



# **AgileForms Integration Guide**

**AgilePoint BPMS v5.0 R2 SP1**

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# Preface

## Disclaimer of Warranty

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AgilePoint, Inc. makes no representations or warranties, either express or implied, by or with respect to anything in this document, and shall not be liable for any implied warranties of merchantability or fitness for a particular purpose or for any indirect, special or consequential damages.

## Copyright

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## Trademarks

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AgilePoint, Inc. and AgilePoint's products are trademarks of AgilePoint Inc. References to other companies and their products use trademarks owned by the respective companies and are for reference purpose only.

## Government Rights Legend

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Use, duplication or disclosure by the U.S. Government is subject to restrictions set forth in the applicable license agreement and as provided in DFARS 227.7202-1(a) and 227.7202-3(a) (1995), DFARS 252.227-7013(c)(1)(ii) (Oct 1988), FAR 12.212(a) (1995), FAR 52.227-19, or FAR 52.227-14, as applicable.

## Virus-free software policy

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AgilePoint recognizes that viruses are a significant security consideration for our customers. To date, we have had no report of AgilePoint BPMS carries any virus. AgilePoint takes the following measures to ensure our software is free of viruses upon delivery:

- AgilePoint is built on top of Microsoft .NET framework. The pre-compiled executable is a .NET Common Language Runtime (CLR) application, not a native machine binary. As far as is known at this time, there are no viruses that infect .NET CLR executables.
- The virtual environment for the product packaging process is fully isolated and protected, and anti-virus software is installed and running during packaging.
- The deliverable package is scanned by anti-virus software before upload to our customer download site.

## Document Revision Numbers

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AgilePoint documentation uses the revision number format **rX.Y.Z**. The letters and numbers in this revision number can be interpreted as follows:

- **r** - Indicates "revision." This helps to differentiate the document *version* numbers, which start with **v**.
- **X** - The major version number for AgilePoint BPMS to which this document refers. For example, AgilePoint releases 5.0, 5.0 SP1, and 5.5 would all have an **X** value of **5**.
- **Y** - The major document revision number. This number typically changes only when either there is a new AgilePoint release, or there are major changes to the document.
- **Z** - The minor document revision number. This number is incremented each time the document is republished.

## AgilePoint Documentation in PDF and HTML

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AgilePoint documentation is provided in both print-friendly (PDF) and web-based (HTML) formats.

### Advantages of HTML Documentation

- HTML is the **primary delivery format** for AgilePoint documentation.
- Unified, global **search** across all documentation. PDF documents allow you to search only within the context of a given PDF file.
- **All hyperlinks supported**. Links in PDFs are only supported in certain contexts.
- "One-stop shopping" for all information related to AgilePoint BPMS.
- The HTML documentation is updated more frequently than the PDF documentation. Web-based documentation is updated periodically between AgilePoint releases to address errors and omissions, but the PDF documentation is updated only at the time of a software release.

### Advantages of PDF Documentation

PDFs can be more easily **printed**, **archived**, and **transferred** (such as by FTP or email) than HTML documentation.

For more information, refer to [Downloading Files and Sharing Links from the Documentation Library](#) in the [Documentation Library](#).

## Opening the Documentation Library

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To open the AgilePoint Documentation Library, do the procedure in this topic.

### Prerequisites

You must have a valid account on the AgilePoint Support Portal.

### Instructions

1. Log on to the AgilePoint Support Portal.
2. Click **Documentation**.
3. On the **Documentation** page, click the documentation library for your AgilePoint release.
  - For AgilePoint BPMS v5.0 SP1 and higher, the web-based documentation library opens in a new tab or window in your web browser.

- For releases prior to v5.0 SP1, a download starts for a Zip file with the PDF documentation for your release.

## Finding Information in the Documentation Library

---

The information in this topic will help you to locate information in the AgilePoint Documentation Library.

### Using the Table of Contents

The table of contents in the AgilePoint Documentation Library is divided by content areas. For example, the Installation section includes all the information you need to install AgilePoint BPMS. The AgilePoint API section includes information about the AgilePoint APIs.

You can use the Table of Contents to explore the AgilePoint documentation content and find the information you want.

### Searching

The web-based documentation includes a centralized search for all documentation content. To search for information:

1. In the AgilePoint Documentation Library, click the **Search** tab. In the Search box, enter **1 search term**, and click **Search**.

The search results display in alphabetical order by topic title.

It is important to understand that the third-party software AgilePoint uses to generate web-based documentation allows only 1 search term. More than 1 search term will cause the search to fail.

AgilePoint recommends using a relatively unique search term to find the information you need. For example, entering a common term, such as "process," will return a high percentage of the total documentation topics in the search results.

2. Browse the list of topic titles to find the information you want.

### Printing

The PDF documentation is provided mainly for the purpose of printing and archiving. To print a set of information:

1. Navigate to the main page of the Documentation Library from which you want to print.
2. In the list of documents, click the document name in the **PDF** column.
3. From your PDF reader software, print the portion of the document you want.

## Downloading Files and Sharing Links from the Documentation Library

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You can download and share files AgilePoint's documentation library as you would in any other web page. Note that if you send links to recipients, they must have a Support Portal login to view the file.

These procedures are common examples based on Internet Explorer with the Adobe Reader plug-in. Exact procedures may vary depending on your web browser, PDF viewer, and email client configuration.

## Share a Link to an HTML Topic

1. Navigate to the topic you want to share.
2. Copy the URL in the Location box in your web browser.
3. Paste the URL in an email, IM client, etc.

## Share a Link to a PDF Document

1. In Internet Explorer, navigate to the Documentation Library home page.
2. In the **PDF** column, right-click the name of the PDF file you want to share.
3. In the quick menu, click **Copy shortcut**.
4. Paste the URL in an email, IM client, etc.

## Save a Copy of a PDF Document

1. In Internet Explorer, [open the Documentation Library home page](#).
2. In the **PDF** column, click the name of the PDF file you want to share.
3. In the Adobe Reader plug-in, click **Save** button.

## Contacting AgilePoint Sales

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AgilePoint is a leading Business Process Management System (BPMS) provider created by a team of driven people who strive to incorporate the principles of relentless innovation for the benefit of our customers. Our mission is to help companies of any size attain and sustain operational success through process excellence.

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**Web site:** [www.agilepoint.com](http://www.agilepoint.com)

**International:** For AgilePoint EMEA and AgilePoint Asia Pacific, please call the AgilePoint Corporate Office for contact information.

## Contacting Customer Support

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To contact AgilePoint Support, please submit a ticket on the AgilePoint Support Portal: <http://support.agilepoint.com/SupportPortal/>

If you do not have a Support Portal account, you can send an email to request one: [support@agilepoint.com](mailto:support@agilepoint.com)

# AgileForms

AgileForms is an AgilePoint product that enables AgilePoint BPMS users to create web-based forms using a graphical user interface (GUI).

AgileForms is built on XML and is fully standards compliant. However, it does not require programming knowledge to use.

# Pre-Installation

Before installing AgileForms Server, perform the procedures in this section on the AgileForms Server machine.

## Obtaining AgilePoint License Keys

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Some AgilePoint BPMS components require a license key. When you sign up for an AgilePoint BPMS account or purchase AgilePoint software, AgilePoint will send you the license keys for the components you need. If during installation you find you do not have a license key you need, do the procedure in this topic.

### Procedure

To obtain new license keys, [contact AgilePoint Customer Support](#).

When requesting new license keys, please provide the following information:

- Your name.
- The name of your company or organization.
- The version numbers and the names of the AgilePoint products that you are planning to install.
- The type (e.g. Evaluation, Development, Production, or Clustered) of license keys and the quantity for each of the AgilePoint products that you are planning to install.
- If you are requesting a license key as a replacement for a previously issued license key, please provide the original license key as well.

Please allow at least one full business day for license keys to be provided following your request.

## Hardware Changes and AgileForms Licensing

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AgileForms license keys use an Installation ID that is specific to the original installed hardware and operating system version. If you change any hardware on the AgileForms machine — for example, if you add RAM or CPUs, or you migrate AgileForms to a new machine — or if your operating system is updated due to manual or automatic system updates, your license key will no longer work. To minimize downtime, AgilePoint recommends the following:

1. [Contact AgilePoint Customer Support](#) to acquire temporary license keys.
2. Modify your hardware.
3. Run the AgileForms activation to acquire an Installation ID for your new hardware.
4. Contact AgilePoint Support again to request new, permanent AgileForms license keys.

## Verifying Required Port Numbers

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The following port numbers are required for AgileForms Server. Make sure that no other software uses these ports on the AgileForms Server machine:

- 81

- 55551

## Setting Up IIS

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1. In **IIS**, create a web site to serve as the AgileForms proxy. Give the site the name **AFProxy** and the port number **55551**.
2. Enable **Anonymous Authentication** for AFProxy.
3. Create an application pool for AgileForms.
4. Set up the application pool identity to use a custom account, and set the credentials to use the AgilePoint service account.
5. Create the main AgileForms website with the name and port number of your choice.
6. Set the web site to use the application pool you created for AgileForms.
7. Disable **Anonymous Authentication** for the site.
8. Enable **Integrated Windows Authentication** for the site.

## Set Up IIS 7.0

---

In IIS 7.0, do the procedure in this topic before you install AgileForms:

1. On the AgileForms Server machine, open the file C:\Windows\System32\inetmgr\config\ApplicationHost.config
2. Modify the following value:
  - **Old value** - <section name="httpErrors" overrideModeDefault="Deny" />
  - **New value** - <section name="httpErrors" overrideModeDefault="Allow" />
3. Save and close ApplicationHost.config.

