Network UPS Tools Change Log

NUT project community contributors

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME
2.8.4.270 2.8.4.270-270+g239aa86c1	2025-10-08	Current release snapshot of Network UPS Tools (NUT).	
2.8.4	2025-08-07	Fixed a few regressions introduced by release v2.8.3. Some changes to docs and recipes, especially for parallel builds. Updated NUT SEMVER definition some more. Some rounds of code-hardening project. Numerous driver updates, some new ones introduced.	JK
2.8.3	2025-04-07	Some changes to docs and recipes, libupsclient API and functionality. Updated NUT SEMVER definition and added scripting around it. Groundwork for vendor-defined status and INSTCMD buzzwords like "ECO". Fixed some regressions and added improvements for certain new device series.	JK
2.8.2	2024-04-01	Some changes to docs and recipes, libnutscan API and functionality. Added nutconf (library and tool). Fixed some regressions and added improvements for certain new device series.	JK
2.8.1	2023-10-31	Some changes to API, docs and recipes, in particular to simplify local builds and tests (e.g. to help end-users check if current NUT codebase trunk has already fixed an issue they see with a packaged installation). Revived NUT for Windows effort, further improved other OS integrations. NUT became reference for "UPS management protocol", Informational RFC 9271. Documentation files refactored to ease maintenance. More drivers and new driver categories introduced.	JK

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME
2.8.0	2022-04-26	Change of maintainer. Many changes to API, docs (both style and content), and recipes, with a stress on non-regression test-ability, run-time debug-ability, general codebase maintainability, as well as OS integrations (notably nut-driver-enumerator for systemd and SMF service instance maintenance). Added a lot in area of CI support and documented pre-requisite package lists for numerous platforms, and CI agent set-up. Added libusb-1.x support and many new driver categories (and drivers), and daisychain device connection support. Instant commands enhanced with TRACKING to enable protocol-based waiting for completion of a particular INSTCMD or SET operation.	JK
2.7.4	2016-03-09	NUT variables namespace updated, in particular for outlet groups, alarms and thresholds, ATS devices, and battery.charger.status to supersede CHRG and DISCHRG flags published in ups.status readings. NUT network protocol extended with NUMBER type; some API changes.	AQ
2.7.3	2015-04-22	Documentation revised, including some API changes. Added NUT DDL links. NUT variables namespace updated.	AQ
2.7.2	2014-04-17	The nut-website project was offloaded into a separate repository. FreeDesktop HAL support was removed (obsoleted in GNOME consumer). Introduced nutdrv_atcl_usb driver.	AQ
2.7.1	2013-11-19	NUT source codebase migrated from SVN to Git (and from Debian infrastructure to GitHub source code hosting). jNut binding split into a separate project. Introduced libnutclient (C++ binding), al175, apcupsd-ups and nutdrv_qx drivers, Mozilla NSS support for simpler licensing than OpenSSL, and a newer apcsmart implementation. Documentation support enhanced with a spell checker, contents massively updated to reflect project changes.	CL

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME
2.6.5	2012-08-08	New macosx-ups driver, new implementation of mge-shut driver. NUT variables namespace updated. Docs cleaned up and revised.	AQ
2.6.4	2012-05-31	New NUT network protocol commands (LIST CLIENTS, LIST RANGE and NETVER), and socket protocol commands (ADDRANGE, DELRANGE). NUT variables namespace updated. Introduced nut-recorder tool.	AQ
2.6.3	2012-01-04	No substantial changes to documentation.	AQ
2.6.2	2011-09-15	Introduced nut-scanner tool and nut-ipmipsu driver, systemd support, and a new apcsmart implementation.	AQ
2.6.1	2011-06-01	Introduced default.* and override.* optional settings in ups.conf, an ups.efficiency report, and outlet.0 special handling.	AQ
2.6.0	2011-01-14	First release of AsciiDoc documentation for Network UPS Tools (NUT).	AQ

Contents

1 Introduction

The primary goal of the Network UPS Tools (NUT) project is to provide support for Power Devices, such as Uninterruptible Power Supplies, Power Distribution Units and Solar Controllers.

2 Very detailed Change Log

This document intends to detail the change log for relatively recent work (roughly since the source code was tracked in Git).

Note

This change log section represents git commits in range *v2.8.4..HEAD* (commits *434cb36a3..239aa86c1*).

2.1 2025-10-07 Jim Klimov <jimklimov+nut@gmail.com>

- clients/upssched.c: start_timer(): drop unneeded NULLness checks [#3105]

- conf/upsmon.conf.sample.in: align NOTIFYFLAG samples with NOTIFYMSG definitions [#3084] Also helps NIT generate an upsmon.conf to report those events in tests.

