

READ THIS FIRST

Before doing anything else, it will be necessary to install INPA/EDIABAS on your computer. I am running INPA version 3.01, which uses EDIABAS v6.4.3. This is the same version as is contained in the NCS folder on the 4shared site (which can be downloaded using the password "INPA"). Although I have included a copy of INPA v5.02 in the Easy GT folder, I chose the earlier version, as I know that it is complete with functioning NCS. I have not tried v5.02 as yet, so it is supplied on an "as is" basis (meaning that it is untested and therefore any risk incurred in its use is the user's alone).

After you have downloaded the EasyDIS program, burn it to a CD. After copying the GT1V44 programs .iso, you should choose to copy the files to a DVD rather than burning a DVD of the .iso file (the default) as attempting to load the programs from an .iso DVD will cause problems.

From here, install the VMware program and follow the EasyDIS installation .PDF **Make sure that there are no Antivirus programs or firewalls running** . If you read page 8a of the Easy DIS Installation .PDF file before you start, it will give you some useful tips to use whilst installing EasyDIS as per the general EasyDIS setup guide, which should be followed to the letter.

Once you reach this point, you should have the EasyDIS base installation and GT1v44 correctly set up on your computer. The installation should have taken between 1 to 2 hours to this point, depending upon your level of computer proficiency.

Basically, what you have achieved at this point is that you have created a "virtual machine" (sort of a computer *inside* your normal computer) on which you have installed DIS and your GT1 programs. This is necessary as DIS and GT1 work on a Unix, rather than a Windows operating system. The next step will be to enable the Unix based DIS/GT1 program to communicate with EDIABAS and your diagnostic interface, which you have set up on the hard drive of your normal Windows-based computer, by creating a network so that the Windows and Unix based computers can talk to each other.

The first step in this process is to use "Explore" to locate the "EDIABAS.ini" file. You will find it by firstly opening the **EDIABAS** folder, then the **Bin** folder. Right click on the folder and choose "open with" then choose "Notepad" (**make sure that the check box is not ticked so that ".ini" files are not automatically associated with Notepad later as this will disrupt their normal functionality**). We are opening the EDIABAS.ini file with Notepad on this occasion, so that we can edit the file to ensure that DIS/GT1 can locate and communicate with it via our network.

Scroll down to this section of the open EDIABAS.ini file:-

```
;
=====
;TCP/IP Configuration
[TCP]
;
=====
```

```

;-----
; RemoteHost
;   Description :  server address/name
;   Default    =
RemoteHost      = WMUC102911

```

```

;-----
; Port
;   Description :  IP communication port
;   Value      :  1000 < port < 30000
;   Default    =
Port           = 3000

```

```

;-----

```

Start with the RemoteHost section and after Default = type one space, then diaghead

After this, highlight the “WMJC102911” on the line below and change this to 192.168.68.1 which is the IP address of our new network.

Now go to the Port = 3000 line and change the 3000 value to 6801.

The modified section of the EDIABAS.ini file should now look like this:-

```

;
=====
=====
;TCP/IP Configuration
[TCP]
;
=====
=====

```

```

;-----
; RemoteHost
;   Description :  server address/name
;   Default    = diaghead
RemoteHost      = 192.168.68.1

```

```

;-----
; Port
;   Description :  IP communication port
;   Value      :  1000 < port < 30000
;   Default    =
Port           = 6801

```

```

;-----

```

We have now finished configuring the EDIABAS.ini file, so using the File menu, save and close the modified file.

Now is a good time to create a shortcut to the EDIABAS Net Server, so return to the EDIABAS/Bin Folder and locate a file named **IFHSrv32**. Right click on the file and choose to send a shortcut to your desktop.

After you have created a shortcut to IFHSrv32 on your desktop, close all the open pages in Windows and return to your newly-created DIS “virtual machine”.

There is more work to do inside DIS in order to ensure that not only can it see our diagnostic head, but that the head can also talk to DIS.

If you are having difficulty seeing the entire DIS screen, left click somewhere inside the DIS window, then hold down the CTRL + ALT keys whilst you press the ENTER key. This should resize the DIS window so that you can see the **Administration** button on the lower right hand side of the screen without having to scroll down. If the mouse pointer inside the DIS window becomes a bit temperamental, it can easily be rectified at any time by holding down the CTRL + ALT keys to bring up the windows mouse pointer. Just superimpose the windows mouse pointer over the DIS mouse pointer and left click and the functionality of the mouse pointer in DIS will be restored.

Push the **Administration** button in DIS and from the DIS menu choose The **Calibrating touch screen** button (second from the bottom). Enter the 5 digit dealer number password you chose during installation (the recommended password was **12345**) and wait for the utilities menu to pop up. When it does, choose Option 7 (SCOADMIN NETWORK).

A window will pop up showing 2 green driver icons – at the top of the screen will be the SCO TCP/IP Loopback driver – **DO NOT TOUCH THIS DRIVER**.

Below this you will see a second driver – AMD PCNet-PC1 Adapter Compatible – PC1 Bus#0, Device #17, Function #0. The configuration settings assigned to this device may not work with your particular machine so left click on the AMD PCNET – PC1 Adapter Compatible line to highlight it, then from the **Hardware** Menu at the top of the screen, choose “Remove network device”.

