

Procedure for Modifying MLC9000+ Profibus GSD files for use with Profibus approved Module.

West Instruments are now able to offer the MLC9000+ BM240 with Profibus approval. The updated product is functionally identical, but has several improvements which increase it's robustness in demanding industrial processes.

Change of Vendor ID

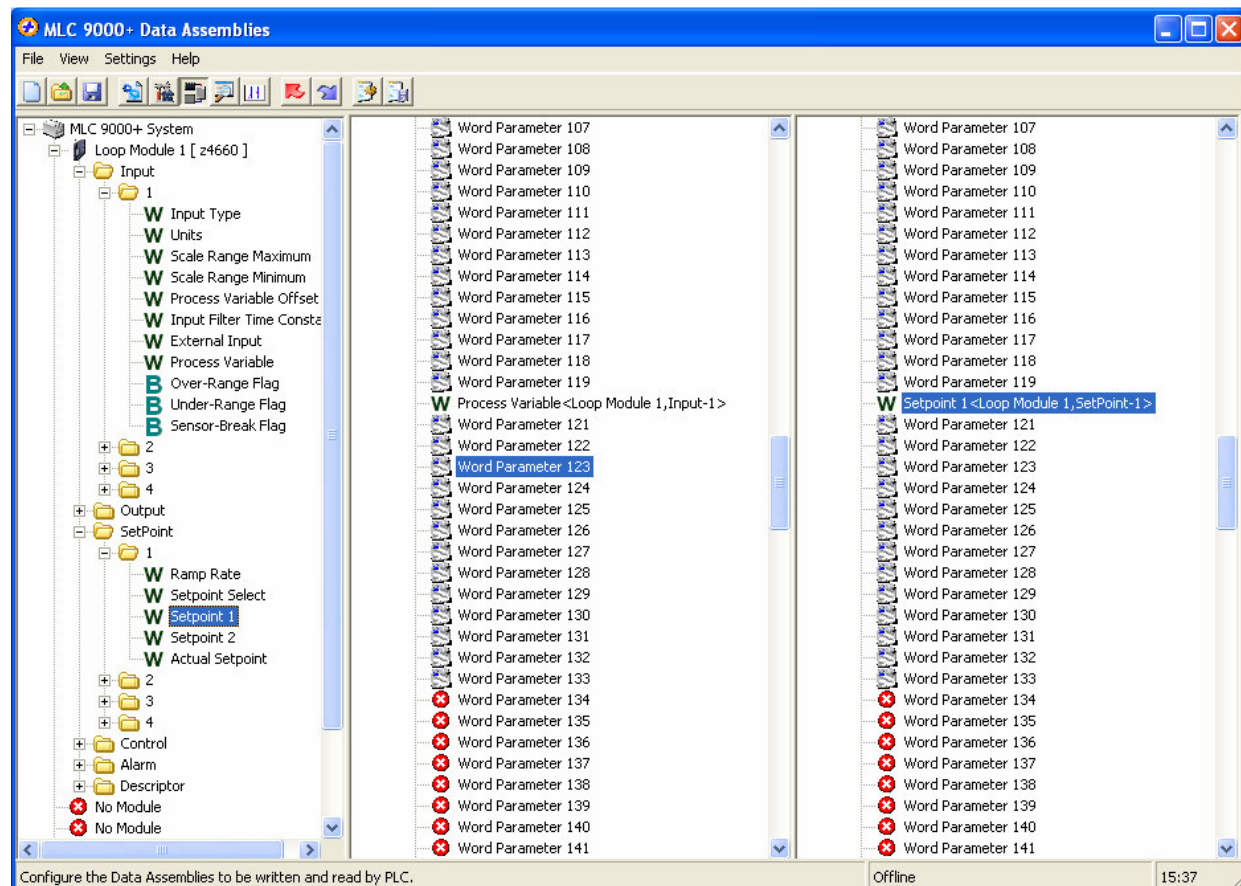
The updated version has to have a new Vendor ID to 0x0AA3. Customers using the latest approved version must use the new Vendor ID in their GSD file.

