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# ProjectWise Web Server

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Implementation Guide

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Last Updated: January 19, 2015

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## Notices

### Notices

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# 1

## ProjectWise Web Server Configuration

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ProjectWise Web Server and Web View Server provides users with web access to ProjectWise.

ProjectWise Web Server and Web View Server is really two servers delivered in a single installation. After installation you choose which server to deploy:

- ProjectWise Web Server is the server to deploy when you want to provide users with normal access to ProjectWise, where they can check out documents, add new documents and folders, and so on. Bentley CONNECTION Passport usage is reported in SELECTserver for the users who connect to ProjectWise Web Server.
- ProjectWise Web View Server is the server to deploy when you want to provide users with read-only access to ProjectWise. No Bentley CONNECTION Passport usage is reported in SELECTserver for the users who connect to ProjectWise Web View Server.

You can deploy either server to a SharePoint website or to a standalone IIS website. Once a user connects to the website, they interact with ProjectWise through a set of ProjectWise Web Parts that you embed into the website. If using a SharePoint website, you add ProjectWise Web Parts like you would add any other web parts. If using a standalone website, the installer delivers two example ASP pages (`default.aspx` or `defaultspatial.aspx`) with ProjectWise Web Parts preconfigured. For standalone websites you can also create your own ASP pages and add ProjectWise Web Parts to them.

### Before You Install and Deploy ProjectWise Web Server and Web View Server

How you configure the computer prior to installation depends on whether or not you are using SharePoint.

1. Installation of the ProjectWise Web Server delivered in this release assumes that you already have a working ProjectWise and datasource configured, installed from the latest ProjectWise V8i (SELECTseries 4) Refresh, build version **08.11.11.590**.
2. See the readme (`readme_projectwise.chm`) delivered with this ProjectWise Web Server release for system requirements.
3. Be an administrator of the computer you are about to configure.
4. In Server Manager, turn on the Web Server (IIS) role and the following role services:
  - **Web Server**
    - **Common HTTP Features**
      - **Static Content**
      - **Default Document**
      - **HTTP Errors**

# ProjectWise Web Server Configuration

Before You Install and Deploy ProjectWise Web Server and Web View Server

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- **HTTP Redirection**
- **Application Development**
  - **.NET Extensibility 3.5**
  - **ASP**
  - **ASP.NET 3.5**
  - **ISAPI Extensions**
  - **ISAPI Filters**
- **Health and Diagnostics**
  - **HTTP Logging**
- **Security**
  - **Windows Authentication**
  - **Request Filtering**
- **Management Tools**
  - **IIS Management Console**

5. In Server Manager, make sure the .NET Framework feature is installed.
6. For SharePoint deployments, install a version of SharePoint supported by this release of ProjectWise, including the latest updates.

You can use:

- Microsoft SharePoint Server 2013 SP1
  - Microsoft SharePoint Foundation 2013 SP1
7. For standalone (non-SharePoint) deployments, if you are working on a computer from which SharePoint has been uninstalled, make sure that correct IIS permissions are set as described in <http://support.microsoft.com/kb/812614/en-us>, as uninstalling SharePoint will affect your IIS permissions.
  8. In IIS, it is strongly recommended that you set up SSL for the website where ProjectWise Web Server or ProjectWise Web View Server will be deployed.

SSL ensures that all communication between the user and the web server (including passwords and other sensitive data) is encrypted and cannot be read or intercepted by a third party.

9. For security reasons, it is recommended that the IIS application pool you plan to use does not use the LocalService or LocalSystem identity.
10. You can deploy to as many IIS websites as needed on the same computer. ProjectWise Web Server and Web View Server supports parallel deployments to both SharePoint and standalone (non-SharePoint) websites on the same computer. ProjectWise Web Server and Web View Server also supports parallel deployments of both ProjectWise Web Server and ProjectWise Web View Server to different IIS websites on the same computer. You cannot, however, deploy both ProjectWise Web Server and ProjectWise Web View Server to the same IIS website.
11. SharePoint lets you extend a web application to another IIS website; however this is not supported by ProjectWise Web Server and Web View Server.
12. For cluster-like functionality in SharePoint, you can set up a web farm. See your SharePoint documentation for more information.

**Note:** When installing ProjectWise Web Server and Web View Server in a web farm, you must install it on the front-end server.

13. If using ProjectWise Publishing Server with ProjectWise Web Server and Web View Server, for performance reasons it is recommended that you do not install them on the same computer.

## ProjectWise Web Server Configuration

### Installing and Deploying ProjectWise Web Server

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14. If you need to install a ProjectWise language pack, it is recommended that you install the language pack *after* installing ProjectWise Web Server and Web View Server, but *before* deploying ProjectWise Web Server or ProjectWise Web View Server.
15. You must launch the installer with elevated privileges (**Run as Administrator**) if:
  - You plan to launch the Product Activation Wizard from the final page of the Setup Wizard. This ensures that the Product Activation Wizard is also run as an administrator, which in turn ensures that the licensing information you enter through the Product Activation Wizard gets registered to the correct location in the Windows Registry.
16. For SharePoint deployments, the user you use to deploy ProjectWise Web Server must be an administrator on the computer you are deploying on, and also an administrator for the local SharePoint installation.

## Installing and Deploying ProjectWise Web Server

Installation and deployment is as follows:

1. First you install ProjectWise Web Server and Web View Server.
2. Then you run the Deployment Wizard to select which IIS websites (SharePoint or standalone) to deploy ProjectWise Web Server or ProjectWise Web View Server to.

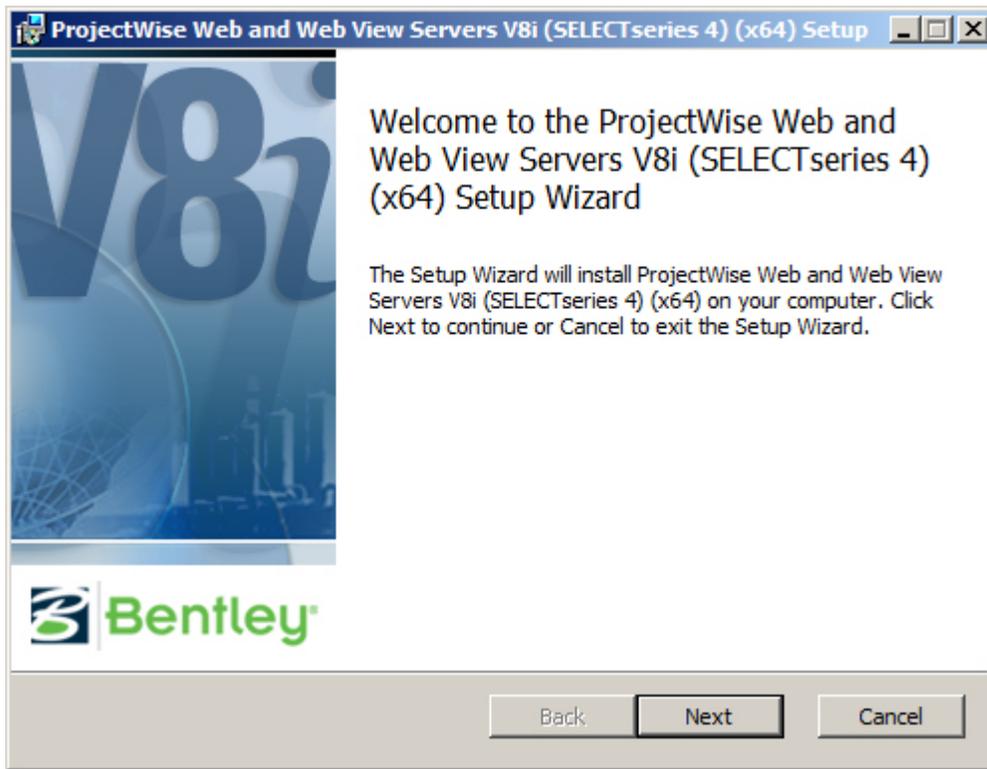
You can deploy to any IIS website that ProjectWise Web Server or ProjectWise Web View Server has not already been deployed to.

### To Install ProjectWise Web Server

1. Double-click the `setup.exe` file to open the ProjectWise Server Setups master installer.
2. Click **Install** next to **ProjectWise Web Server and Web View Server**.
3. When the **Setup Wizard** opens, click **Next**.

# ProjectWise Web Server Configuration

Installing and Deploying ProjectWise Web Server

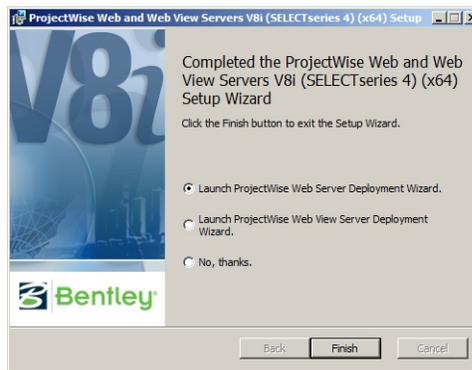


4. When the **License Agreement** page opens, read and accept the agreement, then click **Next**.

The Custom Setup page opens, showing you the features that can be installed, and the location to which the product will be installed.

The default installation location is C:\Program Files\Bentley\ProjectWise.

5. On the **Custom Setup** page, accept or change the default installation location and click **Next**.
6. When the **Ready to Install** page opens, click **Install**.
7. When installation is complete, select which Deployment Wizard you want to run next, then click **Finish**.



The selected deployment wizard opens. At the same time, the Product Activation Wizard opens for you to configure [licensing](#) (on page 54) for this server.

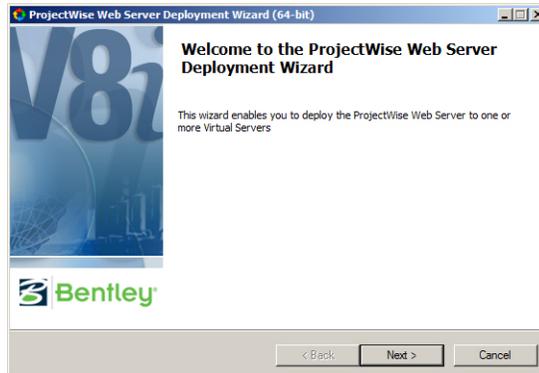
# ProjectWise Web Server Configuration

Installing and Deploying ProjectWise Web Server

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## To Deploy ProjectWise Web Server or ProjectWise Web View Server

1. If the Deployment Wizard you want to run is not already open, open it now by selecting either:  
**Start > All Programs > Bentley > ProjectWise V8i (SELECTseries 4) > Web Server and Web View Server > ProjectWise Web Server Deployment Wizard**  
or  
**Start > All Programs > Bentley > ProjectWise V8i (SELECTseries 4) > Web Server and Web View Server > ProjectWise Web View Server Deployment Wizard**
2. When the selected Deployment Wizard opens, click **Next**.



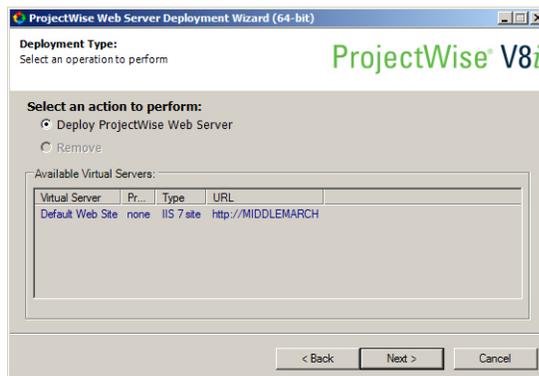
The **Deployment Type** page opens, displaying the virtual servers (websites) currently available in IIS, and whether or not ProjectWise Web Server or ProjectWise Web View Server is currently deployed to any of them.

3. On the **Deployment Type**, do one of the following:

If you launched the ProjectWise Web Server Deployment Wizard, select **Deploy ProjectWise Web Server** and click **Next**.

or

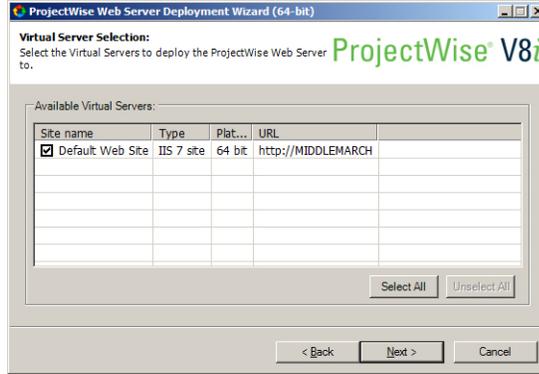
If you launched the ProjectWise Web View Server Deployment Wizard, select **Deploy ProjectWise Web View Server** and click **Next**.



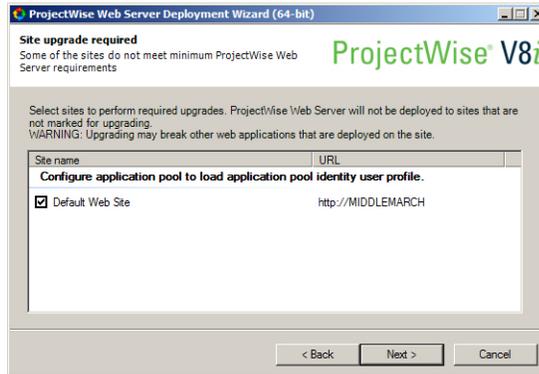
# ProjectWise Web Server Configuration

## Installing and Deploying ProjectWise Web Server

4. On the **Virtual Server Selection** page, select one or more virtual servers (websites) to deploy ProjectWise Web Server or ProjectWise Web View Server to, then click **Next**.



5. If the **Site Update Required** page opens, this means that one or more of the websites you selected to deploy does not meet the minimum requirements of ProjectWise Web Server or ProjectWise Web View Server. Select the websites you want to upgrade, then click **Next**. (ProjectWise Web Server or ProjectWise Web View Server will not be deployed to any website listed that you do not select to upgrade.)



6. When the **Custom Trust Policy** page opens, do one of the following:

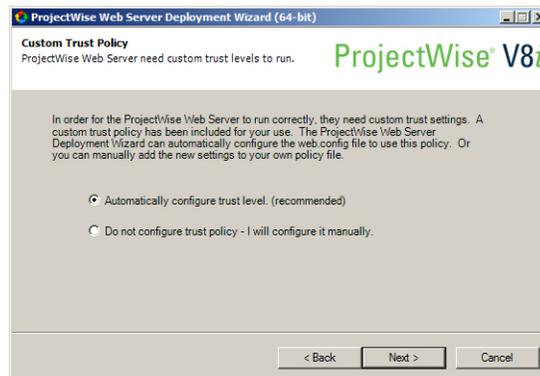
Select **Automatically configure trust level (recommended)** and click **Next**.

or

Select **Do no configure trust policy - I will do it manually** and click **Next**. If you select this option, a text file opens when you click Finish in the Deployment Wizard. This text file contains the custom trust policy information for you to manually add to your existing trust policy.

# ProjectWise Web Server Configuration

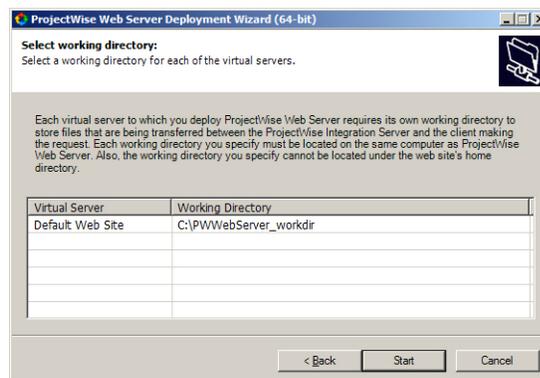
## Installing and Deploying ProjectWise Web Server



7. On the **Select working directory** page, specify a temporary working directory for each website you are deploying ProjectWise Web Server or ProjectWise Web View Server to.

