



Cynclly

FeneVision® Best Practice

eServer Setup and Troubleshooting Guide

Introduction

The eServer Setup guide describes how the eServer Application functions within FeneTech's product family. It provides a setup guide by version to be followed as well as a Troubleshooting Guide and FAQ section.

The last page of this guide provides a worksheet for customers to gather all required information for configuration.

Background

eServer is a service which runs on a client PC or a separate dedicated server. A dedicated server is needed if faxing from more than one modem due to client volume. If more than 300 – 400 faxes are sent per day, then additional modems may be needed to handle this.

Using

CORE users can send e-mails and faxes for Order Acknowledgements, Packing Slips, Purchase Orders, Invoices, etc. throughout the software. The default method for sending these documents is configured by customer/vendor within Customer/Vendor Setup. A user can override the sending method or address within an individual document. Therefore, changes made within Customer/Vendor Setup will not propagate back to previously entered documents.

When a document is triggered to be sent through eServer within CORE, a record is added to the [eQueue] table within the FVMaster database.

The status of Sent is achieved when the emails get into the client's mail server for emails to be sent. There is no two-way communication telling the software the customer received the document. For faxes, it is when the status of the fax changes to Sent from Microsoft Fax. Once a fax goes into Microsoft Fax Services, eServer has succeeded. If documents fail after getting into Microsoft Fax, it is an issue with hardware, the phone number, dialing rules, etc.

Activity Monitoring

The current database maintenance plan contains a job which checks to see if there are items in the [eQueue] table waiting to be sent, but no activity has been seen over the last hour. Whenever this situation occurs, the FeneTech Operator setup to receive emails from SQL for maintenance plan failures will also see this message. Upon receiving this message, the user should check to see what is in the queue in the user interface and check to see if the eServer PC is turned on and the required user is logged in. Typically, if it fails it is due to the PC being turned off, someone logged off the PC, someone logged into the PC with an account other than the one specified for the service (v10.8+), permissions changed on the email server, an Out of Memory exception (which we have solutions for and are listed in the Troubleshooting section), or bad hardware such as a bad modem.

Initial Setup

When configuring eServer for the first time, complete the following steps:

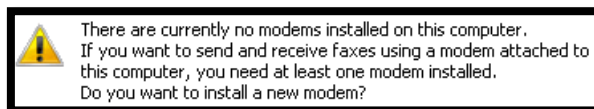
1. Use the configuration worksheet at the end of this guide to gather the information needed for the eServer Setup screen in Core.
 - a. Set up an account for the eServer host machine whose password does not expire. The account needs to be a domain account that is also a local administrator on the eServer host machine.
2. Login to the client PC with the account identified above.
 - a. Install FoxIt Reader version 6.2 or earlier. You will find the Foxit Reader from this downloads file path here: \\fenstore.compusoft.local\Software_BackedUpToAzure\Foxit Reader
 - i. **Version 8 and later is not supported. See the section below for more details.**
 - b. Verify FoxIt Reader is the default PDF Viewer.

- i. Go to Start Menu – Default Programs – Associate a file type or protocol with a specific name.
- c. Uninstall any other PDF Reader such as Adobe.
 - i. Go to Control Panel – Programs and Features to remove any other PDF Reader programs.
- d. Install eServer on the dedicated client PC.
- e. Go to the configuration file and set connection string (found in C:\Program Files (x86)\Common Files\FeneTech Shared\eserver.config).
 - f. Go to Services → FeneTech® eServer. Right click and select properties.
 - g. Go to the Logon tab and specify the username/password for the account identified above.
 - h. Close the screen and restart the service.
 - i. Test sending a fax from Microsoft Fax directly. This will confirm the modem works and that correct dialing rules were provided.
- 3. Go to CORE → Setup → System → eServer.
 - a. Enter the information in the configuration worksheet.
 - a. Test sending an e-mail and a fax from Order Entry. This can be done by holding the shift key while clicking the email/fax option when acknowledging.
 - b. Test sending an email within the network and outside. Test local faxing and long distance faxing.

Configuring Windows Fax and Scan

These steps should be followed once the fax modem is already installed on the PC.

