



# Frequently Asked Questions

## about EDIABAS, INPA and the Tool Set

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## 1 EDIABAS Error Messages

### 1.1 Driver Error

Message comes along with an ADS or OBD connector.

This error occurs if another program or device has taken the COM1 port of your PC.

If you want to work with EDIABAS or INPA, please make sure that the COM1 port is not taken.

### 1.2 DirectNt.sys can't be opened

This error only occurs with an NT computer 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\ or on the Intranet page <http://www5.muc/ti4-web/ti-430/german/themen/Diagnose.htm>.

### 1.3 IFH-0002: Interface isn't connected or doesn't respond

Reason: In the Ediabas.ini file, the interface is set to STD:FUNK. However, you have connected an ADS or OBD connector.

Solution: Modify the interface setting in Ediabas.ini.

### 1.4 IFH-0003: Data transmission HOST/Interface failed

Reason 1: In the Ediabas.ini file, the interface is set to STD:OBD. However, you have connected an ADS connector.

Solution 1: Modify the interface setting.

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

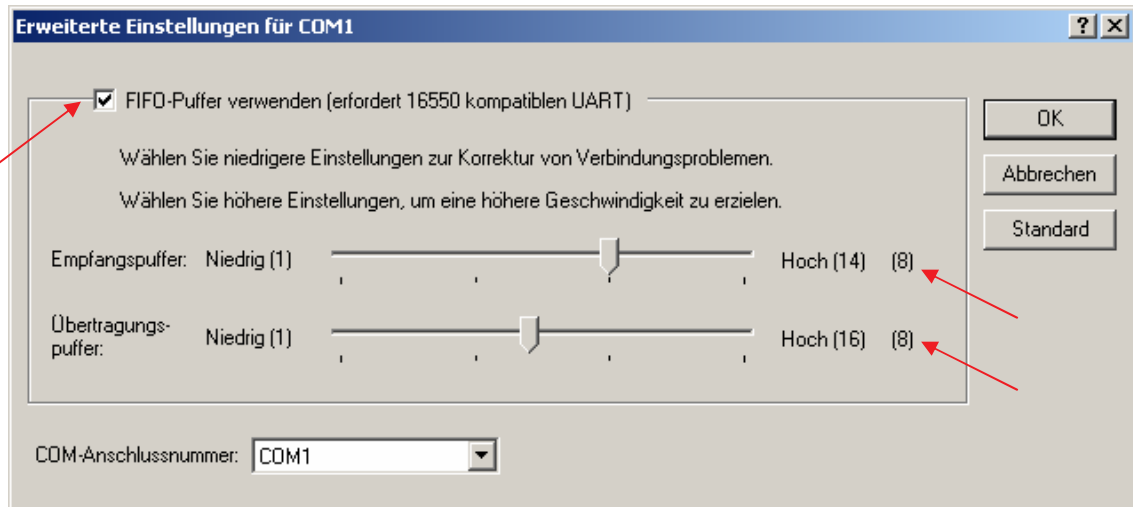
Solution 2: Get rid of the short circuit, for example.

Reason 3: Connector not connected or no power supplied.

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

Reason 4: The device manager has been used to disable the FIFO buffer for COM1.

Solution 4: In the device manager (Windows XP: Enter "Start" à "Control Panel" à "System" à "Hardware" à "Device Manager" à Ports (COM & LPT)), and then select COM1 from the ports. Then under the "Port Settings" tab, select "Advanced". There must be a check-mark by "Use FIFO buffers" and "8" must be selected for the receive buffer and transmit puffer.



### 1.5 IFH-0010: Data transmission to control unit disturbed

This problem can occur with XP computers with the OBD interface.

**Reason:** With Windows XP, it is not possible to automatically set the receive and transmit buffers using OBDSsetup.exe, like in Windows NT.

**Solution:** Set the receive and transmit buffers to 8 as shown in the following:  
Use Start à My Computer à Control Panel à System à Hardware à Device Manager à Ports (COM & LPT) and then click with the right mouse button to call up the properties of the COM port that is being used. Under the Port Settings tab, set the Data bits of the receive and transmit buffers to 8.

### 1.6 IFH-0013: Command not implemented

**Reason:** The error was caused by another programme that accessed the COM1 interface. Usually, the "HotSync" programme is installed on the computer for the organiser.

**Solution:** Check the programmes that are started automatically when Windows is started.

### 1.7 Error: EBAS32.EXE not found or illegal version!



This error occurs if the path variable is set with the path C:\EDIABAS\BIN in the system and user variables (Start à My Computer à Control Panel à System à Advanced and then in the "Environment" tab).



## 1.8 EDIABAS error: Error (95) SYS-0005: OBJECT FILE NOT FOUND

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

Solution 1: Copy the SGBD into the Ecu directory.

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

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

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

Solution 3: Set the system variable (see 2.1)

Reason 4: Incorrect path definition in EDIABAS.INI

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

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

## 1.9 Createfile\_error: OPEN CONNECTION; IFH 0018- INITIALIZATION ERROR

ADS Interface:

The following error appears when Ediabas is started: **Createfile\_error: OPEN CONNECTION**

OBD Interface:

The following error appears when Ediabas is started: **Error 28: IFH 0018- INITIALIZATION ERROR**. (Also see Section 3.3)

Reason: Ediabas is attempting to access port COM1. However, the port doesn't exist, or it has been taken by another programme (e.g. HotSync from Palm, infrared).

Solution: Install a COM1 interface or free it.

## 1.10 Battery and Ignition not recognised

Reason: With a Dell Latitude D600 laptop, 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.

Entry in OBD.ini:

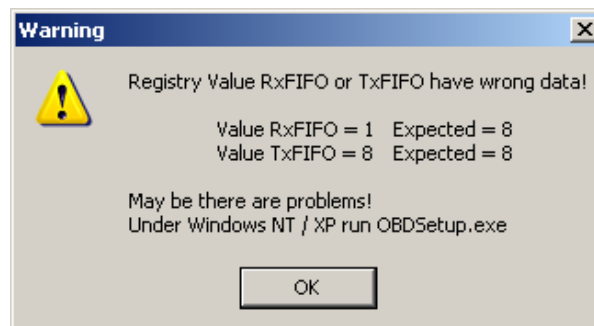
[OBD]

UBATT=OFF

## 1.11 Warning when starting OBD Setup

```
C:\EDIABAS\Hardware\OBD\OBDSSetup.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 ...
-
```