Please note the following:

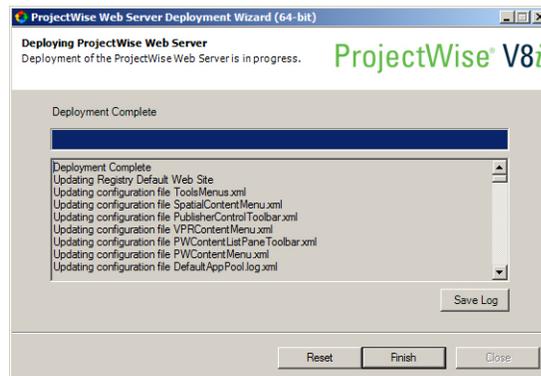
- This temporary working directory is used by the ProjectWise Web Server or ProjectWise Web View Server to store things such as licensing data, images, and files that are being transferred between the main ProjectWise server and the client making the request.
- Each website must have its own working directory that is not being used by any other ProjectWise Web Server or ProjectWise Web View Server deployment.
- The working directory must be located on the same computer you are installing and deploying on.
- The working directory cannot be located under the website's home directory (for example, it cannot be here: C:\inetpub\wwwroot).
- Make sure the local system account has Write permission on the specified working directory.
- To set the working directory for a particular website, click where it says **<Click here to set the working directory>**, then in that field type the path to the local folder, or click the folder icon to browse for a local folder to set as the working directory. Repeat this step for each website you are deploying to.
- UNC paths (\\servername\sharename) are not supported.



8. After you specify a working directory, click **Start**.  
If you specify a working directory folder that does not yet exist, a dialog opens to ask if you would like to create it now. Click **Yes**.
9. When deployment is complete, click **Finish**.

# ProjectWise Web Server Configuration

## Configuring Single Sign-On for ProjectWise Web Server



10. If in step 6 you selected to manually configure the trust policy, a text file opens when you click Finish. This text file contains the custom trust policy information you need to add to your existing trust policy. For more information, see your SharePoint documentation.

You can rerun the Deployment Wizard as needed to deploy to another website, or to [remove a current deployment from a website](#) (on page 44).

## Configuring Single Sign-On for ProjectWise Web Server

*Single sign-on* lets ProjectWise users log in to their datasources using the same Windows credentials they used to log on to their computer. This assumes that their Windows account has already been added to the ProjectWise datasource they are logging in to.

While the general concept of single sign-on is the same across the different ProjectWise clients, for technical reasons single sign-on is configured a little differently for ProjectWise Web Server than it is for ProjectWise Explorer and ProjectWise Administrator users. To enable single sign-on for ProjectWise Explorer and ProjectWise Administrator users, the administrator simply adds the line `SSO=1` to the ProjectWise Integration Server's `dmskrnl.cfg` file. This line, however, does not apply for ProjectWise Web Server single sign-on.

To configure single sign-on for ProjectWise Web Server, you need to do the following:

1. [Add the IP address of this ProjectWise Web Server computer to the \[Trusted Servers\] section](#) (on page 13) in the ProjectWise Integration Server's `dmskrnl.cfg` file.
2. [Create a delegate user in ProjectWise Administrator](#) (on page 14).
3. [Enter the credentials of the delegate user on the ProjectWise Web Server computer](#) (on page 14).

### To Add a Computer to the Trusted Servers List

1. Open the ProjectWise Integration Server's `dmskrnl.cfg` file.
2. Find the [Trusted Servers] section.
3. Under the [Trusted Servers] line, add a new line that includes your computer's IP address.

You can either add a specific IP address, or you can use a subnet mask. You can also add a new line for each application, if they are installed on different computers.

# ProjectWise Web Server Configuration

## Configuring Single Sign-On for ProjectWise Web Server

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For example:

```
[Trusted Servers]
ProjectWise Web Server=194.215.205.19
Bentley i-model Composition Server for PDF=192.168.100.0 255.255.255.0
```

The name before the = can be any name you choose.

The number after the = is the IP address.

The number after the IP address (with a space in between) is the optional subnet mask.

## To Create a Delegate User in ProjectWise Administrator

1. Open ProjectWise Administrator and log in to your datasource.
2. Create a logical user account (right-click the **Users** node and select **New > User**).
3. Turn on that user's user setting, **Administrative > Enable as delegate user**.
4. If needed, add the delegate user to the **Administrator** group (under the **Groups** node).

**Tip:** This step is only required if any of the domain users in the datasource who plan to connect to ProjectWise through ProjectWise Web Server are also members of the Administrator group in ProjectWise.

5. Repeat this procedure as needed to configure a delegate user in other datasources.

Once a delegate user exists in the datasource, you can go to the ProjectWise Web Server computer and specify which delegate user will be used for each datasource.

## To Enter the Credentials of the Delegate User on the ProjectWise Web Server Computer

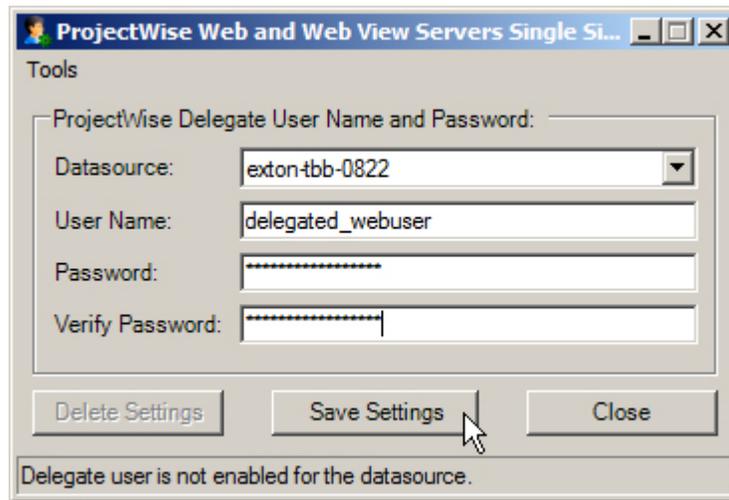
1. On the ProjectWise Web Server computer, select **Start > All Programs > Bentley > ProjectWise V8i (SELECTseries 4) > Web Server and Web View Server > ProjectWise Web Server Single SignOn Settings**.

The **Single Sign-On Settings** dialog opens for you to specify the delegate user to use for each datasource. If you have already specified a delegate user for a particular datasource, you can use this same procedure to change the currently specified delegate user (assuming there is another delegate user in the same datasource).

This dialog requires elevated privileges.

# ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server



2. Select your datasource, enter the user name and password of the delegate user you created in this datasource, and click **Save Settings**.

Repeat this step to specify the delegate user to use in other datasources.

3. Click **Close**.

**Note:** The datasource list displays whatever datasources are configured to display as the result of configuring the ProjectWise network on this computer. If the datasource you need to connect to is not listed, close this dialog, configure the ProjectWise network, then open this dialog again. The ProjectWise network is configured using the **ProjectWise Network Configuration Settings** dialog. See [Connecting Individual Clients to the Server](#) (on page 48) for details.

## Integrating with ProjectWise Publishing Server

To view and/or markup DGN and DWG documents in the ProjectWise Publishing and Markup web part, you need to integrate ProjectWise Web Server with ProjectWise Publishing Server.

### ProjectWise Publishing Server Integration Checklist

1. For better performance it is recommended that you do not install ProjectWise Publishing Server on the same computer as either ProjectWise Web Server and Web View Server or SharePoint. If you need to install ProjectWise Publishing Server and ProjectWise Web Server and Web View Server on the same computer for some reason, you can only use a 64-bit Windows Server 2008 operating system.
2. [Install the Web Server \(IIS\) role and role services](#) (on page 16) required for ProjectWise Publishing Server.
3. Install the following on the same computer:
  - Prerequisites for Bentley Desktop Applications (**08.11.07.03** or later)
  - [ProjectWise Publishing Server V8i \(SELECTseries 4\) \(08.11.11.16\)](#) (on page 21)
  - [ProjectWise Publishing Gateway Service V8i \(SELECTseries 4\) \(08.11.11.590\)](#) (on page 21)

**Note:** Prerequisites for Bentley Desktop Applications and ProjectWise Publishing Server are each separate downloads, available from the Bentley [Software Fulfillment Center](#).

# ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server

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**Note:** This Web Server-only release does not deliver ProjectWise Publishing Gateway Service, therefore you must use the version of ProjectWise Publishing Gateway Service that is delivered with ProjectWise Server Setups V8i (SELECTseries 4) (**08.11.11.590**).

4. In ProjectWise Administrator, do the following:
  - a. Add the ProjectWise Publishing Server address to the datasource settings (on page 23).
  - b. Set ProjectWise Publishing Server as the web viewer for DWG and DGN documents (on page 24).

## To Install the Web Server (IIS) Role and Role Services Required for ProjectWise Publishing Server

1. In Server Manager, turn on the Web Server (IIS) role and the necessary role services.

For Windows Server 2008, the following role services are required:

- **Web Server**
  - **Common HTTP Features**
    - **Static Content**
    - **Default Document**
    - **HTTP Errors**
  - **Application Development**
    - **ASP.NET**
    - **ISAPI Extensions**
    - **ISAPI Filters**
  - **Security**
    - **Basic Authentication**
  - **Management Tools**
    - **IIS Management Console**
    - **IIS 6 Management Compatibility**
    - **IIS 6 Metabase Compatibility**

**Note:** If you encounter a problem installing ProjectWise Publishing Server, check to make sure the **IIS 6 Metabase Compatibility** role service is turned on, as it is not on by default.

## To Install ProjectWise Publishing Server

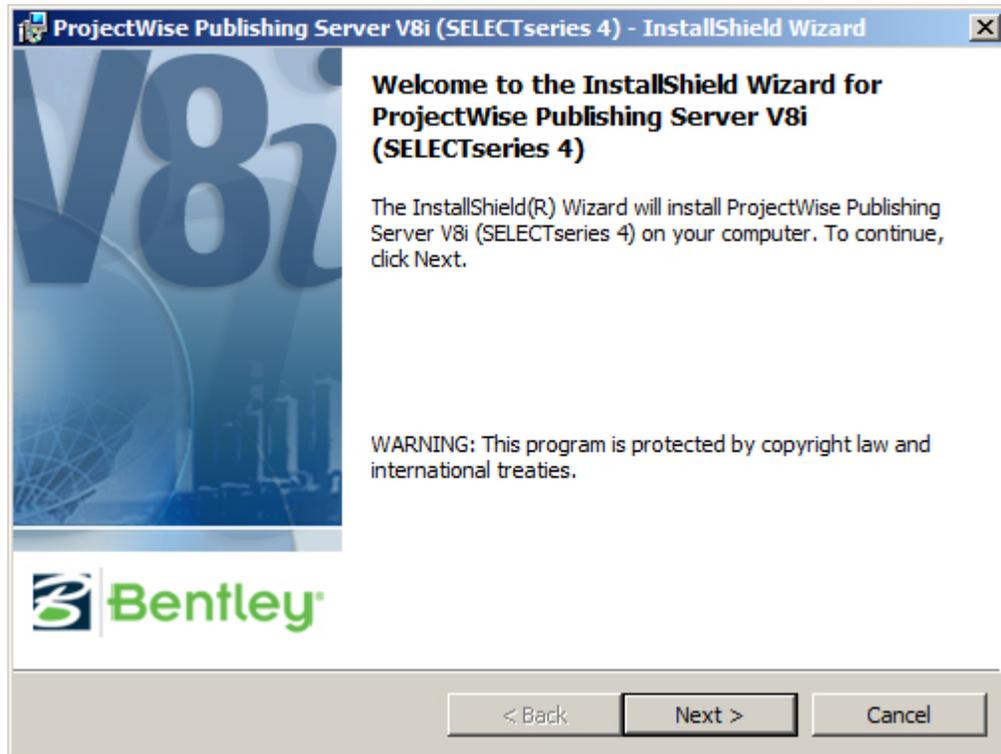
1. Determine whether you want to run ProjectWise Publishing Server as a Web Server Extension, or as a standalone HTTP server. Running ProjectWise Publishing Server as a Web Server Extension allows serving ProjectWise Publishing Server requests through IIS. If you are installing ProjectWise Publishing Server exclusively for use with ProjectWise Web Server and Web View Server, then Web Server Extension is not required.
2. If you plan to install ProjectWise Publishing Server on the same computer as ProjectWise Web Server and Web View Server (which is not recommended), and if you plan to run ProjectWise Publishing Server as a Web Server Extension, then first create a separate IIS website to install ProjectWise Publishing Server to.
3. Install Prerequisites for Bentley Desktop Applications (**08.11.07.03** or later).

## ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server

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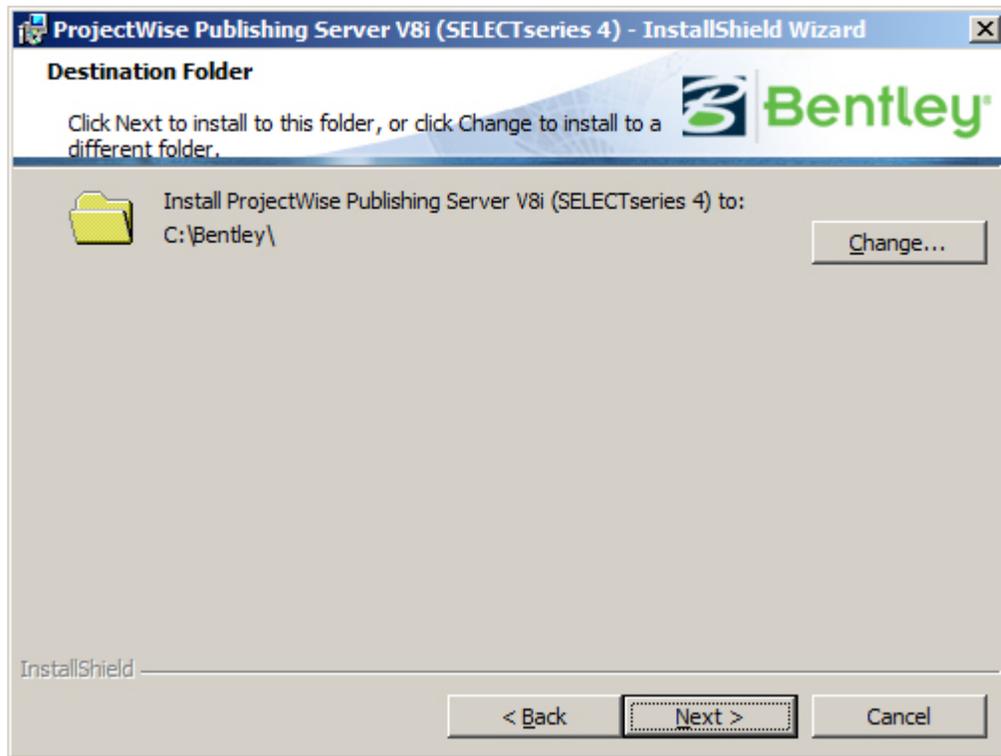
4. Launch the ProjectWise Publishing Server installer.
5. When the **Setup Wizard** opens, click **Next**.



6. When the **License Agreement** page opens, read and accept the agreement, then click **Next**.
7. When the **Destination Folder** page opens, accept or change the default installation location, then click **Next**.

# ProjectWise Web Server Configuration

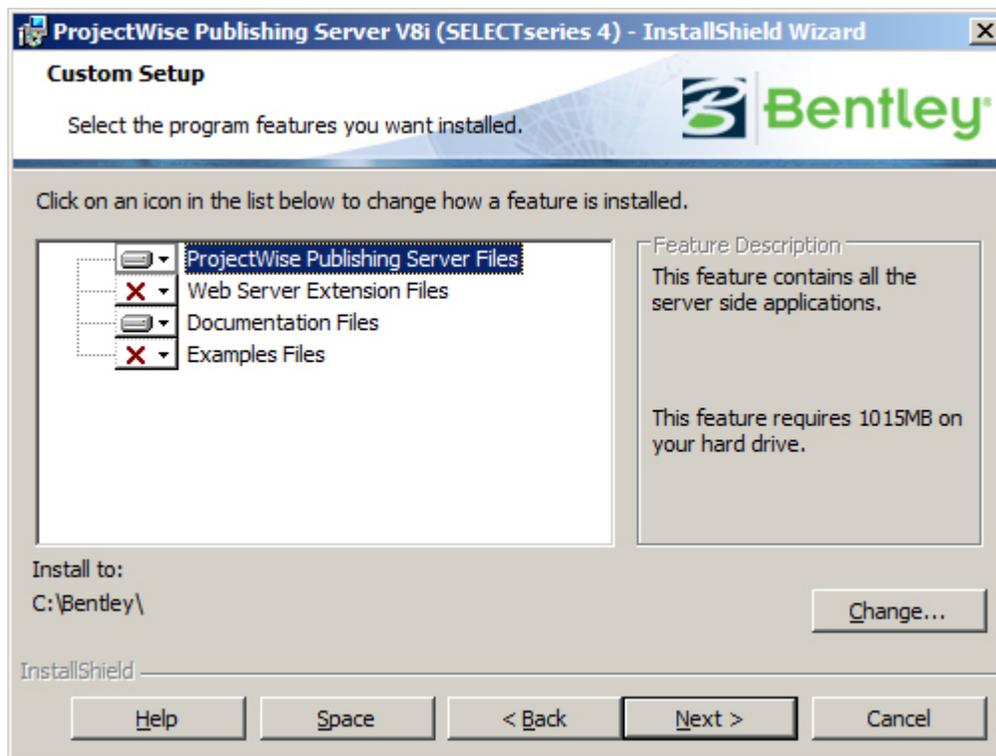
Integrating with ProjectWise Publishing Server



8. On the **Setup Type** page, select **Custom** and click **Next**.
9. On the **Custom Setup** page, select which features to install. If Web Server Extension is not needed, do not install the **Web Server Extension Files** and **Examples Files** features. When finished click **Next**.

# ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server

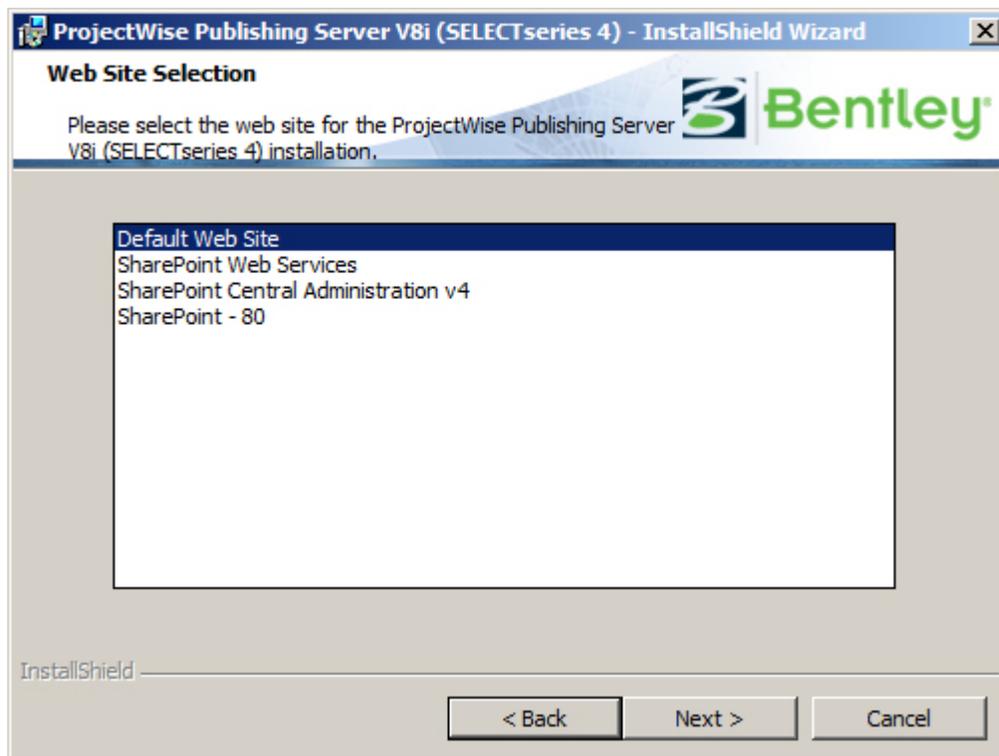


10. On the **Web Site Selection** page, select the IIS website where ProjectWise Publishing Server files will be installed and click **Next**.

**Important:** If the Web Server Extension feature is selected to be installed from the previous step, do not select the same website where ProjectWise Web Server or ProjectWise Web View Server is deployed. In this case, select the dedicated website created in step 2.

## ProjectWise Web Server Configuration

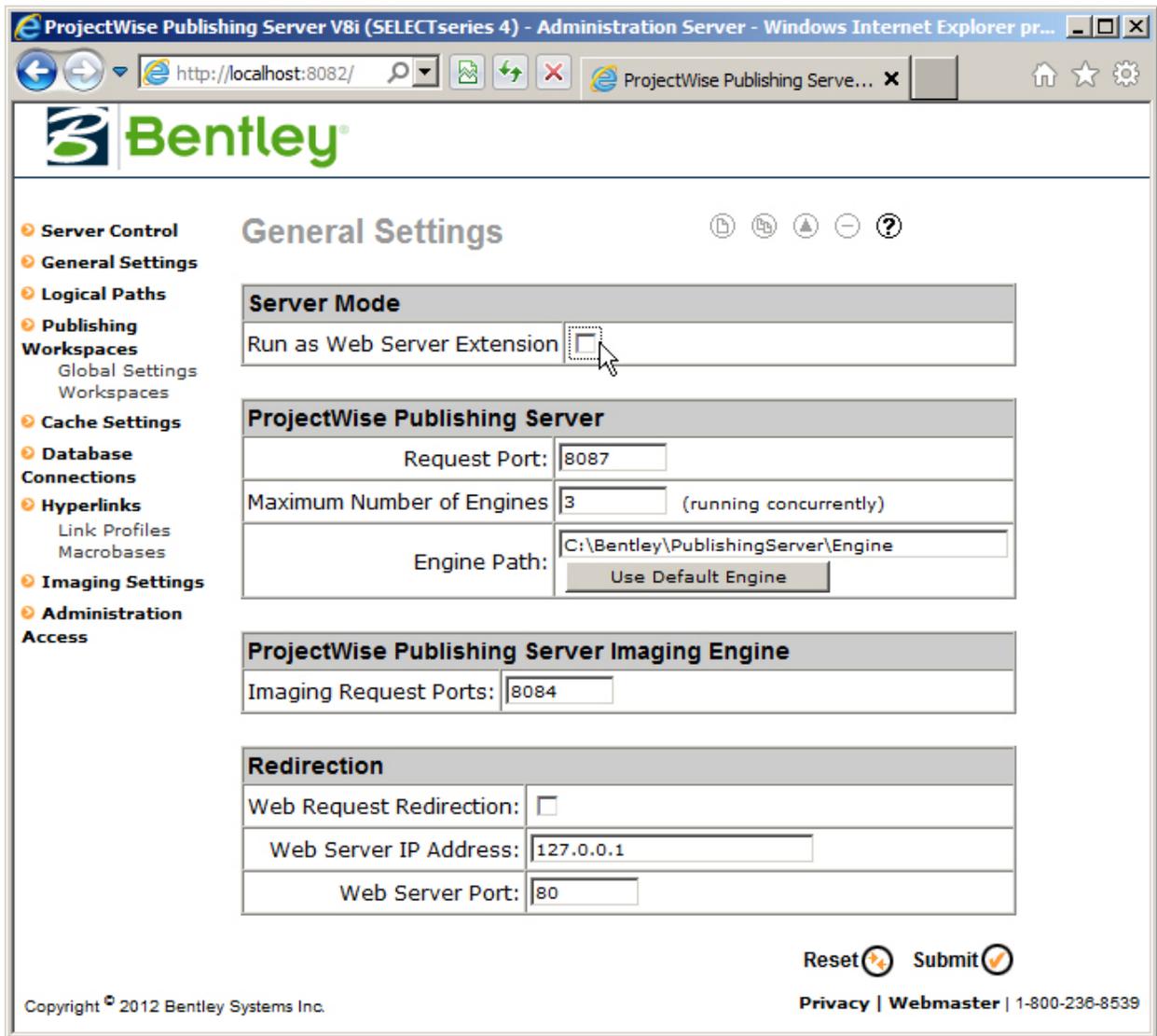
Integrating with ProjectWise Publishing Server



11. When the **Ready to Install** page opens, click **Install**.
12. When installation is complete, click **Finish**.
13. If the Web Server Extension feature was not installed, configure ProjectWise Publishing Server to run in standalone mode. To do this, open the ProjectWise Publishing Server Administration page (**Start > All Programs > Bentley > ProjectWise Publishing Server > ProjectWise Publishing Server Administration**), navigate to the **General Settings** page, turn off **Run as Web Server Extension**, and click **Submit**. To apply configuration changes, a server needs to be restarted. Navigate to the **Server Control** page and click **Restart Server**.

# ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server



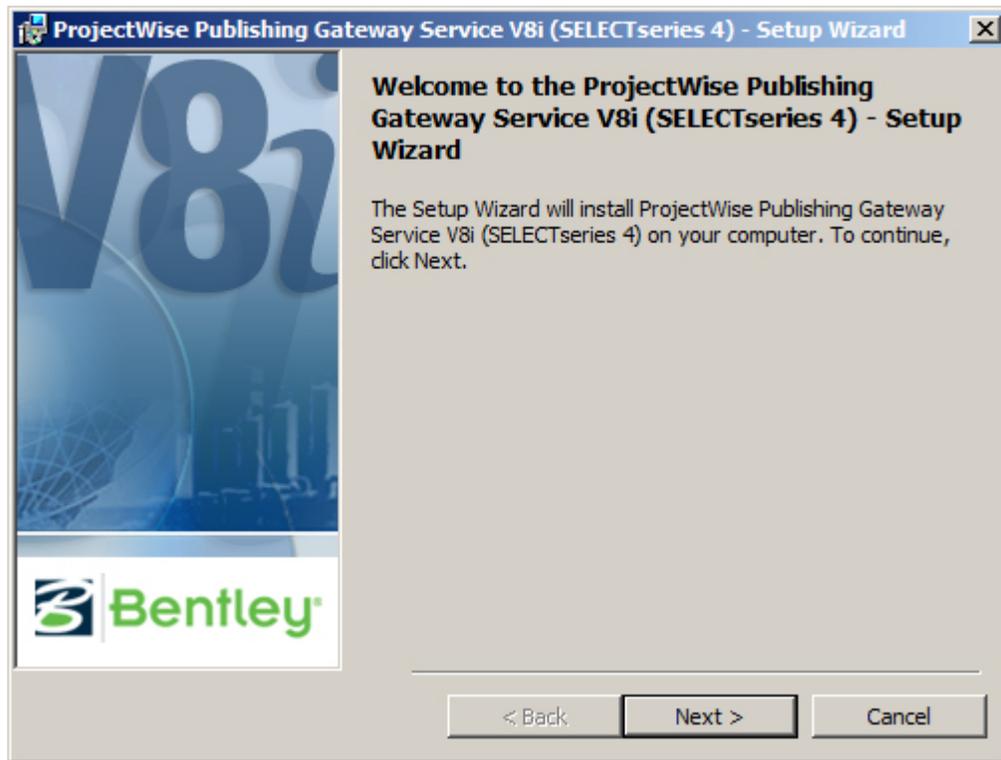
## To Install ProjectWise Publishing Gateway Service

1. Make sure ProjectWise Publishing Server is installed on this computer, and that the ProjectWise Publishing Server service is running.
2. Double-click the setup .exe file to open the ProjectWise Server Setups master installer.
3. Click **Install** next to **ProjectWise Publishing Gateway Service**.
4. When the **Setup Wizard** opens, click **Next**.

## ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server

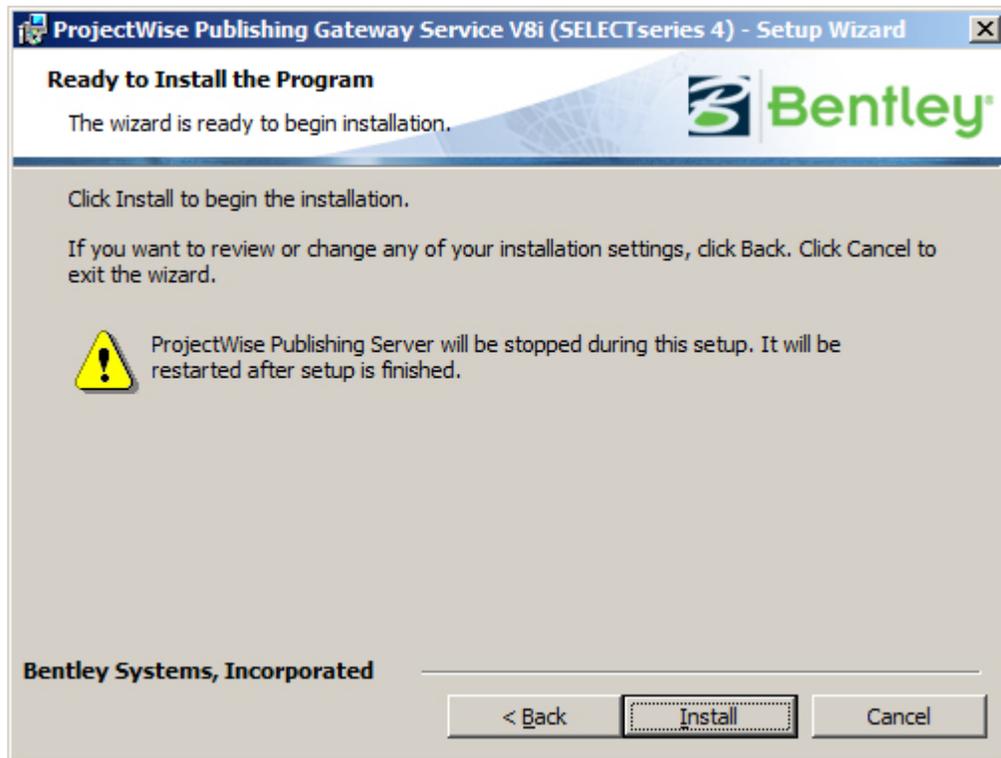
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5. When the **License Agreement** page opens, read and accept the agreement, then click **Next**.
6. When the **Ready to Install** page opens, click **Install**.

# ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server



**Note:** The installer automatically stops the ProjectWise Publishing Server service during installation, and restarts it once ProjectWise Publishing Gateway Service is finished installing.

7. When installation is complete, click **Finish**.

## To Add the ProjectWise Publishing Server Address to the Datasource Settings

1. Open ProjectWise Administrator and log in to your datasource.
2. Right-click your datasource and select **Properties**.

The **Datasource Properties** dialog opens.

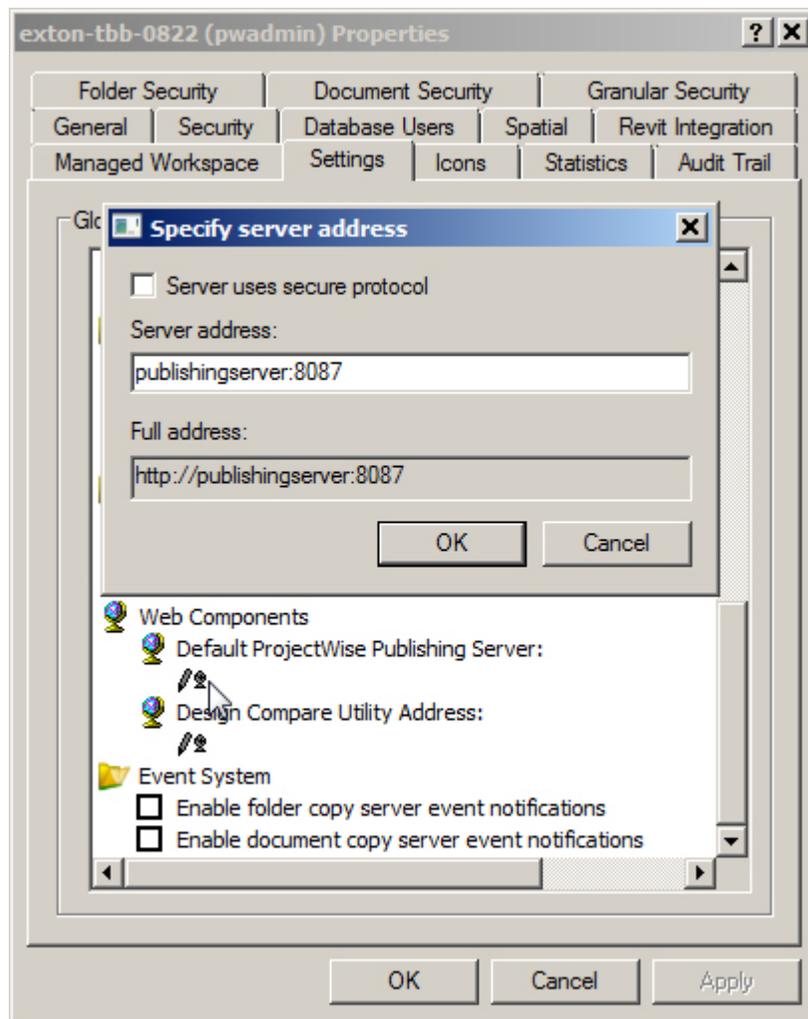
3. On the **Settings** tab, expand **Web Components > Default ProjectWise Publishing Server** and double-click the icon below it.
4. In the **Specify server address** dialog, enter the name of the computer on which ProjectWise Publishing Server is installed, followed by a colon, followed by the port number. For example:

`http://publishingserver:8087`

If ProjectWise Publishing Server is running as a Web Server Extension, specify the port number of the IIS website where ProjectWise Publishing Server is installed. Otherwise, specify the port number of ProjectWise Publishing Server as configured in ProjectWise Publishing Server Administration (default is 8087).

# ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server



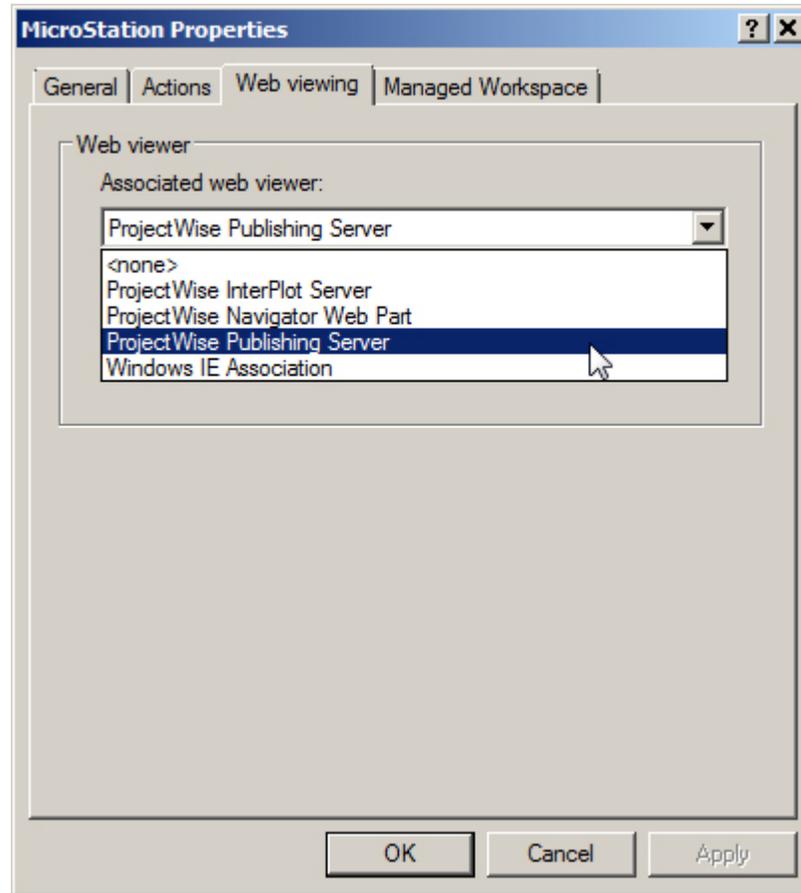
5. Click **OK** in the **Specify server address** dialog, then click **OK** in the **Datasource Properties** dialog.

## To Set ProjectWise Publishing Server as the Web Viewer for DGN and DWG Documents

1. Open ProjectWise Administrator and log in to your datasource.
2. Under the **Applications** node, right-click an application you have associated to DGN and/or DWG documents and select **Properties**.
3. On the **Web viewing** tab, set the **Associated web viewer** to **ProjectWise Publishing Server**.

# ProjectWise Web Server Configuration

Integrating with ProjectWise Publishing Server



#### 4. Click **OK**.

Repeat this procedure for all other applications that are associated to DGN and/or DWG documents. If this step is not done for an application to which a DGN or DWG is associated, then the selected document will not be able to be viewed or marked up through the ProjectWise Publishing and Markup web part.

## Using Workspace Profiles with ProjectWise Publishing Server

If your ProjectWise Web Parts users are viewing DGN documents in folders which have workspace profiles associated to them, then ProjectWise Publishing Server must have access to:

- the files pointed to by the workspace profile, whether the workspace profile points to a local or network drive
- the plot drivers in the workspace pointed to by the workspace profile

When a user selects to view a DGN in ProjectWise Web Parts, ProjectWise Publishing Server is really plotting the DGN, therefore it needs access to the plot drivers, which it normally finds in its own workspace folder. However if a workspace profile is assigned to the ProjectWise folder, ProjectWise Publishing Server looks where the workspace profile points, rather than its own workspace directory. MicroStation does not deliver the DPR.PLT driver (and ProjectWise Publishing Server does) which is what ProjectWise Publishing Server needs to generate the DPR file. If your users are receiving an error to the effect of “engine failed to generate image/rendition file”,

## ProjectWise Web Server Configuration

### Configuring Design Compare

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check to make sure you have a copy of the “DPR.PLT” in the workspace pointed to by the workspace profile. For example, copy DPR.PLT from:

C:\Bentley\Program\BentleyPublisher\Engine\workspace\System\plotdrv

to

P:\workspace\System\plotdrv

## Configuring Design Compare

If you want your users to be able to select two DGN documents (or two renditions produced from MicroStation sources) in the ProjectWise Content web part, and then see the changed, unchanged, added, and deleted graphics between those documents in the ProjectWise Publishing and Markup web part, you need to install and set up the ProjectWise Design Compare utility that is delivered with ProjectWise InterPlot Server.

**Note:** Renditions produced from non-MicroStation sources cannot be compared. Design Compare is designed to detect changes in the element itself. In other words, the user must actually modify the element by moving it, adding vertices, modifying it, changing color, weight, style, or fill. The feature is not designed to detect changes in the mere appearance of the element that are caused by level symbology setups, plot-time design scripts, view attribute changes, or shifts in color tables.

When ProjectWise Publishing Server is installed on a 64-bit Windows Server 2008 to a 64-bit application pool site, the Design Compare utility must be installed to a separate site that uses a 32-bit application pool.

## To Set Up Design Compare on the ProjectWise Web Server / SharePoint Computer

1. Install SharePoint. During install, click **Advanced** (instead of Basic), then select the **Web Front End** option (instead of Stand-alone).
2. After SharePoint is installed, go to **SharePoint Central Administration**.
3. Go to **Application Management > Create or extend web application > Create New Web application**.
4. Set **Use existing IIS Web Site** and make sure that **Default Web Site** is selected.
5. Set **Application Pool** and **Database Name** and **Authentication** sections as usual.
6. Click **OK**, then restart IIS.
7. **Create Site collection** on the newly created application.
8. Install and configure the Design Compare utility as described in the following procedure.

## To Set Up Design Compare on a Computer Where ProjectWise Web Server and SharePoint Are Not Installed

1. On a computer where ProjectWise Explorer is installed, install and configure ProjectWise InterPlot Organizer to create/store IPS and IPARM files in ProjectWise.

Follow directions in the ProjectWise InterPlot Organizer's help under the heading, “Using ProjectWise InterPlot Organizer with other ProjectWise Applications”.

2. On a computer where ProjectWise Publishing Server is installed, install ProjectWise InterPlot Server.
3. Once ProjectWise InterPlot Server is installed, go to the `... \ProjectWise InterPlot Server \pwdiffwu` directory and double-click the `setupDesignCompareUtility.exe` file to begin installing the ProjectWise Design Compare utility.

# ProjectWise Web Server Configuration

## Configuring Design Compare

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4. When prompted to specify a **Virtual Directory Alias**, enter an alias name.

A typical name might be "PWDI". This will be the virtual directory that will be used in Internet Information Server (IIS).

5. When the Virtual Server Selection dialog opens, select your site (**PWDI**) and finish installation.
6. When setup is complete you must grant the local user account that IIS is using (typically IUSR\_<COMPUTERNAME>) rights to the newly created directory, C:\Program Files\Bentley\Design Compare Utility\tmp.

To grant these rights, in Windows Explorer, open the Properties dialog for the \tmp folder, click the **Security** tab, select the user from the list and turn on **Read** and **Write** permissions.

7. Also, make sure you give your Web Parts users **Write** permission to the Design Compare tmp directory, if the Design Compare Virtual Directory security does not allow anonymous access, but only allows Windows authenticated users.
8. In ProjectWise Administrator, right-click your datasource and select **Properties**. On the **Settings** tab, expand **Web Components > Design Compare Utility Address**, and double-click the icon below it.
9. Do one of the following:

To configure the Design Compare utility to run in secure mode, in the Specify server address dialog turn on **Server uses secure protocol**, then enter the name of the computer on which the Design Compare utility is installed exactly as it appears in your certificate, followed by a forward slash, followed by the name of the **Virtual Directory Alias** specified in step 4. For example, `https://interplotserver/PWDI`. To find the computer name as it appears in the certificate, open Internet Information Services, go to **Web Sites > Default Web Site > Properties > Directory Security tab > View Certificate > Issued to**.

or

To configure the Design Compare utility to run in regular mode, in the Specify server address dialog turn OFF **Server uses secure protocol**, then enter the name of the computer on which the Design Compare utility is installed, followed by a forward slash, followed by the name of the **Virtual Directory Alias** specified in step 4. For example, `http://interplotserver/PWDI`.

**Note:** If the Default Web Site port has been changed from the default port 80, or if you install the Design Compare utility to a site other than the Default Web Site, then when specifying the Design Compare utility address, you will also need to specify the port after the server name, and before the Virtual Directory Alias. For example, `https://interplotserver:88/PWDI`

**Note:** The **Document > Design Compare** menu will be disabled in the ProjectWise Content web part if the **Web Components > Design Compare Utility Address** datasource setting is empty, or if it contains an incorrect Design Compare utility address.

## To Set Up a New IIS Site (for Design Compare) That Uses a 32-bit Application Pool, on a 64-bit Windows Server 2008 Computer

1. In the Control Panel, go to **Administrative Tools** and launch **Internet Information Services (IIS) Manager** using the **Run as Administrator** option.
2. Under **Connections**, expand the local computer, right-click **Web Sites** and select **Add Web Site**.
3. In the Add Web Site dialog, do the following:
  - a. In the **Web site name** field, enter a name for the site, such as: PWDI
  - b. In the **Physical Path** field, enter the physical location to where the site lives.

## ProjectWise Web Server Configuration

### Configuring ProjectWise Web Parts in SharePoint

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- c. In the **Port** field, make sure you specify a port that is different than the port ProjectWise Publishing Server is using.
  - d. Click **OK**.
4. Under **Connections**, expand the local computer and select **Application Pools**.
5. In the **Applications Pools** list, right-click the **PWDI** application pool and select **Advanced Settings**.
6. In the Advanced Settings dialog, do the following:
  - a. Set **.NET Framework version** to **No Managed Code**.
  - b. Set **Enable 32-Bit Applications** to **True**.
  - c. Set **Managed Pipeline Mode** to **Classic**.
  - d. Set **Identity** to **NetworkService**.
  - e. Click **OK**.
7. Under **Connections**, select the local computer, then click **Features View**.
8. In the **Features** list, double-click **MIME Types**.
9. Under **Actions**, click **Add**.
10. In the Add MIME Type dialog, do the following:
  - a. In the **File Name Extension** field, enter: `.dpr`
  - b. In the **MIME Type** field, enter: `application/vpr`
  - c. Click **OK**.
11. Close IIS Manager.

## Authentication Methods for Design Compare

Design Compare supports both Windows and Anonymous authentication methods (**Site Properties > Directory Security > Edit > Anonymous** or **Windows access**) when ProjectWise Publishing Server is running as a web server extension.

When **Windows access** is enabled on the website where ProjectWise Publishing Server is installed, you must also configure WinHTTP proxy settings to include the ProjectWise Publishing Server's computer name in the proxy bypass list (for details, see <http://support.microsoft.com/kb/291008>).

On 64-bit operating systems, make sure you use the 32-bit configuration tools located in the `%systemroot%\SysWOW64` directory.

On 64-bit Windows Server 2008 SP2 and Windows Server 2008 R2, the "proxycfg" utility is not available. Instead you must use the `%systemroot%\SysWOW64\netsh winhttp set proxy` command to configure proxy settings. Also, if User Access Control is enabled, you must run this command with elevated privileges.

## Configuring ProjectWise Web Parts in SharePoint

Once ProjectWise Web Server or ProjectWise Web View Server has been deployed to a SharePoint site, you can add ProjectWise Web Parts to your SharePoint team site. After adding them, you need to connect them to a ProjectWise datasource. Once connected, then all your users have to do is point a supported web browser to the SharePoint team site and they will be automatically logged in to the datasource, either using their own Windows domain account if you have configured ProjectWise Web Parts to use *single sign-on*, or using the ProjectWise account you have specified all ProjectWise Web Parts users to use.

**Note:** For optimal security, it is recommended that you:

- configure SSL in your SharePoint site (see your SharePoint documentation)

# ProjectWise Web Server Configuration

## Configuring ProjectWise Web Parts in SharePoint

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- use single sign-on to connect to ProjectWise datasources (see [To Connect Web Parts to a Datasource Using Single Sign-on, on a SharePoint Website](#) (on page 30))

**Note:** ProjectWise Web Server requires that the underlying website has **Read** and **Script** permissions enabled in IIS. These permissions are typically configured automatically by your SharePoint installation.

## To Add ProjectWise Web Parts to a SharePoint Page

1. Go to the SharePoint page where you want to add a ProjectWise web part and click **Edit**.
2. On the **Insert** tab, click **Web Part**.
3. In the **Categories** list, click **ProjectWise**, then in the **Parts** list, select one or more ProjectWise web parts and click **Add**.

**Important:** If the web parts you just added do not display on the page, try modifying some other aspect of the page and then saving the page.

The following ProjectWise web parts are available:

- ProjectWise Content
- ProjectWise Navigation Tree
- ProjectWise Navigator
- ProjectWise Properties
- ProjectWise Publishing and Markup
- ProjectWise Search
- ProjectWise Spatial Content

**Note:** If you only need to use the ProjectWise Navigation Tree web part, you can add it to the page and use it independently without adding any other ProjectWise Web Parts to the page.

**Note:** If you only need to use the ProjectWise Content web part, you can add it to the page and use it independently without adding any other ProjectWise Web Parts to the page. Before adding the ProjectWise Content web part and connecting to your datasource, make sure the user setting, **Document list - Show subfolders** is on. This lets you see projects and folders in the ProjectWise Content web part, without requiring the ProjectWise Navigation Tree web part on the page. User settings can be modified from either ProjectWise Explorer or ProjectWise Administrator.

**Note:** If you only need to use the ProjectWise Search web part, you can add it to the page and use it independently without adding any other ProjectWise Web Parts to the page. Whenever you run a search and the ProjectWise Content web part is not present, a new window opens to display the results of the search, if there are any.

When you first add your ProjectWise Web Parts, none of them are connected to any datasource. That is covered in the following procedures. When using SharePoint, it is recommended that you configure the ProjectWise Web Parts to use *single sign-on*.

## ProjectWise Web Server Configuration

Configuring ProjectWise Web Parts in SharePoint

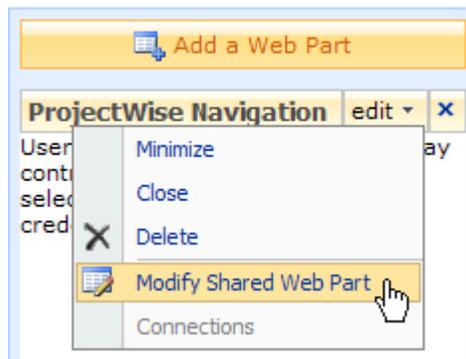
### To Connect Web Parts to a Datasource Using Single Sign-on, on a SharePoint Website

1. [Configure ProjectWise Web Server to use ProjectWise single sign-on](#) (on page 13).
2. On the ProjectWise Web Server computer, log in to the SharePoint site with a Windows domain account that has administrative rights to that site. Make sure this domain account also exists in the ProjectWise datasource you plan to connect to.
3. Make sure that your ProjectWise users having Windows domain-based accounts are also added to the SharePoint site.

If you need to set this up, in SharePoint go to **Site Actions > Site Settings > Users and Permissions > People and groups**, click **New > Add Users**, then add your Windows domain groups and/or Windows domain users. For most users, you should set their permissions to **Team Site Visitors [Read]**.

**Note:** This [Read] permission does not mean that the documents and folders found in ProjectWise Web Parts are read-only, it simply means that users can access the SharePoint site, but they cannot change anything on the site. For example, they will not be able to add a web part or close a web part. If you want some of your users to have this ability, then for those users you can set their permissions to **Team Site Members [Contribute]**. Team Site Members can also, for example, log in to the datasource as a different user.

