



Smart Load-Shedding

Installation and Operations Manual



Instructions

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



Dangerous Voltage

This symbol is intended to alert the user to the presence of un-insulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



Protective Grounding Terminal

This symbol indicates a terminal that must be connected to earth ground prior to making any other connections to the equipment.

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- the customer assumes all such risks, and
- the liability of Server Technology is adequately protected under the circumstances.

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Notices

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Chapter 1: Introduction

Quick Start Guide

The following instructions will help you quickly install and configure Sentry Smart Load-Shedding for your Server Technology equipment. For detailed information on each step, go to the page number listed to the right.

To enable Sentry Smart Load-Shedding, you first must have purchased this feature, been provided an activation key from Server Technology, and already updated to Sentry firmware version 6.0x or later.

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Connecting to the Unit

Serial (RS232) port

Sentry Cabinet Distribution Units are equipped with an RJ45 Serial RS-232 port for attachment to a PC or networked terminal server using the supplied RJ45 to RJ45 crossover cable and RJ45 to DB9F serial port adapter as required. See Data Connections in Appendix A: Technical Specifications for more information on the Serial RS-232 port.

Ethernet port

Sentry Cabinet Distribution Units are equipped with an RJ45 10/100Base-T Ethernet port for attachment to an existing network. This connection allows access to the Switched CDU via Telnet or HTML.

Sentry Cabinet Distribution Units are configured with the following network defaults to allow unit configuration out-of-the-box through either Telnet or HTML:

NOTE: When installed on a DHCP enabled networks, the following network defaults DO NOT apply as the Sentry ships with DHCP support enabled.

- IP address: 192.168.1.254
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.1.1

The local PC network connection must be configured as noted below:

NOTE: Contact your system administrator for instructions in reconfiguring the network connection. Reconfiguration of your network connection may require a restart to take effect.

- IP address: 192.168.1.x (where x is 2-253)
- Subnet Mask: 255.255.255.0

Technical Support



Experience Server Technology's FREE **SMARTER** Technical Support - [Learn more...](#)

Server Technology understands that there are often questions when installing and/or using a new product. Free Technical Support is provided from 6:00 AM to 7:00 PM, Monday-Friday, Pacific Time.

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Interfaces

Sentry Cabinet Distribution Units have two interfaces: the HTML interface accessed via the HTTP enabled Ethernet connections, and the command line for serial and Telnet connections.

Outlet Naming and Grouping

Models with a Single Power Infeed

Absolute names are specified by a period (.) followed by a tower letter and outlet number. The tower letter for the primary Cabinet Distribution Unit is A and the tower letter for the optional Expansion Module is B.

Models with Multiple Power Infeeds

For units with multiple infeed connectors, absolute names are specified by a period (.) followed by the tower letter, *the infeed letter* and outlet number.

Example: The absolute name for outlet 8 on the B infeed of tower A is .AB8.

Outlets may also be included in one or more named groups of outlets, enabling you to issue a command that affects all outlets in a named group.

Usernames and Passwords

Sentry Cabinet Distribution Units have one predefined administrative user account (username/password: admn/admn), and supports a maximum of 128 defined user accounts.

NOTE: For security, Server Technology recommends removal of the predefined administrative user account after a new account with administrative rights has been created.

Only an administrative-level user may perform operations such as creating/removing user accounts and command privileges, changing passwords and displaying user information. An administrator may also view the status of all sensors and power inputs.

Usernames may contain from 1-16 characters and are not case sensitive; spaces are not allowed. Passwords may contain up to 16 characters, and are case sensitive.

HTML Interface

The HTML interface is constructed of three major components:

1. System Location bar
2. User/Navigation bar
3. Control Screen.

The System Location bar displays the Sentry's location and IP address as well as the current Control Screen title. The User/Navigation bar displays the current user and privilege level and provides access to all HTML pages. The Control Screen is used to display current data and allow changes to outlet states or system configuration.

The following sections describe each interface section/page and their use.

NOTE: This manual describes ONLY those features and commands specific to Sentry Smart Load-Shedding. For all other features/commands, please refer to the specific product manual for your device.

