

UPS & USB: íà äääèì ñèñòàíà óíàðàòü.

Ðàçääë : Ñèñòàíà. Äàìèèèñòðèðíààíèá

Îíóáèèèîââîî [Solnechnyi_z](#) [19/07/2009]

Ä äàííé ñòàòüà ñèñòàíààðñý ïðèàì ñàèèð÷àíèý ÈÁÍ ÷àðç usb-ïðò, à òàé æà ðàðáíèá íàèíòüðü òðóáííòàé.

×àñòü I.

Äëý ñ÷àñòèèèâüð íàèääàòàèèé ÈÁÍ òèðü APC äíñòàòí÷íí ñèà÷àòü è óñòàííàòü ñèääóðùèá ñàèâòü:

<http://open-suse.ru/repo/opensuse11.1/i586/apcupsd-3.14.6-1.su111.i586.rpm>

<http://open-suse.ru/repo/opensuse11.1/i586/apcupsd-gapcmon-3.14.6-1.su111.i586.rpm>

<http://open-suse.ru/repo/opensuse11.1/i586/apcupsd-multimon-3.14.6-1.su111.i586.rpm>

Äëý íà÷àèà ñàèí ñíðíàíàòü GUI-óòèèèòó **gapcmon** (apcupsd-gapcmon-3.14.6-1.su111.i586.rpm):

Îñííàíà íèí

Îèí ñ ñàðàíàððàèè UPS

Óàì, ó èíàí ñòèèò ñèñòàíàíüé ñíèèòð **conky**, àíçíèèí ïðèàíàèòñý àòò ýòòò èííòèä, íàèñàíüé ñíé:

\${apcupsd localhost 3551}UPS: \${color FFFFCB}\${alignr}APC \${apcupsd_model}

(\${apcupsd_cable})\${color}

Status:\${color FFFFCB}\${alignr}\${apcupsd_status}\${color}

Timeleft:\${color FFFFCB}\${alignr}\${apcupsd_timeleft} min\${color}

Battery charge:\${color FFFFCB}\${alignr}\${apcupsd_charge BAT1} %\${color}

Load:\${color FFFFCB}\${alignr}\${apcupsd_load} %\${color}

\${apcupsd_loadbar 4}

Èñàíàü (âñíèíýðòñý ñ ïðàààèè root):

apcupsd - çàíóñè äàííà

apcaccess - âñâñ èíòèðíàòèè í èàí:

apcaccess

APC : 001,038,1011

DATE : Sat Jul 18 23:26:54 OMSST 2009

HOSTNAME : home_SuSE_linux

VERSION : 3.14.6 (16 May 2009) suse

UPSNAME : home_SuSE_linux
CABLE : USB Cable
MODEL : Back-UPS ES 525
UPSMODE : Stand Alone
STARTTIME: Sat Jul 18 12:16:11 OMSST 2009
STATUS : ONLINE
LINEV : 231.0 Volts
LOADPCT : 43.0 Percent Load Capacity
BCHARGE : 100.0 Percent
TIMELEFT : 27.6 Minutes
MBATTCHG : 5 Percent
MINTIMEL : 3 Minutes
MAXTIME : 0 Seconds
SENSE : Medium
LOTRANS : 195.0 Volts
HITRANS : 255.0 Volts
ALARMDEL : Always
BATTV : 13.6 Volts
LASTXFER : Unacceptable line voltage changes
NUMXFERS : 1
XONBATT : Sat Jul 18 23:25:37 OMSST 2009
TONBATT : 0 seconds
CUMONBATT: 5 seconds
XOFFBATT : Sat Jul 18 23:25:42 OMSST 2009
SELFTEST : NO
STATFLAG : 0x07000008 Status Flag
SERIALNO : 4B0829P10471
BATTDATE : 2008-07-18
NOMOUTV : 230 Volts
NOMINV : 230 Volts
NOMBATTV : 12.0 Volts
NOMPOWER : 300 Watts
FIRMWARE : 851.t3.I USB FW:t3
APCMODEL : Back-UPS ES 525
END APC : Sat Jul 18 23:26:56 OMSST 2009

apctest - òãñòèðíâàíèà ñèñòàìù:

apctest

2009-07-19 05:36:22 apctest 3.14.6 (16 May 2009) suse

Checking configuration ...

Attached to driver: usb

sharenets.type = DISABLE

cable.type = USB_CABLE

You are using a USB cable type, so I'm entering USB test mode

mode.type = USB_UPS

Setting up the port ...

apctest FATAL ERROR in device.c at line 71

Unable to create UPS lock file.

If apcupsd or apctest is already running,
please stop it and run this program again.
apctest error termination completed

✖αñòù II.

Äëý òãõ, ó êíáí èíáðõñý íáëíõíðùá ïðíáëáíù ñ ïíäëêþ÷áíëáí ÈÁÍ.