4. [Add ProjectWise Web Parts](#) (on page 29) to the page.



5. In any ProjectWise web part (ProjectWise Navigation Tree web part is used for this example), select **Edit > Modify Shared Web Part**.

A settings window for that web part opens on the right side of the screen.

6. Under **Select web parts to connect**, turn on all the ProjectWise Web Parts listed.
7. From the **Location** list, select the ProjectWise datasource you want to connect to.

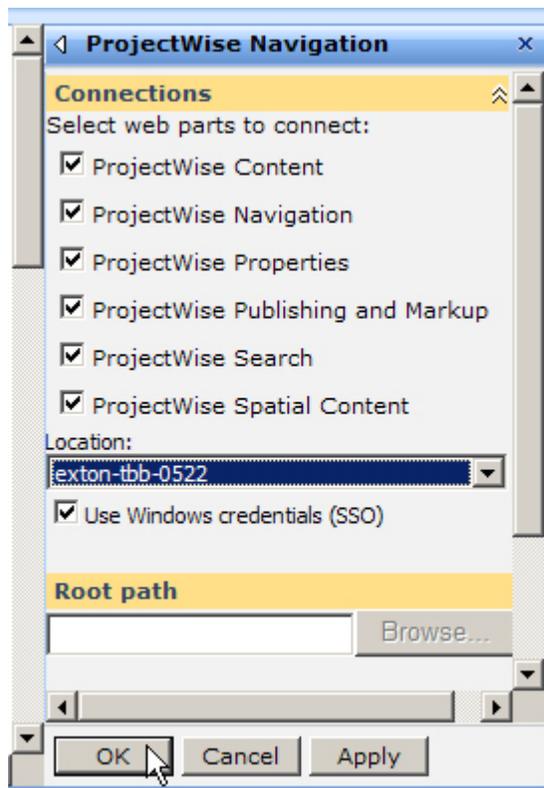
**Tip:** The **Location** list displays whatever datasources are configured to display as the result of configuring the ProjectWise network on this computer, and will contain the same datasources you saw on the **Single Sign-On Settings** dialog in step 1.

8. Turn on **Use Windows credentials (SSO)** and click **OK**.

## ProjectWise Web Server Configuration

Configuring ProjectWise Web Parts in SharePoint

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You, the administrator, are now logged in to the datasource with the same Windows domain account you used to log in to SharePoint (which also exists in the datasource).

9. When prompted, install the ProjectWise Web Server Client Components.

This installs the following ActiveX controls:

- ProjectWise Web File Transfer ActiveX Control - used by any operation that downloads a file to your local web parts working directory
- Bentley DGN Navigator Control - used by the ProjectWise Navigator web part
- VPR ActiveX Control - used by the ProjectWise Publishing and Markup web part
- Spatial ActiveX Control - used by the ProjectWise Spatial Content web part

10. In SharePoint, click **Exit Edit Mode**.

11. Make sure your users' Internet Explorer **Internet Options** are configured properly.

- a. Have your users open Internet Explorer and open the Internet Options dialog (**Tools > Internet Options**).
- b. On the **Security** tab, and click **Custom Level**. In the Security Settings dialog, scroll down to the **User Authentication** section and turn on **Automatic logon with current username and password**. Click **OK** to close the Security Settings dialog.
- c. On the **Advanced** tab, scroll down to the **Security** section and turn on **Enabled Integrated Windows Authentication (requires restart)**.
- d. Click **OK**.

12. Have your users' point their browsers to the SharePoint site.

They will be automatically logged in to the datasource with their Windows domain account, assuming they are logged in to their operating system with their Windows domain account, and assuming that the domain account exists both in the datasource and also in SharePoint.

# ProjectWise Web Server Configuration

## Configuring ProjectWise Web Parts in SharePoint

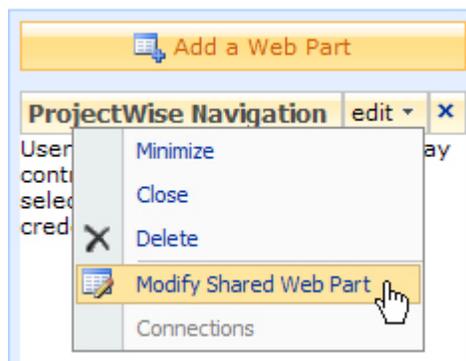
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Have them install the ProjectWise Web Server Client Components when prompted.

### To Connect Web Parts to a Datasource Without Single Sign-On, on a SharePoint Website

If you are testing ProjectWise Web Parts in SharePoint, a quick way to configure the site is to connect to a datasource without using single sign-on. You can always go back later and configure single sign-on using the procedure above. Note that the procedure below should only be used for testing and is not recommended for production. This is because if other users are using this site, they will all be automatically logged in to the datasource with the same user account you connected with.

1. [Add ProjectWise Web Parts](#) (on page 29) to the page.



2. In any ProjectWise web part (ProjectWise Navigation Tree web part is used for this example), select **Edit > Modify Shared Web Part**.

A settings window for that web part opens on the right side of the screen.

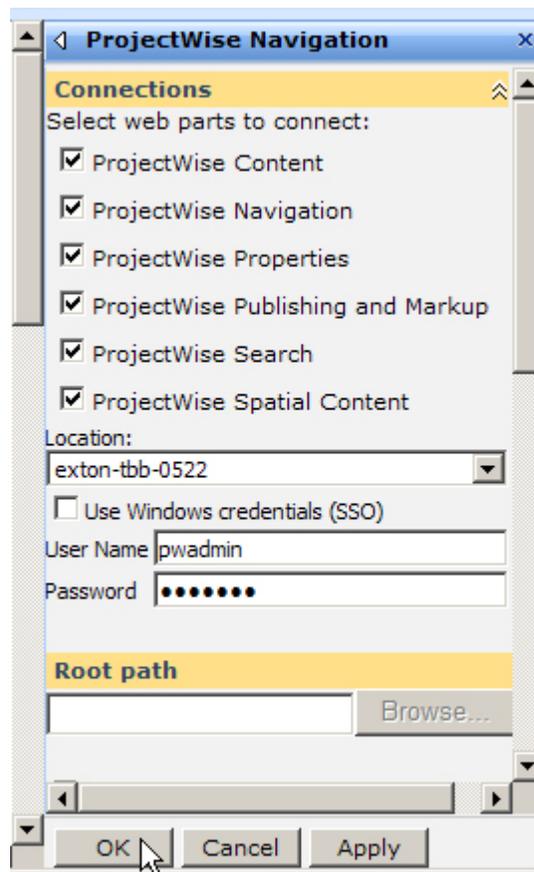
3. Under **Select web parts to connect**, turn on all the ProjectWise Web Parts listed.
4. From the **Location** list, select the datasource you want to connect to.

The **Location** list displays whatever datasources are configured to display as the result of configuring the ProjectWise network on this computer. If the datasource you need to connect to is not listed, close this SharePoint page, configure the ProjectWise network, then open this SharePoint page again. The ProjectWise network is configured using the ProjectWise Network Configuration Settings dialog. See [Connecting Individual Clients to the Server](#) (on page 48) for details.

5. Enter a ProjectWise user name and password (can be a logical account or a Windows domain account) and click **OK**.

# ProjectWise Web Server Configuration

Configuring ProjectWise Web Parts in SharePoint



You are now logged in to the datasource with the selected account.

6. When prompted, install the ProjectWise Web Server Client Components.

This installs the following ActiveX controls:

- ProjectWise Web File Transfer ActiveX Control - used by any operation that downloads a file to your local web parts working directory
- Bentley DGN Navigator Control - used by the ProjectWise Navigator web part
- VPR ActiveX Control - used by the ProjectWise Publishing and Markup web part
- Spatial ActiveX Control - used by the ProjectWise Spatial Content web part

7. In SharePoint, click **Exit Edit Mode**.

## To Modify a Web Part's General SharePoint Settings

1. In the upper-right corner of a ProjectWise web part, click the Edit menu and select Modify Shared Web Part.

On the right side of the screen, a settings window opens.

2. Expand Appearance, Layout, and Advanced, make the necessary changes, and click OK.

These settings are not related to ProjectWise. For more information about them, click the Help link at the top of the team site page.

## ProjectWise Web Server Configuration

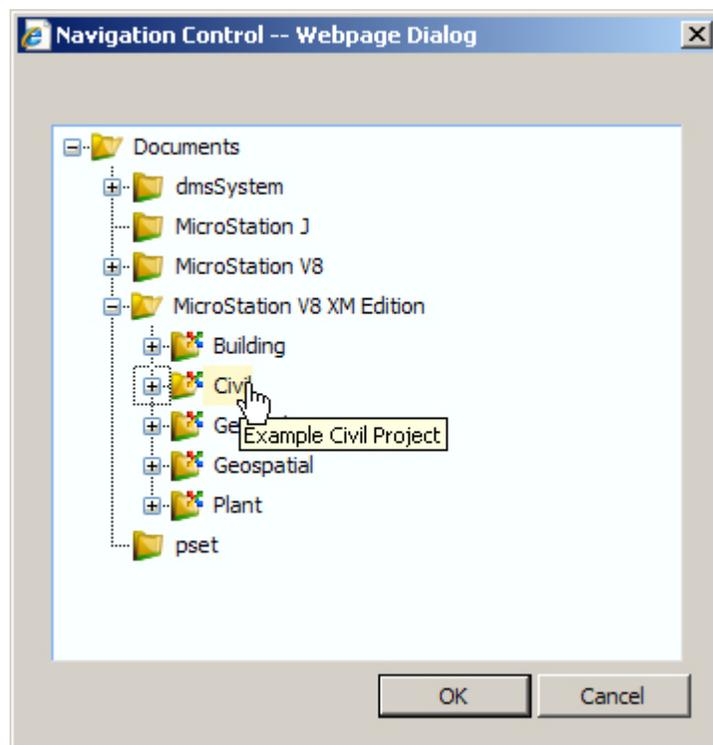
Configuring ProjectWise Web Parts in SharePoint

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### To Set the Topmost ProjectWise Folder or Project That Displays in Various Web Parts

The Documents root folder is the topmost folder in any datasource. However, you do not have to display the entire folder structure in ProjectWise Web Parts. You can set any folder or project in the datasource to be the topmost folder that displays in the ProjectWise Navigation Tree, ProjectWise Content, and ProjectWise Spatial Content web parts.

1. In the ProjectWise Navigation Tree, ProjectWise Content, ProjectWise Spatial Content, or ProjectWise Search web part, click the **Edit** menu and select **Modify Shared Web Part**.
2. In the settings window, click the **Browse** button next to the **Root path** field.



3. In the window that opens, select a folder or project and click **OK**.
4. Back in the settings window, click **OK**.

The root folder for the ProjectWise Navigation Tree, ProjectWise Content, and ProjectWise Spatial Content web parts changes from the Documents root folder to whatever folder or project you set here.

### To Set Whether Searches Will Search the Topmost Folder, or the Entire Datasource

The ProjectWise Search web part has a setting called **Limit to Root Path**. When this setting is on (the default), then searches will only search within the folder that is set as the topmost folder to display in the ProjectWise

## ProjectWise Web Server Configuration

### Configuring ProjectWise Web Parts in a Standalone IIS Website

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Navigation Tree, ProjectWise Content, and ProjectWise Spatial Content web parts. If this setting is on and no top folder is set, then searches will search the entire datasource. If you turn this setting off and there is a folder set as the topmost folder, then searches will search the entire datasource instead of just searching the topmost folder and its subfolders.

1. In the ProjectWise Search web part, click the **Edit** menu and select **Modify Shared Web Part**.
2. In the Search settings window, scroll to the bottom and expand **Miscellaneous**.
3. Do one of the following:

If you want searches to search only the topmost folder and its subfolder, turn on **Limit to Root Path**.

or

If you want searches to always search entire datasource, turn off **Limit to Root Path**.

4. Click **OK**.

### To Set the ProjectWise Search Web Part's Default Search Method

1. In the ProjectWise Search web part, click the **Edit** menu and select **Modify Shared Web Part**.
2. In the Search settings window, expand **Miscellaneous**, and set **Search Method** to **General** or **Advanced**.
3. Click **OK**.

The ProjectWise Search web part is refreshed to show the interface of the selected search mode.

## Configuring ProjectWise Web Parts in a Standalone IIS Website

When deploying ProjectWise Web Server or ProjectWise Web View Server in a standalone IIS website — that is, an IIS website without SharePoint — you can use one of the delivered ASP pages (`default.aspx` or `defaultspatial.aspx`) which has the ProjectWise Web Parts preconfigured, or you can create and configure your own ASP pages.

This section discusses how to configure IIS for your standalone ProjectWise Web Server or ProjectWise Web View Server website, and how to connect it to a ProjectWise datasource. Once connected, all your users have to do is point their supported web browser to this website and they will be automatically logged in to the datasource, either using their own Windows domain account if you have connected ProjectWise Web Parts using *single sign-on*, or using the ProjectWise account you have specified all ProjectWise Web Parts users to use.

**Note:** Make sure your ProjectWise Integration Server is also of the current version. The datasource's ProjectWise Integration Server you connect to must be of the same version as the ProjectWise Web Server and Web View Server.

### Configuring IIS Settings in a Standalone IIS Deployment

When you have deployed a ProjectWise Web Server so that users within the organization (internal users) can have web access to ProjectWise, you should configure the standalone IIS website to use Windows authentication.

ProjectWise Web Server can also be used to provide external consultants access to ProjectWise managed content. For this to work, you need a website that external users can securely log in to and access only the data they have been authorized to access. In this case, the recommendation is to deploy ProjectWise Web Server or ProjectWise Web View Server to a standalone IIS website, enable anonymous access, and finally use ProjectWise native users to authenticate external users.

## ProjectWise Web Server Configuration

### Configuring ProjectWise Web Parts in a Standalone IIS Website

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**Note:** Anonymous authentication is less secure than Windows authentication, so considering taking the following additional security precautions if configuring a ProjectWise Web Server website with anonymous authentication:

- Configure the ProjectWise Web Server website to use SSL.
- Restrict ProjectWise user rights to only those that are necessary (for example, disable the user's ability to delete documents and folders, if not required).

### Enable Your Standalone IIS Website's Read and Script Permissions

1. Open IIS Manager.
2. In the **Connections** pane, navigate to and select the site you deployed to.
3. Click the **Features View** tab to go to the site's Home page.
4. On the **Home** page, in the **IIS** section, double-click **Handler Mappings**.
5. In the **Actions** pane, click **Edit Feature Permissions**.
6. In the Edit Feature Permissions dialog, enable the **Read** and **Scripts** permissions, then click **OK**.

### Configure Your Standalone IIS Website to Use Windows Authentication

1. Open IIS Manager.
2. In the **Connections** pane, navigate to and select the site you deployed to.
3. Click the **Features View** tab to go to the site's Home page.
4. On the **Home** page, in the **IIS** section, double-click **Authentication**.
5. On the **Authentication** pane, make sure **Anonymous Authentication** is set to **Disabled**, and make sure **Windows Authentication** is set to **Enabled**.

### Configure Your Standalone IIS Website to Use Anonymous Access

1. Open IIS Manager.
2. In the **Connections** pane, navigate to and select the site you deployed to.
3. Click the **Features View** tab to go to the site's Home page.
4. On the **Home** page, in the **IIS** section, double-click **Authentication**.
5. On the **Authentication** pane, make sure **Anonymous Authentication** is set to **Enabled**.

## Connecting Web Parts to the Datasource, in a Standalone IIS Deployment

You can configure the Web Parts in your standalone IIS website so that users can log in using single sign-on, or using one ProjectWise account for all users who connect.

