MINUTEMAN

SentryII

User's Manual
Version 2.0

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INTRODUCTION

Sentry II is a UPS power monitoring application for the Windows 95/98/ME, Windows NT/2000/XP, SCO Unixware/Open Desktop, HP-UX, IBM AIX, Red Hat Linux, Tru-64 UNIX, and Novell Netware 4.x, 5.x operating systems. Sentry II monitors the UPS through a cable attached to a serial port on the computer, and the communications interface on the UPS. This connection enables SentryII to check the status of the UPS and to perform a graceful operating system shutdown if required.

Through SentryII's web browser interface, you can configure shutdown timers and event actions, view and print event logs, and view and print power history graphs and data logs.

You can configure SentryII to perform appropriate actions when an event is detected. The user configurable actions include: logging, broadcasting, paging, e-mail, command file execution, and UPS and operating system shutdown. You can set the delays and intervals of these actions. For example, if utility power fails, you may wish to log the event, broadcast a warning message, page the system administrator, and shutdown the system after a configured time delay.

The monitoring screen displays readings and meters for the UPS. You can customize which values are displayed.

The UPS readings can be logged for later viewing. You can configure the frequency of the data logging. The event log tracks the history of power and UPS related events. The data log can be viewed, graphed, or printed. The event log can be viewed or printed.

You can schedule specific actions to occur, such as system shutdown and restarts. You can schedule these actions to recur one-time, daily, every weekday, or a specific day of the week. Some actions may not be supported on all UPS models.

INSTALLATION

System Requirements

1. To use SentryII, your system must be running one of the following operating systems with the TCP/IP protocol:
    - Windows 95/98/ME
    - Windows NT/2000/XP
    - SCO Unixware/Open Desktop
    - HP-UX
    - IBM AIX
    - Red Hat Linux
    - Novell Netware 4.x, 5.x
    - Tru-64 UNIX
2. SentryII requires one dedicated RS-232 serial port on your computer, for communications with the UPS.
3. SentryII requires an additional dedicated RS-232 serial port on your computer, for paging, if this feature is utilized.

Installing the UPS Interface Cable

Install the UPS interface cable by performing the following steps:
1. Locate the UPS interface cable that was provided with SentryII, or the UPS. (Part # 35000003)
2. Identify the computer end of the cable. The computer end of the cable will have a part # label attached.
3. Plug the connector at the computer end of the cable into the dedicated serial communications port on your computer. If this end of the cable does not match your serial port connector, use an RS-232 adapter.
4. Plug the connector at the other end of the cable into the interface port on the UPS. (Refer to the UPS user's manual for help in locating the interface port.)

NOTE: SentryII will look for the UPS on com 1 by default. Com ports 2, 3, or 4 maybe used with minor configuration changes.

Windows

Install Procedure

Step 1.   Insert the SentryII Installation CD and select **Install Software** from the menu. If the autorun feature does not work, run **setup.exe** located in the **{*drive*}:**\\SentryIIServer\Win32 folder on the SentryII Installation CD.
NOTE: Replace **{*drive*}** with the drive letter of the CDROM drive.

NOTE: When using a Windows NT/2000/XP server, logon as the administrator to ensure that you have full read and write privileges.

Step 2.   The InstallShield Wizard will guide you through the installation process.

Step 3.   The default install location is recommended.

Step 4.   The default web server port address is 80. If you are running a standard web server such as IIS, Apache, or Microsoft Personal Web Server, you may want to change this port address to avoid a conflict.

Starting SentryII Services

If, at the end of the installation, you selected to start SentryII, then SentryII should be running. If not, to start SentryII, perform the following steps:

- Windows 95/98/ME
  1. From the Windows *Quick Launch Toolbar*:
  2. Right click on the *SentryII Manager* icon.
  3. From the popup menu, select *Start SentryII*.
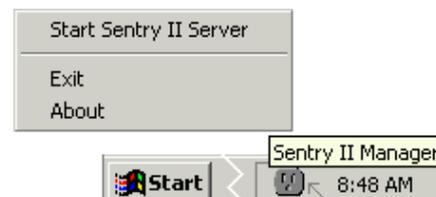
NOTE: If the menu reads *Stop SentryII* then the server is already running. By default, the *SentryII* Manager is placed in the windows Startup folder to run at system startup.

- Windows NT/2000/XP

1. Start the Windows *Services* application.
2. From the Windows *Start Menu*, select the *Settings* menu, and then select the *Control Panel* menu.
3. Select the *Administrative Tools* folder, and then select the *Services* application.
4. Locate the *Sentry II* service in the services list.
5. Right click *Sentry II* and select *Start* from the popup menu.

Connect to Service

Step 1.   To connect to *SentryII*, click the Windows **Start** button and select **Programs / SentryII / Connect to SentryII**.

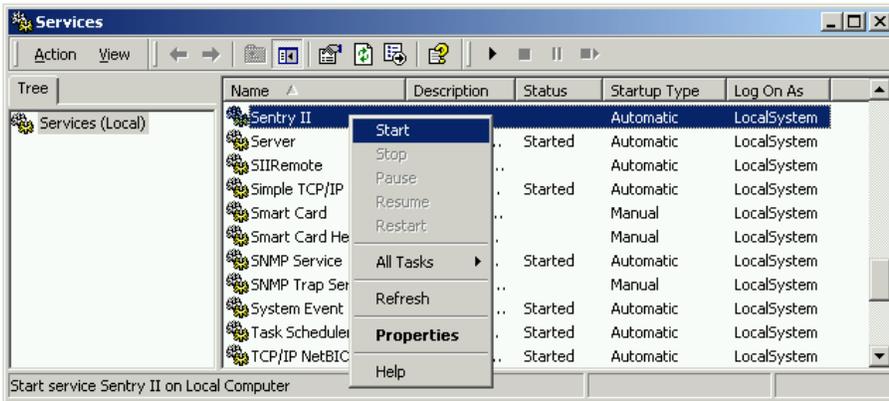Step 2.   The following windows will appear. **SentryII** will display your computer's default DNS name. If not, then manually enter in either your computer name or IP address.

Step 3. Click **Connect** and your default web browser will start. The **SentryII** security page will then appear. The default User Name and Password is **admin**.

NOTE: The administrator User Name and Password can be changed from within the **Users** section once **SentryII** is connected.
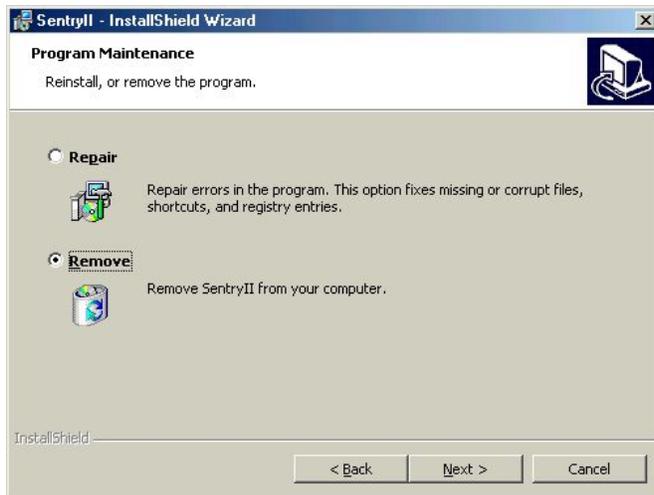

Uninstall Procedure

Uninstall **SentryII** by performing the following steps:

Step 1.   Open the Windows **Control Panel** and choose **Add/Remove Programs**.

