

## 5

## *asmconfig* for SCO OpenServer

*asmconfig* is invoked during ASM Server Agent installation. It may be invoked at any time by typing ***asmconfig*** from a UNIX shell prompt. The executable file is found in the /usr/bin directory.

After executing *asmconfig*, if the password option is enabled, the utility prompts you to input the password for the ASM Server Agent before allowing access to the utility.

## Chapter 5 ASM Server Agent Utilities

Use the right and left arrow keys to select a menu item.

### To move around in asmconfig:

- Use the up and down arrow keys to highlight the item and press the return key to execute or select the highlighted item.
- Use the left and right arrow keys to switch control between the main window and confirm selection window shown at the bottom of the screen.
- To quit, select **Quit** from the main menu and press **Enter**.

The utility has the following functions:

## SNMP Config

```
SNMP_Config Manager_Info Event_Action Password Threshold Event_Log Quit
+-----+-----+-----+-----+-----+-----+
| public | 192.9.210.27 | 162 |                                     |         |         |
| public | 192.9.210.99 | 162 |                                     |         |         |
| public | 202.39.85.64  | 162 |                                     |         |         |
|         |               |     |                                     |         |         |
|         |               |     |                                     |         |         |
|         |               |     |                                     |         |         |
|         |               |     |                                     |         |         |
|         |               |     |                                     |         |         |
|         |               |     |                                     |         |         |
|         |               |     |                                     |         |         |
|         |               |     |                                     |         |         |
|         |               |     |                                     |         |         |
+-----+-----+-----+-----+-----+-----+
| [ Add ]      | [ Modify ]   | [ Delete ]   | [ Cancel ]   |
```

This function allows the user to add, modify or delete any IP address in `/etc/snmpd.trap`. When the user wants the ASM Manager Station to monitor the ASM Server Agent, the Station's IP address must be included in `/etc/snmpd.trap` on the server site. This is the place to do that.

---

## Manager Information

```
SNMP_Config  Manager_Info  Event_Action  Password  Threshold  Event_Log  Quit
+-----+
| Manager Name      :  
| Office Phone     :  
| Office Location  :  
| Home Phone       :  
| Home Location    :  
| Pager Number     :  
| Email Address    :  
| Server Location  :  
|  
|  
|  
|  
+-----+
| Use arrow key and edit...  
+-----+
```

Users can modify Manager Contact Information and Server Location by selecting this function.

To edit data, follow the directions on the status line at the bottom of the screen. Press the **Enter** key to move the cursor to the next line. When you finish typing, press **Enter** and the arrow key to return to the menu item.

# Event Action

SNMP_Config	Manager_Info	Event_Action	Password	Threshold	Event_Log	Quit
-----						
Event		Agent Action		Execution Program		
=====						
Warning Temperature		Broadcast				
Critical Temperature		Broadcast		Shutdown		
ECC Memory Error		Broadcast				
Fan Stops		Broadcast				
Voltage Exceeds Safe Range		Broadcast				
PCI Bus Utilization						
Memory Utilization High						
File System Utilization High		Broadcast				
XPower Supply Fail						
XUPS Battery Fail						
XPower Fan Stop						
XAC Power Fail						
Chassis Intrusion		Broadcast				
Fuse Fail		Broadcast				
Redundant Power Supply Fail		Broadcast				
Redundant Power Supply Fan Fail		Broadcast				
-----						
[Broadcast]		[Execution]		[Cancel ]		
-----						

A typical Event Action screen is shown above. The event type shown depends on the server (for example, UPS).

These events are defined in ASM Pro. Users can define the agent action (broadcast and/or shutdown) and user-defined program at the server site.

To specify an action, use the up and down arrow keys to select the event, then press **Enter** or **Tab** to go to the bottom of the screen. Use the left and right arrow keys to move between [Broadcast], [Execution], and [Cancel].

To exit this screen, press **Tab** and the left/right arrow key.

---

## Password

SNMP_Config	Manager_Info	Event_Action	Password	Threshold	Event_Log	Quit
-------------	--------------	--------------	----------	-----------	-----------	------

Change Password

Disable Password

You can change to a new password which is from 3 to 16 letters...

