



AgilePoint Server Administrator's Guide

AgilePoint BPMS v5.0 R2 SP1

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Preface

Disclaimer of Warranty

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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

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

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

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

To open the AgilePoint Documentation Library, do the following.

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

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

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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Contacting Customer Support

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

AgilePoint Server

AgilePoint Server is the server-side software engine that runs your AgilePoint-based processes. AgilePoint Server interprets the XML schema associated with a process and programmatically executes the appropriate actions. AgilePoint Server's SOA-based software model is what enables you to create and run processes without writing software code.

This document is a user's guide and reference to the features, functionality, usage, configuration, and administration of the AgilePoint Server component of the AgilePoint BPMS Suite.

Deploying an AgilePart to AgilePoint Server

To deploy an AgilePart to AgilePoint Server, use the AgilePoint Deployment Wizard utility. For more information, refer to [AgilePart Deployment Wizard Utility](#) in the [Documentation Library](#).

Restarting AgilePoint Server in Windows Service Mode

To restart AgilePoint Server running in Windows Service mode, do the following.

Prerequisites

- Microsoft Windows PowerShell is installed on your machine.

Navigation

1. Open the Windows PowerShell utility.

Instructions

1. At the PowerShell command prompt, enter the following commands, as appropriate for your system:
 - a. If you are using AgilePoint Clustering Server Manager (NLB environment), enter the following:

```
Restart-Service [Cluster Server Manager service name]
```
 - b. To restart AgilePoint Server, enter the following:

```
Restart-Service [AgilePoint Server Manager service name]
```



Note: In an NLB environment, AgilePoint recommends restarting the servers on different days to maintain system availability. If you restart them on the same day, it is possible to experience system downtime.

Scheduling an AgilePoint Server Restart in Windows Service Mode

To restart AgilePoint Server running in Windows Service mode based on a schedule, do the following.

Prerequisites

- Microsoft Windows PowerShell is installed on your machine.

Navigation

1. Open Notepad.

Instructions

1. In NotePad, create a new file with the following command, and save it as a PowerShell script file with a name such as **apserverrestart.ps1**:

```
Restart-Service [AgilePoint Server Manager service name]
```

If you have multiple AgilePoint Server service instances, create a separate script file for each instance.

2. If you have an NLB environment, in NotePad, create a new file with the following command, and save it as a PowerShell script file with a name such as **csmrestart.ps1**:

```
Restart-Service [Cluster Server Manager service name]
```

3. In Notepad, create a new file with the following command, and save it as a batch file with a name such as **apserverrestart.bat**:

```
PowerShell -command "& '[path]\apserverrestart.ps1' "
```

If you have multiple AgilePoint Server service instances, create a separate script file for each instance.

4. If you have an NLB environment, in Notepad, create a new file with the following command, and save it as a batch file with a name such as **csmrestart.bat**:

```
PowerShell -command "& '[path]\csmrestart.ps1' "
```

5. Use Windows Scheduler to execute the batch files according to the schedule you want.



Note: In an NLB environment, AgilePoint recommends restarting the servers on different days to maintain system availability. If you restart them on the same day, it is possible to experience system downtime.

Safely Stopping AgilePoint Server in IIS Mode

To stop (or shut down) AgilePoint Server in IIS mode safely (i.e. without risking any data loss for requests currently being processed), please use the following instructions.

Whenever you are performing maintenance on a resource required to run AgilePoint Server (e.g. taking the workflow DB offline, upgrading AgilePoint Server, etc.), it is recommended that you first stop AgilePoint Server. This will prevent possible problems, such as: data loss; email notification errors; etc.

1. (Optional) If you are using the AgilePoint Server Monitor windows service, it is recommended that you stop the service while AgilePoint Server is unavailable.
2. Open the IIS management console.
3. Under your server's Application Pools node, select the application pool associated with your AgilePoint Server application.
4. Stop the application pool (e.g. by right-clicking and choosing **Stop**).
You can also choose Recycle if you want the AgilePoint Server application to be available again immediately.
5. When you are ready, start the application pool to make the AgilePoint Server application available again.

Configuration Settings

This section describes additional AgilePoint Server Configuration Settings that can be implemented via AgilePoint Server's configuration file (i.e. `netflow.cfg`). This file is located in the [\[AgilePoint Server installation folder\]](#). These additional configuration options are done manually, as currently there is not a user interface to support them.

Configuring an SMTP Account

By default, AgilePoint Server uses anonymous SMTP. To configure your SMTP server to require authentication, do the following.

How to Start

1. In a text editor, open the AgilePoint Server configuration file `netflow.cfg` from the following location:

```
[AgilePoint Server installation folder]\netflow.cfg
```

Procedure

1. In `netflow.cfg` in the `notification` node, enter the email address and password in the `smtpService` attribute as follows:

```
<notification
  mode="[true or false]"
  format="[text or html]"
  smtpService="[smtp service assembly name]:[smtp service
    class name]:[email address],[password]"
  mailServer="[SMTP server host name]:[port number]:ssl"
  sender="[sender email address]"
  sysadm="[AgilePoint administrator email address.
    If blank, the system uses the sender email address.]"
  encoding="[encoding format]"
```

Example:

```
<notification
  mode="true"
  format="text"
  smtpService="Builtin:username@sbcglobal.net,mypassword"
  mailServer="smtp.sbcglobal.yahoo.com"
  sender="apnotifier@mycompany.com"
  sysadm="adminuser@mycompany.com"
  encoding="utf-8"
```



Note: It is not required to add the user name/password to AgilePoint as a registered user.

Implementing a Custom Email Notification Delivery Module

By default, AgilePoint uses System.Web.Mail for the Email Delivery Module. However, System.Web.Mail sometimes may not work as well with some SMTP servers. AgilePoint provides the flexibility to allow you to plug-in your own email delivery module or use a third-party component for the email delivery.

To plug-in your own mail delivery module:

1. First, implement the interface IWFSMTPService:

```
public interface IWFSMTPService
{
    void Authenticate(String smtpServer, String authenticateString);
    void Send(
        String mailDeliverableID,
        System.Text.Encoding encoding,
        Constants.MailFormat format,
        Constants.MailPriority priority,
        String sender,
        String to,
        String cc,
        String subject,
        String body,
        String attachments);
}
```

2. Add your assembly and class information into the AgilePoint Server configuration file (netflow.cfg). For example:

```
<configuration>
    .. ..
    <notification mode="true"
    smtpService="EasyMailForSMTP:CustomSMTP.EasyMailForSMTPService:"
    .. ..
```

Where **EasyMailForSMTP** is the assembly name and **CustomSMTP.EasyMailForSMTPService** is the class name.

Configuring the AgilePoint Server Thread Pool Size

The **System** tab of the AgilePoint Server Configuration utility provides the user interface to configure the maximum number of threads that AgilePoint will be able to use at runtime while handling workflow requests. When the thread pool is configured via this utility it sets both the Event Capacity (for processing AgileWorks) as well as the Working Capacity (for processing AgileParts). In most cases, the same thread pool size as configured via the utility is sufficient for both the Working Capacity as well as the Event Capacity.

For thread pool sizing, anything between 10-100 should be fine. In most cases, a thread pool size of 10 provides a good balance between concurrent processing and server resource optimization.

The screenshot shows the AgilePoint Server Configuration utility with the following settings:

- System Tab:**
 - Domain: Active Directory
 - System User:
 - Password:
 - Thread Pool Size: (>= 10)
- Notification Tab:**
 - SMTP Server:
 - Email Sender:
 - System User Email:
 - Email Format:

Buttons: OK, Cancel

In some cases, additional tweaking of thread pool sizing may improve performance when heavy CPU usage is apparent for processing AgileParts versus AgileWorks. This finite control over thread pool sizing can be accomplished via the AgilePoint Server Configuration file (i.e., `netflow.cfg`).

As stated above, when using the AgilePoint Server Configuration utility to set the Thread Pool Size, the value entered, sets both the Event Capacity (for processing AgileWorks) as well as the Working Capacity (for processing AgileParts). However, manual customization can be done via the `netflow.cfg` to adjust the Working Capacity for a thread pool without changing the Event Capacity or vice versa. For example, if your CPU is processing a large number of AgileParts rather than AgileWorks, you may want to increase the Working Capacity thread pool size, and leave the Event Capacity as is. Improving AgilePart performance is the key to improving capacity because AgilePart processing can cause a bottleneck.

To modify the `netflow.cfg` file for thread pool optimization, follow these steps.

1. Open the `netflow.cfg` file and locate the server **eventCap** and **workingCap** attributes.
2. Increase the **eventCap** number to increase the available threads for processing AgileWorks or increase the **workingCap** to increase the number of threads for processing AgileParts. The results are viewed via Enterprise Manager on the Performance page.

Thread Pool Sizing Guidelines

When configuring thread pool size, bigger is not always better! More concurrently running threads requires more server resources (e.g. RAM and CPU), so increasing the thread pool size past a certain point could start to decrease performance rather than improve it. In most cases, a thread pool size of 10 provides a good balance between concurrent processing and server resource optimization. Anything between 10-100 should typically be fine for the Thread Pool. Also, it is often just as (if not more) important to configure the IIS App Pool Queue Length Limit appropriately as to fine tune the Thread Pool size.

If all of your process' activities are "short-duration" ones, then you may not need many threads, because the only way that "short-duration" activities alone would typically cause AgilePoint to (simultaneously) utilize the maximum number of threads in the Thread Pool is if a large number of such activities were entered/activated nearly simultaneously. However, if you have a mixture of "long-running" activities and "short-duration" activities, then increasing thread pool sizes may help considerably because "short" activities that start in the "middle" of a long running activity will not have to wait for it to end before being processed. In general, if you analyze a given time period, then increasing either the quantity or the average duration of activities that are active within that time period will increase the likelihood that some of those activities will require concurrent processing (and therefore require a larger Thread Pool size). However, in certain environments, usage patterns may also have a significant affect, and may render some of the above guidelines less (or more) accurate.

In the above context, a "long-running" activity is defined as one that will require server resources for a length of time long enough that it may overlap with other/subsequent activities or processing. Examples of long running activities could include: synchronous AgileParts that require several minutes (or even hours) of processing to complete; Web Service activities with a large timeout value; AgileShapes that interact with (and may have to wait for data from) other servers or systems; etc.

Conversely, a "short-duration" activity is one that will only consume server resources for a brief period. Examples of such activities include: AgileParts that perform minimal processing; Manual activities (or AgileWorks that perform minimal server-side processing); Single- or Multiple-Condition AgileShapes; etc. Note that Manual activities are normally considered to be "short-duration" activities regardless of the activities' time span or due date, because the AgilePoint server's resources are not being used during most of the activities' duration.

Another way to consider the issue is to determine how frequently new processes will be initiated/launched, how long each process takes to complete, and how much of that time is spent on "automatic" activities that are performed by the server. If you have many long-running processes running simultaneously, and each one contains automatic activities that require minutes (rather than seconds or microseconds) to complete, then you are much more likely to have simultaneous workflow processing occurring, which would require more threads for optimal performance.

See below for a list of guidelines that should be helpful in determining a good Thread Pool size for most environments.

Increasing Thread Pool Size

It may help to increase the Thread Pool size if:

- The average server-side processing duration for activities increases.
- The number of activities entered/activated per day increases.
- The number of new process instances per day increases (because this will typically increase the number of activities entered/activated per day).
- The average number of activities per running process instance increases (i.e. if you start deploying much more complicated process models than you were, it increases the likelihood of concurrent processing).
- The average duration (from Start to Complete) of your process instances increases (because this may increase the number of activities entered/activated per day). This is especially true for processes whose duration is determined by the number of times the process instance "loops" back and re-enters an activity earlier in the process model. It may not be relevant for processes whose duration is primarily determined by the durations of the Manual activities in the process.
- Any of your commonly-used processes contain activities that require minutes (or longer) of server-side processing (as described above), as this significantly increases the likelihood of concurrent processing.
- Your environment is prone to intermittent periods of much-higher-than-average load during certain times of day (or week, month, etc.). For example, if your process instances are often started nearly simultaneously (e.g. at the start of the work day or shift, or because of certain events like the upload of a large batch of

files), or you have many activities that "time out" simultaneously (e.g. at the end of the month), then it may make sense to increase the Thread Pool size to take the higher-load periods into account.

- Your server, network, or database is prone to intermittent "slowdowns" (i.e. periods of slower-than-normal processing). E.g. This could be due to scheduled services running in the background at specified times of the day, or could be caused by periods of high server load caused by non-AgilePoint sites or applications (on a non-dedicated server).
- Your server has plenty of memory (i.e. RAM), but not a lot of processing speed (i.e. CPU speed). In other words, activities will take longer to process on a slow machine.

Decreasing Thread Pool Size

It may help to decrease the Thread Pool size if:

- Your server has limited memory (i.e. RAM). Regardless of CPU speed, a server with limited RAM should limit the amount of concurrent processing performed (i.e. threads used) in order to limit memory usage.
- All (or almost all) of your processes use only short-duration activities. In such a scenario, it may be faster for the server to process all activities sequentially (more or less) using a small number of threads, than to concurrently process the same activities. In such a scenario, the server resources required in order to split the server's CPU cycles between multiple threads may actually be (slightly) slower than simply waiting for any activities currently being processed to be completed.
- The opposite of any of the items in the previous list is true. However, note that decreasing the Thread Pool size will rarely result in dramatic performance improvements, so you typically don't need to fine-tune the Thread Pool size below 50.

Configuring the Max Loop

The Max Loop is the number of times a process instance can loop back to the previous step. The maximum number of sessions for an activity is set to **50** by default. Once a process instances loops back the 51st time, the process instance will become suspended.

Procedure

In some cases, you may have a special need to have more than 50 sessions, in this case, open the **netflow.cfg** file in Notepad, and change the value for **maxLoop** to a higher value, and then save the file.

Reset IIS upon making changes to the netflow.cfg file.

You can also set the Maxloop at the process model level to avoid an infinite loop scenario. The process level MaxLoop setting overwrites the global/server level setting in the netflow.cfg file.

There is a Process Template property in AgilePoint Envision called 'Maximum Session Allowed' that allows for the configuration of MaxLoop that will overwrite the global/server level setting in the netflow.cfg file.

Configuring the Swap Out Time

The Swap Out Time configuration option refers to the maximum amount of time a process instance remains in idle before it is swapped out of memory. The maximum swap out time is set to 5 minutes (300 seconds) by default. Increasing the swap out time lets the process stay in memory longer, avoiding the CPU intensive swapping, but keep in mind this may eventually affect capacity. Because swapping consumes a lot of CPU time, it may be beneficial to reduce this number if the CPU is low on memory to improve performance.

To change this setting, open the file `[AgilePoint Server installation folder]netflow.cfg` in Notepad, change the value for `swapoutTime` to a higher/lower value depending on the needs, then save the file. (Any changes to `netflow.cfg` require an IISReset in order to take effect.)

Adjusting the swap out time should only be a temporary workaround solution. If performance is an issue, investing in another CPU, more memory, or a faster hard drive, is a better solution.

Configure Session State Handling

After installing AgilePoint Server and Enterprise Manager, you must configure session state handling. There may be several valid options, depending upon your environment and your organization's requirements.

Value	Description
InProc	This is the default value for ASP.NET. This value is suitable for single-machine AgilePoint Server environments; you cannot use this setting for NLB.
StateServer	This setting can be used in a single-machine or NLB environment to manage the session state using the ASP.NET State Service Windows Service. To use the StateServer setting, the ASP.NET State Service must be running on a separate machine from AgilePoint Server.
SQLServer	In NLB environments, this setting allows the AgilePoint Servers to store their session data on a separate machine in a SQL Server database. If an AgilePoint Server fails, another server in the cluster can take over and serve requests without session data loss.
Off	This setting enables you to turn off the session state for AgilePoint Server. This setting can help to improve performance of AgilePoint Server in NLB environments. You cannot use this session for Enterprise Manager.
Custom	This setting requires custom coding. For more information, contact AgilePoint Support.

If you use Session State handling in an NLB environment, note the following:

- The session must be persisted outside of the current server.
- This session persistence is managed by the .NET Framework, not by AgilePoint. The framework uses the connection string declared in the `web.config` for AgilePoint Server and AgilePoint Enterprise Manager. See [http://msdn2.microsoft.com/en-us/library/87069683\(vs.71\).aspx](http://msdn2.microsoft.com/en-us/library/87069683(vs.71).aspx) to communicate to the database where the session is persisted.

To set up session state handling:

1. Run **InstallSqlState.sql** (installed by default in `[system root]Microsoft.NET\Framework\version`) on the computer running SQL Server that will store the session state (i.e. the db server). This creates a database called `ASPState` with new stored procedures and `ASPStateTempApplications` and `ASPStateTempSessions` tables in the `TempDB` database.
2. Open the **AgilePoint Server** and **AgilePoint Enterprise Manager web.config** files. In the `<sessionState>` node, set the values as required for your environment.

For example, if you are using the **SQLServer** setting, the SQL connection string must point to the session state SQL Server database on the DB server machine that stores the session data:

```
<sessionState mode="SQLServer">
```

```
sqlConnectionString="[your sessionState database connection string]"
cookieless="false"
timeout="20000"
/>
```

If you are using the **Off** setting, no further information is required:

```
<sessionState mode="Off" />
```

Configuring Ascentn.AgilePoint.WCFService.exe.config

The file Ascentn.AgilePoint.WCFService.exe.config provides back-end configuration settings for AgilePoint Server.

Prerequisites

- AgilePoint Server running in Windows Service mode.

How to Start

- On the CSM machine, open the file [\[AgilePoint Server installation folder\]\bin\Ascentn.AgilePoint.WCFService.exe.config](#)

Procedure

- In Ascentn.AgilePoint.WCFService.exe.config, add or modify the following keys as required for your environment.

Field Name	Definition
LicenseActivationCode	<p><u>Definition:</u></p> <p>Specifies the encrypted activation code for the AgilePoint BPMS license. This code is paired with a license key to enable product activation.</p> <p><u>Allowed Values:</u></p> <p>An appSettings key in the following format:</p> <pre><add key="LicenseActivationCode" value="[activation code]" /></pre> <p>This value must be supplied by AgilePoint Sales or Customer Support.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <pre><add key="LicenseActivationCode" value="DFKORhIBxwvSGlo2R03T7AHnlq729JjpNZHYH6ruF8NmiXGctp2wigekli+eNaEzHTKKD51zJJWj17Ejls1OQxGy59eSyKYzlrkV22DtIDSssKCDB6ntTEpfPVLr3"</pre>

Field Name	Definition
	IIsnQ +36ln7tgnb5wwV7yCqkWCPxtsxYlpBgxBDoYcvNr0IYi +NJwvKRAY8wPMwtsy5sFp2h9pNA DPx9HuYfeJwc8eonIR7002MH9mV9k45Hcnyq/ ybs7oEZBzZyyQ8xcBJQgj0qNLtmTZ9mvjJkI7vE ZIS3w/f40JJ6obEy7MJKr7wRUZQmXreubTf/MdF +udsZjTVg9hjEhU4fiVQNwkVNTa2iP4OdmCvH IOBUVr4d8nhOtJiR6KBhTdr6FLBW2dk8rC +eSJJceUt9wF2kflGwSzUzl8P2rAvHNPQopCb3eeiA sFLqng92o6JjLdFs7k1xXrTNSIA05gcwOrTQPs +7n1qkU619EGvijSvFBbwLNtFMoD6PQ+5EXSsz V8MuSXnSvrbAaJnh5MdRRL1COilFXmOzMOZ1+ +jFnV3IL6TcOka5th2sDk +CnszRxL8iARJyUzdM 0jQkDKCibk7Bm6hMm +EQcBGM7ntN5efslPNkz0aOGKNH/ qkdwL24tFxOI0wdoW0I6FazCY6Zf4IO gaGrWSWgTwuwUwbRI2LQnVyb/ ue+WqeB047nJY1sFV/LRfLmx1c/ SoWKzzGlmJr9NsRpnrHVH/eR ptoSjK5DX00QjEZF78ojlCuPu/D0kk98v +hCOekwtF0oXaeEaaHWBsgi7xUgpSbLDnUbbt3F16dA vrK/cDUKNdNZg06Ve +OB80eUzS9dJBEh/7QS1QgJSZ5bYS95Vx/ HLEPUfFqEkNFnpRAoLYmlChnj xvA5ffZItVt +P6BjXKIBS7staCplIBwO6DkXXpY993mh6vGG7mHyn1JjA0TP BQSilwdMffnG6yWBZXHGsj5cXpfBxn+HP0/ RpUKtVzjd2olq4myzSEB8fFWMaoPXGMrH6MHzKRIC lZjoAzZs3rKqmx +ZaG9qkvDUnczuyZqiLe7PpljXy3q5FftKvWsEQ9pfN0Z7fnMZL +QHpfLj0k lvsol/ gBmFbjgfdJ8SfOiZYbgifCXFiyYzPXJg +rppP2lhINSNPWpBFplwS0ntPCwKpqhQ7NLDMA ZbTnBus+OnEatxfvAVYtAJYGfT/ qRhqDFAjGqNJxuysy/ X9wmbx1XwL5ERZmRBES5j8Od9FIY2gB yRK2hS2Cu+8RtcOTa2N/ BsxGAkO3R99ztKwn9uGAltmgGKXNgLpLxoen7a4DEwx +iM1n2iWYcpO3 2ldaWphvtllLoxNhClwsbNq/8KhlyQzjGewixwpi9IHDEIYDKVTC 0W2VlwSmXm9A9/ +CCkm3mQ2VI96p3kLO1H0u3frl1voRilZJwHUgHGE4nwM1Cy/ N7+NAoEei0CYDAAYiOeX8fG1aqIMXBp8WwllD085iqJDYuwPM bTtvrBL8pRkPl +LfziHoL6EKY1IRo6NVsYsLxTXnXXsCcob0w2sBgnpahVwZXN 0B7pACbyXQ +LKWwoYYNJl20cLlgsAcwXgqbXYjqaQQfu0PyKgU6tZMuzV +fLbA1toq+s7h7LYLj4 FACaKVzYYlxq0cktosg6wOBuukyjiwRzNZVLGiJrXqj0+KKmlIrb 1AWs3b/ JTFyse0VZNgXgPEDPDUu4wUhljil5zySahnrl79x6nwd +2qz8FHlun6/oEhFepu9U0JM xCqw +gbeyrsruVrd9zPTtgXBP5HxgPHqxu09MDFdxomCRXxxduSVIA hBva97eO5TXovtcYxZl8u ffF1PWxUupv9tSxiU2WYru/bkyaI5Q==" />

AgilePoint Server Configuration Utility

The AgilePoint Server Configuration utility can be accessed via: **Start > All Programs > AgilePoint > AgilePoint Server Configuration**.

This utility is a user-friendly editor for AgilePoint Server's **netflow.cfg** configuration file. This file can be found in the root folder where you have installed AgilePoint Server (e.g. c:\inetpub\wwwroot\AgilePointServer\netflow.cfg). The location of AgilePoint Server can be determined from the registry.

Although most of the AgilePoint Server configuration settings can be managed via the AgilePoint Configuration Utility, there are some additional configuration settings that can be modified manually via the netflow.cfg file.

For more information, refer to [Configuration Settings](#) in the [Documentation Library](#).

The screenshot shows the 'System' tab of the AgilePoint Server Configuration Utility. The window has four tabs: System, Database, Extension, and Work Calendar. The 'System' tab is active and contains the following fields and controls:

- System** section:
 - Domain: Active Directory
 - System User:
 - Password:
 - Thread Pool Size: (>= 10)
- Notification** section:
 - SMTP Server:
 - Email Sender:
 - System User Email:
 - Email Format:

At the bottom of the window are and buttons.

System Window

This window allows you to configure the AgilePoint system user, thread pool sizing, and default email notification settings.

System Settings

The System area allows you to specify the identity and authentication information for the AgilePoint system user, and the maximum number of threads that AgilePoint will be able to use at run time while handling workflow requests.

The **System User** and **Password** fields should contain the same values that you would use when logging into Windows. However, if you are installing AgilePoint Server on a Windows Server that is a Domain Controller, you cannot use a local administrator account as the AgilePoint Server System User, because the domain controller will not recognize local accounts. To successfully configure AgilePoint Server on a Windows Server domain controller, check the Active Directory check box, and specify the domain name and administrator account that belongs to the domain controlled by the domain controller.

For thread pool sizing, anything between 10-100 should be fine. In most cases, a thread pool size of 10 provides a good balance between concurrent processing and server resource optimization.



Note: In some cases, additional tweaking of thread pool sizing may improve performance when heavy CPU usage is apparent for processing AgileParts versus AgileWorks. This finite control over thread pool sizing can be accomplished via the AgilePoint Server Configuration file (i.e. netflow.cfg). For more information, refer to [Configuring the AgilePoint Server Thread Pool Size](#) in the [Documentation Library](#).

Email Notification Settings

The Notification area allows you to specify the default values for the email notification settings.

