### **EXTRACT E-SYS** .rar ARCHIVE

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- 01) Extract E-Sys .rar archive to create the following 2 folders:
  - "E-Sys Program"
  - "E-Sys Documents"

# **INSTALL E-SYS**

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02) From the extracted "E-Sys Program" folder, run "E-Sys\_Setup\_x\_xx\_x\_xxxxx.exe" to install program to default location (i.e. "C:\EC-Apps\ESG \E-Sys\")

03) When prompted, accept the default installation location Data Path (i.e. "C:\Data\").

\* NOTE: If upgrading from a previous E-Sys version, first uninstall current E-Sys version via Windows Control Panel.

EXTRACT PSdZData\_Lite - OR - PSdZData\_Full .rar ARCHIVE

04) Extract the PSdZData\_Lite or PSdZData\_Full .rar archive to produce the "psdzdata" folder.

- 05) Make sure that there is an empty "dist" folder in each of the psdzdata chassis folders, and if missing, create as needed, e.g.:
  - C:\Data\psdzdata\mainseries\F001\F001\_xx\_xx\_xx\odx\dist
  - C:\Data\psdzdata\mainseries\F010\F010\_xx\_xx\_xx\odx\**dist**
  - C:\Data\psdzdata\mainseries\F020\F020\_xx\_xx\_xx\odx\**dist**
  - C:\Data\psdzdata\mainseries\F025\F025\_xx\_xx\_\odx\dist
  - C:\Data\psdzdata\mainseries\F056\F056\_xx\_xx\_xx\odx\**dist**
  - C:\Data\psdzdata\mainseries\I001\I001\_xx\_xx\_xx\odx\**dist**
  - C:\Data\psdzdata\mainseries\K001\K001\_xx\_xx\_xxx\odx\**dist**
  - C:\Data\psdzdata\mainseries\KE01\KE01\_xx\_xx\_xxx\odx\**dist**
  - C:\Data\psdzdata\mainseries\RR01\RR01\_xx\_xx\_xx\odx\**dist**
  - C:\Data\psdzdata\mainseries\S15A\S15A\_xx\_xx\_vodx\**dist**

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INSTALL PSdZData (Lite or Full)

06) If existing "psdzdata" folder exists in "C:\Data\" (i.e. "C:\Data\psdzdata") **DELETE** it.

07) From the PSdZData\_Lite or PSdZData\_Full extraction, copy the "psdzdata" folder to "C:\Data\" (i.e. "C:\Data\psdzdata")

\* NOTE: If upgrading from a previous PSdZData version, DELETE old PSdZData folder and REPLACE with new PSdZData folder (DO NOT copy (merge) new PSdZData folder on on top of old PSdZData folder).

\* **NOTE:** PSdZData Lite Version has all ECU Firmware files removed, which are needed only for flashing new firmware onto ECU's and which ARE **NOT** needed at all for any Coding. PSdZData Full Version is needed **ONLY** for Programming (flashing) ECU's with new Firmware.

\* **NOTE:** BMW AG made changes to PSdZData beginning with 54.2 PSdZData where they removed (trimmed) all descriptive text from CAFD (and FAFP) files, making FDL Coding of ECU's difficult, as the FDL Codes can no longer be easily located. E-Sys Launcher Premium 2.x uses historical CAFD data from older Untrimmed PSdZData releases to dynamically map the trimmed data back into E-Sys.

# INSTALL E-SYS LAUNCHER PREMIUM AND CREATE .EST TOKEN & PIN

08) Run the "ESysLauncherPremiumSetup\_2.0\_Build\_xx.msi" to install program to default location ("C:\Program Files (x86)\TokenMaster\E-Sys Launcher Premium\ESysLauncher.exe")

- 09) Run "E-Sys Launcher Premium" from Desktop Shortcut.
- 10) In "Path" field, press the "..." Button, and Select folder location to store Token file Path (i.e. "C:\Data\").

11) In "PIN" field, enter any alphanumeric 4-12 character PIN to use with your Token file (e.g. "1234").

12) In "Confirm" field, enter the same alphanumeric 4-12 character PIN previously entered (e.g. "1234").

13) Press the "Generate Token" button, and wait for the "EST Software Token Successfully created at "C: |Data | FreeToken.est" message to appear, and then press the "OK" button.