This item allows the user to change or enable/disable the agent password. A valid password must have a minimum of 3 characters and a maximum of 16 characters. If the user disables the password, the ASM Server Agent **will not** execute password checking when the threshold is set by the ASM Manager Station.



*If the password feature is disabled, the server will have NO SECURITY protection.*

ASM Pro has password protection for setting values. This means that if the user wants to modify threshold values, manager contact information or server location, the ASM Manager Station will request the user to input the ASM Server Agent's password.

## Threshold

```
SNMP_Config  Manager_Info  Event_Action  Password  Threshold  Event_Log  Quit
+-----+-----+-----+-----+-----+-----+
|                                     | PCI Bus Utilization |
|                                     | Memory Utilization |
|                                     | File System Utilization |
|                                     | Bios Eventlog Utilization |
+-----+-----+-----+-----+-----+
| Current PCI Bus Utilization Threshold is 100 |
+-----+-----+-----+-----+-----+-----+-----+
```

The four threshold items that can be set at the server site are: PCI Bus Utilization (for some models only), Memory Utilization and global File System Utilization (for all file systems).

Setting a PCI or memory threshold is the same as setting these thresholds from the station side. However, the File System Utilization threshold is a global value that applies to all of the file systems on the agent being set.

## Event Log

This item allows user to view or clear the Trap Log. When any event occurs, the ASM Server Agent will send a trap and save this event to the Trap Log.

When the View Event Log option is selected, it will allow you to view the Event Log file (/etc/eventlog.dat) by invoking the **vi** editor.

```

SNMP_Config  Manager_Info  Event_Action  Password  Threshold  Event_Log  Quit
+-----+
|                                                     |
|                                                     |
|                                                     |
|                                                     |
|                                                     |
|                                                     |
|                                                     |
|                                                     |
|                                                     |
|                                                     |
| View event log file by vi |
+-----+

```

When you finish viewing the Event Log file, type : **q** ! and press Return to end the viewing session.

Before the program exits, *asmconfig* will ask the user to accept their modifications. If the user chooses **Update**, the corresponding files will be updated. If the user chooses **Cancel**, no modification occurs.

```

SNMP_Config  Manager_Info  Event_Action  Password  Threshold  Event_Log  Quit
+-----+
|                                                     |
|                                                     |
|                                                     |
|                                                     |
| Do you want to update? |
|                         |
|                         |
|                         |
|                         |
|                         |
|                         |
|                         |
|                         |
|                         |
| [Update] [Cancel] |
+-----+

```

After the user updates all modifications, *asmconfig* will ask the user to restart the ASM Server Agent. If the user has changed the IP address in `/etc/snmpd.trap`, the `snmpd` (SNMP daemon) will also be stopped and restarted.

```
+-----+
| Do you want to restart ASM Server Agent? |
+-----+

Note: If you want ASM Server Agent to execute correctly,
      please choose [Restart] after you finish all
      modifications.

[Restart] [Cancel]
```



---

## ***asmcfg* for SCO UnixWare**

Follow these steps to configure the SCO UnixWare agent:

1. At the shell prompt, execute command:

```
# /usr/asm/asmcfg
```

to start the ASM Agent Configuration Utility.

2. Use the <ESC> key to move the cursor between the menu and form regions. When the cursor is located in the form region, use the <PageUp>/<PageDown> key to switch to different form pages. (Each form page contains a group of related configuration parameters.) Use the <Tab> key or Arrow keys to move the cursor around fields in a form page then set up the values in them.  
When the cursor is located in the menu region, select items from the `Config` pulldown menu to directly jump into the corresponding form pages.
3. From the menu, select `File -> Save` to update the modified configuration parameters back into the ASM configuration file `/usr/asm/asmsmxd.conf`.
4. In the menu select `File -> Exit` to quit from the ASM Configuration Utility.



