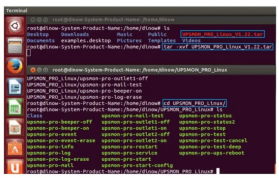
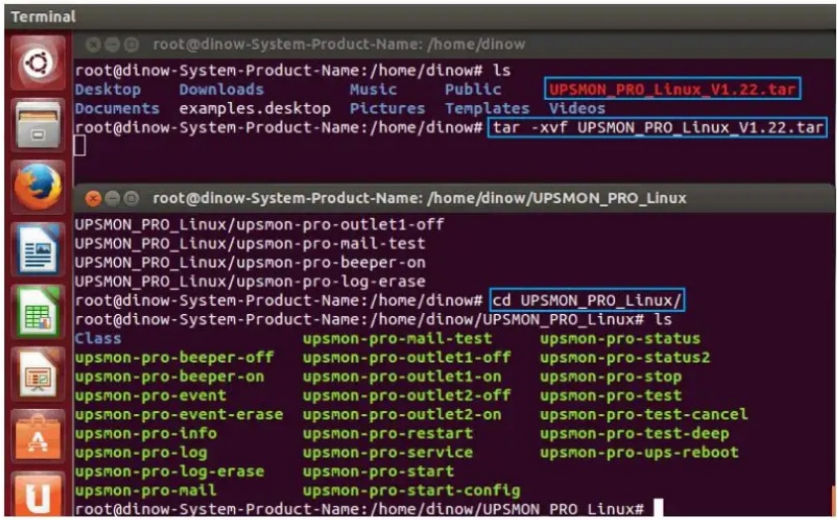


POWERCOM PRO V1.4 UPS Monitoring Software User Manual

Contents

POWERCOM

POWERCOM PRO V1.4 UPS Monitoring Software



Product Information

The UPSMON PRO V1.4 is a UPS monitoring software that allows users to monitor, configure, and control their uninterruptible power supply (UPS) devices. It provides users with information on the status, condition, and events of the UPS. The software also supports email notification for UPS events.

Installation Instructions

1. Copy the UPSMON_PRO_Linux.tar file to the /home/user directory using the command: `cp UPSMON_PRO_Linux.tar /home/user`.
2. Extract the contents of the UPSMON_PRO_Linux.tar file using the command: `tar -xvf UPSMON_PRO_Linux.tar`.
3. Navigate to the UPSMON_PRO_Linux directory using the command: `cd UPSMON_PRO_Linux`.

Starting UPSMON PRO
To start the UPSMON PRO monitoring service, use the command: `upsmon-pro-start`. This will prompt you for basic information and automatically start the UPS monitoring service. Once the program successfully executes, it will show “UPSMON: Start Monitor” indicating a successful UPS connection.

Checking UPS Status
To check the UPS status and ensure the connection is working correctly, use the command: `upsmon-pro-status`. This will continuously poll the current UPS status until you press Ctrl-C.

Configuring UPSMON PRO
To configure email notifications for UPS events, use the command: `upsmon-pro-mail`. This will help you set up email notifications once UPS events occur. To test the email configuration, use the command: `upsmon-pro-mail-test`.

Performing UPS Tests
To check the battery health of the UPS, use the command: `upsmon-pro-test`. This will briefly supply power from the UPS battery. To simulate the battery capability, use the command: `upsmon-pro-test-deep`. This will test the UPS battery power to its limits. To cancel the deep battery power test, use the command: `upsmon-pro-test-cancel`.

Controlling UPS Alarm
To turn on the UPS alarm for warning conditions, use the command: `upsmon-pro-beeper-on`. To turn off the UPS alarm, use the command: `upsmon-pro-beeper-off`.

PRODUCT USAGE INSTRUCTIONS

UPSMON PRO Install

- **Command**: cp UPSMONtar/home/user
- **Command**: tar -xvf UPSMON_PRO_Linux.tar
- **Command**: cd UPSMON_PRO_Linux

This command will copy and uncompressed this ups monitoring software
The package contains executable files about UPS monitoring, configuration, and control

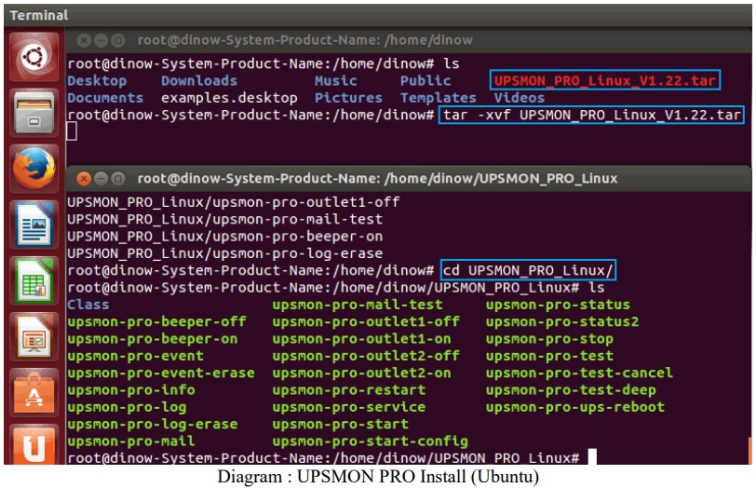


Diagram : UPSMON PRO Install (Ubuntu)

