

Changelog DTS 4138

All notable changes to this project will be documented in this file.

The format is based on [Keep a Changelog](#)

Guiding Principles: see <https://keepachangelog.com/en/1.0.0/#how>

Possible log types:

- [Update instructions] for essential requirements, instructions and information about the software update procedure
- [Added] for new features
- [Changed] for changes in existing functionality. Improvements should appear under the 'changed' section
- [Deprecated] for once-stable features removed in upcoming releases
- [Removed] for now removed in this release
- [Fixed] for any bug fixes
- [Security] in case of vulnerabilities or other security related changes

[08080126.010002.051017 / 16012026] 2026-01-16

Update instructions

Former version has to be at or above 16052025!

See also Bx-800870.13 or higher: chapter 7

It is recommended to set the password to "dts" before the update. After the update reconfigure the password again.

Added

- Compiler warning when debug features are still active
- Restore default config with display button, configurable allowed/not allowed. Default is not allowed.
- Log changed configuration parameters

- File access log (CLOSE_WRITE, CLOSE, DELETE, CREATE) for writable file systems (except /var/log/)
- ICMPv4 deselectable

Changed

- Move password to shadow file
- Improve logging of user logins
- Increase rotate size of dts.log, dtseerror.log, messages
- Improve update process

Deprecated

Removed

Fixed

Security

- Check rules and minimum length for menu password
- Don't allow update of single bin files
- Bootloader u-boot: Deactivated ethernet driver (FEC)
- See also "Changed" and "Added"

[08160525.010002.051016 / 16052025] 2025-05-16

Update instructions

Former version has to be at or above 26102021!

See also Bx-800870.11 or higher: chapter 7

It is recommended to set the password to "dts" before the update. After the update reconfigure the password again.

Added

Changed

- Update busybox to 1.36.1
- Update pure-ftp (SFTP/FTP) to 1.0.52
- Update zlib (SSH) to 1.3.1
- Update dropbear (SSH) to 2025.87
- Update rssh (SSH/SCP/SFTP) to 2.3.4-29
- Update openssl to 3.5.0
- Update openssh (SFTP) to 10.0p1
- Update mailsend to 1.20b2
- Update ntp 4.2.8p18 to use openssl 3.5.0
- dtsapp: Adapt to mailsend 1.20b2

Deprecated

Removed

Fixed

- dtsapp: Fix missing dropbear_ed25519_host_key

Security

- See "Changed" (updates)

[08011124.010002.050915 / 19112024] 2024-11-25

Update instructions

Former version has to be at or above 26102021!

See also Bx-800870.11 or higher: chapter 7

It is recommended to set the password to "dts" before the update. After the update reconfigure the password again.

Added

Changed

- Update dropbear (SSH) to 2024.86

Deprecated

Removed

Fixed

- Typo in DTS4138-MIB.txt
- Fixed password comment in menu text
- Password handling (recover of config after restart leads to invalid password in special cases)

Security

- make DAYTIME and TIME deselectable and as default set off
- See "Changed" (updates)

[08050724.010002.050914 / 08072024] 2024-08-02

Update instructions

Former version has to be at or above 26102021!

See also Bx-800870.11 or higher: chapter 7

Added

Changed

- Update ntp to 4.2.8p18
- Update dropbear (SSH) to 2024.85

Deprecated

Removed

Fixed

- Fix initial timeset from NTP with address as url and slow DNS server or non resolvable url
- Fix recover password from local backup restore without device restart

Security

- See "Changed" (updates)

[08130324.010002.050813 / 13032024] 2024-03-20

Update instructions

Former version has to be at or above 26102021!