The GSD file created by the MLC9000 Workshop Configurator software does not support the new Vendor ID. Users must either use the Profibus Approved file or edit the file created by Workshop.

Profibus Approved GSD file

Profibus approval rules require the use of a single universal GSD. This can be downloaded from the website www.westinstruments.com. This file has a fixed I/O size of 121 read and 121 write values in the MLC9000 Data Assembly.

The user must fix the correct size in the Workshop software by placing a parameter at 121 on the read side and 121 on the write side as in the diagram below. All other parameters must be placed at values lower than this.



Existing Customers

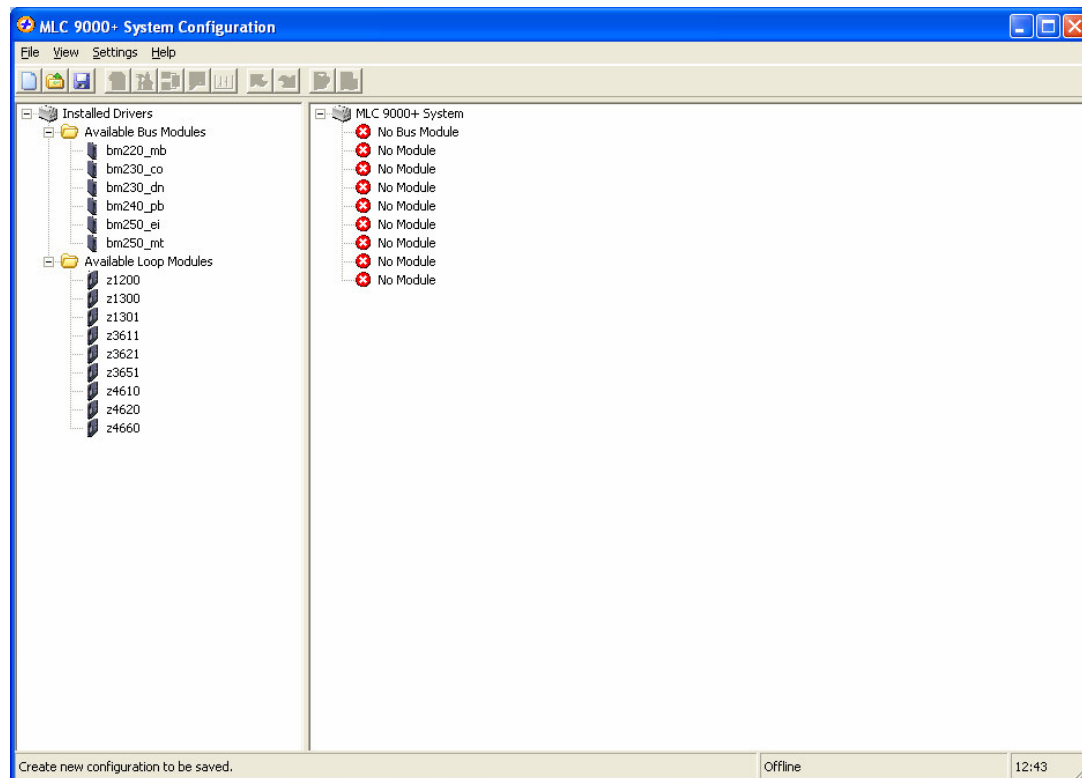
Customers with existing installations can replace old modules with the updated type by ordering a special version MLC9000-BM240-PB-S244. This uses the old Vendor ID (0x06A7) and GSD file, and so can be used without any changes to the PLC code.

Note the S244 type does not have Profibus approval.