BB. UPSMON PRO Start

- Command : **upon-pro-start**

It will ask you the basic information and then auto start-ups monitoring service

- **UPS Connection:** 1.RS232 2.USB 3. SNMP-Card 4. UPSMON-PRO
- **Linux shutdown delay seconds:** When a power failure occurs, Linux will act shutdown after this count-down seconds
- **Linux shutdown if battery capacity:** Linux acts shut down at once if the battery descends to this level
- **Linux shutdown if battery backup minutes:** Linux act shut down at once if the battery estimated backup time descends to this minutes
- **Ups shutdown delay minutes**: Once Linux commits shutdown, ups will sustain power for these minutes

UPSMON: UPSMON Start
It means the program successfully execute

UPSMON: Start Monitor
It means the program successfully gets ups connection

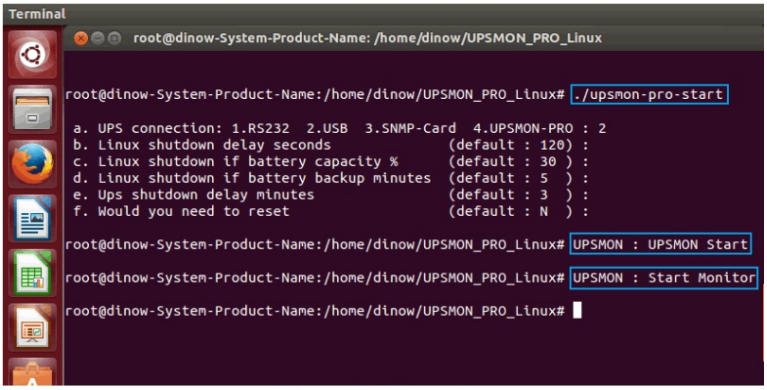


Diagram : USB Connection

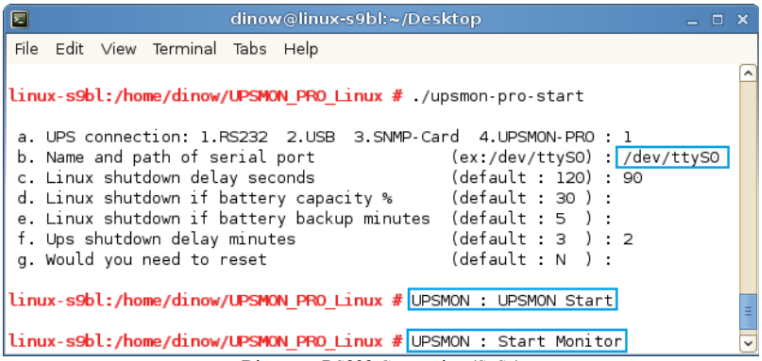


Diagram : RS232 Connection (SuSe)

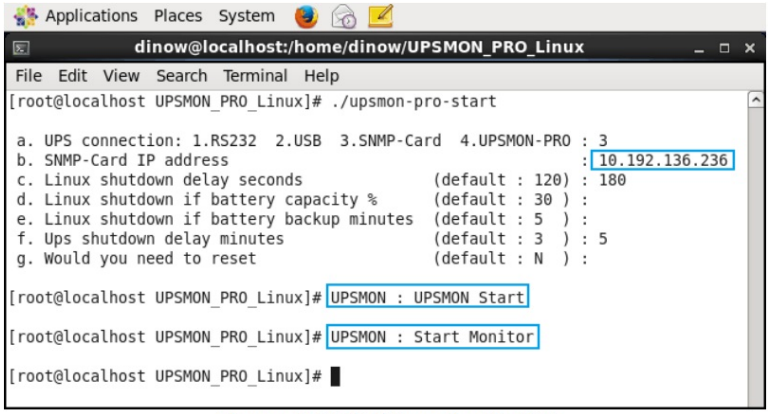


Diagram : SNMPCard Connection (CentOS)

B.2 After you get the description “UPSMON: Start Monitor”, please command immediately with “ **upsmon-pro-status**” to make sure the connection and ups condition is all right

- **B.2 Command**: upsmon-pro-stop

  It will stop ups monitoring the service
- **B.3 Command:** upsmon-pro-service

  This command directly start-ups monitoring without any information query (Add this within start daemon)
- **B.4 Command:** upsmon-pro-restart

  This command will restart the UPS monitoring
- **B.5. Command:** upsmon-pro-start-config