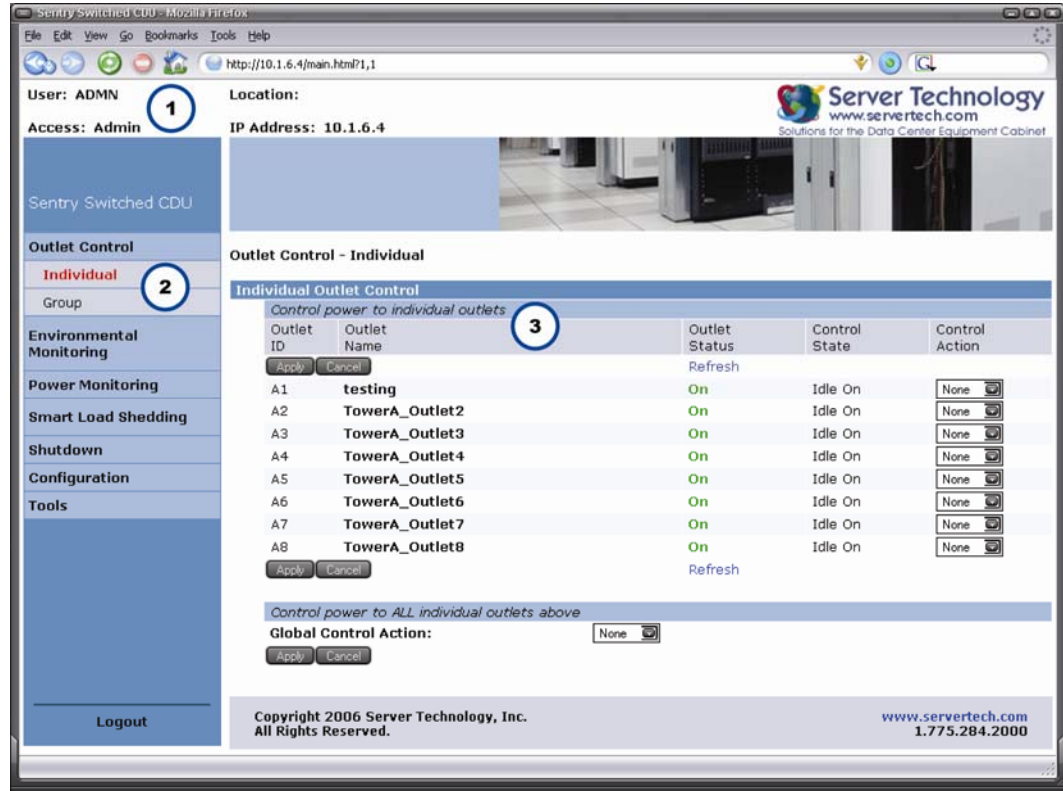


Figure 2.1 Example HTML page

Logging In

Logging in through HTML requires directing the HTML client to the configured IP address of the unit.

To log in by HTML:

In the login window, enter a valid username and password and press **OK**.

If you enter an invalid username or password, you will be prompted again.

You are given three attempts to enter a valid username and password combination. If all three fail, the session ends and a protected page will be displayed.

NOTE: The default Sentry username/password is `admnm/admnm`.

Power Monitoring

UPS

With Sentry Smart Load-Shedding enabled, this page is available under the Power Monitoring section. This page displays all UPSs associated with the Sentry device with their utility power state, nominal voltage and hostname/IP address.

Smart Load-Shedding

The Smart Load-Shedding section offers access to the pages required to configure Sentry Smart Load-Shedding. From these pages, the user may configure the Sentry to monitor the UPS's supplying power to each infeed as well as configure any or all outlets to respond to multiple Smart Load-Shedding conditions.

Outlets

The Outlets page displays all outlets and the conditions under which each are configured to load-shed. The temperature sensor and input feed thresholds may also be configured from this page.

To enable Smart Load-Shedding for an outlet:

To enable Smart Load-Shedding for an outlet, click the appropriate check boxes for each type of load-shed condition and press **Apply**.

