

LOGENA SERVICE TOOL CBCU PLUGIN INSTRUCTIONS v1.03.docx

Author: André Besselsen
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Page 1 of 60

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Released by:	nedjo.cvijetic@logena.com	2012-01-05	Engineering
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1 History

Issue	Date	Author	Remarks
1.00	2009-09-24	R. van Ruiten	1 st issue
1.01	2011-06-01	A. Besselsen	Updates for CBCU/CBCU3 plugin update
1.02	2011-08-16	N. Cvijetic	Hardware and Software requirements updated
1.03	2012-01-05	N. Cvijetic	CBCU Parameter PLC Long Names (please see chapter 5.1.1). CBCU3 Parameter Names (please see chapter 5.2.1). Software Download (please see chapter 6.6).

Table 1: History of Logena Service Tool CBCU Plugin Instructions v1.03.docx

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3 Terms and Abbreviations

3.1 Terms

0

3.2 Abbreviations

CBCU	Central Body Control Unit
FMI	Failure Mode Identifier
OCC	Occurrence Counter
SPN	Suspect Parameter Number

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4 Installation

This chapter describes the steps to install the Logena Service Tool CBCU Plugin

4.1 Hardware Requirements

- Minimal 100MB of free space on your hard disk.
- Minimal 500MB of free memory (RAM)
- Minimal 1.5 GHz CPU speed
- Screen Resolution of at least 800x600.

4.2 Software Requirements

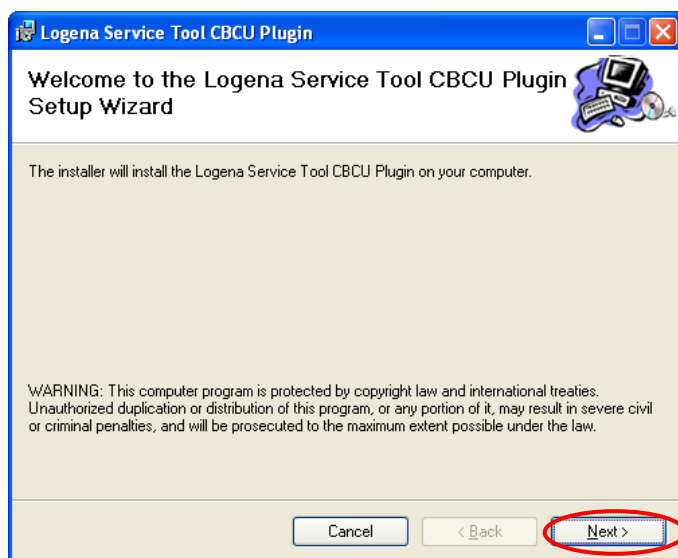
- Windows XP SP3.
- .NET framework 3.5 SP1
- The use of CBCU Plugin requires that the Logena Service Tool has been installed.
- Administrator rights are required for installation and normal use of the CBCU Plugin.

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4.3 Installation of CBCU Plugin

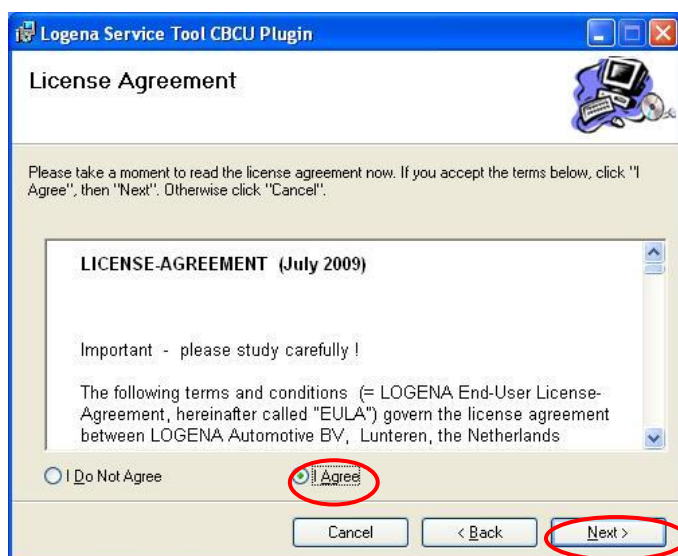
- Uninstall all previous versions of CBCU Plugin.
(Start→Programs→Logena Automotive→CBCU Plugin→Uninstall CBCU Plugin).
- Make sure that the USB Hardlock and the communication interface are not connected to the PC.
- On the installation cd go to x:\Logena Service Tool Plugins\Logena Service Tool CBCU Plugin\Logena Service Tool CBCU Plugin v1. x. x. x
- Start the installation by executing setup.exe.
- Follow the prompts in the installation dialogue until installation is complete.

1. In the Welcome screen of the "Logena Service Tool CBCU Plugin Setup Wizard" click the "Next" button.

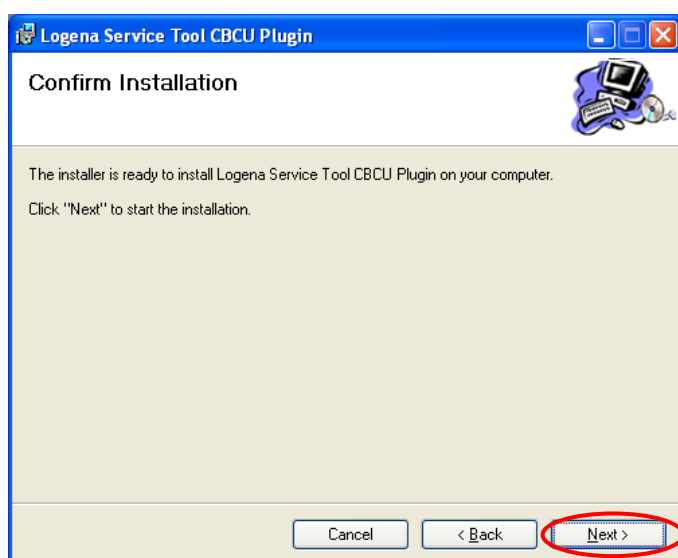


2. Read the License Agreement carefully, when you agree with the License Agreement, check the box "I Agree" and click "Next".

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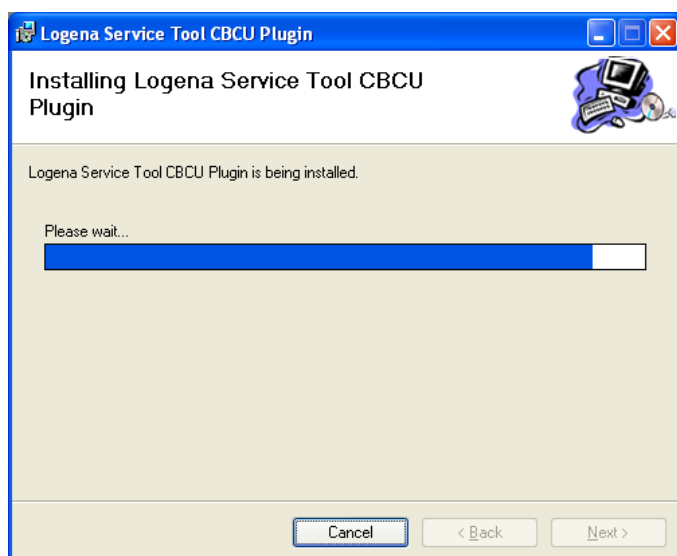


3. In the Confirm Installation screen, click the "Next" button.



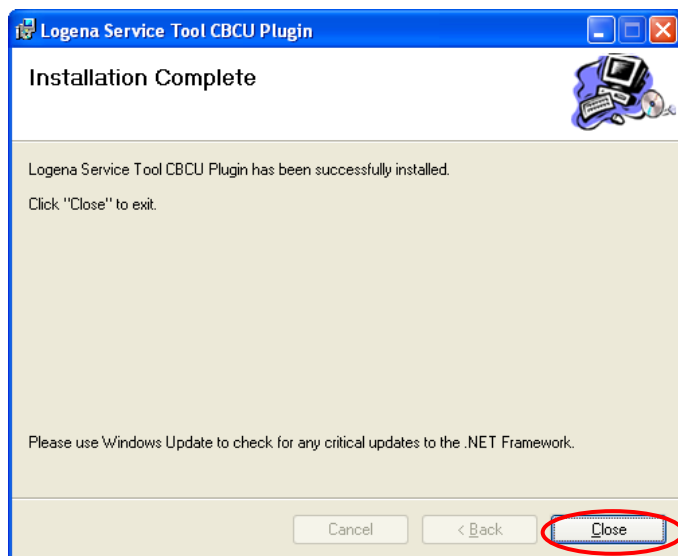
4. The Installing Logena Service Tool CBCU Plugin screen appears, wait until the Logena Service Tool CBCU Plugin is installed.

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- When the installation is completed the Installation Complete screen appears, click the "Close" button.



The Logena Service Tool CBCU Plugin is now fully installed.

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5 Preparations CBCU Plugin

5.1 Setup LogiCAD for CBCU

5.1.1 Configuration manager

Here is a description for the LogiCAD Configuration Manager Parameters and Variables structure. To be able to use parameters and variables in the Logena Service Tool they have to be setup according the construction in this chapter.

Please note: This procedure for CBCU differs from the procedure for CBCU3!

First select the "I/O Variables" Tab (see picture on next page).

In the "PLC Long Name" column the correct structure for the PLC Long Name must be given in. The right structure for the PLC Long Name is for example EV_L1_BYTE.

EV = EEPROM Variable

L1 = Level 1

BYTE = Data type

The first part of the PLC Long name describes if it is a parameter or a variable.

The second part of the PLC Long name describes the access level.

The third part of the PLC Long name describes the data type.

An example of the 5 possible variables levels and the 5 possible parameter levels are displayed in the following table:

PLC Long Name	Description
EV_L1_BYTE	Variable, access level 1, data type
EV_L2_BYTE	Variable, access level 2, data type
EV_L3_BYTE	Variable, access level 3, data type
EV_L4_BYTE	Variable, access level 4, data type
EV_L5_BYTE	Variable, access level 5, data type
EP_L1_BYTE	Parameter, access level 1, data type
EP_L2_BYTE	Parameter, access level 2, data type
EP_L3_BYTE	Parameter, access level 3, data type
EP_L4_BYTE	Parameter, access level 4, data type
EP_L5_BYTE	Parameter, access level 5, data type

The parameter recognition algorithm in the CBCU plug-in version 1.1.9.x and higher has been extended to also support the PLC Long names in the form of **EP_Lx** (e.g. EP_L3). A CBCU parameter will also be recognized if its name is specified in the CBCU3 way (please see chapter [5.2.1](#)).

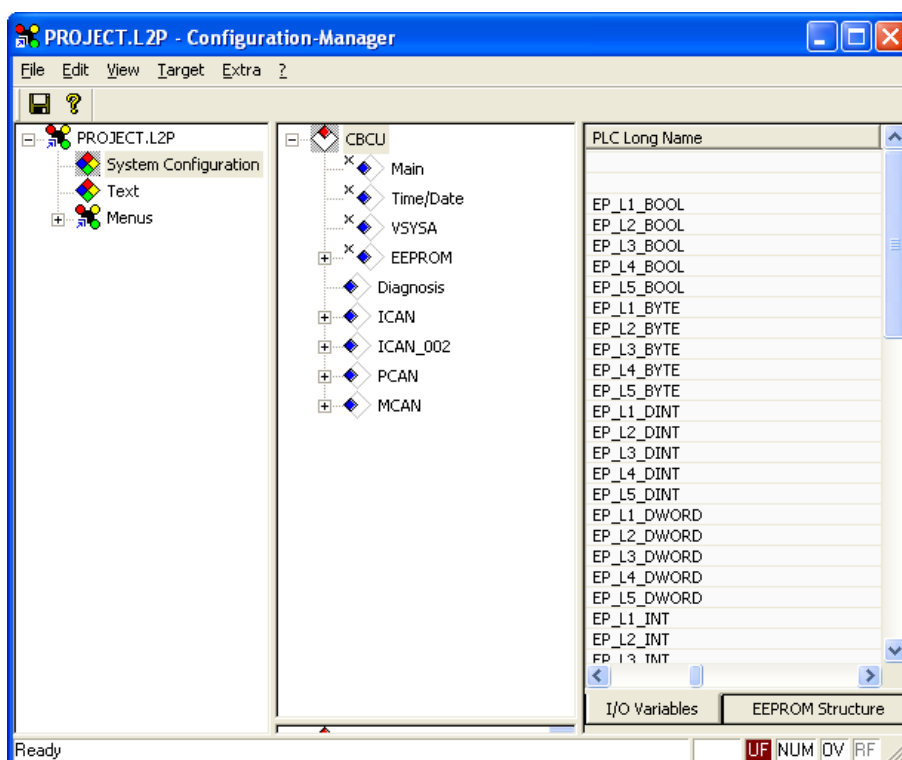
Note: If the structure is not as described in the above table in the PLC Long Name column, the parameter or the variable will not be visible in the Logena Service Tool.