- tests/NIT/upssched.conf.in: add handling for SHUTDOWN_HOSTSYNC [#3084]

- docs/man/upsmon.txt, docs/nut.dict: introduce SHUTDOWN ACTIVITY WORKFLOW section [#3003, #3110]

- docs/man/upsmon.txt: in SIMULATING POWER FAILURES section, refer to NIT scripts as a source of inspiration

- docs/man/upsmon.txt: from UPS CONNECTION TYPES AND UPSMON ROLES section, refer to TIMED SHUTDOWNS section

- docs/man/upsmon.txt: reword intro (and name) of UPS CONNECTION TYPES AND UPSMON ROLES section

2.2 2025-10-06 Jim Klimov <jimklimov+nut@gmail.com>

- docs/man/upssched.txt: suggest using FSD notification for early shutdown activity on the upsmon primary system [#3003]

- docs/man/upssched.conf.txt, docs/man/upssched.txt: note that command execution is not async in upssched

- NEWS.adoc, clients/upsmon.c, clients/upsmon.h: clients/upsmon.{c,h}, NEWS.adoc: Make sure `FSD` notifications are always issued at latest when shutdown handling just starts (or earlier) [#3003, #3110]

- ci_build.sh: consider_cleanup_shortcut(): better react to changes of sources for configure script . . . even if there is no Makefile yet

- scripts/misc/nut.bash_completion.in: fix indentations

- configure.ac, scripts/Makefile.am, scripts/misc/.gitignore, scripts/misc/{nut.bash_completion ⇒ nut.bash_completion.in}: scripts/misc/nut.bash_completion: convert to .in template to use TAIL_ARGS_FROM_NTH_LINE [#3099]

- scripts/upsdrvsvcctl/nut-driver-enumerator.sh.in: use TAIL_ARGS_FROM_NTH_LINE [#3099]

- configure.ac: detect TAIL_ARGS_FROM_NTH_LINE [#3099]

- configure.ac: fix indent

2.3   2025-10-04 Jim Klimov <jimklimov+nut@gmail.com>

- scripts/Solaris/postinstall.in: Update comments/messages for legacy init script usage on Solaris older than 10 [#3099]

- scripts/Solaris/preremove.in, scripts/Solaris/postinstall.in: quiesce upsdrvctl activity; add tweak-ability for debugging NUT programs in the install script context (possibly with custom package builds) [#3099]

- scripts/misc/nut.bash_completion, scripts/Solaris/reset-ups-usb-solaris.sh.sample, scripts/upsdrvsvcctl/nut-driver-enumerator.sh.in: avoid "tail -n \+/-NUM" syntax as unportable [#3099]

- .github/workflows/codeql.yml: disable ccache use for actual compilation, for CodeQL analysis to hook into compiler correctly

2.4   2025-10-02 Jim Klimov <jimklimov+nut@gmail.com>

- ci_build.sh: fix typo in message

- ci_build.sh: USE_CONFIG_SHELL at least from explicit caller envvar [#3099]

- ci_build.sh: revise indentation

- clients/upssched.c: simplify loop processing [#3097]

- tests/NIT/upssched.conf.in: rename parameters passed to "EXECUTE" methods, for less confusing dev-testing logs [#3105]

- clients/upsmon.c: add debug logging to NOTIFYCMD (WIN32) [#3097]

- docs/man/upssched.txt: list common and unique options

- NEWS.adoc, clients/upssched-cmd, clients/upssched.c, conf/upssched.conf.sample.in, docs/man/upssched.conf.txt, docs/man/upssched.txt, scripts/misc/notifyme-debug: upssched: introduce passing of NOTIFYMSG to CMDSCRIPT [#3105]

2.5   2025-10-01 Jim Klimov <jimklimov+nut@gmail.com>

- Makefile.am: work around lack of "id -u" [#3099]

- ci_build.sh: detect_platform_PKG_CONFIG_PATH_and_FLAGS(): fix use of PKG_CONFIG variable [#3099]

- ci_build.sh: work around NCPUS prefixed with white-space [#3099]

- ci_build.sh: work around lack of "find -maxdepth" [#3099]

- scripts/python/Makefile.am: add a fallback TOUPPER/TOLOWER implementation [#3099]

- ci_build.sh, scripts/subdriver/gen-snmp-subdriver.sh, scripts/subdriver/gen-usbhid-subdriver.sh: add a fallback TOUPPER/TOLOWER implementation [#3099]

- configure.ac, m4/ax_realpath.m4: introduce a fallback "mktemp" [#3099]

- scripts/subdriver/gen-usbhid-subdriver.sh: quote calls to mktemp [#3099]

- scripts/subdriver/gen-snmp-subdriver.sh, scripts/subdriver/gen-usbhid-subdriver.sh: add a fallback mktemp implementation [#3099]

- scripts/subdriver/gen-snmp-subdriver.sh: avoid grep for char classes, it is also not ubiquitous [#3099]

- scripts/subdriver/gen-snmp-subdriver.sh: avoid "GREP -e", it is also not ubiquitous [#3099]

- ci_build.sh: avoid "GREP -e", it is also not ubiquitous [#3099]

- ci_build.sh: fix GGREP detection [#3099]

- tools/driver-list-format.sh: revise reaction to "diff" problems or successes [#3099]

- tools/driver-list-format.sh: sed class [:blank:] is not portable [#3099]

- tools/driver-list-format.sh, docs/docinfo.xml.sh.in: fallback for absent "diff -u" feature in pretty reporting [#3099]

- Makefile.am, tests/nut-driver-enumerator-test.sh: fallback for absent "diff -u" feature; use detected or passed EGREP [#3099]

- NEWS.adoc: update about portability fixes [#3099]