## Setting Up Database

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1. In **SQL Server**, create 3 empty databases with the following names:
  - **Site\_Master**
  - **Site\_Template**
  - **Auth\_Template**

# Installation

This section provides instructions for installing the AgileForms add-on components of the AgilePoint BPMS Suite.

## Install AgileForms Server

 **Note:** AgileForms Server cannot use dynamic load balancing and cannot be installed on a machine where NLB is in use. Therefore if AgilePoint Server is a single server installation then you can install AgileForms on either same server or a dedicated single server. However if AgilePoint Server is configured in an NLB environment, AgileForms Server cannot run on the same machine as AgilePoint Server. AgileForms installed on a dedicated single server can communicate with AgilePoint Server that is operating in an NLB mode.

1. Log in to Windows using a user login that belongs to the local system's Administrators group.



**Note:** AgilePoint recommends logging in using the AgilePoint Service Account. If you use any other account to log on, the first time you open the AgileForms Server administration page after you complete the installation, a "User not found" error will appear.

2. Double-click **setup.exe** to run the AgileForms installer. The AgileForms installation window appears.

3. Click the **Install AgileForms...** link that is most appropriate for your system.

4. Click the link for **AgileForms Server**.

5. On the **AgileForms Server** window, click **Next**.

6. On the **Welcome to AgileForms Server Setup Wizard** window, click **Next**.

7. On the **License Agreement** window, read the License agreement, and click **I Agree** to continue. Then click **Next**.

8. On the **Select Installation Folder** window, select an alternate installation folder if desired, then click **Next**.

9. On the **Confirm Installation** window, click **Next**. Once the installation is complete, **AgileForms WebSite Configuration** dialog appears.

10. On the **AgileForms Websites Configuration** dialog box, verify the following information. When you have finished, click **OK**:

- **AgileForms Site** – The main site for AgileForms.
- **Proxy Site** – AgileForms proxy site.
- **User Name** – The user name (in the format – Domain\Username) for the AgileForms service.
- **Password** – The password for the AgileForms service.

11. Once the **Installation Complete** message is displayed, click **Close** to complete the installation.

12. If you see a **Setup succeeded** message, click **OK**. If you see a **Setup has completed. Would you like to reboot now?** message, you can click either **Yes** or **No**.



**Note:** Microsoft Windows (and not the AgilePoint installer) determines whether the reboot or Setup succeeded message is displayed after the installation. In most cases, choosing to not reboot does not seem to interfere with the success of the installation.



**Note:** If the following message appears, run the Client Utility Tool from the AgilePoint installation program: "Failed to add Service model information in [path]\web.config. Please use SVCClient Utility tool to update it before using." For more information, refer to [Run the Windows Service Client Utility Tool](#).

## Set Up the PDF Generator

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Most AgilePoint users who generate PDFs use AgilePoint's PDF Generator AgilePart. However, it is possible to use the built-in PDF generator module for AgileForms, as well. This method simply requires some additional setup.

If you want to use the AgileForms PDF Generator, complete the procedures in this topic. Note that this is **optional**, depending upon the requirements for your organization.

### Prerequisites

- If you want to use the PDF Generator in AgileForms, you cannot have Internet Explorer 9 installed on the AgileForms Server machine. This only applies to the built-in AgileForms PDF Generator feature on the AgileForms Server machine. It does not apply to PDF generation using the PDF Generator AgileShape, or to AgileForms clients machines.

### Register the PDF Generator

To register the PDF Generator for AgileForms:

1. Open the folder **[AgileForms Server installation folder]\FS2\Forms\pdfgen**.
2. Double-click the registration file that is appropriate for your system to add it to the registry:
  - **32 bit** - ABCpdfRegistration.reg
  - **64 bit** - ABCpdfRegistration64bit.reg

### Update the Print CSS Location

To update the print CSS location:

1. In a text editor, open the file **[AgileForms Server installation folder]\FS2\overrides.txt**.
2. In overrides.txt, add the following line, replacing [host name] and [port] with the information for your AgileForms Server machine:

```
Forms/print_css_location: "http://[host name]:[port]/js/print.css"
```

3. Restart the Windows service named **Firmstep**.

## Configure AgileForms Server

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Once you have installed AgileForms Server, configure the AgileForms Server software.

1. To open the AgileForms Server Configuration dialog box, click **Start > All Programs > AgilePoint > AgileForms > AgileForms Configuration**.

2. On the AgileForms Configuration Manager dialog box, modify the information on the **System** tab and **Database** tab as required.
3. When you have completed the configuration, click **OK**.

## System Tab

Field Name	Definition
Server URL	URL of the AgilePoint Server.
Domain	The domain name for the AgilePoint Server.
User Name	The user name for the AgilePoint Server.
Password	The password for the AgilePoint Server.
Hosting Mechanism	<p>IIS or Windows Service, depending on your AgilePoint Server installation type.</p> <p> <b>Note:</b> If you are running AgilePoint Server as a Windows Service, indicating Windows Service creates the binding between the AgileForms Server and the AgilePoint Server. This setting is required.</p>
AgileForms Designer Host	Host name and port number for the main AgileForms web site in the format <b>[host name]:[port]</b> . Example: agileformsite:9000
AFUser Always Anonymous	Select if you want the administrator account for AgileForms to log on as anonymous.
LDAP	The LDAP path to your Active Directory – for example, LDAP://dc=MyCompany,dc=com.
LDAP User	<p>The user name for accessing Active Directory.</p> <p> <b>Note:</b> This user name and password are required only if the application pool identity account for AgileForms does not have read permissions for Active Directory.</p>
LDAP Password	The password for accessing Active Directory.

## Database Tab

Field Name	Definition
User	The user name for connecting to the database.
Password	The password for the user needed for a database connection.
Integrated Security	Select Integrated Security to use Windows authentication for a database connection.
Database Server	Specify the database server name, and click <b>Retrieve database</b> to populate the database lists.
SiteMasterDB	Select the <b>Site_Master</b> database.
Site DB	Select the <b>Site_Template</b> database.
Auth DB	Select the <b>Auth_Template</b> database.
Run Database Scripts	<p>Select Run Database Scripts if you want to generate tables automatically.</p> <p> <b>Note:</b> CAUTION: If you select this option after your AgileForms installation has been running (so the databases are already populated with data), you will overwrite the databases and lose any data.</p>

## Activate or Reactivate Your AgileForms License

When you install AgileForms Server, you must activate it. If your AgileForms licence key expires, or if you get a new AgileForms licence key, you must activate it again.

### Prerequisites

- One of the following occurs:
  - You complete a new installation of AgileForms Server.
  - Your AgileForms license key expires.
  - You get a new AgileForms license key.
- Access to the AgileForms Server with the account used during AgileForms installation. In most cases this is the AgilePoint Service Account.
 

For more information, refer to [AgilePoint User Accounts](#)
- Local machine name. For more information, refer to [Find your local machine name for AgileForms Server](#).
- AgileForms port number. For more information, refer to [Find your port number for AgileForms Server](#).

## Procedure

1. Log on to the AgileForms Server machine using the installation account. You can use a direct login, or a remote desktop connection.
2. On the AgileForms Server machine, in a web browser, go to this URL:  
**http://[machine name]:[port]/Default.aspx/CustomerActivationScreen/**
3. Get the installation ID on the customer activation screen.
4. [Contact AgilePoint Customer Support](#).

AgilePoint Customer Support gives you a temporary activation code, and will send you a permanent activation code when it is available. Getting the permanent activation code can take up to 5 business days.

5. Enter your temporary activation code in the Activation Code section of the AgileForms **Customer Activation** screen.

Once you receive your permanent activation code, use the same procedure to enter it on the **Customer Activation** screen.

## Find Your Machine Name for AgileForms Server

To find your machine name for AgileForms Server, do the procedure in this topic.

### Control Panel System Screen

The screenshot shows the Windows Control Panel 'System' page. On the left is a navigation pane with 'Control Panel Home' and links to 'Device Manager', 'Remote settings', 'System protection', and 'Advanced system settings'. The main content area is titled 'View basic information about your computer' and is divided into several sections:

- Windows edition:** Windows 7 Enterprise, Copyright © 2009 Microsoft Corporation. All rights reserved. Service Pack 1.
- System:**
  - Rating: 4.1 Windows Experience Index
  - Processor: Intel(R) Core(TM) i3-2350M CPU @ 2.30GHz 2.30 GHz
  - Installed memory (RAM): 8.00 GB (7.89 GB usable)
  - System type: 64-bit Operating System
  - Pen and Touch: No Pen or Touch Input is available for this Display
- Computer name, domain, and workgroup settings:**
  - Computer name: 5-PC
  - Full computer name: 5-PC
  - Computer description:
  - Workgroup: WORKGROUP
- Windows activation:** You must activate today. [Activate Windows now](#)

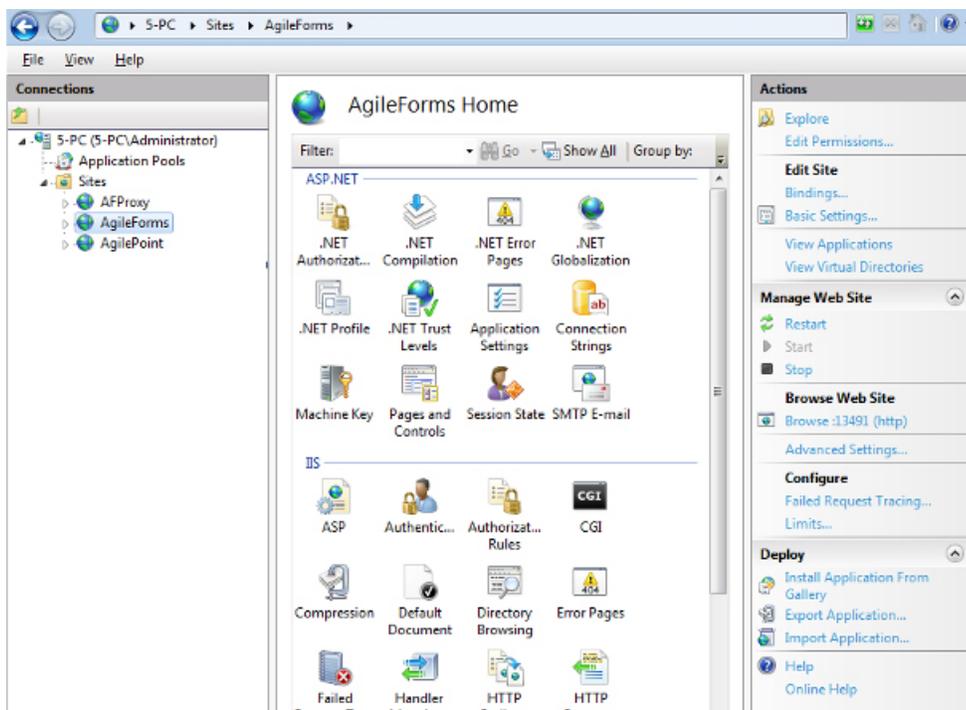
## Procedure

1. On the AgileForms Server machine, click **Start**.
2. On the **Start** menu, right-click **Computer**.
3. On the context menu, click **Properties**.