  This command will reset the ups connection and shutdown condition Polling Interval: The application query interval to ups (second)

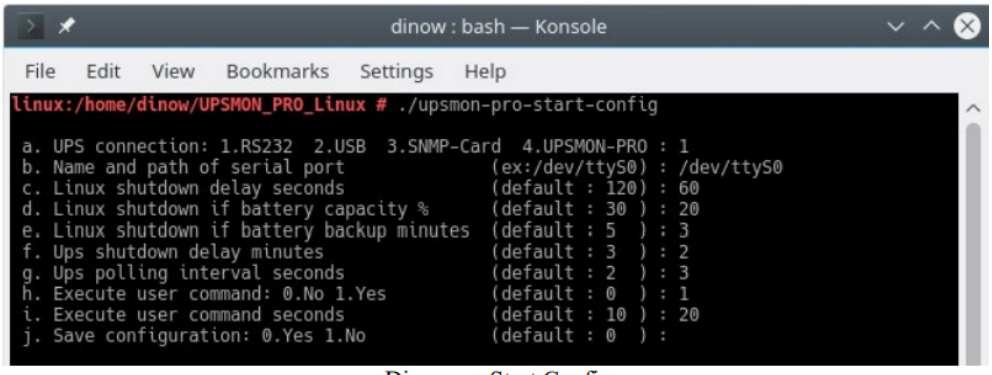


Diagram : Start Config

CC. UPSMON PRO Status

C.1 Command: upsmon-pro-status

It will repeatedly poll your current ups status until Ctrl-C pressing

- **Power Status**: Battery Power / Utility Power
- **Input Voltage**: To display utility power voltage
- **Input Frequency**: To display utility power frequency
- **Output Voltage**: To display ups output voltage
- **Output Power**: To display ups output power
- **UPS Status**: Normal / Bypass / AVR Boost / AVR Buck / UPS Failed
- **UPS Load**: To display the total capacity of loads
- **UPS Temperature**: To display ups inside temperature
- **UPS Beeper**: ON / OFF
- **Battery Status**: Normal/ Charge/ Discharge / Battery Test / Low Battery / Battery Failed
- **Battery Capacity**: To display battery percentage level
- **Battery Voltage**: To display the battery its voltage
- **Battery Backup Time**: To display battery estimated backup time in battery mode
- **Battery Test Times**: Accumulated times that ups made battery test
- **Battery Last Test**: The last time this ups made battery test
- **Battery Test Result**: Normal / Battery Failed / Low Battery
- **Battery Power Times**: Accumulated times that up output power supply from batteries
- **Battery Power Start**: The last time ups switch power from its battery
- **Battery Power End**: The last time ups switch power to utility
- **Battery Age**: The age of UPS batteries used
- **Ambient Temperature**: The sense of environmental temperature
- **Ambient Humidity**: The sense of environmental humidity
- **Upsmon Pro Linux**: This ups monitoring software version
- **Upsmon Pro Status**: Monitoring / Disconnect
- **Upsmon Pro Data Update**: The data update time
- **Upsmon Pro is going to shut down after XXX seconds**: Blackout and shutdown mode

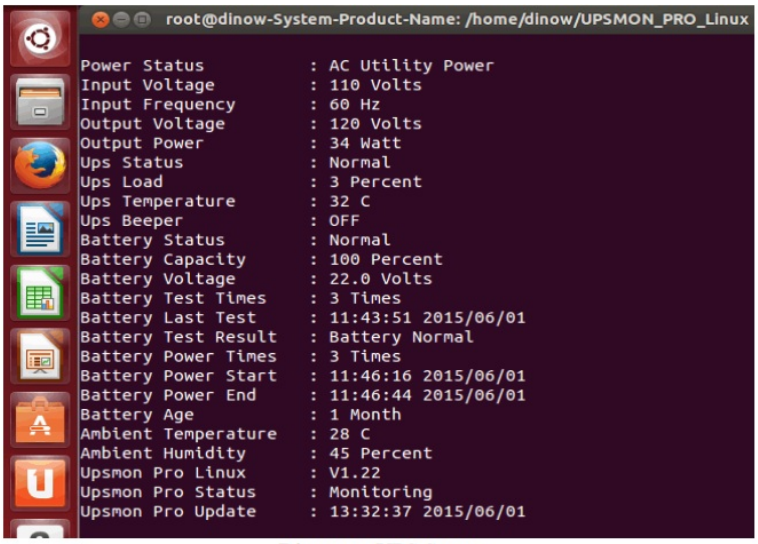


Diagram : UPS Status

C.2 Command: upsmon-pro-info
To display up service/device information / and configuration.

