

Thermoguard Main Program

Note: Thermoguard Report version history is located at the end of this document.

2.96.4

July 18, 2021

- added: "Licensing" tab: New checkbox "Use ARP for License Check": If checked, Thermoguard first checks if the controller is pingable, then retrieves the MAC of the controller by resolving it from the IP address using ARP (instead of reading the inventory data via UDP/Port 8513 resp. HTTP)
- added: Single sensor configuration|Sensor description: New customizable property "MaxRetries" (0..9)
- added: Monitor: Refresh log list after each output

2.96.3

June 3, 2021

- added: Write time at which "Poll all" was completed to registry (only if started with admin credentials) key: HKLM\SOFTWARE\WOW6432Node\Thermoguard\LastPollTerminatedAt sample value: "2021-05-13 18:24:06"

-Important memory leak fix for [Thermoguard Report](#)

2.96.2

April 24, 2021

- fixed: Windows 10 20H2 and Thermoguard running as service: service does not work if last selected sensor's index >1
- added: Configuration|Mail settings|Send test mail(s) button: Added line "8-bit-Test: [°]" to mailbody for test mail via GSM modem (only if 8-bit option is set)

2.96.1

April 19, 2021

- added: Some delays when sending SMS via GSM Modem (more reliable w/ some systems)
- changed: Captions CAM|Relais Interface: violation => alarm
- changed: CAM: Renamed passed parameters [LoLimitVal:]=>[LoLimit:] and [HiLimitDeg:]=>[HiLimit:]
- fixed: CIM-parameter trial counter passed after reset to 0, now correct value before reset
- added: new "CIMafterPoll" executed after complete poll; see separate documentation TG CIM-de.pdf
- added: Support of own parameters for CIM program in registry value "CIMParameters"
- added: **The last polled value of a sensor is written to file \tgc\[sensorlabel].tcv (directory \tgc created on startup automatically)**
- changed: Setup: updated file versions of ComDlg32.ocx, mscomct2.ocx, mscomctl.ocx, MSComm32.ocx, MSFlxGrd.ocx, MSWINSCK.ocx and TabCtl32.ocx
- changed: Setup: changed "replacesameversion" => "ignoreversion"
- added: Setup: Check other apps using file EnDeCrypt.dll and output more sensible message to close them
- changed: Monitor, "Sensor details" tab: More space for retry counter in "Status information" frame, because with active option "Reset to 0 if measured value reenters valid range" the counter can exceed 99. If it reaches >1000, ">1k" is displayed here

2.96.0

January 20, 2021

- removed: Setup: "... update all Thermoguard Report Clients as well" confirmation dialog
 - added: Update old "Documents and Settings.." paths in TGuard.scx on start automatically
 - added: Setup: 2 new TTS (TextToSpeech) default template files for TGReport: DefaultLowAlarm.tgTTS and DefaultHighAlarm.tgTTS (in \ProgramData...\MM)
 - fixed: Setup: TGuard.scx and TGuard.scxtp1 modified
 - changed: File filter for sound file selection extended with *.tgTTS
- Thermoguard Report: Substantial changes, version history see below**

2.95.5

October 27, 2020

(unreleased customer version with EnDeCrypt.dll V2.0)

2.95.4

June 26, 2020

- fixed: **Thermoguard** running as a service "does nothing" if running on Windows 10, Version 2004, Build 19041.329

- added: GSM modem: several diagnostic commands to "Test modem+PIN":
AT+CSQ
AT+CREG=2 / AT+CREG?
only if AT+CGMI reported Telit engine:
at#servinfo
at#rfsts
at#moni
AT+COPS?
AT+WS46?
- fixed: GSM modem: If CGATT=1 fails, SMS dispatch fails. Now, before sending SMS, command AT+CGATT=1 is no longer issued: Either the modem is attached to GPRS anyway after powered on and registered with provider network or if CGATT=1 fails (or *not* attached after powered on, e.g. an old Siemens MC35i), the SMS will be send nevertheless via GSM.
- fixed: AC2xPn, FW1.40 and <3 decimal places configured: "invalid value" due to 1 or 2 leading space(s)
- fixed: "(not licensed)" => "(not licensed)"

2.95.3

June 9, 2020

(unreleased customer version with CGATT=1 ignored for GSM operation)

2.95.2

February 16, 2020

- changed: Single sensor configuration|Calibration: All UpDn controls now in/decreased 0.1 steps (Possibility to hold down mouse button for 1.0 steps unchanged)
- added: Single sensor configuration|Calibration: "Poll sensor" to retrieve current sensor value independently of service, administrator credentials are *not* required
- added: Log message on frmTray QueryUnload: Enables to document the forced termination (on user logout, restart) of the program. In these cases, message xx >.., but not xx <.. will be logged.

2.95.1

November 10, 2019

- changed: Setup: Using InnoSetup 6.03 now (with "modern" style, dialogs are slightly resizable now) Windows 2000, XP, and Server 2003 are no longer supported.
- fixed: Monitor: Single sensor poll button enabled though sensor deactivated (introd. 2.94.7)
- fixed: Error when reading LastStart/Stop from TGuard.ini with custom Date/Time format
- fixed: Runtime error using "Punjab (Pakistan)" and "Punjab (India)" region settings (unsupported, but at least error caught)

[Thermoguard Report: Substantial changes, version history see below](#)

2.94.8

May 13, 2019

- added: "Scan local network": Support for SCLes

2.94.7

February 23, 2019

- changed: If a sensor is operating in (obsolete) "Switch" mode, its AOF "Sensor Missing" will not be fired during "non-alarm hours" although option "Fire AOF during 'non-alarm hours'" is set.
- added: Monitor window: If service is running, Poll buttons disabled and hint "Service polls - Manual poll disabled" is visible

V 2.94 (version number unchanged)

January 16, 2019

- fixed: TGDecrypt: If Source path is a root directory and more than one file selected => file selection dialog never shows up again

[Thermoguard Report version history see below](#)

V 2.94 (version number unchanged)

November 20, 2018

- changed: New code signing certificate
- changed: Removed documentation for Relay Interface, GSM modem and Alarm Relay Channel from setup

V 2.94 (version number unchanged)

August 6, 2018

- fixed: Exception when running version > 2.94 from February 3, 2018 on Windows XP
 - added: "Scan local network": Support for HF1P+
- [Thermoguard Report version history see below](#)

V 2.94 (version number unchanged)

July 23, 2018

- added: "Scan local network": Support for AC2aPn, AC2vPn and SC2eP

[Thermoguard Report version history see below](#)

V 2.94 (version number unchanged)

May 29, 2018

- fixed: Retries on sending SMS via GSM Modem not working correctly after setting COM-Parameters throws error "Could not set comm state, there may be ..."

V 2.94 (version number unchanged)

April 8, 2018

- fixed: When re-reading the *.scx, meta data (sensor specific runtime counters and flags which are not saved in the *.scx) are not synchronized resulting in unexpected behaviour on depending functions when sensor list is changed (change of order, inserted or deleted sensors etc.). For example a "Mail, if Event Revoked" is sent for a sensor which never entered Event state.
- added: While polling (service or interactive instance) sensor configuration changes are not allowed.
- added: If service is running a hint on monitor's "Sensor details" tab is shown explaining that the displayed data is not reflecting the data of the service instance.
- fixed: Service running and all sensors are deleted in interactive session => "(NO SENSOR DEFINED - NOTHING TO POLL)"-message is put out. => Adding again one or more sensors => service still outputs "Nothing to poll", because sensorcount=0 remains "latched".
- fixed: Configuration\Miscellaneous\Design: changing option deletes RUNASADMIN flag in registry.

V 2.94

February 3, 2018

- added: Configuration\Global settings\E-mail recipient(s): new option "Use "E-mail recipient(s)" ... for all sensors ***additionally*** to their specific recipient(s)
- changed: SMTP: Sending "EHLO" instead of "HELO"
- added: Configuration\Sensor configuration: Implemented **Search feature**
- added: Configuration\Sensor configuration\Context menu: Redesigned, and:
 - File selection dialog for "Export as *.txt"
 - New feature "Export as *.scxtpl"**
 - New feature "Import from *.scxtpl"**

V 2.93 (version number unchanged)

June 27, 2017

- added: SC8eP Support for "Scan local network"
- changed: Sensor configuration: "Test CAM" button with Mode "Violation => OFF, Good => ON" now switches relay OFF (if it's not hold by another sensor). Before, "Test CAM" treated this mode like the two "Violation => ON, ..." modes.