14) When the main E-Sys Launcher Premium window appears, press the "Abort" button at bottom of it.

15) Select the "Car Series" Dropdown box and choose your exact chassis type (e.g. F01, F06, F07, F10, F12, F15, F25, F30, F82, F83, etc.).

**\*NOTE:** With E-Sys Launcher Premium version, once "Car Series" is set, it can only be changed every 3 days, so be sure to set it correctly during initial installation and setup. If you do not want this restriction, you can obatain E-Sys Launcher Pro version from TokenMaster, which lacks this restriction and includes other benefits as descibed here:

http://www.bimmerfest.com/forums/showpost.php?p=8697704&postcount=1

Token Master can be reached via email as follows:

fxxtokenmaster@gmail.com

16) After "Car Series" is properly set, press the "Launch Now!" button.

**\*NOTE:** It will take E-Sys a while to open as it writes its the log file.

CONFIGURE E-SYS

17) On E-Sys Menu Bar, select "Options" and then "Settings":

A) On the "PROGRAM" Tab, set the Directories => Data: path to "C:\Data"

B) On the "EST" Tab, set the Developer-Soft-Token => EST: path to match .est Token file created in Step 12) above (i.e. "*C:* |*Data* |*FreeToken.est*")

C) On the "OPTIONS" Tab Uncheck the boxes for "Update VCM after TAL execution" and "Update MSM after TAL execution".

18) Press "OK" to close the Settings Diaglog Window and then from the Menu Bar press "File" and then "Exit" to shut down E-Sys application.

## CONNECT TO CAR WITH E-SYS VIA ENET CABLE

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19) Make connection from car's OBDII port to computer LAN port with OBDII-ENET interface cable.

20) Ensure Car has adequate power and is switched on.

**\*NOTE:** A continuous power source of at least 12.6 Volts is needed. Failure to maintain proper voltage can lead to corruption of ECU Data. As such, ideally the car is connected to an external charger. In lieu of using an external charger, the car can instead be coded with the engine running in order to maintain proper voltage, which is acceptable for coding all ECU's **EXCEPT** the DME (Digital Motor Electronics) ECU or DDE (Digital Diesel Electronics) ECU. The DME/DDE are typically not coded anyway, so this ECU limitation is generally not an issue.

21) Wait a few minutes until the Laptop Windows wired network adapter icon shows a Connection with the yellow exclamation point over it.

**\*NOTE:** The car **does NOT** have a DHCP server, so it **does NOT** assign an IP Address to the computer. Both the computer and the car will go into DHCP fallback mode, each assigning themselves a random Class-B IP Address so that they can talk to each other. This can take up to 60 seconds, so you have to wait until the PC has an IP address before you try to connect). Class-B IP Address range is from 128.0.0.0 to 191.255.255.255. Automatic Private IP Addressing (APIPA) is a network client-side process used as a fall-back position when DHCP services are not available on the network but the client devices are configured to use DHCP for their IP address configuration. APIPA allows the client device to randomly choose one of the 65,534 addresses available in the Class B network address of 169.254.0.0/16.

\*NOTE: If you are running E-Sys in a Virtual Machine (VM), make sure you set the VM NIC to bridging mode. Do NOT use NAT.

- 22) Run "E-Sys Launcher Premium" from Desktop Shortcut to open E-Sys application.
- 23) On E-Sys Toolbar Press the "Connect" Button and in the "Open Connection" window under "Target", select desired Target Vehicle based on car's Chassis.

(e.g. "TargetSelector:Project=F010-xx-xx-xxx, VehicleInfo=F010")

**\*NOTE:** Do NOT select the Target with the "\_DIRECT" suffix (e.g. TargetSelector:Project=F010-xx-xx, VehicleInfo=F010\_DIRECT).

