Danfoss PLUS+1 Service Tool Software

Release Notes

Risk Reduction

This file contains important supplementary and late-breaking information that may not appear in the main product documentation. We recommend that you read this file in its entirety.

Fixes to known issues in the tool will only be made in the latest version; previous versions will not be patched. Known issues that remain in the release are described in the section Important Advisory - Potential User Issues.

It is recommended to always use the latest released version to benefit from the latest improvements. If another version than the latest released version is used, carefully read the What Is Fixed sections for all later releases to understand what known risks that exists and need to be addressed.

For more details on risk reduction, see chapter Risk Reduction in PLUS+1 GUIDE User Manual.

Product License

Existing Users

After installing PLUS+1 GUIDE/Service Tool, your License Key is automatically activated in this version if your maintenance date covers the release date of this version.

New Users

The PLUS+1 software tool chain includes PLUS+1 GUIDE and PLUS+1 Service Tool. This powerful tool chain allows for the rapid development of mobile machine applications. A free Express license is available for all users. Professional developers will benefit from our Professional version that enables additional tools and libraries to speed up the software development process. Add-on modules are also available for the Professional version for an annual subscription fee so you can tailor the tool chain to meet your needs and only pay for the additional features you choose.

Professional License

PLUS+1 GUIDE and Service Tool Professional License can be ordered through your local Danfoss sales representative. After purchase, you will be sent an email with a Product Key that will allow you to activate a License Key. Please follow the instructions under Help in the License Manager.

Free Trial License

A free, time limited, trial license of PLUS+1 GUIDE and Service Tool Professional can be obtained using an automated sequence from the License Manager dialog. This license will allow you to try all features of PLUS+1 GUIDE and Service Tool (including add-ons). Projects created with a trial license will be tagged with a trial label and the use licensed content will disable save, edit, and compile rights when opened with an Express license.

Free Express License

A free Express license will also be issued when you request a free Trial license using the automated sequence from the License Manager dialog. This license provides basic functionality for developing PLUS+1 GUIDE and Service Tool applications using the latest release. Express licenses are valid for one year and users can request one Express license with each major release of PLUS+1 GUIDE and Service Tool.

GUIDE Add-Ons License (FuncSafety)

This is an Add-On license for GUIDE

- It has SAP number 11179525, GUIDE ADDONS LICENSE

- It enables

    - Version Control Support
    - Test Tool
    - Compare SCS
    - Dependency View
    - SIL2 Compilation
    - Traceability Properties
    - Static Analyzer

Integration: Simulink S-Function Add-On License (SimModel)

This is an Add-On license for GUIDE

- It has SAP number 11179531, GUIDE ADDON LICENSE_SIMULINK

- It enables

    - GUIDE-to-Simulink

Service Tool Add-Ons License (ST_Pro)

This is an Add-On license for Service Tool

- It has SAP number 11179527, GUIDE ADDONS ST_Pro

- It enables

  – CAN Xplorer design functionality

  – Scripting Toolbox design functionality

License Support

For general license related question, send an email to:

plus1license@danfoss.com

Support for technical PLUS+1 License related issues can be obtained by sending an email to:

plus+1helpdesk@danfoss.com

System requirements

	Service Tool Minimum	GUIDE Minimum	GUIDE/Service Tool Recommended
CPU*	1.5 GHz, 32-bit (x86), 1 core, 2008 or later		3.0 GHz, 64-bit (x64), 4 cores, 2012 or later
OS**	32-bit Windows 7		64-bit Windows 7/8.1/10
UAC	Local Administrator Access		
RAM	1 GB		3 GB
HD	>1 GB Free, HDD		>2 GB Free, SSD
Resolution	1024 x 768		1920 x 1080
Email	For license registration		
PDF	Any recent standards compliant pdf reader		
Web	Any recent standards compliant web browser (for HTML based F1 help)		
XML	MSXML 4.0 Service Pack 2 (Microsoft XML Core Services)		
.Net	N/A	Version 4 (Full) is needed for PLC code support in GUIDE	

* The CPU should be intended for at least laptop use. Processors designed for netbooks, tablets or similar are not recommended.

** In a future version, support for Windows 8.1 and the 32 bit version of Windows 7 will be removed. Support for 64 bit Windows 7 and 10 will remain.

Version 10.0.8

10.0.8 (March 2018)

What is Fixed

[P100004345]   When downloading an ECU Parameter Transfer file (P1T) created in 9.1 or earlier to an ECU, no parameter values were written.

[P100004332]   The features 'Create Download Package' and 'Save System Specification' were not enabled when using a Trial License.

[P100004452]   The ECU application was not stopped during ECU application download when setting parameters.

Important Advisory—Potential User Issues

- **CAN bus and Machine state**

  - It is required that the Machine is in a safe state before the Service Tool is connected to a system.

  - When logging a large number of signals on a Service Tool page, the CAN bus load can become quite high. This risks to interfere with other CAN communications on the bus.
    Workaround: The PLUS+1 protocol provides a number of options which allows to limit the CAN bus load:
    - KWP2000_STmin : This option sets the minimum time between any two CAN messages in a Keyword Protocol 2000 protocol block transfer on the CAN bus. Even a value of 1 will decrease the bus load significantly. Default value is 0.
    - KWP2000_BlockSize : This option sets the maximum number of CAN messages in a Keyword Protocol 2000 protocol block transfer that can be sent in a sequence without a flow control message. In most cases, tuning this option will provide the best tradeoff between performance and acceptable average bus load.
    - MaxEcuTxBuffer : This option can be used to set a limit on the maximum number of data bytes transferred over the CAN bus in a single Keyword Protocol 2000 protocol block from an ECU to the Service Tool while logging. A value of 0 (default) is used to indicate no limit other than what is supported by the ECU.
    Each option described above can be overridden in any P1D that needs to log a large number of signals on a single Page. The optimal combination of option values should be determined when designing the P1D for a system.
    The selected Log Period also has an effect on the resulting bus load while logging.

- **OS and other environment considerations**

  - If you are experiencing problems accessing network locations:
    Preferred workaround: If possible, keep your PLUS+1 related files in a source control system, and only check them out into folders that are physically located on your PC.
    Alternative workaround: If your IT policies allow it, then modify the UAC setting to its minimum value.

  - It is advisable to complete all Service Tool processes before locking or hibernating your computer.
    Workaround: Close Service Tool before leaving the computer.

  - The tool only supports the setting "100%" in "Display / Make text and other items larger or smaller".

- **Installation**

  - The user must exit Service Tool to install/uninstall other Service Tool versions.
    Recommendation: Close all open programs before installing the tool.

  - PLUS+1 Service Tool is only intended to work with one single user account.
    Workaround: The same user account should be used both for installation and usage of the tool.

  - Manual uninstallation of the CG150 gateway from the Windows Device Manager may be needed when upgrading PLUS+1 drivers on Windows 7 32 and 64-bit.

– When updating to the latest driver package, it is in some cases necessary to manually enable the drivers in the Windows Device Manager. The devices should appear under the "Danfoss" node in the Device Manager tree structure. If the driver is marked as disabled, then right click it and select enable from the context menu. If the devices appear under the "Sauer-Danfoss" node in the Device Manager tree structure, then the old driver was not completely uninstalled, and then the Update menu item should be selected instead. In some cases when the devices appear under the "Sauer-Danfoss" node in the Device manager, it is necessary to first use the Uninstall meny item, and then re-install the driver package.

• **Version independent user data**

– From version 7.0, version independent user data is saved in different folders than previously. This means that changes made to version independent user data in version 7.0 and later will not take effect in version 6.1 and earlier, and changes made to version independent user data in version 6.1 and earlier will not affect version 7.0 and later. User data will only be copied from the previous locations during the very first installation of any 7.0 or later version. This affects Diagnostic Data (PLG) files.

• **DP600 Series Graphical Terminals**

– When using Recover ECU on DP600 Series Graphical Terminals, option Specify ECU needs to be selected using Net: 0 and Node: 239 if the ECU is connected in a system with other PLUS+1™ compliant products.
Workaround: If multiple DP600 Series Graphical Terminals are connected in the system, disconnect the ECU from the other ECUs before using Recover ECU.

– DP600 Series Graphical Terminals does not report a warning during System Scan if the ECU is in boot loader mode.

• **Service Pages**

– When downloading parameters, always be sure that the download checkbox is checked for each parameter to be downloaded.

– Certain date formats in Windows Region and Language settings (e.g. Italian (Switzerland)) are not supported when reading log files created in version 7.0 or earlier.
Workaround: Set Format to English in Windows Region and Language settings [P100003066].

• **Application Log**

– When reading Application Log texts with the Service Tool, the maximum number of characters in a text is limited.

• **File Download**

– The file size limit for displaying LHX Readme files in the Service Tool is 256 kB.

• **Multilingual Service Applications**

- Translation files (.i18n) exported from the Translation Editor in Service Tool 7.2.9 cannot be opened in this and future versions due to file format changes. These files will not be available in the import file list when importing files.

- **Read and Set Bits individually**

  - It is not possible to download both bit values and base value for a parameter in the same parameter download action.

  - When designing Advanced Pages, make sure that potential user defined min/max values for a certain parameter are not exceeded by enabling bits for the same parameter.

  - When using the CAN Xplorer and Service Signals protocols, the naming of parameters may prevent you from logging/writing bit values in certain situations (i.e. if both the parameters "Name" and "Name.<valid bit number>" are available as base parameter names).

- **CAN Xplorer**

  - When using messages with overlapping signals, the behavior is undefined when it comes to the order of encoding signal values into messages.

  - When changing CAN ID dynamically, the ID is always validated as a 29-bit value. When changing an extended message to a standard message, only the first 11 bits will be used.

Product Information on the Web

For technical support, visit the Danfoss support pages:

powersolutions.danfoss.com/Products/MobileElectronics/PLUS1Guide/PLUS1GuideSupport/index.htm

Telephone support:

North America: 1.888.50PLUS1 (+1-888-507-5871)

Europe: +46 476-569 06

Email support: plus+1helpdesk@danfoss.com

PLUS+1 Forum: http://www.plus1forum.danfoss.com/index.php

Please report all suggested enhancements and great ideas to:

PLUS+1 Help desk

Please report all defects to:

PLUS+1 Help desk

Many thanks for all of your support.

The System Development Tools Team.

Disclaimer

The Danfoss Software License Agreement completely defines the licensed use of this software. Information in this document is provided in connection with Danfoss PLUS+1 GUIDE tool set. No license, express or implied, to any intellectual property rights is granted by this document. Danfoss disclaims all warranties and liabilities for the use of this document and the information contained herein and assumes no responsibility for any errors, which may appear in this document, nor does Danfoss make a commitment to update the information contained herein. Danfoss reserves the right to make changes to this document at any time, without notice.

Copyright

Previous Release Notes

Release notes dating back to 2.0.3 follow:

Version 10.0

10.0.7 (November 2017)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00407]   **Feature:** ECU Parameter Transfer Enhancements
- P1T files can now be downloaded to an ECU as long as all writable parameters in the file exists in the ECU (and the types are correct).
- P1T files now also contain more information about the system and the parameters.
- It is possible to decrypt P1T files to CSV/JSON format.
- Note: The new functionality only applies to P1T files created in this version.

[F00414]   **Feature:** Command line mode for Service Tool
Use /? parameter to list available parameters.
Example to downloading a file to ECU from command line:
"C:\Program Files (x86)\Danfoss\PLUS1\10.0\P1Tools\P1Diagnostics\P1Diag.exe" -headless -download-file-to-ecu "C:\Projects\DownloadPackage.mlhx"

Example to run a script function from command line (Add-On license required: 'ST_Pro'*):
"C:\Program Files (x86)\Danfoss\PLUS1\10.0\P1Tools\P1Diagnostics\P1Diag.exe" -headless -run-script "C:\Projects\ScriptFunctions.p1j" "MyScriptFunction"

Example to decrypting a P1T file from command line:
"C:\Program Files (x86)\Danfoss\PLUS1\10.0\P1Tools\P1Diagnostics\P1Diag.exe" -headless -decrypt-p1t "C:\Projects\EcuParameterTransferFile.p1t" "C:\Projects\DecryptedTransferFile.json"

[F00425]   **Information:** The features 'Create System Download Package' and 'Save system specification' are now available for users with Professional license (the 'ST_Pro' add-on license is no longer required).

