

Synthex U-Tran/Doc Manager e-Signer Module - EMF Signer

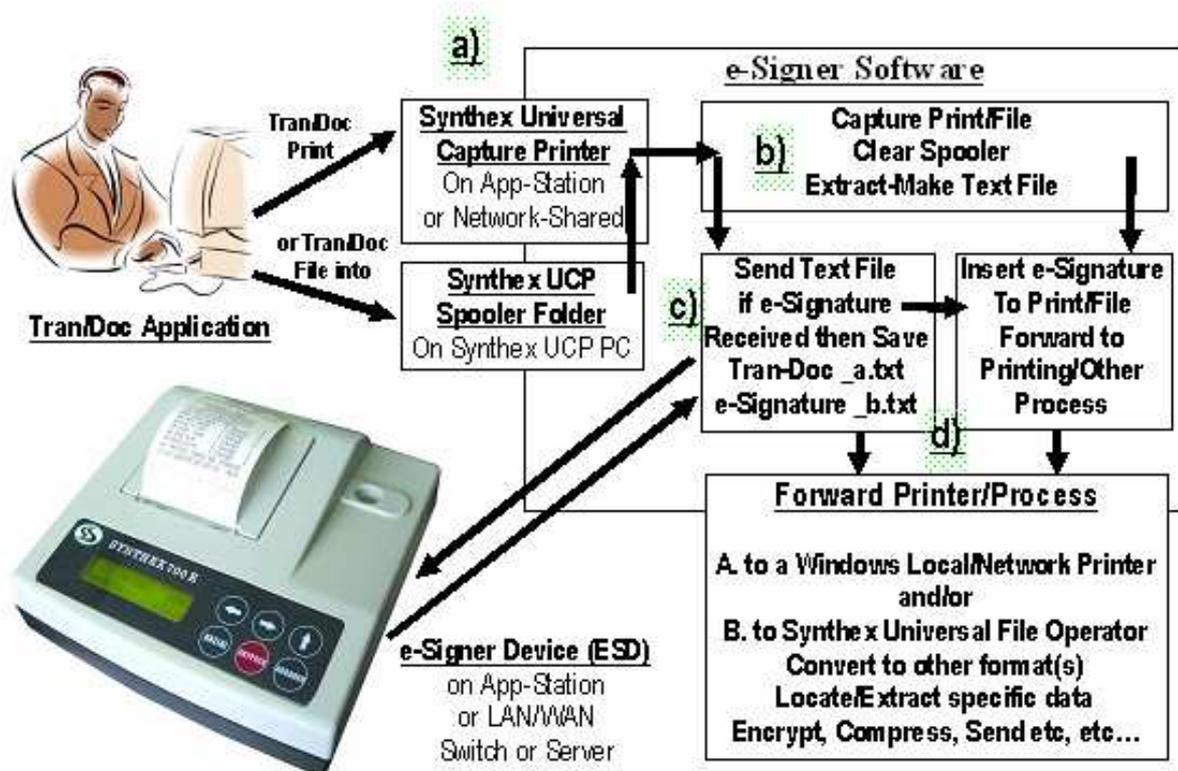
(compliant to the Greek Tax Law)

(e-Signer and EMF Signer used interchangeably)

1. Overview

In order to properly set-up and use the e-Signer module of the Synthex Universal Transaction/Document Manager system, you should carefully examine and understand the following diagram and guidelines pertaining to the basic logic and concepts involved.

The following diagram presents the basic logic behind the e-Signer as well as behind its integration to the Synthex Universal Transaction/Document Manager:



As shown by the above diagram, in order for e-signer to e-sign a transaction or any other document the following steps and guidelines are (must be) followed:

- a) The document(s)/data to be signed are either printed to the Synthex Universal Capture Printer (Syn_UCP), or they are placed (copy, save, other process) into the folder which is the spool folder of Syn_UCP. The Syn_UCP is actually a Windows virtual printer, i.e. does not actually print anywhere and its port should be a virtual port (non-existing physically). Consequently, with applications that print directly to a DOS standard port (LPTx, COMx, physically existing or non-existing), in order for e-Signer to capture such printing, Syn_UCP should be a Shared Printer and the port(s) used by the application should be Net Use(ed) to Syn_UCP ...

