

JENBACHER Advanced Training

Protection Relays Woodward HighPROTEC

The target recipients of this document are:

Service Partners, Commissioning Partners, Subsidiaries/Branches, Location Jenbach

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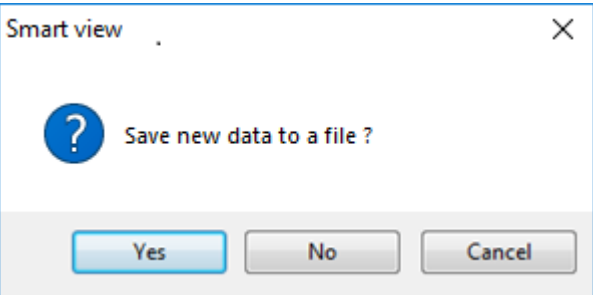
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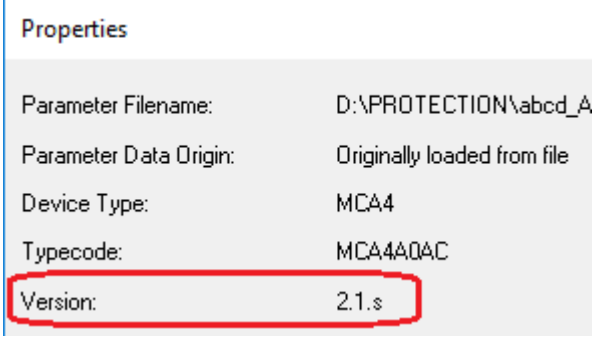
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1 Convert the Firmware Version of a Parameter File

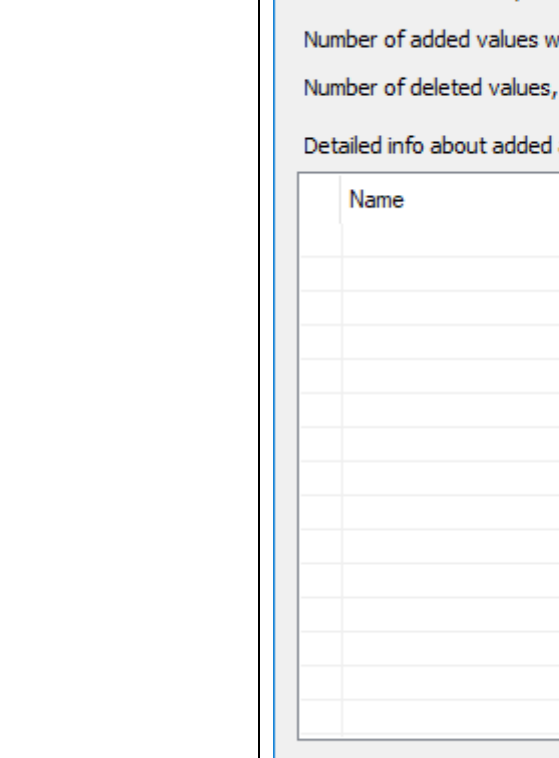
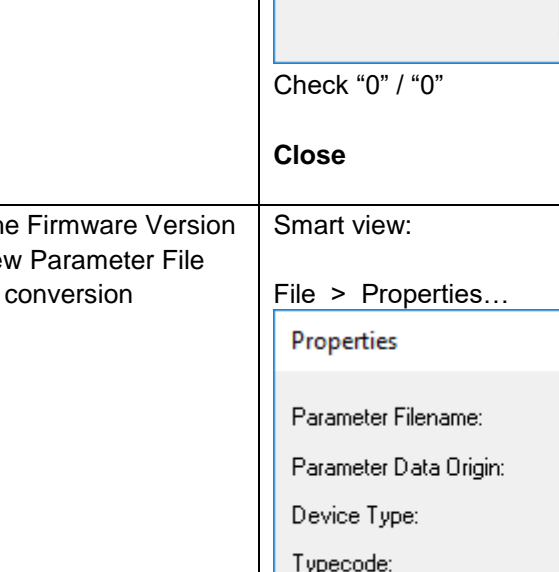
1.1 Example for conversion from MCA4 Firmware Version 2.1.s → 2.6.a