1. Äëý íà÷àëà ñëà÷èáááí èñõíáíúá êíáú ïðíáðáííù è óñòáíááëëáááí áá á ñëñòáíó, íë÷ááí íáíáú÷ííáí íá ýõí ðááá íáð, ïíýõíó áúííëíýðõñý íáú÷íúá ïðíáááóðù:

```
wget http://eu1.networkupstools.org/source/2.2/nut-2.2.1.tar.gz  
tar -xvzf ./nut-2.2.1.tar.gz  
cd ./nut-2.2.1.tar.gz  
./configure && make && make install
```

Ïíñëá óñòáííáëë ïíýáëýðõñý ñëááóðùëá èàòàëíáë (/usr/local/ups/):

bin - èàòàëíá ñ äðáëááðáèë ïíá ïðááááëáíúá ïíááëë UPS'íá
etc - òáëëú êííðëáóðáðëë ááíííá, íáñòðíéëë ïíäëêþ÷áíëý è ups
sbin - ñëñòáíúá ááííí, ááííí ïíëòíðëíáá, è áúá
html, cgi-bin, include, lib è share - á íëð íë÷ááí ïðááëòù íá ïðëááòñý, òáë ÷òí èõ ïíëñúááòù íá íáçáòáëúíí

2. Äëý íà÷àëà, èòí ááëááò ýòí áíáðáúá, íóæíí ïðááááëòùñý ñ UPS, ïíäëêþ÷áí èë íí, áëáëò èë ááí ýáðí. áíñííëüçóáíñý óðëëëòíé èç ïáëáòá usbutils:

lsusb

áúáíá ïíëáæáò, èáëëá usb-óñòðíéñòáá áñòù á ñëñòáíá, áñëë áú ááí íá áëëëòá.

3. Ááëáá á èàòàëíáá ñ èñõíáíúá èíááè, áñòù ïíáëáòáëíá data, á íáí áñòù ñíëñíë ïíáááðæëáááííáí íáíðóáííáíëý - **driver.list**, òáí ïíæíí íáëòë ïíáááðæëáááòñý èë áàø UPS è èáëíé äðáëááð ïíáííáëò äëý íááí.

Òáíáðù êíááá ïðááááëëëëñù ñ ïíááëýð ups è äðáëááðíí, ïíæíí ïðëñòóíáòù è íáñòðíéëá êííðëáíá.

Ðáááëòëðóáí /usr/local/ups/etc/ups.conf

```
user = nobody  
[usbhid]  
driver = usbhid-ups  
port = /dev/hiddev0
```

Á íáúáí, ñòðíéá **user** ïíëáçúáááò íò êíáí áóááò çáíóñëáòùñý äðáëááð, ïí çáíóñëááòñý ñ ïðáááè nobody è ïíýõíó á íà÷àëá íá ïíæáò ïíëó÷èòù áíñòóíá è íáëíõíðùí ðáñòðñáí (á èàòàëíáá /dev/, íá ïíæáò ñíçááòù .pid è

chmod 777 /var/state/upsd - òàì upsd íá ìîã ñîçääòü .pid òàéé
chmod 640 ups/etc/upsd.conf

Óãíãðü çàíóñèääì upsd è â ñéó÷ãá óñîãðíîã çàíóñèää ïðíããðýãì ñîããéíáéã ñ UPS:

ups/sbin/upsd
ups/bin/upsc usbhid@localhost

óñîãðíóé áúãîã äîéæáí áúòü ïðèíðíí ñèããóðùèè...

```
battery.charge: 100
battery.charge.low: 10
battery.charge.warning: 50
battery.date: 2001/09/25
battery.mfr.date: 2007/06/12
battery.runtime: 7177
battery.runtime.low: 120
battery.type: PbAc
...
ups.status: OL
ups.test.result: No test initiated
ups.vendorid: 051d
```

Óãíãðü íãñòðãèãããì upsmon äëý òíãí, ÷òíáú ñèããèòü çà òáì êíããã ðãçðýãèòñý
ããðãðãý è áúéèð÷èòü íãðó íãèéíó. Ðãããèèèèðãì **/usr/local/ups/etc/upsmon.conf**:

*Íðèíð ïíéíñòüð áçýð èç ñòãòüè ñ opennet, ÷òí íãííãí íãéãã÷èè ííã
æèçíü. Íí íã çããúããã ïíãíýòü èíý UPS'à è ïãðíü íã ñãíè (ñãíãý ïãðãý
ñòðíèã).*

```
MONITOR usbhid@localhost 1 upsmon usbhidpassword master
NOTIFYCMD /usr/local/sbin/callwall
NOTIFYFLAG ONLINE SYSLOG+EXEC
NOTIFYFLAG ONBATT SYSLOG+EXEC
NOTIFYFLAG LOWBATT SYSLOG+EXEC
MINSUPPLIES 1
SHUTDOWNCMD "/sbin/shutdown -h +0"
POLLFREQ 5
POLLFREQALERT 2
HOSTSYNC 15
DEADTIME 15
POWERDOWNFLAG /etc/killpower
RBWARNTIME 43200
NOCOMMWARNTIME 300
FINALDELAY 5
```

Âñã, òãíãðü çàíóñèääì upsmon è è áñèè çàíóñè ïðíãã òñîãðíí ïíãíí
ïðíããñèèðíããòü íãðó ðããíóó - áúããðãèããéãì ðíóðã ïèòãíèý èç ñãðè.

Íðeíá-áíeá: çàíóñòèèèñú èè ïðíóáññú ïíæíí ïðíááðèòù -áðáç ps, ñéááópùèì
íáðàçíí: **ps ax | grep ups**
ups/sbin/upsmon

Òàèæá ïðíááðèòù, èàè ïñòàíáèèèááòñý ñèñòàíà ïíæíí, ñéàçàâ upsd, ÷òí UPS
ïíéó÷èè ñéáíáé áúèèþ÷áíèý ïèòàíèý:
upsmon -c fsd

P.S. Á ñòàòùá èñííéúçíááíú ïàòáðèàéú ñ ñàéòà <http://www.opennet.ru/>.