Configuring the Temperature Sensor and Input Feed thresholds:

Click on the **Temperature Sensors and Input Feeds** link.

For each Input Feed, enter a maximum load value for the infeed in the High Load Threshold field and press **Apply**. The High Load Threshold value may be 0 to 255 (in amperes).

For Temperature Sensor, enter a maximum threshold value for the sensor in the appropriate field and press **Apply**. The threshold value may be 0 to 127 in degrees Celsius OR 32 to 254 in degrees Fahrenheit.

NOTE: SNMP and Load-shedding utilize the same infeed and high temperature threshold values.

Configuring the Temperature Sensor and Input Feed auto-recovery:

Click on the **Temperature Sensors and Input Feeds** link.

For each Input Feed and Temperature Sensor, click the Auto-Recovery check box if the outlets associated with that threshold are to be powered back on automatically once the threshold is no longer being exceeded.

UPS

The UPS configuration page is used for maintenance of UPSs associated with the Sentry device. From this page an administrator may associate a UPS to the Sentry device's input feed(s) as well as configure the UPS Hostname/IP address, SNMP Get community string, UPS voltage polling and UPS port.

To add a UPS:

Select the UPS type from the drop-down list, enter an IPaddress or hostname for the UPS and press **Apply**.

Configuring UPS auto-recovery:

Click the Auto-Recovery check box if the outlets associated with that UPS are to be re-powered automatically once utility power is re-established.

Editing the UPS configuration:

Click on the **Edit** link for the appropriate UPS.

Editing the UPS type:

Select the UPS type from the drop-down list and press **Apply**.

Editing the UPS Hostname/IP Address:

In the Hostname/IP field, enter an IP Address or Hostname and press **Apply**.

Editing the UPS SNMP GET community string:

In the SNMP GET Community String field, enter the community string configured on the UPS and press **Apply**.

Enabling/disabling UPS voltage polling:

Select **enabled** or **disabled** from the drop-down list and press **Apply**.

Editing the UPS SNMP port number:

In the Port field, enter the port number and press **Apply**.

Associate the UPS with an infeed:

Select the infeed(s) powered by the UPS and press **Apply**.

To remove a UPS:

Click on the **Remove** link for the appropriate UPS.

Configuration

The Configuration section offers access to all unit configuration options. This section is available to administrative level users only.

Features

The Features configuration page is used for activation maintenance of special features purchased from Server Technology. From this page an administrator may review all activated features as well as activate newly purchased features.

To activate a special feature:

In the Feature Key Value field, enter the activation key provided by Server Technology and press **Apply**.

NOTE: A restart of the Sentry is required after activating new special features.

Tools

This section is available to administrative level users only.

Restart

Performing a warm boot:

Select the **Restart** from the Action drop-down menu and press **Apply**.

Note: System user/outlet/group configuration or outlet states are NOT changed or reset with this command.

Command Line Interface

Logging In

Logging in through Telnet requires directing the Telnet client to the configured IP address of the unit.

Logging in through the Console (RS232) port requires the use of a terminal or terminal emulation software configured to support ANSI or VT100 and a supported data rate (300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, or 115200 BPS) - 8 data bits-no parity-one stop bit and Device Ready output signal (DTR or DSR). The default data rate is 9600.

To log in by RS-232 or Telnet:

1. Press **Enter**. The following appears, where **x.xx** is the firmware version:

```
Sentry Version x.xx
Username:
```

NOTE: Logging in by Telnet will automatically open a session. It is not necessary to press Enter.

2. At the Username: and Password: prompts, enter a valid username and password. And press **Enter**.

You are given three attempts to enter a valid username and password combination. If all three fail, the session ends.

NOTE: The default Sentry username/password is admn/admn.

When you enter a valid username and password, the command prompt appears. If a location identifier was defined, it will be displayed before the prompt.

Commands may be entered in any combination of uppercase and lowercase. All command characters must be entered correctly; there are no command abbreviations. A user must have administrative privileges to use the administration commands. The following tables list and briefly describe each command.