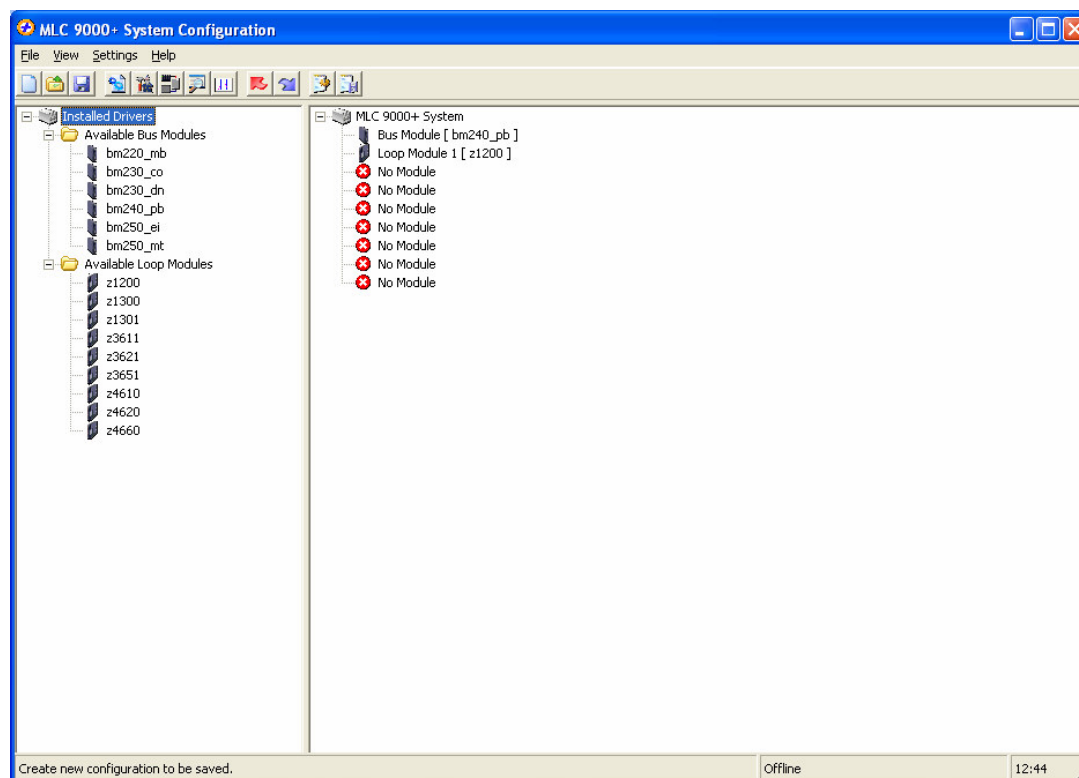
Changing the .gsd File Vendor ID

It is possible to use a different I/O size, but requires the use of a non-Profibus approved GSD file. To create a .gsd file, use the MLC9000 Workshop software (download from www.westinstruments.com) and carry out the following steps.

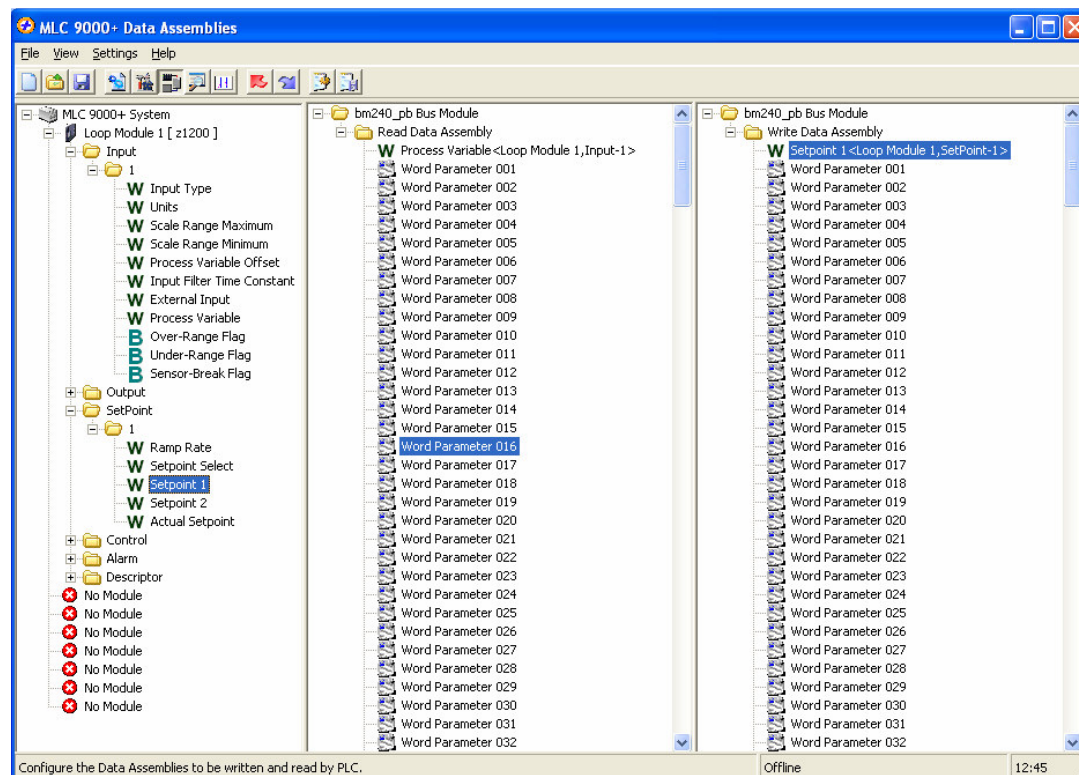
Open the MLC Configurator:



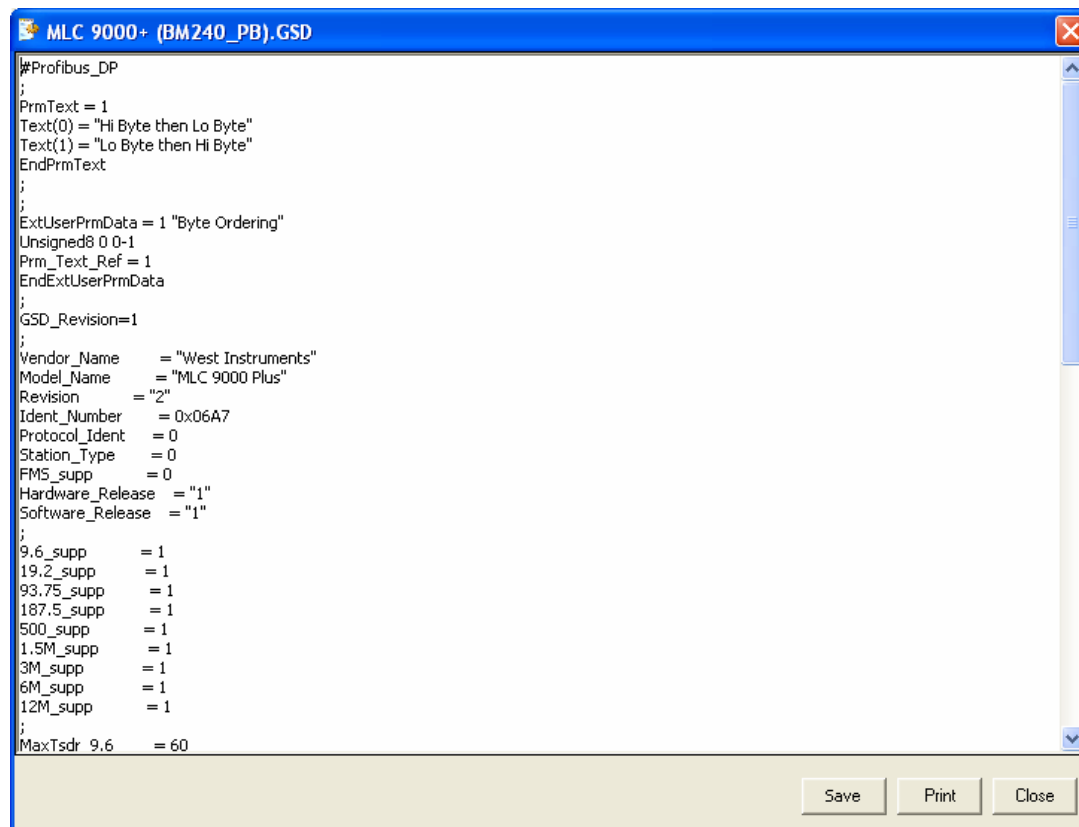
Select mb240_pb and the required Loop modules:



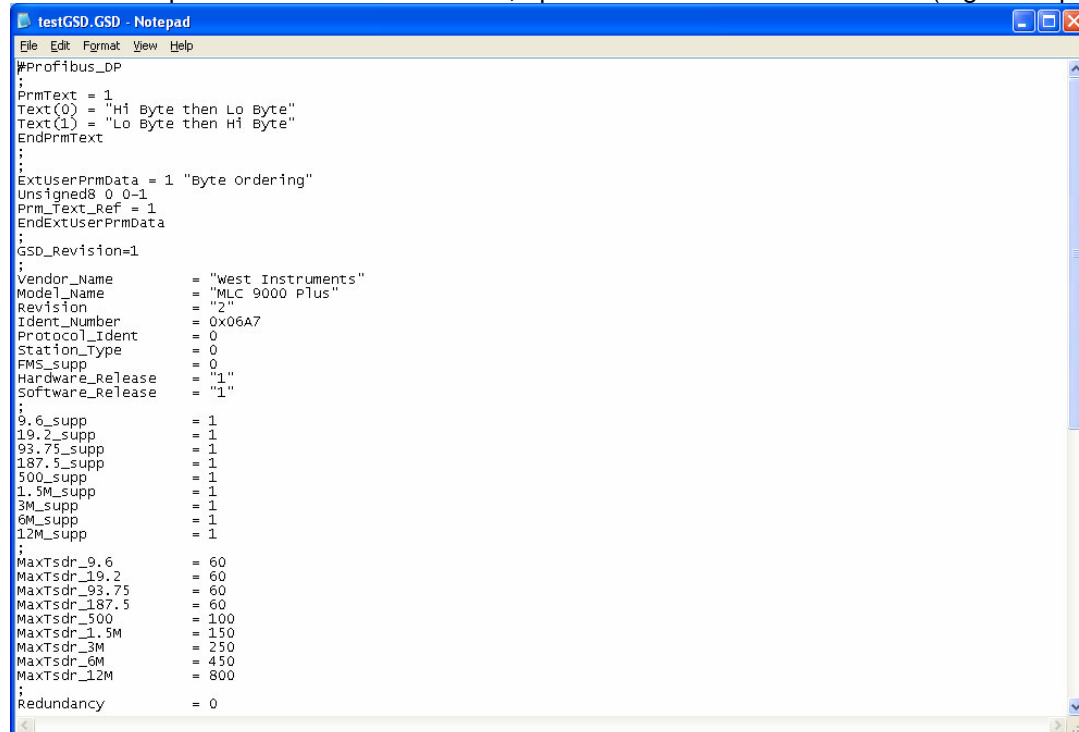
Populate your Data assembly as required:



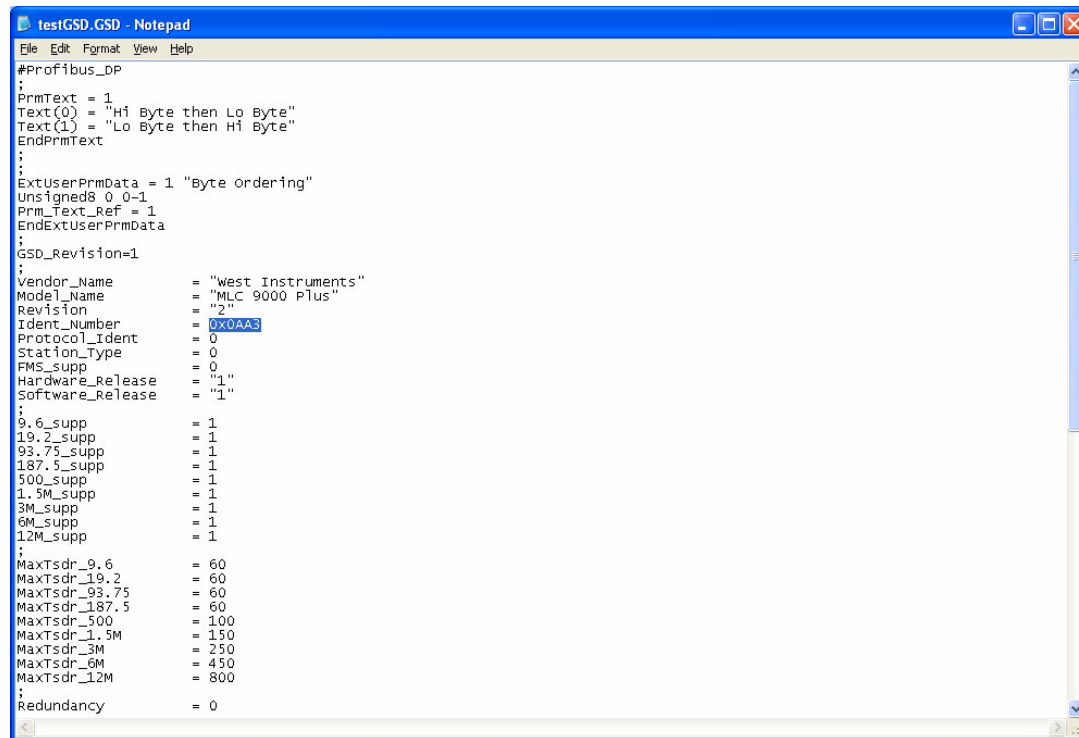
Create your GSD file and save it to a known location:



For Workshop software ver 1.04 or lower, open the GSD file in a text editor (e.g. Notepad):

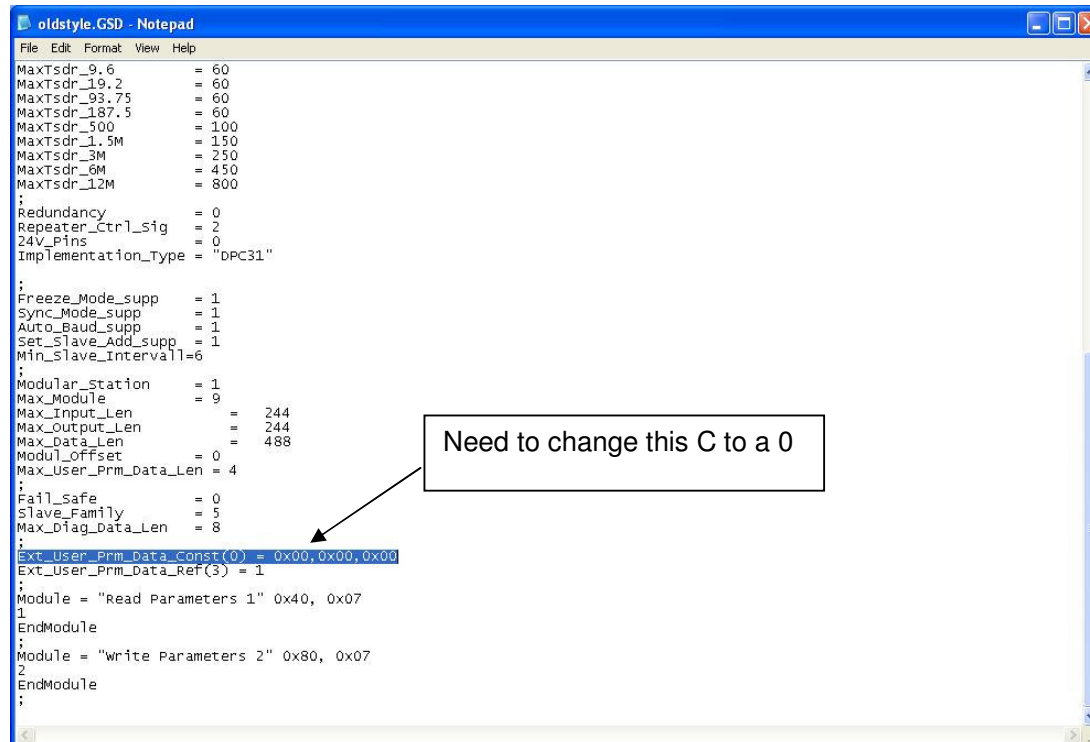


Change the Ident_Number from 0x06A7 to 0x0AA3:



```
testGSD.GSD - Notepad
File Edit Format View Help
;
#Profibus_DP
;
PrmText = 1
Text(0) = "Hi Byte then Lo Byte"
Text(1) = "Lo Byte then Hi Byte"
EndPrmText
;
;
ExtUserPrmData = 1 "Byte Ordering"
Unsigned8 0 0-1
Prm_Text_Ref = 1
EndExtUserPrmData
;
GSD_Revision=1
;
Vendor_Name      = "west Instruments"
Model_Name       = "MLC 9000 Plus"
Revision         = "2"
Ident_Number      = 0x0AA3
Protocol_Ident   = 0
Station_Type     = 0
FMS_supp         = 0
Hardware_Release = "1"
Software_Release = "1"
;
9.6_supp         = 1
19.2_supp        = 1
93.75_supp       = 1
187.5_supp       = 1
500_supp         = 1
1.5M_supp        = 1
3M_supp          = 1
6M_supp          = 1
12M_supp         = 1
;
MaxTsdrr_9.6     = 60
MaxTsdrr_19.2    = 60
MaxTsdrr_93.75   = 60
MaxTsdrr_187.5   = 60
MaxTsdrr_500     = 100
MaxTsdrr_1.5M    = 150
MaxTsdrr_3M      = 250
MaxTsdrr_6M      = 450