[F00422]   **Information:** Initial PLUS+1 InterLink gateway support added.

What is Fixed

[P100004173]   When editing Oscilloscope settings in Advanced Page run mode, the edited values were not saved correctly in certain situations.

[P100004228]   Application crash when license settings file had invalid format.

[P100004201]   Service Application pages containing PVED-CC S5 ISObus parameters had long loading times, and slow performance when uploading parameter values.

[P100004228]   Improved error handling when reading license file in customized Service Tool installations.

[P100004259]   Min/Max/Default values are not set to zero for missing signals/parameters when opening Basic Log/Parameter Pages.

[P100004257]   Script API function St_AddWriteParameterList() did not handle S32/U32 values correctly when parameter values were passed as numeric values.

[P100004260]   Script API function St_WriteParameterList() did not return false on calls with parameter errors.

[P100004141]   The Service Tool did not close down properly in certain situations.

[P100004182]   The search/replace dialog in the Translation Editor was not displayed correctly.

[P100004258]   Clipped texts when using white font color in Advanced Page Oscilloscope components.

[P100004177]   Advanced Pages became corrupted in certain situations after copy/pasting components from a different page.

[P100004218]   When using copy/paste to edit a part of the signal name in Advanced Page component properties, the complete signal name was replaced by the pasted content.

[P100004162]   Hints in Advanced Page components located in panels were not displayed correctly.

[P100004027]   Incorrect error was shown when writing values to signals with no write access.

[P100004186]   The signal status icon in Advanced Page component properties dialogs was not updated correctly in certain situations.

[P100004178]   Boolean parameter components in Advanced Pages were not resized correctly from the 'Find Clipped Texts' dialog.

[P100004168]   Pasting double quoted download filenames in Create System Package dialog did not work correctly.

[P100004221]   The "Keep Settings" property in the Advanced Page Bargraph component property dialog did not work.

[P100004204]   Underscores at the end of signal names were not shown in Advanced Page components.

[P100004197]   Unselected components were cut after copy/paste operations from panels in certain situations.

[P100004198]   After pasting components into a Advanced Page Panel component, the Panel component was left selected together with the pasted components.

[P100004169]   When checking the "Locked" property in Advanced Page Parameter component properties, the Min/Max/Default values are set to default values (based on the selected signal type) if empty.

[P100002181]   It is now possible to enter Unit and Comments in the Inspector for Advanced Page Log and Parameter components.

Version 9.1.7

9.1.7 (September 2017)

What is Fixed

[P100004223]   It was possible to download ECU applications not intended for the ECU. This occurred when the original ECU was disconnected before starting the download and a different ECU type with the same ECU address was connected before using 'Retry Download'.

[P100004217]   The error 'Unable to load Advanced Page. Error=3' was reported in certain situations when loading Advanced Pages containing Graph components.

[P100004139]   Error "Invalid ECU information" was returned during System Scan for ECU applications containing leading or trailing spaces in the Application ID.

[P100004183]   Error "System Error. Code: 5 Access is denied" was returned when closing PLUS+1 Service Tool after running script functions using certain API functions (i.e. Ui_ShowUI).

[P100004148]   Certain Scripting Toolbox API functions could also cause the tool to crash (P1Diag not responding).

[P100004208]   Occasionally Advanced Page texts were lost when saving Service Application files after a log file had been opened prior to the save operation.

[P100004161]   The error 'Invalid class typecast' was reported in certain situations when designing Advanced Pages.

Version 9.1

9.1.6 (May 2017)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00330] **Feature:** PLUS+1 Update Center
PLUS+1 Update Center is included in the installation of PLUS+1 Service Tool. Its purpose is to keep the PLUS+1 toolchain up to date. PLUS+1 Update Center can be configured to start when the operating system starts, and it is also possible to configure PLUS+1 Service Tool to start PLUS+1 Update Center automatically. When started in these ways, the main window of PLUS+1 Update Center will be hidden. To open it, click on its icon in the system tray.

[F00400] **Feature:** HTML-based contextual help (opened in default web browser)
- Accessible when pressing 'F1' in key dialogs

[F00402] **Feature:** Save system specification (Add-On license required: 'ST_Pro'*)
- Accessible from ECU list context menu

[F00345] **Feature:** External links in Service Applications
- Added under External Links item in System Navigator
- Possible to add links to external webpages and PLUS+1 hyperlinks (PLUS+1 GUIDE)
- The links are available as hyperlink objects in Advanced Pages

[W00152] **Feature Extension:** Extended image support in Advanced Pages
- Scalable Vector Graphics now supported (*.svg)
- Metafiles now supported (*.wmf and *.emf)

[W00413] **Feature Extension:** 'Tab Order' property in Advanced Page components
- It is now possible to control the tab order for components in Advanced Pages
- The property is available in the component inspector

[W00180] **Feature Extension:** The Text Component in Advanced Pages now supports multiple lines

[W00403] **Feature Extension:** Undocked windows are now visible also when the Service Tool is not in focus

[W00396] **Feature Extension:** The tool version is now included in Service Application files
- Accessible from File/File Properties...
- Also available in reports

[W00321] **Feature Extension:** Scrolling improvements in Advanced Pages
- It is now possible to use the arrow keys, home/end and page up/down to scroll
- When using the mouse to scroll, the speed and behavior is improved

[W00377] **Feature Extension:** Importing Service Pages where a start page is defined now triggers a query where the current start page can be kept

[W00419]   **Feature Extension:** The Bargraph scale is now scaled accordingly when using multipliers in Advanced Pages

[F00311]   **Feature Extension:** Read-only cells in Basic Pages now look disabled

[F00387]   **Feature Extension:** Warn when the size of text and other items is unsupported
- When PLUS+1 Service Tool is started, a warning dialog will be displayed if the text size setting in the operating system is unsupported

[F00403]   **Feature Extension:** Scripting Toolbox improvements (Add-On license required for design of scripts: 'ST_Pro'*)
- New API function which sets the result code for a CAN Xplorer signal to the initial value. This can be used to determine if a CAN message for the CAN Xplorer signal has appeared on the CAN bus
- Additional items are now available when calling the St_GetScreenParameterData API function

[F00406]   **Feature Extension:** 'Hide virtual ECUs in Normal View' option in P1D
- The option 'Hide virtual ECUs in Normal View' is now available in Design/Service Application Properties
- ECU nodes using the CAN Xplorer and Service Signals protocols are hidden in the System Navigator when this option is set

What is Fixed

[P100003960]   Service Tool occasionally stops responding when running scripts in Service Applications.

[P100003998]   'Invalid report folder' error is displayed when opening a file for download if the selected report folder is missing or contain unicode characters.

[P100004074]   Initial setting of parameters during application download was not performed when downloading an application without any common parameters with the current application.

[P100003959]   The error "List index out of bounds" was shown in Advanced Pages, in rare occasions.

[P100003961]   Occasional issues when running script in Service Applications (error 'St_ScriptEventInitialize is not defined').

[P100004058]   Application download to a JS1 PVE Joystick fails (error 'Value out of range') and Parameter Settings dialog incorrectly states that the parameter structure has changed.

[P100004051]   No warning message when importing a parameter file that does not match the selected parameter page.

[P100004059]   Parameter list was not updated correctly when replacing diagnostic data for offline ECUs.

[P100004034]   Error 'Unable to load offline data file' was displayed in offline mode when opening Service Application Files containing ECUs without associated offline data files.

[P100003926]   The file download setting "Always display parameter settings dialog" was not working.

[P100003978]   Occasional issues when downloading uGraph application and read-only parameter file in a download package (read-only parameter file not found).

[P100004071]   License request failed for 'Get Trial / Express' in License Manager when entering long texts in user registration fields.

[P100004110]   When cutting/pasting Advanced Page components the align orders were lost.

[P100003848]   When replacing signals in Advanced Page Graph components, the changes were not applied completely in certain situations.

[P100004050]   The signal name validation in Advanced Page components was not case sensitive.

[P100004121]   When changing CAN Xplorer message IDs dynamically, the parameter download failed in certain situations.

[P100004008]   When playing log files, the position window is now updated correctly.

[P100004115]   When playing log files recorded through a multilingual P1D, translatable texts were not displayed correctly.

[P100003890]   Advanced Page log components with array signals where the dimension was out of range were shown in run mode.

[P100003634]   Multiple system scans were performed in certain situations.

[P100003563]   Advanced Pages were imported when pressing 'Cancel' in the 'Advanced Page Import Options' dialog.

[P100004065]   The 'Case Options' were not always correctly applied in the 'Result Preview' in 'Find/Replace Signal Names' when replacing signal names.

[P100003921]   When saving Download Packages, there was no question whether to overwrite existing files or not.

[P100002215]   When saving Service Application files, a read-only check is now done early in the save process.

[P100002868]   The font settings in the Advanced Page Oscilloscope component are now also applied to the axis numbers.

[P100003705]   Script functions are now listed under 'Scripts' and not under 'Documents' in the Advanced Page hyperlink dialog.

[P100004096]   Certain special characters were not displayed correctly in Advanced Page components unit fields.

[P100004028]   The Parameter Settings dialog was not displayed correctly when using a setting other than "100%" in "Display / Make text and other items larger or smaller".

Version 9.0

9.0.7 (October 2016)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00368] **Feature Extension:** Performance optimizations when logging.
- The performance when logging a larger amount of signals has been improved. This is most noticable when using WS Telematics connections.
- See important advisory: "**CAN bus and Machine state**" for more information and recommendations.

[F00361] **Feature Extension:** Gateway handling enhancements.
- RP 1210 gateway devices (channels) are now updated when the 'Reset Gateway' functionality is performed.

[F00373] **Feature Extension:** License model updates
- A license with an active maintenance period is now required. Existing pre-8.1 users will receive updated license keys via email.
- Perpetual Add-On licenses are no longer supported.
- A delete icon is now displayed for each license in the License Manager.

[F00382] **Feature Extension:** It is now import Service Tool screens (pfx/lfx files) to a Service Tool design (P1D file) from Windows clipboard (full filename stored in clipboard as text).

[W00250] **Feature Extension:** 'Cancel' button in 'Scan for Service Application File'.
- A 'Cancel' button is now available in the 'Scan for Service Application File' dialog.
- The matching files are now listed while searching, and it is possible to select and open matching files from the search dialog.

[F00267] **Feature Extension:** The Service Tool now supports reading Unicode Application Log data from PLUS+1 ECUs.

[W00356] **Feature Extension:** In Advanced Page components, the Unit checkbox is automatically checked when defining Unit strings.

[M00096] **Feature Extension:** Drivers signed with SHA256 are now available. (From driver setup 2.1.11.)

What is Fixed

[P100003873] Log file position did not work correctly (unless playing through the log file first).

[P100003907] Improved the error text when downloading an application without having the correct Tool Key value supplied. The errors of failed downloads are now listed in the lower part of the download report dialog and it is no longer possible "Retry Download" in this situation as it would result in the same error.

[P100003957]   Service Tool crash in certain situations when running script functions that use API functions with optional parameters (e.g St_SendCan).

[P100003829]   Number values (0 and 1) are now supported for boolean parameters when calling Service Tool API functions in scripts.

[P100003746]   The signal selection dialogs in the Advanced Page Oscilloscope and Graph components flickered when resizing them.

[P100003760]   The alignment properties were not preserved when copy/pasting Advanced Page Panel components.

[P100003761]   When updating the properties of a Scale Definition, the changes were not applied to all components in the Service Application using the Scale Definition.

[P100003790]   When creating a Basic Log/Parameter Page, the page was not shown the first time it was selected after leaving the design dialog.

[P100003802]   Log files were closed when changing Service Tool language.

[P100003834]   The System Scan dialog was hidden behind the main dialog in certain situations.

[P100003887]   No save changes dialog was displayed when closing the Service Application file after editing system configuration.

