

Frequently Asked Questions

regarding

EDIABAS, INPA und ToolSet

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The newest version of this document you can find on the TI-430 intranet webpage or inside GIS

- TP-430 intranet: (webpage is german only, but FAQ is available in english also):
http://www7.muc/ti4-neu/rc/TI-4/05_TP-43/01_TP-430/Diagnose_mit_EDIABAS/index.htm
→ Diagnose mit Ediabas
→ FAG (Frequently Asked Questions)

- GIS (global information server)
<https://gis.bmw.com/gis/e/index.html>
 - BMW Standard Tools Werk
 - Standard Tools
 - Tool Installation Werk

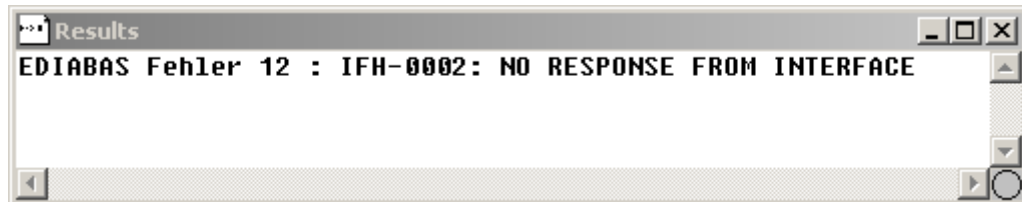
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1 EDIABAS / ToolSet error messages

1.1 EDIABAS Error 12: IFH-0002: NO RESPONSE FROM INTERFACE



Cause: Inside the file EDIABAS.INI the interface is set to
Interface = STD:FUNK
However, you have connected an ADS or OBD connector.

Solution: Modify the interface settings inside EDIABAS.INI.

1.2 EDIABAS Error 13: IFH-0003: DATATRANSMISSION TO INTERFACE DISTURBED

Cause 1: Inside the file EDIABAS.INI the interface is set to
Interface = STD:OBD
However, you have connected an ADS connector.

Solution 1: Modify the interface settings inside EDIABAS.INI.

Cause 2: The data transmission failed when sending (e.g. short circuit in the line).

Solution 2: Fix the problem e.g. get rid of the short circuit.

Cause 3: Connector is not connected or has no power supply.

Solution 3: Check whether the connector is connected and if power is supplied.

Cause 4: The FIFO buffer for COM1 has been disabled inside the device manager.

Solution 4: Inside device manager

→ Start

→ Control Panel

→ System

→ Hardware

→ Device-Manager

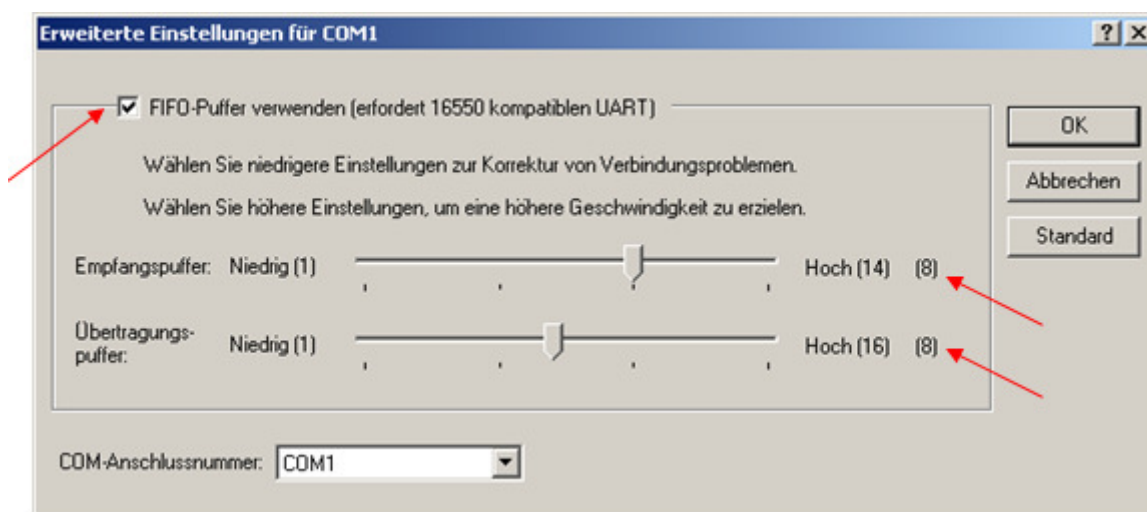
→ Ports (COM & LPT)

select COM1, and then tab

→Port Settings

→ Advanced

There has to be a check-mark by “Use FIFO buffers” and “8” must be selected for the receive and transmit puffers.



1.3 EDIABAS Error 16: IFH-0006: COMMAND NOT ACCEPTED

This error occurs if an SGBD is loaded into ToolSet and the OBD connector is being used.

Cause 1: ODB has actually been set as interface inside EDIABAS.INI, but ToolSet uses multi instance with another interface, e.g. K-line. The setting for multi instance and the interfaces used is made inside the file TOOL32.INI, in the directory C:WINDOWS (or alternatively C:WINNT for Windows NT). Therefore the entries in TOOL32.INI regarding the interfaces are used instead of the ones in EDIABAS.INI. The use of multi-instance in the ToolSet is identified in the title bar, for example with “Tool32:1”, for single multi-instance.

Solution 1: Enter the interface being used into TOOL32.INI or disable multi instance by the entry “No”.

Cause 2: An SGBD using the diagnosis protocol is loaded into ToolSet. For UDS-SGBDs you have to use the interface OMITEC but in the EDIABAS.INI the setting for the interface is

```
Interface = STD:OBD
```

Solution 2: Modify the interface setting inside EDIABAS.INI to

```
Interface = STD:OMITEC
```



The OMITEC connector must have power supply (blue blinking). If the connector is not supplied and you want to load the SGBD, you will have to use the simulation mode. You can activate the simulation mode inside the menu

Configuration

→EDIABAS

Notice, if you want to use the simulation mode, a simulation file for the interface has to exist inside the simulation directory.

for further ways of solution, see **chapter 1.11**

1.4 EDIABAS Error 19: IFH-0009: NO RESPONSE FROM CONTROLUNIT

Cause 1: The interface inside EDIABAS.INI is set to

Interface STD:ADS

However, you have connected an OBD connector.

Solution 1: Modify the interface setting to

Interface = STD:OBD

Cause 2: The ignition is switched off.

Solution 2: Switch on the ignition.

Cause 3: for COM1 the FIFO buffer is disabled by the device manager

Solution 3: inside Device manager

→Start

→ Control Panel

→ System

→ Hardware

select COM1 from the ports and under the tab 'port Settings', select 'advanced'. There must be a check-mark by "Use FIFO buffers" and the highest possible setting must be selected for the receive buffer.

Cause 4: Only some controllers work fine when an OMITEC cable is used (which controllers is by luck). The OMITEC-Connector is blinking blue, therefore, the power supply is ok

Solution 4: Recondition the pins inside the connector or , if possible, exchange the connector.



1.5 EDIABAS Error 20: IFH-0010: DATATRANSMISSION TO CONTROLUNIT DISTURBED

Cause 1: When using the EDIC card, the error message is issued when executing the IDENT job.

Solution 1: Changes must be made in the file XEDICC.INI inside the directory C:\EDIABAS\BIN . The parameters for high speed must be commented out and the parameters for lowspeed must be enabled:

```
; highspped:
;Interface=1;
;Presc=0x01;
;SJW=0x01;
;TSEG1=0x08;
;TSEG2=0x07;

; lowspped:
Interface=2;
Presc=0x0A;
SJW=0x02;
TSEG1=0x05;
TSEG2=0x02;
```

Cause 2: An SGBD using diagnosis protocol UDS is loaded into ToolSet. The interface OMITEC is correct, but the connector has no power supply (no blue blinking).

Solution 2: Connect the OMITEC to the vehicle. The OMITEC connector needs power supply (blue blinking). If the connector can not be supplied and you want to load the SGBD yet, you have to use the simulation mode. You can activate the simulation mode e.g. within the menu

Configuration

-> EDIABAS

Notice, if you want to use the simulation mode, a simulation file for the interface must exist inside the simulation path.

Cause 3: On Windows XP, it is not possible to automatically set the receive and transmit buffers using OBDSsetup.exe, like in Windows NT.

Solutuion 3:Set the receive and transmit buffers to 8 as shown below:

→ Start

→ My Computer



- Control Panel
 - System
 - Hardware
 - Device Manager
 - Ports (Com & LPT)

click with the right mouse button to call up the properties of the COM port that is being used. In the tab 'Port Settings', set the data bits of the receive and transmit buffers to 8.

1.6 EDIABAS Error 23: IFH-0013: COMMAND NOT IMPLEMENTED

Cause: The error is caused by another programm accessing COM1 interface. Often, the "HotSync" programm is installed on the computer for the organiser and may be the cause.

Solution: Check what programmes are started automatically when Windows is started.

1.7 EDIABAS Error 28: IFH-0018: INITIALIZATION ERROR

The error occurs if a SGBD is running by INPA or CASCADE. If the same SGBD is loaded in the Toolset it will not occur an initialization error.

Reason 1: The communications port COM1 doesn't exist, but COM3 yet. The Toolset is working without the initialization error, because the file OBD.ini exists in the directory C:\Ediabas\bin\. But the file OBD.ini has to exist in the directory C:\Windows.

Cause 1: Problem occurs when starting EDIABAS with OBD interface.

EDIABAS tries to use COM1 zuzugreifen but the port is not present or already in use by another programm (i.e. HotSync, infrared).

Lösung 1: Install COM1 port or free ist resources.

Cause 2: The problem occurs when loading an SGBD into ToolSet wird.

Solution 2: See **chapter 1.11**

1.8 EDIABAS Error 30: IFH-0020: DRIVER ERROR

Message appears usin an ADS or OBD connector.

Cause 1: This Error may appear when another programm is using COM1 interface.

Solution 1: When using EDIABAS or INPA be sure no other programm is using the interface (more details see **chapter 3.1**).

Cause 2: No interface is defined inside EDIABAS.INI .

Solution 2: There has to be defined an interface inside EDIABAS.INI , i.e.:

Interface = STD:OBD

1.9 EDIABAS Frror 36: IFH-0026: SIMULATION ERROR

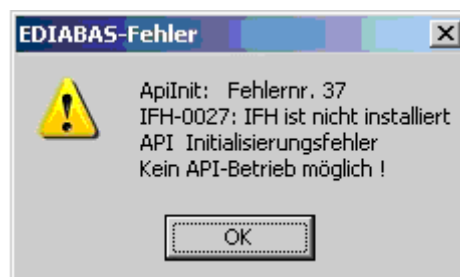


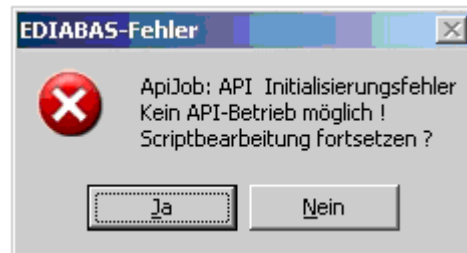
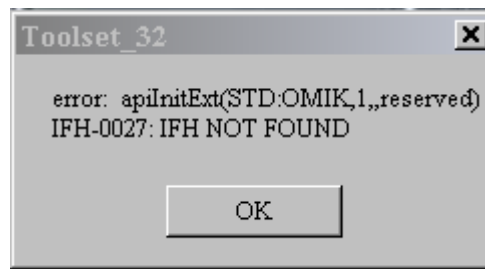
Cause: The simulation file for the OMITEC driver is missing. When using simulation mode and the interface OMITEC, you need the simulation file OMITEC.SIM .

Solution: Copy the file OMITEC.SIM into the directory C:\EDIABAS\SIM\ . If you do not have such a file, please ask the EDIABAS hotline.

1.10 EDIABAS Error 37: IFH-0027: IFH NOT FOUND

Problem occurs when starting INPA or ToolSet. Possible messages that may pop up:





Cause 1: When using OMITEC drivers, not all necessary files were copied.

Solution 1: By hand, copy all files ...\\EDIABAS\\Hardware\\OMITEC\\Driver*.dll from the OMITEC driver directory into the folder C:\\EDIABAS\\BIN\\.

Solution 2: The OMITEC hardware driver must exist under the directory ...\\EDIABAS\\Hardware\\OMITEC. A different location for the driver is not allowed.

Cause 3: The file EDIABAS.INI cannot be found.

Solution 3: In the case that the file EDIABAS.ini does not exist, EDIABAS must be reinstalled. If EDIABAS.ini exists, the path entry has to be upgraded with ...\\EDIABAS\\BIN in the same manner as described in chapter **Fehler! Verweisquelle konnte nicht gefunden werden..**

Cause 4: The interface setting does not exist inside EDIABAS.INI

Solution 4: Please do the settings for the interface e.g.:

```
Interface = STD:OBD
```

Cause 5: The interface setting inside EDIABAS.INI is

```
Interface = STD:OMITEC
```

but the OMITEC driver is not installed correctly.

Solution 5: Install the OMITEC driver following the instructions on the GIS server: 'InstructionforOMITECInstallation.pdf'

Cause 6: The interface setting inside EDIABAS.INI is wrong:

```
Interface = OMITEC
```

Solution 6: Correct the setting to

```
Interface = STD:OMITEC
```

Cause 7: No interface is defined inside EDIABAS.INI , or the existing interfaces are commented out, i.e.:

```
;Interface = STD:OMITEC
```

The semicolon before the settings means, this is a comment line and will be ignored!

Solution 7: There must exactly one interface inside EDIABAS.INI, i.e.:

```
Interface = STD:OMITEC
```

All other interfaces have to be commented out.

Cause 8: The old OMITEC driver was not uninstalled correctly.

Solution 8: Uninstall the old OMITEC driver with the instructions on the GIS server: 'Instruction-forOMITECInstallation.pdf'



1.11 EDIABAS Error 48: IFH-0038: INTERFACE COMMAND NOT IMPLEMENTED

This error may occur when loading the utility file into ToolSet.

Cause 1: The error is caused by another programm that accesses the COM1 interface. This programm could be 'HotSync' for Palm or 'ActiveSync' for Ipack.

Solution 1: Check the programm which are started automatically when Windows is started (see **chapter 3.1**).

