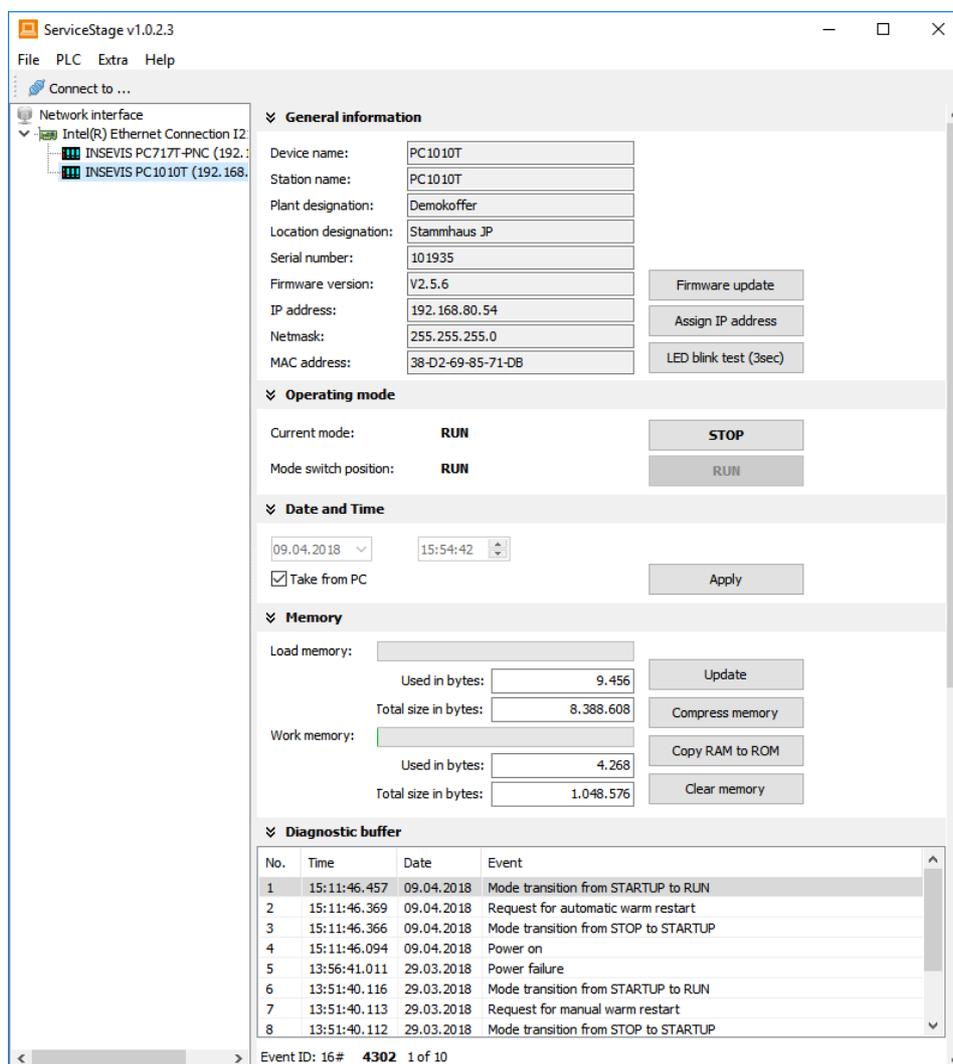# Product information
Maintenance software
ServiceStage

(valid from 02/2014)

Changes to older versions of this document

Changed in Rev. 1: complete new document from ServiceStage 1.0.1.2
Changed in Rev. 2: new design line, backups integrated
Changed in Rev. 3: adapted to newest software release and manual revision

The „ServiceStage" is made to have easy service access to the PLCs. It allows to identify a S7-CPU by its IP-address and to analyze it by diagnostic buffer, to update the user-programs and to set the protection levels. This software is free of licenses, offers lots of service functions easily to be found even if you are not working every day with this software tool. Installed in a minute, useful service functions, absolutely easy to understand.