*Note that the changed parameters will not become effective until ASM Server Agent is restarted. Therefore, if any configuration is modified and saved, the ASM Configuration Utility will prompt to ask whether to restart ASM Server Agent.*

## Config/SNMP

In this pop-up form, the user can enter the IP addresses of SNMP trap destinations (i.e. those ASM management stations expected to receive SNMP traps). The list of IP addresses will be saved to the SNMP configuration file `/etc/netmgt/snmpd.trap` after choosing the OK button. Notice that each IP address entered should be in decimal dot notation, and be typed on one line.

```

ASM Agent Configuration Utility (asmcfg)
File      Config      View
+-----+-----+
[ASM Password]      Add/Modify/Delete IPs of SNMP
Password Protection: Trap Destinations below:
Password: [ Change .
                        127.0.0.1

                        [ Ok ] [ Cancel ]

+-----+-----+
+-Key: <Arrow Key>/<PgUp>/<PgDn>/<Tab>/<Enter>/<ESC>----- (Page-1)

```

## Config/ASM\_Password

In this form page the user can:

- Enable or disable the ASM password protection by selecting or unselecting the check mark in the square bracket. If the ASM password protection is enabled, the ASM Manager Station will request the user to enter the ASM password each time when issuing an SNMP set command. (The default setting is DISABLE)
- Change the ASM password. A valid password must have a minimum of 3 characters and a maximum of 16 characters. (The default password is a null string.)

```
ASM Agent Configuration Utility (asmcfg)
File      Config    View
+-----+
[ASM Password]
Password Protection: [ ]
Password: [ Change ... ]

+-Key: <Arrow Key>/<PgUp>/<PgDn>/<Tab>/<Enter>/<ESC>----- (Page-1) -
```



*If the password feature is disabled, the server will have NO SECURITY protection.*

---

ASM Pro has password protection for setting values. This means that if the user wants to modify threshold values, manager contact information or server location, the ASM Manager Station will request the user to input the password of the ASM Server Agent.

---

## Config/Manager\_Info

This form page contains the information related to the server manager.

```
ASM Agent Configuration Utility (asmcfg)
File      Config  View
+-----+
| [Server Manager Info]
| Manager Name:
| Office Phone:
| Office Address:
| Home Phone:
| Home Address:
| Pager Number:
| Email Address:
|
| Server Location:
|
+-----+
+-Key: <Arrow Key>/<PgUp>/<PgDn>/<Tab>/<Enter>/<ESC>----- (Page-2) -+
```

## Config/Threshold

This form page contains the threshold values for some of the ASM predefined events.

```
ASM Agent Configuration Utility (asmcfg)
File      Config  View
+-----+
| [Threshold Values]
| PCI Bus Util. (%):      100
| Memory Util. (%):      100
| File System Util. (%):  100
|
| Polling Interval (sec.): 1
|
+-----+
+-Key: <Arrow Key>/<PgUp>/<PgDn>/<Tab>/<Enter>/<ESC>----- (Page-3) -+
```

# Config/Event\_Actions

These form pages contain the parameters controlling the server-side ASM event handling actions.

```
ASM Agent Configuration Utility (asmcfg)
File      Config  View
+-----+-----+
| << Event Handling (1) >> |
| Broadcast Shutdown Execute |
| ===== |
| [Warning Temperature Event] |
| Event Action: [V] [ ] [ ] |
| Execute Program: |
| Pager Number: |
|
| [Critical Temperature Event] |
| Event Action: [V] [V] [ ] |
| Execute Program: |
| Pager Number: |
|
| [ECC Memory Error Event] |
| Event Action: [V] [ ] [ ] |
| Execute Program: |
| Pager Number: |
+-----+-----+
+-Key: <Arrow Key>/<PgUp>/<PgDn>/<Tab>/<Enter>/<ESC>----- (Page-4) -+
```

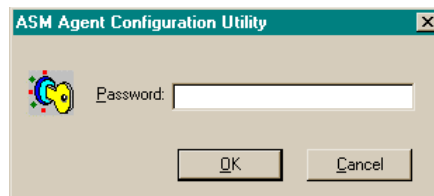
---

## ***asmcfg* for Windows NT**

The ASM configuration utility for Windows NT (*asmcfg*) is found in the ASM Server Agent target directory. The features are similar to *asmconfig* features for the SCO OpenServer utility described earlier in this chapter.

