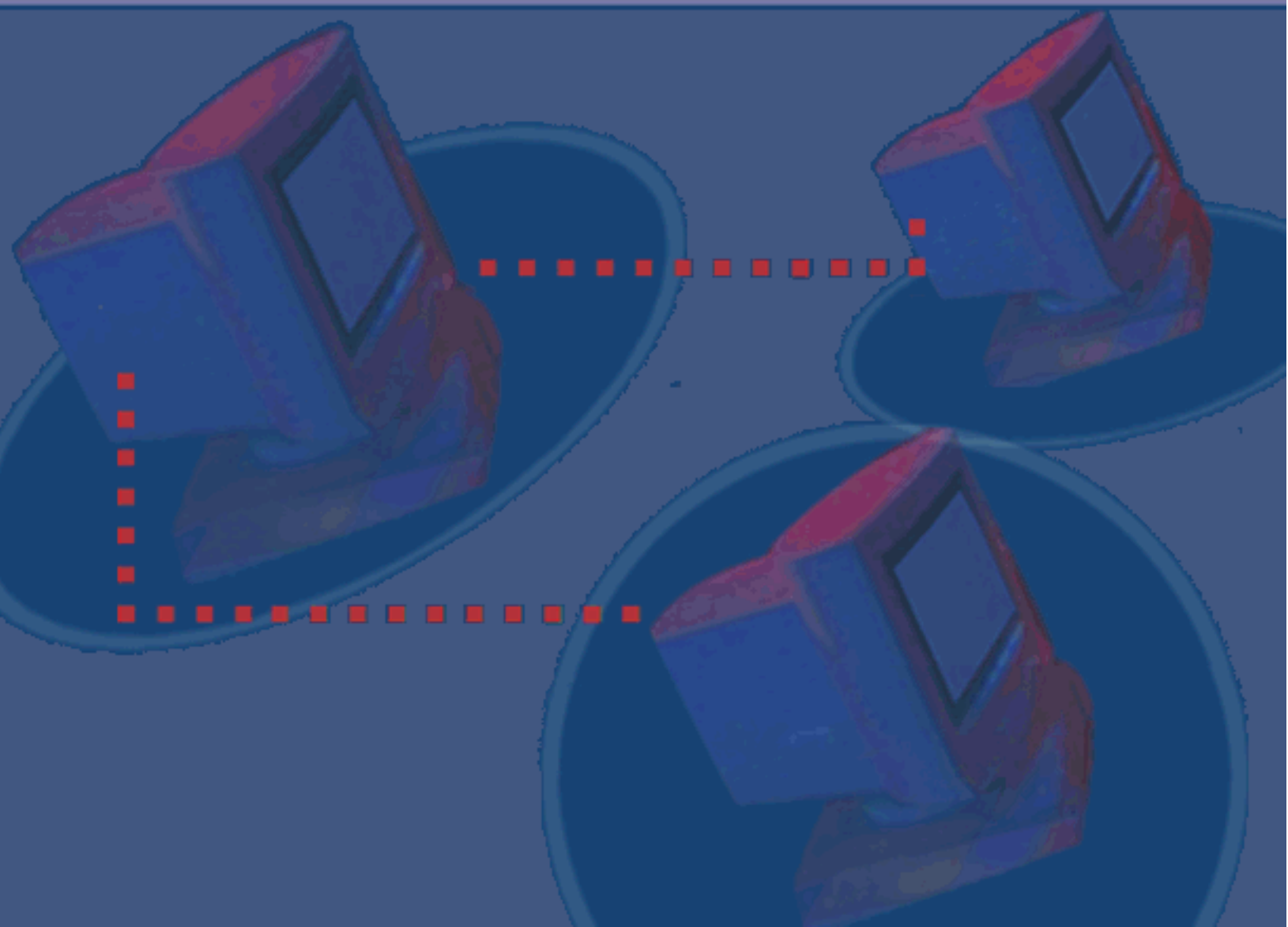


PowerChute[®] *plus* .ini File Parameters for UNIX[®]

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POWERCHUTE® PLUS .INI FILE PARAMETERS FOR UNIX®

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Initialization (powerchute.ini) File

This Reference Guide contains a comprehensive description of all the elements in the PowerChute *plus* .ini file, both those that you can and cannot configure through the menus and dialog boxes of the User Interface Module. It supplements Appendix B of the *PowerChute plus for UNIX User's Guide*. It

When PowerChute *plus* starts up, it first reads the initialization file **powerchute.ini**, which contains information on the local configuration of the UPS and PowerChute *plus*. The file indicates, for example, whether a Measure-UPS is attached to the UPS, or whether error logging is enabled.

When you set parameters through the PowerChute *plus* user interface, this file is automatically updated. But you can also directly modify the file using any text editor that saves your changes in standard ASCII format.