Operations Command Summary

Command	Description
UPSSStat	Displays the status of the associated UPSs

Administrative Command Summary

Command	Description
Create UPS	Adds a UPS association
Remove UPS	Deletes a UPS association
Restart	Performs a warm boot
Set Event InfeedLoad Autorecover	Enables or disables outlet auto-recovery from high load events
Set Event InfeedLoad LoadHigh	Sets the Infeed Load trap high limit
Set Event Temp Autorecover	Enables or disables outlet auto-recovery from high temperature events
Set Event Temp TempHigh	Sets a temperature/humidity sensor Temp trap high limit
Set Event UPSPower Autorecover	Enables or disables outlet auto-recovery from UPS 'on battery' events
Set Outlet LoadEvent	Enables or disables load-shedding on high load conditions
Set Outlet TempEvent	Enables or disables load-shedding on high temperature conditions
Set Outlet UPSEvent	Enables or disables load-shedding on UPS 'on battery' conditions
Set UPS AddInfeed	Add an infeed association to a UPS
Set UPS DelInfeed	Deletes an infeed association from a UPS
Set UPS GETComm	Sets the UPS 'get' community string
Set UPS Host	Sets the UPS Host IP address or hostname
Set UPS Port	Specifies the target port for a UPS
Set UPS Type	Sets the UPS type
Set UPS VPoll	Enables or disables UPS voltage polling
Show Events	Displays Smart Load-Shedding trigger configuration information
Show Features	Displays activated special features
Show Loadshed	Displays outlet Smart Load-Shedding configuration information
Show UPS	Displays UPS configuration information

To display the names of commands that you may execute:

At the command prompt, press **Enter**. A list of valid commands for the current user appears.

Operations Commands

Displaying UPS status:

The UPSStat command displays the status of one or more UPSs.

The display includes UPS index number, type, line/battery status and reported voltage.

NOTE: Access to this command requires enabling user privileges for environmental monitoring using the Set User Envmon command.

To display status of one or more UPSs:

At the Switched CDU: prompt, type **upsstat** and press **Enter**.

Example

The following command displays the UPS status:

```
Switched CDU: upsstat<Enter>
      UPS      UPS      UPS      UPS
      Index    Type      Power Status  Voltage
      1        Liebert   On Utility    119.9
      2        Powerware On Battery    120.0
```

Performing a warm boot:

The Restart command performs a warm boot of the Sentry.

NOTE: System user/outlet/group/port configuration or outlet states are NOT changed or reset with this command.

To perform a warm boot:

At the Sentry: prompt, type **restart** and press **Enter**.

Administration Commands

Administration commands may only be issued by a user with administrative privileges, such as the predefined Admn user or another user who has been granted administrative privileges with the Set User Admnpriv command.

UPS Administration

Creating a UPS record:

The Create UPS command creates a UPS record for use with Smart Load-Shedding.

To create a UPS record:

At the Switched CDU: prompt, type **create UPS** and press **Enter**.

At the prompt, type the corresponding number from the list of the UPS types and press **Enter**.

At the Host Name: prompt, type the UPS's IP address or hostname and press **Enter**.

Example

The following command creates a UPS record for a Toshiba UPS with the hostname 'DC1Toshiba1':

```
Switched CDU: create ups<Enter>
      UPS types:
      1 -- APC
      2 -- Liebert
      3 -- MGE
      4 -- Tripp Lite
      5 -- Generic (RFC1628)
      6 -- Hewlett Packard
      7 -- Minuteman
      8 -- Mitsubishi
      9 -- Powerware
      10 -- Toshiba
      Select type(1-10): 10<Enter>
      Host/IP: DC1Toshiba1<Enter>
```

Removing a UPS record:

The Remove UPS command removes a UPS record.

To remove a UPS record:

At the Switched CDU: prompt, type **remove ups** and press **Enter**.

At the prompt, type the index number of the UPS to be removed and press **Enter**.

Example

The following command removes the UPS record at index 3:

```
Switched CDU: remove ups<Enter>
 1  Type:    Liebert
    Host/IP: DC1Liebert1
 2  Type:    Powerware
    Host/IP: DC1Powerware1
 3  Type:    Toshiba
    Host/IP: DC1Toshiba1
Select UPS(1-8): 3<Enter>
```

Modifying the UPS type:

The Set UPS Type command is used to modify the type of UPS for each UPS record.