[P100003835]   Tool Key value and description not cleared when removing Tool Key from Service Application.

[P100003945]   The Service Tool crashed when opening a Service Application containing UDS protocol signals in Offline Mode.

[P100003964]   It was not possible to click inside a Panel area to focus an Advanced Page to be able to scroll with the mouse wheel.

[P100003886]   The Service Tool crashed when trying to close the application during file open using file association.

[P100003814]   Inconsistent error handling when reading/decoding an empty application log file.

[P100003845]   HTML dialog (opening with Ui_ShowUI) changes position/size when calling Ui_InitModalSequence from a script.

[P100003891]   A blank Service page was displayed in certain situations.

[P100003853]   The clipboard is now cleared from Advanced Page data when closing the Service Application.

[P100003926]   The file download setting "Always display parameter settings dialog" was not working.

[P100003931]   The initial directory for the log to file and open log file file dialogs was not retained.

[P100003897]   Certain XML files caused the CAN Xplorer protocol to stop working.

[P100003983]   'P1Diag has stopped working' application crash in certain situations when using file association and Service Tool is already running.

[P100003358]   The download checkbox was not checked for parameters where the uploaded parameter values were outside the specified range in Advanced Page parameter components.

[P100003709]   Set Pulse components did not have a write access level defined when retrieving this information through script functions.

[P100003736]   The Displayed Digits property in Advanced Page components was not set correctly when a multiplier was selected.

[P100003742]   The page focus was lost when uploading/downloading parameter values.

[P100003756]   The Advanced Page Import Options dialog now displays long ECU/Signal names in a better way.

[P100003757]   The Replace ECU dialog now displays long ECU names in a better way in the drop down list.

[P100003759]   Parameter Lookup Tables were not always displayed correctly in Advanced Page components in certain situations.

[P100003794]   When selecting a gateway in the Service Tool menu, it was not pre-selected in the Select Gateway Channel dialog.

[P100003797]   In the signal selection in Advanced Page components, the correct default Displayed Digits property was not set when typing a signal name and pressing 'Enter'.

[P100002849]   Service Tool may lock up when opening LHX file which is locked by another software.

[P100003818]   The space between the Unit text and the signal value was too large in certain situations in Advanced Page Standard Log components.

[P100001290]   The font color is now gray for the ECU Value and Default Value columns in Basic Parameter Pages.

[P100003872]   WebGPI_PVED_CC: OS string reported in the beginning does not match.

[P100003893]   Certain texts were not translated to German.

[P100003624]   Error "API not started" when changing to offline mode was displayed in certain situations.

[P100003859]   The behavior of the Advanced Page signal selection has been improved.

[P100003864]   If only one matching file is found when using "Scan for Service Application", that file is now automatically opened.

[P100003905]   An "Index out of bound" error is displayed when trying to play an empty log file.

[P100003919]   The Unit field in Advanced Page component properties is now read-only when a Scale Definition that overrides the signal unit is selected.

[P100003977]   The Page Manager in the Advanced Page design dialog had occasional graphical glitches when it was undocked.

Version 8.1.2

8.1.2 (August 2016)

What is Fixed

[P100003805]   Advanced Page components lost the 'Hide Component' properties when editing the Tooltip property in certain situations.

[P100003804]   Service Tool crashes and performance issues when using Service Application applications containing scripts.

[P100003858]   It was not possible to read/write array signal values in PVED-CC valves using the WebGPI protocol.

Version 8.1

8.1.1 (May 2016)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00348]   **Feature:** Enhanced License Model

- A free Express license can be obtained using an automated sequence from the License Manager dialog. This license provides basic functionality for developing PLUS+1 GUIDE and Service Tool applications using the latest release.

- Full license has been renamed to Professional.

- It is now possible to copy and paste the body of a license email in the License Manager to add multiple license keys in one operation.

What is Fixed

[P100003775]   The performance when loading pages containing a large amount of array parameters was heavily reduced.

Version 8.0

8.0.5 (February 2016)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00338] **Feature:** Scripting Toolbox (Add-On license required for design of scripts: 'ST_Pro'*)
- Develop advanced Service sequences in JavaScript/HTML using the Scripting Toolbox API.
- Scripts are started using Advanced Screen hyperlinks or triggered on a range of Service Tool events.

[F00328] **Optimization:** Remote Connectivity performance
- Improved performance: System scan, ECU history actions during diagnostics and post-download actions.
- Also noticeable performance improvements when doing local diagnostics.

[F00286] **Feature:** Read and Set Bits individually
- Possible to read and write specific parameter bit values.
- Add the suffix ".<bit number>" after the parameter name in the signal selection.

[F00273] **Feature:** A trial license allowing you to run a fully functioning PLUS+1 GUIDE and PLUS+1 Service Tool for a period of up to 90 days can be requested from the License Manager.

[F00341] **Feature Extension:** Skip 'Replace ECU' at file open with option in P1D
- Option "Skip 'Replace Missing ECU' at file open" is now available in Design/Service Application Properties.

[W00212] **Feature:** Replace ECU on selected service page with subpages as option
- 'Replace existing ECU' and 'Replace missing ECU' are now available from the service page popup menu.

[W00204] **Feature Extension:** System Navigator
- Clicking on [+] in System Navigator no longer loads the page.

[W00194] **Feature Extension:** Expanded Set Pulse settings
- The Set Pulse component now has the same display settings as the Button component.

[W00229] **Feature Extension:** Find Clipped Text enhancements.
- A new column (Text) is now available in the search result table, which shows a text identifier for each component.
- It is now possible to sort the list by the different columns.

[F00337] **Feature Extension:** The PLUS+1 Tools now officially support Windows 10.

What is Fixed

[P100003667]   Parameter upload occasionally report 'No answer from ECU' when uploading large amount of parameters.

[P100003644]   The signal status was not updated correctly in certain situations after changing the CAN ID/EXT flag for CAN Xplorer protocol messages.

[P100003665]   Parameter Upload/Download occasionally gets disabled after performing a Parameter Upload/Download while logging.

[P100003533]   Hard to distinguish between checked and unchecked menu/toolbar items.

[P100003561]   The Advanced Page import dialog has been improved to avoid confusion.

[P100003513]   Inconsistencies when logging the same signal from UDS and PLUS+1 protocol. UDS protocol now returns log value '0' for signals with error when logging.

[P100003620]   The unit and comment properties in Advanced Page components were not imported correctly in certain situations.

[P100003679]   An alternative method for sending emails can be selected from the License Manager dialog (button with settings icon) for users that experience MAPI issues when sending license emails.

[P100003683]   When selecting 'Read ECU History' from the menu and multiple ECUs were connected, the ECU list was empty in the ECU selection dialog.

[P100003637]   Whitespace characters used in Pages were not saved correctly.

[P100003001]   The Service Tool does not try to restore the file associations on start up, and a proper error message is shown when trying to set the file associations manually in the option dialog.

[P100003139]   Help lines in Advanced Page design are now displayed on top of all components.

[P100003425]   The index column in Array List components was not wide enough when using the classic theme in Windows 7.

[P100003512]   The multiple component selection in Advanced Pages did not work correctly in certain situations.

[P100003361]   The Service Tool was not focused if it was running but not in focus when double-clicking an associated file or trying to start the tool when already running.

[P100003649]   Basic Log Page Notation reverts to Dec when clicking on the field in the design dialog.

[P100003648]   When saving a P1D file created in a newer version of PLUS+1 Service Tool, the warning for file being created in a newer version is displayed on each save until the file is reopened.

[P100003622]   It was not possible to clear an available translation text in the Translation Editor (after saving and closing the editor, the text would be available again).

[P100003654]   When entering an invalid signal name in the basic log page design dialog, the notation and unit would be set to '0'.

[P100003515]   It was possible to double-click and open a P1D while the file association dialog was open, which caused an error message.

[P100003210]   A situation where two save inquiry dialogs were shown have been removed.

[P100003700]   The Service Tool did not start when certain My Documents folders were missing or couldn't be created.

[P100003692]   The gateway channel selection dialog has been improved.

[P100003690]   It is now possible to type in the signal selection field in the Advanced Page component inspector.

[P100003696]   The "Start Logging" button was sometimes enabled even though not properly connected to a system.

Version 7.2.10

7.2.10 (December 2015)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00149]   **Feature:** Multi Lingual Service Tool
             - German user manual updated.

What is Fixed

[P100003519]   The "Find Clipped Text" search crashed when searching large P1D files.

[P100003525]   Certain component properties were not saved correctly when copying a component and changing the copy/original.

[P100003538]   The Service Tool would occasionally crash when importing Advanced Pages created in earlier versions containing Graph components.

[P100003530]   'File not intended for this ECU' error not reported during File Download.

[P100003599]   Invalid languages are removed when opening corrupted P1D files.

[P100003562]   The Service Tool occasionally crashed when closing it after importing multilingual Advanced Pages.

[P100003609]   It was possible to open a P1D file by double-clicking it while the Translation Editor was active for the currently opened P1D file.

[P100003539]   The index column in Array List components was too wide when using the default theme in Windows 7.

[P100003547]   The group frame in Panel components was not visible when using the classic theme in Windows 7.

[P100003559]   Service Tool crash when changing ECU while logging a service page.

[P100003603]   When opening a second Service Application file, all nodes would occasionally not be available which could lead to different errors.

[P100003605]   The Translation Editor would crash in certain situations.

[P100003544]   Parameter/Generate Report save dialog filter incorrectly used .xml instead of .csv extension.

[P100003621]   There was an issue when importing Advanced Pages and merging conflicting text items manually.

[P100003597]   The Service Application texts for the original language in multilingual Service Applications could in certain situations be replaced with texts from a translated language (P100003643).

[P100003600]   Service Application texts in multilingual Service Applications could occasionally be reported as 'Not translated' when opening a Service Application.

[P100003601]   It was possible to double-click a Service Application file which was opened while the Translation Editor was open.

[P100003602]   Importing a translation file in the Translation Editor could lead to duplicate text entries.

[P100003528]   The file download progress was not visible in taskbar.

[P100003529]   'Your license does not allow this function' error message when starting the tool without a design license.

For more detailed information about specific issues, please contact PLUS+1 Helpdesk.

Version 7.2

7.2.9 (September 2015)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00237] **Feature:** Multi Lingual Service Tool Application Files (P1D)
- It is now possible to create multilingual P1D files.
- Add languages and edit translations in Design View, select P1D language in the toolbar in Normal View.
- The Advanced Page auto resize functionality now considers the text length for all available languages.
- It is possible to search for clipped texts in service pages.
Note: The P1D/P1H file format has been updated. Therefore P1D/P1H files created with Service Tool version 7.2 cannot be opened with earlier version of PLUS+1 GUIDE Service Tool.

[F00149] **Feature:** Multi Lingual Service Tool
- The Service Tool is now available in multiple languages in Normal View. Select language in the toolbar.
- English and German are available as default.

[F00299] **Feature Extension:** CAN Xplorer - Dynamically change CAN ID
- It is now possible to change the CAN ID and the Extended flag for defined CAN messages.
- The parameters are available as "<Message>.CanXplorerCanId" and "<Message>.CanXplorerCanExt".
- The parameter values are initialized with the defined message ID properties in the CAN database file, and are reinitialized when scanning the system or reloading the CAN database file.

[F00309] **Feature Extension:** Service Tool version and protocol data properties in P1D files
- Minimum and/or maximum Service Tool version and overriding protocol settings can now be selected in Service Application Properties available from the Design menu.

[F00304] **Feature Extension:** Service Tool can now use up to 4 GB of memory when used on supported 64-bit operating systems. The previous limit of 2 GB remains for supported 32-bit operating systems.

What is Fixed

[P100003506] When copy/pasting components in Advanced Pages, the depth order was not set/updated correctly for the components.

[P100003282] A defect preventing the user to edit the last parameter value in Basic Parameter Pages in certain situations.

[P100003334] An issue when using multiple Oscilloscope components in an Advanced Page.