Cause 2: The COM1 interface is used by a serial printer.

Solution 2: Uninstall the printer.

Cause 3: The infrared interface is active.

Solution 3: Deactivate the infrared interface.

Cause 4: There is no COM1 interface (i.e. COM3 instead)

Solution 4a): Install COM1 interface.



Solution 4b): Create a file with the name OBD.INI and do the following entries to set the existing serial interface (COM3, for example):

[OBD]

Port = Com3

The file OBD.INI must be saved into the directory C:\WINDOWS\ for Windows XP or in directory C:\WINNT\ for Windows NT up to the Ediabas Package 1.3 and as of Ediabas Package 1.4 in directory C:\EDIABAS\BIN\. The current version of the Ediabas Package can be seen in the files C:\EDIABAS\version.txt or C:\EDIABAS\package.pdf.

Cause 5: Only for IBM notebooks: The COM1 interface is reserved for the docking station; the COM3 interface is installed instead.

Solution 5a): see solution 4b

Solution 5b): Set the COM3 port to COM1 inside the device manager

Start

→ Control Panel

→ System

→ Hardware

select COM3 from the ports under the menu item. Then use the right mouse button

→ Properties

→ Port Settings

→ Advanced

→Advanced Settings

Set COM1 in the COM Port Number. The message that COM1 is already taken can be ignored in this case.

Cause 6: Inside EDIABAS.INI is set

Interface=STD:OMITEC

But the OMITEC drivers have not been installed correctly.

Solution 6: Reinstall OMITEC drivers following the instructions that can be found on the GIS server 'InstructionforOMITECInstallation.pdf'

1.12 EDIABAS Fehler 219: IFH-0069: GATEWAY ERROR

A system error was reported by the central Gateway.

Cause 1: Error occurred in vehicle or gateway ecu.

Solution 1: Repeat last job.



Cause 2: Gateway does not know target address. The request cannot be forwarded.

Solution 2: Verify SG address in SGBD and Group-SGBD.

1.13 EDIABAS Error 70: BIP-0010: CONSTANT DATA ACCESS ERROR

Cause 1: The file T_GRTB.GRP inside the directory C:\EDIABAS\ECU\ is expired, there is no information stored for the requested controller/ecu.

Solution 1: Download the latest version of T_GRTB-PRG from ECCO web client.

Cause 2: An external table which is needed by the SGBD is present, but not correctly filled.

Solution 2: Check external tables if all inputs are right.

1.14 EDIABAS Error 92: SYS-0002: ECU OBJECT FILE NOT FOUND

Cause 1: The SGBD you want to load does not exist inside the directory C:\EDIABAS\ECU or is an old one.

Solution 1: Download the latest SGBD using ECCO Web Client and copy it into the directory C:\EDIABAS\ECU\.

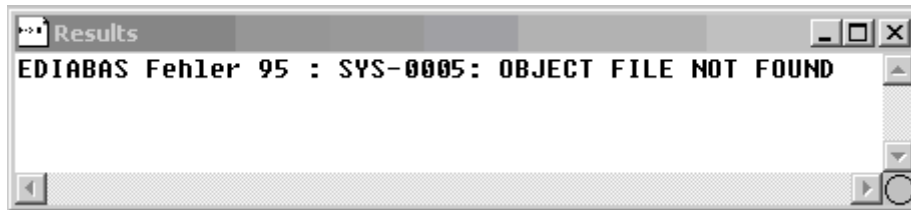
Cause 2: This message appears when the job IDENT_FUNKTIONAL of a functional SGBD is executed, and the external table T_GRTB.PRG does not exist inside the directory C:\EDIABAS\ECU\.

Solution 2: Download the latest T_GRTB.PRG using ECCO Web Export and copy it into the directory C:\EDIABAS\ECU\.

Cause 3: This message appears when the job FS_LESEN_DETAIL is executed, all other jobs inside the SGBD work without problems. This job accesses the external-external table T_SCOD.PRG but it does not exist inside the directory C:\EDIABAS\ECU\.

Solution 2: Download the latest T_SCODPRG using ECCO Web Export and copy it into the directory C:\EDIABAS\ECU\.

1.15 EDIABAS Error 95: SYS-0005: OBJECT FILE NOT FOUND



Cause 1: No SGBD in C:\EDIABAS\ECU

Solution 1: Copy the SGBD into the Ecu directory.

Cause 2: No group file in C:\EDIABAS\ECU (for group call)

Solution 2: Copy the group file into C:\EDIABAS\ECU

Cause 3: No path definition C:\EDIABAS\BIN

Solution 3: Set the system variable (see **chapter 2.1**)

Cause 4: Incorrect path definition in EDIABAS.INI

Solution 4: Set the EcuPath path in Ediabas.ini to C:\EDIABAS\ECU

Cause 5: The name of the SGBD contains reserved characters, or is too long. Only 8 characters are allowed (a-z, A-Z, 0-9, "_").

Solution 5: Rename SGBD.

Cause 6: The SGBD UTILITY.PRG is not located in the directory C:\EDIABAS\ECU .

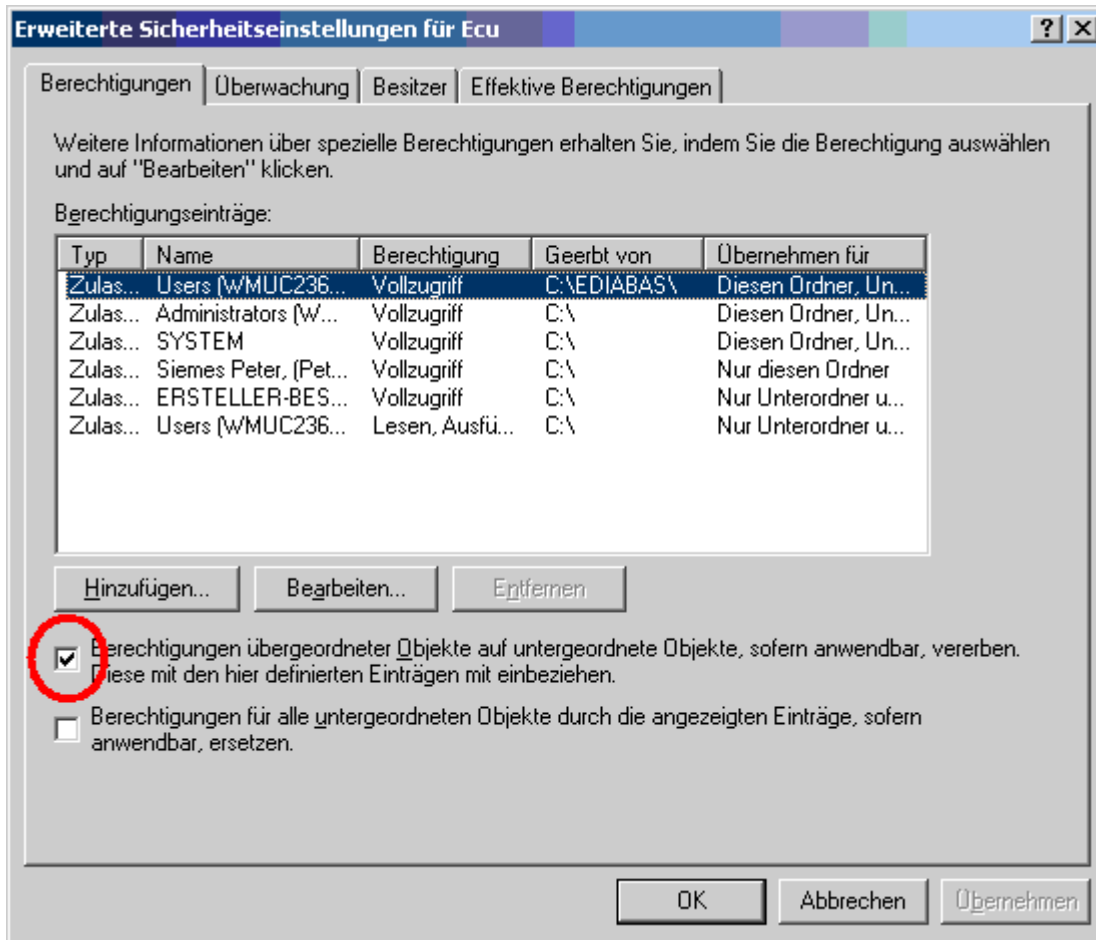
Solution 6: Copy the missing file into the proper directory.

Cause 7: Not enough access rights for the directory C:\EDIABAS\ECU

Solution 7: Set the correct access rights inside the enhanced security properties properties of directory C:\EDIABAS\ECU

→ tab 'security'

→ button 'enhanced'



Cause 8: On some computers the directory C:\EDIABAS\ECU (place for SGBDs) can not be accessed without without administration rights. Another, newly created directory under C:\EDIABAS\ can be accessed without problems (e.g. \ECU1).

Another user on this computer can not access this folder also.

Solution 8: Request / clarify access rights.

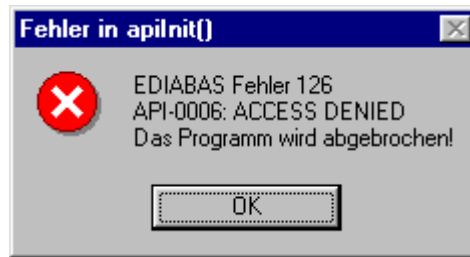
1.16 EDIABAS Error 100: SYS-0010: INITIALIZATION ERROR

Cause: This message appears when an SGBD has an automatic concept switch between multiple diagnostics logs and is not connected to the controller.

Solution: Connect the controller.

1.17 EDIABAS Error 126: API-0006: ACCESS DENIED

Only affects EDIABAS versions up to V6.4.x



Cause: This error message appears when you start ToolSet while an INPA script is running. This also happens the other way round. The reason is that only one program can access EDIABAS at a time.

Solution: Before you start the ToolSet, you must exit INPA.

1.18 EDIABAS Error 134: API-0014: RESULT NOT FOUND

The error occurs when anSGBD using diagnosis protocol UDS is loaded into ToolSet and the Job FS_LESEN is being executed.

Cause: You use the setting “read error like INPA”, but the Toolset can’t support the function yet for UDS-SGBDs.

Solution: Please remove the setting “read error like INPA” inside the menu

Configuration

→ Toolset

For a more accurate display of the results not found, you can activate the ‘ApiTrace’ level 4 inside EDIABAS.INI. Now, when the error occurs, the missing results will be stated.

1.19 EDIABAS Error 136: API-0016: BUFFER OVERFLOW

In ToolSet when executing a job containing a very large number of results, the error message appears. Not all expected results will be displayed, instead, the error message appears:

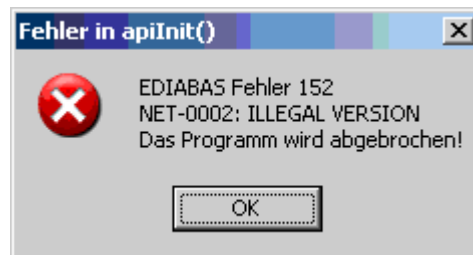
EDIABAS ERROR 136 : API-0016: RESULT OVERFLOW

Cause: EDIABAS Version 7.x is used, but the version of ToolSet is too old to handle the large amount of data. Since EDIABAS 7.x, the maximum data is raised to above 64 kilobytes.

Solution: Update ToolSet32. For handling data packets greater than 64 kilobytes, at least version 3.6.1 is needed. Such a version normally gets installed together with EDIABAS 7.x.

1.20 EDIABAS Error 152: NET-0002: ILLEGAL VERSION

The INI- files are not correct when you try to use the remote mode for a computer to computer connection. When starting EDIABAS on the master the following error message appears:



Cause: Since EDIABAS 7.0 the remote mode is set to OPPS interface by standard. A connection computer to computer is not possible in this configuration.

Solution: Close all diagnostic applications and EDIABAS, then go to C:\EDIABAS\BIN\ and run the file REMOTE_MIT_PC.BAT . Now, the remote mode is set to computer to computer and your connection should work. Also, see **chapter 1.21** .

1.21 EDIABAS Error 159: NET-0009: TIMEOUT



Cause 1: The configuration for the remotehost (slave) is wrong.

Solution 1: Set the corresponding network name for the remotehost inside the configuration file EDIABAS.INI.

Cause 2: The inface cable plugged to the OPPS is not correct.

Solution 2: You need a special OPPS-Cable for connections over CAN-BUS (from L6 series).