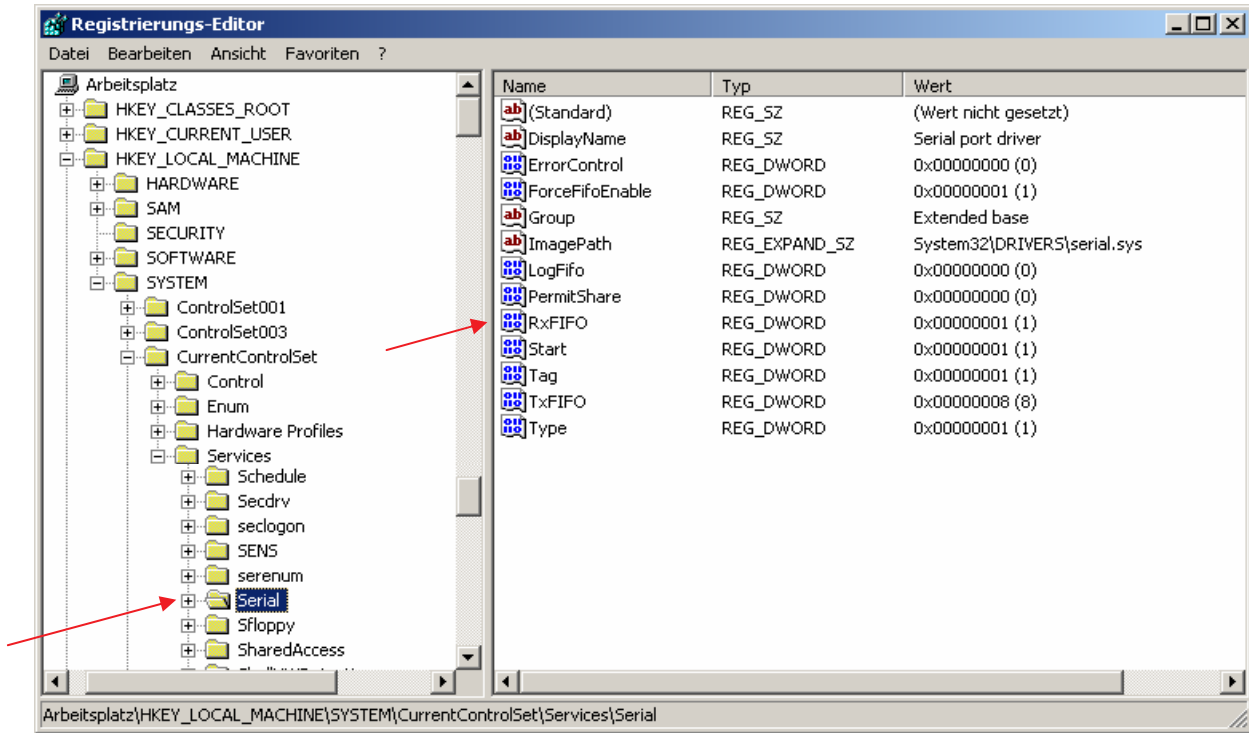
A warning occurs when starting C:\EDIABAS\HARDWARE\OBD\OBDSSetup.exe. After You want to start Tool Set or INPA You will get the following error message:



**Reason:** The value of the variable DWORD (here RxFIFO) can not be set by OBDSSetup.exe.

**Solution:** You have to set the value of the DWORT in the registry. You have to open the Regedit by using Start à Ausführen... à enter regedit à OK. Choose the following path in the regedit: HKEY\_LOCAL\_MACHINE à System à CurrentControlSet à click on Services. On the right side of the window You can cclick on the name of the DWORd value which is defective (here RxFIFO). Enter the value 8 with the base hexadecimal. Click Ok an close the regedit. Now You can start the Tool Set or INPA without an error.

If You have warnings for other DWORDs when startig OBDSSetup.exe, You will have to set the value of the coloum „Expected“ for the wrong value in the registry.



### 1.12 ERROR C1015: Too Many String Variables in Job

Reason: In a job only a maximum of 6 string-variables is acceptable.

Solution: You have to reduce the number of variables.

### 1.13 Failure: EDIABAS Fehler 159, NET-0009: TIMEOUT





Reason 1: The configuration for the remotehost is false.

Solution 1: Set the corresponding networkname for the remotehost in the configuration file EDIABAS.INI.

Reason 2: The inface-cable on the OPSS is not correct.

Solution 2: You need a special OPSS-Cable for the connection with the CAN-BUS. (since type series L6)

Reason 3: In the remotecontrol the OPSS-interface is used by default (since EDIABAS 7.0). The remotecontrol between two PC's is not possible with this configuration.

Solution 3: Close all diagnosticapplications and EDIABAS-Processes that are running and open the file "remote\_mit\_pc.bat" in the directory C:\EDIABAS\bin.

### 1.14 Failure: The name of the file or folder can't be changed



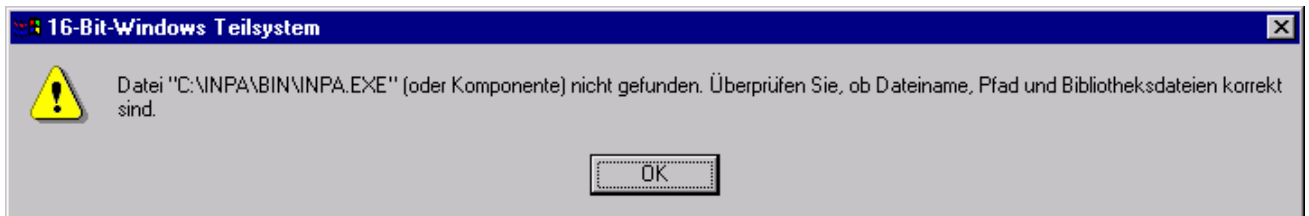
Reason: EDIABAS or another component of EDIABAS is still open.

Solution: You have to shut down the diagnosticapplication and EDIABAS. If necessary, the fileexplorer and the editors which access the EDIABAS-Directory have to close as well.