(e.g. net use lpt1: \\pcname\Syn_UCP).

An installation may have multiple Syn_UCPs, usually Synthex1, 2, 3,...i, but this should be needed and used only when each Synthexi is related to a different Synthex ESD and/or a different Forward Printer/Process (specified in e-Signer User Interface). It is important to clarify that Syn_UCP (and/or its spool folder) are used only to receive document(s) to be e-signed, from there e-Signer just takes the document and clears the spool folder and has no other interaction or relation. Therefore, Syn_UCP and its spool folder are shown in the above diagram as to be only partly interacting with e-signer, i.e. their functioning is purely Windows related and if a document is not properly received by them and into e-Signer, the issue(s) must be Windows related.

- b) e-Signer takes the document/file from Syn_UCP and/or its spool file, extracts the text parts from it, as applicable, to make an ASCII image of the document/file, as required by the e-Signer Device. That text image looks alike the original document/file but without any graphics, it contains only ASCII characters and it is the one sent to the ESD by the e-signing process.
- c) The e-signing process sends the text image of the document/file to the ESD and if everything is as required and no other problem occurs the ESD produces the e-signature of the file and returns it to the e-signing process, otherwise it returns an error (code) which the e-signer displays for the user. If the e-signature is produced and returned properly, the e-signing process saves the e-signature line into a_b.txt and the text file into a_a.txt file in the Working Path and in the 2nd/Backup Path folders which are specified in the corresponding fields of the e-signer user interface. The e-signature line contains also some other information as required and it is used by the Forward Process.
- d) The Forward Process inserts the e-signature line into the original document/file and forwards (sends) the now e-signed file to the Forward Printer for final printing. Of course, this forwarding could be to another Process and this provides the means of integrating e-Signer to the Synthex U_Trans/Doc Manager or other systems that can perform various other processing with the e-signed and/or with the original document/file.

In the following sections of this guide you can see more details about the various settings and requirements for the above logic and guidelines to work properly. The sections are presented in the order you should follow them in order to set up e-signer properly.

2. Installing e-signer

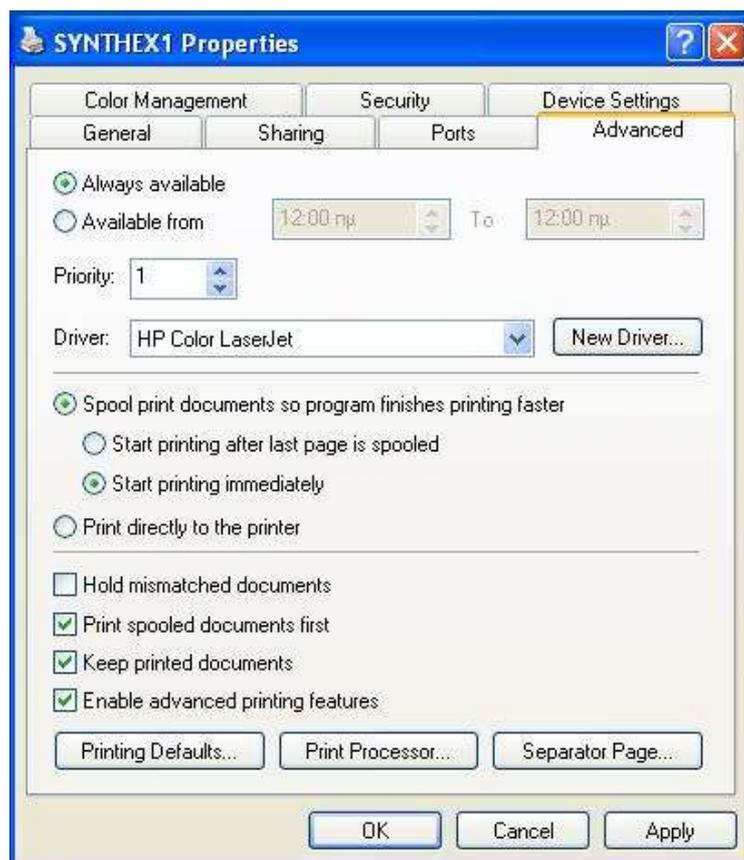
Note: it is absolutely required that you install e-signer under the administrator login.