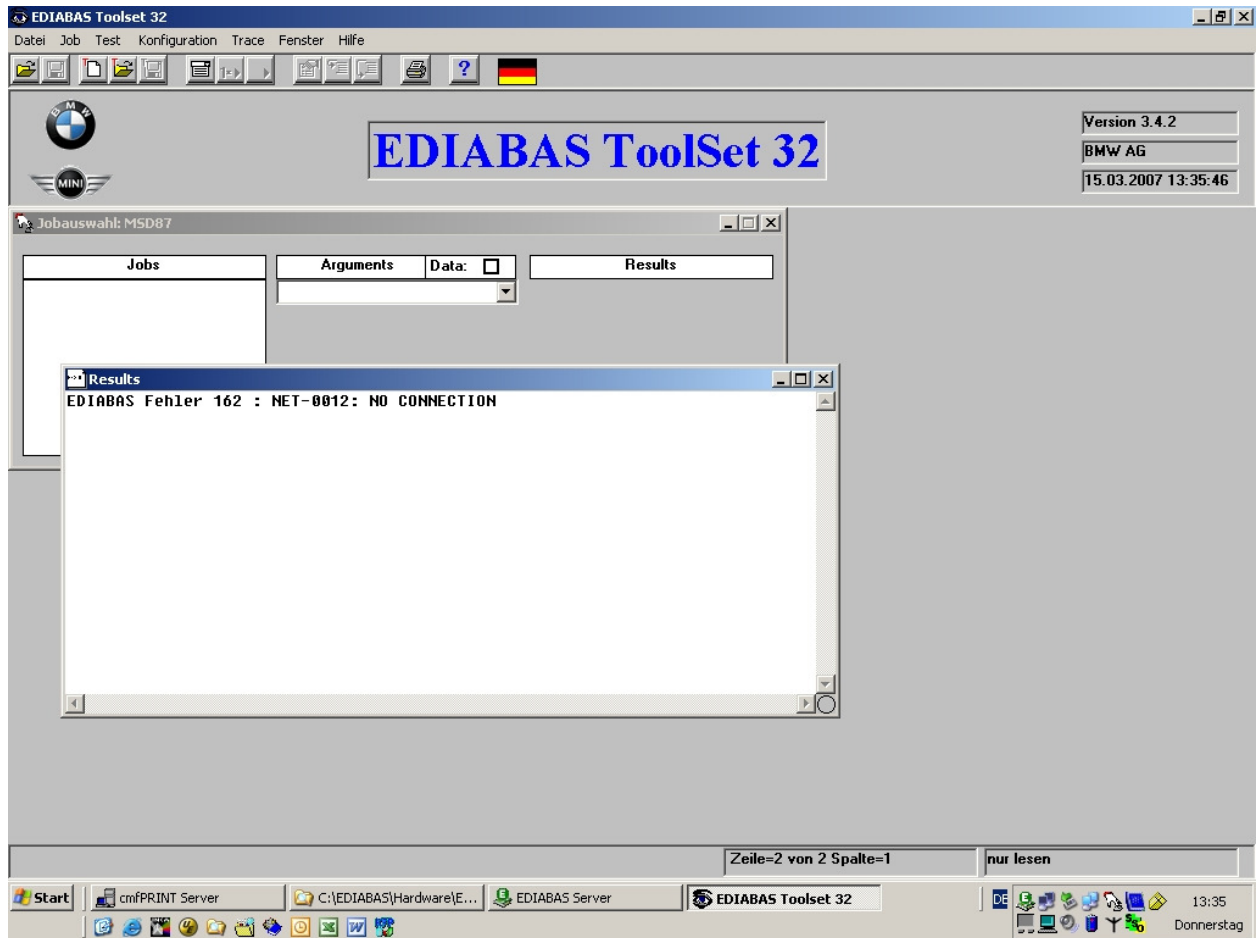
Cause 3: By default OPPS-interface is used In the remote control mode (since EDIABAS 7). The remote control mode between two computers is not possible with this configuration.



Solution 3: Shut down all diagnostic applications and EDIABAS processes and start the file "remote_mit_pc.bat". You can find it inside the directory C:\EDIABAS\bin\.

1.22 EDIABAS Error 162: NET-0012: NO CONNECTION

Problem occurs when using EDIABAS over Ethernet (ENET).



Cause: An ethernet connection was not possible to establish.

Solution 1: Check connection ZGW to ENET (Ethernet, via DHCP-Server).
Check, if ZGW is turned on

Solution 2: Check, if the requested connection settings are true in EDIABAS.INI .

1.23 Error: EBAS32.EXE not found or illegal version!



This error occurs when the path variable is set to C:\EDIABAS\BIN in the system and user variables

- Start
 - My Computer
 - Control Panel
 - System
 - Advanced
 - Tab „Environment“

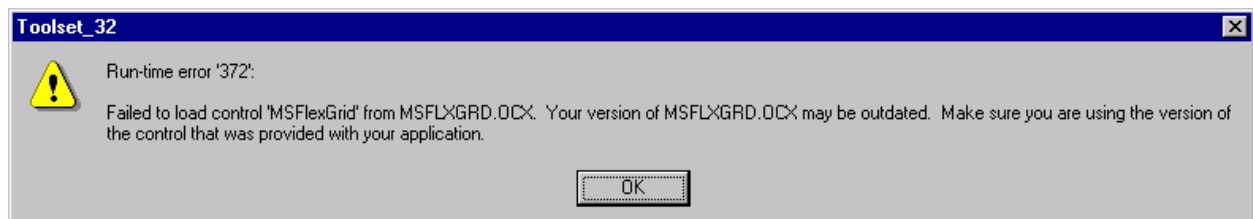
1.24 ToolSet Error: Run-time error '5' – Invalid Procedure Call

Cause: ToolSet has been started twice in a very short period of time.

Solution: Close all ToolSet processes that are running, then start ToolSet again with only one double-click.

1.25 ToolSet Error: Run-time error '372'

The following error message appears.



Cause: An old version of MSFLXGRD.OCX exists inside the Windows directory.

Solution: The file Die MSFLXGRD.OCX inside the directory C:\EDIABAS\BIN needs to be registered:



Windows XP:

→ Start

→ Run...

→ type *regsvr32 c:\ediabas\bin\msflxgrd.ocx*

into the window and execute with 'OK'

Windows NT:

→ Start

→ Run...

→ type *regsvr32 c:\ediabas\bin\msflxgrd.ocx*

into the window and execute with 'OK'.

1.26 ToolSet: When an SGBD is opened, only the hourglass appears and the SGBD does not get loaded

Cause: An old version of RICHTX32.OCX exists inside the Windows directory.

Solution: The file Die MSFLXGRD.OCX inside the directory C:\EDIABAS\BIN needs to be registered:

Windows XP:

→ Start

→ Run...

→ type *regsvr32 c:\ediabas\bin\richtx32.ocx*

into the window and execute with 'OK'

Windows NT:

→ Start

→ Run...

→ type *regsvr32 c:\ediabas\bin\richtx32.ocx*

into the window and execute with 'OK'

1.27 ToolSet: Loading of SGBD takes very long

Loading of SGBDs takes a long time, above average. Especially motor or transmission SGBDs.

Cause: Large SGBDs often contain many and extensive tables that take time to be loaded.

Solution: In the configuration menu item in ToolSet, the checkmark by the selection of table information can be removed for faster loading.

1.28 ToolSet: Helpfile cannot be displayed

After calling a not local Help file (CHM-File on a network device) it is possible that this file cannot be displayed.

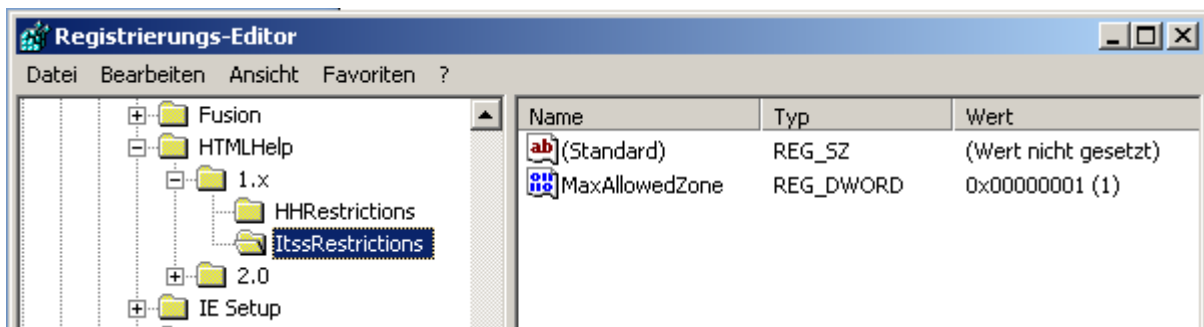
Cause: A reason for this error is the safety patch "KB986358" from Microsoft. This patch controls the display of CHM-files.

Solution: With the registry value „MaxAllowedZone the view of CHM files can be configured. To change this value start the registry editor (call regedit.exe), go to the folder

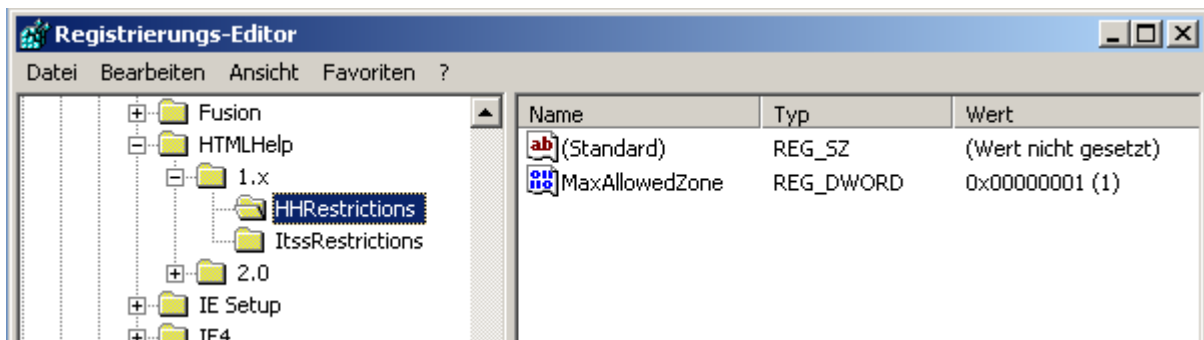
HKEY_LOCAL_MACHINE\ SOFTWARE\ Microsoft\ HTMLHelp\ 1.x

and change the keys to following values:

For „ItssRestrictions“ MaxAllowedZone = 1



and for „HHRestrictions“ MaxAllowedZone = 1.



The meaning of all values for MaxAllowedZone is:

Value	local	Intranet	trustable sites	Internet	restricted Sites
0	permitted	blocked	blocked	blocked	blocked



1	permitted	permitted	blocked	blocked	blocked
2	permitted	permitted	permitted	blocked	blocked
3	permitted	permitted	permitted	permitted	blocked
4	permitted	permitted	permitted	permitted	permitted

1.29 ToolSet: Links in help file doesn't work

After calling a not local Help file (CHM-File on a network device) it is possible that the links of inside this file doesn't work.

Cause: A reason for this error is the safety patch "KB986358" from Microsoft. This patch controls the display of CHM-files.

Solution: Analog as in Chapter „1.28 Helpfile cannot be displayed“ the registry entry for MaxAllowedZone must be increased.

1.30 Battery and ignition not recognized

Cause: On a Dell Latitude D600 notebook, pin 9 has no function and it is therefore not able to correctly recognise the battery status.

Solution 1: Use OBD via USB, see C:\EDIABAS\BIN\INI.PDF Chapter 2.2 for this.

Solution 2: The laptop is connected to the docking station.

Solution 3: Workaround for the OBD driver as of February 2004: A file OBD.INI must be created in the directory C:\WINDOWS for Windows XP, or alternatively C:\WINNT for Windows NT, with the following entry. This is because with UBATT=OFF, the battery status is not determined via hardware, but is permanently set to "Battery voltage available". Also see OBD_DOKU.PDF in the \Ediabas\Hardware\OBD directory.

OBD.INI entry:

```
[OBD]
UBATT=OFF
```

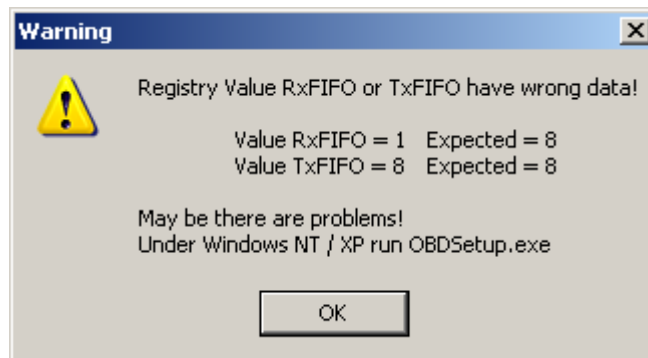
1.31 OBD Setup: Warning at start

A warning occurs when starting C:\EDIABAS\HARDWARE\OBD\OBDSSetup.exe.

```
C:\EDIABAS\Hardware\OBD\OBDSetup.exe
Windows XP Version 5.1 Build 2600
Installing OBD driver...
SubKey 'SYSTEM\CurrentControlSet\Services\Serial' already exist !
Reading values of the key ...
Value Type           = 1           Expected = 1           Ok
Value Start          = 1           Expected = 1           Ok
Value Group          = Extended base Expected = Extended base Ok
Value ErrorControl    = 0           Expected = 0           Ok
Value Tag            = 1           Expected = 1           Ok
Value ForceFifoEnable = 1           Expected = 1           Ok
Value RxFIFO         = 1           Expected = 8           Warning
Value TxFIFO         = 8           Expected = 8           Ok
Value PermitShare    = 0           Expected = 0           Ok
Value LogFifo        = 0           Expected = 0           Ok
Warning! Some values have no standard data - May be there are problems !

Press any key to continue ...
-
```

When you try to start ToolSet or INPA you will get the following error message:



Cause: The value of the variable DWORD (here RxFIFO) can not be set by OBDSetup.exe.

Solution: You have to set the value of the DWORT in the registry manually. You have to open the regedit by using:

- Start
- Run...
- enter *regedit*
- OK.

Inside regedit choose the following path:

- HKEY_LOCAL_MACHINE
- System
- CurrentControlSet

→ Services

On the right side of the window you can click on the name of the DWORD value which is defective (here RxFIFO). Enter the value 8 with the base hexadecimal. Click OK and close regedit. Now you can start ToolSet or INPA without an error.



If you have warnings for other DWORDs when starting OBDSSetup.exe, you will have to set the value of the column „expected“ for the wrong value in the registry.

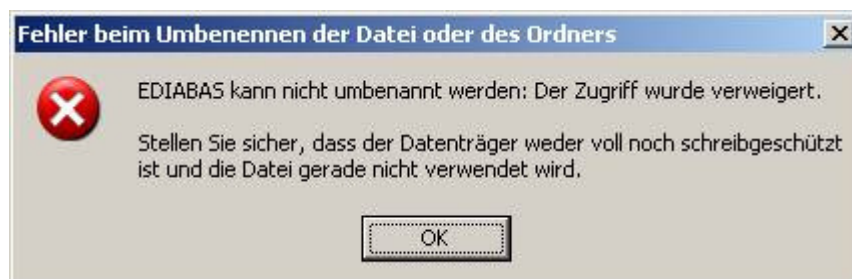
1.32 Error C1015: Too many string variables in job

Cause: Inside a job a maximum of only 6 string-variables is possible.

Solution: You have to reduce the number of variables.

1.33 EDIABAS: renaming of file or folder is not possible

Cause: EDIABAS or another component of EDIABAS is still open.



Solution: You have to shut down the diagnostic application and EDIABAS. If necessary, the fileexplorer and the editors which access the EDIABAS-Directory have to be closed as well.

1.34 ToolSet: black window after loading SGBD

After loading an SGBD into ToolSet one or more windows of the Tool Set are gone black .

Cause: The registration of richtextbox is invalid.

Solution: You have to register richtextbox. Execute the batch file REGSVR32.BAT inside the directory C:\EDIABAS\BIN\ .