## 2 Error Message INPA

### 2.1 APLDLL or API32.DLL can't be found.

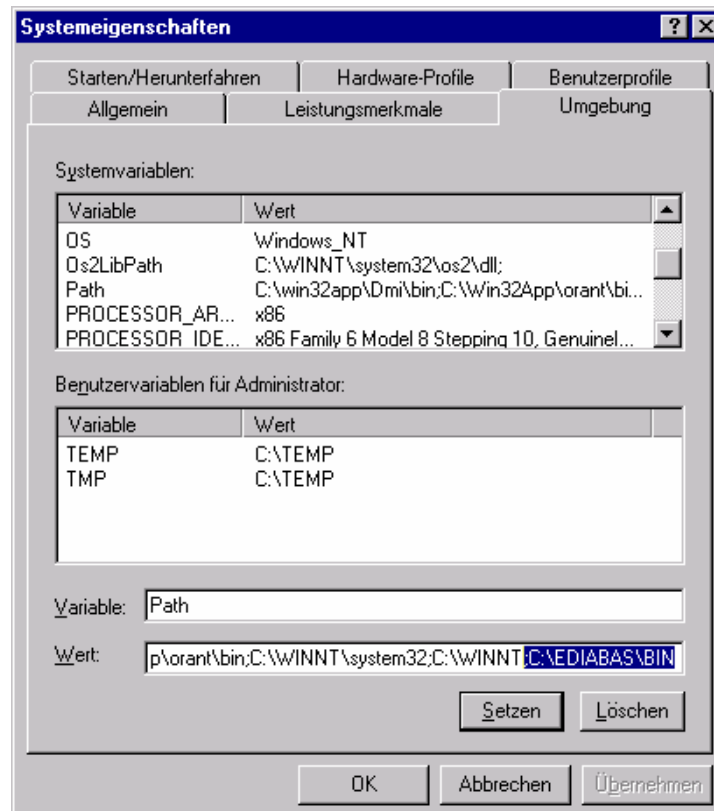
When calling INPA under Windows NT, the following error messages appear:



Reason 1: The path C:\EDIABAS\BIN has not been set in the 'Path' system variable.

Solution with Windows NT:

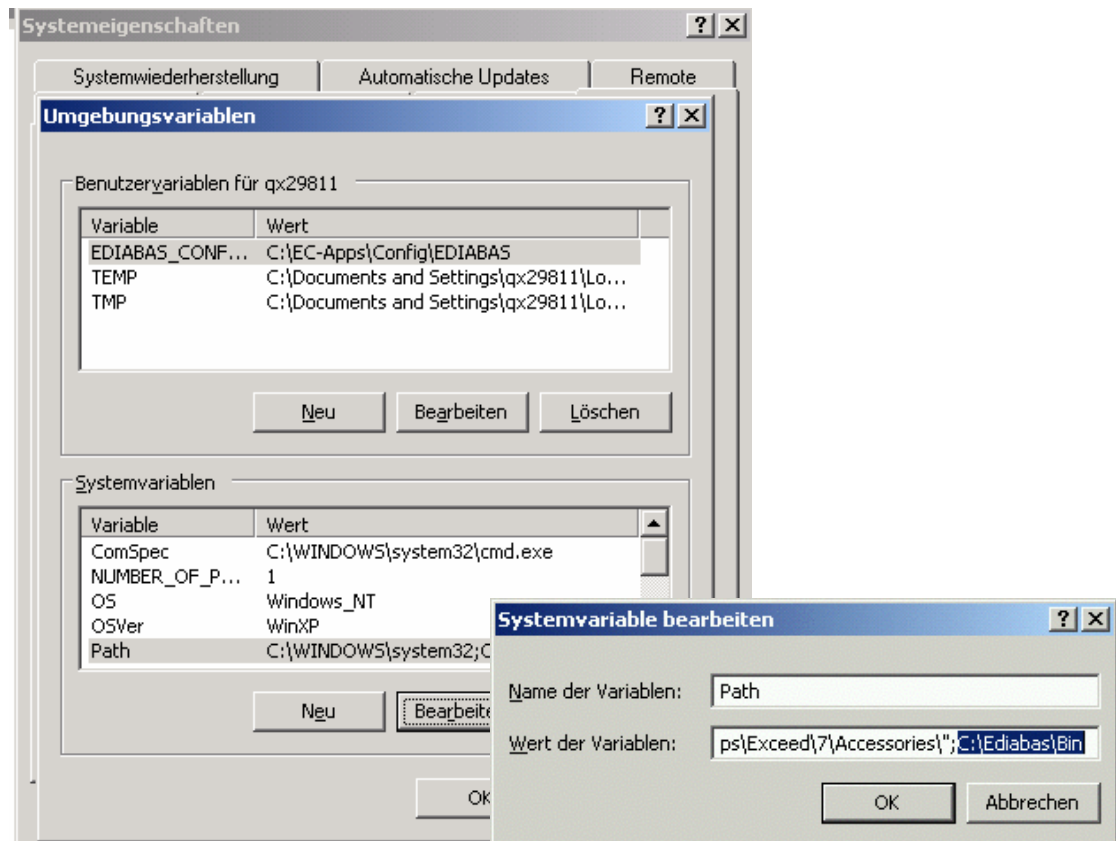
Set the system variable: Please log into your system as the administrator with administrator rights. Use Start à My Computer à Control Panel to call the "System" menu. In the "Environment" tab, double click the system variable 'Path'.



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

Solution with Windows XP:

Set the system variable: Please log into your system as the administrator with administrator rights. Use Start à Control Panel to call the "System" menu. Under "Advanced" and the "Environment" tab, double click the system variable 'Path'.



Go to the end of the variables field value. There, enter a semicolon and then enter the path C:\EDIABAS\BIN.

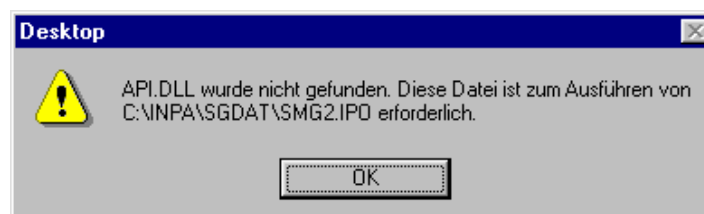
Click "OK".

Completely restart your computer!!! (Don't login under a new name or the like.) It should no longer be a problem to call INPA.

Reason 2: Ediabas is not installed, only INPA is.

Solution 2: Install Ediabas.

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



Reason: The path C:\EDIABAS\BIN has not been set in the 'Path' system variable.

Solution: Set the system variable:

Open the file Autoexec.bat in the directory C:\ by clicking it with the right mouse key with the shift key pressed, and then select "Open with". The best thing is to use the Notepad to display the file.

