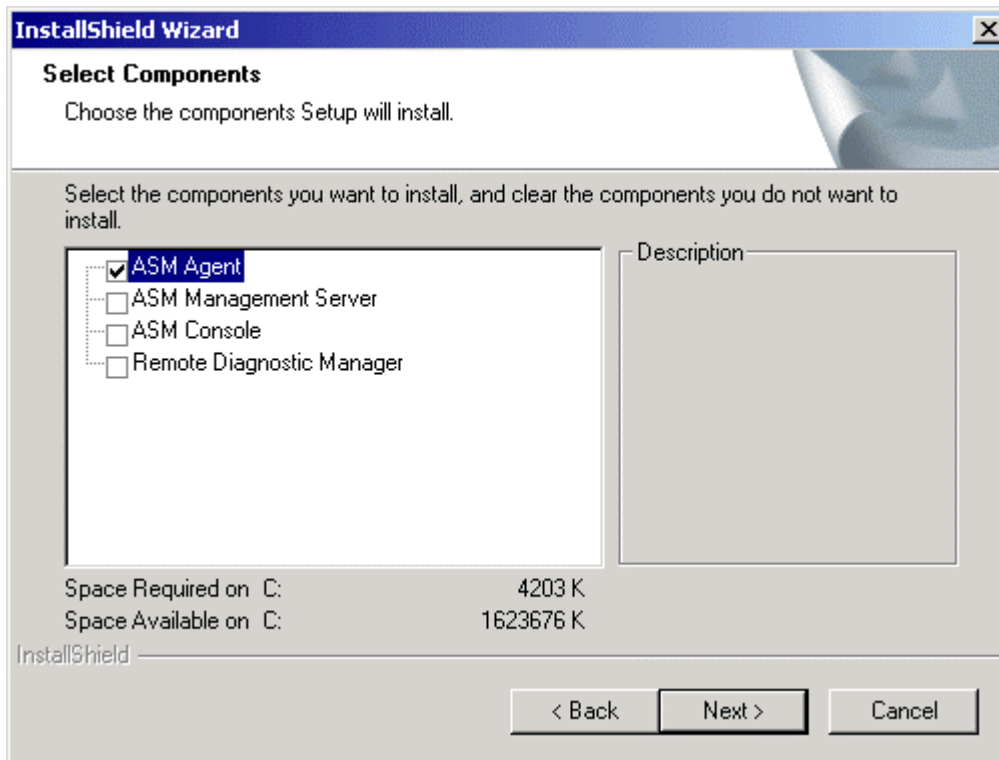
The default directory is:

C:\Program Files\Acer

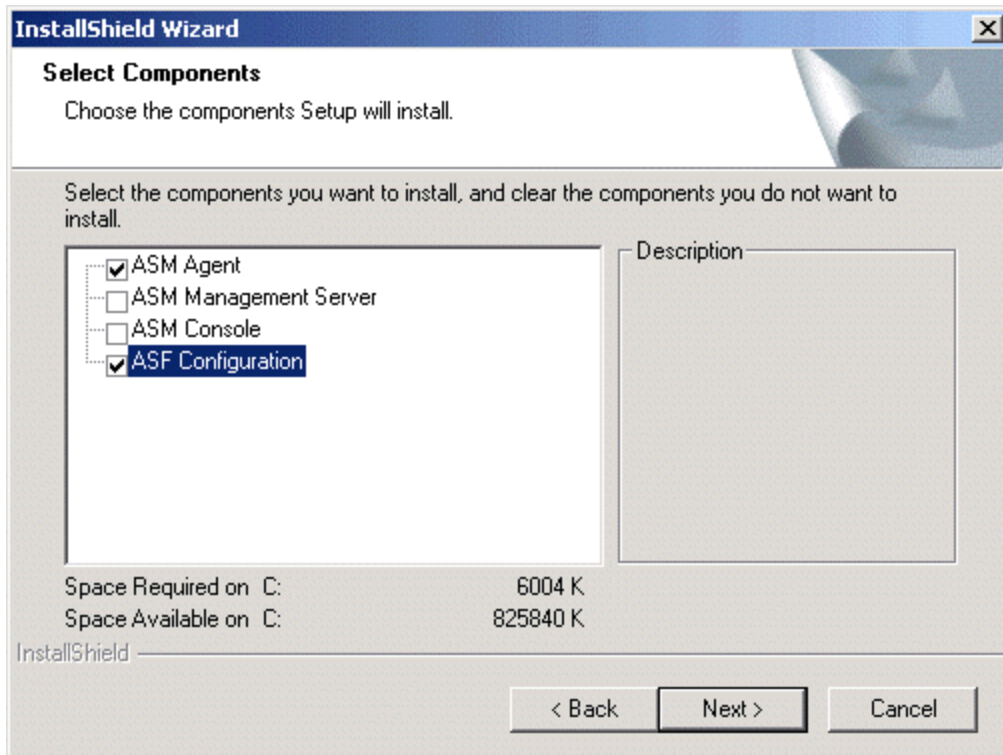
You can specify the destination directory where you want to install Acer Server Manager by clicking Browse button. Click "Next" to continue.



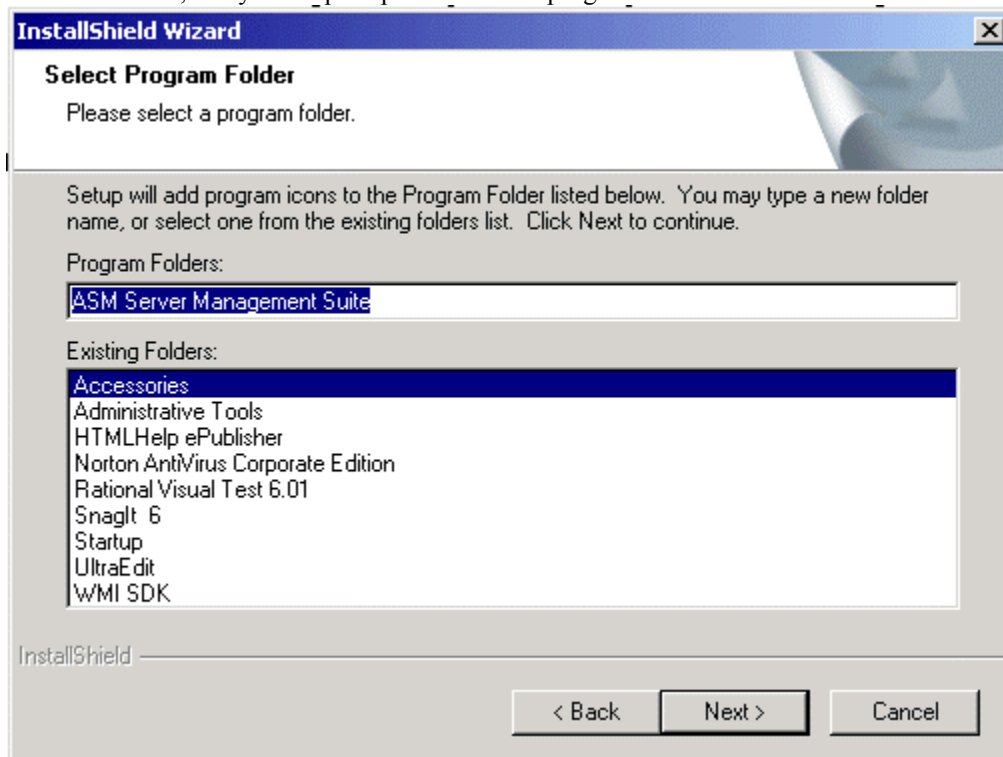
7. Next screen allows you to choose proper install options. To install the Agent on G300, G301, G510, or G700 platforms, check “ASM Agent”. To install the Server, check “ASM Management Server”. You may check the ASM Console and RDM options as well so that they would be installed with the Agent and the Server at the same time, as in the following figure



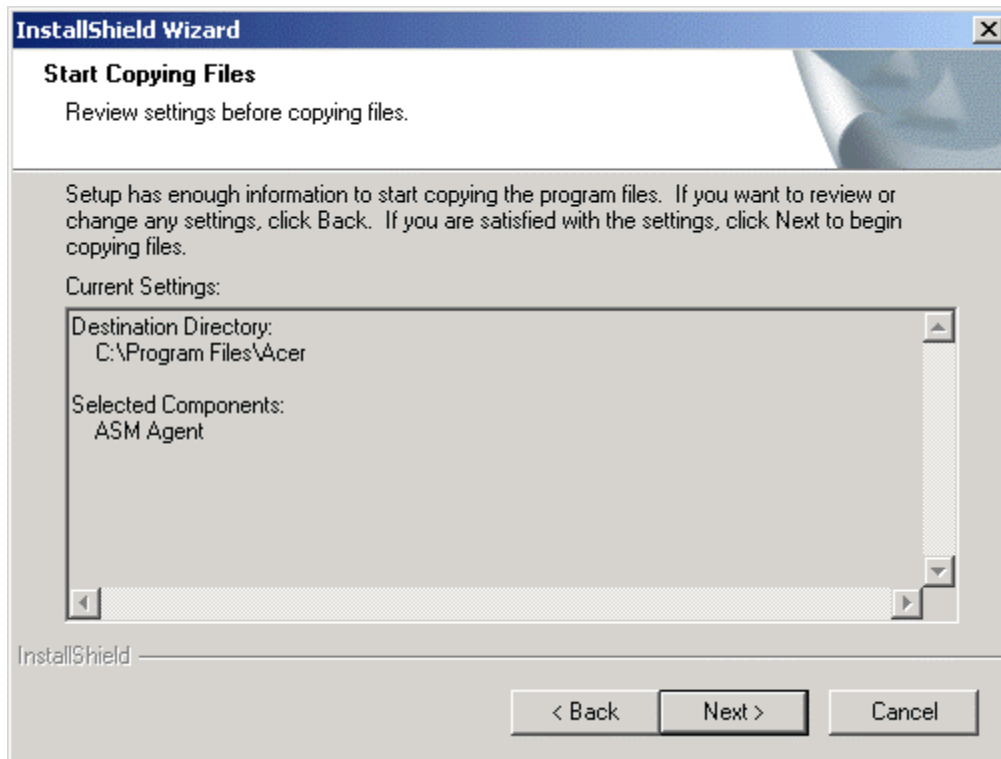
If the managed node is G510, there is ASF Configuration component. You may check the ASF Configuration to install it.



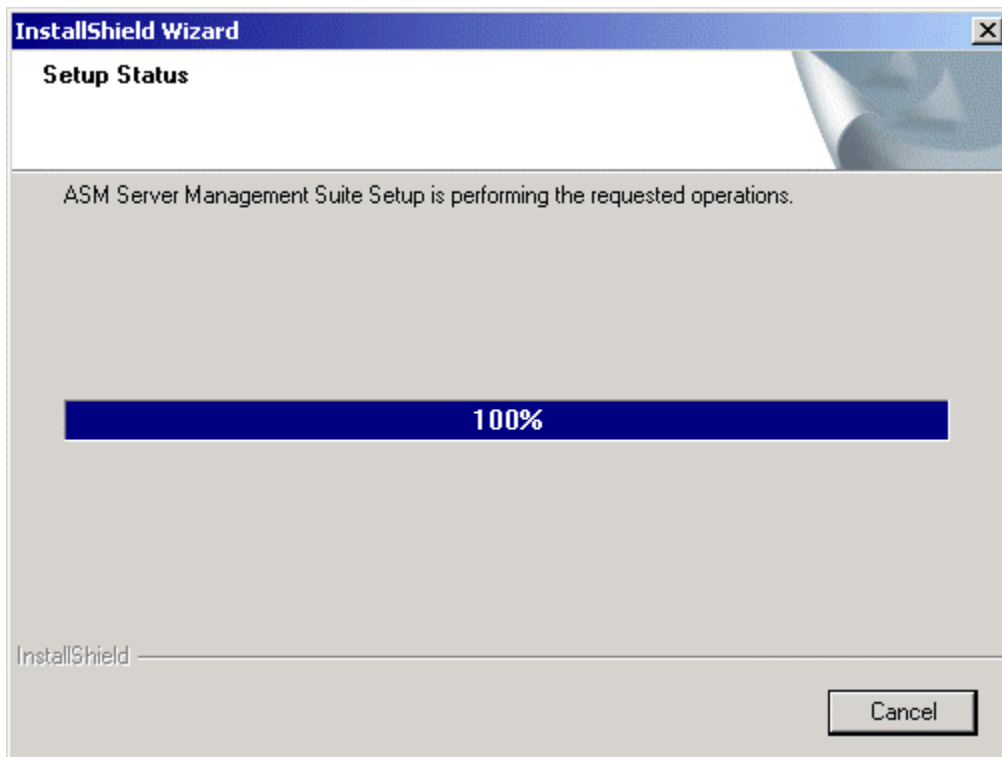
8. Click on “Next”, and you are prompted to select a program folder



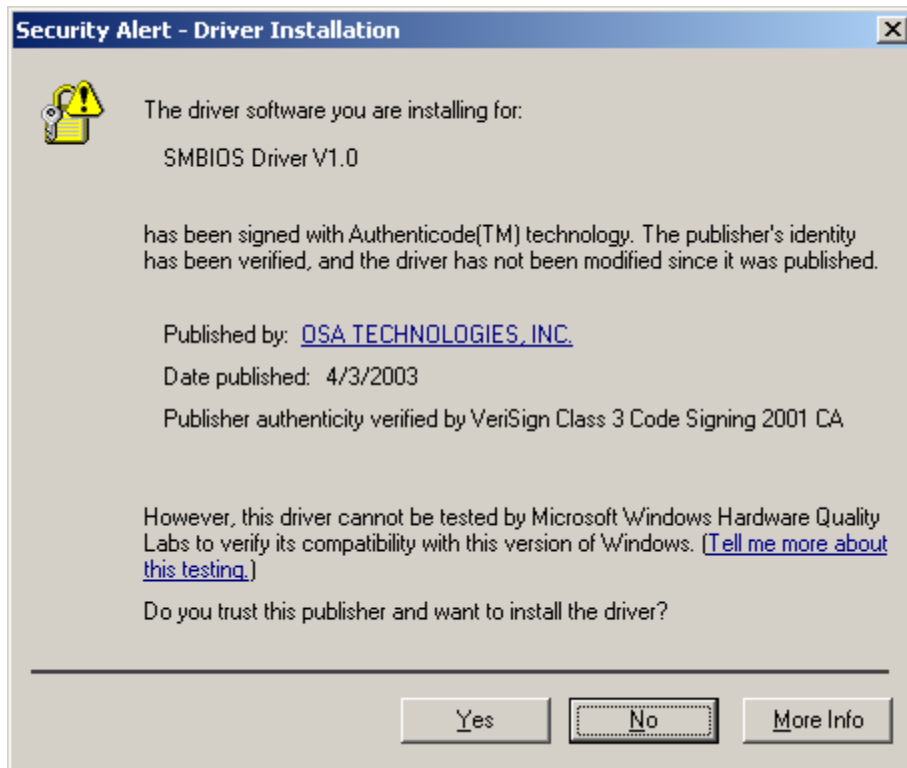
9. Click on “Next”, and you are ready to install



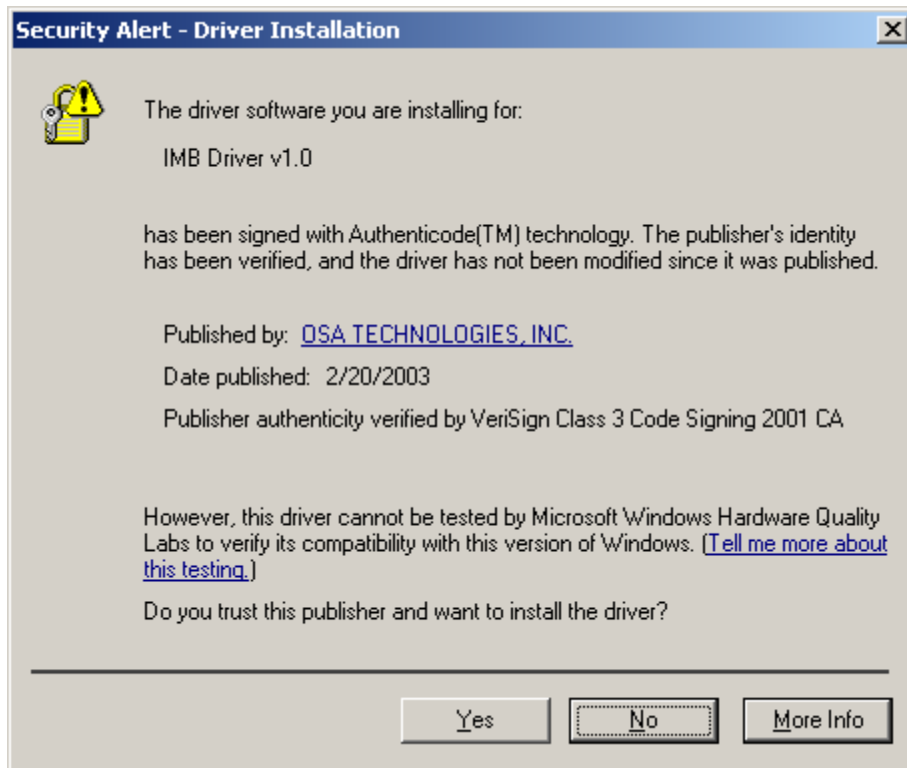
10. Click on “Next” to start the installation, you will see a progress bar during the procedure



11. On Windows Server 2003, the system will pop up the following dialogue boxes to authenticate the drivers:

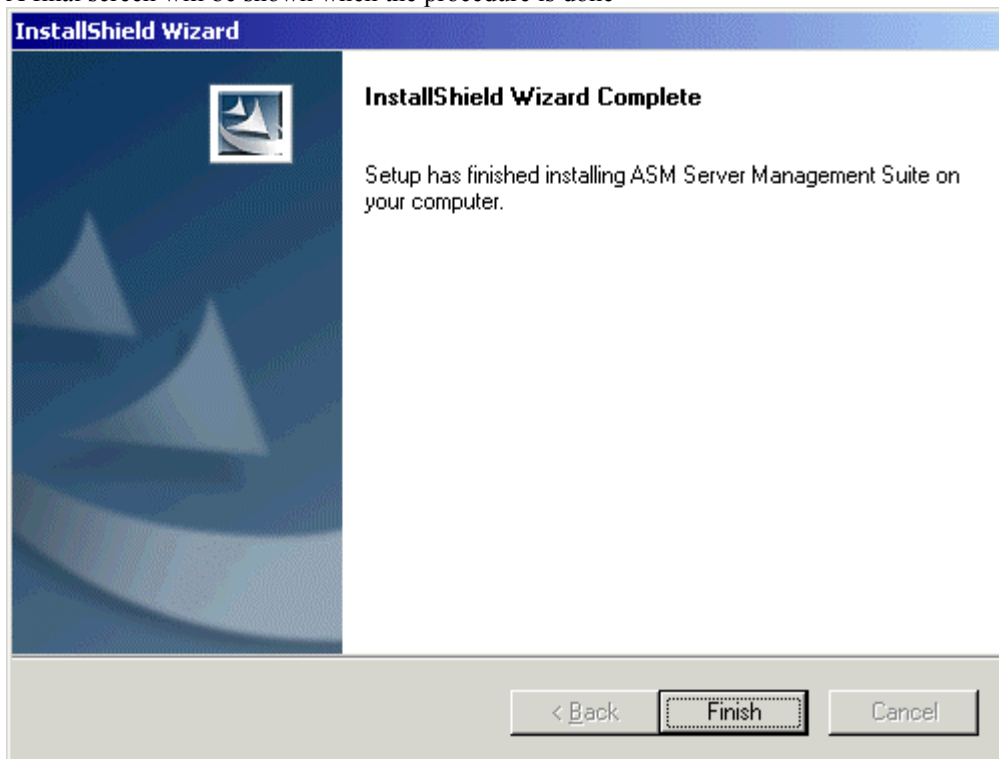


If the computer supports IPMI, an additional dialogue box will also be popped up:



For all these boxes, click "Yes" to continue.

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



Click on "finish" to complete the installation.

2.2 Installing the Server

The Server needs to be installed on the system intended to be the Management Server.

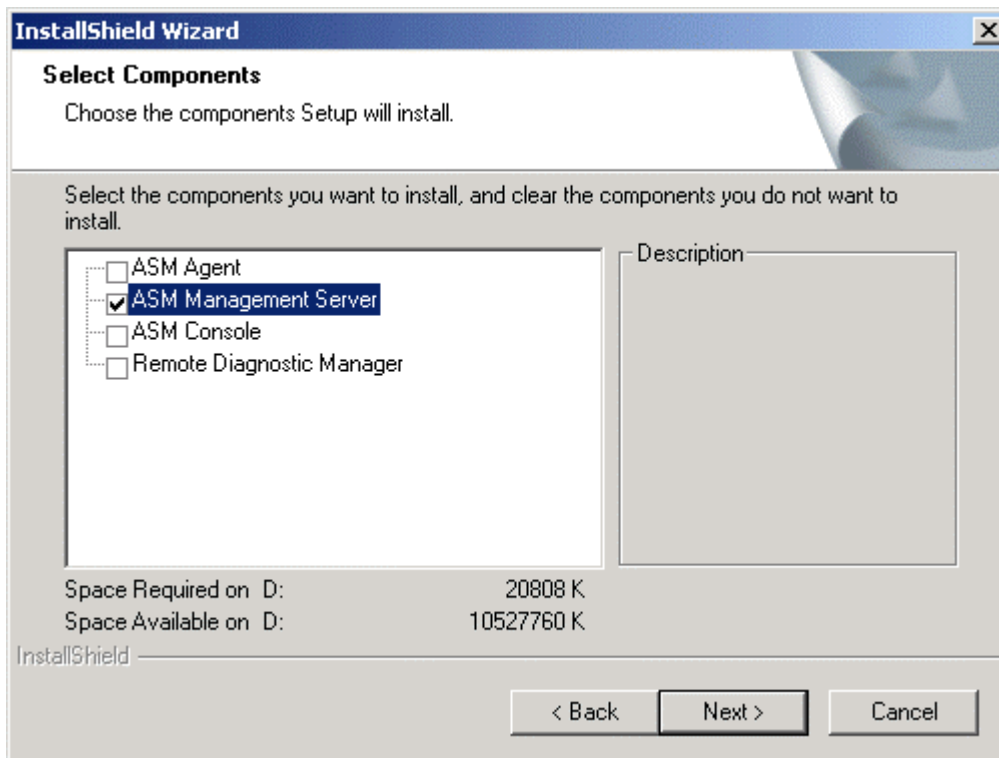
2.2.1 System Requirements

The 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 <ul style="list-style-type: none">• Server• Advanced Server Windows Server 2003
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 Server is the same as installing the Agent, except for choosing ASM Management Server instead of other options in step 6.



Usage Tips: Some operations of the Management Server depend on Windows' SNMP Service. Make sure that SNMP Service has been installed on the platform where the Management Server will be installed.

2.3 Installing the Console

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

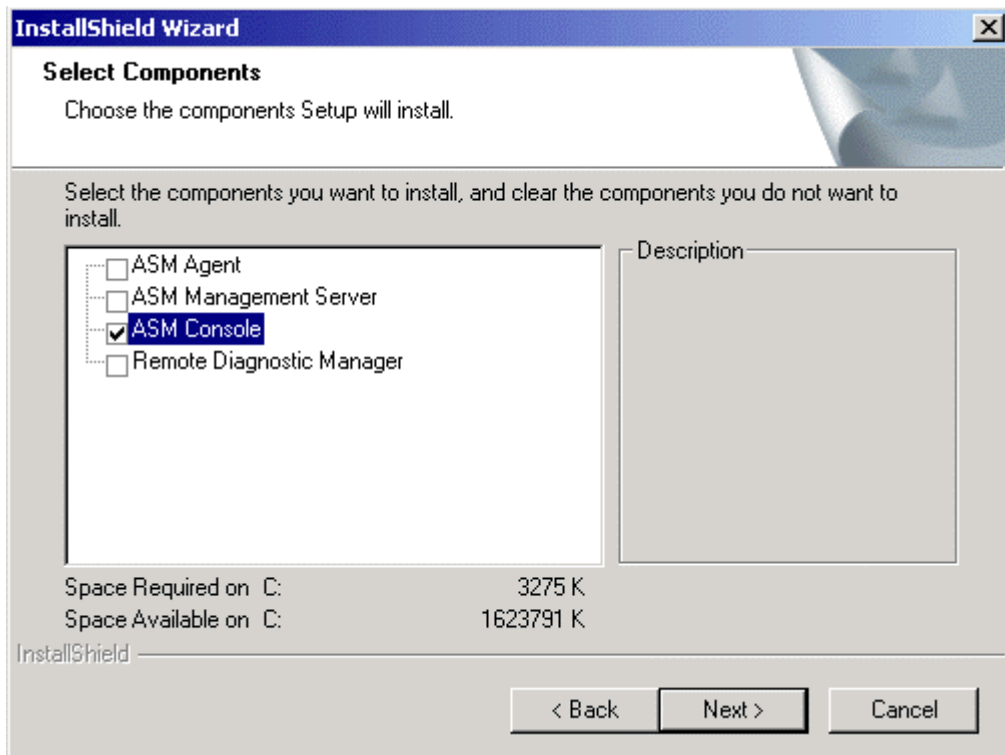
2.3.1 System Requirements

The 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 <ul style="list-style-type: none">• Professional• Server• Advanced Server Windows XP Professional Windows Server 2003
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

2.3.2 Installation Instructions

The installation procedure for the Console is the same as installing the Agent, except for choosing ASM Console instead of other options in step 6.



3 Starting and Using Acer Server Manager

This section will step the user through the process of starting and using Acer Server Manager, with details on the following 4 basic steps, after which the Console GUI and functionality is described.

1. Start the Agent on managed nodes
2. Start the Server on the management server
3. Start the Console on the management client
4. Access Agent through the Console

3.1 Starting the Agent

On the managed node, start the Agent by Clicking:

Start → Programs → Acer Server Management Suite → ASM Agent → start ASM agent

To generate alerts, a Service—*asmagent*—has been added to Windows. *asmagent* will start 3 additional processes: *discoveryAgent.exe*, *eventNodePolling.exe*, and *eventNodeSink.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 Agent from the Program Menu. The service, and the processes will restart when you start the Agent from the Program menu or when you restart Windows.

Stop Agent by Clicking:

Start → Programs → Acer Server Management Suite → ASM Agent → stop ASM agent

Stopping the Agent will stop the generating of alerts from the corresponding node.

3.2 Starting the Server

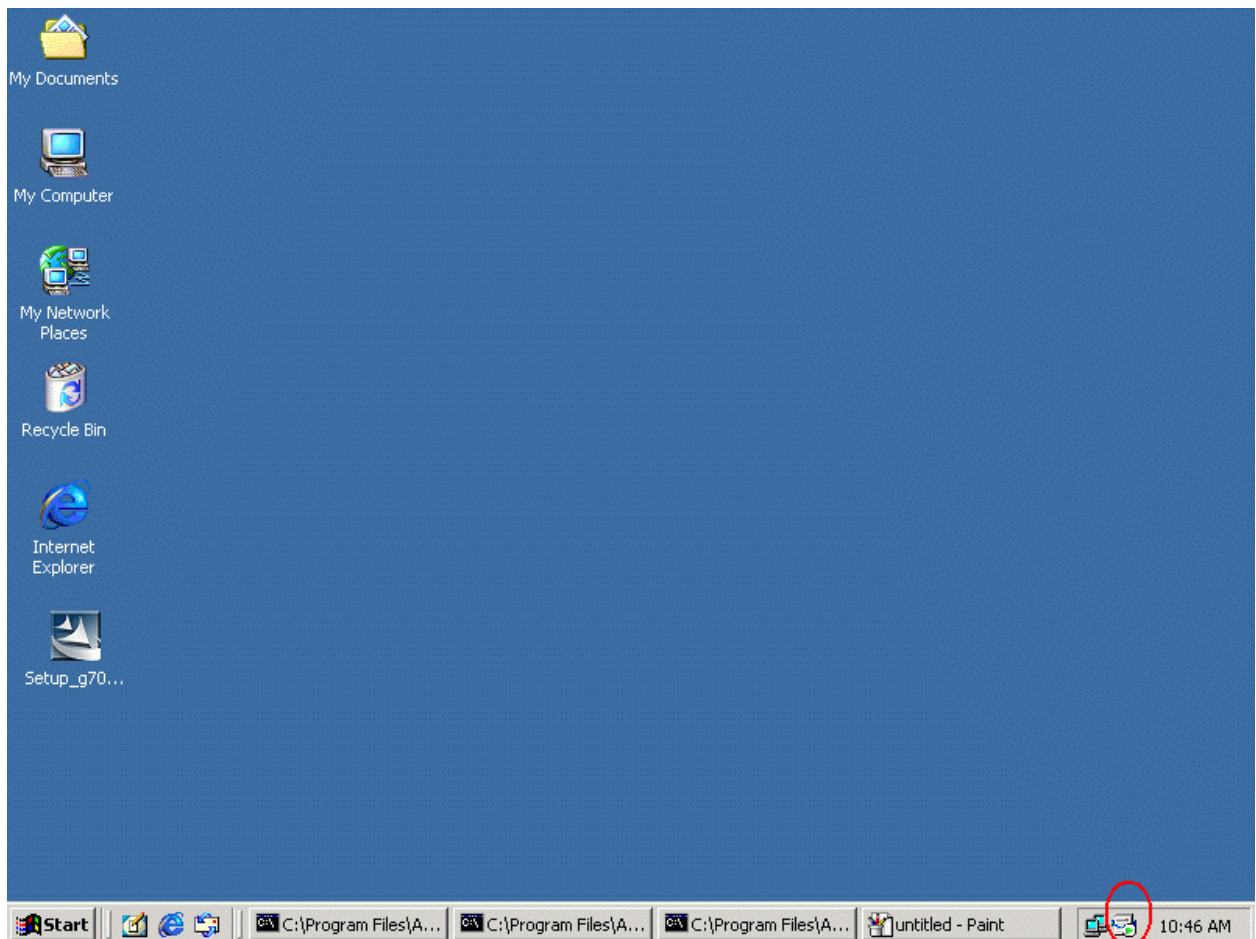
On the management server, start the Server by Clicking:

Start → Programs → Acer Server Management Suite → ASM Management Server → start ASM management server

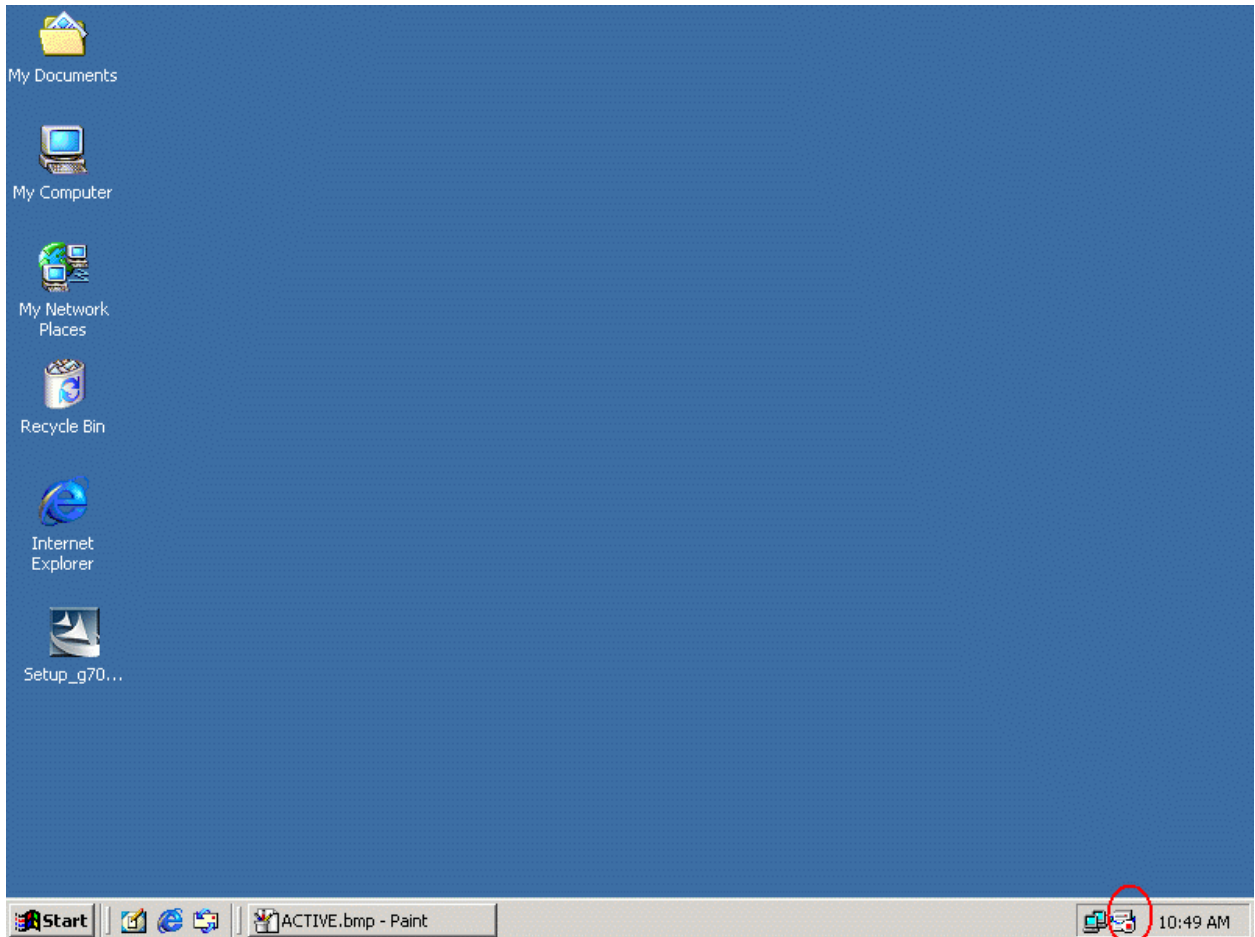
Starting the ASM management server will start four processes: *ASMserver.exe*, *trapExe.exe*, *wmiEventStation.exe* and *StationMon.exe*. For three processes *ASMserver.exe*, *trapExe.exe* and *wmiEventStation.exe*, no action is required of the user to start/stop these processes. Optionally, the user can choose to stop these processes by stopping the ASM management server from the Program Menu. The processes will restart when you start the ASM

management server from the Program menu. The *StationMon.exe* is for monitoring whether the ASM management server is active. There is an icon in system tray.

Picture 1 shows that the Management Server is active.



Picture 2 shows that the Management Server is inactive.



Stop Server by Clicking:

Start → Programs → Acer Server Management Suite → ASM Management Server → stop ASM management server

Stopping the Management Server will stop the management of all the nodes.

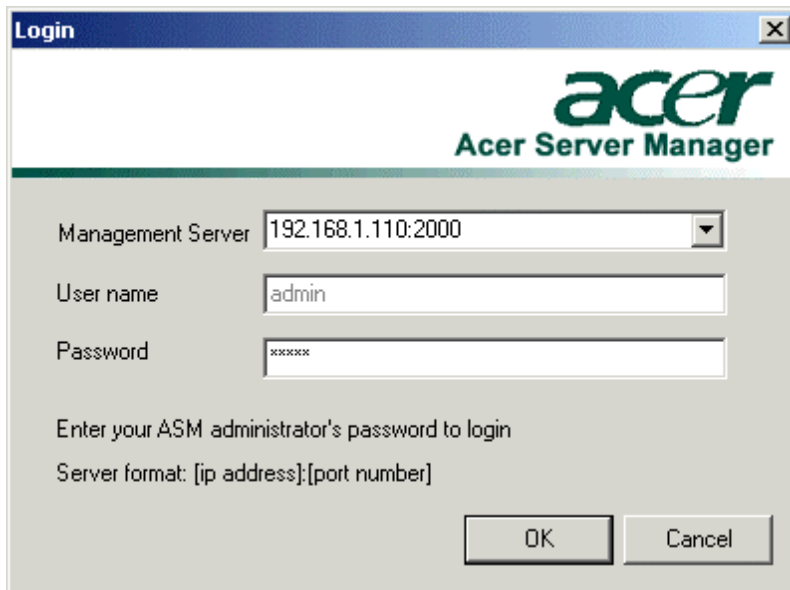
Usage Tips: The Management Server will be started once installation has completed. On successive reboots, the Management Server will be started automatically with “Administrator” login.

3.3 Starting the Console

On the management client, start the Console by clicking

Start → Programs → Acer Server Management Suite → ASM Console

You will be prompted for the management server hostname with a port number and login Username/Password.



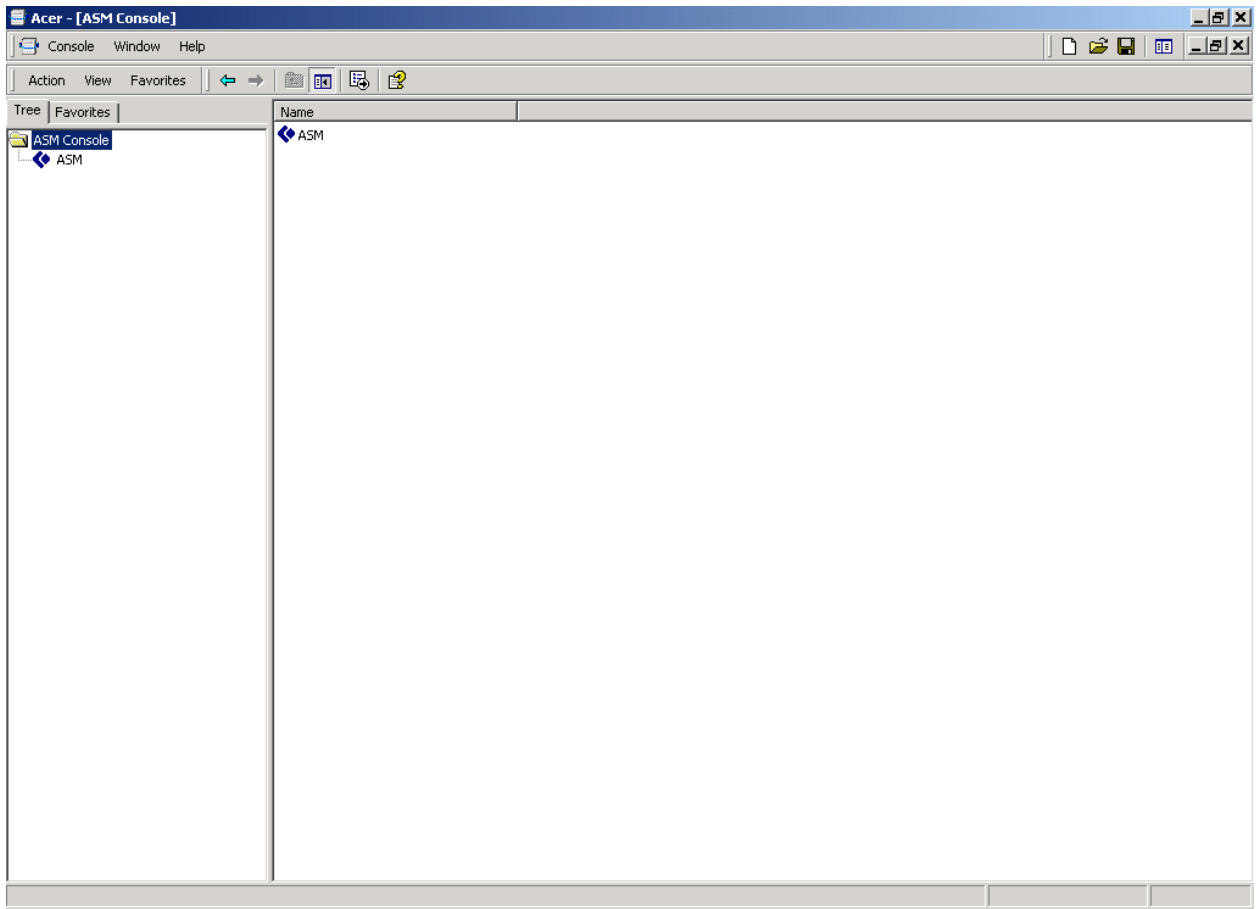
The Acer Server Manager supports remote console access not only via Intranet but also via Internet with SSL encryption.

Before starting the ASM console in remote site, user at first should dial up to connect ISP. In the Login dialog, user should input the server hostname with its port number as well as username and password.

The server hostname could be an external IP/DNS name with a port number such as www.acer.com.cn:5522. Or if your ASM management server is in the intranet, e.g. is 192.168.1.185:2000, it should be mapped to external IP/DNS:port like www.acer.com.cn:5522. Certainly, you can adopt any other ways to allow the remote console to access the management server.

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 Console has started successfully.

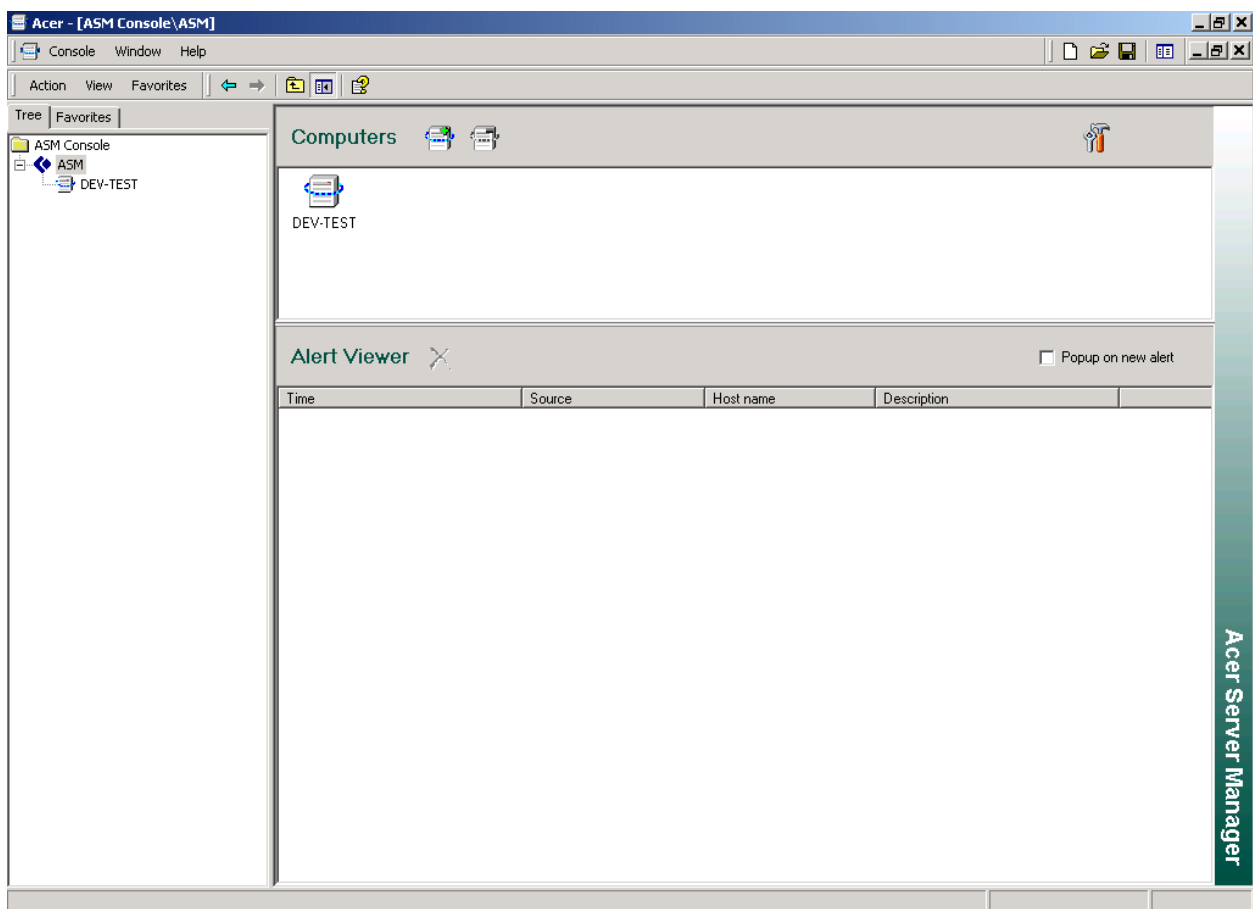


3.4 Console GUI Introduction

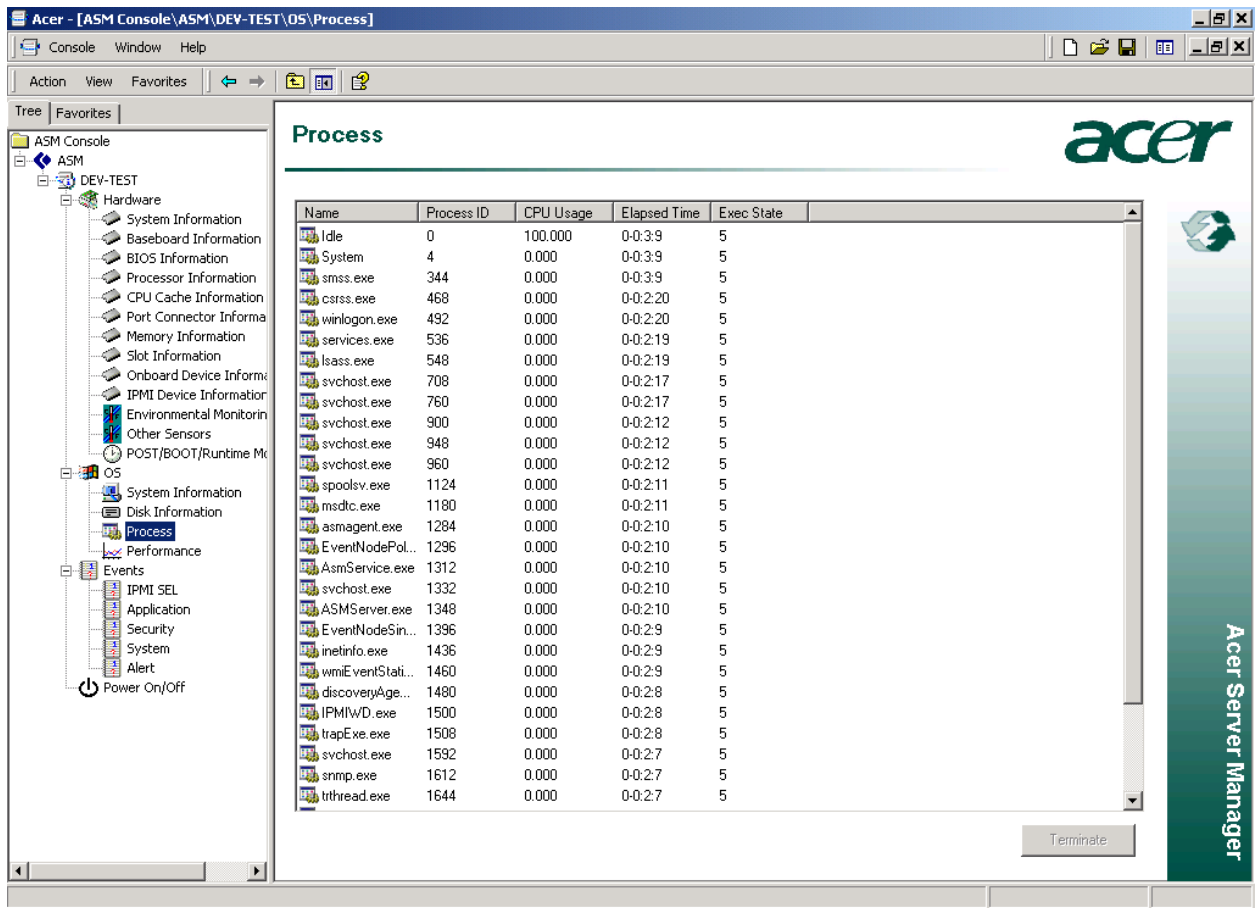
The Console GUI is the primary user interface for system administrators to carry out numerous management tasks.