- tests/NIT/nit.sh: "id -u" is not ubiquitous, find fallback ways to check that I_AM_ROOT [#3099]

- ci_build.sh, configure.ac, docs/Makefile.am, docs/man/Makefile.am, m4/ax_realpath_lib.m4, m4/nut_check_libnetsnmp.m4, scripts/upsdrvsvcctl/nut-driver-enumerator.sh.in: Portability: in some shells, "if" only accepts the list of commands to run (there is no "if ! condition" support) - some better hidden cases [#3099]

- scripts/installer/common/aix_init, scripts/installer/common/ipp-host-shutdown.sample, scripts/installer/common/ipp-os-shutdown: scripts/installer/*: fix syntax to pass on old Solaris 8 /bin/sh [#3099]

- Makefile.am, ci_build.sh, configure.ac, docs/Makefile.am, docs/man/Makefile.am, scripts/Windows/build-mingw-prereqs.sh, scripts/python/app/NUT-Monitor, scripts/python/module/Makefile.am, scripts/upsdrvsvcctl/nut-driver-enumerator.sh.in, tests/NIT/nit.sh, tools/Makefile.am, tools/gitlog2version.sh: Portability: in some shells, "if" only accepts the list of commands to run (there is no "if ! condition" support) [#3099]

- autogen.sh: do fail if configure script did not get generated [#3099]

- configure.ac, m4/ax_check_compile_flag.m4, m4/ax_realpath_lib.m4, m4/nut_check_asciidoc.m4, m4/nut_check_aspell.m4, m4/nut_check_libmodbus.m4, m4/nut_check_libsystemd.m4, m4/nut_check_os.m4, m4/nut_check_pkgconfig.m4, m4/nut_check_py m4/nut_compiler_family.m4: configure.ac, m4/*.m4: try to use the detected GREP and EGREP tools [#3099]

- NEWS.adoc: add historic reference from #3099 to #1660

- ci_build.sh: handle a couple more "test -e" cases [#3099]

- docs/Makefile.am, docs/man/Makefile.am: handle a couple more "test -e" cases [#3099]

- scripts/upsdrvsvcctl/nut-driver-enumerator.sh.in: substitute plain GREP too [#3099]

- docs/man/Makefile.am: substitute plain GREP too [#3099]

- docs/Makefile.am: substitute plain GREP too [#3099]

- data/Makefile.am: export GREP or EGREP detected by configure, so further called scripts do not have to re-detect [#3099]

- tools/gitlog2version.sh: use or discover GREP to avoid literal "grep" [#3099]

- tools/driver-list-format.sh: use or discover EGREP to avoid literal "grep -E" [#3099]

- configure.ac: detect and export (E)GREP as early as possible [#3099]

- configure.ac: avoid "[-e" or "test -e" which some older shells lack [#3099]

- tests/NIT/Makefile.am: nut_version.h: export GREP or EGREP detected by configure, so further called scripts do not have to re-detect [#3099]

- include/Makefile.am: nut_version.h: export GREP or EGREP detected by configure, so further called scripts do not have to re-detect [#3099]

- autogen.sh, ci_build.sh: export GREP or EGREP if we detect them, so further called scripts do not have to re-detect [#3099]

- NEWS.adoc: summarize fixes for "grep" and "test" callouts [issue #3099]

- scripts/Solaris/postinstall.in: avoid "[-e" or "test -e" which some older shells lack [#3099]

- m4/ax_realpath.m4: protect against lack of "test -e" even better (some shells do crash trying) [#3099]

- docs/man/Makefile.am: avoid "[-e" or "test -e" which some older shells lack [#3099]

- tests/NIT/nit.sh: use or discover EGREP to avoid literal "grep -E"; also GREP [#3099]

- tools/nut-dumpdiff.sh: use or discover EGREP to avoid literal "grep -E" [#3099]

- scripts/subdriver/gen-usbhid-subdriver.sh: use or discover EGREP to avoid literal "grep -E"; also GREP; avoid "grep -q" [#3099]

- scripts/subdriver/gen-snmp-subdriver.sh: use or discover EGREP to avoid literal "grep -E"; also GREP; avoid "grep -q" [#3099]

- scripts/Solaris/reset-ups-usb-solaris.sh.sample: roll back "grep -E" requirement [#3099, #1660]

- ci_build.sh: use or discover EGREP to avoid literal "grep -E" [#3099]

- drivers/nutdrv_hashx.c: do not directly require "stdint.h" [#3099]

- drivers/Makefile.am: fix library search order for upsdrvctl build [#3099]

- autogen.sh: avoid "find -not . . . " [#3099]

- autogen.sh: use or discover EGREP to avoid literal "grep -E" [#3099]

- autogen.sh: report about testing generated script syntax [#3099]

- tools/gitlog2version.sh: avoid shell substitution missing in older shells [#3099]

- tools/gitlog2version.sh: use or discover EGREP to avoid literal "grep -E" [#3099]

- tools/gitlog2version.sh: avoid "[-e" or "test -e" which some older shells lack and do crash trying [#3099]

- docs/Makefile.am: avoid "[-e" or "test -e" which some older shells lack [#3099]

- Makefile.am: avoid "[-e" or "test -e" which some older shells lack [#3099]