Indication	<p>The MCA4 Protection Relay has a higher Firmware Version than the Parameter File:</p> <p>English version:</p> <div><div>Smart view</div><div><div>!</div><div>Invalid Parameter file for the connected device: File device version: 2.1.s Connected Device version: 2.6.a</div><div>OKHelp</div></div></div> <p>German version:</p> <div><div>Smart view</div><div><div>!</div><div>Ungültige Parameterdatei für das angeschlossene Gerät: Geräteversion der aktuellen Datei: 2.1.s Geräteversion des angeschlossenen Geräts: 2.6.a</div><div>OKHilfe</div></div></div> <p>OK</p>																			
Convertible Versions	<p>Only the following MCA4 Firmware Versions are allowed to convert upwards:</p> <p>2.1.s → 2.1.t → 2.1.u → 2.6.a (also in steps over more than one version, e.g. 2.1.s → 2.6.a)</p>																			
Identification of the convertible Versions	<table><tr><th>Device Type</th><th>Device Version / Firmware-Version</th><th>Build / Type Plate "FW:"</th><th>Front Plate, Interface</th></tr><tr><td rowspan="5">MCA4</td><td>2.1.s</td><td>20696</td><td rowspan="3">BLUE, RS232</td></tr><tr><td rowspan="2">2.1.t</td><td>21425</td></tr><tr><td>24815</td></tr><tr><td>2.1.u</td><td>26508</td></tr><tr><td></td><td>30219</td></tr><tr><td></td><td>2.6.a</td><td>33811</td><td>BLACK, USB</td></tr></table>	Device Type	Device Version / Firmware-Version	Build / Type Plate "FW:"	Front Plate, Interface	MCA4	2.1.s	20696	BLUE, RS232	2.1.t	21425	24815	2.1.u	26508		30219		2.6.a	33811	BLACK, USB
Device Type	Device Version / Firmware-Version	Build / Type Plate "FW:"	Front Plate, Interface																	
MCA4	2.1.s	20696	BLUE, RS232																	
	2.1.t	21425																		
		24815																		
	2.1.u	26508																		
		30219																		
	2.6.a	33811	BLACK, USB																	

<p>Check, if the required new Firmware Version is already on the PC/Laptop</p>	<p>Smart view:</p> <p>File > Create New Parameter File...</p>  <p>Cancel</p>
<p>If the required Firmware Version is not on the PC/Laptop</p>	<p>Perform "Download Parameter File from the Protection Relay to PC/Laptop", description see "JENBACHER Service Training – Protection Relays Woodward HighPROTEC"</p> <p>- until the Device Tree appears:</p>  <p>File > Close</p>  <p>No</p>