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** -- “ASM” 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 provided by our auto-discovery tool. Here you will also be able to configure the management server including customizing alert filters, adding user-defined actions, applying pre-defined actions to alerts and customizing alert threshold. The **lower** area could be called as “**Alert panel**”, here you will be able to browse all the alerts for the site, delete the alerts and pop up a message box if an alert comes to console.



When a specific managed node in the **left** pane's **Console Tree** hierarchy is selected or expanded, the right pane, known as the **Display Pane**, will show 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 "ASM".

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

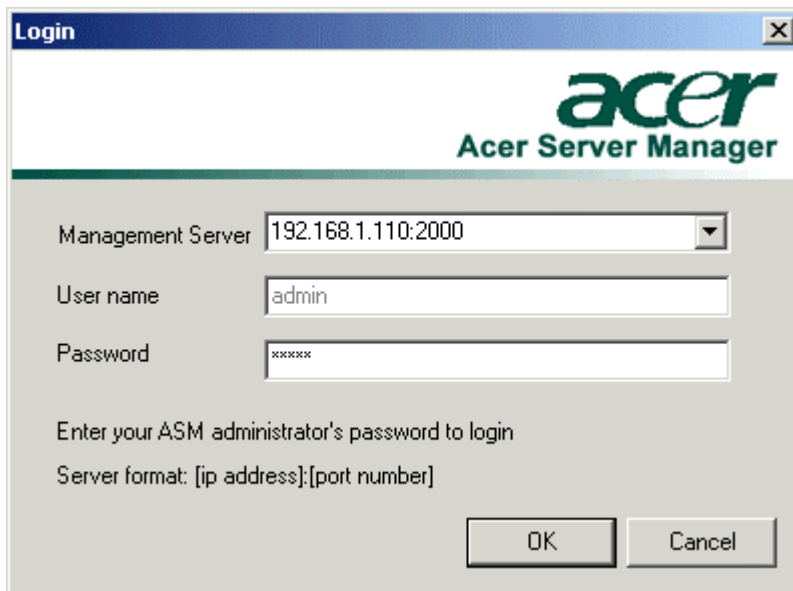
3.5 Adding and deleting a Managed Node

With the 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.

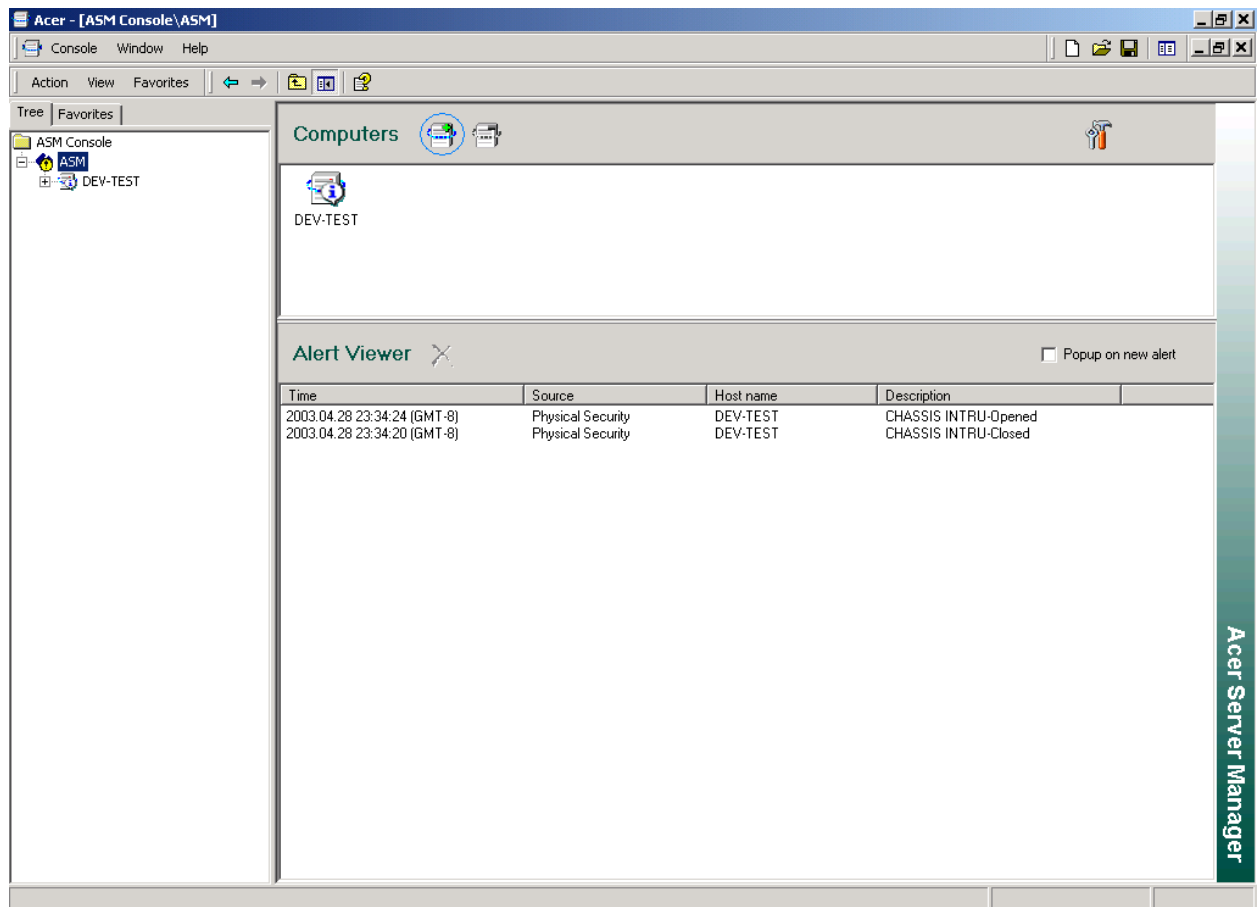
Usage Tips: Each node should be managed by one ASM v5.3 management server at a time; adding a node to the managed server lists of multiple ASM v5.3 management servers will result in indeterminate alert manager behaviour.

3.5.1 Add a Managed Computer Manually

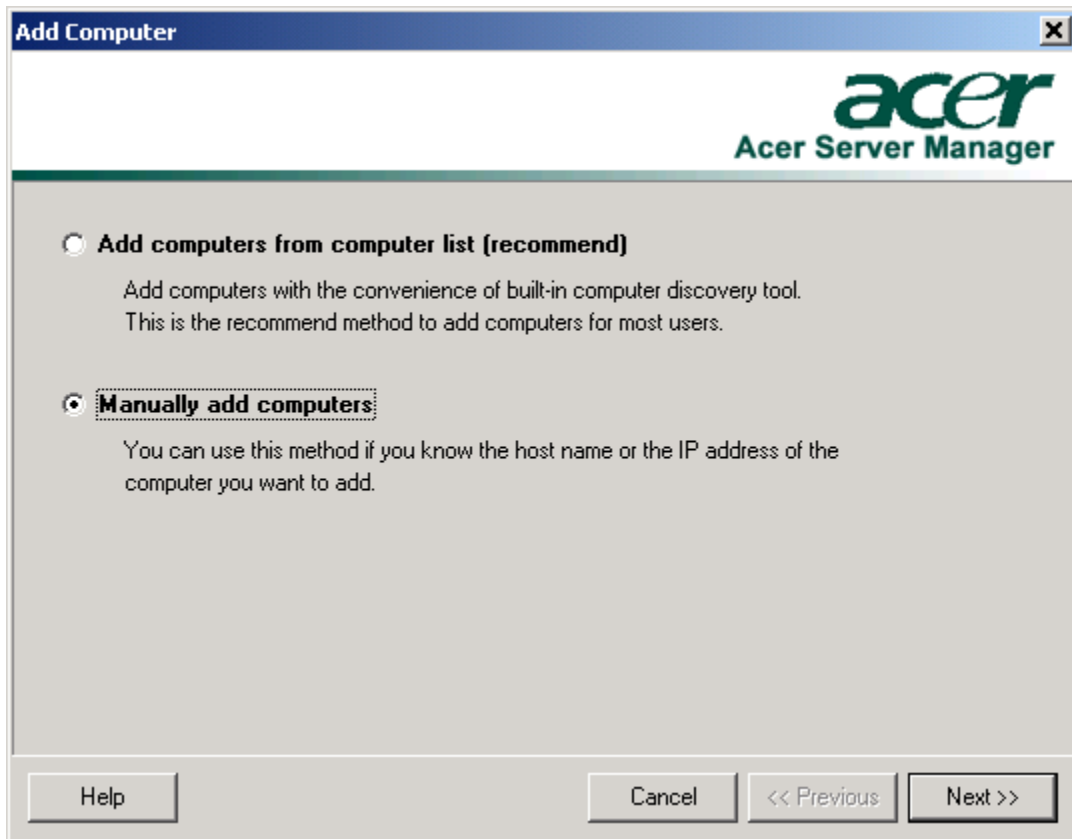
Start the Console from Start Menus, and you will be asked for the management server hostname with a port number, username and password as usual, they will be verified every time you bring up the Console.

The image shows a 'Login' dialog box for 'Acer Server Manager'. The dialog has a title bar with 'Login' and a close button. Below the title bar is the Acer logo and the text 'Acer Server Manager'. The main area contains three input fields: 'Management Server' with a dropdown arrow showing '192.168.1.110:2000', 'User name' with the text 'admin', and 'Password' with masked characters 'xxxxxx'. Below these fields is the instruction 'Enter your ASM administrator's password to login' and the 'Server format: [ip address]:[port number]'. At the bottom right are 'OK' and 'Cancel' buttons.

After login, highlight “ASM5.3”, 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.

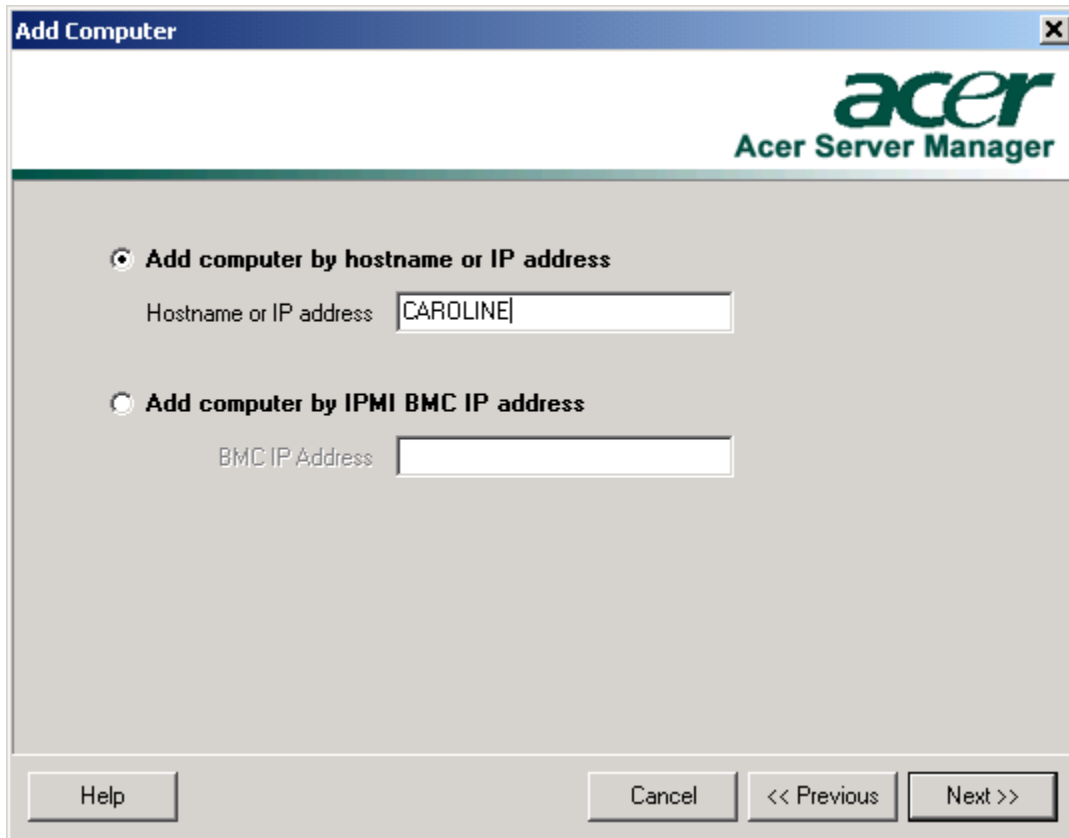


Select the option “Manually add computers”, and click on “Next”.

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.

3.5.1.1 Adding an In-Band node

Firstly, we will add an In-Band node with hostname “CAROLINE”. Fill in the hostname and click on “Next”.



Add Computer

acer
Acer Server Manager

☒ **Add computer by hostname or IP address**


Hostname or IP address:

☐ **Add computer by IPMI BMC IP address**

BMC IP Address:

Help Cancel << Previous 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 know how to set up an authorized account, Please refer to Section 3.8). To verify your identity, the Console will ask you to enter Username/Password for CAROLINE.



Please Input Username / Password

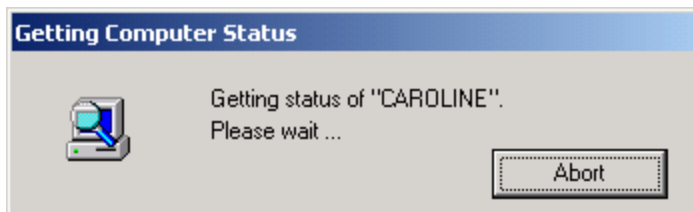
Username:

Password:

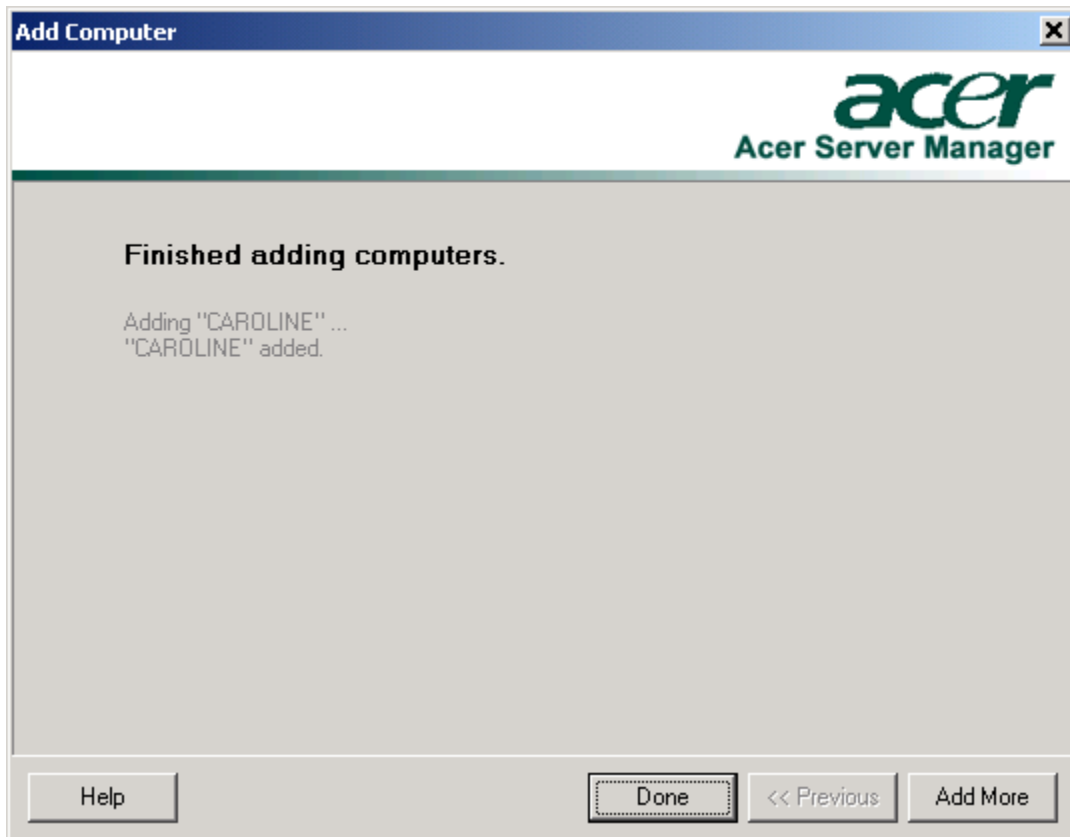
Please supply username and password for **CAROLINE**
Note: user must have the right of accessing WMI.

OK Cancel

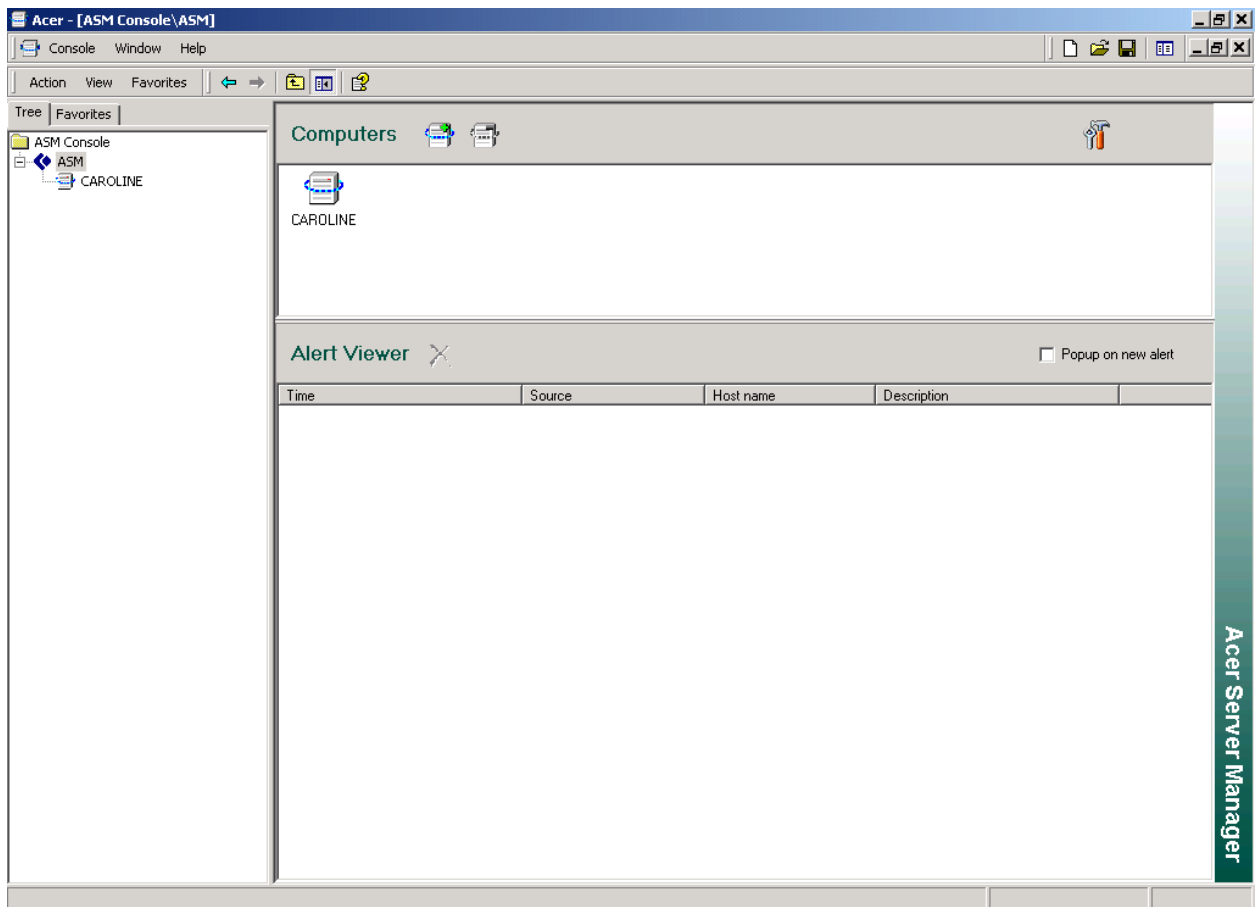
Enter Username/Password, and click on “OK”, if you have entered correctly, Console will then take a few seconds to collect initial status information from CAROLINE.



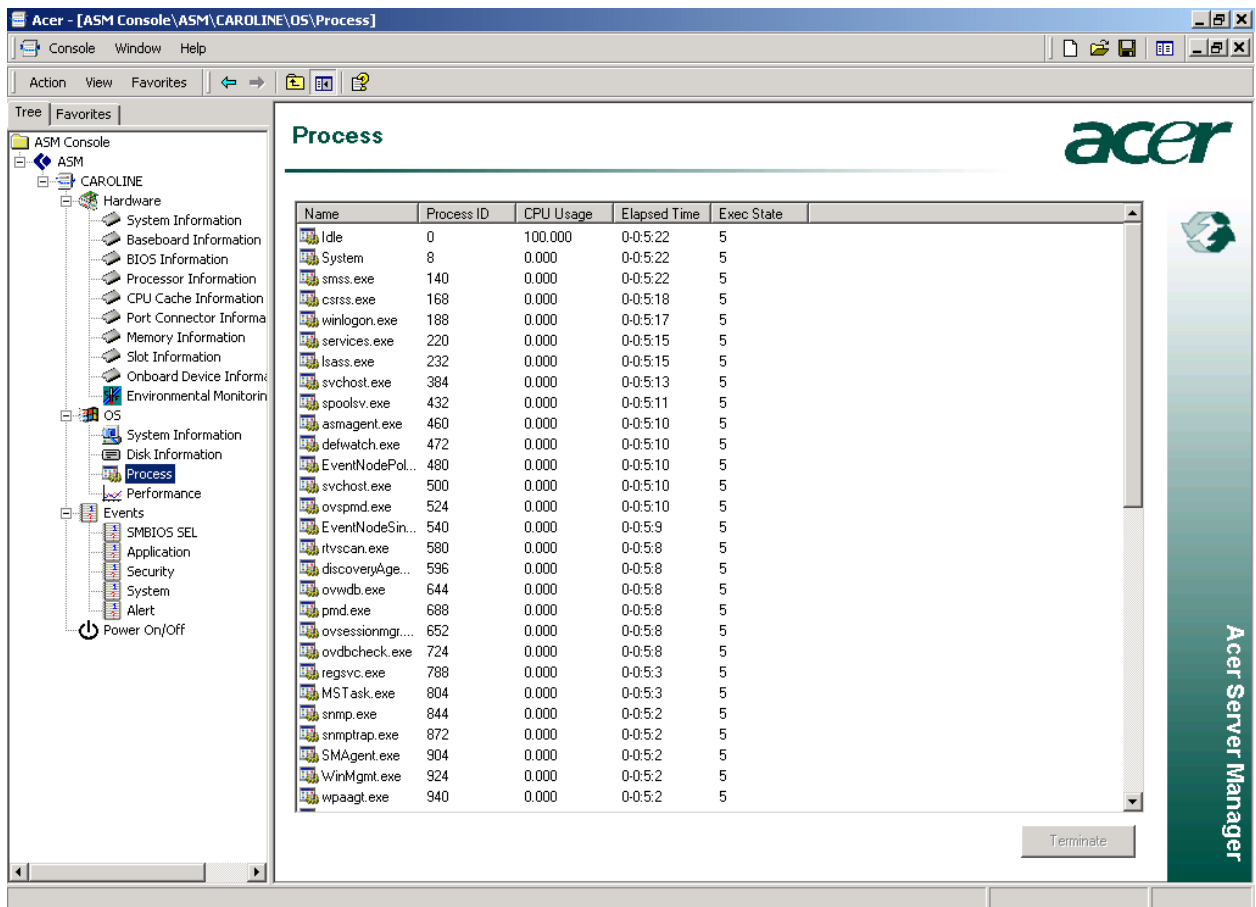
After that is completed, you will see a finish screen.



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



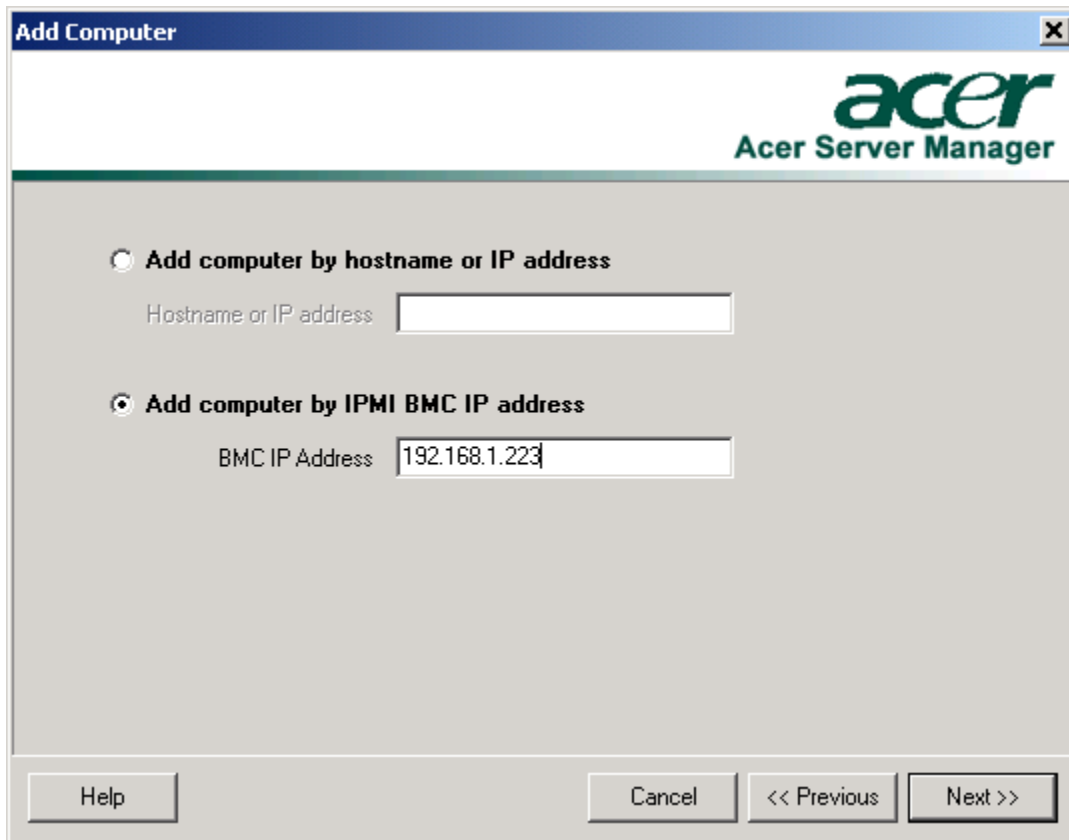
You can now expand the **Console Tree** in the left pane to manage CAROLINE.



3.5.1.2 Adding an OOB node

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

Select “Add computer by IPMI BMC IP address”, and input the target IP. Click on “Next”



Add Computer

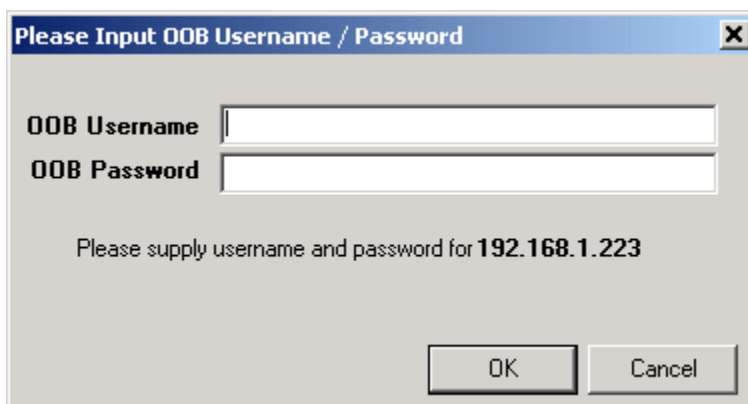
acer
Acer Server Manager

☐ Add computer by hostname or IP address
Hostname or IP address

☒ Add computer by IPMI BMC IP address
BMC IP Address 192.168.1.223

Help Cancel << Previous Next >>

The 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, the Console would not prompt for user id/password. If the user has set userid/password, then we would prompt for userid/password.



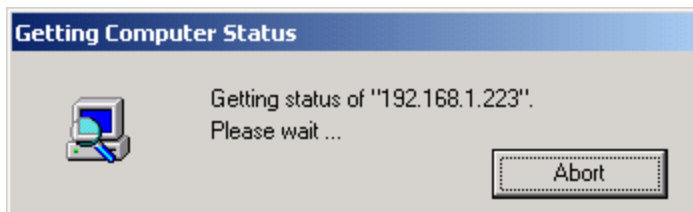
Please Input OOB Username / Password

OOB Username

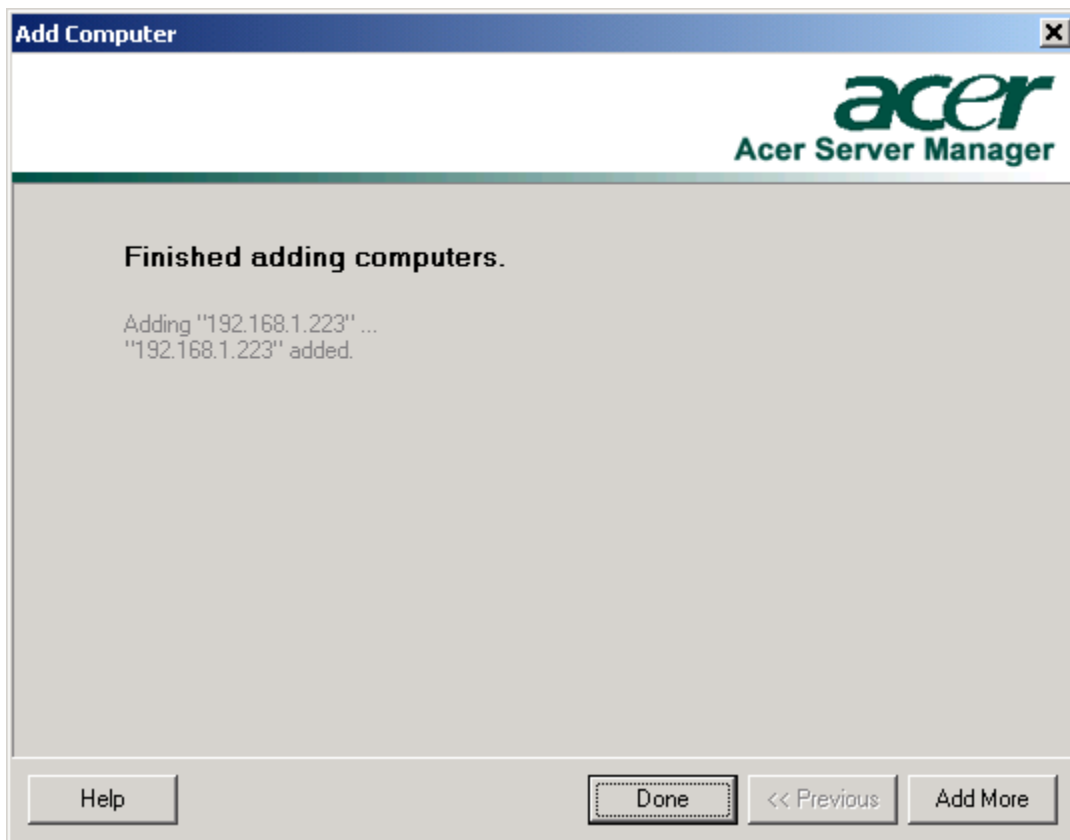
OOB Password

Please supply username and password for 192.168.1.223

OK Cancel



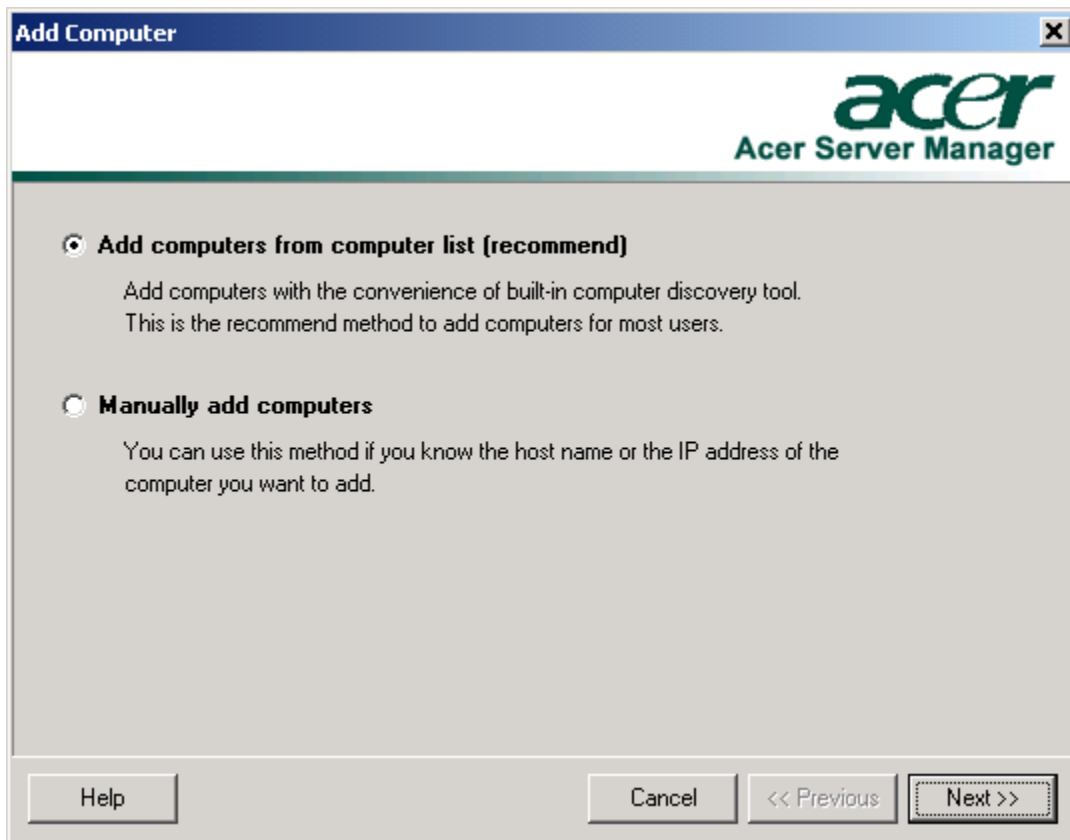
After the process is completed, you will again see a finish screen, which reports whether you have succeeded in adding that computer.



3.5.2 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 Acer Server Manager 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, setting IB and OOB IP on the same NIC, is installed with an Acer Server Manager 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”.

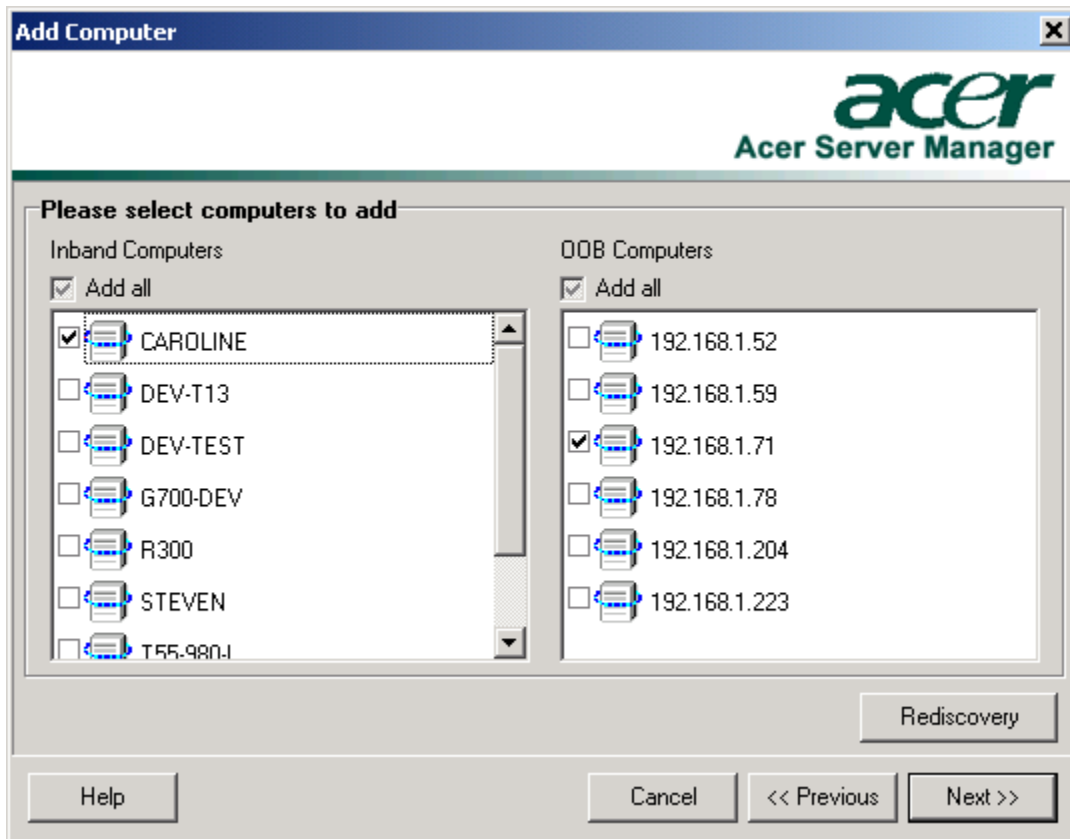


Click on “Next”, if you have performed a discovery before, you will see a dialog box with previously discovered nodes listed, otherwise, you will get an empty list.

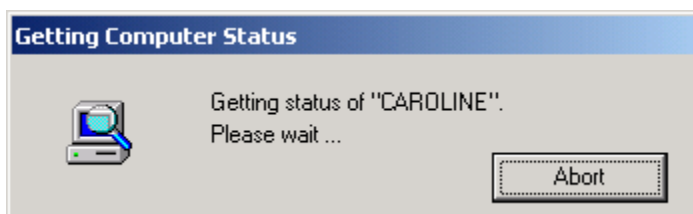
In the first case, you can simply select a number of In-Band or OOB nodes from the list box, and click on “Next”.