### **To Run the Program:**

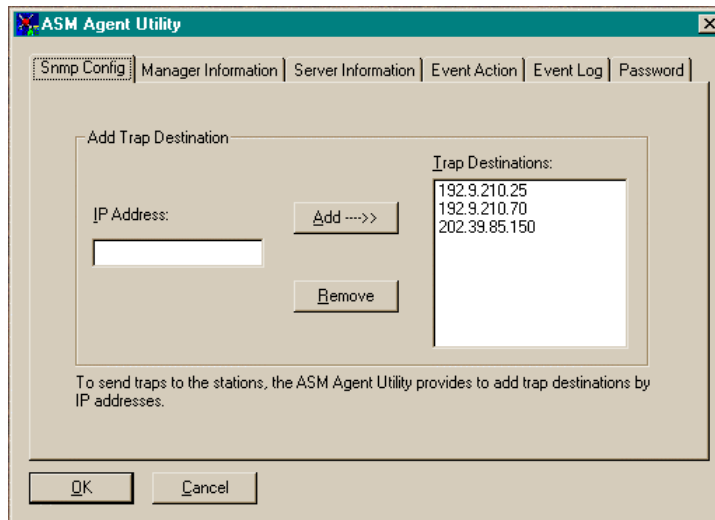
1. Under Windows NT, click **Start** then **Program**. Click **ASM Pro Agent** then **ASM Agent Utility**. The password window will appear.



2. Type in the correct agent password and click **OK**. The utility consists of the following functions, each accessed by clicking on its tab.

---

## SNMP Config



This section allows the user to add, modify or delete any IP address in the SNMP service trap destinations. When the user wants the ASM Manager Station to monitor the ASM Server Agent, the Station's IP address must be included in the SNMP service trap destinations with the community name „public“ on the server site.

To add an IP address to the trap list, type in the IP address and click on the **Add** button. To remove IP address(es) from the trap list, select the desired IP address and click on **Remove**.

## Manager Information

Click on the **Manager Information** tab to modify manager contact information.



---

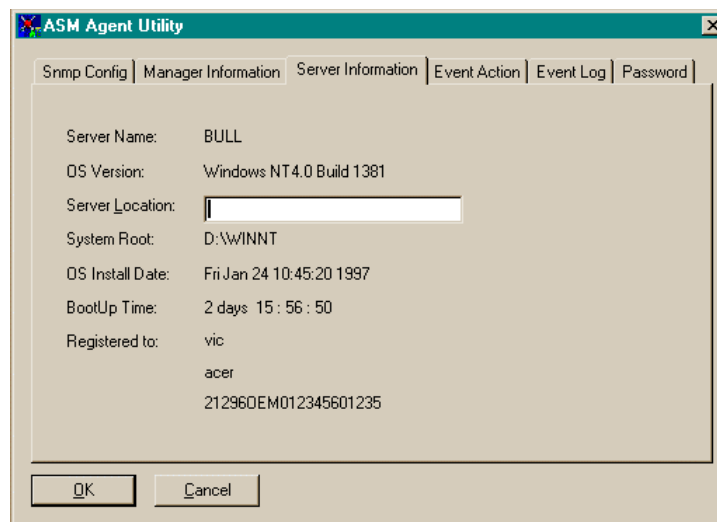
The screenshot shows a Windows-style dialog box titled "ASM Agent Utility". It has a tabbed interface with the following tabs: "Snmp Config", "Manager Information" (which is the active tab), "Server Information", "Event Action", "Event Log", and "Password". The "Manager Information" tab contains seven text input fields, each preceded by a label: "Manager Name:", "Office Location:", "Office Phone:", "Home Location:", "Home Phone:", "Pager Number:", and "E-Mail Address:". At the bottom of the dialog are two buttons: "OK" and "Cancel".

The maximum number of characters allowed is 48 per field.

---

## Server information

Click on the **Server Information** tab to modify the server location.