[P100003344]	Incorrect scaling of log values in basic page Oscilloscope component when playing log files.
[P100003281]	Backup files created using the "Create backup file when overwriting Diagnostic File" setting is now named filename.~ext.
[P100003496]	The Max value in the Oscilloscope component in Advanced Pages was not updated correctly when changing the Horizontal divisions property in design view.
[P100003288]	The File Download dialog now displays a drop-down arrow for ECU and Parameter Setting fields where multiple options exist. The confirm dialog for application type has been extended to display the ECU and download file.
[P100003393]	High CPU usage when using a RP1210 gateway with no system connected.
[P100003170]	In online mode when no Gateway was selected, an error was sometimes displayed when closing the Service Tool.
[P100003444]	An error may be displayed when clicking 'Next' in File Download dialog while using a WS Telematics gateway.
[P100003225]	It is now possible to use RP1210C gateways.
[P100003487]	If an ECU was disconnected before doing a ECU Parameter Transfer, no error message was reported.
[P100003214]	The "Lock" property is now available also in the Inspector for Advanced Page parameter components.
[P100003263]	It is now possible to log multidimensional arrays containing a fixed index in the signal name.
[P100002768]	It is now possible to cut/paste components between Advanced Pages.
[P100003495]	Documents were not available in the System Navigator when using Hardware Service files.
[P100003313]	The time axis values in Oscilloscope components in Advanced Pages were not displayed correctly.
[P100003235]	A progress bar is now available when adding Advanced Page components using Wizards.
[P100003200]	When using "Align..." to align Advanced Page components, the right-clicked component is now used as reference also when using the Page Manager to select components.
[P100003186]	When selecting custom fonts, the tab text in Panel components is now updated correctly.
[P100003259]	The "out of range" error dialog for setting parameter values is now including the ECU and signal name.
[P100003102]	The system scan setting "Ask before scan" didn't work in all situations.

[P100003447]   It is now possible to enter Min/Max/Default values in hexadecimal format in Advanced Parameter components by using "0x" or "$" as prefix. The values will be converted to decimal values once the property dialog is closed.

[P100003425]   The Array List component in Advanced Pages had some minor alignment issues.

[P100003449]   The autoresize functionality in Advanced Pages now consider the alignment of texts when adjusting the size of the components.

[P100003471]   Import/export parameter data values changes the initial folder for File/Open/Save.

VERSION 7.1.12

7.1.12 (June 2015)

What is Fixed

[P100003400]   When using the "Add all named parameters" functionality, parameters with restricted access were added to the list.

[P100003440]   When double-clicking a downloadable application file, the download dialog was displayed even though no ECUs were available.

[P100003445]   When downloading an application to an ECU without having the correct Tool Key for the current application, the download procedure would fail in certain situations.

[P100003383]   The current service page was reloaded after parameter download in certain situations when not necessary.

For more detailed information about specific issues, please contact PLUS+1 Helpdesk.

VERSION 7.1.11

7.1.11 (April 2015)

What is Fixed

[P100003359]   Incorrect values may be reported when uploading Boolean parameters using MC0xx-0xx hardware.

[P100003354]   Issue with restricted parameters set to zero during file download has been resolved.

[P100003307]   Issues download applications containing new restricted parameters has been resolved.

[P100003310]   File download intermittently failed on 50k baud rate.

[P100003347]   File download intermittently failed when using the WS Telematics solution.

[P100003258]   "Log file export" is now updating the log values correctly for screens using multiple ECUs.

[P100003247]   The "Scan for Diagnostic File" function did not locate diagnostic files in the recent list.

[P100003233]   Errors while reading Diagnostic Data from ECU are now reported correctly.

[P100003269]   A defect where the Unit and Comment texts were lost when exporting/importing Advanced Screens has now been fixed.

[P100003286]   It is now indicated that multiple items are available in the ECU and Parameter Settings selections in the download dialog.

For more detailed information about specific issues, please contact PLUS+1 Helpdesk.

VERSION 7.1

7.1.10 (December 2014)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00166]   **Feature:** File download to multiple ECUs is now supported (Add-On license required for design of system download package files: 'ST_Pro'*)

[F00296]   **Feature:** CAN Xplorer protocol allowing read/write of signals defined in a CAN database file is now available (Add-On license required for adding database files to P1D: 'ST_Pro'*).

[M00064]   **Feature Extension:** Duplicated Advanced Screen images and definitions are now automatically removed from the P1D file when opening and importing.

[F00235]   **Feature Extension:** It is now possible to keep the component aspect ratio while resizing all Advanced Screen components by pressing the Shift key while resizing.

[F00233]   **Feature Extension:** Keep aspect ratio propery is now available for Image components.

[F00283]   **Feature Extension:** The spin edit buttons are now enabled when using Scale Definitions in Standard Parameter components.

[F00226]   **Feature Extension:** It is now possible to exit Advanced Screen design without saving the changes. A new option is available in Advanced Screen design settings, select "Save automatically" (default) or "Ask user to save or discard changes".

[F00282]   **Feature Extension:** There is a new property available for Advanced Screen Parameter components, "Indicate changed value". When checked, the value field will be highlighted when the edit value differs from the actual ECU value.

[F00284]   **Feature Extension:** It is now indicated when a log/parameter value is longer than the value field. A warning message is also shown in design mode for Advanced Screen components.

[F00270]   **Feature Extension:** The driver package has been updated to support CG150-2.
There is also improved support for 64-bit versions of Windows.
Furthermore, the Service Tool can now be started without the drivers being installed, although that is only useful when other gateways are available, or offline mode is to be used.
Note 1: It might be necessary to unplug, and then reinsert any connected gateway after updating the driver installation.
Note 2: The Service Tool installer will not prompt the user to install the latest drivers if the previous drivers are already installed. Service Tool 7.0 and 7.1 can both use either the latest or the previous version of the drivers. The latest version is only needed for CG150-2 compatibility, and can be installed manually in this case from the /misc folder.
Note 3: Due to a change in the error frames reporting behavior of the CG150 drivers, Service Tool 7.0 and earlier will sometimes stop working if and when the CAN bus has been inoperational for a time. Resetting the gateway or restarting the tool can be used as workarounds.

[F00272]   **Feature Extension:** The driver package has been signed to avoid warnings when installing.

[F00266]   **Information:** A new file format is now used when logging to file (*.p1log). Playback of old log files is still possible.

[F00180]   **Information:** Copy ECU list to clipboard is now available by right-clicking the ECU list in the Diagnostic Navigator.

[F00275]   **Information:** Display time setting for Advanced Screen component tooltips is now available in Service Tool settings.

What is Fixed

[P100002905]   Issues with missing Advanced Screen images when saving P1D files are now fixed. It is now possible to open P1D files with missing images and manually replace missing images and a warning message is displayed when attempting to save a P1D file that has missing images.

[P100003129]   Occasional issues where log values was not updated correctly after switching between screens is now corrected.

[P100003132]   An issue when uploading/downloading parameters to I/O modules after designing screens have been resolved.

[P100003130]   In certain situations, an empty Scale Definition line was added to the Scale Definition list, causing disorder in the list. This is now fixed.

[P100002922]   The Service Tool froze in rare occasions when adding tooltips to Advanced Screen components. This has now been resolved.

[P100002915]   An error occurred when uploading parameter values in certain Advanced Screens containing Graph components. This is now fixed.

[P100003030]   Issues saving P1D files when adding Diagnostic Data files (under Design/Diagnostic Data node) that are using by the connected system have been resolved.

[P100003039]   The ECU information is now reloaded when hot swapping between ECUs when logging signals.

[P100003133]   The wrong value (the old edit value) was downloaded in certain situations when downloading values after editing and dragging points in the Graph component in Advanced Screens. This is now resolved.

[P100003075]   When importing Advanced Screens, texts would sometimes disappear or get corrupted. This is now resolved.

[P100003146]   The last valid edit value is now used when a value that is out of range is entered in Basic parameter screens.

[P100003166]   Leading and trailing spaces are now retained when decoding application log files.

[P100002942]   When copying components between Advanced Screens, the component orders became incorrect in certain occasions. This has now been corrected.

[P100003142]   The autoresize functionality in Set Pulse and Button components has now been improved.

[P100003157]   The protocol option "RP1210_Filter" is now working again.

[P100003201]   When replacing signal names in Advanced Screens, it would take very long time in certain situations. This is now fixed.

[P100002938]   For certain combinations of installed protocol DLLs, it was not possible to edit protocol options for some of the protocols. This has now been fixed.

[P100002936]   It is now possible to add multiple Service Tool licenses with the same license ID created with License Administration Tool in the License Manager.

[P100002965]   Saving P1D files with same Diagnostic Data added in Diagnostic Navigator as used by the connected system caused an error. This has now been fixed.

[P100002996]   Parameters are lost when a Basic Parameter Function is created and the parameters are added by using Add All Named Parameters. This has now been fixed.

[P100002812]   The PLUS+1 protocol has been updated to comply with the minimum separation time (STmin) in ISO 15765-2.

[P100003087]   When using the Parameter List wizard in Advanced Screens, the Min/Max/Default values in the Parameter components were not shown. This is now fixed.

[P100003148]   An issue when autoresizing Standard Parameter components using Parameter Lookup Tables has been resolved.

[P100002867]   The grid in the Oscilloscope component in Advanced Screens was not updated correctly until resized in certain situations. This has now been fixed.

[P100002861]   Hexadecimal notation was incorrectly allowed for Min/Max/Default values in the Standard Parameter component property dialog. This has now been fixed.

[P100003008]   The Advanced Screen tooltips were still displayed when turned off in menu Options/Settings/Advanced Screen. This has now been fixed.

[P100003189]   The "Enable baudrate setting in status bar" setting was not in use after restarting the Service Tool. This has now been resolved.

[P100003058]   LHX Read Me files were not displayed when downloading certain Display applications. This is now resolved.

VERSION 7.0.8

7.0.8 (September 2014)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00228]   **Feature:** Downloading applications using the Danfoss UDS implementation is now supported.

What is Fixed

[P100003069]   An incorrect checksum calculation made it impossible to download some applications to SC-controllers. This has now been fixed.

[P100002987]   Long waiting times when switching from RP1210 gateways might occur in certain situations. This has now been resolved.

[P100003009]   In rare occasions when using RP1210 gateways, the Service Tool would stop to respond when closing it down. This is now fixed.

[P100002944]   In the Hide Component settings dialog in Advanced Screen design, the value type was reset to ECU value when changing signals. This is now resolved.

VERSION 7.0.7

7.0.7 (March 2014)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00274]   **Information:** A warning dialog stating that parameters will not be transferred is now displayed during file download when correct tool key has not been supplied.

What is Fixed

[P100002978]   An issue where displaying incorrect parameter values in the Parameter Settings dialog when downloading applications is now fixed.

[P100002960]   Issues with parameter values not updating correctly in Service screens has been resolved.

[P100002931]   An issue causing errors while loading Advanced screens containing restricted parameters has been resolved.

[P100002918]   Editing oscilloscope settings for a basic screen signal in run mode incorrectly updated all oscilloscope settings in the screen design. This has now been fixed.

[P100002811]   Issues causing invalid P1D files when system contain Joysticks with invalid part number information has now been fixed.

[P100002885]   In some cases a correct LHX file was not allowed for download. This affected version 7.0.6, and has now been fixed.

[P100002902]   Wrong Basic screen overview image was exported in some cases. This has now been fixed.

[P100002934]   Closing the Service Tool while switching between Online/Offline mode caused an error. This has now been fixed.

VERSION 7.0

7.0.6 (November 2013)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00193]   **Feature:** In the Find/Replace dialog, it is now possible to limit the search scope to certain panels in Advanced Screens. The search result list has also been extended with a Panel column and a Status column, that displays the name of the parent Panel and whether the new name of the signal is valid or not. The Find/Replace dialog is also accessible from Advanced Screens.

[F00234]   **Feature:** It is now possible to align the text in Text components and Text Lookup Tables in Advanced Screens.

[F00249]   **Feature:** The Service Tool background setting has been moved from the tool to the diagnostic application. The background color setting is available in Design/Diagnostic File Properties. When no diagnostic application is opened, the background color will be white.

[F00236]   **Feature:** Custom color settings in Advanced Screen design are now saved in the tool, and the custom colors are available for all components and also the screen settings.