1. Open Windows' Fax and Scan'.
2. Select 'Tools' → 'Fax Accounts'.
3. If there is not an existing account, continue on. Otherwise, skip the rest of this section.
4. Select 'Add' and choose 'Connect to a fax modem'.
 - a. You may see the following message. Select 'Yes' to install a new modem.



- b. Select 'Next' to automatically detect the modem.
5. Choose your fax modem and finish through the rest of the steps to add the account.
 6. Move on to the [Testing Windows Fax and Scan](#) section below.

Testing Windows Fax and Scan

1. Create a new fax with some test content
2. Send the fax to both an internal and external number
3. Be sure that both go through without issue

If you have issues at this point, it is not FeneTech® related. The aforementioned test is simply between the eServer PC (Windows Fax and Scan) and the fax modem. Troubleshooting tips may be included later in this document from FeneTech's experiences, but your IT personnel should be the first to investigate issues at this stage. Windows Event Viewer can be a useful tool for troubleshooting.

Testing eServer

It is often helpful to connect to the eServer PC for potential debugging. Also, you can send an email or fax to a test address by acknowledging an order in Order Entry, and holding shift while clicking the OK button. This will bring up a dialog for you to type into that will override the customer's email/fax information. **(Cancel will still send a record into the [eQueue] table.)**

1. Open CORE on any PC
2. Open any order that doesn't contain sensitive customer information
3. Send test emails to internal and external email addresses via Order Entry. Emails should send within a few minutes.
4. Send test faxes to internal and external addresses via Order Entry. Faxes may be slower than emails.
5. If there are issues with either test, connect to the eServer PC and look at the Event Viewer.

Additional troubleshooting information is included in the [Troubleshooting](#) section below.

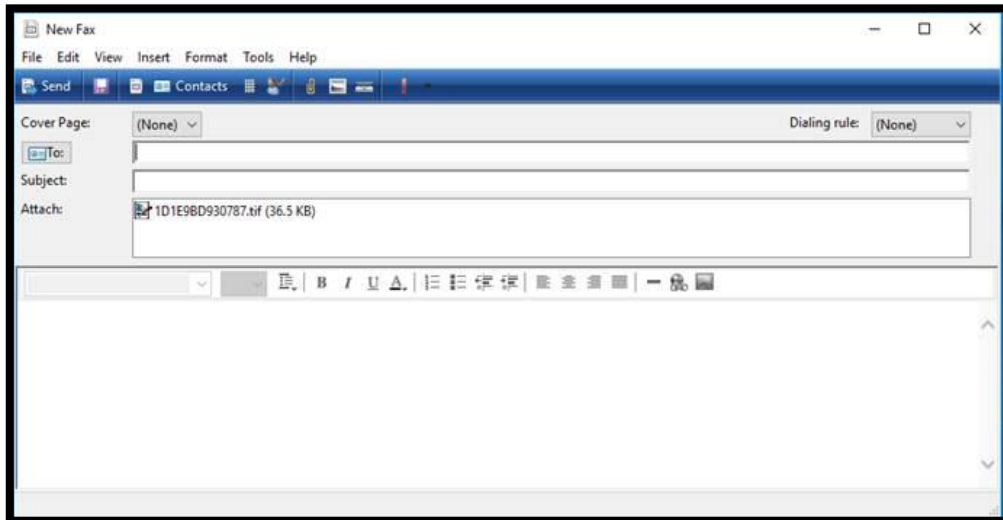
Troubleshooting

The following items should be reviewed when troubleshooting eServer.

Troubleshooting checklist

First, perform the following steps. After that set of steps, there is a more detailed decision tree following.