Step 2.   Choose **SentryII** and click Add/Remove. InstallShield will guide you through the uninstall process.

Step 3.   InstallShield can **Repair** or **Remove SentryII**.

Step 4.   The **SentryII Data Logs** and **Event Logs** are NOT removed during the uninstall process. They can be located in the
          C:\Program Files\Minuteman**SentryII** Data and Event folders.

Novell Netware

Install Procedure

Step 1.   **SentryII** must be installed from a Windows client computer. Before you begin, you will need the name of the Novell
          Netware server and where the software will be installed. If you do not know the name of the netware server, ask your Novell
          Netware Administrator.

NOTE: Novell Client32 is **NOT** required, however TCP/IP **is** a necessity for SentryII.
The Novell server must be running TCP/IP.

Step 2.   Map a drive to the netware server's SYS volume. (NOTE: The netware user must have administrator access rights for SYS)

          If you do not know how to map a drive, see the following:
          - For Windows 95/98/ME, from *Help* on the Windows Start menu, see the <u>index</u> *map network drive and **To assign (map)
            a drive letter to a network computer or folder*.
          - For NT, from *Help* on the Windows Start menu, see the <u>index</u> **mapping network drives**.
          - For 2000, from *Help* on the Windows Start menu, see the <u>index</u> **mapping drives** and **to network computer or folder**.
          - For XP, from *Help and Support* on the Windows Start menu, see the <u>index</u> **mapping drives** and **to network computer
            or folder.**

NOTE: Make a note of the drive letter selected, as this will be needed later. Also the computername is the NetWare server
name and the foldername is SYS. (i.e. \\{computername}\SYS).

Step 3.   Insert the SentryII Installation CD and select **Install Software** from the menu. If the autorun feature does not work, run
setup.exe located in the **{***drive***}:**\\SentryIIServer\Netware folder on the SentryII Installation CD. NOTE: Replace **{***drive***}** with the
drive letter of the CDROM drive.

Step 4.   The InstallShield Wizard will guide you through the installation process.

Step 5.   When prompted for the SentryII installation folder, select the drive letter mapped in Step 2 and enter a new folder name, a
          maximum of 8 characters may be used, where the software will be installed. (For example, **F:\SentryII**.)
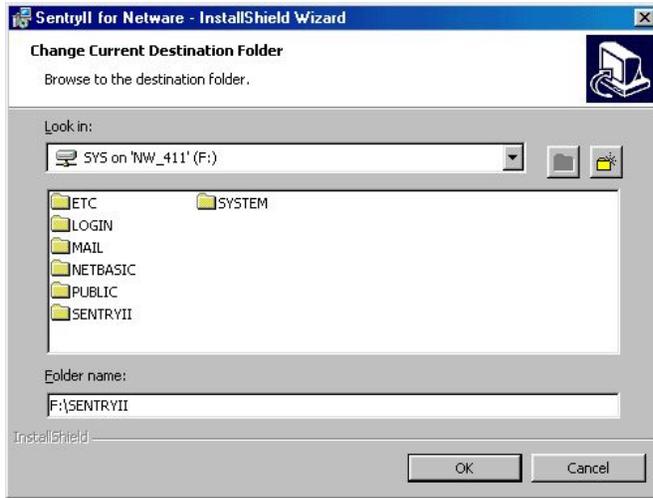
Step 6.   The default web server port address is 80. (NOTE: Novell Netware v 5.1 does have the ability to run a web server, you may want to change this port address to avoid a conflict.)
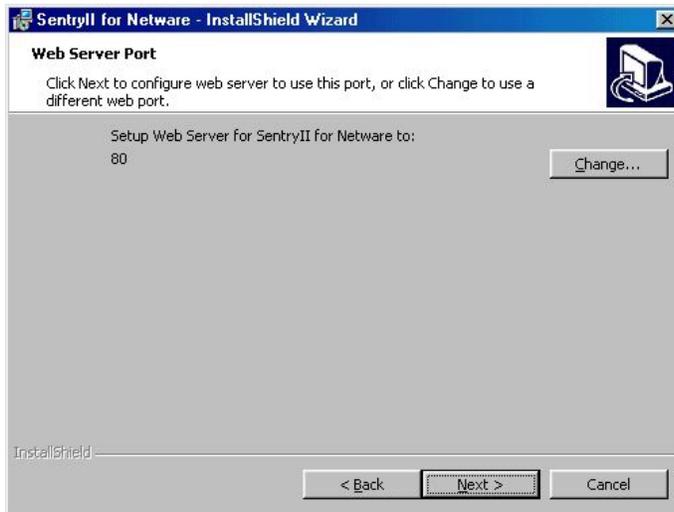
Starting SentryII Services

NOTE: The hosts file on the Novell server may need to be altered before the SentryII service can run properly. This can be done by entering: LOAD EDIT SYS:ETC\HOSTS at the console prompt. The IP address of the server needs to be referenced to the server name.

From the Novell server, start SentryII by entering the following commands at the console prompt: (NOTE: replace *InstallFolder* with the folder name entered in step 5)

        LOAD AIOCOMX.NLM
        LOAD NETDB.NLM
        LOAD SYS:*InstallFolder*\SENTRYII.NLM

SentryII should now be executing on the Novell Netware server. Within a few minutes, you should see
the following messages on the SentryII display:

Connecting to UPS...
UPS connected successfully.

SentryII is now running.

NOTE: To execute SentryII Server at system startup the support NLM files may be placed in the AUTOEXEC.NCF file.

Connect to Service

Step 1.   SentryII must be configured from a Windows client computer. Before you begin, you will need the IP address of the Novell Netware server.

NOTE: TCP/IP **is** a requirement for SentryII. The Windows client must be running TCP/IP.

Step 2.   Start your favorite web browser. Type in the IP address of your server in the Address bar.
(Example: http://***ServerIPaddress***)

Step 3.   The SentryII security web page will load. The default User Name and Password is **admin**.

NOTE: The administrator User Name and Password can be changed from within the **Users** section once SentryII is connected.

Uninstall Procedure

NOTE: SentryII uninstall must be executed from the same Windows client computer that performed the original installation.

Uninstall SentryII by performing the following steps:

Step 1.   Open the Windows **Control Panel** and choose **Add/Remove Programs**.

Step 2.   Choose SentryII and click Add/Remove. InstallShield will guide you through the uninstall process.