To modify a UPS record:

At the Switched CDU: prompt, type **set ups type** and press **Enter**.

At the prompt, type the index number for the UPS record to be modified and press **Enter**.

At the prompt, type the corresponding number from the list of the UPS types and press **Enter**.

Example

The following command modifies UPS type for the record at index number 2 to 'MGE':

```
Switched CDU: set ups type<Enter>
 1  Type:    Liebert
    Host/IP: DC1Liebert1
 2  Type:    Powerware
    Host/IP: DC1Powerware1
Select UPS(1-8): 2<Enter>
UPS types:
 1 -- APC
 2 -- Liebert
 3 -- MGE
 4 -- Tripp Lite
 5 -- Generic (RFC1628)
 6 -- Hewlett Packard
 7 -- Minuteman
 8 -- Mitsubishi
 9 -- Powerware
10 -- Toshiba
Select type(1-10): 3<Enter>
```

Modifying the UPS host address:

The Set UPS Host command is used to modify the IP address or hostname for each UPS record. Hostnames may be up to 60 characters long.

To modify a UPS host address:

At the Switched CDU: prompt, type **set ups host** and press **Enter**.

At the prompt, type the index number for the UPS record to be modified and press **Enter**.

At the prompt, type IP address or hostname for the UPS and press **Enter**.

Example

The following command modifies UPS hostname for the record at index number 2 to 'DC1MGE1':

```
Switched CDU: set ups host<Enter>
  1  Type:    Liebert
     Host/IP: DC1Liebert1
  2  Type:    MGE
     Host/IP: DC1Powerware1
Select UPS(1-8): 2<Enter>
Host/IP: DC1MGE1<Enter>
```

Changing the UPS SNMP port:

With a UPS record configured, the Sentry sends data requests to the default UPS SNMP port number 161. This port number may be changed using the Set UPS Port command.

To change the UPS SNMP port:

At the Switched CDU: prompt, type **set ups port** and press **Enter**.

At the prompt, type the index number for the UPS record to be modified and press **Enter**.

At the prompt, type the desired port number and press **Enter**.

Example

The following command modifies port for the UPS record at index number 1 to '162':

```
Switched CDU: set ups port<Enter>
UPS      UPS
Index   Type      Port
  1     Liebert   161
  2      MGE     161
Select UPS(1-8): 1<Enter>
Port: 162<Enter>
```

Changing the UPS SNMP Get community string:

With a UPS record configured, the Sentry sends data requests to the UPS using the default Get community string of 'public'. This string may be changed using the Set UPS Port command.

NOTE: The GET community string configured on the Sentry MUST match the read-only community string configured on the UPS.

To modify a UPS record:

At the Switched CDU: prompt, type **set ups getcomm** and press **Enter**.

At the prompt, type the index number for the UPS record to be modified and press **Enter**.

At the prompt, type the Get community string for the UPS and press **Enter**.

Example

The following command modifies Get community string for the record at index number 2 to 'readonly':

```
Switched CDU: set ups getcomm<Enter>
UPS      UPS      Community
Index   Type      String
  1     Liebert   public
  2      MGE     public
Select UPS(1-8): 2<Enter>
Community String: readonly<Enter>
```

Enabling/disabling UPS voltage polling:

With a UPS record configured, the Sentry by default enables voltage polling of the UPS. This feature may be enabled or disabled using the Set UPS VPoll command.

To enable/ disable UPS voltage polling:

At the Switched CDU: prompt, type **set ups vpoll** and press **Enter**.

At the prompt, enter the index number for the UPS record to be modified and press **Enter**.

At the prompt, type **on** or **off**, and press **Enter**.

Example

The following command disables voltage polling for the record at index number 2:

```
Switched CDU: set ups vpoll<Enter>
UPS      UPS      Voltage
Index   Type      Polling
1       Liebert    On
2       MGE      On
Select UPS(1-8): 2<Enter>
Voltage Polling: Off<Enter>
```

Adding an infeed to a UPS:

The Set UPS AddInfeed command adds a logical association of an infeed to a UPS.