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

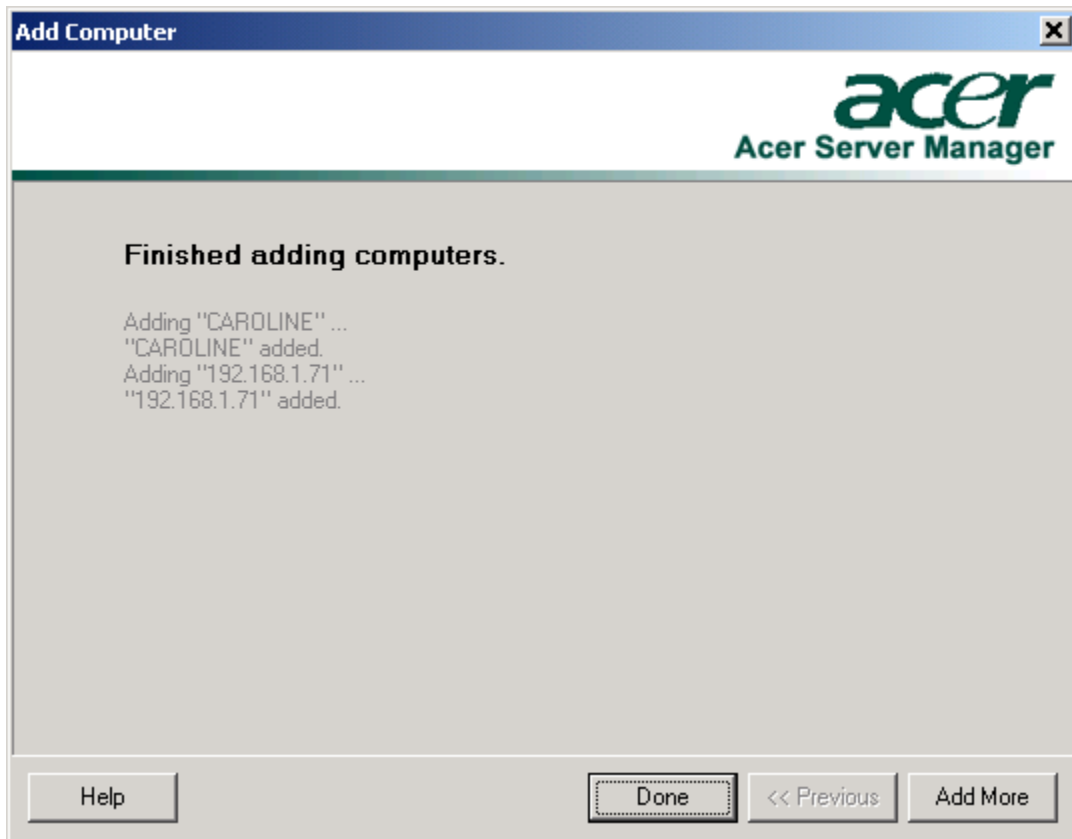
Case 1: Adding nodes from existing lists



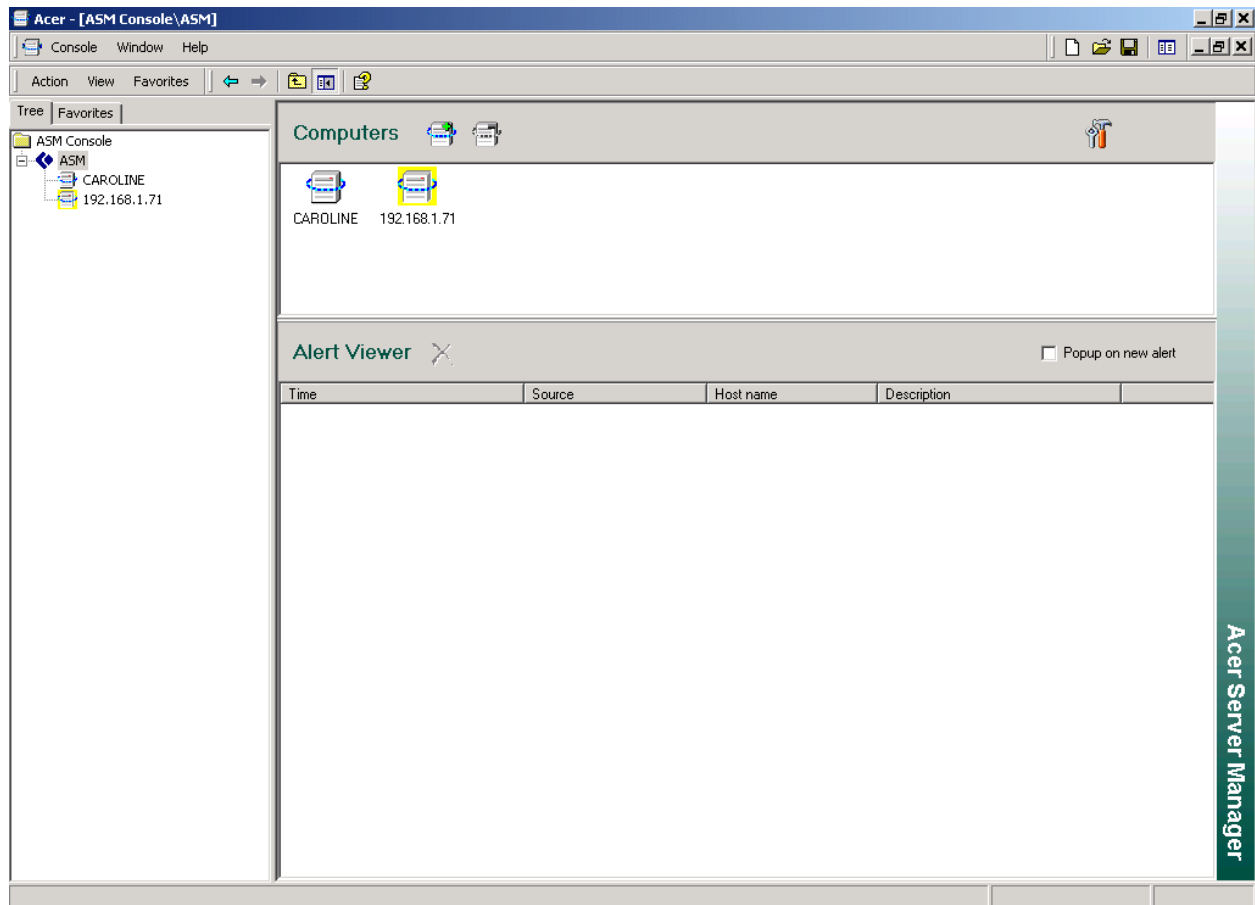
Check the desired nodes from the list box as shown above, and click on “Next”, you will then be asked for Username/Password for every selected node, and if you pass the verification, the Console will collect initial status information from the nodes.



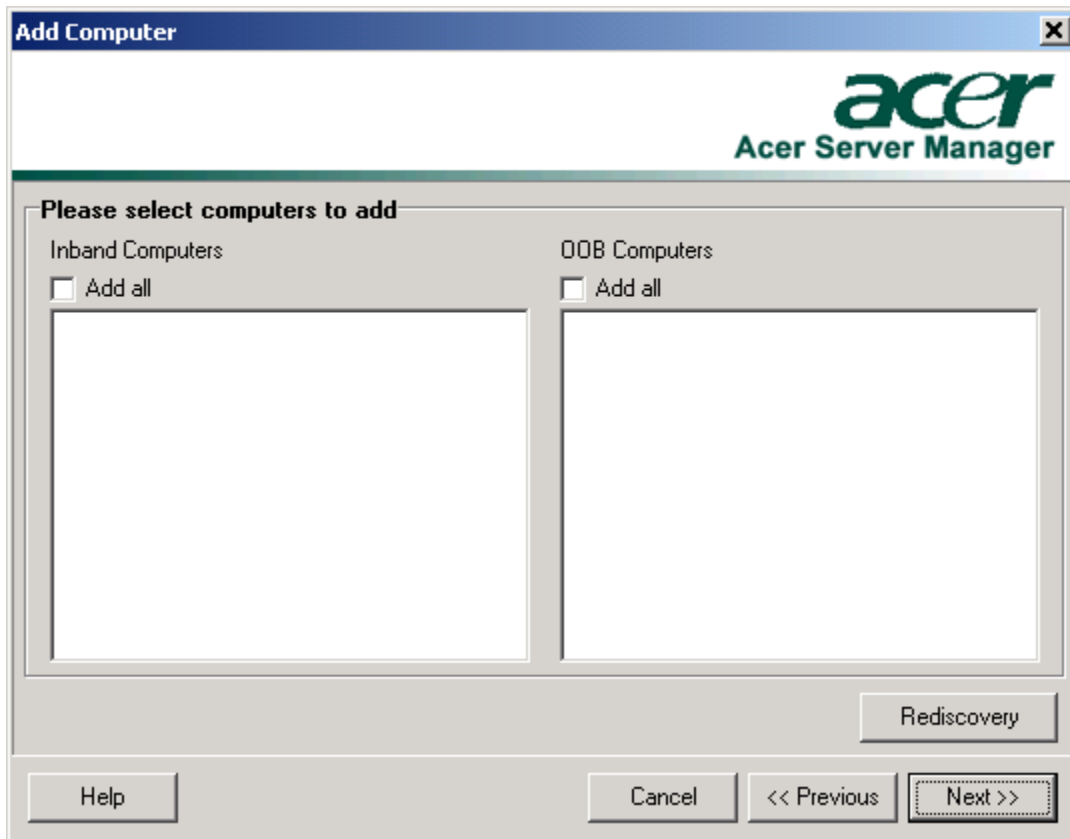
When every thing is finished, you will get a finish dialog, it reports whether you have succeeded or failed for every individual node you have selected.



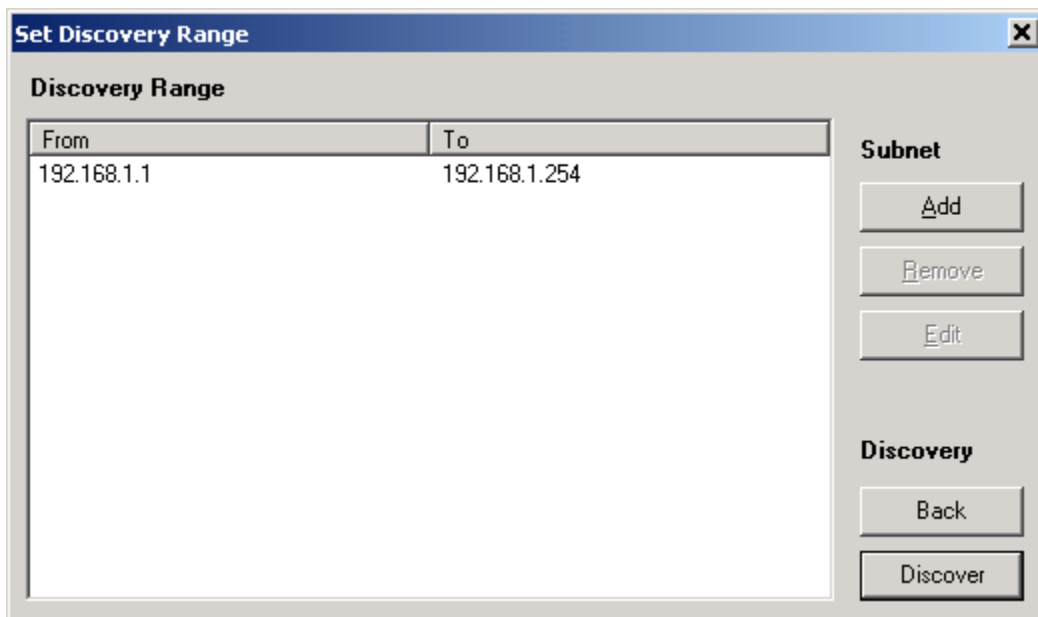
Close the dialog, CAROLINE and 192.168.1.71 were added successfully.



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



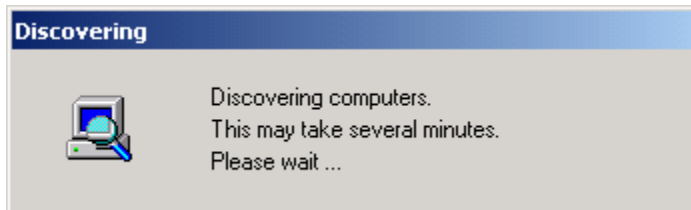
It brings up a "Set Discovery Range" dialog, Click on "Add" if you want to set a new Search Range



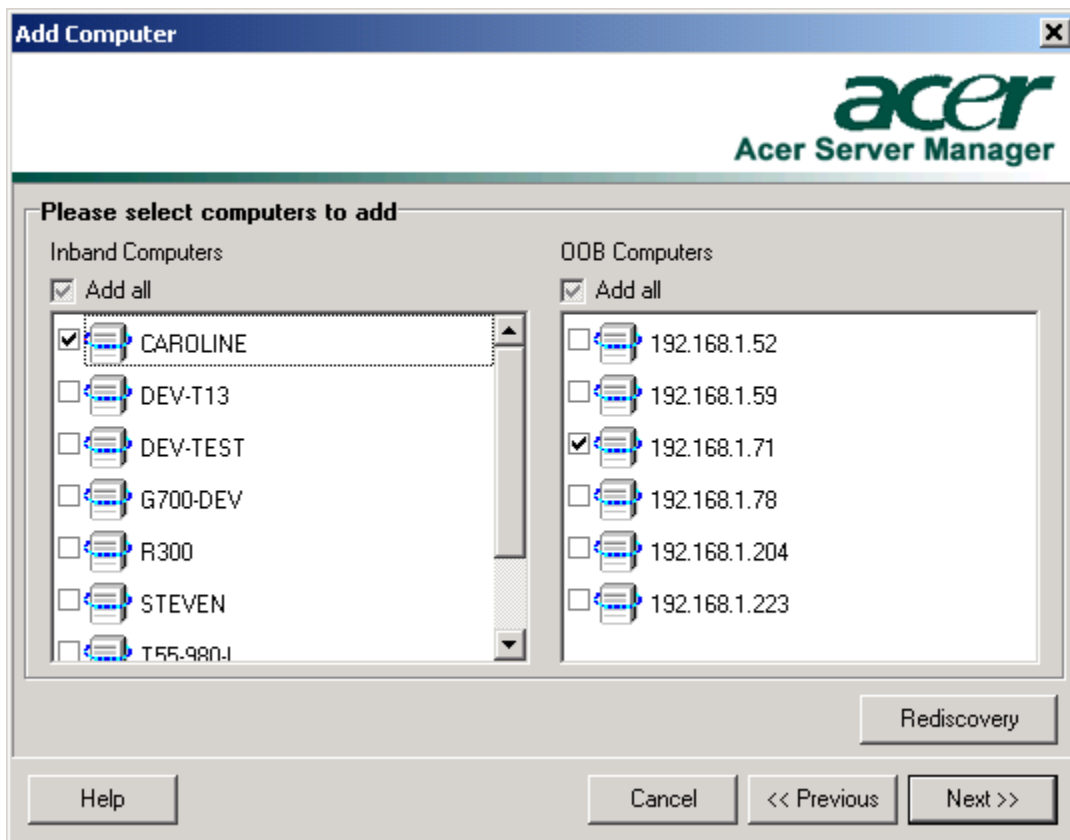
Set your search range, click on "OK" to save



Click on “Discover”, 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.



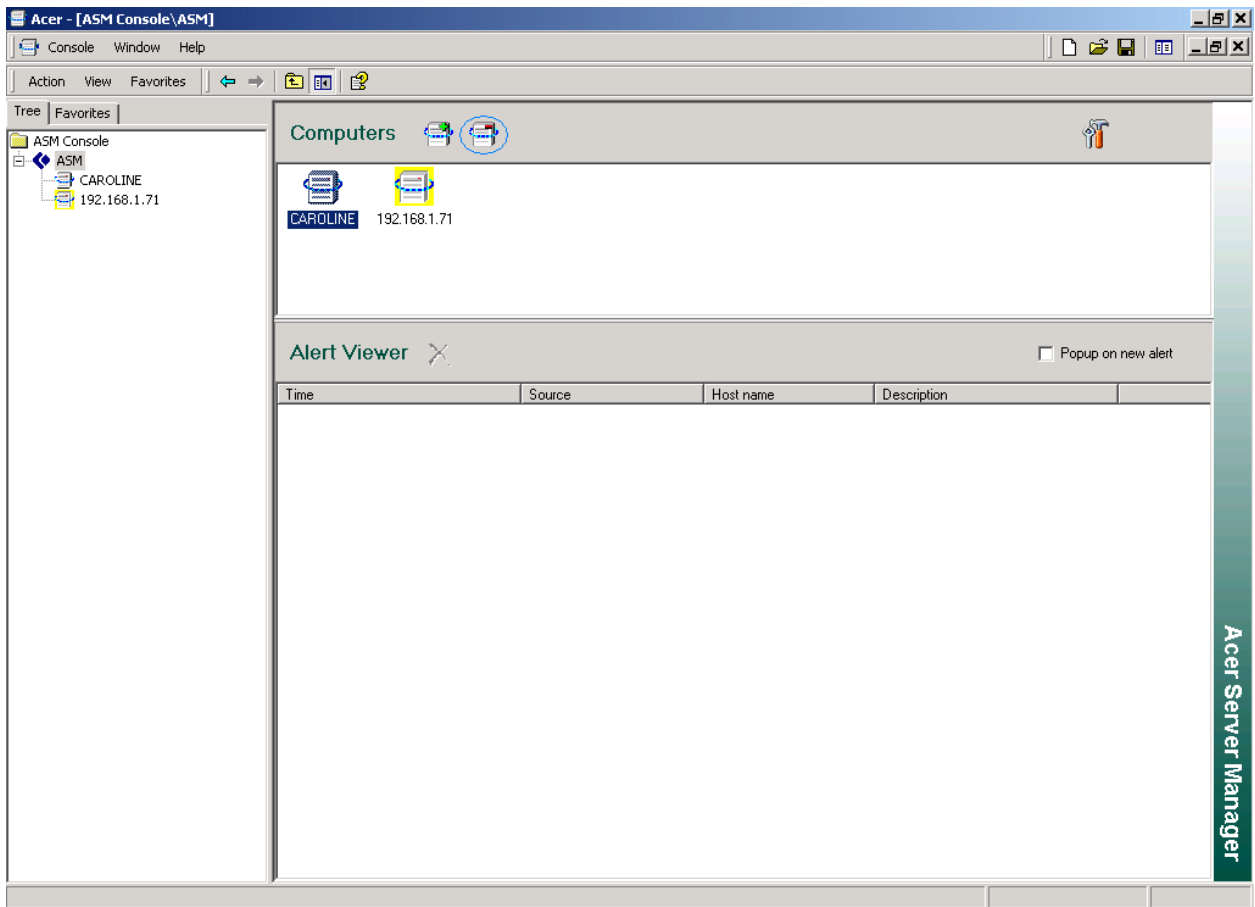
Hints on assisted Discovery:

1. To ensure proper pairing of host names with IP addresses, run assisted-Discovery periodically with an IP address range of 1 – 254
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.

3.5.3 Delete a Managed Node

In the **Discovery Panel**, select a managed node, “DEV-TEST” in our example, click on the icon of a computer with a red “-” on it.



You will be asked for a confirmation



Click on “Yes”, and “DEV-TEST” will be removed from both the **Discovery Panel** and **Console Tree**

3.6 Management Server Configuration

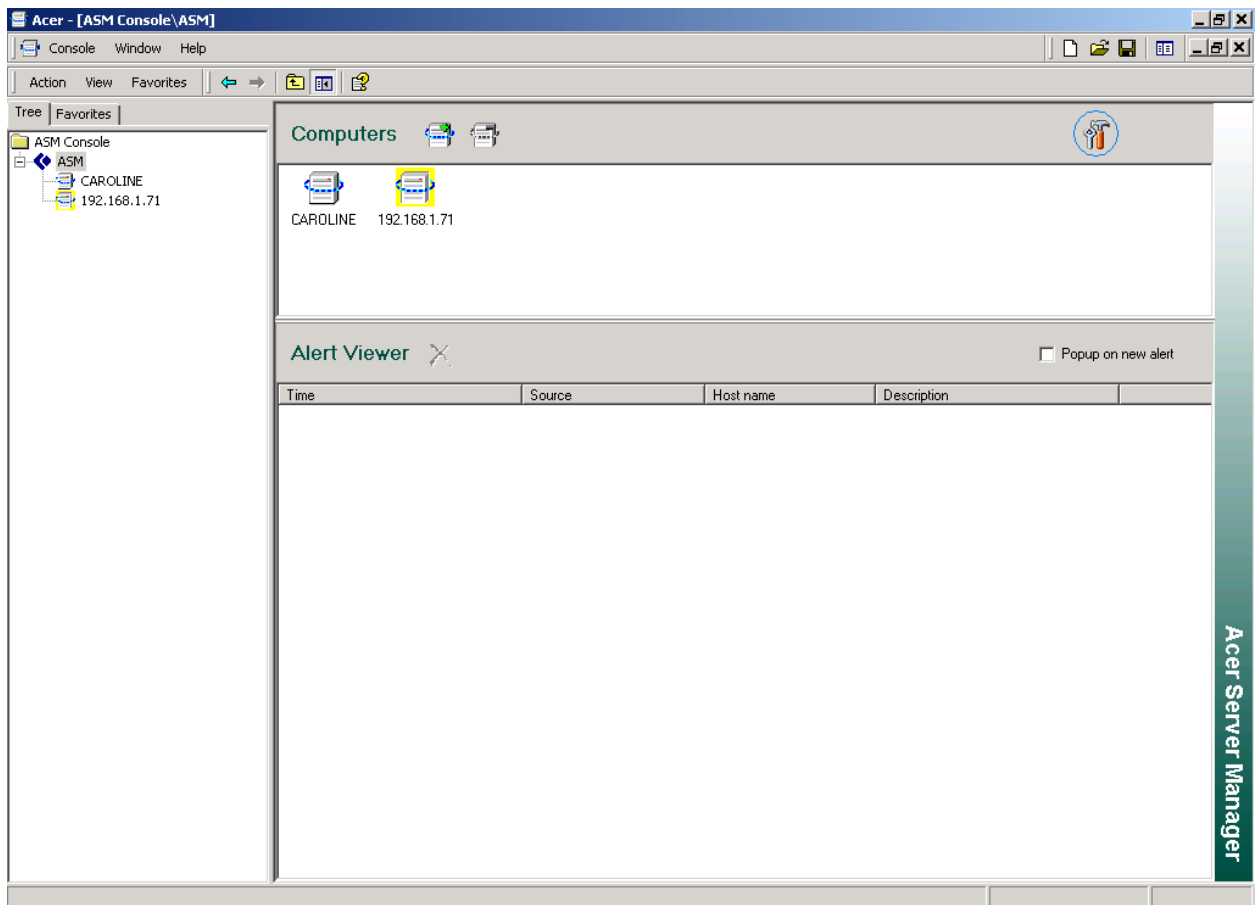
Acer Server Manager 5.3 Console can be configured to perform pre-defined **Actions** upon the occurrence of user-specified **Alerts**. With alert support, Administrators are able to monitor and respond to sudden and critical system issues in a more timely fashion.

In this configuration, you can change your password after a success login.

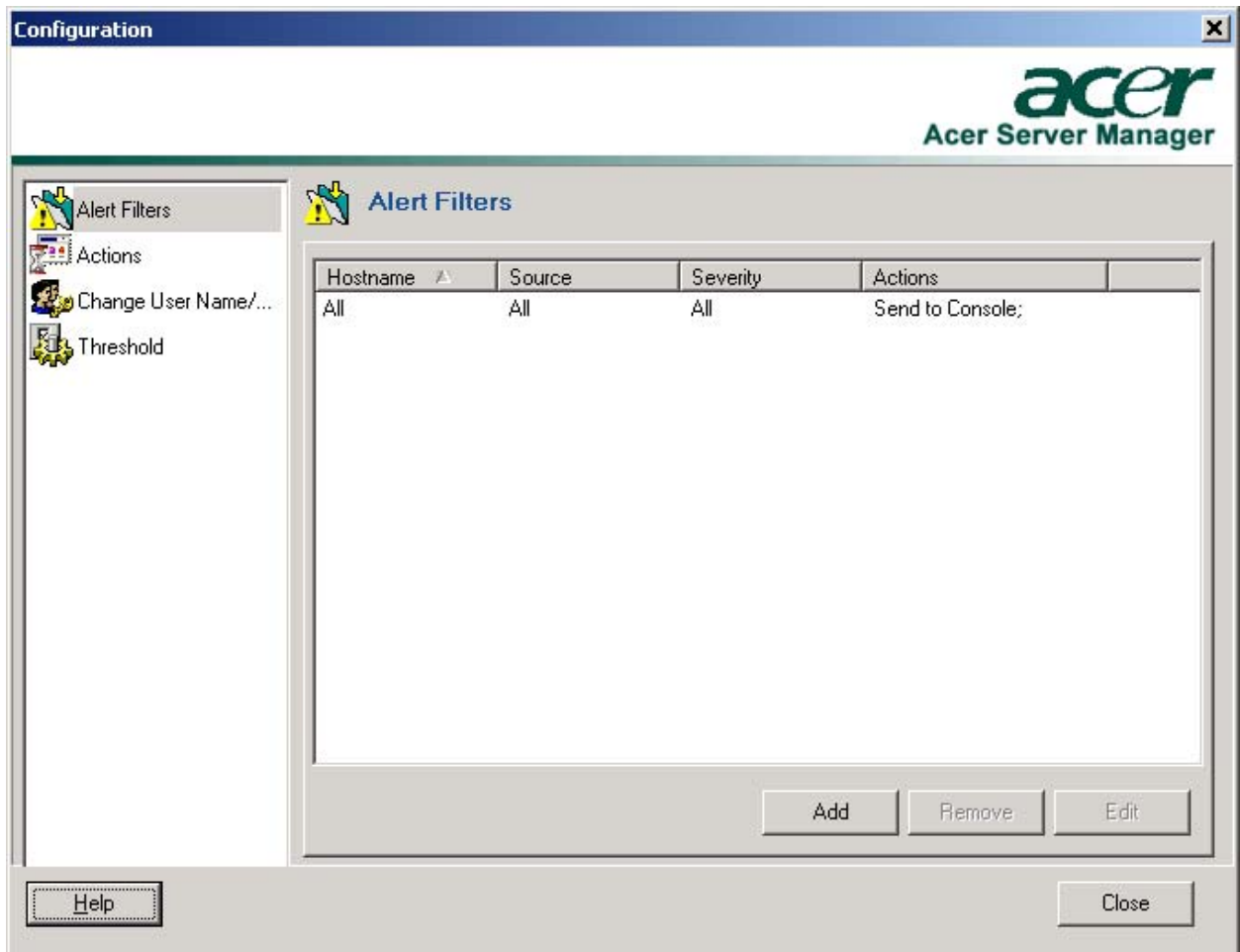
3.6.1 Add pre-defined Actions

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

Click on the “Configure management server” button in the **Discovery Panel**



That brings up the “Configuration” dialog, in which you can set up for **Actions**, **Alert Filters**, **Threshold** and **Change Username/Password**,



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

Acer Server Manager 5.3 supports 4 types of actions, i.e., Console notification, Email notification, SNMP trap notification and 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:

Action

☒ **Send notification to console**

☐ **Send e-mail message**

E-mail address:

Note: Multiple e-mail addresses are allowed, please use ";" to separate.

Sender address:

SMTP server:

☐ **Execute external program**

External program:

☐ **Generate SNMP trap**

Destinations:

Note: Multiple destinations are allowed, please use ";" to separate.

OK Cancel

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

Action

☐ **Send notification to console**

☒ **Send e-mail message**

E-mail address:

Note: Multiple e-mail addresses are allowed, please use ";" to separate.

Sender address:

SMTP server:

☐ **Execute external program**

External program:

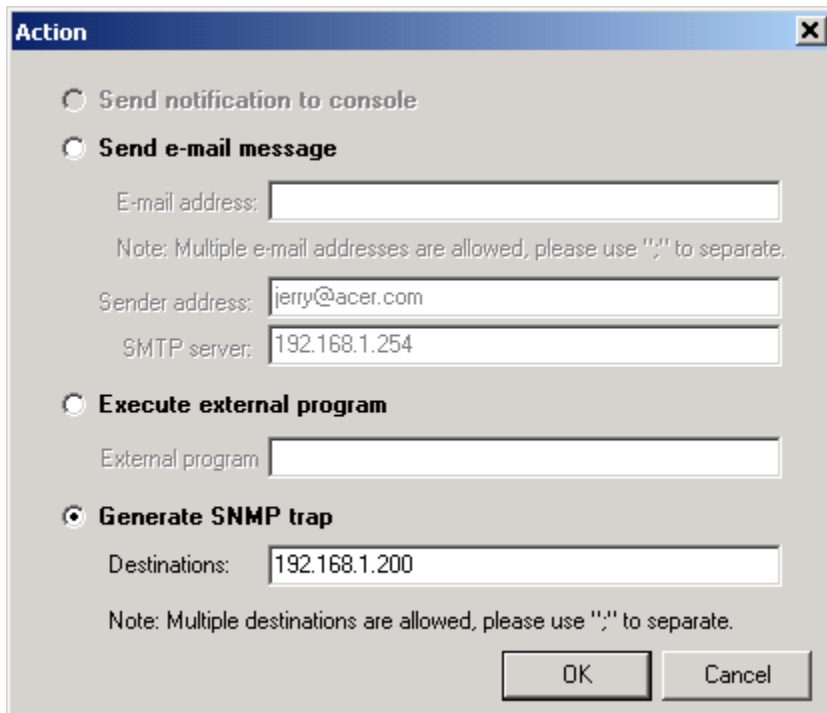
☐ **Generate SNMP trap**

Destinations:

Note: Multiple destinations are allowed, please use ";" to separate.

OK Cancel

To enable SNMP trap notifications, you have to specify destinations by filling in IP addresses. You can enter multiple IP addresses separated by semicolons, but the total length should be less than or equal to 255.

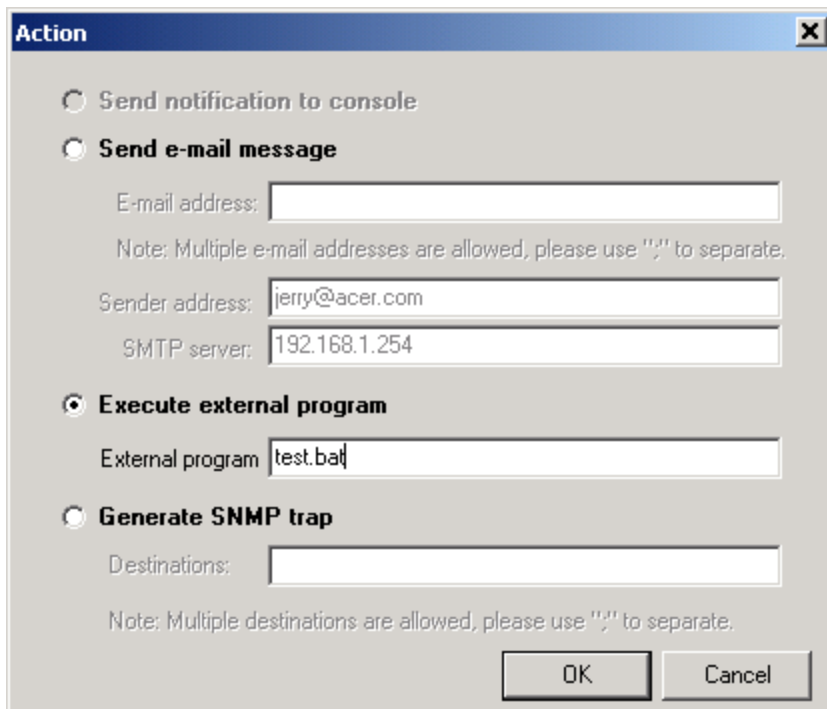


The 'Action' dialog box is shown with the following configuration:

- ☐ Send notification to console
- ☐ Send e-mail message
 - E-mail address: [Empty]
 - Note: Multiple e-mail addresses are allowed, please use ";" to separate.
 - Sender address: jerry@acer.com
 - SMTP server: 192.168.1.254
- ☐ Execute external program
 - External program: [Empty]
- ☒ Generate SNMP trap
 - Destinations: 192.168.1.200
 - Note: Multiple destinations are allowed, please use ";" to separate.

Buttons: OK, Cancel

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

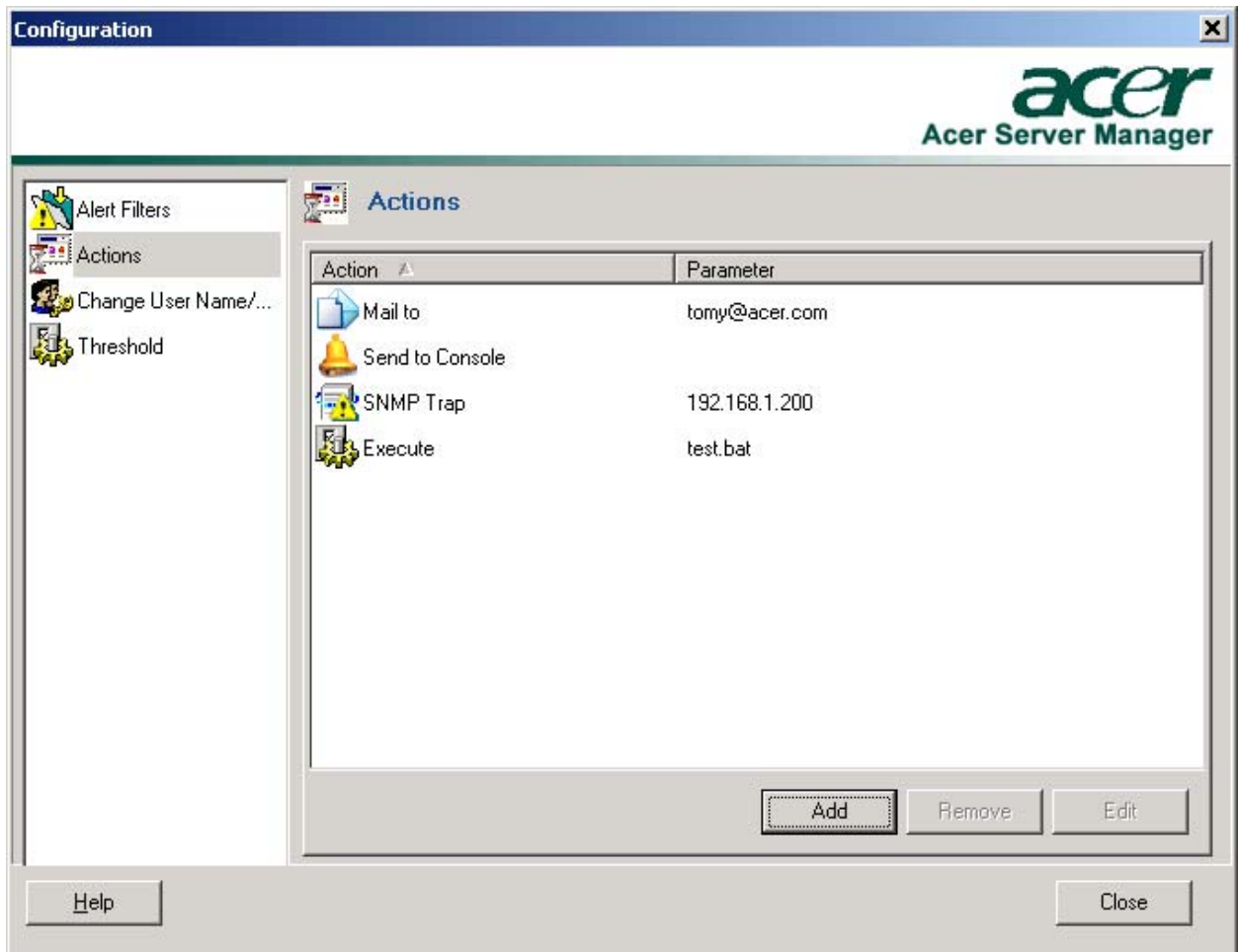


The 'Action' dialog box is shown with the following configuration:

- ☐ Send notification to console
- ☐ Send e-mail message
 - E-mail address: [Empty]
 - Note: Multiple e-mail addresses are allowed, please use ";" to separate.
 - Sender address: jerry@acer.com
 - SMTP server: 192.168.1.254
- ☒ Execute external program
 - External program: test.bat
- ☐ Generate SNMP trap
 - Destinations: [Empty]
 - Note: Multiple destinations are allowed, please use ";" to separate.

Buttons: OK, Cancel

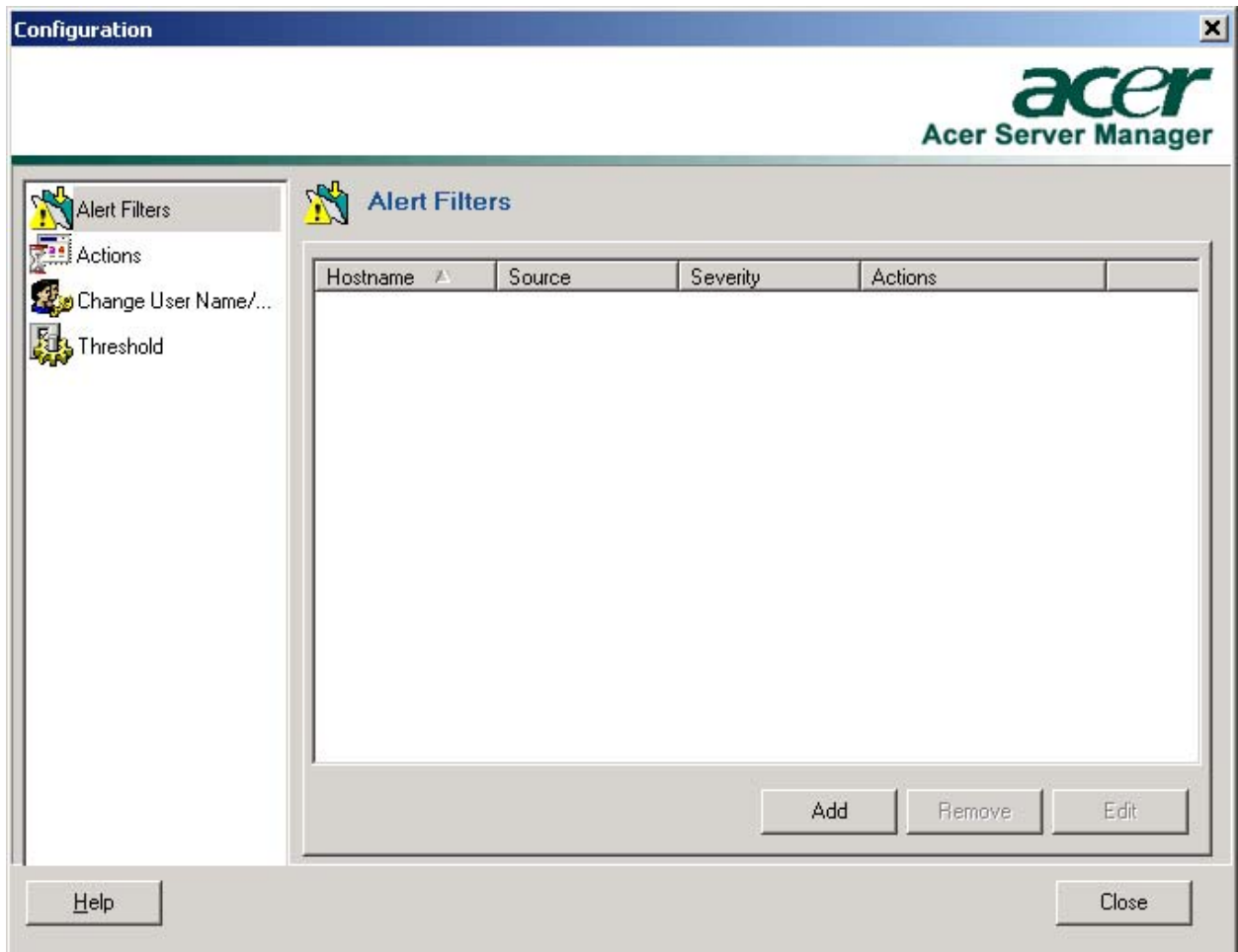
Click on "OK" and return to the "Configuration" dialog



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

3.6.2 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.

Edit Filter [X]

Hostname: CAROLINE Severity: All

Source: All

Action

Action	Parameter
<input checked="" type="checkbox"/> Execute	test.bat
<input checked="" type="checkbox"/> Mailto	tomy@acer.com
<input checked="" type="checkbox"/> Send to Console	
<input checked="" type="checkbox"/> SNMP Trap	192.168.1.200

Caution: combination of hostname,severity and source should be unique in filter table.

OK Cancel

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:

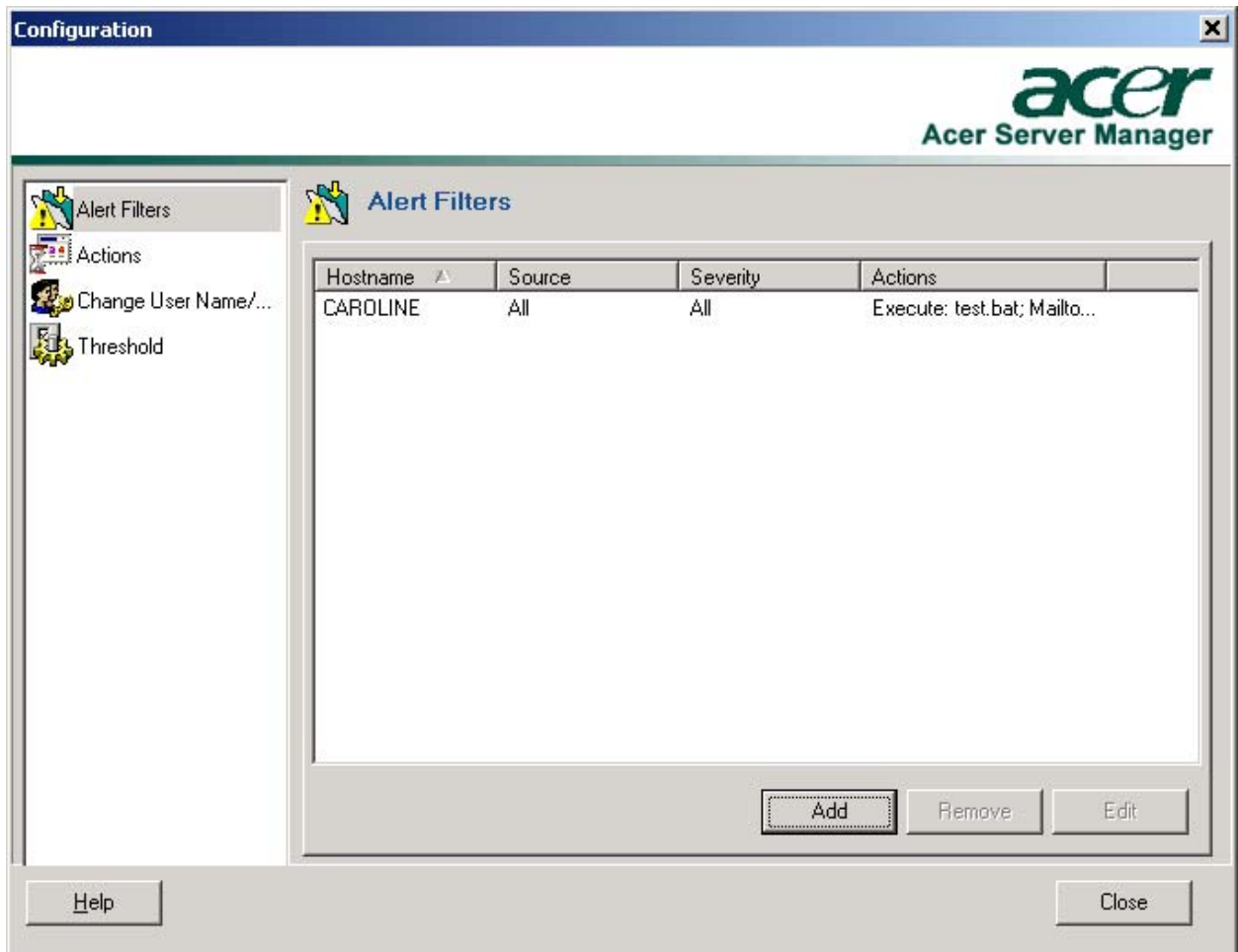
- SMBIOS events or logical groupings
- IPMI events or logical groupings
- SMART Alerts: Predictions generated by IDE Self Monitoring Analysis and Reporting Technology.
- Acer Defined Events:
 - CPU Usage: An alert would be generated if long term CPU usage is over 90%. (10 seconds samples would be taken. 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.

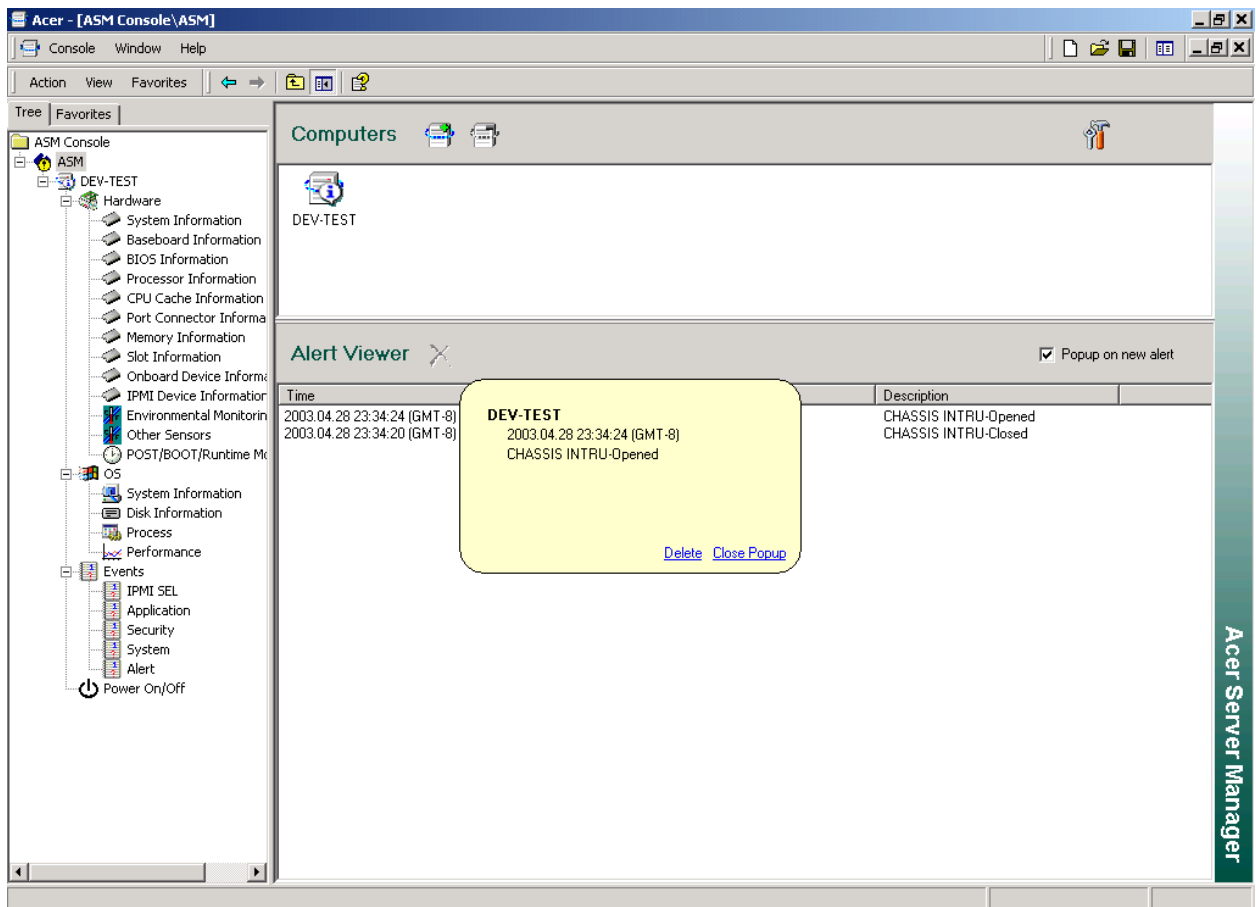
Severity: select the severity(s) and the alerts with the severity(s) would be sent.