1. Open Devices and Printers to make sure that Fax is the default printer
 - a. If it is not, that's OK (it doesn't prove anything). It's just necessary to continue the rest of the troubleshooting steps below.
2. Right click on a PDF and chose Print in the right click menu (simulates step 5e in the [Faxing Steps](#) section below).
 - a. Preferably the exact PDF being faxed to the customer, which will be in %TEMP%
3. The following screen up should appear immediately
 - a. If it does not, FoxIt did not send the print command successfully or there is a modem problem



- b.
4. Double click the tif attachment and verify it looks correct
5. Enter a To number and send the fax

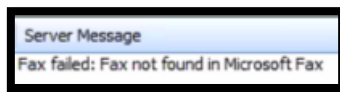
Decision Tree

1. Identify the problem:
 - i. Are only faxes failing? If yes...
 1. Logon to the eServer PC with the designated account and see if the documents are getting into the Microsoft Fax Services Queue.
 - a. If yes, this is not a FeneTech® issue, check the modem, the phone line etc.
 - b. If no, restart the PC.
 - c. Confirm FoxIt Reader version 6.2 is installed and is set as the default PDF Reader.
 - ii. Are only emails failing? If yes...
 1. Confirm emails are getting into the [eQueue].
 2. Check the Application Event Viewer Logs for errors
 3. Check for any Email server changes/outages. Password changes, port # changes, etc. If changes happened, update the setup screen accordingly and restart the service on the eServer PC.
 4. If the error "Invalid HELO Name" is received, this means the Domain setting in eServer setup or eserver.config is incorrect.
 5. If the error "The remote certificate is invalid according to the validation procedure." is received, this means the SSL setting in eServer setup or eserver.config is incorrect.
 - iii. Are all documents failing? If yes...
 1. Check the eServer PC and the service:
 - a. Confirm eServer PC is turned on and logged on
 - b. Confirm only one user is logged in
 - c. Confirm the user who is logged in is setup as the user in the FeneTech® eServer Service
 - d. Confirm FoxIt Reader is still installed and set as the default PDF viewer.
 - e. Restart the service. If it does not start quickly or fails to start, check the following:

- i. If a domain change occurred, was the user account registered with the new domain and added to the FeneTech Security Group?
 - ii. If a domain change occurred, check the Logon As service to see if the domain was specified or to setup a new password.
 - 2. Check the eServer Application Event Log for errors.
 - a. See in the Tips for known Microsoft Memory Leak messages and solutions/workarounds.
 - 3. Did the master database get moved or the Domain change?
 - a. After a migration, connection to the SQL server is stored in the configuration file on the eServer PC. Update it and restart the eServer service.
 - 4. Is the account or PC new?
 - a. Verify the Microsoft user account is on the domain and in the FeneTech Security Group
 - i. Test by installing CORE and trying to run login.
 - b. Make sure the Microsoft account has administrative privileges.
- iv. Are you experiencing random failures from both email and fax? If yes...
 - 1. Check to see if it is isolated to specific customers/vendors and confirm the email/fax information is correct. If incorrect, update in Customer/Vendor Setup and manually on any active Orders already entered.
 - 2. Confirm only one instance of eServer is installed and running. FeneTech® does not support eServer being installed in more than one place. Use the following SQL Query to confirm:

```
SELECT DISTINCT HOSTNAME
FROM MASTER..SYSPROCESSES
WHERE PROGRAM_NAME LIKE '%eServer%'
```

- a. This can cause the following error message in eServer Maintenance:
 - i. Fax failed: Fax not found in Microsoft Fax



- ii.
 - 3. If faxes are randomly failing:
 - a. If have multiple fax Modems, confirm both Modems are working
 - b. Confirm dedicated line only sending out faxes and not receiving faxes
 - 4. If emails are randomly failing:
 - a. Adjust the number of documents being merged to a lower value.
 - b. Confirm the Email provider does not have a low limit on number of emails which can be queued up to go through the email server.
 - v. Are you getting a “STARTTLS” error in eserver maintenance? If yes...



- 1. Check in the Email Settings screen and make sure the “Enable SSL” is set to 1

Enabling Logging for Email Failures

The modified FeneVision.eServer.Service.exe.config file located in the Best Practice folder will be needed.

1. Stop eServer.
2. Make a copy of the existing C:\Program Files (x86)\FeneVision\eServer\FeneVision.eServer.Service.exe.config file, because this will be restored later.
3. Paste the modified FeneVision.eServer.Service.exe.config file over the top of the existing one.
4. Start eServer.
5. Send the email through eServer.
6. Once it fails, there will be a new C:\Program Files (x86)\FeneVision\eServer\FeneVisionTrace.log file that shows up. The file gets big quickly, so copy it off as soon as possible.
7. Stop eServer.
8. Copy the original config file over the modified config file.
9. Start eServer.