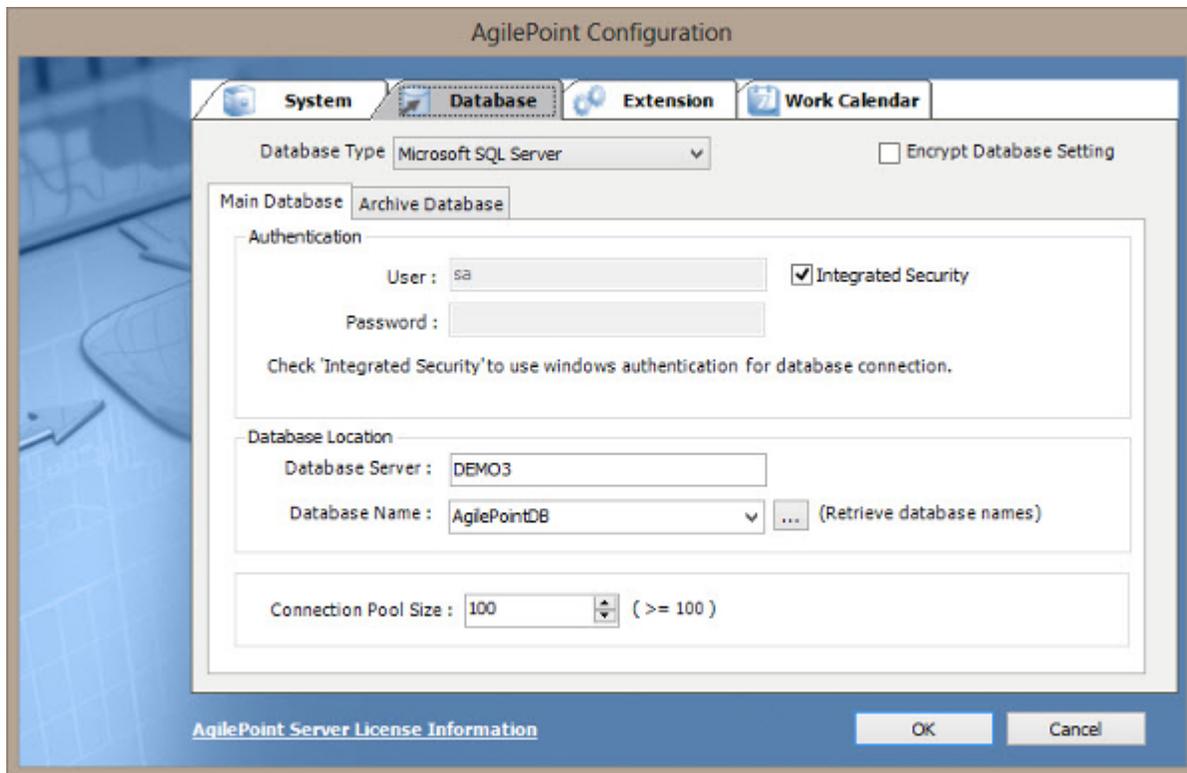
AgilePoint Server's notification mechanism uses an extensible framework that allows for the creation of custom notification modules. AgilePoint server provides a built-in notification module as default. However, it is possible to replace AgilePoint's default module with a custom notification module so that all AgilePoint notifications are processed and sent using the custom module. This allows you to implement virtually any kind of custom notification scenario, including IM, email "batch sending", sending via custom APIs, etc.

For more information, refer to [Implementing a Custom Email Notification Delivery Module](#) in the [Documentation Library](#).

Database Window

Specifies the configuration of the databases AgilePoint Server uses to store data. AgilePoint Server uses two possible databases:

- **Workflow database** - Stores data for processes that are in current use.
- **Archive database** - Stores a backup of the workflow data, as well as the data for processes that have been archived.



How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** window, click the **Database** tab.

Fields

Field Name	Definition
Main Database Tab	<u>Action:</u> Specifies the connection to the AgilePoint workflow database to store the data.
Archive Database Tab	<u>Action:</u> Specifies the connection to the Archive database to store backup of the workflow data and archived process data.
Database Type	<u>Definition:</u> Specifies the database technology you are using to store AgilePoint data. <u>Allowed Values:</u>

Field Name	Definition
	<ul style="list-style-type: none"> • Microsoft SQL Server • Oracle <p><u>Default Value:</u> Microsoft SQL Server</p>
Encrypt Database Setting	<p><u>Definition:</u> Specifies whether to encrypt your stored database settings.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Saves the database settings in encrypted format. • Deselected - Saves the database settings in plain text. <p><u>Default Value:</u> Deselected</p>
User	<p><u>Definition:</u> The user name for the database account AgilePoint Server uses to connect to the database.</p> <p><u>Allowed Values:</u> A valid user name for the database.</p> <p><u>Default Value:</u> sa</p>
Password	<p><u>Definition:</u> The password for the authentication account.</p> <p><u>Allowed Values:</u> A valid password.</p> <p><u>Default Value:</u> None</p>
Integrated Security	<p><u>Definition:</u> When integrated security is selected, the current windows account credentials are used for authentication.</p> <p><u>To Access This Field:</u></p> <ol style="list-style-type: none"> 1. In the Database Type list, select Microsoft SQL Server.

Field Name	Definition
	<p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - The windows account credentials are used for authentication automatically. • Deselected - The user and password fields are enabled for database authentication. <p><u>Default Value:</u></p> <p>Selected</p>
Database Server	<p><u>Definition:</u></p> <p>Specifies the server name and domain for your database.</p> <p><u>Allowed Values:</u></p> <p>A valid database server name.</p> <p><u>Default Value:</u></p> <p>None</p>
Database Name	<p><u>Definition:</u></p> <p>Specifies the name of your database.</p> <p><u>To Access This Field:</u></p> <ol style="list-style-type: none"> 1. Click Ellipses to populate the database names from the database server. <p><u>Allowed Values:</u></p> <p>A valid database name.</p> <p><u>Default Value:</u></p> <p>None</p>
Service Name	<p><u>Definition:</u></p> <p>Specifies the Oracle database service name.</p> <p><u>To Access This Field:</u></p> <ol style="list-style-type: none"> 1. In the Database Type list, select Oracle. <p><u>Allowed Values:</u></p> <p>A valid service name.</p> <p><u>Default Value:</u></p> <p>None</p>
Connection Pool Size	<p><u>Definition:</u></p>

Field Name	Definition
	<p>Specifies the maximum number of simultaneous database connections for the workflow database.</p> <p><u>To Access This Field:</u></p> <ol style="list-style-type: none"> 1. Click the Main Database tab. <p><u>Allowed Values:</u></p> <p>Any integer.</p> <p>It is recommended to use a connection pool size that is ≥ 100, or $2 * \text{the thread pool size}$.</p> <p><u>Default Value:</u></p> <p>100</p>
Archive Completed Process In	<p><u>Definition:</u></p> <p>Specifies the minimum number of days to save completed or canceled processes before archiving.</p> <p><u>To Access This Field:</u></p> <ol style="list-style-type: none"> 1. Click the Archive Database tab. <p><u>Allowed Values:</u></p> <p>Any integer, representing a number of days.</p> <p>If you set this value to 0, archiving does not occur.</p> <p><u>Default Value:</u></p> <p>180</p>

Configuring Process Archiving

Process archiving moves a process instance and all its related data to an archive database when the Completed or Canceled date for the process instance exceeds a specified number of days. This helps save storage space on the main AgilePoint database and improve performance.

You can also archive process data manually. For more information, refer to [APADM Archive Database Command](#) in the [Documentation Library](#).

Prerequisites

- Create a database to use as the archive database.

How to Start

1. Log on to Windows using a user account with the access rights "Archive Process Instance" in AgilePoint.
2. Open the AgilePoint Server Configuration Utility: **Start > All Programs > AgilePoint > AgilePoint Server Configuration**.
3. Click the **Database** tab.

Procedure

1. In the AgilePoint Server Configuration Utility On the **Database** tab, click the **Archive Database** tab.
2. In the **Authentication** section, configure authentication for the archive database.
3. In the **Database Server** field, enter the server name for the archive database.
4. In the **Database Name** field, click the ellipses button to populate the database names on the database server.
5. In the **Database Name** field, select the name of the archive database.
6. In the **Archive completed process in** field, set the number of days to save Completed or Canceled processes before archiving.

The process for archiving AgilePoint processes runs once per day between 1:00 a.m. and 3:00 a.m.

To suspend a database archive schedule without deleting the settings, set **Archive completed process in** to **0**.

Extension Window

AgilePoint provides a powerful integration framework; Global Server Control Extended Module, to allow you to easily extend AgilePoint with additional server control modules. These server control modules extend AgilePoint's functionalities and provide a higher level of customizability. The Extension window allows you to register and configure certain optional server extensions through the Global Server Control Extended Module that can be used to modify the workflow engine's run time behavior. See the sections below for details on the supported extensions.

The screenshot shows the 'Extension' tab of the AgilePoint Server Configuration Utility. The window title bar includes tabs for 'System', 'Database', 'Extension', and 'Work Calendar'. The 'Extension' tab is active. On the left side, there is a list box containing 'SPSIntegration'. To the right of the list box, there are several input fields and buttons:

- Name :** A text box containing 'SPSIntegration' with an 'Add' button to its right.
- Impersonator : (AgilePoint registered user name)** A text box containing 'ASTN\vikash.marodia' with an 'Edit' button to its right.
- Assembly :** An empty text box with a 'Remove' button to its right.
- Class Name :** An empty text box with a 'Configure' button to its right.

At the bottom of the window, there are 'OK' and 'Cancel' buttons.

The Add and Edit buttons allow you to register a new server extension. (See below for details.)

The Remove button allows you to un-register the highlighted server extension.

The Configure button allows you to modify the settings and configuration of the highlighted server extension. It is only enabled for server extensions that support additional configuration options.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

ADSyncModule Extension

For most enterprises, Active Directories are changing continuously with users added or removed frequently. For enterprises with large numbers of groups and users, a mechanism to automate the synchronization of the member association in Active Directory plays an important role for any Active Directory integration.

In addition to the built-in Active Directory integration with products such as: Envision and Enterprise Manager, AgilePoint also provides an out-of-the-box Active Directory synchronization module which can be plugged into AgilePoint through the Global Server Control Module framework. This synchronization module provides the synchronization capability between Active Directory groups and AgilePoint groups automatically.

This synchronization module can be added to the AgilePoint system through the AgilePoint Global Server Control Extended Module. This server extension allows you to enable and configure automated synchronization of the AgilePoint authentication data with Active Directory. It will automate the member synchronization between Active Directory users and groups and AgilePoint users and groups.

Requirements

- The AgilePoint System User (as defined in the AgilePoint Server Configuration utility) should belong to the Active Directory domain.
- AgilePoint Server's Application Pool's Identity user account (as configured in IIS) needs to have read permissions to the Active Directory server and data.

Enabling the AdSyncModule Extension

To enable the AgilePoint Server extension:

1. Open the AgilePoint Server Configuration utility and go to the **Extension** window.
2. On the **Extension** window, click **Add**.
3. Click the Ellipses button next to the Assembly field and add the following assembly:
`..\AgilePointServer\bin\ADSyncModule.dll`
4. In the **Impersonator** field, enter the credential for the AgilePoint Service Account.
For more information, refer to [Setting Up the Hosted Service](#)
5. Click **OK**. Now you will need to configure the module to schedule the synchronization.
6. Click the **Configure** button, and specify the desired configuration settings. In the following configuration interface, you can specify the synchronization with the frequency of every day, week, or month and at a particular time of day starting with the day you set the schedule. The synchronization module also provides

the option of registering the users automatically or sending an alert email to AgilePoint system user if there are members in the Active Directory groups that have yet to be registered in AgilePoint.

7. Click **OK**.

Configuration for Active Directory Groups Synchronization Window - Active Directory Configuration Tab

Synchronizes AgilePoint Server user data with Active Directory.

The screenshot shows a window titled "Configuration for Active Directory Groups Synchronization" with two tabs: "Active Directory Configuration" (selected) and "Sync Settings".

Active Directory Configuration Tab:

- Active Directory:**
 - LDAP Path:

For example: LDAP://dc=MyCompany,dc=com.
click button '...' to get the LDAP connection string for current active directory
 - Domain: (Domain name for users logon)
- Active Directory Access Credentials:**
 - AgilePoint System User
 - Custom User
 - Username: Password:
 - Ex: Domain\Username

Buttons at the bottom: **OK** and **Cancel**

Prerequisites

- Before configuring, you must [enable the ADSync Module Extension AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **ADSyncModule.dll**.
4. Click **Configure**.
5. On the **Configuration for Active Directory Groups Synchronization** window, click the **Active Directory Configuration** tab.

Fields

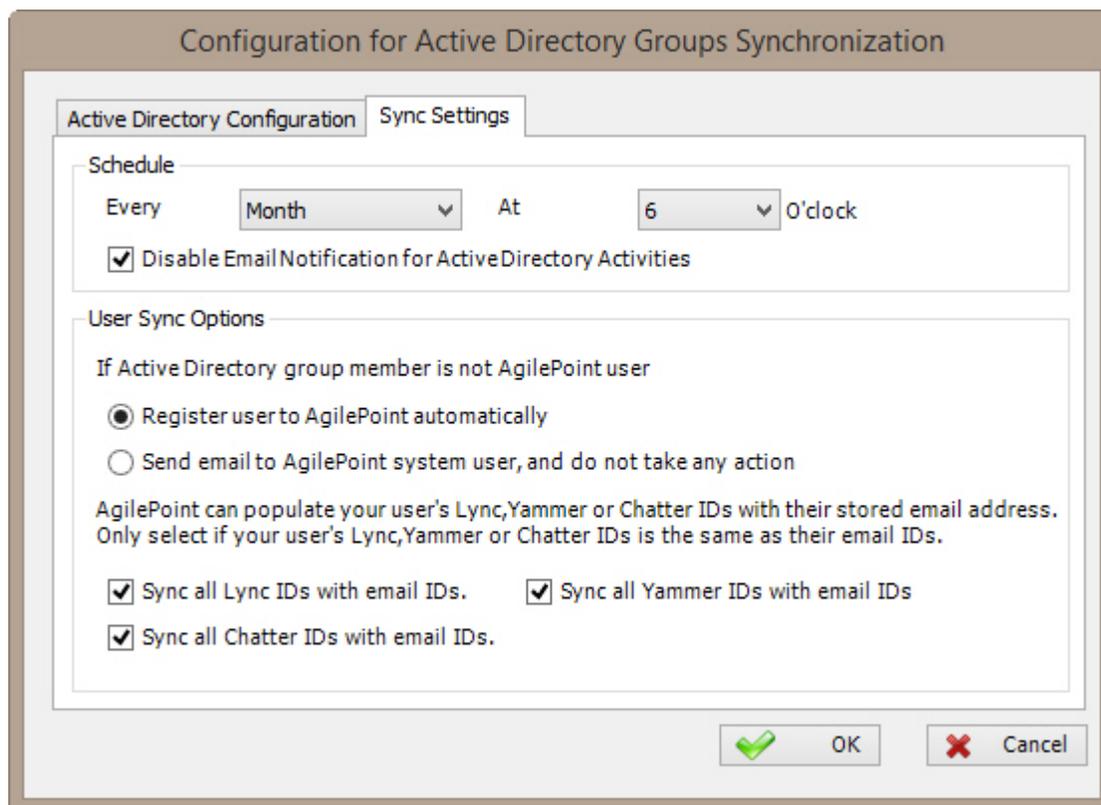
Field Name	Definition
LDAP Path	<p><u>Definition:</u></p> <p>Specifies the LDAP connection string for your Active Directory.</p> <p><u>Allowed Values:</u></p> <p>A valid LDAP connection string.</p> <p>Use the Ellipses button to retrieve the connection string for the current Active Directory.</p> <p><u>Default Value:</u></p> <p>LDAP://</p> <p><u>Example:</u></p> <p>LDAP://DC=MyCompany,dc=com</p>
Domain	<p><u>Definition:</u></p> <p>The authentication domain for Active Directory users.</p> <p><u>Allowed Values:</u></p> <p>A valid domain.</p> <p><u>Default Value:</u></p> <p>None</p>
Configure	<p><u>Opens the Following Window:</u></p> <p>Advanced LDAP Settings Window</p> <p><u>To Access This Field:</u></p> <p>You must be using a Multi-Tenant environment.</p> <p><u>Purpose of this Window:</u></p> <p>Specifies to map the LDAP connection string for your Active Directory with your tenant.</p>
AgilePoint System User	<p><u>Definition:</u></p> <p>Specifies whether the ADSync module extension connects to the specified Active Directory using the AgilePoint Service Account (or system account).</p> <p><u>Allowed Values:</u></p>

Field Name	Definition
	<ul style="list-style-type: none"> • Selected - The ADSync module uses the AgilePoint Service Account. • Deselected - The ADSync module uses a custom account. <p><u>Default Value:</u> Selected</p>
Custom Account	<p><u>Definition:</u></p> <p>Specifies whether the ADSync module extension connects to the specified Active Directory using a specified account other than the AgilePoint Service Account. This is useful if the AgilePoint Service Account does not have an account on your Active Directory domain.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - The ADSync module uses a custom account. • Deselected - The ADSync module uses the AgilePoint Service Account. <p><u>Default Value:</u> Deselected</p>
Username	<p><u>Definition:</u></p> <p>Specifies the user name for an account you want AgilePoint Server to use to connect to your Active Directory domain.</p> <p><u>Allowed Values:</u></p> <p>A valid user name for an account that has access to the Active Directory domain to which you want to connect.</p> <p><u>Example:</u> DEMO3/jsmith</p>
Password	<p><u>Definition:</u></p> <p>The password for the authentication account.</p> <p><u>Allowed Values:</u></p> <p>A valid password.</p> <p><u>Default Value:</u> None</p>

Field Name	Definition
Sync Settings Tab	<p>Opens the Following Window: Configuration for Active Directory Groups Synchronization Window - Sync Settings Tab</p> <p>Purpose of this Window: Specifies the how often Active Directory users and groups are synchronized.</p>

Configuration for Active Directory Groups Synchronization Window - Sync Settings Tab

Specifies the how often Active Directory users and groups are synchronized.



Prerequisites

- Enable the [ADSync Module Extension AgileConnector](#).
- Complete the [Configuration for Active Directory Groups Synchronization Window - Active Directory Configuration Tab](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **ADSyncModule.dll**.
4. Click **Configure**.
5. On the **Configuration for Active Directory Groups Synchronization** window, click the **Sync Settings** tab.

Fields

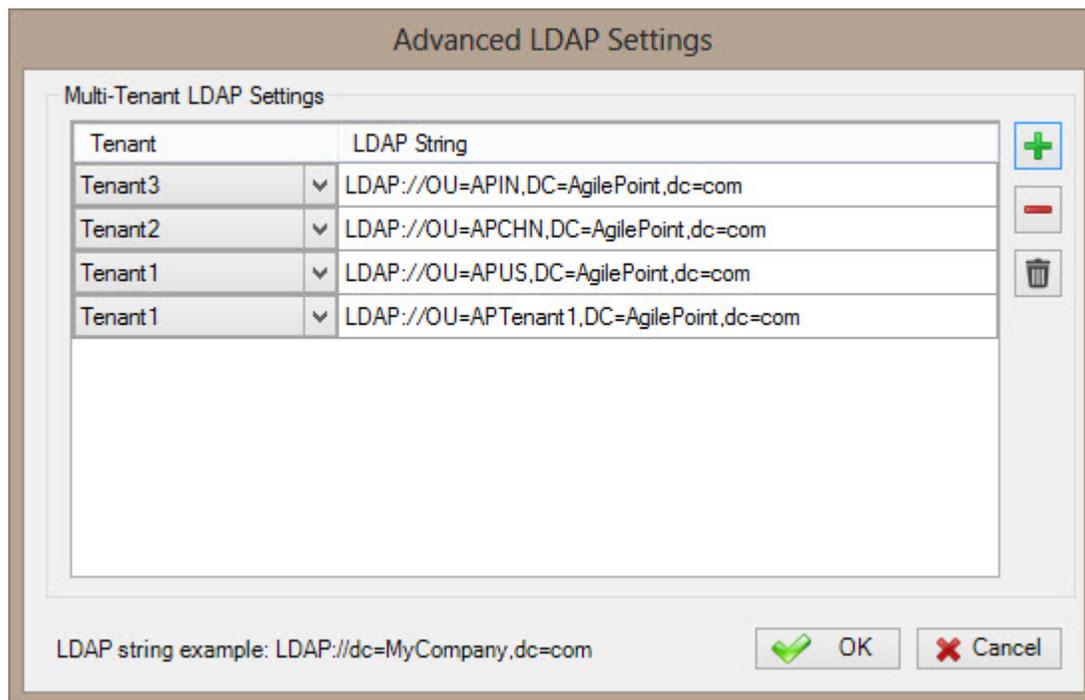
Field Name	Definition
Schedule	<p><u>Action:</u></p> <p>The frequency for Active Directory synchronization. Synchronization can occur every day, week, or month, at a particular time or day.</p>
Disable Email Notification of the Synchronization Activities	<p><u>Definition:</u></p> <p>Disables email notifications for Active Directory synchronization.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Disables email notifications for Active Directory synchronization. • Deselected - Enables email notifications for Active Directory synchronization. <p><u>Default Value:</u></p> <p>Deselected</p>
If Active Directory group member is not AgilePoint user	<p><u>Definition:</u></p> <p>Specifies what actions to take if a member of your Active Directory is not a registered AgilePoint user.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Register user to AgilePoint automatically - Creates an AgilePoint account for the user using their Active Directory information. • Send email to AgilePoint system user, and do not take any action - Does not create an AgilePoint account for the Active Directory user, but sends a notification email to the AgilePoint system user account. <p><u>Default Value:</u></p>

Field Name	Definition
	Register user to AgilePoint automatically
Sync all Lync IDs with email IDs	<p><u>Definition:</u></p> <p>Synchronizes all of your users' Lync IDs with their email IDs.</p> <p>This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Synchronizes Lync IDs with users' email IDs. • Deselected - Does not synchronize Lync IDs with users' email IDs. <p><u>Default Value:</u></p> <p>Deselected</p>
Sync all Yammer IDs with email IDs	<p><u>Definition:</u></p> <p>Synchronizes Yammer IDs with AgilePoint users' email IDs. This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Synchronizes Yammer IDs with users' email IDs. • Deselected - Does not synchronize Yammer IDs with users' email IDs. <p><u>Default Value:</u></p> <p>Deselected</p>
Sync all Chatter IDs with email IDs	<p><u>Definition:</u></p> <p>Synchronizes Chatter IDs with AgilePoint users' email IDs. This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Synchronizes Chatter IDs with users' email IDs.

Field Name	Definition
	<ul style="list-style-type: none"> Deselected - Does not synchronize Chatter IDs with users' email IDs. <p><u>Default Value:</u> Deselected</p>

Advanced LDAP Settings Window

Specifies to map the LDAP connection string for your Active Directory with your tenant.



Prerequisites

- To access this window, you must have a multi-tenant environment.

How to Start

- On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
- On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
- On the **Extensions** tab, select **ADSyncModule.dll**.
- Click **Configure**.
- On the **Configuration for Active Directory Groups Synchronization** window, click **Configure**.

Fields

Field Name	Definition
Add (+)	<p><u>Action:</u></p> <p>Creates a row where you can specify your tenant name and LDAP string.</p>
Tenant	<p><u>Definition:</u></p> <p>Specifies the name of the tenant for which you want to map with LDAP connection string.</p> <p>You can have multiple instances of the same tenant name, and each tenant can have multiple LDAP connection strings.</p> <p><u>Allowed Values:</u></p> <p>A list of your enabled tenant names.</p> <p><u>Default Value:</u></p> <p>None</p>
LDAP String	<p><u>Definition:</u></p> <p>Specifies the LDAP connection string of your Active Directory for your tenant.</p> <p><u>Allowed Values:</u></p> <p>A valid LDAP connection string.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <p>LDAP://DC=MyCompany,dc=com</p>
Remove (-)	<p><u>Action:</u></p> <p>Deletes the selected row from the multi-tenant LDAP settings list.</p>
Delete (🗑)	<p><u>Action:</u></p> <p>Deletes all rows from the multi-tenant LDAP settings list.</p>

Group Member Synchronization Rules

- Only groups that have already been added into AgilePoint will be synchronized with Active Directory. New Active Directory groups will not be added automatically to AgilePoint. The new Active Directory groups can be added manually through the Enterprise Manager interface.
- The changes of user members (adding or removing) in the Active Directory groups will be synchronized to AgilePoint but the changes in AgilePoint groups will NOT be synchronized back to the Active Directory.
- The synchronization only applies to member association (Add or Remove) within the groups. Group properties such as names and descriptions are NOT synchronized.
 - When a new member is added to Active Directory, this member will also be added to the corresponding AgilePoint group. If the actual user entity is not registered in AgilePoint yet, the user entity will be registered to AgilePoint automatically.
 - When a member is removed from Active Directory, this member in the corresponding AgilePoint group will also be removed. The actual user entity will NOT be removed from AgilePoint as the same user entity can also be associated with other groups in the system.
 - If the Active Directory contains sub-groups (Nested groups), the members in the sub-groups will also be synchronized and the members will be added to or removed from the top level group.

User Synchronization Rules

- Changes to the following Active Directory User properties will be synchronized to AgilePoint. Other properties will NOT be synchronized.
 - Full Name
 - Email Address
 - Department
 - Title
 - Manager
- Removal of an Active Directory User will result in the following AgilePoint synchronization actions:
 - The user will be removed from any AgilePoint Groups.
 - Any tasks assigned to this user will still exist, it may be required to cancel or reassign these tasks to a valid AgilePoint user.

Filtering the ADSyncModule Extension

The Extra Filter feature has been added in the ADSync module using two keys of String data type: RequireExtraFilter and ExtraFilterValue. This feature provides extra filter options to synchronize users between Active Directory and AgilePoint. The RequireExtraFilter key is used to enable the Extra Filter feature. The ExtraFilterValue key stores the extra filter value which is a LDAP query. Do not use the objectcategory or objectclass keywords in the query because these keywords are included in the feature.