These functions can be solved with the **freeware** „ServiceStage"

- Device specific data like (ser-no., firmware version, IP-address, MAC-address, etc.),
- Change IP-address directly, Download firmware (for CPU-T-devices)
- Changing of the operation mode RUN ↔ STOP,
- Set and synchronize date and time,
- Memory diagnostic and comprimation,
- Read out, show and store CPU-diagnostic buffer,
- Download of S7-program (as wld-file), visualization- and configurations binary,
- Create backup files and directory on Micro-SD-card
- Assign the know-how-protection levels (Read and/or Write protection)

General information

Displays the system data to inform only (like serial number, firmware version, MAC-address). Shows editable data like
- IP-address,
- Net mask and
- Router-IP-address

as well as a blink test button to identify your CPU again.

Only for CPU-T:
Firmwareupdate possible by Ethernet

Operating mode

Here you can change the operating mode of you CPU between RUN and STOP (not for Panel-HMI). This change must be confirmed in an extra window.

Date and time

For manual adustment of system date and time. By checking the box **„Take from PC"** these data will be taken over from your PC after pressing **„Apply"**.

Memory

Shows the workload of the load- and work-memory (not for Panels-HMI).
The function „**Compress memory**" should be used manually after multiple download of S7-programs to clear the memory.
The function „**Copy RAM to ROM**" copies the battery buffered load memory content (like process data) to the onboard flash, to prevent a loss of data.
The function **"Clear Memory"** deletes all user and process data in the CPU, only the firmware (operating system) remains.

Diagnostic buffer

It displays the last 100 entries of the diagnostic buffer listed by date and time (not at Panels-HMI).

By checking the function „**Information in hexadecimal format**" it is shown in an hexadecimal system.

By pressing „**Update**" new events will be displayed, what happened meanwhile.

With „**Save as**" the displayed entries will be saved into a text file (*.txt).

Know-how-protection

With version 1.0.1.1 can be set different levels of to protectc the S7-program against unauthorized reading ord writing. Therefore the PLC will be switchet to STOP-mode.

Block Update

This function makes it possible to download
- the S7-user program as MemoryCard-file
   *.wld
- the INSEVIS-binary for visualization file as
   *.vsbin and
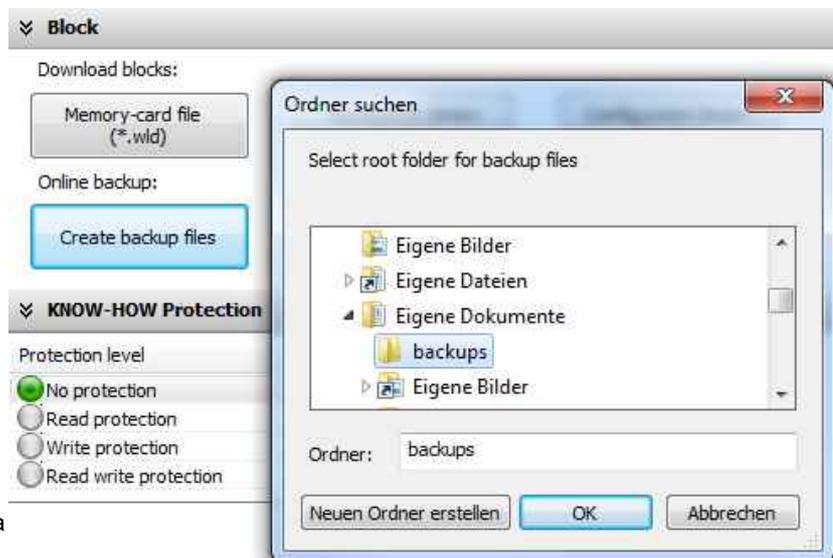- the INSEVIS-configuration file as
   *.csbin
via the network into the CPU

Online Backup

This function creates an WLD-file with all the S7-system data and all OB, DB, FB, SFB and SFC and copies this file with the visualization binary file into a folder „backups".

With these data S7-programs and visualizations can be updatet by a Micro-SD-card only – complete without any PC. (more at „System functions", chapter „Data backup and restore")