

UPS & USB: íà äääèì ñèñòàíà óíàðàòü.

Ðàçääë : Ñèñòàíà. Äàìèèèñòðèðíààíèá

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

Ä äàííé ñàòòüà ïèññóääàòñý ïðèàì ïäèèð÷àíèý ÈÁÍ ÷àðäç usb-ïðò, à òàé æà ðàðáíèá íàèíòüðüò òðóáííòàé.

×àñòü I.

Äèý ñ÷àñòèèèâüð íàéääàòàèéé ÈÁÍ òèðü APC äíñòàòü÷íí ñèà÷àòü è óñòàííàòü ñèääóðùèá ïàèâòü:

<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>

Äèý íà÷àèà ïæíí ïíðíáíàòü GUI-óòèèèòó **gapcmon** (apcupsd-gapcmon-3.14.6-1.su111.i586.rpm):

Îñííââà íèí

Îèí ñ ïàðàìàððàèè UPS

Óàì, ó èíâí ñòèèò ñèñòàííúé ïíèèòüð **conky**, âíçíèæíí ïðèâíèèòñý âíò ýòòò èííðèä, íàèññàíúé ïíé:

```
#{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}
```

Èñàíâü (âúïèéýðòñý ñ ïðàâàèè root):

apcupsd - çàíóñè äàííà

apcaccess - âúââè èíðíðíàòèè í èáí:

```
# 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
SELFTTEST : 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

✖αñòü II.

Äëý òãð, ó êíáí èíáðõñý íáêíòíðüá ïðíáéáíü ñ ïíäêëð÷áíéáí ÈÁÍ.

1. Äëý íà÷àèà ñêà÷èáááí èñõíáíüá êíáü ïðíáðáíü è óñòáíááèèáááí áá á ñèñòáíó, íè÷ááí íáíáü÷ííáí íá ýõí ðááá íáð, ïýõíó áüïíéíýðõñý íáü÷íüá ïðíáááóðü:

```
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
```

Ïíñéá óñòáíáèè ïýáéýðõñý ñèááóðüèá èàòàêíáè (/usr/local/ups/):

bin - èàòàêíá ñ äðáéááðáèè ïíá ïðáááéáíüá ïíááèè UPS'íá
etc - òáéèü êííðèáóðáòèè ááíííá, íáñòðíéèè ïíäêëð÷áíéý è ups
sbin - ñèñòáíüá ááííí, ááííí ïíèòíðèíáá, è áüá
html, cgi-bin, include, lib è share - á íèð íè÷ááí ïðááèòü íá ïðèááòñý, òáè ÷òí èð ïíèñüááòü íá íáçàòáèüíí

2. Äëý íà÷àèà, èòí ááèááð ýòí áíáðáüá, íóæíí ïðáááèèòüñý ñ UPS, ïíäêëð÷áí éè íí, áèáèò èè ááí ýáðí. áíñííèüçóáíñý óðèèèòíé èç ïàèáòà usbutils:

lsusb

áüáíá ïíèáæáð, èáèèá usb-óñòðíéñòáá áñòü á ñèñòáíá, áñèè áü ááí íá áèèèòá.

3. Ááèáá á èàòàêíáá ñ èñõíáíüè êíááè, áñòü ïíèáèòàèíá data, á íáí áñòü ñíèñíè ïíáááðæèáááííá íáíðóáíááíéý - **driver.list**, òáí ïíæíí íáèòè ïíáááðæèáááòñý èè áàø UPS è èáêíé äðáéááð ïíáííáèò äëý íááí.

Óáíáðü êíááá ïðáááèèèèñü ñ ïíááèýð ups è äðáéááðíí, ïíæíí ïðèñòóíáòü è íáñòðíéèá êííðèáíá.

Ðáááèòèðóáí /usr/local/ups/etc/ups.conf

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

Á íáüáí, ñòðíéá **user** ïíèáçüúááò íò êíáí áóááò çáíóñèáòüñý äðáéááð, ïí çáíóñèááòñý ñ ïðáááèè nobody è ïýõíó á íà÷àèá íá ïíæáò ïíèó÷èòü áíñòóíá è íáêíòíðüí ðáñòðíáí (á èàòàêíáá /dev/, íá ïíæáò ñíçááòü .pid è

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

Óãíãðü çàíóñèääì upsd è â ñéó÷ää óñíãðíîã çàíóñèää ìðíããðýãì ñíããéíáíèã ñ UPS:

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

óñíãðíúé áúãíã äíèæáí áúòü ìðèíãðíí ñèããóðùèé...

```
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 íãñòðãèääãì upsmon äëý òíãí, ÷òíáú ñèããèòü çà òãì êíããã ðãçðýãèòñý
ããðãðãý è áúèèð÷èòü íãðó ìãèíó. Ðãããèèèèðãì **/usr/local/ups/etc/upsmon.conf**:

*Ìðèíãð ìíèíñòüð áçýð èç ñòãòüè ñ opennet, ÷òí íãííãí íãèãã÷èè ííã
æèçíü. Íí íã çããúããì ìíãíýòü èíý UPS'à è ìãðíèü íã ñãíè (ñãíãý ìãðããý
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 ãñèè çàíóñè ìðíãã òñíãðíí ìíãíí
ìðíããñèèðíããòü íãðó ðããíóó - áúããðãèããíèãì ðíóðã ìèòãíèý 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/>.