Prerequisites

- The ADSyncModule extension is enabled.

Procedure

1. In the Windows Registry, create the following keys in the location SOFTWARE\Ascentn\Server\ActiveDirectory

Name	Value
RequireExtraFilter	<p><u>Definition:</u></p> <p>Specifies whether additional LDAP filters are required for the Active Directory Sync module.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Yes/True - Enabled • No/False - Disabled
ExtraFilterValue	<p><u>Definition:</u></p> <p>Specifies an LDAP query that defines a synchronization filter for Active Directory.</p> <p><u>Allowed Values:</u></p> <p>An LDAP query that does not include the objectcategory or objectclass keywords.</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> • (mail=*) Synchronizes users who have email IDs. • (givenName=John) Finds users with the given name John.

Synchronizing Active Directory groups with AgilePoint groups

Special characters can be included in group names while synchronizing users of Active Directory and AgilePoint by using a CustomActiveDirectorySync key of String data type in the ADSync module. However, the semicolon (;) and tilde (~) characters cannot be used in group names, because they act as group-pair separators, as follows:

<AgilePointGroup1>~<ActiveDirectoryGroup1>;<AgilePointGroup2>~<ActiveDirectoryGroup2> and so on.

Prerequisites

- The ADSyncModule extension is enabled.

Procedure

1. In the Windows Registry, create the following keys in the location SOFTWARE\Ascentn\Server\ActiveDirectory

Name	Value
CustomActiveDirectorySync	<p><u>Definition:</u> The data type is String.</p> <p><u>Allowed Values:</u> A semicolon-delimited list of group pairs in the following format: <APGroup1>~<ADGroup1>;<APGroup2>~<ADGroup2></p> <p><u>Example:</u></p> <ul style="list-style-type: none"> • <APMyGroup>~<ADYourGroup> Specifies that an AgilePoint Group named APMYGroup is to be synchronized with an Active Directory Group named ADYourGroup. • <APMyGroup>~<ADYourGroup>;<APOurGroup>~<ADTheirGroup> Specifies that 2 pairs of groups are synchronized: APMYGroup with ADYourGroup, and APOurGroup with ADTheirGroup.

Scheduling

The schedule of the synchronization is set through the module's configuration interface. The synchronization can be performed at a particular time of day with the frequency of every day, every week, or every month.

For example, if you schedule the synchronization to be performed at 2am on Jan. 1 and you also select **Every day** as the frequency, the synchronization will be started automatically at 2am on Jan 1, Jan 2, Jan 3, etc.

The following table summarizes the different ways that the schedule can be set for the synchronization.

Frequency	Time	1st Sync	2nd Sync	3rd Sync	4th Sync	5th Sync
Every Day	2am	Jan. 1	Jan. 2	Jan. 3	Jan. 4	Jan. 5
Every Week	2am	Jan. 1	Jan. 8	Jan. 15	Jan. 22	Jan. 29
Every Month	2am	Jan. 1	Feb. 1	March. 1	April. 1	May. 1

The synchronizations typically happen within five minutes of the scheduled time. For example, if the scheduled time is 2am, the actual synchronization could happen between 1:55am to 2:05am.



Note: The scheduling pattern (daily, weekly, or monthly) and scheduling time should be the same for multiple AgileConnectors of the same type.

Exception Handling

This module also provides exception handling for the scheduling. In the event that your server is down during the scheduled synchronization, as soon as your server is back online, the synchronization will be automatically kicked off. After that, the next synchronization will resume the original schedule.

Log Files

The Active Directory Synchronization module provides the following logs.

Time and Status Log

The time and status is logged in the following location:

- AgilePointServer\log[DateTime]-[server name].log

Example:

```
3/12/2012 12:53:29 PM>>
Synchronization started on 3/12/2012 12:53:27 PM

Path=LDAP://DC=MYDOMAIN,DC=com, UserLogonDomainName=MYDOMAIN
43 groups found.
  Synchronizing users
    Updating user 'MYDOMAIN\John.Sample'. User full name:John Sample,
    department:

Synchronization finished on 3/12/2012 12:53:29 PM.
```

Error Log

Errors are logged in the following location:

- AgilePointServer\log\ADSynchModule.log

Example:

```
2012-03-12 12:53:27.732 >>> Active Directory group synchronizer
  'ADSynchModule' has been started. Configuration: every Day at 1 O'clock,
  register user automatically=True, Path=LDAP://DC=ASTN,DC=com,
  Domain=ASTN
```

Notifications

In addition to log files that keep track of the synchronization statuses, the synchronization module also provides email notification capability. Email notification is sent out to the AgilePoint System User with information about the synchronization. This will allow the system user to determine if there is a need to manually synchronize the groups or users in the event of failed synchronization.

DBSyncModule Extension

The DBSyncModule AgileConnector extension allows you to synchronize custom user and group database tables with AgilePoint groups automatically.

Requirements

The following are requirements for the DBSyncModule AgileConnector:

- The AgilePoint System User (as defined in the AgilePoint Server Configuration utility) should be a Database user.
- AgilePoint Server's Application Pool's Identity user account (as configured in IIS) needs to have read permissions for the appropriate database.

Enabling the Extension

To enable the AgilePoint Server extension:

1. Open the AgilePoint Server Configuration utility and go to the **Extension** window.
2. Click the Ellipses button next to the Assembly field and add the following assembly:
`..\AgilePointServer\bin\DBSyncModule.dll`
3. Leave the **Impersonator** field blank.
4. Click **OK**. Now you will need to configure the module to schedule the synchronization.
5. Click the **Configure** button, and specify the desired configuration settings.

In the configuration interface, specify the following information:

- **Connection** - Provide a valid database connection string.
- **Query** - Provide the SQL query to fetch records from a table. The query must fetch the following fields, which are mandatory:
 - TITLE
 - USER_NAME
 - FULL_NAME
 - DEPARTMENT
 - EMAIL_ADDRESS
 - MANAGER
 - GROUP_NAME

To check that the query was set up correctly, click **Verify Query**.

- **Schedule** - Specify the synchronization with the frequency of every day, week, or month and at a particular time of day starting with the day you set the schedule.
- **Option** - This section provides an option to select what action needs to be taken when a database member is not an AgilePoint user. Either one can select to register user to AgilePoint automatically or send a notification to AgilePoint System user.

Configuration for Database Groups/Users Synchronization Window

Synchronizes AgilePoint Users and Groups with the user information resulting from a database query.

Configuration for Database Groups/Users Synchronization

It synchronizes AgilePoint Users and Groups with the user information provided by database query.

Database Information

Connection String:

Query:

```
Select Title AS TITLE, UserName AS USER_NAME,
FullName AS FULL_NAME, Department AS DEPARTMENT,
EmailAddress AS EMAIL_ADDRESS, Manager AS MANAGER,
GroupName AS GROUP_NAME
From GroupTable INNER JOIN UserTable
ON UserTable.UserId=GroupTable.UserId
```

Verify

Schedule

Every At O'clock

Option

If Database group member is not AgilePoint user.

Register user to AgilePoint automatically

Send email to AgilePoint system user, and do not take any action

AgilePoint can populate your user's Lync or Yammer or Chatter IDs with their stored email address. Only select if your user's Lync or Yammer Chatter IDs is the same as their email IDs.

Sync all Lync IDs with email IDs.

Sync all Yammer IDs with email IDs.

Sync all Chatter IDs with email IDs.

Save
 Cancel

Prerequisites

- Before configuring, you must [enable the DBSync Module Extension AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **DBSyncModule**.
4. Click **Configure**.

Fields

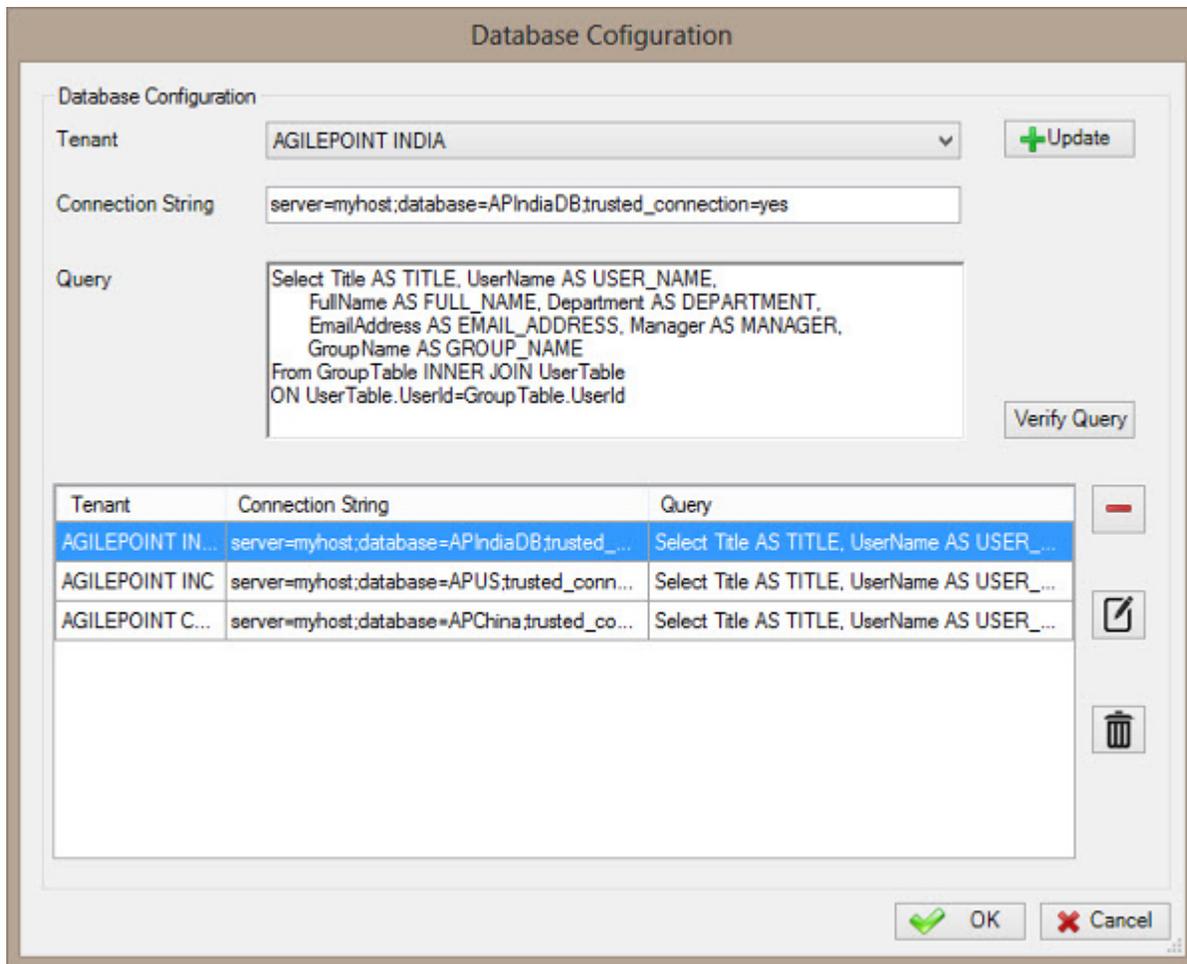
Field Name	Definition
Configure	<p><u>Opens the Following Window:</u> Database Configuration Window</p> <p><u>To Access This Field:</u> You must be using a Multi-Tenant environment.</p> <p><u>Purpose of this Window:</u> Synchronizes users and groups for a tenant with the user information resulting from a database query.</p>
Connection String	<p><u>Definition:</u> Specifies the connection string to be used to connect to the database.</p> <p><u>Allowed Values:</u> A valid connection string.</p> <p><u>Default Value:</u> server=localhost;database=pubs;trusted_Connection=yes</p> <p><u>Custom Attributes:</u> Yes</p> <p><u>Example:</u> server=DataServer;database=StoreDb;trusted_Connection=yes</p>
Query	<p><u>Definition:</u> The SQL query used to fetch the records from the database.</p> <p><u>Allowed Values:</u> A valid SQL query. The query must fetch the following fields, which are mandatory:</p> <ul style="list-style-type: none"> • TITLE • USER_NAME • FULL_NAME • DEPARTMENT • EMAIL_ADDRESS • MANAGER

Field Name	Definition
	<ul style="list-style-type: none"> GROUP_NAME
Verify	<p><u>Action:</u></p> <p>Verifies whether the specified query and connection string are valid.</p>
Schedule	<p><u>Action:</u></p> <p>The frequency for database synchronization. Synchronization can occur every day, week, or month, at a particular time or day.</p>
If Active Directory group member is not AgilePoint user	<p><u>Definition:</u></p> <p>Specifies what actions to take if a member of your Active Directory is not a registered AgilePoint user.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> Register user to AgilePoint automatically - Creates an AgilePoint account for the user using their Active Directory information. Send email to AgilePoint system user, and do not take any action - Does not create an AgilePoint account for the Active Directory user, but sends a notification email to the AgilePoint system user account. <p><u>Default Value:</u></p> <p>Register user to AgilePoint automatically</p>
Sync all Lync IDs with email IDs	<p><u>Definition:</u></p> <p>Synchronizes all of your users' Lync IDs with their email IDs.</p> <p>This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> Selected - Synchronizes Lync IDs with users' email IDs. Deselected - Does not synchronize Lync IDs with users' email IDs. <p><u>Default Value:</u></p> <p>Deselected</p>
Sync all Yammer IDs with email IDs	<p><u>Definition:</u></p>

Field Name	Definition
	<p>Synchronizes Yammer IDs with AgilePoint users' email IDs. This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> ● Selected - Synchronizes Yammer IDs with users' email IDs. ● Deselected - Does not synchronize Yammer IDs with users' email IDs. <p><u>Default Value:</u></p> <p>Deselected</p>
Sync all Chatter IDs with email IDs	<p><u>Definition:</u></p> <p>Synchronizes Chatter IDs with AgilePoint users' email IDs. This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> ● Selected - Synchronizes Chatter IDs with users' email IDs. ● Deselected - Does not synchronize Chatter IDs with users' email IDs. <p><u>Default Value:</u></p> <p>Deselected</p>

Database Configuration Window

Synchronizes users and groups for a tenant with the user information resulting from a database query.



Prerequisites

- To access this window, you must have a multi-tenant environment.

How to Start

- On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
- On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
- On the **Extensions** tab, select **DBSyncModule**.
- Click **Configure**.
- On the **Configuration for Database Groups/Users Synchronization** window, in the **Multi-Tenant Database Information** section, click **Configure**.

Fields

Field Name	Definition
Tenant	<u>Definition:</u>

Field Name	Definition
	<p>Specifies the tenant name.</p> <p><u>Allowed Values:</u> List of your enabled tenant names.</p> <p><u>Default Value:</u> None</p>
<p>Connection String</p>	<p><u>Definition:</u> Specifies the connection string to be used to connect to the database.</p> <p><u>Allowed Values:</u> A valid connection string.</p> <p><u>Default Value:</u> server=localhost;database=pubs;trusted_Connection=yes</p> <p><u>Custom Attributes:</u> Yes</p> <p><u>Example:</u> server=DataServer;database=StoreDb;trusted_Connection=yes</p>
<p>Query</p>	<p><u>Definition:</u> The SQL query used to fetch the records from the database.</p> <p><u>Allowed Values:</u> A valid SQL query. The query must fetch the following fields, which are mandatory:</p> <ul style="list-style-type: none"> • TITLE • USER_NAME • FULL_NAME • DEPARTMENT • EMAIL_ADDRESS • MANAGER • GROUP_NAME
<p>Add</p>	<p><u>Action:</u> Creates a row where you can specify your tenant name, connection string and query.</p>

Field Name	Definition
Verify	<u>Action:</u> Verifies whether the specified query and connection string are valid.
Update	<u>Action:</u> Updates the selected row from the database configuration list.
Remove (-)	<u>Action:</u> Deletes the selected row from the database configuration list.
Edit (✎)	<u>Action:</u> Modifies the selected row from the database configuration list.
Delete (🗑)	<u>Action:</u> Deletes all rows from the database configuration list.

Group Member Synchronization Rules

- Only groups that have already been added into AgilePoint will be synchronized with the database. New groups will be added automatically to AgilePoint when the group name starts with a Group prefix value. The new groups will automatically be assigned to the default "Users" Role. If a group prefix value is empty, then new groups can be added manually through the Enterprise Manager interface.
- The changes of user members (adding or removing) in the database will be synchronized to AgilePoint but the changes in AgilePoint groups will NOT be synchronized back to the database.
- The synchronization only applies to member association (Add or Remove) within the groups.
- When a new member is added to the database, this member will also be added to the corresponding AgilePoint group. If the actual user entity is not registered in AgilePoint yet, the user entity will be registered to AgilePoint automatically.
- When a member is removed from the database, this member in the corresponding AgilePoint group will also be removed. The actual user entity will NOT be removed from AgilePoint as the same user entity can also be associated with other groups in the system.

User Synchronization Rules

Changes to the following database field properties will be synchronized to AgilePoint. Other properties will NOT be synchronized.

- Full Name
- Email Address

- Department
- Title
- Manager

Scheduling

The schedule of the synchronization is set through the module's configuration interface. The synchronization can be performed at a particular time of day with the frequency of every day, every week, or every month.

For example, if you schedule the synchronization to be performed at 2am on Jan. 1 and you also select **Every day** as the frequency, the synchronization will be started automatically at 2am on Jan 1, Jan 2, Jan 3, etc.

The following table summarizes the different ways that the schedule can be set for the synchronization.

Frequency	Time	1st Sync	2nd Sync	3rd Sync	4th Sync	5th Sync
Every Day	2am	Jan. 1	Jan. 2	Jan. 3	Jan. 4	Jan. 5
Every Week	2am	Jan. 1	Jan. 8	Jan. 15	Jan. 22	Jan. 29
Every Month	2am	Jan. 1	Feb. 1	March. 1	April. 1	May. 1

The synchronizations typically happen within five minutes of the scheduled time. For example, if the scheduled time is 2am, the actual synchronization could happen between 1:55am to 2:05am.



Note: The scheduling pattern (daily, weekly, or monthly) and scheduling time should be the same for multiple AgileConnectors of the same type.

Exception Handling

This module also provides exception handling for the scheduling. In the event that your server is down during the scheduled synchronization, as soon as your server is back online, the synchronization will be automatically kicked off. After that, the next synchronization will resume the original schedule.

Log Files



Note: The SharePoint Groups Synchronization module also writes log messages to the SPSyncModule.log file. The SPSyncModule.log file can also be found at the AgilePointServer\log folder. This log file contains detail information about each synchronization operation, such as the status of each group, or what users were unable to be registered to AgilePoint.

The following is an example of the log message in the ActiveDirectorySynchronizer.log file:

```
3/1/2005 5:51:49 PM>> Synchronization has started
to perform on 3/1/2005 5:51:47 PM
Synchronizing Users Registering user 'MYDOMAIN\Test1' to
AgilePoint. User full name: Test1, department: Testing
```

Notifications

In addition to log files that keep track of the synchronization statuses, the synchronization module also provides email notification capability. Email notification is sent out to the AgilePoint System User with information about the synchronization. This will allow the system user to determine if there is a need to manually synchronize the groups or users in the event of failed synchronization.

Email Approval Extension

Using email approval, process participants can approve documents or requests through email, without accessing their task lists. The MailApproval AgileConnector supports the following functionality:

- Approve or reject tasks using a simple email reply
- Multiple AgileConnector configurations
- Network load balancing

Requirements

One of the following:

- A POP3 mailbox configured with a valid account in the AgilePoint Server Configuration
- An IMAP4 mailbox configured with a valid account in the AgilePoint Server Configuration
- An Exchange Server mailbox with a valid account

Enabling the Email Approval AgileConnector

To enable the Email Approval AgileConnector, do the following.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

1. On the **Extensions** tab, click **Add**.
2. In the **Impersonator** field, enter the AgilePoint user name that is used to connect to your email server.
By default, this is the AgilePoint Service Account.
3. Browse to the assembly **[AgilePoint Server installation folder]\bin\Ascentn.AgileConnector.MailApproval.dll**, and then click **OK** to add this extension to AgilePoint Server.

Configuring the Email Approval AgileConnector

To configure the Email Approval AgileConnector, do the following.

Prerequisites

- Before you add the Email Approval AgileConnector, you must add the Event Service AgileConnector.
- Before you configure these settings, you must [add the Email Approval AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **MailApproval**.
4. Click **Configure**.
5. On the **Configure Email Approval** window, click the **Settings** tab.

Procedure

1. On the **Settings** tab, complete the following fields:

Field Name	Definition
POP3 Server	<p><u>Definition:</u></p> <p>Specifies the host name or IP address of the POP3 server.</p> <p>To access this field, select POP3.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • A valid host name or IP address for your POP3 server. <p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <p>Demo3</p>
POP3 Port	<p><u>Definition:</u></p> <p>Specifies the port number which is configured to communicate with your POP3 server.</p> <p>To access this field, select POP3.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • A valid port number. <p><u>Default Value:</u></p> <p>110</p>
SSL-Connection	<p><u>Definition:</u></p>

Field Name	Definition
	<p>Specifies whether the POP3 server uses an SSL encrypted connection.</p> <p>To access this field, select POP3 or IMAP.</p> <p><u>Allowed Values:</u></p> <p>An appSettings key in the following format:</p> <ul style="list-style-type: none"> • Selected - SSL communication is enabled. • Deselected - SSL communication is disabled. <p><u>Default Value:</u></p> <p>Deselected</p>
<p>Microsoft Exchange Server URL</p>	<p><u>Definition:</u></p> <p>Specifies the Exchange Server URL.</p> <p>To access this field, select the Microsoft Exchange Server mode.</p> <p><u>Allowed Values:</u></p> <p>https://[host name]:[port]</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Custom Attributes:</u></p> <p>Yes</p> <p><u>Example:</u></p> <p>https://agilepoint.com:2030</p>
<p>IMAP4 Server</p>	<p><u>Definition:</u></p> <p>Specifies the host name or IP address of the IMAP4 Server.</p> <p>To access this field, select IMAP.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • A valid host name or IP address for your IMAP4 Server. <p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <p>Demo3</p>
<p>IMAP4 Port</p>	<p><u>Definition:</u></p>

Field Name	Definition
	<p>Specifies the port number that is configured for communication with your IMAP4 server.</p> <p>To access this field, select IMAP.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • A valid port number. <p><u>Default Value:</u></p> <p>110</p>
Exchange WebService URL	<p><u>Definition:</u></p> <p>Specifies the Exchange WebService URL.</p> <p>To access this field, select EWS or Office 365.</p> <p><u>Allowed Values:</u></p> <p>https://[ExchangeServerMachineName]:[Port]/EWS/exchange.asmx</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Custom Attributes:</u></p> <p>Yes</p> <p><u>Example:</u></p> <p>https://agilepoint.com:2030/EWS/Exchange.asmx</p>
Login	<p><u>Definition:</u></p> <p>Specifies the username for the mailbox containing the email-based approvals.</p> <p><u>Allowed Values:</u></p> <p>A valid username.</p> <p><u>Default Value:</u></p> <p>None</p>
Password	<p><u>Definition:</u></p> <p>The password for the authentication account.</p> <p><u>Allowed Values:</u></p> <p>A valid password.</p> <p><u>Default Value:</u></p> <p>None</p>

Field Name	Definition
	<p><u>Custom Attributes:</u></p> <p>Yes</p>
Schedule every	<p><u>Definition:</u></p> <p>Specifies the time interval in minutes for the AgileConnector to check the mailbox for new incoming email.</p> <p><u>Allowed Values:</u></p> <p>Any integer.</p> <p><u>Default Value:</u></p> <p>1</p>
Delete incorrect approval emails	<p><u>Definition:</u></p> <p>Deletes all the emails from the mailbox once it is read from the server.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Deletes the emails from the mailbox. • Deselected - Does not delete the emails from the mailbox. <p><u>Default Value:</u></p> <p>Deselected</p>
Basic	<p><u>Definition:</u></p> <p>Saves the basic information about the Email Approval AgileConnector in the AgilePoint Server log file.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Saves the basic information in the AgilePoint Server log file. • Deselected - Does not save the basic information in the AgilePoint Server log file. <p><u>Default Value:</u></p> <p>Selected</p>
Debug	<p><u>Definition:</u></p> <p>Saves the debug information about the email approval AgileConnector in the AgilePoint Server log file.</p>

Field Name	Definition
	<p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Saves the debugging information in the AgilePoint Server log file. • Deselected - Does not save the debugging information in the AgilePoint Server log file. <p><u>Default Value:</u></p> <p>Deselected</p>
Test	<p><u>Action:</u></p> <p>Verifies whether the specified account credential is valid.</p>

Configuring Automatic Replies for Email Approval Success or Failure

You can set up the Email Approval AgileConnector so that it will send a custom automated reply message when an email approval succeeds or fails.

To set up automated approvals, do the following.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **MailApproval**.
4. Click **Configure**.
5. On the **Configure Email Approval** window, click the **Acknowledgement** tab.