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The data types that are used for the Logena Service Tool are:

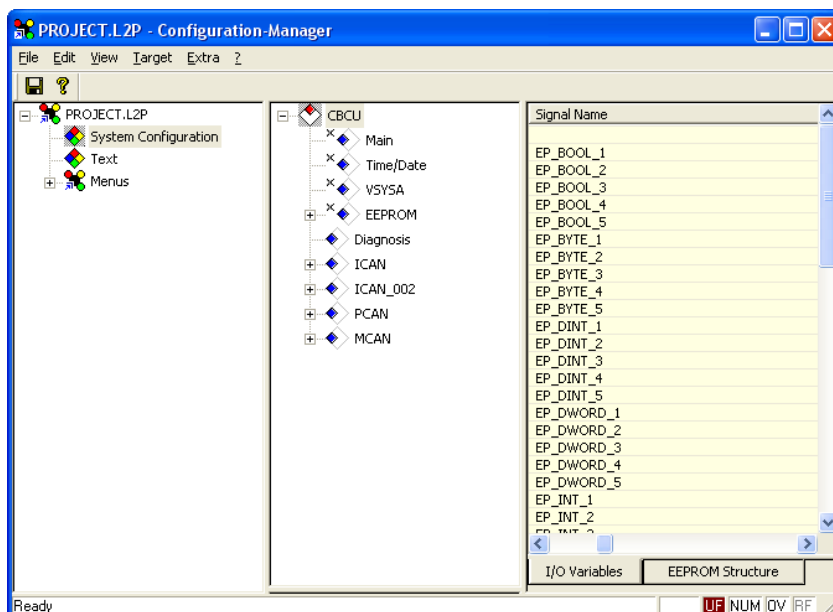
- BOOL
- BYTE
- DINT
- DWORD
- INT
- REAL
- SINT
- TIME
- UDINT
- UINT
- USINT
- WORD

An example of the filled in PLC Long Name is displayed in the following screen:

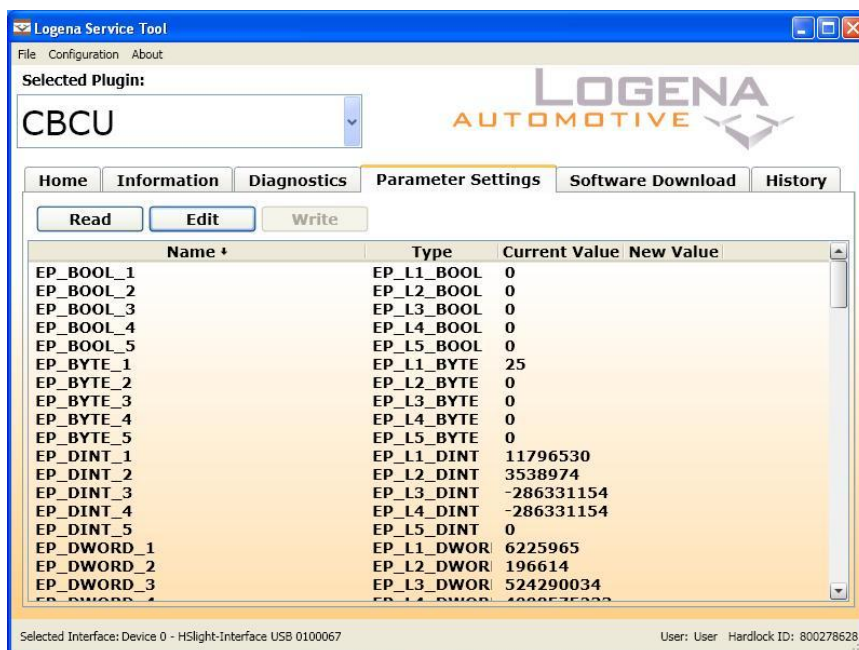


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The name that is displayed in the Logena Service Tool is the "Signal Name" in the LogiCAD Configuration Manager.



Here is an example of how the information is displayed in the Logena Service Tool.

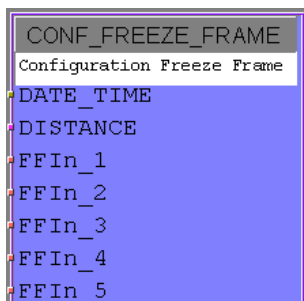


In the "Name" column the "Signal Name" of the LogiCAD project is displayed.
In the "Type" column the "PLC Long Name" of the LogiCAD project is displayed.
In the "Current Value" column the parameter value is displayed.

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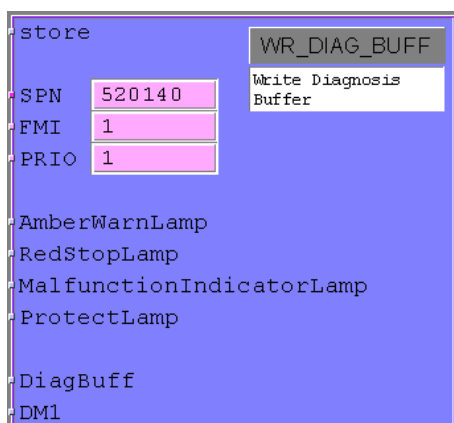
5.1.2 Configuration Freeze Frame

To be able to store freeze frame information, in LogiCAD the Configuration Freeze Frame vendor module should be used. The FFIn inputs correspond with the Freeze Frame information displayed in the Logena Service Tool.



5.1.3 Write Diagnostic buffer

To be able to store error information, the Write Diagnostic Buffer vendor module should be used. The information of the diagnostic buffer is displayed in the Logena Service Tool when the error occurs.



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5.2 Setup LogiCAD for CBCU3

5.2.1 Configuration manager

Here is a description for the LogiCAD Configuration Manager Parameters and Variables structure. To be able to use parameters and variables in the Logena Service Tool they have to be setup according the construction in this chapter.

Please note: This procedure for CBCU3 differs from the procedure for CBCU!

First select the "EEPROM Structure" Tab (see picture on next page).

In the "Structure Name" column the correct prefix must be given in.

The Prefix must be put directly in front of the actual Structure Name.

The correct prefix is for example EV_L1_BYTE_.

EV_ = EEPROM Variable

L1_ = Level 1

BYTE_ = Data type

Please note: The Structure Name in total may not be longer than 32 characters.

The first part describes if it is a parameter (EP) or a variable (EV)

The second part describes the access level.

The third describes the data type.

An example of the 5 possible variables levels and the 5 possible parameter levels are displayed in the following table:

Prefix for Structure Name	Description
EV_L1_BYTE_	Variable, access level 1, data type
EV_L2_BYTE_	Variable, access level 2, data type
EV_L3_BYTE_	Variable, access level 3, data type
EV_L4_BYTE_	Variable, access level 4, data type
EV_L5_BYTE_	Variable, access level 5, data type
EP_L1_BYTE_	Parameter, access level 1, data type
EP_L2_BYTE_	Parameter, access level 2, data type
EP_L3_BYTE_	Parameter, access level 3, data type
EP_L4_BYTE_	Parameter, access level 4, data type
EP_L5_BYTE_	Parameter, access level 5, data type

The parameter recognition algorithm in the CBCU plug-in version 1.1.9.x and higher has been extended to also support the parameter names in the form of **EP_Lx_Par_Name** (e.g. EP_L3_MY_PAR).

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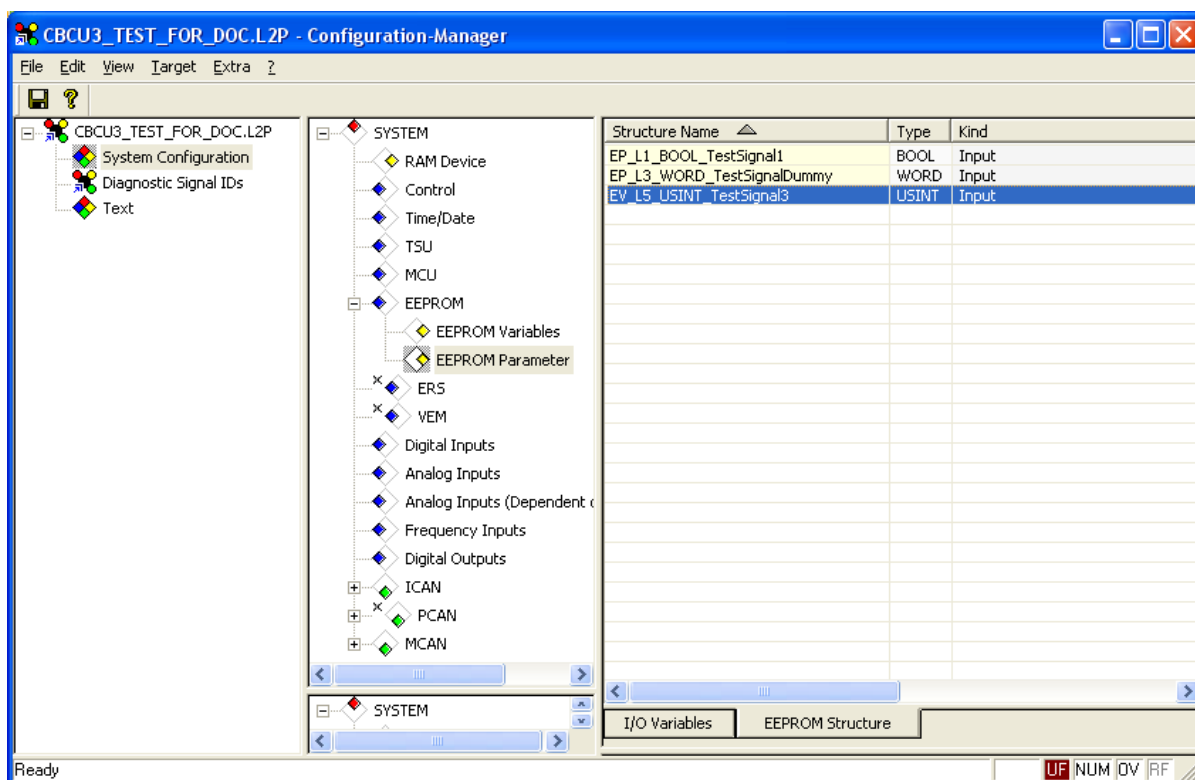
Note: If the structure is not as described in the above table in the prefix of the Structure Name column, the parameter or the variable will not be visible in the Logena Service Tool.

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The data types that are used for the Logena Service Tool are:

- BOOL
- BYTE
- DINT
- DWORD
- INT
- REAL
- SINT
- TIME
- UDINT
- UINT
- USINT
- WORD

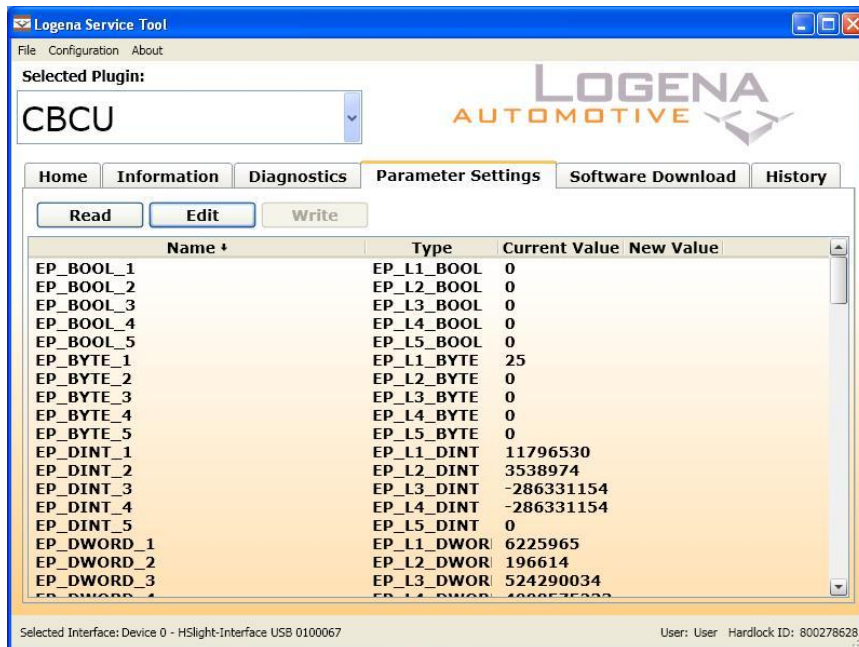
An example of the filled in prefixes is displayed in the following screen:



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The name that is displayed in the Logena Service Tool is the Structure Name in the LogiCAD Configuration Manager, but then without the prefix (e.g. "EP_L1_BOOL_").

Here is an example of how the information is displayed in the Logena Service Tool.



In the "Name" column the "Structure Name" (without prefix) of the LogiCAD Project is displayed.

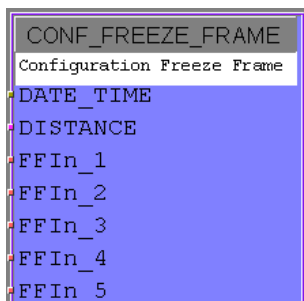
In the "Type" column the Prefix of the LogiCAD project is displayed.

In the "Current Value" column the parameter value is displayed.

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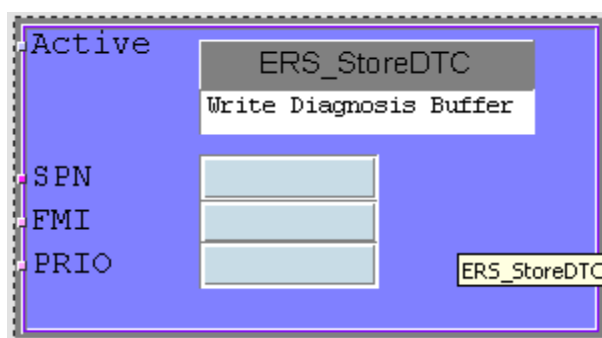
5.2.2 Configuration Freeze Frame

To be able to store freeze frame information, in LogiCAD the Configuration Freeze Frame vendor module should be used. The FFIn inputs correspond with the Freeze Frame information displayed in the Logena Service Tool.



5.2.3 Write Diagnostic buffer

To be able to store error information, the Write Diagnosis Buffer vendor module should be used. The information of the diagnostic buffer is displayed in the Logena Service Tool when the error occurs.