Step 3.   InstallShield can **Repair** or **Remove** SentryII.
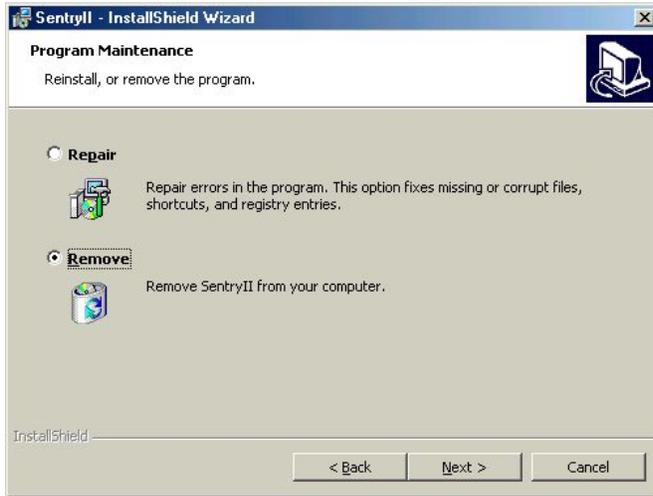
Step 4.   The SentryII **Data Logs** and **Event Logs** are NOT removed during the uninstall process. They can be located in the SYS:*InstallFolder*\Data and Event folders.

Unix

Install Procedure

Step 1. You must be logged in to the server as root to ensure that you have full read and write privileges.

- Auto Install: Insert the SentryII Installation CD into the drive. Mount the CD-ROM drive. Execute the **install** script located in the \SentryIIServer\Unix folder on the SentryII Installation CD.

KNOWN ISSUE: The KDE desktop environment running with the Konqueror web browser does NOT work properly with install scripts. For this setup, please use the Manual Install listed below.

- Manual Install: Insert the SentryII Installation CD into the drive. Mount the CD-ROM drive. Open a terminal windows and go to the **mnt/cdrom/SentryIIServer/Unix** folder. Type **./install** at the command prompt to begin the install process.

Step 2. The install script will begin.
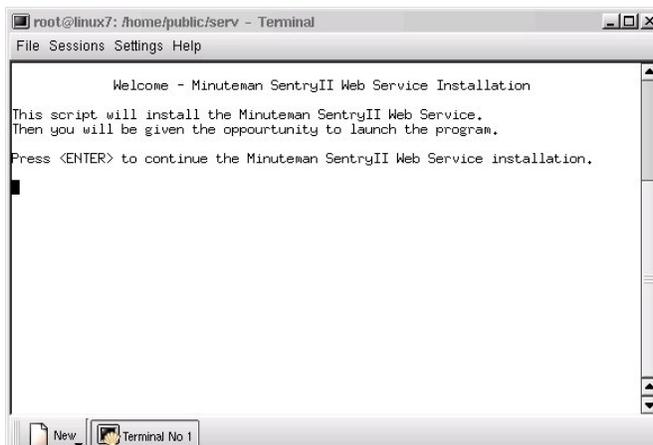
Step 3.   All default install locations are recommended.
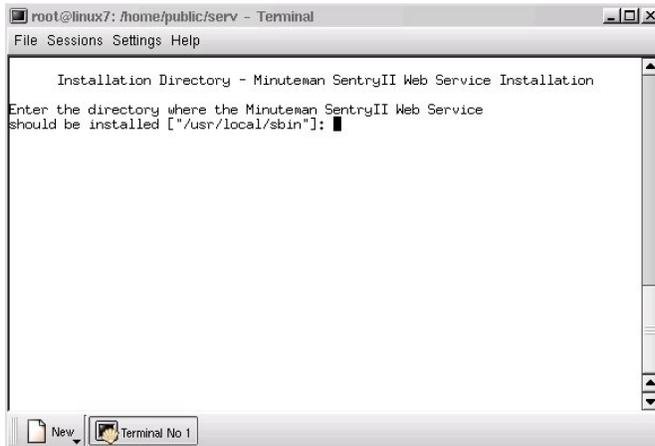
Step 4.   The default web server port address is 80.
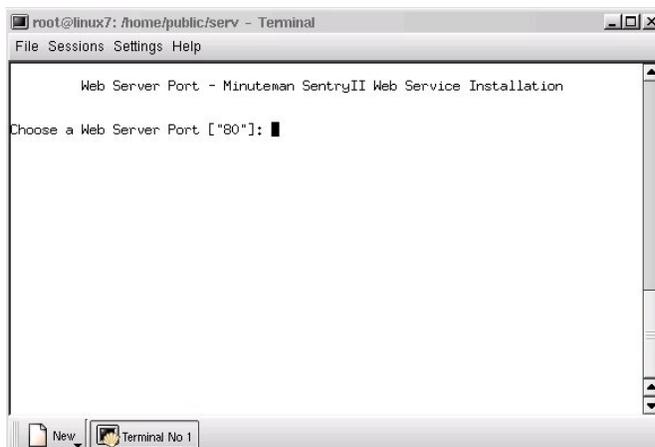
Starting SentryII Services

If, at the end of the installation, you selected to start SentryII, then SentryII should be running.
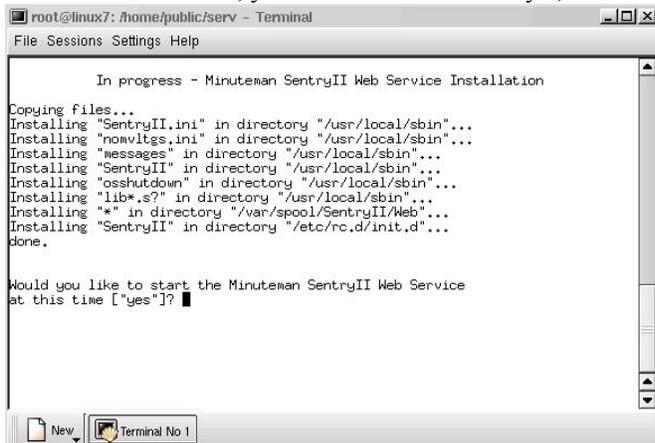
If not, please perform the following steps:

To start SentryII, execute the following commands for your platform:

❑   HP-UX
1.   cd /opt/SentryII
2.   ./SentryII daemon

❑   SCO Unixware / Open Desktop
1.   cd /etc/init.d
2.   ./SentryII start

❑ IBM AIX
1. cd /usr/local/sbin
2. ./SentryII daemon

❑ Red Hat Linux
1. cd /etc/rc.d/init.d
2. ./SentryII start

❑ Tru-64 UNIX
1. cd/usr/local/sbin
2. ./SentryII daemon

Connect to Service

Step 1. Start your favorite web browser. Type in the IP address of your server in the Address bar.
(Example: http://**ServerIPaddress**)

Step 2. The SentryII security web page will load. The default User Name and Password is **admin**.