Instructions

1. On the **Acknowledgement** tab, complete the following fields as required for your environment.

Field Name	Definition
Failed email approval reply message	<p><u>Definition:</u></p> <p>Specifies the content the automated message sent to participants when an email approval fails.</p> <p><u>Allowed Values:</u></p> <p>A text string that represents the body of the email.</p> <p><u>Default Value:</u></p> <p>A default email message body.</p>
Successful email approval reply message	<p><u>Definition:</u></p>

Field Name	Definition
	<p>Specifies the content the automated message sent to participants when an email approval is successful.</p> <p>Replies for successful approvals are optional.</p> <p><u>Allowed Values:</u></p> <p>A text string that represents the body of the email.</p> <p>To enable email replies for successful approvals, the check box must be selected.</p> <p><u>Default Value:</u></p> <p>Deselected, with no default message.</p>

Configure SharePoint Connectivity for the Email Approval AgileConnector

To configure the Email Approval AgileConnector so it can change values in SharePoint ListForm or InfoPath processes, do the procedure in this topic.

Prerequisites

- If you use Forms Based Authentication, refer to this information from Microsoft to configure your SharePoint environment: <http://msdn.microsoft.com/en-us/library/bb975136%28v=office.12%29.aspx>

How to Start

- On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
- On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
- On the **Extensions** tab, select **MailApproval**.
- Click **Configure**.
- On the **Configure Email Approval** screen, click the **Connect to SharePoint** tab.

Procedure

- On the **Connect to SharePoint** tab, complete these fields as necessary for your environment .

Field Name	Definition
Windows Authentication	<p><u>Definition:</u></p> <p>Specifies if AgilePoint uses Windows Authentication to connect to SharePoint.</p>
Claims Authentication	<p><u>Definition:</u></p> <p>Specifies Claims authentication options for SharePoint.</p> <p><u>Allowed Values:</u></p>

Field Name	Definition
	<p>If this setting is selected, these types of Claims Authentication are available:</p> <ul style="list-style-type: none"> • Form Based Authentication - Activates Forms based authentication where a custom membership provider to connect to an on-premises SharePoint environment. • Office 365 - Activates Claims authentication to connect to SharePoint in an Office 365 environment. You can use this setting side-by-side with on-premises SharePoint. • Federated Authentication - Activates Federated authentication to connect to SharePoint — for example, ADFS. <p> Note: Out of the box, AgilePoint supports ADFS authentication. If you want to use your own authentication provider, see Federated Authentication Example in the Documentation Library.</p> <p><u>Default Value:</u> Deselected</p>
Domain	<p><u>Definition:</u> The authentication domain. This does not apply to Form Based Authentication.</p>
Username	<p>The user ID of the SharePoint authentication account.</p>
Password	<p><u>Definition:</u> The password for the authentication account.</p> <p><u>Allowed Values:</u> A valid password.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> Yes</p>
Fed Auth Url	<p><u>Definition:</u> The URI of the federated authentication provider. This provider supplies security tokens for federated authentication.</p> <p><u>Allowed Values:</u></p>

Field Name	Definition
	<p>A valid federated authentication provider URI.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Custom Attributes:</u></p> <p>No</p> <p><u>Example:</u></p> <p>https://fs.agilityclouds.com</p>

Logging

The MailApproval module writes log messages to the AgilePoint Server log file which can be found at AgilePointServerLog. The following is an example of a log message in the file:

```
8/12/2008 8:04:05 >>> AgileConnector MailApproval Started.
Pop3 server, Server=110, Port=in.telenet.be, userName=xxxxxxx 8/12/2008
8:05:08 >>> TaskId: 65B82D87B3F34765B2DDE64791786961 8/12/2008
8:05:08 >>> {Approval [X] = {/pd:myFields/pd:Approved}=True}
8/12/2008 8:05:08 >>> {Remarks [This is a test] =
{/pd:myFields/pd:Remark}} 8/12/2008 8:05:08 >>> Number of
email based workitems received: 11
```

POP3 Limitations

The following limitations apply when using Email Approval on a POP3 server:

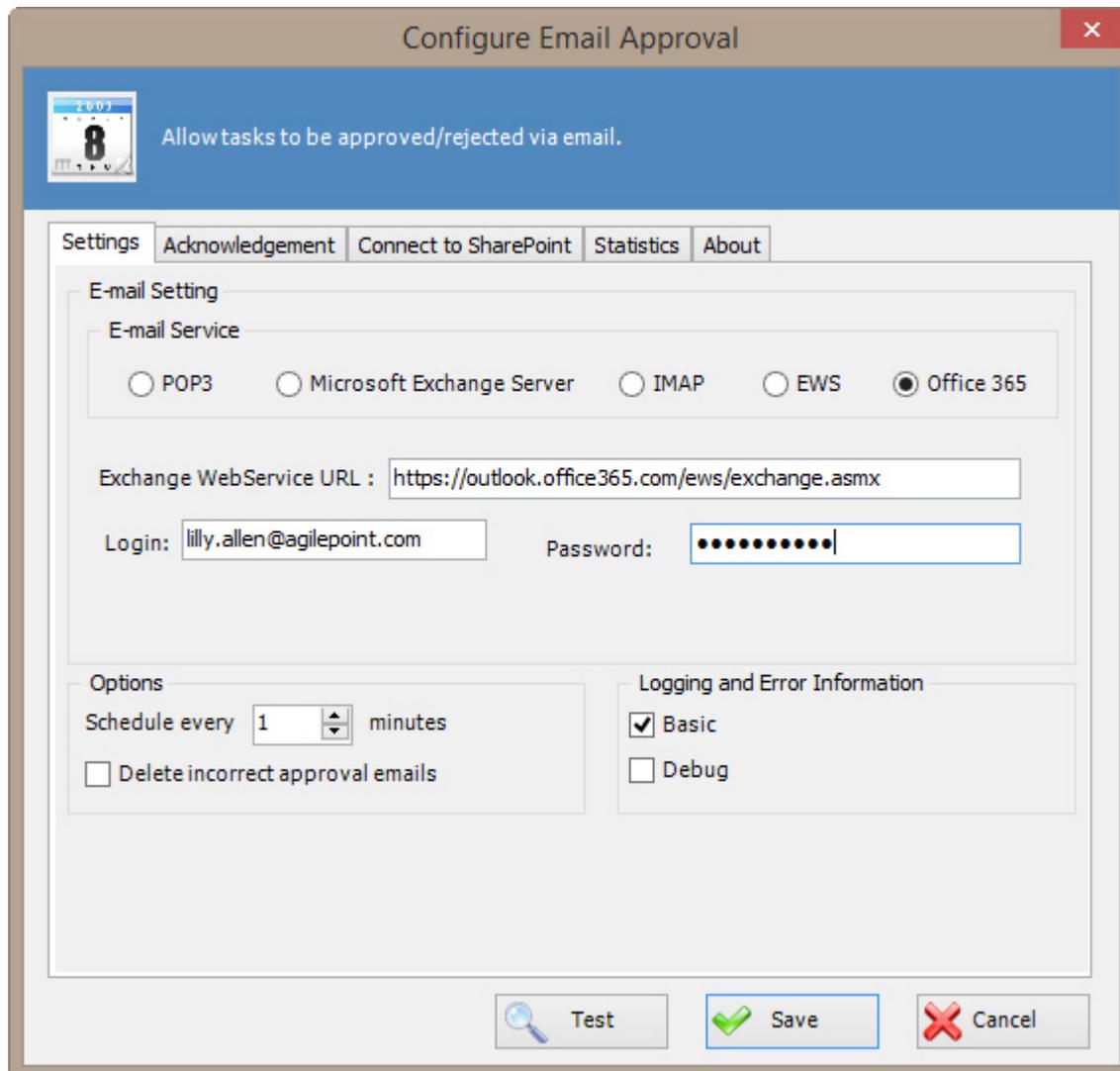
- There is no response while testing a connection if you deselect **SSL-Connect** when the POP3 Server requires SSL.
- The incorrect emails will not be deleted from the mailbox even if the option **Delete incorrect approval emails** is selected.

Creating an Email Template to Support Approvals

For information about creating an email template for direct approvals, see the Envision Online Help.

Email Approval Configuration Window - Settings Tab

Specifies the basic settings for the Email Approval AgileConnector.



Configure Email Approval

Allow tasks to be approved/rejected via email.

Settings Acknowledgement Connect to SharePoint Statistics About

E-mail Setting

E-mail Service

POP3 Microsoft Exchange Server IMAP EWS Office 365

Exchange WebService URL :

Login: Password:

Options

Schedule every minutes

Delete incorrect approval emails

Logging and Error Information

Basic Debug

Prerequisites

- Before you add the Email Approval AgileConnector, you must add the Event Service AgileConnector.
- Before you configure these settings, you must [add the Email Approval AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **MailApproval**.
4. Click **Configure**.
5. On the **Configure Email Approval** window, click the **Settings** tab.

Fields

Field Name	Definition
POP3 Server	<p><u>Definition:</u></p> <p>Specifies the host name or IP address of the POP3 server.</p> <p>To access this field, select POP3.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • A valid host name or IP address for your POP3 server. <p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <p>Demo3</p>
POP3 Port	<p><u>Definition:</u></p> <p>Specifies the port number which is configured to communicate with your POP3 server.</p> <p>To access this field, select POP3.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • A valid port number. <p><u>Default Value:</u></p> <p>110</p>
SSL-Connection	<p><u>Definition:</u></p> <p>Specifies whether the POP3 server uses an SSL encrypted connection.</p> <p>To access this field, select POP3 or IMAP.</p> <p><u>Allowed Values:</u></p> <p>An appSettings key in the following format:</p> <ul style="list-style-type: none"> • Selected - SSL communication is enabled. • Deselected - SSL communication is disabled. <p><u>Default Value:</u></p> <p>Deselected</p>
Microsoft Exchange Server URL	<p><u>Definition:</u></p> <p>Specifies the Exchange Server URL.</p>

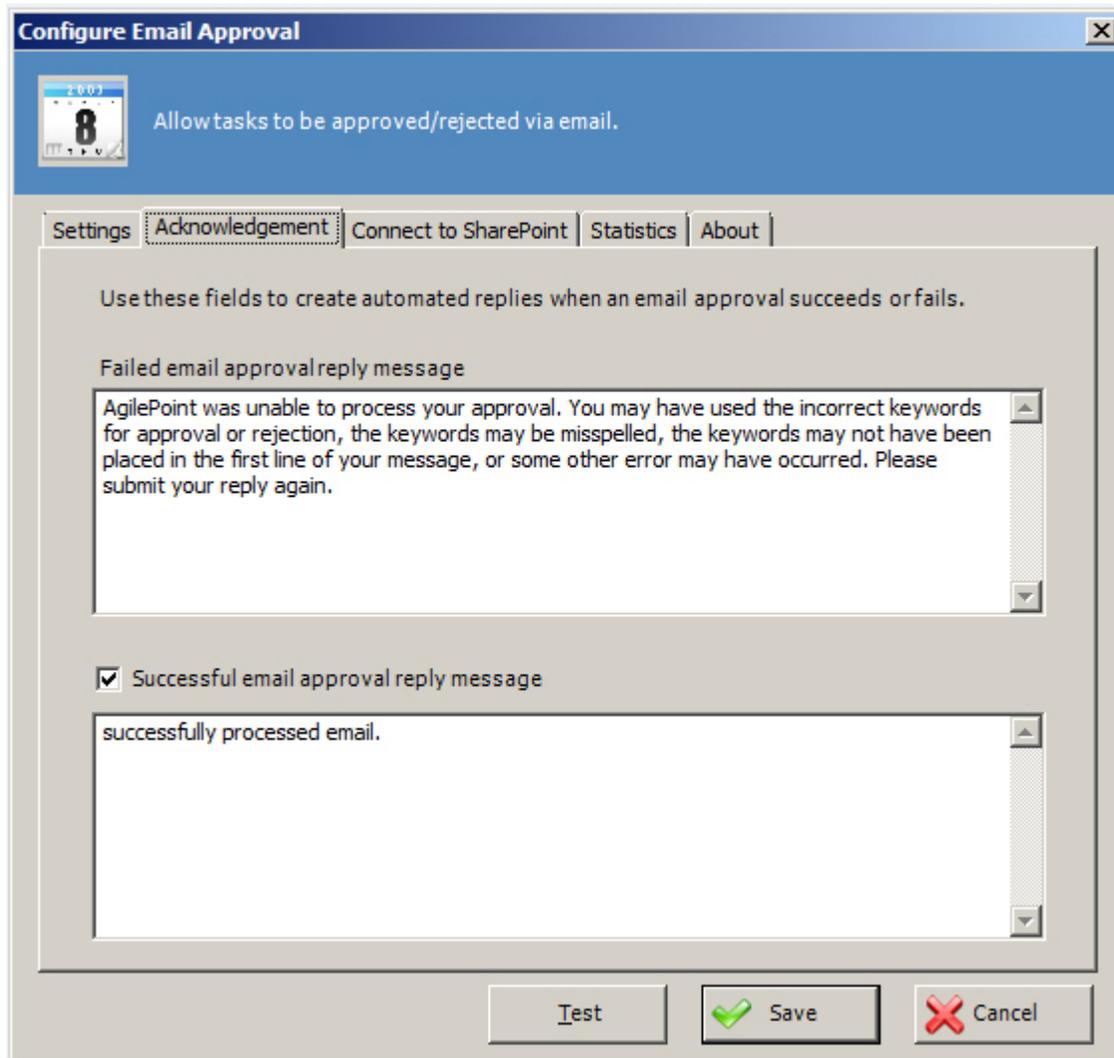
Field Name	Definition
	<p>To access this field, select the Microsoft Exchange Server mode.</p> <p><u>Allowed Values:</u> https://[host name]:[port]</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> Yes</p> <p><u>Example:</u> https://agilepoint.com:2030</p>
IMAP4 Server	<p><u>Definition:</u> Specifies the host name or IP address of the IMAP4 Server. To access this field, select IMAP.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • A valid host name or IP address for your IMAP4 Server. <p><u>Default Value:</u> None</p> <p><u>Example:</u> Demo3</p>
IMAP4 Port	<p><u>Definition:</u> Specifies the port number that is configured for communication with your IMAP4 server. To access this field, select IMAP.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • A valid port number. <p><u>Default Value:</u> 110</p>
Exchange WebService URL	<p><u>Definition:</u> Specifies the Exchange WebService URL. To access this field, select EWS or Office 365.</p> <p><u>Allowed Values:</u></p>

Field Name	Definition
	<p>https://[ExchangeServerMachineName]:[Port]/EWS/exchange.asmx</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> Yes</p> <p><u>Example:</u> https://agilepoint.com:2030/EWS/Exchange.asmx</p>
Login	<p><u>Definition:</u> Specifies the username for the mailbox containing the email-based approvals.</p> <p><u>Allowed Values:</u> A valid username.</p> <p><u>Default Value:</u> None</p>
Password	<p><u>Definition:</u> The password for the authentication account.</p> <p><u>Allowed Values:</u> A valid password.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> Yes</p>
Schedule every	<p><u>Definition:</u> Specifies the time interval in minutes for the AgileConnector to check the mailbox for new incoming email.</p> <p><u>Allowed Values:</u> Any integer.</p> <p><u>Default Value:</u> 1</p>
Delete incorrect approval emails	<p><u>Definition:</u></p>

Field Name	Definition
	<p>Deletes all the emails from the mailbox once it is read from the server.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Deletes the emails from the mailbox. • Deselected - Does not delete the emails from the mailbox. <p><u>Default Value:</u></p> <p>Deselected</p>
Basic	<p><u>Definition:</u></p> <p>Saves the basic information about the Email Approval AgileConnector in the AgilePoint Server log file.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Saves the basic information in the AgilePoint Server log file. • Deselected - Does not save the basic information in the AgilePoint Server log file. <p><u>Default Value:</u></p> <p>Selected</p>
Debug	<p><u>Definition:</u></p> <p>Saves the debug information about the email approval AgileConnector in the AgilePoint Server log file.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Saves the debugging information in the AgilePoint Server log file. • Deselected - Does not save the debugging information in the AgilePoint Server log file. <p><u>Default Value:</u></p> <p>Deselected</p>
Test	<p><u>Action:</u></p> <p>Verifies whether the specified account credential is valid.</p>

Email Approval Configuration Window - Acknowledgement Tab

Specifies the configuration of Email Approval AgileConnector for sending a custom automated reply message when an email approval succeeds or fails.



Prerequisites

- Before you add the Email Approval AgileConnector, you must add the Event Service AgileConnector.
- Before you configure these settings, you must [add the Email Approval AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

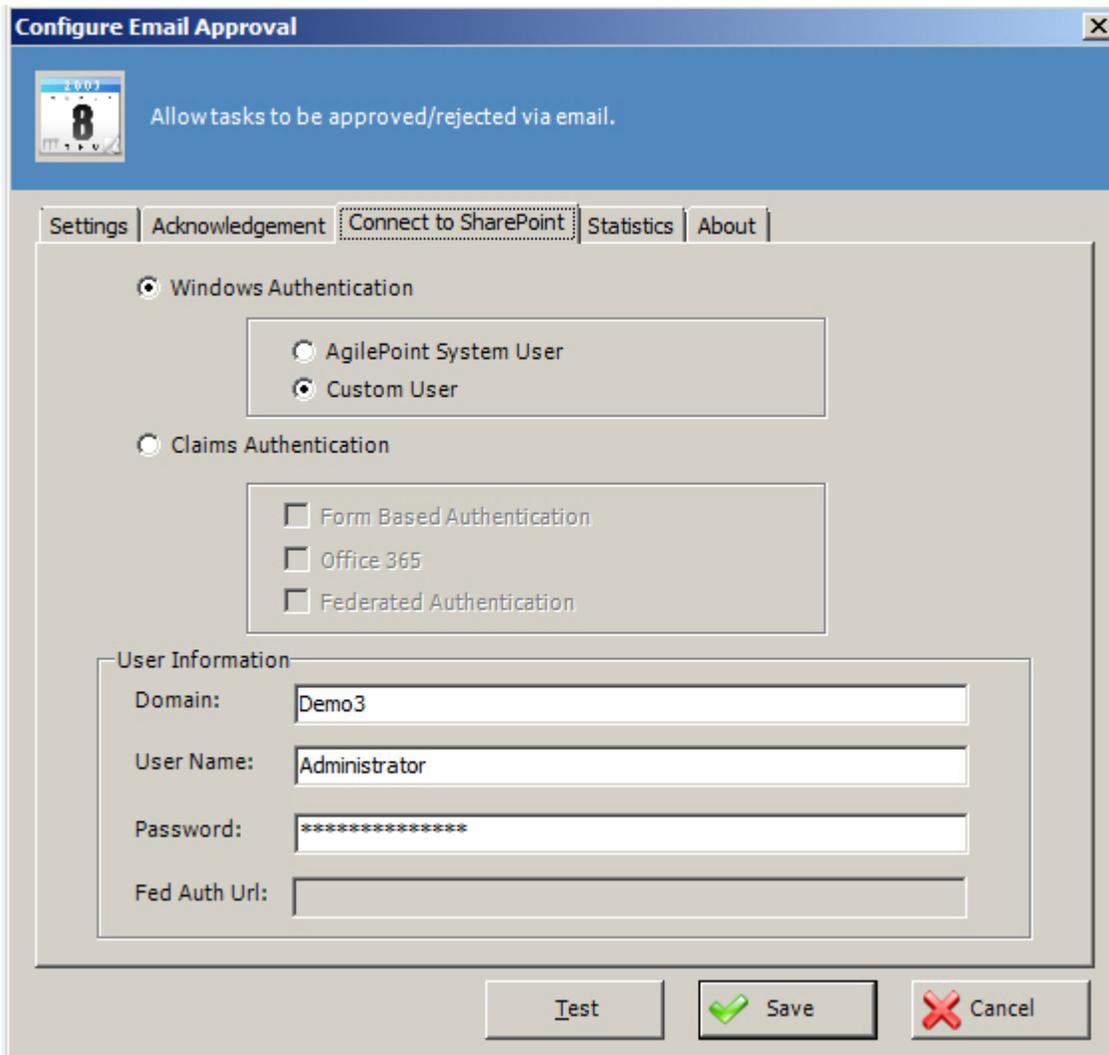
3. On the **Extensions** tab, select **MailApproval**.
4. Click **Configure**.
5. On the **Configure Email Approval** window, click the **Acknowledgement** tab.

Fields

Field Name	Definition
Failed email approval reply message	<p><u>Definition:</u></p> <p>Specifies the content the automated message sent to participants when an email approval fails.</p> <p><u>Allowed Values:</u></p> <p>A text string that represents the body of the email.</p> <p><u>Default Value:</u></p> <p>A default email message body.</p>
Successful email approval reply message	<p><u>Definition:</u></p> <p>Specifies the content the automated message sent to participants when an email approval is successful.</p> <p>Replies for successful approvals are optional.</p> <p><u>Allowed Values:</u></p> <p>A text string that represents the body of the email.</p> <p>To enable email replies for successful approvals, the check box must be selected.</p> <p><u>Default Value:</u></p> <p>Deselected, with no default message.</p>

Configure Email Approval Screen - Connect to SharePoint Tab

Configures the Email Approval AgileConnector to change values in SharePoint ListForm or InfoPath processes.



Configure Email Approval

Allow tasks to be approved/rejected via email.

Settings | Acknowledgement | **Connect to SharePoint** | Statistics | About

Windows Authentication

AgilePoint System User
 Custom User

Claims Authentication

Form Based Authentication
 Office 365
 Federated Authentication

User Information

Domain: Demo3
 User Name: Administrator
 Password: *****
 Fed Auth Url:

Test Save Cancel

Prerequisites

- Before you add the Email Approval AgileConnector, you must add the Event Service AgileConnector.
- Before you configure these settings, you must [add the Email Approval AgileConnector](#).
- If you use Forms Based Authentication, refer to this information from Microsoft to configure your SharePoint environment: <http://msdn.microsoft.com/en-us/library/bb975136%28v=office.12%29.aspx>

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **MailApproval**.
4. Click **Configure**.
5. On the **Configure Email Approval** screen, click the **Connect to SharePoint** tab.

Fields

Field Name	Definition
Windows Authentication	<p><u>Definition:</u></p> <p>Specifies if AgilePoint uses Windows Authentication to connect to SharePoint.</p>
Claims Authentication	<p><u>Definition:</u></p> <p>Specifies Claims authentication options for SharePoint.</p> <p><u>Allowed Values:</u></p> <p>If this setting is selected, these types of Claims Authentication are available:</p> <ul style="list-style-type: none"> • Form Based Authentication - Activates Forms based authentication where a custom membership provider to connect to an on-premises SharePoint environment. • Office 365 - Activates Claims authentication to connect to SharePoint in an Office 365 environment. You can use this setting side-by-side with on-premises SharePoint. • Federated Authentication - Activates Federated authentication to connect to SharePoint — for example, ADFS. <p> Note: Out of the box, AgilePoint supports ADFS authentication. If you want to use your own authentication provider, see Federated Authentication Example in the Documentation Library.</p> <p><u>Default Value:</u></p> <p>Deselected</p>
Domain	<p><u>Definition:</u></p> <p>The authentication domain.</p> <p>This does not apply to Form Based Authentication.</p>
Username	<p><u>Definition:</u></p> <p>The user name for the SharePoint authentication account.</p> <p><u>Allowed Values:</u></p> <p>A valid user name.</p>

Field Name	Definition
	<p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> No</p>
Password	<p><u>Definition:</u> The password for the authentication account.</p> <p><u>Allowed Values:</u> A valid password.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> Yes</p>
Fed Auth Url	<p><u>Definition:</u> The URI of the federated authentication provider. This provider supplies security tokens for federated authentication.</p> <p><u>Allowed Values:</u> A valid federated authentication provider URI.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> No</p> <p><u>Example:</u> https://fs.agilityclouds.com</p>

Enterprise Social AgileConnector

The Enterprise Social AgileConnector facilitates communication with Yammer applications.

Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.

Enabling the Enterprise Social AgileConnector

To enable the Enterprise Social AgileConnector, do the following.

Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

1. On the **Extensions** tab, click **Add**.
2. In the **Impersonator** field, enter the AgilePoint user name that is used to connect to your email server.
By default, this is the AgilePoint Service Account.
3. Browse to the assembly **[AgilePoint Server installation folder]\bin\AgilePoint.AgileConnector.EnterpriseSocial.dll**.
4. Click **OK**.

Configuring the Enterprise Social AgileConnector

To configure the Enterprise Social AgileConnector, do the following.

Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.
- Before configuring, you must [enable the Enterprise Social Network AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **EnterpriseSocial**.
4. Click **Configure**.

Procedure

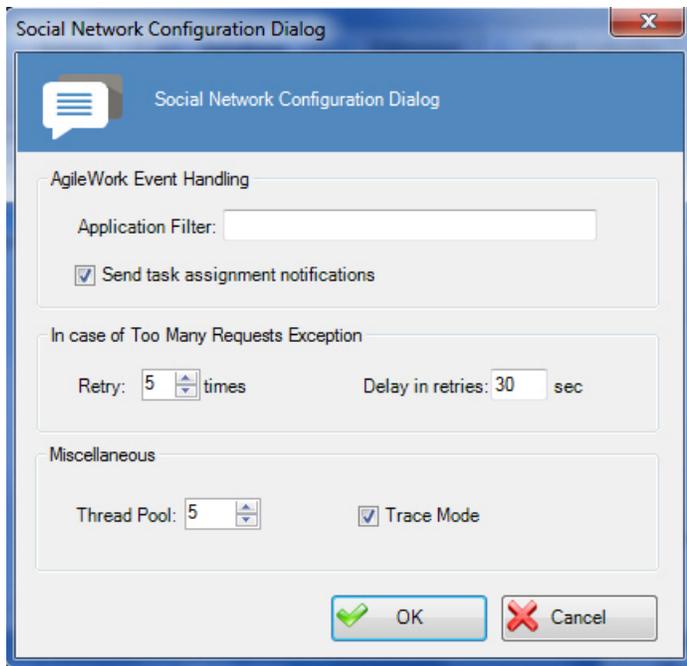
1. On the **Social Network Configuration Dialog** window, complete the following fields as required.

