Release notes CHIPTOOL 5.9.9.1

This document lists all modifications, additional features and bugfixes of the current CHIPTOOL version since version 4.0.1.8. The list is sorted by our internal change request numbers "CR Number" and by the "Type" of the change request. We defined three different types of change request: "Defect", "Suggestion" and "Checkup". "Checkup" means a necessary verification and possible improvement of a CHIPTOOL component. The report fields "Component" and "Category" are describing the affected parts of the CHIPTOOL. "Synopsis" and "Description" are used for description of the change request.

Release notes CHIPTOOL V5.9.9.1

CR Number: 1440
Type: Suggestion
Component: Network scan
Category: PC network interfaces
Synopsis: Select specific PC network interface for scan
Description: It shall be possible to select a specific (or all) network adapters of the PC for scanning.
Fix: Implemented. Under menu item TOOLS | PC IP configuration the customer can select a specific network interface (or all), which is used for network scan.

CR Number: 1456
Type: Suggestion
Component: Network scan
Category: Network traffic
Synopsis: Reduce network traffic

Description: If more than on Chiptool applications are running at a local network, the amount of broadcast packets is high. For reducing network traffic Chiptool shall evaluate all incoming broadcast answers
even thoose, which are not sent to the destination udp port.

Fix: Implemented. Under menu item CHIP | Options the user is able to enable this feature and select the fixed listening port. This feature is still under development and by default disabled.

CR Number: 1439
Type: Suggestion
Component: Read flash image
Category: Reduced image files
Synopsis: Reduced hexfile images
Description: SC1x targets: It shall be possible to shrink image hex file read by "Read flash image" to a much smaller size for transfering them by TCPIP.
Fix: Implemented for SC1x images. If the customer selects at the Read Flash Dialog the Checkbox "Reduce image", Chiptool will shrink the retrieved image. See the Chiptool Help for details.

CR Number: 1443
Type: Suggestion
Component: Terminal
Category: General
Synopsis: Command history
Description: The Terminal should create a command history so that one can repeat the last few commands without having to retype them.
Fix: Implemented

CR Number: 1446
Type: Suggestion
Component: Terminal
Category: General
Synopsis: Logging feature
Description: The Terminal should feature logging functionality.
Fix: Implemented

CR Number: 1383
Type: New
Component: Program flash
Category: Ethernet gang programming
Synopsis: Ethernet gang programming for SC1x3 targets
Description: It should be possible to program hexfile images on multiple SC1x3 targets simultaneous by Ethernet TCP/IP.
Fix: Implemented. See the Chiptool Help for details.

Total: 6

Release notes CHIPTOOL V5.9.7.0

CR Number: 1304
Type: Defect
Component: CHIPTOOL
Category: FTP-Client
Synopsis: Problem with IPC@CHIP FTP access rights
Description: CHIPTOOL crashes if one tries to access files on the IPC@CHIP via FTP and the resp. FTP user has read-only access rights.
Fix: Fixed

CR Number: 1335
Type: Defect
Component: CHIPTOOL
Category: FTP Client
Synopsis: Access rights at CHIPTOOL PC
Description: FTP-Client doesn't work correctly if user doesn't have full access to the file system of his PC.
The CHIPTOOL FTP-client stores temporary files in directories not all users may have access rights for.
Fix: Fixed. The FTP-client now creates temporary files in a dedicated temporary directory.

CR Number: 1349
Type: Defect
Component: CHIPTOOL
Category: FTP-Client
Synopsis: Parsing invalid dates
Description: CHIPTOOL FTP-Client hangs when a directory on the remote station contains a file with an invalid date.
Fix: Fixed

CR Number: 1385
Type: Defect
Component: Program flash
Category: TCP/IP transfer
Synopsis: Sending image packets
Description: The transfer should be automatically aborted, if the maximum number of

errors/timeouts is reached.

