Visual Fusion® Installation Guide

VFSProxy
VFS 4.5
VFX 4.5
VFX 3.0
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Installing Visual Fusion 4.5

This guide provides instructions for deploying IDV Solutions Visual Fusion Server (VFS) 4.5 on a server or a server farm and for installing the optional connectors to ArcSDE databases and the MOSS Business Data Catalog. If you are upgrading to Visual Fusion 4.5 from an earlier version, see the Visual Fusion 4.5 Upgrade Guide.

Before installing, check your server or server farm against the hardware and software requirements that follow.

1 VFS Hardware and Software Requirements

The following software is required for server computers that will host VFS 4.5 Standard Edition or VFS 4.5 Enterprise Edition:

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Windows Server 2003 or Windows Server 2008</td>
<td>Operating system. Latest software updates should be installed and Internet Information Services (IIS) enabled.</td>
</tr>
<tr>
<td>Windows SharePoint Services (WSS) 3.0</td>
<td>See the complete set of <a href="https://www.microsoft.com">WSS 3.0 system requirements</a> from Microsoft.</td>
</tr>
<tr>
<td>Microsoft Office SharePoint Server (MOSS) 2007 Enterprise Edition</td>
<td>MOSS 2007 Enterprise is a licensed Microsoft product that you must purchase separately. Refer to the complete list of <a href="https://www.microsoft.com">MOSS 2007 system requirements</a> from Microsoft. Required only if you plan to use Visual Fusion (VF) Search or the VF Excel Library template. Optional, otherwise.</td>
</tr>
<tr>
<td>Disable Loop Check</td>
<td>See Microsoft Knowledgebase article <a href="https://support.microsoft.com">here</a></td>
</tr>
</tbody>
</table>

In addition, if you are installing the VFS Enterprise edition, which includes the Visual Fusion SQL connector, you should have installed:

- Microsoft SQL Server 2008, or
- SQL Server 2005 or SQL Server 2000 with Service Pack 4 (SP4)

SQL Server and the MOSS servers are typically separate physical servers, but can reside on the same physical box, depending on the needs of the application and infrastructure available.
1.1 Additional requirements for VFS Connectors

Optional connectors are available to allow VFS Enterprise editions to display data from ArcSDE, Oracle, and MOSS Business Data Catalog (BDC). The following software is required if you are installing one of the VFS Connectors:

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESRI ArcSDE 9.3, 9.2 or ArcSDE 9.1 Service Pack 1</td>
<td>See the complete set of <a href="https://www.esri.com/software/arcgis/system-requirements">ArcSDE system requirements</a> from ESRI.</td>
</tr>
<tr>
<td>Oracle 10g or 11g</td>
<td>Oracle and MOSS or WSS are typically installed on separate servers, but can reside on the same physical box, depending on the needs of the application and infrastructure available</td>
</tr>
<tr>
<td>BDC</td>
<td>MOSS 2007 Enterprise Edition</td>
</tr>
</tbody>
</table>

1.2 Other pre-installation requirements

**MapPoint credentials**

MapPoint Web service account credentials are required for Visual Fusion to perform geocoding and the installers will prompt you to enter them. If you do not already have a Virtual Earth or MapPoint Web service account, you can request a free developer account at: [https://mappoint-css.live.com/mwssignup/](https://mappoint-css.live.com/mwssignup/).

**Access and permissions**

When you install a new SharePoint solution file (.wsp), you must add it to the solution store in the configuration database. To do this, you must be a local administrator on the Web front-end server of the farm that will host Visual Fusion, and one of the following must be true:

- This account was initially used to set up SharePoint on the server or farm, or
- The account has been granted **Farm Administrator** permissions, and has **Connect** and **Execute** permissions on the SharePoint farm configuration database (SharePoint_Config), and the Central Administration content database (SharePoint_AdminContent_GUID).

**Web application and site collection**

If you are not deploying VFS to an existing Web application and site collection, create one using the SharePoint 3.0 Central Administration page on your SharePoint server. For more information, see:

2 Running the Installation Packages

You should have received the following set of .zip files, each containing the installer file for one Visual Fusion component:

1. VFS 4.x App Hub.zip (e.g. VFS 4.5 App Hub.zip)
2. VFS 4.x Standard.zip or VFS 4.x Enterprise.zip or
3. VFS 4.x Site Definitions (Silverlight).zip or VFS 4.x Site Definitions (Flash).zip
4. VFX 4.x.zip

Check that you have the correct Zip file for the Visual Fusion edition you have purchased. For example, VFS 4.5 Enterprise.zip is the installation package for the enterprise edition of VFS 4.5, while VFS 4.5 Standard.zip is the package for the standard edition. Each of these Zip files contains SharePoint solutions for both MOSS Standard and MOSS Enterprise environments; the installer will choose the correct solution to install by detecting the edition of SharePoint on your server.

The following installation steps are the same for all four installers, and for all Visual Fusion and SharePoint editions.

Note: To deploy VFS in a server farm, you only need to run the VFS installation package on one of the front-end web servers.

1. Log on as an administrator with the required permissions. (See Preparing for installation.)
2. Unzip the installer (.zip) package.
3. In the folder containing the extracted files, double-click the Setup.exe file to run the installer.
4. On the Welcome dialog, click Next.
5. On the System Check dialog, wait for all checks to complete and then click Next to continue. Important: If one of the system checks fails, then you must fix the problem before you can install VFS.
6. On the Software License Agreement dialog, select I accept the terms in the License Agreement to accept this agreement and then click Next to continue.
7. On the SharePoint Solution Installer License Agreement dialog, select I accept the terms in the License Agreement to accept this agreement and then click Next to continue.
8. On the MapPoint Web Service Credentials dialog, enter your MapPoint Web Service user account name and password. (If necessary, you may bypass these fields and add the information later in the configuration files. See “Modifying the VFS Web.config file” on page 16 for details about manually setting up the MapPoint Web Service user credentials.)
9. On the Farm Deployment Target dialog, click the drop-down list to select the SharePoint web application to which VFS should be deployed. VFS is deployed as a SharePoint solution to the selected SharePoint web application. Click Next to continue.
10. Examine the Virtual Earth Service URLs and make any changes. Select an appropriate culture to use with Virtual Earth. Click Next to continue.
Important: The Virtual Earth connection that is configured in this installer contains a URL that points to the staging environment by default. If you have a production level account, then you must replace this URL with the production environment URL.

11. On the Confirm Installation dialog, click Next to continue. The VFS installation will begin.

12. Wait for the solution deployment to complete; then click Close to finish the setup program.

13. Repeat these steps for each of the Visual Fusion installation packages.

14. Next, complete the post-installation steps, as described beginning on page 10.

Important: If an error occurs during installation, you can click Details to get more information on what may have caused the error.
2.1 Installing data connectors

The optional data connectors below are available for Enterprise editions of Visual Fusion.

You must run the VFS installation package prior to installing any connectors.