V 2.93 (version number unchanged)

March 18, 2017

- fixed: for Variable limits support: "Type mismatch" with region setting other than German

V 2.93 (version number unchanged)

February 16, 2017

- added: new option "Reset Retry counter to 0 if measured value reenters valid range (else on alarm); added document with different alarm behavior depending on settings to CD and online (German only)

[Thermoguard Report version history see below](#)

V 2.93 (version number unchanged)

December 18, 2016

- added: Variable limits support (see separate documentation)
- changed: System manual: revised documentation for "Configuring AC2nP"

[Thermoguard Report version history see below](#)

V 2.93

October 1, 2016

-fixed: "Modal form active" error message when a popup window on limit violation should show and configuration window has been closed before poll. Introduced with 2.92/April 3: *Monitor window open and a modal window (e.g. "About")...*

[Thermoguard Report version history](#) [see below](#)

V 2.92 (version number unchanged)

July 3, 2016

- fixed: If an HC1/HR1 follows an AC2xP in the sensor list, it is treated erroneously as an AC2 resulting in 3 retries and FAIL (introduced w/ 2.92 Skip HTTP header fix)
- fixed: Poll: Sporadically a retry is performed (message "RETRY #1 (no or wrong data received)") although extended logging shows correct data (SocketLn:<correct>).
- changed: Data recognition for HC1/HR1 redesigned

V 2.92 (version number unchanged)

April 20, 2016

changes for [Thermoguard Report](#) only - [Thermoguard Report version history](#) see below

V 2.92

April 3, 2016

- added: Baudrate for GSM operation configurable (may be set to 115.200 with certain new Mainboards)
- fixed: Eliminate custom Windows Time formats AM symbol and PM symbol when writing dates back to TGuard.ini (Win 10 sets "vorm." and "nachm." for German (Switzerland) region settings now which resulted in a "type mismatch error" on Thermoguard start
- fixed: AC2xP: Skip HTTP header information to extract correct unit/value from Controller's answer ("Get HTTP header enable" option should be OFF in controller's native configuration though)
- added: System manual: Added alternative illustration of wiring scheme for SC2e/SC8e
- added: HQ1P Support for "Scan local network"
- fixed: Monitor window open and a modal window (e.g. "About"). Windows taskbar icon => "Close all windows" => Runtime error 204

[Thermoguard Report version history](#) see below

V 2.91

August 8, 2015

- added: Possibility to backup TGuard.ini and TGuard.scx to a custom path automatically on configuration changes.
- added: Sensor Configuration/"CAM settings" tab: New option under "Trigger COM Relais Interface": violation => OFF, good => ON
Associated chapter "Configuration sample" added to *TG Relay Interface-en.pdf*
- added: New extended sensor configuration option "##MailSubject=x" to overcome 50 character limit (supporting all macros)
- added: Description of extended sensor configuration to System manual 2.91
- added: Sensor configuration: New variable %lim for mail settings: either %lo or %hi depending on Low or High limit violation
- added: Context menu item captions of main program: If service is running: hint that closing Thermoguard will not stop the service "Close Thermog." instead of "Shut down TG" (German: "schließen" instead of "beenden")
- added: Added above Note to Program termination dialog, if service is running analogously
- changed: Sensor Configuration/"Source:" captions "HM1 Temperature" => "HM1/HF1 Temperature" and "HM1 Humidity" => "HM1/HF1 Humidity"
- fixed: Poll daily/weekly: Poll performed twice if short
- fixed: Sensor Configuration/"CAM settings" tab: captions of "Execution trigger..." when Alarm Relay Channel mode is active depending on "Normally closed" or "Normally open" setting
- fixed: Sensor Configuration/Alarm Relay Channel mode: When switching to "CAM settings" tab, wiring diagram still visible
- added: Sensor Configuration: When switching between Alarm Relay Channel mode and standard sensor operation and CAM is enabled, a message box with information on CAM settings execution trigger option pops up

V 2.90 (version number unchanged)

March 22, 2015

- added: (internal only) HF1P support for test report printout
- [Thermoguard Report version history](#) see below

V 2.90 (version number unchanged)

November 12, 2014

- added: New extended sensor configuration in description field supported: ##RelayPulse=x where x is a number in range 500..65535 setting the interval length in milliseconds for Relay Interface "Pulse" Mode; example: ##RelayPulse=2000 => relay is energized for 2 seconds.

V 2.90 (version number unchanged)

October 10, 2014

- changed: Input fields on "Mail" and "Service" tabs (Heartbeat) resize with window now
- added: Single sensor configuration: Extended sensor configuration in description field supported: Format is ##Key=MyData. Right now, ##AOFSubject=MySubject is available, where %lbl, %loc and %aof can be used in MySubject as placeholders for sensor label, location and cause of AOF.

V 2.90 (version number unchanged)

October 2, 2014

- changed: Built with renewed code signing certificate

V 2.90 (version number unchanged)

July 16, 2014

- added: Support for NETIO4 device

V 2.90 (version number unchanged)

April 26, 2014

- changed: Service will not be uninstalled on update. Therefore no need to re-enter svc account credentials
- added: Alarm Relay Channel allows configuration as NC (Normally closed) or NO (Normally open) contact. An Alarm is now called "RelAlarm" (instead of "Open") and "RelOK" for normal condition (instead of "Closed"). See updated documentation TG Alarm Relay Channel-en.pdf
- added: HF1P support

V 2.90 (version number unchanged)

February 23, 2014

- fixed: If TG is busy polling around point of time where heartbeat mail has to be sent, heartbeat mail is "missed" and none will be sent from then on until program restart.
- fixed: In Log-Message "HIGH|LOW LIMIT VIOLATED//Sensor #001 of #xxx/Label/Loc... /Retry=4/Max.=X" value for X does not take a possible Global Retry setting into account; now it does
- added: *.tg "Branch Support"
- changed: Integrated Alarm Relay Channel support: Complete redesign
- added: lo/hi limits are appended to data in *.tg files, so that TGReport can show formerly set limits other than the current ones.
- added: Single Sensor configuration:
New option "Mail if Event revoked" (lo/hi and as global setting)
- fixed: Leading and trailing space characters in a sensor label are saved. But TGReport ignores them. Now, leading and trailing spaces are not saved.
- fixed: Scan: Restored SCx counter (right of Scan button, removed V2.62)
- added: change log in \log\chg directory logs only (CHG) events.
- changed: Sensor list: Inserting and deleting a sensor and altering sort reclassified from (INF) to (CHG)
- fixed: General settings|Holidays dialog: With en region settings, monthview control is cut off. Now, the dialog width is set dependent on width of monthview control which depends on system's region setting (en is wider than de)
- changed: Design "beautified" for "XP style" theme: force flat comboboxes, unified, more consistent color scheme for checkboxes serving as "switches for frames", etc.

V 2.80

October 6, 2013

- added: Integrated Alarm Relay Channel support (see new separate documentation)
- added: Configuration|Sensor Configuration: SHIFT+Insert or right mouse button click on "Insert": Select a sensor from a list of templates from file TGuard.scx.tpl. A sample.tpl is installed by setup
- changed: No need to restart service if sensor data changed. Service reads TGuard.scx before every poll
- added: Setup: New "Run this program as administrator" option for TGuard.exe (Current user)
- added: "Flag file" TGuardCfgAccess.~~~ created in data directory if configuration is active.
- changed: Button caption:
German: "Reset" => "Rückg."
English: "Reset" => "Undo"
- fixed: Single Sensor Configuration Quick browsing (e.g. hold SHIFT + RIGHT key) triggers an error if about >700 sensors in list.
- removed: QMon-Feature

V 2.70 (version number unchanged)

January 11, 2013

- added: Configuration|Assign IP|Button disabled showing hint "Admin privileges required!" if program is started without admin privileges
- changed: 10 retries when opening COM Port for GSM Modem / COM port closed not before end of all AT command sequences (fixes problems when GSM Modem is hooked via USB/driver to some systems)

V 2.70 (version number unchanged)

October 10, 2012

- added: All executables are digitally signed now

V 2.70

September 22, 2012

- changed: internal handling of Tguard.ini settings: No file I/O operations on Tguard.ini while polling
- fixed: License information may contain empty field(s) now (e.g. if "Name" is not set)
- added: CIM - Custom Interface Module for OEM-Integrators
- changed: Port 8512 not needed any longer
- added: Scan local network: Support of models AC2aP and AC2vP and HC1L
- changed: TGRelIF and GSM COM Port setting: max Port# is 16 (17..255 not supported by MSCOMM32.OCX)
- fixed: It is possible to set two different sensor names "sensor" and "Sensor". Because Thermoguard Report searches for *.tg files case insensitively, this may not be allowed
- fixed: ", " not longer valid in sensor name (used as field separator in TGReport tgl file)
- fixed: Setup: Service is stopped/removed/reinstalled although Main component is not checked
- changed: Setup: Removed shortcuts for quick launch bar (not visible in windows 7)
- changed: Setup: Removed "Launch" options
- added: Setup: New Option for Firewall rule
- fixed: Monitor and Configuration: Position of several buttons (e.g. "OK" in monitor) not correct
- changed: CAM Test/Append Thermoguard parameters: Now, "real" sensor parameters are used instead of "parameter 1" etc.; the "measured value" is set to 0.0
- changed: TGRelIF redesigned:
 - + Multi-COM Support (1..16): COM-PORT setting now sensor-specific => i.e. up to 16 Relaisinterfaces supported now!
 - + NLS support
 - + "iniless" mode
- fixed: TGRelIF: if "pulse" sent shortly twice, relay is not released
- changed: These two log messages now only appear with active advanced logging:
 - "External program x not activated, skipped."
 - "COM Relay Interface trigger not activated, skipped."
- changed: svcHlp.dll code (set logonasservice right) integrated, dll removed
- added: [Thermoguard Report](#): Redesigned and new Visual Mode
- changed: Documentation: Relay Interface and GSM Modem come with their own PDF now
- changed: Shortcuts TGReport => TG Report etc.
- changed: Only German documentation is installed with German setup; vice versa for english
- added: New CD autorun splash screen

V 2.67

December 3, 2010

changes for [Thermoguard Report](#) only - [Thermoguard Report version history](#) see below

V 2.66

September 13, 2010

- added: Scan local network handles UDP responses more flexible.
- changed: Documentation:
 - Chapter GSM Modem Operation replaced for new GSM Modem model in ISO mounting case.
 - => [Thermoguard Report: New Annotation Editor](#)

V 2.65

April 10, 2010

- improved: Shared File access when multiple Thermoguard Report instances access *.tg files. Changes in Thermoguard main program as well as Thermoguard Report! Please update both.
- changed: Mail settings:
 - If number of "Name" entries does not equal number of corresponding "E-mail" entries for Main recipients or Ccs there is just a warning, but e-mail is sent though (the e-mail address is set as the name in this case).
 - With V2.64, it may happen that no e-mail is sent for the correctly entered main recipient(s) if

e.g. there is a CcName entry, but no CcE-mail entry.