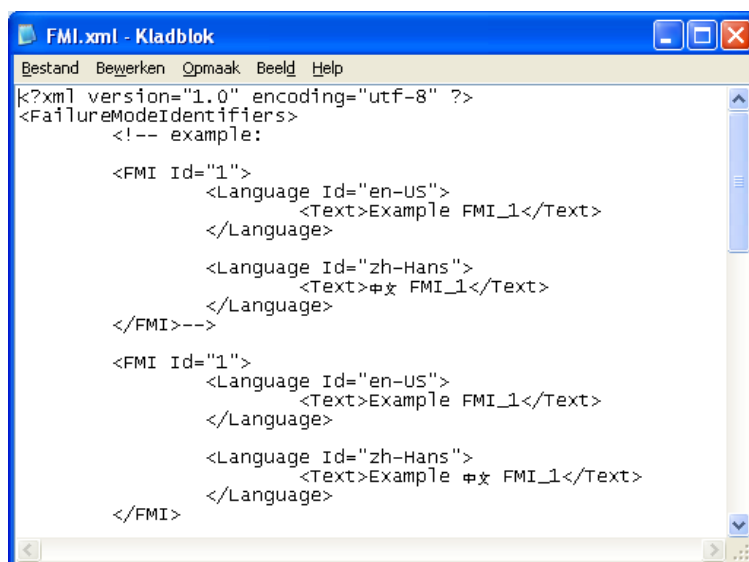


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5.3

5.4 Setup FMI file

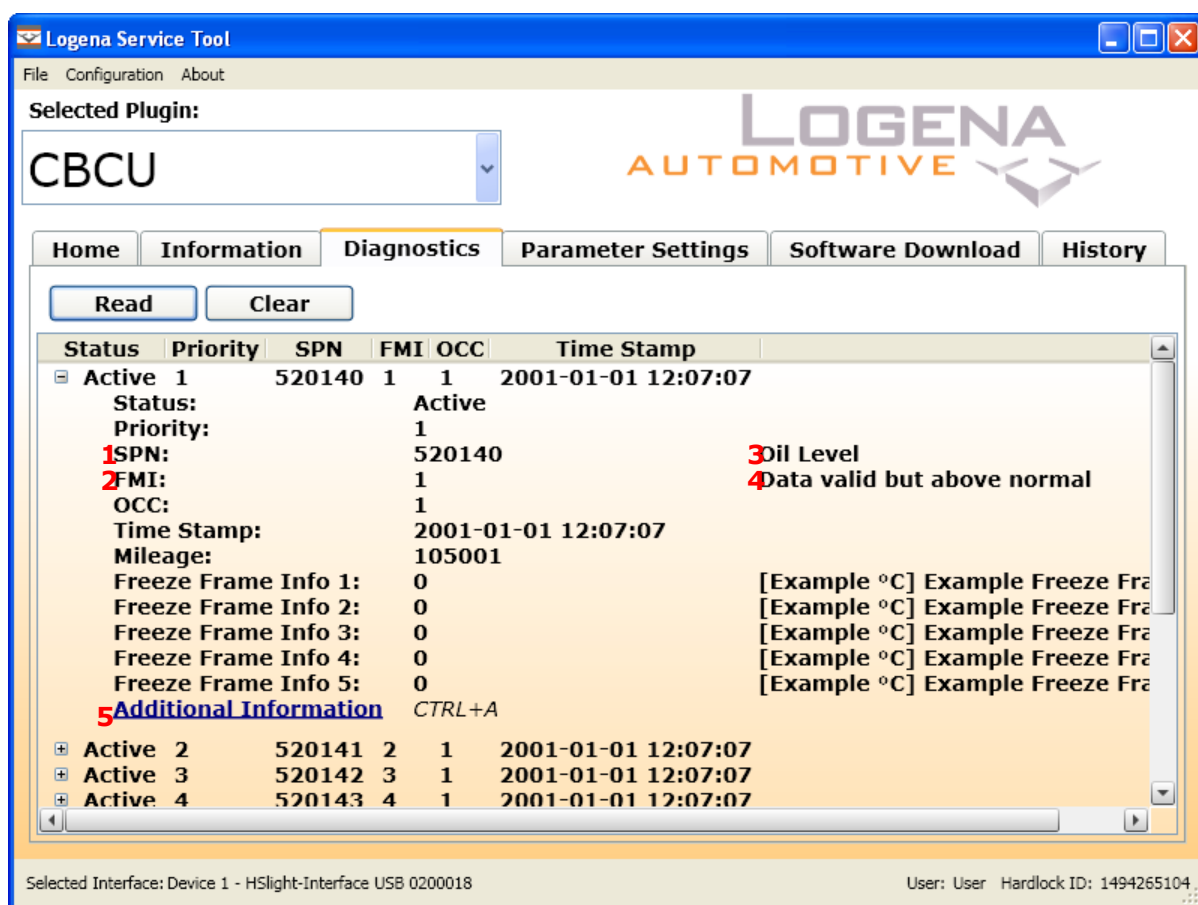
- After installation of the CBCU Plugin, the file "FMI.xml" is placed in the following folder:
"C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU".
- Open this file with a text editor (Notepad), this will look like this:



In this file, the first section of the layout is an example, the second layout is the layout that can be filled in. Copy and paste the second layout as many times as there are errors.

- In `<FMI Id="1">` the "1" can be changed, this text stands for the FMI Number given to the error in the LogiCAD project. (See nr. 2 in the overview of the diagnostics tab of the Logena Service Tool on the next page).
- The text under the `<Language Id="en-US">` represents the English translation for the FMI description. *Do not change this line!!*
- In `<Text>Example FMI_1</Text>` the text "Example FMI_1" can be changed, this text is the FMI description for the English translation, this text will be shown besides the FMI number. (See nr. 4 in the overview of the diagnostics tab of the Logena Service Tool on the next page).
- The text under `<Language Id="zh-Hans">` represents the Chinese translation for the FMI description. *Do not change this line!!*
- In `<Text>Example 中文 FMI_1</Text>` the text "Example 中文 FMI_1" can be changed, this text is the FMI description for the Chinese translation, this text will be shown besides the FMI number.

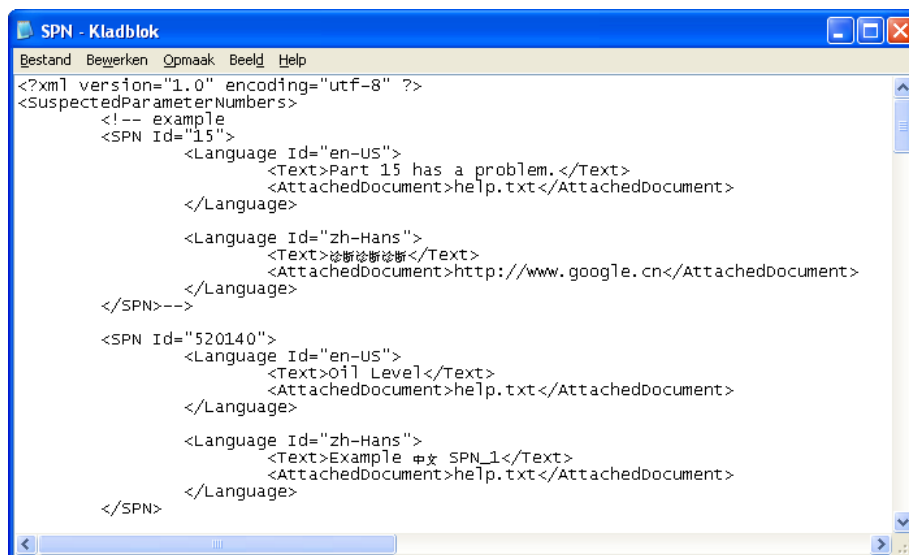
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5.5 Setup SPN file

- After installation of the CBCU Plugin, the file "SPN.xml" is placed in the following folder:
"C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU".
- Open this file with a text editor, this will look like this:



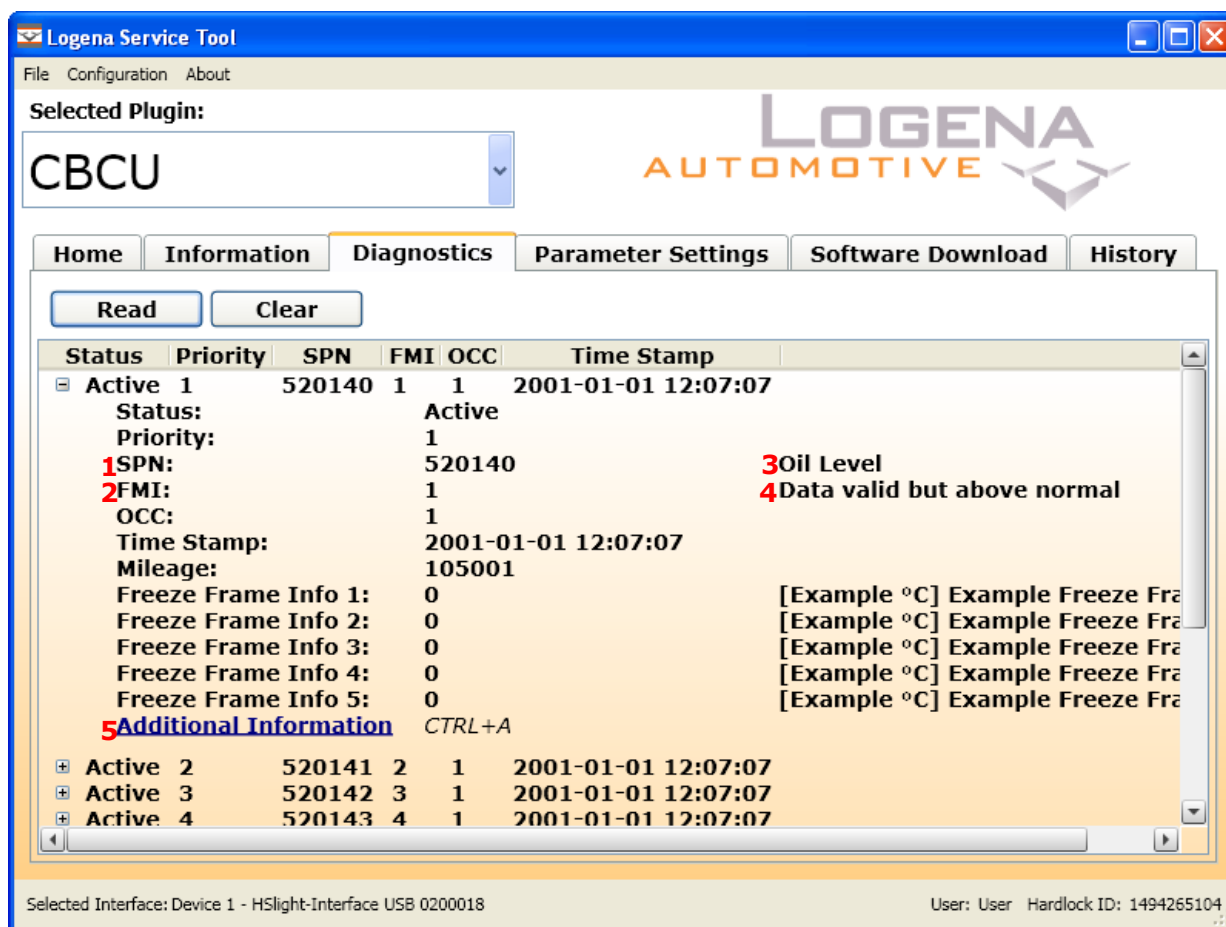
In the above file, the first section of the layout is an example, the second is the layout that can be filled in. Copy and paste the second layout as many times as there are errors.

- In <SPN Id="520140"> the "520140" can be changed, this text stands for the SPN Number given to the error in the LogiCAD project. (See nr. 1 in the overview of the diagnostics tab of the Logena Service Tool on the next page).
- The text under the <Language Id="en-US"> represents the English translation for the SPN description. *Do not change this line!!*
- In <Text>Oil Level</Text> the text "Oil Level" can be changed, this text is the SPN description for the English translation, this text is shown besides the SPN number. (See nr. 3 in the overview of the diagnostics tab of the Logena Service Tool on the next page).
- In <AttachedDocument>help.txt</AttachedDocument>, the link to the document "help.txt" can be changed for the English translation, this document will be opened when the hyperlink with additional information is clicked in the error description. When no path is given to the description, this file has to be allocated in the "C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU" folder. It is also possible to open a website, just fill in the URL instead of help.txt. (See nr. 5 in the overview of the diagnostics tab of the Logena Service Tool on the next page).
- The text under <Language Id="zh-Hans"> represents the Chinese translation for the SPN description. *Do not change this line!!*

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- In `<Text> Example 中文 SPN_1</Text>` the text "Example 中文 SPN_1" can be changed, this text is the SPN description for the Chinese translation, this text will be shown besides the SPN number.
- In `<AttachedDocument>help.txt</AttachedDocument>`, the link to the document "help.txt" can be changed for the Chinese translation, this document will be opened when the hyperlink with additional information is clicked in the error description. When no path is given to the description, this file has to be allocated in the "C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU" folder. It is also possible to open a website, just fill in the URL instead of help.txt.

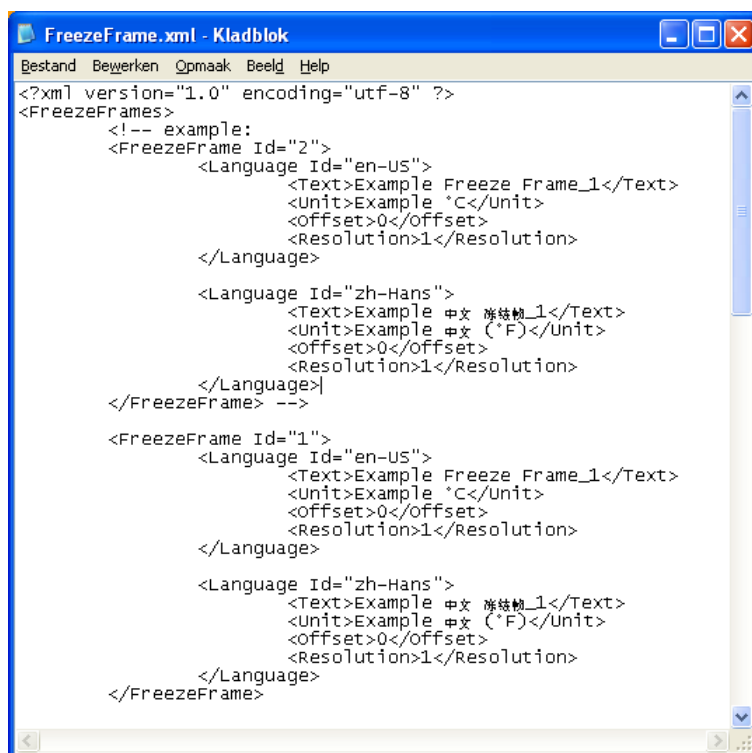
The following screen shows how the information is displayed in the error description:



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5.6 Setup Freeze Frame file

- After installation of the CBCU Plugin, the file "FreezeFrame.xml" is placed in the following folder:
"C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU".
- Open this file with a text editor, this will look like this:



In the above file, the first layout is an example, the second layout is the first layout that can be filled in. In total there are five layouts to fill in.