<table>
<thead>
<tr>
<th>Connector</th>
<th>Requirements and notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArcSDE</td>
<td>Enables VFS to process data from an ESRI ArcSDE server.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Check the name of your installation package to verify that you are installing the correct version of the ArcSDE connector. For example, VFS 4.5 Connector for ArcSDE 9.2.zip should be installed with ArcSDE 9.2. If the version numbers do not match, contact IDV Solutions to see if there is a connector available for your ArcSDE version.</td>
</tr>
<tr>
<td></td>
<td>Before you install the ArcSDE connector, your server or server farm must meet the connector’s software requirements. The ArcSDE connector plug-in requires:</td>
</tr>
<tr>
<td></td>
<td>• The runtime libraries of the ArcSDE 9.1/9.2 You need a valid ESRI ArcSDE 9.1/9.2 license before installing the ArcSDE connector for VFS</td>
</tr>
<tr>
<td></td>
<td>• The latest Microsoft Visual C++ redistribution package</td>
</tr>
<tr>
<td></td>
<td>Be sure to perform the pre-installation steps for the ArcSDE connector.</td>
</tr>
<tr>
<td>Oracle</td>
<td>Enables VFS to process data from an Oracle database server.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Check the name of your installation package to verify that you are installing the correct version of the Oracle connector. For example, VFS 4.5 Connector for Oracle 10g.zip should be installed with Oracle 10g. If the version numbers do not match, contact IDV Solutions to see if there is a connector available for your version of Oracle.</td>
</tr>
<tr>
<td>BDC</td>
<td>Enables VFS to connect and process Business Data Catalog (BDC) data sources on a MOSS 2007 server. The installation package VFS 4.5 Connector for MOSS BDC.zip installs and configures this plug-in.</td>
</tr>
<tr>
<td></td>
<td>The BDC Connector requires a SharePoint 2007 Enterprise server or server farm.</td>
</tr>
<tr>
<td>Visual Fusion Contribute</td>
<td>Enables VFS to process photos and notes sent from users’ iPhones.</td>
</tr>
</tbody>
</table>

2.1.1 ArcSDE pre installation steps

Follow the steps below to install the components required by the ArcSDE connector:

1. Log on to a computer where ArcSDE 9.1/9.2 is installed and find the sde.dll, pe.dll and sg.dll for ArcSDE 9.2 (or sde91.dll, pe91.dll and sg91.dll for ArcSDE 9.1) in the bin folder of the ArcSDE installation path. (By default, this path is C:\arcgis\ArcSDE\sqlxe\bin.)

2. Log on as an administrator to the server where you will install VFS 4.5 and copy the sde.dll, pe.dll and sg.dll files to the %System32% folder. (By default, this path is C:\Windows\System32.)
3. Download and install Microsoft Visual C++ 2005 SP1 Redistributable Package. (You can locate this at the Microsoft Download Center, and download the x86 version at:  

4. If you are installing VFS 4.5 and the ArcSDE connector in a server farm, repeat steps 1-3 on all the front-end web servers in this farm.

Note: When installing the ArcSDE connector in a server farm, you must install the .dll files on all front-end web servers, but you only need to run the installation package once.

2.1.2 Running the connector installers

1. Log on as an administrator to the server where VFS 4.5 is installed.

2. Double-click to extract the ArcSDE connector (.zip) package.

3. In the folder containing the extracted files, double-click the Setup.exe file to run the installer.

4. On the Welcome dialog, click Next.

5. On the System Check dialog, wait for all checks to complete and then click Next to continue.

Note: If one of the system checks fails, then you must fix the problem before you will be allowed to complete the installation.

6. On the IDV Solutions Software License Agreement dialog, select I accept the terms in the License Agreement to accept this agreement and then click Next to continue.

7. On the SharePoint Solution Installer License Agreement dialog, select I accept the terms in the License Agreement to accept this agreement and then click Next to continue.

8. Click Next in the Confirm Installation dialog. The connector installation will begin.

9. Click Close to finish the setup program. Repeat for any other connectors you are installing.

Important: If an error occurs during the installation process, you can click Details to get more information on what may have caused the error.

When you have run the installers for the connectors, move on to the Post-Installation Steps, which include configuring the connectors.
3 Post-installation Steps

After you run the Visual Fusion installer packages, you should perform the tasks below to complete your installation.

- **Registering the VFS Handler with IIS**
- **Activating VFS Features**
- **Configuring SharePoint Excel Services** (if your server is running MOSS 2007 Enterprise)
- **Modifying the VFS Web.config file** (if you have installed the ArcSDE, BDC, or Oracle connectors or have multiple front-end Web servers)
- **Configuring the optional connectors** (if you have installed the ArcSDE, BDC, or Visual Fusion Contribute connectors)
- **Allowing Virtual Earth access** (if a proxy service is running on your network)
- Grant appropriate access to users.
- Testing your configuration by creating a new site through the App Hub, or updating Existing Visual Fusion Sites (if you have created sites under a previous Visual Fusion version)

3.1 Registering the VFS handler with IIS

To determine whether the VFS HTTP handler module is registered with IIS, run the following request in your browser (replace [server] with the actual name of your server):

http://[server]/CheckConfig.vfs

If you receive a message like the one below, then the VFS handler is properly registered and you can skip ahead to the next section:

```
IDV Solutions Visual Fusion Server 4.0.0.2009050816
>>> No configuration errors or warnings were found
```

If you receive an HTTP 404 ("The webpage cannot be found") message, then follow the steps to register the handler in IIS 6.0 on page 10 or IIS 7.0 on page 11.

3.1.1 Registering the handler in IIS 6.0

This section is required only if you are running Internet Information Services 6.0 on your server. Follow the steps below to register the VFS web application extension (.vfs) in IIS and map it to the ASP.NET ISAPI.

1. Log on as an administrator to the server where VFS 4.x is installed.
2. Open IIS Manager; double-click the local computer; click to expand the Web Sites folder, right-click the SharePoint web site, and then click Properties.
3. Click the Home Directory tab.
4. In the Application settings area, click Configuration, and then click the Mappings tab.
5. Scroll down to find .vfs in the list box of Application Mappings. If .vfs is not in the list, follow steps 6-10 to add .vfs to the web application mappings.
6. On the **Mappings** tab, click **Add**.

7. In the **Executable** box, type or browse to the path to the ASP.NET 2.0 program on the local computer. (By default, the path is: `C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_isapi.dll`)

8. In the **Extension** box, type `.vfs`.

9. In the **Verbs** box, select **All Verbs**.

10. Select the **Script engine** check box.

11. Unselect the **Verify that file exists** check box.

12. Click **Ok** to apply the changes.

13. If you are installing Visual Fusion to a server farm, repeat steps 1-12 on all front-end web servers in this farm.

If you will be using the VFX 4.x Silverlight viewer, you may also need to [add the Silverlight MIME types to IIS](#) (as described on page 13) before you activate the VFS features.

### 3.1.2 Registering the handler in IIS 7.0

This section applies only if you are running **Internet Information Services 7.0** (or later) in **Integrated Mode** on your server. If you are running IIS 7.0 (or later) in **Classic Mode**, you can skip this section and go on to Activate the Visual Fusion Features.

To determine which mode your site is running in:

1. Open IIS 7.0 Manager and use the tree view on the left side of the application to navigate to the **Application Pools** list.
2. Locate the application pool assigned to the site you will use to host Visual Fusion Server.
3. The **Managed Pipeline Mode** column indicates which mode your site is running in.

To register the handler in **Integrated** mode, follow these steps:
1. Open IIS 7.0 Manager.
2. In the tree view on the left side of IIS Manager, select the site that will be used to host Visual Fusion.
3. Double-click on the Handler Mappings item.