### \*NOTE:

- F001 psdzdata covers F001/F002/F003/F004/F007/RR04/RR05/RR06 (5-Series GT is an F07 **NOT** an F10) F010 psdzdata covers F006/F010/F011/F012/F013/F018
- F020 psdzdata covers F020/F021/F022/F023/F030/F031/F032/F033/F034/F035/F036/F080/F082/F083/F087
- F025 psdzdata covers F015/F016/F025/F026/F085/F086
- F056 psdzdata covers F039/F045/F046/F047/F048/F049/F052/F054/F055/F056/F057/F060
- I001 psdzdata covers I001/I012
- K001 psdzdata covers K010/K018/K019/K021/K022/K023/K032/K033/K045/K046/K047/K048/K049/K050/K051/K052/K053/K054 K080/K081
- KE01 psdzdata covers K017
- RR01 psdzdata covers RR01/RR02/RR03
- S15A psdzdata covers F090/G001/G002/G011/G012/G030/G031/G032/RR11/RR12/RR31

\*NOTE: If the "Open Connection" window under "Target" is empty (no targets), verify the following:

- A) That the psdzdata chassis folders each have an empty "dist" folder (See Step 05).
- B) That the "psdzdata" folder is installed properly (See Step 07).
- C) That the "Directories => Data: path is set properly (See Step 17A).

24) In the "Open Connection" window under "Interface" select "Connection via VIN".

**\*NOTE:** If "Connection via VIN" is grayed out and Vehicle VIN is not shown verify the following:

- A) ENET Cable connection to car is good.
- B) Car has proper voltage (Make sure Charger voltage is at least 12.6 Volts or motor is running if car is not on a Charger).
- C) Laptop Windows Firewall and any Antivirus software is disabled and not running.
- D) Laptop Lan Adapter has a 169.254.xxx.xxx IP address (Make sure it is using DHCP and does not have a Static IP address assigned to it).

If "Connection via VIN" remains grayed out, close E-Sys and shut car completely off for 30 minutes, and try connection again beginning with Step 19.

25) In the "Open Connection" window under "vehicle-specific parameter (optional)" select "Series, I-Step Shipment", and **leave the two Dropdown boxes blank**.

\*NOTE: Do NOT select "Read parameters from VCM".

26) In the "Open Connection", select "Connect" button.

**\*NOTE:** Window should pop up confirming successful connection and car can now be accessed with E-Sys.

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NOTES:

A) Each time E-Sys is launched, the first time the FDL Editor or CAF-Viewer is invoked, either directly via "Editors & Viewers => FDL-Editor" or "Editors & Viewers => CAF-Viewer" or indirectly via right-clicking on a module's read CAFD and selecting "Edit FDL", you will need to enter the EST Token PIN.

B) Coding KOMBI (Instrument Cluster) module will cause the car to chime and the dashboard to reset including the clock. Simply reset the vehicle Date and Time via iDrive when done coding module.

C) Coding some ECU's can result in a variety of initial Error Messages appearing on CID Screen. This is common. Just click on "Ok" to dismiss them, and they should **NOT** reappear again. If errors persist, try and clear them with E-Sys as follows:

- Click "External Applications" in the left menu.
- Click "External Application"
- Double-click "Transmitter"
- Scroll to the bottom and click "... Clear all DTCs (clear DTC, clear Infospeicher, ZFS DM\_Lock, clear ZFS DM\_Clear, ZFS DM\_Unlock) to highlight it.
- Click "Connect" button.
- Click the "Send" button.

D) Some ECU's take a long time before the changes begin working (e.g. trunk and mirror close). If still not working after a full hour of car being shut off, try recoding the module again, even if it looks like the correct parameter (e.g. "nicht\_aktiv") is set.

E) If you want to read an ECU CAFD's last as-coded settings (i.e. net coding data), go to the "Editors & Viewers => FDL-Editor", put your PIN in, and then navigate to your CAF folder (C:\Data\CAF) and select the desired CAFD file's corresponding read coding data .ncd file. You do **NOT** need

to be connected to the car.

(e.g. Module CAFD Name cafd\_000000f9.caf.007\_003\_167 = CAFD\_000000F9\_007\_003\_067.ncd)

F) If you want to look at an unread CAFD file, go to the "Editors & Viewers => CAF-Viewer", put your PIN in, and then navigate to your CAFD folder (C:\Data\psdzdata\swe\cafd) and select the desired CAFD. You DO NOT need to be connected to the car.

(e.g. Module CAFD Name cafd\_000000f9.caf.007\_003\_167)

G:) For known Coding Parameters, search for Coding Cheat Sheet for your chassis (e.g. F10, F30, F20, F15, etc.) or use The Coding Database tool:

www.bmwcodingdatabase.com