- **Ups Company**: The manufacturer of the ups
- **Ups Model**: The ups model name
- **Ups Firmware**: The UPS firmware version
- **Rating Input Volt**: Rating Input Voltage
- **Rating Output Volt**: Ratting Output Voltage
- **Upsmon Pro Connect :** RS232 / USB / SNMP-Card / UPSMON-PRO
- **Upsmon Pro RS232 Port Name and Path**: Serial port path (ex: /dev/ttyS0)
- **Upsmon Pro Master IP:** The IP address of Upsmon Pro Master (RS232 or USB)
- **Snmp Card IP**: The IP address of the snmp card
- **Snmp Card firmware**: The firmware version of snmp card
- **Snmp Card Community**: The community of snmp card
- **Upsmon Pro Usb VID & PID**: Usb vendor ID and Usb Product ID
- **Upsmon Pro Usb Type**: Driver for usb/hid ups equipment
- **Polling Interval**: The query interval to ups
- **Linux shutdown delay seconds:** When a power failure occurs, Linux will act shutdown after this count-down seconds
- **Linux shutdown if battery capacity:** Linux acts shut down at once if the battery descends to this level
- **Linux shutdown if battery backup minutes:** Linux act shut down at once if ups estimated battery backup time descends to this minutes
- **Ups shutdown delay minutes**: Once Linux commits shutdown, ups will sustain power for these minutes
-

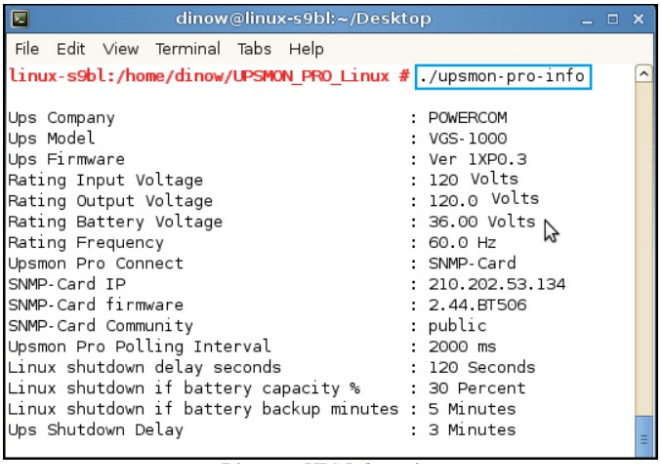


Diagram : UPS Information

C.3 Command: upsmon-pro-log

To list the UPS data log

- **C.4 Command:** upsmon-pro-log-erase

  To erase the ups data log To avoid data conflict, please execute this command without upsmon pro service running
- **C.5 Command:** upsmon-pro-event

  To list the UPS event
- **C.6 Command:** upsmon-pro-log-erase

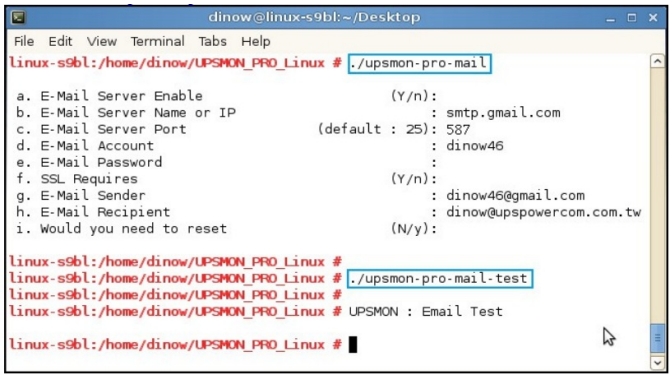
  To erase the event of the up To avoid data conflict, please execute this command without upsmon pro service running

DD. UPSMON PRO Config

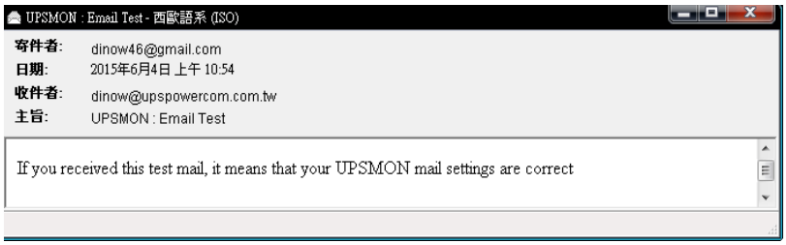
D.1 Command: upsmon-pro-mail
This configuration will help you to get email notification once uUPSevents occurs

- **E-Mail Server Enable**: Y / n
- **E-Mail Server Name or IP:** Email server address
- **E-Mail Server Port**: 25 (default)
- **E-Mail Account**: The account of this email server
- **E-Mail Password**: The password of this email account
- **SSL Requires**: This mail server requires a secure connection
- **E-Mail Sender**: The email address of this account
- **E-Mail Recipient:** The recipient who needs to get an email notification

D.2 Command: upsmon-pro-mail-test



This command will send a test mail to make sure your configuration is successful or not



EE. UPSMON PRO Set

- **E.1 Command:** upsmon-pro-test

  To check the battery health, UPS will supply the power shortly from its battery
- **E.2 Command:** upsmon-pro-test-deep