Event Viewer Tips

View the Application Event Viewer Log on the eServer PC. Below are some common errors seen and steps to resolve:

1. **The fax server cannot find the job or message by its ID.** This indicates the service is not able to authenticate and the account is not specified or has the wrong password. Go to Services, FeneTech® eServer. Right click and select Properties. Select Logon. Confirm the specified username and password match the account logged on and the account has local admin permissions. Restart the service. (versions 10.8+)
2. **Out of Memory Error on Windows XP PC's with Microsoft Fax Services.** This is a Microsoft bug and to fix, the user needs to install this update on their OS: <http://support.microsoft.com/kb/951347/en-us>.
3. **Error during order ack report create.** This indicates a Microsoft Memory Leak for Reporting Services. This is resolved in Reporting Services 2012 which is used in version 11.0+. When we continued supporting Windows XP we could not use Reporting Services 2012. Temporary solution is to restart the PC. Long term solution is to create a batch file to restart the FeneTech® eServer service nightly and clear the memory preemptively. See appendix for this information.
4. **Email failed: Mailbox unavailable. The server response was: 5.7.1 Unable to relay for name@fenetech.com.** This may mean that the sender username is not authorized to send emails outside the domain. Have the customer try sending an email inside the domain to see if that works. If it does, then the user must contact their IT department to modify the account to allow for sending e-mails externally.
5. **The event source ExceptionManagerInternalException does not exist and cannot be created with the current permissions"...."The source was not found, but some or all event logs could not be searched. Inaccessible logs: Security.** Make sure the user logged into eServer is a domain account with administrative permissions. If it cannot connect, verify the eserver.config file has a valid database, username, and password. Also verify the user's account has been added to the FeneTech Security Group.

Faxing Steps

The following is a list of the exact steps being taken when eServer sends a fax through Microsoft Fax and Scan. This can help with more technical and difficult issues but should not be used as a first resort.

1. eServer looks at [eQueue] to determine what needs faxed
2. eServer calls into SSRS to generate a report
3. SSRS exports to report to a PDF, which is temporarily saved in the windows %TEMP% directory
4. eServer points to the PDF file and tells MS FAX to send it to a specific fax number
5. MS FAX does the following:
 - a. Examines the file extension from step 3 (PDF)
 - b. Figures out the default program for the PDF by looking at **HKEY_CLASSES_ROOT\.pdf**
 - c. Uses the default program from step 5b
 - i. This will likely be FoxitReader.Document (**HKEY_CLASSES_ROOT\FoxitReader.Document**)
 - d. Finds **HKEY_CLASSES_ROOT\FoxitReader.Document\shell\printto\command** to figure out how to print
 - i. NOTE: Not all PDF viewers can printto from the command line (Foxit Reader can)
 - e. MS FAX now invokes the command line from 5d, passing in the PDF document from step 3, and the name of the FAX printer (which is named FAX as of Windows 10)
 - i. NOTE: Since MS FAX is doing all of this itself, it has hardcoded its own fax printer name into the printto statement (FAX as of Windows 10). Therefore, it doesn't really matter what the default printer on the machine is.
 - f. The printto command invokes the spoolsv.exe spooler, just like any print job would
 - g. The printto command writes a BLOB to the spooler using FSCTL_PIPE_TRANSCEIVE
 - i. <https://msdn.microsoft.com/en-us/library/dd240221.aspx>
 - h. Windows now invokes the FAX printer driver
 - i. In Windows 10, this is C:\Windows\System32\spool\drivers\x64\3\FXSDRV.DLL
 1. This driver is hosted by splwow64.exe, which is the 'Print driver host for applications'
 - i. The FAX driver takes the BLOB and writes it to a binary file in C:\Windows\System32\FxsTmp
 - i. It will be named something like fax5B3F.tmp
 - j. Splwow64 now calls the 'Windows Shared Fax Driver' C:\Windows\SHRFAX:
 - k. SHRFAX takes the BLOB and converts it to a fax compliant TIF file (CCITT FAX4 format)
 - i. https://en.wikipedia.org/wiki/Group_4_compression
 - l. Splwow64 now invokes WFS.EXE (Windows Fax & Scan) and passes it the tif file created from step 5k above, along with the fax number information