- tests/NIT/README.adoc, tests/NIT/nit.sh: tests/NIT/nit.sh: avoid "[-e" or "test -e" which some older shells lack [#3099]

- ci_build.sh: avoid "[-e" or "test -e" which some older shells lack [#3099]

- Makefile.am: EXTRA_DIST some more useful files

2.6   2025-09-30 Jim Klimov <jimklimov+nut@gmail.com>

- docs/net-protocol.txt: log the TODO idea for "Logout pending" of some sort [#3086]

- docs/net-protocol.txt: cross-link LIST CLIENT and GET NUMLOGINS

- docs/net-protocol.txt: clarify intro about client libraries and other bindings, in-tree or third-party

2.7   2025-09-29 Jim Klimov <jimklimov+nut@gmail.com>

- drivers/snmp-ups.c: allow to actually abort stuck init [#3101]

- drivers/snmp-ups.c: implement a non-trivial upsdrv_tweak_prognames() to allow aliasing with "snmp-ups-old" [#3101]

- NEWS.adoc, UPGRADING.adoc, docs/new-drivers.txt, docs/nut.dict, drivers/adelsystem_cbi.c, drivers/al175.c, drivers/apc_modbus.c, drivers/apcsmart-old.c, drivers/apcsmart.c, drivers/apcupsd-ups.c, drivers/asem.c, drivers/bcmxcp.c, drivers/belkin.c, drivers/belkinunv.c, drivers/bestfcom.c, drivers/bestfortress.c, drivers/bestuferrups.c, drivers/bestups.c, drivers/bicker_ser.c, drivers/blazer_ser.c, drivers/blazer_usb.c, drivers/clone-outlet.c, drivers/clone.c, drivers/dummy-ups.c, drivers/etapro.c, drivers/everups.c, drivers/failover.c, drivers/gamatronic.c, drivers/generic_gpio_common.c, drivers/generic_gpio_libgpiod.c, drivers/generic_modbus.c, drivers/genericups.c, drivers/huawei-ups2000.c, drivers/hwmon_ina219.c, drivers/isbmex.c, drivers/ivtscd.c, drivers/liebert-esp2.c, drivers/liebert-gxe.c, drivers/liebert.c, drivers/macosx-ups.c, drivers/masterguard.c, drivers/metasys.c, drivers/mge-utalk.c, drivers/microdowell.c, drivers/microsol-apc.c, drivers/microsol-common.c, drivers/netxml-ups.c, drivers/nhs_ser.c, drivers/nut-ipmipsu.c, drivers/nutdrv_atcl_usb.c, drivers/nutdrv_hashx.c, drivers/nutdrv_qx.c, drivers/nutdrv_siemens_sitop.c, drivers/oneac.c, drivers/optiups.c, drivers/phoenixcontact_modbus.c, drivers/pijuice.c, drivers/powercom.c, drivers/powerman-pdu.c, drivers/powerpanel.c, drivers/powervar_cx_ser.c, drivers/powervar_cx_usb.c, drivers/rhino.c, drivers/richcomm_usb.c, drivers/riello_ser.c, drivers/riello_usb.c, drivers/safenet.c, drivers/skel.c, drivers/sms_ser.c, drivers/snmp-ups.c, drivers/socomec_jbus.c, drivers/solis.c, drivers/tripplite.c, drivers/tripplite_usb.c, drivers/tripplitesu.c, drivers/upscode2.c, drivers/usbhid-ups.c, drivers/vedirect.c, drivers/victronups.c: drivers/*, docs/new-drivers.txt, UPGRADING.adoc, NEWS.adoc: implement (no-op) upsdrv_tweak_prognames() and bump DRIVER_VERSION numbers [#3101]

- drivers/main.c, drivers/main.h: drivers/*: introduce upsdrv_tweak_prognames() hook [#3101]

- common/common.c, drivers/main.c: drivers/main.c: main(): use new sendsignalfnaliases() and sendsignalpidaliases() with prognames[] [#3101]

- NEWS.adoc, common/common.c, docs/nut.dict, include/common.h: common/common.c, include/common.h, NEWS.adoc: extend with plural sendsignalpidaliases() and sendsignalfnaliases() [#3101]

- drivers/main.c, drivers/main.h: drivers/main.{c,h}: allow to track several prognames[] for acceptable driver program aliases [#3101]

- drivers/upsdrvctl.c: help(): fix global vs local arg name

- NEWS.adoc, common/common.c, docs/nut.dict, include/common.h: common/common.c, include/common.h, NEWS.adoc: extend with plural checkprocnames() and compareprocnames() [#3101]

- clients/upsmon.c: add comments to methods involved in shutdown to clarify who normally runs as root or not [#3084]

2.8   2025-09-28 Nick Briggs <nicholas.h.briggs@gmail.com>

- Makefile.am, clients/Makefile.am, docs/Makefile.am, docs/docinfo.xml.sh.in, docs/man/Makefile.am, scripts/python/Makefile.am, scripts/systemd/nut-server.service.in, scripts/upsdrvsvcctl/nut-driver-enumerator.sh.in: Modifies Makefile.am files and some script ".in" files to use $EGREP The standard Solaris 10/11 "/usr/bin/grep" does not accept the "-E" option. The autotools will set EGREP to the best available tool. Makefile.am that need EGREP functionality should use $(EGREP) rather than directly calling "grep -E". Additionally, scripts that are generated to be installed as part of the package that need EGREP functionality should use the same tool that was located during configuration (assuming no cross-compilation with different EGREP tool availability). Closes #3099