On the **View basic information about your computer** screen, the **Computer name** field shows your machine name.

## Find Your Port Number for AgileForms Server

To find the port number for your AgileForms Server, do the procedure in this topic.



## Prerequisites

- You must be logged on to the AgileForms Server machine using the AgilePoint Server user account that is set up in the [AgileForms Server configuration](#).



**Note:** AgilePoint recommends logging in using the AgilePoint Service Account. If you use any other account to log on, the first time you open the AgileForms Server administration page after you complete the installation, a "User not found" error will appear.

## Procedure

1. On the AgileForms Server machine, click **Start > Control Panel > Administrative Tools**.
2. On the **Administrative Tools** screen, click **Internet Information Services Manager**.

3. On the **Connections** section, expand your machine name.
4. Click **Sites**.
5. Click **AgileForms**.

The **Browse** field in the right pane shows your port number.

## Hardware Changes and AgileForms Licensing

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AgileForms license keys use an Installation ID that is specific to the original installed hardware and operating system version. If you change any hardware on the AgileForms machine — for example, if you add RAM or CPUs, or you migrate AgileForms to a new machine — or if your operating system is updated due to manual or automatic system updates, your license key will no longer work. To minimize downtime, AgilePoint recommends the following:

1. [Contact AgilePoint Customer Support](#) to acquire temporary license keys.
2. Modify your hardware.
3. Run the AgileForms activation to acquire an Installation ID for your new hardware.
4. Contact AgilePoint Support again to request new, permanent AgileForms license keys.

## Open AgileForms Server Administration

---

Once you have installed and activated AgileForms Server, you can open the AgileForms Server administration screen.

### Prerequisites

- You must be logged on to the AgileForms Server machine using the AgilePoint Server user account that is set up in the [AgileForms Server configuration](#).



**Note:** AgilePoint recommends logging in using the AgilePoint Service Account. If you use any other account to log on, the first time you open the AgileForms Server administration page after you complete the installation, a "User not found" error will appear.

### Procedure

1. Click **Start > All Programs > AgilePoint > AgileForms > AgileForms Server**.

This opens the page [http://\[machine name\]:\[port\]/default.aspx/Admin/](http://[machine name]:[port]/default.aspx/Admin/)

## Set up the AgileForms Impersonator

---

To complete the AgileForms installation, complete the following procedure on the **AgilePoint Server** machine:

1. To open the **AgilePoint Server Configuration** tool:
  - On an IIS installation, click **Start > AgilePoint > AgilePoint Server Configuration**.
  - On a Windows Service installation, in the **AgilePoint Server Manager**, select the Windows Service you want to configure, and click the **Configuration** icon.
2. On the **AgilePoint Server Configuration** tool, click the **Extension** tab.

3. On the **Extension** tab, click **Add**.
4. In the **Name** field, enter **AgileForms**.
5. In the **Impersonator** field, enter the user name for the AgilePoint system administrator in the format [domain \user name].
6. Click **OK**.



**Note:** You must reset IIS for the changes to take effect.

## Adding AgileForms Users from Multiple Active Directory Domains

You can add users to AgileForms from multiple Active Directory domains. The LDAPMultipleDomains configuration setting provides the ability to activate this functionality, and to configure the connection strings for multiple domains.

If this setting is not present, the value is assumed to be "false."

### How to Start

1. In a text editor, open the file [\[AgileForms Server installation folder\]\Webroot\web.config](#).

### Procedure

1. In the AgileForms web.config file within the <appSettings> node, add the following node:

```
<add key="LDAPMultipleDomains" value="[value]" />
```

Key	Value
LDAPMultipleDomains	<p><u>Function:</u></p> <p>Specifies whether to use a default LDAP search string, or a list of custom, overriding search strings.</p> <p><u>Accepted Values:</u></p> <ul style="list-style-type: none"> <li>• <b>True</b> - Indicates that all new users are searched based on a default LDAP search string for the domain identified in their user name.</li> <li>• <b>List search strings</b> - Specifies overriding LDAP search strings for one or more Active Directory domains.</li> </ul> <p><u>Default Value:</u></p> <p>True</p> <p><u>Example:</u></p>

Key	Value
	<p>A company has multiple Active Directory domains: MYCORP1, MYCORP2, MYCORP3. The primary domain is MYCORP1.</p> <p>When a new user, JSmith, logs on to AgileForms for the first time, the LDAP search for his Active Directory account depends upon the value of LDAPMultipleDomains.</p> <ul style="list-style-type: none"> <li> <p><b>True</b> - If LDAPMultipleDomains, is set to True, the user will be searched based on his domain and user name using the connection string LDAP://[DOMAIN]/JSmith. JSmith may be MYCORP1/JSmith, MYCORP2/JSmith, or MYCORP3/JSmith, but as long as JSmith is on the primary server, AgileForms will find his account.</p> <pre>&lt;add key="LDAPMultipleDomains" value="True" /&gt;</pre> </li> <li> <p><b>List search strings</b> - If users in some domains are on specific servers that need to be specified in the LDAP connection string, then you must define those connection strings in the value of LDAPMultipleDomains.</p> <p>If MYCORP3 uses the main LDAP server, but MYCORP1 and MYCORP2 use subservers, then the node might look like the following:</p> <pre>&lt;add key="LDAPMultipleDomains" value="MYCORP1:MYLDAPSERVERA;MYCORP2:MYLDAPSERVERB;MYCORP3:MYLDAPSERVERC" /&gt;</pre> <p>In this case, if JSmith were in the MYCORP1 domain (MYCORP1/JSmith), then the LDAP connection string would be LDAP://MYLDAPSERVERA. However, if JSmith were on the MYCORP3 domain, the connection string would be LDAP://MYCORP3.</p> </li> </ul>

## Adding Active Directory Users with No Email Address

When users are added from Active Directory to AgileForms, the **mail** attribute in Active Directory must have a value, even if the user does not have an email address. You can simply add a dummy email address to any Active Directory users who do not have them.

If an Active Directory user does not have an email address, the following error is thrown:

```
LDAP://[domain]|name:[user name] address not defined for user
```

## Setting the Calendar Start Day

---

Optionally, you can change the first day of the week in a pop-up calendar in date/time controls. The default start day is Monday.

### Prerequisites

- Install an AgileForms version or Intermediate Fix that includes FIX 09.0058.05. For more information, see the Intermediate Fixes document.

### How to Start

1. On the AgileForms Server, in a text editor, open the file [\[AgileForms Server installation folder\]\FS2\overrides.txt](#)

### Procedure

1. Paste the following line:

```
CalendarWeekStart: [day code]
```

2. Replace [day code] with one of the following values to indicate the week day on which you want the calendar week to start:

Day of week	Value
Sunday	0
Monday	1
Tuesday	2
Wednesday	3
Thursday	4
Friday	5
Saturday	6

## Installing AgileForms Envision Add-on

---

To complete the AgileForms installation, complete the following procedure on each **AgilePoint Envision client** machine:

1. Log in to Windows using a user login that belongs to the local system's Administrators group.
2. Double-click **setup.exe** to run the AgilePoint installer. The AgilePoint installation window appears.
3. Click the **Install AgileForms...** link that is most appropriate for your system.
4. Click the **AgileForms Envision Add-on** link that is most appropriate to your system.

- If you are installing AgileForms in 32-bit mode, there is only one link available.
  - If you are installing on AgileForms in 64-bit mode, you must select whether your Visio installation is 32-bit or 64-bit.
5. On the **AgileForms Envision Add-On** window, click **Next**.
  6. On the **Welcome to AgileForms Envision Add-On Setup Wizard** window, click **Next**.
  7. On the **License Agreement** window, read the License agreement, and click **I Agree** to continue. Then click **Next**.
  8. On the **Select Installation Folder** window, select an alternate installation folder if desired, then click **Next**.
  9. The installer is now ready to install the AgileForms Envision Add-On. Click **Next** to install.
  10. Once the **Installation Complete** message is displayed, click **Close** to complete the installation.
  11. If you see a **Setup succeeded** message, click **OK**. If you see a **Setup has completed. Would you like to reboot now?** message, you can click either **Yes** or **No**.



**Note:** Microsoft Windows (and not the AgilePoint installer) determines whether the reboot or Setup succeeded message is displayed after the installation. In most cases, choosing to not reboot does not seem to interfere with the success of the installation.