[F00242]   **Feature:** It is now possible to add Diagnostic Data files to specific protocols in the diagnostic application. These files will be active for the applicable protocol once added. A Design node has been added in the Diagnostic Navigator where these files can be added.

[F00256]   **Feature Extension:** Performance when using a display unit as USB to CAN gateway has been improved, mainly for DP600LX and DP700. This requires HWD support.

[F00231]   **Feature Extension:** Performance of opening hex/lhx files has been optimized with respect to supporting larger files for units with more memory and/or larger address space.

[F00225]   **Information:** Windows 8 (32/64-bit) is now supported.

[F00250]   **Information:** The PLUS+1 GUIDE tools are now installed in a 'Danfoss' program group.

[F00259]   **Information:** PLUS+1 GUIDE Static Simulator has been removed from the Service Tool installation and will have a separate installation.

[F00253]   **Information:** The main window caption of the PLUS+1 GUIDE tools now also display the release part of the version number in addition to the major and minor release numbers.

[F00260]   **Information:** The Remote Desktop support software on the Help menu has been updated to a web-based solution.

What is Fixed

[P100002820]   When downloading parameter values outside the parameter type range in Advanced Screens, the minimum/maximum value for the parameter type was downloaded in previous versions. This has now been corrected. An error message is now displayed and invalid parameter values are not downloaded to the target.

[P100002850]   Issues preventing duplicated signals in basic log screens have been resolved.

[P100002845]   It is no longer possible to close the Service Tool while File/Save is in progress.

[P100002822]   Occasional problems when loading Advanced Screens have been resolved.

[P100002797]   Downloading parameters incorrectly caused an access denied error message under certain circumstances. This is now fixed.

[P100002725]   Occasional issues with importing Advanced Screens with mergable data have been resolved.

[P100002693]   Issues when importing Lookup Tables have been resolved.

[P100002743]   It is now possible to start logging again after playing a log file if a screen with log signals is selected in the Diagnostic Navigator.

[P100002716]   The ECU application were disabled even if the Parameter Settings dialog was not displayed or if ServiceTool.DisableDownload was set. This is now fixed.

[P100002702]   Issues during file download to ECUs that require a minimum separation time between CAN frames has been resolved.

[P100002836]   When duplicating Advanced Screens, texts in Text Components became linked and a change affected both screens. This is now fixed.

[P100002846]   The download checkbox in Advanced Screen parameter components is now unchecked during Parameter Upload.

[P100002796]   In certain situations, it was possible to move Graph component points beyond the specified limits in Advanced Screens. This is now fixed.

[P100002788]   An error occurred when opening an empty log file. This is now fixed.

[P100002786]   When opening a diagnostic application containing a start screen in Offline Mode, the start screen was not selected. This is now resolved.

[P100002754]   When exiting Advanced Screen Lookup Table dialogs using the "Escape" key, the entries were occasionally lost when entering the dialog again. This is now fixed.

[P100002724]   An issue when aligning multiple Advanced Screen components has been resolved.

[P100002715]   The ECU application is now enabled when closing Service Tool without downloading the opened file.

[P100002802]	An issue where the displayed size of images where incorrect when using image lookup tables in Advanced Screens has now been corrected.

[P100002842]	When an error occurred while uploading/downloading parameter values in Basic Parameter Screens, error icons were not shown in the left column. This is now resolved.

[P100002671]	Basic Screens and Advanced Screens now share the same error message when trying to download an invalid parameter value.

[P100002794]	Advanced Screen Text Lookup Tables were not updated correctly in all situations. This has now been corrected.

[P100002805]	Large readme files in LHX files are now displayed correctly when downloading applications.

[P100002729]	The baud rate selection in the status bar sometimes showed the incorrect selection when starting the Service Tool. This has now been fixed.

[P100002735]	Advanced Screen component names are now retained when duplicating screens and when copying components between screens. A incrementing number will be added to the component name during naming conflicts.

[P100002693]	Issues when importing Lookup Tables have been resolved.

[P100002696]	An issue with missing lookup table references when using Duplicate Screen has been resolved.

VERSION 6.1.7

6.1.7 (September 2013)

What is Fixed

[P100002702]   Issues during file download to ECUs that require a minimum separation time between CAN frames has been resolved.

[P100002715]   The ECU application is now enabled when closing Service Tool without downloading the opened file.

[P100002716]   The ECU application were disabled even if the Parameter Settings dialog was not displayed or if ServiceTool.DisableDownload was set. This is now fixed.

[P100002696]   An issue with missing lookup table references when using Duplicate Screen has been resolved.

[P100002693]   Issues when importing Lookup Tables have been resolved.

VERSION 6.1

6.1.6 (April 2013)

New Features and Functionality (see the Service Tool User & Design Manuals for more detailed information)

[F00216]   It is now possible to select type of signals to add in Advanced Screen Wizard (All, Used, System, Set).

[F00217]   The component name will now be retained when copying Advanced Screen components.

[F00223]   A Design license is now required to access parameter values in the Parameter Settings dialog displayed during File Download.

What is Fixed

[P100002683]   An issue where Lookup Tables were automatically selected on creation has been resolved.

[P100002410]   Issues when deleting and adding Lookup Tables have been resolved.

[P100002620]   A problem causing no parameters to be written to the ECU when selecting a large amount of parameters during File Download have been resolved.

[P100002670]   It is now possible to open Advanced Screen log files created in earlier versions (5.1 and older).

[P100002661]   A certain issue when playing log files has now been resolved.

[P100002645]   An issue when using hide component values in hexadecimal form has been resolved.

[P100002622]   The unit is not displayed for the actual value in the component hint for Advanced Screen components, when using multiplier.

[P100002430]   An issue reading Application Log texts longer than 127 characters has been resolved.

[P100002672]   The Parameter Settings dialog is now resizeable.

[P100002590]   Sometimes no red borders were shown in Advanced Screens when read/write errors occurred. This has now been fixed.

[P100002612]   The signal filter is now enabled and fully functional in the Standard Parameter component in Advanced Screens.

[P100002574]   An occasional issue when import tables in Advanced Screens has been resolved.

[P100002609]   Parameters are now added in alphabetical order when using the "All parameters" wizard in Advanced Screens.

[P100002596]   A problem causing the parameter report dialog to be displayed when downloading read-only parameters has now been resolved.

[P100002660]   In some situations, a P1A file is not created when reading Application Log data from an ECU. This is now corrected.

[P100002651]   The Error Log wizard in Advanced Screens now contain the correct signal filters.

[P100002636]   The obsolete Alias filter has been removed in Advanced Screen component properties dialogs.

[P100002606]   Set value parameters are now added when using the "All parameters" wizard in Advanced Screens.

[P100002561]   A proper error message has now been added when no ECU was found, when using the Recover ECU functionality.

[P100002684]   LHX Read Me files are now using the full available area of the Service Tool dialog.

VERSION 6.0.8 (December 2012)

New Features and Functionality (see the User Manual for more detailed information)

[F00083]   A new parameter settings dialog will now appear when downloading applications with common parameters. This dialog will display the changes in the parameter structure and allow configuration of parameter values. This dialog can be configured to always be displayed during file download in the Service Tools options.

[F00157]   A new component called "Panel" is now available in Advanced Screens. The new Align property can be used to align components within a panel component or the screen area. It is available in the Inspector under Screen Attributes. Three (3) new wizards are also available in Advanced Screens (All Signals, All Parameters & Error Log).

[F00182]   It is now possible to scale signal values in Advanced Screens. Scale Definitions are created in the Definitions pane (formerly called Lookup Tables) and can be selected in Log and Parameter components.

[F00183]   Installing Diagnostic Data files is now supported for protocols which support this functionality. The "Recover ECU" is also available for all protocols and gateways (where supported). The Service Tool is now running in "Multiple Protocols" mode at all times. The "PLUS+1 only" and "Multiple Protocols" menu items have been removed.

[F00176]   Alignment tools such as Guidelines, Rulers and Magnetic Snap are now available in Advanced Screens. These are enabled or disabled in the Advanced Screen options.

[F00138]   It is now possible to Copy/Paste components between Advanced Screens.

[F00139]   Additional image formats (PNG/GIF) are now supported in Advanced Screens.

[F00184]   The cursor keys can now be used to select, move and resize components when designing Advanced Screens.

[F00179]   Lookup Tables are now sorted alphabetically in Advanced Screens.

[F00198]   A progress bar is now available in the Windows task bar when downloading applications (Windows 7 and later only).

[F00195]   The Service Tool Manual is now split into two parts. The "User Manual" includes run mode operations, and the "Design Manual" includes designing diagnostic applications.

[F00196]   The signal/parameter selection in basic log and parameter design has been updated.

What is Fixed

[P100002359]   The controller memory Auto-Fix functionality during application download could previously target the wrong ECU if the system contained several ECUs using the same GUIDE application. This has now been fixed.

[P100002424]   The Parameter File Import/Export, Set Default, and Check/Uncheck all parameters func-tionality now locks the user interface until complete. A progress dialog has also been added.

[P100002403]   The Screen area is now resized when Advanced Screens are displayed and the Diag-nostic Navigator is hidden or undocked.

[P100002344]   Occasional problems when opening P1D files containing multiple files with the same name has now been resolved.

[P100002345]   It is now possible to install Diagnostic Data from an LHX file.

[P100002388]   Zipped kernel diagnostic data is now supported.

[P100002420]   Problems when setting Hide Component and Tooltip properties through the Inspector in Advanced Screens has now been resolved. [P100002423]

[P100002421]   It was possible to set a minimum and maximum value outside the parameter data type in the Standard Parameter Component in Advanced Screens. This could cause the Log/Upload/Download parameter values menu items and toolbar buttons to be disabled. This is now resolved. [P100002422]

[P100002397]   Values containing "," and "." was accepted when pasted in the Standard Parameter Com-ponent when not using Multiplier or Scale Definitions. This is now resolved.

[P100002419]   Occasional problems when editing signal properties in the Oscilloscope Component in Advanced Screens have now been resolved.

[P100002393]   It was possible to enter duplicate names for components in Advanced Screens. This issue is now resolved.

[P100002394]   Occasional problems when entering negative values in the Standard Parameter Com-ponent have now been resolved.

[P100002391]   The range interpretation when using the "In Set" operator in Hide Component properties has been improved. [P100002392]

[P100002410]   Issues when deleting and adding Lookup Tables has been resolved.

[P100002437]   Occasional problems when loading Advanced Screens where the user received the error message "Unable to notify Advanced Screens items" has now been resolved.

[P100002438]   The Set Pulse component was sometimes marked with a red border (invalid component) even when the component was valid. This is now resolved.

[P100002427]   Occasional problems when loading Advanced Screens after editing the background color has now been resolved.

[P100002444]   An issue making it impossible to edit Screens when switching from Online Mode to Offline Mode has now been resolved.

[P100002363]   Various issues when entering invalid Parameter values in Basic Parameter Screens are now resolved. [P100002364][P100002365][P100002366][P100002367]

[P100002327]   It is now possible to use a CG150 with CANKing together with the Service Tool when using Multiple Protocols. [P100002327]

[P100002382]   Imported Lookup Tables was sometimes marked as incorrect until being edited. This is now fixed. [P100002382]

[P100002381]   Lookup Table names are now verified to be unique also when renaming Tables in the Lookup Tables/Definitions pane.

[P100002378]   Oscilloscope size settings are now saved when pressing the Auto Resize button.

[P100002331]   The Snap to Grid setting in Advanced Screens is now also used when moving components using the arrow keys.

[P100002349]   The default component settings and grid settings in Advanced Screens are now saved correctly when leaving the screens.

[P100002370]   Deleting the Image Description in the Image Repository does not delete the image from the repository.

[P100002376]   Occasional issues with the Oscilloscope Component in Advanced Screens when using large fonts have now been resolved. [P100002377][P1dev00001193]

[P100002348]   An issue when adding an already existing Image in the Image Repository has now been resolved.

[P100002304]   The component properties "Name" and "Order" in Advanced Screen components are now available in the correct place in the Inspector.