2.9   2025-09-25 Jim Klimov <jimklimov+nut@gmail.com>

- clients/upsmon.c: main loop: avoid sleep if FSD signal was raised during the long work cycle [#3084]

- clients/upsmon.c: user_fsd(), main loop: try to ensure immediate reaction to FSD signals (interrupt a sleep() if needed) [#3084]

- docs/config-notes.txt: clarify that upsmon exit is now subject to SHUTDOWNEXIT setting [#3084, #2133]

- NEWS.adoc, clients/upsmon.c, clients/upsmon.h, common/nutconf.cpp, common/nutwriter.cpp, conf/upsmon.conf.sample.in, docs/config-notes.txt, docs/man/upsmon.conf.txt, include/nutconf.hpp: clients/upsmon.h, conf/upsmon.conf.sample.in, etc: Introduced a SHUTDOWN_HOSTSYNC notification message [#3084]

- conf/upsmon.conf.sample.in, docs/man/upsmon.conf.txt: revise documentation of FINALDELAY [#3084] Notably, both primary and secondary upsmon doshutdown() to handle FSD.

- clients/upsmon.c: doshutdown(), runparent(): debug-log just before executing shutdowncmd [#3084]

- clients/upsmon.c: runparent(): when waiting for a child to exit, and we know its PID, react to the end of specifically that process [#3084]

- clients/upsmon.c: doshutdown(), runparent(): Take note of start timestamp before calling SHUTDOWNCMD [#3084]

- clients/upsmon.c: doshutdown(): debug-log about waiting for FINALDELAY [#3084]

- clients/upsmon.c: set_pdflag(): log if POWERDOWNFLAG is not configured or is being written now [#3084]

- clients/upsmon.c: doshutdown(), runparent(): initialize "time(&start)" always [#3084] Avoid (semi-bogus) warnings from clang that variable 'start' may be uninitialized when used here in difftime() later on.

- clients/upsmon.c: truly deal with SHUTDOWNEXIT timeout as such, not a countdown [#3084]

- clients/upsmon.c: revise tracking pid_pipechild when parent exits [#3084]

- clients/upsmon.c: fix whitespace markup in decls

2.10 2025-09-24 Jim Klimov <jimklimov+nut@gmail.com>

- clients/upsmon.c: add interaction between upsmon parent and child if SHUTDOWNEXIT is non-trivial [#3084]

- clients/upsmon.c: revise comments and log messages in forceshutdown(), doshutdown(), start_pipe() [#3084]

- clients/upsmon.c: start_pipe(), notify(): revise parent/child logging around the fork() [#3084]

- clients/upsmon.c, clients/upssched.c, drivers/upsdrvctl.c: call first setproctag() after setting up nut_debug_level [#3084]

- common/common.c, include/common.h: refactor and optimize getprocname(getpid()) calls with caching getmyprocname() and getmyprocbasename() [#3084]

- common/common.c, include/common.h, clients/upsmon.c, clients/upssched.c, drivers/upsdrvctl.c: move proctag_cleanup() into common code and auto-register during first use of setproctag() [#3084]

- drivers/upsdrvctl.c, NEWS.adoc: introduce logging of self-assigned forked process tags [#3084]

- clients/upssched.c, NEWS.adoc: introduce logging of self-assigned forked process tags [#3084]

- clients/upsmon.c: improve debugging messages of forceshutdown() [#3084]

- clients/upsmon.c, NEWS.adoc: introduce logging of self-assigned forked process tags [#3084]

- common/common.c, include/common.h, NEWS.adoc, docs/nut.dict: introduce logging of self-assigned forked process tags [#3084]

2.11 2025-09-23 Jim Klimov <jimklimov+nut@gmail.com>

- ci_build.sh: honour CI_CCACHE_USE=no more diligently

- NEWS.adoc, clients/upssched.c, conf/upssched.conf.sample.in, docs/man/upssched.conf.txt: clients/upssched.c: revise CANCEL-TIMER, introduce CANCEL-TIMER-MATCHED [#3097]

- scripts/misc/notifyme-debug: fix shell typo

- clients/upssched.c: fix START-TIMER-SHARED [#3097]

- clients/upssched.c: revise logging of timer events [#3097]

2.12 2025-09-22 Jim Klimov <jimklimov+nut@gmail.com>

- clients/upssched.c: start_timer(): revise START-TIMER-SHARED behavior [#3097]

- clients/upssched.c: fix CI suggestions [#3097]

- clients/upssched.c: log-trace through, and fix, removetimers() and connection loss due to a recent bug there [#3097]

- clients/upssched.c: send_to_one(): improve debugging [#3097]

- clients/upssched.c: collect_string(): fix the iteration logic [#3097]

- clients/upssched.c, docs/man/upssched.txt, NEWS.adoc: introduce upssched -l mode [#3097]