Leading or trailing ";" and/or spaces in name and/or e-mail fields will now be removed when processed. Multiple ";" between entries will be replaced with a single ";".

- fixed: Data file settings: If checkbox "Alarm e-mail on *.tg write failure" is not checked and field "E-mail" is not empty, an e-mail is sent, but should not.
- fixed: Scan local network: If list is sorted so that "?" entries appear at top of the list, exporting the list using right mouse click causes a runtime error.
- fixed: Scan local network: Records of exported file TGuardSCx.txt contain redundant TAB character at end of line.
- changed: Scan local network: Redesigned: Faster (now 1 base pass instead of 2). New models show 4digit platform code now as their "Base-HW".
- changed: Scan local network: It is possible now to assign an IP "0.0.0.0" also if other devices with "0.0.0.0" are present (no "Address already in use" rejection in this case).
- added: Log files: Append program version in first logged line on file change ("Log file would exceed... (Version...)").
- added: Sensor configuration, Basic settings:
Three new "sources" supported for upcoming HMI model.
- changed: Sensor configuration, Basic settings/Alarm settings:
Now, the smallest/largest supported values are set on the "Alarm settings" tab for Low/High limits depending on the selected source (e.g. -200°C..+650°C for "SC1" or -40°C..+80°C for "HCl Temperature").
- changed: CAM TG parameter #2 now always set to "[Current value:]" instead of either "[Current temperature:]" or "[Current humidity:]" which is not appropriate for other analog units.

V 2.64

February 28, 2010

- added: TLS support for e-mail (e.g. for googlemail).
- removed: Test button for authentication
- added: Mismatch error issued if number of "Name" entries does not equal number of corresponding "E-mail" entries (for Main recipients as well as cc pairs).
- fixed: Sensor label may not contain character "_" (causes malfunction when reading *.tg files in TGReport, if a sensor "abc" and a sensor "abc_x" exist). Applies to location name and log prefix as well (i.e. keyboard input of "_" in configuration text fields is rejected).
- added: Message box output is written to log file now.
- changed: Naming (sample): "Relay IF port #" to "Relay Interface relay#"
- improved: CAM: If a relay of the Relay Interface has been switched ON by e.g. sensor #001, sensor #002 will not switch it OFF. TGuard.ini keeps track of which sensor holds which of the 8 relays in ON status.

TGRelIF 2.64

- added: TGRelIF utility now displays which sensor has switched on which relay

V 2.63

January 10, 2010

- changed: Internal changes only, but important changes for Thermoguard Report, see [here](#)

V 2.62

October 4, 2009

- added: Built-in support for Koukaam NetIO-230A Internet Power Controller
- fixed: Sensor configuration: if sensor list is sorted by IP address column, numerical order is incorrect.
- changed: Scan local network redesigned:
 - + Faster
 - + List is disabled during "Details" scan (if option "Include details" is checked)
 - + Support of new models and improved identification of old models (e.g. "WTH")
 - + Removed BIOS column
 - + Note for SHFT+F1 (depending on model)
 - + Added: Controller list can be sorted by clicking column headers
 - + IP assignment: Ability to change IP-address even if it is not 0.0.0.0 (if supported by controller)
 - + IP assignment: Button labeled according to situation:
"no selection", "Assign ...", "wrong format" or "Address already in use"
 - + Debug output revised
- added: Configuration/Data File Settings: New option: "Alarm e-mail on *.tg write failure"
- added: Licensing: Height of "Licensed MAC addresses" list now depending on height of configuration window

V 2.61 (version number unchanged)

March 1, 2009

-fixed: Program fails to start with Region settings "Italian (Italy)"

V 2.61 (version number unchanged)

December 30, 2008

-added: English system manual
-added: English TGReport manual
-changed: German manuals: minor changes
-changed: en NLS: relais => relay
-changed: en NLS: SCx => SCn

V 2.61

December 9, 2008

-fixed: CTRL+DblClick on sensor list causes runtime error
-changed: Scan local network: 12.8=>"SC1e-H",12.14=>"SC1a-N", 12.17=>"HM1" (new), "AC2a"=> "AC2aa", "AC2v"=>"AC2vv"
-changed: AC2 Port1/2: removed need to append "#" to unit (introduced in 2.60)
-added: New source "AC2 /Single3"

V 2.60

June 10, 2008

-added: New Source: Text file
-added: Three retries when writing to *.tg failed (250ms delay in between)
-added: Vista 256px Icon support
-added: XPStyle Support, may be switched off optionally under "Miscellaneous"
-added: Build date is shown in **Thermoguard START** log message
-added: Configuration/General settings: "Next poll at" shows "Guard halted" analogous to Monitor
-added: Sensor config./Basic settings: new buttons for "Enable" and "Write data to *.tg file"
-added: 7bit/8bit option for GSM modem operation
-added: Scan local network: Option "Verbose (slower)"
-added: The setup stops and removes the TG service, if installed and reinstalls and restarts it, if it was running. This ensures that a new service version is used in case an update is installed in a different target directory than the version currently installed.
If reinstalling the user may enter a specific username/password for the service account.
-added: If the service is running, stopping (and restarting) the Guard in Monitor will stop (and restart) the service as well
-added/changed: Now, any defined holidays override not only the "non alarm hours" of the general alarmhour settings, but also "non alarm hours" which may be set for any individual sensor. Added new "holiday"-button on Single sensor configuration dialog/"Alarm settings" tab (providing the same functionality as the one under Configuration/"General settings" tab).
-added: Logging: Manual poll of a single sensor if it's in AOF state: User confirmation of revoking AOF is logged analogous to Manual poll of all sensors.
-added: If installing the service the user may enter a specific user for the service account.
-changed: Logging: "Polling sensor x of y...": When source is simulation or of new type "text file" no IP is included. At the end of the line, output of the source equals the strings in Sensor config./Basic settings/"Source" now
-changed: Sensor config./Basic settings: "SCx Port"=> "Source" (044) resp. "Quelle" (049)
-changed: Do not send heartbeat mail if Guard is halted
-changed: Alarm popup windows set to "stay on top"
-changed: Scan local network: If the HTTP-version poll of a SCx fails, there is no longer an UDP/HTTP mismatch!.." error (resulting in an empty controller list), but for each affected SC the new error message "GET /Version failed (3s timeout)!" is issued and the list will always be populated.
-changed: TGuard can not be started twice any longer
-changed: Setup revised:
+ using Inno Setup V5.2.3
+ no more TGSvcHlp
+ more detailed handling of accessed files
-changed: New file storage location structure for Vista, configuration data now resides in %ALLUSERS-PROFILE%\Thermoguard Data
-changed: Program- and configuration paths are written to the log file (but not to the monitor)
-changed: Flag SvcPolls now saved to TGuard.ini (PollBySvcRuns=0/1), not in the registry as before
-changed: Monitor/Manual cancel of a poll:
No need to wait until all 4 connection retries are done after pressing "Cancel". Now, "cancel" interrupts immediately and generates a "FAIL" for this sensor, which is written to the log, sample: "16.10.2007 20:41:22 FAIL (Canceled by user)". However, it does not trigger

an AOF though. Additionally even after connected to a HCl the retrieval of a value can be canceled without waiting for the 8s default timeout.
Sample log message: "16.10.2007 20:41:22 FAIL (Canceled by user while getting value)".
This is convenient during hardware setup and testing phase especially, e.g. if accidentally a wrong IP has been entered etc.

- changed: The icon of the extended logging line "Next poll calculated" is (+) now instead of (i)
- changed: Sound support redesigned (did not work with Vista any longer):
 - + removed: msdxm.ocx
 - + removed: sliders and mute checkboxes from miscellaneous tab
 - + removed: mp3 support
 - + New log message "The user stopped the WAV replay manually."
- changed: Removed: stdole2.tlb and oleaut32.dll selfregistration (for Vista)
- changed: file associations for *.sim und *.tg will be set already by setup
- fixed: Although "Write Log file" is disabled, Start and End of Thermoguard is logged to logfile
- fixed: German Logging for Relais Interface:
In the two Log-Messages ...
"RelIF Auslösung, Modus [M]: 700ms Impuls an Relais Interface Port #[P] gesendet." and
"RelIF Auslösung, Modus [M]: Relais Interface Port #[P] eingeschaltet."
[P] equals [M] (0..2) instead showing the independent Relais-Port-Number (1..8)
- fixed: SMTP-Mail: MAIL FROM:und RCPT TO: data now enclosed by "<>"
- fixed: Case 1)
SensorA: Enable calibration=>Enable Switch
SensorB: Disable calibration and Switch
If you browse now from A to B, B's calibration input fields are activated, but shouldn't
Case 2)
SensorA: Disable calibration=>Enable Switch
SensorB: Enable calibration, disable Switch
If you browse now from A to B, B's calibration input fields are not activated, but should
- fixed: timer problem around midnight
- fixed: NLS: c.WsPOP3ConnFail not translated
- fixed: Runtime error when cursor is positioned in Lo or High AlarmLimit input field and ESC pressed
- fixed: Runtime error if a non-executable file is selected as a CAM and trying to execute this file after alarm is triggered.
- fixed: If extended logging active and Guard halted, the debug message "Next poll calculated ..." is generated, but should not.
(If the logpath is not available while the Guard is halted, the attempt to log anything rises an error otherwise)
- fixed: Sensor list: Doubleclick on line without a sensor entry=>single sensor configuration window shows up => close this window => execute "insert" or "qmon" => runtime error
- fixed: Doubleclick on an empty sensor list => (wrong) message "User-defined sort order active" shows up => yes => runtime error
- fixed: NLS (German): "zu Datei schreiben" => "in Datei schreiben"
- fixed: Frame of Poll Indicator not resized correctly on fast machines

TGDecrypt 2.60

- added: XPStyle Support
- added: Vista 256px Icon support
- changed: Supporting new configuration default path structure
- fixed: START-Button not enabled, if long *.log- or *.tg-paths displayed in the shortened notation (including "...")