To add an infeed to a UPS:

At the Switched CDU: prompt, type **set ups addinfeed** and press **Enter**.

At the prompt, enter the index number for the UPS record to be modified and press **Enter**.

At the prompt, type the absolute infeed ID of the desired infeed, and press **Enter**.

Example

The following command associates infeed .aa to UPS record at index number 1:

```
Switched CDU: set ups addinfeed<Enter>
UPS      UPS      Infeed
Index   Type      IDs
1       Liebert
2       MGE      .AA
Select UPS(1-8): 1<Enter>
Infeed ID: .aa<Enter>
```

Removing an infeed from a UPS:

The Set UPS DelInfeed command removes a logical association of an infeed from a UPS.

To remove an infeed from a UPS:

At the Switched CDU: prompt, type **set ups delinfeed** and press **Enter**.

At the prompt, enter the index number for the UPS record to be modified and press **Enter**.

At the prompt, type the absolute infeed ID of the desired infeed, and press **Enter**.

Example

The following command removes the association of infeed .aa from UPS record at index number 2:

```
Switched CDU: set ups addinfeed<Enter>
UPS      UPS      Infeed
Index   Type      IDs
1       Liebert    .AA
2       MGE      .AA
Select UPS(1-8): 2<Enter>
Infeed ID: .aa<Enter>
```

Displaying UPS configuration:

The Show UPS command displays information about all UPSs.

- UPS Type and Host/IP address
- UPS SNMP port and community string
- SNMP Objects OID values and expected return values

To display UPS configuration information:

At the Switched CDU: prompt, type **show ups** and press **Enter**.

Example

The following command displays UPS configuration information:

```
Switched CDU: show ups<Enter>
 1  Type:      Liebert
    Host/IP:   DC1Liebert1
    Voltage Polling:      ON
    SNMP Configuration
      Community String: public
      SNMP Port:         162
    SNMP Objects/Expected Values
      Voltage:           .1.3.6.1.2.1.33.1.4.4.1.2.1
      Utility Status:    .1.3.6.1.2.1.33.1.4.1.0
      On Battery:        0x5
      On Utility:        0x3

More (Y/es N/o):
```

Outlet Administration

The following commands are for configuration of the triggers on which outlets will load-shed.

Enabling/disabling load-shedding on high temperature condition:

The Set Outlet TempEvent command is used to enable/disable outlet load-shedding triggered by high temperature sense by one of the temperature/humidity sensors.

NOTE: Temperature/humidity probes are an optional accessory and must be purchased separately.
For more information, please contact your Server Technology Sales Representative.

To enable/disable high-temperature load-shedding:

At the Switched CDU: prompt, type **set outlet tempevent**, followed by the outlet ID, T/H sensor ID, and **on** or **off**. Press **Enter**.

Example

The following command enables load-shedding for outlet .a1 upon a high temperature condition on temperature/humidity sensor .a2:

```
Switched CDU: set outlet tempevent .a1 .a2 on<Enter>
```

Enabling/disabling load-shedding on high load condition:

The Set Outlet LoadEvent command is used to enable/disable outlet load-shedding triggered by high load conditions.

To enable/disable high-load load-shedding:

At the Switched CDU: prompt, type **set outlet loadevent**, followed by the outlet ID, and **on** or **off**. Press **Enter**.

Example

The following command enables load-shedding for outlet .a2 upon a high load condition:

```
Switched CDU: set outlet loadevent .a2 on<Enter>
```

Enabling/disabling load-shedding on UPS On-Battery condition:

The Set Outlet UPSEvent command is used to enable/disable outlet load-shedding triggered by UPS On-Battery conditions.

To enable/disable UPS On-Battery load-shedding:

At the Switched CDU: prompt, type **set outlet upsevent**, followed by the outlet ID, and **on** or **off**. Press **Enter**.

Example

The following command enables load-shedding for outlet .a3 upon a UPS On-Battery condition:

```
Switched CDU: set outlet upsevent .a3 on<Enter>
```

Displaying outlet load-shedding configuration:

The Show Loadshed command displays information about all outlet load-shed configurations.