The next step is to re-add an AMD PCNet-PC1 Adapter Compatible that your machine will recognise by again going to the **Hardware** menu and choosing **Add new LAN adapter**. A window will pop up showing AMD PCNet-PC1 Adapter Compatible devices found on your computer – this is an important step as in my case, the original adapter was set to work off Bus #0, Device #17, Function #0 whereas my computer requires the adapter to work off Bus #2. Choose the first **AMD PCNet-PC1 Adapter Compatible** on the list then yes to add the new adapter and a pop up will ask what protocol you want to add to the adapter – choose **SCO TCP/IP** from the options displayed and a settings panel will pop up. The first line “Local Host Name” should already be populated with **gt1ap**. The next line is where we need to enter the IP Address, which is **192.168.68.30**. When you tab to the next line, the Netmask address (**255.255.255.0**) should back populate, as should the Broadcast Address **192.168.68.255**, TCP connections and Pseudo ttys lines. Hit **OK** to accept these adapter settings and return to the SCOADMIN NETWORK page where you will see your newly created adapter listed in place of the one you deleted.

Before going further, hold down CTRL + ALT and hit ENTER to pop up the toolbar of your Virtual Machine and press the CTRL + ALT keys together to pop up the Windows mouse pointer.

From the Virtual Machine **Edit** menu, choose Virtual Network Settings, then on the Next Screen, Select the **Host Virtual Network Mapping** Tab. Now Click on the > symbol located on the Right hand side of the **VMware Network Adapter VMnet1** line and choose **Subnet...** to view its IP Address and Subnet Mask. Ensure that the IP Address is listed as 192.168.68.0 by altering it if necessary and that the Subnet Mask is 255.255.255.0. When this has been completed, click **OK** and then click the **Apply** button at the bottom of the screen before choosing OK to exit the editor and save your settings.

After the editor has closed, left click back inside the SCOADMIN NETWORK window and this time choose **Exit** from the **Hardware** menu. A message will pop up telling you that your settings have changed and asking if you want to relink the kernel. Choose **yes** and a black screen will pop up, advising you that the kernel is to be rebuilt, relinked and asking if you want to use it to rebuild the system. Choose yes to all of the prompts. The Virtual machine will reconfigure itself to adapt to your new settings, then shut itself down and restart.

When DIS appears, again choose the **Administration** button, then **Calibrating touch screen**. Enter the **12345** password and again choose Option 7. SCOADMIN NETWORK.

We need to view our EDIABAS.ini and hosts settings from the Unix side, to ensure we can talk to our Windows software and interface.

When the SCOADMIN NETWORK screen appears, left click in a blank section of the window and hit **CTRL + SysRq** to access the Unix root file (*remember the black screen you encountered when the kernel was rebuilding?*) at the login prompt, type **root**, then choose option 1 to choose a password. The easiest password to remember if you get stuck is **password** so type password once then again when prompted to confirm your choice.

A few lines of text will be generated by the root file, the last being **TERM = (scoansi)** _ hit ENTER when you see this line and # should appear at the beginning of the next line. Be careful when working with UNIX, as **commands are case sensitive**.

After the # type **cd /etc** another # will appear at the beginning of the next line – after it, type **vi ediabas.ini**. You should view this file to ensure that the correct IP address **192.168.68.1** and port **6801** are identified. If not, use the UNIX command summary to edit and resave the file.

After viewing the correct EDIABAS.ini file, type **:q!** to exit without changes or **:wq** to save changes and exit the file.

When the # prompt reappears, type **vi hosts**.

A file will appear listing IP addresses, it will look something like this:-

```
#  @(#) hosts, v 6.1 1993/08/21 02:17:48 stevea Exp - STREAMware TCP/IP
source
e
#      SCCS IDENTIFICATION
127.0.0.1      localhost
192.168.68.30      gtlap gtlap
192.168.68.32      gtlap2 gtlap2
```

"hosts" x lines xxx characters

We need to modify this file so that it can find our diaghead, so use the down arrow to place the cursor on the line 127.0.0.1 localhost then type **o** (to **o**pen a new line underneath the present line).

Type 192.168.68.1 diaghead diaghead then hit the **ESC** key
Note that keystrokes are the IP address(TAB)diaghead(SPACE)diaghead(ESC)

The modified files should now look like this:-

```
#  @(#) hosts, v 6.1 1993/08/21 02:17:48 stevea Exp - STREAMware TCP/IP
source
e
#      SCCS IDENTIFICATION
127.0.0.1      localhost
192.168.68.1      diaghead diaghead
192.168.68.30      gtlap gtlap
192.168.68.32      gtlap2 gtlap2
```

"hosts" x lines xxx characters

After hitting the ESC key type **:wq** to exit the file and save your changes and return to the # prompt. At the # prompt, type **init 6** to reboot the program or **init 0** to shutdown DIS.

NEARLY FINISHED!

DIS should always be shut down by choosing the Administration button, then going to the utilities menu from the calibrating touch screen button and choosing Option 0

In order to use DIS to diagnose your car, **first hit the IFHSrv32 shortcut** you created earlier so that the Network between DIS and EDIABAS is supported. The IFHSrv32 icon will appear on your toolbar. **Make sure that there are no Antivirus programs or firewalls running**, then start your DIS/GT1 Virtual Machine.

A few minor adjustments may need to be made, depending upon what diagnostic head you are using – for example I use an ADS interface, so I had to use the Utilities menu to change the translator to "FISTER" and ensure that vm was switched off as INPA had been set up to use ADS rather than an OBD interface.

Remember that if you do make changes, you will also need to restart EDIABAS from the Utilities menu to ensure that your settings are adopted and saved.

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Bimmerforums members Airbone, AwesomeisLuke and Randomy, the members of the BMWECU.Org forum and Ken "Fister" M*. My installation would still be a work in progress if not for the creator of EasyDIS, and original author of its installation instructions.***