### To Connect Web Parts to a Datasource Using Single Sign-on, on a Standalone IIS Website

1. [Configure ProjectWise Web Server to use ProjectWise single sign-on](#) (on page 13).
2. On the ProjectWise Web Server computer, make sure you are logged in to the computer with a Windows domain account. Make sure this domain account also exists in the ProjectWise datasource you plan to connect to.
3. On the ProjectWise Web Server computer, launch Internet Explorer and enter either:  
`http://localhost/default.aspx`

## ProjectWise Web Server Configuration

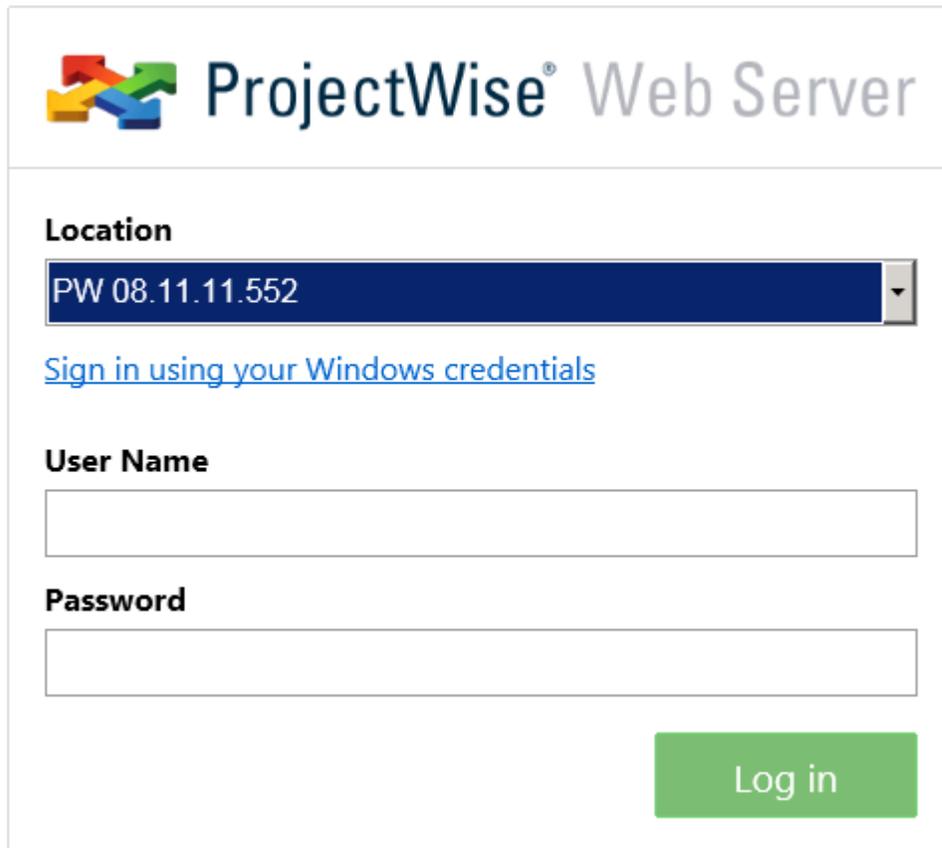
Configuring ProjectWise Web Parts in a Standalone IIS Website

---

or

`http://localhost/defaultspatial.aspx`

The delivered sample ProjectWise home page opens and displays the login form.



The screenshot shows the ProjectWise Web Server login interface. At the top left is the ProjectWise logo, followed by the text 'ProjectWise® Web Server'. Below this is a 'Location' dropdown menu with 'PW 08.11.11.552' selected. A blue link reads 'Sign in using your Windows credentials'. There are two input fields: 'User Name' and 'Password'. A green 'Log in' button is positioned at the bottom right of the form.

4. From the **Location** list, select the ProjectWise datasource you want to connect to.

**Tip:** The **Location** list displays whatever datasources are configured to display as the result of configuring the ProjectWise network on this computer, and will contain the same datasources you saw on the **Single Sign-On Settings** dialog in step 1.

5. Click **Sign in using your Windows credentials**.
6. Once the credentials are verified, click **Log in**.

You, the administrator, are now logged in to the datasource with the same Windows domain account you used to log in to the computer, which also exists in the datasource.

7. When prompted, install the ProjectWise Web Server Client Components.

This installs the following ActiveX controls:

- ProjectWise Web File Transfer ActiveX Control - used by any operation that downloads a file to your local web parts working directory
- Bentley DGN Navigator Control - used by the ProjectWise Navigator web part
- VPR ActiveX Control - used by the ProjectWise Publishing and Markup web part

## ProjectWise Web Server Configuration

### Configuring ProjectWise Web Parts in a Standalone IIS Website

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- Spatial ActiveX Control - used by the ProjectWise Spatial Content web part
8. Make sure your users' Internet Explorer **Internet Options** are configured properly.
    - a. Have your users open Internet Explorer and open the Internet Options dialog (**Tools > Internet Options**).
    - b. On the **Security** tab, and click **Custom Level**. In the Security Settings dialog, scroll down to the **User Authentication** section and turn on **Automatic logon with current username and password**. Click **OK** to close the Security Settings dialog.
    - c. On the **Advanced** tab, scroll down to the **Security** section and turn on **Enabled Integrated Windows Authentication (requires restart)**.
    - d. Click **OK**.
  9. Have your users' point their browsers to the ProjectWise Web Server by entering one of the following in the **Address** field:

`http://webserver:portnumber/default.aspx`

or

`http://webserver:portnumber/defaultspatial.aspx`

where `webserver` is the name of the computer on which ProjectWise Web Server is installed, and `portnumber` is the port that the default website is using.

They are now automatically logged in to the datasource, assuming they have a Windows domain account in the datasource, and assuming they are also logged into their operating system with that same domain account.

Have your users install the ProjectWise Web Server Client Components when prompted.

The next time they visit this site, they will be automatically logged in to the same datasource using single sign-on.

### To Connect Web Parts to a Datasource Without Single Sign-On, on a Standalone IIS Website

1. On the ProjectWise Web Server computer, launch Internet Explorer and enter either:

`http://localhost/default.aspx`

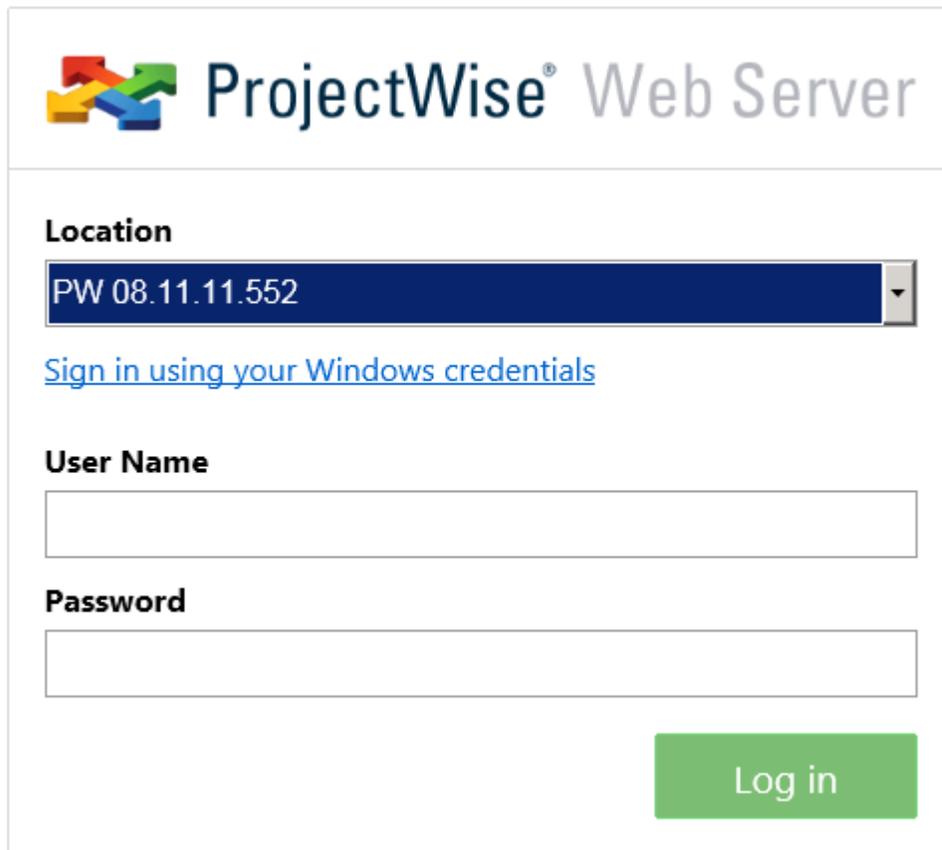
or

`http://localhost/defaultspatial.aspx`

The delivered sample ProjectWise home page opens and displays the login form.

## ProjectWise Web Server Configuration

Configuring ProjectWise Web Parts in a Standalone IIS Website



**Location**

PW 08.11.11.552

[Sign in using your Windows credentials](#)

**User Name**

**Password**

Log in

2. From the **Location** list, select the ProjectWise datasource you want to connect to.

**Note:** The **Location** list displays whatever datasources are configured to display as the result of configuring the ProjectWise network on this computer. If the datasource you need to connect to is not listed, close this browser, configure the ProjectWise network, then open a browser to this page again. The ProjectWise network is configured using the **ProjectWise Network Configuration Settings** dialog. See [Connecting Individual Clients to the Server](#) (on page 48) for details.

3. In the **User Name** and **Password** fields, enter the credentials of a ProjectWise user account.

This can be a logical account or a Windows-based account.

4. Click **Log in**.

You, the administrator, are now logged in to the datasource with the specified account.

5. When prompted, install the ProjectWise Web Server Client Components.

This installs the following ActiveX controls:

- ProjectWise Web File Transfer ActiveX Control - used by any operation that downloads a file to your local web parts working directory
- Bentley DGN Navigator Control - used by the ProjectWise Navigator web part
- VPR ActiveX Control - used by the ProjectWise Publishing and Markup web part
- Spatial ActiveX Control - used by the ProjectWise Spatial Content web part

# ProjectWise Web Server Configuration

## Configuring ProjectWise Web Parts Client Computers

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6. Have your users' point their browsers to the ProjectWise Web Server by entering one of the following in the **Address** field:

`http://webserver:portnumber/default.aspx`

or

`http://webserver:portnumber/defaultspatial.aspx`

where `webserver` is the name of the computer on which ProjectWise Web Server is installed, and `portnumber` is the port that the default website is using.

7. When the sample page opens, have your users do the following:
  - a. Select the ProjectWise datasource to connect to from the **Location** list.
  - b. Enter the correct user name and password and click **OK**.
  - c. Install the ProjectWise Web Server Client Components when prompted.

The next time they visit this site, the last used datasource and user name are remembered, and they will only have to enter their password.

## Configuring ProjectWise Web Parts Client Computers

### Adding the Web Parts Site to the Trusted Sites List

Adding the Web Parts website address to your browser's Trusted sites list is a requirement for using ProjectWise Web Parts.

1. In Internet Explorer, go to Tools > Internet Options.
2. In the Internet Options dialog, select the Security tab.
3. Select Trusted sites and click the Sites button.
4. In the Trusted sites dialog that opens, type your Web Parts website address and click Add.
5. Click OK to close the Trusted sites dialog.
6. Click OK to close the Internet Options dialog.

### Configure Internet Explorer Security Settings

1. In Internet Explorer, go to Tools > Internet Options > Security tab, select Trusted sites, click Custom Level.  
The Security Settings dialog opens for the Trusted Sites Zone.
2. For ActiveX controls to work properly in Internet Explorer, make sure the following options are set:

Category	Setting	Value
ActiveX controls and plug-ins	Download signed ActiveX controls	Prompt
	Download unsigned ActiveX controls	Disable
	Initialize and script ActiveX controls not marked as safe for scripting	Disable

## ProjectWise Web Server Configuration

### Configuring ProjectWise Web Parts Client Computers

---

Category	Setting	Value
	Run ActiveX controls and plug-ins	Enable
	Script ActiveX controls marked safe for scripting	Enable
Scripting	Active Scripting	Enable
	Allow paste operations via script	Enable
	Scripting of Java applets	Enable

3. (Windows Server 2008 only) For downloading to work properly when using Internet Explorer on Windows Server 2008, make sure the following options are set:

Category	Setting	Value
Downloads	Automatic prompting for file downloads	Enable

4. (Internet Explorer 9 only) Additional settings are required when using Internet Explorer 9:

Category	Setting	Value
Scripting	Allow Programmatic clipboard access	Enable
User Authentication	Logon	Automatically logon with current user name and password

5. Click OK to save changes and close the Security Settings dialog.  
6. (Windows Vista only) For copy outs to function properly when using Internet Explorer on Windows Vista, on the Security tab of the Internet Options dialog, turn off the setting, *Enable Protected Mode*.  
7. Click OK to save changes and close the Internet Options dialog.

## Turning Off Your Browser's Popup Blocker

Occasionally Web Parts needs to open items in a new window. For example, if you right-click a folder and select Properties when the Properties web part is not present, the properties of the selected folder display in a new window. When your popup blocker is enabled, these additional windows will not open; therefore you should disable the popup blocker in your browser. See your browser's documentation for instructions.

## Installing .NET Framework 3.5 for the ProjectWise Navigator Web Part

ProjectWise Web Parts users who are using Windows 8 will need to install .NET Framework 3.5 on their computers, in order to use the ProjectWise Navigator web part.

# ProjectWise Web Server Configuration

## User Settings for ProjectWise Web Parts Users

---

### Remotely Installing ActiveX Controls for Users

When users visit the Web Parts site for the first time, they are prompted to download the ProjectWise Web Server Client Components, which installs the following ActiveX controls:

- ProjectWise Web File Transfer ActiveX Control - used by any operation that downloads a file to your local web parts working directory
- Bentley DGN Navigator Control - used by the ProjectWise Navigator web part
- VPR ActiveX Control - used by the ProjectWise Publishing and Markup web part
- Spatial ActiveX Control - used by the ProjectWise Spatial Content web part

In some cases, you may have to remotely install these ActiveX controls for your users. For example, your users may not have the administrative permissions on their computer necessary to install the ActiveX controls. Another possibility is that you have upgraded the minor version of ProjectWise Web Server and Web View Server (for example, from the initial version of **08.11.11.xxx** to a later update of **08.11.11.xxx**), while your users are still using the ActiveX controls that were delivered with the original ProjectWise Web Server and Web View Server installation, causing the two to become out of sync and requiring that the users' ActiveX controls be upgraded.

To remotely install the ActiveX controls, you can either use a Group Policy to install them, or you can remotely connect to your users computers and manually install them. When remotely installing the ActiveX controls, you need to launch these two installers:

- ProjectWise Web and Web View Servers V8i (SELECTseries 4) Client Components.msi - this installs the ProjectWise Web File Transfer ActiveX Control, the VPR ActiveX Control, and the Spatial ActiveX Control
- DgnNavigatorControlAx.msi - this installs the Bentley DGN Navigator Control

**Note:** These installers are delivered with ProjectWise Server Setups, but are not listed when you launch the master setup.exe installer. Instead, you will find them in the . . . \product\pwwebserver folder.

### User Settings for ProjectWise Web Parts Users

The following user settings are specific to ProjectWise Web Parts users. Read the following to determine if you need to configure these settings for any of your ProjectWise Web Parts users.

<b>Working Directory - When Accessing ProjectWise Over The Web</b>	Used to preset the user's working directory when using ProjectWise Web Parts.
	In a new datasource, the default ProjectWise Web Parts working directory for every user is set to:
	<code>%LocalAppData%\ProjectWise\WebWorkDir\%Datasource%</code>
	When this default working directory is set as shown above, the user's working directory will be created automatically on their computer when they first log in to the datasource through ProjectWise Web Parts. If it cannot be created in the specified location for any reason, then the user will be prompted to set their own working directory upon logging in.
	The user can always change the location of their working directory by selecting <b>Tools &gt; Working Directory</b> from the Content web part, however, changing the location of the working directory from ProjectWise Web Parts does not change the value set for this user

## ProjectWise Web Server Configuration

Support for Microsoft Forefront TMG

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setting in the datasource. If the user changes their working directory from ProjectWise Web Parts on one computer, but then uses ProjectWise Web Parts from another computer, the working directory on the new computer will be created based on the value set for the user setting in ProjectWise Administrator.

To change a user's default ProjectWise Web Parts working directory, expand this setting, select the default location displayed, then select it again and wait for it to become editable. You can enter plain text, a variable, or both. The value you enter should specify the path to and including the folder name you want the user to use. Note that if you specify a drive that does not exist on the user's computer, then the user will simply be prompted to select another location for the working directory.

You can use any or all of the following variables to help create a unique ProjectWise Web Parts working directory folder name for your users:

- `%LocalAppData%` — this variable will be expanded to the user's local folder that stores the data for local applications. For example, on Windows Vista this would expand to `C:\Users\[user.name]\AppData\Local`
- `%Datasource%` — the name of the datasource the user is logging in to
- `%User%` — the user's ProjectWise user name

If you modify the default ProjectWise Web Parts working directory setting for any user, then instead of the working directory getting created automatically when they log in to the datasource through ProjectWise Web Parts, they will be prompted to create the working directory specified here. If you want to change the default ProjectWise Web Parts working directory and you also want it to get created automatically (without prompting the user), then you need to apply a group policy that lets the working directory get created automatically.