Fix: Fixed

CR Number: 1327
Type: Defect
Component: Programming flash
Category: Sc1x3 serial image transfer
Synopsis: Baudrate reduction
Description: Reducing the baudrate for the transfers of SC1x3 RTOS is not possible. It is necessary to disable the 19200 Baud checkbox in that case.
Fix: Fixed. Added a "SC1x only" hint at the baudrate checkbox

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CR Number: 1307
Type: Defect
Component: Serial communication
Category: Serial communication via RS232 USB adapters
Synopsis: Malfunction and Windows system crash
Description: Serial communication sometimes doesn't work, when the user uses USB-based serial ports on his PC to communicate via CHIPTOOL with the IPC@CHIP. In rare cases this leads to system crashes and reboots of the Windows PC, because of fatal errors at the USB RS232 driver layer.
Fix: Fixed. The causal reasons for this problems are malfunctions at the USB-RS232 Driver layer. A modification at the CHIPTOOL basic RS232 functions helps to avoid the crash.

CR Number: 1330
Type: Suggestion
Component: CHIPTOOL
Category: Multiple start
Synopsis: Avoid multiple starts of CHIPTOOL
Description: By default, it shoud be forbidden to start CHIPTOOL several times at the PC, except when CHIPTOOL is started with additional command line parameters. The user must be able to disable this option.
Fix: Implemented. The user can disable this options at the CHIPTOOL option menu

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CR Number: 1343
Type: Suggestion
Component: CHIPTOOL
Category: Security
Synopsis: Problems with MS-Windows XP firewall
Description: The Windows XP SP2 firewall blocks CHIPTOOL network communication, but it did not inform the user about the restriction.
Fix: Fixed. When CHIPTOOL is registered at the WinXP firewall, the messagebox pops up and inform the user about the blocking mode.

CR Number: 1394
Type: Suggestion
Component: CHIPTOOL
Category: Network scan
Synopsis: Collect mode
Description: If Collect mode is selected, CHIPTOOL shall list the found targets sorted by their appearance at the network.
Fix: Implemented

CR Number: 1328
Type: Suggestion
Component: IP configuration
Category: Multiple IP addresses at one device interface
Synopsis: Multiple IP addresses at one device interface
Description: Since SC1x V1.20 and SC1x3 RTOS V1.05 configuration of multiple ip addresses at one device interface is supported. CHIPTOOL must also support the functionality Also the information dialog "Display IP configuration" displays now up to three configured IP addresses of an interface of the PC.
Fix: Implemented. IPC@CHIPs which support this feature are listed with the Device index number and a additional address index.

CR Number: 1326
Type: New
Component: Terminal
Category: File transfer
Synopsis: Serial XModem
Description: The serial terminal application of CHIPTOOL shall support RS232 XModem filetransfers.
Fix: Implemented

Total: 11

Release notes CHIPTOOL V5.9.2.1

CR Number: 1231
Type: Defect
Component: CHIPTOOL
Category: GUI
Synopsis: Problems with several windows in the taskbar
Description: The windows of the terminal and FTP-Client that now appear in the taskbar do not

yet work correctly.
Message boxes that are shown by one of these windows appear in front of the main window and when activating one of these windows after working with another application the main window is shown in front of the respective window.

Fix: Subwindows shown in the taskbar now work correctly.

CR Number: 1248
Type: Defect
Component: CHIPTOOL
Category: FTP-Client
Synopsis: Problem with last directory, if drive is no longer available.
Description: The FTP-Client saves the last local directory when closing. When it is reopened, it tries to open the saved directory again. If the last directory is situated on a drive that is no longer available (e.g. Memory-Sticks etc.) the whole file browser frame gets locked until the FTP-Client gets restarted.
Fix: The FTP-Client now checks for the existance of the saved directory before trying to reopen it.

CR Number: 1232
Type: Defect
Component: FTP-Client
Category: FTP-Transfer
Synopsis: Checking of file existance is case sensitive
Description: When the FTP-Client checks for the existance of a remote file it doesn't ignore the case in filenames. This causes files to be overwritten without prompting the user if the FTP-server (like IPC@CHIP FTP-server) stores e.g. all files in uppercase.
Fix: Checking for file existance now ignores case.

CR Number: 1230
Type: Defect
Component: Terminal
Category: Telnet
Synopsis: Problem with CRLF and SC12 RTOS <= 1.04
Description: The telnet server of SC12 RTOS version 1.04 and older expects the sequence CRLF for new lines. IPC@CHIPTOOL's terminal only sends a single CR.
Fix: IPC@CHIPTOOL's terminal now sends CRLF for newlines when connected to a telnet server.