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.

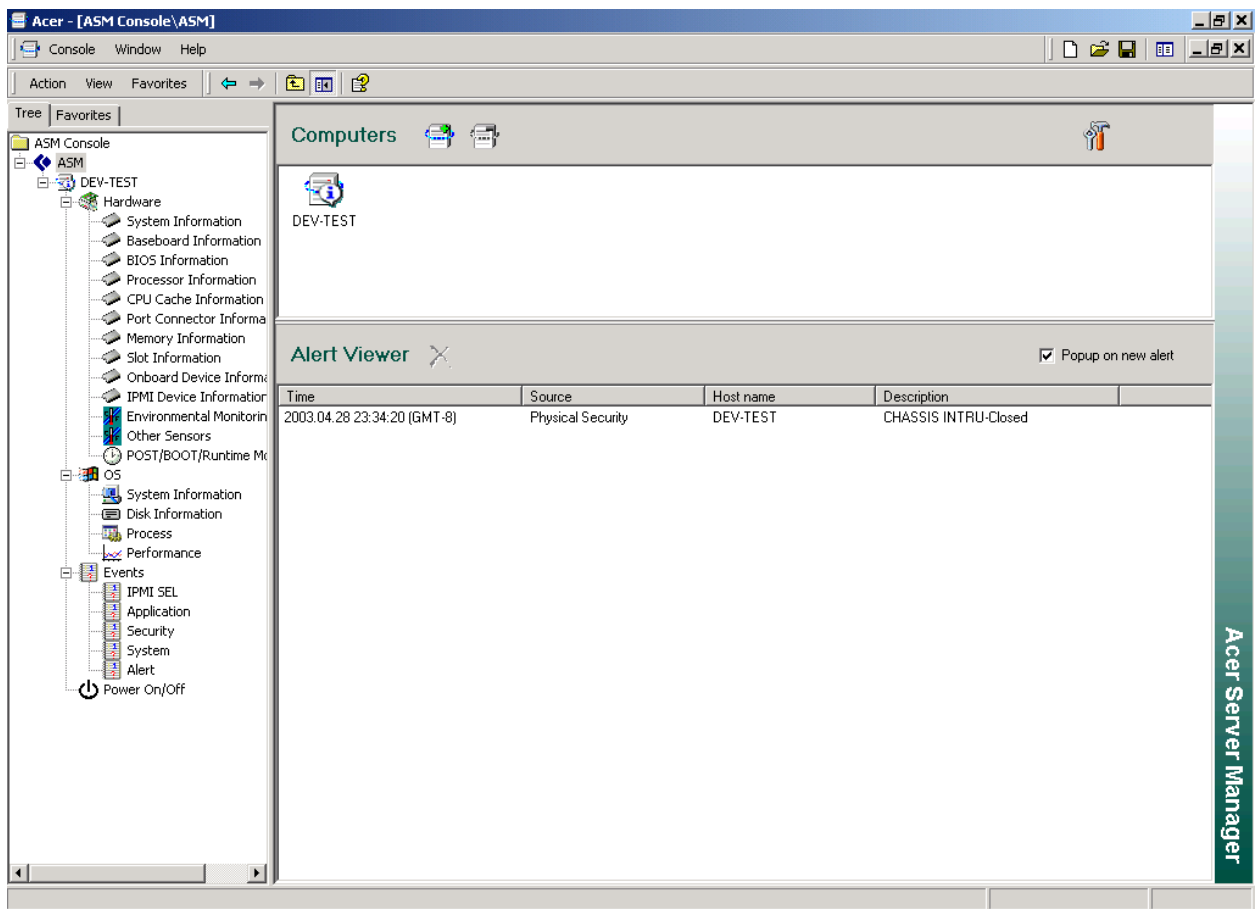
Click on “OK”, and new alert is added successfully



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



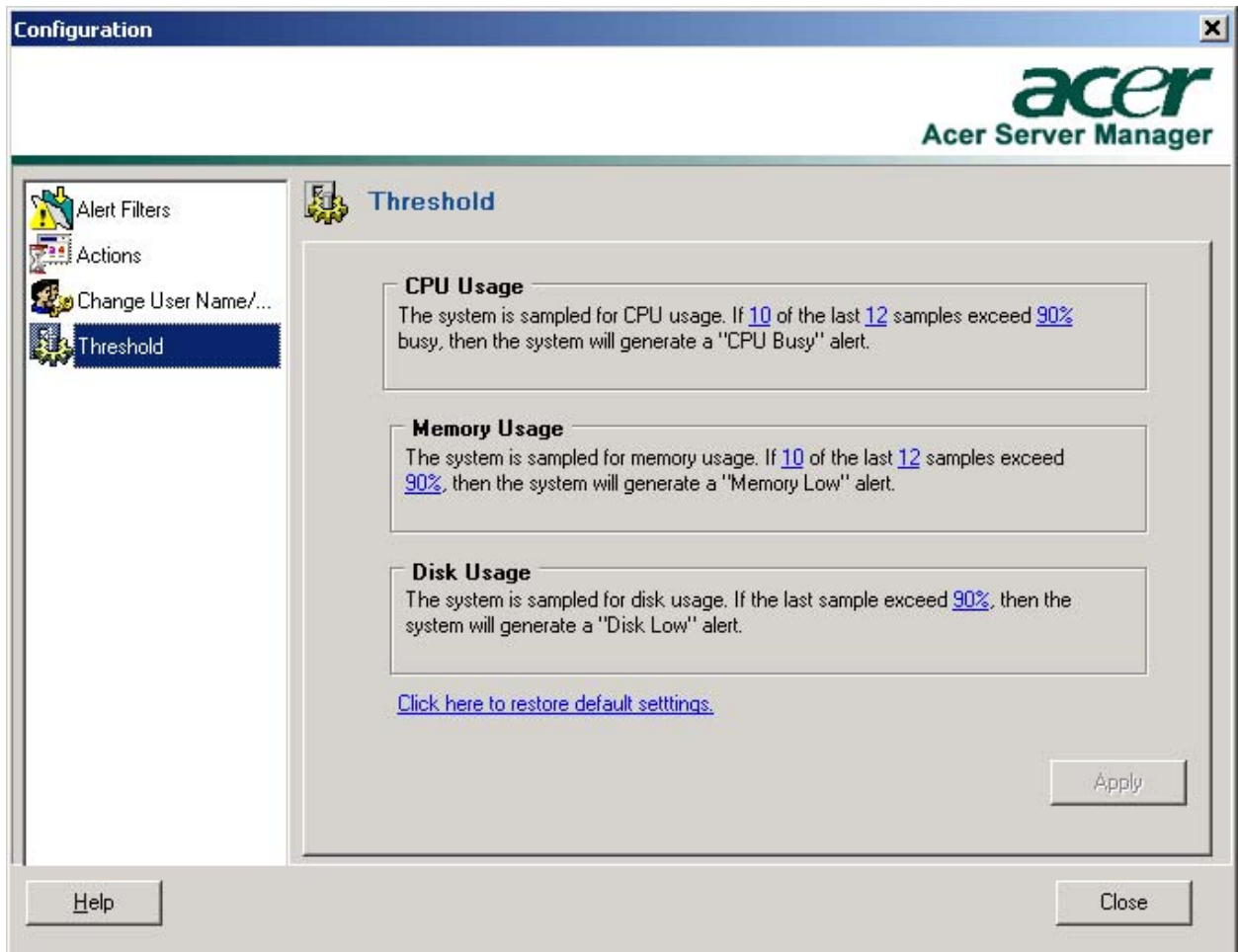
You can also view all the past alerts from the **Alert panel**



3.6.3 Set Threshold

To set Threshold for alerts, highlight “Threshold” in the “Configuration” dialog, and there are 3 types of threshold respectively for CPU Usage, Memory Usage and Disk Usage. The alert will be generated if one of the CPU/Memory/Disk Usage is out of the threshold.

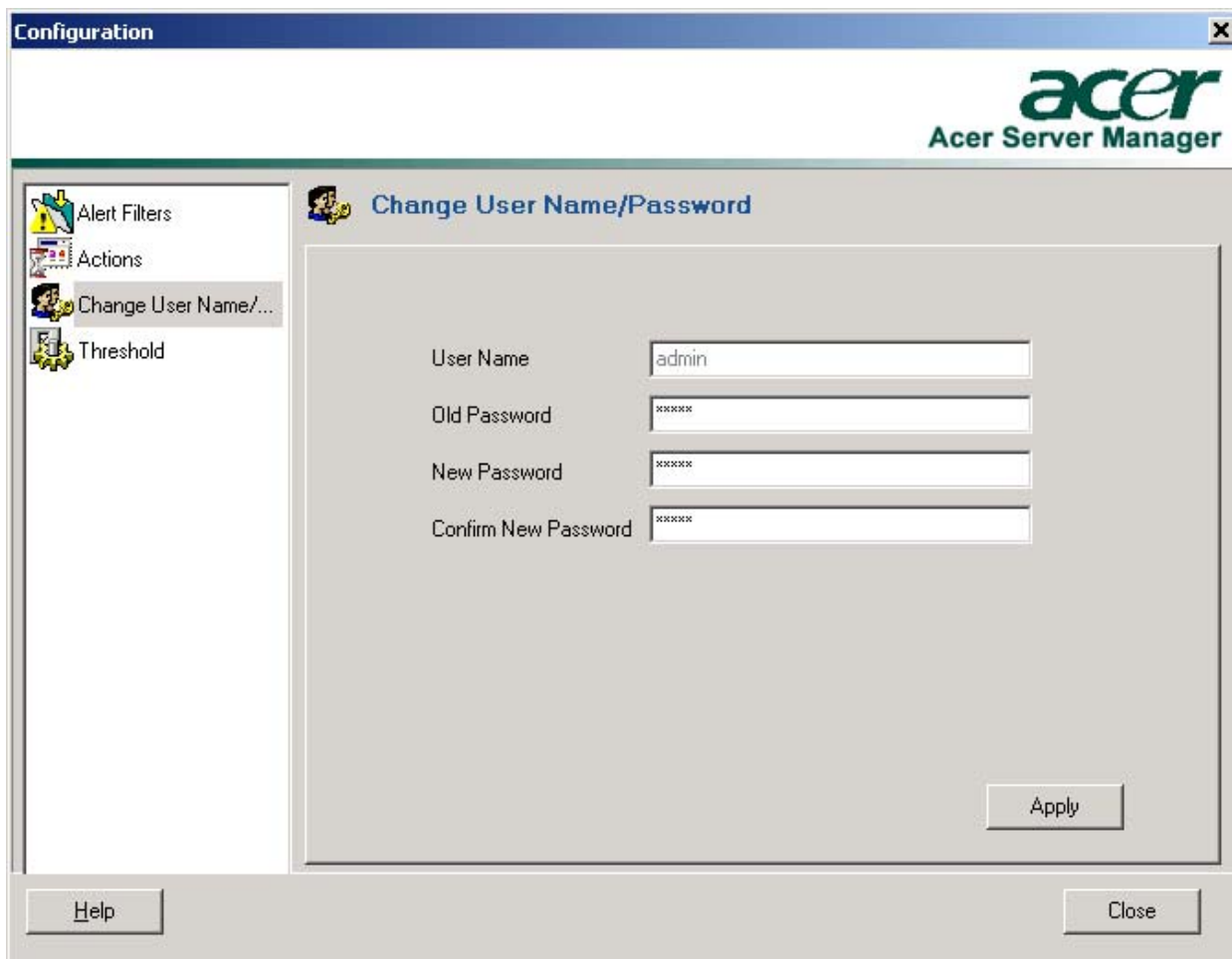
Click on “Click here to restore default settings” to set default settings.



3.6.4 Change Acer Server Manager Password

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

To change Password, highlight "Change User Name/Password" in the "Configuration" dialog



Click to the “Change Password” icon in the **Discovery Panel** as shown in the above screenshot.

Enter your old password once and 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.

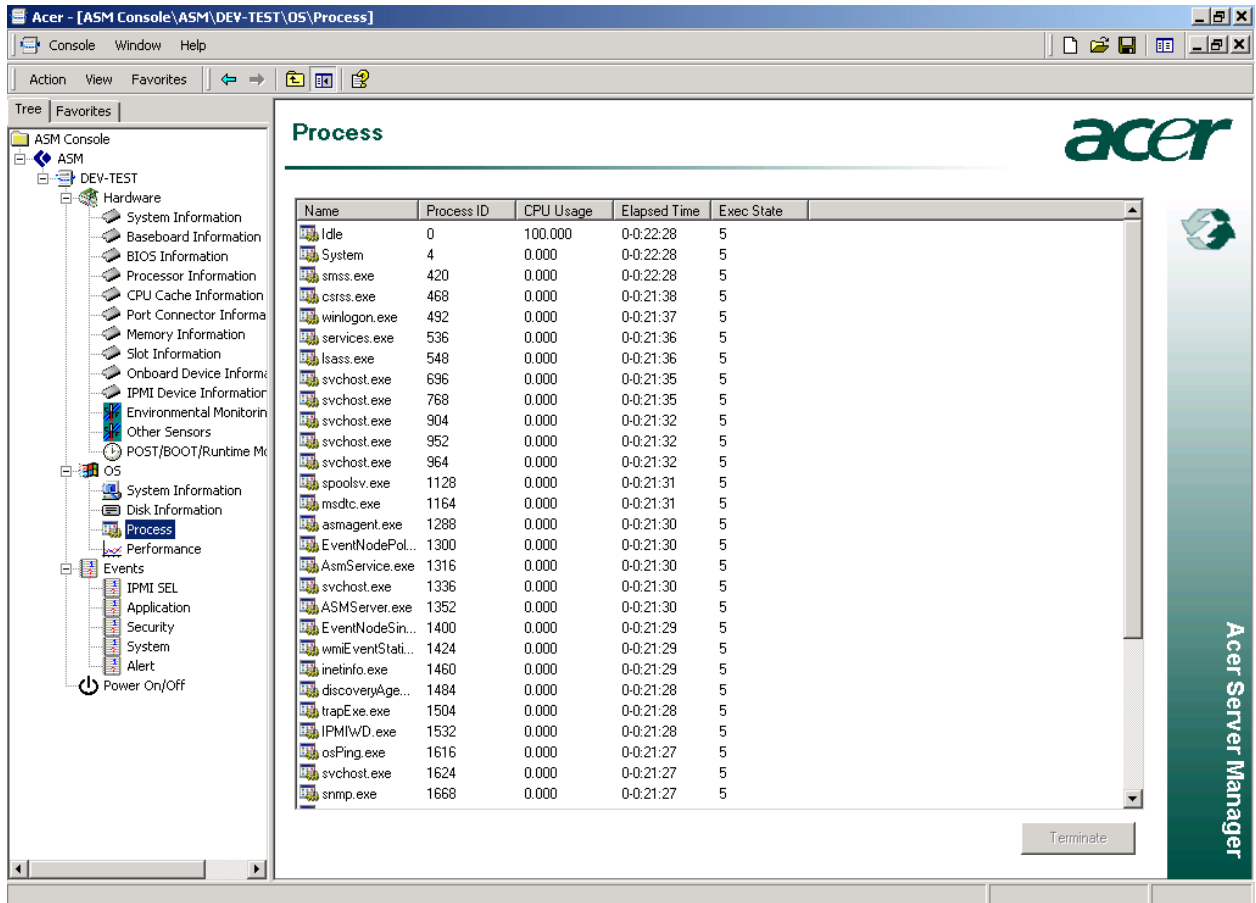


3.7 Managing a Managed Node

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.

3.7.1 Retrieving information from a Managed node

Information the 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.

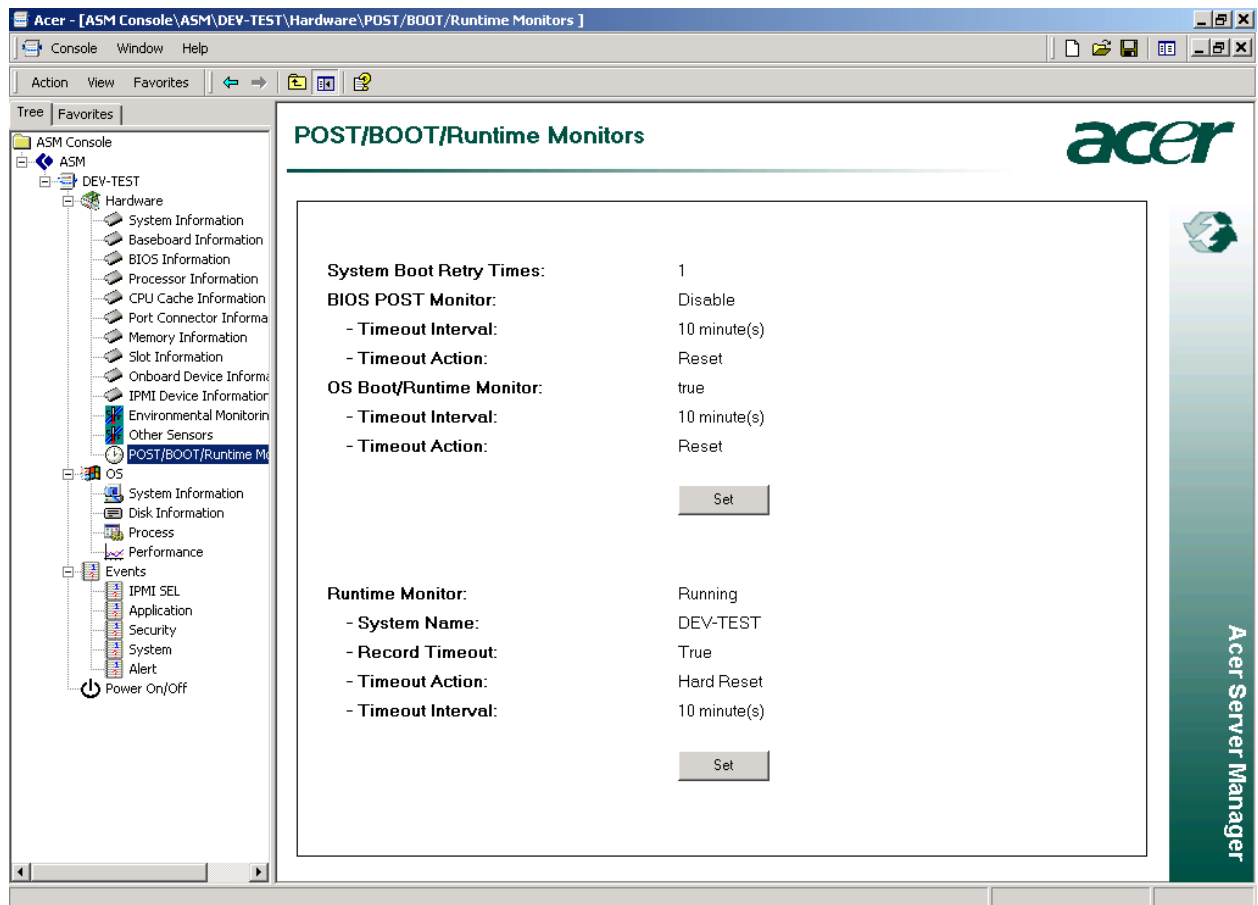


3.7.1.1 Hardware information

- **POST/BOOT/Runtime Monitors**

The POST/BOOT/Runtime Monitors is a run time monitor -- 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, indicating that BIOS has not finished running in 300 seconds, 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.

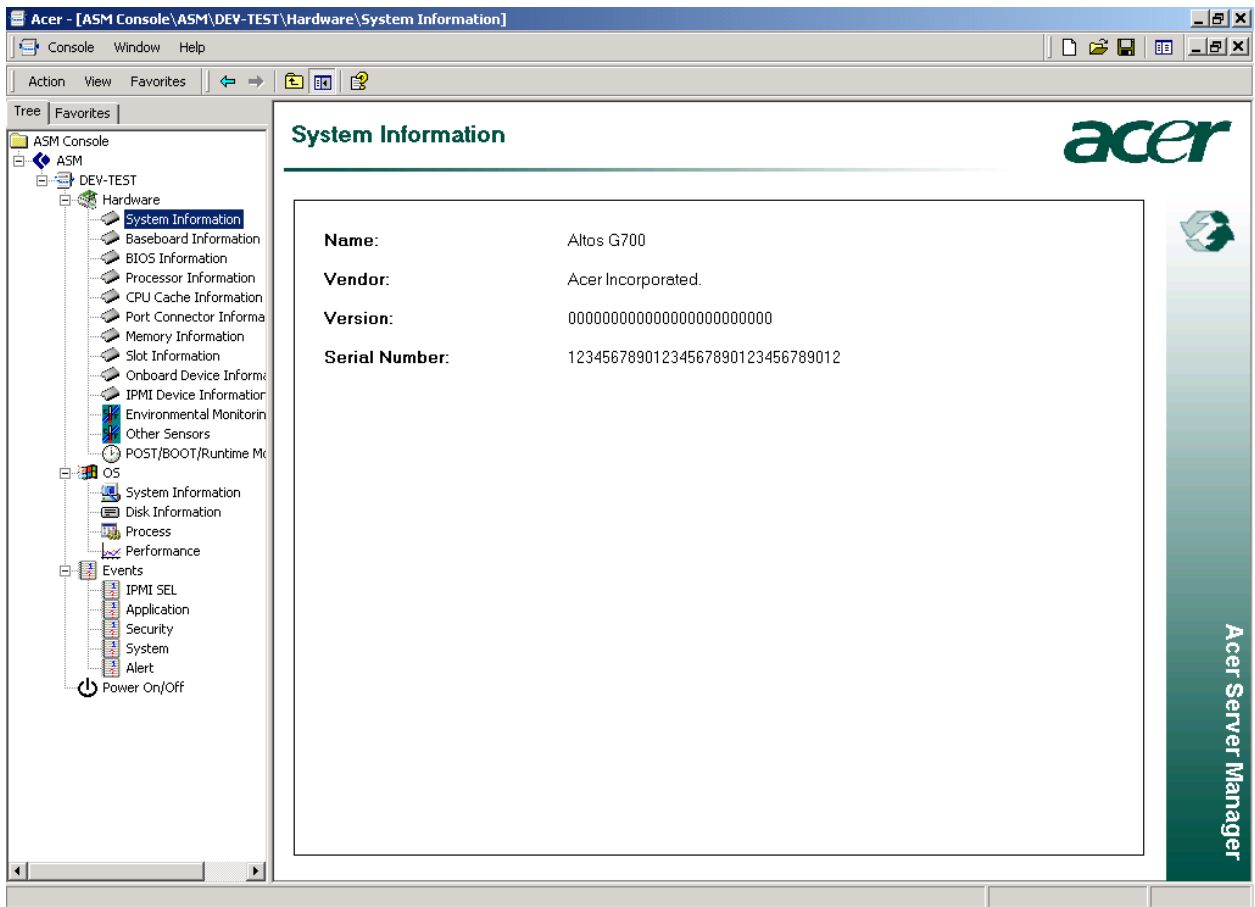
Selecting “POST/BOOT/Runtime Monitors” will show the settings for the POST and BOOT. The display pane for the POST/BOOT/Runtime Monitors displays the following information: 1) watchdog timer event source. 2) Watchdog timer event source enabled/disabled 3) timer setting 4) action selected.



This item is not available if underlying platform is G300.

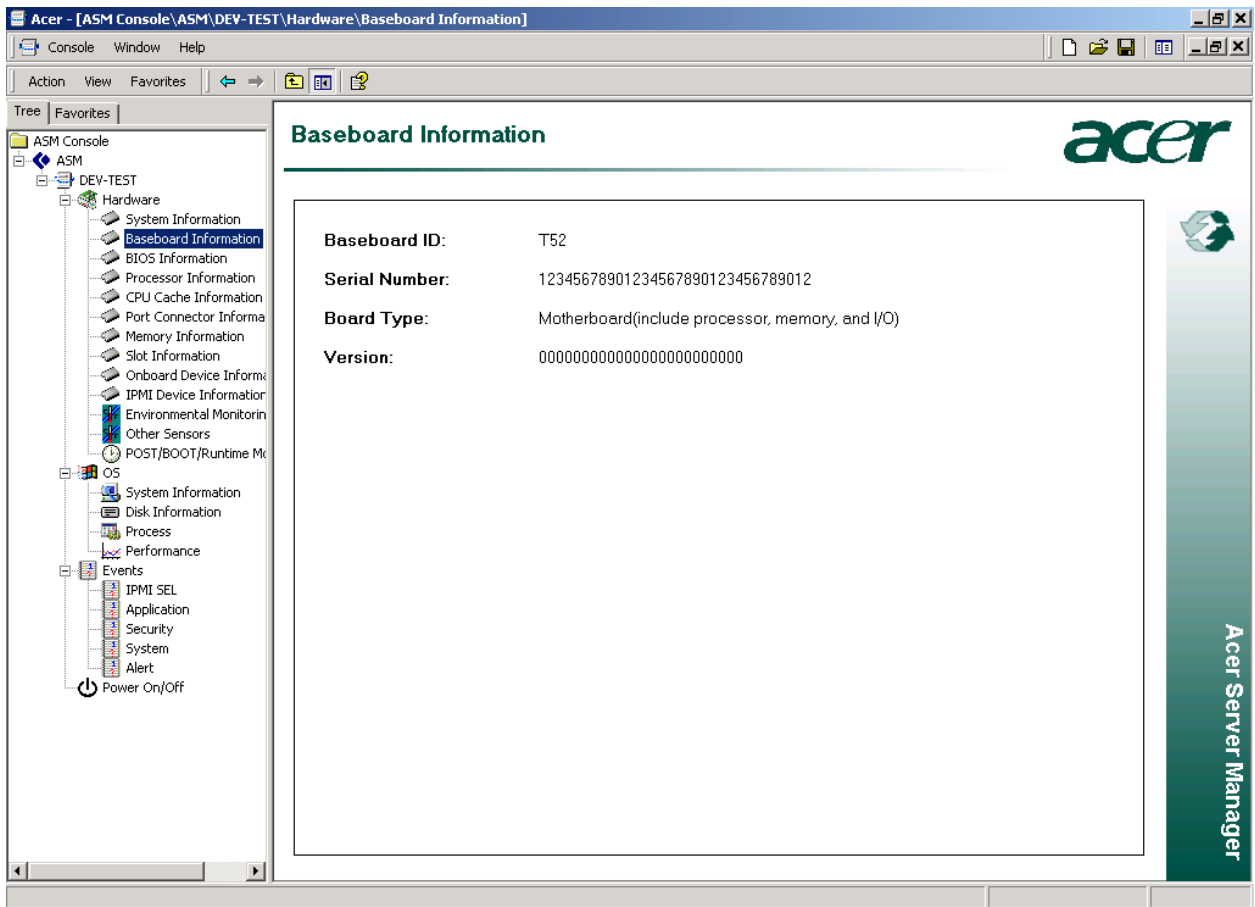
- **System Information**

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



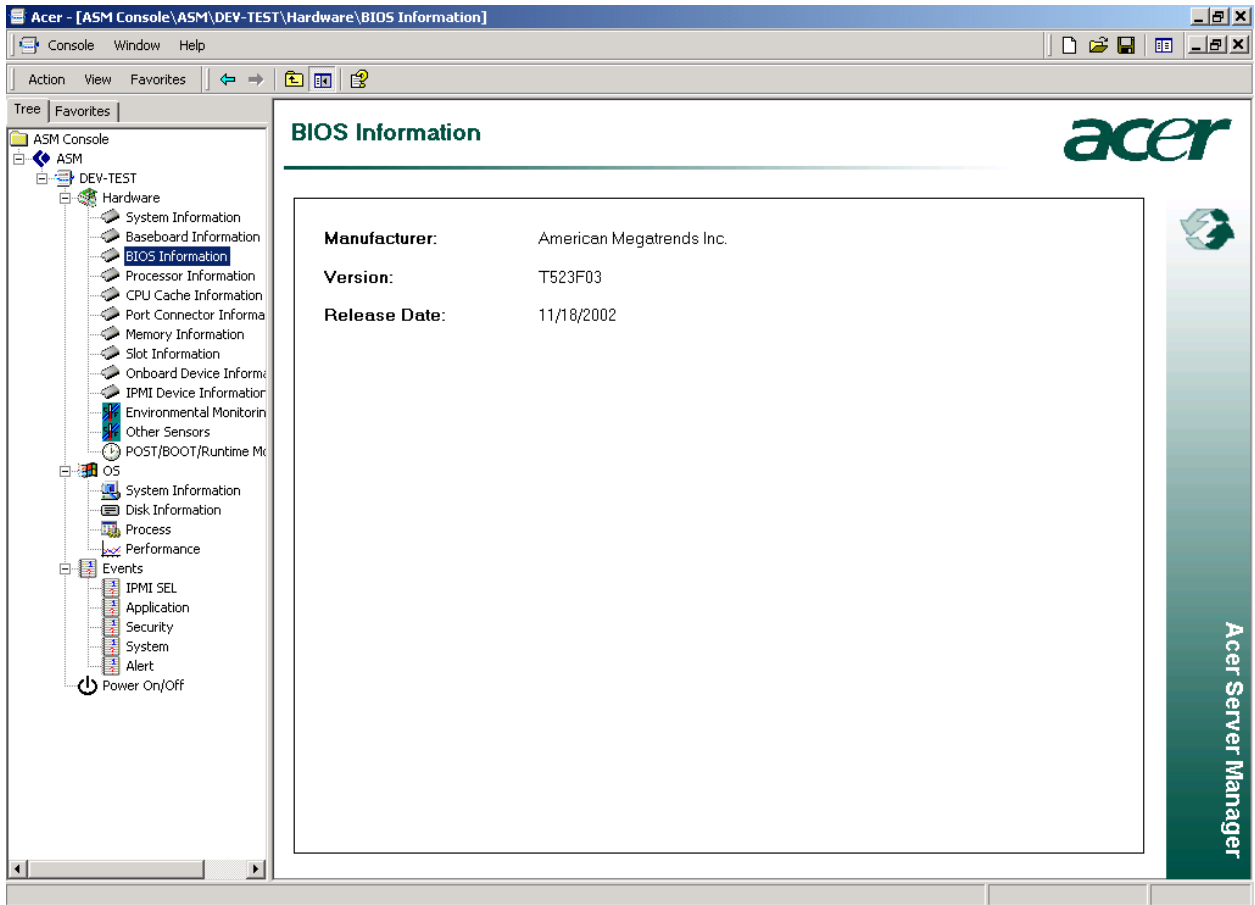
- **Baseboard**

“Baseboard Information” lists Baseboard ID, Serial Number, Board Type and Version.



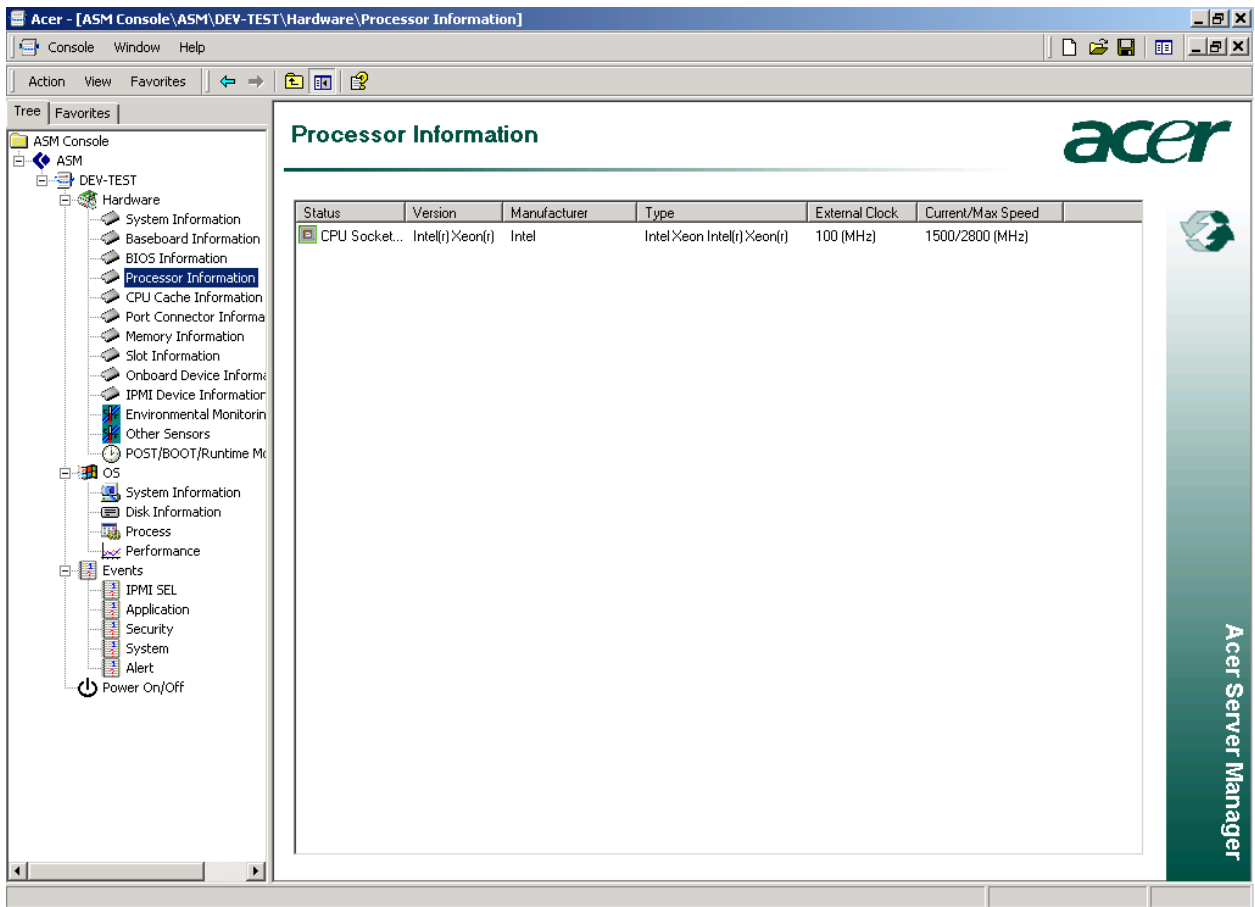
- **BIOS Information**

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



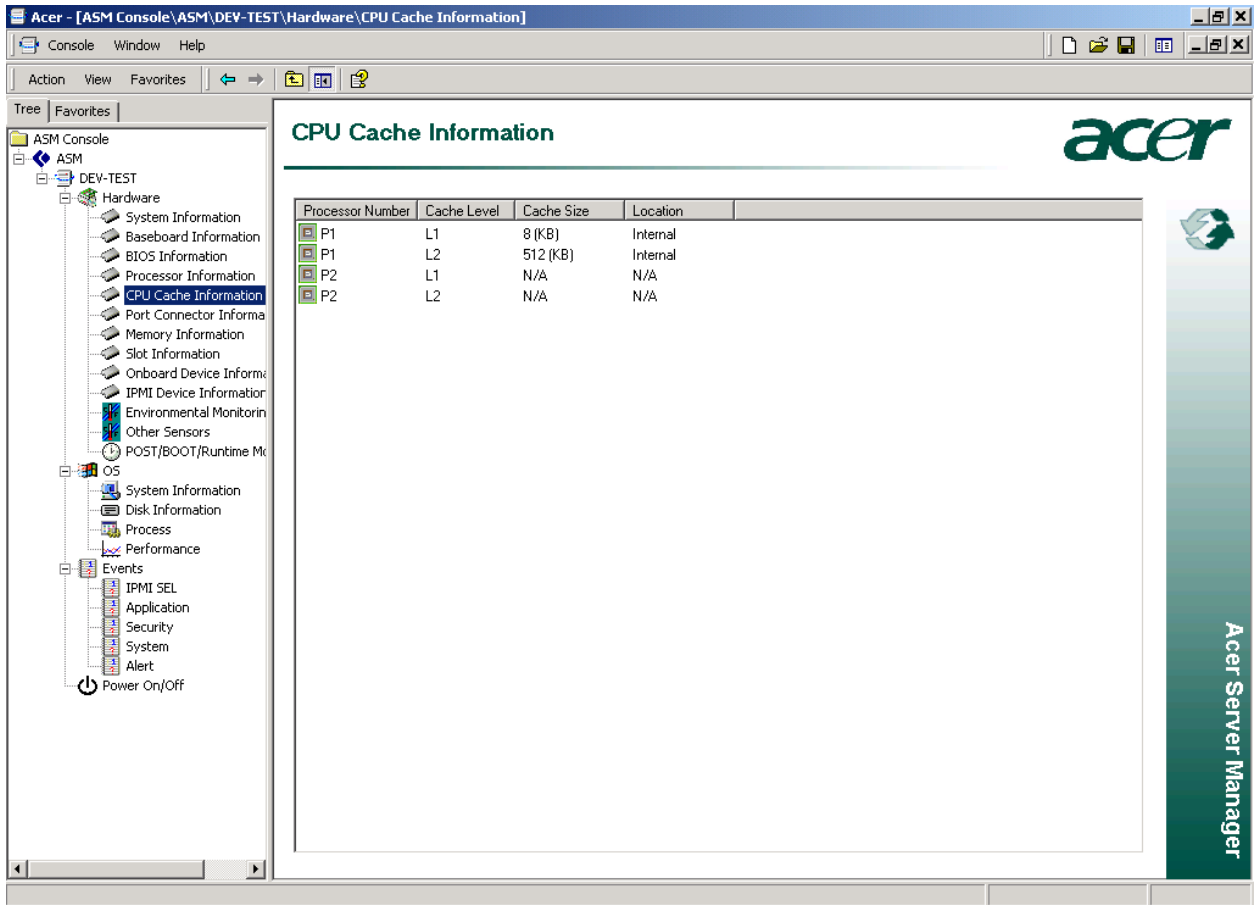
- **Processor Information**

“Processor Information” provides information about the CPUs of a managed node.



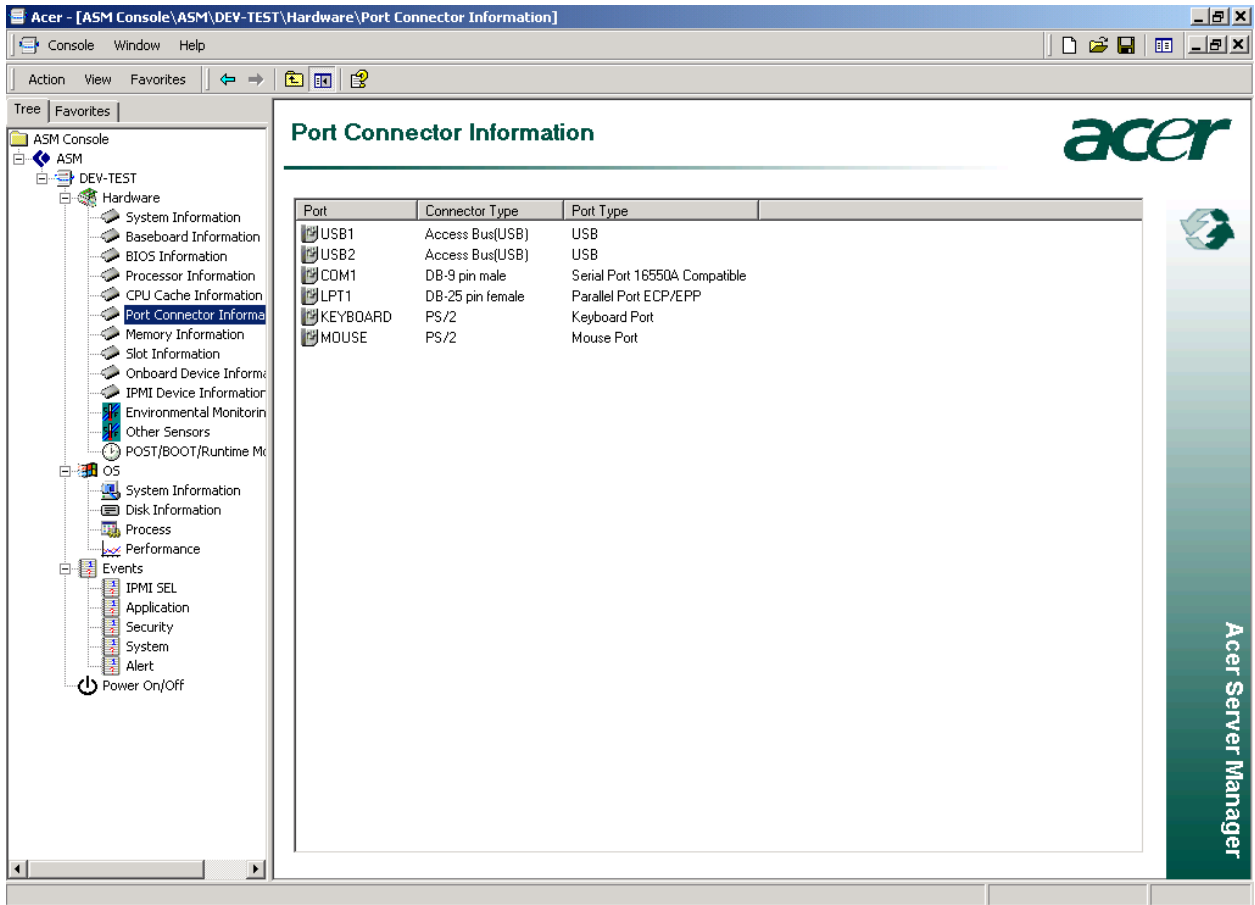
- **CPU Cache Information**

“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.

