

The Vinci Software changelog

v.3.2.2.2 - Software update 2024 April 18.

Small bugs solved.

v3.2.1.1 - Software release. 2024 April 4.

▼ v3.2.1.1 changelog

- NEW: you can use domain name instead of IP in TCP protocols
- NEW: print modbus exceptions
- FIX: IEC 101/104 float value parsing
- FIX: Originator input field validation
- FIX: improve IEC101/104 tag importing (47 and 60)

v3.2.0.10 - Software release. 2022 October 28.

What's new

- Added TLS 1.2 support to IEC 60870-5-104 master. To use this with your slave, you need to have a PKCS#12 certificate archive. The default prefixes are `.p12` or `.pfx`. This feature is only available to licensed clients.

You can enable TLS from the settings tab while using IEC 60870-5-104. Beforehand you need to add your certificate to the Vinci, you can do that by going to the menu tab -> Options -> Certificate management. There you will select your PKCS#12 file and enter the password for the archive. If the password is incorrect, the field will turn red, if correct it will turn green.

The screenshot displays the Vinci software interface for IEC 60870-5-104 configuration. At the top, there are dropdown menus for 'IEC 60870-5-104' and 'Master (Client)', a green 'START' button, and input fields for 'IP: 127.0.0.1' and 'Port: 2404'. Below these are 'Console' and 'Statistic' tabs. The main area is divided into 'Parameters' and 'Security' sections. The 'Parameters' section has checkboxes for 'Send Start DT on start up' and 'Auto ack. Test Frame'. The 'Security' section has a checkbox for 'Enable TLS', which is highlighted with a red rectangle. To the left of the 'Parameters' and 'Security' sections are input fields for 'es: 2', 'es: 2', 'es: 3', and 'nds: 30'. At the bottom, a 'Certificate management' dialog box is open, showing a 'Select PKCS#12 Certificate' field, an 'Enter certificate password' field with a green background, and a 'Verify' button.

- You can now send raw messages via serial port. Sending is done by selecting the protocol **SerialPort** and going to the **System** tab on the right side of the screen. There you need to select from which port to send it and what message. Messages should be written in HEX format, you can add space between the numbers or write it as one long message. This feature is only available to licensed clients.

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NEW

IEC 60870-5-104 TLS 1.2

IEC 104 master now supports TLS1.2 using PKCS#12 certificate archive files. Only available to licensed users.

Raw message sending

You can now send raw messages via COM port using the Serial port protocol. Only available to licensed users.

IEC 60870-5-101/104 P/N checkbox

Now it is possible to change the P/N bit while using IEC 60870-5-101 and 104 protocols.

FIXES:

- Interface
 - FIX: If the IP address had any spaces before or after it, Vinci would crash.

v3.1.1.186 - Software release. 2022 September 16.

What's new

- All .vinci files will be associated with the Vinci software when installing Vinci. By opening these files, Vinci will automatically load the save.
- If Vinci encounters a problem it will display a form, in which you will be able to explain how did you encounter this issue. Then you can send the report to us, to fix this issue.

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NEW

File association

All .vinci files will be associated with the Vinci software when installing Vinci. Opening these log files will automatically load the configuration and log.

Crash report form

If Vinci encounters a problem it will display a form, in which you will be able to explain how did you encounter this issue. Then you can send the report to us, to fix this issue.

FIXES:

- IEC 60870-5
 - FIX: IEC101/104 P/N bit enabled when TEST bit is enabled
 - FIX: IEC101 telegram parsing incorrectly
 - FIX: IEC104 end of initialization was being sent before receiving StartDT
- Interface
 - FIX: UI buttons disappear on smaller displays
 - FIX: In the statistics tab, if the tags status changes, the color stays the same

v3.1.0.171 - Software release. 2022 June 27.

What's new

- The improved user experience by asking to save before exiting. Previously every instance was asking to save the log into a file. Now that became optional.
- License activations - now the software has a license activation feature. All customers having Vinci Expert and Commercial licenses can register their licenses.

12 License Details

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Current license SN: Status: PREMIUM

14 To use your The Vinci license with this installation, please enter the license SN and Authorization Code. It was sent to you by email or POST.

For new license key please visit <https://the-vinci.com/vinci-software/>

15 SN: REGISTER LICENSE

16 Authorization Code:

17 C_CS_NA_1 (103) Pos. ActCon (7) (... 1 0

- Lookup values - now that enables to change in statistics shows commands states names as you prefer.

Tag

Name:

Type:

Asdu: Ioa: Value:

Qualifier ☐ Select

Lookup values:

☐ Use

Value	Custom value
NotPermi...	
Off	
On	
NotPermi...	

Save Cancel

- IEC 60870-5 Commands now have Select Before Operate (SBO) control possibilities.