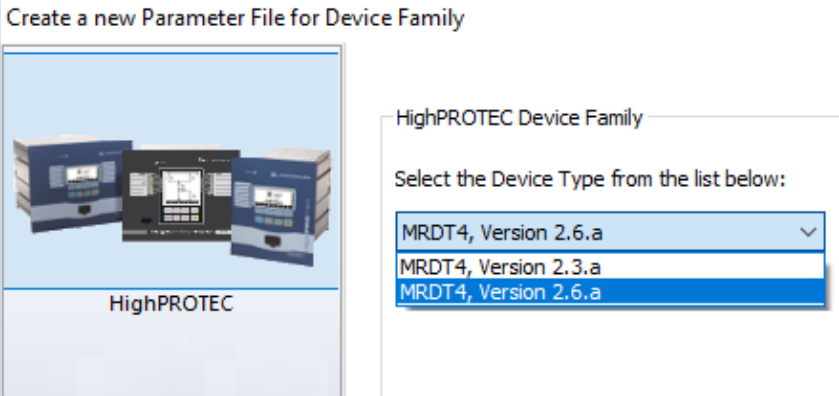

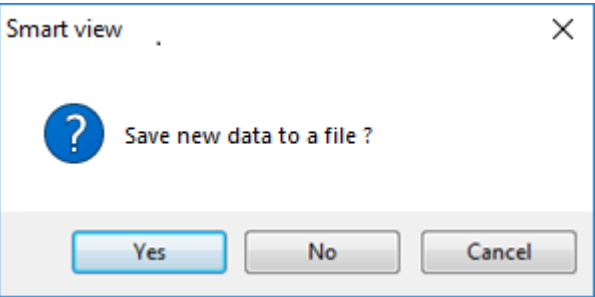
Open Parameter File	<p>Smart view:</p> <p>File > Open Existing Parameter File... > D:\PROTECTION\abcd_Ax_MCA4_V01.HptPara (resp. C:\PROTECTION\, if drive D: is not available)</p> <p>Open</p>
Check the Firmware Version of the Parameter File	<p>Smart view:</p> <p>File > Properties...</p>  <p>OK</p>
Save the Parameter File with a new File name	<p>Smart view:</p> <p>File > Save As... > D:\PROTECTION\abcd_Ax_MCA4_V02.HptPara (resp. C:\PROTECTION\, if drive D: is not available)</p> <p>Save</p> <p>NOTE: "Save As..." with a new File name should be done BEFORE any modification!</p>

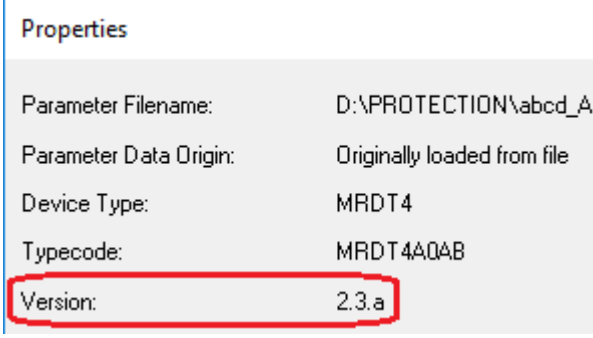
<p>Save the Parameter File with the new Firmware Version "type"</p>	<p>Smart view:</p> <p>File > Save As... > D:\PROTECTION\abcd_Ax_MCA4_V02.HptPara (resp. C:\PROTECTION\, if drive D: is not available)</p> <div data-bbox="708 443 1433 667"> </div> <p>Save as type: select the required Firmware Version "type"</p> <p>Save</p> <div data-bbox="616 770 1343 1025"> </div> <p>Yes</p> <div data-bbox="616 1093 1305 1429"> </div> <p>Yes</p>
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	<p>Message at the end of conversion:</p>  <p>Check "0" / "0"</p> <p>Close</p>
Check the Firmware Version of the new Parameter File after the conversion	<p>Smart view:</p>  <p>OK</p>

1.2 Example for conversion from MRDT4 Firmware Version 2.3.a → 2.6.a

Indication	<p>The MRDT4 Protection Relay has a higher Firmware Version than the Parameter File:</p> <p>English version:</p> <div><div>Smart view</div><div><div></div><div><p>Invalid Parameter file for the connected device:</p><p>File device version: 2.3.a</p><p>Connected Device version: 2.6.a</p></div></div><div><div>OK</div><div>Help</div></div></div> <p>German version:</p> <div><div>Smart view</div><div><div></div><div><p>Ungültige Parameterdatei für das angeschlossene Gerät:</p><p>Geräteversion der aktuellen Datei: 2.3.a</p><p>Geräteversion des angeschlossenen Geräts: 2.6.a</p></div></div><div><div>OK</div><div>Hilfe</div></div></div> <p>OK</p>													
Convertible Versions	<p>Only the following MRDT4 Firmware Versions are allowed to convert upwards:</p> <p>2.3.a → 2.6.a</p>													
Identification of the convertible Versions	<table><tr><th>Device Type</th><th>Device Version / Firmware-Version</th><th>Build / Type Plate "FW:"</th><th>Front Plate, Interface</th></tr><tr><td rowspan="4">MRDT4</td><td rowspan="3">2.3.a</td><td>21129</td><td rowspan="3">BLUE, RS232</td></tr><tr><td>24814</td></tr><tr><td>30239</td></tr><tr><td>2.6.a</td><td>33811</td><td>BLACK, USB</td></tr></table>	Device Type	Device Version / Firmware-Version	Build / Type Plate "FW:"	Front Plate, Interface	MRDT4	2.3.a	21129	BLUE, RS232	24814	30239	2.6.a	33811	BLACK, USB
Device Type	Device Version / Firmware-Version	Build / Type Plate "FW:"	Front Plate, Interface											
MRDT4	2.3.a	21129	BLUE, RS232											
		24814												
		30239												
	2.6.a	33811	BLACK, USB											