  To simulate battery capability, ups will supply battery power for its limits
- **E.3 Command:** upsmon-pro-test-cancel

  With this command, it will cease deep battery power test
-

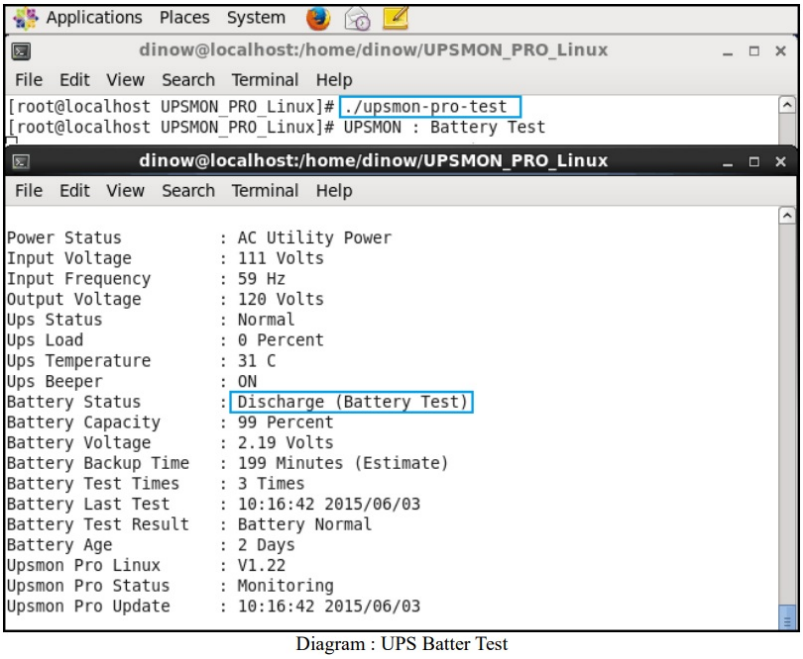


Diagram : UPS Batter Test

E.4 Command: upsmon-pro-beeper-on

Ups alarm for ups warning condition

- **E.5 Command:** upsmon-pro-beeper-off

  Ups silence for UPS warning condition
- **E.6 Command:** upsmon-pro-ups-reboot

  Description: Shutdown Linux and reboot ups after XX minutes
  - Ups reboot after minutes: Ups reboot its power after 1 minute
  - Commit ups reboot (Y / n) :
- **E.7 Command:** upsmon-pro-outlet1-off

  It will turn ups outlet1 OFF at once
- **E.8 Command:** upsmon-pro-outlet1-on

  It will turn ups outlet1 ON at once
- **E.9 Command:** upsmon-pro-outlet2-off

  It will turn ups outlet2 OFF at once
- **E.10 Command:** upsmon-pro-outlet2-on

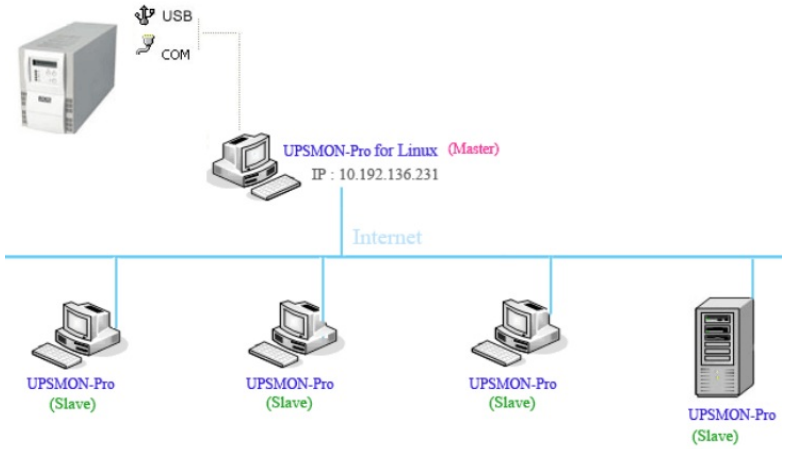
  It will turn up outlet2 ON at once UPS outlet control is specific for certain ups

FF. UPSMON PRO Multi-Connect

The UPSMON PRO can play the role of Master or Slave

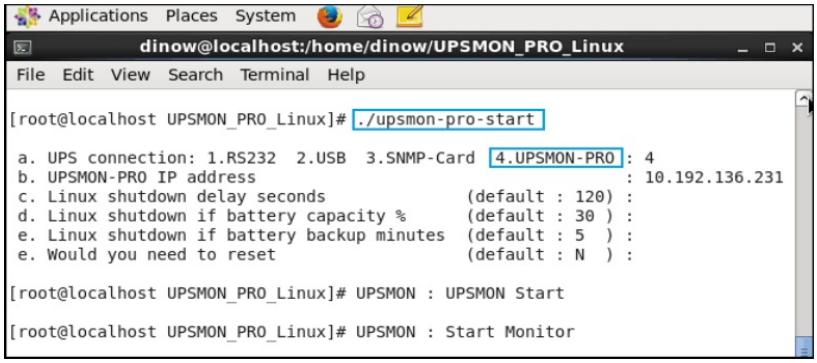
F.1 UPSMON PRO Master

- UPSMON PRO Master: The Linux that physically connects UPS via RS232 or USB
- UPSMON PRO Master: It can share UPS status with the other UPSMON PRO Slaves
- EX: UPSMON PRO Master: 192.136.231 (IP Address)