4. From the menu on the right side of the screen, select Add Managed Handler...
5. In the Request Path field, enter *.vfs.
6. In the Type field, enter the following:


7. Click OK.
8. Repeat steps 1-7 on all Web front-end servers in the farm.
   Your next step is to activate the Visual Fusion Features as described on page 14.
3.1.3 Adding Silverlight MIME types to IIS 6.0

If the website hosting Visual Fusion is running in an environment under IIS 6.0, and you have not served a Silverlight application from IIS before, you may need to add Silverlight MIME types to IIS. This will allow you to use the VFX 4.0 Silverlight map viewer. (Skip this step if you plan to use the Flash-based VFX 3.0 viewer.)

All MIME types needed to support Silverlight are implemented by default in IIS 7 in Windows Server 2008 and Windows Vista SP1, so if you are running IIS 7.0, then you should skip this section. For additional information, see http://learn.iis.net/page.aspx/262/silverlight/.

To add Silverlight MIME types:

1. Open IIS 6.0 Manager; expand the Web Sites folder, and right-click on the Web site hosting Visual Fusion.
2. Select Properties from the context menu.
3. On the HTTP Headers tab, click the MIME Types… button.
4. In the dialog, click the New button and add the following MIME types:

   - .xaml application/xaml+xml
   - .xap application/x-silverlight-app

5. Click OK twice, and then close IIS Manager.

Your next step is to activate the Visual Fusion Features as described on page 14.
3.2 Activating VFS features

To activate the VFS features:

1. Log on as an administrator and navigate in your web browser to the root site of the site collection hosting VFS.

2. Select Site Actions > Site Settings from the drop-down menu in the upper right corner of the page.

3. On the Site Settings page, under Site Collection Administration, click Site collection features.

4. Locate and activate each of the following features by clicking its Activate button:
   - Visual Fusion App Hub
   - Visual Fusion Composer
   - Visual Fusion Excel Geographic Worksheets
   - Visual Fusion List and Library Templates
   - Visual Fusion Map Viewer

Be sure that the Status column of each of the VFS features shows Active, as in the illustration below.

5. If you are upgrading from a previous version of VFS to VFS 4.5, you must also activate the Visual Fusion Upgrade Existing Site Content feature to make your existing VFS lists and document libraries compatible with VFS 4.5.

If you are installing VFS on a server running MOSS 2007 Enterprise, your next step is to Configure SharePoint Excel Services (see page 15); otherwise, skip to the section on editing the Web.config file (page 16).
3.3 Configuring SharePoint Excel Services

If you are installing VFS on a server running MOSS 2007 Enterprise, follow the steps below to configure SharePoint Excel Services for use with VFS. This will enable VFS to geocode Excel documents.

1. Log on as an administrator to the server on which you installed VFS.

2. Open SharePoint 3.0 Central Administration from the Windows taskbar by selecting Start > Administrative Tools.

3. In the Shared Services Administration section on the left, click the Shared Service Provider of the SharePoint server or server farm. (By default, the Shared Service Provider is SSP1).


5. On the Excel Services Settings page, in the Security section, under File Access Method, select Process account as shown in the illustration below; then click Ok to go back to the Shared Service Provider home page.


7. On the Excel Services Trusted File Locations page, click Add Trusted File Location.

8. On the Add Trusted File Location page, in the Location section (shown in the illustration below) make these entries:

   - In the Address field, enter the URL of the web site where VFS 4.5 is installed. (This is the web site chosen in the Installation Address drop-down list during the VFS 4.5 installation.)
   - Under Location Type, select Windows SharePoint Services.
   - Under Trust Children, select Children trusted. Click Ok to finish.
3.4 Modifying the VFS Web.config file

When you deploy the VFS SharePoint solution, a separate Web.config file for Visual Fusion Server is installed to the server. The VFS 4.5 installers will make required modifications to this file during the installation process; however, you may need to take the following manual steps:

1. If you have installed one of the optional connectors (for ArcSDE, BDC, or Oracle), you need to edit the Web.config to enable the connectors. (See page 17.)

2. If you are using a Map Point Web Services production account, you need to change the Map Point URLs from staging to production. (See page 17.)

3. If you are using an external proxy for requests from VFS, you may need to edit the proxy entries. (See page 18.)

4. If you are installing VFS in a server farm with more than one Web front-end server, then after you finish editing Web.config, you need to copy this file to the other servers in the farm. (See page 18.)

**Note:** If the VFS Solution is redeployed to the SharePoint farm for any reason, you must perform the steps described on page 17 under "Editing Web.config if the VFS solution is redeployed"

When you have completed all of the installation steps, you may test the installation by creating a Visual Fusion site through the App Hub (see page 25).
3.4.1 Enabling data connectors in Web.config

If you have installed any of the optional data connectors available with Visual Fusion Enterprise, you should enable the connectors by making the following changes in the Web.config file.

1. If you installed the ArcSDE Connector, uncomment the following entry in the `<DataConnectionProviders>` section by removing the comment tags “<!--” and “-->”.

```xml
<add name="SDE"
IdvSolutions.FusionServer.Plugins.ArcSde,
Culture=neutral,Version=4.5.0.0,PublicKeyToken=1de9179dbcb848c8"/>
```

2. If you installed the BDC connector, uncomment the following entry in the `<DataConnectionProviders>` section by removing the comment tags “<!--” and “-->”.

```xml
<add name="MOSS.BDC"
type="IdvSolutions.FusionServer.Plugins.MOSS.BDC.BdcDataConnection,
IdvSolutions.FusionServer.Plugins.MOSS.BDC,
Culture=neutral,Version=4.5.0.0,PublicKeyToken=444166a1b1c3d700"/>
```

3. If you installed the Oracle connector, uncomment the following entry in the `<DataConnectionProviders>` section by removing the comment tags “<!--” and “-->”.

```xml
<add name="Oracle"
type="IdvSolutions.FusionServer.Plugins.Oracle.OracleDataConnection,
IdvSolutions.FusionServer.Plugins.Oracle,
Culture=neutral,Version=4.5.0.0,PublicKeyToken=d76e676bfab10be"/>
```

Once you have made your changes, you can copy Web.config to all front-end servers in your farm, then go on to configure the connectors, as described on page 20.

3.4.2 Enabling MapPoint production tiles.

When you install VFS, the `<Connections>` section of the Web.config file contains a set of four URLs that point to the MapPoint web services that are required by VFS.

If you are using a MapPoint Developer Account, your file must contain the following URLs for the MapPoint staging environment:

```xml
<Set name="find" value="https://findv3.staging.mappoint.net/Find-30/FindService.asmx"/>
<Set name="route" value="https://routev3.staging.mappoint.net/Route-30/RouteService.asmx"/>
<Set name="render" value="https://renderv3.staging.mappoint.net/Render-30/RenderService.asmx"/>
<Set name="common" value="https://findv3.staging.mappoint.net/Find-30/Common.asmx"/>
```

If you have a production level MapPoint account, your file must contain the following URLs for the MapPoint production environment:

```xml
<Set name="find" value="https://findv3.mappoint.net/Find-30/FindService.asmx"/>
<Set name="route" value="https://routev3.mappoint.net/Route-30/RouteService.asmx"/>
<Set name="render" value="https://renderv3.mappoint.net/Render-30/RenderService.asmx"/>
<Set name="common" value="https://findv3.mappoint.net/Find-30/Common.asmx"/>
```
3.4.3 Editing proxy entries

The VFS installer creates default entries for two proxies, httpProxy and fileProxy. If you are using an external proxy for requests from VFS, you may need to update these entries. (If you will be using the Flash-based VFX 3 user interface, see the VFS Proxy Installation beginning on page 40, for information about setting up the VFS proxy servers.)