NOTE: The administrator User Name and Password can be changed from within the **Users** section once SentryII is connected.
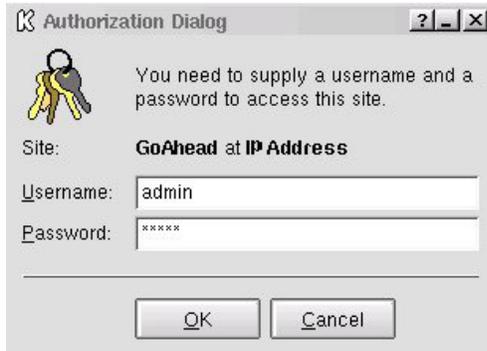
CONFIGURATION

After SentryII is connected, the default page will be displayed.
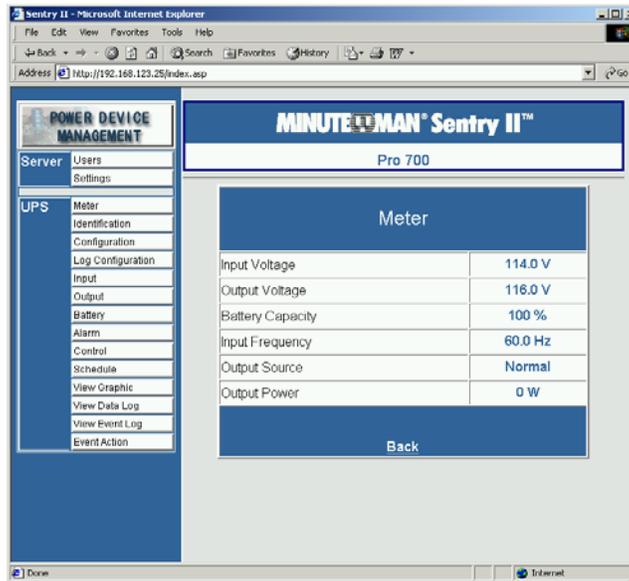
To begin the configuration, select **User** located in the **Server** section.

User Management

The User Management page is where the valid user accounts are set up for SentryII. The default user is **admin**, which has administrator privileges. Logging in under this account allows you to completing configure SentryII. To add additional users, enter the **Name**, **Password**, **Confirm Password**, select whether this user should have administrator privileges, and select **Save**. NOTE: The information a user will be able to view is limited if an account is set up without administrator privileges.

Server Settings

The Server Settings page contains the configurable settings for the SentryII server. If your server requires values other than the defaults, enter the correct values and select *Save*. A message will be displayed confirming that the changes have been saved.

The following is a description of the fields contained on this page:

- API Port

  SentryII's API communications port. The default port 8888 may be changed if it conflicts with another service running on the computer. (NOTE: This port is used to communicate with all SentryII Remote clients.)

- Web Server Port

  SentryII uses this port to communicate with a web browser. The default port 80 may be changed if it conflicts with another web server running on the computer.

- Serial Communications Port

  SentryII uses this port to communicate with the UPS. Select the port the UPS has been connected to.

- Baud Rate

  SentryII communicates with the UPS using this baud rate. This rate will be auto detected from the UPS when the SentryII service is started. If not, please refer to the documentation provided with your UPS.

- SMTP Server

  The SMTP server name or IP address supplied here will be used to send email notifications.

- Contact Closure UPS

  Select this checkbox if the UPS supports contact closure and you would like SentryII to use this mode. (NOTE: Units connecting to an AS400 computer will benefit most from this feature. Contact Closure requires a non-standard communications cable. Part # 35000015)

NOTE: If the UPS is connected to any com port other than com 1 the default page will not display until the required com port is selected and your web browser is restarted.

UPS Configuration

The Configuration page contains configurable and static settings for the attached UPS. If changes are required, enter the correct values and select *Save*. A message will be displayed confirming that the changes have been saved.

Configuration	
Nominal Input Voltage	115 V
Nominal Input Frequency	60.0 Hz
Nominal Output Voltage	115 V
Nominal Output Frequency	60.0 Hz
Nominal Volt-Amp Rating	700 Va
Nominal Output Power	455 W
Nominal Low Battery Time	2 Min
Nominal Battery Voltage	12 V
Audible Alarm	Disabled
Low Voltage Transfer Point	85 V
Battery Installed Date (MM/DD/YYYY)	01/01/2001
Nominal Battery Life	1826 Days
Shutdown Type	Output
Auto Restart	Enabled

Save

Back   Home

The following is a description of the fields contained on this page:

- Nominal Input Voltage   The expected input voltage.

- Nominal Input Frequency   The input frequency provided by the UPS.

- Nominal Output Voltage   The output voltage provided by the UPS.

- Nominal Output Frequency   The output frequency provided by the UPS.

- Nominal Volt-Amp Rating   The volt-amp rating provided by the UPS.

- Nominal Output Power   The output power provided by the UPS.

- Nominal Low Battery Time   The low battery time provided by the UPS.

- Nominal Battery Voltage   The expected battery voltage.

- Audible Alarm   Enable or disable the audible alarm feature of the UPS.

- Low Voltage Transfer Point   The low voltage point at which the UPS begins to provide power.

- Battery Installed Date   The date which the UPS first started service. (User changeable field.)

- Nominal Battery Life   Estimated battery life of 3 years. (User changeable field.)

- Shutdown Type   Determines the shutdown mode for the UPS. (Default of "Output" is recommended.)

- Auto Restart   Enable or disable the automatic restart feature of the UPS. (Default of "Enabled" is recommended.)

NOTE: Some fields may not be supported or displayed by all UPS's.

EVENT CONFIGURATION

Event Action

The event action page provides complete control over UPS system events. The available events vary by UPS model, however you can configure options for Paging, Logging, SNMP Traps, Broadcast, SMTP Email, Shutdown, and System Commands, for any available event. This allows you to take the appropriate action based on the event, such as sending a notification of the event to the administrator.

NOTE: Some options for actions are not available for all operating systems.

To configure an event, select an event from the Event List. Then, select the button for the type of action to take when the event occurs. The following sections describe how to set up each action.

Paging

You can configure SentryII to use a third party paging system to send pages, to up to five people, when an event occurs. To avoid sending pages for events that last only a short time, enter a delay time. To set up paging for an event, select the **Pager** button. The following configuration page will be displayed. Enter the desired configuration and select the **OK** button. A message will be displayed confirming that the settings have been saved.

The following is a description of the fields contained on this page:

- **Event**   Displays the name of the event that is being configured.

- **Paging Enabled**   Select the checkbox to enable paging for this event. This option allows you to retain your settings whether the option is enabled or disabled.

- **Delay**   The amount of time in seconds, after the event occurs, before paging is performed. If the event is removed before the delay time is reached, the paging will be cancelled.

- **Port**   The dedicated serial communications port used when paging is performed. A modem must also be available and properly configured for this port.

- **Alarm-Add**   The numeric message sent, as the page, when an event is added.

- **Alarm-Remove**   The numeric message sent, as the page, when an event is removed.

- **Pager Number**   Up to five separate pages may be configured. Each field must contain only one paging phone number followed by any codes required by the paging service to complete the page.