- i. <http://www.vistax64.com/vista-print-fax-scan/60479-windows-fax-scan-command-line-options.html>
- ii. E.g.: "C:\Windows\System32\WFS.exe" /Delete /Account . /SendTo C:\Users\fenetech\AppData\Local\Temp\1D1E997DE004C.tif
- m. WFS now takes the tif and sends it to the fax number using the attached fax modem

FoxIt Versioning

FoxIt is only required when faxing documents, not for emails. So, if faxing won't be used, there is no reason to install FoxIt. FoxIt version 6.2 is required for eServer. Contact FeneTech for a version 6.2 install. Any version after that will not work. A single email or fax will send without issue, but nothing will send after that.

Automatic updates should be turned off in the application. However, some users have still noticed the software updating itself even with automatic updates turned off. To go a step further, the update server URLs can be disabled on a network. This will ensure the updates cannot fire.

Addresses found online in FoxIt's help here: <https://help.foxitsoftware.com/kb/how-does-foxit-updater-connect.php>.

- us-request.foxitservice.com – This is the request server.
- cdn0X.foxitsoftware.com – This is the response server where the setup file is stored for downloading.

Frequently Asked Questions

1. **How can I send a document to more than one email recipient?** Use a semicolon between email addresses. This will generate multiple records in the [eQueue] table. Each [eQueue] record must contain only one email address.
2. **How can I see what was successfully sent and what failed?** Versions prior to 10.12 – Order Maintenance/Document Maintenance (PO's) have email sent and fax sent columns. Users can sort on failures. Versions 10.12+ can view in eServer Maintenance screen the success and failure ratios.
3. **My customers complain about getting an email for each order ack, invoice, po, etc. Is there anything we can do?** Adjust the mail merge setting from the default of 1 to 5 or 6. Do not set it too high as if the document gets too large either the user or the recipient's mail servers may reject it. Additionally, the user may want to adjust the delay for pulling items from the [eQueue] table. By default it is set to merging what is in the queue every minute. If users are flagging items for eServer individually, you should extend the wait time.
4. **I'm not getting an image within the email body.** Update the image URL within eServer setup in CORE (v10.9+) or in the configuration file on the eServer PC.
5. **I want to update the header information within the email body for address, phone, etc.** Update the eServer Setup in CORE (v10.9+) or in the configuration file on the eServer PC.
6. **How can I set eServer up in debug mode?**
 1. Make sure the debug key is set to a value of 1 in the eserver.config file.

```
<add key="interval" value="1" />
<add key="debug" value="1" />
```
 2.

```
</GeneralSettings>
```
 3. Set the debug fax number and debug email address in Core-Setup-System-eServer on the Fax Settings and Email Settings tabs, respectively.
 4. Restart the eServer service after making these changes.
 5. If setting this up with a pre-existing FVMaster, there could be items in the equeue table that you do NOT want sent out. You can set the Obsolete field in this table to 1 to disable each row in the table. Make sure the eServer service is OFF, or eServer not installed, until you've marked the items obsolete.

eServer Configuration Questionnaire

Please complete the following questionnaire and provide to FeneTech.

General Questions	
Days of eServer history to maintain (Default 21 days)	
Number of documents to merge*	
Faxing Questions	
Sending Fax Number	
Dialing Prefix (ie, 9)	
Local Area Code	
Email Questions	
Sending address (ie. CustomerService@company.com)	
E-mail Server	
Host	
Port (ie, 25)	
Username	
Password	
Domain	
Email Body Information	
Company Address	
Company Phone Number	
Company Fax Number	
Company Logo URL (Optional)**	

* Number of documents to send at one time in one email/fax. Default is 1, it is suggested to start with 5 if you would like them merged. This means up to five documents will be merged in a single correspondence. If the document is too large, it will be reject by either your mail server or the clients mail server.

** The logo needs to be publically accessible as the URL and not the logo itself imbedded in the email body. The URL of the logo posted on most user's websites will work for this purpose.