Field Name	Definition
Application Filter	<p><u>Definition:</u></p> <p>Filters the process template based on the application name.</p> <p>The messaging service is enabled on the process templates identified in this field.</p> <p><u>Allowed Values:</u></p> <p>One or more valid application names.</p> <p>Multiple application names must be separated with a semicolon (;).</p> <p><u>Default Value:</u></p> <p>None</p>
Send task assignment notification	<p><u>Definition:</u></p> <p>Specifies that the Enterprise Social Network AgileConnector sends an notification to the participants about the task assignment.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Sends an notification to the participants. • Deselected - No notification is sent. <p><u>Default Value:</u></p> <p>Selected</p>
Retry	<p><u>Definition:</u></p> <p>Specifies the number of times you want to retry an operation that failed due to a "Too Many Requests" exception.</p> <p>The error "429 (Too Many Requests)" occurs if your Yammer application receives too many requests within a specified time. For more information, refer to http://developer.yammer.com/restapi.</p> <p><u>Allowed Values:</u></p> <p>Any integer.</p> <p><u>Default Value:</u></p> <p>5</p>
Delay In Retries	<p><u>Definition:</u></p>

Field Name	Definition
	<p>Specifies the number of seconds you want to delay between retries after an operation fails due to a "Too Many Requests" exception.</p> <p>The error "429 (Too Many Requests)" occurs if your Yammer application receives too many requests within a specified time. For more information, refer to http://developer.yammer.com/restapi.</p> <p><u>Allowed Values:</u></p> <p>Any integer.</p> <p><u>Default Value:</u></p> <p>30</p>
Thread Pool	<p><u>Definition:</u></p> <p>Specifies the maximum number of concurrent connections between the AgilePoint Server and Yammer.</p> <p><u>Allowed Values:</u></p> <p>Any integer.</p> <p><u>Default Value:</u></p> <p>1</p>
Trace Mode	<p><u>Definition:</u></p> <p>Specifies whether the AgileConnector writes the detail logging information into the log file.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Indicates that the AgileConnector writes the detail logging information into the log file. • Deselected - Indicates that the AgileConnector does not write the detail logging information into the log file. <p><u>Default Value:</u></p> <p>Selected</p>

Social Network Configuration Dialog

Specifies the configuration details for the Enterprise Social AgileConnector.



Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.
- Before configuring, you must [enable the Enterprise Social Network AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **EnterpriseSocial**.
4. Click **Configure**.

Fields

Field Name	Definition
Application Filter	<p><u>Definition:</u></p> <p>Filters the process template based on the application name.</p> <p>The messaging service is enabled on the process templates identified in this field.</p> <p><u>Allowed Values:</u></p> <p>One or more valid application names.</p>

Field Name	Definition
	<p>Multiple application names must be separated with a semicolon (;).</p> <p><u>Default Value:</u> None</p>
Send task assignment notification	<p><u>Definition:</u> Specifies that the Enterprise Social Network AgileConnector sends an notification to the participants about the task assignment.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Sends an notification to the participants. • Deselected - No notification is sent. <p><u>Default Value:</u> Selected</p>
Retry	<p><u>Definition:</u> Specifies the number of times you want to retry an operation that failed due to a "Too Many Requests" exception.</p> <p>The error "429 (Too Many Requests)" occurs if your Yammer application receives too many requests within a specified time. For more information, refer to http://developer.yammer.com/restapi.</p> <p><u>Allowed Values:</u> Any integer.</p> <p><u>Default Value:</u> 5</p>
Delay In Retries	<p><u>Definition:</u> Specifies the number of seconds you want to delay between retries after an operation fails due to a "Too Many Requests" exception.</p> <p>The error "429 (Too Many Requests)" occurs if your Yammer application receives too many requests within a specified time. For more information, refer to http://developer.yammer.com/restapi.</p> <p><u>Allowed Values:</u> Any integer.</p> <p><u>Default Value:</u></p>

Field Name	Definition
	30
Thread Pool	<p><u>Definition:</u></p> <p>Specifies the maximum number of concurrent connections between the AgilePoint Server and Yammer.</p> <p><u>Allowed Values:</u></p> <p>Any integer.</p> <p><u>Default Value:</u></p> <p>1</p>
Trace Mode	<p><u>Definition:</u></p> <p>Specifies whether the AgileConnector writes the detail logging information into the log file.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Indicates that the AgileConnector writes the detail logging information into the log file. • Deselected - Indicates that the AgileConnector does not write the detail logging information into the log file. <p><u>Default Value:</u></p> <p>Selected</p>

ContentListener AgileConnector

The Content Listener AgileConnector extension enables you to initiate processes on items in a SharePoint list or library based on conditions you specify. The Content Listener AgileConnector runs a CAML query based on a schedule you specify to evaluate the items in the SharePoint list and initiate the appropriate processes.

For example, you could initiate an escalation processes for all items in a SharePoint list that are designated high priority or past due.

Enabling the ContentListener AgileConnector

To enable the AgilePoint Server extension:

1. Open the AgilePoint Server Configuration utility and go to the **Extension** window.
2. Click the **Add** button.
3. Click the **Ellipses** button on the Extension window and add the following assembly:

```
...\AgilePointServer\bin\Ascentn.AgileConnector.ContentListener.dll
```



Note: The **Name** field will be auto-populated, DO NOT change it. Leave the **Impersonator** field blank.

Configuring the ContentListener AgileConnector

Once you have added the ContentListener AgileConnector

Prerequisites

1. Enable the ContentListener AgileConnector.

For more information, refer to [Enabling the ContentListener AgileConnector](#) in the [Documentation Library](#).

How to Start

1. On the **AgilePoint Server Configuration Utility**, click the **Extension** Tab.

Procedure

1. On the **Extension** tab, select **ContentListener**.
2. Click **Configure**.
3. On the **SharePoint Content Listener Connector Configuration** window, complete the fields as described in this topic.

Fields

Field Name	Definition
Add Task	Creates a new task.
Delete Task	Removes an existing task.
SharePoint Access Credentials	The credentials you want to use to authenticate to SharePoint. <ul style="list-style-type: none"> • AgilePoint System Account - The standard AgilePoint system account • Custom Account - Credentials for an account you specify in the Domain, User, and Password fields.
Schedule Name	A free text name for the schedule.
Site	The URL of the SharePoint site associated with the process.
List	The SharePoint list associated with the process.
Process	The process model to use for the initiated process.
CAML Query	Specifies the CAML query used to initiate the process.

Field Name	Definition
	<p>You can type or paste a CAML query in the box, or click the Ellipses button to open the CAML Query Configuration window.</p> <p>For more information, refer to CAML Query Builder Configuration Window - List and View Fields Tab.</p>
Recurrence	<p>Specifies the schedule to run the CAML query. Options are:</p> <ul style="list-style-type: none"> • One Time - The schedule occurs only one time. • By Minute - The schedule occurs once every specified number of minutes. • By Day - Recurs at the specified time on the specified interval of days. • By Week - Recurs at the specified time on the specified days. • By Month - Recurs at the specified time on the specified days of the specified months.

DataService AgileConnector

This AgilePoint Server extension (AgileConnector) allows you to enable application data services to collect and track application data. The Data Services includes two core components:

- Data Population
- Data Tracking

Data Population allows you to write to a database the desired application data values. The data can then be used for reporting purposes. The configuration is done via AgilePoint Envision. For more information, refer to [Data Services](#) in the [Documentation Library](#).

Data Tracking provides the functionality to set up fields in AgilePoint Envision to be monitored for changes to application data, for example you can see for a specific field on a form, the "Old Value" and if the data changes, the "New Value". This viewpoint is provided via the AgilePoint Enterprise Manager Data Tracking tab.

Enabling the DataService AgileConnector

To enable the DataService AgileConnector, do the following.

Good to Know

- To support multiple applications, you can configure multiple AgileConnectors, or list multiple applications within the Application Filter of one AgileConnector.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

1. On the **Extensions** tab, click **Add**.
2. Click the **Ellipses** button next to the **Assembly** field to browse the assembly **[AgilePoint Server installation folder] \bin\Ascentn.AgileConnector.DataService.dll**.

Note the following:

- The **Name** field appears with the default AgileConnector name. Do not change this value.
 - The **Impersonator** field must be blank.
3. Click **Configure**.
 4. On the **Data Service Configuration** window, complete the following fields as required.

Field Name	Definition
Application Filter	<p><u>Definition:</u></p> <p>Filters the process template based on the process model type or name.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • SPSIntegration - Uses only process models created using InfoPath, SPList and SPDoc process templates. • AgileForms - Uses only process models created using AgileForms process templates. • MyApplication - Uses only process models created using Generic process templates — usually ASP.NET applications. • Custom application name - Uses only process models with a custom application name specified in the process template. <p>Multiple application names must be separated with a semicolon (;).</p> <p><u>Default Value:</u></p> <p>MyApplication</p>
Connection String	<p><u>Definition:</u></p> <p>Specifies the connection string to be used to connect to the Data Tracking database.</p> <p><u>Allowed Values:</u></p> <p>A valid connection string.</p> <p><u>Default Value:</u></p> <p>Data Source=.;Integrated Security=SSPI;Initial Catalog=AgilePointTracking</p>

Field Name	Definition
	<p><u>Example:</u></p> <p>Data Source=mydomain;Integrated Security=SSPI;Initial Catalog=AgilePointTracking</p>

EventService AgileConnector

This AgilePoint Server extension (AgileConnector) allows you to initiate processes automatically via scheduling, email, database, or file dropping.

Enabling the EventService AgileConnector

To enable the AgilePoint Server extension:

1. Open the AgilePoint Server Configuration utility and go to the **Extension** window.
2. On the **Extension** window, click **Add**.
3. Click the **Ellipses** button on the Extension window and add the following assembly:

```
..\AgilePointServer\bin\Ascentn.AgileConnector.EventService.dll
```



Note: The **Name** field will be auto-populated, DO NOT change it. Leave the **Impersonator** field blank.

After registering the EventService AgileConnector, you can check the AgilePoint Server log file for verification. If you see the two lines as shown below in the log file, this means that the EventService AgileConnector configuration is correct.

```
2/23/2009 2:23:14 PM >>>
    EventServiceManager EventService Started.
2/23/2009 2:23:14 PM >>> EventServiceManager,
    Event count: [number of event]
```

Lync Approval AgileConnector

The Lync Approval AgileConnector enables you to receive messages via Lync that can affect your process data. A common use for this functionality is approvals.

- AgilePoint Server installed in Windows Service mode.

Enabling the Lync Approval AgileConnector

To enable the Lync Approval AgileConnector, do the following.

Prerequisites

- AgilePoint Server installed in Windows Service mode.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.

2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

1. On the **Extensions** tab, click **Add**.
2. In the **Impersonator** field, enter the AgilePoint user name that is used to connect to your email server.
By default, this is the AgilePoint Service Account.
3. Browse to the assembly **[AgilePoint Server installation folder]\bin\AgilePoint.LyncApproval.AgileConnector.dll**.
4. Click **OK**.

Configuring the Lync Approval AgileConnector

To configure the Lync Approval AgileConnector, do the following.

Prerequisites

- AgilePoint Server installed in Windows Service mode.
- Before you configure these settings, you must add the Lync Approval AgileConnector.
For more information, refer to [Enabling the Lync Approval AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **LyncApproval**.
4. Click **Configure**.
5. On the **Lync Approval** screen, click the **Lync Settings** tab.

Procedure

1. On the **Configure Lync Approval AgileConnector** screen, complete the following fields as required.

Field Name	Definition
Application Filter	<p><u>Definition:</u></p> <p>Filters the process template based on the application name.</p> <p>The messaging service is enabled on the process templates identified in this field.</p> <p><u>Allowed Values:</u></p> <p>One or more valid application names.</p> <p>Multiple application names must be separated with a semicolon (;).</p>

Field Name	Definition
	<p><u>Default Value:</u> None</p>
Lync Sign-In Address	<p><u>Definition:</u> Specifies the email address for the Lync account.</p> <p><u>Allowed Values:</u> A valid email address.</p> <p><u>Default Value:</u> None</p>
Lync Sign-In Domain	<p><u>Definition:</u> Specifies the domain name for the Lync account used by AgilePoint Server.</p> <p><u>Allowed Values:</u> A valid domain name.</p> <p><u>Default Value:</u> None</p>
Password	<p><u>Definition:</u> The password for the authentication account.</p> <p><u>Allowed Values:</u> A valid password.</p> <p><u>Default Value:</u> None</p>
Send Task Assignment Notifications to Lync	<p><u>Definition:</u> Specifies that the Lync Approval AgileConnector sends the task assignment notification to the participants via Lync.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Sends a task assignment notification via Lync. • Deselected - No task assignment notification is sent. <p><u>Default Value:</u> Deselected</p>

Configuring SharePoint Connectivity for the Lync Approval AgileConnector

To configure the Lync Approval AgileConnector so it can change values in SharePoint ListForm or InfoPath processes, do the procedure in this topic.

Prerequisites

- AgilePoint Server installed in Windows Service mode.
- Before you configure these settings, you must add the Lync Approval AgileConnector.
For more information, refer to [Enabling the Lync Approval AgileConnector](#).
- If you use Forms Based Authentication, refer to this information from Microsoft to configure your SharePoint environment: <http://msdn.microsoft.com/en-us/library/bb975136%28v=office.12%29.aspx>

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **LyncApproval**.
4. Click **Configure**.
5. On the **Lync Approval** screen, click the **Connect to SharePoint** tab.

Procedure

1. On the **Connect to SharePoint** tab, complete these fields as necessary for your environment .

Field Name	Definition
Windows Authentication	<p><u>Definition:</u></p> <p>Specifies if AgilePoint uses Windows Authentication to connect to SharePoint.</p>
Claims Authentication	<p><u>Definition:</u></p> <p>Specifies Claims authentication options for SharePoint.</p> <p><u>Allowed Values:</u></p> <p>If this setting is selected, these types of Claims Authentication are available:</p> <ul style="list-style-type: none"> • Form Based Authentication - Activates Forms based authentication where a custom membership provider to connect to an on-premises SharePoint environment. • Office 365 - Activates Claims authentication to connect to SharePoint in an Office 365

Field Name	Definition
	<p>environment. You can use this setting side-by-side with on-premises SharePoint.</p> <ul style="list-style-type: none"> Federated Authentication - Activates Federated authentication to connect to SharePoint — for example, ADFS. <p> Note: Out of the box, AgilePoint supports ADFS authentication. If you want to use your own authentication provider, see Federated Authentication Example in the Documentation Library.</p> <p><u>Default Value:</u> Deselected</p>
Domain	<p><u>Definition:</u> The authentication domain. This does not apply to Form Based Authentication.</p>
Username	<p><u>Definition:</u> The user name for the SharePoint authentication account.</p> <p><u>Allowed Values:</u> A valid user name.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> No</p>
Password	<p><u>Definition:</u> The password for the authentication account.</p> <p><u>Allowed Values:</u> A valid password.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> Yes</p>
Fed Auth Url	<p><u>Definition:</u></p>

Field Name	Definition
	<p>The URI of the federated authentication provider. This provider supplies security tokens for federated authentication.</p> <p><u>Allowed Values:</u> A valid federated authentication provider URI.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> No</p> <p><u>Example:</u> https://fs.agilityclouds.com</p>

Lync Approval AgileConnector Configuration Window - Lync Settings Tab

Specifies the configuration options for the Lync Approval AgileConnector.

Prerequisites

- AgilePoint Server installed in Windows Service mode.
- Before you configure these settings, you must add the Lync Approval AgileConnector.

For more information, refer to [Enabling the Lync Approval AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **LyncApproval**.
4. Click **Configure**.
5. On the **Lync Approval** screen, click the **Lync Settings** tab.

Fields

Field Name	Definition
Application Filter	<p><u>Definition:</u></p> <p>Filters the process template based on the application name.</p> <p>The messaging service is enabled on the process templates identified in this field.</p> <p><u>Allowed Values:</u></p> <p>One or more valid application names.</p> <p>Multiple application names must be separated with a semicolon (;).</p> <p><u>Default Value:</u></p> <p>None</p>
Lync Sign-In Address	<p><u>Definition:</u></p> <p>Specifies the email address for the Lync account.</p> <p><u>Allowed Values:</u></p> <p>A valid email address.</p> <p><u>Default Value:</u></p> <p>None</p>
Lync Sign-In Domain	<p><u>Definition:</u></p> <p>Specifies the domain name for the Lync account used by AgilePoint Server.</p> <p><u>Allowed Values:</u></p> <p>A valid domain name.</p> <p><u>Default Value:</u></p> <p>None</p>

Field Name	Definition
Password	<p><u>Definition:</u> The password for the authentication account.</p> <p><u>Allowed Values:</u> A valid password.</p> <p><u>Default Value:</u> None</p>
Send Task Assignment Notifications to Lync	<p><u>Definition:</u> Specifies that the Lync Approval AgileConnector sends the task assignment notification to the participants via Lync.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Sends a task assignment notification via Lync. • Deselected - No task assignment notification is sent. <p><u>Default Value:</u> Deselected</p>

Lync Approval AgileConnector Configuration Window - Connect to SharePoint Tab

Configures the Lync Approval AgileConnector to change values in SharePoint ListForm or InfoPath processes.

Prerequisites

- AgilePoint Server installed in Windows Service mode.
- Before you configure these settings, you must add the Lync Approval AgileConnector.
For more information, refer to [Enabling the Lync Approval AgileConnector](#).
- If you use Forms Based Authentication, refer to this information from Microsoft to configure your SharePoint environment: <http://msdn.microsoft.com/en-us/library/bb975136%28v=office.12%29.aspx>

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **LyncApproval**.
4. Click **Configure**.

5. On the **Lync Approval** screen, click the **Connect to SharePoint** tab.

Fields

Field Name	Definition
Windows Authentication	<p><u>Definition:</u></p> <p>Specifies if AgilePoint uses Windows Authentication to connect to SharePoint.</p>
Claims Authentication	<p><u>Definition:</u></p> <p>Specifies Claims authentication options for SharePoint.</p> <p><u>Allowed Values:</u></p> <p>If this setting is selected, these types of Claims Authentication are available:</p> <ul style="list-style-type: none"> • Form Based Authentication - Activates Forms based authentication where a custom membership provider to connect to an on-premises SharePoint environment. • Office 365 - Activates Claims authentication to connect to SharePoint in an Office 365 environment. You can use this setting side-by-side with on-premises SharePoint. • Federated Authentication - Activates Federated authentication to connect to SharePoint — for example, ADFS. <p> Note: Out of the box, AgilePoint supports ADFS authentication. If you want to use your own authentication provider, see Federated Authentication Example in the Documentation Library.</p> <p><u>Default Value:</u></p> <p>Deselected</p>
Domain	<p><u>Definition:</u></p> <p>The authentication domain.</p> <p>This does not apply to Form Based Authentication.</p>
Username	<p><u>Definition:</u></p> <p>The user name for the SharePoint authentication account.</p> <p><u>Allowed Values:</u></p> <p>A valid user name.</p>

Field Name	Definition
	<u>Default Value:</u> None <u>Custom Attributes:</u> None
Password	<u>Definition:</u> The password for the authentication account. <u>Allowed Values:</u> A valid password. <u>Default Value:</u> None <u>Custom Attributes:</u> Yes
Fed Auth Url	<u>Definition:</u> The URI of the federated authentication provider. This provider supplies security tokens for federated authentication. <u>Allowed Values:</u> A valid federated authentication provider URI. <u>Default Value:</u> None <u>Custom Attributes:</u> None <u>Example:</u> https://fs.agilityclouds.com

MSMQ AgileConnector

This AgilePoint Server extension (AgileConnector) allows you to run Microsoft Message Queuing.

Enabling the MSMQ AgileConnector

To enable the AgilePoint Server extension:

1. Open the AgilePoint Server Configuration utility and go to the **Extension** window.
2. Click the **Add** button.

- Click the **Ellipses** button on the Extension window and add the following assembly:

```
...\AgilePointServer\bin\Ascentn.AgileConnector.MSMQ.dll
```



Note: The **Name** field will be auto-populated, DO NOT change it. Leave the **Impersonator** field blank.

- Click **OK**.
- Click the **Configure** button and specify the desired configuration settings.

MSWFRuntime AgileConnector

This AgilePoint Server extension (AgileConnector) allows you to enable AgilePoint Server to host and execute Microsoft Windows Workflow Foundation activities at run time. AgilePoint provides the Sequential Workflow AgilePart that can be initiated from an AgilePoint process as a sub-process to facilitate the data-exchange between AgilePoint and Windows Workflow Foundation. The Sequential Workflow AgilePart can be customized by leveraging this AgileConnector for Windows Workflow Foundation.



Note: This AgileConnector requires the .NET Framework 3.0 or later.

This AgileConnector is implemented as a class named **Ascentn.AgileConnector.MSWFRuntime** in the **Ascentn.AgileConnector.MSWFRuntime** assembly. The assembly is located by default in the ... **\AgilePointServer\bin** folder under your AgilePoint Server installation location.

Once you have enabled and configured the AgileConnector from the AgilePoint Server Configuration utility's Extensions window (as shown below), then you can create AgilePoint workflow applications that execute Windows Workflow Foundation activities and workflow applications.

Enabling the MSWFRuntime AgileConnector

To enable the AgilePoint Server extension:

- Open the AgilePoint Server Configuration utility and go to the **Extension** window.
- Click the Add button.
- Ensure the database is configured properly.
- Click the Ellipses button on the Extension window and add the following assembly:

```
...\AgilePointServer\bin\Ascentn.AgileConnector.MSWFRuntime.dll
```



Note: The **Name** field will be auto-populated, DO NOT change it. Leave the **Impersonator** field blank.

- Click **OK**.
- Click the **Configure** button and specify the desired configuration settings. It prompts the following window for the Windows Workflow Foundation persistence and tracking database configuration.

This step requires DBA privileges for creating tables and stored procedures. Also, the following SQL files are used:

- **SqlPersistenceService_Logic.sql**
- **SqlPersistenceService_Schema.sql**
- **Tracking_Logic.sql**

- **Tracking_Schema.sql**

These files can be found in the AgilePoint Server folder at ...**AgilePoint Server\Components\Workflow Foundation**.

The Database Server needs to be same as AgilePoint Server, but the Database can be different.

7. Once finished with the configuration, click **OK**.

RemotingService AgileConnector

This AgilePoint Server extension (AgileConnector) allows you to enable and configure AgilePoint Server to use Remoting to interact with AgilePoint Server. This extension opens up a port that can be used to connect (via Remoting) to the AgilePoint Server Process Engine and API. This AgileConnector is implemented as a class named **Ascentn.Workflow.Extension.RemotingService** in the **Ascentn.AgileConnector.RemotingService.dll** assembly. The assembly is located by default in the ... **AgilePointServer\bin** folder under your AgilePoint Server installation location.

Once you have enabled and configured the AgileConnector from the AgilePoint Server Configuration utility's Extensions window (as shown below), then you can create client applications that use Remoting to interact with AgilePoint Server.

Enabling the RemotingService AgileConnector

To enable the AgilePoint Server extension:

1. Open the AgilePoint Server Configuration utility and go to the **Extension** window.
2. Click the **Add** button.
3. Click the **Ellipses** button on the Extension window and add the following assembly:

```
...\AgilePointServer\bin\Ascentn.AgileConnector.RemotingService.dll
```



Note: The **Name** field will be auto-populated, DO NOT change it. Leave the **Impersonator** field blank.

4. Click **OK**.
5. Click the **Configure** button and specify the desired configuration settings.
6. Click **OK**.

SAP Integration AgileConnector

This AgilePoint Server extension (AgileConnector) enables you to run the SAP Integration component of the AgilePoint BPMS Suite.

Prerequisites

- The standard SAP AgileConnector requires a .NET 3.5 environment. For .NET 4.0 environments, you must use a custom web service to connect to the ERPLink SAP connector installed on a .NET 3.5 machine. For more information, [contact AgilePoint Professional Services](#).

Enabling the SAP AgileConnector

To configure the SAP AgileConnector, do the following.

Prerequisites

- The standard SAP AgileConnector requires a .NET 3.5 environment. For .NET 4.0 environments, you must use a custom web service to connect to the ERPLink SAP connector installed on a .NET 3.5 machine. For more information, [contact AgilePoint Professional Services](#).

How to Start

- On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
- On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

- On the **Extensions** tab, click **Add**.
- Browse to the assembly [\[AgilePoint Server installation folder\]\bin\Ascentn.AgileConnector.SAPIntegration.dll](#), and then click **OK** to add this extension to AgilePoint Server.

Configuring the SAP AgileConnector

To configure the SAP AgileConnector, do the following.

Prerequisites

- The standard SAP AgileConnector requires a .NET 3.5 environment. For .NET 4.0 environments, you must use a custom web service to connect to the ERPLink SAP connector installed on a .NET 3.5 machine. For more information, [contact AgilePoint Professional Services](#).

How to Start

- On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
- On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

- On the **Extensions** tab, select the **SAPIntegration** AgileConnector.
- Click the **Configure** button.
- In the configuration window for the SAP Integration AgileConnector, configure the following fields as required.