Copy and unzip the e-signer files into a folder and run setup.exe.

e-signer installs in Program Files, under a Microlec\EMFSigner folder. After installation you should first create a printer to be used as the Synthex Universal Capture printer.

3. Set up the Synthex Universal Capture Printer

You may need to contact your system/network administrator in order to create a printer in your system. The printer you create must have a physically non-existing port (Synthex1 or null) and it should be named Synthex1 (Synthexi if multiple printers are created). It is advisable that the printer installed has a driver as close as possible to the one of the forward printer (where the actual printing will be done), but it should not have exactly the same driver because some drivers conflict (create error) when used in both the capture and the forward printer. We assume there is already a printer on your system that will be used as the Forward Printer. If you need more details on creating a printer, please see the related section at the end of this document.



Very Important: you must access the printer's properties "Advanced" tab and check the option "Keep printed documents", or nothing will work.

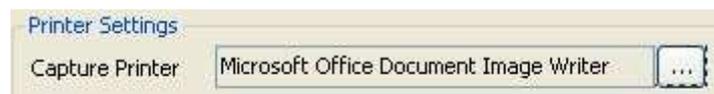
4. Set up e-signer parameters and other information

Double-click the e-signer (or EMF Signer) shortcut on your desktop to start the program and select the language you want for the user interface. At the left side of the e-signer window you should set-up the information needed for each Printer (and corresponding ESD Device) you are going to use. When you first install e-signer, you should see the one default printer under the tab Printer Properties1. If you add more Printers later you see more such tabs, one for each Printer.

Very Important: after you make changes to any settings, you should click the Save button (diskette icon above Printer Properties1) for the changes to be applied. If you exit without Saving, your changes will be lost.

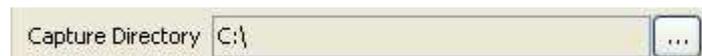
In the **Printer Settings** area, follow the instructions below:

- In the “**Capture Printer**” field, select the virtual printer (Synthex1) you have previously installed in your system. This printer is named Capture Printer because it is used to “capture” the document before it goes to the actual printer



Click  and browse for the Synthex1 (or other virtual) printer, select it and return (ok) to replace the default setting.

- In the “**Capture Directory**” field, select the folder that will act as the printer spooling folder for the capture printer. This folder should be used only by the e-signer capture printer and it very important that it should not be used for anything else. Also it is very important that it should not be in the WINDOWS folder and not be a root directory of a hard disk (e.g. C:\).



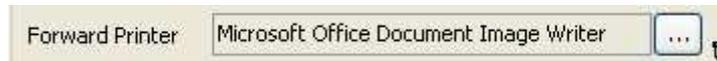
Click the button  to browse for the folder if one does not exist, create a new one by clicking the Make New Folder button. When you select the folder and return, the following message will appear in your screen



Very Important: the message indicates that you should restart the Print Spooler Service for it to recognize the change you just performed for the capture printer’s spooling folder. You should do this at this point because it is usually forgotten if left for

later and if that happens nothing will work. Of course, you could just ignore it if you intend to restart your PC after all software settings, which is a good practice.

- In the “**Forward Printer**” field, select the forward printer where the document will be sent for printing after e-Signer has processed and e-signed it.

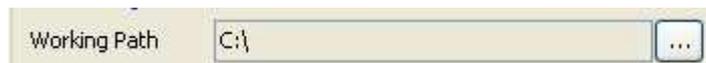


Use the button  to browse and select the appropriate printer.

For now leave the rest of the selections as they are in the Printer Settings area.

In the **ESD Settings** area, follow the instructions below:

- In the “**Working Path**” field, select the folder where the document text and the signature files will be stored (*_a, *_b, *_c) will be stored.



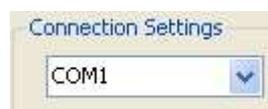
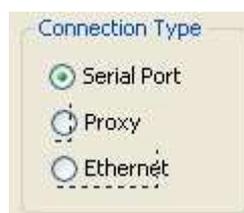
Click the button  to browse and find or create a new one and select it.

Repeat the above for the Backup Path (or Save_2), where a second copy of the files will be stored.

- In the “**Serial Number**” field, input the serial number of the ESD device corresponding to the Printer been set up (e.g. EXY99000003).