Memory Information

Location: System memory

Supported Speed: 70ns, 60ns

Supported Memory Type: Parity, ECC, DIMM, SDRAM

Error Detecting Method: 64-bit ECC

Memory Error Correcting: Single-bit ECC

Maximum Capacity: 6144 (MB)

Installed Memory: 512 (MB)

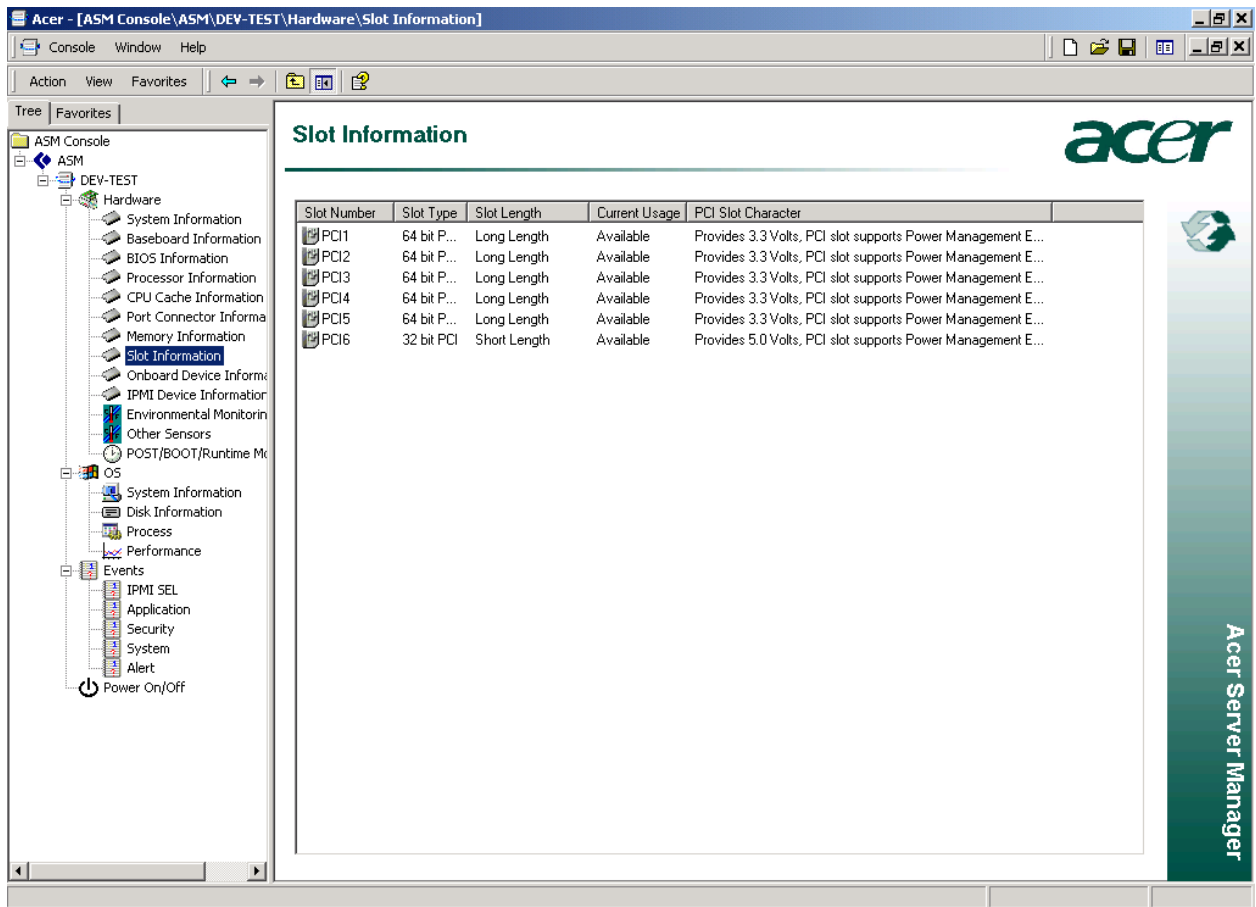
Current Interleave: Two Way Interleave

Number of Memory Device: 6

Memory Type	Bus Speed	Slot Number	Installed Size	Enable Size
DDR	200MHz	DIMM1	256MB, Single B...	256MB
DDR	200MHz	DIMM2	256MB, Single B...	256MB
DDR	200MHz	DIMM3	Single Bank	Not installed
DDR	200MHz	DIMM4	Single Bank	Not installed
DDR	200MHz	DIMM5	Single Bank	Not installed
DDR	200MHz	DIMM6	Single Bank	Not installed

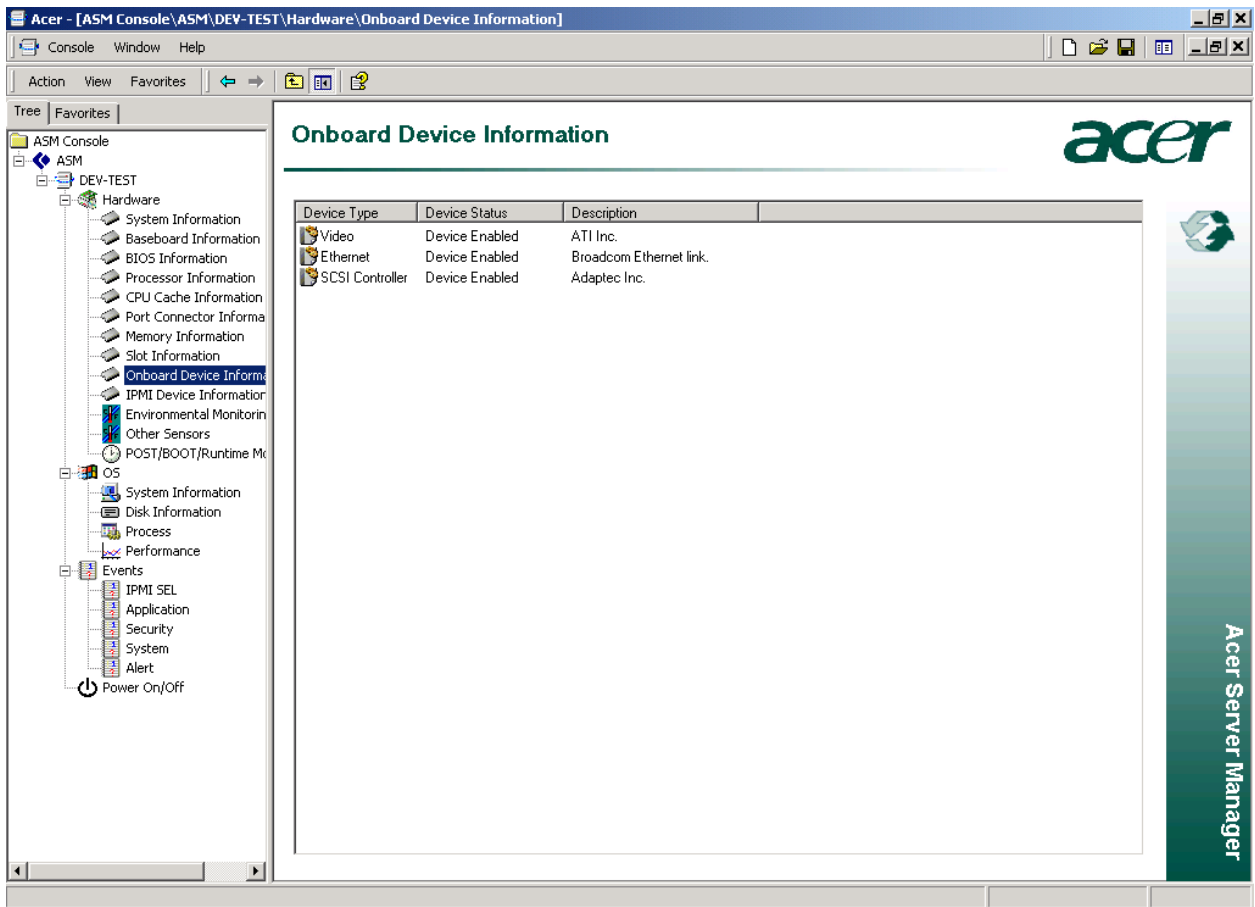
- **Slot Information**

“Slot Information” lists characteristics of system slots



- **Onboard Device Information**

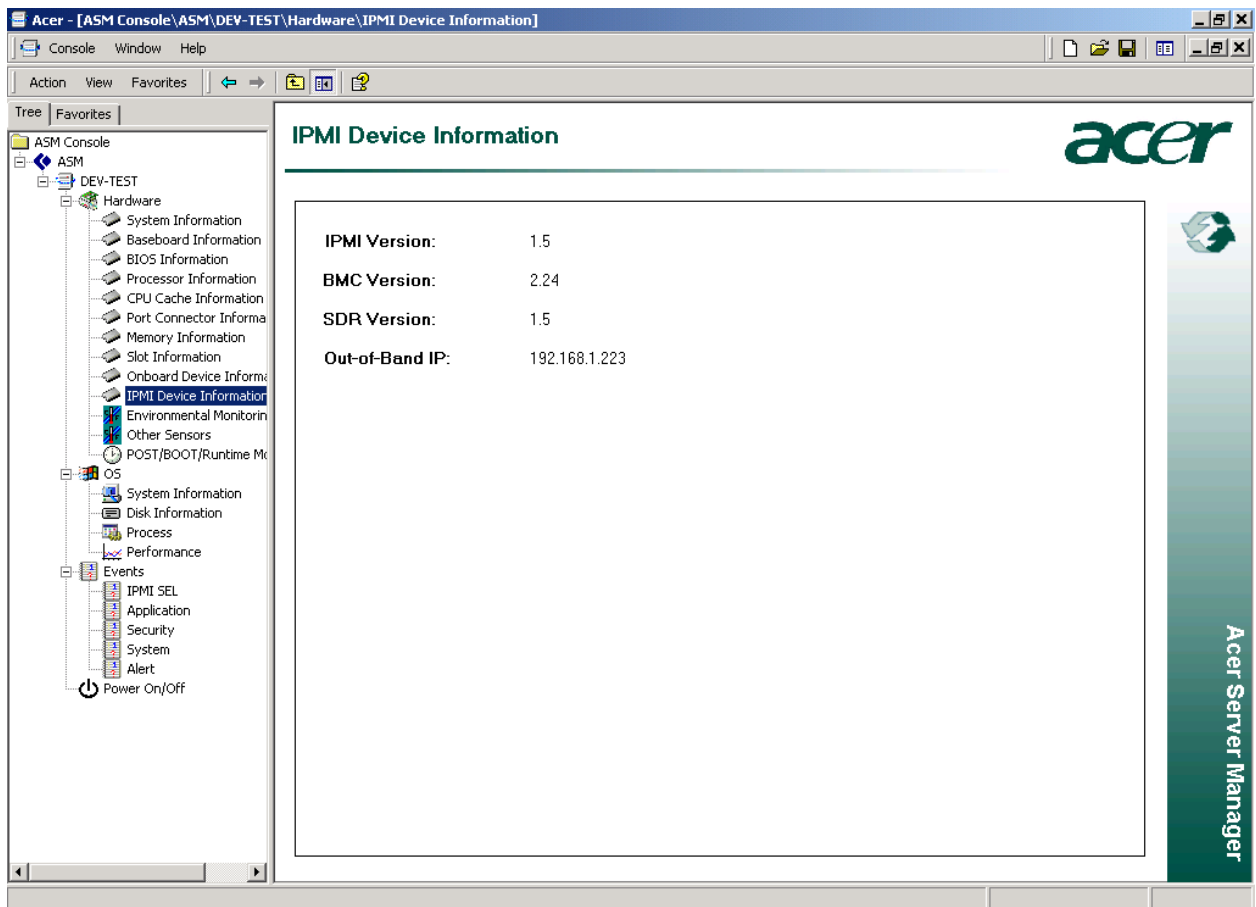
“Onboard Device Information” gives the attributes of devices that are on the system baseboard.



- **IPMI Device Information**

“IPMI Device Information” will provide version information of the node IPMI, BMC, SDR and Out-of-Band IP.

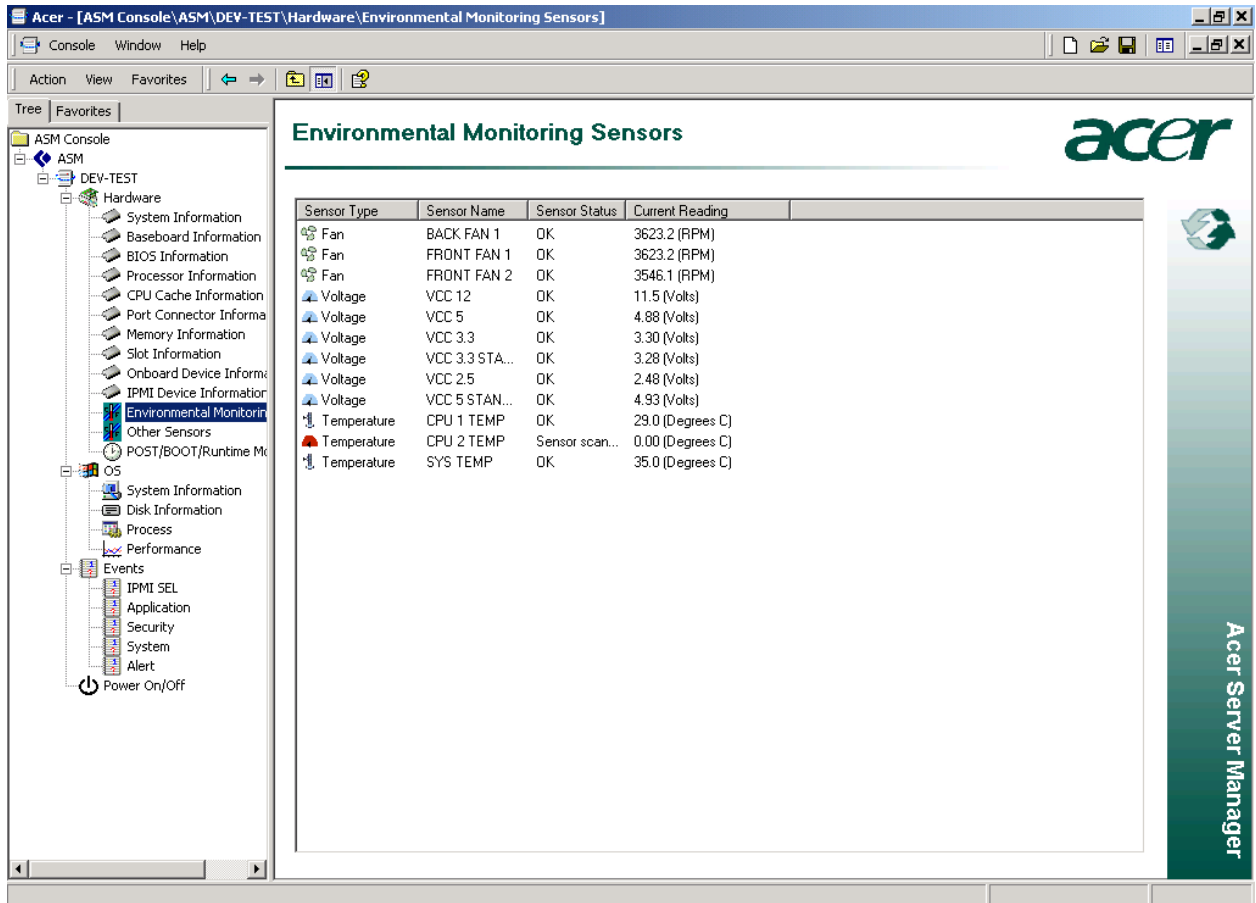
This item is not available for platform that does not support IPMI.



- **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.



The screenshot shows the Acer Server Manager application window. The title bar reads "Acer - [ASM Console\ASM\DEV-TEST\Hardware\Environmental Monitoring Sensors]". The menu bar includes "Console", "Window", and "Help". Below the menu bar is a toolbar with icons for "Action", "View", and "Favorites". The left pane shows a tree view with the following structure:

- ASM Console
 - ASM
 - DEV-TEST
 - Hardware
 - System Information
 - Baseboard Information
 - BIOS Information
 - Processor Information
 - CPU Cache Information
 - Port Connector Informa...
 - Memory Information
 - Slot Information
 - Onboard Device Inform...
 - IPMI Device Informator...
 - Environmental Monitori...**
 - Other Sensors
 - POST/BOOT/Runtime M...
 - OS
 - System Information
 - Disk Information
 - Process
 - Performance
 - Events
 - IPMI SEL
 - Application
 - Security
 - System
 - Alert
 - Power On/Off

The right pane is titled "Environmental Monitoring Sensors" and features the Acer logo. It contains a table with the following data:

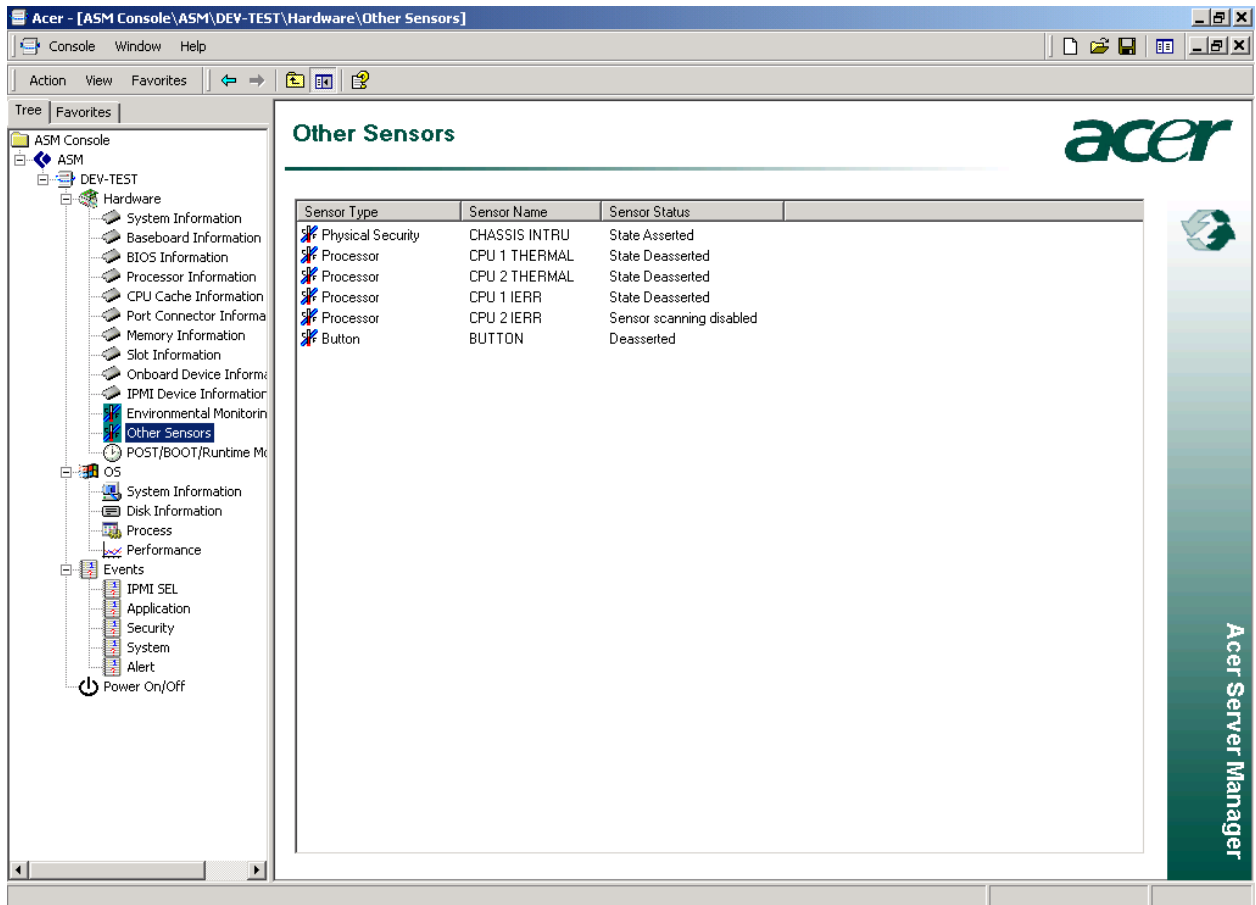
Sensor Type	Sensor Name	Sensor Status	Current Reading
Fan	BACK FAN 1	OK	3623.2 (RPM)
Fan	FRONT FAN 1	OK	3623.2 (RPM)
Fan	FRONT FAN 2	OK	3546.1 (RPM)
Voltage	VCC 12	OK	11.5 (Volts)
Voltage	VCC 5	OK	4.88 (Volts)
Voltage	VCC 3.3	OK	3.30 (Volts)
Voltage	VCC 3.3 STA...	OK	3.28 (Volts)
Voltage	VCC 2.5	OK	2.48 (Volts)
Voltage	VCC 5 STAN...	OK	4.93 (Volts)
Temperature	CPU 1 TEMP	OK	29.0 (Degrees C)
Temperature	CPU 2 TEMP	Sensor scan...	0.00 (Degrees C)
Temperature	SYS TEMP	OK	35.0 (Degrees C)

The right pane also includes a vertical sidebar on the right side with the text "Acer Server Manager" and a circular arrow icon.

- **Other Sensors**

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

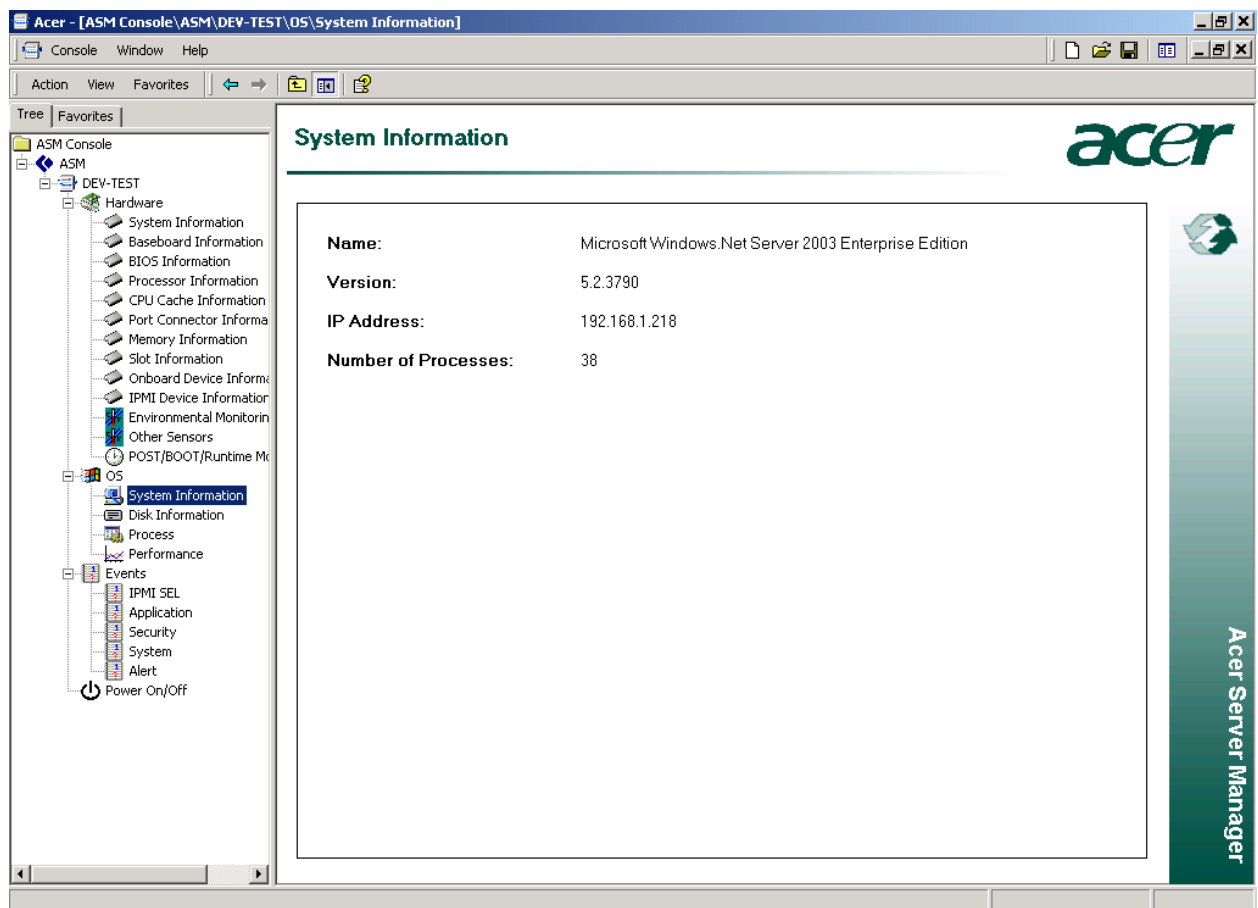
This item is not available for platforms that do not support IPMI.



3.7.1.2 Get OS information of a Managed node

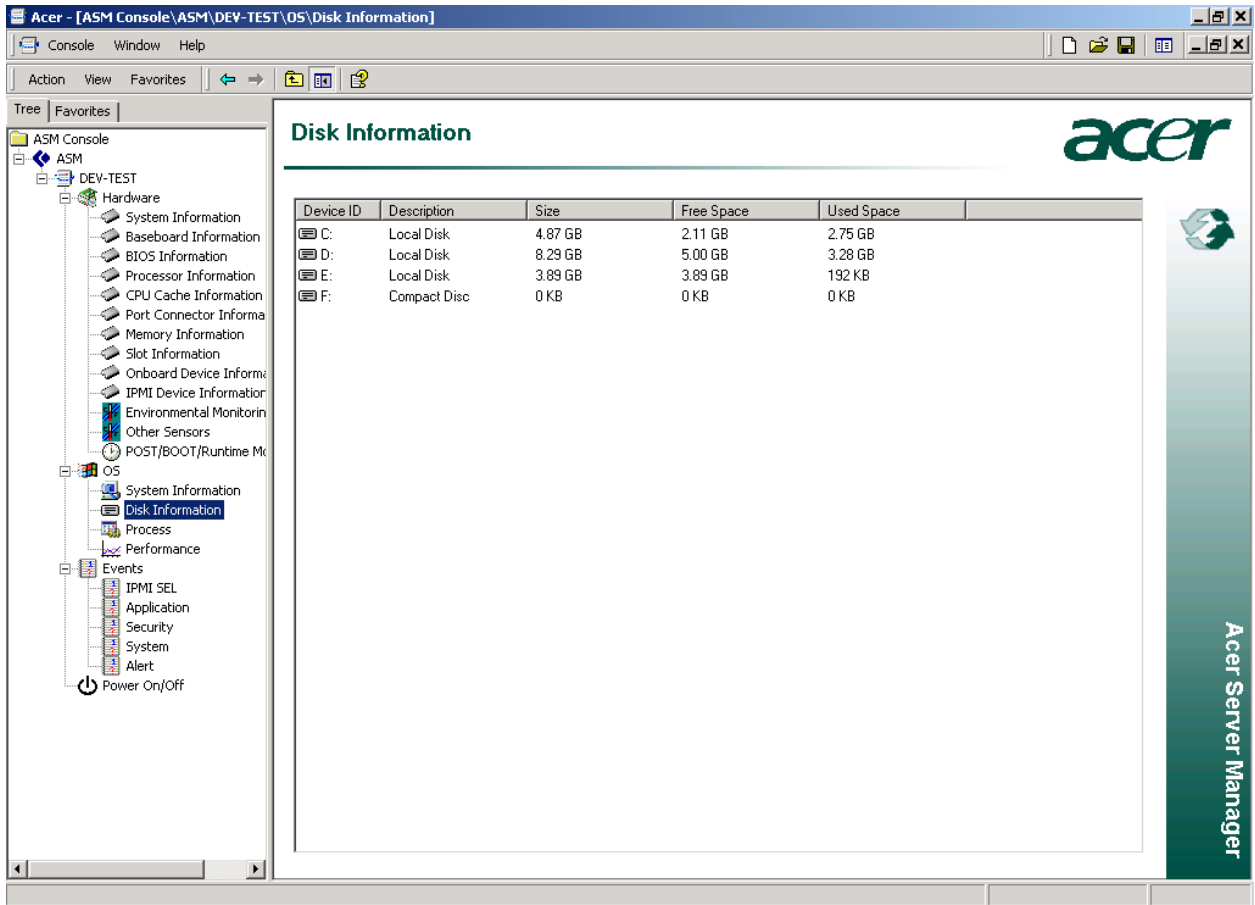
- **System Information**

“System Information” shows elementary system information such as OS name, OS version, system IP, etc.



- **Disk Information**

“Disk Information” displays information such as device ID, description, size, etc.



- **Process**

“Process” lists all the currently active processes with their name, process ID, CPU usage, elapsed time, and status

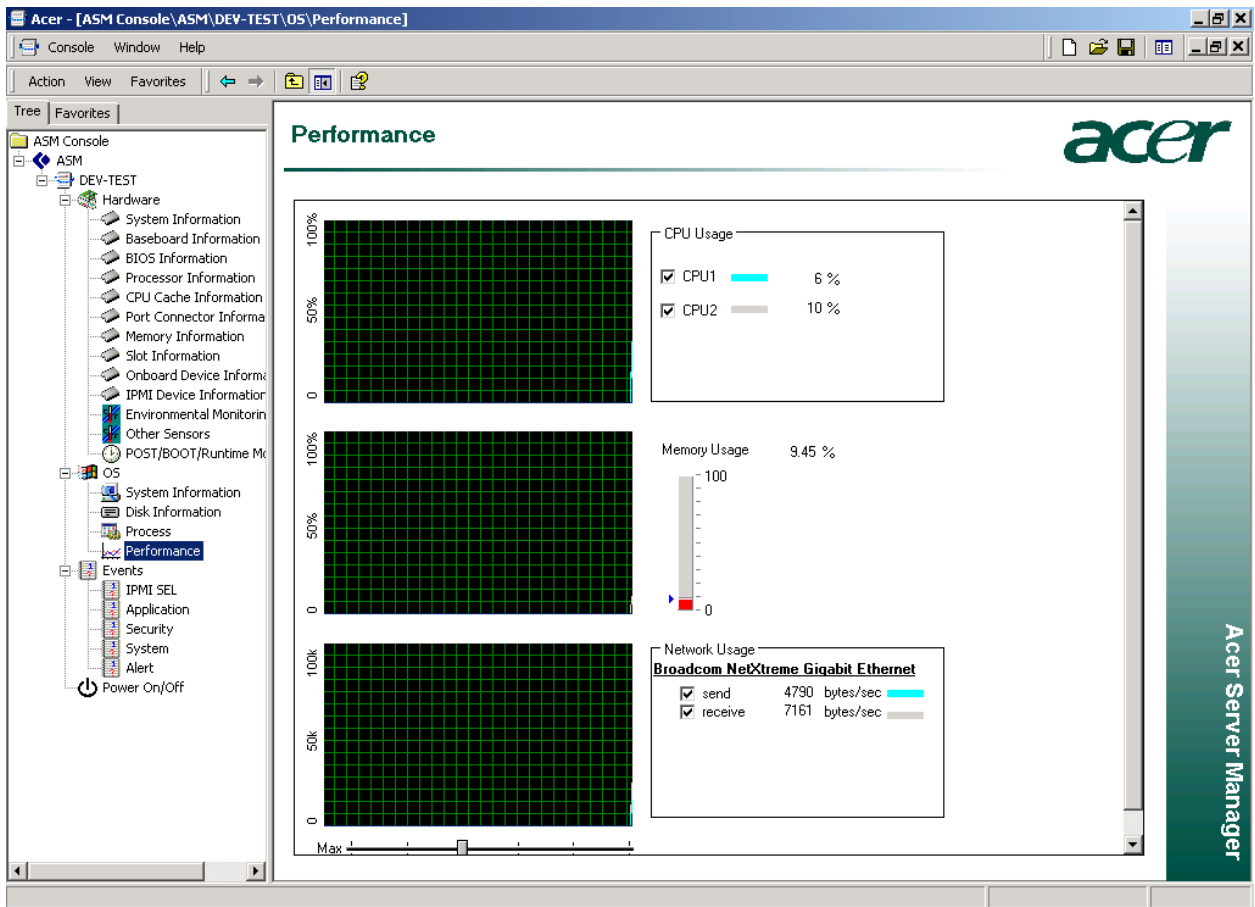
Process

Name	Process ID	CPU Usage	Elapsed Time	Exec State
Idle	0	100.000	0-0:22:28	5
System	4	0.000	0-0:22:28	5
smss.exe	420	0.000	0-0:22:28	5
csrss.exe	468	0.000	0-0:21:38	5
winlogon.exe	492	0.000	0-0:21:37	5
services.exe	536	0.000	0-0:21:36	5
lsass.exe	548	0.000	0-0:21:36	5
svchost.exe	696	0.000	0-0:21:35	5
svchost.exe	768	0.000	0-0:21:35	5
svchost.exe	904	0.000	0-0:21:32	5
svchost.exe	952	0.000	0-0:21:32	5
svchost.exe	964	0.000	0-0:21:32	5
spoolsv.exe	1128	0.000	0-0:21:31	5
msdtc.exe	1164	0.000	0-0:21:31	5
smagent.exe	1288	0.000	0-0:21:30	5
EventNodePol...	1300	0.000	0-0:21:30	5
AsmService.exe	1316	0.000	0-0:21:30	5
svchost.exe	1336	0.000	0-0:21:30	5
ASMServer.exe	1352	0.000	0-0:21:30	5
EventNodeSin...	1400	0.000	0-0:21:29	5
wmiEventStati...	1424	0.000	0-0:21:29	5
inetinfo.exe	1460	0.000	0-0:21:29	5
discoveryAge...	1484	0.000	0-0:21:28	5
trapExe.exe	1504	0.000	0-0:21:28	5
IPMIWd.exe	1532	0.000	0-0:21:28	5
osPing.exe	1616	0.000	0-0:21:27	5
svchost.exe	1624	0.000	0-0:21:27	5
srmp.exe	1668	0.000	0-0:21:27	5

Terminate

- **Performance**

Administrator can monitor the node's CPU, Memory, and Network Usage dynamically.

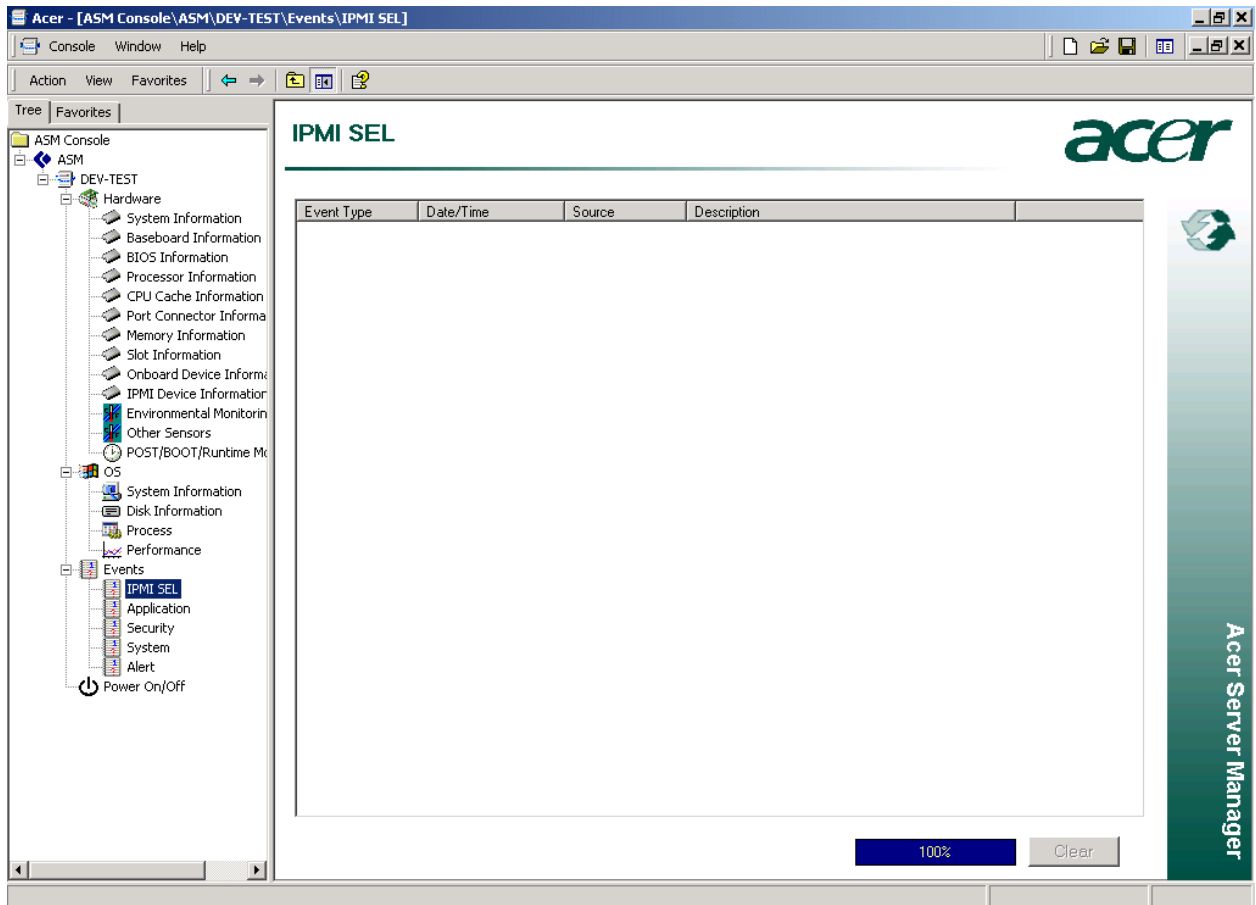


3.7.1.3 Get Events information of a Managed node

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.

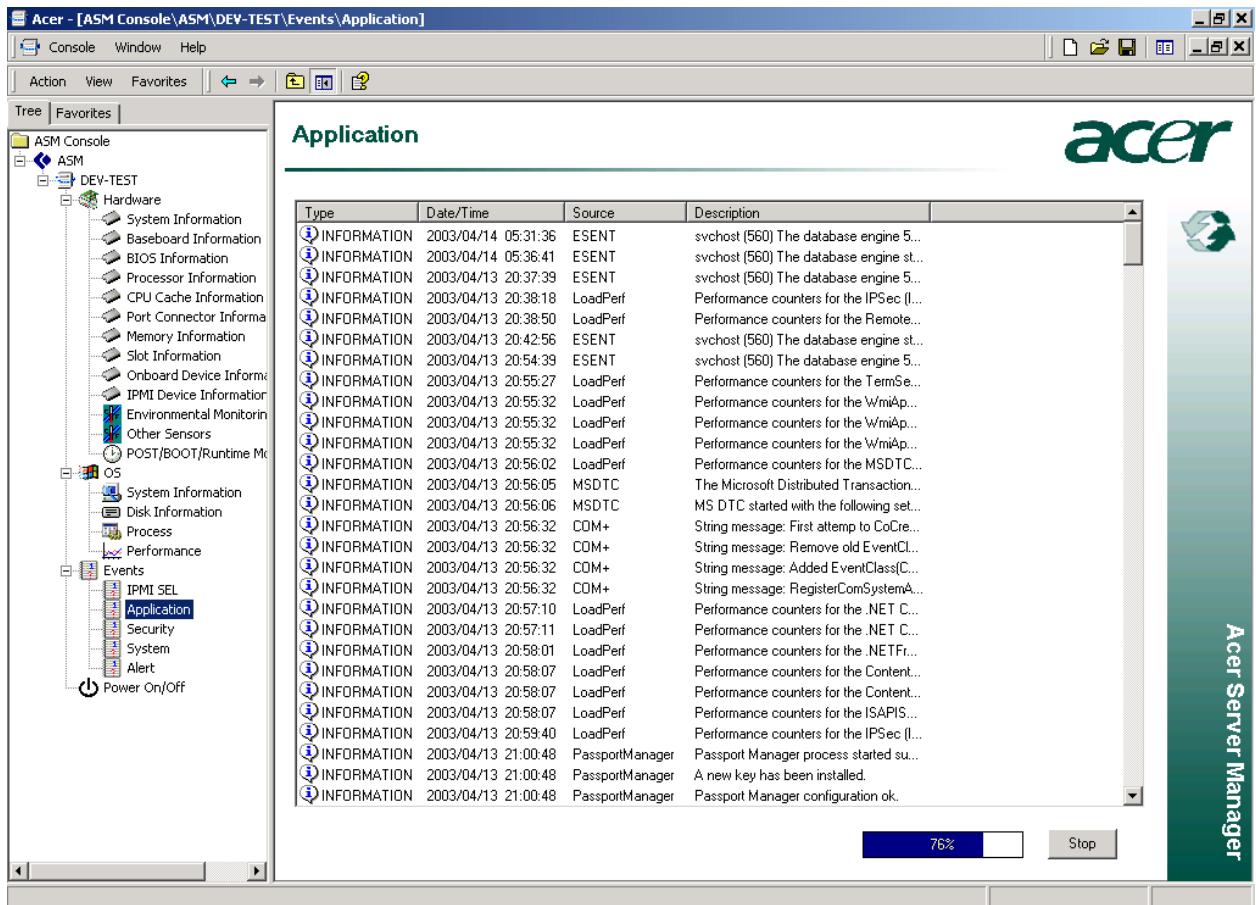
- **IPMI SEL**

“IPMI SEL” retrieves event log related to IPMI



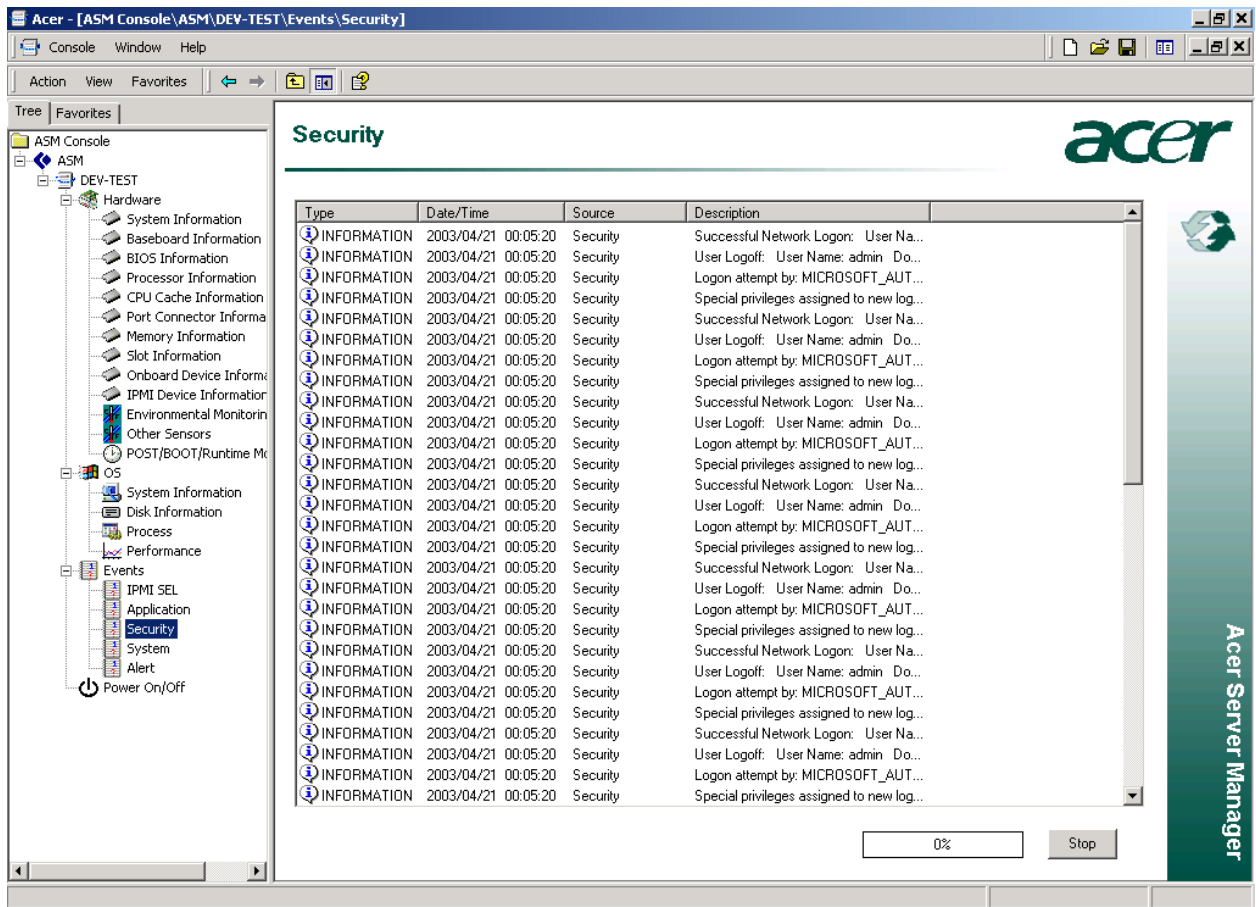
- **Application**

This item gets application event log.



- **Security**

This item gets security event log.



- **System**

This is retrieved from the system log of the operating system. Color-coded icons are used to denote the severity (non-recoverable/critical/non-critical) of the respective events.