1.35 DirectNt.sys kann nicht geöffnet werden

english meaning: directNt.sys can not be opened

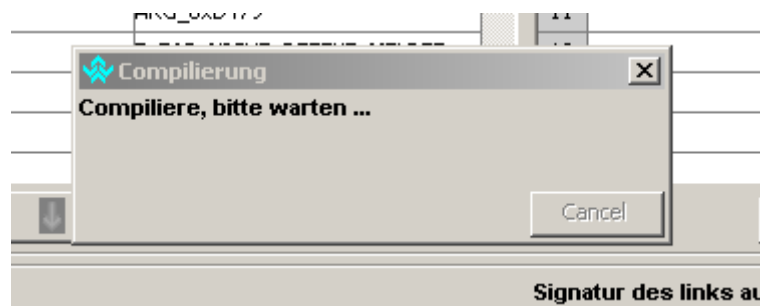
This error only occurs on computers with Windows NT, if the ADS driver hasn't been installed.

The instructions for installing the ADS driver can be found in the "Installation Guide/Update Guide" ADS_DOKU.PDF in the directory C:\EDIABAS\Hardware\ADS\ (no longer part of the standard installation since EDIABAS 7) or on the Intranet page <http://www5.muc/ti4-web/ti-430/> under ,Diagnose Interfaces'.

1.36 BEST2 Compiler, Parser stack overflow

While compiling a diagnostic function with many arguments it is possible to get a "Parser stack overflow" during parsing the B2S-sources. This behavior occurs for BEST2 compilers with a version smaller then 7.2.0.

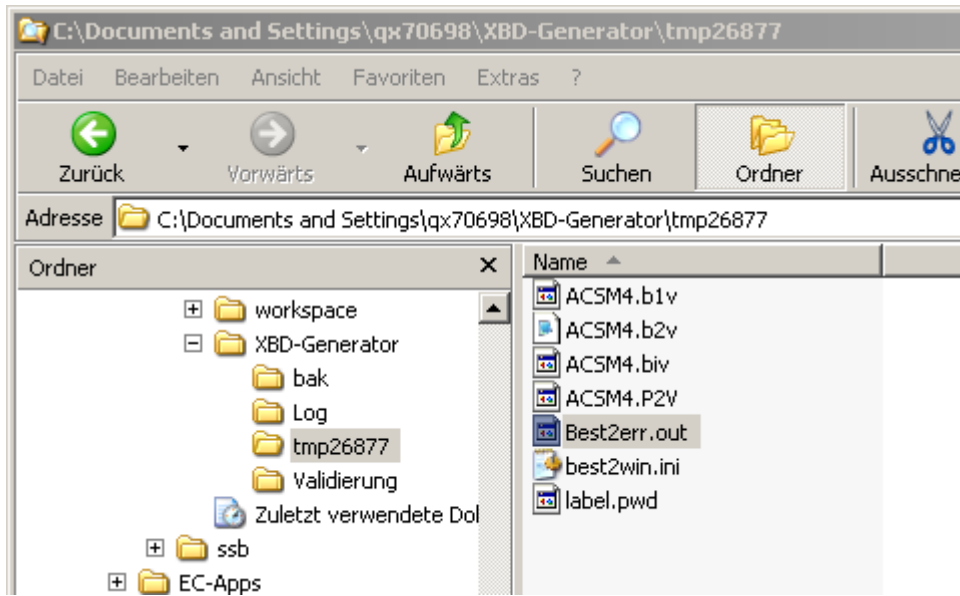
This error can be determined when the XBD-Generator is seeming hang up.



You can see that this hang up is a "Parser stack overflow" in the file Best2err.out. All compiler errors and messages are logged there



regarding
EDIABAS, INPA and ToolSet



Solution: Replace BEST2 compiler by at least version 7.2.0.

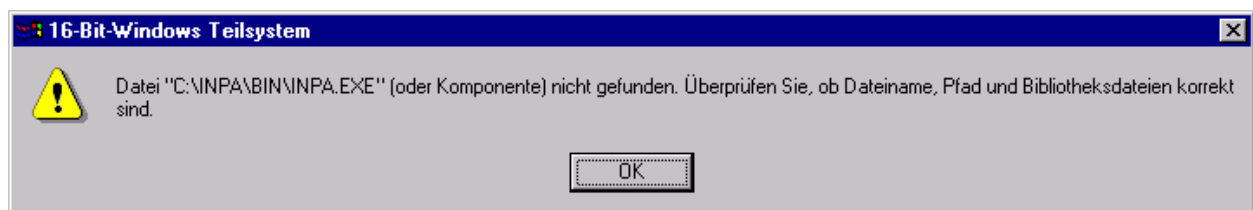
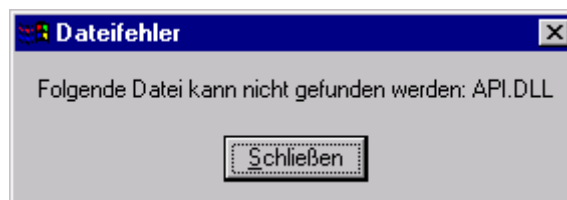
2 INPA-specific errors

2.1 API.DLL oder API32.DLL kann nicht gefunden werden

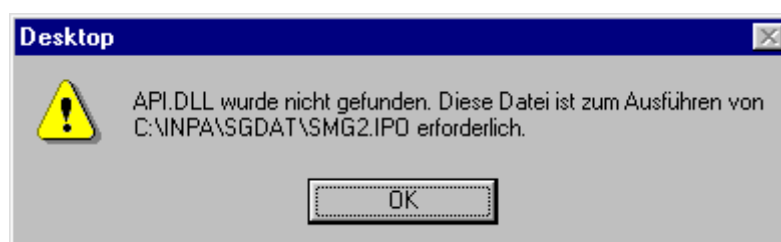
english meaning: API.DLL or API32.DLL can not be found

Attention: The files API.DLL or API32.DLL are allowed only inside the directory C:\EDIABAS\BIN\ ! More details you can find in **chapter 2.11** .

When calling INPA under Windows NT/XP, the following error messages appear:



When calling INPA under Windows 95/98, the following error message appears:



Cause 1: Ediabas is not installed, only INPA.

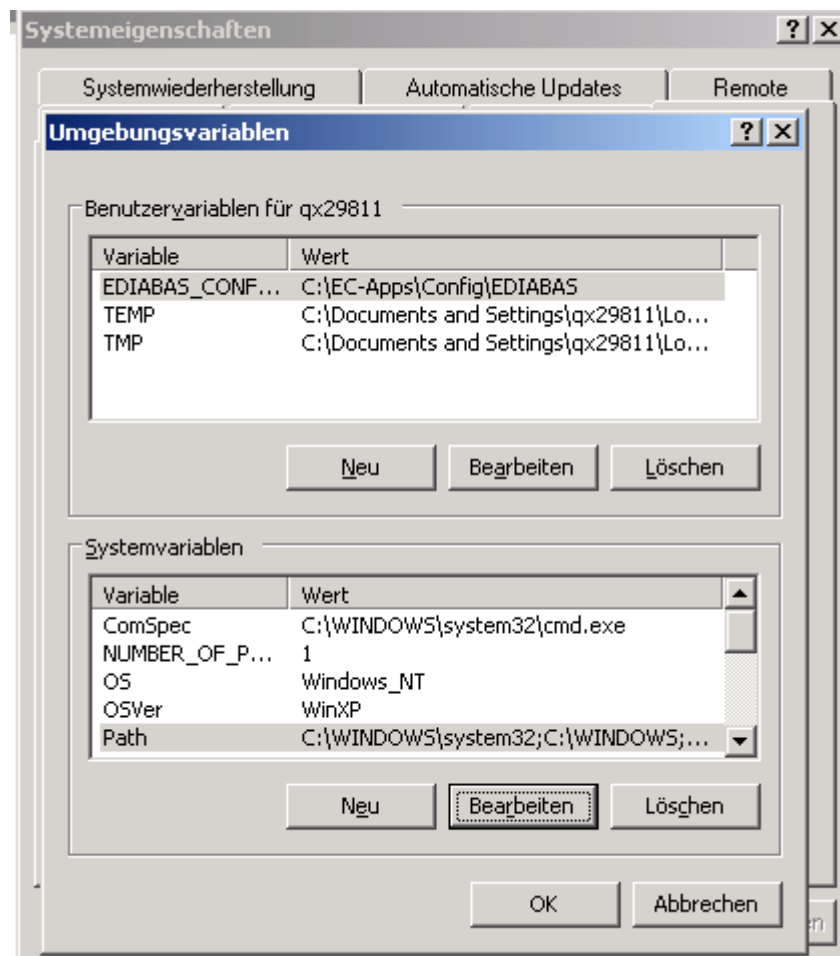
Solution 1: Install Ediabas.

Cause 2: The directory C:\EDIABAS\BIN has not been set in the 'Path' system variable.

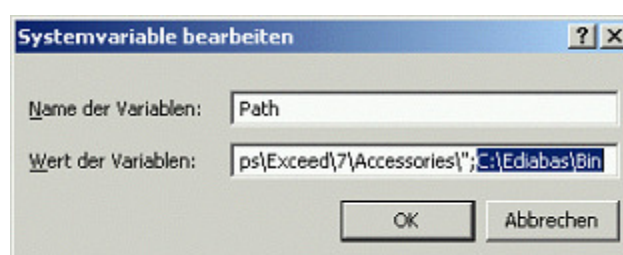
Solution 2a: (using Windows XP)

Set the system variable: Please log into your system as administrator (or with administration rights) and go to:

- Start
 - Control Panel
 - System
 - tab ,Advanced'
 - button ,Environment'
- double click the system variable 'Path'.



Go to the end of the field value, then type in a semicolon and enter the path C:\EDIABAS\BIN . Click 'Set' and 'OK'.



Completely restart your computer! (Do not just login under a new name!) It should no longer be a problem to start INPA.

Solution 2b: (using Windows NT)

Set the system variable: Please log into your system as administrator (or with administration rights) and go to:

→ Start

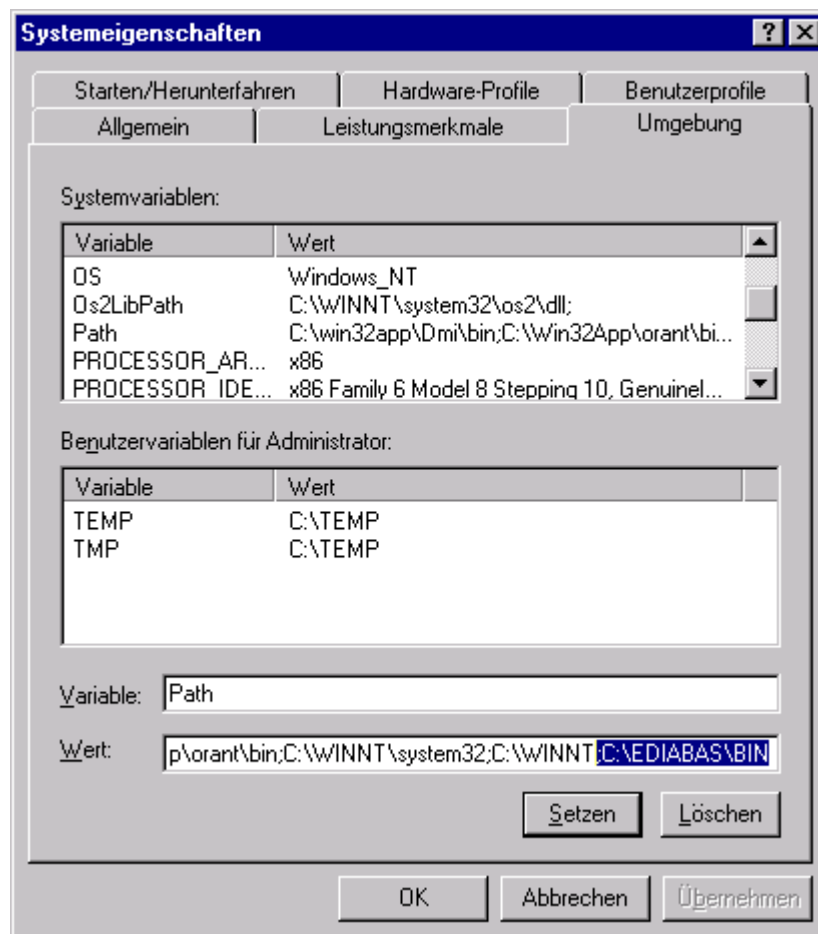
→ My Computer

→ Control Panel

→ System

→ tab 'Environment'

double click the system variable 'Path'.

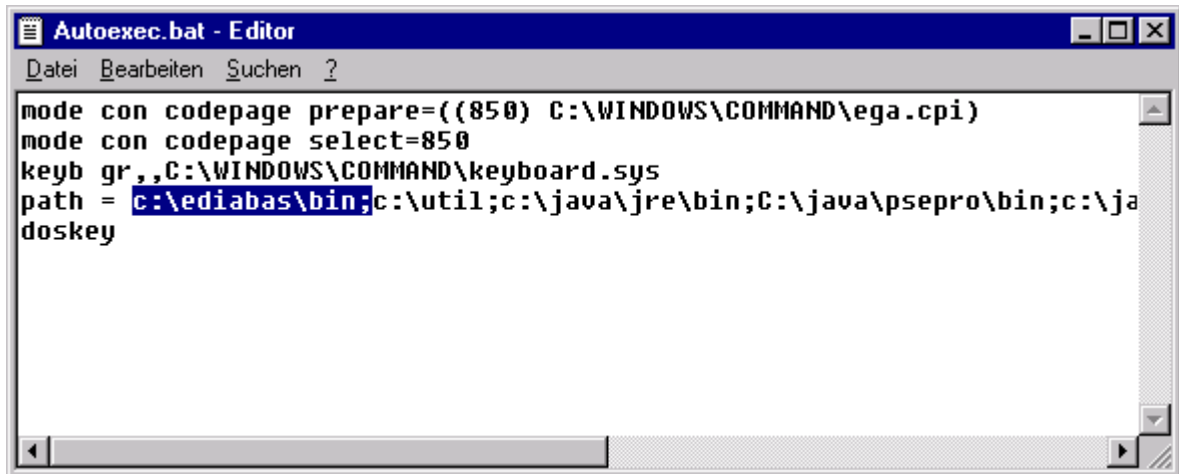


Go to the end of the field value, then type in a semicolon and enter the path C:\EDIABAS\BIN . Click 'Set' and 'OK'.