The proxy entries are in the Web.config VfcLayerControl node, in the <FeedInfoFormats> section, shown below.

```xml
<add name="VfcLayerControl"
    httpProxy="http://URL_for_HTTP_proxy_server/HttpRequestProxy.vfs"
    fileProxy="http://URL_for_data_file_proxy_server/FileBounceProxy.vfs"/>
```

If a proxy service is running on your network, you may also need to reconfigure the proxy to allow Visual Fusion to access Virtual Earth and MapPoint Web Service. (See page 23.)

3.4.4 Copying the VFS Web.config to all Web front-ends

If you are installing VFS in a server farm with more than one Web front-end server, then you need to copy the VFS Web.config file to the other servers in the farm. If installing to a single Web front-end farm, then you can skip ahead to the next section.

1. On the Web front-end that you used to install VFS, locate the file C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFS\VFS4.0\web.config.
2. Copy the Web.config file into the same directory on all of the other Web front-end servers. If the file already exists, overwrite it.

3.4.5 Editing Web.config if the VFS solution is redeployed

If your VFS SharePoint solution is ever re-deployed to the SharePoint farm for any reason, or if the VFS Web.config file ever becomes corrupted, you will need to restore your application.

**Important:** Certain actions may cause the VFS SharePoint solution to be re-deployed without your explicitly electing to do so, either using the stsadm.exe utility or from the SharePoint 4.5 Central Administration Solution Management interface. For example, extending an existing web application will re-deploy the VFS solution to the web application and overwrite any changes you have made to the VFS Web.config. The best practice is to keep a backup copy of your VFS Web.config in a separate location so that it will not be overwritten if your solution is re-deployed.

**Important:** Make a backup copy of the current VFS Web.config file before making any changes. Also, keep a backup copy of the changed file in a separate location.