MaxTsdrr_12M     = 800
;
Redundancy       = 0
```

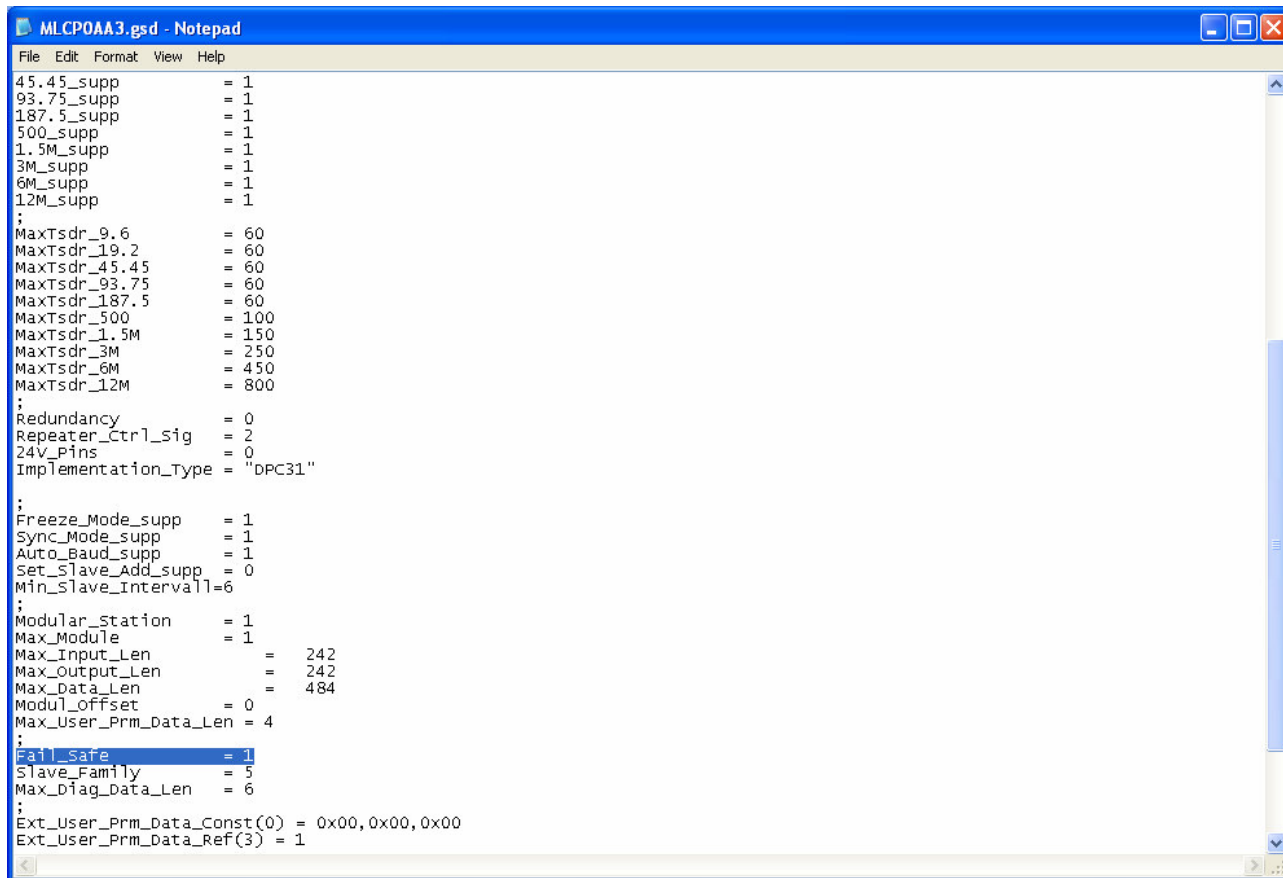
Next change needed: must change Ext_User_Prm_Data_Const (0)=0xC0 to 0x00



```
oldstyle.GSD - Notepad
File Edit Format View Help
;
MaxTsdrr_9.6     = 60
MaxTsdrr_19.2    = 60
MaxTsdrr_93.75   = 60
MaxTsdrr_187.5   = 60
MaxTsdrr_500     = 100
MaxTsdrr_1.5M    = 150
MaxTsdrr_3M      = 250
MaxTsdrr_6M      = 450
MaxTsdrr_12M     = 800
;
Redundancy       = 0
Repeater_ctrl_Sig = 2
24V_pins         = 0
Implementation_Type = "DPC31"
;
Freeze_Mode_supp = 1
Sync_Mode_supp   = 1
Auto_Baud_supp   = 1
Set_Slave_Add_supp = 1
Min_slave_Intervall=6
;
Modular_Station  = 1
Max_Module        = 9
Max_Input_Len     = 244
Max_Output_Len    = 244
Max_Data_Len      = 488
Modul_Offset      = 0
Max_User_Prm_Data_Len = 4
;
Fail_Safe        = 0
Slave_Family      = 5
Max_Diag_Data_Len = 8
;
Ext_User_Prm_Data_Const(0) = 0x00,0x00,0x00
Ext_User_Prm_Data_Ref(3) = 1
;
Module = "Read Parameters 1" 0x40, 0x07
1
EndModule
;
Module = "Write Parameters 2" 0x80, 0x07
2
EndModule
;
```