## Installing AgileForms SharePoint Integration

---

1. Log on to Windows using a user login that belongs to the local system's Administrators group.
2. Double-click **setup.exe** to run the AgilePoint installer. The AgilePoint installation window appears.
3. Click the **Install AgileForms...** link that is most appropriate for your system.
4. Click the link for **AgileForms SharePoint Add-On for AgilePoint SharePoint Integration v1** or **v2**, depending on the SharePoint Integration version you have installed.
5. On the **AgileForms SharePoint Integration** window, click **Next**.
6. On the **Welcome to AgileForms SharePoint Integration Setup Wizard** window, click **Next**.
7. On the **License Agreement** window, read the License agreement, and click **I Agree** to continue. Then click **Next**.
8. On the **Select Installation Folder** window, select an alternate installation folder if desired, then click **Next**.
9. On the **Confirm Installation** window, click **Next**.
10. Once the **Installation Complete** message is displayed, click **Close** to complete the installation.
11. If you see a **Setup succeeded** message, click **OK**. If you see a **Setup has completed. Would you like to reboot now?** message, you can click either **Yes** or **No**.



**Note:** Microsoft Windows (and not the AgilePoint installer) determines whether the reboot or Setup succeeded message is displayed after the installation. In most cases, choosing to not reboot does not seem to interfere with the success of the installation.

## Add, Deploy, and Activate the SharePoint Solution Files

---

You can skip this section if you are installing the AgileForms SharePoint Integration via the AgilePoint installer.

## Prerequisites

- AgileForms SharePoint Integration installed.
- Log on to the SharePoint machine using a user account that belongs to the local system's Administrators group.

## How to Start

1. Open the **stsadm** command line tool.
  - **SharePoint 2007** - C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\BIN\stsadm.exe
  - **SharePoint 2010** - C:\Program Files\Common Files\Microsoft Shared\web server extensions\14\BIN\stsadm.exe

## Procedure

1. in the **stsadm** command line tool, add the solution files to SharePoint.

```
stsadm -o addsolution -filename
    AgilePoint.AgileForms.WebParts.wsp
```



**Note:** You can copy the wsp files to [\[SharePoint server extensions folder\]\BIN](#) and use the command as shown above, or specify the path in the command to the location of the wsp files.

2. On the primary SharePoint front-end web server, in the **stsadm** tool, deploy the solution files to SharePoint.

```
stsadm -o deploysolution -name
    AgilePoint.AgileForms.WebParts.wsp -immediate -allowgacdeployment
    -url "[Site Collection URL]"
```

3. Execute from command line at the following directory [\[SharePoint server extensions folder\]\BIN](#):

```
stsadm -o copyappbincontent
```

4. in the **stsadm** tool, activate the features.

```
stsadm -o activatefeature -name AgilePoint.AgileForms.WebParts
    -url "[Site Collection URL]" -force
```



**Note:** If you receive an error during the activation, such as access denied, reset IIS and then try again.



**Note:** If a new Site Collection is created, it is necessary to active the AgilePoint Features manually.

## Configuring AgileForms SharePoint Integration v2

---



**Note:** This step is required only if you are using AgilePoint SharePoint Integration v2.

1. In SharePoint, open the AgilePoint Configuration List.
2. Create a new list item with the following settings:
  - **Application** - AgilePointASPAssociation

- **AP Setting Key** - AgileForms
- **AP Setting Value** - http://[AgileForms Server]:[port]/FormRender.aspx

## Configuring AgileForms SharePoint Integration v1

---



**Note:** This step is required only if you are using AgilePoint SharePoint Integration v1.

1. Add the following keys to the **web.config** file for your SharePoint installation:

```
<add key="CustomAgilePointTaskActions"
    value="AgilePoint.AgileForms.CustomTaskListActions.
    AgileFormsCustomTaskListActions,
    AgilePoint.AgileForms.CustomTaskListActions,
    Version= 1.0.0.0, Culture=neutral,
    PublicKeyToken= 4b23e0a5c23bcd0" />
<add key="FormRenderURL"
    value="http://[server]:[port]/FormRender.aspx" />
```

## Configuring AgileForms Back Office Integration

---



**Note:** This component is necessary to perform SharePoint lookups from AgileForms. However, this functionality and the installation of this component are optional. Please note that this component deploys a globally available web service on the SharePoint machine. This web service is deployed using a standard SharePoint solution under the layouts folder. If you do not install this component, you can still perform SharePoint lookups for AgileForms using a custom web service.

### Executable Configuration

If you want to configure Back Office Integration using the executable configuration tool:

Open the file [\[AgileForms Integration for SharePoint installation folder\]\AgilePoint.AgileForms.BackOfficeConnector.exe](#).

### Manual Configuration

If you want to install AgileForms Back Office Integration manually:

1. Add the following .wsp SharePoint Solution files to your SharePoint Web Application(s) using the stsadm tool via command line as follows:

(You can find the stsadm.exe at location [\[SharePoint server extensions folder\]\BIN](#)).

```
stsadm -o addsolution -filename
    FirmstepSharepointConnector.wsp
```

2. To deploy the SharePoint Solutions, open SharePoint Central Administration and go to the **Operations** tab. Click **Solution management** under the Global Configuration section. Deploy **FirmstepSharepointConnector.wsp** to your SharePoint Web Application(s).

### Configure Anonymous Authentication

If you want to perform SharePoint lookups from AgileForms, you must do the procedure in this topic:

1. In IIS, navigate to your SharePoint web application.
2. Within the SharePoint web application, open the folder **\_layouts > FirmStepSharepointConnector**.
3. Set **Anonymous Authentication** to **Enabled**.

## Setting Up AgilePoint BPMS to Support AgileForms Using SSL

To connect Envision to AgileForms server when it is configured in Secure Socket Layer (SSL) mode, do the procedure in this topic.

### Prerequisites

- AgileForms is installed in your environment, and configured to use SSL encryption.
- A version of AgilePoint Envision that includes fix 01.0098.01 or higher.

### Procedure

1. On the Enterprise Manager Main Page, click **Shared Custom Attributes**.
2. On the **Custom Attributes** window, select the **AgileFormDesignerHost** shared custom attribute.
3. Click **Edit**.



**Note:** This page can only be used by administrators and users with the **Modify Shared Custom Attributes** access right.

4. Modify the value of the AgileFormDesignerHost shared custom attribute to reflect the correct SSL port of the AgileForms website.

**Example:** Demo3:443

5. On the **Custom Attributes** window, click **Add**.



**Note:** This page can only be used by administrators and users with the **Modify Shared Custom Attributes** access right.

6. On the **Custom Attributes** window, complete the following fields:

Field Name	Value
Name	AgileFormUseSSL
Type	Boolean
Value	True

7. On the AgileForms Server machine, in a text editor open the following file:

**[AgileForms Server installation folder]\FS2\overrides.txt**

8. In overrides.txt, delete the following line:

**Forms/AF/achieveforms\_image\_url:'http://images/'**

9. On the AgileForms Server machine, restart the Windows service named **Firmstep**.

# Using AgileForms

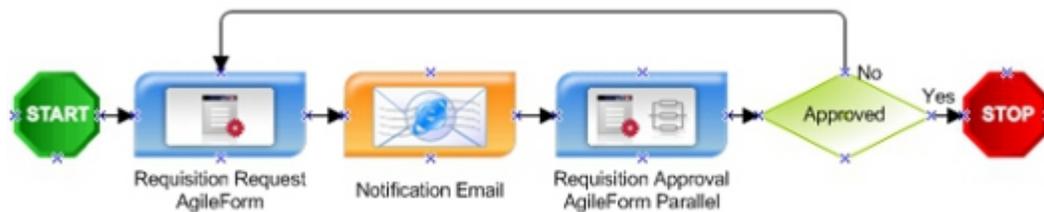
This section provides information about using the AgileForms Integration components within AgilePoint Envision and SharePoint. For information about building forms using AgileForms, see the AgileForms online help. This help documentation is accessible from within the AgileForms Designer user interface.

## Envision Add-On for AgileForms

AgileForms comes with an add-on that enables you to create AgileForms-based processes in Envision. This add-on includes an AgileForms process template and an AgileForms Stencil.

To use the AgileForms stencil, you must have the AgileForms Envision Add-On application installed and a live connection to the AgileForms Server.

The following is an example of an AgileForms-based process that uses forms created in AgileForms to support a simple request and approval.



## AgileForms Stencil

This section describes the AgileShapes in the AgileForms stencil.

### AgileForm Shape

Generates an AgileForm you define. This form appears as an activity in the participant's Task List. For detailed information regarding AgileForms, see the AgileForms Online Help.



**Note:** The default value of the Work To Perform property for this activity is **FormRender**. Do not change this value.

#### Properties for This AgilePart

Field Name	Definition
Edit Form	Opens the AgileForms form editor, which edits the form. For detailed information about editing forms in AgileForms, see the AgileForms online help.
Export Form	Saves the form as an AgileForms XML form file.