1. Log on as an administrator to the server where VFS is installed.
2. Use a text editor to open %CommonProgramFiles%\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFS\VFS4.5\web.config.
3. Modify the following node in the <Connections> section of Web.config, entering the correct MapPoint username and password.

```xml
<add name="MapPoint"
    provider="MPWS">
4. Check the MapPoint connection URLs. If necessary, enter the appropriate URLs for staging or production, as described under "Enabling MapPoint production tiles."

5. If you are using an external proxy for requests from VFS, check the proxy entries (described under "Editing proxy entries") and edit if necessary.

6. If you installed any of the optional ArcSDE, Oracle, or BDC connectors, uncomment the entry for the appropriate connector in the <DataConnectionProviders> section of the file.

7. If you are installing VFS 4.5 in a server farm, copy the edited VFS web.config file and all the layer configuration files (by default, the VFS layer configuration files are in C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFS\VFS4.5\layers) from the server on which you ran the VFS installation package to the same locations on all other front-end web servers and application servers in this farm. Then execute IISRESET on each server.

⚠️ Important: Copy and overwrite only the Web.config file and the files in the layers folder. Do not change/overwrite other VFS files on other servers. Refer to the Visual Fusion Help for details about editing configuration files.

8. Run IISRESET on this server. Any changes to the VFS web.config file will not take effect until after IIS has been reset.
3.5 Configuring the optional connectors

If you have installed the optional connectors for ArcSDE, MOSS Business Data Catalog (BDC) or Visual Fusion Contribute, you must perform some additional configuration steps. (No additional steps are required for the Oracle connector.)

3.5.1 Configuring the ArcSDE connector

If you installed the ArcSDE connector for VFS on the server or server farm, follow these steps to configure it:

1. Log on as an administrator to the server where VFS 4.5 is installed.

2. Using a text editor, open the services file in the %System32%\Drivers\etc\ folder. (By default, the path is C:\Windows\system32\Drivers\etc\services.) At the end of this file, add this new line, replacing the variables with the information for your ArcSDE database instance:

   [ArcSDE Database Instance Name]   [ArcSDE Database Instance TCP Port Number]/tcp
   # [Description of this line]

   Example:   esri_sdeSampleDB   5156/tcp   #A sample ArcSDE database at port 5156

   If you are installing VFS 4.5 in a server farm, repeat the steps 1-2 on all other front-end web servers and application servers in this farm.

3.5.2 Configuring SharePoint BDC

If you installed the BDC connector, follow these steps to configure SharePoint BDC:

1. Log on as an administrator to the server where VFS 4.5 is installed.

2. Open SharePoint 4.5 Central Administration from the Start Menu → Administrative Tools.

3. In the Shared Services Administration section on the left of the screen, select the Shared Service Provider for the SharePoint server or server farm, as shown at right. (By default, the Shared Service Provider is named SharedServices1.)

4. On the Shared Service Provider home page, in Business Data Catalog section, select Import application definition to specify the data source to which BDC connector will be connected. Refer to the Microsoft TechNet library article

3.5.3 Configuring Visual Fusion Contribute

Visual Fusion Contribute requires these additional features to be installed on the server: two new actions for Visual Fusion Server, and a modified version of the MapPoint geocoder.

1. Log on as an administrator to the server where VFS 4.5 is installed.

2. Use a text editor to open %CommonProgramFiles%\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFS\VFS4.5\web.config.
   (By default, the path is C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFS\VFS4.5\web.config).

3. In the <Connections> section (in the VisualFusionServer node), add the following:

   ```xml
   <add name="Contribute" provider="iMPWS">
      <Parameters>
         <Set name="username" value="[USERNAME]"/>
         <Set name="password" value="[PASSWORD]"/>
         <Set name="searchMode" value="Gazetteer,SingleLineAddress"/>
         <Set name="urls">
            <Set name="find" value="https://findv3.staging.mappoint.net/Find-30/FindService.asmx"/>
            <Set name="route" value="https://routev3.staging.mappoint.net/Route-30/RouteService.asmx"/>
            <Set name="render" value="https://renderv3.staging.mappoint.net/Render-30/RenderService.asmx"/>
            <Set name="common" value="https://findv3.staging.mappoint.net/Find-30/Common.asmx"/>
         </Set>
      </Parameters>
   </add>
   ```

   Replace [USERNAME] and [PASSWORD] with your MapPoint credentials.

   If you have a production level MapPoint account, replace the URLs with the following URLs for the MapPoint production environment:

   ```xml
   <Set name="find" value="https://findv3.mappoint.net/Find-30/FindService.asmx"/>
   <Set name="route" value="https://routev3.mappoint.net/Route-30/RouteService.asmx"/>
   <Set name="render" value="https://renderv3.mappoint.net/Render-30/RenderService.asmx"/>
   <Set name="common" value="https://findv3.mappoint.net/Find-30/Common.asmx"/>
   ```

4. In the <Actions> section (in the VisualFusionServer node), add the following:
<add
name="PostCommentPhoto.vfs"
IdvSolutions.FusionServer.Plugins.Contribute,
PublicKeyToken=ddc7f44fa7ebda47">
<Parameters>
  <Set name="Site" value="[SHAREPOINT_SITE]"/>
</Parameters>
</add>

<add
name="ReverseGeocode.vfs"
IdvSolutions.FusionServer.Plugins.Contribute,
PublicKeyToken=ddc7f44fa7ebda47">
<Parameters>
  <Set name="Connection" value="Contribute"/>
  <Set name="Source" value=""/>  
  <Set name="MinimumAccuracyForAddresses" value="0.3"/>
</Parameters>
</add>

Replace [SHAREPOINT_SITE] with the URL to the SharePoint site where users will submit their iPhone photos and notes.

The ReverseGeocode.vfs action has several parameters; for a typical deployment, use the values in the code above; they allow the Contribute geocoder to work side-by-side with your existing geocoder. (For information on using other parameter values or replacing the default geocoder with the Contribute version, see "Data Requests and the REST API" in the Visual Fusion Help.)

One parameter value in the code above that you may want to change is MinimumAccuracyForAddresses. Along with latitude and longitude coordinates, an iPhone running the Contribute application automatically sends a value in kilometers that indicates the margin of error in the location. The larger this accuracy value, the greater the potential for error when the reverse geocoder determines a street address from the coordinates.

The parameter MinimumAccuracyForAddresses specifies how small an accuracy value the application will require for the reverse geocoder to return a street address instead of a general area (ex. "5913 Executive Drive, Lansing, MI" instead of "Lansing, MI"). When the accuracy value is greater than this parameter value, only general areas are returned. The lower the value of this parameter, the greater accuracy is required and the fewer street addresses may be returned.

5. In the Web.config section
   <configuration><VisualFusionServer><Providers><DataConnectionProviders>, add the following:

<add name="iMPWS"
type="IdvSolutions.FusionServer.Plugins.Contribute.Data.iPhoneMpwsDataConnection,
IdvSolutions.FusionServer.Plugins.Contribute,
PublicKeyToken=ddc7f44fa7ebda47"/>

Visual Fusion Contribute is now set up; see the Visual Fusion Help for information on creating a Visual Fusion Picture Library to accept the contributions from users' iPhones. You will need to send the name of this library and the URL of your Visual Fusion application to users who will be contributing photos. The users must download Contribute from the iPhone App store and install it on their iPhones.
3.6 Reconfiguring a proxy service to allow Virtual Earth access

If a proxy service is running on your network, you may need to reconfigure the proxy to allow the URLs below, so that Visual Fusion can access Virtual Earth and MapPoint Web Service for functions including geocoding, tiles, and place name find.

**VE WebService:**
- http://staging.common.virtualearth.net/find-30/common.asmx
- http://staging.dev.virtualearth.net/webservices/v1/imageryservice/imageryservice.svc
- http://common.virtualearth.net/find-30/common.asmx
- http://dev.virtualearth.net/webservices/v1/imageryservice/imageryservice.svc

**VE Tiles:**
- http://t0.staging.tiles.virtualearth.net/tiles/
- http://t1.staging.tiles.virtualearth.net/tiles/
- http://t2.staging.tiles.virtualearth.net/tiles/
- http://t3.staging.tiles.virtualearth.net/tiles/

http://t0.tiles.virtualearth.net/tiles/
http://t1.tiles.virtualearth.net/tiles/
http://t2.tiles.virtualearth.net/tiles/
http://t3.tiles.virtualearth.net/tiles/

**MapPoint WebService:**
https://findv3.mappoint.net/Find-30/FindService.asmx
https://routev3.mappoint.net/Route-30/RouteService.asmx
https://renderv3.mappoint.net/Render-30/RenderService.asmx
https://findv3.mappoint.net/Find-30/Common.asmx

https://findv3.staging.mappoint.net/Find-30/FindService.asmx
https://routev3.staging.mappoint.net/Route-30/RouteService.asmx
https://renderv3.staging.mappoint.net/Render-30/RenderService.asmx
https://findv3.staging.mappoint.net/Find-30/Common.asmx

Old VE Tile URLs:
http://r0.ortho.tiles.virtualearth.net/tiles/
http://r1.ortho.tiles.virtualearth.net/tiles/
http://r2.ortho.tiles.virtualearth.net/tiles/
http://r3.ortho.tiles.virtualearth.net/tiles/
http://a0.ortho.tiles.virtualearth.net/tiles/
http://a1.ortho.tiles.virtualearth.net/tiles/
http://a2.ortho.tiles.virtualearth.net/tiles/
http://a3.ortho.tiles.virtualearth.net/tiles/
http://h0.ortho.tiles.virtualearth.net/tiles/