Field Name	Definition
Max Threads for SAP Integration	<u>Definition:</u>

Field Name	Definition
	<p>Specifies the maximum number of concurrent connections between AgilePoint Server and SAP.</p> <p><u>Allowed Values:</u></p> <p>Any integer.</p> <p><u>Default Value:</u></p> <p>5</p>
Send Notification for Suspended Processes	<p><u>Definition:</u></p> <p>Specifies whether the SAP Integration AgileConnector sends a notification to the AgilePoint system administrator if a process instances is suspended as a result of an SAP integration error.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Deselected - No email notification is sent. • Selected - Sends an email notification if a process instance is suspended. <p><u>Default Value:</u></p> <p>Deselected</p>

Configuring the AgilePoint SharePoint Integration AgileConnector

This AgilePoint Server extension (AgileConnector) allows for the communication between AgilePoint Server and SharePoint. This extension is only applicable for the AgilePoint SharePoint Integration v2.

Prerequisites

- AgilePoint Server is installed.
- The credentials for the SharePoint Impersonator account.

The SharePoint Impersonator account is determined during pre-installation. For more information, refer to [Creating a SharePoint Impersonator User Account](#) in the [Documentation Library](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

1. On the **Extension** tab, click on **Add**.
2. Browse one of the following locations to open the file **Ascentn.SharePoint.AgileConnector.dll**:

- For IIS installations, this file is located in the **bin** folder under the AgilePoint Server installation folder.
 - For Windows Service installations, this file is located in the **bin** folder under the path provided in the **Location** field in Windows Server Manager for the Windows Service instance you want to configure.
3. Change the **Name** from **AgileConnector** to **SPSIntegration**.
 4. Enter the Impersonator (e.g. Administrator).
 5. Click **OK**.
 6. Optionally, you can click **Configure** to set the maximum thread for SharePoint access and to set the credential for SharePoint access. By default it will use the AgilePoint System User Account credential.
 7. When you have finished the configuration, on the **AgilePoint Configuration** window, click **OK**.
Accept any informational messages.
If you are prompted to restart IIS or the AgilePoint Service, click **Yes**.

Configuring the SharePoint Integration AgileConnector

To configure the SPSIntegration extension, do the following.

Prerequisites

- If you use Forms Based Authentication, refer to this information from Microsoft to configure your SharePoint environment: <http://msdn.microsoft.com/en-us/library/bb975136%28v=office.12%29.aspx>

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **SPSIntegration**.
4. Click **Configure**.

Instructions

1. On the **AgileConnector for SharePoint** window, configure the following fields as required for your environment, and then click **OK**.

Field Name	Definition
Max Threads for SharePoint Access	<p><u>Definition:</u> Specifies the maximum number of concurrent connections between AgilePoint Server and SharePoint.</p> <p><u>Allowed Values:</u> Any integer.</p> <p><u>Default Value:</u> 10</p>

Field Name	Definition
Windows Authentication	<p><u>Definition:</u></p> <p>Specifies if AgilePoint uses Windows Authentication to connect to SharePoint.</p>
Claims Authentication	<p><u>Definition:</u></p> <p>Specifies Claims authentication options for SharePoint.</p> <p><u>Allowed Values:</u></p> <p>If this setting is selected, these types of Claims Authentication are available:</p> <ul style="list-style-type: none"> • Form Based Authentication - Activates Forms based authentication where a custom membership provider to connect to an on-premises SharePoint environment. • Office 365 - Activates Claims authentication to connect to SharePoint in an Office 365 environment. You can use this setting side-by-side with on-premises SharePoint. • Federated Authentication - Activates Federated authentication to connect to SharePoint — for example, ADFS. <p> Note: Out of the box, AgilePoint supports ADFS authentication. If you want to use your own authentication provider, see Federated Authentication Example in the Documentation Library.</p> <p><u>Default Value:</u></p> <p>Deselected</p>
Domain	<p><u>Definition:</u></p> <p>The authentication domain.</p> <p>This does not apply to Form Based Authentication.</p>
Username	<p>The user ID of the SharePoint authentication account.</p>
Password	<p><u>Definition:</u></p> <p>The password for the authentication account.</p> <p><u>Allowed Values:</u></p> <p>A valid password.</p> <p><u>Default Value:</u></p> <p>None</p>

Field Name	Definition
	<u>Custom Attributes:</u> Yes
Fed Auth Url	<u>Definition:</u> The URI of the federated authentication provider. This provider supplies security tokens for federated authentication. <u>Allowed Values:</u> A valid federated authentication provider URI. <u>Default Value:</u> None <u>Custom Attributes:</u> No <u>Example:</u> https://fs.agilityclouds.com
Use UTF8 Encoding	<u>Definition:</u> Specifies whether to use UTF-8 encoding when communicating with the external system. <u>Allowed Values:</u> <ul style="list-style-type: none"> • Selected - Specifies to use UTF-8 encoding. • Deselected - Specifies not to use UTF-8 encoding. <u>Default Value:</u> Deselected
Send Notification for Suspended Processes	<u>Definition:</u> Specifies whether the SPSIntegration AgileConnector sends a notification to the AgilePoint system administrator if a process instances is suspended as a result of a SharePoint Integration error. <u>Allowed Values:</u> <ul style="list-style-type: none"> • Deselected - No email notification is sent. • Selected - Sends an email notification if a process instance is suspended. <u>Default Value:</u> Deselected

SMS Service and Approval AgileConnector

The SMS AgileConnector enables you to send messages from a process via SMS. Optionally, you can use a third-party SMS listening service in order to receive SMS messages for responses such as approvals.

- AgilePoint Server installed in Windows Service mode.
- If you want to use Strikelron SMS listener functionality, you must set up an account with Strikelron. This is a paid account.
To register an account, visit www.strikeiron.com.
- If you want to use a different SMS listener vendor, [contact AgilePoint Professional Services](#) to request a new AgileConnector.

Enabling the SMS Service and Approval AgileConnector

To enable the SMS Service and Approval AgileConnector, do the following.

Prerequisites

- AgilePoint Server installed in Windows Service mode.
- If you want to use Strikelron SMS listener functionality, you must set up an account with Strikelron. This is a paid account.
To register an account, visit www.strikeiron.com.
- If you want to use a different SMS listener vendor, [contact AgilePoint Professional Services](#) to request a new AgileConnector.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

1. On the **Extensions** tab, click **Add**.
2. In the **Impersonator** field, enter the AgilePoint user name that is used to connect to your email server.
By default, this is the AgilePoint Service Account.
3. Browse to the assembly **[AgilePoint Server installation folder]\bin\AgilePoint.AgileConnector.SMSService.dll**.
4. Click **OK**.

Configuring the SMS Service and Approval AgileConnector

The Configuring the SMS Service and Approval AgileConnector supports two types of actions using SMS:

- **Sending notifications based on events** - SMS notifications are set up in the AgileWorks within a process model. Sending SMS notifications does not require a listener service account.

- **Listening for incoming responses for process input** - This is typically used for simple responses such as approve/reject. This requires a listener service account.

To configure the SMS Service and Approval AgileConnector, do the following.

Prerequisites

- AgilePoint Server installed in Windows Service mode.
- If you want to use Strikelron SMS listener functionality, you must set up an account with Strikelron. This is a paid account.
To register an account, visit www.strikeiron.com.
- If you want to use a different SMS listener vendor, [contact AgilePoint Professional Services](#) to request a new AgileConnector.
- Before configuring, you must [enable the SMS Service and Approval AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **SMSService**.
4. Click **Configure**.

Procedure

1. If you want to filter out process models that will not use SMS messaging, complete the following field.

Field Name	Definition
Application Filter	<p><u>Definition:</u></p> <p>Filters the process template based on the application name.</p> <p>The messaging service is enabled on the process templates identified in this field.</p> <p><u>Allowed Values:</u></p> <p>One or more valid application names.</p> <p>Multiple application names must be separated with a semicolon (;).</p> <p><u>Default Value:</u></p> <p>None</p>

2. To set the "from" name participants see in their SMS notifications, complete the following field:

Field Name	Definition
From Name in SMS Text	<p><u>Definition:</u></p>

Field Name	Definition
	<p>Specifies the name displayed in an SMS text message.</p> <p><u>Allowed Values:</u> A single line of text.</p> <p><u>Default Value:</u> None.</p>

3. If you want users to receive notifications when tasks are assigned, select **Send Notification to Users about Task Assignment**.
4. If you want AgilePoint to listen to incoming SMS messages to support SMS responses, do the following:
 - a. On the **Configure SMS Service AgileConnector** window, enter the user name and password for your SMS.

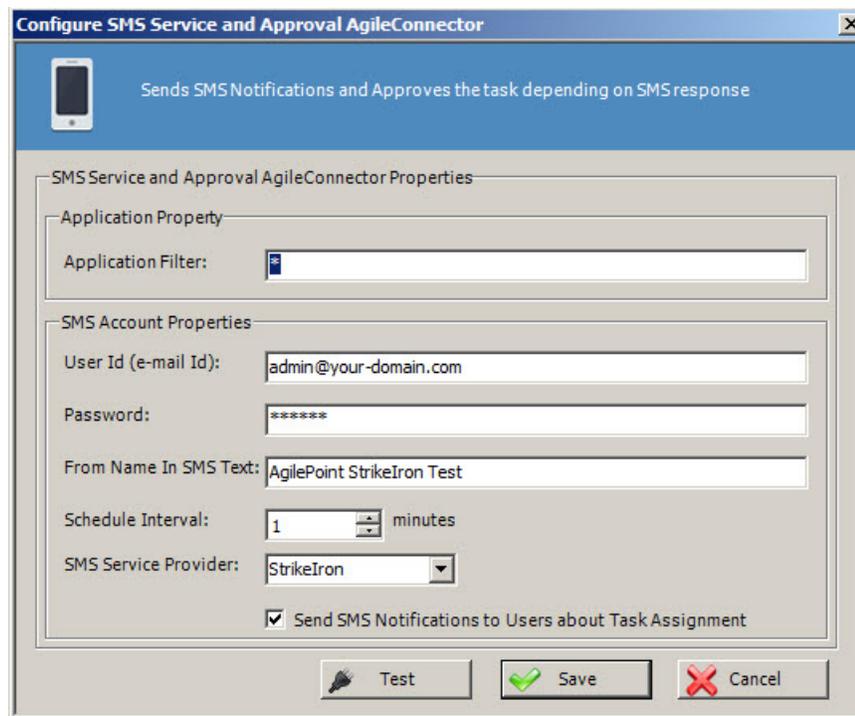
Field Name	Definition
User ID	<p><u>Definition:</u> Specifies the user name of the Strikelron service account.</p> <p><u>Allowed Values:</u> A valid user name.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> No</p>
Password	<p><u>Definition:</u> The password for the authentication account.</p> <p><u>Allowed Values:</u> A valid password.</p> <p><u>Default Value:</u> None</p>
Schedule Interval	<p><u>Definition:</u> Specifies the number of minutes for the AgileConnector to wait before checking whether the task has been approved.</p> <p><u>Allowed Values:</u> Any integer.</p>

Field Name	Definition
	<u>Default Value:</u> 1
SMS Service Provider	<u>Definition:</u> Specifies the name of the service provider. <u>Allowed Values:</u> A valid service provider name that appears in the list. If you want to use a different SMS listener vendor, contact AgilePoint Professional Services to request a new AgileConnector. <u>Default Value:</u> Strikelron.

- b. To test whether the SMS listener account is valid, click **Test**.

SMS Service and Approval AgileConnector Configuration Window

Specifies the configuration details of the SMS Service and Approval AgileConnector.



Prerequisites

- AgilePoint Server installed in Windows Service mode.
- If you want to use Strikelron SMS listener functionality, you must set up an account with Strikelron. This is a paid account.
To register an account, visit www.strikeiron.com.
- If you want to use a different SMS listener vendor, [contact AgilePoint Professional Services](#) to request a new AgileConnector.
- Before configuring, you must [enable the SMS Service and Approval AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **SMSService**.
4. Click **Configure**.

Fields

Field Name	Definition
Application Filter	<p><u>Definition:</u></p> <p>Filters the process template based on the application name.</p> <p>The messaging service is enabled on the process templates identified in this field.</p> <p><u>Allowed Values:</u></p> <p>One or more valid application names.</p> <p>Multiple application names must be separated with a semicolon (;).</p> <p><u>Default Value:</u></p> <p>None</p>
User ID	<p><u>Definition:</u></p> <p>Specifies the user name of the Strikelron service account.</p> <p><u>Allowed Values:</u></p> <p>A valid user name.</p> <p><u>Default Value:</u></p> <p>None</p>

Field Name	Definition
	<u>Custom Attributes:</u> No
Password	<u>Definition:</u> The password for the authentication account. <u>Allowed Values:</u> A valid password. <u>Default Value:</u> None
From Name in SMS Text	<u>Definition:</u> Specifies the name displayed in an SMS text message. <u>Allowed Values:</u> A single line of text. <u>Default Value:</u> None.
Schedule Interval	<u>Definition:</u> Specifies the number of minutes for the AgileConnector to wait before checking whether the task has been approved. <u>Allowed Values:</u> Any integer. <u>Default Value:</u> 1
SMS Service Provider	<u>Definition:</u> Specifies the name of the service provider. <u>Allowed Values:</u> A valid service provider name that appears in the list. If you want to use a different SMS listener vendor, contact AgilePoint Professional Services to request a new AgileConnector. <u>Default Value:</u> Strikelron.

Field Name	Definition
Send SMS Notification to Users about Task Assignment	<p><u>Definition:</u></p> <p>Specifies that the SMS Service AgileConnector sends an SMS notification to the participants about the task assignments.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Sends an SMS notification to the participants. • Deselected - No SMS notification is sent. <p><u>Default Value:</u></p> <p>Deselected</p>
Test	<p><u>Action:</u></p> <p>Verifies whether the specified account credential is valid.</p>

Configuring the SPSyncModule Extension

This AgilePoint Server extension (AgileConnector) allows you to synchronize SharePoint site collection groups with AgilePoint groups automatically.

This extension is optional.

Prerequisites

- The AgilePoint System User (as defined in the AgilePoint Server Configuration utility) should be a SharePoint user.
- AgilePoint Server's Application Pool's Identity user account (as configured in IIS) needs to have read permissions to the SharePoint data.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

1. On the **Extension** tab, click on **Add**.
2. Browse one of the following locations to open the file **SPSyncModule.dll**:
 - For IIS installations, this file is located in the **bin** folder under the AgilePoint Server installation folder.
 - For Windows Service installations, this file is located in the **bin** folder under the path provided in the **Location** field in Windows Server Manager for the Windows Service instance you want to configure.
3. Leave the **Impersonator** field blank.
4. Click **OK**.

Now you will need to configure the module to schedule the synchronization.

5. Click the **Configure** button, and specify the desired configuration settings.

In the configuration interface, you can specify the SharePoint site for which you want to synchronize the groups; you can also optionally provide the site prefix and group prefix. You can also specify the synchronization with the frequency of every day, week, or month and at a particular time of day starting with the day you set the schedule. The synchronization module also provides the option of registering the users automatically or sending an alert email to AgilePoint system user if there are members in the SharePoint groups that have yet to be registered in AgilePoint.

6. Provide a valid SharePoint Site URL, for example `http://[hostname]:[port]/sites/MySite`.
7. The **Site Prefix** field is optional.

In a case where two site collections are configured, then groups with a common name can be distinguished using this property. For example Site "A" has a group called "Employees" and Site "B" also has a group called "Employees". In AgilePoint, you can create two groups "SiteA_Employees" corresponding to Employees group in site A and "SiteB_Employees" corresponding to siteB's Employees. So while configuring Site A mention "SiteA_" in site prefix so that it will sync with "SiteA_Employees" during the synchronization process and for site B mention "SiteB_" in site prefix so that it sync's with "SiteB_Employees".

8. The "Group Prefix" field is optional.

This property is used in case a new group is created in SharePoint and you want that group to be created in AgilePoint. If a group prefix is not empty, then all the groups created in SharePoint starting with a Group prefix value will be created in AgilePoint during the Synchronization process. For example, the group prefix value is set as "GR_" then all the new groups in SharePoint starting with GR_ will be created and synced during the synchronization process.

9. The **Schedule** section is used to schedule the frequency of synchronization.

You can configure Synchronization frequency to sync daily (Every Day) at a particular time, or Weekly (Every Week), or Monthly (Every Month).

10. The **Option** section provides an option to select what action needs to be taken when a SharePoint group member is not an AgilePoint user. Either one can select to register user to AgilePoint automatically or send a notification to AgilePoint System user.

Group Member Synchronization Rules

- Only groups that have already been added into AgilePoint will be synchronized with SharePoint. New SharePoint groups will be added automatically to AgilePoint only if the group prefix value is not empty and the new SharePoint group name starts with a Group prefix value. The new groups will automatically be assigned to the default "Users" Role. If a group prefix value is empty, then new groups can be added manually through the Enterprise Manager interface.
- The changes of user members (adding or removing) in the SharePoint groups will be synchronized to AgilePoint but the changes in AgilePoint groups will NOT be synchronized back to the SharePoint groups.
- The synchronization only applies to member association (Add or Remove) within the groups. Group properties such as names and descriptions are NOT synchronized.
- When a new member is added to SharePoint group, this member will also be added to the corresponding AgilePoint group. If the actual user entity is not registered in AgilePoint yet, the user entity will be registered to AgilePoint automatically.

- When a member is removed from SharePoint group, this member in the corresponding AgilePoint group will also be removed. The actual user entity will NOT be removed from AgilePoint as the same user entity can also be associated with other groups in the system.

User Synchronization Rules

Changes to the following SharePoint User properties will be synchronized to AgilePoint. Other properties will NOT be synchronized.

- Full Name
- Email Address
- Department
- Title
- Manager

Scheduling

The schedule of the synchronization is set through the module's configuration interface. The synchronization can be performed at a particular time of day with the frequency of every day, every week, or every month.

For example, if you schedule the synchronization to be performed at 2am on Jan. 1 and you also select **Every day** as the frequency, the synchronization will be started automatically at 2am on Jan 1, Jan 2, Jan 3, etc.

The following table summarizes the different ways that the schedule can be set for the synchronization.

Frequency	Time	1st Sync	2nd Sync	3rd Sync	4th Sync	5th Sync
Every Day	2am	Jan. 1	Jan. 2	Jan. 3	Jan. 4	Jan. 5
Every Week	2am	Jan. 1	Jan. 8	Jan. 15	Jan. 22	Jan. 29
Every Month	2am	Jan. 1	Feb. 1	March. 1	April. 1	May. 1

The synchronizations typically happen within five minutes of the scheduled time. For example, if the scheduled time is 2am, the actual synchronization could happen between 1:55am to 2:05am.

 **Note:** The scheduling pattern (daily, weekly, or monthly) and scheduling time should be the same for multiple AgileConnectors of the same type.

Exception Handling

This module also provides exception handling for the scheduling. In the event that your server is down during the scheduled synchronization, as soon as your server is back online, the synchronization will be automatically kicked off. After that, the next synchronization will resume the original schedule.

Log Files

 **Note:** The SharePoint Groups Synchronization module also writes log messages to the SPSyncModule.log file. The SPSyncModule.log file can also be found at the AgilePointServer\log folder.

This log file contains detail information about each synchronization operation, such as the status of each group, or what users were unable to be registered to AgilePoint.

The following is an example of the log message in the ActiveDirectorySynchronizer.log file:

```
3/1/2005 5:51:49 PM>> Synchronization has started
to perform on 3/1/2005 5:51:47 PM
Synchronizing Group 'Employees', SharePoint site URL =
http://r61i-01:8000 Registering user 'MYDOMAIN\Test1' to
AgilePoint. User full name: Test1
```

Notifications

In addition to log files that keep track of the synchronization statuses, the synchronization module also provides email notification capability. Email notification is sent out to the AgilePoint System User with information about the synchronization. This will allow the system user to determine if there is a need to manually synchronize the groups or users in the event of failed synchronization.

Configuration Interface

SharePoint Section

- **SiteURL** - Provide a valid SharePoint site URL, for example `http://[hostname]:[port]/sites/MySite`
- **Site Prefix** - This property is optional. In case two site collections are configured then groups with common name can be distinguished using this property. For example Site "A" has group called "Employees" and Site "B" also has a group called "Employees". In AgilePoint you can create two groups "SiteA_Employees" corresponding to Employees group in site A and "SiteB_Employees" corresponding to siteB's Employees. So while configuring Site A mention "SiteA_" in site prefix so that it will sync with "SiteA_Employees" during synchronization process and for site B mention "SiteB_" in site prefix so that it sync's with "SiteB_Employees"
- **Group Prefix** - This property is optional. This property is used in case a new group is created in SharePoint and you want that group to be created in AgilePoint. If a group prefix is not empty then all the groups created in SharePoint starting with Group prefix value will be created in AgilePoint during Synchronization process. For example, the group prefix value is set as "GR_" then all the new groups in SharePoint starting with GR_ will be created and synced during synchronization process.

Option Section

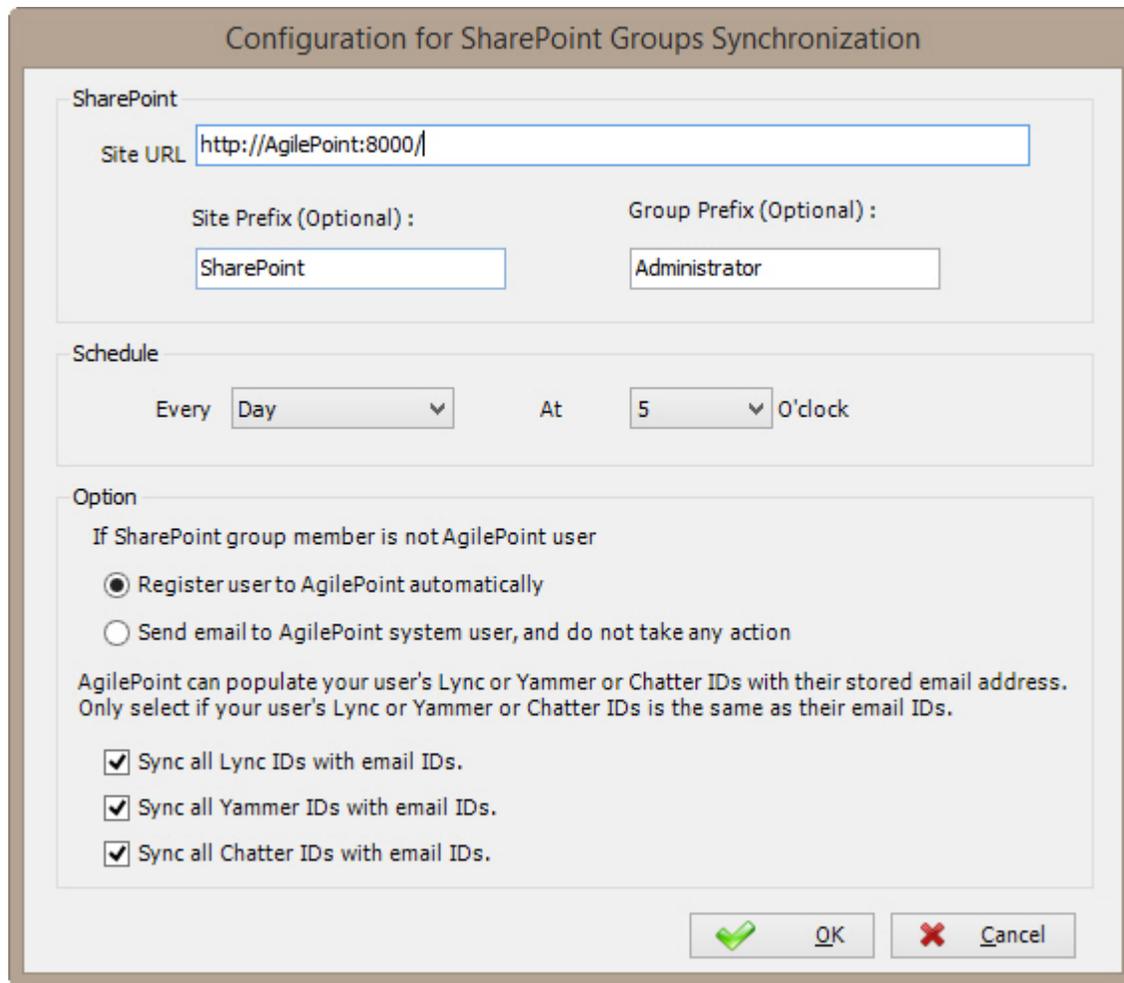
This section provides an option to select what action needs to be taken when a SharePoint group member is not an AgilePoint user. Either one can select to register user to AgilePoint automatically or send a notification to AgilePoint System user.

Schedule Section

This section is used to Schedule the frequency of Synchronization. One can configure Synchronization frequency to sync daily (Every Day) at particular time, or Weekly (Every Week) or Monthly (Every Month).

Configuration for SharePoint Groups Synchronization Window

Specifies how to synchronize SharePoint groups with AgilePoint groups.



Prerequisites

- Before configuring, you must [enable the SPSync Module AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **SPSyncModule**.
4. Click **Configure**.