- In the “**Connection Type**” area, select the type of the connection and select/input the corresponding information. With Serial Port select COMx and Claim Port which is not required but it is recommended to make sure there are no conflicts with other devices and the ESD.

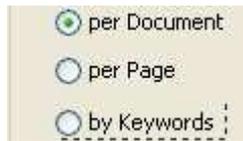


For Proxy or Ethernet enter the appropriate IP Address. For Proxy enter the IP address of the PC running the service, for Ethernet enter the IP Address of the ESD Device with

an Ethernet connection, which must also be entered into the ESD Device itself. In either case, you may need to consult your system or networking administrator for further information and assistance.

192.168.145.001

- In the “**Signature Settings**” area, select an option to indicate how the document should be treated during electronic signing



per Document
per Page
by Keywords

If the option “**per Document**” is selected, then the whole document will be electronically signed and the signature will be placed at its end, regardless of the number of the pages it consists of.

If the option “**per Page**” is selected, then every page of the printed document is electronically signed and a signature is placed on its page.

If the option “**by Keywords**” is selected, then the printed document will be signed only if it contains a special keyword. If this keyword is found in more than one pages of the document then each page that contains this keyword will be signed. In the area “**Comparison Settings**” you must enter the keyword(s). You should enter the keyword in the blank textbox and you can enter more than one keyword if you wish.



Comparison Settings

With Invoice Number

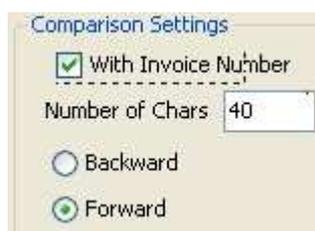
Number of Chars 40

Backward

Forward

Keywords

If you want to e-sign each one of multiple documents that are printed as one file, each document must have an id number such as an invoice number which changes from one document to the next but it should always be at a fixed position from a keyword such as “Invoice Number”. Then you can check the box “**With Invoice Number**”, specify the appropriate (part of) keyword, also specify the position of the id number (forward or backward) as well as the number of characters (including spaces) this id number is positioned from the keyword specified.



Comparison Settings

With Invoice Number

Number of Chars 40

Backward

Forward

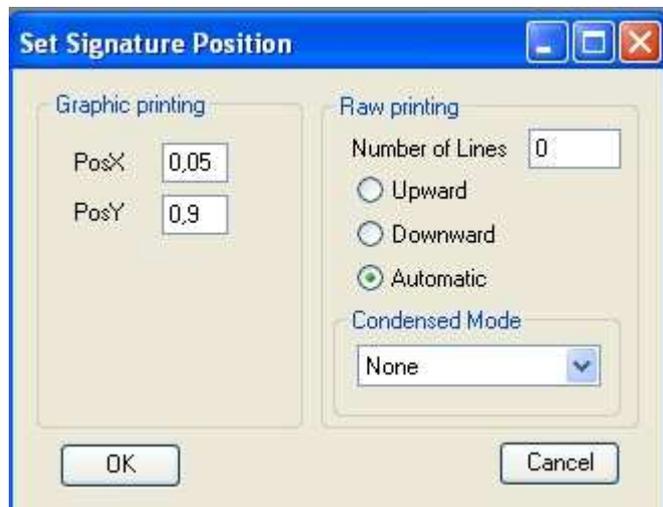
In addition you can select the font with which the signature will be printed.



Note: the Remove Keyword option removes the specified keyword before printing and should be used only with Text documents where usually a special mark keyword is used just to indicate the document should be e-signed.

Use  to specify if you want to print the electronic signature line broken down to more than one line, 2 or 4 lines are allowed and this is used if you print on narrower paper than the length of the e-signature line (80 characters).

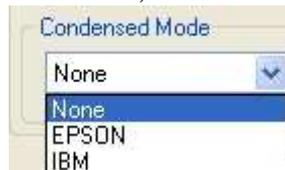
Use the button  to define the position of the e-signature line.



If the document is a graphic one, then the Graphic printing settings are used.

If the document is a raw text one, then use the Raw printing settings are used. The Number of lines filed specifies how many lines the e-signature line will be positioned upward or downward from the last text character of the invoice. If the “**Automatic**” option does not work for you experiment with other settings.