[P100002299]   When using an Oscilloscope Component in Advanced Screens and locking the computer, an error message would be displayed when unlocking the computer. This is now resolved.

[P100002285]   Invalid Gauge Components were shown in run mode. This is now fixed.

[P100002286]   Common properties were not always shown in the Inspector when selecting multiple components in Advanced Screens. This is now resolved.

[P100002294]   Valid signals were occasionally marked as invalid in the Graph Component Signal Selection in Advanced Screens. This is now fixed.

[P100002298]   A glitch making the Diagnostic Navigator to automatically hide when it should not has been removed.

[P1dev00000320]   Array signals now have the correct Access Levels in Advanced Screens.

[P1dev00001311]   The Hyperlink Selection dialog and the Array Index dialog in Advanced Screens are now displayed on the same monitor as the parent dialog. [P1dev00001312]

[P100002457]   Occasional issues making Lookup Tables corrupt when exporting and importing screens have now been resolved.

[P100002516]   Parameter values are now validated when importing parameter values from file.

[P100002508]   The needle indication in the Graph Component in Advanced Screens was sometimes incorrect when logging signals with the S32 data type. This has now been corrected.

[P100002494]   The Advanced Screen Design settings are now saved correctly.

[P100002475]   Occasional issues when using Parameter Lookup Tables in the Standard Parameter Component in Advanced Screens have been resolved. [P100002476]

[P100002398]   The Log Component positions in Graphical Overview are now saved correctly in Basic Screens.

[P100002541]   Images and texts are now available in Advanced Screens after playing log files.

[P100002509]   A memory leak when using Advanced Screens has been removed. [P100002537]

[P100002495]   Occasional issues when hiding the panes in Advanced Screen Design have been resolved.

[P100002514]   Corrupt HEX files are now detected.

[P100002343]   It is now possible to play read-only log files.

[P100002552]   The Unit property is now aligned correctly in Advanced Screen components.

[P100002353]   It is now possible to log to file using Hardware Diagnostic files.

[P100002323]   Hyperlinks now work when using Hardware Diagnostic files.

[P100002565]   It is now possible to scroll vertically in Advanced Screens using the mouse scroll wheel.

VERSION 5.1.10 (May 2012)

What is Fixed

[P100002359]   The controller memory Auto-Fix functionality during application download could previously target the wrong ECU if the system contained several ECUs using the same GUIDE application. This has now been fixed.

[P100002403]   The Screen area is now resized when Advanced Screens are displayed and the Diagnostic Navigator is hidden or undocked.

[P100002424]   The Parameter File Import/Export, Set Default, and Check/Uncheck all parametersfunctionality now locks the user interface until complete. A progress dialog has also been added.

[P100002344]   Occasional problems when opening P1D files containing multiple files with the same name has now been resolved.

[P100002345]   It is now possible to install Diagnostic Data from an LHX file.

[P100002388]   Zipped kernel diagnostic data is now supported.

VERSION 5.1.9 (November 2011)

What is Fixed

[P100002313]   It is now possible to import advanced screens from previous versions containing non-Latin characters.

[P100002330]   The Advanced Screen area is now resized when hiding the Diagnostic Navigator.

[P100002296]   Problems when custom tools executables were missing have been resolved.

[P100002306]   Problems upgrading from a 4.x license have been resolved.

VERSION 5.1.8 (September 2011)

New Features and Functionality (see the GUIDE User Manual for more detailed information)

[F00134]   It is now possible to use RP1210A/B Gateways with J1939 protocol for gateways that do not support generic CAN protocol. This is done automatically and does not require any changes in the Service Tool settings.

[F00134]   CAN filters are now available when using RP1210A/B Gateways.

[F00093]   A System ID can be embedded in a GUIDE application. The Service Tool program uses the embedded System ID to automatically open a P1D file with a matching System ID.

[F00135]   Screens can now be duplicated by right-clicking on a screen and selecting Duplicate.

What is Fixed

[P100002120]   The Parameter List screen automatically checks for download any imported value that differs from the value that is displayed in the Parameter List screen's Edit value column.

[P100002276]   The free version of the Service Tool program now can read application log records with access levels 5–9. The Access App Log Enable component must be used in the application to enable access by the Service Tool program.

[P100002244]   Problems with memory not being released when selecting images in Advanced Screen Image components have been resolved.

[P100002195]   Occasional problems where the Autofix parameter dialog box displays when downloading the same LHX have been resolved.

[P100002222]   A problem with intermittent CG 150 Gateway disconnects that occurs when the Service Tool program starts has been resolved.

[P100002165]   The "Incorrect Toolkey" error message no longer displays when a user starts the Service Tool program by opening a P1D using file association.

[P100002189]   Problems when saving changes in the Normal View have been resolved.

[P100002125]   Screens now can be loaded after clicking Cancel in the Missing Gateway dialog box.

[P100002177]   A problem that occurs when loading P1D files that contain regional characters has been resolved.

[P100002199]   An Advanced Screen component with an invalid property and an enabled hide component property no longer displays when connected to a controller.

[P100002152]   The display data in Advanced Screen log components with an image lookup table now displays correctly.

[P100002143] The "Unable to load offline data file untitled" error message is no longer displayed for ECUs that do not have a Diagnostic File.

[P100002249] Under certain circumstances when using Graph Components and Standard Parameter components with common parameters, the parameter values in the Standard Parameter components do not always update correctly. This problem has been resolved.

[P100002240] When using Multiple Protocols, Application Log Files (*.P1A) are not saved with the correct file name, and when trying to decode Application Log Files, no files are available in the file list. This problem has been resolved.

VERSION 5.0.9 (January 2011)

What is Fixed

- Issues related to reading PC information in the License Manager have been fixed (GetMacAddress failed). [P100002130]

VERSION 5.0.8 (December 2010)

New Features and Functionality (see the User Manual for more detailed information)

- The License Manager now supports re-hosting and subscription services.

- The License Manager User Manual is available via Tools menu > License Manager > Help.

- Note: PLUS+1 Tools products supported by License Manager version 4.x are not compatible with version 5.x [F00098]

- A new Button component has been added in Advanced Screens. The Button component can be used to hyperlink to documents, screens or menu items. [F00089]

- P1D files can now be configured to hide menus and toolbars when opened. [F00085]

- Additional download support for Displays has been added. [F00099]

- ECU values in the Standard Log and Standard Parameter components can now be formatted to display decimal points. [F00088]

- It is now possible to hide documents when designing P1D/P1H files by using the 'Hide in Normal View' menu selection. When 'Hide in Normal View' is selected, documents are only accessible by using Advanced Screen hyperlinks. [F00087]

- Read ECU History, Read Application Log and ECU Parameter Transfer is now accessible from the file menu. [F00090]

- It is now possible to return to previous screen from the File Download panel. [F00121]

- The information displayed in the tooltip for Advanced Screen components in run mode has been updated. [F00106]

- The 64 bits version of Windows 7 is now supported. [F00063]

- The icons have been updated and large icon support has been added. [F00123]

What is Fixed

- Advanced Screen log files are now stored correctly after logging has been stopped and restarted. [P100001935]

- System Scan will now be automatically performed when selecting a screen in Normal View and an ECU is in a not scanned state. [P100002015]

- It is now possible to change signal name when having multiple components selected. [P100001990]

- Components will snap to grid when pasting in Advanced Screen design. [P100001979]

- When clicking AutoResize in the Advanced Screen component properties dialog the current values will always be applied. [P100001977]

- The Advanced Screen Import Options dialog is now only displayed when multiple data choices are present during Screen import. [P1dev00000693]

- The Advanced Screen design window will open in the same location where it was last closed. [P100001924, P100001925]

- The current screen selection will now be retained when switching to offline mode. [P100002005]

- A System Scan is now performed after a failed File Download. [P100002046]

- Issues when overwriting log files has now been resolved. [P100001923]

VERSION 4.3.8 (September 2010)

What is Fixed

- Occasional problems when selecting a new screen before the previous screen had finished loading have now been resolved. [P100002036]

- Parameter values are now downloaded even if the value is not confirmed before pressing the Download button. [P100002037]

- The Read-Only Parameter file information is now available in reports created using Generate Report in the Parameter menu. [P100002056]

VERSION 4.3.7 (April 2010)

What is Fixed

- Occasional problems when importing Advanced Screen have been resolved. [P100001976]

- Logging data to file with an ECU disconnected no longer generates log files with missing data points. A warning message will be displayed when opening log files with missing data points. [P100001864]

- Service Tool communication now works when using RP1210 gateways and CAN messages with 11-bit IDs are on the CAN bus. [P100002013]

- Read and Write access levels now works correctly in Basic screens when using access level components in GUIDE applications. [P100002026]

VERSION 4.3.6 (February 2010)

New Features and Functionality (see the User Manual for more detailed information)

- This version of the Service Tool runs on Windows 7 (32-bit only).

- New Advanced Screen Component – Array List

- Significant speed improvements made when loading and saving P1D files.

- User settings are now automatically imported from the previously installed version.

- The log and parameter toolbars can now be moved or hidden.

- Error reporting during parameter upload and download has been improved.

- Navigation between screens has been improved; a progress dialog is now displayed during loading. It is now possible to quickly navigate between screens by holding down the shift key.

- An error message is now displayed during System Scan if an ECU is running in boot loader mode. Failed or interrupted downloads will (in most cases) place the ECU in boot loader mode.

What is Fixed

- Occasional problems when using hyperlinks have been resolved. [P100001840]

- The installation size in Microsoft Windows' Add/Remove Programs is now correctly reported. [P100001656]

- The text IEC 61508 SIL2 Certified is now displayed in the Diagnostic Navigator for SIL2 certified GUIDE applications. [P100001860]

- It is no longer necessary to reselect the gateway after Cancel is clicked in the missing gateway dialog. [P100001866]

- Documents will now be opened using the associated software when hyper linking instead of selecting the document in the Diagnostic Navigator. [P100001844]

- Parameter report files created using Parameter/Generate report now contains the ECU information for connected hardware units. [P100001892]

- Scan for hardware diagnostic files now works for P1H files saved with multiple hardware units connected can now be found using Scan for hardware diagnostic files. [P100001199]

- Log values are now displayed correctly when using hexadecimal notation in basic log screens. [P100001292]

- Oscilloscope playback now works correctly when stepping through a saved log file. [P100001702]

- The user manual now described how to install Diagnostic Data files for use in online and offline modes. [P100001897]

VERSION 4.2.6 (June 2009)

New Features and Functionality (see the User Manual for more detailed information)

- New Advanced Screen Component - Graph

- Diagnostic Data files can now be managed from the file menu for online and offline use.

- It is now possible to access the PLUS+1 Support Web Page and launch Remote Desktop from the Help Support menu.

What is Fixed

- A correct error message is now displayed when uploading or downloading values with insufficient access rights. [P100001781]

- Downloading negative values to parameters with type S8 now works. [P100001756]

- It is now possible to hyperlink to imported Advanced Screens. [P100001608]

- The Autofix dialog when downloading ECU application will now only be displayed when the memory structure has been changed. [P100001743]

- The Automatic Parameter Upload now works correctly when switching from Design to Normal view. [P100001740]

- Under certain circumstances the log period info will not be updated until the info changes or window is focused. This has now been fixed. [P100001681]

- Navigating using hyperlinks in Advanced Screens no longer fails intermittently. [P100001741]

- ECU history records will now be updated correctly with user and license information when using multiple protocols. [P100001753]

- Adding write-protected documents when designing P1D files no longer causes problem when opening the file. [P100001713]

- Importing log and parameter screens already present failed intermittently. This has now been fixed [P100001582]

- Saving or adding documents to P1D files without using File/New first caused problems. This has now been fixed [P100001539, P100001545]

- The width of Standard Parameter components are now updated correctly when using Auto Resize. [P100001751]

- The "unable to find node" error message after downloading Plus-C application is now displayed. [P100001727]

VERSION 4.1.7 (April 2009)

What is Fixed

- Different short date formats in Regional settings caused unhandled exception errors. This has now been fixed [P100001731]

- Parameter transfer was transferring parameters while "Access level Disabled" was set. This has now been fixed [P100001721]

- When using basic parameter design screens, the read value was not updating correctly after upload. This caused the update default settings to always have a value of zero. This has been fixed. [P100001699]

VERSION 4.1.6 (January 2009)

New Features and Functionality (see the User Manual for more detailed information)

- A Find/Replace Signal Names function has been added

- The Diagnostic Navigator has been updated. New features include a grid layout design and ECU list that update during runtime.