See the following sections:

- [Formatting of Elements in the .ini File](#)
- [Initialization File Settings](#)

Caution:

Before you edit the initialization file, save a backup copy with a different file name in case your editing introduces errors. APC recommends that, whenever possible, you make initialization file changes through the PowerChute plus menus and dialog boxes.

Formatting of Elements in the .ini File

The elements in the initialization (.ini) file consist of keywords (headings), and related parameter names and values. The keywords and parameters appear in the following format:

```
[keyword]
parameter name=value
```

For example:

```
[Devices]
MeasureUps=Yes
```

The following table provides element descriptions and rules on using them:

Element	Description and Rules	(page 1 of 2)
<i>Keyword</i>	<p>The name of a section, enclosed in brackets, represents a PowerChute <i>plus</i> feature or function.</p> <ul style="list-style-type: none">• Make sure that a keyword does not already exist in the .ini file before adding it.• Place keywords in any order within the initialization file.• Type keywords exactly as shown in this appendix, including the case (upper or lower).• Enclose keywords in brackets [].• Do not include any spaces in a keyword.	

Initialization (powerchute.ini) File Initialization File Settings

Element	Description and Rules	(page 2 of 2)
<i>Parameter name</i>	<p>The label that identifies a value.</p> <ul style="list-style-type: none">Place parameters in any order below the keyword to which they apply.Do not include any spaces in a parameter name.Enter parameter names exactly as shown in this appendix, including the case (upper or lower).	
<i>Value</i>	<p>A variable, often limited to a set of system-defined values, but in some cases user-defined.</p> <ul style="list-style-type: none">When entering multiple values for the same parameter, separate consecutive values with a comma but no spaces.Use no spaces at the end of the line.Type system-defined values exactly as shown, including the case (upper or lower).User-defined values cannot contain the number sign character # except to enclose the names of standard PowerChute <i>plus</i> variables, as described in Variables in [EventText] and [PopupText].	

Initialization File Settings

The following sections of this document describe the parameters and values that can be used in each keyword section of the **.ini** file:

- [\[Battery Calibration\]](#)
- [\[Devices\] and Related Sections](#)
- [\[DataLogging\]](#)
- [\[ErrorLogging\]](#)
- [\[EventLogging\]](#)
- [\[EventText\]](#)
- [\[EventUsers\]](#)
- [\[FlexEventNames\]](#)
- [\[Help\]](#)
- [\[Messaging\]](#)
- [\[Modem\]](#)
- [\[Pager\]](#)
- [\[PopupText\]](#)
- [\[SelfTests\]](#)
- [\[Shutdown\]](#)
- [\[UPS\]](#)
- [\[UserInterface\]](#)
- [The EEPROM-Configurable Parameters Sections](#)

Initialization (powerchute.ini) File Initialization File Settings

To configure event actions for individual events, see [Action Codes Used in the .ini File](#) and [Event Configuration Examples](#).

Note:

An initialization file may not have all the sections, parameters, and values that are documented in this appendix.

[Battery Calibration]

All parameters in this section, except for the LastCalibrationDate parameter, are configurable through the **Schedule UPS Tests** menu option of the **Diagnostics** menu.

[BatteryCalibration]

LastCalibrationDate=10/20/00	The date of the last runtime calibration, in the format <i>MM/DD/YY</i> .
BatteryCalibrationDay=Monday	The day (in the first week of each month) that the scheduled runtime calibration will occur.
BatteryCalibrationTime=07:00 AM	The time of the monthly scheduled runtime calibration.
Enabled=Yes	A value of <i>Yes</i> turns on the Monthly runtime calibration test. <i>No</i> disables the testing.

[Devices] and Related Sections

If your Measure-UPS device or Environmental Monitoring SmartSlot card is not recording data or the environmental monitoring values are not displayed on the Main Screen, check this section of the **.ini** file to be sure that the MeasureUps parameter value is *Yes*.

All parameters in the Measure-UPS sections, except for the MeasureUps parameter in the [Devices] section, are configurable through **Measure-UPS Parameters** in the **Configuration** menu.

[Devices]

Measure-UPS=Yes	Allowed values are <i>Yes</i> and <i>No</i> . If you set this value to <i>No</i> , PowerChute <i>plus</i> does not display environmental monitoring data on the Main Screen or log that data in the Data Log.
-----------------	--

[AmbientTemperatureSensor]

EnableLowThreshold=Yes	Allowed values are <i>Yes</i> and <i>No</i> . <i>Yes</i> turns on monitoring of the low temperature threshold and is equivalent to checking the Low Temperature check-box. See Thresholds in Chapter 4 of the <i>User's Guide</i> .
EnableHighThreshold=Yes	Allowed values are <i>Yes</i> and <i>No</i> . <i>Yes</i> turns on monitoring of the high temperature threshold and is equivalent to checking the High Temperature check-box. See Thresholds in Chapter 4 of the <i>User's Guide</i> .
LowThresholdValue=20	The Low Temperature Threshold in Celsius.
HighThresholdValue=80	The High Temperature Threshold in Celsius.