Fields

Field Name	Definition
Configure	<u>Opens the Following Window:</u> SharePoint Groups Synchronization Window

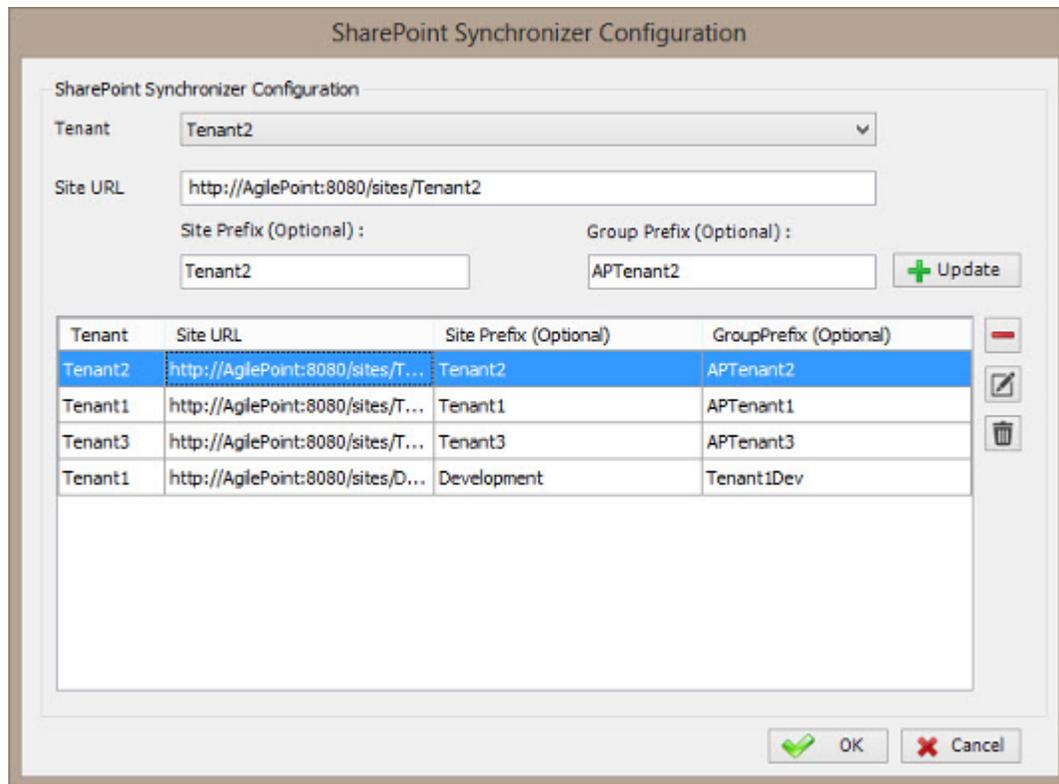
Field Name	Definition
	<p><u>To Access This Field:</u></p> <p>You must be using a Multi-Tenant environment.</p> <p><u>Purpose of this Window:</u></p> <p>Specifies how to synchronize SharePoint groups with AgilePoint groups within a tenant.</p>
Site URL	<p><u>Definition:</u></p> <p>Specifies the URL for your SharePoint site.</p> <p><u>Allowed Values:</u></p> <p>A valid SharePoint site URL.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Custom Attributes:</u></p> <p>Yes</p> <p><u>Example:</u></p> <p>http://mysharepoint:8000/sites/\${mysite}</p>
Site Prefix	<p><u>Action:</u></p> <p>Distinguishes a site with the specified name prefix in two site collections during the synchronization process.</p> <p><u>Allowed Values:</u></p> <p>A single line of text with no spaces.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <p>Two sites, Site A and Site B, each have a group called "Employees." In AgilePoint, you can create two groups: "SiteA_Employees" and "SiteB_Employees." While configuring site A, enter "SiteA_" in the Site Prefix so this site syncs with "SiteA_Employees." While configuring Site B, enter "SiteB_" in Site Prefix so this site syncs with "SiteB_Employees".</p>
Group Prefix	<p><u>Action:</u></p> <p>Indicates that all the groups in SharePoint starting with a specified prefix in the group name are created in AgilePoint during the synchronization process.</p>

Field Name	Definition
	<p><u>Allowed Values:</u></p> <p>A single line of text with no spaces.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <p>If the group prefix value is set as GR_ then all the new groups in SharePoint starting with GR_ will be created and synced during the synchronization process.</p>
Schedule	<p><u>Action:</u></p> <p>The frequency for SharePoint synchronization. Synchronization can occur every day, week, or month, at a particular time or day.</p>
If Active Directory group member is not AgilePoint user	<p><u>Definition:</u></p> <p>Specifies what actions to take if a member of your Active Directory is not a registered AgilePoint user.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Register user to AgilePoint automatically - Creates an AgilePoint account for the user using their Active Directory information. • Send email to AgilePoint system user, and do not take any action - Does not create an AgilePoint account for the Active Directory user, but sends a notification email to the AgilePoint system user account. <p><u>Default Value:</u></p> <p>Register user to AgilePoint automatically</p>
Sync all Lync IDs with email IDs	<p><u>Definition:</u></p> <p>Synchronizes all of your users' Lync IDs with their email IDs.</p> <p>This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Synchronizes Lync IDs with users' email IDs. • Deselected - Does not synchronize Lync IDs with users' email IDs.

Field Name	Definition
	<p><u>Default Value:</u> Deselected</p>
Sync all Yammer IDs with email IDs	<p><u>Definition:</u> Synchronizes Yammer IDs with AgilePoint users' email IDs. This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Synchronizes Yammer IDs with users' email IDs. • Deselected - Does not synchronize Yammer IDs with users' email IDs. <p><u>Default Value:</u> Deselected</p>
Sync all Chatter IDs with email IDs	<p><u>Definition:</u> Synchronizes Chatter IDs with AgilePoint users' email IDs. This synchronization occurs each time and Active Directory synchronization occurs. AgilePoint recommends using this option only if all of your users' messaging IDs and email IDs are the same.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - Synchronizes Chatter IDs with users' email IDs. • Deselected - Does not synchronize Chatter IDs with users' email IDs. <p><u>Default Value:</u> Deselected</p>

SharePoint Groups Synchronization Window

Specifies how to synchronize SharePoint groups with AgilePoint groups within a tenant.



Prerequisites

- To access this window, you must have a multi-tenant environment.

How to Start

- On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
- On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
- On the **Extensions** tab, select **SPSyncModule**.
- Click **Configure**.
- On the **SharePoint Groups Synchronization** window, click **Configure**.

Fields

Field Name	Definition
Tenant	<p><u>Definition:</u> Specifies the tenant name.</p> <p><u>Allowed Values:</u> List of your enabled tenant names.</p> <p><u>Default Value:</u></p>

Field Name	Definition
	None
Site URL	<p><u>Definition:</u> Specifies the URL for your SharePoint site.</p> <p><u>Allowed Values:</u> A valid SharePoint site URL.</p> <p><u>Default Value:</u> None</p> <p><u>Custom Attributes:</u> Yes</p> <p><u>Example:</u> http://mysharepoint:8000/sites/\${mysite}</p>
Site Prefix	<p><u>Action:</u> Distinguishes a site with the specified name prefix in two site collections during the synchronization process.</p> <p><u>Allowed Values:</u> A single line of text with no spaces.</p> <p><u>Default Value:</u> None</p> <p><u>Example:</u> Two sites, Site A and Site B, each have a group called "Employees." In AgilePoint, you can create two groups: "SiteA_Employees" and "SiteB_Employees." While configuring site A, enter "SiteA_" in the Site Prefix so this site syncs with "SiteA_Employees." While configuring Site B, enter "SiteB_" in Site Prefix so this site syncs with "SiteB_Employees".</p>
Group Prefix	<p><u>Action:</u> Indicates that all the groups in SharePoint starting with a specified prefix in the group name are created in AgilePoint during the synchronization process.</p> <p><u>Allowed Values:</u> A single line of text with no spaces.</p> <p><u>Default Value:</u></p>

Field Name	Definition
	None <u>Example:</u> If the group prefix value is set as GR_ then all the new groups in SharePoint starting with GR_ will be created and synced during the synchronization process.
Add	<u>Action:</u> Creates a row where you can specify your tenant name, site url, site prefix and group prefix.
Update	<u>Action:</u> Updates the selected row from the SharePoint groups synchronization configuration list.
Remove (-)	<u>Action:</u> Deletes the selected row from the SharePoint groups synchronization configuration list.
Edit (✎)	<u>Action:</u> Modifies the selected row from the SharePoint groups synchronization configuration list.
Delete (🗑)	<u>Action:</u> Deletes all rows from the SharePoint groups synchronization configuration list.

Yammer Hashtag AgileConnector

The Yammer Hashtag AgileConnector enables process participants to initiate process instances using Yammer hashtags.

Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.

Enabling the Yammer Hashtag AgileConnector

To enable the Yammer Hashtag AgileConnector, do the following.

Prerequisites

- The user interface for this feature is available in English only.

- AgilePoint Server installed in Windows Service mode.

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.

Procedure

1. On the **Extensions** tab, click **Add**.
2. In the **Impersonator** field, enter the AgilePoint user name that is used to connect to your email server.
By default, this is the AgilePoint Service Account.
3. Browse to the assembly **[AgilePoint Server installation folder]\bin\AgilePoint.AgileConnector.YammerHashTag.dll**.

Configuring the Yammer Hashtag AgileConnector

To configure the Yammer Hashtag AgileConnector, do the following.

Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.
- Before configuring, you must [enable the Yammer Hashtag AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **YammerHashTag**.
4. Click **Configure**.

Procedure

1. On the **Yammer Hashtag Configuration** window, select the schedule you want to start a process instance after the hashtag is posted to Yammer:
 - **Fixed Time** - A time of day after the hashtag appears.
For example, if the fixed time is set to Hour 22 and Minute 15, the process will start at the next occurrence of 10:15 pm.
 - **Time Frequency** - A time interval following the time the hashtag is posted.
For example, if this is set to 15 Minutes, the process will start 15 minutes after the hashtag is used.
2. Click **Next**.
3. On the **Yammer Hashtag Configuration** window, click **Add (+)**.
4. On the **Add Yammer Definition** window, in the **Yammer Definition Name** field, enter an identifying name for your Yammer hashtag configuration settings.

5. Complete the fields on the **Yammer HashTag Configuration** window as required.

For more information, see the following topics:

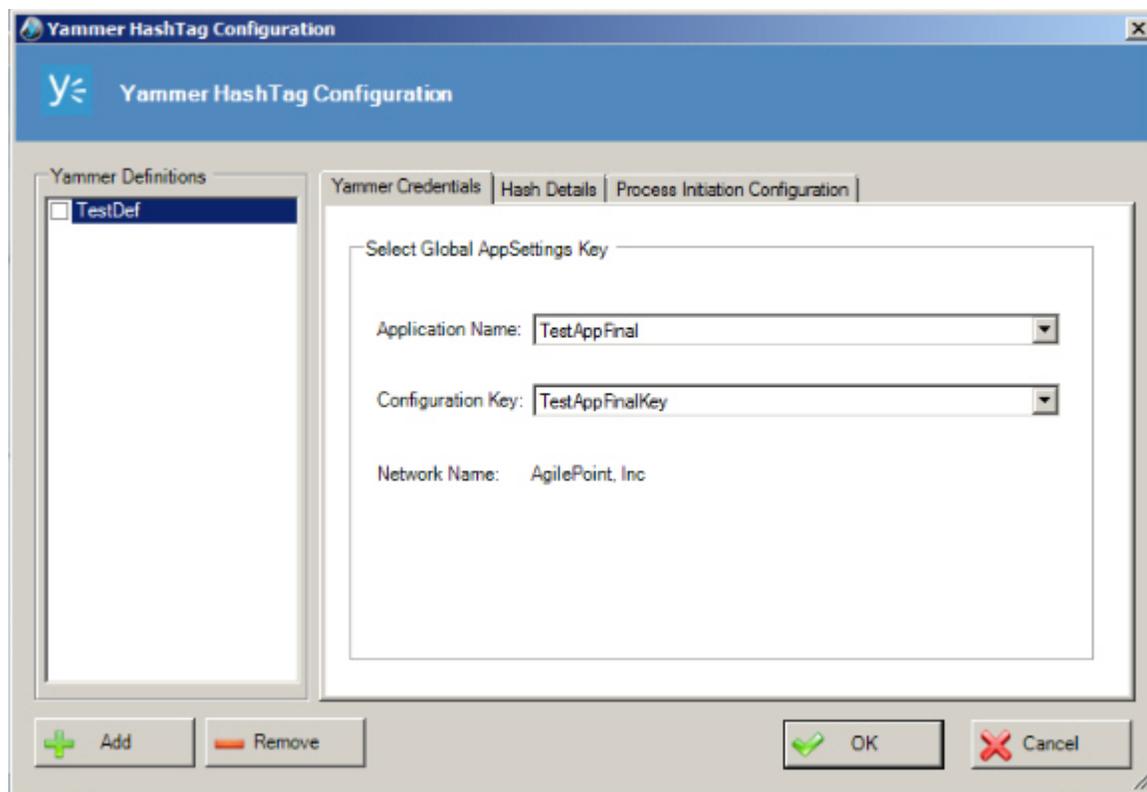
- [Yammer HashTag Configuration Window - Yammer Credentials Tab](#)
- [Yammer HashTag Configuration Window - Hash Details Tab](#)
- [Yammer HashTag Configuration Window - Process Initiation Configuration Tab](#)

Configuration Windows

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

Yammer HashTag Configuration Window - Yammer Credentials Tab

Identifies your Yammer application credentials.



Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.
- Before configuring, you must [enable the Yammer Hashtag AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.

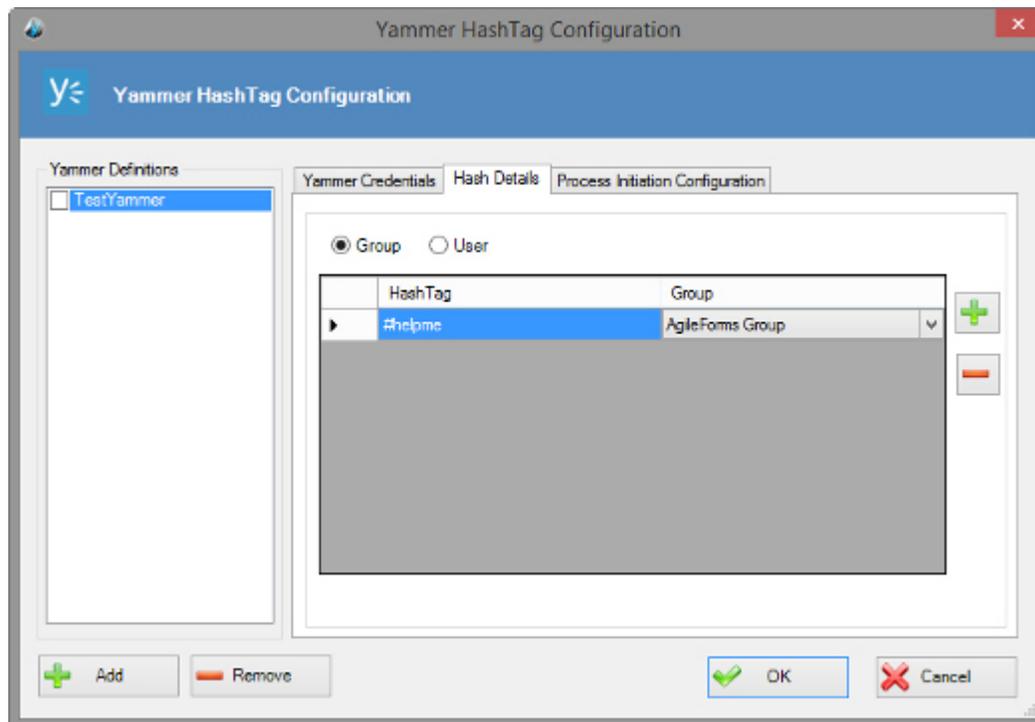
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **YammerHashTag**.
4. Click **Configure**.
5. On the **Yammer Hashtag AgileConnector Configuration** window, set the schedule to initiate your process instance.
6. Click **Next**.

Fields

Field Name	Definition
Yammer Definitions	<p><u>Definition:</u></p> <p>A group of configuration settings for initiating a specified process instance using a specified Yammer connection.</p> <p>You can select a Yammer definition to modify, or click Add to create a new Yammer definition to add to the list.</p> <p><u>Allowed Values:</u></p> <p>The list of your defined Yammer definitions.</p> <p><u>Default Value:</u></p> <p>None</p>
Add	<p><u>Action:</u></p> <p>Creates new Yammer definition.</p>
Remove	<p><u>Action:</u></p> <p>Deletes the selected Yammer definition.</p>
Access Token Name	<p><u>Definition:</u></p> <p>Specifies the unique name for your connection to the enterprise social application.</p> <p><u>Allowed Values:</u></p> <p>An alphanumeric string with no spaces.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Custom Attributes:</u></p> <p>No</p>

Yammer HashTag Configuration Window - Hash Details Tab

Specifies the combination of Yammer hashtags and recipients that are used to initiate your process.



Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.
- Before configuring, you must [enable the Yammer Hashtag AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **YammerHashTag**.
4. Click **Configure**.
5. On the **Yammer Hashtag AgileConnector Configuration** window, set the schedule to initiate your process instance.
6. Click **Next**.

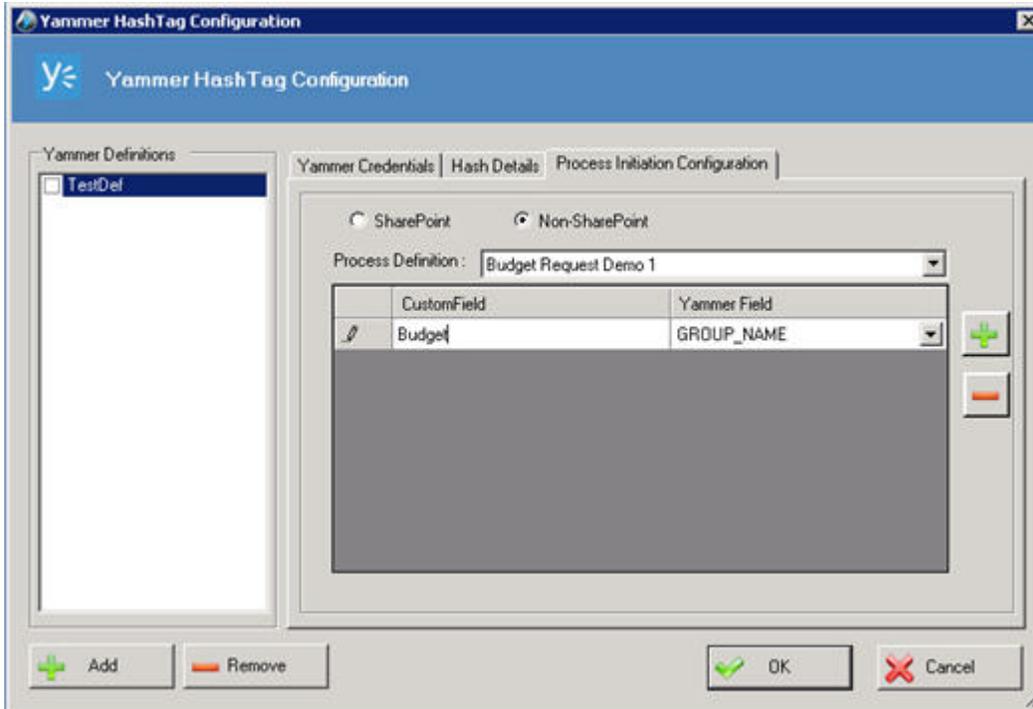
Fields

Field Name	Definition
Yammer Definitions	<p><u>Definition:</u></p> <p>A group of configuration settings for initiating a specified process instance using a specified Yammer connection.</p> <p>You can select a Yammer definition to modify, or click Add to create a new Yammer definition to add to the list.</p> <p><u>Allowed Values:</u></p> <p>The list of your defined Yammer definitions.</p> <p><u>Default Value:</u></p> <p>None</p>
Add	<p><u>Action:</u></p> <p>Creates new Yammer definition.</p>
Remove	<p><u>Action:</u></p> <p>Deletes the selected Yammer definition.</p>
Group / User	<p><u>Definition:</u></p> <p>Specifies where to listen for messages that include the Yammer hashtag key posted to the specified group, or the administrator user.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Group - Listens for the posted message to specified group. • User - Listens for the posted message to the administrator user account associated with the application name and configuration key. <p><u>Default Value:</u></p> <p>Group</p>
HashTag	<p><u>Definition:</u></p> <p>Specifies the Yammer hashtag which, when posted to the specified user or group, will initiate your process.</p> <p><u>Allowed Values:</u></p>

Field Name	Definition
	<p>A single line of text with prefix # symbol and no space.</p> <p><u>Default Value:</u> None</p>
Group	<p><u>Definition:</u> Specifies the group name which is used in the Yammer application.</p> <p><u>Allowed Values:</u> A valid Yammer group name.</p> <p><u>Default Value:</u> None</p>
Add (+)	<p><u>Action:</u> Creates a new Yammer hashtag key.</p>
Remove (-)	<p><u>Action:</u> Deletes the selected Yammer hashtag.</p>

Yammer HashTag Configuration Window - Process Initiation Configuration Tab

Specifies the behavior when a process instance is initiated using a Yammer hashtag.



Prerequisites

- The user interface for this feature is available in English only.
- AgilePoint Server installed in Windows Service mode.
- Before configuring, you must [enable the Yammer Hashtag AgileConnector](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** screen, click the **Extensions** tab.
3. On the **Extensions** tab, select **YammerHashTag**.
4. Click **Configure**.
5. On the **Yammer Hashtag AgileConnector Configuration** window, set the schedule to initiate your process instance.
6. Click **Next**.

Fields

Field Name	Definition
Yammer Definitions	<p><u>Definition:</u></p> <p>A group of configuration settings for initiating a specified process instance using a specified Yammer connection.</p>

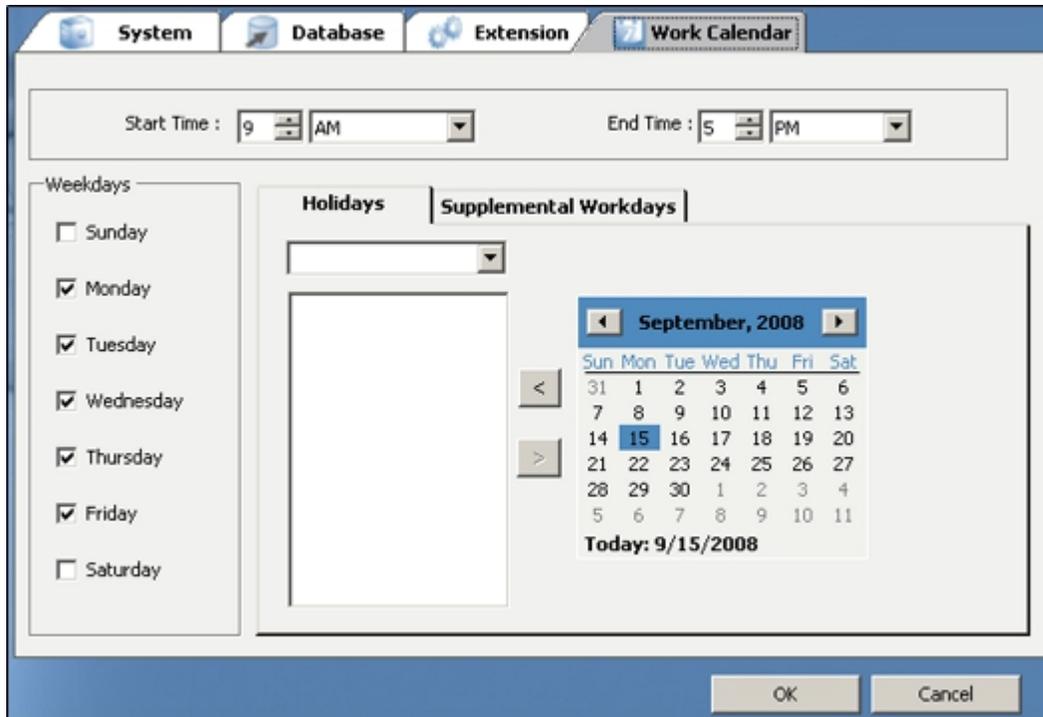
Field Name	Definition
	<p>You can select a Yammer definition to modify, or click Add to create a new Yammer definition to add to the list.</p> <p><u>Allowed Values:</u></p> <p>The list of your defined Yammer definitions.</p> <p><u>Default Value:</u></p> <p>None</p>
Add	<p><u>Action:</u></p> <p>Creates new Yammer definition.</p>
Remove	<p><u>Action:</u></p> <p>Deletes the selected Yammer definition.</p>
SharePoint / Non-SharePoint	<p><u>Definition:</u></p> <p>Specifies whether your process is associated with a SharePoint list.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • SharePoint - Specifies that your process is associated with a SharePoint list. This option allows you to associate Yammer variables with SharePoint list columns associated with your process. • Non-SharePoint - Specifies that your process is not associated with a SharePoint list. This option allows you to associate Yammer variables with custom attributes from a non-SharePoint process. <p><u>Default Value:</u></p> <p>Non-SharePoint</p>
SharePointListUrl / Process Definition	<p><u>Definition:</u></p> <p>Specifies the process model you want to initiate.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • SharePoint list URL - Enter the SharePoint list URL associated with the AgilePoint process you want to initiate. <p>In SharePoint, ensure your SharePoint list is associated with a workflow that initiates your AgilePoint process.</p> <ul style="list-style-type: none"> • Process Definition - Select the process model you want to initiate.

