



FeneVision® Best Practice

# Web Setup and Troubleshooting Guide

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## Introduction

The following instructions should be used during the install of FeneVision Web. This is an application that should be installed on its own server. It should not be installed on the database server as it requires exposing the server externally. Only one install should be completed per company. **NOTE: Before running any install on an existing Web server, whether it's ROE or Web Center, back up the C:\inetpub\wwwroot folder and save it elsewhere. This will help preserve the web skin, but more importantly save any configuration files used to setup URL redirects.**

## Using

This guide will help install Web to use the Web application. The Web application allows customers to have a site where their customers can enter orders and upload them to CORE for manufacturing. It should be explained to the customer that the IP needs to be exposed for users to be able to access Web from outside the customer's domain.

## Setup Process

**Bolded tasks only apply to first time installs.**

Non-bolded tasks need to occur on every install, including upgrades and SP installs.

When upgrading, all customized database procedures and functions that affects Order Entry (Parts, Pricing, Customers, etc.) should also be updated on FVRremote.

Check the Hardware Requirements document to see what is needed for the Web server prior to starting.

### Windows Server 2016+

1. **Verify that Internet Information Services (IIS) is installed, and all features that Web uses are installed as well on the Web server.**
  - a. **Open Control Panel, select 'Programs and Features', and choose 'Turn Windows features on or off'.**
  - b. **Windows Server:**
    - i. **For 'Installation Type', select 'Role-based or feature-based installation'**
    - ii. **For 'Server Selection', select your server from the server pool**
    - iii. **For 'Server Roles', check 'Web Server (IIS)'**
      1. **If a dialog pops up, accept the defaults and click 'Add Features'**
    - iv. **For 'Features' in the '.NET Framework 4.6 Advanced Services' group check the following:**
      1. **Within 'WCF Services', ensure these are checked:**
        - a. **HTTP Activation**
    - v. **For 'Web Server Roles (IIS) & Role Services', check the following:**
      1. **Within 'Common HTTP Features', ensure these are checked:**
        - a. **Default Document**
        - b. **Directory Browsing**
        - c. **HTTP Errors**
        - d. **Static Content**
      2. **Within 'Health and Diagnostics', ensure these are checked:**
        - a. **HTTP Logging**
      3. **Within 'Performance', ensure these are checked:**
        - a. **Dynamic Content Compression**



7. **Open roeweb.config in C:\Program Files (x86)\Common Files\FeneTech Shared\Config**
  - a. Modify the FVMaster Connection String setting
    - i. DO NOT USE sa! Use a less privileged user, such as iis.
8. **If this is a 64-bit server, the Application Pool for Web and ROE needs to be set to run in 32-bit mode. In IIS, expand the computer name and select 'Application Pools'. Right click the FeneVision Web App Pool, select Advanced Settings, and set 'Enable 32-Bit Applications' to True. Do the same for FeneVisionROEAppPool.**
9. Install the latest OS updates from Windows Update.
10. Update the new Images folder for web skin customization. See **BP0054-Q2S Web Skin Configuration** for instructions on how to create a custom skin or update during upgrade/service pack deployment.
11. Restart IIS.
12. **Navigate to Visual Studio on the SQL/Database server, where CORE and BI are already deployed. Deploy Web RDL Reports.**
  - a. **On the RDL Reports, add browse permission to a Microsoft Windows Domain user created specifically for report permissions. Note this should be a user specifically created for this since the password will be in plain text. Commonly this user is created as {DOMAIN}\WebSSRSUser.**
13. **Navigate to the Web server**
  - a. **For versions prior to 18.2, go to <http://localhost/WCAdmin>. Navigate to permissions. Add the following parameters to match the account used on the Web reports.**
  - b. **For versions 18.2+, go to <http://localhost/webadmin>. In order to login to the web admin page, you'll need to login as an administrator other than the fenetech super user. This can be accomplished by opening Core, creating a new employee as an administrator, and logging in to the webadmin page with this user. Note that you do not need to check off "Web" under the employee's access to login to the web admin page. Then add the following parameters to match the account used on the Web reports.**

Parameter	Description
WebCenterSSRSDomain	The domain for the user on the SSRS machine that has permissions to access the SSRS 'Browser'
WebCenterSSRSPassword	The password for the user on the SSRS machine that has permissions to access the SSRS 'Browser'
WebCenterSSRSUser	A user on the SSRS machine that has permissions to access the SSRS 'Browser'