[HumiditySensor]

EnableLowThreshold=Yes	Allowed values are <i>Yes</i> and <i>No</i> . A <i>Yes</i> value turns on monitoring of the low humidity threshold and is equivalent to checking the Low Humidity check-box. See Thresholds in Chapter 4 of the <i>User's Guide</i> .
EnableHighThreshold=Yes	Allowed values are <i>Yes</i> and <i>No</i> . A <i>Yes</i> value turns on monitoring of the high humidity threshold and is equivalent to checking the High Humidity check-box. See Thresholds in Chapter 4 of the <i>User's Guide</i> .

Initialization (powerchute.ini) File Initialization File Settings

LowThresholdValue=20 The low humidity threshold as a percentage of relative humidity.
HighThresholdValue=80 The high humidity threshold as a percentage of relative humidity.

The four contact sensor sections, [ContactSensor1] through [ContactSensor4] contain the configuration parameters for the four external contacts that the Measure-UPS can monitor.

With an Environmental Monitoring SmartSlot Card, you can use PowerChute *plus* to monitor and configure the following:

- Ambient temperature and humidity thresholds for the first probe only
- Contact closure settings for only one sensor for each of the four contact sensor zones. If you mix normally open and normally closed settings for the same zone, PowerChute *plus* recognizes the first sensor only.

Allowed values for the parameters in each contact sensor section are described in the following table:

Parameter	Values
Enabled	yes - turns on monitoring of the contact sensor no - turns off monitoring of the contact sensor
Description	A brief description of the contact being monitored
DefaultState	Open - The contact is normally open Closed - The contact is normally closed

For more information on these parameters, see **Measure-UPS Parameters** in Chapter 4 of the *User's Guide*.

Examples of the contact sensor sections follow.

```
[ContactSensor1]
Enabled=Yes
Description=Computer Room Door
DefaultState=Closed
```

```
[ContactSensor2]
Enabled=Yes
Description=Data Center Door
DefaultState=Closed
```

```
[ContactSensor3]
Enabled=Yes
Description=Smoke Detector - Main Hallway
DefaultState=Open
```

```
[ContactSensor4]
Enabled=Yes
Description=Mainframe Area
DefaultState=Closed
```

Initialization (powerchute.ini) File Initialization File Settings

[DataLogging]

This section enables or disables data logging, sets the name and maximum size of the Data Log, and sets the time interval for data logging. Configure these parameters through the **Log Options...** on the **Logging** menu, as described in Chapter 7 of the *User's Guide*.

[DataLogging]

DataLogEnabled=Yes	Allowed values are Yes or No. No disables data logging.
DataLogName=usr/lib/powerchute/powerchute.dat	The path and file name for the Data Log file.
DataLogMaxSize=50000	Maximum size of the Data Log file in bytes.
DataLogInterval=600	The time interval in seconds between instances of data logging. A setting of 600, for example, causes PowerChute <i>plus</i> to record UPS and environmental monitoring data every 10 minutes.

[ErrorLogging]

This section of the **.ini** file enables or disables error logging and sets the name and maximum size of the Error Log. You can configure the parameters in this section only through the initialization file. You cannot view the Error Log through the PowerChute *plus* user interface. View it directly using the UNIX terminal window.

[ErrorLogging]

ErrorLogEnabled=Yes	Allowed values are Yes or No. No disables error logging.
ErrorLogName=usr/lib/powerchute/powerchute.err	The drive, path and file name for the Error Log file.
ErrorLogMaxSize=50000	Maximum size in bytes for the Error Log file.

[EventLogging]

This section enables or disables event logging and sets the name and maximum size of the Event Log. See **Log Options...** in Chapter 7 of the *User's Guide* for information on how to configure these parameters through the user interface.

[EventLogging]

EventLogEnabled=Yes	Allowed values are Yes or No. No disables event logging.
EventLogName=usr/lib/powerchute/powerchute.log	The path and file name for the Event Log file.
EventLogMaxSize=50000	Maximum size of the Event Log in bytes.

[EventText]

This section of the **.ini** file contains the event text for each PowerChute *plus* event. PowerChute *plus* uses event text to log the event in the Event Log file and displays the event text in the **Last Two Events Window** on the Main Screen.

Initialization (powerchute.ini) File Initialization File Settings

The first digit of the six-digit code at the beginning of each line indicates the severity of the event. The first four digits together identify the event category, and the last two digits identify sub-categories of the event. (See Appendix A of the *User's Guide* for more information on event categories and severity).

For example, 3100 identifies the event **Ambient Temperature Out of Range**. This event has two sub-categories, one for events below and the other for events above the temperature thresholds.

The first sub-category is identified by 01 with a complete ID of 310001.

The second sub-category is identified by 02, with a complete ID of 310002.