http://h1.ortho.tiles.virtualearth.net/tiles/
http://h2.ortho.tiles.virtualearth.net/tiles/
http://h3.ortho.tiles.virtualearth.net/tiles/

3.7 Grant users access

Visual Fusion automatically recognizes SharePoint group permissions for sites, lists and libraries. To grant users access to Visual Fusion applications, you must add them to the appropriate groups in your site collection, by following these steps:

1. Select **Site Actions > Site Settings**, then select **People and Groups**.
2. Add users and groups to the desired SharePoint groups. Users must have **Contribute** or higher permissions to create applications.

To give users additional privileges to approve applications created in the App Hub:

1. Select **View All Site Content** and browse to the **Visual Fusion Application Approvers** list.
2. For each user, select the user name; select **Edit Item**; enter the user name in the **Approver Name** field and click **OK**.
4 Creating a Visual Fusion Site using App Hub

The simplest way to create a new Visual Fusion site is to use the App Hub. Before using the App Hub, be sure to log in to your SharePoint site using an account that is a member of either the “Site Members” or “Site Owners” group, but is not the System Account (at the top of the page, verify that the link bar does not say “Welcome System Account”).

1. Make sure your account is a Visual Fusion application approver:
   a. From the root site (default.aspx) page in the site collection, select View All Site Content from the Quick Launch bar.
   b. Under the Lists heading, click the link for Visual Fusion Application Approvers.
   c. Look for your account name in the list of approvers. If it is not there, select New to add your account.
2. Navigate to the Visual Fusion App Hub page using the link on the top navigation bar.

3. Click the **Start Here** button to begin creating a new application.

4. Fill out the *Create New Visual Fusion Application Request* form. At a minimum, fill in values for **Application Name** and **Web site address (URL)**. Also, select the desired **Template** to use for the site. The other fields in the form are optional.

5. Click **Create** to create the site.

6. Click the **Launch** button to navigate to the site you just created.
Setting up a Visual Fusion sandbox

For developing and testing applications, you may want to set up one or more Visual Fusion "sandboxes." A Visual Fusion sandbox is a SharePoint site collection with the Visual Fusion Features activated. Site collections are the preferred structure for creating sandbox boundaries, because they provide the requisite security and will isolate the data and user roles from other site collections, without incurring the overhead of a new Web application. Each sandbox hosts a single instance of App Hub, from which users can create any number of Visual Fusion applications. By default, any user who has access to the sandbox site collection will have access to every application created with that instance of App Hub.

Once you have installed Visual Fusion, follow the steps below to set up a sandbox. These steps are general guidelines and might slightly differ based on your environment. Repeat these steps each time you want to create a new sandbox.

1. Create a new Site Collection through SharePoint Central Administration. (For help, see the Microsoft documentation on creating site collections for your SharePoint version: Windows SharePoint Services 3.0 or SharePoint Server 2007.)

2. Browse to the root site of the newly created site collection and select Site Actions > Site Settings from the drop-down menu in the upper right corner of the page.

3. Under Site Collection Administration, select Site collection features.

4. Activate each of the following features by clicking its Activate button:
   - Visual Fusion App Hub
   - Visual Fusion Composer
   - Visual Fusion Excel Geographic Worksheets
   - Visual Fusion List and Library Templates
   - Visual Fusion Map Viewer

5. To give the appropriate users access to this sandbox:
   a. Select Site Actions > Site Settings, then select People and Groups.
   b. Add users and groups to the desired SharePoint groups. Users must have Contribute or higher permissions to create applications.

6. To give sandbox users privileges to approve the applications they create in the App Hub:
   a. Select View All Site Content and browse to the Visual Fusion Application Approvers list.
   b. For each user, select the user name; select Edit Item; enter the user name in the Approver Name field and click OK.

7. Optionally, set up SpatialWiki at the top site of this site collection. (Follow the SpatialWiki Installation Guide.)

8. To test the sandbox, create a new site (You can delete the test site from App Hub later by following these instructions.)
6 Updating existing Visual Fusion sites

After you have completed the installation of Visual Fusion, you need to update any existing Visual Fusion sites created under a previous version of VFS. The first step is to activate the Visual Fusion Upgrade Existing Site Content feature from the site collection features page, as described in section 4.3. Next, you will need to perform the following steps in each site:

1. Navigate to the VFS site in a browser.
2. Navigate to the page hosting the Visual Fusion Composer web part. The page should now display the following error message:

3. Select Site Actions > Edit Page and then click on the edit drop-down menu in the top right corner of the Composer web part.
4. Choose Delete from the drop-down menu and select OK to confirm the deletion.

5. Click on Add a Web Part and find the Visual Fusion Composer web part, in the Visual Fusion Web Parts group. Check the box next to the web part name, and click Add.
6. From the edit drop-down menu of the new Composer web part, select Modify Shared Web Part.

In the settings editor for the Composer web part, expand the Export Options category. Then, check the Show VFX export button option, and choose VFX3 from the Pick VFX version drop-down menu.
7. Click **OK** to apply the web part settings.

8. Click on the **Exit Edit Mode** button near the top right corner of the page.

You should now see all of your site content in the Composer web part, beneath the **All Visual Fusion Feeds** heading. You will need to rebuild your feed hierarchy by dragging feeds (layers) from the left side of the Composer into the **Selected Feeds** panel on the right, and applying styles to individual feeds. Refer to the Visual Fusion Help for more information.

Once you have completed recreating your Feed Hierarchy, take the following steps to reconnect the hierarchy to the VFX feed control:

1. On the right side of the Composer web part, click on the button **Copy Path for the Selected Feeds to Clipboard**.
2. A dialog opens containing a URL. Select this URL and copy it to the clipboard (right-click and choose **Copy**, or press **Ctrl+C**).
3. Close the URL dialog by clicking the red “X” button in the top-right corner.

4. Navigate to the page in your site that is hosting the VFX map viewer and side panel web parts.

5. Select Site Actions > Edit Page.

6. Choose to edit the Visual Fusion Side Panel Viewer web part, and select Modify Shared Web Part from the drop-down menu.

7. Expand the Viewer Configuration node and locate the UI Configuration File URL field.

8. Paste the URL from the clipboard into this field (right-click and choose Paste, or press Ctrl+V), and select OK to close the editor.

9. Click on the Exit Edit Mode button near the top-right corner of the page.

The Visual Fusion Experience side panel web part is now configured to display the feed list that is configured in the Composer. If you have feed (layer) configuration files stored on the file system, you may find it advantageous to move them to a Visual Fusion File Configuration Library; for information, see the Visual Fusion Help for details.
Installing Visual Fusion Experience (VFX) 4.x

Visual Fusion Experience (VFX) 4.5 is the Silverlight-based user interface for Visual Fusion. Normally, you will install it along with the Visual Fusion Server components. (See page 6, "Running the installation packages.") This section details the steps you must follow when installing or uninstalling VFX alone. To install or uninstall the VFX Flash client (VFX 3.0) instead, see page 35, "Installing Visual Fusion Experience 3.0".

Important: To run the VFX installation package, you must be in the Administrator group on the server and be granted the db_owner database role on the SharePoint farm configuration database and the central administration site content database.

1 Running the installation package for VFX 4.5

Follow these steps to run the VFX4.5 installation package on a single server or a server farm:

1. Log on as an administrator to the server on which you will install VFX 4.5. If you are installing VFX 4.5 in a server farm, log on as an administrator to one of the front-end web servers in the farm.
2. Double-click the VFX 4.5 installation (.zip) package to extract it.
3. In the folder containing the extracted files, double-click the Setup.exe file to run the installer.
4. On the Welcome dialog, click Next.
5. On the System Check dialog, wait for all checks to complete and then click Next to continue.

Important: If one of the system checks fails, then you must fix the problem before you will be allowed to install VFX.

6. On the IDV Solutions Software License Agreement dialog, scroll down to read through the license agreement. Click I accept the terms in the License Agreement to accept this agreement and then click Next to continue.
7. On the SharePoint Solution Installer License Agreement dialog, scroll down to read through the license agreement. Click I accept the terms in the License Agreement to accept this agreement and then click Next to continue.
8. On the Farm Deployment Target dialog, click the drop-down list to select the SharePoint web application to which VFX 4.5 should be deployed. VFX 4.5 is deployed as a SharePoint solution to the selected SharePoint web application. Click Next to continue.