- UPS Type and Host/IP address
- UPS SNMP port and community string
- SNMP Objects OID values and expected return values

To display outlet load-shedding configuration information:

At the Switched CDU: prompt, type **show loadshed** and press **Enter**.

Example

The following command displays outlet load-shedding configuration information:

```
Switched CDU: show loadshed<Enter>
```

Outlet ID	Outlet Name	Enabled UPS	Conditions Load	TempA1	TempA2
.A1	TowerA_Outlet1	-	-	-	X
.A2	TowerA_Outlet2	-	X	-	-
.A3	TowerA_Outlet3	X	-	-	-
.A4	TowerA_Outlet4	-	-	-	-
.A5	TowerA_Outlet5	-	-	-	-
.A6	TowerA_Outlet6	-	-	-	-
.A7	TowerA_Outlet7	-	-	-	-
.A8	TowerA_Outlet8	-	-	-	-

Event Administration

Setting the Infeed Load limit:

The Set Event InfeedLoad Loadhigh command is used to set the upper load limits for an input feed.

NOTE: SNMP and Load-shedding utilize the [same](#) infeed threshold value.
The Set Event InfeedLoad Loadhigh command is equivalent to the SNMP command Set Trap Infeed Loadhigh.

To set the infeed load limit:

At the Switched CDU: prompt, type **set event infeedload loadhigh**, followed by the infeed, and a value from 0 to 255 in amperes. Press **Enter**.

Example

The following command sets the infeed load limit for the first infeed on the first tower to 25 amperes, using the infeed's absolute name:

```
Switched CDU: set event infeedload loadhigh .aa 25<Enter>
```

Enabling or Disabling Infeed Auto-recovery:

The Set Event InfeedLoad Autorecover command is used to enable or disable auto-recovery of previously shed outlets when the infeed load returns to levels below the configured upper limit.

To enable or disable infeed auto-recovery:

At the Switched CDU: prompt, type **set event infeedload autorecover**, followed by **on** or **off**, and press **Enter**.

Example

The following command enables infeed load auto-recovery:

```
Switched CDU: set event infeedload autorecovery on<Enter>
```

Setting the Temperature sensor threshold limit:

The Set Event Temp TempHigh command is used to set the upper threshold limits for the Temperature sensor.

NOTE: SNMP and Load-shedding utilize the same temperature high threshold value.
The Set Event Temp TempHigh command is equivalent to the SNMP command Set Trap THS TempHigh.

To set the Temperature threshold limits:

At the Switched CDU: prompt, type **set event temp temphigh**, followed by the sensor name and a value from 0 to 127 in degrees Celsius. Press **Enter**.

Example

The following command sets the second temperature high threshold limit to 95:

```
Switched CDU: set event temp temphigh .a2 95<Enter>
```

Enabling or Disabling Temperature Auto-recovery:

The Set Event Temp Autorecover command is used to enable or disable auto-recovery of previously shed outlets when the temperature returns to levels below the configured upper limit.

To enable or disable temperature auto-recovery:

At the Switched CDU: prompt, type **set event infeedload autorecover**, followed by the sensor name, and **on** or **off**. Press **Enter**.

Example

The following command enables temperature auto-recovery for temperature/humidity sensor .A2:

```
Switched CDU: set event infeedload autorecovery .a2 on<Enter>
```

Enabling or Disabling UPS Auto-recovery:

The Set Event UPSPower command is used to enable or disable auto-recovery of previously shed outlets when the UPS returns to an 'on utility' state.

To enable or disable UPS auto-recovery:

At the Switched CDU: prompt, type **set event upspower autorecover**, followed by **on** or **off**, and press **Enter**.

Example

The following command enables UPS auto-recovery:

```
Switched CDU: set event upspower autorecovery on<Enter>
```

Displaying load-shedding event configuration:

The Show Events command displays information about all load-shed event configurations.