See your PowerChute *plus* initialization file for a complete list of event texts. An example list is shown here.

Note:

Variables are enclosed by number signs, #. See [Variables in \[EventText\]](#) and [\[PopupText\]](#).

```
[EventText]
100000=*** PowerChute plus Version version number Started ***
100100=*** PowerChute plus Stopped ***
.
.
.
200000=UPS on battery
200001=UPS on battery: High input line voltage #MAX_VOLTAGE# V
.
.
.
300000=Unable to communicate with UPS
300100=UPS output overload
```

See **How to Notify Users** and **How to Notify Administrators** in Chapter 4 of the *User's Guide* for alternative ways to change the text logged.

For information on configuring event text to appear in other languages in the user interface, see Appendix C of the *User's Guide*.

[EventUsers]

The `Users` parameter in this section is configurable through the **Event Users...** menu option of the **Configuration** menu. See “How to Set Up Event Users” in Chapter 4 of the *User's Guide*.

```
[EventUsers]
Users=Don,Pete,Doug
```

User Names Section

The example shown here is a sample user name section. User name sections are configurable through the **Event Users...** menu option of the **Configuration** menu. The name used as the section name for a user (such as `[Don]` below), must match a name value that is specified for the `Users` parameter in the [\[EventUsers\]](#) section.

```
[Don]
NotificationAddress=don    The notification address in the Messaging section of the “Event Users”
                           dialog box.
EMailAddress=don          The E-mail Address in the E-Mail section of the “Event Users” dialog box
                           for the selected user.
```

Initialization (powerchute.ini) File Initialization File Settings

NotificationEnabled=Yes	Yes, if the Enabled check box in the Messaging section of the “Event Users” dialog box is marked. No, otherwise.
PagingEnabled=Yes	Yes, if the Enabled check box in the Paging section of the “Event Users” dialog box is marked. No, otherwise.
EMailEnabled=Yes	Yes, if the Enabled check box in the E-Mail section of the “Event Users” dialog box is marked. No, otherwise.
PagerNumber=555-2222	The Access Number in the Paging section of the “Event Users” dialog box for the selected user.
PagerAccessCode=4444	The Access Code in the Paging section of the “Event Users” dialog box for the selected user.

[FlexEventNames]

This section of the **.ini** file contains the names of all PowerChute *plus* events. The list shown here is partial.

For a complete listing of events, see Appendix A: **FlexEvents Reference**, in the *User’s Guide*, or see your PowerChute *plus* initialization file.

```
[FlexEventNames]
1000=PowerChute Started
1001=PowerChute Stopped
.
.
.
2000=UPS On Battery
2001=System Shutdown
.
.
.
3000=Unable to Communicate With UPS
3001=UPS Output Overload
```

[Help]

This section is relevant only for versions of PowerChute *plus* for UNIX that use HTML help. This section contains a parameter to set the path for the browser that the PowerChute *plus* HTML help system will use. You initially set this path during the installation of PowerChute *plus*, and therefore you need to change it only if you change your browser or browser location.

```
[Help]
```

```
BrowserPath=/usr/bin/netcape
```

The full path to the browser to use for the PowerChute *plus* help system. The path shown here, for Red Hat Linux version 6.2, is an example.

Initialization (powerchute.ini) File Initialization File Settings

[Messaging]

Through the User Interface Module, you can configure parameters for the **Notify Users** or the **Notify Administrators** action for only one event at a time. (For more information, see Chapter 5 of the *User's Guide*.)

The [Messaging] section of the initialization file enables you to set defaults for these two actions for the following parameters:

- Specific users or administrators to be notified of the events
- The default message delay before the initial messages to users and administrators
- The default message interval between messages to users

Any defaults you set in the **.ini** file will apply to events that have the **Notify Users** and **Notify Administrators** actions checked in the “Event Actions” dialog box in the user interface (as described in Chapter 5 of the *User's Guide*) but that *do not* have parameters set through the **Options** button for these actions.

[Messaging]

MessageDelay=5	The time in seconds that PowerChute <i>plus</i> waits before notifying administrators or users that an event occurred. The default is 5 seconds.
MessageInterval=30	The time interval, in seconds, that PowerChute <i>plus</i> waits between sending messages to users. The default is 30 seconds.
NotifyType=All	The category of users to be notified. Allowed values are All and Some. These values correspond to the All Users and Specific Users radio buttons in the “Notify Users” dialog box. If you specify Some as the value for NotifyType, PowerChute <i>plus</i> notifies the users you specify as the value for the NotifyUsers parameter.
NotifyUsers=	Users to be notified of all events for which user notification is configured. If the value of the NotifyType parameter is Some, PowerChute <i>plus</i> uses this parameter to determine which users to notify. Use a comma between user names. Each user specified here must also be listed as a value for the User parameter in the [EventUsers] section.
AdminNotifyUsers=	The user names of administrators to be notified of all events for which administrator notification is configured. Use a comma between user names. Each administrator you specify here must also be listed as a value for the User parameter in the [EventUsers] section.