    The phone number must contain any access numbers required for the phone system to gain access to an outside line, such as dialing 8 or 9. Each comma (,) represents three (3) seconds dialing pause time. This allows the modem to pause before sending a sequence of numbers to the paging system. There may be times, when a pause is required, before the paging system is ready to receive the next numeric command.

    It may be necessary to test the pause time until it is determined to be functioning properly. This may require an event to be manually triggered. See the *UPS Control Options* section to trigger an event.

    Valid characters are limited to 0 through 9, comma (,) and the pound sign (#).

    An example pager number follows: 1,8007597243,,,,,123456#,,,
    The numeric 1 would be dialed.

Followed by a 3 second pause.
The numbers 8007597243 would be dialed.
Followed by a 15 second pause.
The numbers 123456 and # would be dialed.
Followed by a 9 second pause.
Then, the numeric add or remove alarm would be sent as the pager message.
End of example.

Logging

You can configure SentryII to log the event to the event log file. For instructions on how to view the event log, see the *View Event Log* section.

To set up logging for an event, select the *Logging* button. The following configuration page will be displayed.

Logging	
Event	Alarm On Battery
Logging Enabled	☑
	OK
Home	

Select the *Logging Enabled* checkbox to enable logging for the event, and select the *OK* button. A message will be displayed confirming that the settings have been saved.

SNMP Trap

You can configure SentryII to send a SNMP trap, to up to 10 other computers on the network, when an event occurs. To set up a SNMP trap for an event, select the *Trap* button. The following configuration page will be displayed. Enter the desired configuration and select the *OK* button. A message will be displayed confirming the settings have been saved.

SNMP Trap	
Event	Alarm On Battery
SNMP Trap Enabled	☐
Trap Receiver Configuration	
IP Address	Community
	OK
Home	

The following is a description of the fields contained on this page:

- Event   Displays the name of the event that is being configured.

- SNMP Trap Enabled   Select the checkbox to enable sending a trap for this event.

- IP Address   The IP address of the computer that will receive the trap. Up to 10 addresses may be entered, each in a separate field.

- Community   This is the community name used when sending the trap. (i.e. PUBLIC)

Broadcasting

You can configure SentryII to broadcast a notification message when an event occurs. To avoid sending broadcasts for events that last only a short time, enter a delay time.

To set up broadcasting for an event, select the *Broadcast* button. The following configuration page will be displayed. Enter the desired configuration and select the *OK* button. A message will be displayed confirming the settings have been saved.

Broadcast	
Event	Alarm On Battery
Broadcast Enabled	☐
Delay	10 **Seconds**
Broadcast To	* **[*,user,machine]**
OK	
Home	

The following is a description of the fields contained on this page:

- Event   Displays the name of the event that is being configured.

- Broadcast Enabled   Select the checkbox to enable broadcasting for this event.

- Delay   The amount of time in seconds, after the event occurs, before broadcasting is performed. If the event is removed before the delay time is reached, the broadcasting will be cancelled.

- For Unix only   All of the current network connections to the Unix server will be sent a broadcast message.

- For Netware only   All of the current network connections to the Netware server will be sent a broadcast message.

- For Windows 95/98/ME only   (NOT viewable) Only NT/2000 servers can send broadcast messages. On Windows 95/98/ME machines, winpopup may be used to receive broadcast messages.

- For Windows NT/2000/XP only   A space delimited list of recipients. If an asterisk (*) is entered, all current connections on the logged in domain will be sent a broadcast message. Otherwise, the specified user name and/or computer name will be sent a broadcast message.

Email Notification

You can configure SentryII to send an email message to up to five different email addresses when an event occurs. To avoid sending emails for events that last only a short time, enter a delay time. To set up email notification for an event, select the *Email* button. The following configuration page will be displayed. Enter the desired configuration and select the *OK* button. A message will be displayed confirming the settings have been saved.

The following is a description of the fields contained on this page:

- Event   Displays the name of the event that is being configured.

- Send Email Enabled   Select the checkbox to enable sending email notifications for this event.

- Delay   The amount of time in seconds, after the event occurs, before sending email notifications. If the event is removed before the delay time is reached, sending email will be cancelled.

- Sender Address   The email address of the default mail account used as a reference to the sender.

- Alarm-Add   The message sent, as the body of the email, when an event is added.

- Alarm-Remove   The message sent, as the body of the email, when an event is removed.

- Recipient   The SMTP email address of the recipient. Up to five (5) recipients may be entered in separate fields. The address must be entered in the default notation (i.e. recipient@somedomain.net)

UPS and/or Operating System Shutdown

You can configure SentryII to shutdown the UPS and/or Operating System, when an event occurs that warrants this action. To avoid shutting down the system for events that last only a short time, enter a delay time.

To set up shutdown for an event, select the ***Shutdown*** button. The following configuration page will be displayed.

Shutdown	
Event	**Alarm On Battery**
Shutdown Enabled	☑
Shutdown OS Delay	10 **Seconds**
Shutdown UPS Delay	120 **Seconds**
Message	Shuting down
OK	
Home	

The following is a description of the fields contained on this page:

- Event   Displays the name of the event that is being configured.

- Shutdown Enabled   Select the checkbox to enable shutdown for this event.

- Shutdown OS Delay   The amount of time in seconds, after the event occurs, before the operating system will be shutdown. Enter –1 to disable shutting down the operating system. If the event is removed before the delay time is reached, the action will be cancelled.

- Shutdown UPS Delay   The amount of time in seconds, after the event occurs, before the UPS will be shutdown. If the event is removed before the delay time is reached, the action will be cancelled.

- Message   Shutdown message.

Run a System Command

You can configure SentryII to run an operating system command, when an event occurs. To avoid running a system command for events that last only a short time, enter a delay time.

To set up a system command for an event, select the **Command** button. The following configuration page will be displayed.

Execute System Command	
Event	Alarm On Battery
Command Enabled	☑
Delay	10 **Seconds**
Command	
Command Path Add	
Optional Parameters Add	
Command Path Remove	
Optional Parameters Remove	
OK	
Home	

The following is a description of the fields contained on this page:

- Event   Displays the name of the event that is being configured.

- Command Enabled   Select the checkbox to enable running a system command for this event.

- Delay   The amount of time in seconds, after the event occurs, before the system command will be executed. If the event is removed before the delay time is reached, the system command will be cancelled.

- Command Path Add   The path and system command to execute when the event is added.

- Optional Parameters Add   Parameters to pass to the system command.

- Command Path Remove   The path and system command to execute when the event is removed.

- Optional Parameters Remove   Parameters to pass to the system command.

MONITORING

Meter

The meter page displays current meter readings from the UPS. This allows you to view a quick snapshot of the status of the UPS.

Meter	
Input Voltage	116.0 V
Output Voltage	116.0 V
Battery Capacity	94 %
Input Frequency	60.0 Hz
Output Source	Normal
Output Power	0 W
Back	

Identification

The identification page displays the UPS model information. An Identification description and Attached Devices may be entered here. To save any changes, select *Save*. A message will be displayed confirming that the changes have been saved.