F.2 UPSMON PRO Linux Slave

- UPSMON PRO Slave: The Linux that connects to UPSMON PRO Master via the net
- UPSMON PRO Slave: Execute upsmon-pro-start with 4 upsmon-pro parameter



F.3 UPSMON PRO Windows Slave

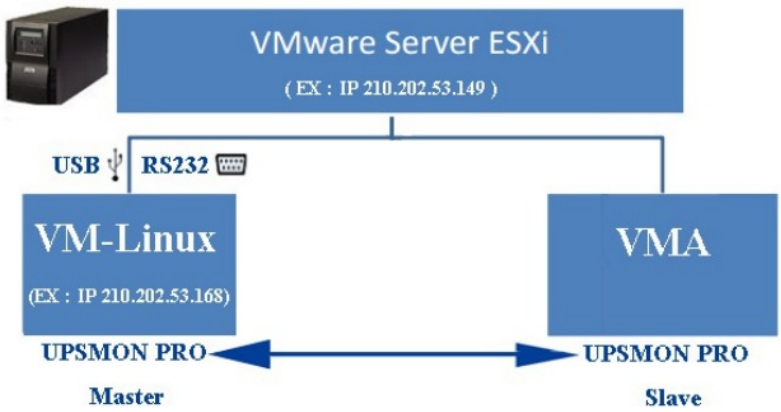
- UPSMON PRO Slave: The Windows that connect to UPSMON PRO Master via net
- UPSMON PRO Slave: Connect: Choose UPSMON PRO

UPSMON PRO Auto Start

G.1 Command : / path / UPSMON_PRO_Linux / upsmon-pro-service

To have a daemon start every time Linux reboots, please add the above script to the beginning procedures. Typically this script is located in “/etc/rc.d/” or “/etc/rc.d/rc.local” or “/etc/init.d/rc.local”. However, the name and path vary by the distribution

VMWare Support



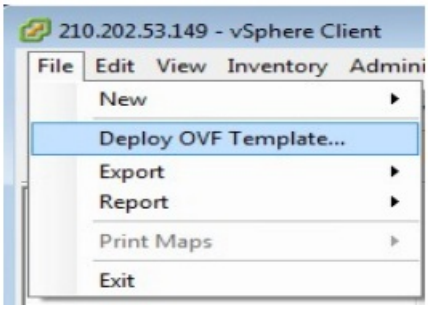
H.1 Get ups monitoring on vm-Linux

1. UPSMON PRO installed on vm-Linux (Refer AA)
2. UPSMON PRO gget-upsmonitoring via usb-port or com-port
3. UPSMON PRO now plays the role of master

H.2 VMA Install (vSphere Management Assistant)

1. VMWare web site **https://www.vmware.com/support/developer/vima/**
2. Download the **VMA**

3. Start the VMware vSphere Client
4. Select “File” > “Deploy OVF Template”. Click the browse button and select the OVF document.