Solution 2c: (using Windows 95/98)

Set the system variable: Open the file AUTOEXEC.BAT inside the directory C:\ for editing (by clicking it with the right mouse key with the shift key pressed, and then select "Open with". The best way is to use Notepad to display the file.



Now, enter the path 'c:\lediabas\bin' into the 'path'-variable.

Save the change and close the file, then completely restart your computer! (Do not just login under a new name!)

It should no longer be a problem to start INPA.

2.2 IFH-0018: INITIALIZATION ERROR → INPA does not work, but Toolset works fine

The error occurs when an SGBD is run by INPA or CASCADE. If the same SGBD is loaded into ToolSet it works without problems.

Cause 1: The communication port COM1 does not exist, but COM3. Toolset is working without an initialization error, because the file OBD.INI exists inside the directory C:\EDIABAS\BIN. But the file OBD.INI has to exist in the directory C:\WINDOWS for INPA to work.

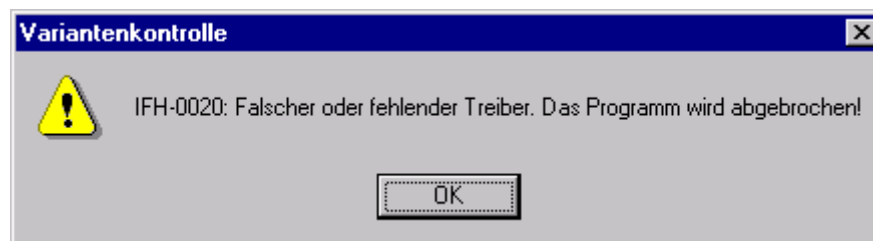
Solution 1: Copy the file OBD.INI into the directory C:\WINDOWS or create a new one (for creation of OBD.INI see chapter 1.18).

Cause 2: See **chapter 1.18**

Solution 2: See **chapter 1.18**

2.3 IFH-0020: Falscher oder fehlender Treiber. Das Programm wird abgebrochen!

English meaning: Incorrect or Missing Driver. The programme will be aborted!



Conditions:

You have access to [\\smuc0900\sg](#) and you are linked to this drive while starting an INPA Script.

Cause 1: Missing EDIABAS.INI file inside C:\WINNT .

Cause 2: You are not connected to the controller.

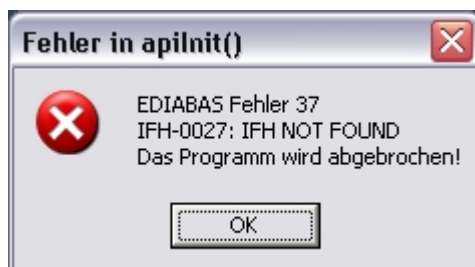
For developers: Simulation is not switched on in the EDIABAS.INI file.

Solution: Copy the EDIABAS.INI file from C:\EDIABAS\BIN to C:\WINNT .

2.4 IFH-0027: IFH NOT FOUND → Das Programm wird abgebrochen!

English meaning: IFH NOT FOUND → programm will be terminated!

The error occurs when starting INPA.



Cause: EDIABAS configuration is not correct.

Solution: see **chapter 1.10**

2.5 BIP-0010: Fehler bei Zugriff auf Konstanten → Das Programm wird abgebrochen!

English meaning: Error while accessing constants → programm will be terminated!



Cause: The file T_GRTB.GRP inside the directory C:\EDIABAS\ECU\ is expired, there is no information stored for the requested controller/ecu.

Solution: Download the latest version of T_GRTB-PRG from ECCO web client.

2.6 SYS-0002: SG-Variantenbeschreibungsdatei nicht gefunden

english meaning: controller variants file not found. Programm will be terminated!

The error occurs when starting an INPA script.



Cause 1: The *.PRG SGBD is not located inside the directory C:\EDIABAS\ECU .

Solution 1: Copy the SGBD into the ECU directory.

Cause 2: The external table T_GRTB.prg does not exist inside the directory C:\EDIABAS\ECU or it is obsolete.

Solution 2: Copy the file into the ECU directory or update the external table using the ECCO Web Client.

2.7 **SYS-0005: SG-Beschreibungsdateien nicht gefunden. Das Programm wird abgebrochen!**

english meaning: SGBD not found. Programm will be terminated!



Cause 1: The SGBD is not located in the directory C:\EDIABAS\ECU.

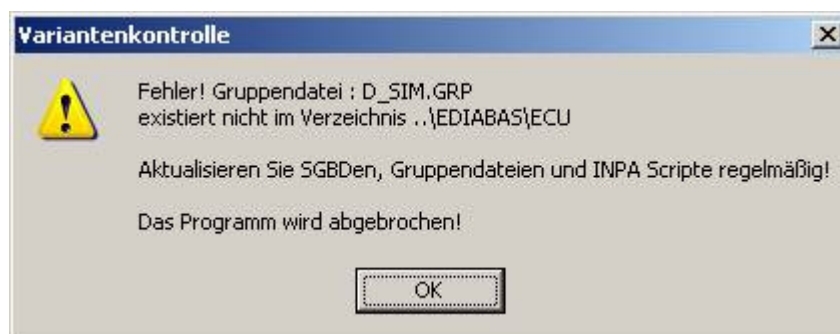
Solution 1: Copy the SGBD into the Ecu directory.

Cause 2: The EcuPath in EDIABAS.INI (C:\EDIABAS\BIN) is not set to C:\EDIABAS\ECU.

Solution 2: Set the correct directory.

2.8 **INPA Error: D_SIM.GRP is missing**

Error message window appears when starting INPA:



Cause: Simulation mode is activated for EDIABAS, but there is no simulation file existing inside C:\EDIABAS\SIM for the SGBD used by INPA.

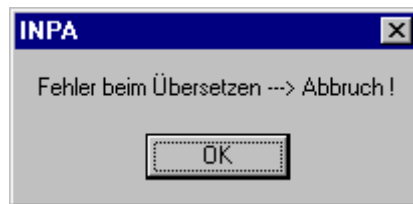
Solution 1: Deactivate the simulation mode inside EDIABAS.INI. For further work with INPA you will need a real controller (connected by diagnosis interface).

Solution 2: If you still need simulation mode, you must create a simulation file. This file should be able to handle all requests by this INPA script.

2.9 INPA Error: Fehler beim Übersetzen → Abbruch!

english meaning: Error while translation → termination!

The following error message appears when starting an INPA script:



Cause 1: An INPA script with the ending IPO was started by the programm INPA.EXE instead of INPALOAD.EXE .

Solution 1: Only start INPA scripts ending with IPO by INPALOAD.EXE .

Cause 2: The selected INPA script does not exist inside the directory C:\INPA\SGDAT\ .

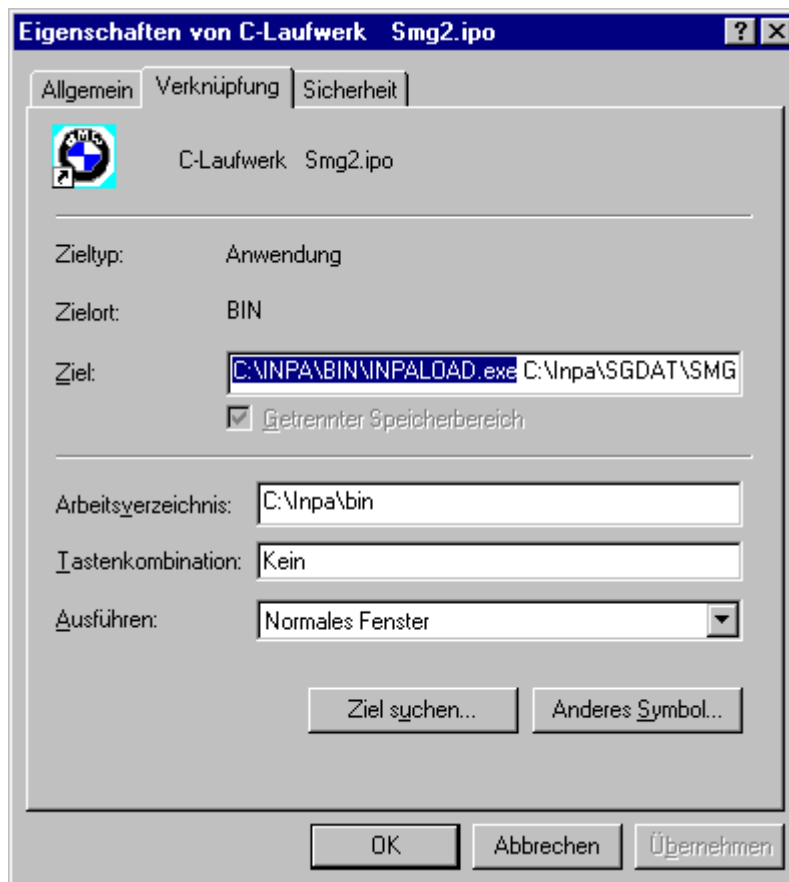
Solution 2: Update the INPA scripts using the ECCO Web Client.

Cause 3: INPA Version 5.0.1: The INPA script *.IPO can not be started with a double-click inside the directory C:\INPA\SGDAT*.IPO.

Solution 3: Update to Version the latest version.

Cause 4: INPA Version 5.0.1: The desktop link of an INPA script does not work.

Solution 4: The target directory must be expanded to include the INPALOAD directory. To do so, click the desktop link once with the right mouse button and go to 'Properties'. Expand the target path to include C:\INPA\BIN\INPALOAD.EXE for Windows NT (see Fig.) and C:\EC-Apps\INPA\BIN\INPALOAD.EXE for Windows XP.



Cause 5: The files STARTGER.IPO and STARTUS.IPO do not exist inside the directory C:\INPA\CFGDAT\.

Solution 5: Reinstall INPA.

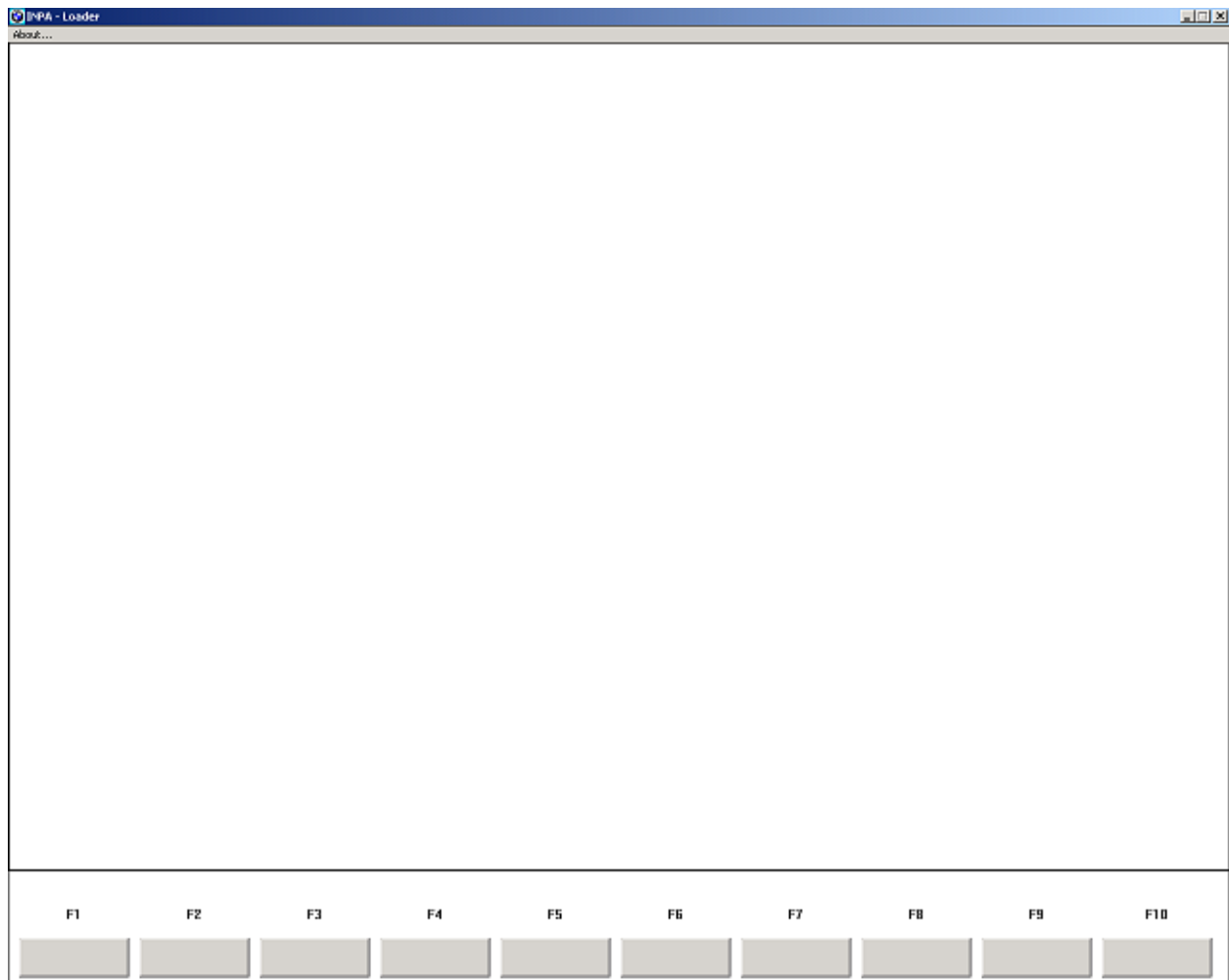
2.10 INPA Error: Opening INPA – Übersetzungsfehler returned a_0x2

English meaning: Opening INPA – translation error returned a_0x2

Cause: During the installation of EDIABAS/INPA, the configuration option 'Without configuration' was selected.

Solution: When running the installation programm, select a configuration, e.g. "BMW Plant 1.1 Munich".