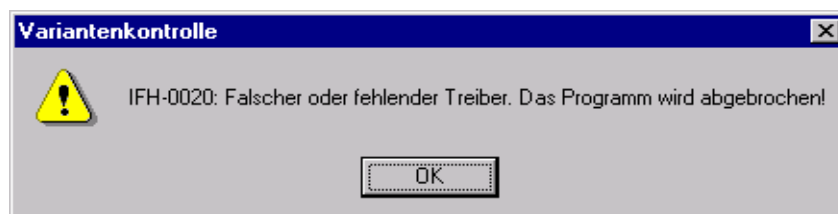
```
Autoexec.bat - Editor
Datei Bearbeiten Suchen ?
mode con codepage prepare=((850) C:\WINDOWS\COMMAND\ega.cpi)
mode con codepage select=850
keyb gr,,C:\WINDOWS\COMMAND\keyboard.sys
path = c:\ediabas\bin;c:\util;c:\java\jre\bin;c:\java\psepro\bin;c:\ja
doskey
```

Now, at "path", enter the path c:\ediabas\bin.

Save the change and close the file.

Completely restart your computer!!! (Don't login under a new name or the like.)

## 2.2 Error Message 0020: Incorrect or Missing Driver. The programme will be aborted!



Conditions:

You have access to [\\smuc0900.sg](http://smuc0900.sg). You are linked to this drive and would like to start an INPA script.

Reason 1: Missing Ediabas.ini file in C:\Winnt.

Reason 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.

## 2.3 SYS-00002: ECU variation description file not found.

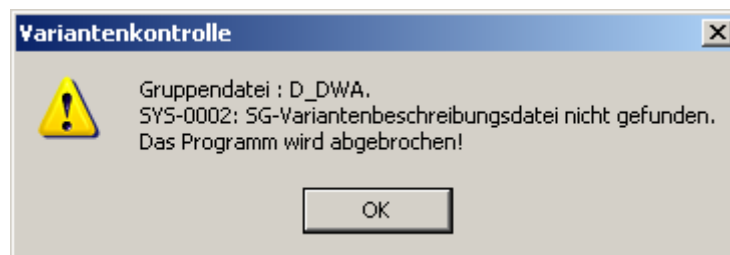
The error occurs when starting an INPA script.

Reason 1: The \*.prg SGBD is not located in the path C:\Ediabas\Ecu.

Solution 1: Copy the \*.prg SGBD into the ECU directory.

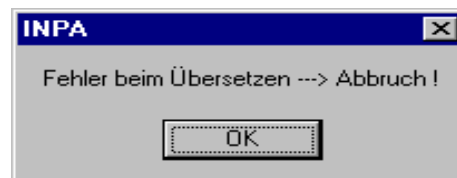
Reason 2: The external table T\_GRTB.prg doesn't exist in the directory C:\EDIABAS\ECU or it is obsolete.

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



## 2.4 INPA Error: Error at Compiling à Abort!

The following error message appears when starting an INPA script.



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

Solution 1: Only start INPA scripts that end with IPO with **INPALOAD.EXE**.

Reason 2: The selected INPA script doesn't exist in the C:\INPA\SGDAT\ directory.

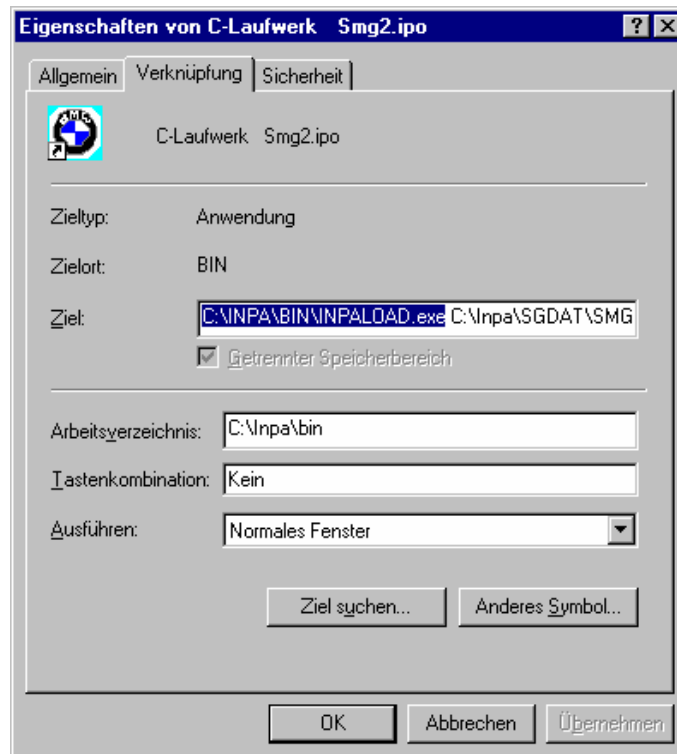
Solution 2: Update the INPA scripts using the ECCO Web Client.

Reason 3: INPA Version 5.0.1: The INPA script \*.IPO can't be started with a double-click in the directory C:\INPA\SGDAT\\*.IPO.

Solution 3: Update to Version 5.0.2.

Reason 4: INPA Version 5.0.1: The desktop link of an INPA script doesn't work.

Solution 4: The target path must be expanded to include the INPALOAD path. To do this, 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.



Grund 5: The file startger.ipo of the german installation and the file status.ipo of the english installation don't exist in the directory \INPA\CFGDAT\.

Lösung 5: Install INPA once again.

## 2.5 IFH-0018: Inizialisation Error – INPA doesn't work but Toolset yet

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.

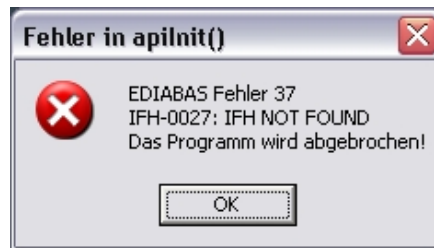
Solution 1: Copy the file OBD.ini in the directory C:\Windows or create a new one. (Creation of OBD.ini q.v. 3.3).

Grund 2: q.v. 3.3

Lösung 2: q.v. 3.3

## 2.6 IFH-0027: IFH not found à The Programm was aborted!

The error occurs when starting INPA.



Reason 1: The setting for the interface in the configuration file Ediabas.ini doesn't exist.

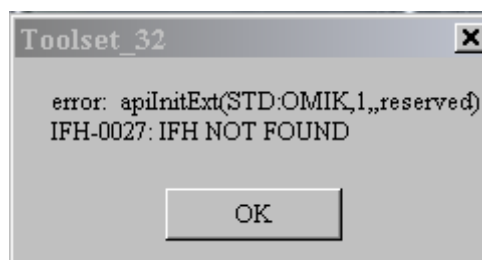
Solution 1: Please do the settings for the interface e.g.:  
Interface = STD:OBD

Reason 2: The setting for the interface in the configuration file Ediabas.ini is Interface=STD:OMITEC, but the OMITEC driver isn't installed correctly.