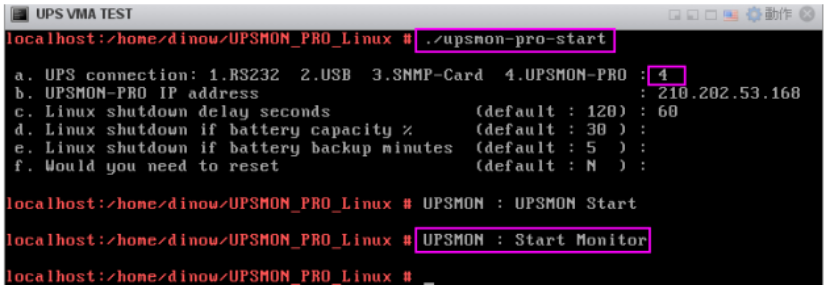


5. Execute VMA and the default user name is vi-admin. Set the password before the first login

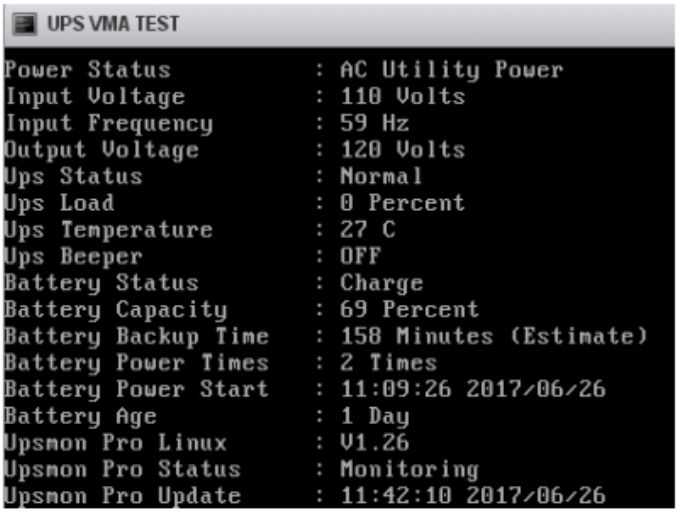
H.3 UPSMON PRO Install and start monitoring on VMA

1. **Command** : cp UPSMON_PRO_Linux.tar /home/user

2. **Command** : tar -xvf UPSMON_PRO_Linux.tar
3. **Command** : cd UPSMON_PRO_Linux
4. **Command** : ./upsmon-pro-start
5. UPSMON-PRO: 4
6. UPSMON-PRO-Master IP Address
7. Count down seconds
8.

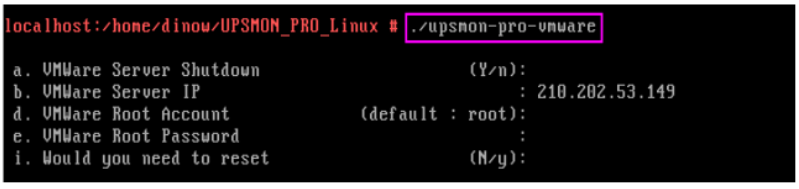


Command : ./upsmon-pro-status



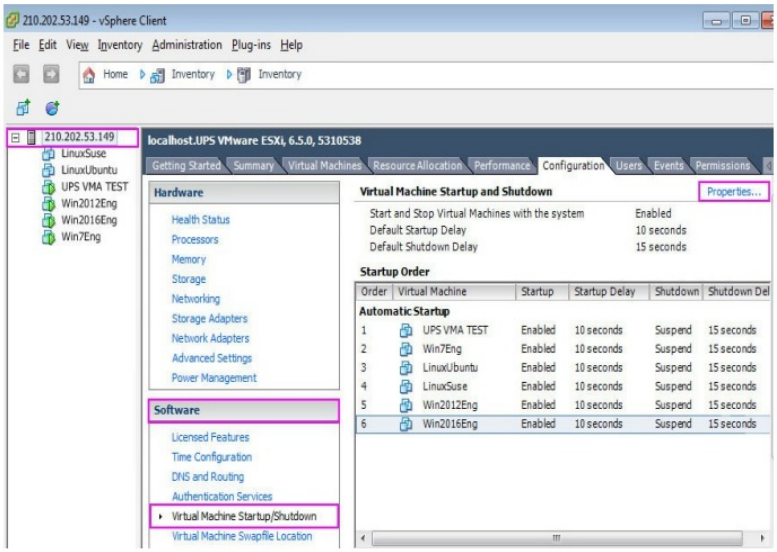
H.4 UPSMON PRO VMWare shutdown configuration

1. **Command** : upsmon-pro-vmware
2. Filled in your Vmware Esxi IP / root (administrator) / password