- Infeed ID, name, high load threshold and auto-recovery configuration
- Temperature/Humidity sensor ID, name, high temperature threshold and auto-recovery configuration.
- UPS auto-recovery configuration

To display UPS configuration information:

At the Switched CDU: prompt, type **show events** and press **Enter**.

Example

The following command displays UPS configuration information:

```
Switched CDU: show events<Enter>
Input feed load event configuration:
  Input      Input      High      Auto
  Feed ID    Feed Name    Thresh    Recover
  .AA        TowerA_InfeedA    25 A      OFF
More (Y/es N/o): y
Temperature event configuration:
  Sensor      Sensor      High      Auto
  ID          Name        Thresh    Recover
  .A1         Temp_Humid_Sensor_A1    123 Deg. C    OFF
  .A2         Temp_Humid_Sensor_A2    95 Deg. C      ON
UPS power event configuration:
Auto Recover: ON
```

Feature Administration

Activating special features:

The Set Feature command is used to activate special features purchased from Server Technology.

To activate a special feature:

At the Switched CDU: prompt, type **set feature**, followed by the activation key provided by Server Technology, and press **Enter**.

NOTE: A restart of the Sentry is required after activating new special features.

Example

The following command activates the special feature with the activation key '1234-abcd-5678-efgh':

```
Switched CDU: set feature 1234-abcd-5678-efgh<Enter>
```

Displaying activated special features:

The Show Features command displays all activated special features for the device.

To display activated special features:

At the Switched CDU: prompt, type **show features** and press **Enter**.

Example

The following command displays all activated special features:

```
Switched CDU: show features<Enter>
Activated Features:
Smart Load Shedding
```

System Administration

Performing a warm boot:

The Restart command performs a warm boot of the Sentry.

NOTE: System user/outlet/group/port configuration or outlet states are NOT changed or reset with this command.

To perform a warm boot:

At the Sentry: prompt, type **restart** and press **Enter**.

Chapter 3: Appendices

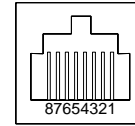
Appendix A: Technical Specifications

Data Connections

RS-232 port

Sentry Cabinet Distribution Units are equipped standard with an RJ45 DTE RS-232c serial port. This connector may be used for direct local access or from other serial devices such as a terminal server. An RJ45 crossover cable is provided for connection to an RJ45 DCE serial port.

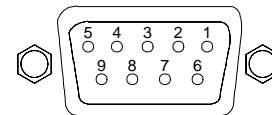
Pin	DTE Signal Name		Input/Output
1	Request to Send	RTS	Output
2	Data Terminal Ready	DTR	Output
3	Transmit Data	TD	Output
4	Signal Ground		
5	Signal Ground		
6	Receive Data	RD	Input
7	Data Set Ready	DSR	Input
8	Clear to Send	CTS	Input



RJ45 to DB9F serial port adapter

Additionally, an RJ45 to DB9F serial port adapter is provided for use in conjunction with the RJ45 crossover cable to connect to a PC DB9M DCE serial port. The adapter pinouts below reflect use of the adapter with the provided RJ45 crossover cable.

Pin	DCE Signal Name		Input/Output
1			
2	Receive Data	RD	Output
3	Transmit Data	TD	Input
4	Data Terminal Ready	DTR	Input
5	Signal Ground		
6	Data Set Ready	DSR	Output
7	Request to Send	RTS	Input
8	Clear to Send	CTS	Output



Appendix B: Warranty, Product Registration and Support

Warranty

For [Server Technology Warranty](#) information, please see our website.

Product Registration

Registration is your key to special offers and services reserved for Registered Users.

- Excellent Technical Support Services
- Special Update and Upgrade Programs
- Warranty Protection
- Extended Warranty Service
- New Product Information

[Register your products online today!](#)

Technical Support



Experience Server Technology's FREE **SMARTER** Technical Support - [Learn more...](#)

Server Technology understands that there are often questions when installing and/or using a new product. Free Technical Support is provided from 6:00 AM to 7:00 PM, Monday-Friday, Pacific Time.

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Return Merchandise Authorization

If you have a unit that is not functioning properly and is in need of technical assistance or repair:

Please review Server Technology's [Return Merchandise Authorization](#) process on our website.



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