<p>Check, if the required new Firmware Version is already on the PC/Laptop</p>	<p>Smart view:</p> <p>File > Create New Parameter File...</p>  <p>Cancel</p>
<p>If the required Firmware Version is not on the PC/Laptop</p>	<p>Perform "Download Parameter File from the Protection Relay to PC/Laptop", description see "JENBACHER Service Training – Protection Relays Woodward HighPROTEC"</p> <p>- until the Device Tree appears:</p>  <p>File > Close</p>  <p>No</p>

Open Parameter File	<p>Smart view:</p> <p>File > Open Existing Parameter File... > D:\PROTECTION\abcd_Ax_MRDT4_V01.HptPara (resp. C:\PROTECTION\, if drive D: is not available)</p> <p>Open</p>
Check the Firmware Version of the Parameter File	<p>Smart view:</p> <p>File > Properties...</p>  <p>OK</p>
Save the Parameter File with a new File name	<p>Smart view:</p> <p>File > Save As... > D:\PROTECTION\abcd_Ax_MRDT4_V02.HptPara (resp. C:\PROTECTION\, if drive D: is not available)</p> <p>Save</p> <p>NOTE: “Save As...” with a new File name should be done BEFORE any modification!</p>

Save the Parameter File with the new Firmware Version "type"

Smart view:

File > Save As... >

D:\PROTECTION\abcd_Ax_MRDT4_V02.HptPara


(resp. C:\PROTECTION\, if drive D: is not available)

File name:	abcd_Ax_MRDT4_V02.HptPara
Save as type:	HighPROTEC Parameter MRDT4 2.3.a (*.HptPara)
	HighPROTEC Parameter MRDT4 2.3.a (*.HptPara)
	HighPROTEC Parameter MRDT4 2.6.a (*.HptPara)

Save as type: select the required Firmware Version "type"

Save

Confirm Save As




abcd_Ax_MRDT4_V02.HptPara already exists.
Do you want to replace it?

Yes No

Yes

Smart view

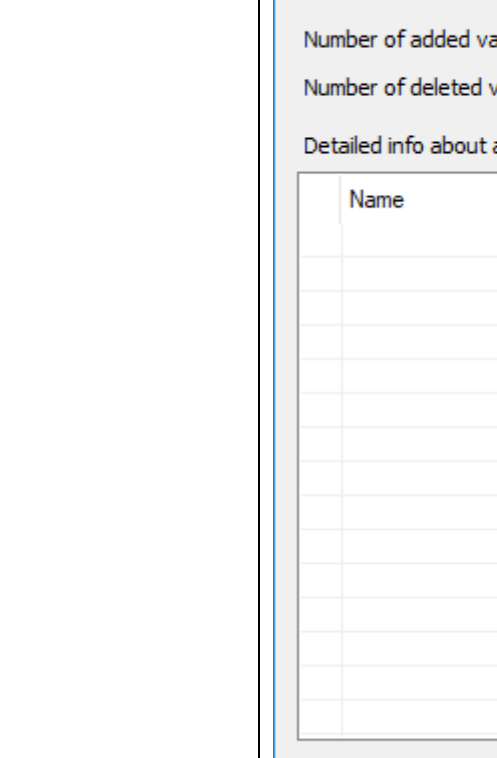
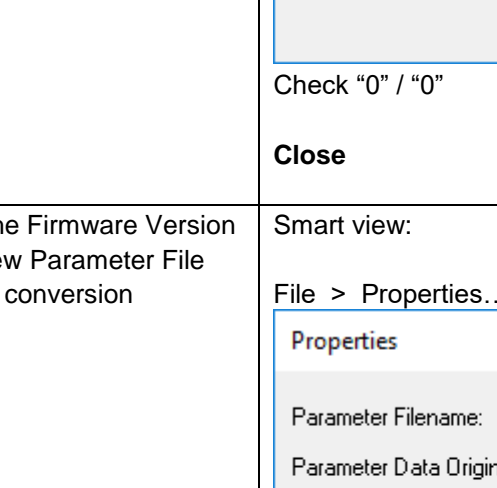