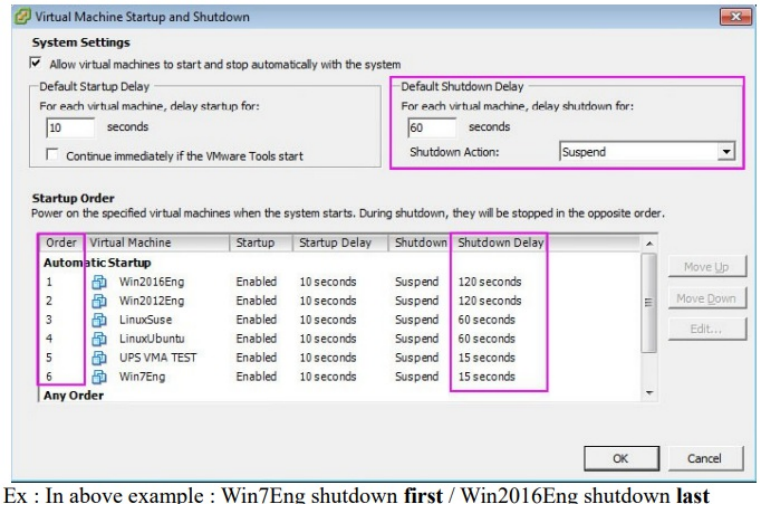


H.5 Configure startup/shutdown automatically with VMware ESXi

1. Vmware host >> Software >> Virtual Machine Startup / Shutdown >> Properties

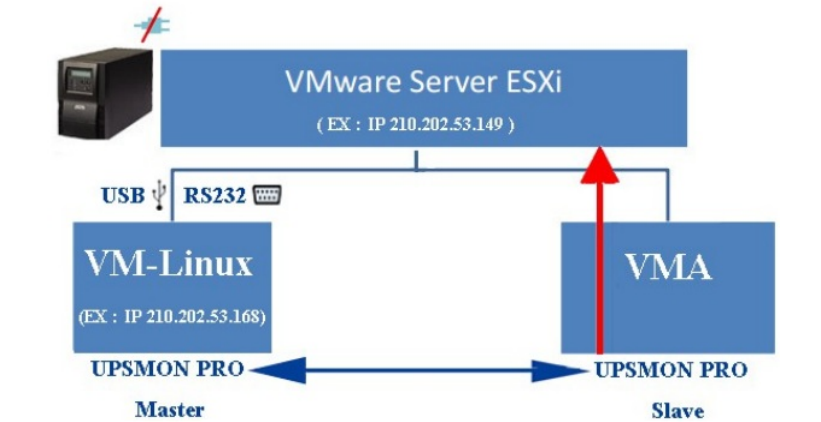


2. This window allows you to set: up shutdown type/shutdown delay/shutdown order/startup order



Ex : In above example : Win7Eng shutdown **first** / Win2016Eng shutdown **last**

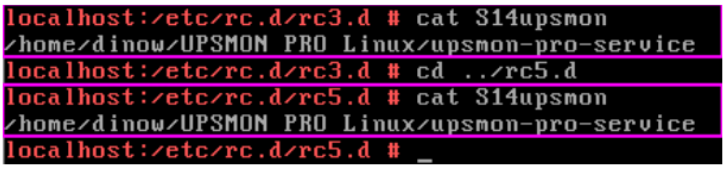
H.6 Power failure and the VMware shutdown as a sequence




```
localhost:/home/dinow/UPSMON_PRO_Linux # UPSMON : Power Failure
UPSMON : Linux count down 60 seconds

UPSMON : Power Failure and Linux is going to shutdown


UPSMON : Linux count down 60 seconds


UPSMON : Linux count down 30 seconds


UPSMON : Linux count down 10 seconds

UPSMON : Execute VMWare Shutdown
```

H.7 Configuration to auto-start up VMware ESXi

Command : / path / UPSMON_PRO_Linux / upsmon-pro-service
To have a daemon start every time via reboots, please add the above script to the beginning procedures. Typically this script is located in “/etc/rc.d/rc3.d” and “/etc/rc.d/rc5.d/”. However, the name and path vary by the distribution



Q and A

Supported Operating Systems

- CentOS
- Debian
- Fedora
- RedHat
- Suse
- OpenSuse
- Ubuntu
- Mint

H.2 Linuxusb connect Fail :

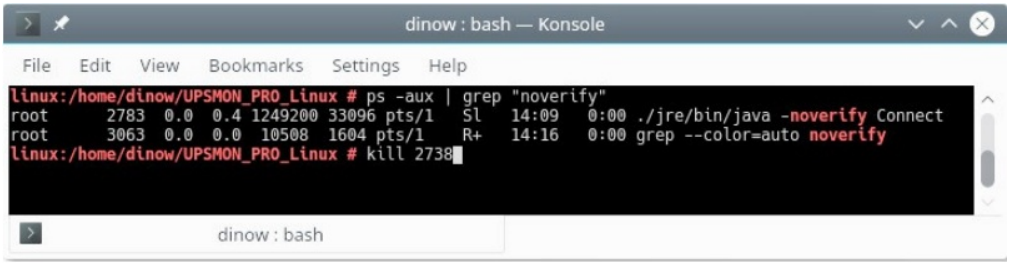
Command : sudo	apt-get	install lib32bz2-1.0	(Debian)
Command : sudo	apt-get	install lib32z1	(Ubuntu / Mint)
Command : yum	install	glibc.i686	(Fedora / CentOS)

H.3 Linux Display Fail :

1. **Command**: sudo apt-get install default-jre \
2. **Command** : cd UPSMON_PRO_Linux / EXT
3. **Command** : java Display

H.4
Stop the service with command

- **Command** : ps -aux | grep “noverify”
- **Command:** PID
- **Former ups and its usb connection :** Command: cd Class/EXT
- **Command:** vi UPS_USB_2400.txt ./UPS_USB_1200.txt



H.5 Former ups and its usb connection :

- **Command** : cd Class/EXT
- **Command**: vi UPS_USB_2400.txt ./UPS_USB_1200.txt

Documents / Resources

	POWERCOM PRO V1.4 UPS Monitoring Software [pdf] User Manual PRO V1.4 UPS Monitoring Software, PRO V1.4, UPS Monitoring Software, Monitoring Software , Software

References

- Home - VMware {code}