If you want to condense the e-signature line, use the dropdown



and select the appropriate printer mode for condense printing.

For the **Description of Copies** area see the information following.

The Signature Prefix setting (if checked) specifies that the word PROTOTYPE will be printed before the e-signature line. If there is a need for more copies of this signed document then you should specify an analogous description for each copy (this description will be printed before the electronic signature of each copy). The number of copies to be printed will be determined by the number of descriptions entered in the “**Description of copies**” textbox, each description separated by a newline. If no description is entered in this area only the prototype document will be signed and printed.



If you wish to print the copies to alternative printers, then you can add those printers by pressing the button 



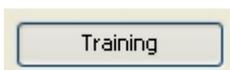
You should add a new row for each alternative printer and each row corresponds to the same row in the “**Description of copies**” textbox. If the alternative printers are less than the number of description of copies, then the remaining unassociated copies will be printed to the original forward printer.

5. Preview of Operation and Results of settings

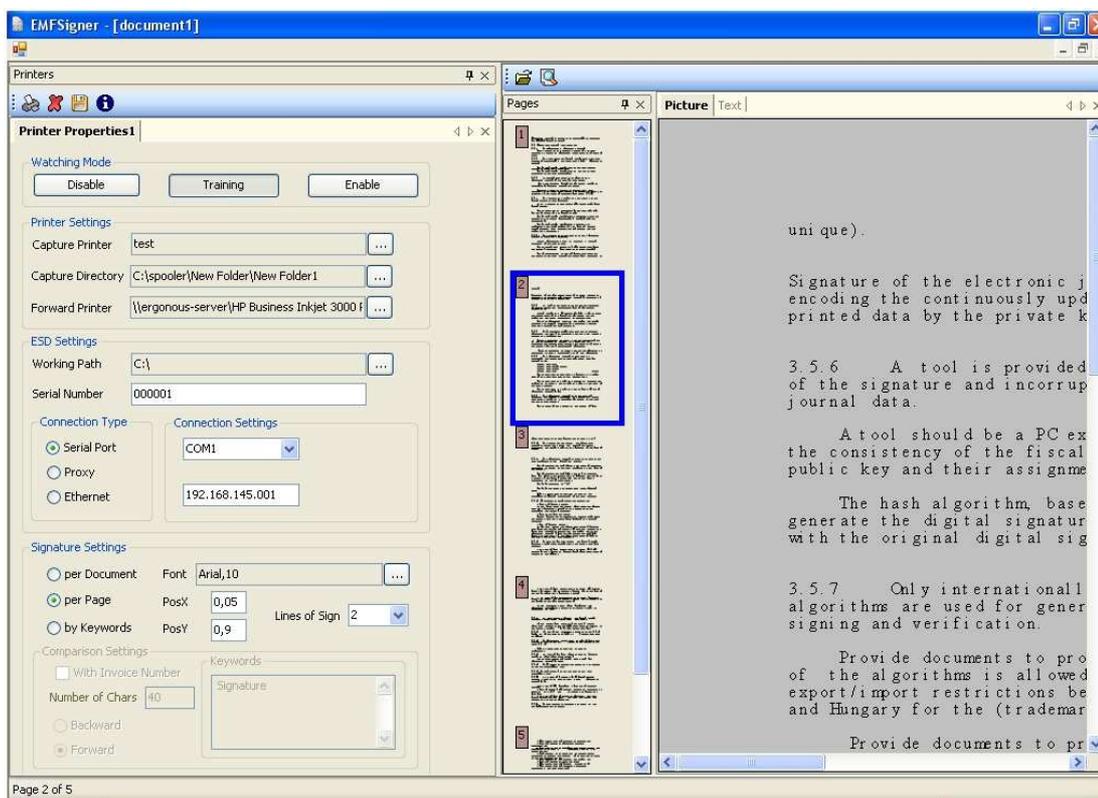
For operating the e-Signer, you may need to activate the software. If you have not already done so, a message will display asking for the activation code. When the activation code is entered and accepted by the e-Signer, press the button  to save it, otherwise you will be asked for it again next time you try to operate.

You can preview the position of the signature and other results of your settings by setting e-Signer to Training mode and pressing the preview button .