Field Name	Definition
Import Form	Imports an AgileForms XML form file, and replaces the form for this activity with the imported one. All fields from the imported form are added to the form library for the current process.
Preview Form	Opens the AgileForms preview window, where you can preview the form.
ReportView	<p>Default value: False</p> <p>Specifies whether an AgileForms AgileShape will be used in Report View.</p> <p>This property can be set to the following values:</p> <ul style="list-style-type: none"> <li>● <b>True</b> - The AgileShape will serve as the Report View form. Only one AgileShape can have this value in a single process model.</li> <li>● <b>False</b> - The AgileShape will not serve as the Report View form.</li> </ul> <p>If all AgileForms AgileShapes in a process model are set to False, the AgileForm for the Submit step is used for the Report View, as if it were set to True.</p>
SaveOptionField	<p><u>Function:</u> A field that enables the process participant to save an AgileForm, rather than submitting it, at runtime.</p> <p><u>Accepted Values:</u> A schema node.</p> <p><u>Default Value:</u> None</p> <p><u>Accepts Variables:</u> No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>● Yes/No</li> <li>● Text</li> <li>● Select One, with the values "Save" and "Do not Save".</li> </ul>
SaveOptionText	<p><u>Function:</u> Specifies the label of the SaveOptionField.</p> <p><u>Accepted Values:</u></p>

Field Name	Definition
	<p>A text string.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Accepts Variables:</u></p> <p>No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• Save</li> </ul>
SubmitStep	<p>Default value: False</p> <p>This property should be set to 'True' if the Form is used as the Submit step (i.e. the first step where you are creating the list item).</p> <p> <b>Note:</b> If you have set a custom field as required in a SharePoint list, it must be editable on the Submit step, otherwise SharePoint throws an exception.</p> <p> <b>Note:</b> If you have set a field to be of type Multiple lines of text, the field cannot be set as Read Only.</p>
Transfer Form	<p>Transfers a form from one AgileForm AgileShape to another within a process. If you transfer a form to an AgileShape the current form is overwritten with the one that is transferred.</p>
Edit Library	<p>Opens the AgileForms form library editor.</p> <p>Each field you add to an AgileForm is added to the form library for the process. The fields in a form library are available for use for to all forms within a process.</p>
Export Library	<p>Saves the form as an AgileForms XML form library file.</p>
Import Library	<p>Imports an AgileForms XML form library file.</p> <p> <b>Note:</b> If you import a form library, the current form library will be overwritten with the imported form library. If you want to add form fields to an existing form library, AgilePoint recommends importing a form, instead of a form library.</p>

## AgileWork Properties

This AgileWork inherits the properties of the AgileWork AgileShape. For a list of these properties, see [AgileWork - Common Setup](#). Note that only the relevant properties are available in AgilePoint Envision. Unneeded properties are hidden.

## AgileForm Serial

Generates an AgileForm for serial, or sequential, approvals. This form appears as an activity in the identified participants' Task List.

In a serial approval model, the task cannot move forward until a defined set of participants submits an approval in a specified order. (For approvals that do not require a particular approval sequence, use the AgileForm Parallel AgileShape.) You can define the set of approvers and number of required approvers. All approvers for the AgileForm Serial AgileShape use the same approval form.

For detailed information regarding AgileForms, see the AgileForms Online Help.



**Note:** The default value of the Work To Perform property for this activity is **FormRender**. Do not change this value.

### Properties for This AgilePart

Field Name	Definition
Approvers	<p>Default value: \$Approvers</p> <p>This property specifies the name of the custom attribute that (initially) contains the user names of the approvers. The user names should be separated by a semicolon. Each time this AgileShape is entered at runtime, the AgileShape will assign a task to the first username specified by this property. Then the custom attribute associated with this property will be modified to remove the username so that the next username will be assigned the task during the next iteration through the loop.</p> <p> <b>Note:</b> The value of this property must be the name of a custom attribute. The value of the custom attribute must be initialized elsewhere using an Update Custom Attributes AgileShape.</p>
LoopCondition	<p>Default value: \$HasMoreApprover</p> <p>This property specifies the name of the custom attribute that will be updated each time the AgileShape is exited to indicate whether more Approvers are still waiting to be assigned the task. The value of the specified custom attribute should be checked (using a SingleCondition AgileShape within the loop) to determine whether the loop should be exited or not.</p>

Field Name	Definition
	 <b>Note:</b> The value of this property must be the name of a custom attribute. The value of the custom attribute must be initialized elsewhere using an Update Custom Attributes AgileShape.
Configuration	<p>This property allows the process modeler to configure the participants for the approval task.</p> <p>Click the Ellipses button to open the configuration dialog.</p>
Edit Form	<p>Opens the AgileForms form editor, which edits the form. For detailed information about editing forms in AgileForms, see the AgileForms online help.</p>
Export Form	<p>Saves the form as an AgileForms XML form file.</p>
Import Form	<p>Imports an AgileForms XML form file, and replaces the form for this activity with the imported one. All fields from the imported form are added to the form library for the current process.</p>
Preview Form	<p>Opens the AgileForms preview window, where you can preview the form.</p>
ReportView	<p>Default value: False</p> <p>Specifies whether an AgileForms AgileShape will be used in Report View.</p> <p>This property can be set to the following values:</p> <ul style="list-style-type: none"> <li>● <b>True</b> - The AgileShape will serve as the Report View form.</li> </ul> <p>Only one AgileShape can have this value in a single process model.</p> <ul style="list-style-type: none"> <li>● <b>False</b> - The AgileShape will not serve as the Report View form.</li> </ul> <p>If all AgileForms AgileShapes in a process model are set to False, the AgileForm for the Submit step is used for the Report View, as if it were set to True.</p>
SaveOptionField	<p><u>Function:</u></p> <p>A field that enables the process participant to save an AgileForm, rather than submitting it, at runtime.</p> <p><u>Accepted Values:</u></p> <p>A schema node.</p> <p><u>Default Value:</u></p>

Field Name	Definition
	<p>None</p> <p><u>Accepts Variables:</u></p> <p>No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>• Yes/No</li> <li>• Text</li> <li>• Select One, with the values "Save" and "Do not Save".</li> </ul>
SaveOptionText	<p><u>Function:</u></p> <p>Specifies the label of the SaveOptionField.</p> <p><u>Accepted Values:</u></p> <p>A text string.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Accepts Variables:</u></p> <p>No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• Save</li> </ul>
SubmitStep	<p>Default value: False</p> <p>This property should be set to 'True' if the Form is used as the Submit step (i.e. the first step where you are creating the list item).</p> <p> <b>Note:</b> If you have set a custom field as required in a SharePoint list, it must be editable on the Submit step, otherwise SharePoint throws an exception.</p> <p> <b>Note:</b> If you have set a field to be of type Multiple lines of text, the field cannot be set as Read Only.</p>
Transfer Form	<p>Transfers a form from one AgileForm AgileShape to another within a process. If you transfer a form to an AgileShape the current form is overwritten with the one that is transferred.</p>
Edit Library	<p>Opens the AgileForms form library editor.</p>

Field Name	Definition
	Each field you add to an AgileForm is added to the form library for the process. The fields in a form library are available for use for to all forms within a process.
Export Library	Saves the form as an AgileForms XML form library file.
Import Library	Imports an AgileForms XML form library file.   <b>Note:</b> If you import a form library, the current form library will be overwritten with the imported form library. If you want to add form fields to an existing form library, AgilePoint recommends importing a form, instead of a form library.

### AgileWork Properties

This AgileWork inherits the properties of the AgileWork AgileShape. For a list of these properties, see [AgileWork - Common Setup](#). Note that only the relevant properties are available in AgilePoint Envision. Unneeded properties are hidden.

## AgileForm Parallel

Generates an AgileForm for parallel (non-sequential) approvals. This form appears as an activity in the identified participants' Task List.

In a parallel approval model, the task cannot move forward until a defined set of participants submits an approval. However, the approvers need not approve in any particular order. (For approvals that require a particular sequence, use the AgileForm Serial AgileShape.) Each approver must be defined as an individual participant, using either an ID or a custom attribute. Each participant can also use a unique AgileForm.

For detailed information regarding AgileForms, see the AgileForms Online Help.

 **Note:** The default value of the Work To Perform property for this activity is **FormRender**. Do not change this value.

### Properties for This AgilePart

Field Name	Definition
Configuration	Opens the <a href="#">AgileForm Parallel Configuration Window</a> , where you can configure an AgileForm Parallel approval.
Edit Library	Opens the AgileForms form library editor.  Each field you add to an AgileForm is added to the form library for the process. The fields in a form library are available for use for to all forms within a process.
Export Library	Saves the form as an AgileForms XML form library file.

Field Name	Definition
Import Library	<p>Imports an AgileForms XML form library file.</p> <p> <b>Note:</b> If you import a form library, the current form library will be overwritten with the imported form library. If you want to add form fields to an existing form library, AgilePoint recommends importing a form, instead of a form library.</p>
SaveOptionField	<p><u>Function:</u></p> <p>A field that enables the process participant to save an AgileForm, rather than submitting it, at runtime.</p> <p><u>Accepted Values:</u></p> <p>A schema node.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Accepts Variables:</u></p> <p>No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>• Yes/No</li> <li>• Text</li> <li>• Select One, with the values "Save" and "Do not Save".</li> </ul>
SaveOptionText	<p><u>Function:</u></p> <p>Specifies the label of the SaveOptionField.</p> <p><u>Accepted Values:</u></p> <p>A text string.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Accepts Variables:</u></p> <p>No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• Save</li> </ul>

## AgileWork Properties

This AgileWork inherits the properties of the AgileWork AgileShape. For a list of these properties, see [AgileWork - Common Setup](#). Note that only the relevant properties are available in AgilePoint Envision. Unneeded properties are hidden.

## AgileForm Parallel Configuration Window

This property allows the process modeler to configure the participants for the approval task and the form each participant sees.

1. Click the **Ellipses** button to open the configuration dialog.
2. On the **Dynamic Parallel Configuration** dialog box, click **Add**, or select a participant and click **Edit**.
3. Add a participant in the **Participant** field. You must use a single participant (as opposed to a role or group), but you can use a custom attribute to identify the participant.
4. Define the form for the approval using the following buttons on this dialog box.