[Modem]

This section contains paging modem parameters, if you have a paging modem configured.

[Modem]

PortName= <i>portname</i>	The name of the port to which the modem is connected, such as /dev/ttyS1 for Linux. Port names differ by UNIX platforms.
InitializationString= <i>string</i>	The modem initialization string, provided in your modem documentation. This parameter is not required for Hayes-compatible modems.
DialType=Tone	The dial type, either Tone or Pulse.
BaudRate=19200	The modem's baud rate. Allowed values are 300, 1200, 2400, 9600, 14400, and 19200.

Initialization (powerchute.ini) File Initialization File Settings

[Pager]

The parameters in this section are configurable through the **Event Users...** menu option of the **Configuration** menu. Selecting the **Edit Services...** button in the “Event Users” dialog box displays the “Pager Services” dialog box in which you can configure any of the parameters in this section.

[Pager]

Services=Skytel	The pager service name.
AnswerDelay=10	The time in seconds that PowerChute <i>plus</i> waits to give the receiving unit enough time to respond to the page.
AccessCodeDelay=10	The time in seconds that PowerChute <i>plus</i> waits after sending the access code until it sends the message.
ExitCode=##	The code that allows the modem and pager to disengage properly.

[PopupText]

This section of the **.ini** file contains the default notification message texts that PowerChute *plus* uses by default in notifying administrators and users when one of nine particular FlexEvents occur. The texts are listed by ID code below.

Note:

When one of these nine events occurs, PowerChute plus does not log the popup text in the Event Log. It logs the text described in the [\[EventText\]](#) section.

On UNIX systems, “popup” messages are sent as broadcast messages to terminal windows, not as popups.

Note:

Variables are enclosed in number signs, #. See [Variables in \[EventText\] and \[PopupText\]](#).

```
[PopupText]
1003=Normal utility power at #HOSTNAME# has been restored.
1006=Shutdown of #HOSTNAME# has been cancelled.
1007=UPS batteries at #HOSTNAME# are no longer discharged.
1016=Shutdown process started.
2000=#HOSTNAME# is running on battery power.
2001=#HOSTNAME# has been shutdown.
2003=Low battery power at #HOSTNAME#.
3000=#HOSTNAME# has lost communications with the UPS.
3003=UPS batteries at #HOSTNAME# are discharged.
```

See **How to Notify Users** and **How to Notify Administrators** in Chapter 4 of the *User’s Guide* for alternative ways to change the text that will be logged.

For information on configuring notification message text to appear in other languages in the user interface, see Appendix C of the *User’s Guide*.

[PrepareForShutdown]

This section contains a shutdown configuration example: if you do not have access to the User Interface Module, you can configure shutdown by adding the [PrepareForShutdown] keyword and the related parameters to the initialization file.

Most events have seven possible actions, coded as shown in [Action Codes Used in the .ini File](#).

Initialization (powerchute.ini) File Initialization File Settings

[SelfTests]

This section receives its values from the **Self Test** parameter of the “Schedule UPS Self-Tests” dialog box.

Note:

The [SelfTests] section was designed for character-based platforms.

[SelfTests]

EnableSelfTests=Yes	If you select any radio button except Off, the value for this parameter is Yes. Allowed values are Yes and No.
SelfTestDay=Monday	The day of the week you selected in the drop-down list box for PowerChute <i>plus</i> to perform a self- test. You must also select the Weekly radio button in the user interface, or use Weekly as the value for the SelfTestSchedule parameter in this section of the .ini file.
SelfTestSchedule=Daily	Options are Daily, Weekly or Never.
SelfTestTime=08:00 AM	The time at which the self-test will occur.
LastSelfTestDay=04/13/00	If no self-test was performed within the last five minutes or since installation (if installation was within the last five minutes), the value is Unknown.
LastSelfTestResult=Passed	The result of the last self test, Passed or Failed. If no self-test was performed within the last five minutes or since installation (if installation was within the last five minutes), the value is Unknown.

[Shutdown]

Unless otherwise indicated, the values for parameters in this section are accessible from the **Schedule Server Shutdown...** menu of the user interface.