TGRelIF 2.60

- added: XPStyle Support
- added: Vista 256px Icon support
- added: /CfgDataDir:[path] command line switch
- added: Display current configuration file name

V 2.52

December 9, 2006

- fixed: runtime error #13, when polling Hx1, which is set to a baudrate <> 4800
- added: support for SC hardware platform 12.14+12.15

V 2.51

October 15, 2006

- fixed: If the TG service account has no write permission on the application path (but on the log and *.tg path) then the logfile grows rapidly when trying to change the logfile if max logfile size exceeded (trying to write the new logfile extension to TGuard.ini). Now, the current logfile will not grow, but a warning message will be written to it.
- fixed: (internal:) configuration: service state buttons refreshed if svc running and configuration

- changed (confirm svc restart) although service tab was not currently active.
- added: Scan local network: SC2e/SC8e support
- changed: Program version is not longer displayed in the statusline of monitor and configur. window.
- changed: GSM support refactored.
- added: GSM support in english documentation

V 2.50

August 9, 2006

- added: Direct SMS support via GPRS modem (configuration/Mail settings tab) for scenarios without a network connection
- added: Miscellaneous tab: new option "Fire AOF during 'non-alarm hours'". If this option is changed all AOFs are revoked
- fixed: SC1e needed "SC2 or SC8 Port1" setting, setting "SC1" did not work ("Sensor missing") (introduced V2.40)
- fixed: Active setting [Global Settings]/"E-mail recipient(s) setting" was effective for heartbeat mail too, this is not intended.
- changed: COM-Portnumber range for RelaisInterface extended from 1..20 to 1..255
- changed: Shortened text of heartbeat mail for <e-mail to SMS> and new GSM-SMS (max. 140 chars)
- changed: Miscellaneous tab: 1. relabeled option "Never activate AOF status" to "Fire AOF repeatedly" 2. If this option is changed all AOFs are revoked now
- NOTE: New Thermoguard Report version V2.0 released - introducing *Thermoguard Live!*

V 2.40

May 21, 2006

- added: Support for Analog Controller AC2
- added: TGScan: support for new HC1 platform 8.4
- fixed: If TSvcLd.exe not present and trying to install service, mousepointer not switched back to "standard pointer"
- fixed: If "NO DATA RECEIVED" occurs, MAC showed "N/-A" instead of "N/A" and missing leading space
- changed: Sensor config./Basic settings: Fontcolor of port selection dark blue now

V 2.33 (version number unchanged)

March 1, 2006

- fixed: Program did not start with english region settings (introduced 2/27)

V 2.33 (version number unchanged)

February 27, 2006

- fixed: Program may miss polls, if running on slow AMD-K6 (300MHz)
- changed: Tguard.exe always replaced with setup even if same version number, but binary different

V 2.33

February 19, 2006

- fixed: Program may stop polling, if:
 - daylight saving is set (e.g. on March 26, 2:00 A.M.)
 - system time is altered manually while TG running
 - when system is busy for >1 second at calculated point of polltime
- fixed: NLS error: "... "Hx1 Sensor missing" recognition exceeded the set limit of %1 for ..." (%1 not replaced with value)

V 2.32

February 5, 2006

- added: Sensor configuration/Alarm settings: New feature to set individual non alarm hours or hours where sensor is disabled
- changed: General settings: labels of "Alarm hours" now counting from 00..23 instead of 01..24
- changed: Service: 1) identify "installed" status not using registry query, but returnvalue of Open Service() API function 2) Deleteflag of service (state "delete pending") checked only in status "stopped"
- fixed: General settings/non alarm hours: alarm fired between 00:00:01 and 00:59:59 even if this hour was configured as non alarm hour
- fixed: Logging: "acoustic alarm rejected" if running as service was logged though not configured for a sensor
- fixed: Service hung, if extended logging activated and alarm occurred

V 2.31

December 27, 2005

- added: English manuals for main program and *Thermoguard Report*
- changed: Addressed some English NLS issues

V 2.30.2

November 6, 2005

- added: New option on miscellaneous tab: "Never activate AOF status"
- added: UDP License check retry if MAC address read did not start with "00C03D"
- fixed: Service tab: Label "Send e-mail once every day at" truncated
- changed: Documentation update

V 2.30

October 23, 2005

- added: Logging to logfile: two letters preceding logline indicate if the line has been written by an interactive instance ("Ix", where x is the instance-ID) or by the service ("SV")
- added: "Switch" mode for SCx
- added: "Heartbeat" e-mail once a day
- added: NT-service support
- added: "Read ahead" for Hx1 : polltime for Hx1 cut into half!
- added: Scan network: SHFT+F1 on hitlines executes browser with SCx and Telnet port 1111 with Hx1
- added: New option on config/miscellaneous tab: "Monitor: clear activity log before poll"
- added: introduced Mail Retry feature
- added: no of testmails configurable
- added: introduced HRI support
- added: Sensor missing detection for Hx1
- added: ESC works on QMon too now
- changed: New "AllInOne" Setup
- changed: Scan: SCx list will be sorted always now
- changed: Single sensor config.: Entered IP already validated if IP-field loses focus
- changed: No full CPU load when polling
- changed: No full CPU load while window "do you want to start another instance" is active
- changed: Scan: improved autosizing of columns
- changed: Logging to logfile: Tab character used instead of Space to divide logline
- changed: Monitor activity log: Added Space between [computername:username] and logline contents
- changed: Logging: Eliminated final ",," at the end of (CHG)-class logline
- changed: Monitor/Sensor details: # of errors shows "0" instead of "- - -" if errorcount ist 0
- fixed: Runtimeerror 10053, e.g. if port 8000 is not accessible when polling HC1
- fixed: Single sensor config.: key worked on empty sensor list ("want to delete 0 selected entries?" Confirmation caused runtime error), analog with kbd shortcuts for copying a sensor
- fixed: Single sensor config.: Kbd shortcuts (e.g.) could be executed while user defined sort order was active, now warning message #32
- fixed: Company named "Net & Partners" displayed as "Net _ Partners in Config/Licensing Tab in "Company"- field
- fixed: Single sensor config.: If user defined sort order using very last column was active, error message at restart
- fixed: Alarm limits with SCx Port "Simulation file Humidity" are set analog to port "HC1 Humidity" now
- fixed: "Note: Global settings active!"-Hint not shown on single config/mail tab although global settings/mail active (introduced in 2.20 w/ NLS)
- fixed: Scan: hint "Note: Export list by right clicking..." disappeared when resizing window
- fixed: double poll (at :00 and :01 Second) if only one "fast" SC (SC1a/SC1e) is polled
- fixed: Error Message #25 "Invalid IP address: %1" did show "%1" instead of the wrong value
- fixed: Scan: SCx list showed redundant entries

V 2.21

May 8, 2005

- changed: Filename template for *.log files changed from
[prefix]_mm-dd-yyyy-hh-mm-ss.log to
[prefix]_yyyy-mm-dd_hh-mm-ss.log
(Note: applies on existing installations not before new *.log is created)
- changed: Filename template for *.tg files changed from
TGx_[strLabel]_mm-dd-yyyy.tg to
TGx_[strLabel]_yyyy-mm-dd.tg
- changed: Status of RelaisInterface write to HKLM instead of HKCU now (TGRelIF.exe V1.1 too).

- added: Write application path to registry, e.g. for *TGReport*
- new: Analyzing software *TGReport* for calculating Mean Kinetic Temperature and graphic representation (separate setup)

V 2.20 (version number unchanged)

January 30, 2005

- changed: Some NLS strings: German E-mail to E-Mail; Eventmodus => Eventstatus

V 2.20

January 13, 2005

- added: National Language Support (NLS) English/German
- added: Monitor: 2nd combobox for sensor location
Sensor can be selected not only by label but also by location
- added: "Sensor picture ID" support
If a graphicsfile \MM\img\- added: Configurable alternative MailserverPort for SMTP
- added: TGScan identifies I/O-Hw 12.7 as "SC1a" and 12.8 as "SC1e"
- changed: All soundsettings: Soundfile option and Browse-for-soundfile-button now always enabled; Play-button not enabled if soundfile missing or no soundcard installed
- fixed: Slow systems: Right mouse click on taskbar icon immediately after prg start caused error. Now, icon will not be established in toolbar until main program has been loaded completely
- fixed: If modal window active during poll and soundfile alarm triggered, there was no way to switch off sound because the "Stopsound-window" did not re-appear in upper left corner after modal close
- fixed: If modal window active during poll monitor win-dow was locked afterwards (intr. 2.10)
- fixed: If global settings active & "no sound" selected & config window displayed when shutting down TG, the global settings "soundfile" option(s) was/were grayed at TG restart
- removed: 10 wav files from distribution

V 2.10

August 14, 2004

- added: AK Modul-Bus Relais Interface support * New utility *TG-RelIF.exe*
- added: Support of ESC key to close windows
- changed: "About" credits
- fixed: "Scan local network"-Speed slow
- fixed: If a frame was disabled and reenabled, contained radio button option changed value when browsing with TAB (applies to: "Authentication required", global settings sound options, CAM execution options, AOF sound options)
- removed: Inadequate tooltip on "show last log..." button
- added: "Scan local network": Dialogbox after assigning IP for a "manual" pause allowing the controller to reset itself before a new rescan takes place.