- docs/man/upssched.conf.txt: PIPEFN: chain the paragraphs of one description (indent them correctly) [#3097]

- NEWS.adoc, clients/upssched.c, conf/upssched.conf.sample.in, docs/man/upssched.conf.txt, tests/NIT/upssched.conf.in: clients/upssched.c, conf/upssched.conf.sample.in, docs/man/upssched.conf.txt, NEWS.adoc: introduce support for DEBUG_MIN in upssched.conf [#3097]

- clients/upssched.c: update © header with major contributors

- clients/upssched.c: in messages that refer to upsmon, append its man page section

- clients/upssched.c, NEWS.adoc, conf/upssched.conf.sample.in, docs/man/upssched.conf.txt: let timers pass forward the UPSNAME and NOTIFYTYPE again - now with relevant values; introduce START-TIMER-SHARED [#3092, #3097]

2.13 2025-09-21 Jim Klimov <jimklimov+nut@gmail.com>

- clients/upssched.c: update comments [#3092]

- clients/upssched.c: rename global upsname ⇒ ups_name to be on par with global notify_type [#3092]

- docs/man/nut.txt, docs/nut.dict: describe NUT layer 3.5 - role of the drivers during shutdown

- docs/man/nut.txt: suggest more packaged user-names for NUT daemons

- NEWS.adoc, drivers/nutdrv_qx.c, drivers/nutdrv_qx.h: drivers/nutdrv_qx.{c,h}, NEWS.adoc: define an internal QX_FLAG_MAPPIN introduce analyze_mapping_usage() method [#3095]

- drivers/nutdrv_qx.c: fix whitespace

- drivers/usbhid-ups.c: analyze_mapping_usage(): rephrase last suggestion with also checking and building recent NUT code [#3082, #3095]

2.14 2025-09-19 Jim Klimov <jimklimov+nut@gmail.com>

- drivers/snmp-ups.c, drivers/usbhid-ups.c: drivers/snmp-ups.c: account SU_FLAG_MAPPING_HANDLED and do analyze_mapping_ [#3095]

- NEWS.adoc, drivers/snmp-ups.h: drivers/snmp-ups.{c,h}, NEWS.adoc: define an internal SU_FLAG_MAPPING_HANDLED [#3095]

- drivers/snmp-ups.c: fix markup

- drivers/snmp-ups.h: modernize a few comments

- drivers/snmp-ups.c: suggest in log how to improve a driver where only IETF auto-matched [#3095]

- drivers/hidtypes.h: update a comment [#3082]

- drivers/usbhid-ups.c: fix whitespace

- drivers/usbhid-ups.c: offload analyze_mapping_usage() to a method [#3082, #3095] Note the activity is now still limited to when debug logging is enabled.

2.15 2025-09-18 Jim Klimov <jimklimov+nut@gmail.com>

- drivers/usbhid-ups.c, NEWS.adoc: suggest in log how to improve a driver with too few mappings defined/used [#3082]

- NEWS.adoc, docs/ci-farm-do-setup.adoc, docs/ci-farm-lxc-setup.txt, docs/config-notes.txt, docs/config-prereqs.txt, docs/configure.txt, docs/daisychain.txt, docs/design.txt, docs/documentation.txt, docs/download.txt, docs/features.txt, docs/hid-subdrivers.txt, docs/net-protocol.txt, docs/new-clients.txt, docs/new-drivers.txt, docs/nut-names.txt, docs/nut-versioning.adoc, docs/nutdrv_qx-subdrivers.txt, docs/outlets.txt, docs/scheduling.txt, docs/security.txt, docs/snmp-subdrivers.txt, docs/sock-protocol.txt, docs/support.txt: docs/*.txt: add asciidoc comments with links to nut-website rendered contents of most interesting pages

- docs/maintainer-guide.txt: avoid pushing final release tags to upstream more than once, really!

- scripts/Makefile.am: do not EXTRA_DIST the generated scripts/Windows/Makefile — the .in template suffices Thanks to @gdt for the heads-up.

2.16 2025-09-12 Jim Klimov <jimklimov+nut@gmail.com>

- clients/upsmon.c: doshutdown(): log more loudly that exit_flag is raised, so shutdownexitdelay does not apply currently [#3084]

2.17   2025-09-11 Jim Klimov <jimklimov+nut@gmail.com>

- clients/upsmon.c, NEWS.adoc: doshutdown(): collapse non-zero shutdownexitdelay handling into one clause, and ping the data server(s) while in the loop [#3084]

- clients/upsmon.c: more logging about ways to exit() the program, and why/when it happened [#3084]

2.18   2025-09-10 Jim Klimov <jimklimov+nut@gmail.com>

- scripts/python/module/Makefile.am: emit log note that .pypi-dist-pip-wheel goal does not produce sdist archives [#3056]

- scripts/python/module/Makefile.am: fix typo in comment

- NEWS.adoc: fixed PyPI publication to include sdist tarball [#3056]

- .github/workflows/PyNUTClient.yml: fix shell markup [#3056]

- .github/workflows/PyNUTClient.yml: actually install "setuptools" module with "pip" [#3056]