[Shutdown]

LowBatteryShutdownType=Normal	Allowed values are Quick or Normal (the default). Quick enables faster shutdown for UNIX systems that are using any supported Smart-UPS or Back-UPS Pro model. With a value of Quick, the UNIX system performs safe but minimal shutdown procedures when a low-battery condition occurs. On some UNIX systems, however, the shutdown may not be noticeably faster than with the Normal setting. You can configure this parameter only by directly entering a value into the initialization file.
-------------------------------	--

Initialization (powerchute.ini) File Initialization File Settings

ShutdownDelay=300	The default time in seconds that PowerChute <i>plus</i> waits before starting operating system shutdown. PowerChute <i>plus</i> uses this default when an event occurs for which the Shut Down Server action has been configured in the “Event Actions” dialog box but for which no new delay time has been entered in the dialog box for that action. Editing the .ini file to change this value changes the default only. <i>This is not the Shutdown Delay value in the “Schedule Server Shutdown” dialog box.</i> You can override this value for a single event by configuring a different shutdown delay time for that event through the user interface. For example, if you configure a different shutdown delay time for the System Shutdown Starting event, PowerChute <i>plus</i> records that change in a [PrepareForShutdown] section. Similarly, if you configure a different shutdown delay time for the Comm Lost While on Battery event, PowerChute <i>plus</i> records that change in a [CommunicationLostOnBattery] section. With all events, the parameter is ShutdownDelay= <i>number</i> .
AdminShutdownDelay=900	The delay period for shutdowns, configured in the “Shut Down Server” dialog box that appears when you choose Shut Down Server Now from the System menu. The default is 900 seconds. You can change this value in the dialog box or by editing the value here.
DailyShutdownEnabled=Yes	A value of Yes indicates that the Daily Shutdown check-box is marked in the “Schedule Server Shutdown” dialog box.
DailyShutdownTime=8:00 PM	The shutdown time specified for a daily shutdown.
DailyWakeupTime=7:00 AM	The reboot time specified for a daily shutdown.
WeeklyShutdownEnabled=Yes	A value of Yes indicates that the Weekly Shutdown check-box is marked in the “Schedule Server Shutdown” dialog box.
WeeklyShutdownDay=Friday	The specified day to begin a weekly shutdown.
WeeklyShutdownTime=7:00 PM	The specified time to begin a weekly shutdown.
WeeklyWakeupDay=Monday	The reboot day specified for a weekly shutdown.
WeeklyWakeupTime=07:00 AM	The reboot time specified for a weekly shutdown.

[UPS]

Some parameters in this section differ depending on the UPS and operating system you are using.

This section of the **.ini** file contains the UpsPollInterval parameter, which controls how frequently PowerChute *plus* retrieves and reads data values about the UPS.

[UPS]

SignallingType=Smart	Allowed values are Simple or Smart. A Back-UPS uses Simple Signaling. Other UPS models can use either. Configure this parameter through the Communication Parameters menu option of the Configuration menu.
PortName= <i>portname</i>	The name of the serial port you are using for the UPS, such as /dev/ttyS0 or /dev/ttyS1 for Linux. Configure this parameter through the Communication Parameters menu option of the Configuration menu.

Initialization (powerchute.ini) File Initialization File Settings

AutoUpsRebootEnabled=Yes	Allowed values are Yes or No, configured through the UPS Shutdown Parameters... menu option of the Configuration menu.
BatteryReplacementDate=04/09/00	The date of the last battery replacement, in the format <i>MM/DD/YY</i> . Configure this value through the UPS Operating Parameters... menu option of the Configuration menu.
UpsPollInterval=4	The time interval (in seconds) between PowerChute <i>plus</i> queries to the UPS for information. The default and lowest allowed value is 4 seconds. Increase this value if you are using UPS accessory devices (such as a Measure-UPS device, Environmental Management SmartSlot Card, SNMP Adapter, or Interface Expander), and if PowerChute <i>plus</i> is unable to establish communication with the UPS.

[UserInterface]

The values for parameters in this section can also be set through the **Monitoring Preferences...** option of the **Configuration** menu. The values chosen affect how PowerChute *plus* displays information on the Main Screen.

[UserInterface]

TemperatureUnits=Fahrenheit	Determines how PowerChute <i>plus</i> displays temperature in the UPS Temp: field of the Data Fields Window on the Main Screen. Allowed values are Fahrenheit (the default) and Celsius.
BarGraphType=Battery Capacity	Determines what information PowerChute <i>plus</i> graphs in the leftmost graph on the Main Screen. Allowed values are Battery Capacity (the default), Run Time Remaining, and Battery Voltage.

The EEPROM-Configurable Parameters Sections

The following sections are EEPROM-configurable values that enable you to configure the UPS through the initialization (.ini) file. You can also configure any of these values through the user interface.

The formatting of the parameter names and values for all these sections is as follows:

```
[Name of Sensor]  
InitialValue = xx
```

For some of the sections, as noted in their descriptions, the allowed values differ by UPS model, type, or operating voltage. For allowed values of those parameters, see the UPS owner's or user's manual shipped with your UPS or the pull-down list boxes in the relevant dialog boxes of the user interface.