2.11 INPA Error: Only a white screen appears when running INPALOAD.EXE



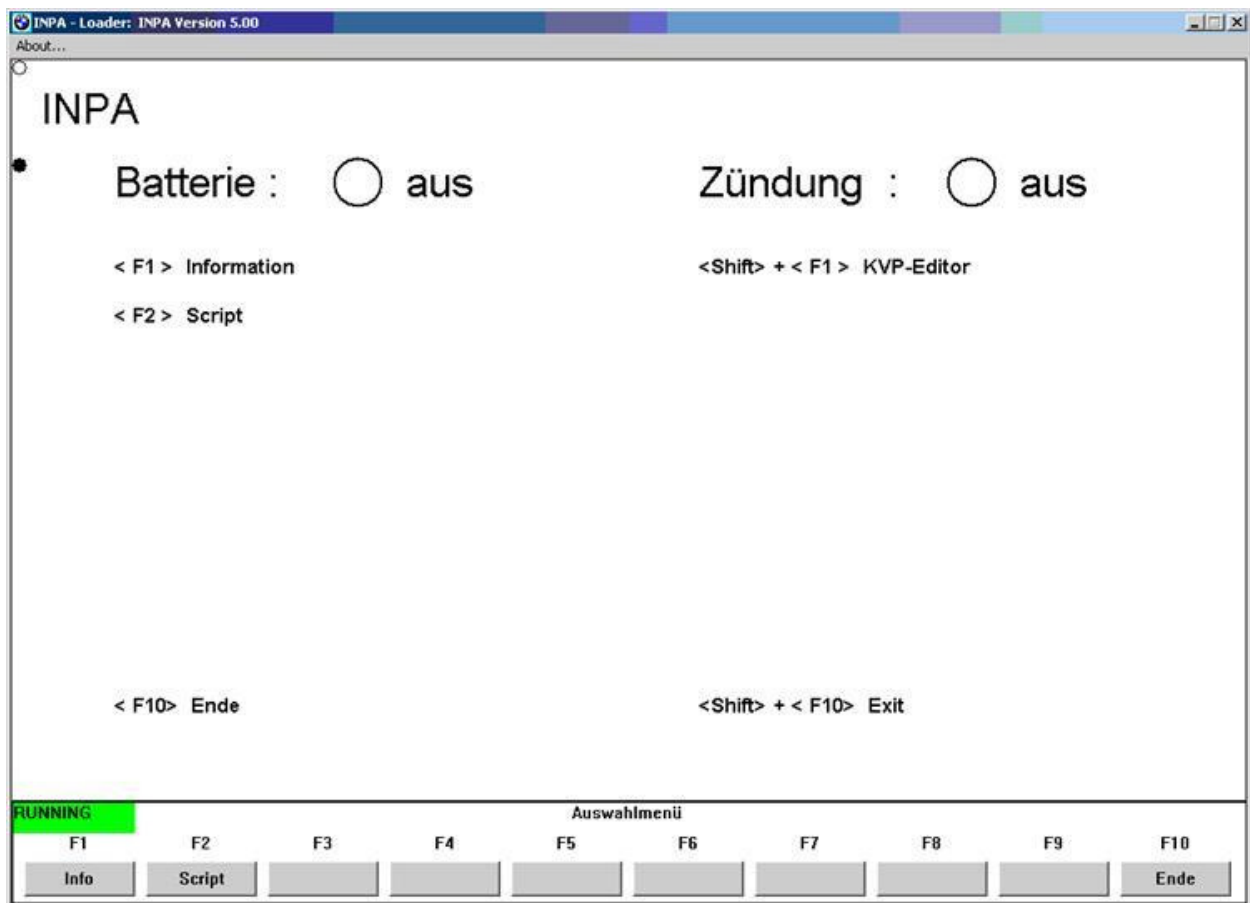
Cause 1: The file API.DLL or API32.DLL has been manually copied into the WINDOWS directory.

Solution 1: Delete the file API.DLL (or alternatively API32.DLL) from the WINDOWS directory. The file may only exist in the directory \EDIBAS\BIN\.

Cause 2: You have installed the 32-bit version of INPA (as of Version 5.0.1) and did not perform an update of the INPA scripts.

Solution 2: Update the INPA scripts using the ECCO Web Client.

2.12 INPA Fehler: Starting window without series to select



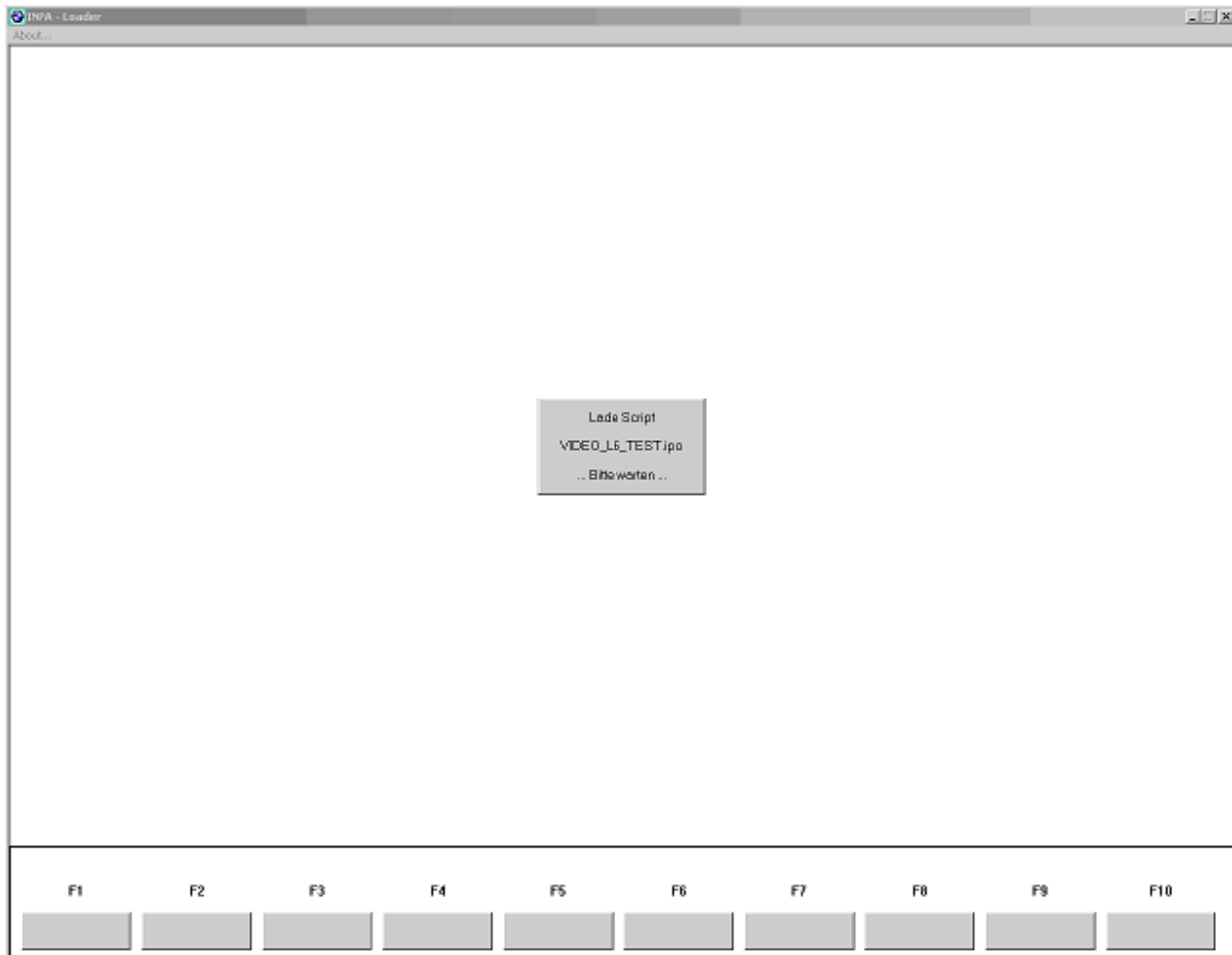
Cause 1: After installation and update of INPA the configuration files and INPA scripts are missing.

Solution 1: Configuration files and INPA scripts can be downloaded from ECCO (Information about ECCO you can get over Tel. 55555, suppliers contacts their BMW developer).

Copy the configuration files and INPA-scripts in the following folder:

- SGBDen : .\EDIABAS\ECU*.PRG
- Group-files : .\EDIABAS\ECU*.GRP
- INPA-Configuration : .\INPA\CFGDAT\INPA.INI
: .\INPA\CFGDAT*.GER
: .\INPA\CFGDAT*.ENG
- INPA-Scripts : .\INPA\SGDAT*.IPO

2.13 INPA Error: INPA script stalls while loading

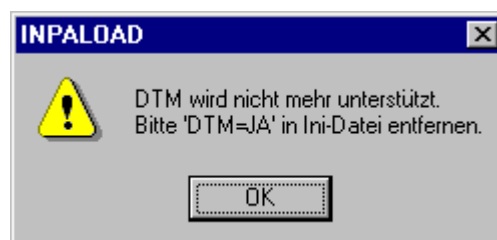


Cause: During the loading process the compiler counts the displayed lines inside the script. The compiler may stall when a 'while' loop exists without an exit-condition (programmer-mistake)

Solution: Avoid 'while' loops. If a 'while' loop is necessary, include an exit-condition inside the while loop.

2.14 INPA Error: DTM wird nicht mehr unterstützt

English meaning: DTM is no longer supported.



Cause: This error message appears if INPA.INI has been copied from Version 4.7.7 to Version 5.x.x.

Solution: Since it can not be excluded that even more files from the old version have been mixed with the new ones, please uninstall INPA completely and then reinstall INPA using the Global Information Service (GIS) <https://gis.bmw.com>.

2.15 INPA Errorr: Bridge16.exe kann nicht initialisiert werden

English meaning: Bridge16.exe can not be initialized

Cause 1: A 16 bit INPA script has been started using the 32 bit version of INPA (as of Version 5.0.1).

Solution 1a: Update the INPA scripts using the ECCO Web Client.

Solution 1b: Convert the INPA script to the standard 'includes' for the 32-bit version. To do this, contact the respective person responsible at TI-43x.

Cause 2: A 16 bit DLL has been found, which means the developer of the INPA script is using a 16-bit DLL.

Solution 2: The developer of the INPA script has to convert the DLL to 32 bit.

2.16 Error while opening the error file → Termination!



Cause: This error occurs with Windows XP because the user does not have the correct access rights to edit files inside the directory C:\INPA\BIN .

Solution: The user needs the appropriate access rights for the 'INPA' directory.

2.17 Compiler: Datei: \INPA\DEUTSCH***.OUT nicht gefunden!

English meaning: File not found!

Cause: The directory C:\EDIABAS\BIN has not been set inside the 'path' system variable.



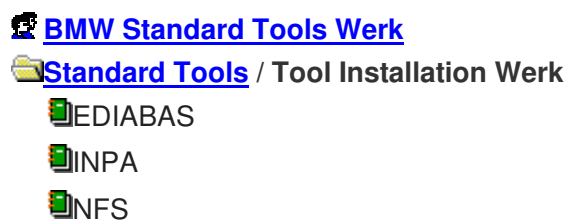
Solution: Set the path C:\EDIABAS\BIN inside the 'Path' system variable (see **chapter 2.1**).

3 General Questions

3.1 Installation of EDIABAS and INPA

The Installation of EDIABAS, INPA and NFS have to be done webbased via the Global Information Service (GIS). You can reach the GIS homepage with the following link: <https://gis.bmw.com/>.

In the forum „BMW Standard Tools Werk“ you can find the installation data of EDIABAS, INPA and NFS. The path ist shown below:



For access rights to GIS forum „BMW Standard Tool Werk“ send a mail to Referenz@bmw.de stating the name, Q/QX number, and the reason. We can give access rights to this forum only for colleagues from the T departments. Colleagues from other departments and suppliers can get the installation via the GIS forum „BMW Standard Tools Entwicklung“. You can apply for access rights using the following link: <https://gis.bmw.com/gis/d/toolsantrag.htm>.

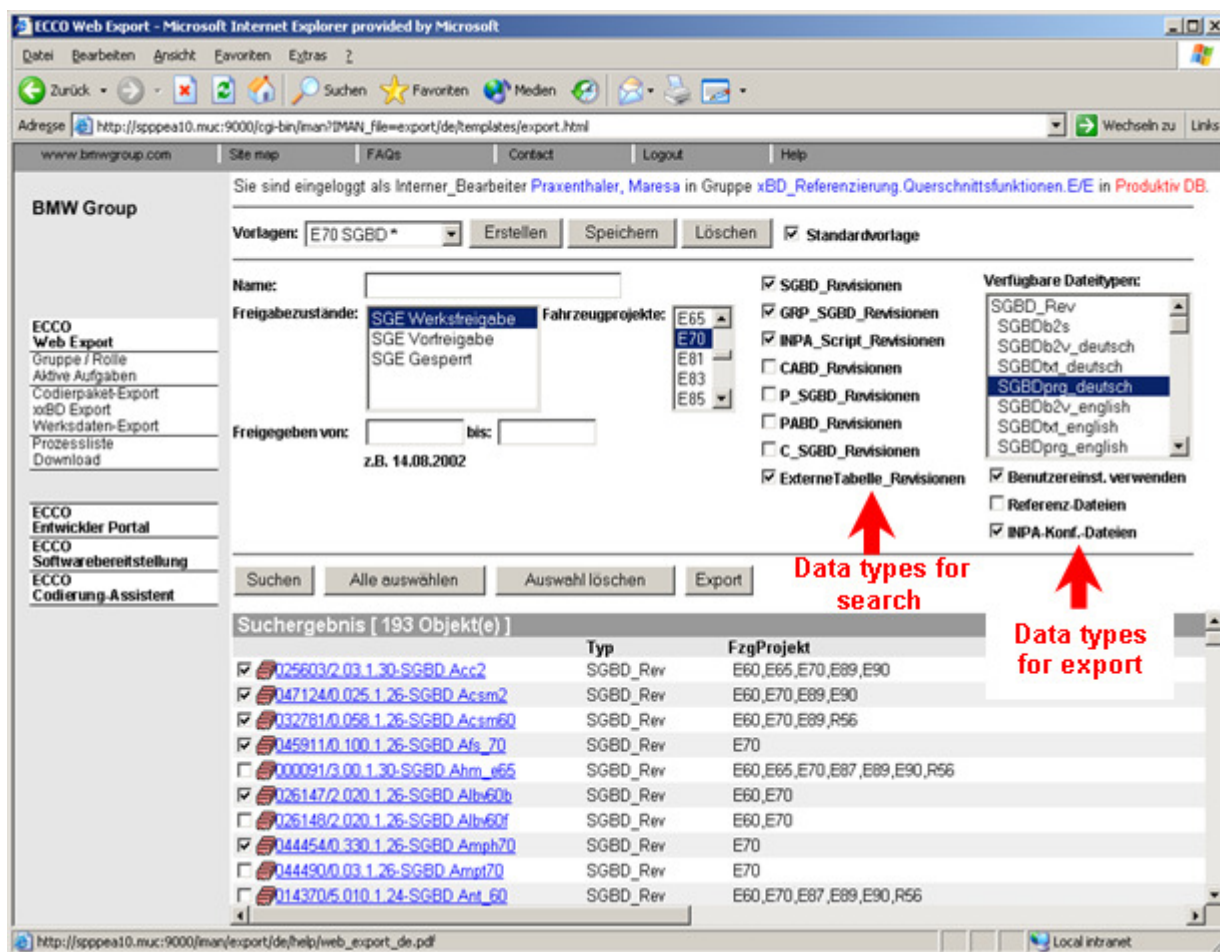
Please pay attention to the installation instructions that you can get in the same directories as of the installation data. After the installation you have to download the SGBDs, Group SGBDs, INPA scripts, INPA configuration files and external tables using the ECCO Web Client. Which data you have to download is described in **chapter 3.2**.

