NUT - Network UPS Tools

Ubuntu 24.04 Issues

Out of the box, you receive the following errors when running nut-scanner:

```
$ nut-scanner -U
Cannot load USB library (libusb-1.0.so) : file not found. USB search disabled.
Cannot load SNMP library (libnetsnmp.so) : file not found. SNMP search disabled.
Cannot load XML library (libneon.so) : file not found. XML search disabled.
Cannot load AVAHI library (libavahi-client.so) : file not found. AVAHI search disabled.
Cannot load IPMI library (libfreeipmi.so) : file not found. IPMI search disabled.
Cannot load NUT library (libupsclient.so) : file not found. NUT search disabled.
nut-scanner : utility for detection of available power devices.

OPTIONS:
  -C, --complete_scan: Scan all available devices except serial ports (default).
* Options for USB devices scan not enabled: library not detected.
* Options for SNMP devices scan not enabled: library not detected.
* Options for XML/HTTP devices scan not enabled: library not detected.
  -O, --oldnut_scan: Scan NUT devices (old method).
* Options for NUT devices (avahi method) scan not enabled: library not detected.
* Options for IPMI devices scan not enabled: library not detected.
  -E, --eaton_serial <serial ports list>: Scan serial Eaton devices (XCP, SHUT and Q1).
  -T, --thread <max number of threads>: Limit the amount of scanning threads running
simultaneously (default: 512).

Note: many scanning options depend on further loadable libraries.
Run-time loadable library search paths used by this build of NUT:
NOTE: Reporting filtered (existing unique) built-in paths:
Built-in: /usr/lib/x86_64-linux-gnu
Built-in: /usr/lib64
Built-in: /usr/lib
```

```
Built-in: /usr/local/lib
Built-in: /usr/lib/gcc/x86_64-linux-
```

The only issue I could find posted was Libraries not found (Ubuntu 24.04 Server arm) #2431, yet it didn't seem to have a resolution. I haven't read every bit of the issue, but the root of cause is pretty obvious that some package is no longer providing the symlinks that are expected to exist.

The easy solution is to create symlinks for the files its looking for to the files that actually exist.

```
pushd /usr/lib/x86_64-linux-gnu/
sudo ln -s libusb-1.0.so.0 libusb-1.0.so
sudo ln -s libnetsnmp.so.40 libnetsnmp.so
sudo ln -s libavahi-client.so.3 libavahi-client.so
sudo ln -s libfreeipmi.so.17 libfreeipmi.so
sudo ln -s libneon-gnutls.so.27 libneon.so
popd
```

After creating the symlinks, everything is working like a champ.

CyberPower CP1000PFCLCDa UPS Configuration

```
# /etc/nut/nut.conf
MODE=standalone
#MODE=netserver
```

```
# /etc/nut/ups.conf
maxretry = 3

# use "nut-scanner -U" to scan for connected UPS's

[cyberpower1]
        driver = "usbhid-ups"
        port = "auto"
        vendorid = "0764"
```

```
        productid = "0601"
        product = "CP1000PFCLCDa"
        serial = "CX1KP2001248"
        vendor = "CPS"
        bus = "001"
        pollinterval = 15
```

```
# /etc/nut/upsd.conf
LISTEN 0.0.0.0 3493
```

```
# /etc/nut/upsd.users

[monuser]
  password = REDACTED
  admin master
```

```
# /etc/nut/upsmon.conf
MINSUPPLIES 1
SHUTDOWNCMD "/sbin/shutdown -h +0"
POLLFREQ 5
POLLFREQALERT 5
HOSTSYNC 15
DEADTIME 25
POWERDOWNFLAG /etc/killpower
RBWARNTIME 43200
NOCOMMWARNTIME 300
FINALDELAY 5
```

Actual logs from a power-related shutdown

These are the logs from a DELL Latitude 5500 connected to a Smart UPS 750 via USB. The UPS was on battery for ~7 minutes before hitting battery low state and initiating an automatic power-fail shutdown.

```
2024-11-06T00:09:54.168676-06:00 server1 nut-monitor[1203]: UPS smartups750@localhost on battery
2024-11-06T00:09:54.179395-06:00 server1 nut-monitor[366128]: PIPEFN must be set before any ATs in the config file!
2024-11-06T00:09:54.179755-06:00 server1 nut-monitor[366128]: PIPEFN must be set before any ATs in the config file!
2024-11-06T00:09:54.179958-06:00 server1 upssched[366128]: PIPEFN must be set before any ATs in the config file!
2024-11-06T00:09:54.181207-06:00 server1 nut-monitor[366124]: Network UPS Tools upsmon 2.8.1
2024-11-06T00:16:54.235149-06:00 server1 nut-monitor[1203]: UPS smartups750@localhost battery is low
2024-11-06T00:16:54.236230-06:00 server1 nut-monitor[1203]: FSD set on UPS smartups750@localhost failed: ERR ACCESS-DENIED
2024-11-06T00:16:54.236442-06:00 server1 nut-monitor[1203]: Executing automatic power-fail shutdown
2024-11-06T00:16:54.242982-06:00 server1 nut-monitor[1203]: Auto logout and shutdown proceeding
```

-end

Revision #3
Created 2024-08-27 18:16:37 UTC by bluecrow76
Updated 2025-05-22 16:46:27 UTC by bluecrow76