- Now supports multiple diagnostic protocols for future protocol plug-in development

- It is now possible to hide Advanced Screen components using parameter edit values, enabling dynamic component display.

- Advanced Screens - Storing images in native JPG format is now supported. Using JPG format files creates faster P1D and P1H processing times.

- In Options it is now possible to enable warning messages to warn the user about conflicting file formats.

What is Fixed

- User interface when gateway is missing has been improved. [P100001625]

- Unit and comments in Advanced Screens are now available after using the Replace Missing/Existing ECU functionality. [P100001646]

- Problems involving uploading parameters using P1H files have now been resolved. [P100001620]

- Offline data files are now available when opening P1D files in offline mode. [P100001623]

- Bargraph view is no longer automatically checked for signals with no view selected when designing Basic Log Screens. [P100001572]

- Problems accessing array parameters in Inverter applications have been resolved. [P100001639]

- Hexadecimal and binary values can now be entered in Advance Parameter Component. [P100001267]

- Auto resize is now working correctly on Advanced Parameter Component. [P100001593]

- Some text no longer appears clipped in Windows Vista, when using the ClearType effect option. [P100001291]

- Replace Missing/Existing ECU and P1H files now works when using Advanced Screens designed with Net/Node number 0,0. [P100001503, P100001504]

VERSION 4.0.3 (October 2008)

What is Fixed

- Automatic Parameter Upload now works in Normal View (CQ P100001559).

- Occasional problems with Automatic Parameter Fix during file download have been resolved (CQ P100001602, P100001604).

- Parameter Transfer Function now handles negative numbers (CQ P100001351).

- System Scan no longer fails intermittently with Diagnostic Data errors on certain ECU Application (CQ P100001562).

- Oscilloscope Min Count is now saved when Basic Log Functions are designed. (CQ P100001540).

- Application Download no longer fails intermittently generating an 'Unable to verify CRC' error message (CQ P100001516).

- A more accurate error message is now displayed when read/write parameter access is disabled (CQ P100001523).

VERSION 4.0.2 (June 2008)

New Features and Functionality (see the User Manual for more detailed information)

- New Advanced Screen Component - Boolean Parameter

- New Advanced Screen Component - Parameter Table

- Supports multiple read-only parameter files

- Supports multiple application log files

- Supports RP1210B gateway standards

What is Fixed

- Oscilloscope component in Advanced Screens now displays smooth signal output (stair step display issue resolved) (CQ P100001489).

- Automatic Parameter Fix during file download now works for parameters with read and write access set to disable. The dialog will only be available when parameters have moved to a new memory location (CQ P100001089, P100001281).

- Display issues in Advanced Screens involving signals using access right levels have been resolved (CQ P100001480).

- Log and Parameter screens now update correctly depending on access rights after Parameter Download (CQ P100001256).

- The Diagnostic Data will now be available when opening P1D files in offline mode (CQ P100001365).

- Warning message will be displayed after Parameter Upload for parameter values that are out of range (CQ P100001383).

- Scan for diagnostic file now finds P1D files containing only Advanced Screens (CQ P100001433).

- Parameter Import is available in offline mode (CQ P100001452).

- Opening P1D files using file association now works in Normal View (CQ P100001450).

- It is now possible to select arrays with the length of 1 (CQ P1000001385).

- Issues involving logging Advanced Parameter Screens to file have been resolved (CQ P100001374).

- Problems involving resizing Advanced Screen Components when using dual monitors have now been resolved (CQ P100001486).

VERSION 3.2.5 (APRIL 2008)

What is Fixed

- Issues using DP600 as a CAN gateway have been resolved (P100001420, P100001421, P100001422, P100001424)

VERSION 3.2.4 (JANUARY 2008)

New Features and Functionality (see the User Manual for more detailed information)

- Set Pulse and Input Value components are available in the Advanced Screen design.

- New Hyperlink property used to navigate between screens and link to documents available on Text and Image components in the Advanced Screen design.

- Advanced Screen components can now be hidden depending of a set of values instead of a single value.

- Import and Export is now supported for Advanced screens and lookup tables.

- Basic and Advanced Screens can be hidden in Normal View

- P1D and P1H files can now be locked to prevent changes.

- Support for toolkey in P1D files have been added.

- The Graphical User Interface of the GUIDE Service Tool options dialog has been updated.

What is Fixed

- Parameter Transfer Function now handles negative numbers (P100001351)

- Parameter Upload and Download for IX024-010 and IX012-010 now works without generating an error message (CQ P100001326).

- Advanced Screens with incomplete Image Lookup Tables can now be used without generating an error message (CQ P100001318).

- P1H files containing only Advanced Screens and Standard Log components can now be opened (CQ P100001313).

- Bargraph and Oscilloscope signals are now displayed correctly for P1H Log Screens (CQ P100001265).

- Parameter Upload now works without generating an error message after ECU power cycle (CQ P100001262).

- GUIDE Service Tool no longer crashes when closing the software while editing a Basic Parameter Screen parameter value (CQ P100001255).

- Pressing Ctrl+L or Ctrl+P in Normal View no longer displays an error message (CQ P100001212).

- The correct create new menu text is now displayed when right-clicking a Screen in Design View (CQ P100001205).

- Scan for hardware diagnostic file now finds P1H files containing only Advanced Screens (CQ P100001199).

- Oscilloscope Signal Selection color in Advanced Screen design will be unique (CQ P100001269).

- Right alignment now works for Oscilloscope components in Advanced Screen design (CQ P100001270).

- Advanced Screen background image is now updated when replaced in the Image Repository (CQ P100001271).

- Advanced Screen component inspector scroll bar is now displayed correctly (CQ P100001272).

VERSION 3.1.5 (OCTOBER 2007)

New Features and Functionality (see the User Manual for more detailed information)

- GUIDE Service Tool is an IEC61508 SIL2 certified code generation support tool.

- GUIDE Service Tool is tested for Windows Vista 32-bit.

- Oscilloscope and gauge components are available in the Advanced Screen design.

- GUIDE Service Tool supports the GUIDE "lock lhx" feature. This feature restricts the download of an LHX application file by either hardware part number or hardware serial number.

- GUIDE Service Tool can display customized startup screens when opening a P1D or P1H file.

- In the Normal View, the tree in the Diagnostic Navigator tab does not display the Parameter Functions and Log Functions links if there are no parameter functions or log functions.

- The installation of GUIDE now follows Microsoft Windows installation guidelines.

    – User Data files can now be found in the %UserProfile%\My Documents\Sauer-Danfoss folder.

    – Application Data files are now in the %AppData%\Sauer-Danfoss folder.

- If previous versions of GUIDE are installed, the installation software will automatically copy all necessary user and application data to the 3.1.5 installation.

- Notes for directory structure:

    – %AppData% is typically: C:\Documents and Settings\<user profile name>\Application Data

    – %UserProfile% is typically: C:\Documents and Settings\<user profile name>

    – {InstallPath} is typically: C:\Program Files

- This pertains to the following GUIDE Service Tool files:

    – Hardware Files
      From: {InstallPath}\Sauer-Danfoss\PLUS1\P1Tools\P1Diagnostics\Hardware\
      To: %UserProfile%\My Documents\Sauer-Danfoss\PLUS1\GUIDE Service Tool\Hardware\

    – Diagnostic Files
      From: {InstallPath}\Sauer-Danfoss\PLUS1\P1Tools\P1Diagnostics\DiagnosticFiles\
      To: %UserProfile%\My Documents\Sauer-Danfoss\PLUS1\GUIDE Service Tool\DiagnosticFiles\

    – Image Files
      From: {InstallPath}\Sauer-Danfoss\PLUS1\P1Tools\P1Diagnostics\Images\
      To: %UserProfile%\My Documents\Sauer-Danfoss\PLUS1\GUIDE Service Tool\Images\

    – Log Files
      From: {InstallPath}\Sauer-Danfoss\PLUS1\P1Tools\P1Diagnostics\Log\
      To: %UserProfile%\My Documents\Sauer-Danfoss\PLUS1\GUIDE Service Tool\Log\

- **–** Diagnostic Data Files
  From: {InstallPath}\Sauer-Danfoss\PLUS1\P1Tools\P1Diagnostics\PLG\
  To: %AppData%\Sauer-Danfoss\PLUS1\GUIDE Service Tool\PLG\

- **–** Troubleshooting Files
  From: {InstallPath}\ Sauer-Danfoss\PLUS1\P1Tools\P1Diagnostics\Troubleshooting\
  To: %AppData%\Sauer-Danfoss\PLUS1\GUIDE Service Tool\Troubleshooting\

- **–** Advanced Screen Settings
  From: {InstallPath} \Sauer-Danfoss\PLUS1\P1Tools\P1Diagnostics\AdvDesignSettings\
  To: %UserProfile%\My Documents\Sauer-Danfoss\PLUS1\GUIDE Service Tool\ Files: ComponentSettings.xml GUISettings.xml

- If this auto copy doesn't work, (e.g. access rights problems), the copy process can be done manually with the GUIDE Service Tool not running.

What is Fixed

- GUIDE Service Tool no longer saves unused Advanced Screen images in P1D or P1H files (CQ P100001182).

- Replace Existing ECU now works for Text and Image Components when using Advanced Screens (CQ P100001305).

- Text components with reference problems caused by a defect in version 3.0.3 are now fixed. Text fields in Advanced Screens now retain their values when exiting the Editor (CQ P100001185).

- In the Normal View, logging automatically starts for Advanced Log Functions (CQ P100001169).

- The Redo button is disabled in the Advanced Screen Design when a change is made to the design (CQ P100001191).

- Parameter Upload now works without generating the "Unable to initialize parameter read" error message when uploading large amounts of parameters (CQ P100001188).

- Automatic Parameter Fix now works without generating the "Error Downloading Parameters" error message when using parameters with negative values (CQ P100001190).

VERSION 3.0.5 (JUNE 2007)

What is Fixed

- Text components with reference problems caused by a defect in version 3.0.3 are now fixed. Text fields in Advanced Screens now retain their values when exiting the Editor (CQ P100001185).

VERSION 3.0.4 (APRIL 2007)

What is Fixed

- Text components in Advanced Screen design can be copied without reference problems [CQ P100001082].

- The Standard Parameter component behaves as anticipated when downloading Boolean parameters [CQ P100001153].

- Images deleted from the Advanced Design Image Repository are no longer saved in P1D/P1H files [CQ P100001108].

- Advanced Screen Log files containing more than 10 signals open correctly [CQ P100001097].

- The Service Tool saves P1D/P1H files without occasionally creating corrupt files [CQ P100001110].

VERSION 3.0.3 (JANUARY 2007)

New Features and Functionality (see the User Manual for more detailed information)

- NOTE: To access many of the new features it is necessary to create Applications that use the new features. Further details can be found in the PLUS+1 GUIDE documentation.

- NOTE: Please review the relevant section of the manual for further details of the new features added to the PLUS+1 GUIDE Service Tool program in this release.

- The Graphical User Interface of the PLUS+1 GUIDE Service Tool program has been updated with new toolbars, icons and menus.

- A new screens format has been added in development mode. When a new screen is added, "Basic" screens are as before. Selecting "Advanced" screens give access to the new Service Tool Screen Editor.

- Service Tool Screen Editor components provide advanced functionality, for example "hiding" a Text box when a given a value is false.

- Service Tool Screen Editor components include a Look-up Table function that converts a numeric value to a text string. Thus, a logged error number can be converted to plain text for the user.

- Service Tool Screen Editor components include complex Text Boxes that allow color changes and many other features to enhance the look and operation of Service Tool Applications.

- Service Tool Screen Editor components include Bar graphs with extensive properties to create rich graphic Service Tool Applications.