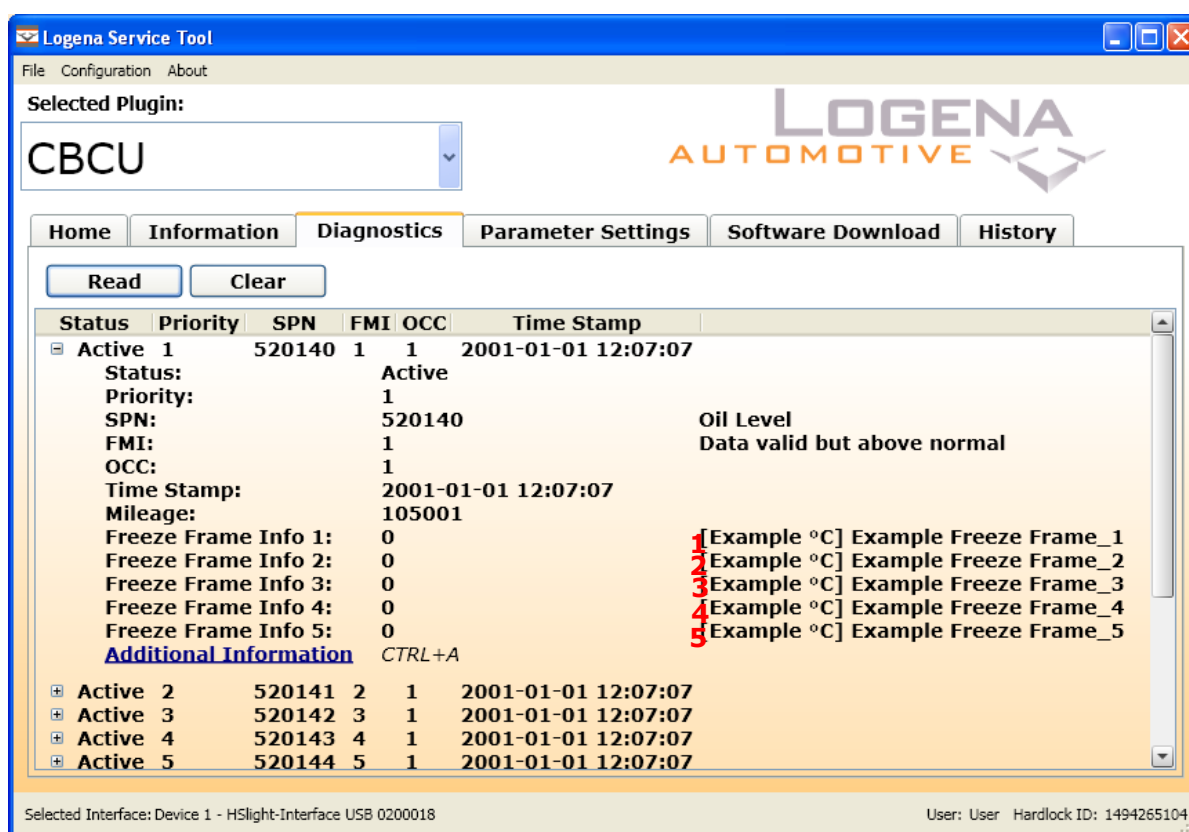
- In <FreezeFrame Id="2"> the 2 stands for the FreezeFrame Id given to the FreezeFrame Configuration in the LogiCAD project.
- The text under the <Language Id="en-US"> represents the English translation for the FreezeFrame description. *Do not change this line!!*
- In <Text>Example Freeze Frame_1</Text> the text "Example Freeze Frame_1" can be changed, this text is the FreezeFrame description for the English translation, it is shown besides the FreezeFrame information. (See nr. 1 to 5 in the overview of the diagnostics tab of the Logena Service Tool on the next page).
- In <Unit>Example °C</Unit>, the unit "Example °C" text can be changed, this text is shown besides the saved FreezeFrame information.
- (See nr. 1 to 5 in the overview of the diagnostics tab of the Logena Service Tool on the next page).
- In <Offset>0</Offset>, the offset "0" text can be changed, this text is shown besides the saved FreezeFrame information.
- In <Resolution>1</Resolution>, the resolution "1" text can be changed, this text is shown besides the saved FreezeFrame information.

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- The text under <Language Id="zh-Hans"> represents the Chinese translation for the FreezeFrame description. *Do not change this line!!*
- In <Text>Example 中文 冻结帧_1</Text> the text "Example 中文 冻结帧_1" can be changed, this text is the FreezeFrame description for the Chinese translation, this text is shown besides the FreezeFrame information.
- In <Unit>Example 中文 (°F)</Unit>, the unit "Example 中文 (°F)" text can be changed, this text is shown besides the saved FreezeFrame information.
- In <Offset>0</Offset>, the offset "0" text can be changed, this text is shown besides the saved FreezeFrame information.
- In <Resolution>1</Resolution>, the resolution "1" text can be changed, this text is shown besides the saved FreezeFrame information.

The following screen shows how the information is displayed in the error description:

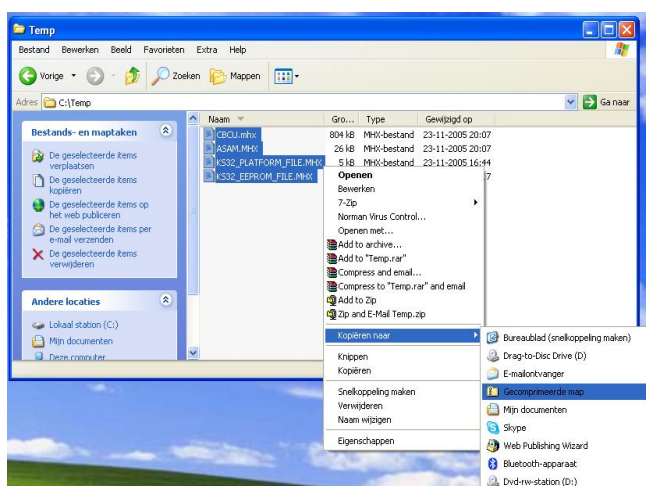


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5.7 Create Software Download Files

5.7.1 Download Software Files for CBCU

- After the first usage of the CBCU Plugin, the following folder is created:
"C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU\Software Packages".
- The CBCU Plugin is only capable of downloading software files with the following extension: *.CBCU_A and *.CBCU3_A (see also next chapter).
- The *.CBCU_A files have to be created manually as follows:
 - After compiling a LogiCAD project, get the following files (CBCU.MHX and ASAM.MHX) from this folder:
"xxx.L2P\Configuration.L2C\CBCU.L2R\public\CCODE\MBRT\CBCU" (xxx=project name).
 - Get the following files (KS32_EEPROM_FILE.MHX and KS32_PLATFORM_FILE.MHX) from this folder:
"xxx.L2P\Configuration.L2C\Target-Files" (xxx=project name).
- Gather these 4 files together in a temporary folder, e.g. C:\Temp.
- Select all 4 files, click with the right mouse button on the selection and select:
"Send to→Compressed (zipped) Folder" (see picture below).



- Rename the result (the *.zip file) to a *.CBCU_A file, i.e. the CBCU_A files is just a ZIP file but the extension has been changed from ZIP to CBCU_A.
- For Version Management reasons it is recommended to give the *.CBCU_A file a useful name, e.g. 17122008V2.CBCU_A to indicate a software version 17122008v2 (just an example, any name may be used as long as the file extension is CBCU_A).

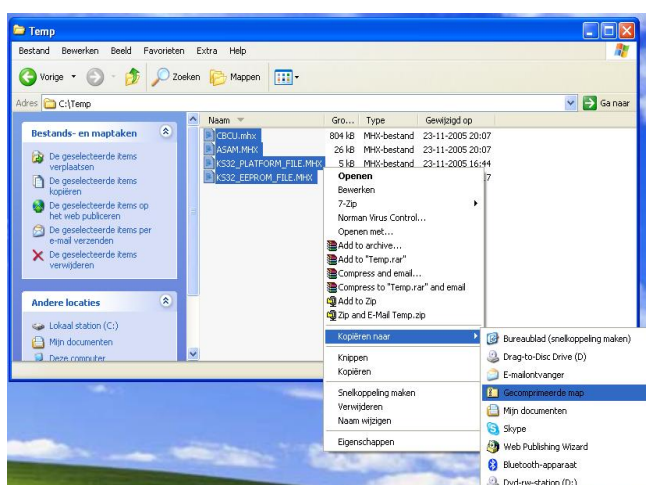
Note: This name may not contain Chinese Characters!

- After creating the *.CBCU_A file(s), put them in the following folder:
"C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU\Software Packages".
- The CBCU Plugin is able to check this folder for *.CBCU_A files and will automatically list these in the appropriate "Software Download" screen, see chapter 6.6 Software Download.

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5.7.2 Download Software Files for CBCU3

- After the first usage of the CBCU Plugin, the following folder is created:
"C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU\Software Packages".
- The CBCU Plugin is only capable of downloading software files with the following extension: *.CBCU_A and *.CBCU3_A (see also previous chapter).
- The *.CBCU_A files have to be created manually as follows:
 - After compiling a LogiCAD project, get the following files:
BASE.MHX
PLC.MHX
ASAM.MHX
PARAMETER-SETS.MHX
EEPROM-VARIABLES.MHX
EEPROM-PARAMETER.MHX
 - from the folder :
"xxx.L2P\Configuration.L2C\Target-Files" (xxx=project name).
(xxx=project name).
- Gather these 5 files together in a temporary folder, e.g. C:\Temp.
- Select all 5 files, click with the right mouse button on the selection and select:
"Send to→Compressed (zipped) Folder" (see picture below).



- Rename the result (the *.zip file) to a *.CBCU3_A file, i.e. the CBCU3_A files is just a ZIP file but the extension has been changed from ZIP to CBCU3_A.
- For Version Management reasons it is recommended to give the *.CBCU3_A file a useful name, e.g. 17122008V2.CBCU3_A to indicate a software version 17122008v2 (just an example, any name may be used as long as the file extension is CBCU3_A).

Note: This name may not contain Chinese Characters!

- After creating the *.CBCU3_A file(s), put them in the following folder:
"C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU\Software Packages".
- The CBCU Plugin is able to check this folder for *.CBCU3_A files and will automatically list these in the appropriate "Software Download" screen, see chapter 6.6 Software Download.

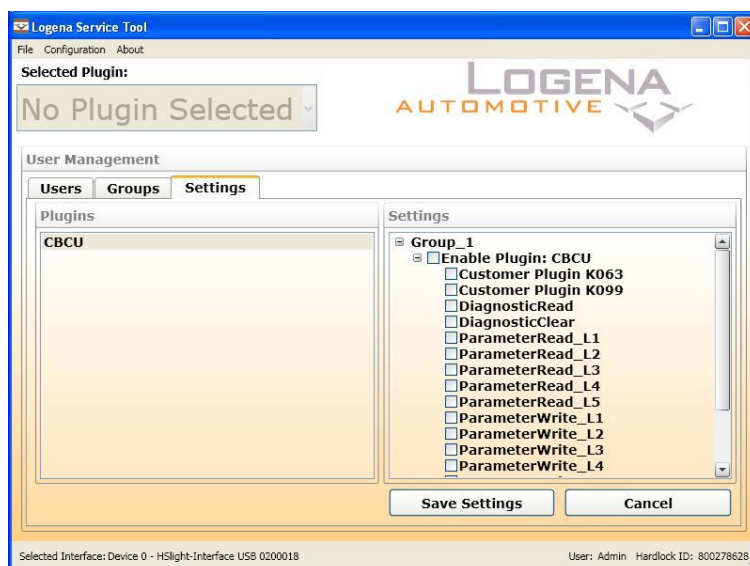
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6 CBCU Plugin

This chapter describes the functional usage of the Logena Service Tool.

6.1 Settings User Management

Before the CBCU plugin can be used the plugin must be configured. To access the CBCU plugin settings see chapter 9 References, reference 1 Logena Service Tool CBCU Plugin Instructions v1.xx chapter Plugin Settings.



To enable the plugin check the box for "Enable Plugin: CBCU". In the user management settings the administrator can enable / disable the different functions per group. When an item is checked, this item is accessible for the user. For example: when the "DiagnosticClear" is disabled the user cannot clear the diagnostic information.

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6.1.1 Enable / Disable Functions

The following items can be checked:

- Customer plugins
- DiagnosticRead
- DiagnosticClear
- ParameterRead_L1
- ParameterRead_L2
- ParameterRead_L3
- ParameterRead_L4
- ParameterRead_L5
- ParameterWrite_L1
- ParameterWrite_L2
- ParameterWrite_L3
- ParameterWrite_L4
- ParameterWrite_L5
- SoftwareDownload
- ECUInstallationDateWrite
- ODOMeterWrite
- VINWrite

Customer plugins:

Enables or disables the customer plugin which are allowed to use with used the hardlock.

DiagnosticRead:

Enables or disables the possibility to read the diagnostic information, when this function is disabled the DiagnosticClear is automatically disabled.

DiagnosticClear:

Enables or disables the possibility to clear the diagnostic information.

ParameterRead_L1:

Enables or disables the possibility to read the level 1 parameters, when this function is disabled the ParameterWrite_L1 is automatically disabled.

ParameterRead_L2:

Enables or disables the possibility to read the level 2 parameters, when this function is disabled the ParameterWrite_L2 is automatically disabled.

ParameterRead_L3:

Enables or disables the possibility to read the level 3 parameters, when this function is disabled the ParameterWrite_L3 is automatically disabled.

ParameterRead_L4:

Enables or disables the possibility to read the level 4 parameters, when this function is disabled the ParameterWrite_L4 is automatically disabled.

ParameterRead_L5:

Enables or disables the possibility to read the level 5 parameters, when this function is disabled the ParameterWrite_L5 is automatically disabled.

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ParamterWrite_L1:

Enables or disables the possibility to write the level 1 parameters.

ParamterWrite_L2:

Enables or disables the possibility to write the level 2 parameters.

ParamterWrite_L3:

Enables or disables the possibility to write the level 3 parameters.

ParamterWrite_L4:

Enables or disables the possibility to write the level 4 parameters.

ParamterWrite_L5:

Enables or disables the possibility to write the level 5 parameters.

SoftwareDownload:

Enables or disables the possibility to download software into the CBCU.

ECUInstallationDateWrite:

Enables or disables the possibility to write the ECU installation date.

ODOMeterWrite:

Enables or disables the possibility to write the ODO meter value.

VINWrite:

Enables or disables the possibility to write the Vehicle Identification Number.

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6.2 Starting the Logena Service Tool

1. Start the tool and login with a user other then "Admin".



2. After a successful login the following screen appears:



- Click on the "No Plugin Selected" dropdown box and select the CBCU plugin.

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3. When the CBCU plugin is selected the home screen of the CBCU appears.



Different tabs can be selected, the usage of the tabs is explained in the following chapters.