9. On the MapPoint and Virtual Earth Web Service Settings dialog, enter your MapPoint Web Service credentials. Examine the Virtual Earth Service URLs and make any changes. Select an appropriate culture to use with Virtual Earth. Click Next to continue.

Important: The Virtual Earth connection that is configured in this installer contains a URL that points to the staging environment by default. If you have a production level account, then you must replace this URL with the production environment URL.
10. On the Confirm Installation dialog, click Next to continue. The VFX 4.5 installation will begin.
11. Click Close to finish the setup program.
Note: The VFX 4.5 files will be installed to the folder [Common Files Folder]\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFX4.5. By default, the installation folder will be C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFX4.5.

The default virtual directory is http://MyServer/_layouts/VFX4.5

Your next step is to configure IIS for serving Silverlight applications.

1.1 IIS Configuration

If you have not served a Silverlight application from IIS before, you may need to make some changes to do so. Follow the steps outlined at http://learn.iis.net/page.aspx/262/silverlight/ to prepare IIS for serving Silverlight applications.

When you are done, activate the VFX feature

1.2 Activate the VFX feature

Follow these steps to activate the VFX feature:

1. Log on as an administrator to the top-level site on which VFX is installed.
2. Click Site Action to open the drop-down menu, and then click Site Settings.
3. On the Site Settings page, click Site collection features in the Site Collection Administration section.
4. On the Site Collection Features page, activate the Visual Fusion Experience Web Parts feature by clicking the Activate button. The Status column will show Active when this feature has been activated.

The following illustration shows the Visual Fusion Experience Web Parts feature.

![Visual Fusion Map Viewer](image)

Web part that embeds the Visual Fusion Map Viewer in a page.
2 Uninstalling Visual Fusion Experience (VFX) 4.x

If you have access to the original installation package that was used to install VFX 4.x, then you can choose to repair or remove an existing install. Repairing an install has the effect of first retracting the VFX solution from the server, and then re-deploying it. If you do not have the original installation package, then you will not be able to repair an existing installation, but you can still remove it manually using the SharePoint Central Administration application.

In either situation, the first step is to remove the VFX program from the server or server farm. If you are uninstalling manually, you must also edit your site’s Web.config file and remove the VFX Web Parts.

2.1 Removing the VFX program

To remove or repair an installation of VFX 4.5 from a server or a server farm, first log on as an administrator to the server on which VFX 4.5 is installed. Then, follow one of the two sets of instructions below, depending on whether or not you have access to the original installation package for the solution you wish to remove or repair.

If you have access to the original installation package:

1. Open the directory containing the extracted files from the VFX 4.5 installation package that was used to install VFX 4.5 on your server.
2. Double-click to run the Setup.exe file.
3. On the Welcome dialog, select Next.
4. On the System Check dialog, wait for all system checks to complete successfully and then select Next.
   
   Important: You will not be able to uninstall VFX 4.5 from the server unless all of the system checks pass successfully. If one of these checks fails, contact your server’s administrator to determine the problem.
5. In the Repair or Remove dialog, select Remove to remove the VFX 4.5 solution from the SharePoint server, or select Repair to retract and then re-install the VFX 4.5 solution. Then, select Next.
6. Follow the remaining prompts to complete the remove or repair operation.

If you do not have access to the original VFX installation package:

1. Open the SharePoint Central Administration page by selecting Start > Administrative Tools > SharePoint 4.5 Central Administration from the Windows Start menu.
2. From the SharePoint Central Administration home page, select the Operations tab near the top of the page.
3. On the Operations page, under the Global Configuration heading, select the Solution Management link.
4. In the list of installed solutions, click on the VFX45.wsp SharePoint Solution.
5. On the Solution Properties page, click the **Retract Solution** link located above the list of properties.

6. On the Retract Solution page, click **OK** to schedule the solution retraction timer job to run immediately. You will be redirected to the Solution Management page.

7. On the Solution Management page, refresh the page periodically until the “Status” field for the selected solution displays “Not Deployed”.

8. Click once again on the name of the SharePoint solution that was just retracted.

9. On the Solution Properties page, click the **Remove Solution** link located above the list of properties.

10. Select **OK** when asked if you are sure you want to remove the solution.

### 2.2 Updating the Web.config file

If you do not have access to the original VFX installation package, follow these steps to update the Web.config file of the web site on which you installed VFX:

1. Use a text editor to open the Web.config file of the web site on which VFX 4.5 is installed. This web site is the one chosen in the **Installation Address** drop-down list during the step 5 of VFX 4.5 installation.

2. Remove the following entries in the `<appSettings>` section.

   ```xml
   <add key="IdvSolutions.FusionServer.MapPoint.UserName" value=""/>
   <add key="IdvSolutions.FusionServer.MapPoint.Password" value=""/>
   <add key="IdvSolutions.FusionServer.VirtualEarth.Common" value=""/>
   <add key="IdvSolutions.FusionServer.VirtualEarth.Culture" value=""/>
   <add key="IdvSolutions.FusionServer.VirtualEarth.Imagery" value=""/>
   ```

3. Save the modified web.config file and exit the text editor.

4. If VFX 4.5 is installed in a server farm, repeat the above steps (1-3) on all front-end web servers and application servers in this farm.

### 2.3 Removing VFX web part files

Follow these steps to remove VFX web part files from the web part gallery:

1. Log on as an administrator to the top-level site on which VFX is installed.

2. Click **Site Action** to open the drop-down menu, and then click **Site Settings**.

3. On the **Site Settings** page, click **Web Parts** in the **Galleries** section.

4. Find **VFMapWebPart45.webpart** and click the ![icon] icon to edit its properties.

5. On the **Edit item** page of **Web Part Gallery: VFMapWebPart45**, click **Delete Item**.

6. Click **Ok** when prompted for confirmation.
Installing Visual Fusion Experience (VFX) 3.0

Visual Fusion Experience (VFX) 3.0 is the Flash-based user interface for Visual Fusion. The sections that follow explain:

How to implement VFX 3.0 with applications created under VFX 2.2
How to run the VFX 3.0 installation packages
How to uninstall VFX 3.0

1 Implementing VFX 3.0 with Existing Visual Fusion Applications

You can install and use VFX 3.0 with existing Visual Fusion composite applications. The installation process will create a new directory with VFX 3.0 Web parts, separate from the VFX 2.2 Web parts. To replace the VFX 2.2 Web parts in an existing application, simply create a new Web Part Page, select the “Header, Right Column, Body” layout template, and add the VFX 3.0 Web parts. Then, configure the VFX Web parts as desired. Verify that everything is functioning properly, and delete or archive the VFX 2.2 Web parts.

2 Running the VFX installation package

*Important:* To run the VFX installation package, you must be in the *Administrator* group on the server and be granted the *db_owner* database role on the SharePoint farm *configuration database* and the *central administration site content database*.

Follow these steps to run the VFX3.0 installation package on a single server or a server farm:

1. Log on as an administrator to the server on which you will install VFX 3.0. If you are installing VFX 3.0 in a server farm, log on as an administrator to one of the front-end web servers in the farm.
2. Double-click the VFX 3.0 installation (.zip) package to extract it.
3. In the folder containing the extracted files, double-click the *Setup.exe* file to run the installer.
4. On the Welcome dialog, click **Next**.
5. On the System Check dialog, wait for all checks to complete and then click **Next** to continue.

*Important: If one of the system checks fails, then you must fix the problem before you will be* allowed to install VFX.

6. On the IDV Solutions Software License Agreement dialog, scroll down to read through the license agreement. Click **I accept the terms in the License Agreement** to accept this agreement and then click **Next** to continue.
7. On the SharePoint Solution Installer License Agreement dialog, scroll down to read through the license agreement. Click **I accept the terms in the License Agreement** to accept this agreement and then click **Next** to continue.
8. On the Farm Deployment Target dialog, click the drop-down list to select the SharePoint web application to which VFX 3.0 should be deployed. VFX 3.0 is deployed as a SharePoint solution to the selected SharePoint web application. Click **Next** to continue.
9. On the Confirm Installation dialog, click **Next** to continue. The VFX 3.0 installation will begin.

10. Click **Close** to finish the setup program.