A different version type was selected!

Should the "MRDT4" parameter data be converted from version "2.3.a" to version "2.6.a" ?

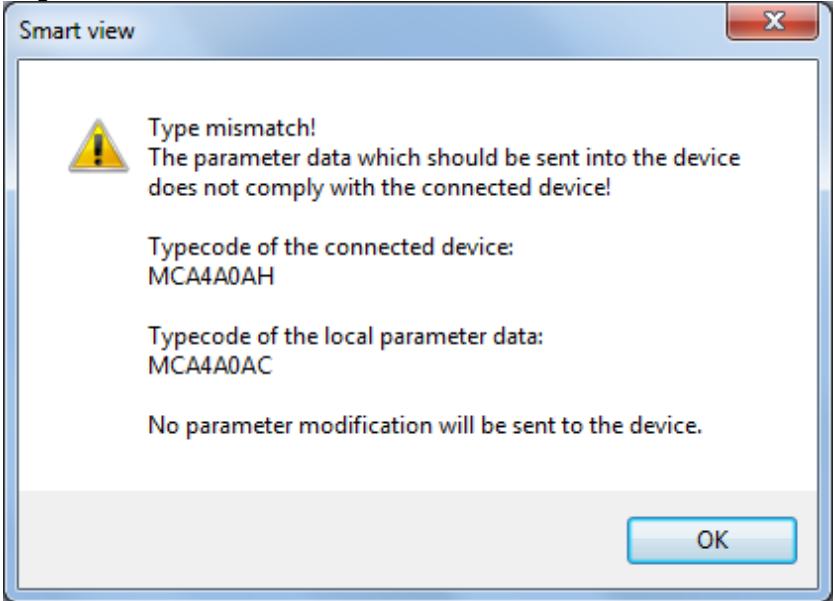
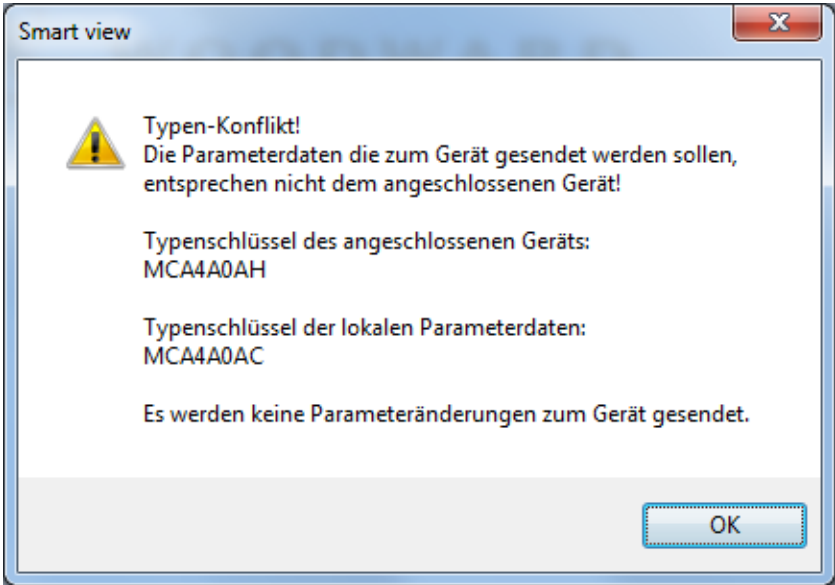
Yes No Help