4. When there are changes made and those are not processed, and you are navigating to another tab, a message pops up:



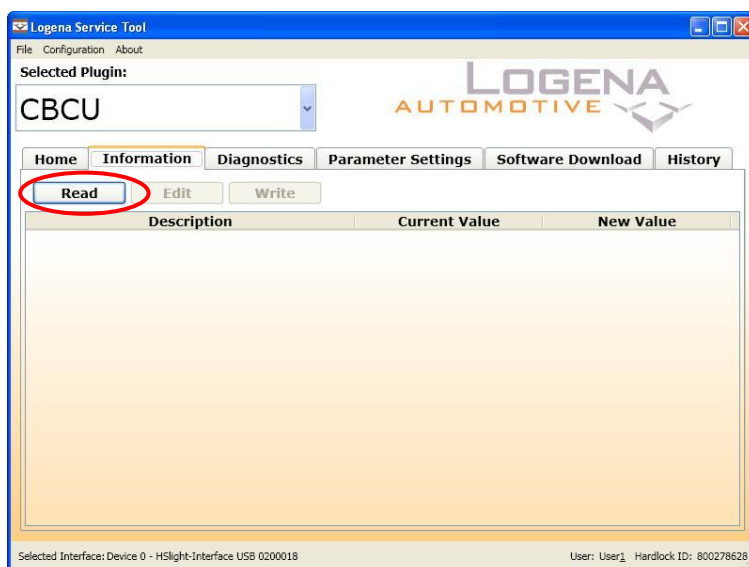
When the "OK" button is clicked the changed values will get lost.
When the "Cancel" button is clicked, you will not navigate to the other tab and you will be able to write the changed values into the CBCU.

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6.3 Read / Edit Information

Under the information tab, information can be read from the CBCU. For example the CBCU Serial number and VIN.

1. To read the information from the CBCU, click the "Read" button.



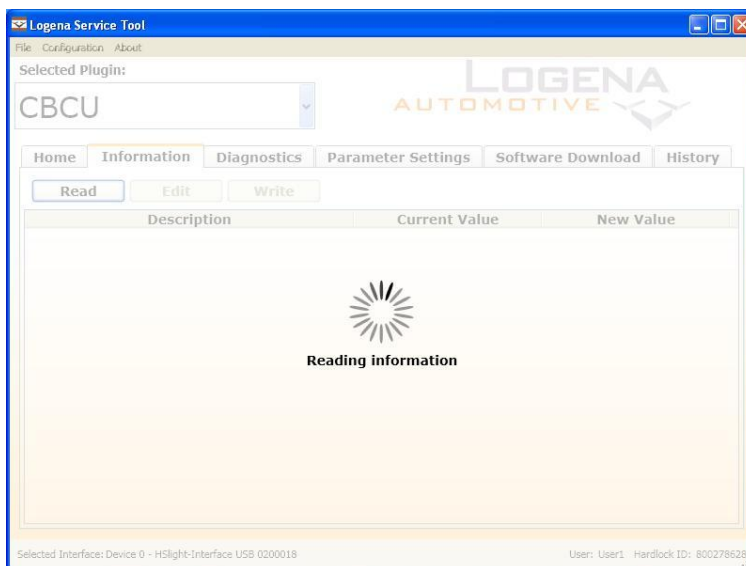
2. Every time the communication is started with the vehicle a warning message pops up:



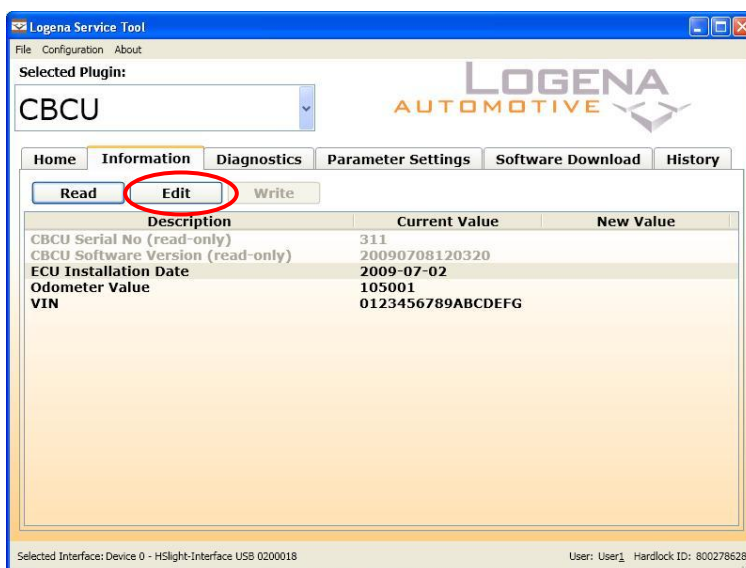
This warning reminds you to follow several safety precautions. Read this warning carefully, when all the warnings and precautions are read and understood, click the "OK" button, otherwise click the "Cancel" button.

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3. The Information screen shows progress sign with the text: Reading Information.



4. When the information is read out of the CBCU, the information is displayed in the Information window:



5. The ECU Installation Date, Odometer Value and the VIN can be changed. To change one of these values, double click on the description or select the description you want to change and click the "Edit" button. See picture above.

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6. To change for example the ECU Installation Date, the right format of the new date must be filled in correctly. The minimum and maximum values of the parameter are displayed in the popup. When a Type of the parameter is available this is also displayed in the popup.

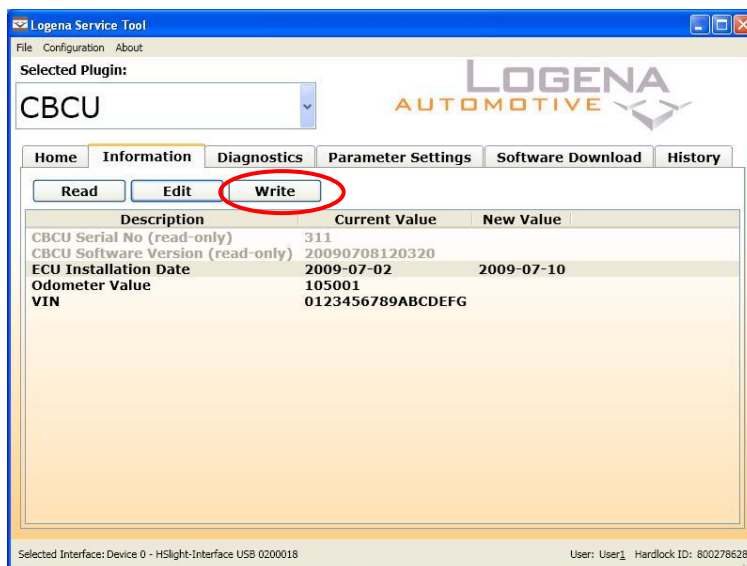
As long as the correct format is not filled in the textbox is red and the text Validation not OK is displayed:

When the validation is Ok, the blue line appears and the "Ok" button is enabled. Click on the "Ok" button to change the ECU Installation Date:

Changing the Odometer Value and the VIN works the same way, if the validation is not OK, the textbox is red and the text Validation not OK is displayed.

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7. To write the information into the CBCU click the "Write" button:



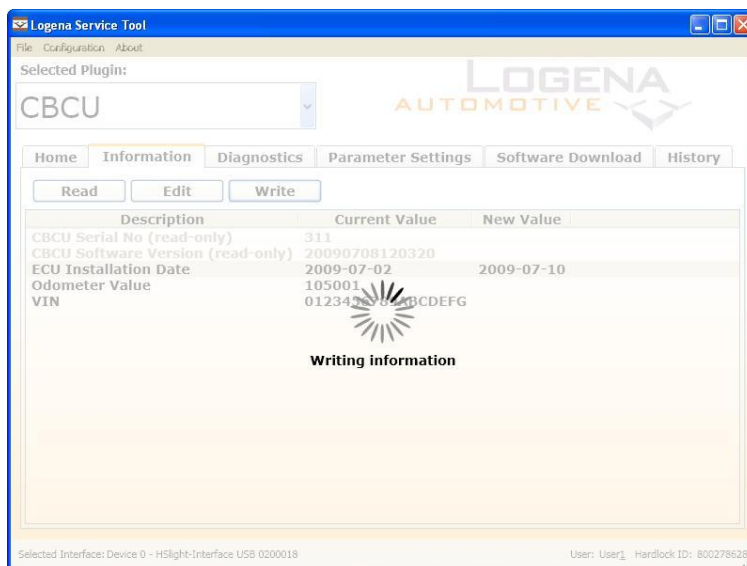
8. Every time the communication is started with the vehicle a warning message pops up:



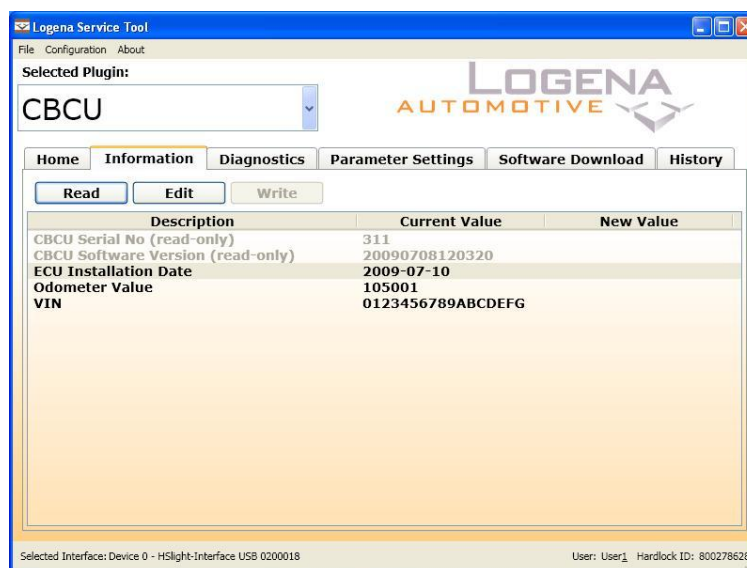
This warning reminds you to follow several safety precautions. Read this warning carefully, when all the warnings and precautions are read and understood, click the "OK" button, otherwise click the "Cancel" button.

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9. The Information is written into the CBCU while the following screen is visible:



10. After the information is written, the updated values are displayed under "Current Value".

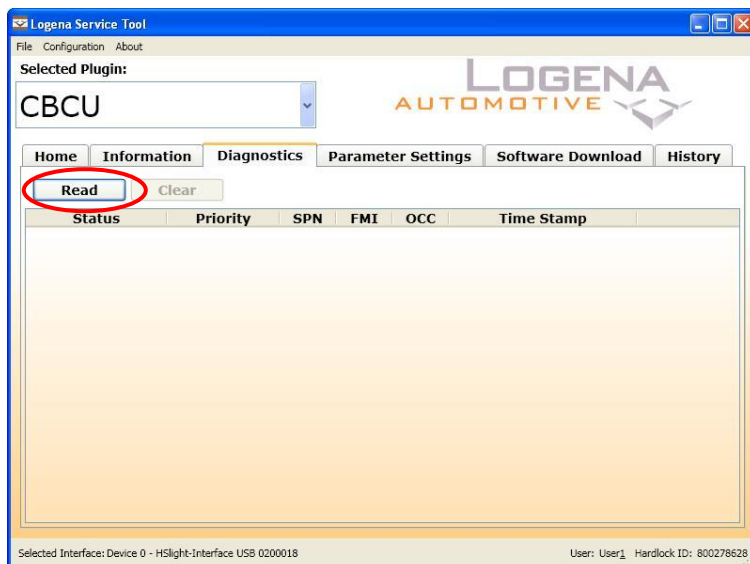


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6.4 Read / Clear Diagnostics

Under the Diagnostics tab, the diagnostic information can be read from the CBCU.

1. To read the diagnostic information from the CBCU, click the "Read" button.



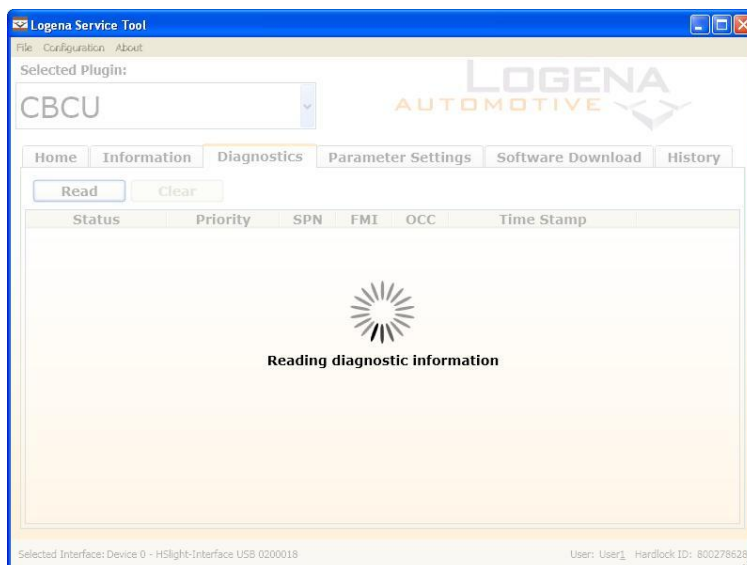
2. Every time the communication is started with the vehicle a warning message pops up:



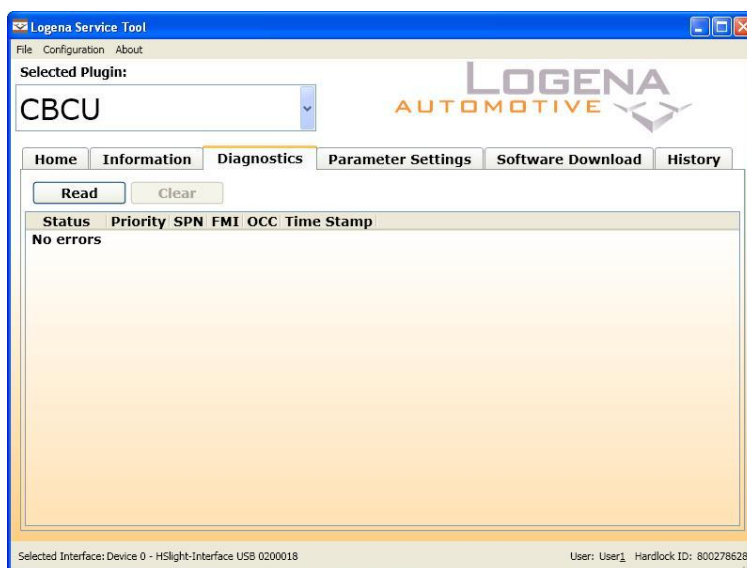
This warning reminds you to follow several safety precautions. Read this warning carefully, when all the warnings and precautions are read and understood, click the "Ok" button, otherwise click the "Cancel" button.