Identification	
Manufacturer	MINUTEMAN
Model	Pro 700
UPS Software Version	1.01
Identification	Pro Series UPS
Attached Devices	
Save	
Back Home	

Input

The input page displays the current state of the input power to the UPS. Refer to the documentation provided with the UPS for more details on the information provided on this page.

Input	
Input Out of Tolerance Count	1
Number of Input Lines	1
Input Frequency	60.0 Hz
Input Voltage	116.0 V

Back   Home

Output

The output page displays the current state of the output power from the UPS. Refer to the documentation provided with the UPS for more details on the information provided on this page.

Output	
Output Source	Normal
Number of Output Lines	1
Output Voltage	116.0 V
Output Current	0.0 A
Output Power	0.0 W

Back   Home

Battery

The battery page displays the current state of the UPS battery. Refer to the documentation provided with the UPS for more details on the information provided on this page.

Battery	
Battery Condition	Good
Battery Status	OK
Battery Charge	Resting
Battery Capacity	91 %
Battery Voltage	13.3 V

Back   Home

Alarm

The alarm page displays the current state of the alarms supported by the UPS.

Alarm	
General Failure	Normal
Charger Failure	Normal
Input Bad	Normal
Output Off	Normal
Overload	Normal
Shutdown Pending	Normal
Bad Battery	Normal
Low Battery	Normal
Depleted Battery	Normal
On Bypass	Normal
On Battery	Normal
Test Results Summary	Passed

Back   Home

View Graphic

The view graphic page provides a current view of UPS values. The meters show nominal value ranges in green, the thresholds in yellow, and invalid values in red.

The UPS current values and meter graphs are fully configurable and can display any values provided by the UPS.

Manufacturer	MINUTEMAN
Model	Pro 700
Output Source	Normal
Battery Status	OK
Input Voltage	116 V
Battery Voltage	13 V
Alarm Count	0

Log Graph
8/8/2001
7:23:33 AM

Input Voltage
116 V

Output Voltage
117 V

Battery Voltage
13 V
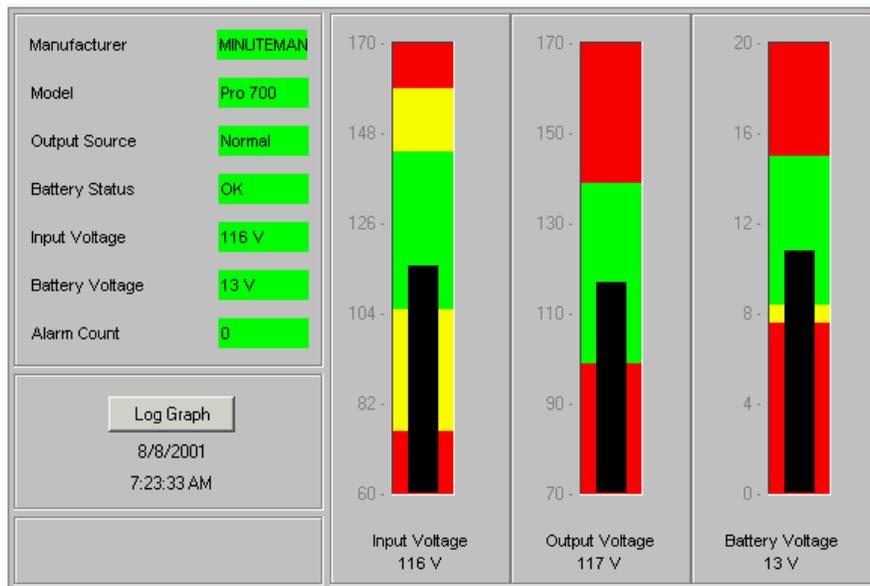
If you would like to see other values, changing them is easy. To change a value or a meter, click on the title of the value or meter and the following window will be displayed.

Select a new value from the drop-down list and select *Save*. The value will automatically be updated on the view graphic page.

You can also view the log graph by selecting the *Log Graph* button. The graph is fully configurable. You can select the UPS value, begin date, and time range to view the customized graph. Select the *Refresh* button to view the changes. You can also specify the Y minimum and maximum values, whether the X and/or Y grid lines are displayed, and whether lines or points are graphed. Select *Exit* to close the log graph window.
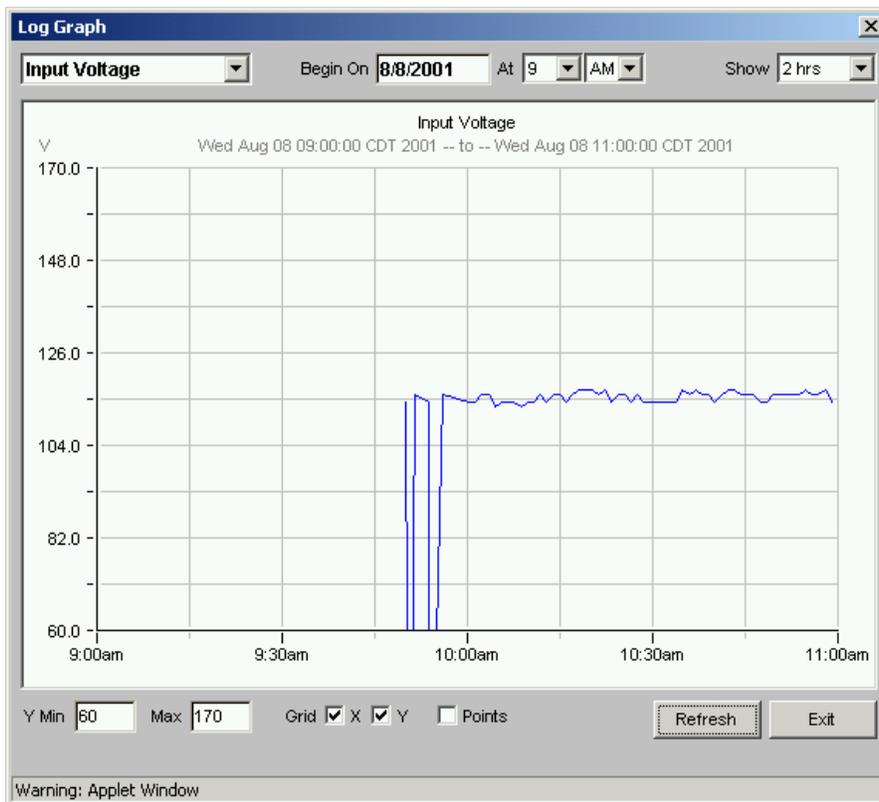
UPS CONTROL OPTIONS

Control

The control page provides the interface for controlling various options provided by the UPS. You can control startup, shutdown, restart, and testing options. Not all options are supported or displayed by all UPS's.
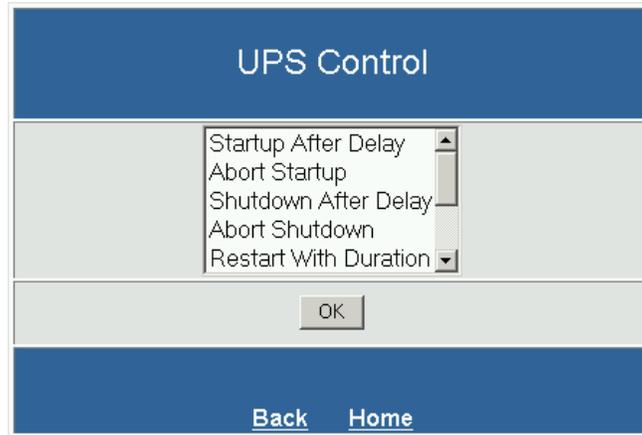
To perform an option, select the option and select the **OK** button. A perform command page will be displayed displaying available configuration information for the option. Enter the desired configuration information, if any, and select the **Perform Command** button. A message will be displayed confirming the command has been performed successfully.