[AlarmDelaySensor]	The UPS Audible Warning at low battery, configurable through the "UPS Shutdown Parameters" dialog box. Allowed values are O (Alarm upon power fail), T (Alarm 30 seconds after power fail), L (Alarm at low battery), and N (No alarm).
[HighTransferVoltageSensor]	The High Transfer Point (in Volts), configurable through the "UPS Operating Parameters" dialog box. For 120 VAC units, allowed values are 129, 132, 135, and 138. Other models differ.
[LowTransferVoltageSensor]	The Low Transfer Point (in Volts), configurable through the UPS Operating Parameters dialog box. For 120 VAC units, allowed values are 97, 100, 103, and 106. Other models differ.
[LowBatteryDurationSensor]	The Low Battery Signal Time in minutes, configurable through the "UPS Shutdown Parameters" dialog box. Allowed values are 2, 5, 7, and 10.

Initialization (powerchute.ini) File Action Codes Used in the .ini File

[MinReturnCapacitySensor]	The UPS Wakeup Delay (Capacity) as a percentage of total capacity, configurable through the “UPS Shutdown Parameters” dialog box. For Smart-UPS models, allowed values are 0, 15, 50, and 90. Other models differ. Not available on Matrix-UPS models.
[RatedOutputVoltageSensor]	Nominal UPS Output in VAC, configurable through the “UPS Operating Parameters” dialog box. For 220-240 VAC models, allowed values are 220, 225, 230, and 240. For 120 VAC models, this parameter cannot be changed from the factory setting.
[NumberBatteryPacksSensor]	The number of external battery packs connected to the UPS, configurable through the “UPS Operating Parameters” dialog box. This parameter is valid only for UPSs that support external battery packs.
[SelfTestScheduleSensor]	The schedule for automatic UPS self-tests. Allowed values are On (perform the test at turn-on), Off (no self-test), 168 (perform the test weekly) and 336 (perform the test every two weeks). If you configure self-tests using this parameter in the initialization file and also configure self-tests through the “Schedule UPS Tests” dialog bog, both will occur.
[ShutdownDelaySensor]	The UPS Turn Off Delay in seconds, configurable through the “UPS Shutdown Parameters” dialog box. Allowed values vary by UPS model; see the <i>Owner’s Manual</i> for your UPS for information on what values you can use. For Linux, always set this value to at least 180 to allow enough time for safe system shutdown.
[TurnonDelaySensor]	UPS Wakeup Delay (Time) in seconds, configurable through the “UPS Shutdown Parameters” dialog box. Allowed values are 0, 60, 180, and 300 seconds.
[UpsSensitivitySensor]	Sensitivity , configurable through the “UPS Operating Parameters” dialog box. Allowed values are A (On UPS models with automatic voltage regulators only), L (Low), M (Medium), and H (High).

Action Codes Used in the .ini File

Most events have seven possible actions, coded with the following letters for use in the **.ini** file. Use these codes as values for the **Actions** parameter in an **.ini** file section to configure an individual event. See [Event Configuration Examples](#) for a list of the event configuration keywords to use as section names for such sections, and for two examples of how to configure an individual event.

L	Log Event
A	Notify Administrators
U	Notify Users
C	Run Command File
M	Send E-Mail
P	Page Users
S	Shut Down Server

Event Configuration Examples

This section provides examples of how to configure an individual event. Each PowerChute *plus* event has a corresponding keyword that is the section title for its event configuration parameters in the **.ini** file. For example, [AmbientTemperatureOutOfRange] corresponds to the **Ambient Temperature Out of Range** event, which

**Initialization (powerchute.ini) File
Event Configuration Examples**

is related to the Measure-UPS device or the Environmental Monitoring SmartSlot Card. The list of all event configuration keywords follows:

Event Name	Event Configuration Keyword
Abnormal Contact Position	[ContactFault]
Administrative Shutdown	[AdminShutdown]
Ambient Temp in Range	[AmbientTemperatureInRange]
Ambient Temp Out of Range	[AmbientTemperatureOutOfRange]
Base Module Fan Failure	[MatrixFanFailure]
Base Module Power Supply Failure	[BypassPowerSupplyFailure]
Battery No Longer Needs Replacing	[DontReplaceBattery]
Cancel Battery Calibration	[RunTimeCalibrationCancelled]
Check Smart Cell Signal	[CheckSmartCellSignal]
Comm Lost While On Battery	[CommunicationLostOnBattery]
Communication Established	[CommunicationEstablished]
Contact Normal	[ContactNormal]
Humidity In Range	[HumidityInRange]
Humidity Out Of Range	[HumidityOutOfRange]
Low Battery Condition	[LowBattery]
Power Restored	[LineGood]
PowerChute Started	[PowerchuteStarted]
PowerChute Stopped	[PowerchuteStopped]
Return From Bypass	[NotOnBypass]
Shutdown Cancelled	[CancelShutdown]
Smart Cell Signal Returned	[SmartCellSignalOK]
System Shutdown Complete	[FinalShutdown]
System Shutdown Starting	[PrepareForShutdown]
Unable To Communicate with UPS	[CommunicationLost]
UPS Battery Is Discharged	[BatteryDischarged]
UPS Battery Needs Replacing	[ReplaceBattery]
UPS Enabling SmartBoost	[SmartBoost]
UPS On Battery	[LineFail]
UPS On Bypass: Failure	[OnBypassFailure]