Solution 2: Install the OMITEC driver with the instructions  
InstructionforOMITECInstallation.pdf via the GIS server.

Reason 3: The setting for the interface in the configuration file Ediabas.ini is Interface=OMITEC, but the correct setting is Interface=STD:OMITEC.

Solution 3: Please do the settings for the interface Interface=STD:OMITEC.



Reason 4: The old OMITEC driver wasn't uninstalled correctly.

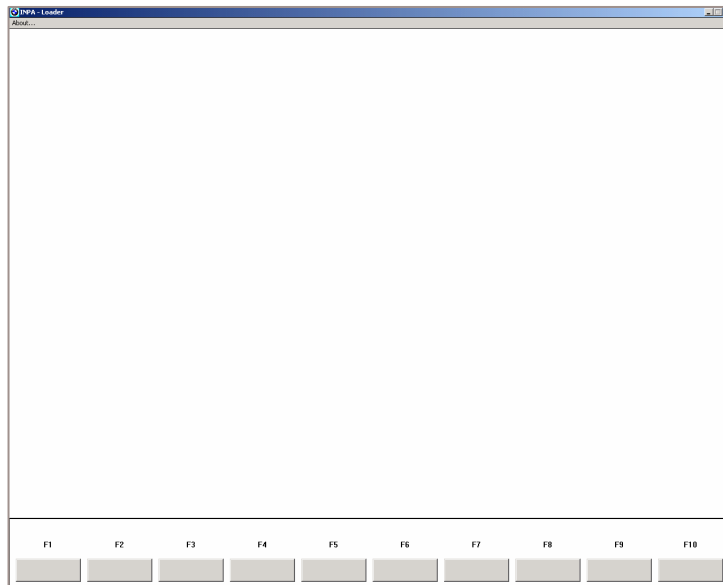
Solution 4: Please uninstall the old OMITEC driver with the instructions  
InstructionforOMITECInstallation.pdf via the GIS server.

## 2.7 INPA Error: Opening Inpa – Transmission error returned a\_0x2

Reason: During the installation of Ediabas/Inpa, the configuration "Without configuration" was selected.

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

## 2.8 INPA Error: Only a white screen appears when you run INPALOAD.EXE.



Reason 1: The api.dll or api32.dll file has been manually copied into the WINDOWS directory with Windows XP and into the WINNT directory with Windows NT.

Solution 1: Delete the file api.dll or alternatively api32.dll from the WINDOWS or alternatively the WINNT directory. The file may only exist in the directory \EDIBAS\BIN\.

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

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

## 2.9 INPA Error: DTM is no longer supported



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

Solution: Since it can't be excluded that even more files from the old version have been mixed with the new ones, the old ones must be deleted, or alternatively reinstalled (see Chapter 5). Reinstall INPA using the Global Information Service (GIS) <https://gis.bmw.com>.

## 2.10 INPA Error: Bridge16.exe can't be initialised





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

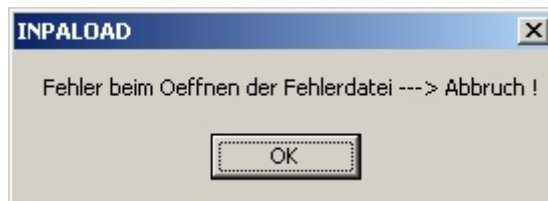
Solution 1a): Update the INPA scripts using the ECCO Web Client.

Solution 1b): Convert the INPA script to the standard 'includes' for the 32-bit version. To do this, contact the respective person responsible for INPA at TI-43x (see \\smuc0900\sgref\Referenz\Referenz.inp)

Reason 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 must convert the DLL to 32-bit.

## 2.11 Error when opening the error file à abort:



Reason: This error occurs with Windows XP because the user doesn't have the correct rights to change files in the directory C:\INPA\Bin.

Solution: The user needs "Power user" rights or the user needs the appropriate write rights to the "INPA" directory.

## 2.12 Compiler: File: \INPA\DEUTSCH\\*\*\*.OUT not found!

Reason: The path C:\EDIABAS\BIN has not been set in the 'Path' system variable.

Solution: Set the path C:\EDIABAS\BIN in the 'Path' system variable. (q.v. chapter 2.1).

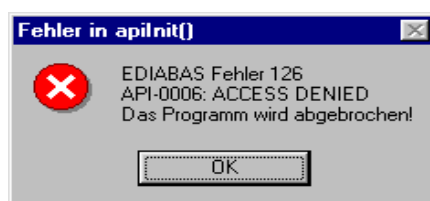
### 3 Tool Set Error Messages

#### 3.1 EDIABAS error 100: SYS-0010: INITIALIZATION ERROR

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

Solution: Connect the controller.

#### 3.2 EDIABAS Error 126 (only up to Ediabas V6.4.x)



Reason: This error message appears if you start the Tool Set while an INPA script is running. This is also true the other way round. The reason for this is that only one programme can access EDIABAS at a time.

Solution: Therefore, before you start the ToolSet, you must exit INPA!!!

#### 3.3 IFH-0006: Command not accepted and IFH-0018: Initialization Error and IFH-0038: Interface Command not implemented

Errors IFH-0006 and IFH-0018 occur if any SGBD is loaded in the Tool Set. Error IFH-0038 is generated when loading the utility file into the Tool Set.

Reason 1: The error was caused by another programme that accessed the COM1 interface. This programme could be "HotSync" for Palm or "ActiveSync" for Ipack.

Solution 1: Check the programmes that are started automatically when Windows is started (see Chapter 4.1).

Reason 2: The COM1 interface is taken by a serial printer.

Solution 2: Uninstall the printer.

Reason 3: The infrared interface is active.

Solution 3: Deactivate the infrared interface.

Reason 4: There is no COM1 interface (COM3 instead, for example)

Solution 4a): Install the COM1 interface.

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



[OBD]  
Port = Com3

The file OBD.ini must be saved in 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.

Reason 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: In the device manager (Windows XP: Select "Start" à "Control Panel" à "System" à "Hardware" and then select COM3 from the ports under the menu item "Device Manager". Then use the right mouse button à "Properties" à "Port Settings" à "Advanced" to reach the "Advanced Settings for COM3". Set COM1 in the COM Port Number. The message that COM1 is already taken can be ignored in this case.

Reason 6: The old OMITEC driver wasn't uninstalled correctly.

Solution 6: Please uninstall the old OMITEC driver with the instructions **InstructionforOMITECInstallation.pdf** via the GIS server.