V 2.0

August 1, 2004

- added: HygrolanController (HC) Support
- changed: Former Advanced Configuration window merged into main configuration
- changed: Scan local network moved to Configuration tab
- improved: Scan local network (speed, reliability, HC-support)
- added: Configuration window sizeable now
- added: Show last logfile function
- changed: Single sensor config redesigned:
- added: * 2point calibration support on separate Tab
* simulation/temp and simulation/humidity now selectable as special SCxPorts in combobox
* icon illustrates SCx Port
* status bar shows sensor label
* alarm settings moved to separate tab
* Activate and Write data to *.tg file checkboxes enlarged
* switching IP<=>hostname redesigned
* support for ports 80..89 in hostname mode (non HC) (more than one SC in dynDNS scenario)
* various new keyboard shortcuts (ALT+char)
- added: Play test tune on miscellaneous tab
- removed: [TGSimulation.Settings]-section in *.sim files obsolete, unit will be set dependent of new simulation ports (see above)
- removed: global setting "simulation"

- changed: Backup of distribution-TGuard.ini in \doc renamed from Tguard.bak to Tguard.ini.bak
- changed: Default timeout increased to 8 seconds again (HC needs longer timeout)
- changed: Qmon: replaced || with "<CRLF>" in custmailbody
- changed: Unit included in *.tg file lines
- changed: monitor redesigned:
 - * single poll on activity tab possible, linked to "single sensor details" tab
 - * licensing moved to configuration window
 - * total number of polls moved to uptime tab
 - * keyboard shortcuts "+" and "-" (poll all/this); F4 (AOF Reset), F5 (new: show last *.tg)
- added: "Single sensor details" tab: Show last *.tg file
- added: Single sensor configuration: Dialog when trying to edit or right click single sensor: "Do you want to reestablish default sort order?"
- changed: Focus transferred to config window when config window called from monitor and vice versa.
- added: 44 CAM parameters now
- fixed: Single sensor config: Invalid entry=>cancel=> invalid err msg. - Now, user must first confirm that he want to apply changes after cancelling before invalid err msg. appears

V 1.96

May 2, 2004

- added: Advanced configuration/Miscellaneous: Proxy support
- added: Hostname instead of IP Address supported alternately e.g. for DynDNS Router setup scenario
- added: Initial IP assignment for SCx via "Scan local network.." function possible
- redesgn: * eliminated 200..2000ms polltime adjustment:
 - Now, incoming HTTP data will be recognized as soon as it is "ready" resulting in minimum poll cycle-times
 - * "simpause" eliminated accordingly.
- added: Advanced configuration/Miscellaneous: New option "Skip dialog when shutting down"
- added: Some more log messages in "Extended logging"-mode
- added: CRLF resp. LF in log messages will be replaced with "|"
- changed: http-requests will be sent with "HTTP/1.0" so a "404" response (instead of "no data") issued by SCx in case of false configuration (e.g. SC8-Port assigned to SC1) can be dismissed quicker.
- changed: column header "IP.." changed to "IP/Host" type for single sensor config list and sensor inventory export file.
- changed: msdxm.ocx claims to be version 0.0.0.0., so it will not cause the MSI error message 1931 any more.
- fixed: **ESMTP authentication using separate connection**
- fixed: "Reset paths method" did not consider AOF-File and CAM-File path
- fixed: columnwidth-autoadjust of monitor's activity log is limited to 259 max. characters now (= max. characters a listview control can display)
- removed: "frmXXX Load/Unlad" log messages from extended logging
- removed: msstdfmt.dll from distribution; not used
- Build: Built with VS6 SP6

V 1.95

February 20, 2004

- added: Advanced configuration/Logging: New option **Encrypt Logfile**
- added: Configuration/Data file settings: New option **Encrypt *.tg files**
- added: New decryption utility **TGDecrypt.exe**
- added: Shortcut for TGDecrypt added by installation to Start/Programs/Thermoguard menu
- added: Monitor/License info:
 - New Feature "Scan local network for SCx"** lists all sensorcontrollers with their MAC and IP addresses and performs an integrity check: Which SCx are in license, but can not be found in network and vice versa.
- added: Optional **Holiday settings** overriding non-alarmhour settings: Perform always alarm action on these dates
- added: Version added to **"**THERMOGUARD START/END**"** log strings
- fixed: **Poll time increased significantly relative to number of lines in monitor's activity log**
- fixed: **Email: Timestamp for GMT difference incorrect for non-daylight saving dates**
- fixed: If AOF Email configured for a sensor the mail did not fire if the (rare) cause was "#10061 Connection forcefully rejected"; in addition "(#10061)" will be appended to the alarm string now
- fixed: **Clearing an entry on Configuration=>"Mail settings" saved as value "1" instead of empty value (introduced in 1.94)**
- fixed: Single sensor config./Base settings and Advanced configuration/Global settings: Background color for "Low limit settings" frame was "Menu bar" instead of "Button face" (visible on Windows XP)
- fixed: When clicking on Monitor activity log while sensor list is empty, runtime error #5 occurred

- fixed: Path selection dialog for *.log-, *.sim-, *.tg-paths shows no title (introduced in 1.91)
- removed: volumecontrol.ocx from distribution/installation; using mixer API directly now
- changed: About-Dialog: Exchanged link www.thermoguard.de against www.thermoguard.com; scrolling credits show three Thermoguard URLs now (.com/.de/.ch)
- changed: Advanced configuration/Miscellaneous:
 - * Rearranged controls
 - * Added volume-value below sliders
 - * Added "Mute (all)"-Checkboxes below sliders
 - Renamed "Max. response time for one sensor query" to "Time for one sensor query"
- changed: Default button for Message #2 ("Apply configuration changes?") changed from second ("No") to first ("Yes")
- changed: Max. lines for monitor's activity log decreased from 999999 to 10000 in distribution TGuard.ini
- changed: Default single sensor IP timeout decreased from 10 to 2 seconds for the two distribution sample sensor entries too (analog to second last point of version 1.94 history)
- changed: Hex-Characters in MAC-Address output (Monitor/License Info and Log-message "... is licensed") divided by "-" (00-C0-3D... instead 00C03D...)
- changed: Increased Monitor height (for WinXP)
- changed: Advanced configuration/Miscellaneous/"Generate API messages" moved to Advanced configuration/Logging/"Extended Logging"; new functionality:
 - * Events from all log classes will be logged.
 - * Additional events (marked with '+' in Monitor's activity log) will be logged.
 - * Logging will be directed to system's debug-channel additionally

V 1.94

December 14, 2003

- added: Single sensor configuration:
 - Sensorspecific configuration of a replacement text for "SENSOR MISSING" AOF message
- added: Advanced configuration/Logging:
 - Optional Computername and Username prefixes
- added: Separating line "=====" before "***Thermoguard START**" in logfile
- added: Advanced config: "Log output" tab renamed to "Logging"
- added: Configuration/General Settings:
 - Specific hours of a week can be excluded from any alarm action while monitoring and logging continue ("Nightshift only" alarm functionality)
- added: Statusbar at bottom of Monitor window showing TG version and name of customer
- changed: Logfile settings moved from Configuration/GeneralSettings to Advanced Configuration/Logging
- changed: Default single sensor IP timeout decreased to 2 seconds due to multiplying retrieval mechanism introduced in 1.90
- fixed: AOF Test did not play AOF sound.

V 1.93

July 4, 2003

- added: Monitor: "Release AOF latched state...?"-dialog for "Poll now!"- (on Single sensor status tab) and "Poll!" (on Activity tab)-buttons implemented
- added: "AOF Reset"-button on Monitor/Single sensor status (duplicates rightmouseclick-functionality on "Latched:"-area).
- added: "Hide Adv"-button on Adv. config. settings dialog
- added: Critical errors which lead to a program abortion (e.g. ini-versionlevel mismatch or invalid value for an ini entry) are written to logfile now.
- added: FAIL events are logged to *.tg too now
- added: new utility "StopSndTG" provided on CD
- added: Single sensor configuration redesigned:
 - Dialog divided into 4 tabs.
 - * Sensor description-"switching" obsolete now.
 - * Customized mail subject and body
 - * AOF and CAM made sensor specific! CAM-trigger added & TG-paras xmitted optionally
- changed: ini-versionlevel is checked before reading complete ini
- changed: Port 1 and 2 combobox-strings in single thermo config show "SC2/8" instead of "SC8" now
- fixed: Instance check claims "one or more instance(s) already running" if a window's titlebar shows "Thermoguard", e.g. Windows 2000 explorer window shows default TG installation path and folder viewing option "display the full path in title bar is deactivated. App's title changed to "Thermoguard " (with a trailing space)
- fixed: Alarm-off graphics (upper left corner) not in a perfectly round shape
- fixed: SMTP timestamp did not support daylight saving offset on systems where activated
- fixed: QMon marked entries as global active ("##") though global settings mainswitch unchecked

V 1.92 (version number unchanged)

May 29, 2003

-added: Support for new F/W 1.33, SC8

V 1.92

May 18, 2003

-added: Improved handling of multiple instances:
If one or more instances are already running, the user may decide in a startup-warning-dialog if he wants to add another one. An instance counter ID " - (x)" is appended to all major window-titles up from second instance. The tooltip and the "About"-menueentry of the tray icon show this instance ID too.