Field Definitions

Field Name	Definition
Edit	Opens the AgileForms form editor, which enables you to edit the form. For detailed information about editing forms in AgileForms, see the AgileForms online help.
Preview	Opens the AgileForms preview window, where you can preview the form.
Export	Saves the form as an AgileForms XML form file.
Import	Imports an AgileForms XML form file, and replaces the form for this activity with the imported one. All fields from the imported form are added to the form library for the current process.
Transfer	Transfers a form from one AgileForm AgileShape to another within a process. If you transfer a form to an AgileShape the current form is overwritten with the one that is transferred.

## AgileForm Dynamic Group

This AgileShape can be used as similar to the Manual AgileShape, however it facilitates dynamic group functionality. When users are added/removed from a group, the change is persisted at runtime.

### Properties for This AgilePart

Field Name	Definition
Group/Role	Default value: AgilePointGroup Specifies whether an AgilePoint Group or an AgilePoint Role will be used to perform the work.

Field Name	Definition
Group/RoleName	Specifies the name of the AgilePoint group or AgilePoint role that will be used to perform the work.
ReportView	<p>Default value: False</p> <p>Specifies whether an AgileForms AgileShape will be used in Report View.</p> <p>This property can be set to the following values:</p> <ul style="list-style-type: none"> <li>● <b>True</b> - The AgileShape will serve as the Report View form. Only one AgileShape can have this value in a single process model.</li> <li>● <b>False</b> - The AgileShape will not serve as the Report View form. If all AgileForms AgileShapes in a process model are set to False, the AgileForm for the Submit step is used for the Report View, as if it were set to True.</li> </ul>
SaveOptionField	<p><u>Function:</u> A field that enables the process participant to save an AgileForm, rather than submitting it, at runtime.</p> <p><u>Accepted Values:</u> A schema node.</p> <p><u>Default Value:</u> None</p> <p><u>Accepts Variables:</u> No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>● Yes/No</li> <li>● Text</li> <li>● Select One, with the values "Save" and "Do not Save".</li> </ul>
SaveOptionText	<p><u>Function:</u> Specifies the label of the SaveOptionField.</p> <p><u>Accepted Values:</u> A text string.</p> <p><u>Default Value:</u> None</p>

Field Name	Definition
	<p><u>Accepts Variables:</u></p> <p>No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• Save</li> </ul>
SubmitStep	<p>Default value: False</p> <p>This property should be set to 'True' if the Form is used as the Submit step (i.e. the first step where you are creating the list item).</p> <p> <b>Note:</b> If you have set a custom field as required in a SharePoint list, it must be editable on the Submit step, otherwise SharePoint throws an exception.</p> <p> <b>Note:</b> If you have set a field to be of type Multiple lines of text, the field cannot be set as Read Only.</p>

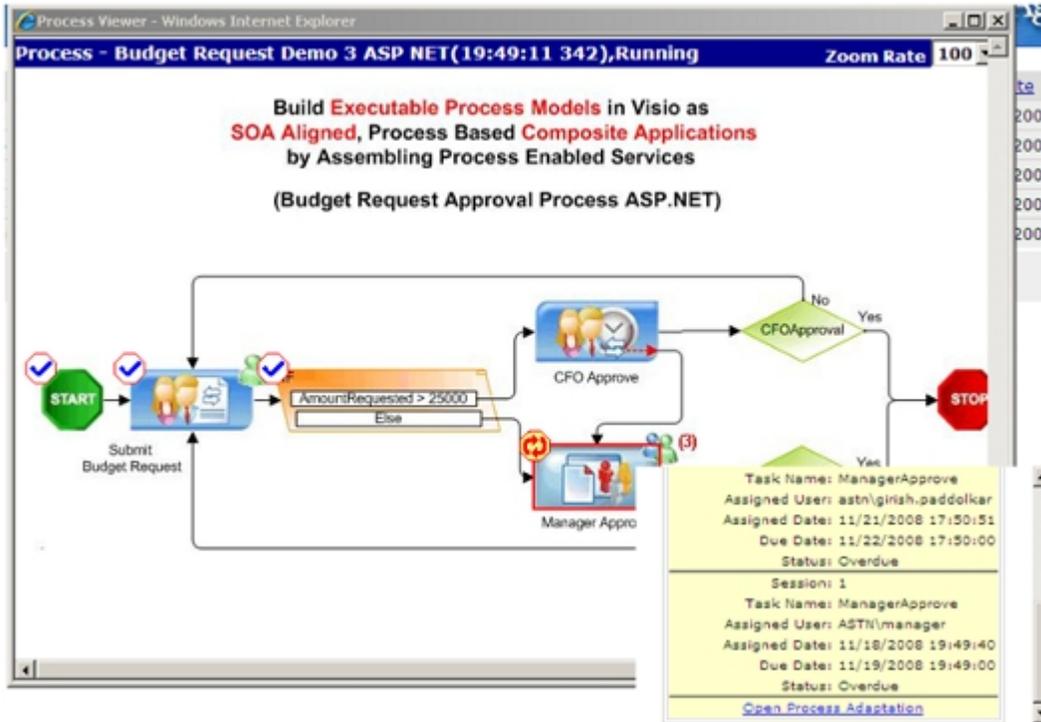
### AgileWork Properties

This AgileWork inherits the properties of the AgileWork AgileShape. For a list of these properties, see [AgileWork - Common Setup](#). Note that only the relevant properties are available in AgilePoint Envision. Unneeded properties are hidden.

## AgileForm Process Adaptation

This AgileShape is a combination of the Dynamic Parallel, Dynamic Sequential, and Voting AgileWork. It allows for a running process instance to adapt by adding a new participant to complete a task in either a Parallel or Sequential fashion at runtime to support dynamic processes. Manageability at runtime is accomplished either through the AgilePoint Enterprise Manager or the Process Viewer.

-  **Note:** A user must have **Create a Task** and **Cancel a Task** access rights in AgilePoint Enterprise Manager in order to see the Process Adaptation functionality in AgilePoint Enterprise Manager.
-  **Note:** A modification to the Process Viewer web.config file is required in order to see the Process Adaptation functionality in the Process Viewer.



To enable the **Open Process Adaptation** link in the Process Viewer, make the following modification to the AgilePoint Web application's web.config file:

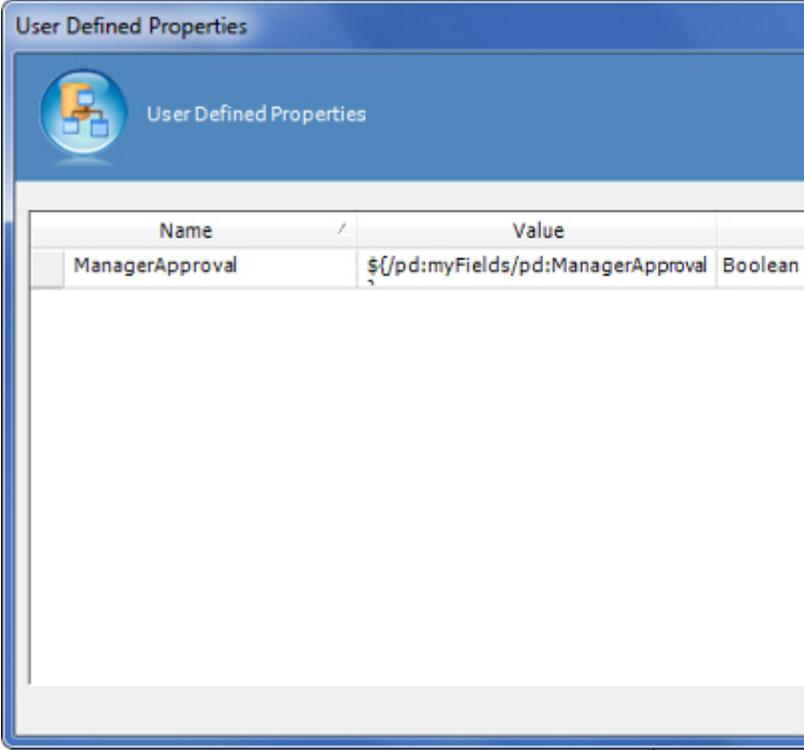
```
<appSettings>
  <add key="ProcessAdaptationUrl"
    value="http://[AgilePoint Server host]:[port]/EnterpriseManager/
    ProcessAdaptation/LinkedTasks.aspx"/>
</appSettings>
```

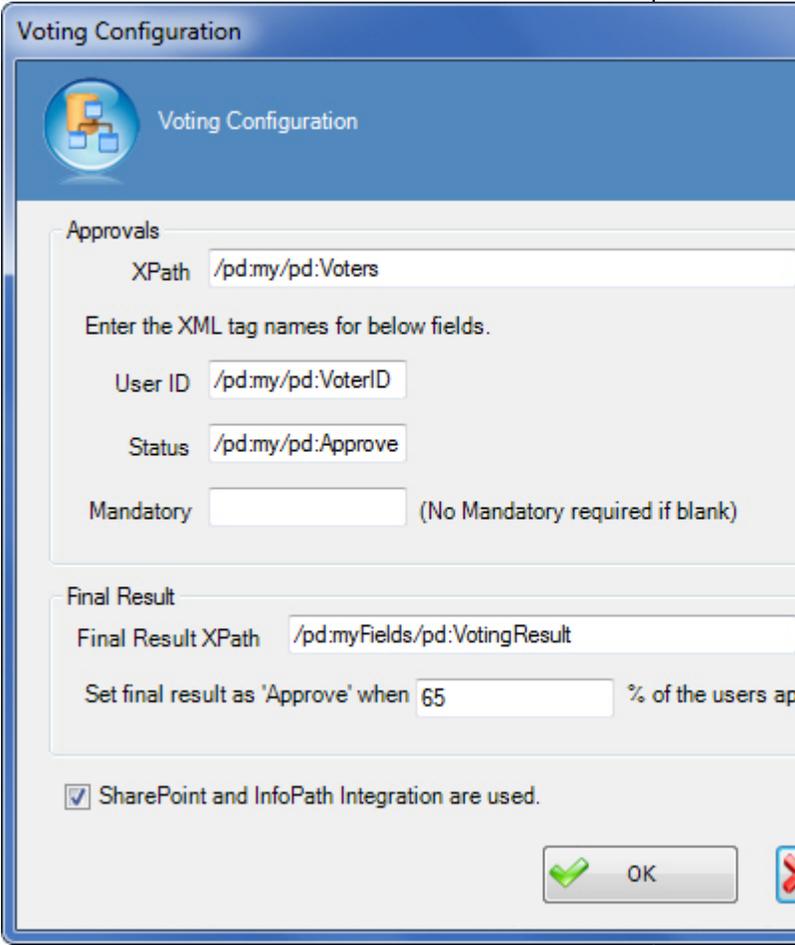
The value for the Process Adaptation is the URL of the process adaptation URL in AgilePoint Enterprise Manager.