- In Advanced mode it is possible to combine Log values and Parameter values into the same screen.

- Support for Application Logging has been added. This allows the PLUS+1 GUIDE Service Tool program to upload an Application Log from Applications that use the feature.

- Application Log files are stored in open text or encrypted. This allows secure data transfer to Users with a higher access level.

- A tool is provided to convert the secured application file to clear text files.

- When an application is updated from one version to another, parameter data can be automatically updated by the PLUS+1 GUIDE Service Tool program.

- A tool is provided that allows parameter data to be copied from one hardware to another. Thus, the parameter data from one hardware can be "cloned" onto another hardware.

- Read-only Parameter files are supported. This allows read-only constant files to be downloaded separately from the application. This feature has many useful implementations; see the PLUS+1 GUIDE User Manual for further details.

- Support for the new Application Password Components (See the PLUS+1GUIDE User Manual for further details).

- It is possible to make hardware "Required" to be present in a system. When it is not it is highlighted to alert the user.

VERSION 2.2.7 (September 2006)

What is Fixed

- It is possible to embed a Toolkey into the User's License. This feature operates correctly for all users [CQ P100000954].

- Screens created in the Service Tool, including those without images, are correctly saved to the P1D Diagnostic File [CQ P100000944].

VERSION 2.2.6 (June 2006)

What is Fixed

- The Service Tool now shares CPU load more effectively with other applications. Thus it is possible to run them at the same time as the Service Tool.

VERSION 2.2.5 (May 2006)

New Features and Functionality (see the User Manual for more detailed information)

- A Recovery Mode feature has been added to the Service Tool so it can access the boot loader at ECU power-up. Thus if an application inadvertently corrupts and the CAN port and Service Tool communication cannot be established, the controller can still be accessed.

- It is possible to export screens and import them to other applications including sub pages of the tree.

- The maximum number of log values in a single screen is now unlimited.

- An online context sensitive windows Help file is now included in addition to the pdf Manual.

- Download times of parameters has been significantly reduced.

- Help files and other documents can be added to the Tree View and are stored in the Service Tool P1D file.

- If communication is lost with the system, the Gateway Status information will change color to indicate the loss of communications.

- Horizontal scrollbars are provided for the screens of a fixed size. This includes the Parameter and Log Screens.

- The functionality of the Parameter list download screen has been enhanced using check boxes. This speeds the download of data to hardware.

- When playing back a recorded file, it is possible to "Step forward" after the data is paused.

- The default parameters pop-up hints of have been extended to include the maximum and minimum value range.

- Additional information has been added to the headers in Log Files [CQ P100000332].

- The GUIDE Service Tool now supports the download of Hex files created in the PLUS C environment.

- An "Abort Scan" button has been added to the System Scan dialog window.

- The active gateway is now highlighted in the Communication > Settings menu.

- A progress bar has been added for the upload and download of parameters.

- Right-click the "download" column in the Parameter List window allows various options for the whole column to be selected at one time.

What is Fixed

- The Service Tool behaves as anticipated when logging data for extended periods of time [CQ P100000501].

- It is now possible to change the baud rate setting easily when connected to a system of a different baud rate {CQ P100000564].

- The Service Tool behaves as anticipated in Design Mode with screens that do not contain any parameters or log values [CQ P100000592].

- It is possible to connect to a system with multiple PLUS+1 Controllers some of which have the security tool key set and others that do not. [CQ P100000604].

- If is possible to open P1H files by double clicking them in the PLUS+1 GUIDE [CQ P100000655].

- In some cases, the operating system attempted to open two instance of the Service Tool which caused error messages in the second instance. It is no longer possible to open multiple instances [CQ P100000670].

- Resizing of the windows has been disabled when downloading an application. This previously had caused problems during downloads. [CQ P100000674]

- Operations with USB Hubs and changing between different CAN Gateways has been made more robust [CQ P100000710].

- Operation of the checkboxes in Parameter Download load table now behaves as expected [CQ P100000711].

- Issues associated with multiple programs using the same CAN Gateways, (specifically the CG150 and Kvaser products) has been addressed [CQ P100000721].

- When adding parameters to the parameter list, if the ECU number is left blank it will be automatically set to the first value in the list [CQ P100000725]

- Changing between online and offline modes has been made more robust [CQ P100000699].

- Files exported in CSV format now display the time in quotation marks, so they can be correctly imported into Excel using a colon delimiter [CQ P100000734].

- The Error message displayed when trying to download a restricted LHX file has been enhanced [CQ P100000736]

- Application downloads have been made more robust when CAN traffic is high (>70% bus load) [CQ P100000094].

- The issues associated with using a colon character (:) for the CSV delimiter have been resolved to overcome the discrepancy in Microsoft Excel. [CQ P100000734].

- A FILE ACCESS DENIED message box has been added when the user does not have the necessary access rights for a Service Application. [CQ P100000736].

- The Text View displays data correctly when it is selected after using the Logging Data function for extended periods of time. [CQ P10000501].

- The Service Tool behaves correctly when switching from Online to Offline Mode [CQ P100000699].

- If the ECU number is left blank in the Diagnostic Set Up Screen it caused an error: ECU 0,0 not found. The default ECU is now the first ECU on the list [CQ P100000725].

- The resizing of the screen components is disabled while download is in progress [CQ P100000674].

- It is not possible to launch two instances of the GUIDE Service Tool as this causes incorrect operation [CQ P100000670].

- When double clicking Service Tool Files it correctly opens the Service Tool, or switches to it and performs the correct operation [CQ P100000655].

- It is possible to mix system hardware that has a security Toolkey with hardware that does not have a Toolkey [CQ P100000604].

- Note: It is not possible to access all hardware when there are multiple Toolkeys in one System, only one Toolkey can be entered for a system. The drivers for the CG150 have been updated; this provides better support particularly when used with the CANKing Monitor Software [CQ P100000721].

- When switching between different communication ports the process has been made more robust. This is specifically targeted at USB Hubs [CQ P100000710].

- If the incorrect communication speed is selected then some communication devices caused the Service Tool to become unresponsive and hang. This behavior has been corrected [CQ P100000564].

- Only the Parameters that are selected for download are downloaded and verified, and only these fields are updated [CQ P100000711].

- Note: It is possible to download a restricted number of parameters on a Parameter List Screen by using the checkboxes on the right side of the screen. Graphic images are now displayed correctly and are more robust when images are changed [CQ P100000502, P100000785].

- The values in the log graphical overview are now correctly left aligned with Hex and binary values [CQ P100000513].

- The Service Tool is more robust when working with a large number of Parameters in a single page (>400) and behaves correct [CQ P100000737, P100000738].

- The range checking of the Parameter values perform as described in the manual [CQ P100000742].

- When loading a diagnostic file off line the "OK" button functionality has been reviewed and restructured [CQ P100000768].

- A system scan can now be aborted using the button added to the dialog window [CQ P100000769].

- Following a download or opening a file the sequence of enabling screens and processes has been reviewed and made more secure [CQ P100000774, P100000778].

- File save process has been reviewed and restructured to avoid circumstances where a save operation was not completed [CQ P100000786].

- The timing of data logging has been reviewed for "slow" systems to ensure data is revied before the next request is started [CQ P100000793].

- The handling of Hardware specific files (P1H) has been made more robust [CQ P100000796].

- Previously, when a parameter download checkbox was deselected, it was necessary to click on a different parameter row for the de-selection to take effect. It is no longer necessary to click on another row for the de-selection to occur.

VERSION 2.1.3 (November 2005)

What is Fixed

- It is possible to create Graphical log pages combining data from both Input Modules and other PLUS+1 Hardware [CQ P100000744].

VERSION 2.1.2 (September 2005)

New Features and Functionality (see the User Manual for more detailed information)

- It is possible to install and uninstall GUIDE and the GUIDE Service tool independently. [CQ P100000553]

- Parameter values can be saved to disk, and later can be loaded into a parameter screen, and downloaded to a Controller. The parameter file can be freely edited by the User.

- Parameter screens with all of the parameters in a system can be created with a menu command.

- It is possible to move a Screen up/down/in/out in the Tree on the left of the screen.

- Screen for IO Modules and other Hardware, called "Hardware Only" pages, have been introduced.

- The DP600 can be connected directly by USB link to the Service Tool. Options are provided to allow it to access other hardware in the system.

- The new Sauer Danfoss CG150 CAN Gateway is supported by the Service Tool.

- A new format for report files has been provided to allow easier data analysis including recording the timestamp in milliseconds [CQ P100000305, CQ P100000333]

- In "Run Mode" parameters are automatically read when the screen is selected; it is no longer necessary to click read. [CQ P100000363]

- The Service Tool now supports different CAN baud rates from 50K to 1M [CQ P100000222].

- The range of Security Access Levels has been extended to include "D", which inhibits access from the Service Tool. Thus is it possible to construct secure passwords within an application.

What is Fixed

- The GUIDE Service Tool is now more robust when connecting to a large system with high bus loads [CQ P100000527].

- The Kvaser gateway now connects to the system correctly when BAUD rates other than 250K are used or the BAUD rate is changed [CQ P100000589].

- The graphics in P1H files are now displayed [CQ P100000593].

- Applications using large arrays will work with the Service Tool [CQ P100000621].

- It is possible to log an array on the Service Tool [CQ P100000622].

- NV Symbol Alias names can be seen using the "DynamicNV flag" [CQ P100000647].

- P1H files can be opened in all Service Tool Modes [CQ P100000654].

VERSION 2.1.1 (July 2005)

What is Fixed

- [Trying to open multiple instances of the Service Tool by double clicking LHX files is correctly handled [CQ P100000450].

- When a display is used as a CAN Gateway it correctly re-scans the system after a file download to the display is complete, even when operating in Logging Mode [CQ P100000486].

- It is possible to move Screens within the tree structure, a restriction has been added so a screen cannot be dropped so it becomes a child of itself [CQ P100000587].

- When changing the configuration of display CAN Gateway the Service Tool responds in a predictable way [CQ P100000568].

- Generic Hardware (p1h) files can be re opened after they are saved [CQ P100000577].

- LHX Files are produced correctly and the "INTERNAL: UNKNOWN KEY VALUE" error report from the Service Tool is fixed [P100000581]

- Parameter Files (xml) can be imported into the Graphic or List views [CQ P100000584]

VERSION 2.1.0 (June 2005)

What is Fixed

- When accessing arrays the service tool verifies the length of an array to ensure it is never out of bounds [CQ P100000453].

- It is possible to create Parameter Screens without any Parameters, for User information only [CQ P100000292].

- All variable types are handled correctly including U32 [CQ P100000455].

- It is possible to open and use "read only" p1d files [CQ P100000458].

- When a display is used as a CAN Gateway it correctly re-scans the system after a file download to the display is complete [CQ P100000486].

- When a display is used as a CAN gateway the Service Tool correctly detects when it is plugged and unplugged and the USB port is changed [CQ P100000506, P100000507].

- The UCAN gateway connects to the bus with the correct BAUD rate as power up, so error messages are not transmitted [CQ P100000490].

- Off Line mode does not attempt to access the system [CQ P100000504].

- If the Service Tool tries to access hardware that is no longer accessible, appropriate error messages are displayed [CQ P100000472].

- In design mode parameters with an access level higher than the Users are not visible [CQ P100000540].

- When files that are not an image file is selected as a background, appropriate error messages are displayed [CQ P100000554].

- Error messages associated with incorrect Tool keys have more detail [CQ P100000449].

- Only one instance of a p1d project can be opened at once [CQ P100000456].

VERSION 2.0.4 (March 2005)

What is Fixed

- The compile speed on some PCs types was extended this has been corrected. [CQ P100000464].

VERSION 2.0.3 (February 2005)

New Features and Functionality (see the User Manual for more detailed information)

- The installation process automatically removes the previous installation of GUIDE, with the user's confirmation.

- Multiple baud rates from 50K to 1Mbit are supported.

- The GUIDE Service Tool supports shortcuts to external programs e.g. WebGPI, WinGPI, and uGlog.

- The GUIDE Service Tool has a "search and replace" tool for the ECU CAN Address and Node.