Need to change this C to a 0

You now need to Change the Fail_Safe = 0 to 1 as shown below



```

MLCPOAA3.gsd - Notepad
File Edit Format View Help
45.45_supp      = 1
93.75_supp      = 1
187.5_supp      = 1
500_supp        = 1
1.5M_supp       = 1
3M_supp         = 1
6M_supp         = 1
12M_supp        = 1
;
MaxTsdrr_9.6     = 60
MaxTsdrr_19.2    = 60
MaxTsdrr_45.45   = 60
MaxTsdrr_93.75   = 60
MaxTsdrr_187.5   = 60
MaxTsdrr_500     = 100
MaxTsdrr_1.5M    = 150
MaxTsdrr_3M      = 250
MaxTsdrr_6M      = 450
MaxTsdrr_12M     = 800
;
Redundancy       = 0
Repeater_Ctrl_sig = 2
24V_Pins         = 0
Implementation_Type = "DPC31"
;
Freeze_Mode_supp = 1
Sync_Mode_supp   = 1
Auto_Baud_supp   = 1
Set_Slave_Add_supp = 0
Min_Slave_Intervall=6
;
Modular_Station  = 1
Max_Module       = 1
Max_Input_Len    = 242
Max_Output_Len   = 242
Max_Data_Len     = 484
Modul_offset     = 0
Max_User_Prm_Data_Len = 4
;
Fail_Safe        = 1
Slave_Family     = 5
Max_Diag_Data_Len = 6
;
Ext_User_Prm_Data_Const(0) = 0x00,0x00,0x00
Ext_User_Prm_Data_Ref(3) = 1

```

Save the file. This is now your new .gsd file.