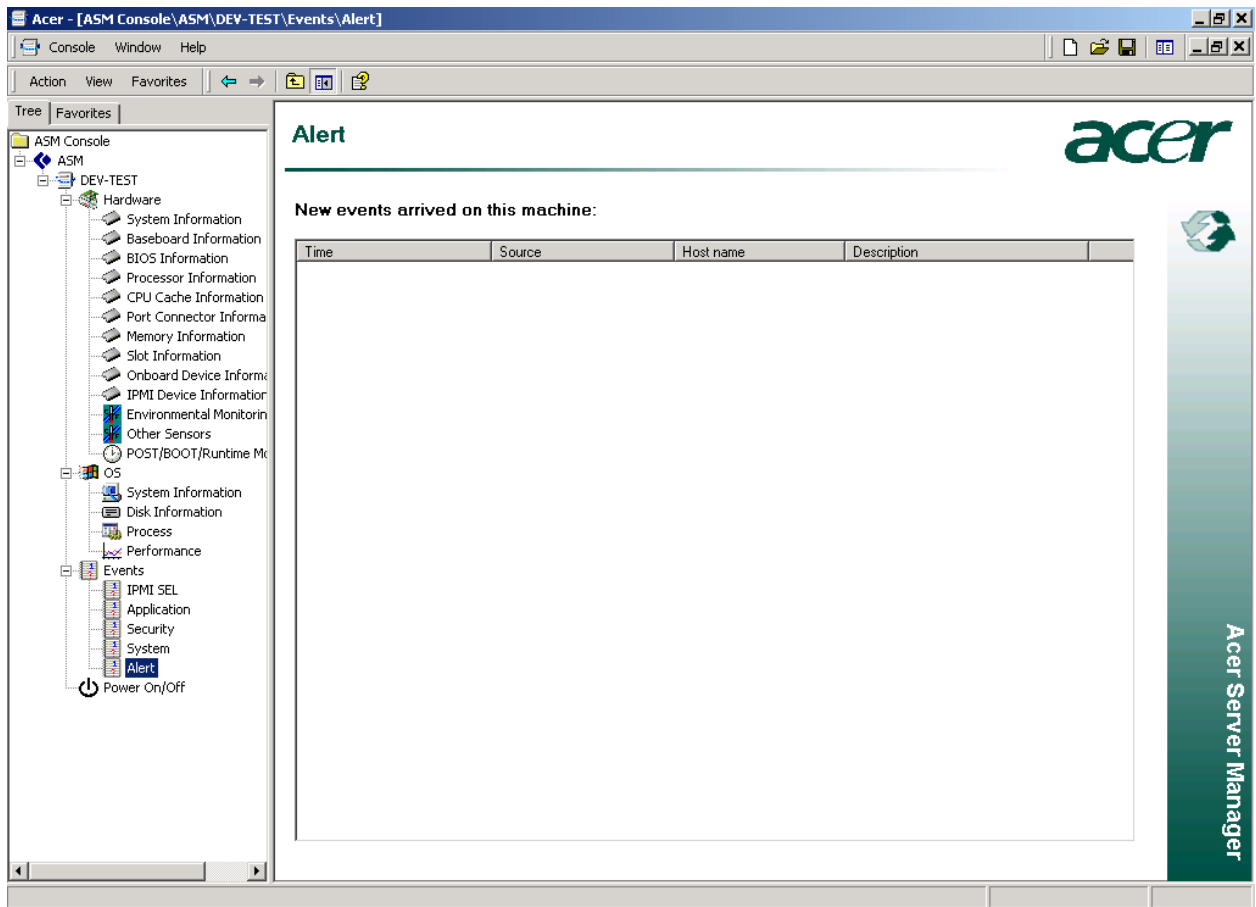
System

Type	Date/Time	Source	Description
INFORMATION	2003/04/14 05:31:24	EventLog	Microsoft (R) Windows (R) 5.02. 3790 Multiprocessor Free.
INFORMATION	2003/04/14 05:31:24	EventLog	The Event log service was started.
INFORMATION	2003/04/14 05:31:10	Serial	\\Device\\Serial0 \\Device\\Serial0
INFORMATION	2003/04/14 05:34:05	b57w2k	Broadcom NetXtreme Gigabit Ethernet
INFORMATION	2003/04/14 05:34:08	b57w2k	Broadcom NetXtreme Gigabit Ethernet
INFORMATION	2003/04/13 20:37:56	EventLog	The NetBIOS name and DNS host name of this machine h...
INFORMATION	2003/04/13 20:38:20	IPSec	The IPSec Driver is starting in Bypass mode. No IPSec sec...
INFORMATION	2003/04/13 20:54:38	Workstation	This computer has been successfully joined to workgroup '...
INFORMATION	2003/04/13 21:10:57	Setup	Setup successfully installed Windows build 3790.
INFORMATION	2003/04/13 21:10:59	USER32	The process winlogon.exe has initiated the restart of comp...
INFORMATION	2003/04/13 21:11:01	EventLog	The Event log service was stopped.
INFORMATION	2003/04/13 21:13:46	EventLog	Microsoft (R) Windows (R) 5.02. 3790 Multiprocessor Free.
INFORMATION	2003/04/13 21:13:46	EventLog	The Event log service was started.
INFORMATION	2003/04/13 21:14:02	DfsSvc	DFS has finished building all namespaces.
INFORMATION	2003/04/13 21:14:02	DfsSvc	DFS server has finished initializing.
INFORMATION	2003/04/13 21:13:32	b57w2k	Broadcom NetXtreme Gigabit Ethernet
INFORMATION	2003/04/13 21:13:33	IPSec	The IPSec Driver is starting in Bypass mode. No IPSec sec...
INFORMATION	2003/04/13 21:13:35	b57w2k	Broadcom NetXtreme Gigabit Ethernet
INFORMATION	2003/04/13 21:13:58	IPSec	The IPSec driver has entered Secure mode. IPSec policies...
ERROR	2003/04/13 21:14:03	W32Time	Time Provider NtpClient: An error occurred during DNS loo...
INFORMATION	2003/04/13 21:15:25	Service Control	The Terminal Services service was successfully sent a star...
ERROR	2003/04/13 21:29:08	W32Time	Time Provider NtpClient: An error occurred during DNS loo...
INFORMATION	2003/04/13 21:52:15	Service Control	The Network Connections service was successfully sent a ...
INFORMATION	2003/04/13 21:52:16	Service Control	The Network Connections service entered the running state.
INFORMATION	2003/04/13 21:52:16	Service Control	The Windows Installer service was successfully sent a start...
INFORMATION	2003/04/13 21:52:16	Service Control	The Windows Installer service entered the running state.
INFORMATION	2003/04/13 21:52:20	Service Control	The Network Location Awareness (NLA) service was succ...
INFORMATION	2003/04/13 21:52:20	Service Control	The Network Location Awareness (NLA) service entered th...

36% Stop

- **Alert**

This displays the new events for the current node. The Alert Pane displays new events for all nodes.



Usage Tips: Alerts are always associated with hostnames. (The hostname in the above picture is DEV-TEST.) If a Managed Node has been added to the Console Tree using its IP address (via Out-Of-Band), the IP address would appear in place of the hostname. In this case, no alert entries would appear in the Display Pane when one selects the Alert node.

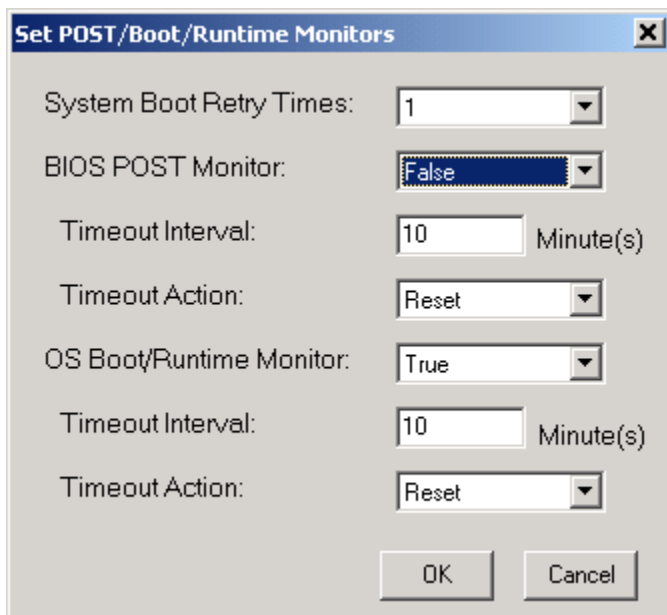
3.7.2 Settings

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

- **Set POST/BOOT Runtime**

User may remotely set IPMI POST/BOOT runtime via the Console.

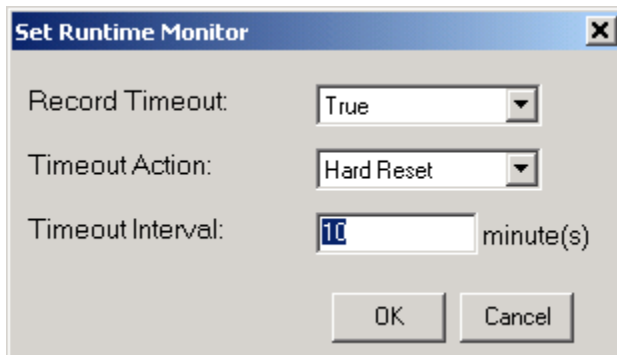
When “POST/BOOT/Runtime Monitors” is selected, Click on “Set” button in the display pane, it brings up a dialog where user may input his configuration. Clicking on “OK”.



The dialog box titled "Set POST/Boot/Runtime Monitors" contains the following settings:

- System Boot Retry Times: 1
- BIOS POST Monitor: False
- Timeout Interval: 10 Minute(s)
- Timeout Action: Reset
- OS Boot/Runtime Monitor: True
- Timeout Interval: 10 Minute(s)
- Timeout Action: Reset

Buttons: OK, Cancel



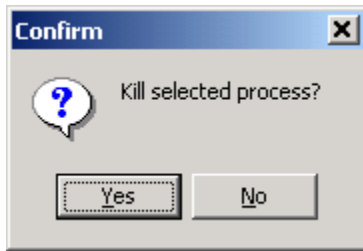
The dialog box titled "Set Runtime Monitor" contains the following settings:

- Record Timeout: True
- Timeout Action: Hard Reset
- Timeout Interval: 10 minute(s)

Buttons: OK, Cancel

- **Terminate a Process**

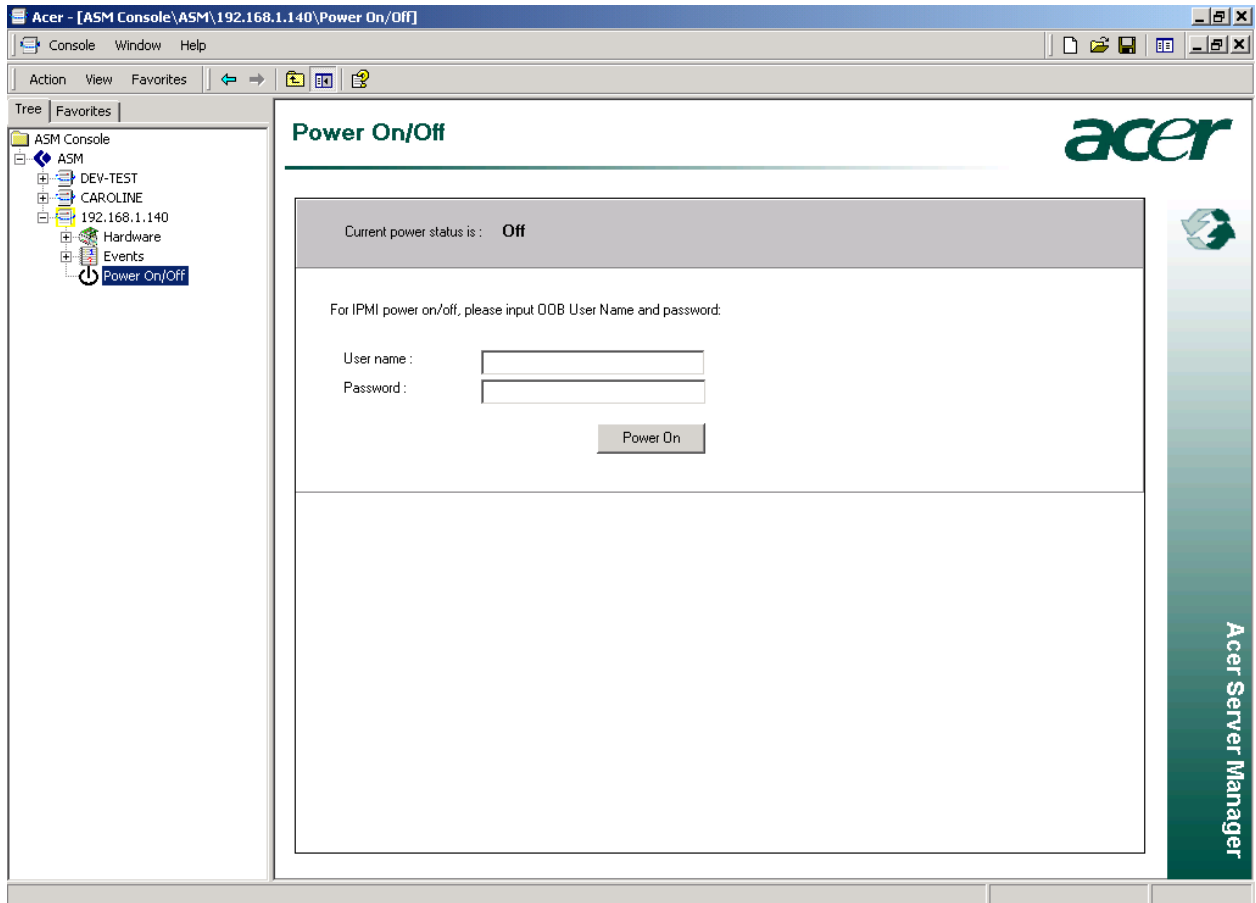
Within the Console, user can highlight a process, and click on the “Terminate” button to kill that process remotely.



3.7.3 Power On/Off

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

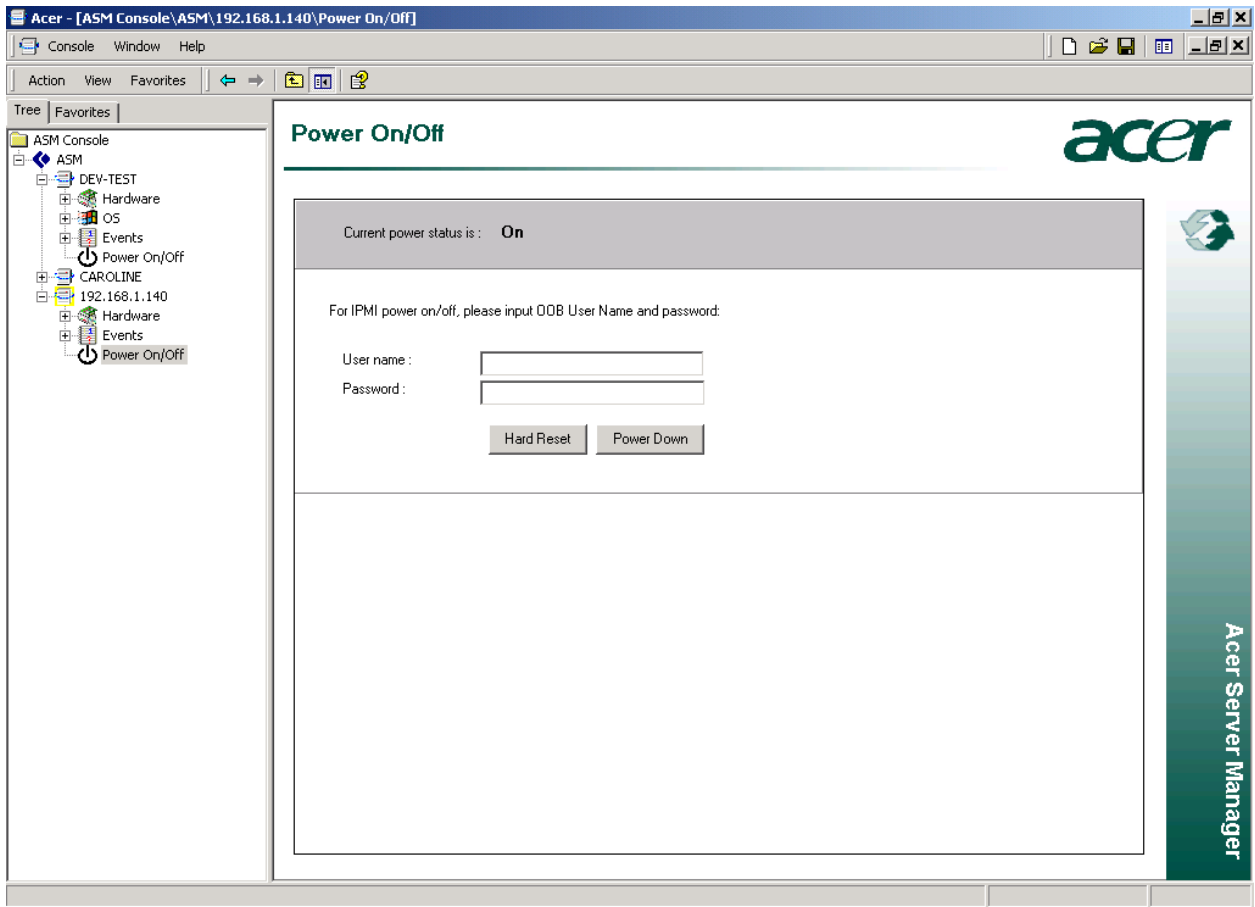
If the target node is off, but with OOB available, you can input OOB username and password to power it on.



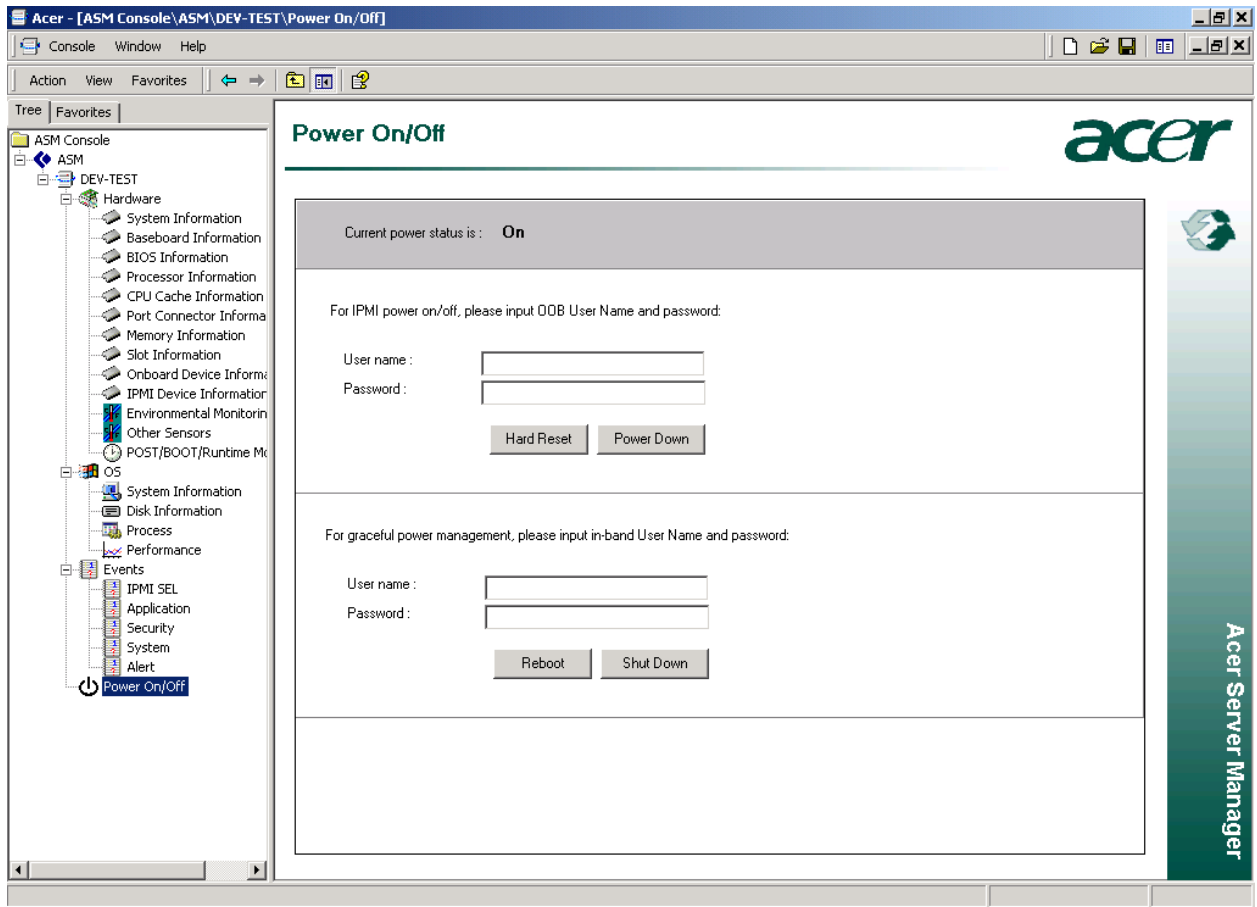
Click on "Yes" of the "Confirm" message box.



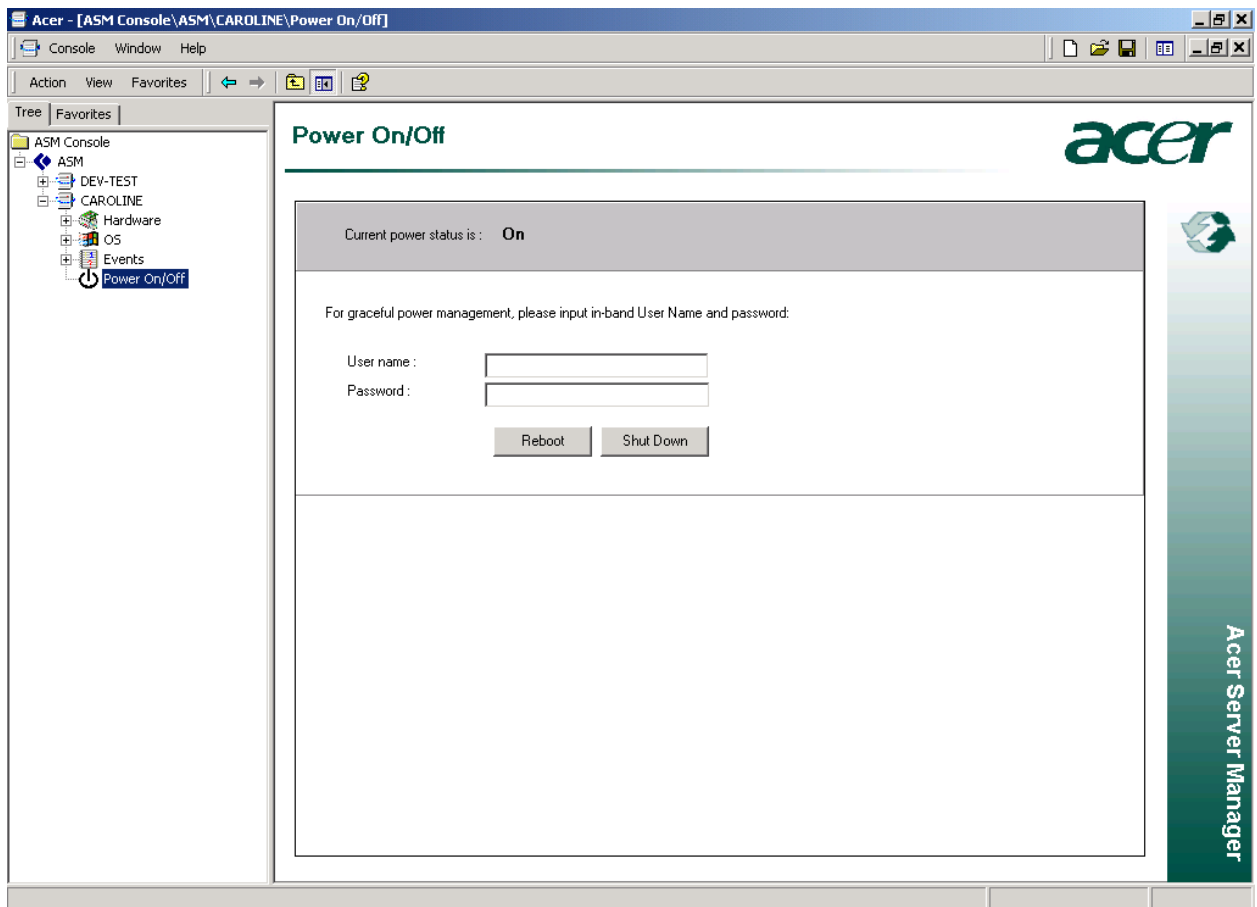
If the Power On was successful, “Current power status” in the display pane will be updated to “On”. And User can now perform a “Hard Reset” or “Power Down” with IPMI OOB support.



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



Notice: On platforms with no IPMI, users can only do In-Band “Reboot” or “Shut Down”.



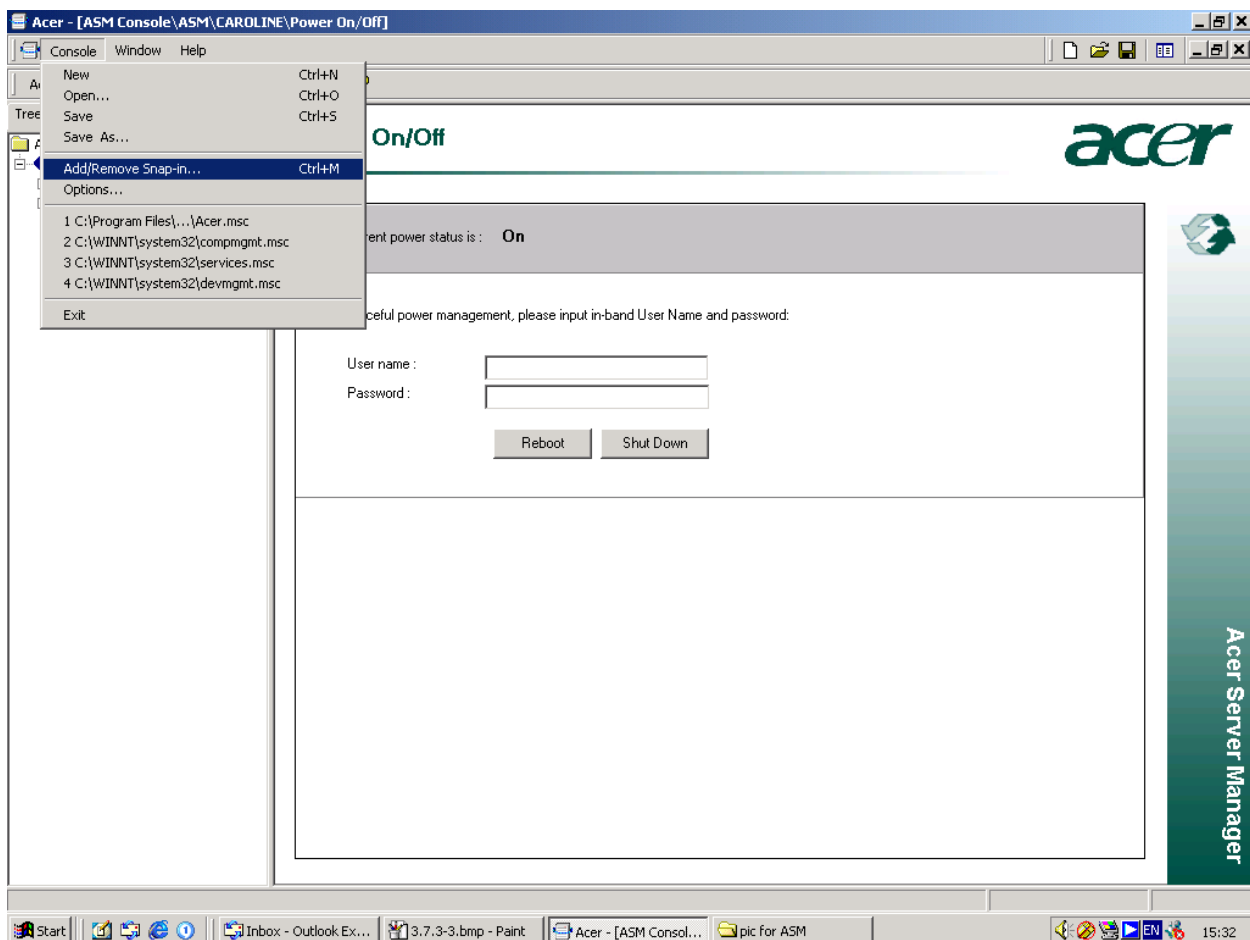
3.8 Setting up an Authorized account

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

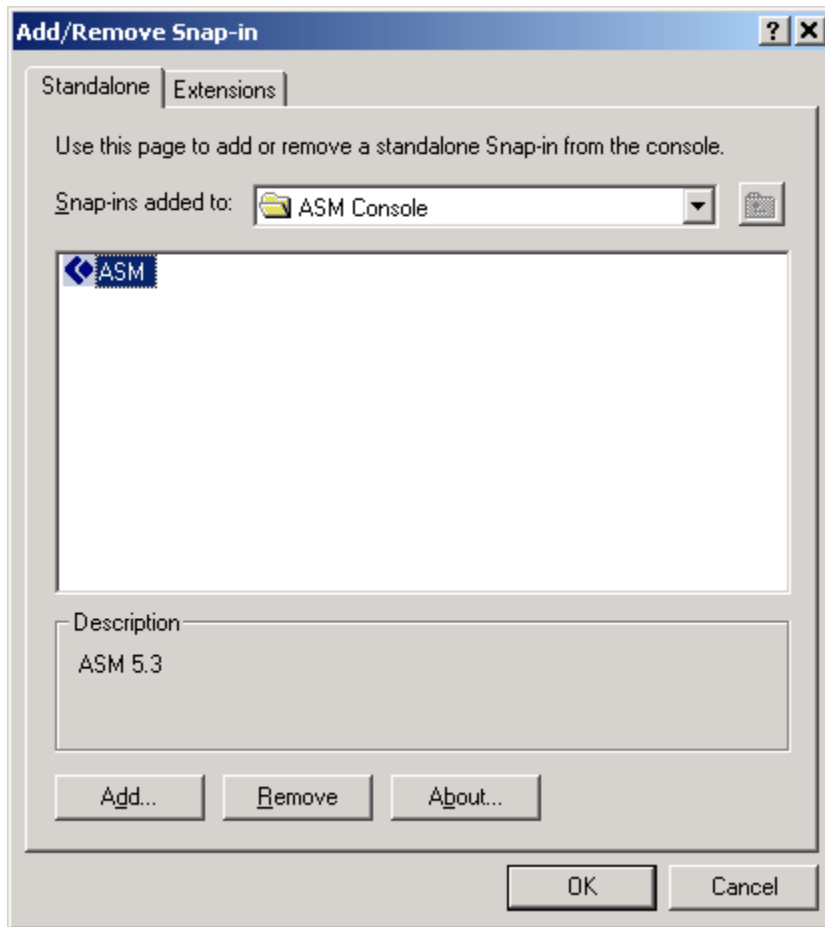
You surely can use the Administrator's account when prompted for user name and password. You can also add an ordinary user account to the Administrator's Group, so that the user has access to the Agent on your server, as well as anything else you as an administrator can do.

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

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



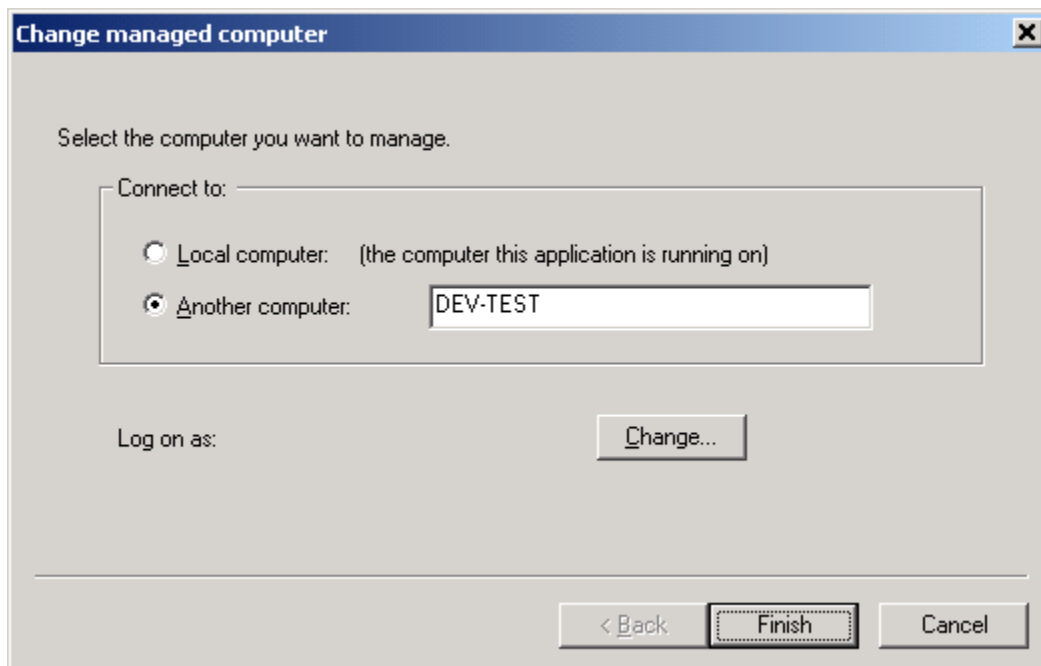
2. Click on “Add” button of the “Add/Remove Snap-in...” dialog box



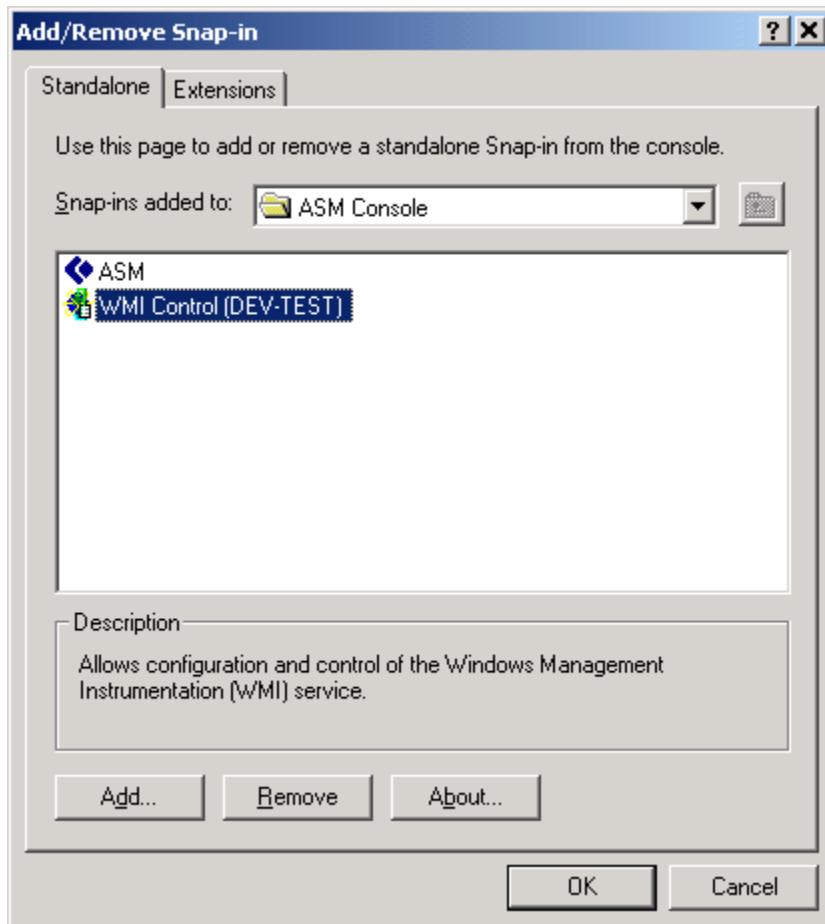
3. As the “Add Standalone Snap-in” dialog box pops up, select “WMI Control” from the list box, and Click on “Add”



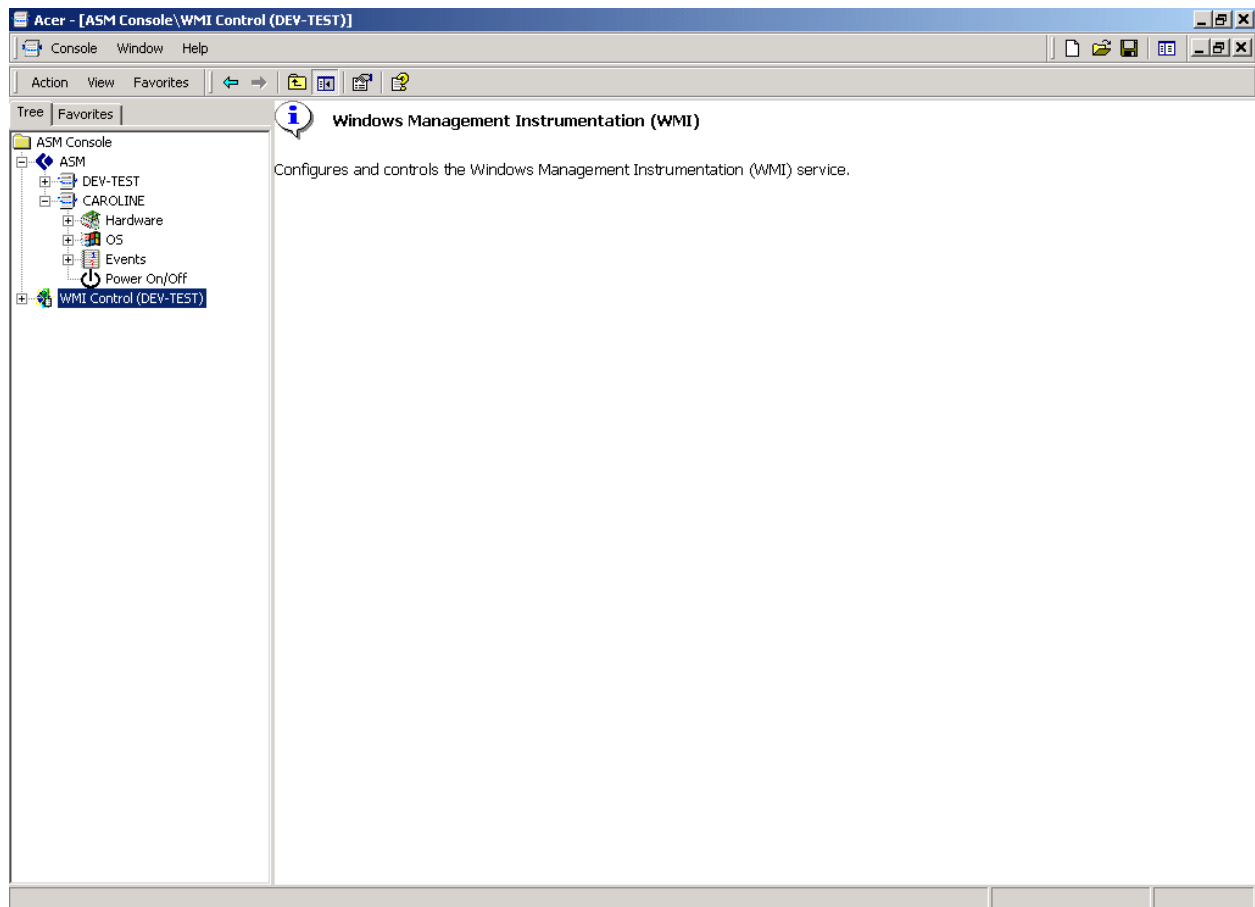
4. This brings up a “Change managed computer” dialog box. In this example, we show how to set up the permission for user “DEV-TEST\admin” so that he can access the Agent on server “DEV-TEST” from this local system. So select “Another computer” and type the server name “DEV-TEST”, and click on “Finish”.



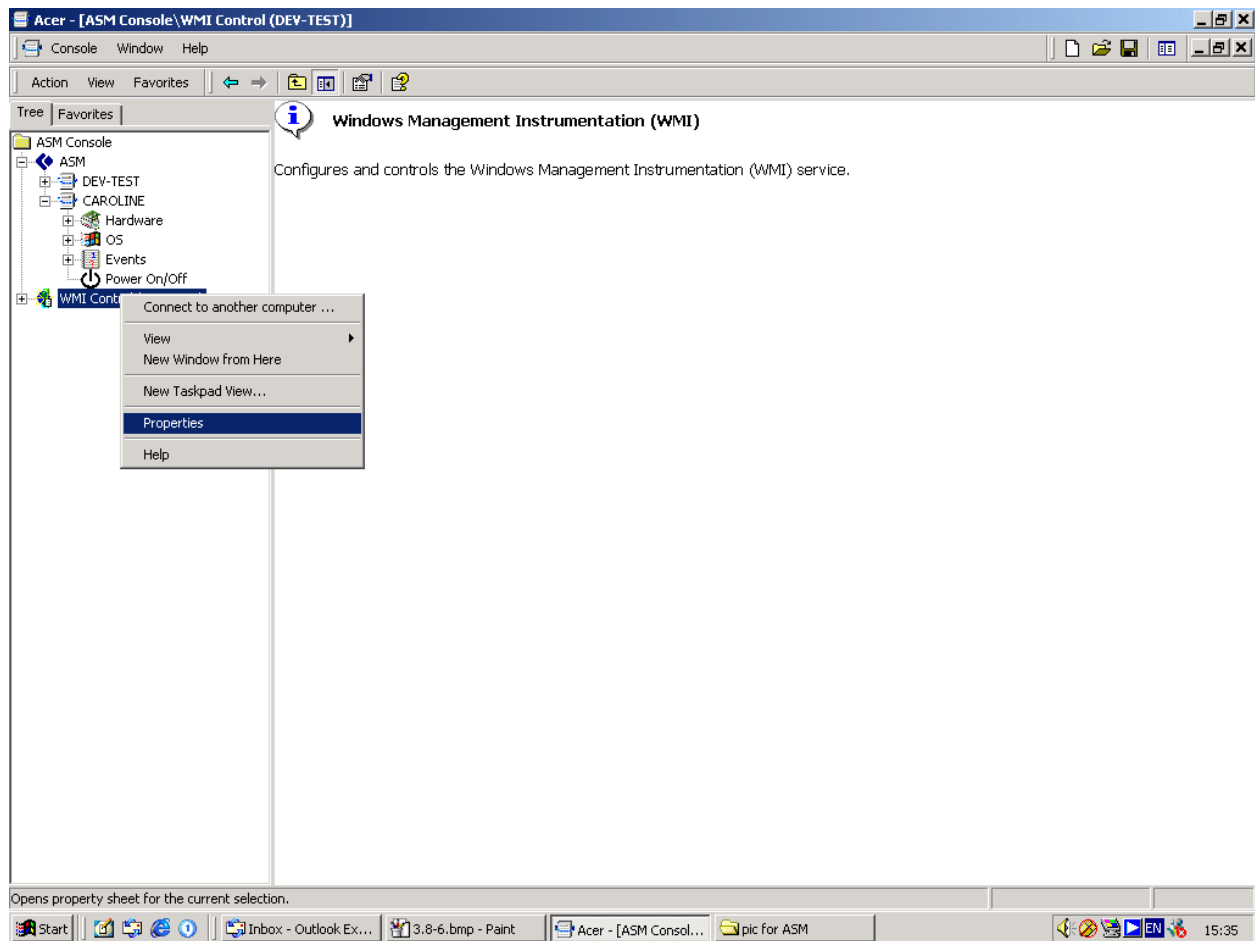
5. You can observe from the “Add/Remove Snap-in” dialog box that the WMI Control [DEV-TEST] has been added.