- Press the button “**Training**”

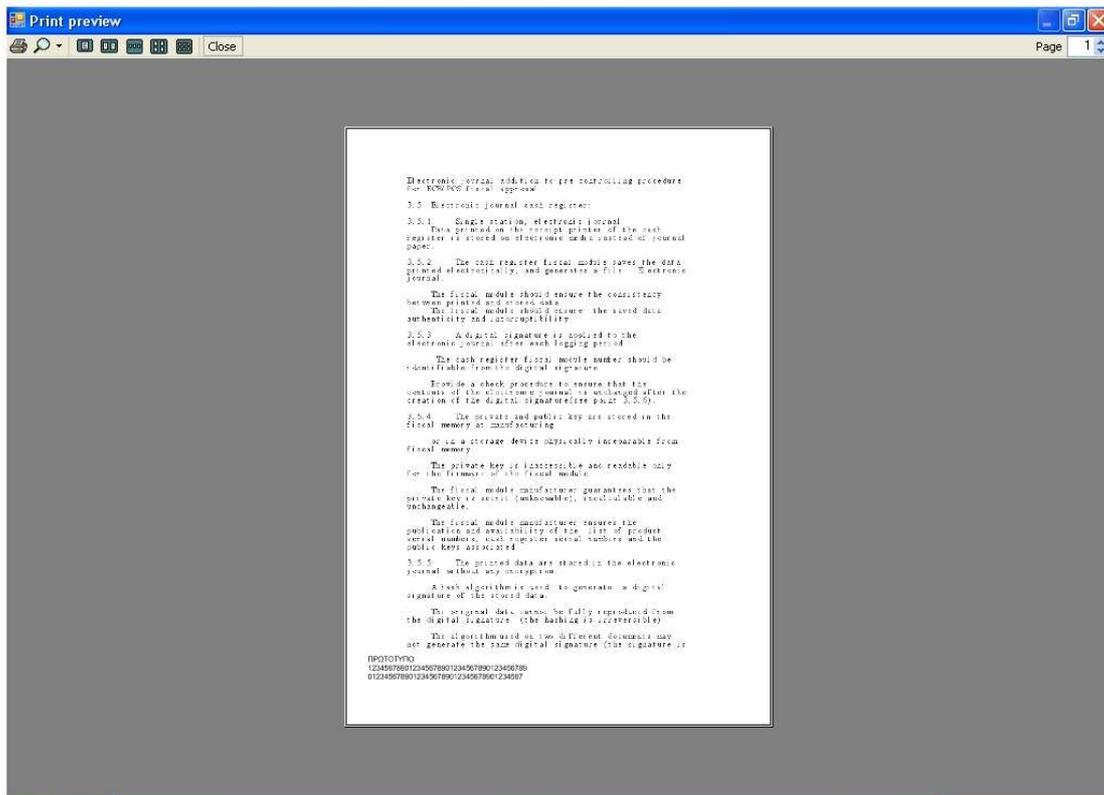


- Send the document to be printed after selecting the capture printer (Synthex1). The e-Signer will capture the document and a preview of it will be displayed on the right side of the e-Signer window.



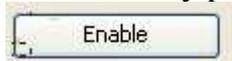
This preview confirms that the capture printer works properly and that e-Signer recognizes it and cooperates with it properly. If this preview fails then check to see what might be the problem with the Windows related set up of the capture printer.

- To see a preview of the printing that will occur, as well as where the position of the electronic signature will be, press the button .



If the position of the signature is not a desired, use the “**Signature Settings**” to make the necessary adjustments.

- Repeat the same procedure until you are satisfied with the result. When the result is satisfactory press the button  to save the settings and then press the button



to activate the normal operation mode of e-Signer.

In Enable mode, every time a document is printed to the capture printer (or placed in its spool folder), e-signing will be performed on the document according to the saved settings. In case there is no connection to the ESD device, or to the forward printer, then an error will be displayed, and you should act accordingly.

Note: you could and should perform a test of the actual complete operation including the forward printing, with the ESD Device turned off so that you do not waste and have to reverse an e-signature. When the ESD Device is off, e-Signer generates an appropriate message, and if you press Cancel at this message, e-Signer proceeds with the rest of the process and forward printing by placing an appropriate message line exactly at the position where the e-signature line would be placed.