SCHEDULING

Schedule

The schedule page provides the interface for scheduling the date and time when the shutdown and restart UPS events should occur.

To add a new schedule, select the **New** button. To make changes to a current schedule, select **[Edit]**. And to remove a schedule, select **[Delete]**.
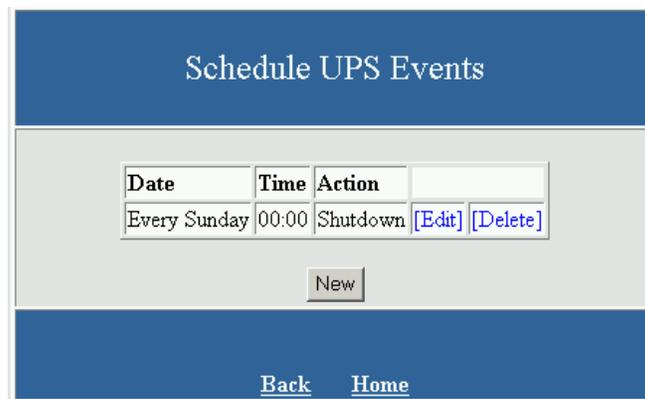
After selecting the *New* button or *[Edit]*, the following page will be displayed. Select the desired shutdown and restart configuration and select the *Save* button.

The following is a description of the fields contained on this page:

- Date   The date when the event should occur. The date may easily be selected by clicking on the date icon.

- Time   The time when the event should occur on the specified date.

- UPS Action   The UPS shutdown and restart settings. If **Shutdown with Restart** is selected, the UPS will shutdown and then restart after n number of seconds.

- OS Shutdown   The operating system shutdown options. If enabled, the operating system will shutdown n number of seconds before the UPS is shutdown.

NOTE: Newer computer systems support the automatic power management feature. This feature enables the computer to power off automatically at shutdown. If the **Shutdown with Restart** action is selected and your computer supports this feature your computer will NOT power on. Please refer to the computer manufacture's Users Manual for instructions on changing the power management feature from within your system's BIOS.

DATA & EVENT LOGGING

Log Configuration

The log configuration page contains the configurable settings for logging UPS readings and events on a regular basis. It also provides options for exporting and purging the log file. To configure the logging, enter the desired settings and select the *Save* button. A message will be displayed confirming that the changes have been saved.

To export the log file, enter the path and file name to exported to and select the *Export Log File* button. The log will export as a comma-delimited text file. To purge the log file, select the Purge Log File button.

The following is a description of the fields contained on this page:

- Logging Enable   Select the checkbox to enable the logging of UPS readings and events.

- Logging Interval   How often the logging will occur, in minutes.

- Maximum Data Log Size   Maximum size of the data log file, either unlimited or a specified number of megabytes.

- Maximum Data Log History   Maximum number of days to keep data log entries, either unlimited or a specified number of days.

- Maximum Event Log Size   Maximum size of the event log file, either unlimited or a specified number of megabytes.

- Maximum Event Log History   Maximum number of days to keep event log entries, either unlimited or a specified number of days.

- Export File Name   The file name and path where the log may be exported to.

View Data Log

The view data log page allows you to select a date range of UPS log records to view. Leaving the date fields blank will display all records.

To display the log, after selecting the desired date range, select the **OK** button.

A page similar to the following will be displayed.

NOTE: The data fields contained in the log may vary depending on the UPS model connected.

Select the **First** button to display the first page of the log. Select **Previous** to display the previous page. Select **Next** to display the next page of the log. And select **Last** to view the last page of the log.

View Event Log

The view event log page allows you to select a date range of event log records to view. Leaving the date fields blank will display all records.

To display the log, after selecting the desired date range, select the **OK** button.

A page similar to the following will be displayed.

Select the **First** button to display the first page of the log. Select **Previous** to display the previous page. Select **Next** to display the next page of the log. And select **Last** to view the last page of the log.

SENTRYII REMOTE

SentryII Remote was designed to extend the system shutdown capability to multiple servers/workstations in a network. The Remote agent is available for Windows, Netware, and Unix. This gives the user cross-platform shutdown capabilities.

System Requirements

1. To use SentryII Remote, your system must be running one of the following operating systems:
   - Windows 95/98/ME
   - Windows NT/2000/XP
   - SCO UnixWare/Open Desktop
   - HP-UX
   - IBM AIX
   - Red Hat Linux
   - Novell Netware 4.x, 5.x

- Tru-64 UNIX

2. The SentryII Remote client MUST be on the same network as the server/workstation hosting the SentryII Server.

3. NO other equipment is required! All Remote Clients can be automatically shutdown by one event from one MINUTEMAN UPS.

Windows Client

Installation

Step 1. Insert the SentryII Installation CD and select **Install Software** from the menu. If the autorun feature does not work, run **setup.exe** located in the **{*cdrom drive*}:**\\RemoteClient\Win32 folder on the SentryII Installation CD.

NOTE: When using a Windows NT/2000 server, logon as the administrator to ensure that you have full read and write privileges.

Step 2. The InstallShield Wizard will guide you through the installation process.

Step 3. The default install location is recommended.
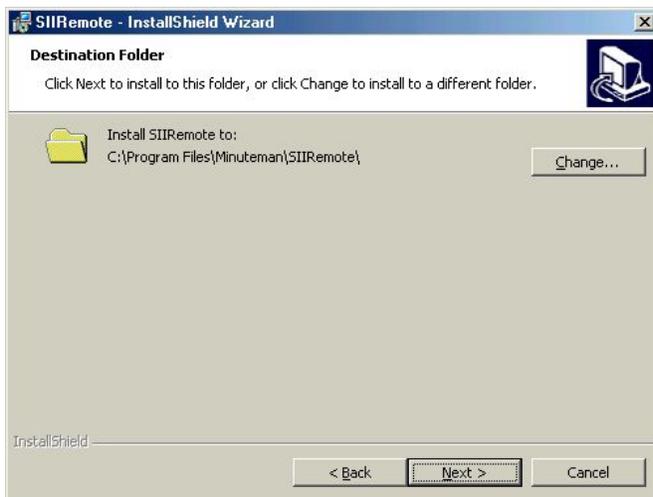
Step 4. Specify the desired setting for the SentryII Remote client.