### **User can only log in through ProjectWise Web View Server**

ProjectWise Web View Server is intended for casual ProjectWise Web Parts users who only need read-only access to ProjectWise. The benefit of using ProjectWise Web View Server is that ProjectWise Passport usage is not reported in SELECTserver when a user logs in to ProjectWise, using ProjectWise Web Parts, through a ProjectWise Web View Server.

If you have deployed a ProjectWise Web View Server, turn this user setting on for those users who will *only* be connecting to ProjectWise through ProjectWise Web View Server (if they try to access ProjectWise through ProjectWise Web Server or ProjectWise Explorer they will not be permitted to log in). When this setting is off, there is no restriction to which client the user can log in through.

## Support for Microsoft Forefront TMG

ProjectWise Web Server and Web View Server supports Microsoft Forefront Threat Management Gateway (Forefront TMG) 2010 with the latest updates.

## Support for Microsoft Network Load Balancing

ProjectWise Web Server and Web View Server supports Microsoft Network Load Balancing. Make sure the following is configured:

## ProjectWise Web Server Configuration

Undeploying and Uninstalling ProjectWise Web Server and Web View Server

- When configuring your port rules, set the **Affinity** parameter to **Single**.
- In the ECOM.CONFIG file (located in the site's directory), the key="PublicAddress" setting must be set to the external server name, when the internal server name differs from the external name. For example:

```
<add key="PublicAddress" value="https://server1.bentley.com:442" />
```

## Undeploying and Uninstalling ProjectWise Web Server and Web View Server

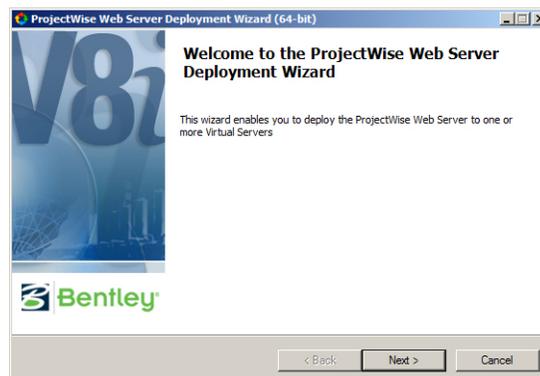
If necessary you can undeploy a particular instance of ProjectWise Web Server or ProjectWise Web View Server from a website, and leave the other deployments deployed.

If you need to completely uninstall ProjectWise Web Server and Web View Server from your computer, you must first undeploy all instances of ProjectWise Web Server and ProjectWise Web View Server that are currently deployed.

**Tip:** If you have a ProjectWise Language Pack installed and you are uninstalling ProjectWise Web Server and Web View Server, make sure you uninstall the ProjectWise Language Pack *after* uninstalling ProjectWise Web Server and Web View Server.

### To Undeploy ProjectWise Web Server and/or Web View Server

1. From the Windows **Start** menu, launch the Deployment Wizard for the type of server you have deployed:  
**Start > All Programs > Bentley > ProjectWise V8i (SELECTseries 4) > Web Server and Web View Server > ProjectWise Web Server Deployment Wizard**  
or  
**Start > All Programs > Bentley > ProjectWise V8i (SELECTseries 4) > Web Server and Web View Server > ProjectWise Web View Server Deployment Wizard**
2. When the selected Deployment Wizard opens, click **Next**.



The **Deployment Type** page opens, displaying the virtual servers (websites) currently available in IIS, and whether or not ProjectWise Web Server or ProjectWise Web View Server is currently deployed to any of them.

## ProjectWise Web Server Configuration

Undeploying and Uninstalling ProjectWise Web Server and Web View Server

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3. Select the **Remove** option and click **Next**.
4. On the Virtual Server Selection page, select the websites from which to undeploy the selected server type (ProjectWise Web Server or ProjectWise Web View Server click **Next**.
5. When prompted, click **Yes** to confirm removal.
6. When removal is complete, click **Finish**.

# 2

## Language Packs

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The text that displays in the various windows, menus, dialogs, and error messages can be switched to another language by installing a ProjectWise language pack.

ProjectWise language packs provide localized interfaces for users of:

- ProjectWise Explorer
- ProjectWise Administrator
- ProjectWise Web Parts
- Orchestration Framework Administrator

Search the Bentley [Software Fulfillment Center](#) to see if there is a ProjectWise language pack for your language.

### Before You Install the Language Pack

1. Make sure the application for which you are installing the language pack is already installed.

If you install the language pack first and then the application, the language pack will not apply and you will have to uninstall and reinstall it to make it apply.

2. For ProjectWise Explorer and/or ProjectWise Administrator, make sure you first install ProjectWise Explorer with the **User Tools** option turned on, as this will be used to set the new locale for these applications.
3. For ProjectWise Web Parts, the ProjectWise language pack is not installed on user's computers, but on the ProjectWise Web Server and Web View Server computer. It must be installed to each website in IIS that ProjectWise Web Server or ProjectWise Web View Server is deployed to, that you want to change the language for. You must install ProjectWise Web Server and Web View Server before you install the ProjectWise language pack, but you can install the ProjectWise language pack either before or after you deploy ProjectWise Web Server or ProjectWise Web View Server.
4. If you are going to deploy ProjectWise Web Server or ProjectWise Web View Server to a SharePoint site, make sure the appropriate Microsoft SharePoint Language Packs are obtained from Microsoft and installed. SharePoint Site Language selection determines use of localized user interfaces.
5. If you are going to deploy ProjectWise Web Server or ProjectWise Web View Server to a non-SharePoint site, then make sure your website is configured properly (for details, see <http://msdn.microsoft.com/en-us/library/bz9tc508.aspx>)

### To Install the Language Pack

1. Download your language pack and extract the package.

The extracted folder will look something like this:

## Language Packs

### After You Install the Language Pack

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```
C:\BentleyDownloads
  \pw08110901xx
    \product
```

Where XX at the end of the folder name is the two letter abbreviation that indicates the language - like `bas08111349de` for German.

2. In Windows Explorer, open the `product` folder and double-click the MSI file.
3. When the Setup Wizard opens, click **Next** and follow the prompts to completion.

## After You Install the Language Pack

1. ProjectWise Explorer and ProjectWise Administrator computers:

After language pack installation, select **Start > All Programs > Bentley > ProjectWise V8i (SELECTseries 4) > Tools > User Tools**. In the **ProjectWise Tools** dialog, select the **Set Locale** icon and click the **Execute** button. In the dialog that opens, select the newly installed language, click **OK**, then click **Close**.

2. ProjectWise Web Server computers:

After language pack installation, deploy ProjectWise Web Server or ProjectWise Web View Server, then restart both ProjectWise Web Server Host Service and Internet Information Services (IISRESET).

3. Orchestration Framework Administrator computers:

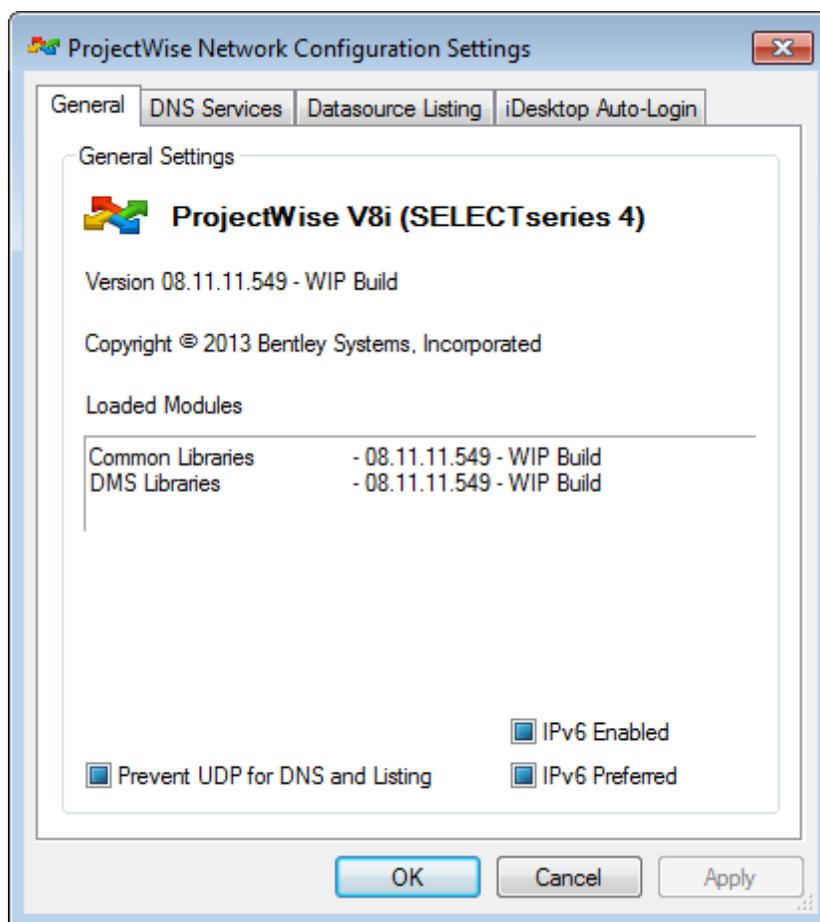
After language pack installation, change the display language of the operating system.

# 3

## Configuring the ProjectWise Network

### Connecting Individual Clients to the Server

The **ProjectWise Network Configuration Settings** dialog is primarily used to establish a TCP connection from the ProjectWise client computer to one or more ProjectWise servers in order to obtain datasource list information and populate the datasource lists in the ProjectWise applications installed on the client computer. This dialog is delivered with ProjectWise Explorer, ProjectWise Administrator, and ProjectWise Web Server and Web View Server.



# Configuring the ProjectWise Network

## Connecting Individual Clients to the Server

---

You can also use the **ProjectWise Network Configuration Settings** dialog to:

- Block the client from broadcasting UDP requests.

This shortens the time it takes to retrieve the datasource list by not searching for local datasources, and instead only retrieving the datasources of the servers you explicitly connect to here.

- Direct the client to a server from which they can get server name resolution information.

Depending on the client's socket version and/or the network configuration, the client may have problems solving IP addresses by host name. For example, a client may be really slow at solving IP addresses by host name, or may not be able to solve them at all, or the client may fail to retrieve a file from the storage area, or file operations may be really slow. To eliminate these problems, you should configure the [NameResolution] section of a server's DMSKRNL.CFG file, and then point the client to that server.

- Configure auto-login settings for integrated applications (for ProjectWise Explorer only)

The iDesktop Auto-Login tab is used to control whether or not ProjectWise Explorer users will be automatically logged into a particular integrated application, when that integrated application is opened from the desktop.

- Enable ProjectWise clients to use IPv6

**Caution:** For better performance it is strongly recommended to prevent the use of UDP when using ProjectWise Web Server and Web View Server.

**Note:** Although ProjectWise permits you to enter a hostname (computer name), an IP address, or a fully-qualified domain name (hostname + domain name) in the **Hostname** fields on the **DNS Services** and **Datasource Listing** tabs, it is recommended that you use fully-qualified domain names (FQDN) here. Direct use of IP addresses should only be reserved for cases when using DNS names is not an option.

**Note:** When using host names, make sure the host names are configured for reverse lookup.

**Note:** If ProjectWise Web Server and Web View Server is installed on the same computer as your ProjectWise Integration Server, that server's datasources will always display in the **Locations** list when connecting ProjectWise Web Parts, even if you turn on **Prevent UDP**.

## To Open the **ProjectWise Network Configuration Settings** Dialog

1. Do one of the following:

From the Control Panel, on newer 64-bit operating systems: Set the view of the Control Panel to **Category** view, then open the category called **Network and Internet** and double-click the **ProjectWise V8i Network** icon.

or

From the Control Panel, on older 64-bit operating systems: Open the folder called **View 32-bit Control Panel Items**, then double-click the **ProjectWise V8i Network** icon.

or

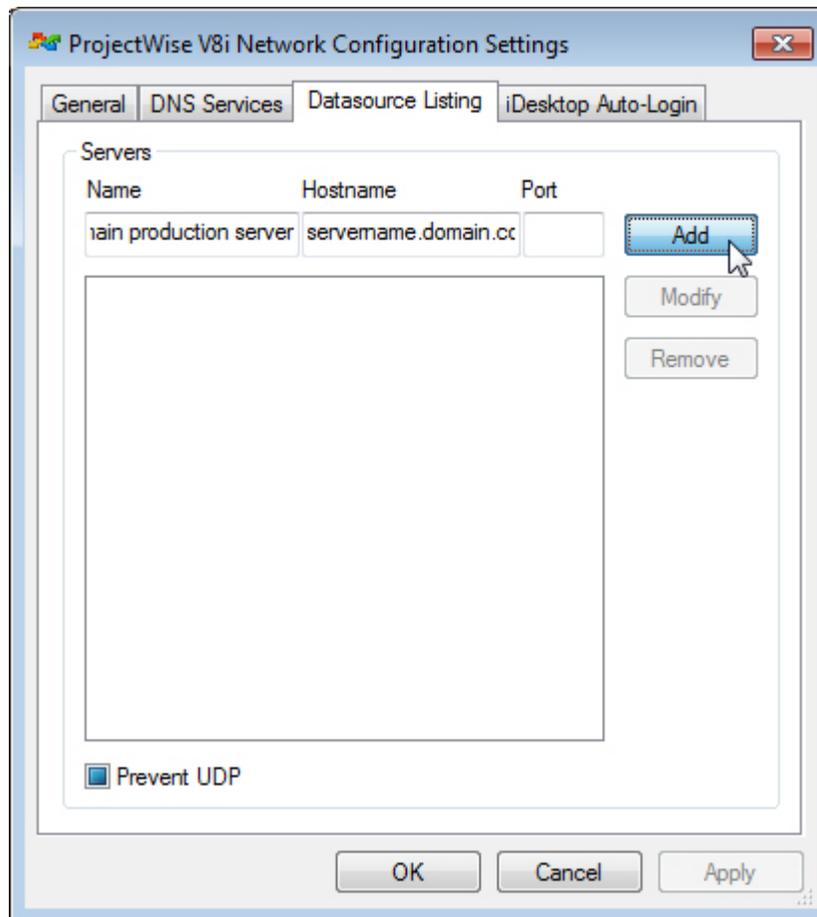
From a command prompt, enter `control.exe /name Bentley.ProjectWiseNetConfiguration`

## Configuring the ProjectWise Network

Connecting Individual Clients to the Server

### To Connect to a Server and Get Its List of Datasources (TCP)

1. Open the **ProjectWise Network Configuration Settings** dialog (on page 49).
2. Select the **Datasource Listing** tab.
3. Enter values for **Name**, **Hostname**, and **Port** and click **Add**.
  - **Name** is just a descriptive name for the ProjectWise server. For example, **Production Server**
  - **Hostname** is the fully-qualified domain name (FQDN) of the computer where the ProjectWise server is installed. For example, **server.domain.com**
  - **Port** is the specified ProjectWise server's listener port number, which is **5800** by default. You only need to enter a port number here if the listener port on the server has been changed to something other than **5800**. Otherwise you can leave it blank.
4. Click **OK**.



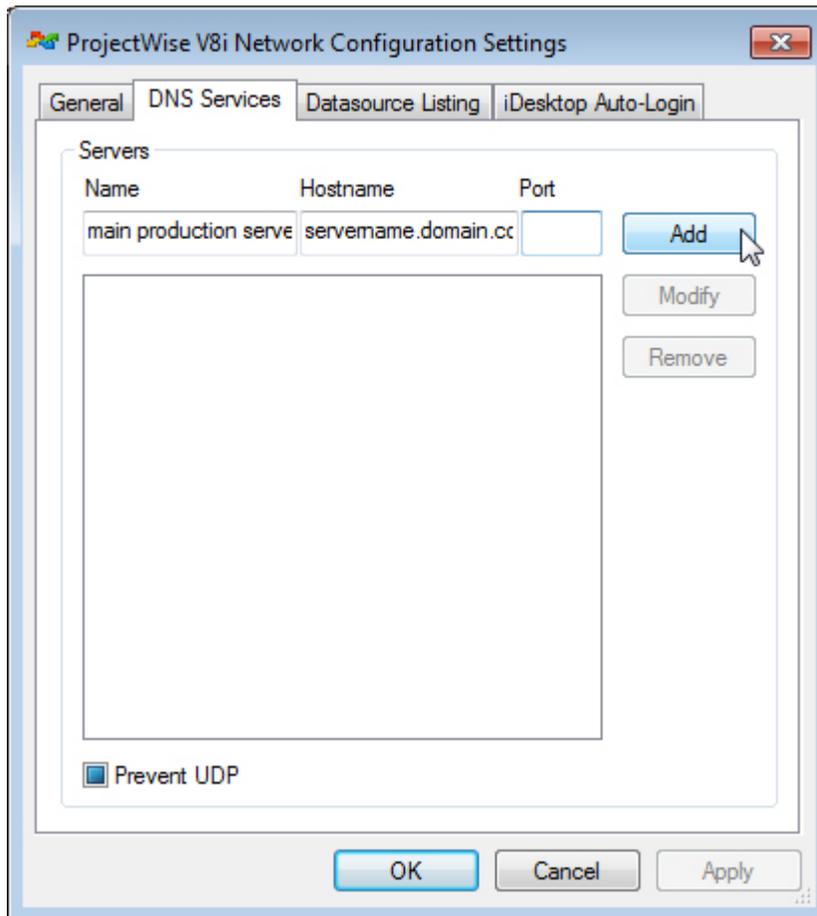
On 64-bit operating systems, the information gets added to the computer's registry under the key `HKEY_LOCAL_MACHINE\SOFTWARE Wow6432Node\Bentley\Projectwise\08.11\NetworkConfig\Dlisting\Servers`.

# Configuring the ProjectWise Network

Connecting Individual Clients to the Server

## To Point to the Server from Which the Client Can Get Server Name Resolution Information

1. Open the **ProjectWise Network Configuration Settings** dialog (on page 49).
2. Select the **DNS Services** tab.
3. Enter values for **Name**, **Hostname**, and **Port** and click **Add**.
  - **Name** is just a descriptive name for the ProjectWise server. For example, **Production Server**
  - **Hostname** is the fully-qualified domain name (FQDN) of the computer where the ProjectWise server is installed. For example, **server.domain.com**
  - **Port** is the specified ProjectWise server's listener port number, which is **5800** by default. You only need to enter a port number here if the listener port on the server has been changed to something other than **5800**. Otherwise you can leave it blank.
4. Click **OK**.



On 64-bit operating systems, the information gets added to the computer's registry under the key `HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Bentley\ProjectWise\08.11\NetworkConfig\Dns\Servers`.

# Configuring the ProjectWise Network

## Setting Up ProjectWise to Use IPv6

---

### To Prevent the Use of UDP

1. Open the **ProjectWise Network Configuration Settings** dialog (on page 49).

2. Do one of the following:

To prevent the use of UDP entirely, turn on **Prevent UDP for DNS and Listing** on the **General** tab.

or

To prevent the use of UDP for just server name resolution information, turn on **Prevent UDP** on the **DNS Services** tab.

or

To prevent the use of UDP for just datasource list information, turn on **Prevent UDP** on the **Datasource Listing** tab.

3. Click **OK**.

### Setting Up ProjectWise to Use IPv6

ProjectWise fully supports Internet Protocol Version 6 (IPv6).

**Caution:** Before you begin, it is highly recommended that you contact Bentley Professional Services to assist you in setting up ProjectWise V8i (SELECTseries 4) on IPv6.

To run ProjectWise V8i (SELECTseries 4) on IPv6:

- You must have a fully-configured IPv6 DNS server.
- All ProjectWise V8i (SELECTseries 4) clients and servers must be part of the IPv6 network.
- All ProjectWise V8i (SELECTseries 4) clients and servers must be configured to use IPv6, by enabling the IPv6 settings on the ProjectWise V8i Network Configuration Settings dialog.
- All ProjectWise V8i (SELECTseries 4) servers must be configured to use IPv6, by enabling the IPv6 settings in the `dmskrn1.cfg` file.

**Note:** On Windows XP and Windows Server 2003, IPv6 is not installed by default. On those operating systems you will need to manually install IPv6 before enabling the IPv6 settings in the ProjectWise Network Configuration Settings dialog.

**Note:** For situations in which you need to enter a datasource name using both the IP address and the datasource name (`IP:datasource`) — for example, when logging in through ProjectWise Explorer or integrated applications — when using IPv6 you need to enter the IP address inside square brackets [ ]. For example:

```
[2001:ffff:ffff::1]:datasource
```

The same is true, when using IPv6, for situations in which you need to enter a server address using the IP address followed by a port number (`IP:port`). For example:

```
[2001:ffff:ffff::1]:port
```

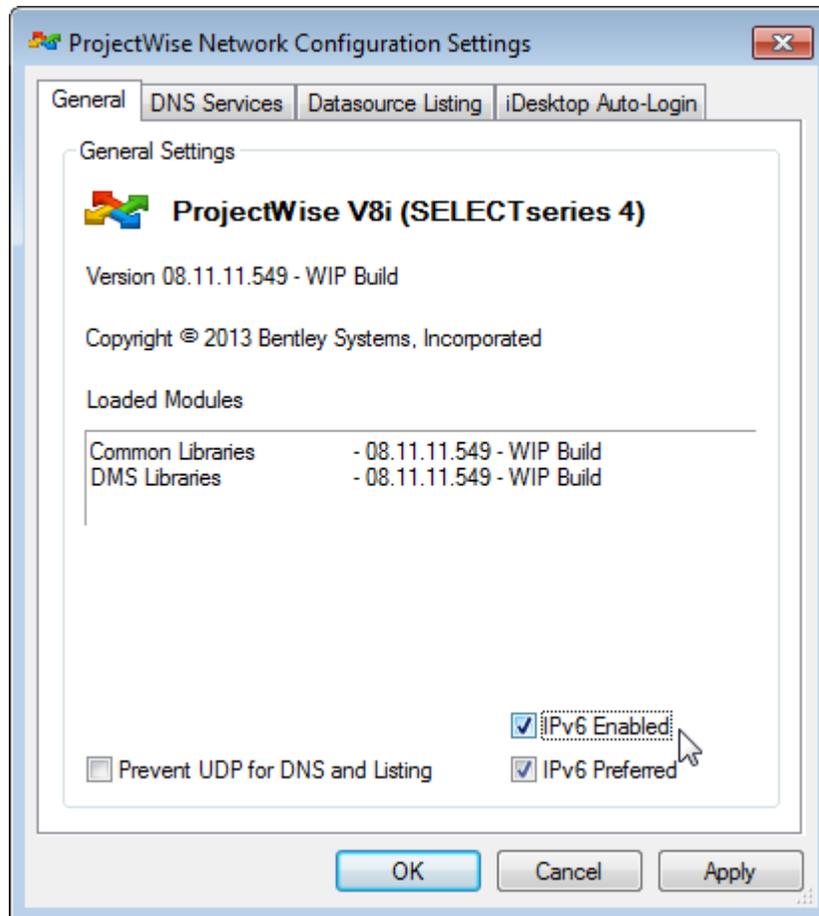
# Configuring the ProjectWise Network

Setting Up ProjectWise to Use IPv6

## To Enable ProjectWise Clients to Use IPv6

Do these steps on each of the ProjectWise Explorer, ProjectWise Administrator, and ProjectWise Web Server computers in your IPv6 network.

1. Open the **ProjectWise Network Configuration Settings** dialog (on page 49).
2. On the **General** tab, turn on **IPv6 Enabled** and **IPv6 Preferred**.
3. Click **OK**.



# 4

## Licensing

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ProjectWise licensing is managed by SELECTserver, which tracks the usage of Right to Run licenses reported by:

- ProjectWise Integration Server
- ProjectWise Caching Server
- ProjectWise Web Server and Web View Server
- Bentley i-model Composition Server for PDF
- Bentley i-model Composition Server for i-model (extension to ProjectWise Automation Service)
- ProjectWise PDx Project Server

SELECTserver also tracks the usage of Bentley CONNECTION Passport licenses used by ProjectWise Explorer, ProjectWise Administrator, Bentley Navigator, and ProjectWise Web Parts users who are logging in through ProjectWise Web Server.

**Note:** SELECTserver does not track ProjectWise Web Parts users who log in through ProjectWise Web View Server.

**Note:** On each computer that you have Bentley software installed, that computer can only report to one SELECTserver. Therefore if you have multiple products on the same computer that require licensing through SELECTserver, you only need to run the Product Activation Wizard once on that computer for all the products that require licensing.

## Activating Your Product

Product activation is achieved by connecting to a SELECTserver, receiving verification that your SELECTserver Name and Activation Key are correct, and successfully posting usage logs. Product activation is not the same as checking out a license. This section describes how to configure ProjectWise Integration Server for activation. After initial configuration, ProjectWise Integration Server automatically and transparently tries to activate each time it runs, and runs unconstrained for a period of 30 days after its last successful activation. However, if activation is unsuccessful for a period of 30 days, ProjectWise Integration Server reports license expired exceptions until the license is successfully activated again.

## Using the Product Activation Wizard

The Product Activation Wizard is designed to step users through the product activation process. After a product is installed, you must obtain a license and then activate that license. Obtaining the license alone is not enough to complete the process. This wizard eliminates the confusion and makes it clear that obtaining a license and activating a product are two essential steps.

The first screen of the Product Activation Wizard offers these product activation options:

## Licensing

### Activating Your Product

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- **SELECT subscriber activating against a hosted (Bentley) SELECTserver**
- **SELECT subscriber with a deployed (local) SELECTserver**
- **NON-SELECT or Node Locked user**
- **Evaluation Only - No license information**

The wizard steps you through the activation process based on the options selected.

### SELECT Subscriber Activating Against a Hosted (Bentley) SELECTserver

If you are activating against a hosted (Bentley) SELECTserver, the Server Name is pre-populated but you must provide the proper Activation Key provided by the [Bentley Sales Support Center](#)).

1. Select **SELECT subscriber activating against a hosted (Bentley) SELECTserver** and click **Next**.

The **Activating against a SELECTserver** page opens.

2. Enter the site activation key in the **Site Activation Key** field.
3. If you are using HTTPS, turn on **HTTPS (SSL)**.
4. If you are using a proxy server to connect to the SELECTserver, click the **Proxy** button and fill in the Proxy Server information, then click **OK**.
5. Click **Test Connection** to verify the connection to the SELECTserver.
6. Click **Next**.

The **Country of Use** page opens.

7. Select the country where you will be using this product and click **Next**.

The **Wizard Selections** page displays the information provided on the previous pages.

8. Review the information and click **Finish** to activate the product.

### SELECT Subscriber with a Deployed (local) SELECTserver

If you are activating against a local SELECTserver, you must provide the proper Server Name and Activation Key. The Server Name and Activation Key, along with any proxy configuration information, can be obtained from your Site Administrator.

1. Select **SELECT subscribers with a deployed (local) SELECTserver** and click **Next**.

The **Activating against a SELECTserver** page opens.

2. Enter the name of the server in the **Server Name** field.
3. Enter the site activation key in the **Site Activation Key** field.
4. If you are using HTTPS, turn on **HTTPS (SSL)**.
5. If you are using a proxy server to connect to the SELECTserver, click the **Proxy** button and fill in the Proxy Server information, then click **OK**.
6. Click **Test Connection** to verify the connection to the SELECTserver.
7. Click **Next**.

The **Country of Use** page opens.

8. Select the country where you will be using this product and click **Next**.

The **Wizard Selections** page displays the information provided on the previous pages.

9. Review the information and click **Finish** to activate the product.

## Licensing

### Client-side Licensing for ProjectWise Web Parts Users

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#### NON-SELECT or Node Locked User

If you are not a Bentley SELECT subscriber and you are activating your product, you are presented with three options:

##### I have a license file ready to import

1. Enter the path to your license file (or **Browse** to the location of your license file) in the **License File** field.
2. Click **Next**.

The **Wizard Selections** page displays the information provided on the previous pages.

3. Review the information and click **Finish** to activate the product.

##### I have an activation key

1. Enter the site activation key in the **Site Activation Key** field.
2. If you are using HTTPS, turn on **HTTPS (SSL)**.
3. If you are using a proxy server to connect to the SELECTserver, click the **Proxy** button and fill in the Proxy Server information, then click **OK**.
4. Click **Test Connection** to verify the connection to the SELECTserver.
5. Click **Next**.

The **Check out license now?** page displays.

6. Enter your email address in the **Email Address** field.
7. Select the product to be activated (if not pre-populated) in the **Product Name** field.
8. Enter the product version number (if not pre-populated) in the **Product Version** field.
9. Click **Next**.

The **Country of Use** page opens.

10. Select the country where you will be using this product and click **Next**.

The **Wizard Selections** page displays the information provided on the previous pages.

11. Review the information and click **Finish** to activate the product.

##### I do not have any license information

1. The product will run in evaluation mode.
2. Click **Go To Bentley.com** to request activation information.

#### Evaluation Only - No License Information

1. The product will run in evaluation mode.
2. Click **Go To Bentley.com** to request activation information.

## Client-side Licensing for ProjectWise Web Parts Users

By default, Bentley CONNECTION Passport license usage by ProjectWise Web Parts users connecting to ProjectWise Web Server is automatically reported to the SELECTserver that your ProjectWise Integration Server is connected to, and there is nothing else you need to configure to track the license usage of those users.

## Licensing

### Launching the Product Activation Wizard from the Desktop

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However, if you need some ProjectWise Web Parts users to use a different SELECTserver, then you must do the following:

1. On the ProjectWise Web Server computer, [launch the Product Activation Wizard](#) (on page 57) and enter the name of another SELECTserver and that server's **Site Activation Key**.
2. Next, open ProjectWise Administrator, log in to your datasource and go to the **Users** datasource node. For each ProjectWise Web Parts user who needs to use a different SELECTserver, right-click the user account and select **Properties**. On the **Settings** tab, expand the **Administrative** category and set **Client Licensing** to **Activate and record usage through client's configured SELECT Server**.

## Launching the Product Activation Wizard from the Desktop

If you skipped the Product Activation Wizard step at the end of your installation, or if you need to change your existing SELECTserver information, you can run the Product Activation Wizard later by launching the `ActivationWizard.exe` file, or by first launching the License Management Tool (`LicenseTool.exe`) and then selecting **Tools > Product Activation Wizard**.

The `ActivationWizard.exe` and `LicenseTool.exe` files are located under:

...\Bentley\ProjectWise\bin	for ProjectWise Integration Server, ProjectWise Caching Server, and ProjectWise Automation Service
...\Bentley\ProjectWise\Web\Bin	for ProjectWise Web Server and Web View Server

**Important:** If you are launching the Product Activation Wizard in one of the ways described above for your ProjectWise Web Server and Web View Server installation, then after running the Product Activation Wizard, you must restart IIS.

## Launching the Product Activation Wizard with Elevated Privileges

Because of certain access control restrictions to the Windows Registry in Windows Server 2008 and later, on those operating systems the Product Activation Wizard must be launched with elevated privileges. This can be done by logging in to the computer with an administrator account and then launching `ActivationWizard.exe` or `LicenseTool.exe`, or by right-clicking `ActivationWizard.exe` or `LicenseTool.exe` and selecting **Run as Administrator**.

If the Product Activation Wizard is *not* launched with elevated privileges, the Product Activation Wizard will add the licensing information to the `HKEY_CURRENT_USER` section of the Registry instead of `HKEY_LOCAL_MACHINE`. When the server looks for and cannot find the licensing information under `HKEY_LOCAL_MACHINE`, the server enters 30-day countdown mode. After the 30-day countdown mode expires, the server enters 4-hour evaluation mode. You cannot fix the problem simply by rerunning the Product Activation Wizard, because the Product Activation Wizard will find a valid licensing configuration under `HKEY_CURRENT_USER` and therefore will not move the licensing information to the location it needs to be in.

To correct the issue if it occurs:

1. Launch the Windows Registry Editor (`regedit.exe`) application with elevated privileges. This can be done by logging in to the computer with the Administrator account and launching `regedit.exe`, or by right-clicking `regedit.exe` and selecting **Run as Administrator**.
2. In the Registry Editor, navigate to the `HKEY_CURRENT_USER\Software\Bentley` registry node, then delete the `Licensing` registry key and all its subkeys.

## Licensing

### Launching the Product Activation Wizard from the Desktop

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3. Close the Registry Editor.
4. Launch the Product Activation Wizard with elevated privileges as described above, then reenter your SELECTserver activation information.

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