CR Number: 1247
Type: Suggestion
Component: CHIPTOOL
Category: GUI
Synopsis: Add a trayicon
Description: IPC@CHIPTOOL should possess an icon in the traybar to provide an easy way to start the terminal or the FTP-client. Previous connections should be accessible through a menu.

Fix: Added a trayicon to IPC@CHIPTOOL. The icon possesses a menu that allows to open the main window, the terminal or the FTP-client directly. In addition a submenu lists all previous telnet and FTP connections. The user can thus easily reopen them. When the main window is closed, CHIPTOOL minises to the tray. This behaviour is configurable through the advanced options dialog.

CR Number: 1251
Type: Suggestion
Component: CHIPTOOL
Category: GUI
Synopsis: Misplaced texts and buttons at PCs with large fontsize enabled
Description: If "large fontsizes" (120dpi) are enabled at the Windows PC "System control", some textlabels and buttons are misplaced at some CHIPTOOL formulars (e.g. at "Program flash").
Fix: Fixed

CR Number: 1250
Type: New
Component: CHIPTOOL
Category: SC13-LF and SC11-LF
Synopsis: Support new IPC@CHIP targets SC13-LF and SC11-LF
Description: The new SC13-LF/SC11-LF Bootloader (Version 2.30) locks up the upper 16 KBytes of flash memory.
This area is now write-protected. Because of this behaviour, the flashdisk size for the SC11/SC13 @CHIP-RTOS version V1.01 is about 12KByte smaller than at earlier RTOS versions. CHIPTOOL has to take care of this important change.
Fix: Implemented. CHIPTOOL V5.9.2.1 supports now IPC@CHIP SC11,SC13 targets with Bootloader V2.30 and/or @CHIP-RTOS 1.01 or higher. Older CHIPTOOL versions are not able to program or read flash images for these targets.

Total: 7

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CR Number: 1228
Type: Defect
Component: CHIPTOOL
Category: Command line options
Synopsis: Command line options do not work correct.
Description: In version V5.8.0.10 the command line options are not working.
Fix: Fixed.

Total: 1

Release notes CHIPTOOL V5.8.0.10

CR Number: 912
Type: Defect
Component: Help file documentation
Category: Command line parameter
Synopsis: Wrong description
Description: Read Flash image command lines: Must write RF instead of RD
Fix: Fixed.

CR Number: 911
Type: Defect
Component: IP configuration
Category: Abort of an IP configuration process
Synopsis: Abort of an IP configuration
Description: Aborting an IP configuration process by pressing the ABORT button doesn't work. User must wait, until process timed out.
Fix: Fixed.

CR Number: 1096
Type: Suggestion
Component: CHIPTOOL
Category: Target support
Synopsis: Support new IPC@CHIP targets SC123/SC143
Description: CHIPTOOL must support the new IPC@CHIP targets SC123/SC143
Fix: Implemented. CHIPTOOL menu Flash | Program Flash supports now the new targets SC123 and SC143. At the dialogues of CHIPTOOL menu Flash | Read flash image and User persistent data the user is able to choose 20 bit target support (SC11,12,13) or 24-bit(SC123/Sc143)

CR Number: 1174
Type: Suggestion
Component: CHIPTOOL
Category: IP configuration
Synopsis: Show IP configuration of target PC
Description: A new menue item shall be provided, which list the ip configuration of the target PC. This information will be useful for configure IPC@CHIPs with the correct IP

settings for the users network.

Fix: Implemented: See CHIPTOOL menu Tools | Display PC IP configuration. This feature is only available under Windows 2000/NT or XP.