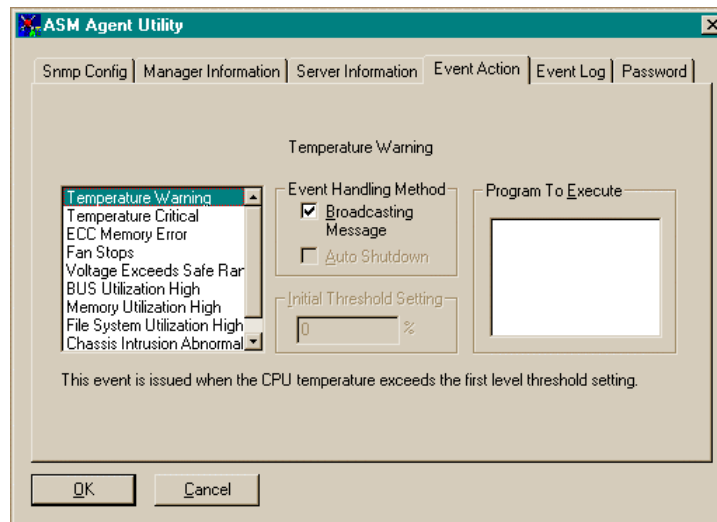


The maximum number of characters allowed is 48.

---

## Event Action

Click on the **Event Action** tab to display the following screen.



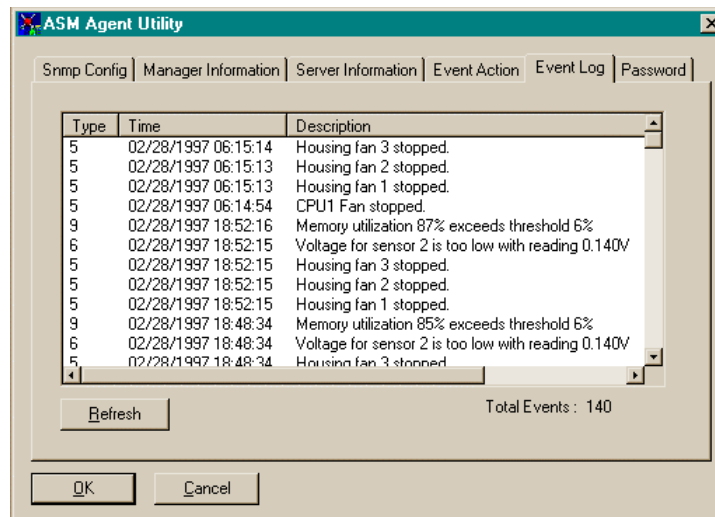
Various events are defined in ASM Pro. Users can define the agent action (broadcast message and/or shutdown), threshold setting and user-defined program at the server site.

To specify the event action, simply highlight the event, then use the mouse to check the Event Handling Method check box. You can also type in the name of the user-defined program you wish to execute when the event occurs. And you can set the threshold value for certain events here.

---

## Event Log

Click on the **Event Log** tab to display the following screen:



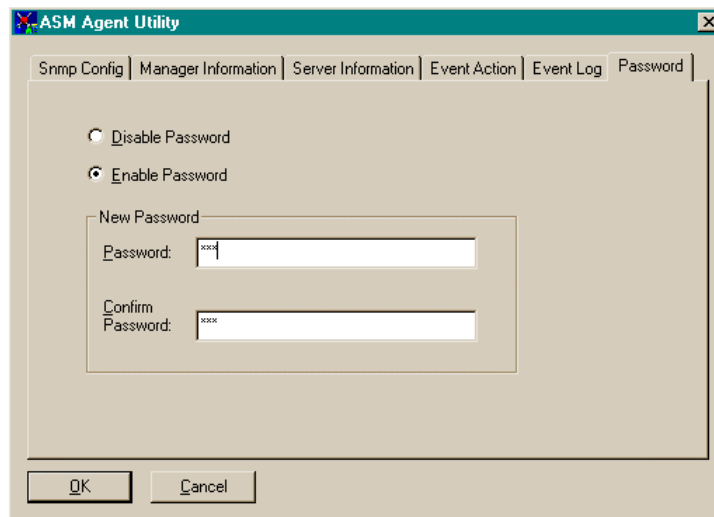
This screen shows the Event Log list which contains all the traps generated in the server machine.

To refresh the Event Log list, click on the **Refresh** button.