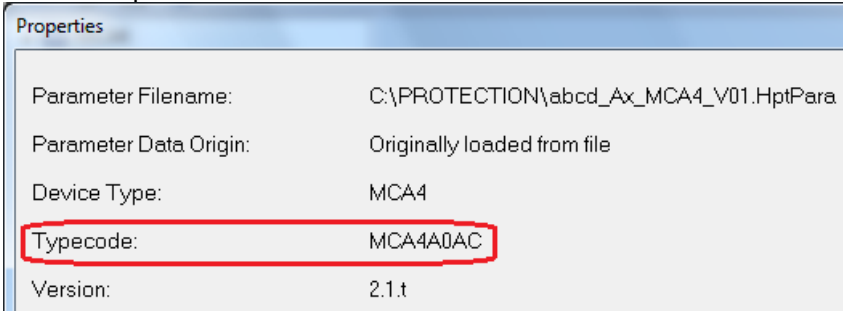
Yes

	<p>Message at the end of conversion:</p>  <p>Check "0" / "0"</p> <p>Close</p>
Check the Firmware Version of the new Parameter File after the conversion	<p>Smart view:</p>  <p>OK</p>

2 Convert the Device Typecode of a Parameter File

Example for conversion from Typecode MCA4-A0AC → MCA4-A0AH

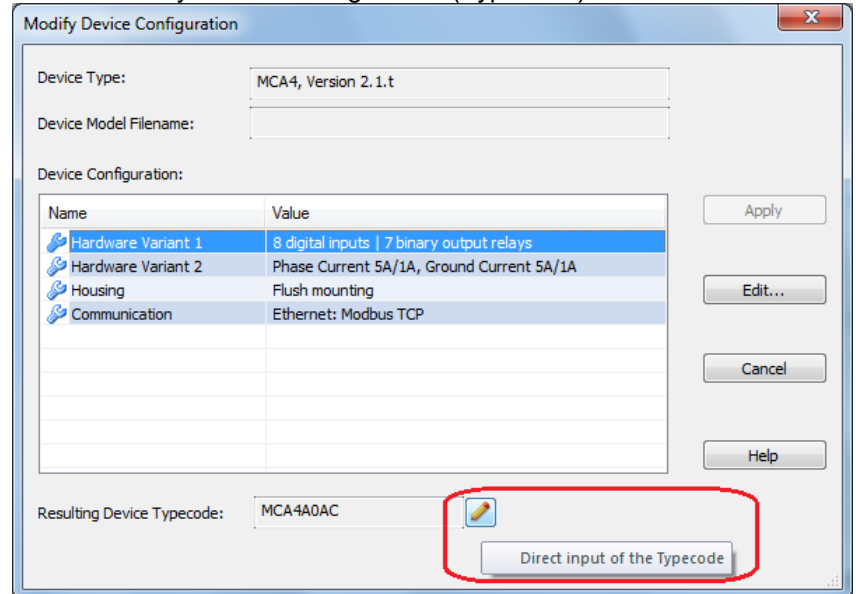
Indication	<p>The MCA4 Protection Relay has another Typecode than the Parameter File:</p> <p>Englisch:</p>  <p>German version:</p>  <p>OK</p>
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Convertible Device Typecodes	WARNING: Only with a written order by the GE Jenbacher headquarter and only the last letter of the Device Typecode is allowed to change with this procedure!
Verify the Device Type of the installed Protection Relay	Compare the installed Device Type with the Item Number in the Wiring Diagram. If there is any difference, clarify the source of the mismatch and set the appropriate corrective actions. If a conversion of the Parameter File is ordered, proceed acc. to the subsequent description.
Open Parameter File	Smart view: File > Open Existing Parameter File... > D:\PROTECTION\abcd_Ax_MCA4_V01.HptPara (resp. C:\PROTECTION\, if drive D: is not available) Open
Check the Device Typecode of the Parameter File	Smart view: File > Properties...  OK
Save the Parameter File with a new File name	Smart view: File > Save As... > D:\PROTECTION\abcd_Ax_MCA4_V02.HptPara (resp. C:\PROTECTION\, if drive D: is not available) Save NOTE: "Save As..." with a new File name should be done BEFORE any modification!