For the Process Viewer in SharePoint using AgileForms, add the key entry into the SharePoint web.config at C:\inetpub\wwwroot\wss\VirtualDirectories\8000\web.config.

**Properties for This AgilePart**

Field Name	Definition
UserDefinedProperties	<p><b>Note:</b> Developers may need to write code to fully implement this.</p> <p>This property allows the process modeler to configure initial ClientData values that will be associated with the AgileShape's associated task(s) at runtime. This is basically a way of allowing you to specify a set of name/value pairs that are passed to your Web page via an object called a WorkItem. This is an alternative to passing data via URL parameters. In your Web page you can retrieve this data via the ClientData property of the WorkItem. It is then up to you to decide how to use the data.</p>

Field Name	Definition
	<p>Click the <b>Ellipses</b> button to open the configuration dialog.</p> 
Voting Configuration	<p>This property allows the process modeler to configure data binding to the data schema within a repeating table for which to establish the approval data.</p> <p>The "Mandatory" option provides an added level of functionality, requiring any participants that have been identified as "Mandatory" to approve, or the final decision will be not-approved. The final result is also configured here by setting a custom attribute to store the final result and specifying the percentage of participants that will need to approve before the final decision is considered as approved. For example, the process designer specifies the voting percentage as 60%. If 60% of the approvers approve the preceding request, then the final decision is considered as approved.</p> <p>Click the <b>Ellipses</b> button to open the configuration dialog.</p>

Field Name	Definition
	
ApprovalType	<p>The property can be set to Sequential or Parallel at design time. This property determines a runtime whether the task will be delivered in a sequential or parallel fashion to the participants of the task. This can be changed at runtime via AgilePoint Enterprise Manager or the Process Viewer.</p> <p>Sequential means that the task will be delivered in a sequential fashion to 1 participant at a time.</p> <p>Parallel means that all the tasks will be delivered to each of the participants at the same time, there is no particular order for which the task is assigned to the participants.</p>
UpdateCustomAttribute	<p>This property allows the process modeler to configure an update to a custom attribute value based on an event type.</p>
SubmitStep	<p>Default value: False</p>

Field Name	Definition
	<p>This property should be set to 'True' if the Form is used as the Submit step (i.e. the first step where you are creating the list item).</p> <p> <b>Note:</b> If you have set a custom field as required in a SharePoint list, it must be editable on the Submit step, otherwise SharePoint throws an exception.</p> <p> <b>Note:</b> If you have set a field to be of type Multiple lines of text, the field cannot be set as Read Only.</p>
SaveOptionField	<p><u>Function:</u></p> <p>A field that enables the process participant to save an AgileForm, rather than submitting it, at runtime.</p> <p><u>Accepted Values:</u></p> <p>A schema node.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Accepts Variables:</u></p> <p>No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>• Yes/No</li> <li>• Text</li> <li>• Select One, with the values "Save" and "Do not Save".</li> </ul>
SaveOptionText	<p><u>Function:</u></p> <p>Specifies the label of the SaveOptionField.</p> <p><u>Accepted Values:</u></p> <p>A text string.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Accepts Variables:</u></p> <p>No</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>• Yes</li> </ul>

Field Name	Definition
	<ul style="list-style-type: none"><li>• Save</li></ul>

### AgileWork Properties

This AgileWork inherits the properties of the AgileWork AgileShape. For a list of these properties, see [AgileWork - Common Setup](#). Note that only the relevant properties are available in AgilePoint Envision. Unneeded properties are hidden.

## Creating Repeating Tables in AgileForms

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For information about creating repeating tables using AgileForms output, see the following AgilePoint KB article:

## Data Security in AgileForms

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This section provides information about setting up data security options in AgileForms.

### Configuration Windows

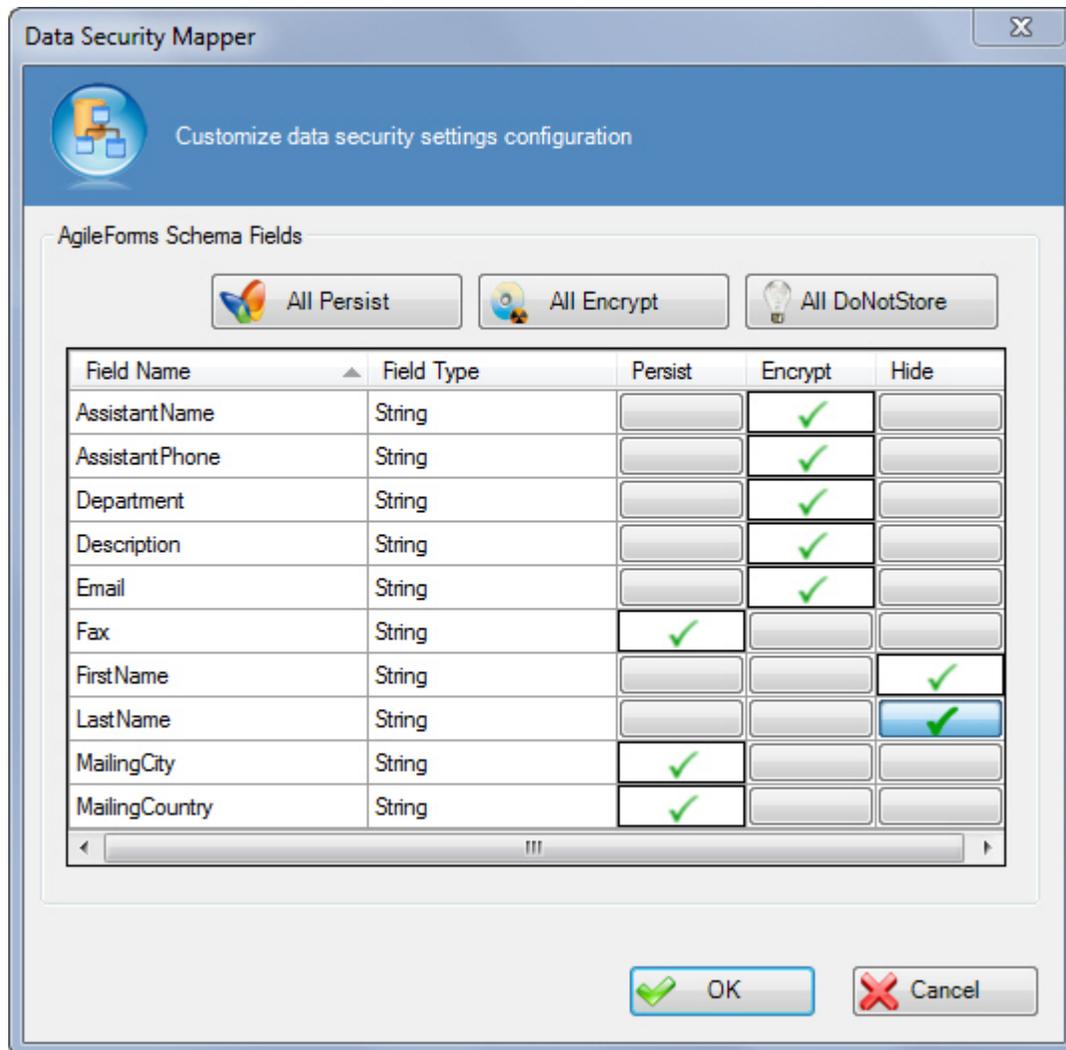
The following topics provide details about the configuration windows for this AgileForms.

#### Data Security Mapper Window

Specifies the AgileForms field level data security options. You can select the following:

- Store your data in encrypted format to the AgilePoint schema or database.
- Choose not to store data to the AgilePoint database. This is useful, for example, if users do not want to store personal or financial data on the system.

By default, AgileForms field data is sent as plain text in XML.



## How to Start

1. In AgilePoint Envision, open an AgileForms process model.
2. In the **Process Model Properties** pane, click **Manage Data Security**.

## Fields

Field Name	Definition
All Persist	<u>Function:</u> Select all schema fields' values to be persisted.
All Encrypt	<u>Function:</u> Select all schema fields' values to be encrypted.