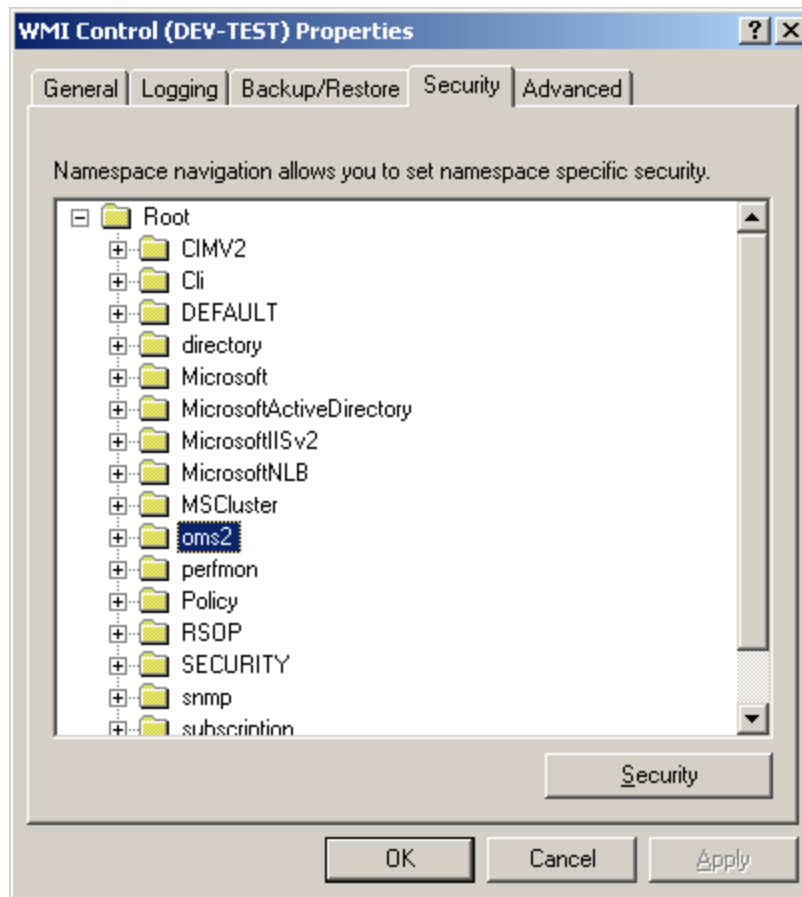
6. Close all dialog boxes, and you have a screen looks like this



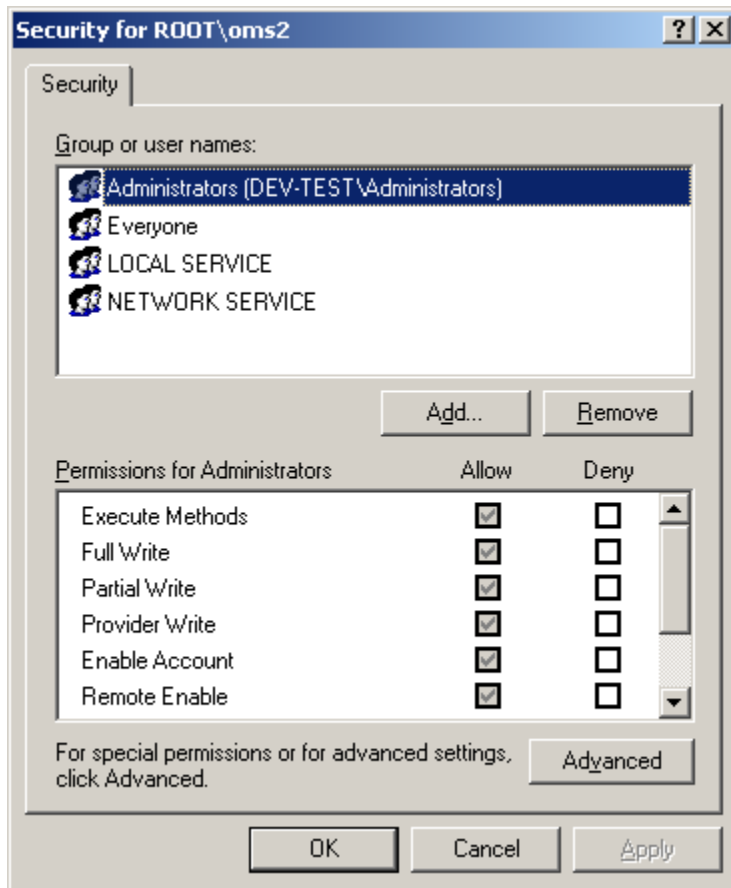
7. Right Click on the “WMI Control (DEV-TEST)”, and select “Properties” from the pop up menu



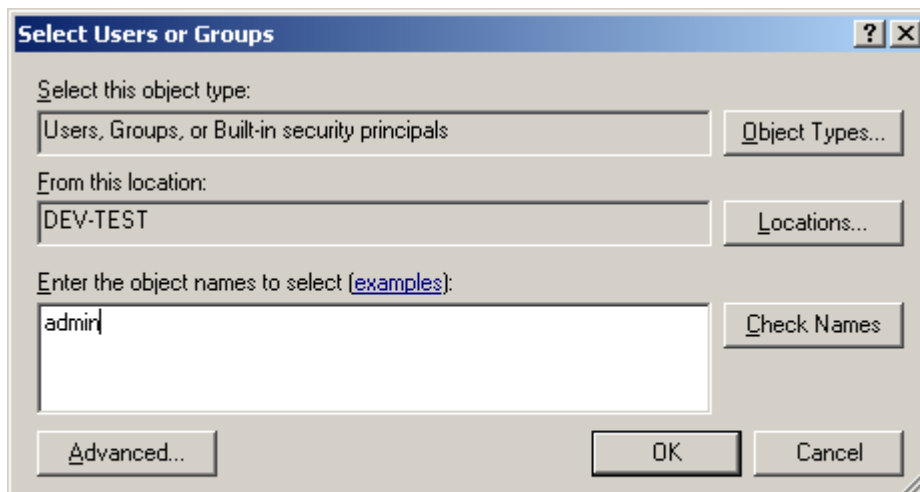
8. Select Tab "Security", highlight "\Root\oms2" in the browse window, and click on button "Security"



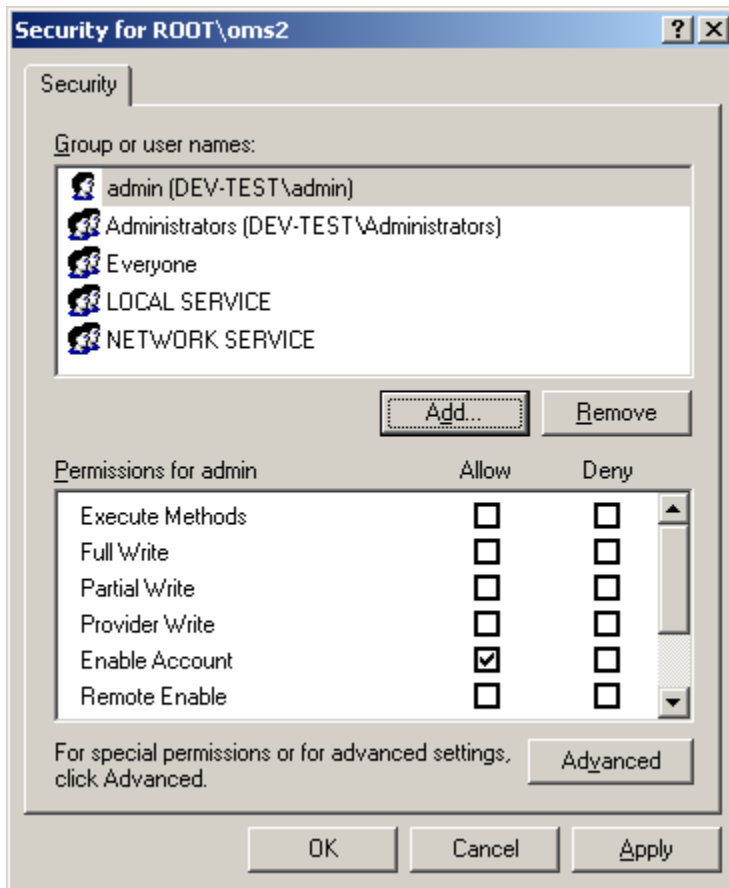
9. As the “Security for ROOT\oms2” dialog box appears, Click on “Add” button



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\admin”.



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



You are all set now. User “admin” should be able to access the Agent on Server “DEV-TEST” remotely via the Console.

4 Uninstalling Acer Server Manager

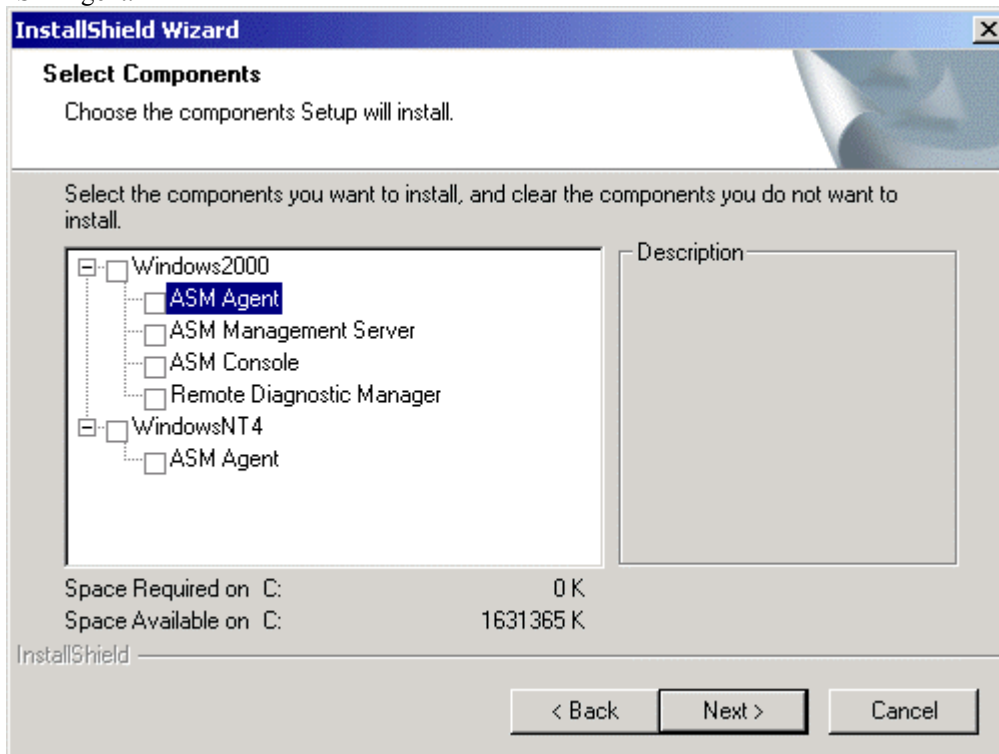
During installation, some files will be copied to the hard disk directory you specified. You may wish to remove these files some time in the future to retrieve hard drive space. In addition, you have to uninstall before you reinstall / upgrade the Acer Server Manager software.

4.1 Uninstalling the Agent

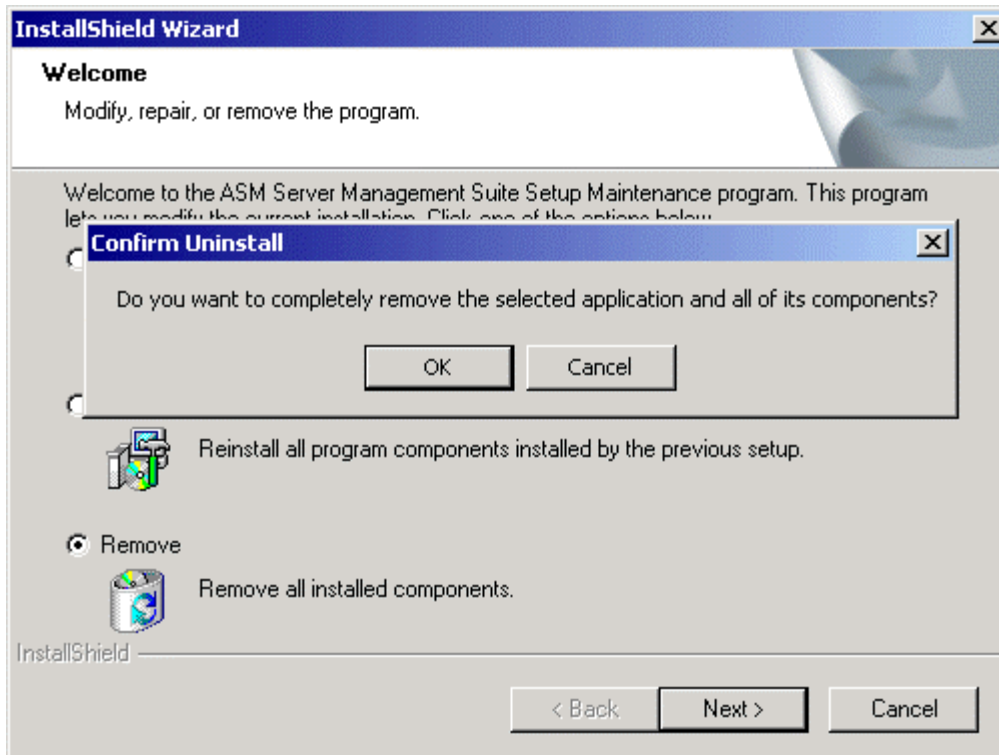
To uninstall the Agent, click

Start → Programs → Acer Server Management Suite → Uninstall

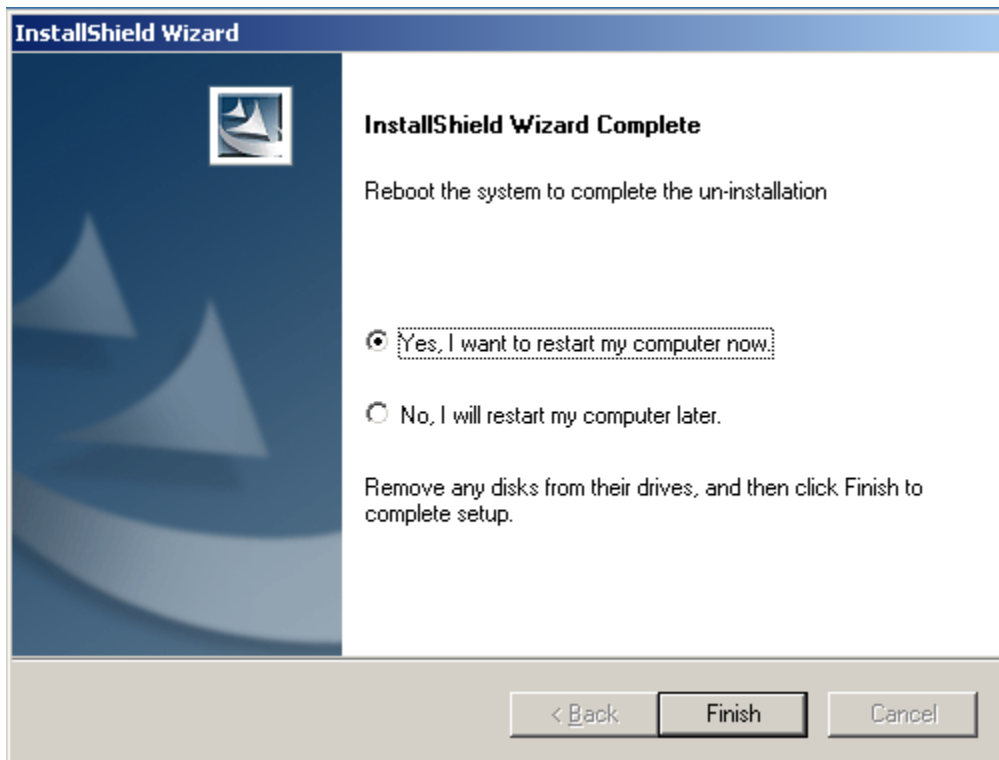
You can select Modify and click on “Next”, then uncheck the “ASM Agent” component. Click on “Next” will clear the ASM Agent.



Or you can select Remove and click on “Next”, it will delete all installed components.



On Windows Server 2003, an additional dialogue box will be popped up:

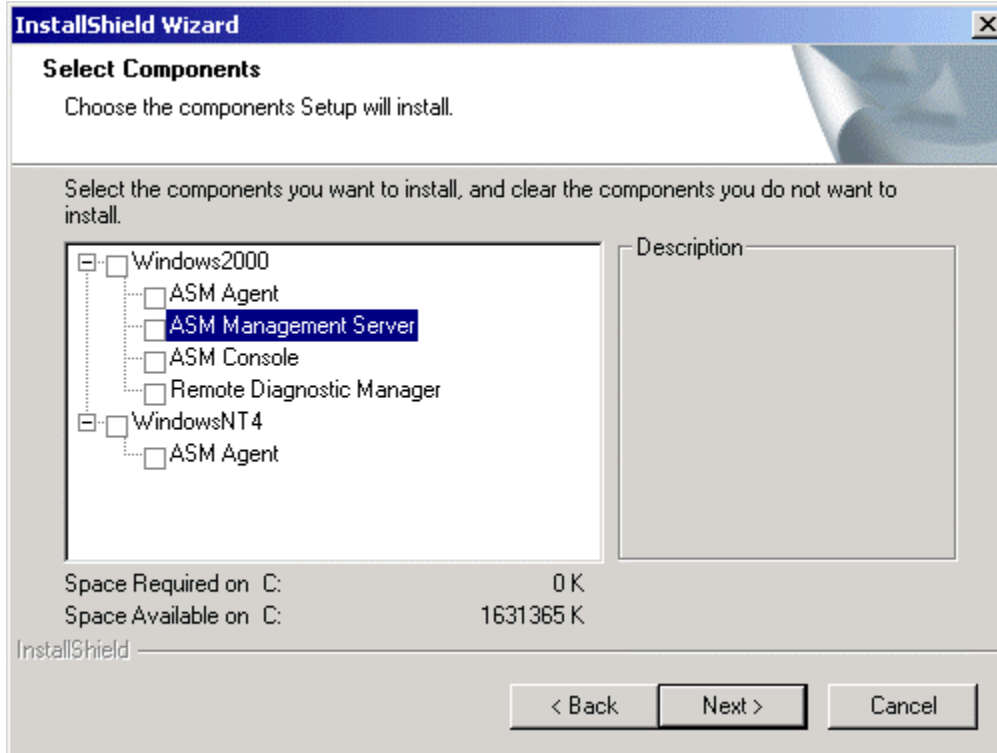


4.2 Uninstalling the Server

To uninstall the Server, click

Start → Programs → Acer Server Management Suite → Uninstall

You can select Modify and click on “Next”, then uncheck the “ASM Management Server” component. Click on “Next” will clear the Server.



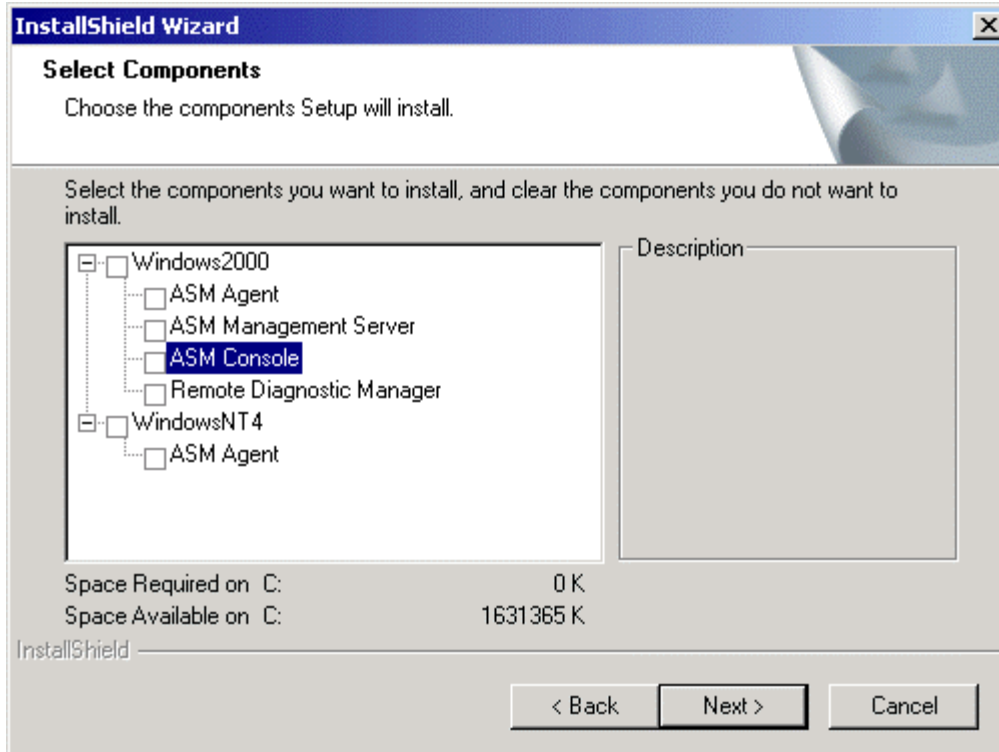
Or you can select Remove and click on “Next”, it will delete all installed components.

4.3 Uninstalling Acer Server Manager Console

To uninstall the Console, click

Start → Programs → Acer Server Management Suite → Uninstall

You can select Modify and click on “Next”, then uncheck the “ASM Console” component. Click on “Next” will clear the Console.



Or you can select Remove and click on “Next”, it will delete all installed components.

Note: Delete the directory where you installed Acer Server Manager 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 Browsing a Managed Node by HP OpenView NNM

We suppose that you have installed HP OpenView Network Node Manager (NNM) in your machine. If not, please refer to the HP OpenView NNM Installation Guide to install it.

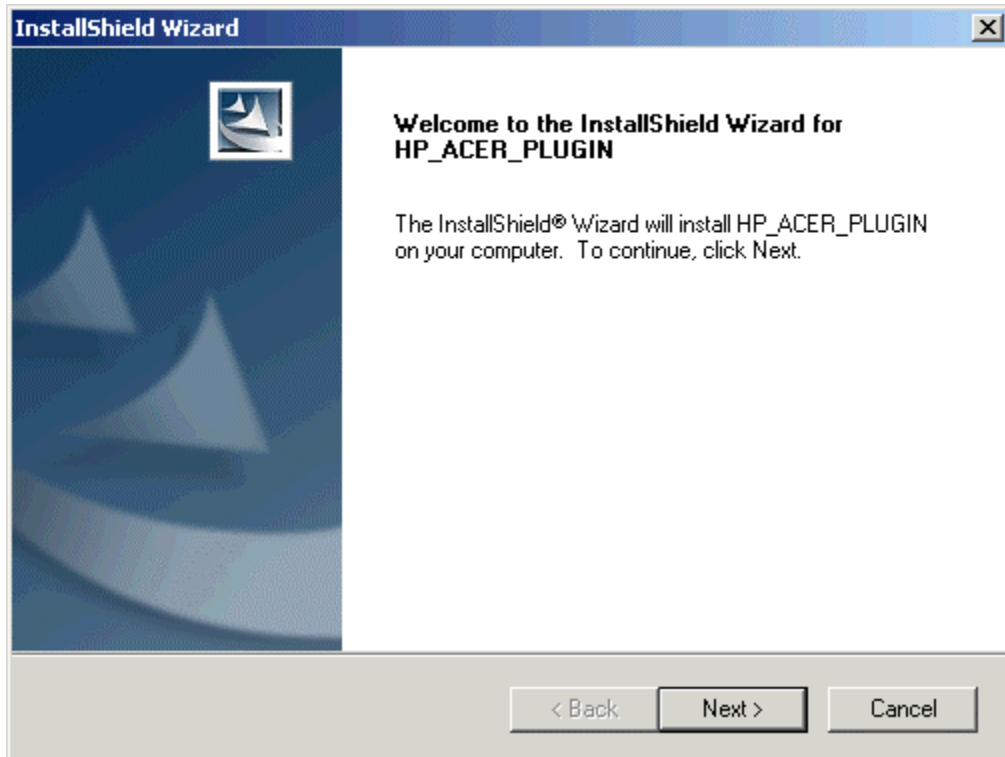
In order to browse the SMBIOS, IPMI and OS information in managed node via HP OpenView NNM, a plug-in software should be installed. The software consists of two components -- one is called "Client" which should be installed into ASM Agent, and the other is called "Server" which should be installed into HP OpenView NNM.

5.1 Installation Instruction

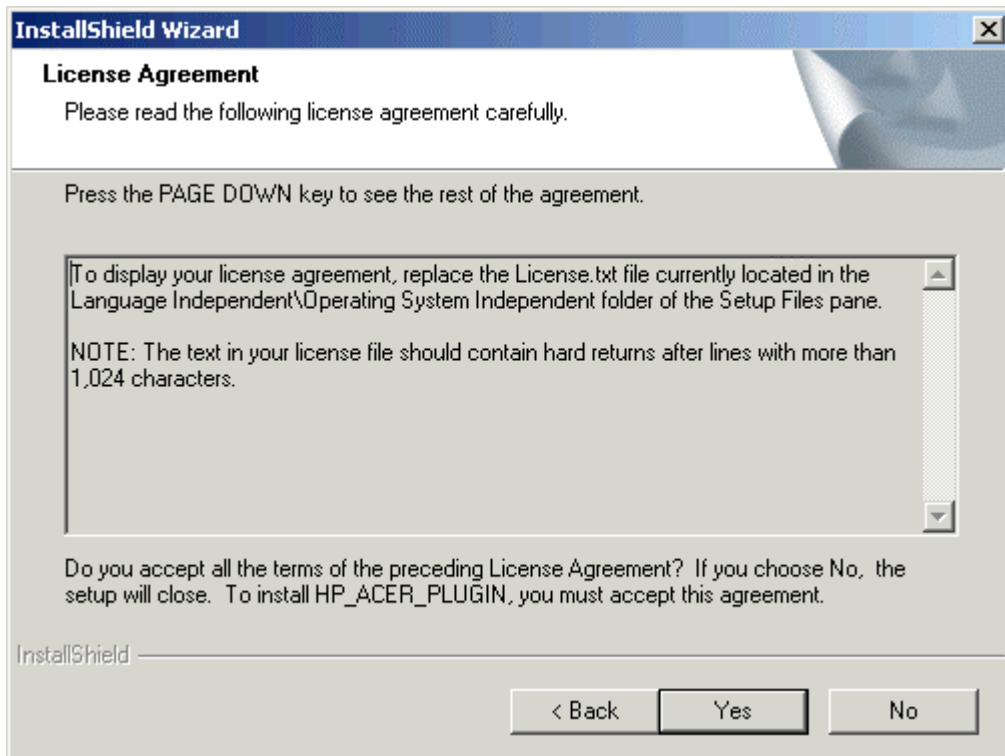
Before installation, please check that you installed Windows SNMP component and HP OpenView NNM successfully.

1. In Windows Explorer, double-click on
<CDROM Drive Letter>:\ HP_ACER_PLUG.exe

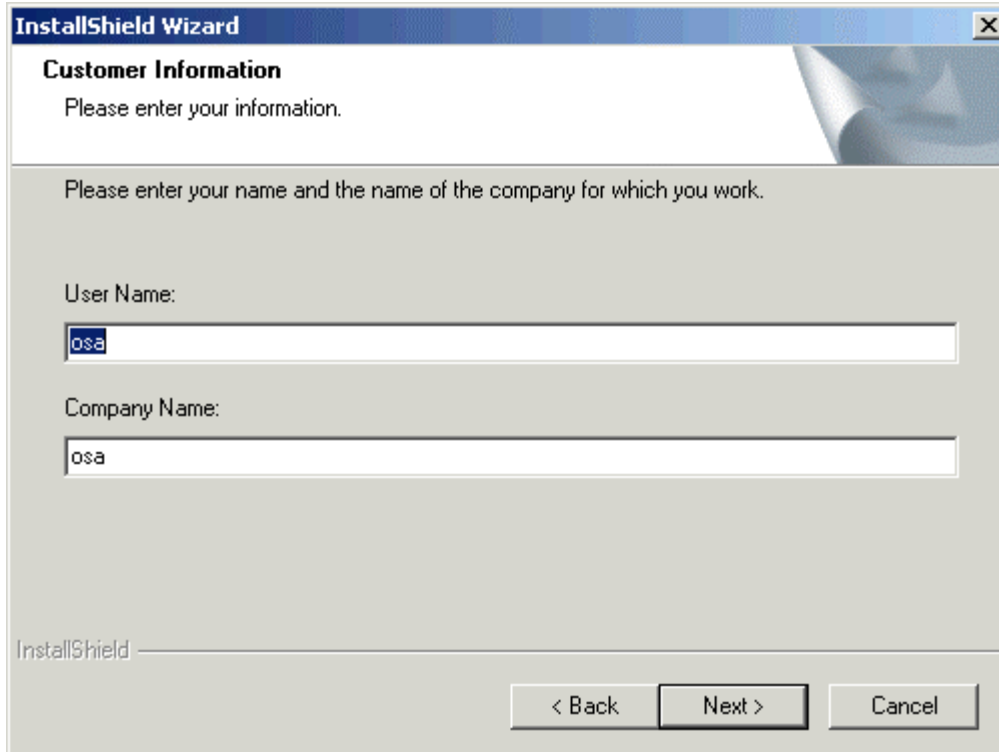
The following Welcome window will appear in a few seconds:



2. Click on “Next”, and you will see the License Agreement screen

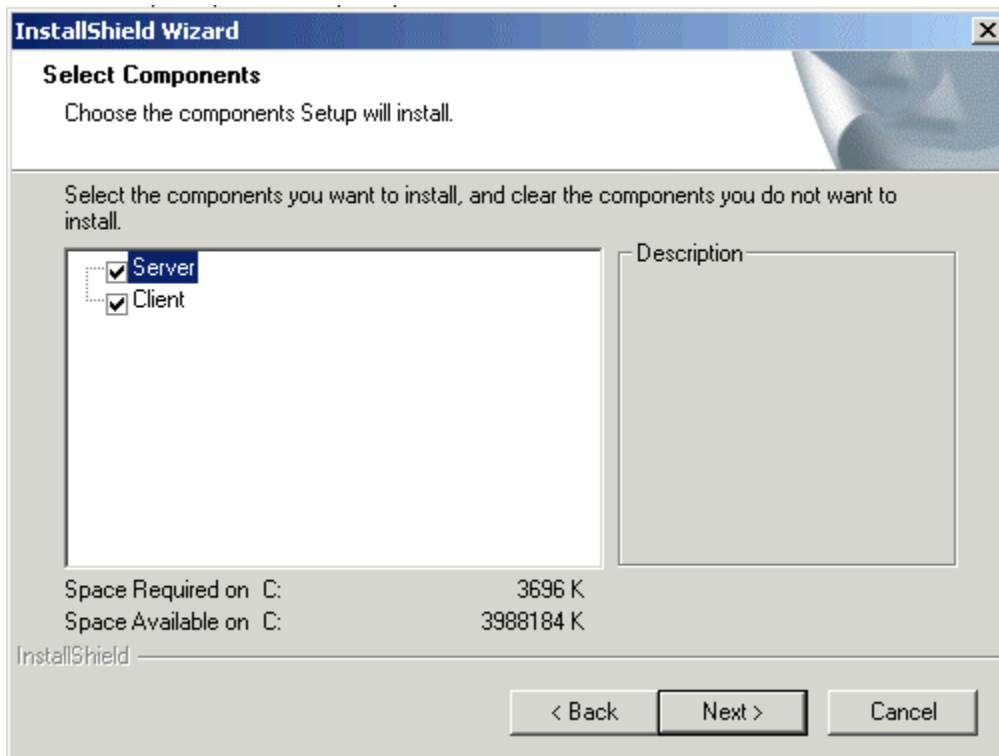


3. Click on “Yes”, and you will be prompted to enter the Customer Information



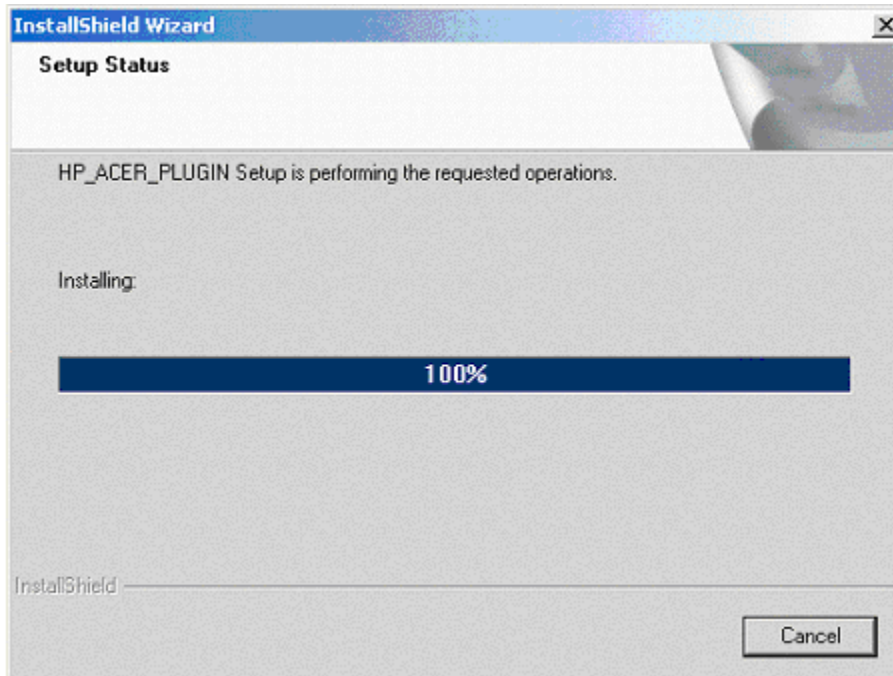
The screenshot shows the 'InstallShield Wizard' window with the 'Customer Information' tab selected. The window has a blue title bar and a light gray background. The main area contains the text 'Please enter your information.' and 'Please enter your name and the name of the company for which you work.' Below this are two text input fields: 'User Name:' and 'Company Name:'. Both fields contain the text 'osa'. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a black border.

4. Click on "Next", and you will be prompted to choose the components. Select the "Client" to install SNMP provider for ASM Agent. Select the "Server" to install SNMP MIB and OOB provider for HP OpenView NNM.

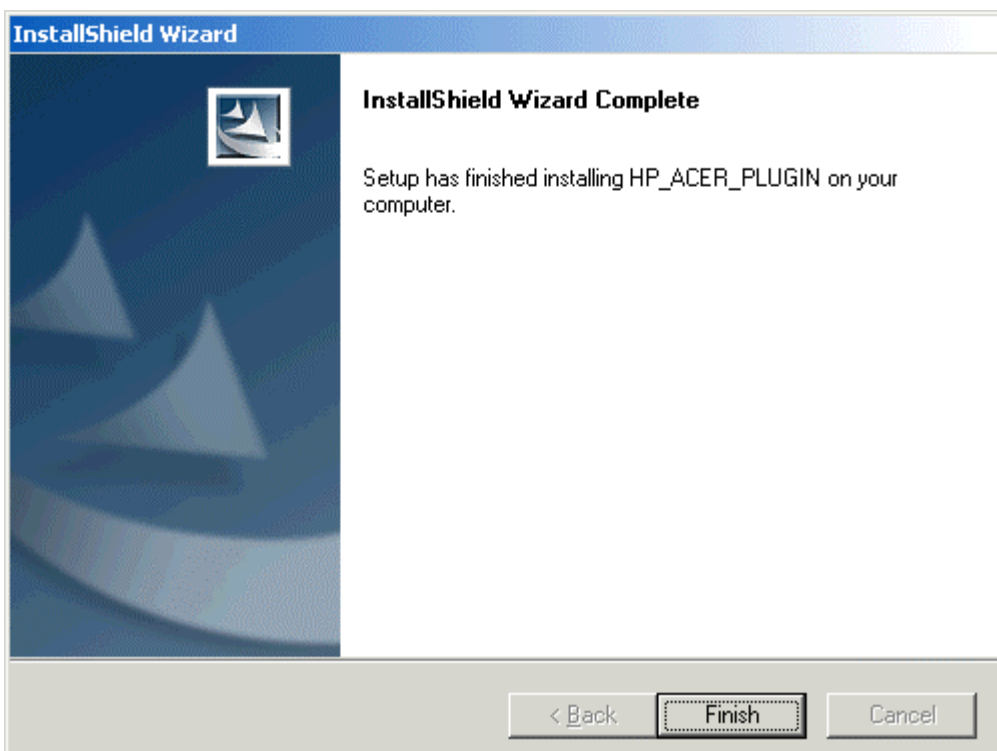


The screenshot shows the 'InstallShield Wizard' window with the 'Select Components' tab selected. The window has a blue title bar and a light gray background. The main area contains the text 'Choose the components Setup will install.' and 'Select the components you want to install, and clear the components you do not want to install.' Below this is a list box containing two items: 'Server' and 'Client', both of which are checked. To the right of the list box is a 'Description' label and an empty text area. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a black border. Below the list box, the following text is displayed: 'Space Required on C: 3696 K' and 'Space Available on C: 3988184 K'.

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



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



Click on “finish” to complete the installation.

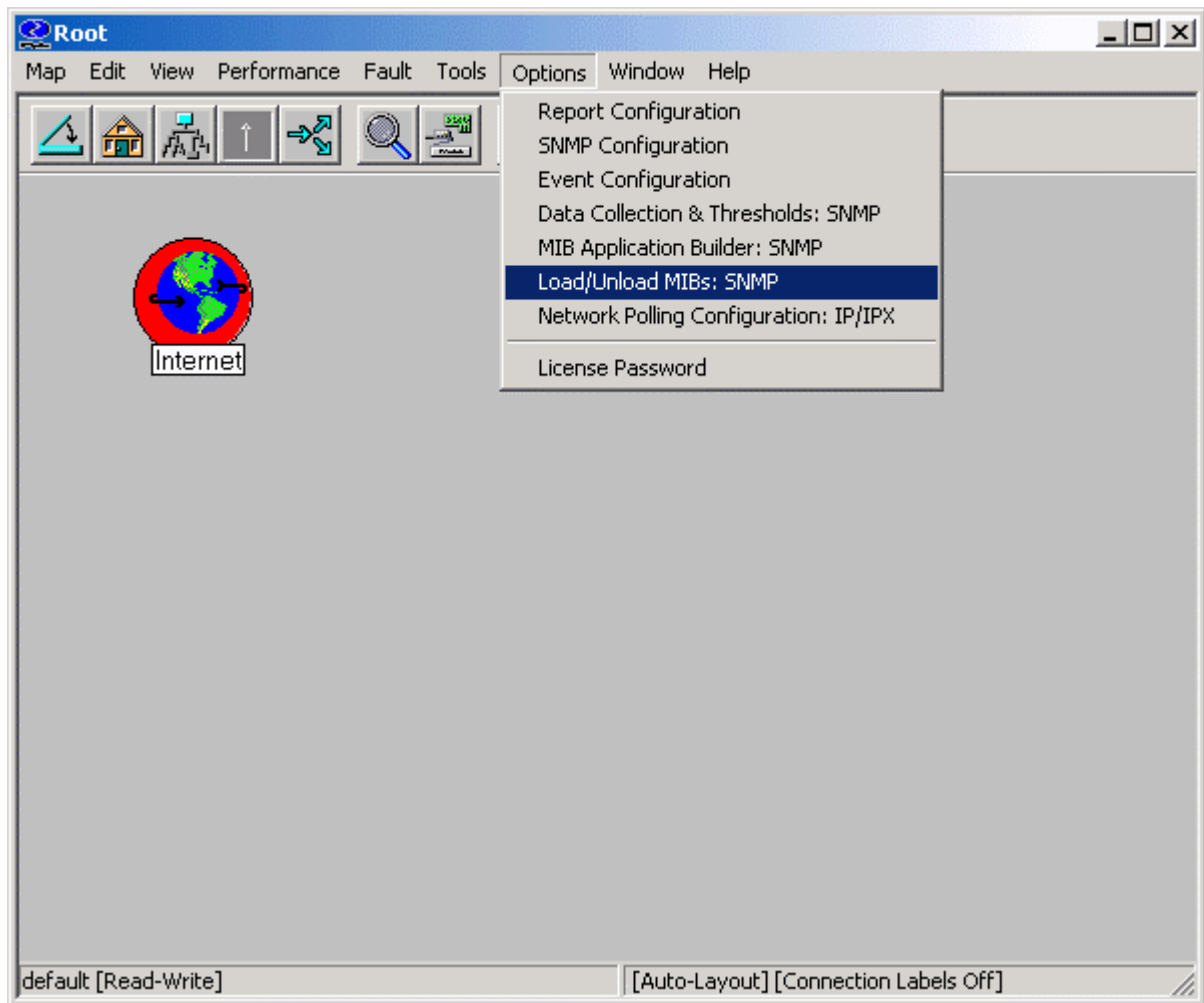
5.2 SMBIOS/IPMI/OS information with In Band

To browser SMBIOS/IPMI/OS information, start the HP OpenView NNM by Clicking:

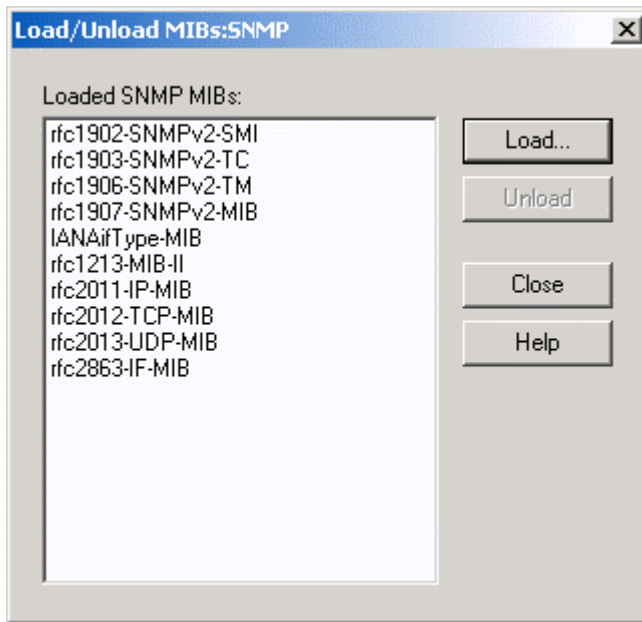
Start → Programs → HP OpenView → Network Node Manager Admin → Network Node Manager

To use HP OpenView to browse management information provided by the ASM Agent, a special MIB (management information base), the OSA-SNMP-MIB, is required. This MIB is loaded automatically when the HP_Acer_Plugin was installed. Optionally, user can load the mib file by the following steps,