Modify Device Typecode

Smart view:

Edit > Modify Device Configuration (Typecode)...



Modify Device Configuration

Device Type: MCA4, Version 2.1.t

Device Model Filename:

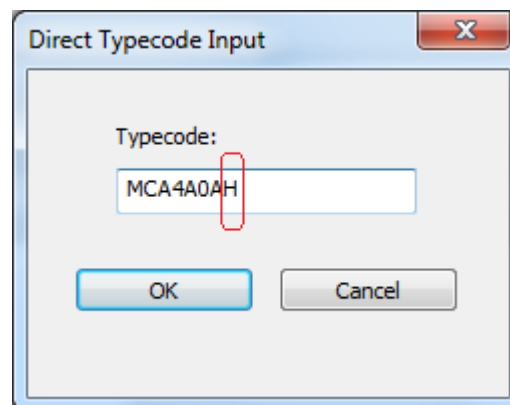
Device Configuration:

Name	Value
Hardware Variant 1	8 digital inputs 7 binary output relays
Hardware Variant 2	Phase Current 5A/1A, Ground Current 5A/1A
Housing	Flush mounting
Communication	Ethernet: Modbus TCP

Resulting Device Typecode: MCA4A0AC

Direct input of the Typecode

Direct input of the Typecode



Direct Typecode Input

Typecode:

MCA4A0AH

OK Cancel

Modify Typecode, **OK**

Modify Device Configuration

Device Type: MCA4, Version 2.1.t

Device Model Filename:

Device Configuration:

Name	Value
Hardware Variant 1	8 digital inputs 7 binary output relays
Hardware Variant 2	Phase Current 5A/1A, Ground Current 5...
Housing	Flush mounting
Communication	Ethernet: IEC61850

Apply

✓ Apply

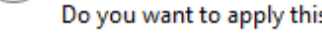
Apply Device type modification and checks the current data on plausibility

Cancel

Help

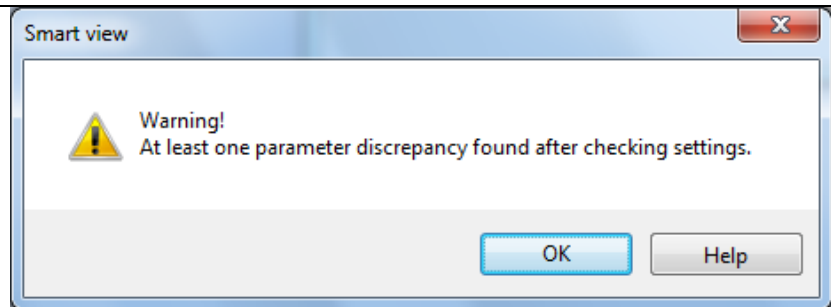
Resulting Device Typecode: MCA4A0AH

Apply

A screenshot of a 'Smart view' dialog box. It contains a question mark icon and the text: 'At least one project engineering parameters was modified. Do you want to apply this modification?'. There are 'Yes' and 'No' buttons at the bottom right.