-fixed: TG performs up to 3 winsock connection-retrials on nonfatal error 10061 ("Connection forcefully rejected") and when interrogating license via UDP

-fixed: "Subscript out of range"-err when clicking repeatedly on "close all msg windows" icon in monitor while closing process is still active

-fixed: Wrong month as sendmail date showed on non english region settings for months where 3-digit abbreviation differs from english syntax

-changed: Default values altered: Keep old logfiles=1, PopUpMax=20

-changed: Verbose information in "cannot log"-alarm message window

V 1.91

Januar 25, 2003

-changed: Alarm Messages shortened for SMS 160char limit

-changed: Alternative CompactPath routine using API func of user32.dll eliminates former need to distribute shlwapi.dll

-changed: in *.msi, the following files are updated to their latest versions: tabctl32.ocx, mswinsck.ocx and msvbvm60.dll

-changed: En/Disabling buttons and frames when testing sound ("Play"-button) revised

-changed: "Test CAM" and "Test AOF" buttons now independent from parent frames

-changed: Fontsize for msi installation messages decreased with ORCA

-added: After Shutdown/Restart, TG remembers activation state of monitor and config. windows (written to/read from TGuard.ini)

-added: Added up/down-Controls on Advanced Config tab Miscellaneous for "Max. popup windows" and "Max. response time"

-added: File extensions .tg and .sim are associated to the current application setting for document type .txt on TG start. As a result, doubleclicking on .tg or .sim files open these files using the specified application for .txt files.

-added: PopUpWarning Window's "frame"-color indicates warning type: blue=loViol, red=hiViol, black=AOF

-added: Special Mail subject support for SMS: own subject can be specified in pipe symbols: |*BODY#| in ToName or CcName fields

-fixed: Sendmail used fixed time zone GMT +0200

-fixed: After testing/playing sound, OK/Cancel buttons remained disabled e.g. with non-us country setting and national ressource Vb6xx.dll present.

-fixed: Mail subject "Thermoguard Alarm Mail" missing (created in V1.90)

-fixed: AOF off => on => AOFTest did not execute w/o preceding "apply"

-fixed: Single Thermo config: Keyboard shortcuts introduced in 1.90 (e.g. CTRL+C) were active in Shift-Listentry mode too

V 1.90

November 28, 2002

-added: Introduced Custom Alarm Module (CAM) interface

-added: Introduced Alarm on Fail (AOF) feature, new (FAIL)log class

-added: Support for multiple mail recipients (separated by ";"); max.length of input field increase from 50 to 200 characters

-added: Response time for one sensor query (wait time for temper. value) now adjustable from 200..2000 milliseconds (former versions=fixed 2000). Additionally, if at first try, no data is received, TG performs two retrials.

-added: Monitor window is resizable now

-added: All window sizes/positions saved to TGuard.ini/restored at restart

-added: "SC8-PortX" appended to Infostring in Alarm/Log-messages

-added: introduced Global settings "main switch"

-added: "Export sensor inventory" function in context menu of sensorlist

-added: Sensorlist: INS/DEL, CTRL+C/CTRL+V and CTRL+INS/SHFT+INS keys are supported now

-changed: Sensorsettings now stored in TGuard.scx instead of TGuard.ini. Increased performance with some 100 sensors configured

-changed: Introduced Advanced settings form

- changed: Renamed "(single) thermo" => "sensor"
single sensor config:
"IP/Host" => "IP Address"
"Basic sensorcontroller settings"=>
"Basic sensor settings"
"Multi Sens" => "SCx Port"
(in Multi Sens-Listbox:)
"Sensor #x" => "SC8 PortX", "(SC1)"=>"SC1"
- changed: PopUpWindows Test: Window count compared to saved setting only now
- changed: Sensorlist: Lo/HiLim/Calib columns rightjustified
- fixed: Changing the unit C/F sets all lo/hi/cal to def. settings -2.5/7.5/0 in sensorlist
- fixed: While incorrect Logfilepath setting active trying to confirm single sensor setting change caused endless loop
- fixed: Reloading *.lic.bak resulted in loss of previous *.lic; now, Date/time string preceeds *.lic-backup-files
- fixed: Starting TG and 4 times Alt+F4+"Yes"=> Error
- fixed: Runtime error when trying to play non-multimedia file
- fixed: Runtime error when trying to play an "empty" soundfile spec

V 1.80

August 30, 2002

- added: Full SC8 sensorcontroller support
- changed: Order of Configuration tabs
- changed: minor label changes (e.g. xxx-Server=>Sensorcontroller)

V 1.75

August 14, 2002

- (internal evaluation version)

V 1.60

May 7, 2002

- added: SMTP-Response Code logged in case of unexpected response for improved mail failure diagnostics
- changed: Renamed all WTG WebThermoGuard to TG=Thermoguard including all related file naming: .wtg=>.tg wtg.ini=>TGuard.ini etc.
- fixed: After ESMTP-Authentication no alarm mail sent

V 1.50

January 20, 2002

- added: Right mouse click on Configuration/Single thermo config.list: new form allows for Activation/Deactivation/Inversion of all selected entries in a single step (doubleclick on option supported)
- changed: improved performance while browsing single therms in Single thermo configuration form (now no ini file access)
- changed: exe compiled to P-Code as WTG app does not require Native Code => exe-size shrunked significantly
- changed: VSI installer to compress "optimized for size" resulting in lower *.msi file size
- changed: Encryption routine altered => New lic-file format Licfile size increased from 22222 to 123123 Bytes. New format used for Mailserver authentication entry in wtg.ini too
- fixed: Monitor/License info/Reload lic file:
Despite the file selection dialog has been canceled by the user, WTG performed and logged redundant refresh of licfile using current lic.
- fixed: Configuration/Global mail settings / button "Set password": Misplaced tooltip text; removed

V 1.00 (version number unchanged)

January 13, 2002

- fixed: Monitor/Single thermo status: Inactive label listitems were not refreshed when renaming thermo in Configuration/Single thermo configuration dialog
- added: http GET command supports old F/W vers. now
- changed: WAVs shrunked still a little bit

V 1.00 (version number unchanged)

December 4, 2001

- added: Monitor/License info: interactive Refresh of license file supported
- fixed: Single Thermo Configuration: Wrong label: "IP/Multi" changed to "IP / Host"
- fixed: QMon: 2nd Tab-Pos. too small for small screen fonts
- fixed: Monitor: After Stopping and restarting the Guard, forecolor of countdown remained red instead of blue
- fixed: Tray: Trying to open Configuration while modal window is displayed (error message) resulted in runtime error
- changed: Configuration: New General Settings Tab Design

V 1.00 (version number unchanged)

November 25, 2001

- changed: New About-Window Design
- fixed: "Play"-Button active though no soundcard
- fixed: Manual Reset function for ALL thermos not possible, if currently displayed thermo value = 0
- fixed: Runtime error when popup window or "stop sound" window launched, but modal form (e.g. single thermo config or "About") active

V 1.00 (version number unchanged)

November 24, 2001

- changed: MSI support
- added: Support for future 8portMultiThermo Device
- changed: Port set to 80 permanently, Command= not longer in wtg.ini

V 1.00 (version number unchanged)

November 20, 2001

- changed: Configuration: General settings: Renamed frame caption "System debug" to "API messages"
- fixed: Configuration: Global mail settings: After "Test send mail", buttons "Test" of Dialup and Authentication enabled even if these modes were not active.
- fixed: Configuration: Global mail settings: "Test send mail" called Dialup even if Dialup not activated

V 1.00 (version number unchanged)

November 19, 2001

- changed: About-Credits: new text
- changed: sim-file ..30Min: first value 4,6=>4.6
- changed: 4,6 also valid if regional settings's dec. separator is "."
- added: initial-wtg as wtg.bak added to \doc
- changed: no program termination if "ini"-value not found in *.sim file
- added: filename clearly stated in ini-error messages
- added: if inifile not present, message says "FILE NOT FOUND" instead of "section/entry..." not found (wtg.ini only)

V 1.00 (version number unchanged)

November 17/2, 2001

- changed: Disabled GlobalActivation-graphics more subtle now

V 1.00 (version number unchanged)

November 17/1, 2001

- added: This file added to \doc
- changed: shlwapi.dll V4.72 (MIE4.0) replaces V5.50 (MIE5.5) in distribution package (Windows 2000 issue)
- changed: ini-error handling for "!notFound!"-entries improved
- fixed: program timer halted before critical/prg termination is called in order to suppress compiler's std. runtime err message

V 1.00

November 15, 2001

(Initial Upload to www.thermoguard.de/download)

Thermoguard Report

V 2.96.3

June 3, 2021

Fixed:

- + Live! Memory leak ("Out of memory" error)

V 2.96.0

January 18, 2021

Changed:

- + Major internal redesign
- + Search pattern for tg files changed from `"*TG?_[[NAME]]_?????????.*tg"` to `"TG?_[[NAME]]_?????????.tg"`
- + Collecting data: duplicate entries are ignored now
- + Live!: Trailing blank lines (CRLF) in a *.tg are ignored now
- + Replaced EnDeCrypt.dll version 1.0 with version 2.0
- + Live!: Context menu: Moved "Transfer properties" (CTRL+F7) to "Miscellaneous functions"
- + Live!: Context menu: Moved "Alarm set selection (C)" (formerly "Color set selection", see below in "Added" section) from "VALUE - Settings" to "Miscellaneous functions", so it can be called in all three Live! window modes now (Value, Chart, Visual)
- + Live!: Context menu: "VALUE - LCD mode" replaces "VALUE - Settings" due to above change
- + Live!: "Transfer properties" dialog redesigned: Two radio buttons instead of "Apply to all Live! windows" checkbox (more understandable)
- + Live!: "Transfer properties" dialog: CHART properties may also be transferred to other open Live! windows which are currently not set to CHART mode
- + "Bring/Send Live! window of selected sensor to fore/background" only enabled if one single sensor selected AND is now "Expert" function
- + "Create Legend for selected sensors Live! Charts" is now "Expert" function
- + Shortcut for "From:" now CTRL+G (former CTRL+F is for new search feature now)

Fixed:

- + Live! not displaying latest value if tg-files with more than one separation mode exist or weekday "week starts on..." has been changed (introd. 2.95.1)
- + Chart: window not on taskbar after minimized
- + Chart: if decimal point changes in a *.tg file, separate lo/hi limit lines are drawn for the same limits, but should not
- + Arithmetic mean (Chart|Details) and Standard deviation output for Switch/Relay type sensor not sensible
- + Live!: Shortcuts of Main window main menu (e.g. ALT+F) are executed even if Live! window has focus, but should not.
- + "Load Sensor selection" (containing invalid sensor name)=>"Sensor x no longer exist"=>Access violation
- + Tab order main window

Added:

- + Live! Color sets are now named Live! Alarm sets and provide "Blink", "Play sound", "Acknowledge" options (any combination of these) in case of a Low or High limit violation. Supports also Windows "Text to Speech" API using customizable template files *.tgTTS; new F3 function to test alarm set options with selected sensor; see updated documentation TG Report-en.pdf for details.
- + New Search function (button or CTRL+F)
- + Live!: "Transfer properties" dialog:
 - Added new option "Alarm Set #"+ Progress indicator (line counter every 50k lines) in status bar also with "Calculate"/"Chart" functions: "Retrieving", "Sorting" and "Unifying" (CTRL+U)

V 2.95.4

June 26, 2020

Changed:

- + If "Magnetic snap at screen edges" is off, Live!-Window can be moved beyond left margin now.

Fixed:

- + Live! window: For Alarm relay channel status "RelOK" "warning" background color was set (yellow by default) instead of "good" status (green by default, analogously to "Closed" in switch mode)

V 2.95.1

November 10, 2019

Changed:

- + **Performance of loading TGLive! window sets improved significantly, especially with a lot of *.tg files, access via network and if not already cached (e.g. after a restart).** Generally accessing *.tg files is much faster now. Also applies when getting data when opening a Chart window

Added:

- + Dialog with progress bar when loading a Live! windows set
- + More log messages (when closing windows, batch processing etc.)
- + **Batch print/save of chart windows: Added own dedicated target path, dialog redesigned, final message box**

Fixed:

- + Live! window statusbar info update not correct when changing tabs

V 2.94 (version number unchanged)

January 16, 2019

Fixed:

- + Chart: View|Y-Range: smallest/largest value (or ENTER key): if not applicable, mouse cursor not restored

Added:

- + Extras: "Expert Mode": Possibility to protect the advanced functions with a password
- + **Options|Miscellaneous settings: New options for Chart:**
 - For Chart|Annotation Editor: Set fixed Destination Folder and Filename Pattern (w/ placeholder support)
 - For Chart|Annotation Editor and "Save as PNG": Add own text to footer (w/ placeholder support)

V 2.94 (version number unchanged)

August 6, 2018

Added:

- + Extras: "Create evenly formatted text files from *.tg" (e.g. for database import)
- + Extras: "Cross check report *.tg <=> TGuard.scx" (e.g. to find "orphaned" *.tg files)

V 2.94 (version number unchanged)

July 23, 2018

Fixed:

- + Live! Chart: no initial vertical autofit, if initially opened in value mode and then switched to chart mode
- + Error message "can not access logfile" not translated to german / appended "Write access needed" hint to this message
- + Chart: Minimized State is persisted, but should not
- + Sensor selection => No selection available => Save selection => nls problem

Added:

- + **Live!: status bar info configurable now: Label, Location, Highest, Lowest, Date, Time, Unit (highest/lowest in diagram mode menu obsolete)**
- + Log file output lines with preceding COMPUTER (DOMAIN\USERNAME)
- + Verbose log messages for annotation editor
- + New command line parameters for logging: /LOGFILE:<> /LOGCOUNT:<> /LOGSIZE:<>
- + New parameter /LOGDBG sends output to debug channel independently of log file settings

Changed:

- + Live!: Do not save "grip" at statusbar to png or pdf
- + Disabled Minimization Title bar icon for Forms "Sensor Info", "Edit Live! Color set" and "Sensor Selection"

V 2.93 (version number unchanged)

February 16, 2017

Fixed:

- + One or more Live! window open => minimize Thermoguard Report (TGR) => Close TGR using right mouse click on taskbar icon => Reopen TGR => First Live! window is not visible (i.e. is minimized instead of main window). Now, minimized state of main window is not persisted at all
- + Live!: Memory leak if last value is not numeric (e.g. Relay-Channel, Switch, FAIL etc.)

V 2.93 (version number unchanged)

December 18, 2016

Fixed:

- + Chart: Open chart A with multiple limit lines. Open chart B with multiple limit lines. As soon as A is resized, it displays the limit lines of diagram B.

V 2.93

October 1, 2016

Added:

- + Live!Chart display period setting: Now, a period from 1.59 minutes can be set (for special application purposes). The query interval for *.tg files is switched from 1500 milliseconds to 333 milliseconds if such a minute based setting is active. Also the bottom axis of the Live!Chart Window displays time format hh:mm:ss instead of hh:mm
- + Sensor's label and mode info appended to a Live!Winodws' title (not visible, internally)
- + Live!Chart may be saved as pdf (future use, not enabled right now)
- + New parameter /GUID:<GUID> If used, <GUID> will be appended to main window's caption to enable an explicit WM_CLOSE after FindWindow by an external application
- + New parameter /hm
Hides main window, but does not hide the mouse cursor (as with /h which is still supported)

Changed:

- + German nls: "Anzeigezeitraum für Live! Fenster setzen" => "Anzeigezeitraum für Live!-Diagramm-Fenster setzen"

V 2.92 (version number unchanged)

April 20, 2016

Fixed:

- + Live! value window: No refresh of segments in LCD mode when transparent

V 2.92

March 28, 2016

Added:

- + Live!Chart: New functions "Increase|Decrease Line Width", "Changing|Select line color", "Transfer properties" and "Bring|Send Live!Chart window of selected sensor to foreground|background" (in main window's sensor list context menu)
- + Live!All modes: Transparency Support, e.g. allowing several "Live" curves to be displayed within one Live! chart and Show/Hide Status bar
- + Live!Visual mode: Supports Hiding Tabs now too

Changed:

- + Live!: Reorganized context menus (and introducing mode dependent sub menus)
- + Live! window context menu|"Hide main window" no longer hides the mouse cursor.
- + Chart: Swapped output of Top and Left coordinates in Options|"Window info in status bar" function

Fixed:

- + Live! windows' screen position not restored correctly on multiple monitor setup
- + Start TGReport => Move and or resize the Main window => Context menu Live! (or Chart window's Options menu)|"Hide main window" => "Show main window" does not restore the latest position/size of main window, but its position/size after startup.

V 2.90 (version number unchanged)

March 22, 2015

Fixed:

- + Chart: Save chart as xxx: Warning message "Chart height too low" instead of "Out of system resources" message when trying to save chart if vertically minimized.
- + Chart: Batch print/save: NLS placeholder strings not filled (especially noticeable if "Show details" is active)

Added:

- + Chart: New function "Save as PDF" - available in batch print also

V 2.90 (version number unchanged)

April 26, 2014

Changed:

+ Service will not be uninstalled on update. Therefore no need to re-enter svc account credentials

Fixed:

+ Window contents is missing (main windows and other) when windows fonts are set to 125%

Added:

+ Support for Relay Alarm Channel configuration NC or NO (showing "RelAlarm" and "RelOK" instead of "Open" and "Closed")

V 2.90 (version number unchanged)

February 23, 2014

Fixed:

+ *TGLive!* does not support new *.tg format (introduced 2.90, Jan. 26) properly, if *.tg files are encrypted; now it does.

V 2.90

January 26, 2014

Added:

+ **Chart: Support for appended lo/hi limits in *.tg files: ability to display multiple limit lines.**

+ **Main: New option "Save Chart settings sensor specific"**

+ Chart: New option "Y-Range: set own range" allows user defined fixed range for value axis (ALT+Enter)

+ Main window, period selection: New "From:" button ("Very firstdata") analogously to "To:" button (added to context menus as well)

+ Support for Alarm Relay Channel (as with switch)

+ Chart: New option "Save as PNG (only inner area)"

Fixed:

+ *TGLive!*: If a sensor label contains "[" character (e.g. for new "Branch Support"), data is not saved correctly. Now, "[" and "]" are replaced with "(" and ")".