**Note:** The VFX 3.0 files will be installed to the folder `[Common Files Folder]\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFX3.0`. By default, the installation folder will be `C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\TEMPLATE\LAYOUTS\VFX3.0`. The default virtual directory is `http://MyServer/_layouts/VFX3.0`.

When you are done, you are ready to modify the Web.config.

### 2.1 Modifying the Web.config file

Follow these steps to modify the web.config file of the web site on which you installed VFX:

1. Use a text editor to open the web.config file for the web site on which VFX 3.0 is installed. This web site is the one chosen in the **Installation Address** drop-down list during the step 5 of VFX 3.0 installation.

2. Add the following entries to the `<appSettings>` section, entering your MapPoint Web services user credentials for the value attributes.

   ```xml
   <add key="IdvSolutions.FusionServer.MapPoint.UserName" value="username"/>
   <add key="IdvSolutions.FusionServer.MapPoint.Password" value="password"/>
   <add key="IdvSolutions.FusionServer.MapPoint.Common" value=""/>
   ```

3. Save the modified web.config file and exit the text editor.

4. If VFX 3.0 is installed in a server farm, repeat the above steps (1-3) on all front-end web servers and application servers in this farm.

Now you must activate the VFX feature.

### 2.2 Activating the VFX feature

Follow these steps to activate the VFX feature:

1. Log on as an administrator to the top-level site on which VFX is installed.

2. Click **Site Action** to open the drop-down menu, and then click **Site Settings**.

3. On the **Site Settings** page, click **Site collection features** in the **Site Collection Administration** section.

4. On the **Site Collection Features** page, activate the **Visual Fusion Experience Web Parts** feature by clicking the **Activate** button. The **Status** column will show **Active** when this feature has been activated.

The following illustration shows the **Visual Fusion Experience Web Parts** feature.
3 Uninstalling Visual Fusion Experience (VFX) 3.0

If you have access to the original installation package that was used to install VFX 3.0, then you can choose to repair or remove an existing install. Repairing an install has the effect of first retracting the VFX3.0 solution from the server, and then re-deploying it. If you do not have the original installation package, then you will not be able to repair an existing installation, but you can still remove it manually using the SharePoint 3.0 Central Administration application.

To remove or repair an installation of VFX 3.0 from a server or a server farm, you will need to:

- **Remove the VFX program**
- **Update the Web.config file**
- **Remove the VFX web parts**

3.1 Removing the VFX program

To remove or repair an installation of VFX 3.0 from a server or a server farm, first log on as an administrator to the server on which VFX 3.0 is installed. Then, follow one of the two sets of instructions below, depending on whether or not you have access to the original installation package for the solution you wish to remove or repair.

If you have access to the original installation package:

1. Open the directory containing the extracted files from the VFX 3.0 installation package that was used to install VFX 3.0 on your server.
2. Double-click to run the **Setup.exe** file.
3. On the Welcome dialog, select **Next**.
4. On the System Check dialog, wait for all system checks to complete successfully and then select **Next**.
   
   **Important:** You will not be able to uninstall VFX 3.0 from the server unless all of the system checks pass successfully. If one of these checks fails, contact your server’s administrator to determine the problem.

5. In the Repair or Remove dialog, select **Remove** to remove the VFX 3.0 solution from the SharePoint server, or select **Repair** to retract and then re-install the VFX 3.0 solution. Then, select **Next**.
6. Follow the remaining prompts to complete the remove or repair operation.

If you do not have access to the original VFX installation package:

1. Open the SharePoint Central Administration page by selecting **Start > Administrative Tools > SharePoint 3.0 Central Administration** from the Windows Start menu.
2. From the SharePoint Central Administration home page, select the **Operations** tab near the top of the page.
3. On the Operations page, under the **Global Configuration** heading, select the **Solution Management** link.

4. In the list of installed solutions, click on the VFWWebParts30.wsp SharePoint Solution.

5. On the Solution Properties page, click the **Retract Solution** link located above the list of properties.

6. On the Retract Solution page, click **OK** to schedule the solution retraction timer job to run immediately. You will be redirected to the Solution Management page.

7. On the Solution Management page, refresh the page periodically until the “Status” field for the selected solution displays “Not Deployed”.

8. Click once again on the name of the SharePoint solution that was just retracted.

9. On the Solution Properties page, click the **Remove Solution** link located above the list of properties.

10. Select **OK** when asked if you are sure you want to remove the solution.

### 3.2 Updating the Web.config file

Follow these steps to update the web.config file of the web site on which you installed VFX:

1. Use a text editor to open the web.config file of the web site on which VFX 3.0 is installed. This web site is the one chosen in the **Installation Address** drop-down list during the step 5 of VFX 3.0 installation.

2. Remove the following entries in the `<appSettings>` section.

   ```xml
   <add key="IdvSolutions.FusionServer.MapPoint.UserName" value=""/>
   <add key="IdvSolutions.FusionServer.MapPoint.Password" value=""/>
   <add key="IdvSolutions.FusionServer.MapPoint.Common" value=""/>
   ```

   **Important:** The MapPoint connection that is configured in this Web.config file contains a URL that points to the staging environment by default. If you have a production level MapPoint account, then you must replace this URL with the production environment URL, shown below:

   ```xml
   ```

   If you do not already have a MapPoint web service account, you can request a free developer account at: [https://mappoint-css.live.com/mwssignup/](https://mappoint-css.live.com/mwssignup/). If you are using a developer account, then you must use the MapPoint web service staging URLs.

3. Save the modified web.config file and exit the text editor.

4. If VFX3.0 is installed in a server farm, repeat the above steps (1-3) on all front-end web servers and application servers in this farm.
3.3 Removing VFX web part files

Follow these steps to remove VFX web part files from the web part gallery:

1. Log on as an administrator to the top-level site on which VFX is installed.
2. Click Site Action to open the drop-down menu, and then click Site Settings.
3. On the Site Settings page, click Web Parts in the Galleries section.
4. Find VFFlashWebPart30.webpart and click the ⌘ icon to edit its properties.
   The following illustration shows the VFX web part files to be removed:

   ![VFFlashWebPart30.webpart](image)

6. Click Ok when prompted for confirmation.
7. Repeat step 4-6 to delete the VFMapWebPart30.webpart and VFSidePanelWebPart30.webpart from the web part gallery.
VFS Proxy Installation

1 Visual Fusion Proxy Services
To use Visual Fusion Experience 3, you need to install VFS Proxy; this program provides proxy services that VFX 3 requires to work around security restrictions in Flash. (In contrast, VFX 4.5 is built on Microsoft Silverlight and does not require VFS Proxy.)

VFX 3 uses two types of proxy services:

- **HTTP proxy request service**
  A Flash movie is unable to request data from any HTTP domain other than the domain from which the movie was loaded. An HTTP proxy request service fetches data from HTTP servers while giving the appearance to the Flash viewer that data is coming from its home domain.

- **Data file proxy service**
  A Flash movie loaded from the web cannot directly access files on a user’s hard drive. A data file proxy service is used for features, such as the GeoRSS feed editor, that require loading and saving to a hard drive.

2 Setting up the proxy services

Steps for IIS6 and IIS7:
1. Create a new site under IIS. If there is no domain available to use for this site, use a different port number than the site that hosts the Visual Fusion Experience (VFX) files.
2. Run VFSProxy.msi to install the application.
3. Follow the instructions in the installation wizard. Select the site created in step 1 for installation address.
4. In IIS, configure this application to use Anonymous Access and remove ‘Integrated Windows Authentication’ and ‘Basic Authentication’ access.
5. Configure this application to use .NET 2.0.
6. Grant read, write and modify privileges to the user account being used for Anonymous Access.
7. Give the local ‘Users’ group read, write and modify permissions for the application.

Additional steps for IIS7:
8. Edit the Application Pool used by the proxy, and set the Managed Pipeline mode to Classic.
9. Navigate the Handler Mappings configuration window for the site and select Add Script Map…
10. Enter * .prxy in the Request path input box.
11 Enter %windir%\Microsoft.NET\Framework\v2.0.50727\aspnet_isapi.dll in the Executable input box.

12 Enter a name for the script mapping in the Name input box.

13 Click the Request Restrictions button.

14 Select the Mapping tab and select the checkbox labeled “Invoke handler only if request is mapped to:”

15 Select the File radio button.

16 Click on the Verbs tab and select the All verbs radio button.

17 Click the Access tab and select the Script radio button.

3 Post installation steps

Test that the proxy installation has been successful; open a browser window and attempt to access, through the proxy, a URL that you know is valid. For example, enter a URL similar to the following:

http://[proxy path]/HttpRequestProxy.prxy?query=http://www.yahoo.com
If the site displays, the proxy is working correctly.