14. **Reboot the Web server.**
15. **If you are installing WEB for 17.1 and above and are getting errors, check [step 11](#) in the Troubleshooting section.**

## Troubleshooting

1. If you are receiving an error about iis not being able to login to either FVMaster or FVRemote, double check the spelling on your password and restart IIS.
  - a. Also check to ensure iis has permission on both databases
2. (12.3 and higher only) The publish takes too long.
  - a. If this is a VM, increase the number of CPUs available. The publish will utilize all available CPUs.
  - b. Look at the folder timestamps in C:\Program Files (x86)\Common Files\Fenotech Shared\ROE. You should notice one or two tables that took a long time. You could try increasing the page size for the table. This will tell the publish to write more data each time. Tables with few columns can have high page sizes. For example, MultiAxisPriceGridCellValues has three columns. You can increase the page size to 200,000 records and gain performance increases.
    - i. To do this, edit the C:\Program Files (x86)\Common Files\Fenotech Shared\config\roeweb.config file.
    - ii. Find the record for MultiAxisPriceGridCellValues. It will look like this:

```
<add key="MultiAxisPriceGridCellValues" value="1" />
```
    - iii. Add a PageSize property. This will override the default set at the top of the file.

```
<add key="MultiAxisPriceGridCellValues" value="1" PageSize="200000" />
```
3. I receive a "out of memory" exception during the publish.
  - a. (12.3 and higher) Check the available RAM on the web server. If it is below 8GB consider adding more RAM. The publish is a 64-bit process and will write/compress multiple XML files at the same time. We've seen this process utilize over 6GB of RAM when working with large amounts of data.
  - b. This can happen if the page size is too large.
    - i. (Pre 12.3) Try to lower the PageSize setting in the C:\Program Files (x86)\Common Files\Fenotech Shared\config\roeweb.config file.
    - ii. (12.3 and higher) You can adjust the default page size as noted above. However you might lose performance when publishing other tables. You could identify the table causing the out of memory exceptions and lower the page size for that table (similar to the steps above for increasing the page size).
4. I receive a "User does not have ALTER TABLE permission" on a table when performing a sync.
  - a. Confirm that the iis user has membership to the database role of db\_ddladmin. This can often be reset when the iis user is dropped on the FVRemote database.
5. In quote entry, adding a line item appears to do nothing, but if I hit Finish, the line item appears. If I hit Add multiple times, multiple line items appear.
  - a. Go to event viewer on the Web Server to see if an error is occurring.
  - b. If a Surcharge ufnx exists in FVMaster but not in FVRemote, you will see this behavior and an error in event viewer referencing an unavailable ufnx. Add the ufnx'es to FVRemote, give public permission to them, and try again.
6. Quote Report does not generate when clicking the Print button.
  - a. Check event viewer.
  - b. Check the Web reports are deployed on the database server and dedicated Microsoft user account has browse access.
  - c. If Event Viewer says "...the permissions are insufficient for DOMAIN\SERVERNAME..."
    - i. Check the Microsoft user is setup within WCAdmin page's parameters.
      - 1.
    - ii. Check in [\\localhost\reports](#) > Manage > Security, that the user has Browse permission.
    - iii. Check with the customer that the Microsoft user is on the same domain and in the FeneTech Security Group in Active Directory.
7. I want to increase the session timeout from 20 minutes.
  - a. Multiple changes to the web.config file needed to be made.
  - b. Navigate to the web.config file. Modify the authentication line to include a timeout like so:

```
<authentication mode="Forms">  
<forms timeout="120" />  
</authentication>
```
  - c. Similarly, there is a SessionState setting with a timeout. That timeout should also be bumped up to the desired value in minutes. Do not set to 24 hrs. Recommend 2-4 hrs.
  - d. Modify the FeneVisionWCAppPool to have the same timeout.
  - e. In IIS, recycle the app pool.

