

## Installing the APC Smart-UPS on an Agilent 3070 Testhead Controller

Many Agilent 3070 family customers are concerned about file system corruption when HP-UX (Unix) is not properly shutdown. The most common cause of improper shutdown is electrical power disturbances. This article covers the installation and configuration of an APC Smart-UPS and APC PowerChute software.

### Required Hardware

APC, SU700NET, Uninterruptible Power Supply. This 700 VA UPS will power a testhead controller for approximately 10 minutes. Cost ~\$500 USD.

### Required Software

APC, AP9005, PowerChute Plus v4.2.3 (or newer) for HP-UX. This software provides communication between the UPS and HP-UX to gracefully shutdown the operating system when the primary AC power fails.

These items are available worldwide from American Power Conversion. USA phone, 1-800-800-4APC; URL: [www.apcc.com](http://www.apcc.com).

### Required Parts

- APC, SU700NET UPS.
- APC, DB-9 serial cable, pn# 940-0024C.
- A free Com1 port on the rear of the controller.

### Setting up the Hardware

1. Shutdown the controller and peripherals.
2. Connect the power for the controller, monitor and E3788 (SCSI MUX box) into the UPS. the monitor and controller should be connected to the UPS. The MUX box is a SCSI device that needs to be powered by the save source as the controller. If there are any external disks, these need to be connected to the UPS also.
3. This procedure is for using the Com1 port on the back of the controller. In the past, this port was reserved for other purposes, but this is no longer the case. The strip printer should be connected to Com2 or Com B of the controller. That should leave the Com1 (A) port available. The device for Com1 is ttyd0p0. The full device path is /dev/ttyd0p0.

(if ttyd0p0 does not work, try tty0p0)

4. Connect the appropriate cable from the Com1 port to the UPS.

## Boot the Controller

1. Turn on the UPS.
2. Turn on the controller and all peripherals.
3. When you see a CDE login screen, login as root.

## Create a User Account:

The user interface software (/usr/lib/powerchute/xpowerchute) requires that a user account /home/pwrchute exist. Create this user account using SAM.

## Install PowerChute Software

The PowerChute Plus software is available on CD-ROM and 3.5-inch floppy disk. It must be copied from the install media to your controller:

1. Copy the hp10 directory from the install media to an empty directory on your PC (/apc).
2. From the root login, use FTP to copy the PowerChute Plus software from your PC to an empty directory on your controller. (Suggested path: /opt/apc/hp10)
3. Change directories: `cd /opt/apc/hp10`
4. Change the permissions on the files you just copied: `chmod 500 *`. This makes the files executable by the root user.
5. Install the software: `./install`

The installation script will prompt you through a series of questions; enter the following responses:

- Select the media type from which you will install: [?] 1
- Enter path to mounted CD ROM [ /opt/apc/hp10 ] (default)
- Would you like to see an overview of the Installation? [y/n,q] n
- Which parts of PowerChute Plus for Unix do you wish to install? [?] 3
- Which APC Hardware will PowerChute Plus for Unix be running with [?] 2
- Do you currently have a Measure-UPS attached to the UPS? [y/n,q] n
- On which Operating System are you installing? [?] 5
- Do you currently have TCP/IP Installed? [y/n,q] y  
(Assuming the testhead is networked; if it is not networked, it should be.)
- Which color scheme do you wish to use [1]? ( default)

- Which serial device will be dedicated to PowerChute Plus for Unix [?] 3
- Enter full path name of a serial device: /dev/ttyd0p0
- Where do you wish to install PowerChute Plus for Unix? /usr/lib/powerchute
- Are the above selections correct? [y/n,q] y

The software will complete its installation, and check communication to the UPS and display a message that the controller must be rebooted to put the software into effect.

Reboot the controller and test to be sure that everything is working correctly. The default shutdown delay when a power failure is detected is 5 min. If power is restored before the delay time period the shutdown will not occur.

You can monitor and test the UPS with the interface software. The daemon that handles the power failure sensing and shutdown runs automatically and does NOT require interface program to operate correctly.

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