1. On the **Options** menu, click on **Load/Unload MIBs: SNMP**.

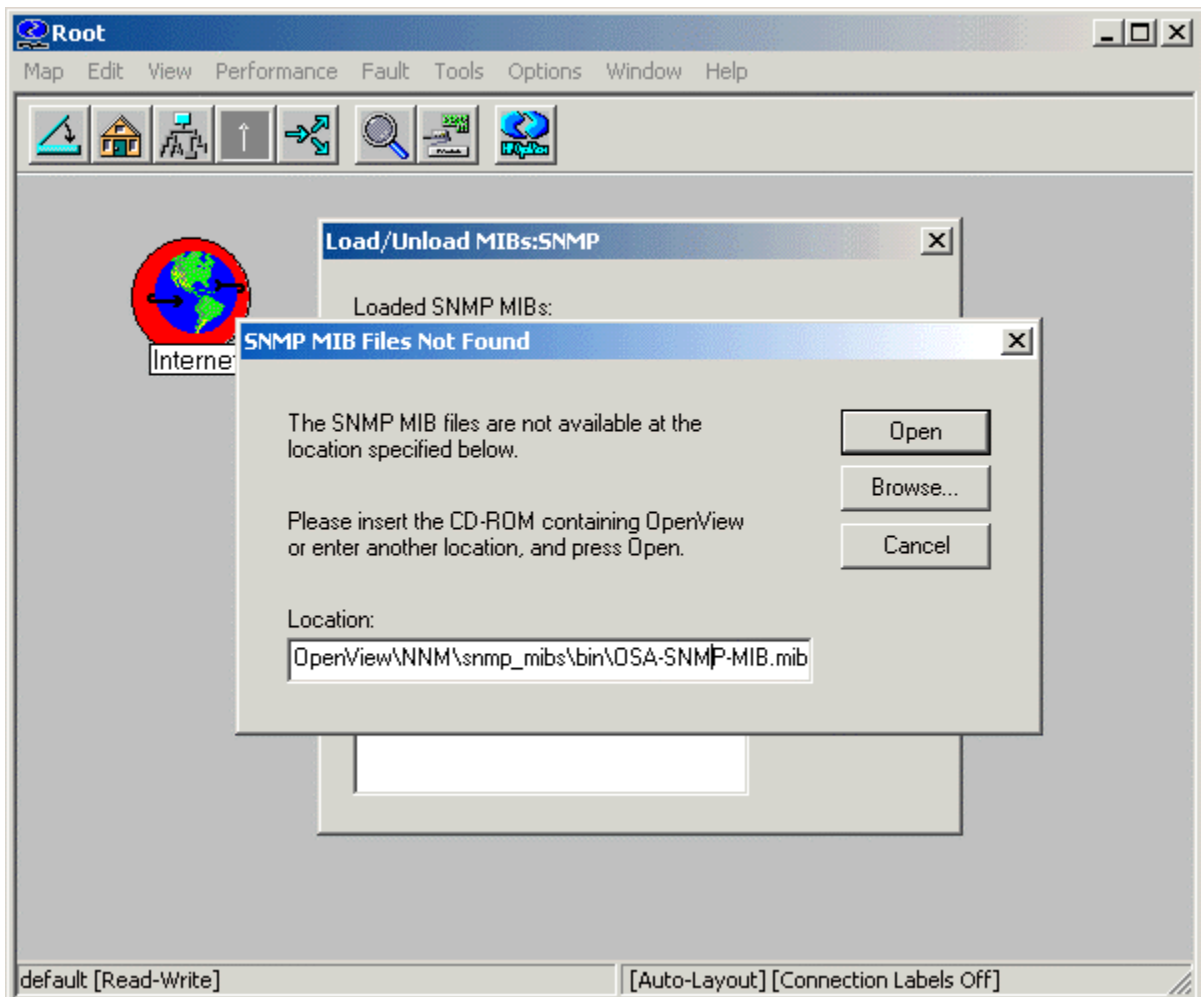


2. Click on **Load...**

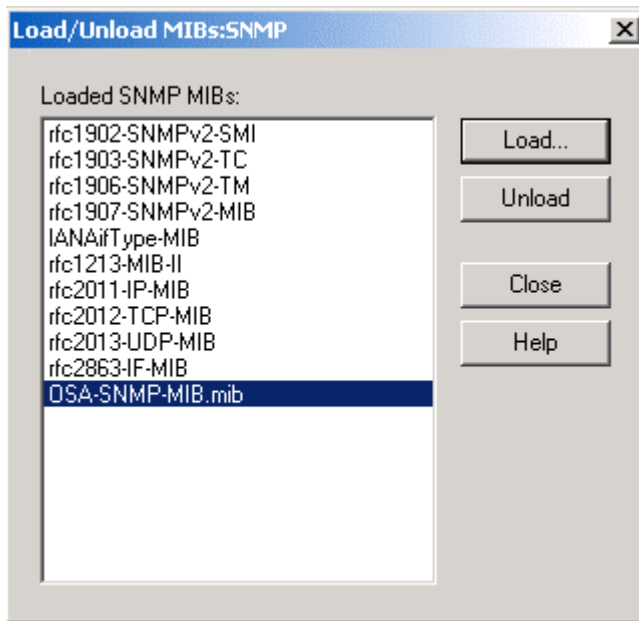


3. Input the mib file,

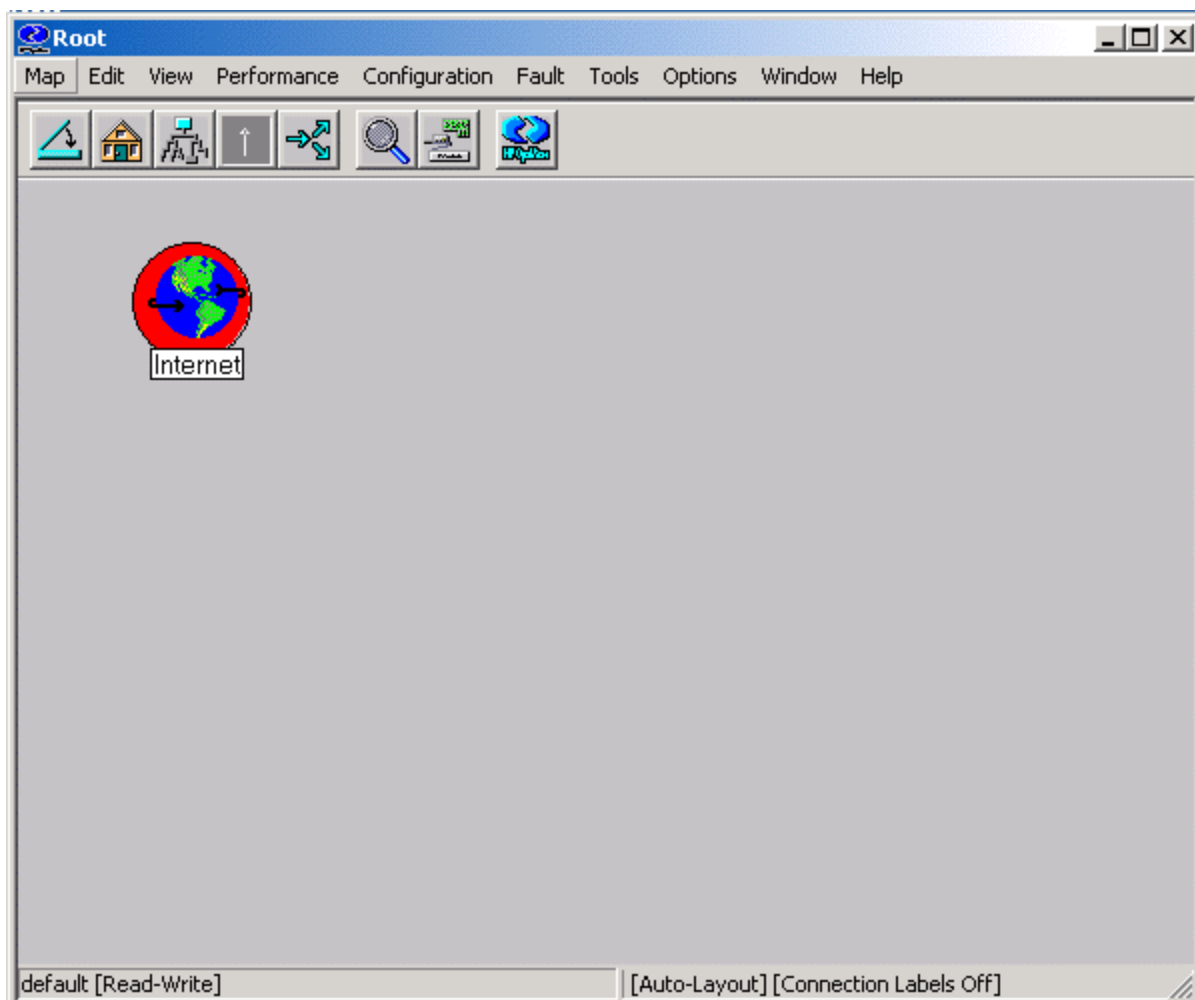
Program Files\HP OpenView\NNM\snmp_mibs\bin\OSA-SNMP-MIB.mib

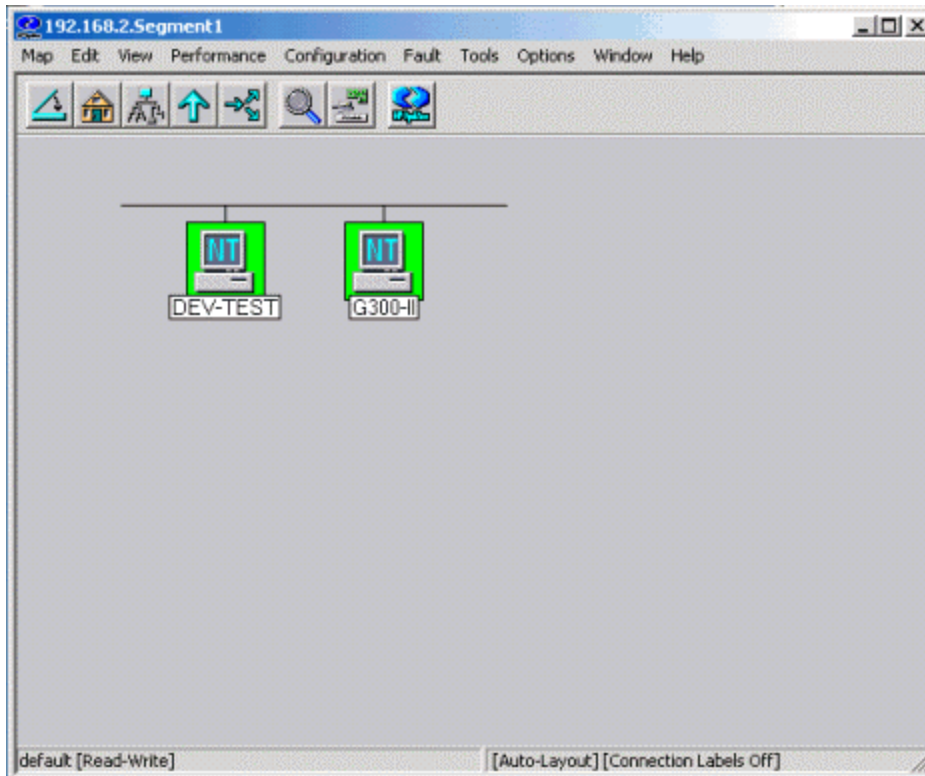


4. Click on **Open**, and then click on **Close**



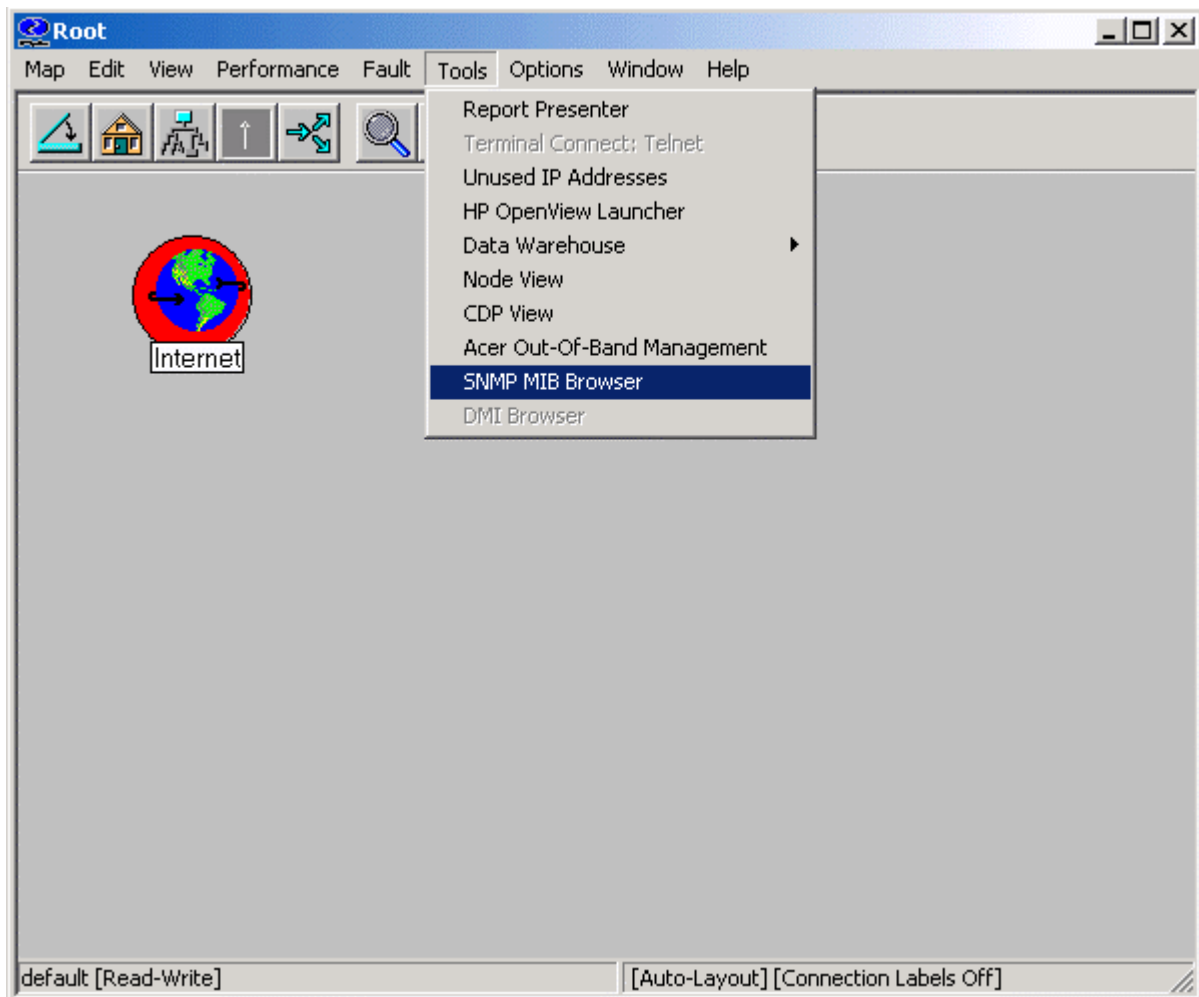
Then, user can browse all the computers in the intranet/internet by double-clicking the **Internet** icon, and determine which node you want to manage, e.g. DEV-TEST



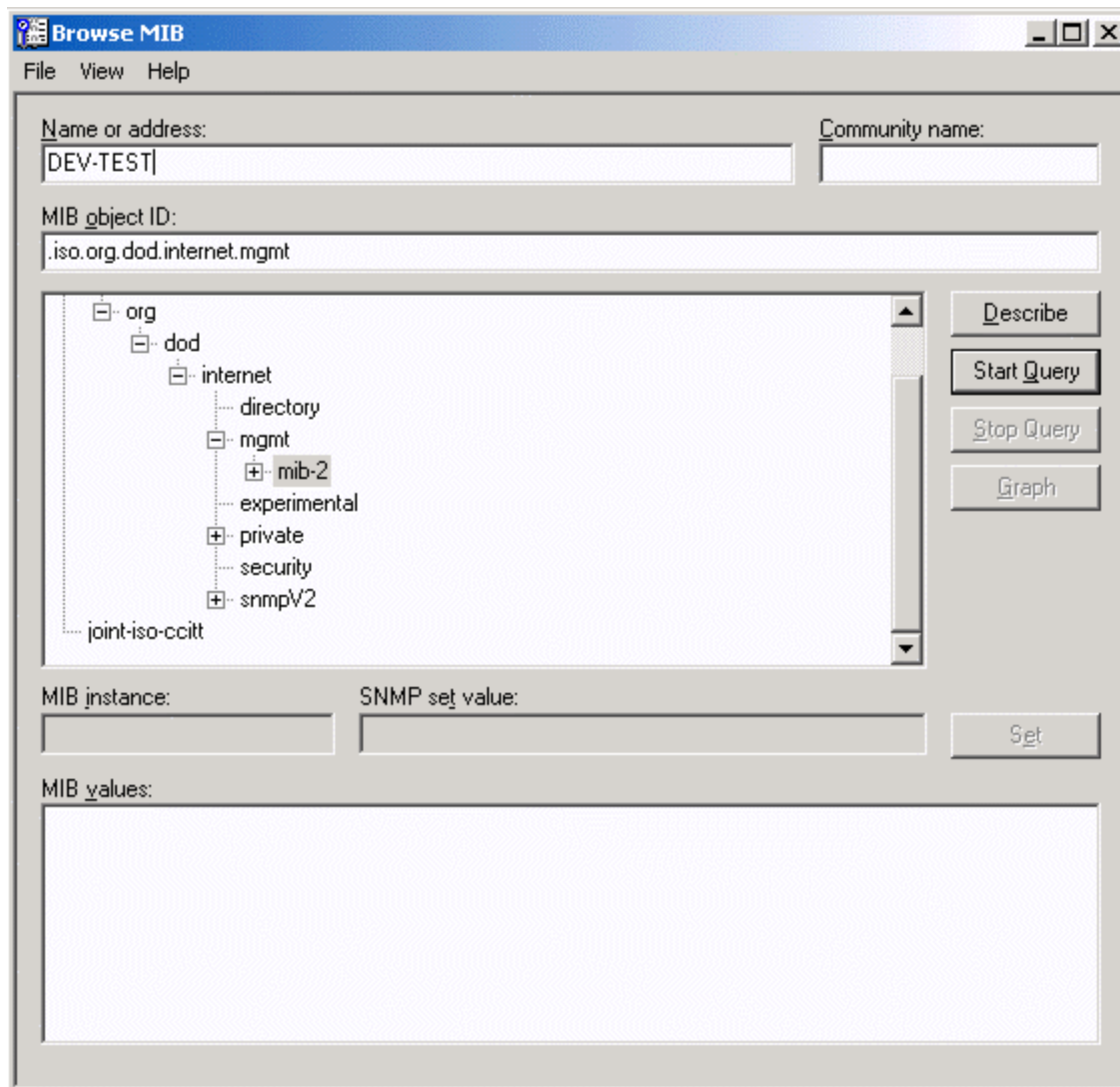


On the **Tools** menu,

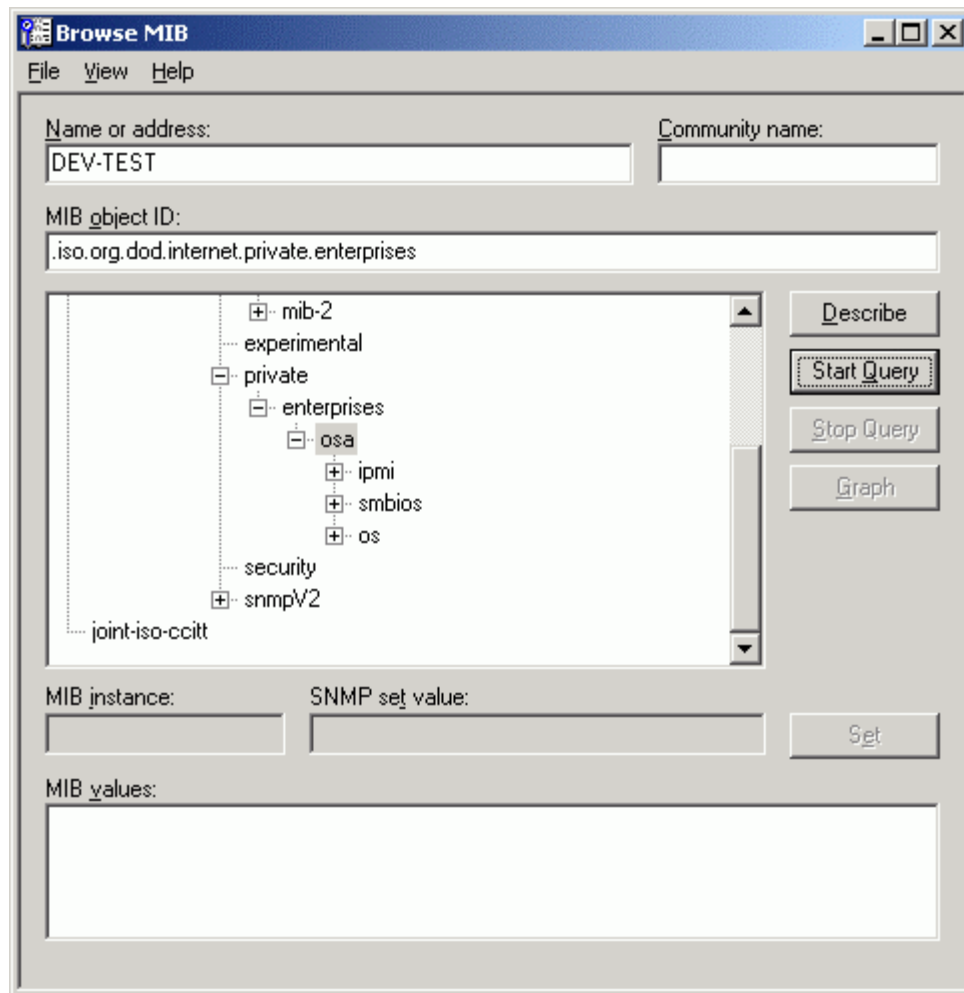
1. Click on **SNMP MIB Browser**



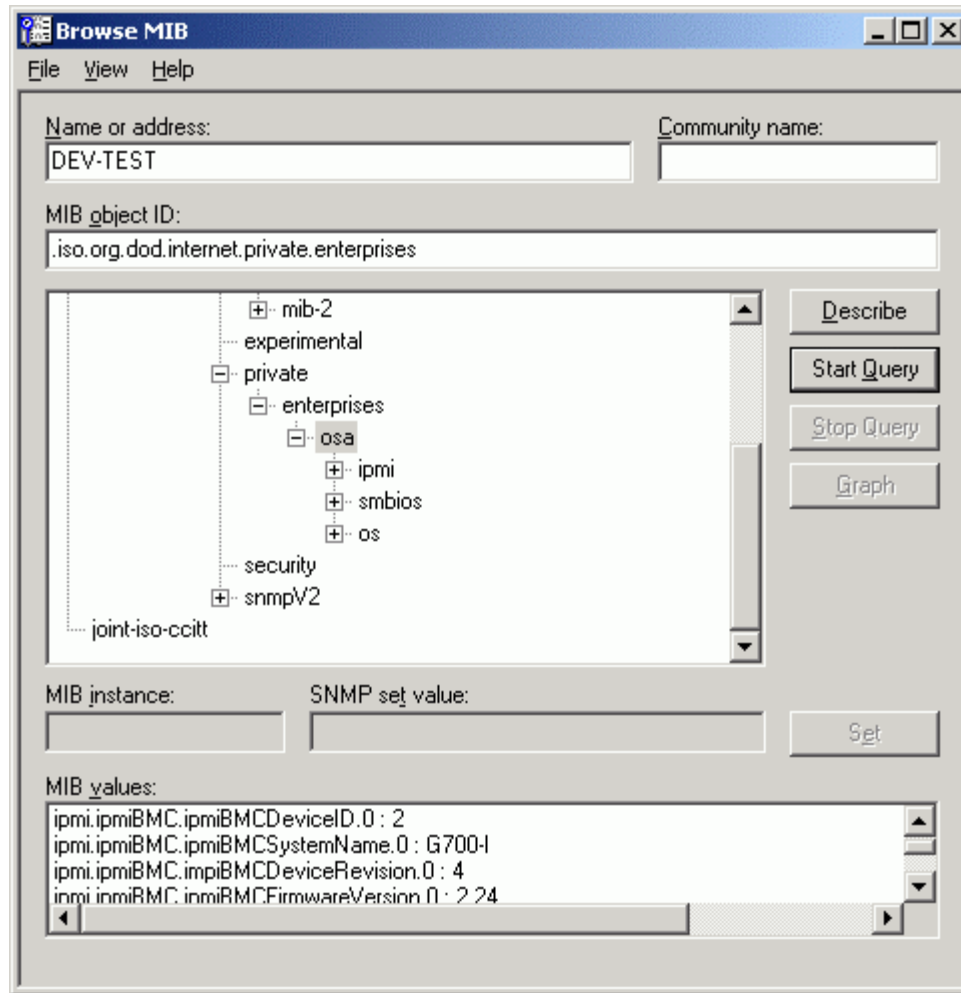
2. Specify a node name for Name or address field, e.g. DEV-TEST



3. Under the tree iso→org→dod→internet→private→enterprises→osa, user can find the ipmi, smbios and os sub-trees



4. Highlight an item which belongs to ipmi, smbios or os sub-trees. And click on **Start Query** button

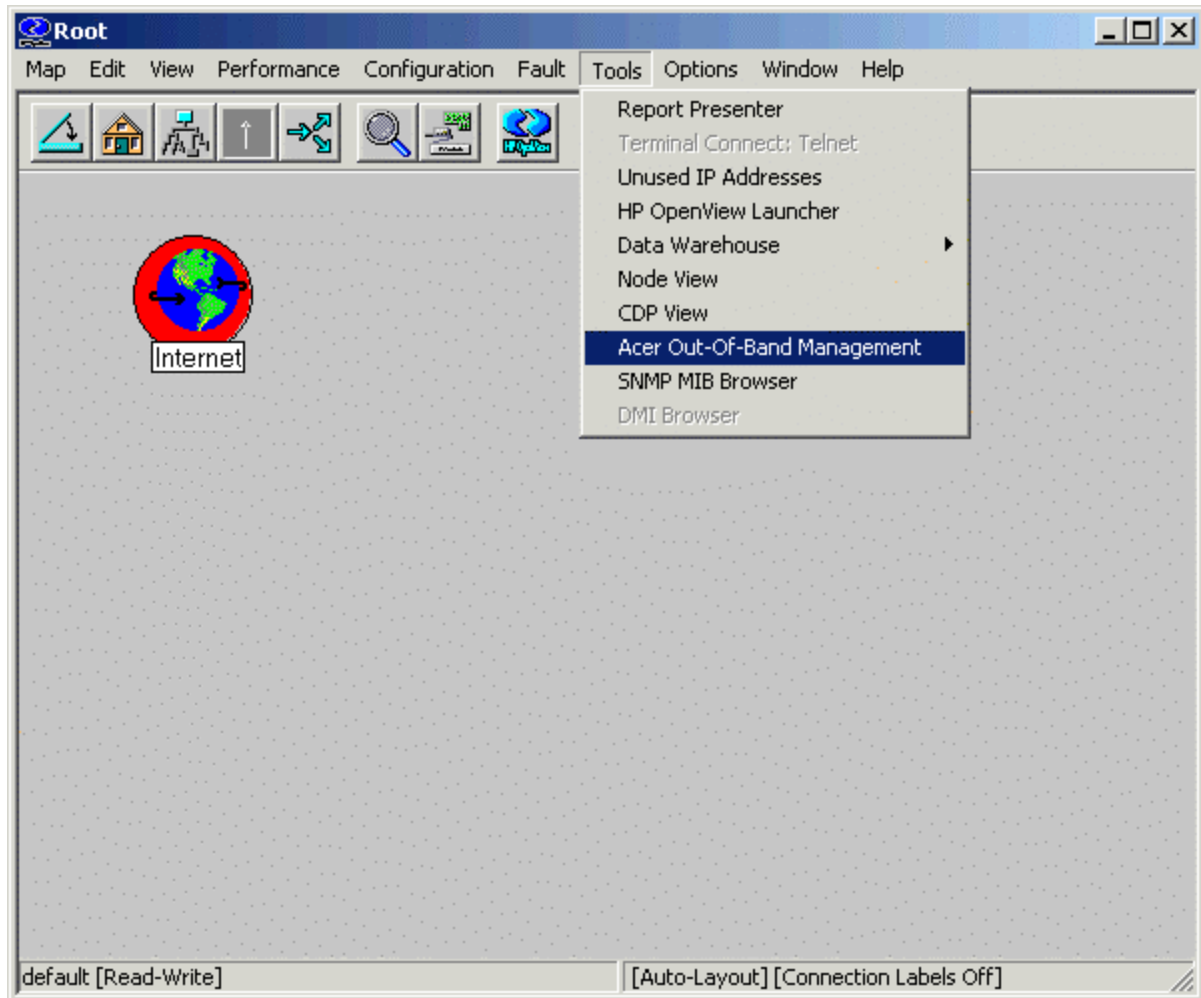


5. The queried information will be shown in the MIB values display area. If the item highlighted which belongs to ipmi sub-tree, the information shown will be IPMI data. If belongs to smbios sub-tree, the information shown will be SMBIOS data. The same, we can get OS information.

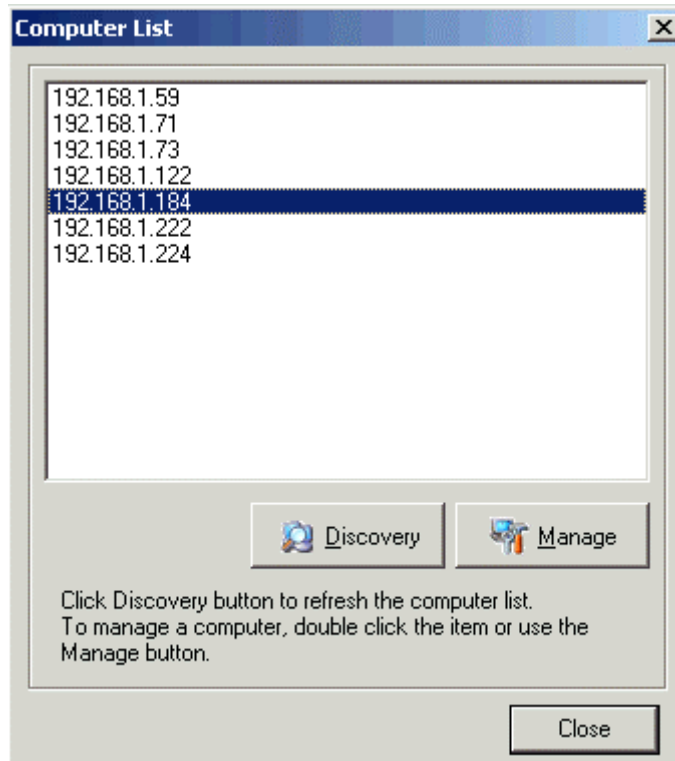
5.3 SMBIOS/IPMI/OS information with Out of Band

After the OSA-SNMP-MIB.mib was loaded successfully, on the **Tools** menu,

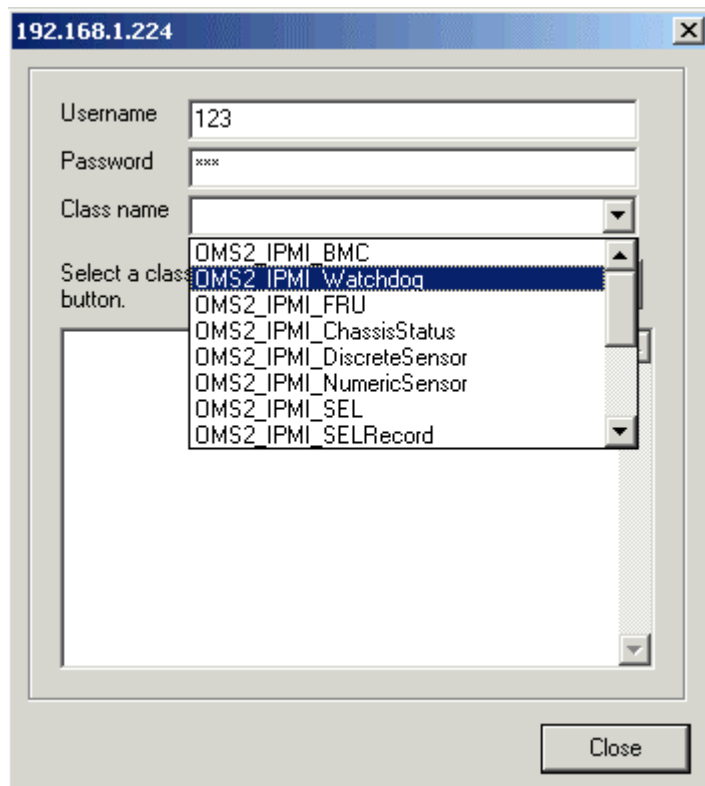
1. Click on **Acer Out-of-Band Management**



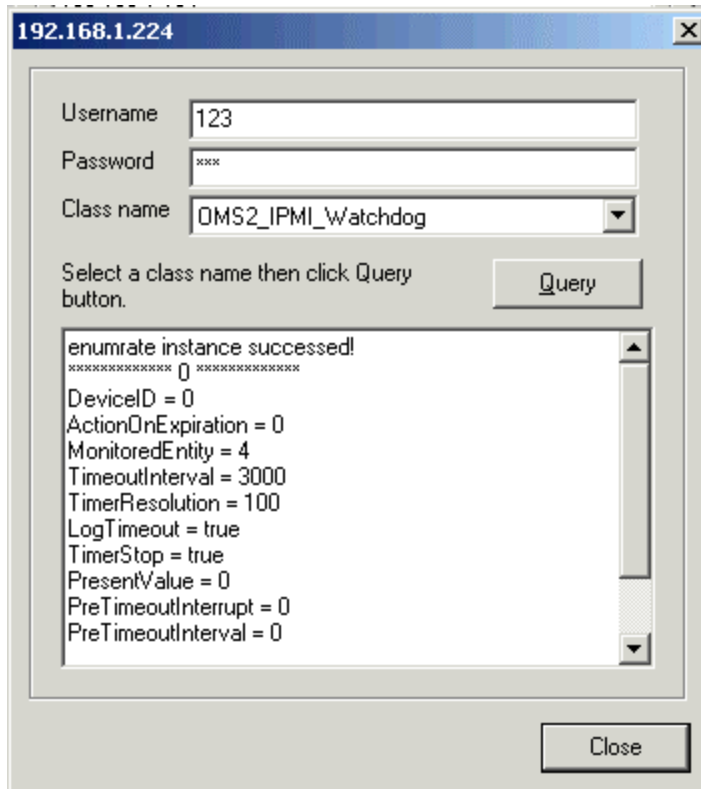
2. Click on **Discovery** button. In a few seconds, the discovered computers will be listed out



3. Click on a node you want to manage. Then click on **Manage** button, it will pop up a dialog in which you should input OOB user name and password, and you should choose a class name to determine the IPMI data you need



4. Click on **Query** button, the IPMI data for the class will be shown in display area



5.4 Un-installation

To uninstall the HP-ACER_PLUGIN software, click

Start → Settings → Control Panel → Add/Remove Programs → HP_ACER_PLUGIN

6 ASF Configuration

Please ensure that you selected ASF Configuration component while Acer Server Manager software installation for G510.

6.1 ASF Firmware Installation (Optional)

To install ASF firmware, boot the system with Windows 98 Startup Disk. At DOS prompt,

1. Enter installation directory of the Acer Server Manager, then go to ASFCFG subdirectory
2. Type "b57diag -b57eng -all" to start the "b57diag"
3. At "b57diag" command prompt, type "seprg 5702ASF.bin" to program the boot code onto the EEPROM
4. At "b57diag" command prompt, type "asfprg" to program the ASF code onto the EEPROM
5. Type "q" to quit "b57diag" program

6.2 NIC Configuration

At "b57diag" command prompt, type "secfg" and hit another <enter> to go to next page.

To enable ASF, enter "24=1" and save the configurations "save".

6.3 ASF Parameter Configuration

At "b57diag" command prompt, type "ascfg"

Change ASF Misc. Info "6"

Enable ASF: Type 1=1 at command prompt

Enable HearBeat "2=1"

Enable RMCP "3=1"

Enable PET "4=1"

Give a value to Heart beat interval "8=5"

Assign a SMBus Address for 5702 "14=68"

Assign Time before 1st poll "17=3C"

Set item 6 SysIP as 6=xxx.xxx.xxx.xxx

Set Management Console IP 7=as xxx.xxx.xxx.xxx

Set Server's gateway onto "Gateway" as xxx.xxx.xxx.xxx

Set subnet mask item as xxx.xxx.xxx.xxx

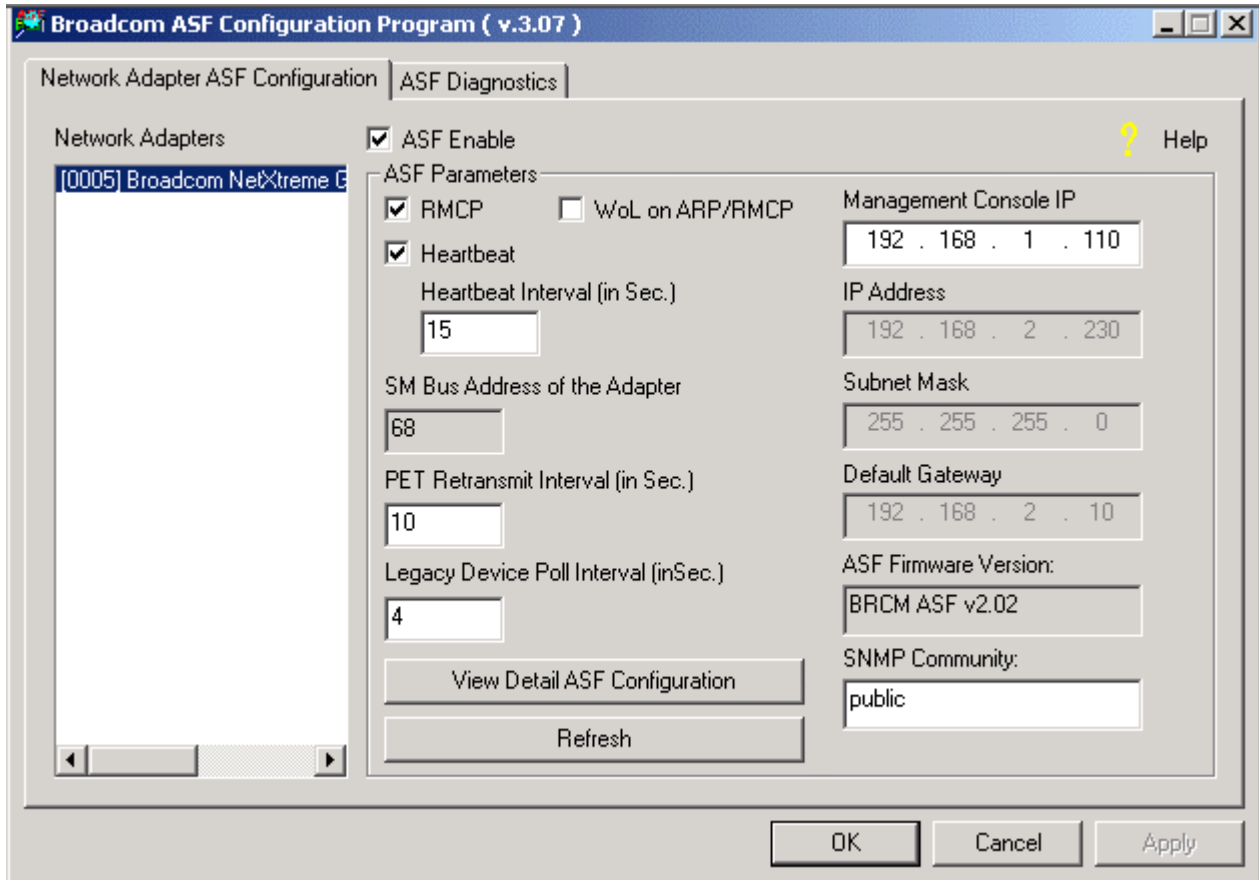
Save all "8"

6.4 Broadcom's ASF Configuration Utility

On Windows 2000 OS environment, launch Broadcom's ASF Configuration utility by clicking,

Start → Programs → Acer Server Management Suite → ASF Configuration

In this utility, you can get detail ASF configuration and set management console IP etc.



7 Frequently Asked Question

7.1 General

7.1.1 What is Acer Server Manager? How is it used?

The Acer Server Manager Version 5.3 is one of the Acer Technologies' Server Management Solutions. With this management software, administrators can monitor the health and utilization of server systems, locally and remotely.

The Acer Server Manager software consists of three components:

- **Console**

The Console offers a standard MMC (Microsoft Management Console) GUI. This allows the system administrator to access the remote Management Server to manage the Agent.

- **Server**

The Server runs on the management server. It extends the standard WMI software, which is available by default with the installation of a Windows Operating System.

Server evaluates requests for information from the WMI consumer (in this case, the Console), identifies which WMI provider has the information, retrieves the system information and perform data process and analysis, then returns the data to the consumer.

- **Agent**

The Agent runs on the managed node. It extends the standard WMI software, which is available by default with the installation of a Windows Operating System.

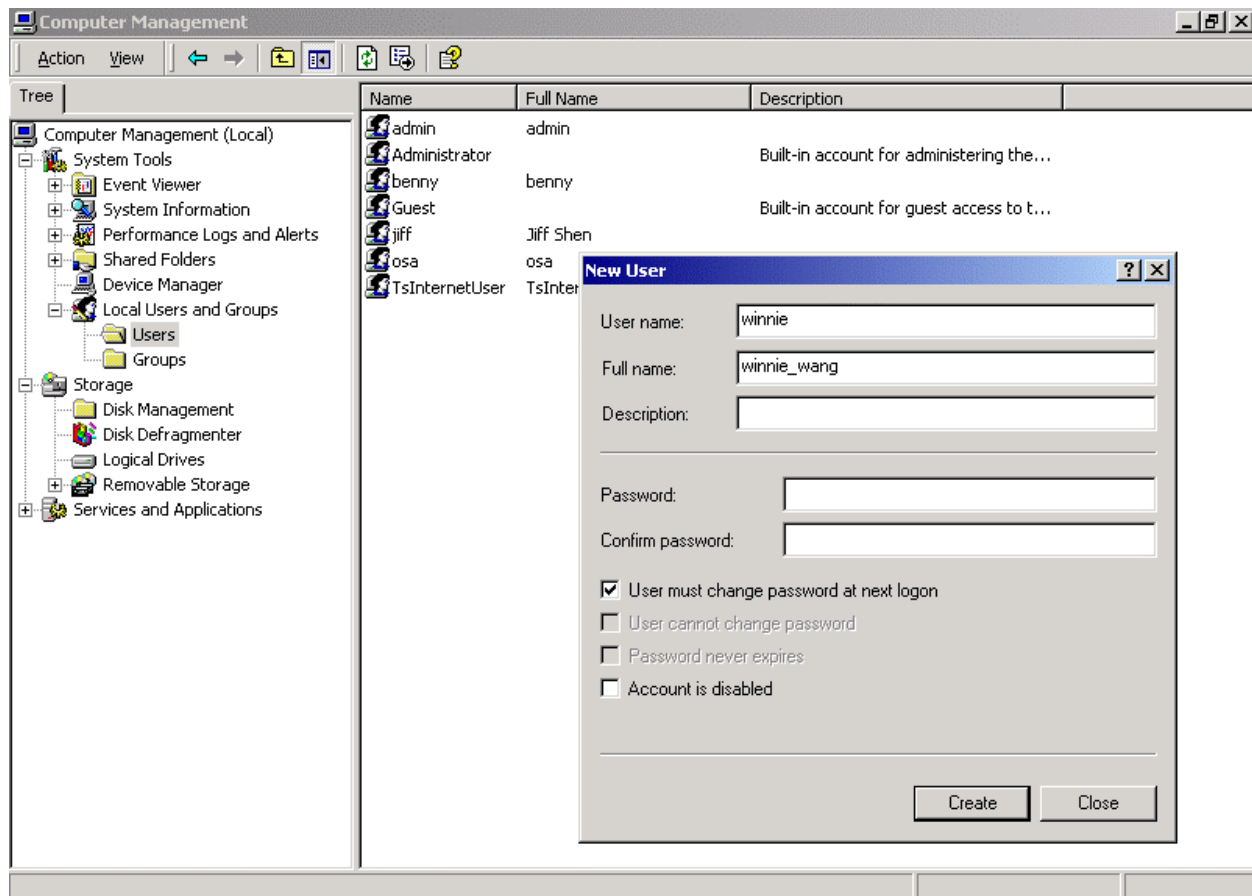
Agent catches requests for information from the WMI consumer (in this case, the Server), getting the data by executing WMI provider, and sends the data to the consumer. Acer Server Manager extends the standard Windows software with 2 WMI providers, the SMBIOS provider and the IPMI provider.

7.2 Installation and Configuration

7.2.1 Can't access the Agent with a newly added user account.

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



7.2.2 Acer Server Manager reports “IPMI does not exist” while BMC is available

Q: I installed the 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: The 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, the Acer Server Manager would fail to find IPMI. If BMC is present and the Console reports “IPMI does not exist”, please make sure BMC is alive, and reinstall the Agent.

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

Q: On the “hardware” node on a platform with IPMI support, I see a node for “IPMI SEL” but I cannot find a node for “SMBIOS SEL”. On a platform without IPMI support, it is the other way around. Why?

A: The Acer Server Manager keeps track of the hardware capability of each managed node. On a platform with IPMI support, the Acer Server Manager knows that a BMC is available. So retrieves system event log entries (SEL) from the BMC. On a platform without IPMI support, it knows that BMC is not available.

7.2.4 Why is it that on a platform with IPMI support, 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 server to the tree using its OOB IP address, and the OS on the server was not active when the addition is made. Delete the computer and add it back, or run Discovery again.

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

Q: I can normally retrieve OS information from 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.

7.2.6 Out-Of-Band UserID/Password

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

A: Acer Server Manager v5.3 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.

7.2.7 Auto-Discovery

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

A: No. We do not perform auto discovery in Acer Server Manager 5.3. You need to add it manually, or run Discovery.

7.2.8 Configurations for Alerts

Q: Can I change the alert settings?

A: In the Alert component, you can change the filters, the corresponding actions and the CPU/Memory/Disk Usage thresholds. In Acer Server Manager 5.3, we do not allow the user to change the other settings.

7.2.9 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.

7.3 What is planned for future releases of Acer Server Manager?

The following features are planned for future releases of Acer Server Manager:

Support for additional operating systems (Linux, Netware, SCO)

System resources management

Additional system information

Out-of-band management through serial port

Console redirect

Appendix A: Acer Server Manager Version 5.3 Quick Installation Guide

System Requirements

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

Server

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

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/Windows XP Professional
- Ethernet Card

System Setup

Installing 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 the Agent.
2. Logon to Windows 2000 using the Administrator account
3. Insert Acer Server Manager Version 5.3 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.
5. Next screen allows you to choose the proper components you want to install, Choose the "ASM Agent".
6. Click on "next", and follow the wizard to finish the procedure.

Installing Server

The installation procedure for the Console is the same as installing the Agent, expect for choosing "ASM Management Server" instead on step 5.

Installing Console

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