- .github/workflows/PyNUTClient.yml: allow manually running the GHA task

2.19   2025-09-08 Jim Klimov <jimklimov+nut@gmail.com>

- docs/hid-subdrivers.txt, docs/nut.dict: docs/hid-subdrivers.txt: updating existing drivers: suggest newly logged discrepancies of "seen vs. used" data [#3082]

- drivers/nutdrv_atcl_usb.c: when suggesting other drivers and configs, refer to build-aware man page sections

- docs/hid-subdrivers.txt: fix a bit of markup

- clients/upslog.c, NEWS.adoc: update help() and failure messages to suggest -m *,-

- drivers/usbhid-ups.c: process_boolean_info(): handle OB=!OL and OL=!OB here (when the bit is being set) [#3080]

- drivers/usbhid-ups.c: upsdrv_initups(): upsdebugx() at verbosity 0 (always) if there are too few mappings known or used via USB HID [#3082]

- drivers/apc-hid.c, NEWS.adoc, scripts/upower/95-upower-hid.hwdb: declare support for APC 0x051d:0x0005 as a USB HID device [#3047]

- drivers/nutdrv_atcl_usb.c: upsdrv_initups() failure mode: suggest using nutdrv_qx(8) or blazer_usb(8) driver instead [#1021, #2152 follow-up]

- data/driver.list.in: add Voltronic Power USB ID 0665:5161 as nutdrv_qx supported (per driver source comments)

- data/driver.list.in: add "Various" USB interface chip names or IDs 0665:5161 and 0001:0000 as nutdrv_qx or rarely nutdrv_atcl_usb supported

- data/driver.list.in: add Salicru SPS 500 ONE USB ID 0665:5161 as nutdrv_qx supported [#3079]

- data/driver.list.in: add Belkin USB ID 0665:5161 as nutdrv_qx supported (per driver source comments)

- drivers/usbhid-ups.c: upsdrv_initups(): fix variable name for the snprintf() return value [#3083]

- drivers/usbhid-ups.c: upsdrv_initups(): also report how many hid2nut mappings are known vs. how many were used using USB HID [#3082]

- drivers/usbhid-ups.c: upsdrv_initups(): generalize the report of unused report descriptor entries to "completely unused" vs. "partially unused" (e.g. Feature vs Input) [#3082]

- drivers/usbhid-ups.c, drivers/hidtypes.h, NEWS.adoc: check if the subdriver code (mappings) and the device report sit together well [#3082]

- drivers/usbhid-ups.c: callback(): update logged message that not only Manufacturer, but possibly an explicit Model, may be not-supported

- NEWS.adoc: update about usbhid-ups suggestion to iterate "subdriver" values

- drivers/usbhid-ups.c: upsdrv_initups(): check that if no ups_status bit was set, suggest that wrong "subdriver" is used then [#3080, #3061, #2058]

- drivers/usbhid-ups.c: callback(): add log messages to stress that the dump of Report Descriptor actually seen, and its later hid_ups_walk() with a particular subdriver, may not match up well [#3061]

- drivers/usbhid-ups.c: upsdrv_initups(): add log messages to help trace logical progress through the code [#3061]

- drivers/usbhid-ups.c: possibly_supported(): suggest iterating "subdriver" values [#2058]

- NEWS.adoc, drivers/usbhid-ups.c, drivers/usbhid-ups.h: drivers/usbhid-ups.c: do not assume that "!online"=="offline" [#3080]

- drivers/usbhid-ups.c: fix indentation (cosmetic)

- drivers/usbhid-ups.c: ups_status_set(): revise code markup/style

2.20   2025-09-07 Jim Klimov <jimklimov+nut@gmail.com>

- drivers/mge-hid.c, NEWS.adoc: Improved support for Eaton 5S1500LCD (US version). [#2380]

- NEWS.adoc, docs/config-prereqs.txt, docs/configure.txt, docs/developers.txt, docs/download.txt, docs/maintainer-guide.txt, docs/man/apcsmart.txt, docs/man/belkin.txt, docs/man/genericups.txt, docs/man/mge-shut.txt, docs/man/upsdrvsvcctl.txt, docs/man/upsmon.conf.txt, docs/man/upssched.conf.txt, docs/man/upsset.cgi.txt, docs/man/usbhid-ups.txt, docs/new-drivers.txt, docs/outlets.txt, docs/packager-guide.txt, docs/scheduling.txt, scripts/Windows/README.adoc, scripts/external_apis/enphase/READ Reword multiple docs to avoid admonition blocks with invalid sentences

- docs/Makefile.am: spellcheck: help avoid admonition blocks with invalid sentences (after rendering as a box)

- docs/download.txt: revise markup for Windows downloads

- docs/download.txt: revise info about/from Repology

- docs/download.txt: revise note about official releases

- docs/download.txt: revise part about source archives from github

2.21   2025-09-06 desertwitch <24509509+desertwitch@users.noreply.github.com>

- drivers/nutdrv_qx_megatec.c: trim battery.runtime variable

2.22   2025-09-05 Jim Klimov <jimklimov+nut@gmail.com>

- .github/workflows/codeql.yml: fix syntax for codeql queries

2.23   2025-09-04 Jim Klimov <jimklimov+nut@gmail.com>

- .github/workflows/codeql.yml: Revert ".github/workflows/codeql.yml: use modern "language" ID "c-cpp"" This reverts commit 972358ec7663007419f0b1926d30f9f5a494d910.