Initialization (powerchute.ini) File Event Configuration Examples

Event Name	Event Configuration Keyword
UPS On Bypass: Maintenance	[OnBypassMaintenance]
UPS Output Overload	[Overload]
UPS Return From Low Battery	[ReturnFromBatteryDischarged]
UPS Run Time Calibration Completed	[RunTimeCalibrationCancelled]
UPS Run Time Calibration Initiated	[RunTimeCalibrationStarted]
UPS Self-Test Failed	[SelfTestFailed]
UPS Self-Test Passed	[SelfTestPassed]
UPS Overload Condition Solved	[ReturnFromOverload]

When you use the “Event Actions” dialog box and its options, PowerChute *plus* records parameter values in the initialization file only if you change them from their default settings.

Most events have seven possible actions, as shown in [Action Codes Used in the .ini File](#).

Example 1

This example shows a typical **.ini** file section that configures the **Ambient Temperature Out Of Range** event.

[AmbientTemperatureOutOfRange]	
Actions=LUAS	The letter codes for the specified actions for this event: Log the event (L), Notify User (U), Notify Administrator (A), and Shut Down Server (S) in this example. Some of the other parameters in this example are relevant only if you specify U, A, or S for this parameter.
NotifyDelay=10	The delay time (in seconds) before PowerChute <i>plus</i> notifies users.
NotifyInterval=30	The interval that PowerChute <i>plus</i> waits before sending the notification message again.
NotifyType=All	The parameter values correspond to the radio buttons you select under Users to Notify in the “Notify Users” dialog box. All corresponds to All Users . Some corresponds to Specific Users .
NotifyRepeat=No	The values correspond to radio buttons in the “Notify Users” dialog box. No indicates that the Notify Once radio button is selected. Yes indicates that the radio button for repeat notification is selected.
ShutdownDelay=10	The delay specified for the Shut Down Server event action; see “Overview of Available Actions for Events,” in Chapter 5 of the <i>User’s Guide</i>
AdminNotifyUserList=Don	Administrators to be notified if this event occurs. Commas separate user names if the parameter value is a list.
AdminNotifyDelay=5	The time (in seconds) that PowerChute <i>plus</i> waits before notifying administrators.
NotifyUserList=Don, Pete	Users to be notified. Commas separate user names if the parameter value is a list.
NotifyMessage=message	The user-configured notification message for this event.

Example 2

This example shows a typical **.ini** file section that configures the **System Shutdown Starting** event

Initialization (powerchute.ini) File Variables in [EventText] and [PopupText]

[PrepareForShutdown]

Actions=LUSC

The letter codes for the specified actions for this event: Log the event (L), Notify User (U), Shut Down Server (S), and Run Command File (C) in this example. The next two parameters, `CommandFile` and `CommandFileDelay`, are relevant only if you specify C as a letter code for this parameter. The parameter `Shutdown Delay` is relevant only if you specify S as a letter code.

CommandFile=/bin/powerfail

A command file to run immediately before shutdown. The path shown here is an example.

CommandFileDelay=5

The delay time (in seconds) before the command file executes. This is an optional parameter.

ShutdownDelay=120

The default delay time (in seconds) is 30. Configure a time interval that includes enough time to run the command file specified as the **CommandFile** parameter. This is an optional parameter.

Variables in [EventText] and [PopupText]

Some event texts and popup texts use a variable. A variable is a code name that is replaced by a value when the event text is logged or displayed. A variable has the following format in the `.ini` file: `#variable_name#`.

The following table specifies the variables PowerChute *plus* uses in event or popup texts. For examples of their usage, see the [\[EventText\]](#) and [\[PopupText\]](#) sections of the PowerChute *plus* initialization file.

Variable	Description
#BATTERY_CAPACITY#	The battery capacity remaining
#CONTACT_NUMBER#	The number of the contact being monitored by the Environmental Monitoring SmartSlot Card or Measure-UPS device
#CONTACT_POSITION#	The position of the contact being monitored by the Environmental Monitoring SmartSlot Card or Measure-UPS device: Open or Closed.
#HIGH_THRESHOLD#	The value of the high threshold
#HOSTNAME#	The name of the server or host computer
#LOW_THRESHOLD#	The value of the low threshold
#MAX_VOLTAGE#	The maximum reported voltage
#MIN_VOLTAGE#	The minimum reported voltage
#NORMAL_POSITION#	The normal operating position for a contact that the Environmental Monitoring SmartSlot Card or Measure-UPS device is monitoring.
#USER_COMMENT#	The user-defined description for a contact that the Environmental Monitoring SmartSlot Card or Measure-UPS device is monitoring. See Contacts in Chapter 4 of the User's Guide for more information.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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