### 3.4 IFH-0006: Command not accepted

This error occurs if a SGBD is loaded in the Tool Set when the OBD connector is being used.

Reason 1: ODB has actually been set as the interface in Ediabas.ini, but the Tool Set uses the multi-instance with another interface, e.g. K-Line. The setting for the multi-instance and the interfaces used here is made in the file Tool32.ini in the directory C:\Windows (for Windows XP) or alternatively C:\Winnt (for Windows NT). Then, the entries in Tool32.ini, or alternatively the interface apply and not the ones in Ediabas.ini. The use of multi-instance in the Tool Set is identified in the title bar, for example with "Tool32:1", for single multi-instance.

Solution 2: Enter the interface that is being used in Tool32.ini or disable multi-instance with the entry "No".

Reason 2: A SGBD is loaded in the Tool Set when the diagnosis protocol UDS is being used. For UDS-SGBDs You have to use the interface OMITEC but in the EDIABAS.ini the setting for the interface ist „STD:OBD“.

Solution 2: Change the setting for the interface to „interface = STD:OMITEC“ in the EDIABAS.ini file. The OMITEC connector has to be stressed by the voltage (blue blinking). If the connector can't be stressed by the voltage and You want to load the SGBD yet, You will use the simulation mode. You can activate the simulation mode e.g. with the menue „configuration -> EDIABAS“. Notice, if you want to use the simulation mode, a simulation file for the interface will have to exist in the simulation path.

### 3.5 IFH-0009: ECU isn't connected or doesn't respond

Reason 1: In the Ediabas.ini file, the interface is set to STD:ADS. However, you have connected an OBD connector.

Solution 1: Modify the interface setting.

Reason 2: The ignition is switched off.

Solution 2: Switch the ignition on.

Reason 3: The device manager has been used to disable the FIFO buffer for COM1.

Solution 3: In the device manager (Windows XP: Enter "Start" à "Control Panel" à "System" à "Hardware" à "Device Manager" à Ports (COM & LPT)), and select COM1 from the ports and under the "Port Settings" tab, select "Advanced". There must be a check-mark by "Use FIFO buffers" and the highest possible setting must be selected for the receive buffer.

### 3.6 SYS-0002: ECU OBJECT FILE NOT FOUND

Reason 1: If the external table T\_GRTB.prg doesn't exist in the directory C:\EDIABAS\ECU\ the error message will be displayed when You execute the job IDENT\_FUNKTIONAL of a functional SGBD.

Solution 1: You have to download the external table using the ECCO Web Export and copy it in the directory C:\EDIABAS\ECU\.

Reason 2: The SGBD, which You want to start doesn't exist in the directory C:\EDIABAS\ECU or is an old one.

Solution 2: You have to download the SGBD using the ECCO Web Client and copy it in the directory C:\EDIABAS\ECU\.

### 3.7 SYS-0005: Controller description file not found. The programme will be aborted!



Reason 1: The SGBD is not located in the path C:\Ediabas\Ecu.

Solution 1: Copy the SGBD into the Ecu directory.

Reason 2: This error occurs if the EcuPath in Ediabas.ini (C:\Ediabas\Bin) isn't set to C:\EDIABAS\ECU.

Solution 2: Set the correct path.

### 3.8 ToolSet Error: Runtime error '372'

The following error message appears.



Reason: The old version msflxgrd.ocx exists under c:\winnt\system32.

Solution: msflxgrd.ocx under c:\Ediabas\bin must be registered. To do this, select "Start" à "Run..." and execute regsvr32 :ediabas\bin\msflxgrd.ocx in the window and confirm with "OK".

The following must be entered for Windows XP: "regsvr32 c:\ediabas\bin\msflxgrd.ocx"

### 3.9 Tool Set Error: Run-time error '5' – Invalid Procedure Call

Reason: The Tool Set was started twice in a very short period of time.

Solution: Close all Tool Set processes that are running and start the Tool Set again with only one double-click.

### 3.10 Tool Set Problem: If an SGBD is opened, then only the hourglass appears and the SGBD is not loaded.

Reason: An old version Richtx32.ocx exists under c:\winnt\system32.

Solution: Richtx32.ocx under c:\Ediabas\bin must be registered. To do this, select "Start" à "Run..." and execute "regsvr32 :ediabas\bin\richtx32.ocx" in the window and confirm with „OK“.

The following must be entered for Windows XP: „regsvr32 c:\ediabas\bin\richtx32.ocx“

### 3.11 EDIABAS error 20: IFH-0010: Data transmission to control unit disturbed

Reason 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" in the "...\\Ediabas\\Bin" directory. There, the parameters set for high-speed must be commented out and the parameters for low-speed must be enabled:

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



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

**Reason 2:** A SGBD is loaded in the Tool Set when the diagnosis protocol UDS is being used. You use the interface OMITEC but the connector isn't stressed by the voltage (no blue blinking).

**Solution 2:** Connect the OMITEC with the vehicle. The OMITEC connector has to be stressed by the voltage (blue blinking). If the connector can't be stressed by the voltage and you want to load the SGBD yet, you will use the simulation mode. You can activate the simulation mode e.g. with the menu „configuration -> EDIABAS“. Notice, if you want to use the simulation mode, a simulation file for the interface will have to exist in the simulation path.

### 3.12 EDIABAS Error 134: API-0014: Result not found

The error occurs if a SGBD is loaded in the Tool Set when the diagnosis protocol UDS is being used and the Job FS\_LESEN is being executed.

**Reason:** 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” in the menu “configuration -> Toolset”.

### 3.13 It takes too long to load an SGBD in the Tool Set

Loading motor or transmission SGBDs takes an above average amount of time.

**Reason:** Large SGBDs often contain many and extensive tables and their information has to be loaded.

**Solution:** Under the Configuration menu item in the Tool Set and then Tool Set, the checkmark by the selection of table information must be removed.

### 3.14 Black Windows in the Tool Set

After loading a SGBD one or more windows of the Tool Set are black windows.

**Reason:** The registration of the richtextbox is invalid.

**Solution:** You have to register the richtextbox. Execute the batch file REGSVR32.BAT in the directory C:\Ediabas\bin\.

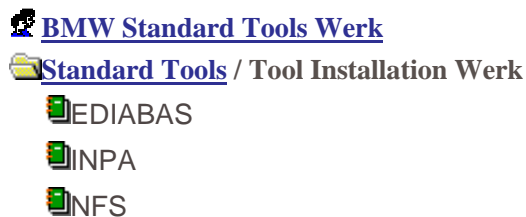


## 4 General Questions

### 4.1 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 acces rights for the GIS forum „BMW Standard Tool Werk“ send an mail to Referenz@bmw.de stating the name the Q/QX number an the reason. We can give access rights for this forum only for colleagues from the T departements. Colleagues from other departments and supplieres 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>.

