LS-WVL ??NUT (Network UPS Tools)??UPS

????

- **LS-WVL刷 Debian 12**

????

```
apt install -y nut
```

??

編輯 `/etc/nut/nut.conf`，修改 **MODE=netclient**，確認權限為 **root nut**

none: Nut 未設定
standalone: 獨立模式 **，**一般在只有一個 **UPS** 且只負責本地系統 **(**不提供網路服務 **)**的情況下使用 **.**
netserver: Nut Server.
netclient: 客戶端模式 **，**只啟動 **nut-monitor,** 用於連接遠端的 **Nut** 服務 **.**

```
root@LS-WVL885:~# cat /etc/nut/nut.conf
...
MODE=netclient
```

編輯 `/etc/nut/upsmon.conf`，以下範例為當 **UPS**切換到電池後執行 **upssched**調度程序，，確認權限為 **root nut**

```
#監控的UPS IP 使用者及密碼，模式為slave
MONITOR ups@192.168.1.1 1 monuser secret slave

#系統最少需要多少台 UPS ，通常單一 UPS 系統設1
MINSUPPLIES 1

#偵測到要關機（如 UPS 電池低、FSD）時，upsmon 執行的指令
SHUTDOWNCMD "/sbin/shutdown -h +0"

#每幾秒輪詢 UPS 狀態
POLLFREQ 5
```

```
#在告警（例如 ONBATT）時，每幾秒檢查一次
POLLFREQALERT 5

HOSTSYNC 15
#若 15 秒都收不到 UPS 更新資料，就認為 UPS 通訊掛掉
DEADTIME 15

#當系統真的要「切電源」時，會建立這個旗標檔，UPS daemon 看到它後會通知 UPS 關閉輸出電源。
POWERDOWNFLAG /etc/killpower

RBWARNTIME 43200

#若 300 秒都沒有收到 UPS 通訊，就發出「通訊中斷」通知
NOCOMMWARNTIME 300

#關機流程最後等待的秒數
FINALDELAY 5

#NUT自帶調度程序
NOTIFYCMD /sbin/upssched

#UPS切換電池和恢復供電時皆觸發調度程序
NOTIFYFLAG ONBATT EXEC
NOTIFYFLAG ONLINE EXEC

#UPS無回應或恢復觸發調度程序
NOTIFYFLAG COMMOK EXEC
NOTIFYFLAG NOCOMM EXEC
```

upssched程序的設定檔為 `/etc/nut/upssched.conf`，編輯並確認權限為 **root nut**

```
#自訂執行腳本位置
CMDSCRIPT /bin/upssched-cmd

#確認以下路徑正確
PIPEFN /var/run/nut/upssched.pipe
LOCKFN /var/run/nut/upssched.lock

#當UPS狀態切換後執行參數
AT ONBATT * EXECUTE onbatt
```

```
AT ONLINE * EXECUTE onpower
AT NOCOMM * EXECUTE lost
AT COMMOK * EXECUTE connect

#□UPS□□□□□□□□shutdown□□□120□
AT ONBATT * START-TIMER shutdown 120

#□UPS□□□□□□□□□□□
AT ONLINE * CANCEL-TIMER shutdown
```

□□ `/bin/upssched-cmd`□□□□□□ root nut□□□□ `chmod +x`□ □□□□□□□□ log□□□ shutdown□□□□ 120□ UPS□□□□□□□□

```
#! /bin/sh
case $1 in
  shutdown)
    echo "$(date): AC Power not restored after 120s, shutting down system." >> /var/log/ups-
shutdown.log
    sleep 3
    sudo /sbin/shutdown -h +0
    ;;
  onbatt)
    echo "$(date): AC Power outage, on battery" >> /var/log/ups-shutdown.log
    ;;
  onpower)
    echo "$(date): AC Power restored" >> /var/log/ups-
shutdown.log
    ;;
  connect)
    echo "$(date): Communications with UPS established" >> /var/log/ups-
shutdown.log
    ;;
  lost)
    echo "$(date): Communications with UPS lost" >> /var/log/ups-
shutdown.log
    ;;
  *)
    logger -t upssched-cmd "Unrecognized command: $1"
    ;;
esac
```

□□ `visudo`□□□ **nut**□□□□□□□ **shutdown**□□

```
root@LS-WVL885:~# visudo


...
nut ALL=(ALL) NOPASSWD: /sbin/shutdown
```

□□ **nut**□□□□□ **log**□

```
touch /var/log/ups-shutdown.log


chown root:nut /var/log/ups-shutdown.log


chmod 664 /var/log/ups-shutdown.log
```

```
systemctl enable nut-monitor


systemctl start nut-monitor
```

??

□□□□□ **UPS**□□

```
root@LS-WVL885:~# upsc ups@192.168.1.1
Init SSL without certificate database
battery.charge: 96
battery.charge.low: 10
battery.charge.warning: 50
battery.date: 2001/09/25
battery.mfr.date: 2023/08/10
battery.runtime: 2636
ups.status: OL CHRG
ups.test.result: No test initiated
ups.timer.reboot: 0
ups.timer.shutdown: -1
ups.vendorid: 051d
```

□□ **UPS**□□□□□ **120**□□□□□□□□□□□□□□□ **log**

```
root@LS-WVL885:~# cat /var/log/ups-shutdown.log
Mon Sep  1 01:11:06 AM CST 2025: AC not restored after 120s, shutting down system.
Mon Oct 20 01:14:56 AM CST 2025: AC Power outage, on battery
Mon Oct 20 01:15:11 AM CST 2025: AC Power restored
```

UPS□□□□□□□□ log

```
root@test:~# cat /var/log/ups-shutdown.log
Sun Nov 16 04:52:15 PM CST 2025: Communications with UPS lost
Sun Nov 16 04:52:25 PM CST 2025: Communications with UPS established
```

Revision #4
Created 1 September 2025 01:12:26 by Jason
Updated 16 November 2025 16:59:18 by Jason