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3. While the Logena Service Tool is reading the diagnostic information the following screen is displayed:

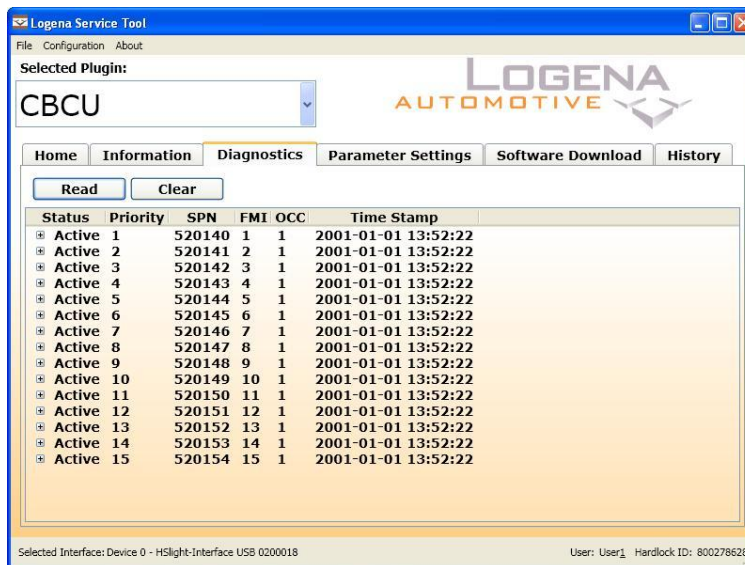


4. When the CBCU has no errors stored, the text "No errors" is displayed.

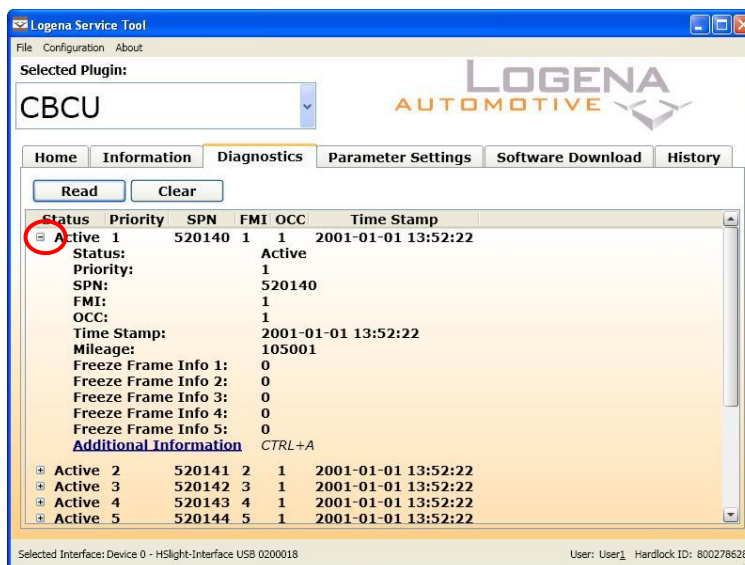


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5. If there are errors stored in the CBCU, the errors are displayed in the diagnostics tab.

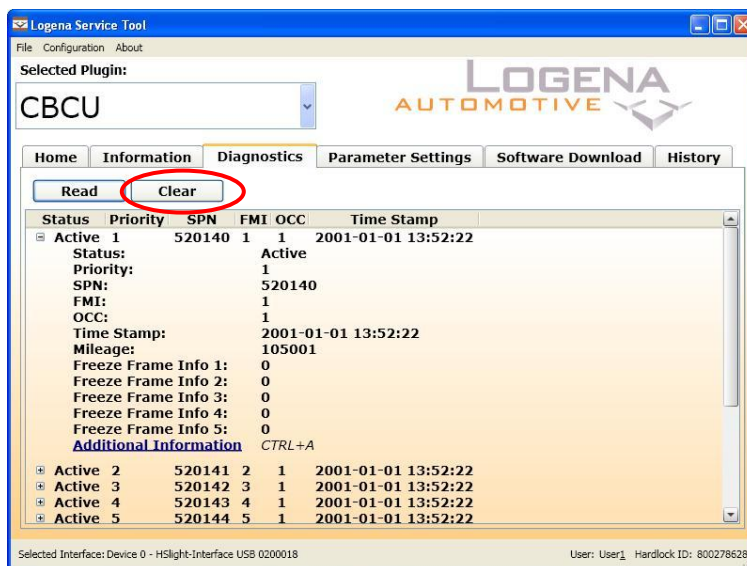


6. To see detailed information of an error, expand the error by clicking on the + box left of the error.



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7. To clear the diagnostic information, click the "Clear" button.



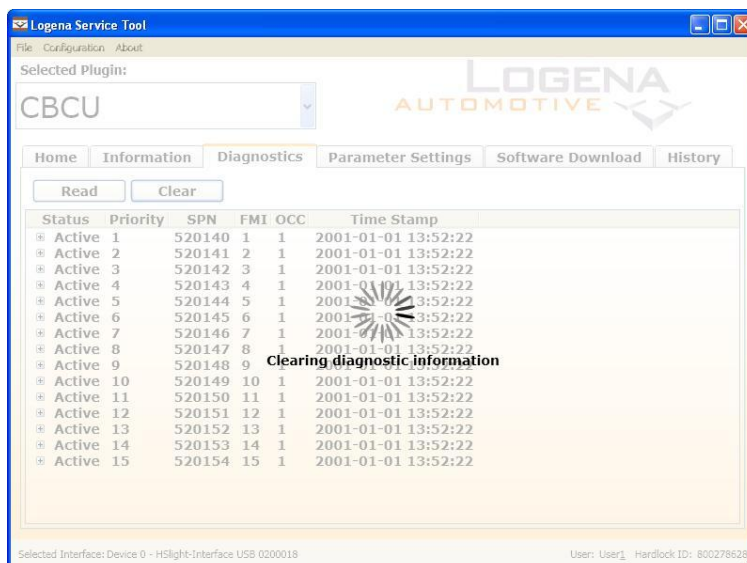
8. Every time the communication is started with the vehicle a warning message pops up:



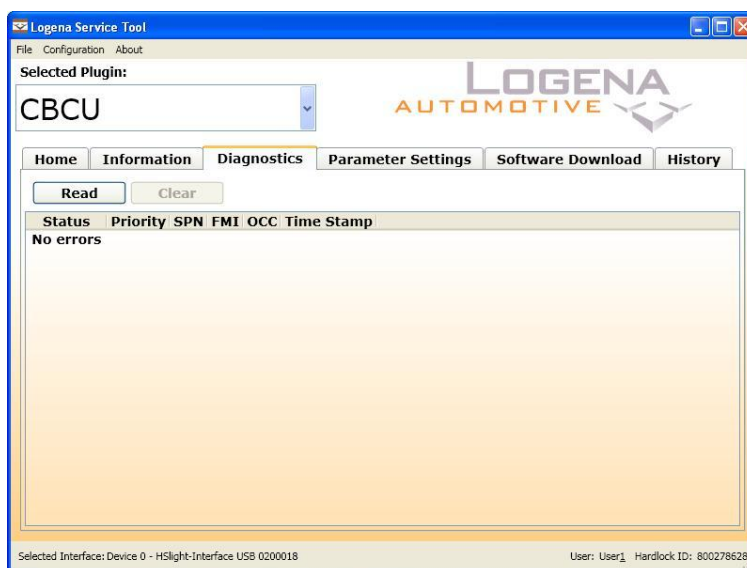
This warning reminds you to follow several safety precautions. Read this warning carefully, when all the warnings and precautions are read and understood, click the "OK" button, otherwise click the "Cancel" button.

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9. While the information is cleared the following screen is displayed:



10. When all the errors are cleared and there are no active errors, the following screen is displayed:



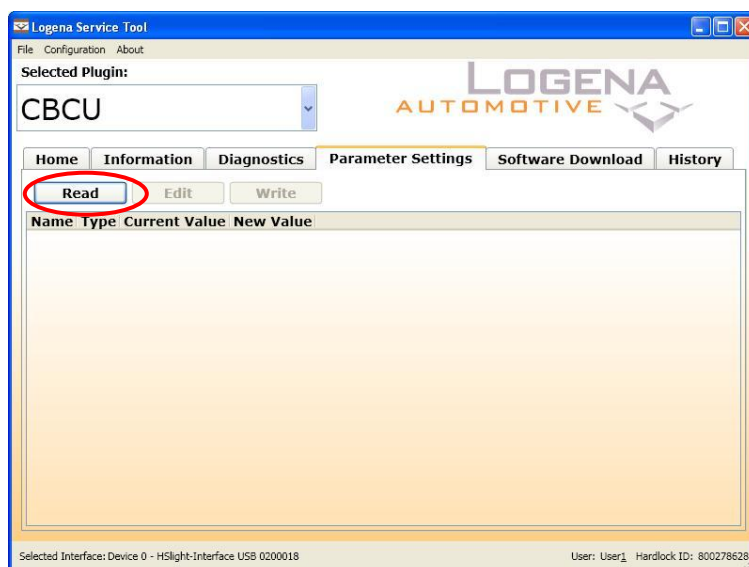
If there are active errors, the errors will be displayed after a Diagnostic Clear.

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6.5 Read / Write Parameters

Under the parameters tab the parameters can be read, edited, and written.

1. To read the parameters from the CBCU, click the "Read" button.



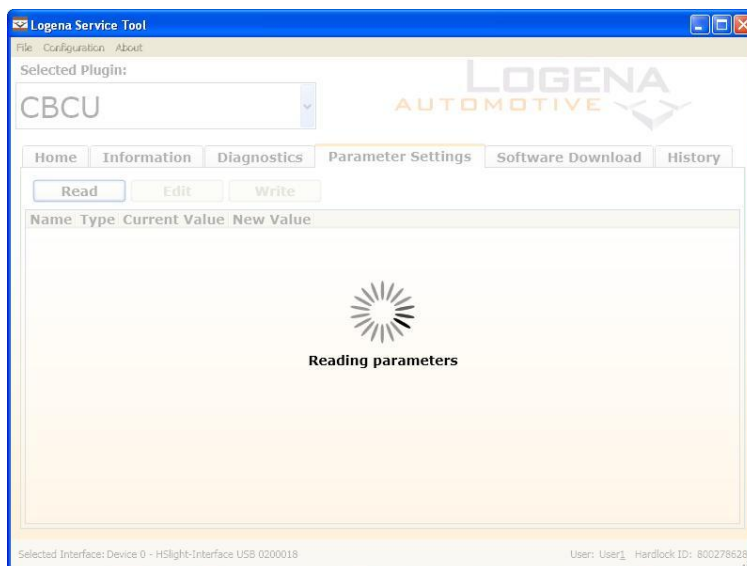
2. Every time the communication is started with the vehicle a warning message pops up:



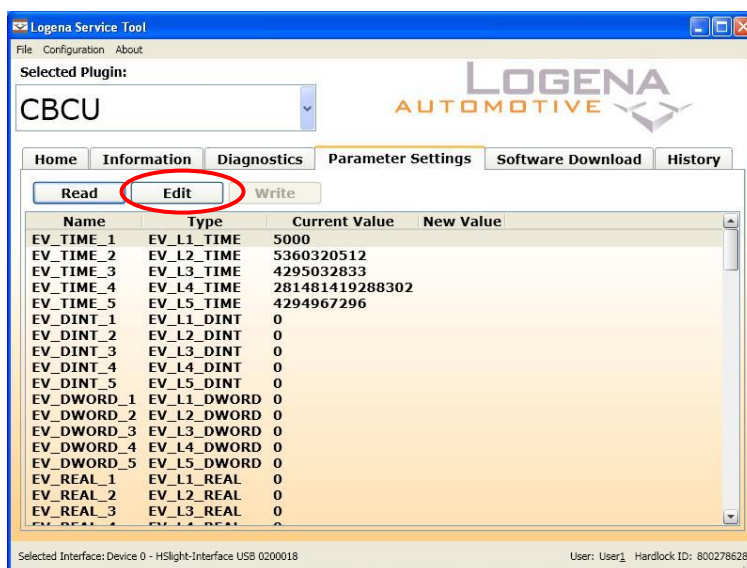
This warning reminds you to follow several safety precautions. Read this warning carefully, when all the warnings and precautions are read and understood, click the "OK" button, otherwise click the "Cancel" button.

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3. While the parameters are written the following screen is displayed.



4. The present parameters are displayed in a list. To change a parameter value, double click on the parameter or select the parameter and click the "Edit" button.



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11. To change a parameter value a valid value must be filled in. The minimum and maximum values of the parameter are displayed in the popup screen. The Type of the parameter is also displayed in the popup screen. As long as no correct format is filled in, the textbox is red and the text "Validation not Ok" is displayed:

Logena Service Tool - Edit Parameter

Name: EV_TIME_1

Type: EV_L1_TIME

Minimum Value: -9223372036854775808

Maximum Value: 9223372036854775807

New Value:

Validation not Ok

Please fill in the new value in msec according to the minimum and maximum value.

Ok Cancel

12. When a valid value is given in the "Ok" button is enabled, the parameter value can be changed, click the "Ok" button to confirm.

Logena Service Tool - Edit Parameter

Name: EV_TIME_1

Type: EV_L1_TIME

Minimum Value: -9223372036854775808

Maximum Value: 9223372036854775807

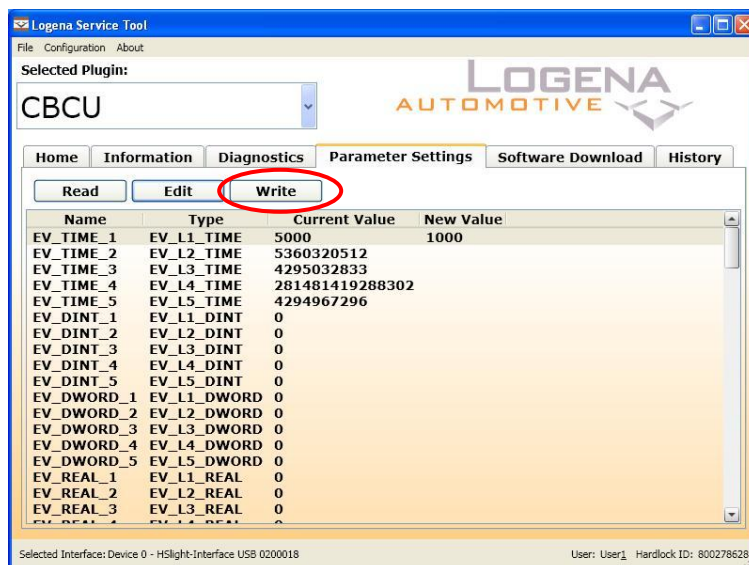
New Value:

Please fill in the new value in msec according to the minimum and maximum value.