- .github/workflows/codeql.yml: enable ccache per scenario, follow experience from wmnut#24

- .github/workflows/codeql.yml: enable more codeql queries

- .github/workflows/codeql.yml: relocate comments, drop dead code

- .github/workflows/codeql.yml: avoid man-db update in APT actions

- .github/workflows/codeql.yml: report the location and version of compiler used

- .github/workflows/codeql.yml: add a way to vary matrix.build-mode for codeql

- .github/workflows/codeql.yml: only init CodeQL just before the actual build, not before other filesystem changes

- .github/workflows/codeql.yml: use modern "language" ID "c-cpp" "c" and "cpp" are older names, now aliases to this one

- .github/workflows/codeql.yml: revise markup and comments of the matrix definition

- .github/workflows/codeql.yml: Allow manually running the action, e.g. if disabled after some quietness in the source

2.24   2025-09-03 Laurent Bigonville <bigon@bigon.be>

- docs/Makefile.am: Fix installation of the pdf files

2.25   2025-09-03 Jim Klimov <jimklimov+nut@gmail.com>

- docs/developers.txt: clarify use of "void" argument lists

2.26   2025-09-02 Jim Klimov <jimklimov+nut@gmail.com>

- tools/nut-usbinfo.pl: update comment

- tools/nut-usbinfo.pl: use binmode for written files to have same markup regardless of builder OS

- ci_build.sh: when reporting host envvars, use backslashes to facilitate copy-paste reproduction of CI builds

- ci_build.sh: when reporting CONFIGURING NUT, use backslashes to facilitate copy-paste reproduction of CI builds

- configure.ac, docs/configure.txt, m4/nut_check_python.m4, NEWS.adoc: allow to configure Python module install location more generally [#3062]

- scripts/python/app/NUT-Monitor-py2gtk2.in, scripts/python/app/NUT-Monitor-py3qt5.in, scripts/python/app/NUT-Monitor-py3qt6.in scripts/python/app/NUT-Monitor-py*.in: try to honour a customized PyNUT(Client) module path [#3062]

2.27   2025-09-02 Hector Martin <marcan@marcan.st>

- drivers/apc_modbus.c: apc_modbus: Fix invalid memory access for USB vendor/product/serial

2.28   2025-08-31 Jim Klimov <jimklimov+nut@gmail.com>

- configure.ac, docs/configure.txt, m4/nut_check_python.m4, NEWS.adoc: allow to configure PyNUT(Client) install location [#3062]

2.29   2025-08-09 Colin Dean <colindean@users.noreply.github.com>

- docs/download.txt, docs/nut.dict: Include macOS with Mac OS X Apple shortened the name to "OS X" in 2011 and then changed it to "macOS" in 2016 to align with the branding of Apple's other operating systems. https://en.wikipedia.org/w/-index.php?title=MacOS&oldid=1304698699

- docs/download.txt: Update download.txt with link to Homebrew formula for macOS nut has been in Homebrew since 2014.

2.30   2025-08-08 Jim Klimov <jimklimov+nut@gmail.com>

- NEWS.adoc, UPGRADING.adoc: prepare for v2.8.5.x iterations

- NEWS.adoc, UPGRADING.adoc, docs/docinfo.xml.in: Revert "NEWS.adoc, UPGRADING.adoc, docs/docinfo.xml.in: finalize text before NUT v2.8.4 release" This reverts commit 8f14140bbc395baa108bd06a9f664bd0a6f00bc8.

- tools/gitlog2version.sh: for development, set fallback NUT_VERSION_DEFAULT=2.8.4.1

- configure.ac: for now do not require (pre-)release tagged commits to build changelog by default - keep doing it on systems where we can though

- configure.ac: rephrase the message about --enable-docs-changelog [#3019, #3053]

- ci_build.sh: limit default "configure --enable-docs-changelog=no" for CI builds on systems where CANBUILD_DOCS_ALL!=yes

- ci_build.sh: add support for WITH_CHANGELOG envvar to pass down as configure --enable-docs-changelog=. . .

- .github/workflows/codeql.yml: configure --disable-docs-changelog in CI builds

- configure.ac: for (pre-)release builds we default nut_enable_docs_changelog auto⇒yes - do so loudly, and default --with-doc man⇒auto as well for all builds to have a chance to try this

- docs/maintainer-guide.txt: update the guide

- docs/maintainer-guide.txt: commit that in tools/gitlog2version.sh: for development, set fallback NUT_VERSION_DEFAULT=X.Y.Z.1

- docs/maintainer-guide.txt: remind to double-check that release NUT_VERSION_DEFAULT in tools/gitlog2version.sh must be a triplet

2.31   2024-01-31 Charles Lepple <clepple+nut@gmail.com>

- drivers/tripplite_usb.c: add battery.charge for Protocol 3017 Reference: #2258

2.32   2024-01-25 Charles Lepple <clepple+nut@gmail.com>

- drivers/tripplite_usb.c: Protocol 3017 adjustments Reference: #2258 SMX1200XLHG is 230V / 50 Hz