See also Bx-800870.11 or higher: chapter 7

Added

Changed

- dtsapp: watchdog time increased to delay unintentional reboot with very high network load

Deprecated

Removed

Fixed

Security

- Detect and block SSH brute force attack
- Disallow TCP timestamps
- Disallow ICMP timestamps (CVE-1999-0524)
- Warning in menu if default password is active
- Hide password in menu

- Encrypt password in dts4138.conf file. **CAUTION: a new dts4138.conf file can't be used with older firmware** (password will be set to default)
- Build options changed for dropbear (disable Chacha20-Poly1305 and CBC ciphers) to fix CVE-2023-48795

[07291123.010002.050812 / 19122023] 2023-12-19

Update instructions

Former version has to be at or above 26102021!

See also Bx-800870.11 or higher: chapter 7

Added

- dtsapp: add log of boot reason
- dtsapp: add detection and log of segmentation fault

Changed

- Update net-snmp to 5.9.4
- Update dts-snmppd to 1.4 (adapt to net-snmp 5.9.4)

Deprecated

Removed

Fixed

- ntpd: close filehandle in case of pending sample from dts relock
- dts-snmppd: improve handling of alive notification timeout

Security

- See "Changed" (updates)

[07120523.010002.040711 / 29062023] 2023-06-29

Update instructions

Former version has to be at or above 26102021!

See also Bx-800870.11 or higher: chapter 7

Added

Changed

- Update net-snmp to 5.9.3
- Update dts-snmpd to 1.3 (adapt to net-snmp 5.9.3)
- Update ntp to 4.2.8p17

Deprecated

Removed

Fixed

Security

- See "Changed" (updates)

[07181122.010002.030611 / 28112022] 2022-11-28

Update instructions

Former version has to be at or above 26102021!

See also Bx-800870.11 or higher: chapter 7

Added

- Add USB mode (enable/disable USB port)

- Add GNSS info for GNSS 4500 to MIB

Changed

- Update dropbear (SSH) to 2022.83
- Update net-snmp to 5.9.1
- Update dts-snmpd to 1.2 (adapt to net-snmp 5.9.1)
- Update ntp to 4.2.8p15

Deprecated

Removed

Fixed

- Fix mail tls
- Fix restart of network and network services after restore from backup or default config

Security

- See "Added" (USB mode) and "Changed" (updates)

[07051121.010002.020510 / 29032022] 2022-10-06

Update instructions

Update 26102021 has to be done first!

See also Bx-800870.10 or higher: chapter 7

Fixed

- Fix: Sync adjust from NTP was very slow -> improved
- Fix: NTP did not reach stratum 16 in any case

[07251021.010002.020409 / 26102021] 2021-10-21

Update instructions

Update 26082020 has to be done first!

See also Bx-800870.10 or higher: chapter 7

Added

- Added SNMP parameter: order contact
- DCF in adapted for Siemens GPS 2000 antenna with Siemens GNSS Interface
- GNSS info for GNSS 4500

Fixed

- Bugfix ntp for poll interval < 3

Security

- Code signing added: next update requires signed firmware image
- Default settings changed (Telnet & FTP off, SNMP V3 only)

[06130220.010001.020308 / 26082020] 2020-08-31

Update instructions

Update is recommended for users of SINEC/SIMATIC functionality

1. step: Update **rootfsDTS4138.img**, **ulimageDTS4138** and **dts4138app.img** image.
2. step: After reboot update **dts4138v2cfg.img** (save configuration before this update)

See also Bx-800870.06 or higher: chapter 7

Added

- Additional SINEC features (only DTS 4138S)
- Added SNMP parameter: order number

Changed

- Update ftpd pure-ftp 1.0.49
- Update sftp
- Update busybox 1.31.1
- Update ntp 4.2.8p14
- Stop NTP backup when no more NTP server is available.

Security

- Root user login deactivated

[05140219.010001.020107 / 25022019] 2019-05-10

Update instructions

Update is recommended for users of SNMP or SSH

- First step: Update **rootfsDTS4138.img**, **ulimageDTS4138** and **dts4138app.img** image.
- After reboot update **dts4138cfg.img** (save configuration before this update)
See also Bx-800870.06 or higher: chapter 7

Changed

- Update dropbear (SSH) 2018.76
- Update ntp 4.2.8p12
- Update snmp net-snmp 5.8
- Update openssl 1.1.1a

Fixed

- Bugfix: SNMP IPv6, network slave clock IPv6

Security

- Features: SNMP V1 and V2c deselectable

[04040612.010000.010006 / 28032018] 2018-08-24

Update instructions

An update is recommended for customers who are using NTP from or to the Internet.