Ok Cancel

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13. The changed parameters have a new value and are displayed in the new value column. To write the new values to the CBCU click the "Write" button.



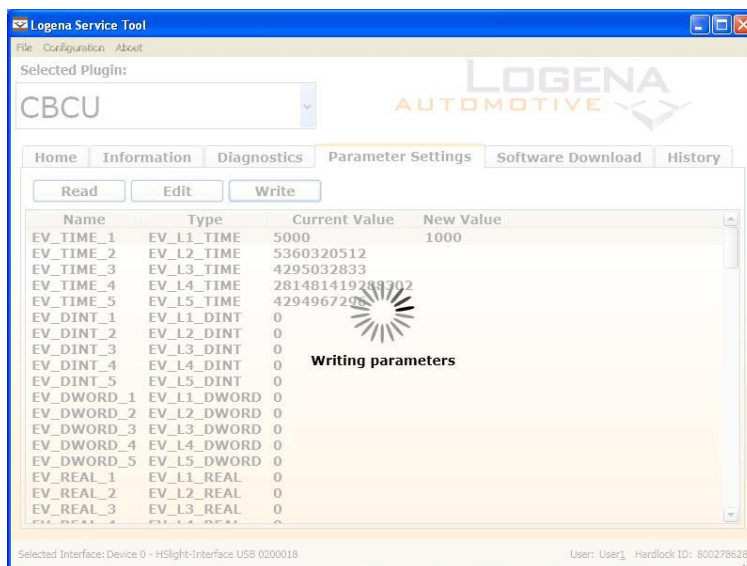
14. Every time the communication is started with the vehicle a warning message pops up:



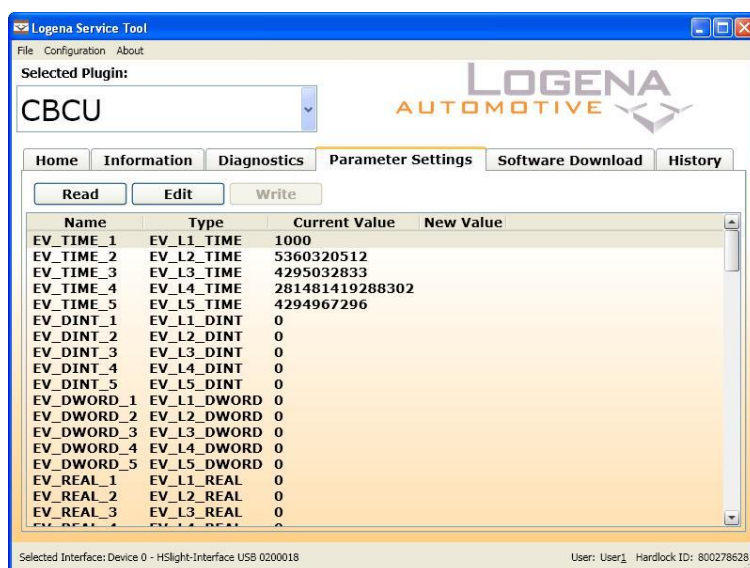
This warning reminds you to follow several safety precautions. Read this warning carefully, when all the warnings and precautions are read and understood, click the "OK" button, otherwise click the "Cancel" button.

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15. While the parameters are written into the CBCU the following screen is displayed:



16. After the parameters are written, the New Value is written to the Current Value.

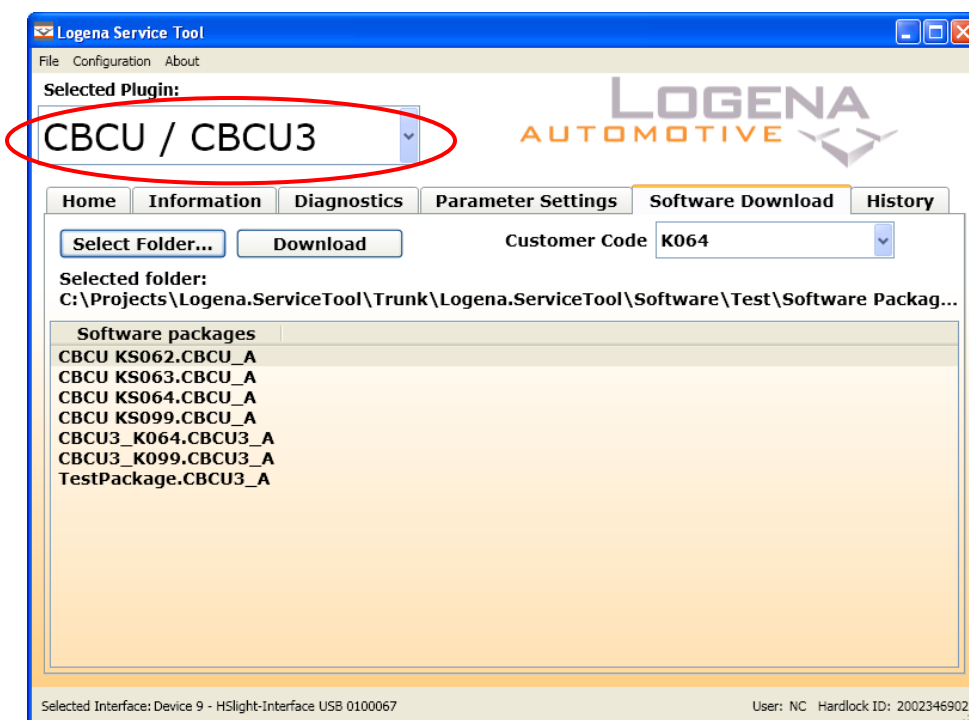


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6.6 Software Download

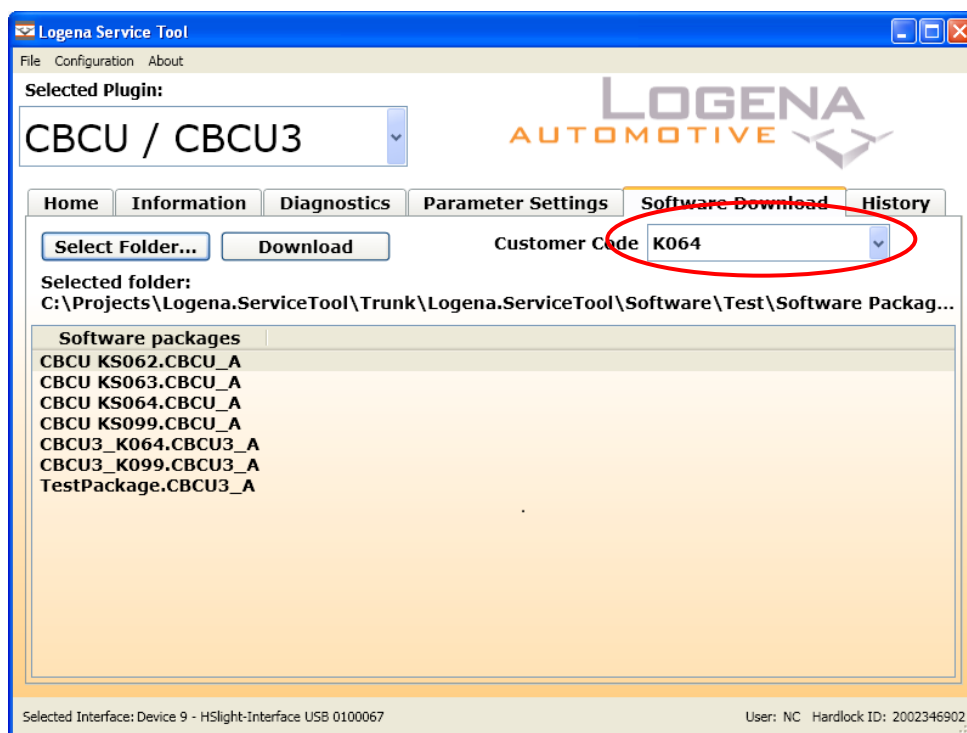
Under this tab new software can be downloaded into the CBCU

1. Select a file to download into the CBCU. The standard folder for the Software Packages is: C:\Program Files\Logena Automotive\ Logena Service Tool\Plugins\CBCU\Software Packages. When a download package with the right extension is placed in this folder, it is displayed in the Software packages list. If you desire another folder for the CBCU download packages, select the folder in which the download files are located by clicking the "Select Folder" button and navigate to the desired folder.



2. If downloading after a previous incomplete download (e.g. only the BASE system was successfully downloaded), then it can be necessary to manually set the proper Customer Code using the Drop-Down box. The selected Customer Code will be used only in case the retrieval of the Customer Code from the CBCU/CBCU3 fails during the download procedure.

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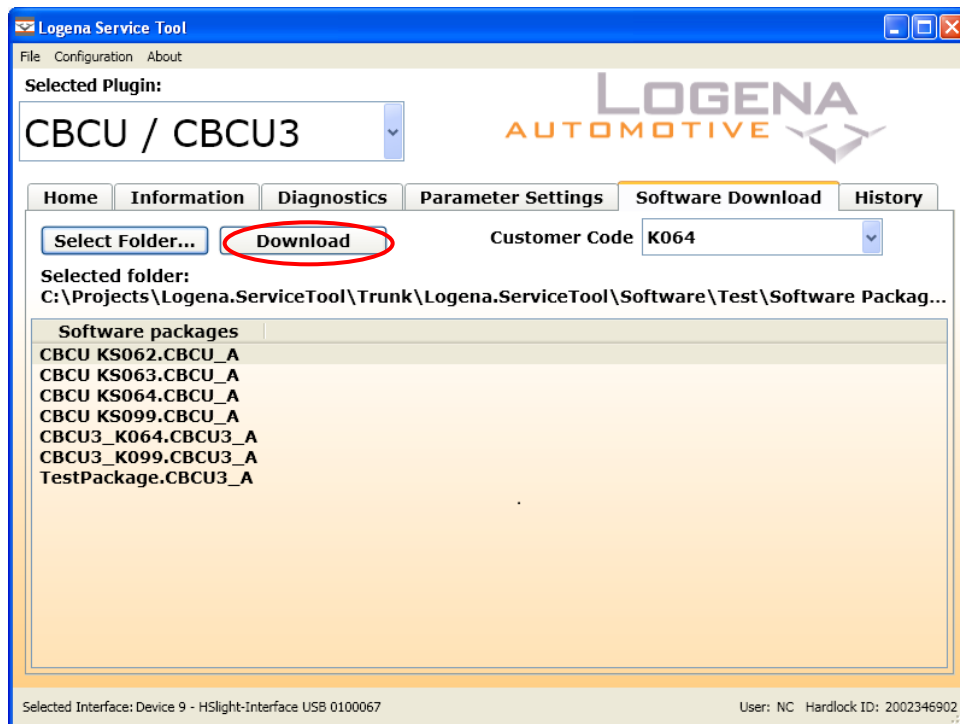


Note: If there is only one Customer Code enabled in the Service Tool, it will be silently used if the Customer Code retrieval from the CBCU/CBCU3 fails and there will be no drop-down box visible.

Note: The drop-down box will show a merged list of all enabled Customer Codes (CBCU as well as CBCU3 Customer Codes) because it is being filled at the moment that it is not known which type of CBCU is connected to the Service Tool. If the user selects a Customer Code in the drop-down box enabled only for a CBCU and tries to apply it on a CBCU3, then there will be raised an error during the download procedure.

3. To download software to the CBCU, select the software package to download and click the "Download" button.

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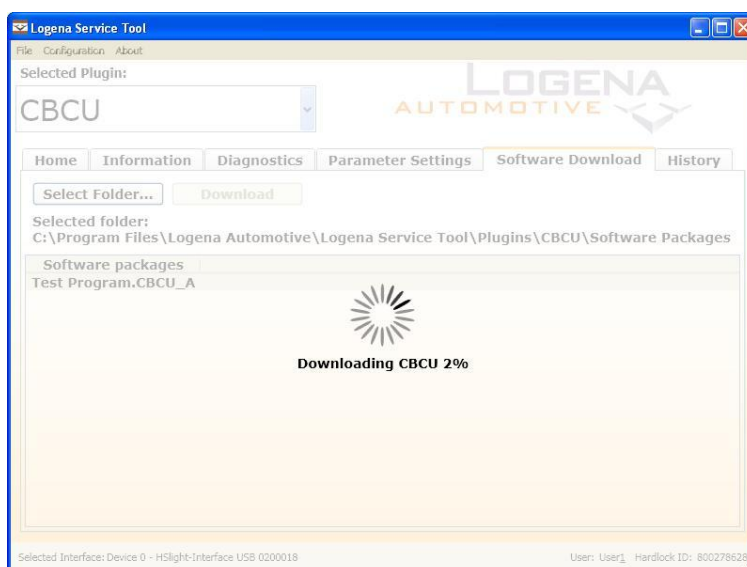
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4. Every time the communication is started with the vehicle a warning message pops up:



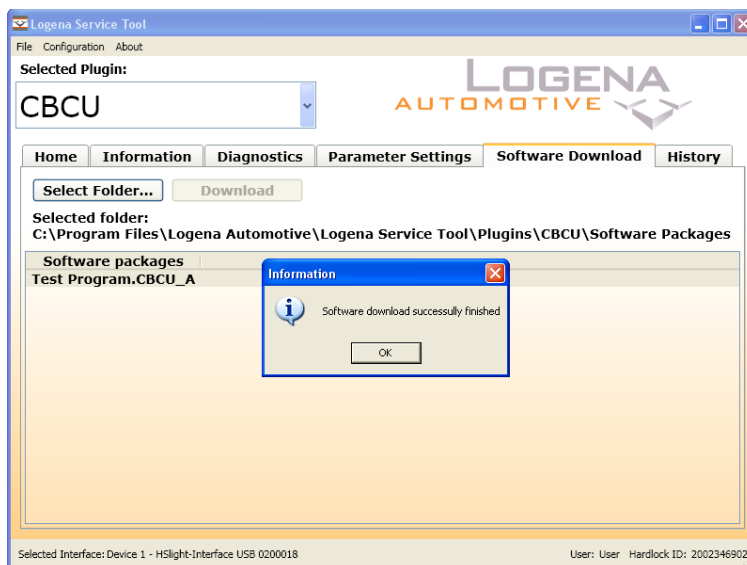
This warning reminds you to follow several safety precautions. Read this warning carefully, when all the warnings and precautions are read and understood, click the "OK" button, otherwise click the "Cancel" button.