8. After adding in an SSL certificate, I get an error stating "HTTP status 404 Not found", and am unable to sync from Core to Web.
  - a. In the wc.config file, you need to change the "ROE Web Services URL" value to the newly binded web address. The local host won't be able to be reached now, which is the issue.

```
<add key="ROE Web Services URL" value="http://localhost/ROE" />
```

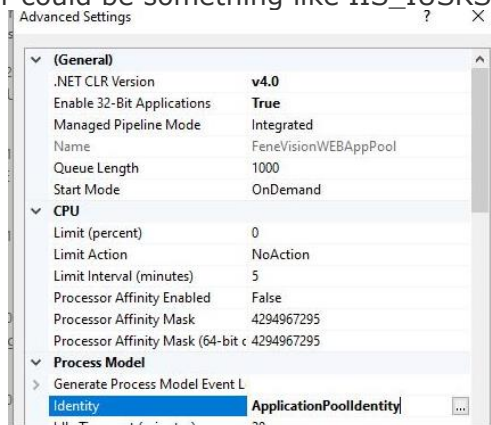
9. If reports are not generating within the web center app and the event viewer displays a 404 or 417 error:
  - a. Go to SSMS
  - b. Use FVRemote database
  - c. Select all from the GeneralSetup table
  - d. If the value of the ReportServerURL parameter = ' <http://localhost/reportserver>' edit and use the following script to update the value to match the SQL server instead:

ReportServerFolder	FeneVision Web
ReportServerURL	http://fenevisioncore/reportserver

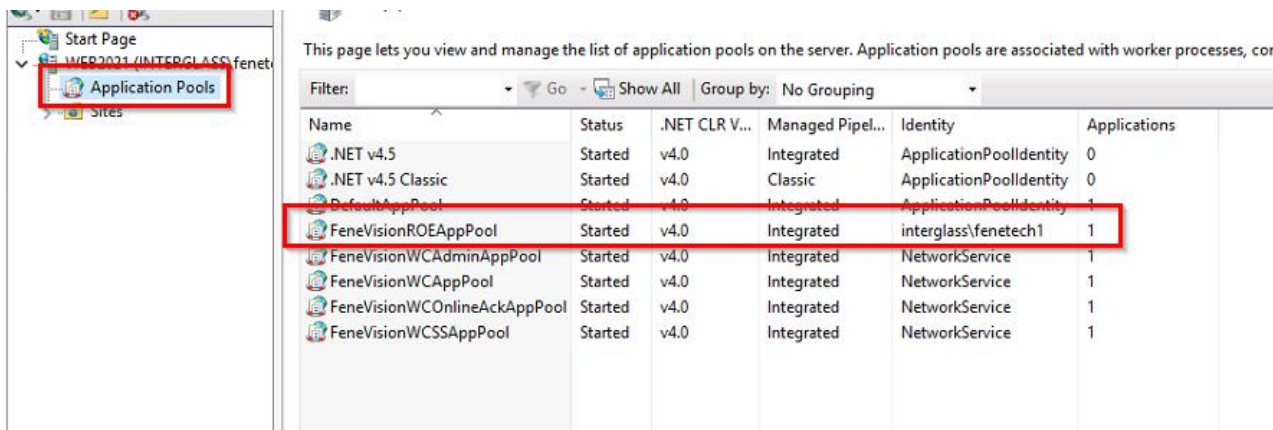
- 2.
  3. use FVRemote
  4. update GeneralSetup
  5. set [Value] = 'http://**dbservername**/reportserver' where Parameter = 'ReportServerURL'
- e. Restart WEB server and try pulling one report from a quote.
10. I receive an "Access to Path is Denied" error when uploading quotes to Core.



- a. The domain account running ROE Web Services needs to have write permission to the Order Attachments path.
- b. To find the domain account, look at the advanced settings of the FeneVisionROEAppPool. Right click on this application pool and select Advanced Settings. Add the account in the Identity field to the directory path security. Might need to add in the format MACHINENAME\identityaccount, where MACHINENAME is the web computer and where identityaccount is from the Identity Field or could be something like IIS\_IUSRS.