3.2 xBD export of SGBDs, group SGBDs, INPA scripts and INPA configuration files using the ECCO Web Client

The update of SGBDs, group SGBDs, external tables, INPA scripts and INPA configuration files can be done using the ECCO Web Client.

You can apply for access rights to ECCO at the user service center (Tel. 089-382-55555) stating your valid Q/QT/QX number.

You can reach the homepage of the ECCO Web Client by the following link: <http://www6.muc/ppea>. After login you have to select the link xBD Export in the navigation bar and you get to the search screen. You have the possibility to search for a single file or search for all files assigned to a certain series or search for a several release periods.



When you have installed EDIABAS you will need the following files:

- SGBD_Revisionen
- GRP_SGBD_Revisionen
- ExterneTabelle_Revisionen

When you have installed INPA you will need the following files:

- SGBD_Revisionen
- GRP_SGBD_Revisionen
- ExterneTabelle_Revisionen
- Inpa_Script_Revisionen

In the column „Verfügbare Dateitypen“ you have to select the data types. This column is very important for the export of the files, i.e. the data types which are selected will be exported. Please pay attention on the correct selection.

When you have installed EDIABAS you should select the following data types:

- SGBDprg_english or SGBDprg_deutsch
- SGBDgrp
- EXTABprg_english or EXTABprg_deutsch



When you have installed INPA you should select the following data types (in addition to the data types above):

- INPAipo_english or INPAipo_deutsch
- Select also „Benutzereinst. verwenden“
- Select also „INPA-Konf.-Dateien“

After download of the necessary files you have to copy the files into the right directories:

EDIABAS data:

...\\EDIABAS\\ECU\

- SGBDs: SGBDprg_deutsch → all *.PRG files
- external tables: EXTABprg_deutsch → T_GRTB.PRG, T_PCOD.PRG
- Group SGBDs: SGBDgrp_deutsch → all *.GRP files

INPA data:

...\\INPA\\SGDAT\

- INPA scripts: INPAipo_english → all *.IPO files

...\\INPA\\CFGDAT\

- INPA-configuration files: INPA_Konfig_xBD_Download_eng.zip
→ all *.GER files or *.ENG files
INPA.INI file

GER = german INPA configuration, ENG = english INPA configuration

If you have problems regarding the xBD Export using ECCO Web Client please call the user service center:

Tel. 089-382-55555 or send an email to ECCO hotline: ecco.hotline@bmw.de.

3.3 How can I find out if the serial interface COM1 has been taken?

There is a way to find out if the serial interface, for example COM1, is already in use, but it is not possible to find out which programm is using the interface.

As described in the respective sections of Chapter 1, the most common programmes to take COM1 are HotSync for the Palm and ActiveSync for the Ipack or a Nokia software. In order to establish whether these programmes are automatically started when you start the computer, please check your 'autostart' settings. Do this by making sure that these programmes do not appear in the following directories:

- C:\Documents and Settings\All Users\Startmenu\Programs\Autostart\
- C:\Documents and Settings\Your QX Number\Startmenu\Programs\Autostart\

Another way to check the usage of COM1 is to look into the system information. The system information can be run with the DOS command 'winmsd' in an input prompt:

→ Start

→ Run...

→ type *winmsd*

→ OK.

Here, it is important that you only run winmsd if the Ediabas server is closed. Under the directory

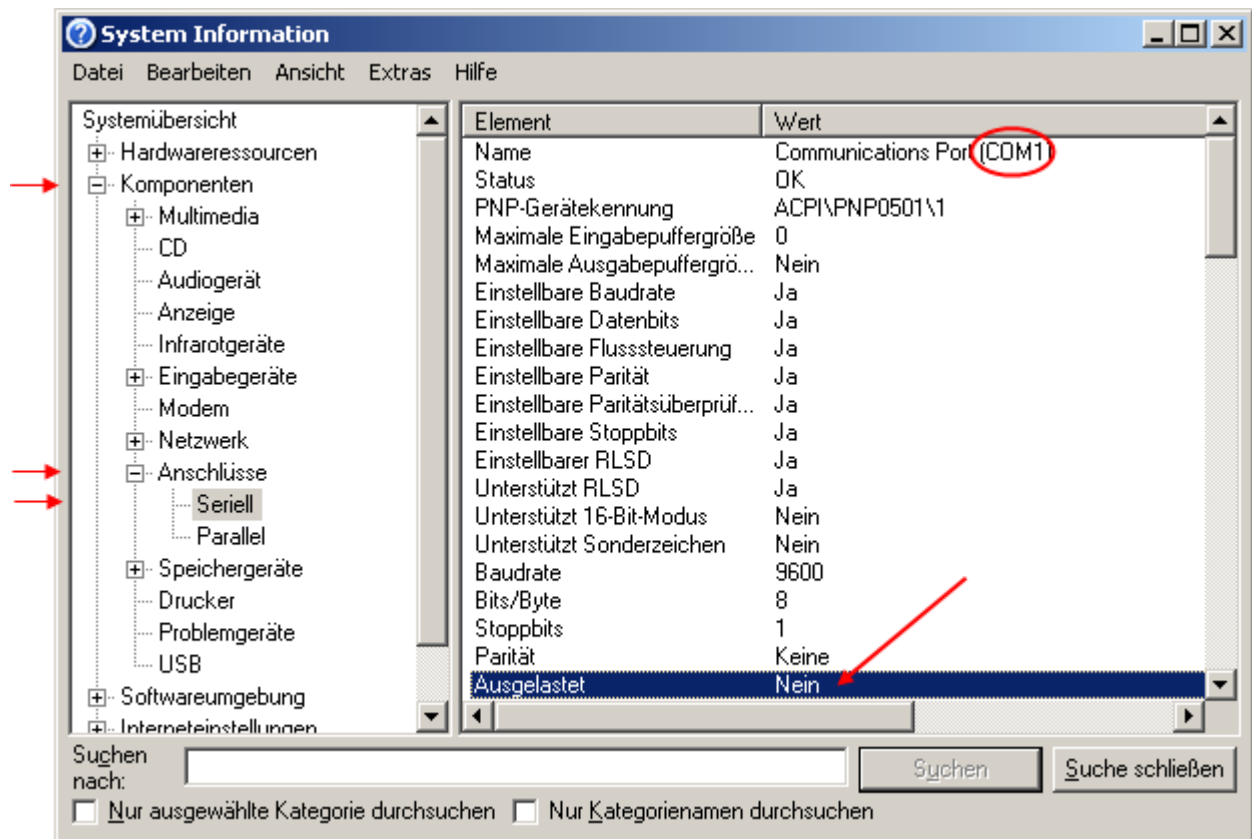
→ System Summary

→ Components

→ Ports

→ Serial

the information about the active serial ports COM1, COM2, etc will be shown if they exist. The current value can be seen in the element "Busy". If this value is "No", the interface is free, and if it is "Yes", the interface has been taken by a programm. But you can not find out what programme it is here.



3.4 How do I start INPA?

Start Inpa using IINPALOAD.EXE in C:\INPA\BIN or alternatively C:\EC-APPS\INPA\BIN. Or use

→ Start



- All Programs
 - EDIABAS INPA ELDI NCS NFS
 - INPA(_IPO)

to start the general reworking programm. This corresponds to call INPALOAD.EXE inside C:\INPA\BIN.

3.5 How can I switch between OBD and ADS interfaces?

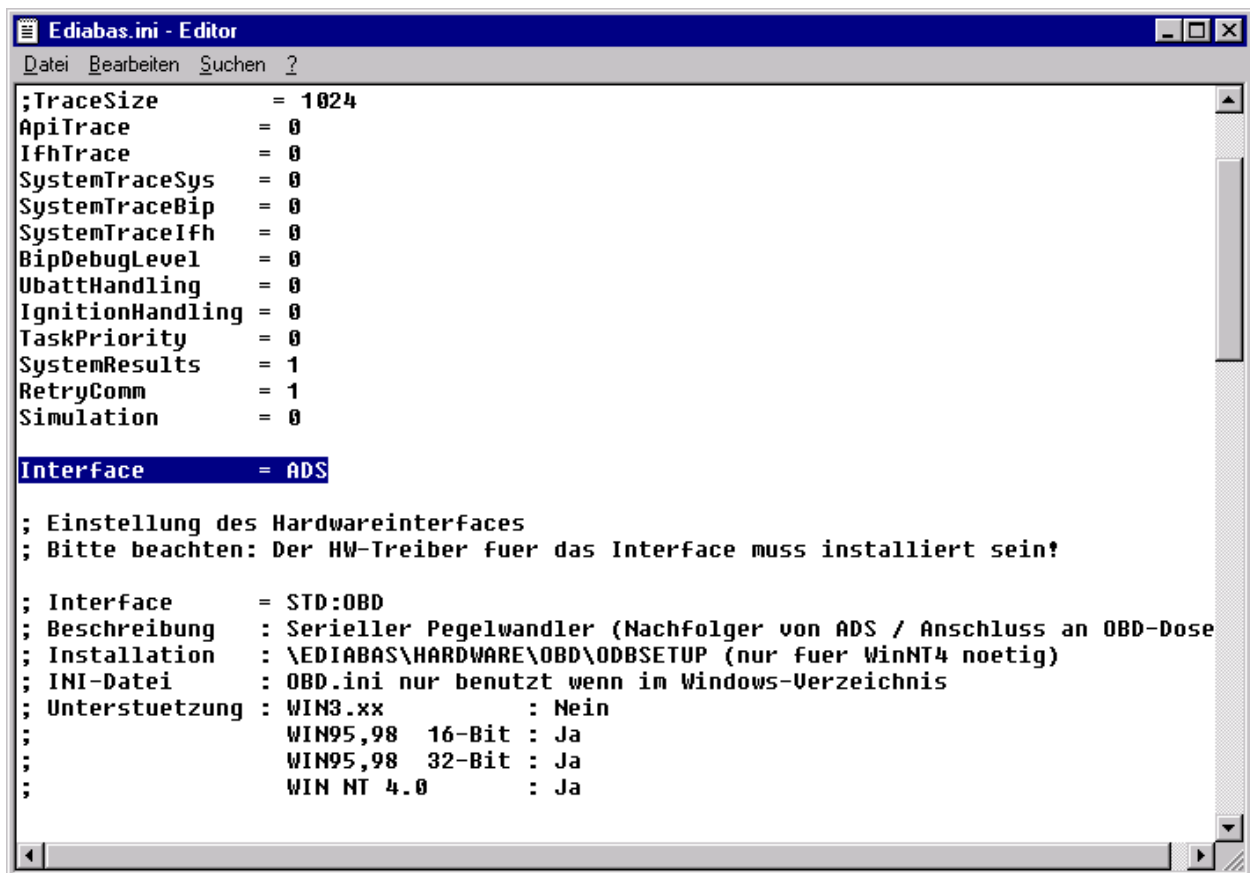
Prerequisite:

The appropriate driver must be installed for the interface you want to use. In the installation guide for INPA <http://smuc0900/TI-430> under

- Themen
 - EDIABAS / INPA
 - EDIABAS or INPA)

you can look up how a driver is installed.

Now, you can change the interface directly inside the file EDIABAS.INI (C:\EDIABAS\BIN).



You only have to make the appropriate change to the line where the interface is entered.



Interface = ADS ADS interface will be used.
Interface = STD:OBD OBD interface will be used.

In case OBD is being used via USB, an additional entry is necessary in OBD.INI. See C:\EDIABAS\BIN\INI.PDF for details.

3.6 In which directory OBD.INI has to be saved?

When an OBD.INI file exists, in order to not run the interface via COM1 by default (compare to 1 i), the OBD.ini file must be saved into the directory C:\EDIABAS\BIN\.

This is for actual EDIABS packages (above 1.4). To find out the installed version see **chapter 3.8**.

3.7 How can I find out which interface is installed for INPA?

To do this, you have 2 possibilities:

1. Call
 - Start
 - All Programs
 - EDIABAS INPA ELDI NCS NFS
 - EDIABAS
 - Tool32

Inside the configuration menu, select EDIABAS. There you will find the desired information in the interface line.

2. you can also check inside the EDIABAS.INI (C:\EDIABAS\BIN) to see what interface is have installed.

3.8 How do I find out which EDIABAS package is installed?

The current version of the Ediabas package can be seen inside the files C:\EDIABAS\VERSION.TXT or C:\EDIABAS\PACKAGE.PDF.

3.9 How do I uninstall EDIABAS or INPA?

No registry entries are made during the installation, therefore a special uninstall routine is not needed.

To uninstall INPA, just delete the directory C:\INPA.

To uninstall EDIABAS also, just delete the directory C:\EDIABAS.

3.10 What is the difference between ToolSet.exe and Tool32.exe?

TOOL32.EXE is the current version, when it is started the EDIABAS server will start as 32 bit application.

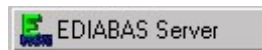
TOOLSET.EXE is an old version and is only required under Windows 3.11.