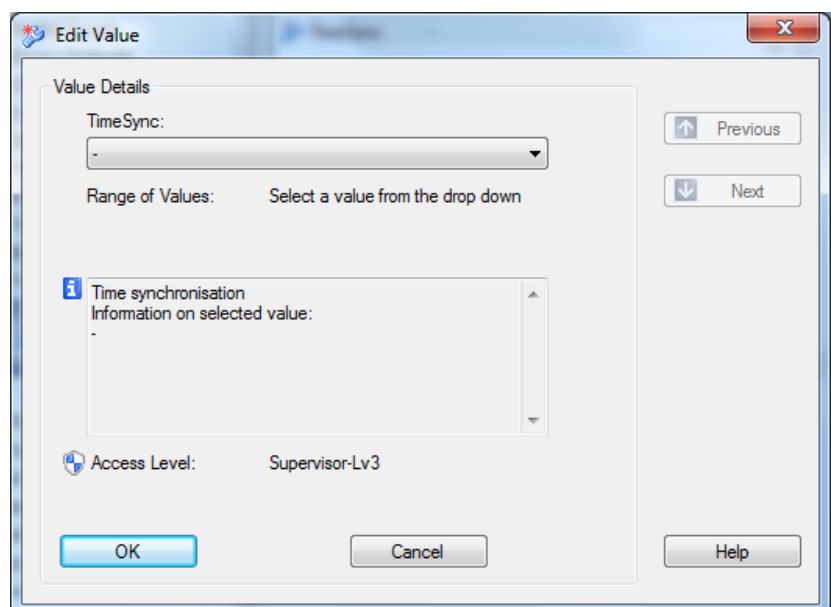
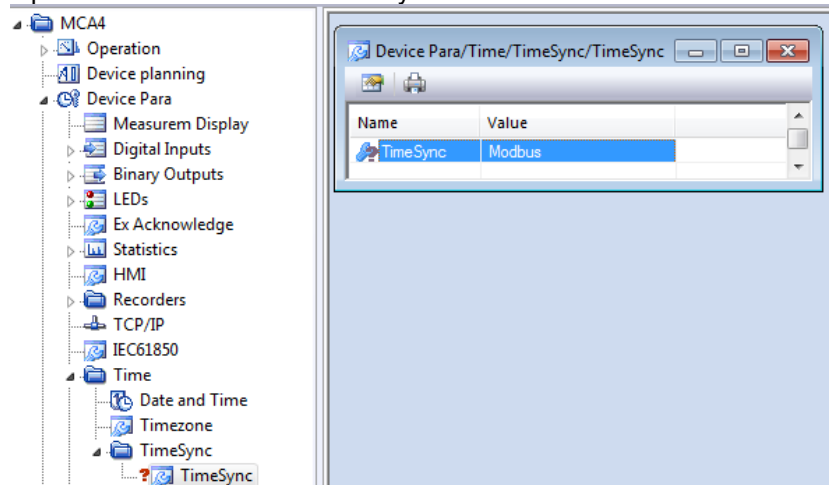
Yes

Optionally:
if Warning message appears

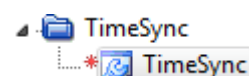


OK

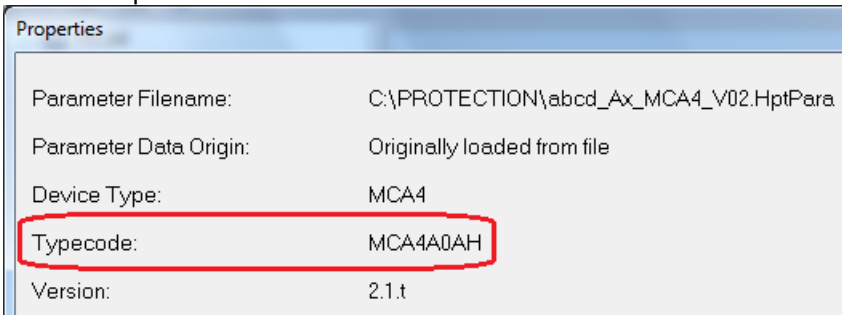
Open marked Parameter "TimeSync" with doubleclicks:



Change Value to "-", OK, File > Save



The star symbol disappears after Save of the Parameter File

Save the Parameter File	<p>Smart view:</p> <p>File > Save</p>
Check the Device Typecode of the new Parameter File after the conversion	<p>Smart view:</p> <p>File > Properties...</p>  <p>OK</p>