5. While the software is being downloaded the different states of the download are displayed in the busy screen.



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When the busy screen disappears, the popup "Software download successfully finished" is displayed. Click "OK".

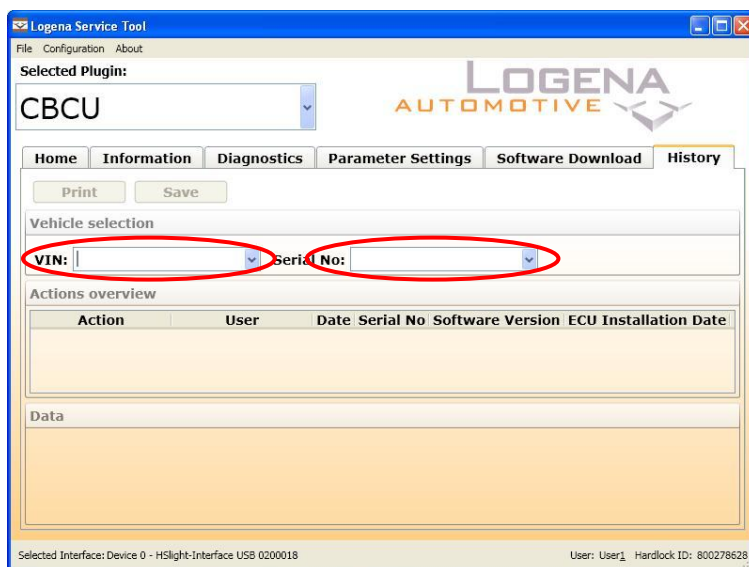


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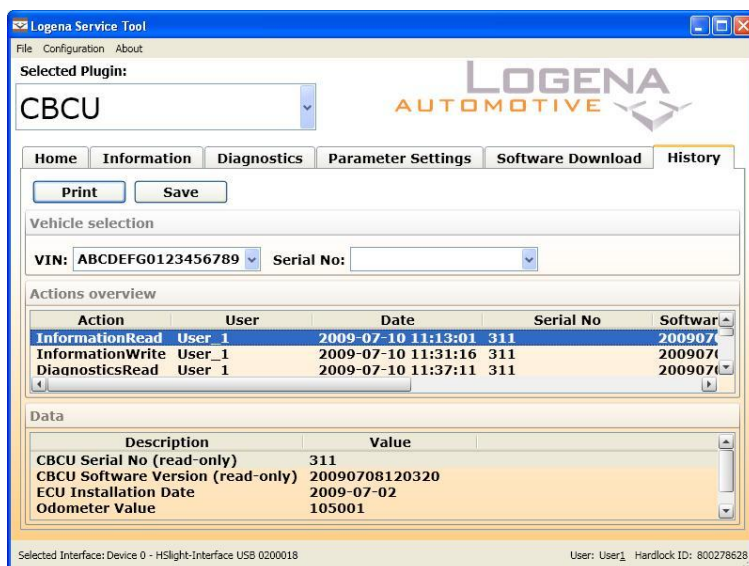
6.7 History tab

All read, write, clear and download actions are saved in the History tab. The history actions can be viewed per VIN or per CBCU Serial No.

1. Select a VIN or CBCU Serial No, to see the history of actions performed on the specific vehicle.

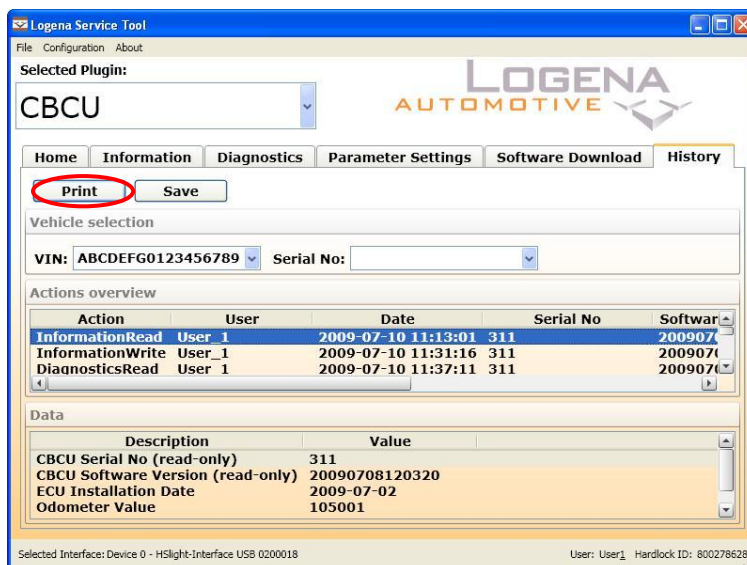


2. In the "Actions overview" column all the actions for the chosen vehicle are displayed. Select an action to view the information of the action in the "Data" column.

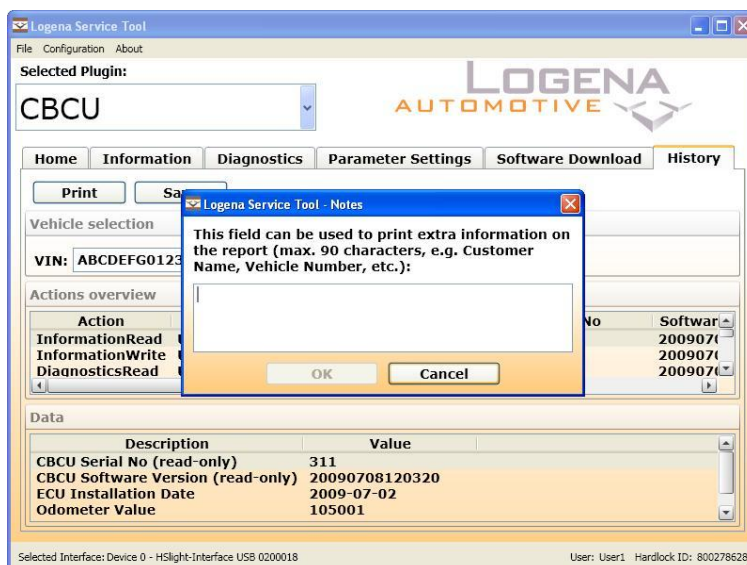


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- It is possible to print a report of the action that is selected by clicking the "Print" button.

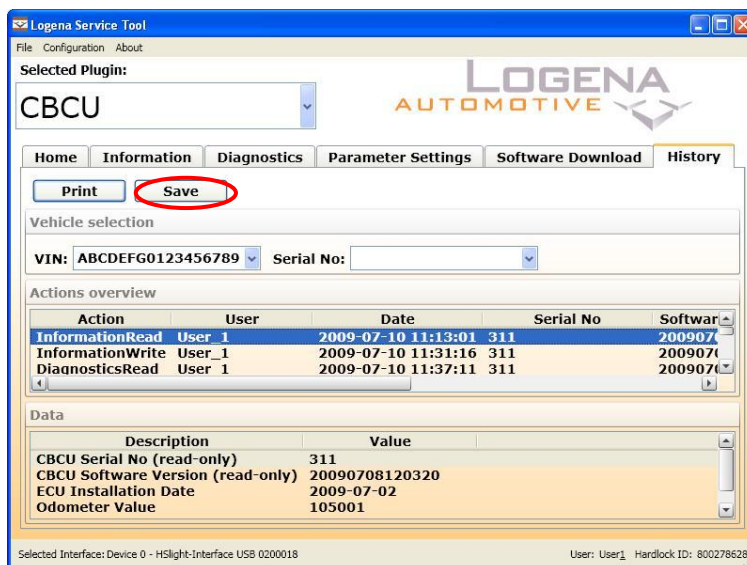


- A window pops up, in this window additional information must be filled in. Click the "OK" button to proceed the printing of the report. A standard Windows print window pops up, follow the standard steps to finish the printing of the report.

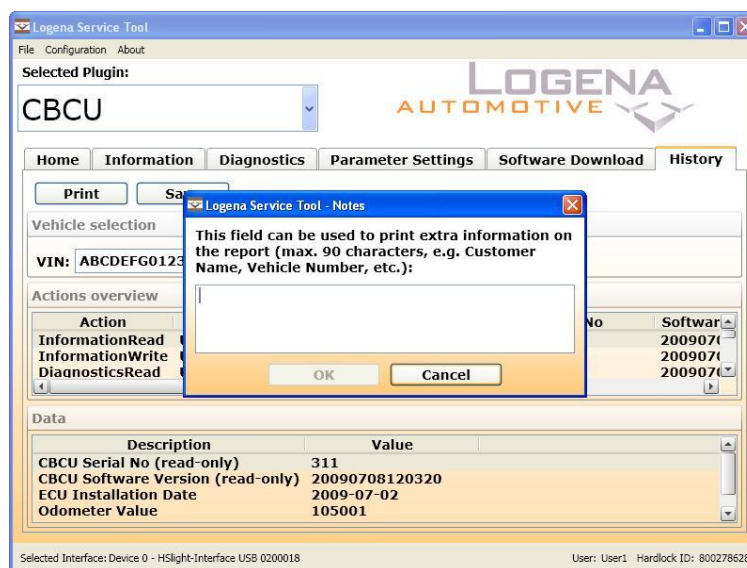


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- Instead of printing a report, a report can also be saved. Click the "Save" button to save the report.

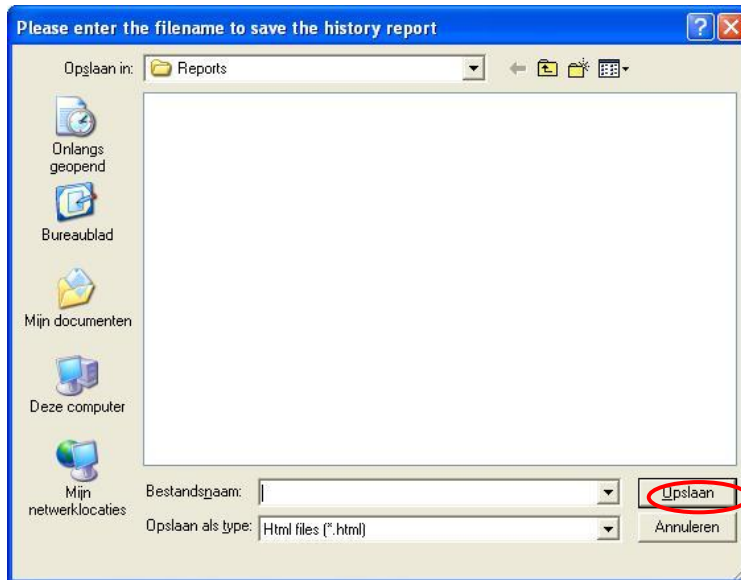


- A window pops up, fill in the additional information and click the "OK" button.



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7. The window to save the report pops up. Choose a name for the report and the folder to save the report in. The standard folder to save the reports in is:
"C:\Program Files\Logena Automotive\Logena Service Tool\Plugins\CBCU\Reports"
Click the "Save" button to save the report.



8. The message that the report is saved successfully pops up, click "Ok" to confirm the message.



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7 Troubleshooting

Problem	Cause	Solution
Popup screen: "Code: 00010100 Communication Interface could not be found! Possible solutions: -verify connection to Communication Interface -(re)connect Communication Interface -verify Serial Number of Communication Interface"	Initializing of device failed, not connected or wrong interface selected?	verify connection to Communication Interface -(re)connect Communication Interface -verify Serial Number of Communication Interface"
Popup screen: "Code: 0x00010400 Communication Interface not enabled!"	Interface Customer Code is not enabled	Use an interface that is enabled for the involved customer
Popup screen: "Code: 00010500"	Starting communication failed	Switch on CBCU Connect interface to U-bat
Popup screen: "Code: 0x00010700 CBCU Customer Plugin not enabled!"	ECU Customer Plugin is not enabled	Use a dongle with the involved customer enabled.
Popup screen: "Code: 0x00010812 Action failed! Possible cause: -no program loaded in CBCU"	Starting diagnostic session failed, probably no program loaded	Load a program into the CBCU
Popup screen: "Code: 0x00020100 CBCU Customer Plugin unknown!"	Customer plugin not known by DLL	Use a CBCU and DLL with matching customer numbers
Popup screen: "Code: 0x00060100 Serial No of CBCU does not match, please perform a read action!"	ECUSN is different	Perform a Read action

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Problem	Cause	Solution
Popup screen: "Code: 0x00060200 CBCU Software Version does not match, please perform a read action!"	SSPLCSVN is different	Perform a Read action
Popup screen: "Code: 0x00070100 Importing download file failed!"	Importing CBCU.MHX failed, the file is corrupt	
Popup screen: "Code: 0x00070200 Importing download file failed!"	Importing ASAM.MHX failed, the file is corrupt	
Popup screen: "Code: 0x00070300 Importing download file failed!"	Importing KS32_PLATFORM_FILE.MHX failed, the file is corrupt	
Popup screen: "Code: 0x00070400 Importing download file failed!"	Importing KS32_EEPROM_FILE.MHX failed, the file is corrupt	
Popup screen: "Code: 0x000B0131 Writing Odometer Value failed! Possible cause: -the Odometer value you tried to write is lower than the current Odometer value which is stored inside the CBCU"	Setting the Odometer value failed, the value is out of range	Write an odometer value that is higher than the current value

Table 2: Error Codes Logena Service Tool CBCU Plugin Instructions v1.03.docx

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8 Revision History

Revision Number	Changes	Remarks
1.00	1 st issue	
1.01	Updated for new CBCU/CBCU3 Plugin, changes marked in yellow	

Table 3: Revision History Logena Service Tool CBCU Plugin Instructions v1.03.docx

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9 References

1. Logena Service Tool CBCU Plugin Instructions v1.xx
(Guideline)

		Date:	Department:
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