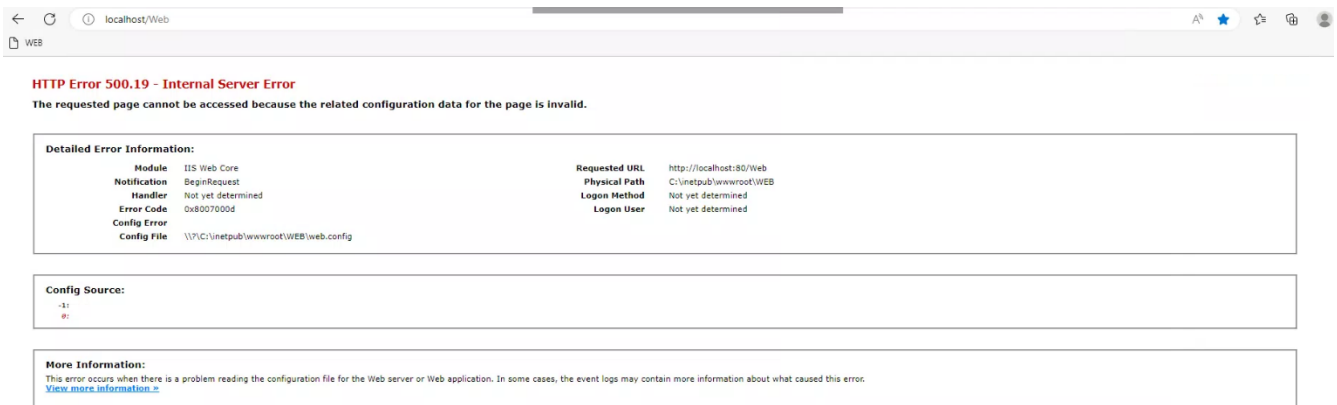


- c. If this does not work, try changing the Identity of the app pool running FeneVisionROEAppPool:



- d.
- e. Right click on the app pool and select advanced settings. Click on the ellipses next to Identity
  - i. Use an account with domain access to the file path.

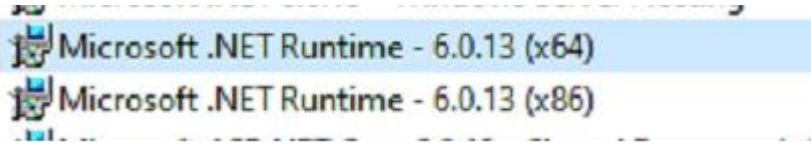
11. When attempting to access localhost/web (17.1 and above), you can be presented with the following error because the installer doesn't always lay down everything it needs for iis.



- a. To fix this, you will need to install both the .NET Core: Runtime and Hosting Bundle AND .NET Core App version 6.0.0. It's likely the hosting bundle is all that is missing, but check for both under installed programs.
  - i. Also keep in mind that depending on which server you are on, the .NET Core version (x64 vs x86) you will need to install will vary. After installing the Runtime and Hosting Bundle, if you try going to localhost/web, Event Viewer will show the specific version of .NET Core that you require. Currently the hosting bundle link will install both.



- b. The below links will take you to the installers needed. Download the installers and run them on the server. Later version are available, but version 6.0 is the version advised to be used.
  - i. [.NET Core: Runtime and Hosting Bundle](#)
  - ii. [.NET Core version 6.0.0](#)
- c. One or both of these should be installed on the web server after the install completes:



12. For customers who are using WEB prior to 17.1, if they have a native speaking language that may have different culture currency settings, it will be important to set the Web Browser up in the correct language. If the correct language is not setup as the default language, there is a chance that the wrong currency symbol will be displayed.
  - a. In Chrome and Edge, use the following steps to ensure the correct language is configured on the browser:
    - i. In the top right corner, click on the ellipsis icon to get the drop down menu to display. From there, go to Settings.
    - ii. Within the Settings window, navigate to the Languages tab.
    - iii. Under Languages, the screen has a section has for “Preferred Languages”, ensure that the customer’s native language is selected as the default. If it is not there, add it and make it the default display language.
      1. Ex: If a Spanish speaking customer is based out of Argentina, you will want to make sure that the language is set to “Spanish (Argentina)”. If it is set to “Spanish (Spain) for example, then the currency icon will show as € instead of \$.
13. You receive “This site has encountered an internal server error” when uploading a quote. Users can login and create quotes.
  - a. ROE and Web talk to each other over port 80 when uploading a quote (also when performing publish/sync). It may be the customer blocked port 80, ask them to verify it is open.

## WEB ICON

This section refers to if the customer would like to have their own icon image instead of the default FVWeb.



If the customer would like to change out this “FWB” and use one of their own here are the steps needed to switch this.