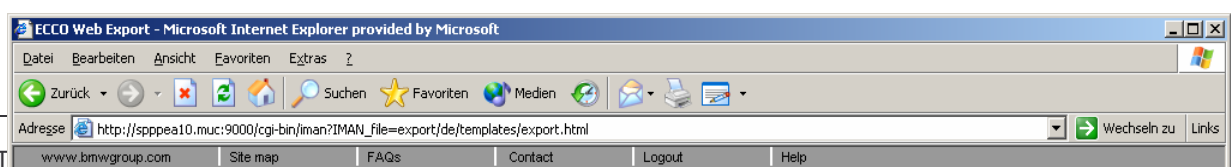
Please pay attention to the intallation instructions which You can get in the same directories of the installation data. After the intallation You have to download the SGBDs, INPA scripts, Group SGBDs, INPA configuration files and external tables using the ECCO Web Client. Which data You have to download is described in the following chapter 4.2.

### 4.2 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 webbased using the ECCO Web Client.

You can apply for acces rigths for 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 Clients with the following link: <http://www6.muc/ppea>. After login You have to select the link xBD Export in the navigation bar and You can see the search screen. You have the possibility to search for a single file or search for all files assigned to a certain type serie or search for a several release periods.





If You have installed EDIABAS You will need following files:

- SGBD\_Revisionen
- GRP\_SGBD\_Revisionen
- ExterneTabelle\_Revisionen

If You have installed INPA You will need following files:

- SGBD\_Revisionen
- GRP\_SGBD\_Revisionen
- ExterneTabelle\_Revisionen
- Inpa\_Script\_Revisionen

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

If You have installed EDIABAS You will select the following data types:

- SGBDprg\_english or SGBDprg\_deutsch
- SGBDgrp
- EXTABprg\_english or EXTABprg\_deutsch

If You have installed INPA You will 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 the download of the necessary files You have to copy the files in the right directories:

EDIABAS data:

- 1 ...\\EDIABAS\\ECU\
  - SGBDen: SGBDprg\_deutsch à alle \*.prg-Dateien
  - externe Tabellen: EXTABprg\_deutsch à T\_GRTB.prg, T\_PCOD.prg
  - Gruppen-SGBDen: SGBDgrp\_deutsch à alle \*.grp-Dateien

INPA data:

- 1 ...\\INPA\\SGDAT\
    - INPA scripts: INPAipo\_english à all \*.ipo files
  - 1 ...\\INPA\\CFGDAT\
    - INPA-Konfig-Files: INPA\_Konfig\_xBD\_Download\_eng.zip  
à all \*.ger files or \*.eng files  
Inpa.ini file
- ger = german INPA config, eng = english INPA config

If You have problems with the xBD Export using ECCO Web Client please call the user service center: Tel. 089-382-55555 or send a mail to ECCO hotline: ecco.hotline@bmw.de.

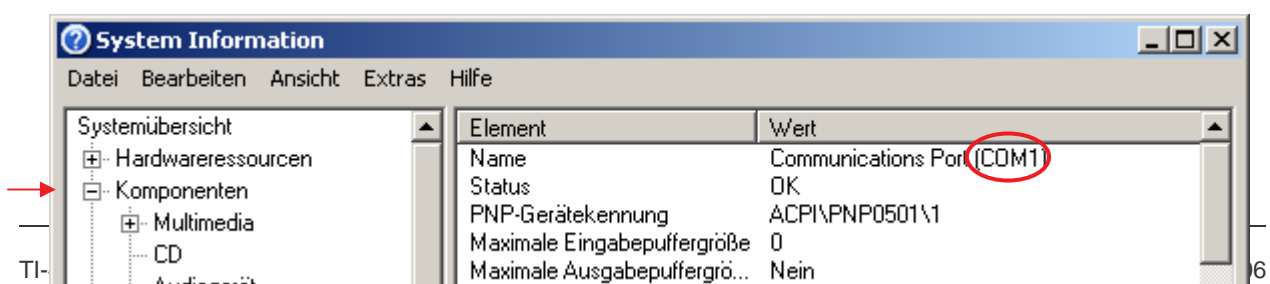
### 4.3 How can I find out if the serial interface COM1 has been taken?

There is a way to find out if the serial interface, for example COM1, has been taken, but it is not possible to find out what programme has taken the interface.

As described in the respective sections of Chapter 3, the programmes that most often 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 don't 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 utilisation of COM1 is to look in the system information. The system information can be run with the DOS command winmsd in an input prompt (Start à Run... à enter winmsd à OK). Here, it is important that you only run winmsd if the Ediabas server is closed. Under the path System Summary à Components à Ports à Serial, the information about the active serial ports COM1, COM2, and so on will be shown if they exist. The current value can be seen in the element "Busy". If this value is "No", then the interface is free, and if it is "Yes", then the interface has been taken by a programme. You can't find out what programme it is here.





```
Ediabas.ini - Editor
Datei Bearbeiten Suchen ?
;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       = ADS

; Einstellung des Hardwareinterfaces
; Bitte beachten: Der HW-Treiber fuer das Interface muss installiert sein!

; Interface      = STD:OBD
; Beschreibung   : Serieller Pegelwandler (Nachfolger von ADS / Anschluss an OBD-Dose
; Installation   : \EDIABAS\HARDWARE\OBD\ODBSETUP (nur fuer WinNT4 noetig)
; INI-Datei      : OBD.ini nur benutzt wenn im Windows-Verzeichnis
; Unterstuetzung: WIN3.xx      : Nein
;                WIN95,98 16-Bit : Ja
;                WIN95,98 32-Bit : Ja
;                WIN NT 4.0   : Ja
```

#### 4.4 How do I start INPA?

Start Inpa using Inpload.exe in C:\Inpa\Bin or alternatively C:\EC-Apps\Inpa\Bin or use Start à All Programs à EDIABAS INPA ELDI NCS NFS à INPA(\_IPO) to start the general reworking programme. This corresponds to calling Inpload.exe under smuc0900\sg\Inpa\Bin or alternatively C:\Inpa\Bin.