Added

- Added SIMATIC mode

Security

- Added accessibility control for NTP control packet (NTPQ)

[03040612.010000.010005 / 20022015] 2015-02-15

Update instructions

An update is not needed or recommended for customers. (No functional improvement).

New devices will have the latest u-boot version.

Changed

- New version of u-boot 2013.07 to be compatible with latest version of flash on processor module. This version of the bootloader is compatible with all versions of used flash. There's no change in functionality of the DTS 4138.timeserver.

[03040612.010000.010005 / 21102013] 2013-10-28

Update instructions

If previous version was not equal or newer than 30102012, then update has to be done in 2 steps:

1. step: dts4138app.img and dtscheck.md5
2. step: dts4138cfg.img, ulmageDTS4138 and dtscheck.md5

See also Bx-800870.00 or higher: chapter 7

Fixed

- SINEC fixed (link reconnect, link lost)
- Fix slave behavior after switch over (no immediate jump back, even if new master has higher stratum)
- SNMP: remove old header from config file (dtsUser1 cannot be set to noauth)
- Restart IPv6 after link reconnect (neighbor solicitation didn't restart)
- Allow IPv6 TZ requests (for SCP with IPv6)
- Fix hostname handling when DHCP on (set hostname from DHCP, inform DHCP about hostname)
- Do NTP restart after autokey config.
- Fix auto-update of TZ-files (for SCP)
- Block Ctrl-Z to close menu (do not allow close of the menu with Ctrl-Z)

[02040612.010000.010004 / 30042013] 2013-04-30

Update instructions

If previous version was not equal or newer than 30102012, then update has to be done in 2 steps:

1. step: dts4138app.img and dtscheck.md5
2. step: dts4138cfg.img, ulmageDTS4138 and dtscheck.md5

See also Bx-800870.00 or higher: chapter 7

Fixed

- Fixed menu errors
- Manual renew of DHCP release now possible
- /ram directory limited to 16MB (before an overwrite with system crash->reboot was possible)
- update of time zone files changed

[01040612.010000.010003 / 12112012] 2012-11-16

Update instructions

If previous version was not 30102012, then update has to be done in 2 steps:

1. step: dts4138app.img and dtscheck.md5
2. step: dts4138cfg.img, ulmageDTS4138 and dtscheck.md5

See also Bx-800870.00 or higher: chapter 7

Changed

- Season table version 10

Fixed

- Fixed menu error (info gateway 2 was wrong)
- Fixed IRIG B output (single repeated telegram could occur very seldom, all 3 to 7 days)
- Update problem without DHCP fixed (dts4138cfg.img)

[01040612.010000.010002 / 30102012] 2012-11-02

Update instructions

Update has to be done in 2 steps:

1. step: dts4138app.img and dtscheck.md5
2. step: dts4138cfg.img, ulmageDTS4138 and dtscheck.md5

See also Bx-800870.00 or higher: chapter 7

Fixed

- Fixed update error (dts4138cfg.img)
- Fixed menu errors (typing errors)

[01040612.010000.010001 / 31082012] 2012-09-26

Update instructions

See Bx-800870.00 or higher: chapter 7

Fixed

- Fixed IP config. From USB stick
- Fixed SNMP IPv6
- Fixed day of year in IRIG out
- Fixed remove of 2.IP red. server
- Fixed some small menu issues
- Fixed SNMP sysObjectID

[00040612.010000.010000 / 11062012] 2012-06-12

Update instructions

See Bx-800870.00 or higher: chapter 7

Changed

- First release