CR Number: 1217
Type: Suggestion
Component: CHIPTOOL
Category: FTP filesystem access
Synopsis: FTP client application
Description: CHIPTOOL shall contain a FTP client application for accessing the filesystem of the IPC@CHIP targets.
Fix: Implemented: See CHIPTOOL menu TOOLS | FTP-Client

CR Number: 1218
Type: Suggestion
Component: CHIPTOOL
Category: Telnet and serial terminal support
Synopsis: Telnet and serial RS232 terminal
Description: CHIPTOOL shall provide a telnet and serial terminal application
Fix: Implemented: See CHIPTOOL menu TOOLS | Terminal

CR Number: 906
Type: Suggestion
Component: Network scan
Category: Conflict detection
Synopsis: Targets with invalid serial number 0 should be marked by conflict marker 'X'.
Description: Targets with invalid serial number 0 should be marked by conflict marker 'X' at the network scan window.
Fix: Implemented

CR Number: 993
Type: Suggestion
Component: Program flash
Category: File open dialog
Synopsis: File open dialog
Description: File open dialog doesn't allow to edit a filename "by hand". It is only possible to select a file via the standard open dialog window. It should be possible to edit a hex filename. If CHIPTOOL runs under Win98, it is not possible to open write protected hexfiles.
Fix: Fixed

CR Number: 1189
Type: Suggestion

Component: Programming flash
Category: Software update
Synopsis: Serial gang programming
Description: It shall be possible to program up to 8 IPC@CHIP simultaneously via serial RS232 ports.
Fix: Preliminary implemented (Beta): See CHIPTOOL menu Flash | Serial gang program. This feature is still under development.

CR Number: 1216
Type: Suggestion
Component: Software update
Category: Program flash
Synopsis: Software update via internet
Description: At CHIPTOOL version V4.8.x.x (or lower), the software update via TCP/IP UDP works only at local networks. It shall be possible to update IPC@CHIPs , which are not located at a local network.
Fix: Implemented: With command line option DB:<Serial number> it is possible to update an IPC@Chip outside of a local network. If this option is specified with a valid IP address and a valid serial number or MacID, CHIPTOOL doesn't uses the broadcast IP address. The update is executed without the target detection at the start of the transfer and without the final target detection after the image is transfered. See also the CHIPTOOL Help.

Total: 10

Release notes CHIPTOOL V4.0.1.8

CR Number: 879
Type: Defect
Component: Network scan
Category: Ping option
Synopsis: Pinging IPC@CHIPs
Description: Activating the ping option at the network scan window can lead to a hangup of the CHIPTOOL application.
Fix: Fixed.
The ping option was removed. From now on, it is possible to ping a selected IPc@CHIP by using the right mouse click pop menu of the network scan window.

CR Number: 872
Type: Defect
Component: Software update
Category: Checksum method for serial RS232 software updates
Synopsis: Checksum method must be improved
Description: The current checksum method is not safe enough. This can lead to undetected incorrect programmed
flash images of IPC@CHIPs.

We should use CRC16 checksum method instead.

Fix: Implemented.
CHIPTOOL is able to use old checksum method or CRC16, depending on the bootloader version of the target IPC@CHIP. The bootlader version ,which supports both checksum methods
(CRC16 and old checksum method) is V2.24.

CR Number: 189
Type: Suggestion
Component: Command line options
Category:
Synopsis: Command line options
Description: It should be possible to execute direct the following CHIPTOOL features by using command line options:
1. Program flash by serial interface
2. Program flash by TCP/IP UDP
3. Read flash image
4. Program user product data
5. IP configuration

Fix: Implemented
See CHIPTOOL windows helpfile for more details.

CR Number: 695
Type: Suggestion
Component: Documentation
Category: CHIPTOOL Help
Synopsis: Extend the CHIPTOOL Help
Description: The windows helpfile should describe all features of CHIPTOOL.
Fix: Implemented:
Windows Help-documentation describes now all CHIPTOOL features.

CR Number: 878
Type: Suggestion
Component: Flash images
Category: Reading full flash images
Synopsis: Reading full flash images, including files
Description: Customers should be able to program their IPC@CHIP based products with a complete flash image, which contains the @CHIP-RTOS code and also the files of the flashdisk drive A:.
For this purpose it is necessary to read flash image from a "master" IPC@CHIP.