6. Frequently Asked Questions

- **Can more than one ESD device be connected to the e-Signer?**

It is possible to connect multiple ESD devices but it should be according to the applicable law(s). Each ESD device should have another capture printer with a different printing spool folder. The forward printer can be the same or different. To add a new ESD device or use the same ESD device (not recommended), press the button . A new Printer Properties tab is created and in there you specify all settings according to the previously given instructions.

- **How can an ESD device be removed from e-Signer?**

An ESD device can be removed from e-Signer simply by pressing the button  after the device's Settings screen has been selected.

NOTE: remember that you must Save for any changes to take effect and that includes adding or removing Printers/ESD Devices.

- **What happens if the ESD device is not connected to the e-Signer?**

Then an error message will be displayed asking the user to repeat or cancel the printing. The forward printer will print the invoice without an electronic signature. Instead of the electronic signature a message will be printed stating that there was an error during the procedure and the invoice is not electronically signed

- **Can e-Signer issue a Z Report or show the ESD device's Header?**

Press the button  to issue a Z Report from the ESD device. If you want to see the ESD device's header, press the button  to display the following window.



The screenshot shows a window titled "Συσκευή σήμανσης >>>". It contains the following information:

- Κατασκευαστής:** SYNTHEX
- Τύπος:** SYNTHEX 700
- Σειριακός αριθμός:** EXY03000547
- Version:** 02.24
- Κατάσταση συσκευής:**
 - Υπογραφές ημέρας: 0 of 2400
 - Κλεισίματα Z: 34 of 1850
 - Αλλαγές τίτλου: 2 of 10
 - Σύνολο υπογραφών: 152
 - Ημερομηνία: 04/12/2009 - 16:51
- Ενεργός τίτλος:**
 - SYNTHEX LTD
 - MAIANDROY 77
 - N. FILADELFEIA , ATHENS, GREECE
 - TEL:2102517882
 - FAX:2102517450
- Τύπος Εκτύπωσης:** Normal (selected)

Buttons at the bottom: Αλλαγή, Ανανέωση, Έξοδος.

Please see the ESD Device documentation about the information on this window.

- **Can e-Signer set the invoice's Header?**

Press the button  to set the invoice's Header, in cases when the application does not include it.



- **Is there any other way that e-Signer can load documents/files to be signed and printed? What kind of files does e-Signer support?**

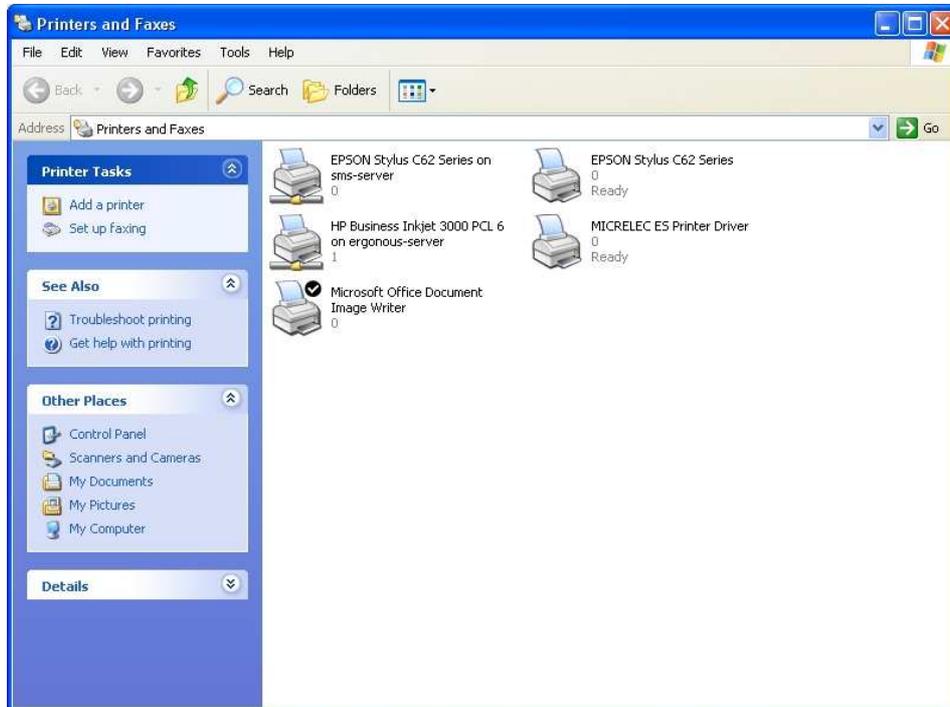
The basic ways to e-sign documents are described in the Overview. The formats and types of documents supported are many and they are updated frequently with the intention to support any format and type.