#### 4.5 How can I switch between OBD and ADS interfaces?

Prerequisite:

The appropriate driver must be installed for the interface that you want to use. In the installation guide for INPA (<http://smuc0900/TI-430> or <http://smuc0900/TI-430> under Subjects à EDIABAS /INPA à EDIABAS or INPA), you can look up how a driver is installed.

Now, you can change the interface directly in the file **Ediabas.ini** (C:\EDIABAS\BIN). You only have to make the appropriate change to the line where the interface is entered.

Interface = STD:OBD, i.e the OBD interface will be used.

Interface = ADS, i.e the ADS interface will be used.

For the case that OBD is being used via USB, an additional entry is necessary in OBD.ini. See C:\EDIABAS\BIN\INI.PDF for this.

#### **4.6 In which directory structure is OBD.ini saved?**

If the OBD.ini file exists, then in order to not run the interface via COM1 by default (compare to 1 i), then the OBD.ini file must be saved in 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.

#### **4.7 How can I find out what interface I installed with INPA?**

To do this, you have 2 possibilities:

1. Call Start à All Programs à EDIABAS INPA ELDI NCS NFS à EDIABAS Tool32. In the configuration menu, select Ediabas. There, you will find the desired information in the interface line.
2. However, you can also check in the **Ediabas.ini** (C:\EDIABAS\BIN) to see what interface you have installed. For the OBD interface, you will find the line 'Interface = STD:OBD' and for the ADS Interface the line 'Interface = ADS'.

#### **4.8 How do I find out what EDIABAS package is installed?**

The version of the currently installed Ediabas package can be seen in the files C:\EDIABAS\version.txt or C:\EDIABAS\package.pdf.

#### **4.9 How can I uninstall EDIABAS or INPA?**

You uninstall INPA by deleting the Ediabas and Inpa folders under C:\.

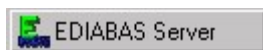
Reason: No registry entries are made during the installation.

#### **4.10 How can tell if the EDIABAS server is running as a 16-bit or a 32-bit application?**

Under Windows 95 and 98, the EDIABAS server runs as a 16-bit version. The can be recognised by the yellow **E** in the task bar.



Under Windows NT4 and XP, the EDIABAS server runs as a 32-bit version. This can be recognised by the green **E** in the task bar.



Note:

As of 2003, there is the EDIABAS Version 6.4. This can also run as a 32-bit application under Windows 95/98 and XP.

#### **4.11 What is the difference between \EDIABAS\bin\ToolSet.exe and \EDIABA\bin\Tool32.exe?**

Tool32.exe is current and when it is started, the Ediabas server will start as a 32-bit application. ToolSet.exe is an old version and is required under Windows 3.11.

#### **4.12 What is an SGBD and what is its connection to EDIABAS?**

The controller description files (SGBD) contain the controller-specific know-how. Each SGBD contains the order telegram of the respective controller and decodes its reply telegrams. In the process, the raw data (bytes) is 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 variation-specific SGBD.

The SGBDs are loaded and interpreted by the EDIABAS runtime system by an application programme when the order is issued. The file name of the SGBD (without extension) is the name with which the application programme addresses a controller variation or controller group.

#### **4.13 Where are the individual SGBD names and their meanings given in plain English?**

Click the "Show" Version List SGBD button on the "Dienste Tool" interface. There will be a list of all SGBDs by name with the current version number, the person responsible at BMW, and the name of the associated controller. It is only possible to access the version list when the network is in operation or it can be viewed at \\smuc0900\Referenz\Referenz.sgbd.

#### **4.14 What is a Job?**

Jobs are services that EDIABAS provides. They aren't hard coded in EDIABAS, but are a main component of each SGBD.

Each job has a fixed name and any 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).



#### 4.15 What do SGBDs with the name `_xxx` mean?

SGBDs that begin with “\_” (e.g. `_LWS5`), contain jobs that are only intended for development (e.g.: writing the ident data). These SGBDs are not used in production or in customer service.

#### 4.16 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 as of E65 using the variation index in addition.

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.

Updating the group files as of the E65 has changed since February 2004. The table with the information about which controller must load which SGBD, depending on the diagnostics and variation index, was moved from the group file to an external table. At runtime, the swapped-out table `C:\ECU\T_GRTB.prg` is used. Therefore, it is now only necessary to update this table and not `D_?????.prg`.

##### Additional Information for SGBD Developers:

In the file `STD_GRTB.b2s`, the diagnostics 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\`.

#### 4.17 Diagnostics Index

- a) Who creates it? Reinhold Drexel, TI-430
- b) What is it used for? Identification of the controller
- c) When does it change? When a new SGBD is due

#### 4.18 Variation Index

- a) Who creates it? Data handling team
- b) What is it used for? Identification of the ECU
- c) When does it change? 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).

#### 4.19 What is the meaning of the file `EDIABAS.ini`?

`Ediabas.ini` is the configuration file. Normally, no changes must be made here after the installation. One reason for a change to `Ediabas.ini` is, for example, if you want to work with a simulation file, i.e. there doesn't have to be a ECU.

The `Ediabas.ini` can be found in the `\Ediabas\Bin` directory.

##### **EcuPath:**

The group files (`d_*.grp`) and SGBDs (`*.prg`) are found in the path given for `EcuPath`. In the developer versions, it also contains `*.b2v`, `*.b2s` and `*.txt` files.

##### **SimulationPath:**



The path given in the SimulationPath is 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, then 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, i.e the OBD interface will be used.

Interface = ADS, i.e the ADS interface will be used.

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

Excerpt form the 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
```

#### 4.20 How is the simulation file connected to the trace file?

There is one simulation file for each ECU. In this file are the ECU's request and reply telegrams. This file has the same name as the ECU description file, however it has the ending "\*.SIM" (e.g. DME31.SIM).

There is also a separate simulation file for each interface that is to be simulated. The filename is made up of the name of the interface with the ending "\*.SIM" (e.g. EDIC.SIM). The setting of the EDIABAS configuration element called **Interface** will be used as the interface name. The interface-specific return values are in 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 in the Tool Set in the menu bar under "Configuration" as well as in the Ediabas.ini configuration file.

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

#### 4.21 Why have an XBD Generator?

Before the introduction of the SGBD generator, the source code was 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).

#### 4.22 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 PC. The prerequisite for this is a network connection of locally and remotely controlled PCs via TCP/IP as well as a WIN32 operating system that is supported by EDIABAS.

Applications and EDIABAS run on the local PC and the interface handler (IFH) as well as the IFH-Server run on the PC to be remotely controlled. Before accessing the remotely controlled PC, 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 PCs.

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

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



#### 4.23 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).

#### 4.24 What is the KVP Editor?

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