NOTE: This splash screen is only available during the install process. To change these settings after installation, you may edit the C:\Program Files\Minuteman\SIIRemote\SIIRemote.ini file.

The following is a description of the fields contained on this page:

- Server Address   The SentryII Server's IP address.

- Server Port   The API port number of the SentryII Server. (See *Server Settings* on page 13)

- Username   The default is admin. This setting must coincide with the defined SentryII users list. (See *User Management* on page 13)

- Password   The default is admin. This setting must coincide with the defined SentryII passwords list. (See *User Management* on page 13)

- On Battery Shutdown   The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. If the event is removed before the delay time is reached, the action will be cancelled. (See *UPS and/or Operating System Shutdown* on page 20)

- Low Battery Shutdown   The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. (See *UPS and/or Operating System Shutdown* on page 20)

NOTE: All Remote clients need to be configured to shutdown <u>before</u> the SentryII Server.

Starting SentryII Services

If, at the end of the installation, you selected to start SentryII, then SentryII should be running. If not, to start SentryII, perform the following steps:

- Windows 95/98/ME
    1. Click the Windows **Start** button and select **Programs / SentryII / SIIRemote**.
    2. **SentryII** Remote is a hidden service and may only be seen by pressing **Ctrl-Alt-Delete**.

- Windows NT/2000/XP
    1. Start the Windows *Services* application.
    2. From the Windows *Start Menu*, select the *Settings* menu, and then select the *Control Panel* menu.
    3. Select the *Administrative Tools* folder, and then select the *Services* application.
    4. Locate the *SentryII Remote* service in the services list.
    5. Right click *SentryII Remote* and select *Start* from the popup menu.

Novell Netware Client

Installation

Step 1. The *SentryII* Remote must be installed from a Windows client computer. This should be done in exactly the same manner as the *SentryII* Server installation. (see **Novell Netware | Install Procedure** page 7)

Step 2. Insert the *SentryII* Installation CD and select **Install Software** from the menu. If the autorun feature does not work, run **setup.exe** located in the **{***cdrom drive***}:**\\RemoteClient\Netware folder on the *SentryII* Installation CD.

Step 3. The InstallShield Wizard will guide you through the installation process.

Step 4. When prompted for the *SentryII* installation folder, select a drive letter mapped to the SYS volume of your Novell server and enter a new folder name, a maximum of 8 characters may be used, where the software will be installed. (For example, **F:\SentryII**.)

Step 5. Specify the desired setting for the *SentryII* Remote client.

NOTE: This splash screen is only available during the install process. To change these settings after installation, you may edit the *InstallFolder*\SIIRemote\SIIRemote.ini file.

The following is a description of the fields contained on this page:

- Server Address   The *SentryII* Server's IP address.

- Server Port   The API port number of the *SentryII* Server. (See *Server Settings* on page 13)

- Username   The default is admin. This setting must coincide with the defined *SentryII* users list. (See *User Management* on page 13)

- Password   The default is admin. This setting must coincide with the defined *SentryII* passwords list. (See *User Management* on page 13)

- On Battery Shutdown   The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. If the event is removed before the delay time is reached, the action will be cancelled. (See *UPS and/or Operating System Shutdown* on page 20)

- Low Battery Shutdown   The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. (See *UPS and/or Operating System Shutdown* on page 20)

NOTE: All Remote clients need to be configured to shutdown <u>before</u> the SentryII Server.

Starting SentryII Services

From the Novell server, start SentryII Remote by entering the following commands at the console prompt: (NOTE: replace *InstallFolder* with the folder name entered in step 4)

LOAD SYS:*InstallFolder*\SIIREMOTE\S2REMOTE.NLM

The SentryII Remote client should now be executing on the Novell Netware server. Within a few minutes, you should see the following messages on the SentryII display:

Connecting to Server...
Successfully connected.

SentryII Remote is now running.

Unix Client

Installation

Step 1. You must be logged in to the server as root to ensure that you have full read and write privileges.

- <u>Auto Install</u>: Insert the SentryII Installation CD into the drive. Mount the CD-ROM drive. Execute the **install** script located in the \RemoteClient\Unix folder on the SentryII Installation CD.

KNOWN ISSUE: The KDE desktop environment running with the Konqueror web browser does NOT work properly with install scripts. For this setup, please use the Manual Install listed below.

- <u>Manual Install</u>: Insert the SentryII Installation CD into the drive. Mount the CD-ROM drive. Open a terminal windows and go to the **mnt/cdrom/RemoteClient/Unix** folder. Type **./install** at the command prompt to begin the install process.

Step 2. The install script will begin.

Step 3. <u>All</u> default install locations are recommended.

Step 4.   Specify the desired setting for the SentryII Remote client.

NOTE: This splash screen is only available during the install process. To change these settings after installation, you may edit the **usr/local/sbin/**SIIRemote.ini file.

The following is a description of the fields contained on this page:

- Server Address   The SentryII Server's IP address.

- Server Port   The API port number of the SentryII Server. (See *Server Settings* on page 13)

- Username   The default is admin. This setting must coincide with the defined SentryII users list. (See *User Management* on page 13)

- Password   The default is admin. This setting must coincide with the defined SentryII passwords list. (See *User Management* on page 13)

- On Battery Shutdown   The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. If the event is removed before the delay time is reached, the action will be cancelled. (See *UPS and/or Operating System Shutdown* on page 20)

- Low Battery Shutdown   The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. (See *UPS and/or Operating System Shutdown* on page 20)

NOTE: All Remote clients need to be configured to shutdown <u>before</u> the SentryII Server.

Starting SentryII Services

If, at the end of the installation, you selected to start SentryII, then SentryII should be running.

```
root@linux7: /home/public/s2remote – Terminal            _ □ ×
File  Sessions  Settings  Help

            In progress – Minuteman SentryII Remote Client Installation

Copying files...
Installing "SIIRemote.ini" in directory "/usr/local/sbin"...
Installing "messages" in directory "/usr/local/sbin"...
Installing "SIIRemote" in directory "/usr/local/sbin"...
Installing "osshutdown" in directory "/usr/local/sbin"...
Installing "lib*.so" in directory "/usr/local/sbin"...
Installing "SIIRemote" in directory "/etc/rc.d/init.d"...
done.


Would you like to start the Minuteman SentryII Remote Client
at this time ["yes"]? █



  New    Terminal No 1
```

If not, please perform the following steps:

To start SentryII, execute the following commands for your platform:

❑ HP-UX
1. cd /opt/SentryII
2. ./SIIRemote daemon

❑ SCO UnixWare / Open Desktop
1. cd /etc/init.d
2. ./SIIRemote start

❑ IBM AIX
1. cd /usr/local/sbin
2. ./SIIRemote daemon

❑ Red Hat Linux
1. cd /etc/rc.d/init.d
2. ./SIIRemote start

❑ Tru-64 UNIX
1. cd/usr/local/sbin
2. ./SIIRemote daemon