3.11 How can tell if the EDIABAS server is running in 16 bit or 32 bit mode?

On Windows 95 and 98 computers, EDIABAS server runs in 16 bit mode. That can be recognised by the yellow **E** in the task bar.



Under Windows NT and XP computers, EDIABAS server runs in 32 bit mode. That can be recognised by the green **E** in the task bar.



Note:

Since EDIABAS Version 6.4 (as of 2003), the server runs in 32 bit mode on Windows 95, 98 and XP computers.

3.12 What is an SGBD and what is its connection to EDIABAS?

The controller/ECU description files (SGBD) contain the controller-specific know how. Each SGBD contains the order telegrams of the respective controller and decodes its reply telegrams. In the process, the raw data (bytes) are converted into directly useable variables (data types: int, long, real, string), i.e the error code is converted into error text.

For each controller variation, there is exactly one specific SGBD.

The SGBDs are loaded and interpreted from EDIABAS runtime system by an application programm by order. The file name of the SGBD (without extension) is the name that application programmes use to address a controller variation or controller group.



3.13 What is a job?

Jobs are services that EDIABAS provides. They are not hard coded in EDIABAS, but are a main component of each SGBD. Each job has a fixed name and a number of results. Jobs are independent of each other. There is no data exchange between jobs.

A job corresponds to a function with one complete order. It usually reads data from a controller, analyses it and returns results that can be used directly by different applications. A job normally works with one diagnostics telegram (multiple in exceptional cases).

3.14 What do SGBDs with the name `_xyz` mean?

SGBDs that begin with ‘_’ (e.g. `_LWS5`), contain jobs that are only intended for development (e.g.: writing ident data). These SGBDs are neither used in production or customer service.

3.15 What is the group file used for?

Among other things, INPA uses group files to select the respective SGBD. The group identifies the controller and starts the corresponding SGBD. The choice is made using the diagnostics, and by reading out the variation index in addition (since E65).

The group files are located in `C:\EDIABAS\ECU` and have the following naming convention:

`D_00xx.GRP` were assigned up to the E65; `xx` = the controller address; For example: `D_0032.GRP` = transmission. The name `D_?????.GRP` is assigned after the E65 and is legible; for example `D_KLIMA.GRP` or `D_MOTOR.GRP`, etc.

Since February 2004 Updating the group files has changed. The table with the information about which controller must load which SGBD was moved from the group file to an external table. At runtime, the swapped-out table `C:\ECU\T_GRTB.PRG` is used. Therefore, now it is only necessary to update this table and not `D_?????.PRG`.

Additional Information for SGBD Developers:

Inside the file `STD_GRTB.B2S`, the diagnostic and variation indexes of the individual SGBDs can be seen as well as the group file to which the respective SGBD is assigned. You can find the file `STD_GRTB.B2S` on drive `\smuc0900\sg\` in directory `\Referenz\Ediabas\Include\`.

3.16 Diagnostic index

- | | |
|--------------------------------|----------------------------------|
| a) <u>Who creates it?</u> | Reinhold Drexel, TI-430 |
| b) <u>What it is used for?</u> | Identification of controller/ECU |
| c) <u>When it is changed?</u> | As soon as a new SGBD is needed |



3.17 Variation index

- | | |
|--------------------------------|---|
| a) <u>Who creates it?</u> | Data handling team |
| b) <u>What it is used for?</u> | Identification of controller/ECU |
| c) <u>When it is changed?</u> | When the SGBD and/or the PABD changes (PABD, if something in ECU programming changes), e.g. if the authentication changes or a timing has changed). |

3.18 What is the meaning of the file EDIABAS.INI an its components?

EDIABAS.INI is the configuration file. Normally, no changes must be made here after the installation. One reason for a change of EDIABAS.INI is, for example, if you want to work with a simulation file (that means there does not have to be a ECU present).

The EDIABAS.INI can be found in the directory C:\EDIABAS\BIN.

EcuPath:

The group files (d_*.GRP) and SGBDs (*.PRG) are found in the path given for EcuPath. In developer versions, it also contains *.B2V, *.B2S and *.TXT files.

SimulationPath:

The path describes where the simulation files are located for groups (d_*.SIM) and for SGBDs (*.SIM), which are only relevant to SGBD and INPA developers.

TracePath:

If ApiTrace and/or IfhTrace are activated, the traces will be stored there with api.trc and ifh.trc.

TraceSize:

You can set the size of the trace files ApiTrace and IfhTrace. If 1024 is set, then the maximum size of the file is 1 MB; for 512, it is a maximum of 500 KB.

ApiTrace:

The ApiTrace file is activated by replacing the zero with a number from 1 to 7. The api.trc file contains the job and result names with their data. If ApiTrace is not needed, this should be set to zero to increase the performance of EDIABAS. You can find information about the trace level in the Ediabas documentation.

IfhTrace:

The IfhTrace file is activated by replacing the zero with a number from 1 to 3. The ifh.trc file only consists of the telegrams that have been sent (INPUT) and received (OUTPUT). If IfhTrace is not needed, this should be set to zero to increase the performance of EDIABAS.

Simulation:

Simulation is used to check the SGBDs and INPA scripts without being directly connected to a ECU. This function is activated by changing the zero to 1.

Interface:

You can directly change the interface here. You only have to make the appropriate change to the line where the interface is entered.

Example:

Interface = STD:OBD OBD interface will be used.

Interface = ADS ADS interface will be used.

The prerequisite is to have the appropriate driver installed for the interface.

Excerpt of EDIABAS.INI file:

```
Ediabas.ini - Editor
Datei Bearbeiten Suchen ?
;EDIABAS 6.0.2
[Configuration]
EcuPath          = C:\EDIABAS\ECU
SimulationPath   = C:\EDIABAS\SIM
TracePath        = C:\EDIABAS\ECU
;CodeMapping     = C:\EDIABAS\BIN\ansi2oem.tab
;TraceSize       = 1024
ApiTrace         = 0
IfhTrace         = 0
SystemTraceSys  = 0
SystemTraceBip  = 0
SystemTraceIfh  = 0
BipDebugLevel   = 0
UbatHandling    = 0
IgnitionHandling = 0
TaskPriority     = 0
SystemResults   = 1
RetryComm       = 1
Simulation       = 0

Interface        = STD:OBD
```

3.19 How is the simulation file connected to the trace file?

For each ECU there may be one simulation file. In this file are the ECU's request and reply telegrams. This file has the same name as the ECU description file, but it has the ending *.SIM (e.g. DME31.SIM).

There is also a separate simulation file for each interface that has to be simulated. The file-name is made up by the name of the interface, again with the ending *.SIM (e.g. OMITEC.SIM). The EDIABAS.INI interface setting will be used as the interface name. The interface-specific return values are stored inside the interface simulation files.

The trace file records the telegrams that have been sent (INPUT) and received (OUTPUT). The recording of such traces can be enabled inside ToolSet in the menu bar under 'Configuration' as well as in the EDIABAS.INI configuration file.

A simulation file can be created automatically from the ifh.trc trace file by using trace2sim.exe. This tool is found in \\smuc0900\sg\Ediabas\Sim\trace2sim.exe.



3.20 Why have an SGBD Generator?

Before the introduction of the SGBD generator, the source code was made and edited with a text editor (up to 40,000 lines). For this purpose, it was necessary to learn the special, C-based programming language BEST/2 (description language for ECU). Manual programming is known to be very prone to errors (copy & paste), and it is very difficult to implement the guidelines specified in the diagnostics specification sheet part 5 as the SGBD becomes larger.

Now, the SGBD Generator is to be used to create an SGBD by means of menu-driven input of the data, in which the BMW guidelines are kept. This should result in less effort for the developer, but it definitely requires a certain amount of practice in working with the SGBD Generator. A major advantage is the automatic integration of standard 'include' files, whereby new standard 'includes' can be added without further ado (new sample XML).

3.21 What are the prerequisites for remote access via TCP/IP?

EDIABAS for WIN32 makes it possible to access the diagnostics interfaces and the attached ECUs that are connected to another computer. The prerequisite for this is a network connection between the local and the remote controlled computers via TCP/IP as well as a WIN32 operating system that is supported by EDIABAS.

Applications and EDIABAS run on the local computers and the interface handler (IFH) as well as the IFH-Server run on the computer to be remote controlled. Before accessing the remote controlled computer, the IFH server IFHSRV32.EXE must be started. The remote control is activated, or alternatively controlled using the EDIABAS configuration file EDIABAS.INI. The EDIABAS configuration must be performed manually on both computers.

The EDIABAS configurations '**TracePath**' and '**SimulationPath**' are not transferred from the local computer to the remote controlled one, rather the respective configurations of the EDIABAS.INI file on the remotely controlled computer is used.

The network protocol TCP (**NetworkProtocol** entry) as well as a freely selectable port number must be given to both computers. The port number must be identical on both of them and must not collide with other TCP applications (1000 < port number < 30000).

3.22 What is the VC Tool and when is it used?

VC Tool (version check) can be used to check the versions of the files that are created during the installation of EDIABAS. When it runs, the tool compares the files specified in the files BMW_bin.pid, BMW_hw.pid and BMW_rest.pid with regard to their creation data and creation time. That way, changes made incorrectly in the EDIABAS files can be detected and corrected.

After running, the VC Tool creates a text file called VC.log in which the comparison is given with the specific results. This file is stored in the directory where the VC Tool is found (C:\EDIABAS).



3.23 What is the KVP-editor?

KVP bedeutet **K**ontinuierlicher **V**erbesserungs **P**rozess. Der KVP-Editor kann bei der Verwendung des INPA-Tools aufgerufen werden. Hier hat der Anwender, hauptsächlich in der Nacharbeit und im Werk eingesetzt, die Möglichkeit mit Angabe seines Namen und Telefonnummer eine Fehlerbeschreibung und Verbesserungswunsch einzutragen und dieses Formular direkt an den zuständigen Bearbeiter bei BMW zu schicken.

KVP stands for continuous improvement process. The KVP Editor can be started when using the INPA Tool. This is mainly used during reworking and in the plant. The user has the possibility to enter his name and telephone number along with an error description and improvement request and then to send the form directly to the person responsible at BMW.

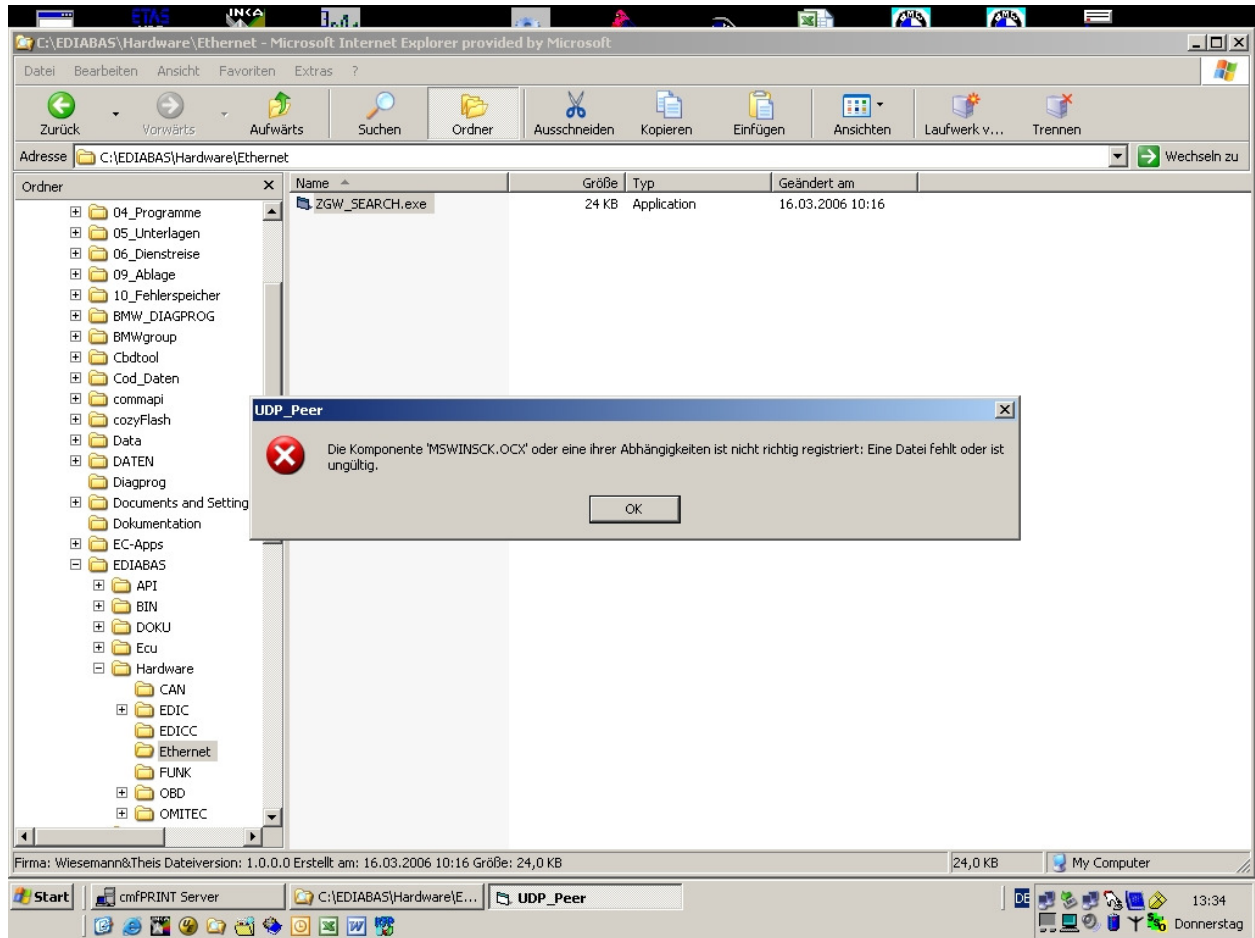
3.24 Use of EDIABAS via Ethernet (ENET)

Known errors in handling an causes for connection problems when using EDIABAS over Ethernet:

Cause 1: The ZGW used is too old

Solution1: Older versions of the ZGW controller do not provide the full functionality and therefore can cause problems during communication. If no communication can be established, a newer version of ZGW has to be used (information from end of 2007)

Cause 2: Requested dll file MSWINSCK.OCX does not exist.



Solution 2: The files MSWINSCK.OCX and ZGW_SEARCH.EXE must both be stored in the same directory C:\EDIABAS\Hardware\ENET