Note: if you have any requirements that you do not know how to address, please contact us for help. Chances are that there will be a solution already that we can discuss.

Setting up a new Windows Printer to use as the Synthex Universal Capture Printer

If you need to, you could follow the instructions below.

- Open the Windows “**Printer and Faxes**” Settings page



- Under the “**Printer Tasks**” areas, select the option “**Add a printer**” to start the procedure and add a printer



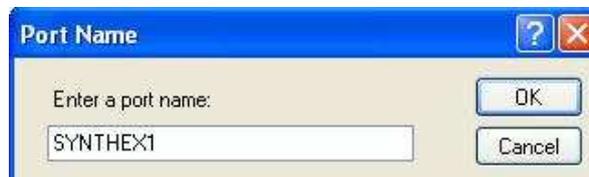
- Press “**Next**” to load the next screen and check the option “**Local Printer...**”



- Press “**Next**” to load the next screen and choose the option “**Create a new port**”



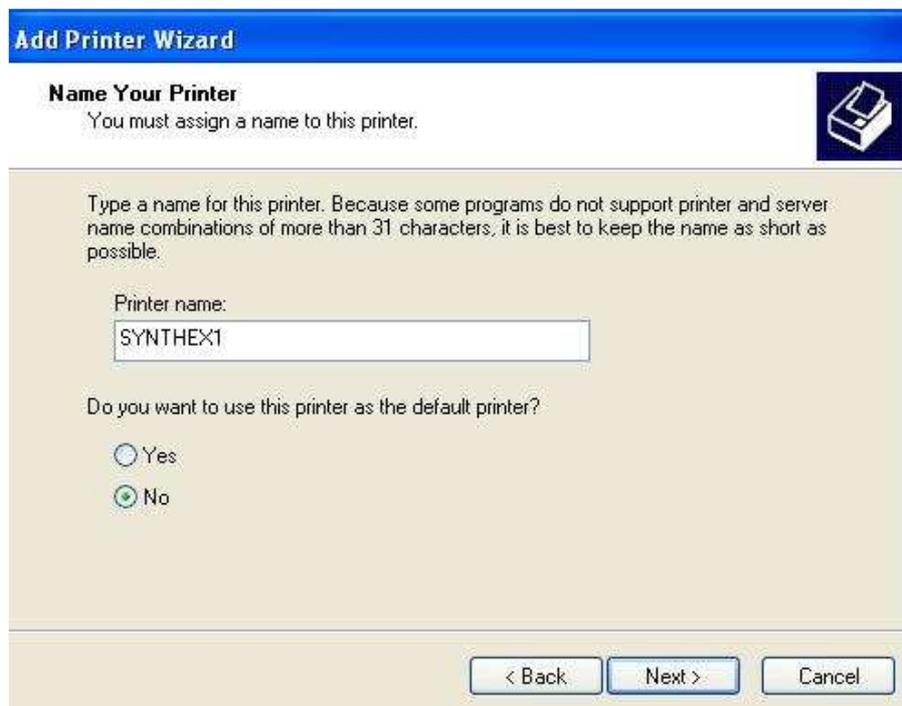
- Press “**Next**” and give a name to the port being created. This should be a name distinguishable for the capture (virtual) printer that the e-Signer will use, as below.



- Press “**OK**” and at the “**Add Printer Wizard**” screen, under “**Manufacturer**” “**Printers**” make the appropriate selections according to related guidelines (to be as close as possible to the Forward Printer but not the same as that).



- Press “**Next**” and enter the name of the capture (virtual) printer. If this is going to be the only printer used by the invoice application, then it can be set as a default printer, otherwise it is suggested not to be default.



- Press “**Next**” and at the Share Printer window make the appropriate selection and Shared Name entry, according to if other application users use the same capture (virtual) printer or you want to Net Use the printer.