1. Customer will need to provide their own favicon.ico file
2. Once you have this file go to C:\inetpub\wwwroot\WEB\wwwroot
3. Replace the “favicon” file with your new file
4. Refresh Web now by pressing F5 and you’ll see the new image appear

Note: On Upgrades, this file will get overwritten, you will need to backup the old one and save it off like we do with the web skins.

## DMZ

NOTE: DMZ needs to be set up by the Customers IT or a Third-Party IT. This is configuration outside the scope of FeneVision and FeneTech expertise and is not the responsibility of FeneTech to configure.

The items below are those FeneTech has encountered in the past and should be verified by the IT team.

1. Ensure the appropriate ports are open when setting up the DMZ. There are specific ports that need to be available for connection between the Production Server and the DMZ Server:
  - TCP/UDP 389 LDAP
  - TCP 636 LDAPS
  - UDP 123 NTP
  - TCP/DNS 53 DNS
  - TCP/UDP 88 Kerberos
  - TCP/UDP 135-137 NetBIOS (Optional)
  - TCP/UDP 42 Host Name Server
  - As well as all SQL ports that Microsoft recommends
2. If SSL (https) is being used and errors like the following throw during the web sync, try the following.
  - Error from Event Viewer:

General Information

\*\*\*\*\*

Additional Info:

ExceptionManager.MachineName: {WEBSERVERNAME}

ExceptionManager.TimeStamp: 5/27/2022 4:07:19 PM

ExceptionManager.FullName: Microsoft.ApplicationBlocks.ExceptionManagement, Version=1.0.0.0, Culture=neutral,

PublicKeyToken=null

ExceptionManager.AppDomainName: FeneVision.Web.DataPoller.exe

ExceptionManager.ThreadIdentity:

ExceptionManager.WindowsIdentity: NT AUTHORITY\SYSTEM

1) Exception Information

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Exception Type: System.Net.WebException

Status: ProtocolError

Response: System.Net.HttpWebResponse

Message: The request failed with HTTP status 403: Forbidden.

Data: System.Collections.ListDictionaryInternal

TargetSite: System.Object[] ReadResponse(System.Web.Services.Protocols.SoapClientMessage,

System.Net.WebResponse, System.IO.Stream, Boolean)

HelpLink: NULL

Source: System.Web.Services

HResult: -2146233079

StackTrace Information

\*\*\*\*\*

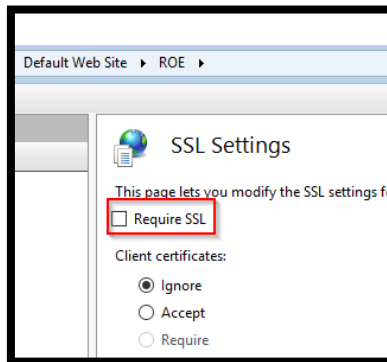
at System.Web.Services.Protocols.SoapHttpClientProtocol.ReadResponse(SoapClientMessage message, WebResponse response, Stream responseStream, Boolean asyncCall)

at System.Web.Services.Protocols.SoapHttpClientProtocol.Invoke(String methodName, Object[] parameters)

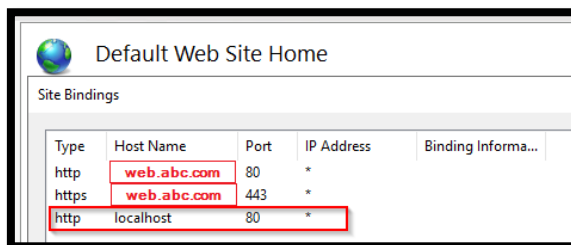
at FeneVision.RemoteOrderEntry.Business.SystemDataSync.SystemSync.CompatibleVersions(String RemoteVersion)

at FeneVision.RemoteOrderEntry.Business.SystemServerSync.SyncSystemData()

- Potential Solution – ROE doesn’t require external exposure and thus doesn’t require SSL. Web only uses it internally.
  - Remove Requires SSL from the ROE website



- Create a localhost binding in addition to the existing binding configured for SSL



- Change the wc.config file’s “ROE Web Services URL” setting to use localhost

```
<add key="ROE Web Services URL" value="http://localhost/ROE" />
```

If the server is not able to be pinged from the Web server, verify these are added in by the Customers IT.