Fix: Implemented:
Menuitem Flash | Read flash image provides the upload of a complete flash image via the serial RS232 interface.See CHIPTOOL help for more details.
It is possible to reprogram other IPC@CHIPs with the uploaded image by usign menuitem Flash | Program flash

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CR Number: 876

Type: Suggestion
Component: IP configuration
Category: User specific TCP/IP device interfaces
Synopsis: Configuration of User specific TCP/IP device interfaces
Description: At older CHIPTOOL versions and SC12 @CHIP-RTOS equal or less V1.04 the IP configuration was only made for the default ethernet interface of the SC12.
SC13 @CHIP V0.90 allows now the porgramming of own TCP/IP device driver.
CHIPTOOL should support the IP configuration of such devices instead of the default
ethernet controller.
Fix: Implemented.
CHIPTOOL supports now the IP configuration of such user programmed TCP/IP devices.
See CHIPTOOL windows helpfile for more details.

CR Number: 875
Type: Suggestion
Component: Network scan
Category: IPC@CHIP detection
Synopsis: IPC@CHIP detection by serial number
Description: Because of the new IPC@CHIP products the serial number is no longer a unique key for that detecting IPC@CHIPs at the network.
E.g. it can happen, that a IPC@CHIP variant SC13 has the same serial number as a SC12. In that case it is not possible to update the software of an IPC@CHIP over TCP/IP UDP by using the serial number at the "UDP config commands". The probability of such a conflict situation is very slight, but we it is necessary to add a new identify method for the "UDP config protocol".
Fix: Implemented:
From now on the worldwide unique 12 Byte MAC-Address of the internal ethernet controller can also be used at "UDP config commands" instead of the serial number. The old method (identify by serial number) is still supported, because of compatibility reasons. The UDP config server at SC13 RTOS V0.90, SC12 RTOS V1.10 will now return an extendend hello answer. The extensions are not visible at older CHIPTOOL versions.This extended hello answer contains now the additional informations (among others): Ethernet MAC-address as unique ID, RTOS version, Bootloader version, ...

See CHIPTOOL help for other details.
The scan window is moved to main window of CHIPTOOL.
The colum ! will display possible serial number or IP address conflicts.

CR Number: 873
Type: Suggestion
Component: Software update
Category: Intel-Hexfile format check
Synopsis: Avoid download of invalid or corrupted Intel hexfile images
Description: Before download a Intel Hexfile image to the IPC@CHIP target,
CHIPTOOL should check, that the Intel-Hexfile has the correct format and corrrect line checksums.
Fix: Implemented.
A download of an Intel Hexfile is only possible, if the Intel hexfile has the correct

format
and correct line checksums.

CR Number: 874
Type: Suggestion
Component: Software update
Category: Target detection
Synopsis: Required target detection for different IPC@CHIP targets
Description: Because of the creation of new IPC@CHIP products (e.g. SC11,SC13), it is necessary to add
a target check, before downloading a software image to an IPC@CHIP target.
E.g. It should be not possible to upgrade a IPC@CHIP SC13 with a SC12 @CHIP-RTOS version.
Fix: Implemented for @CHIP-RTOS versions SC12 V1.10, SC11,SC13 V090 and Bootstraploader V2.24 or higher.
Intel-Hexfiles of those version are generated with a target signature (SC12,SC13,..).
Before downloading the image to the target, CHIPTOOL will check, if the target IPC@CHIP has the same target signature.
Please note: These protection will not work for older CHIPTOOL versions,hexfiles (e.g.SC12 @CHIP-RTOS versions with less or equal V1.04) without such a signature.
In those case, it is necessary to repeat the download with a correct @CHIP-RTOS version.

CR Number: 877
Type: Suggestion
Component: User product data
Category: Serial download of user product data
Synopsis: Serial RS232 download of user product data
Description: Since SC12 @CHIP-RTOS 1.10 , SC13 RTOS V0.90 we provide a special section of the
flash memory of 192 bytes outside of the filesystem.
The user is able to program these section with own non-volatile data (e,g, the serial number if his
IPC@CHIP named product).
CHIPTOOL should support the serial RS232 download of the users data.
Fix: Implemented:
Under CHIPTOOL menu Flash | User product data the user is able to download via the serial interface a max. 192 byte binary file, which contains his data.

See CHIPTOOL windows helpfile for more details.

Total: 10