+ If a sensor's switch property is set, but not enabled (if source does not support it, i.e. greyed out in main program), *TGReport* Chart and *Live!* interpret it as being configured as active switch nevertheless.

+ Shortcuts for main window are effective even if main window does not have focus, should not happen.

+ German main menu: ALT keyboard shortcuts for "&Datei" and "E&instellungen" were already used => changed

Improved:

+ Chart: Processing large amount of data:

* NLS processing earlier

* Wait Cursor when executing y scaling options

+ Main window: En/Disabling controls when calculating/initiating chart

V 2.80

October 6, 2013

Added:

+ Support for "Maintenance" *.tg value

V 2.70 (version number unchanged)

January 11, 2013

Fixed:

+ If sensor list is empty on startup (e.g. ACME demo license) "Chart" button is enabled (raising an exception if clicked). Now Chart button is disabled in this scenario.

V 2.70

October 10, 2012

Changed:

- + **Main window redesigned**, Sensor selection subset can be saved/loaded etc.
- + vertically sizeable
- + Multiple sensors can be selected and all charts are created for all selected sensors (configurable confirmation dialog)
- + Chart opens directly on button click, no need any longer to calculate first, then show chart. However "calculate only" still possible via context menu
- + Live!: Smaller minimum size for Live! Window

Added:

- + Options|Edit Live! Color Set. All 7 sets can be customized now.
- + **New Visual Mode and Visual Designer**
- + **Chart batch print**
- + Load Thermoguard Live! window set: Warning dialog listing sensor names which do not exist any longer
- + Live!: Enhanced tooltip information
- + Live!: "Value/Chart/Visual" tabs can be hidden
- + Live!: Added: Show/Hide cursor (cursor is hidden too with tgreport.exe /h parameter)

Fixed:

- + Live!: Status bar appears light yellow with XP Style also.
- + Live!: Can not drag and click Live! window in non-lcd mode
- + Live!: "Show last *.tg file": If no one exists, windows explorer starts

V 2.67

December 3, 2010

Added:

- + Standard deviation calculation, output under "Results"

Fixed:

- + Live!: Two sensors named "Sensorname" and "Sensorname_xxx" (e.g. if sensor entry has been copied) were treated as the very same sensor. This caused wrong chart display. Now they are treated correctly as two different sensors.

V 2.66 (version number unchanged)

September 13, 2010

Fixed:

- + Live!: Correct unit support for sources of type HM1.. and Text file

V 2.66

September 3, 2010

Added:

- + **New integrated Annotation Editor**

V 2.65

April 10, 2010

Improved:

- + Shared File access when multiple Thermoguard Report instances access *.tg files. Changes in Thermoguard Report as well as in Thermoguard main program! Please update both.

V 2.63

January 10, 2010

Added:

- + Stream logging feature (optional). 20 log files à 2MB (revolving) will be written to \log subdirectory under TGReport config path.

Changed:

- + Live!: Improved internal routines for reading last value from *.tg resulting in less memory usage.

Fixed:

- + Live!: If a *.tg file contains data newer than 26.12.2009 23:59:58 and older *.tg files are present, Live! display shows "old".
- + Two minor memory leaks

V 2.62

October 4, 2009

Added:

- + Live! (chart): new option Low/High peak values in window status bar
- + Live!: new option SHFT+RETURN: current display based on low/high limit lines (as with reset, but current x-axis only)
- + Chart: new option Window information (position/size in status bar)
- + Chart: new radio option "x axis: Force period entered in main window" (new option) <=> "x axis: First/last value found" (as before <= 2.61)

Changed:

- + Live!: In Chart mode new background gradient visualizations help to recognize error situations (e.g. locked *.tg file etc.) better. Now, on "----", "dcerr", "derr" errors, title is blinking in bold red font too (previous versions only on "old").
- + Live!: "Autosave window as PNG" option: Title information is only saved in "---", "old", "derr" and "err" situations or if option "Show info in title bar" is active (previous versions always saved title info).
- + NLS labeling more consistent (high/low instead of min/max etc.)

Fixed:

- + Main: If *.tgl (also default TGReport.tgl) contains *only* entries without a match in the Thermoguard main program sensor configuration, then using /h switch closes the main window and TGReport an only be terminated by killing its process via task manager.
- + Live!: **Multiple screen support**
- + Chart: **If return pressed and smallest=largest value => High/Low limit lines collapse and left axis shows same value repeatedly**
- + Chart: If *.tg recorded for AC2 with custom unit "xxx" and first value or requested period was a violation or alarm then °C displayed as unit label instead of "xxxx".
- + Main and Chart (Details): If a date/time is midnight, "00:00:00" is skipped.

V 2.61 (version number unchanged)

December 30, 2008

Added:

- + en TGReport Manual

Changed:

- + en NLS: Live!Chart => Live! Chart
- + en NLS: SCx => SCn

V 2.61

December 9, 2008

Added:

- + new command line parameter /h to hide main window automatically after start and window set loaded

V 2.60

June 10, 2008

Added:

- + German NLS support
- + XPStyle support
- + Vista 256px Icon support
- + TGLive!: 2 new autosave options for ftp upload purposes
- + Fixed path support (special customer request, see documentation)
- + /CfgDataDir command line parameter
- + View/increase/Decrease linewidth F4/F3 (1-10), stored for every new chart
- + Help/About dialog shows paths, horizontally sizeable
- + Options/Configure paths horizontally sizeable

Changed:

- + Icon for "Close", "Live", "Calculate" changed
- + Option "Calculate: Set End Time to current system time on click" is checked by default now for a new installation.
- + slightly different minimum sizes for LCD/nonLCD mode
- + /l switch is now default, the last active Live! windows will be opened without using this switch.
- + For Vista compatibility: Configuration data now resides in %ALLUSERSPROFILE%\Thermoguard Data
- + Save as PNG: Details are included now if active!
- + Save as PNG and Save/Load TGLive! window set:
If called for the first time, the new default configuration path %ALLUSERSPROFILE%\Thermoguard Data is preset, afterwards the last location will be memorized; if this path does not exist, the default path is set again.
- + If TGR is closed with no active Live! window, there will be no more tgreport.tgl file of 0 Bytes size
- + Print routine revised: Details included, if set; Now, chart size affects printout size
- + Animation speed: Default=0, LowSpeed limited to -1000, value now saved
- + Switch function: "Open" state now counted as "Max. violation", not as an error
- + "D" shortcut in chart window changed to "i" (analogous to main window)

Fixed:

- + Vista: Buttons disappearing after pressing <alt>-key
- + If a negative data value triggers a high violation (for example -12°C if high limit is -18°C), TG Report increments the minimum violation statistics counter erroneously.
- + Path configuration: if user toggled checkbox "User-defined..." and clicked "cancel", new state is saved, but should not

V 2.1

October 15, 2006

Added:

- + Encrypted *.tg data can now be read by TGReport using the helper dll EnDeCrypt.dll. Hence, the TGLive! error display "EnCr" became obsolete. Now, the new display string "dCEr" shows up in case an error occurred during decryption

Changed:

- + Documentation completed (German)
- + "Old" displayed as " Old" now (leading space, 4 digits)

Fixed:

- + "derr" overruled "encr"
- + Live! Button accessible if no sensor present (e.g. ACME license)
- + Sensorinfo: sSCPport # => SCxPort <verbose Portlabel>

V 2.0

August 12, 2006

Added:

- + New Thermoguard Live! extension. See documentation for details.
- + Chart window: Possibility to hide the main window (in Options menu)

Fixed:

- + if the low and/or high limit setting of a sensor was x,y where ,y was ,1 or ,2 or ,3 or ,4 or ,6 or ,7 or ,8 or ,9 then the label of the min/max lines in chart-view showed wrong value(s) with rounding error.
- + Switch function: "Closed" condition counted as error

Redesigned:

- + Treatment of data from sensor operating in Switch mode

Changed:

- + Label of Maxvalue placed below the red Maxline so it will not disappear when shrinking the chartwindow vertically.
- + "Close all charts"-button shows now number of charts in caption (extra label removed) and can also be used if only one chart is open).

Improved:

- + View/"Fit Y"-function: Added an additional border of 5% of the current vertical y-Range between the min/max value(s) and the chart grid providing better visibility of the min/max value(s).
- + The line to and from an "error-value" (e.g. "FAIL") is drawn yellow
- + Error handling when application directory is write protected
- + Decreased bottom and right margin in chart view

V 1.3

May 7, 2006

Added:

- + AC2 data Support (userdefined Unit)

Changed:

- + Order of "Min val"/"Max val" detail results fields
- + Min val/Max val include unit too (like LoLim/HiLim set)
- + Widened fields / buttons

V 1.2.2.0

December 12, 2005

Added:

- + English system manual

Changed:

- + Some minor NLS issues

Fixed:

- + Sporadic error when closing chart window

V 1.2.1.0

October 9, 2005

Added:

- + Display "Closed" and "Open" "values" created by TGMain 2.30 switch mode.

V 1.2

October 6, 2005

Fixed:

- + When processing *.tg files the filespec
`*TG*_[Label]*.*tg`
was used instead of
`*TG*_[Label]*.*tg`
E.g. a sensor called F1 reads also *.tgs from F11 and F12 by mistake

V 1.1

June 22, 2005

Added:

- + New feature in options menu "Calculate: Set End Time to current system time on click (alternate keyboard shortcut to toggle this function: "e")

Fixed:

- + Command reference was a bit too narrow

V 1.0

May 8, 2005

(first release)