Field Name	Definition
All DoNotStore	<p><u>Function:</u></p> <p>Select all schema fields' values not be stored.</p>
Field list	<p><u>Function:</u></p> <p>Specifies the data security option for the field.</p> <p><u>Accepted Values:</u></p> <ul style="list-style-type: none"> <li>• <b>Persist</b> - The field value is stored in the schema in the format it is displayed on the form, usually in plain text. This is the default option, and effectively provides no added security.</li> <li>• <b>Encrypt</b> - Puts the field data in the AgilePoint schema in the encrypted data format. When the user opens the next task, the encrypted value is decrypted and the unencrypted value shows to the user.</li> </ul> <p>For more information, refer to <a href="#">How Do I Apply a Custom Encryption Algorithm to AgileForms Data?</a>.</p> <ul style="list-style-type: none"> <li>• <b>Hide</b> - Bypasses the AgilePoint schema, so the data is not stored directly in the process instance XML. If you want the data to appear in the next form, you must use AgileForms to set up a lookup in the external system.</li> </ul> <p><u>Default Value:</u></p> <p>Persist</p> <p><u>Accepts Variables:</u></p> <p>No</p>

## Instructions

The following topics provide instructions for using and configuring this AgileForms.

### Setting up Data Security for Your AgileForms Process

To set up field level data security for your AgileForms, do the procedure in this topic.

### Prerequisites

- A functional AgileForms process model.

### How to Start

1. In AgilePoint Envision, open an AgileForms process model.
2. In the **Process Model Properties** pane, click **Manage Data Security**.

## Procedure

1. On the **Data Security Mapper** window, select the data security option for each field as appropriate for your system:

Field Name	Definition
Field list	<p><u>Function:</u></p> <p>Specifies the data security option for the field.</p> <p><u>Accepted Values:</u></p> <ul style="list-style-type: none"> <li>• <b>Persist</b> - The field value is stored in the schema in the format it is displayed on the form, usually in plain text. This is the default option, and effectively provides no added security.</li> <li>• <b>Encrypt</b> - Puts the field data in the AgilePoint schema in the encrypted data format. When the user opens the next task, the encrypted value is decrypted and the unencrypted value shows to the user.</li> </ul> <p>For more information, refer to <a href="#">How Do I Apply a Custom Encryption Algorithm to AgileForms Data?</a>.</p> <ul style="list-style-type: none"> <li>• <b>Hide</b> - Bypasses the AgilePoint schema, so the data is not stored directly in the process instance XML. If you want the data to appear in the next form, you must use AgileForms to set up a lookup in the external system.</li> </ul> <p><u>Default Value:</u></p> <p>Persist</p> <p><u>Accepts Variables:</u></p> <p>No</p>

## AgileForms Process Initiator Web Part

AgileForms comes with an add-on that enables you to initiate processes from SharePoint.



**Note:** To use this Web Part, you must have the AgileForms and AgileForms SharePoint Integration add-on applications installed.

### AgileForms Process Initiator

HR Process  
Budget Request

A SharePoint user can initiate an AgileForms process (any process where the Application property in the process template is set to AgileForms) by clicking the process name in the AgileForms Process Initiator Web Part.

By default, all processes where the Application property in the process template is set to AgileForms are displayed in the Web Part. You can change which processes display, as well as their display names by modifying the Shared Web Part (as shown below).

## AgileForms Report View

You can view the current data in an AgileForms process instance using the Report View feature. Report View populates an AgileForm you specify with the current data from the process instance.

There are two ways to access the AgileForms report view:

- SharePoint Process Instance List Web Part
- Direct URL

## Setting Up a Process to Use AgileForms Report View

To set up a process to use AgileForms Report View, do the procedure in this topic.

### Prerequisites

- AgileForms is installed in your environment.
- An AgileForms process model created in AgilePoint Envision.

### How to Start

1. In AgilePoint Envision, open an AgileForms process model.

### Procedure



**Note:** This procedure is optional. If you do not set up an AgileShape for the Report View, the form for the Submit step will be used by default.

1. In your AgileForms process model, add an AgileShape from the AgileForms Stencil.

This AgileForm will serve as a template for the Report View. When participants access the Report View, they will see this AgileForm populated with the most current data from the process instance.

For more information, refer to [AgileForms Stencil](#) in the [Documentation Library](#). Note that it is not possible to use the AgileForm Parallel activity for the Report View.

2. Select the AgileShape you want to use for the Report View.
3. In the AgileShape properties, set value of the following property to **True**.

Field Name	Definition
ReportView	Default value: False Specifies whether an AgileForms AgileShape will be used in Report View.

Field Name	Definition
	<p>This property can be set to the following values:</p> <ul style="list-style-type: none"> <li>• <b>True</b> - The AgileShape will serve as the Report View form. Only one AgileShape can have this value in a single process model.</li> <li>• <b>False</b> - The AgileShape will not serve as the Report View form. If all AgileForms AgileShapes in a process model are set to False, the AgileForm for the Submit step is used for the Report View, as if it were set to True.</li> </ul>

## Opening AgileForms Report View Using SharePoint

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To open AgileForms Report View in SharePoint, do the procedure in this topic.

### Prerequisites

- AgileForms is installed in your environment.
- AgilePoint SharePoint Integration v2 is installed in your environment.
- Configure the Process Instance List Web Part so that for the user has access to the desired process instances.

For more information, refer to [Configuring the Process Instance List Web Part](#) in the [Documentation Library](#).

### How to Start

1. In SharePoint, navigate to the Process Instance List Web Part.

### Procedure

1. On the **Process Instance List Web Part**, expand the **Process Name** list for the process instance you want, and click **Report View**.

## Creating a URL to open AgileForms Report View

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To open AgileForms Report View from a URL, do the procedure in this topic.

### Prerequisites

- AgileForms is installed in your environment.
- A way to gather the process instance ID for the process you want — for example, the following process attribute:

Field Name	Definition
ProcessInstanceID	The unique ID of a process instance.  <b>Common Usage:</b> Can be used in the body of an email template to provide the Administrator user with the identification code assigned to the process instance.

## Procedure

1. Create a URL in the following format:

```
http://[AgileForms Server]:[port]/FormRender.aspx?PID=[process instance ID]&ReportView=Yes
```

2. Publish the URL to the appropriate users, such as through a web page or email.

## Hosting File Attachments on SharePoint

File attachments in AgileForms are limited to 5 MB. This feature enables you to use SharePoint to host file attachments, and then display the attachments in an AgileForm as a hyperlink to a SharePoint document library. This enables you to have larger file attachments, and to attach documents to AgileForms that are managed in SharePoint.

### Prerequisites

- AgileForms SharePoint Integration installed.
- AgileForms Back Office Connector installed.
- A SharePoint document library you want to use for AgileForms attachments.

### How to Start

1. In AgilePoint Envision, open an AgileForms process model.
2. In your AgileForms process model, add an AgileShape from the AgileForms Stencil.
3. Select the AgileForms AgileShape.
4. If the Properties pane is not displayed, click **Show Properties**.
5. On the AgileForm Properties, in the **Edit Form** field, click the **Ellipses** button.
6. Log on to AgilePoint Server.

### Procedure

1. On the AgileForms Designer, complete these fields:

Field Name	Value
Type	User Upload

Field Name	Value
Name	The field name of your choice

- Click **Add**.
- Configure the properties of the User Upload control as desired.
- On the AgileForms Designer, click the **Integration** tab.
- Complete these fields:

Field Name	Value
Type	SharePoint Document Library
Name	A name of your choice for the integration
Status	Pre-Submission

- Click **Add**.
- On the **SharePoint Fields Wizard** select the following:

Field Name	Value
Select the SharePoint Server, and press "Get Webs" to retrieve the Webs available	The SharePoint server that hosts the document library where you want to store your AgileForms file attachments.

- Click **Get Webs**.
- On the **SharePoint Fields Wizard** select the following:

Field Name	Value
Select the SharePoint Web, and press "Get Document Libraries" to retrieve the Document Libraries available	The sub-site that hosts the document library where you want to store your AgileForms file attachments. If there is no sub-site, enter a forward slash (/).

- Click **Get Document Libraries**.
- On the **SharePoint Fields Wizard** select the following:

Field Name	Value
Select the required Document Library, and press "Get Library Columns" to retrieve the Library Columns available	The document library where you want to store your AgileForms file attachments.

- Click **Get Library Columns**.
- On the **SharePoint Fields Wizard** select the following:

Field Name	Value
SharePoint list columns	<p>Select any columns you want to associate with data from fields in your form.</p> <p>Note the following:</p> <ul style="list-style-type: none"> <li>• These are additional metadata columns to support the form attachments. These columns do not affect your attachment or the links to your attachment</li> <li>• For any columns you add, you must associate a form field using a Form Field Token.</li> </ul>

14. Click **Select Library Columns**.

15. On the **SharePoint Document Library Integration for New Form** page, complete these fields:

Field Name	Value
Document Name	<p>Specifies a prefix that will be appended to the attachment file name at runtime.</p> <p>Optionally, you can enter <b>{{Data Name for User Upload control}}</b> to use only the file name.</p> <p>Example: {MyUploadField}</p> <p>Do not leave this field blank.</p>
Document	Select <b>User Upload</b> , and click <b>Select</b> .
Field Token	<p>Enter a value in the following format:</p> <p><b>{{Data Name for User Upload control}:File}</b></p> <p>Example: {MyUploadField:File}</p>
Replace file with link?	Select to specify that the file attachment in the form will be replaced with a hyperlink.
Link Base URL	<p>Specifies the base URL for document links.</p> <p>In other words, the URL in the form is [base URL]/ [file name].</p>

16. Associate library columns with form fields as required. You must map form fields to the SharePoint columns that are required in your document library.

Field Name	Value
Library Column	Specifies the column name to which you want to populate form data.

Field Name	Value
Form Field Token	The Data Name from a field in your form. Enter a value in the following format: <b>([Field Data Name])</b> Example: (MyField)
Delete	For any columns you add, you must associate a form field using a Form Field Token. If you do not want to associate a library column with a form field, click <b>Delete</b> to remove the column from the list. If you do not delete unused columns, errors will occur.

17. Click **Add**.
18. Click **Save Form**.