TagsSystemChannel

APDU

ASDU: 1

Originator: 1

Test

General interrogation

Send

QOI: 20

Counter interrogation

Send

FRZ: 0

RQT: 0

Commands

Read

Test

Clock synchronization

Send

IV

SM

SB

PC time

2022-06-23 11:33:40

Custom Command

Type: C_SC_NA_1(45)

IOA: 1

Value: 0

QU/QL: 0

Cause: Activation

Select

Execute

Select

OFF

ON

Execute

OFF

ON

SBO

SBO

OFF

ON

- Now in IEC 60870-5-103 Master protocol, you can control the startup routine by freely setting Link layer settings.

THE VINCI PROTOCOL ANALYZER

FileTagsOptionsHardwareHelp

Protocol: IEC 60870-5-103

Mode: Master

START

Port:

SettingsConsoleStatistic

Timeouts

Reading data: 2000

Pause before send: 2000

Address

Link address: 1

Link layer settings

Enabled	Function	
<input checked="" type="checkbox"/>	ResetFcb	↑
<input checked="" type="checkbox"/>	RequestStatusOfLink	
<input checked="" type="checkbox"/>	ResetOfRemoteLink	↓

- Now Modbus master supports commands with functions 5, 6, 15, and 16.
- Now Modbus master you can send commands from the Tag window directly.

The 'Tag' dialog box is shown with the following configuration:

- Name: New Tag
- Type: Read Input Registers (4)
- Slave: 1 Address: 1
- Format: Signed
- Value: 0
- Buttons: Write 6, Write 16
- Bottom Buttons: Save, Cancel

- Added support of many number formats to represent measurements. That works both ways to show values as well convert on commands execution.

The 'Tag' dialog box is shown with the 'Format' dropdown menu open, displaying a list of available number formats. The 'Hex' format is currently selected.

Available formats in the dropdown:

- Signed
- Unsigned
- Hex
- Binary
- Signed32BigEndian
- Signed32LittleEndian
- Signed32BigEndianByteSwap
- Signed32LittleEndianByteSwap
- Unsigned32BigEndian
- Unsigned32LittleEndian
- Unsigned32BigEndianByteSwap
- Unsigned32LittleEndianByteSwap
- Signed64BigEndian
- Signed64LittleEndian
- Signed64BigEndianByteSwap
- Signed64LittleEndianByteSwap
- Unsigned64BigEndian
- Unsigned64LittleEndian
- Unsigned64BigEndianByteSwap
- Unsigned64LittleEndianByteSwap
- Float32BigEndian
- Float32LittleEndian
- Float32BigEndianByteSwap
- Float32LittleEndianByteSwap
- Double64BigEndian
- Double64LittleEndian
- Double64BigEndianByteSwap
- Double64LittleEndianByteSwap

Buttons: Save, Cancel

Other improvements

- NEW: Freemium version is limited to 50 tags.
- NEW: New Tag saves on the "enter" key press.
- FIX: Tag Import CSV file headers are now case insensitive and became easier with import/export.
- FIX: Improved Tag import/export behavior.
- FIX: removed unnecessary files from the installation folder.
- FIX: remove a single item from the filter.
- FIX: enabled the possibility to copy multiple rows from the console tab.
- IEC 60870-5:
 - NEW: IEC103 now supports the 23rd data type.
 - NEW: added type and number to all commands and indications by the standard.
 - FIX: IEC104 master t3 timer resets after receiving test frame activation.
 - FIX: IEC104 master reconnection issue fixed.
 - FIX: Display warning if Telegram structure doesn't match with structure Settings.
 - FIX: IEC103 slave doesn't establish a connection after receiving an ACK.
- Modbus:
 - FIX: issue commands with registers higher than 255.
 - FIX: Modbus Start button was not responding to clicks after importing tags.

▼ v3.1.0 changelog

Important changes:

- The improved user experience by asking to save before exiting. Previously every instance was asking to save the log into a file. Now that became optional.
- License activations - now the software has a license activation feature. All customers having Vinci Expert and Commercial licenses can register their licenses.
- Lookup values - now that enables to change in statistics shows commands states names as you prefer.
- IEC 60870-5 Commands now have Select Before Operate (SBO) control possibilities.
- Now in IEC 60870-5-103 Master protocol, you can control the startup routine by freely setting Link layer settings.
- Now Modbus master supports commands with functions 5, 6, 15, and 16.
- Now Modbus master you can send commands from the Tag window directly.
- Added support of many number formats to represent measurements. That works both way to show values as well convert on commands execution.

Other improvements:

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v3.0.1.119 - Bugfix version release. 2022 February 22.

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Important updates and bug fixes:

- Modbus TCP stability (avoid a crash);
- Modbus format of registers conversion into various formats has bad interpretation;
- IEC 60870-5 protocols command COT-x fixed;
- IEC 60870-5 some data types become hidden because they cannot be in use by protocol description;
- IEC 60870-5 time sync fixed;

- IEC 60870-5-103 and 104 GI fixed;

v3.0.0.98 - Software release. 2022 January 12.

▼ v3.0.0 initial version

🕒Revision #13

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