---

## Password

Click on the **Password** tab to display the following screen:



The screenshot shows the 'ASM Agent Utility' window with the 'Password' tab selected. The window has a title bar with a close button. Below the title bar is a tabbed interface with tabs for 'Snmp Config', 'Manager Information', 'Server Information', 'Event Action', 'Event Log', and 'Password'. The 'Password' tab is active. Inside the tab, there are two radio buttons: 'Disable Password' (unselected) and 'Enable Password' (selected). Below these is a section titled 'New Password' containing two text input fields. The first field is labeled 'Password:' and contains the text 'xxxx'. The second field is labeled 'Confirm Password:' and also contains 'xxxx'. At the bottom of the window are 'OK' and 'Cancel' buttons.

This screen allows the user to change or enable/disable the agent password. A valid password should have a minimum of 3 characters and a maximum of 16 characters. If the user disables the password, the ASM Server Agent will not execute password checking when the threshold is set by the ASM Manager Station.



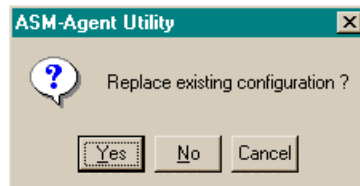
*If the password feature is disabled, the server will have NO SECURITY protection.*

ASM Pro has password protection for setting values. This means that if the user wants to modify threshold values, manager contact information or server location, the ASM Manager Station will request the user to input the ASM Server Agent's password.

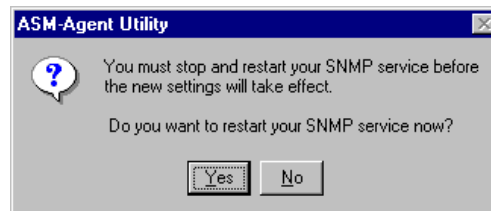
---

## Saving Changes in *asmcfg*

After you are finished making changes, click on **OK**. The following dialog box displays:



To save your modifications, click on **Yes**. Otherwise, click on **No**. The following dialog box displays:



After the file has been saved, this dialog box asks the user to restart the SNMP service for the changes to take effect. Click on **Yes** to restart these services.

---

## ***asmcfg* for NetWare**

The ASM configuration utility for NetWare (*asmcfg*) is similar in function to the *asmcfg* utility used for Windows NT and the *asmconfig* utility for SCO OpenServer.

### **To run *asmcfg*:**

At the system console prompt on your NetWare server, enter the command **load *asmcfg***. A window similar to the following appears:



The utility includes the following functions: (For each function, follow the instructions at the bottom of the screen.)

### **Password**

Select the **Password** option to change, enable, or disable the password. A valid password must have a minimum of 3 characters and a maximum of 16 characters.



*If the password feature is disabled, the server will have NO SECURITY protection.*

---

ASM Pro contains password protection for setting threshold values. Whenever changing a threshold value or a default value from the ASM Manager Station, the ASM Manager Station will request the user to enter the password for the ASM Server Agent having a value changed. If the user disables the password here, the ASM Server Agent no longer executes password checking when any values are changed.

## **OOB**

Click on the **OOB** button (Out of Band connection between the agent and the station via modem) to configure and to change the out of band modem settings. The modem settings control the out of band connection between the ASM Server Agent and the ASM Manager Station, including the COM port settings. Refer to your modem manual for the proper values.

## **Manager Information**

Select **Manager Information** from the pulldown menu to modify manager contact information, such as the manager's name, address, and phone number.

## **Server Location**

Select **Server Location** from the pulldown menu to specify the physical location of the server.

## **Event Handling**

Select **Event Handling** to display the Event Handling screen. (A typical Event Handling screen is shown below.)



Event Handling			
Event	Broadcast	Shutdown	Execute Program
Warning Temperature	Yes		
Critical Temperature	Yes	Yes	
ECC Memory Error	Yes		
Fan Stops	Yes		
Voltage Exceeds Safe Range	Yes		
		Threshold	
PCI Bus Utilization	No	100	
Memory Utilization	No	100	
Volume Utilization	Yes	100	

See the Event Type section of Chapter 4 (Fault Management) for an illustration and a description of the important events.

Saving changes made in *asmcfg* is similar to the procedure for saving changes made in the comparable *asmcfg* utility for Windows NT. See „Saving Changes in *asmcfg*“ earlier in this chapter for instructions on how to save changes.

## Uninstalling ASM Server Agent

From the main *asmcfg* screen, choose the **uninstall** option. Follow the onscreen prompts.