Field Name	Definition
	<p><u>Default Value:</u></p> <p>None</p>
<p>Custom Field</p>	<p><u>Definition:</u></p> <p>Specifies to a variable to map from your process to a Yammer variable.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • For a SharePoint process, to select name of a custom SharePoint list column as custom attribute do the following: <ol style="list-style-type: none"> 1. Click Connect (). 2. On the Connect to SharePoint window, enter the user account you want to use to connect to SharePoint. For more information, refer to Logging on to SharePoint from a Process Template or AgileShape. 3. Select the name of the custom SharePoint list column. • For a non-SharePoint process, specify a process attribute you want to map to the Yammer field. <p><u>Default Value:</u></p> <p>None</p>
<p>Yammer Field</p>	<p><u>Definition:</u></p> <p>Specifies the standard Yammer variable you want to map with your process variable.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • MESSAGE_ID • GROUP_NAME • SENDER_ID • REPLIED_TO_ID • CREATED_AT • NETWORK_ID • MESSAGE_TYPE • SENDER_TYPE • URL • WEB_URL

Field Name	Definition
	<ul style="list-style-type: none"> • BODY_PARSED_TEXT • BODY_PLAIN_TEXT • BODY_RICH_TEXT • THREAD_ID • SENDER_FULL_NAME • SENDER_DEPARTMENT • SENDER_EMAIL • CLIENT_TYPE • CLIENT_URL • SYSTEM_MESSAGE • DIRECT_MESSAGE • CHAT_CLIENT_SEQUENCE • CONTENT_EXCERPT • LANGUAGE <p><u>Default Value:</u> None</p>
Add (+)	<p><u>Action:</u> Creates a new custom field.</p>
Remove (-)	<p><u>Action:</u> Deletes the selected custom field.</p>

Work Calendar Window

This window allows you to configure the "business hours" that are used by certain AgilePoint technologies that use "business time". E.g. When a Manual or Delay AgileShape is configured to use "business time", the settings on this window determine how the specified interval of "business time" corresponds to real (absolute) time.



AgilePoint Server Manager Configuration in Windows Service Mode

This topic provides information about the configuration file for AgilePoint Server running in Windows Service mode. This is the configuration file for the windows service version of AgilePoint Server. It stores information about the services configured in AgilePoint Server Manager.

Location: [\[AgilePoint Server installation folder\]](#)\APServerManagerConfig.cfg

Prerequisites

- AgilePoint Server installed in Windows Service mode.

Example

```
<?xml version="1.0" encoding="utf-8"?>
<Services>
  <Service Name="APServer1" DisplayName="AgilePointServer" Location="C:\AgilePoint
\APServer1" EMVirtualPath="EnterpriseManager" EMURL="http://localhost:9000/
EnterpriseManager" EMSite="AgilePointServer" />
</Services>
```

Multi-Tenant Configuration

AgilePoint Server can run in a multi-tenant environment. A multi-tenant environment allows you to operate multiple AgilePoint databases from a single AgilePoint Server instance. This is especially useful for in-house cloud-like environments within an organization.

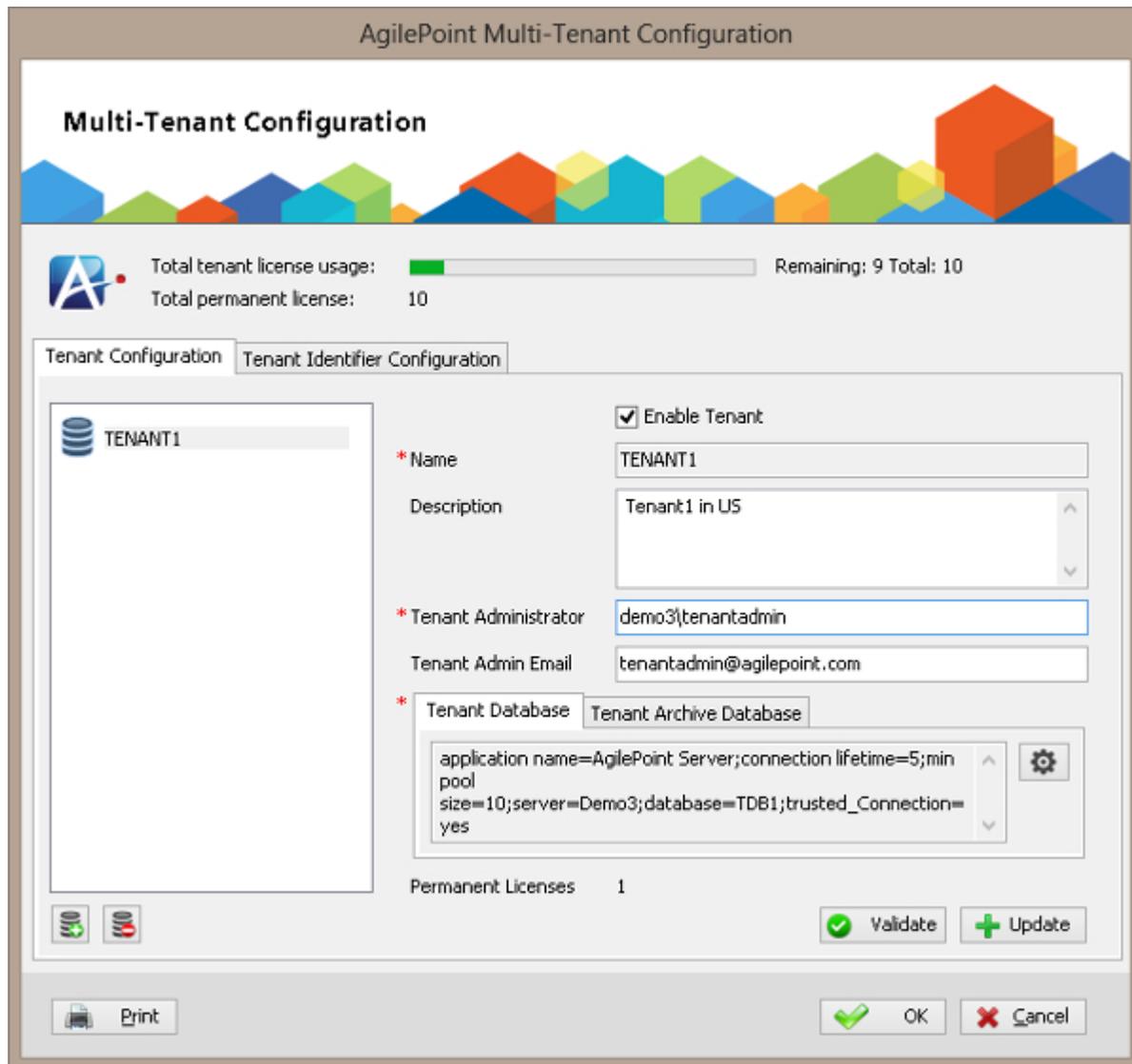
If you are using AgilePoint Server in a multi-tenant environment, you must set up your tenants (databases and data sets) using the information in this section.

Prerequisites

- Multi-Tenant environments require a special license.
For more information, refer to [Contacting AgilePoint Sales](#).
- AgilePoint recommends setting up a Multi-Tenant environment only with the help of AgilePoint Professional Services.
For more information, refer to [Contacting AgilePoint Sales](#).

AgilePoint Multi-Tenant Configuration Window - Tenant Configuration Tab

Specifies the setup for tenants, or database instances to associate with your AgilePoint Server.



How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** window, click **Multi-Tenant Configuration**.
3. On the **Multi-Tenant Configuration** window, click the **Tenant Configuration** tab.

Fields

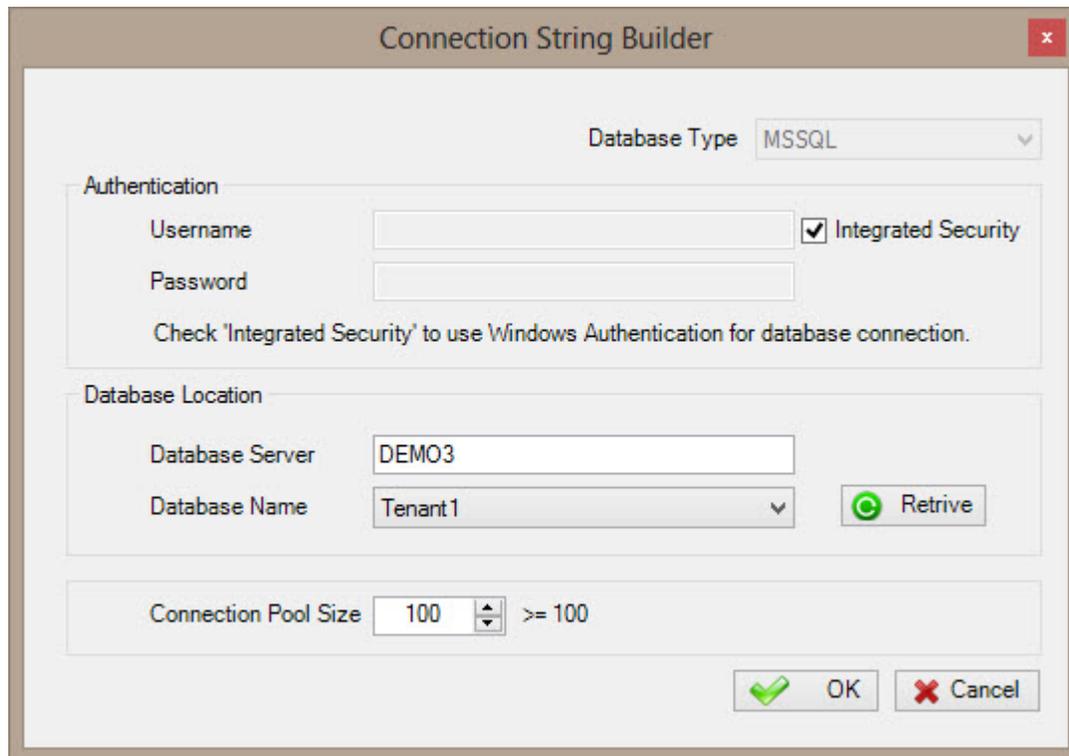
Field Name	Definition
Enable Tenant	<p><u>Definition:</u> Specifies whether to enable the selected tenant.</p> <p><u>Allowed Values:</u></p>

Field Name	Definition
	<ul style="list-style-type: none"> • Selected - Activates the selected tenant. • Deselected - Deactivates the selected tenant. <p><u>Default Value:</u> Selected</p>
Name	<p><u>Definition:</u> Specifies unique name of tenant.</p> <p><u>Allowed Values:</u> A single line of text.</p> <p><u>Default Value:</u> None</p>
Description	<p><u>Definition:</u> Specifies a free text description of the tenant.</p> <p><u>Allowed Values:</u> Multiple lines of text.</p> <p><u>Default Value:</u> None</p>
Tenant Administrator	<p><u>Definition:</u> Specifies the user name for the tenant administrator.</p> <p><u>Allowed Values:</u> A valid user name in the format [domain]\[user name].</p> <p><u>Default Value:</u> None</p> <p><u>Example:</u> demo3\tenantadmin.</p>
Tenant Admin Email	<p><u>Definition:</u> The tenant administrator's email address to which notification to be send.</p> <p><u>Allowed Values:</u> A valid email address.</p> <p><u>Default Value:</u></p>

Field Name	Definition
	None
Tenant Database Tab	<u>Action:</u> Specifies the connection to the database to store workflow data for your tenant.
Tenant Archive Database Tab	<u>Action:</u> Specifies the connection to the archive database for your tenant, where AgilePoint stores backup of the workflow data and archived process data.
Configure ()	<u>Opens the Following Window:</u> Connection String Builder Window <u>Purpose of this Window:</u> Sets up a connection string to a workflow database or archive database for your tenant.
Add ()	<u>Action:</u> Adds new tenant.
Remove ()	<u>Action:</u> Deletes the selected tenant from the tenant list.
Validate	<u>Action:</u> Validates the selected database connection string.
Update	<u>Action:</u> Saves your tenant settings.
Print	<u>Action:</u> Displays the AgilePoint multi-tenant license information and tenant information.
Tenant Identifier Configuration Tab	<u>Opens the Following Window:</u> AgilePoint Multi-Tenant Configuration Window - Tenant Identifier Configuration Tab <u>Purpose of this Window:</u> Sets the Tenant Identifier assembly to determine which tenant the user belongs to based on a user name, e-mail address, or mobile number stored in the AgilePoint database.

Connection String Builder Window

Sets up a connection string to a workflow database or archive database for your tenant.



How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** window, click **Multi-Tenant Configuration**.
3. On the **Multi-Tenant Configuration** window, click the **Tenant Configuration** tab.
4. Click the **Tenant Database\Tenant Archive Database** tab.

Fields

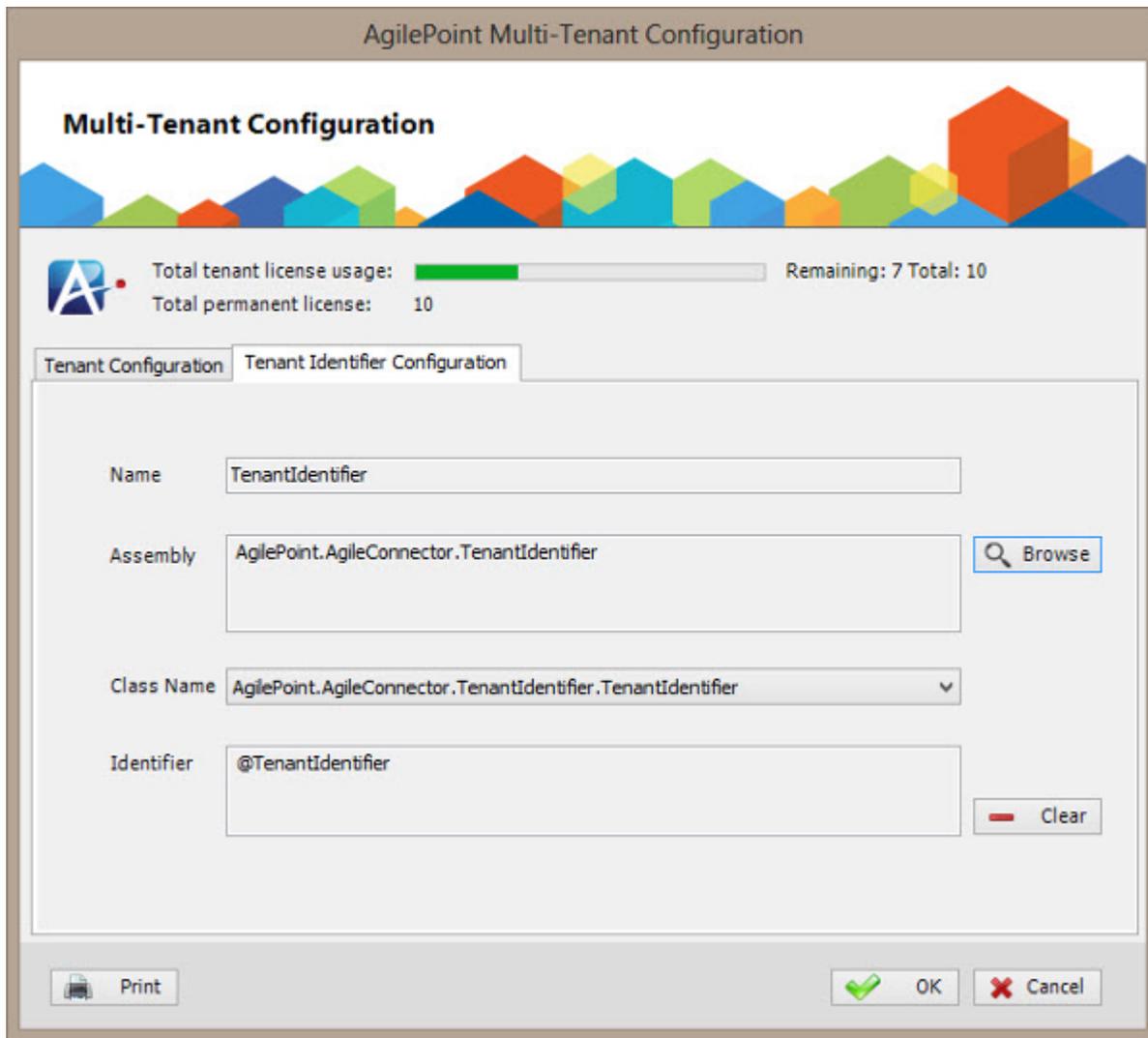
Field Name	Definition
Database Type	<p><u>Definition:</u> Specifies the database technology you are using to store AgilePoint data.</p> <p><u>Allowed Values:</u> Read only</p>

Field Name	Definition
Username	<p><u>Definition:</u></p> <p>The user name for the database account AgilePoint Server uses to connect to the database.</p> <p><u>Allowed Values:</u></p> <p>A valid user name for the database.</p> <p><u>Default Value:</u></p> <p>None</p>
Password	<p><u>Definition:</u></p> <p>The password for the authentication account.</p> <p><u>Allowed Values:</u></p> <p>A valid password.</p> <p><u>Default Value:</u></p> <p>None</p>
Integrated Security	<p><u>Definition:</u></p> <p>When integrated security is selected, the current windows account credentials are used for authentication.</p> <p><u>Allowed Values:</u></p> <ul style="list-style-type: none"> • Selected - The windows account credentials are used for authentication automatically. • Deselected - The user and password fields are enabled for database authentication. <p><u>Default Value:</u></p> <p>Selected</p>
Database Server	<p><u>Definition:</u></p> <p>Specifies the server name and domain for your database.</p> <p><u>Allowed Values:</u></p> <p>A valid database server name.</p> <p><u>Default Value:</u></p> <p>None</p>
Database Name	<p><u>Definition:</u></p> <p>Specifies the name of your database.</p>

Field Name	Definition
	<p><u>Allowed Values:</u> A valid database name.</p> <p><u>Default Value:</u> None</p>
Retrieve	<p><u>Action:</u> Retrieves the names of existing databases from the data source.</p>
Connection Pool Size	<p><u>Definition:</u> Specifies the maximum number of database connections that use to connect to the workflow database at runtime.</p> <p><u>Allowed Values:</u> Any integer. It is recommended to use a connection pool size that is ≥ 100 or $2 * \text{the thread pool size}$.</p> <p><u>Default Value:</u> 100</p>

AgilePoint Multi-Tenant Configuration Window - Tenant Identifier Configuration Tab

Sets the Tenant Identifier assembly to determine which tenant the user belongs to based on a user name, e-mail address, or mobile number stored in the AgilePoint database.



How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Configuration**.
2. On the **AgilePoint Server Configuration Tool** window, click **Multi-Tenant Configuration**.
3. On the **Multi-Tenant Configuration** window, click the **Tenant Identifier Configuration** tab.

Fields

Field Name	Definition
Name	<p><u>Definition:</u></p> <p>The text ID of the tenant identifier.</p> <p><u>Allowed Values:</u></p>

Field Name	Definition
	The value is determined by the assembly
Assembly	<p><u>Definition:</u> Specifies the dll file of your tenant identifier. Click Browse to select your dll.</p> <p><u>Allowed Values:</u> A valid assembly name.</p> <p><u>Default Value:</u> None</p>
Class Name	<p><u>Definition:</u> Specifies the implementation of the IWFTenantIdentifier interface.</p> <p><u>Allowed Values:</u> A valid class name</p> <p><u>Default Value:</u> None</p>
Identifier	<p><u>Definition:</u> Specifies whether the assembly contains an implementation of the IWFTenantIdentifier interface or both the IWFTenantIdentifier interface and the IWFIntegratedApplication interface.</p> <p><u>Allowed Values:</u> Read only</p>
Clear	<p><u>Action:</u> Clears all the field values on the configuration tab.</p>

AgilePoint Server Log Files

AgilePoint Server creates and maintains log files to store informational, warning, and error messages about the server and the workflow engine.

Enabling AgilePoint Server Debug Mode

To enable AgilePoint Server debug mode, do the following.

How to Start

1. In a text editor, open the file [\[AgilePoint Server installation folder\]\netflow.cfg](#).

Procedure

1. Add the debug attribute to the server element in the netflow.cfg file:

```
<server
  eventCap="50"
  workingCap="50"
  maxLoop="50"
  swapoutTime="60"
  debug="true"
  archiveTime="180"
  assemblyPath="C:\Inetpub\AgilePointSite\TuscaSampleApplication\bin">
```

2. Save the file.
3. Restart the Windows service for the AgilePoint Server instance.

Log File Name Format and Location

This topic provides the location and naming convention for the AgilePoint Server log.

The log files are located in the following folder:

[\[AgilePoint Server installation folder\]\log](#).

The following is the file name convention for the AgilePoint Server log files.

apsvc-[Assembly version]-[yyyymmdd]T[hhmmss]-[MachineName]-[ProcessID].log

Example:

apsvc-5.0.4.42679-20140611T100710-APS-1636.log

Details:

Field Name	Definition
Assembly version	The version of your Ascentn.Workflow.WFCore.dll file.
yyyymmdd	The year, month and date of log file creation.

Field Name	Definition
hhmmss	The hours, minutes, seconds of log file creation.
MachineName	The name of machine where the AgilePoint Server is installed.
ProcessID	The PID of AgilePoint Server instance in task manager.

Managing Log File Size

To help you manage storage space for log files, AgilePoint Server creates a new log file when the current log file reaches the specified maximum file size, and provides an option for specifying a custom log file location. To manage your log file size, do the following.

Prerequisites

- Back up the AgilePoint.WCFService.exe.config file.

How to Start

1. In a text editor, open the file **[AgilePoint Server installation folder]\bin\Ascentn.AgilePoint.WCFService.exe.config**.

Procedure

1. Add one of the following keys to the **<appSettings>** node:

Field Name	Definition
LogFileFolder	<p><u>Definition:</u></p> <p>Specifies the location for your AgilePoint Server log file.</p> <p><u>Allowed Values:</u></p> <p>An appSettings key in the following format:</p> <pre><add key="LogFileFolder" value="[absolute path to your log file folder]" /></pre> <p><u>Default Value:</u></p> <p>[AgilePoint Server installation folder]\log</p> <p><u>Example:</u></p> <pre><add key="LogFileFolder" value="c:\Users\Log" /></pre>
MaxLogFileSize	<p><u>Definition:</u></p> <p>Specifies the maximum file size for your log file.</p>

Field Name	Definition
	<p><u>Allowed Values:</u></p> <p>An appSettings key in the following format: <add key="MaxLogFileSize" value="[number of MB]" /></p> <p>This value is an integer that represents log file size in MB.</p> <p><u>Default Value:</u></p> <p>50</p> <p><u>Example:</u></p> <p><add key="MaxLogFileSize" value="150" /></p>

2. Save the file.
3. Restart the Windows service for the AgilePoint Server instance.

AgilePoint Deployment Services

The AgilePoint Deployment Utility is used to package and migrate AgilePoint Process Models and associated AgilePart/AgileWork assemblies amongst the different AgilePoint Server environments (e.g. Development, Testing, Staging, and Production). This tool can also be used to backup and restore Process Models and associated AgilePart/AgileWork assemblies.

Installing AgilePoint Deployment Services is optional. For a fresh installation and upgrade, AgilePoint Deployment Services is installed as a separate component via the **AgilePoint Utilities and Other Support Files** section of the installer.

The AgilePoint Deployment Services consists of the following components:

- AgilePoint Deployment Service
- AgilePoint Deployment Utility

AgilePoint Deployment Service

The AgilePoint Deployment Service is a Windows service that runs on the AgilePoint Server machine, and provides a WCF communication channel between the server and the client.

AgilePoint Deployment Utility

The AgilePoint Deployment Utility is used to package and migrate AgilePoint Process Models and associated AgilePart/AgileWork assemblies amongst the different AgilePoint Server environments (e.g. Development, Testing, Staging, Production). This tool can also be used to backup and restore Process Models and associated AgilePart/AgileWork assemblies.

Opening the AgilePoint Deployment Utility

To open the AgilePoint Deployment Utility:

1. Click **Start > All Programs > AgilePoint > AgilePoint Deployment Utility**.

Adding an AgilePoint Server

To expose process templates and associated dependencies that are deployed to an AgilePoint Server, first add the AgilePoint Server to the server collection. Two things are accomplished at this stage; the first is to test the connection to the AgilePoint Server, the second is to create a connection to the AgilePoint Server. After the information about the AgilePoint Server is gathered, the AgilePoint Deployment Service will validate the connection, and the certification of the user.

To add an AgilePoint Server:

1. From the AgilePoint Explorer tab, click the **Add** button.
2. In the **Display Name** field, type a Display Name that specifies the name of the AgilePoint Server that will be displayed in the AgilePoint Server Collection list.

3. In the **Server** field, select either **Host Name** or **IP Address** and enter the information about the AgilePoint Server as necessary.
4. In the **Port** field, type the Port number for the WCF Service (the default is 8917). The port number can be found and changed in the file [\[AgilePoint Deployment Service installation folder\]\apds.exe.config](#).
5. In the **Domain** field, type the Domain Name for the AgilePoint Server.
6. In the **Username** field, type the AgilePoint Server System username.
7. In the **Password** field, type the password for the AgilePoint Server System user.
8. Click **Test Connection** to test the connection to the AgilePoint Server. If the test connection is successful, click **OK**.
9. The AgilePoint Deployment Utility appears with the AgilePoint Server added.
10. Repeat the process to add the desired AgilePoint Servers to the AgilePoint Deployment Utility.

Removing an AgilePoint Server

For one reason or another, an AgilePoint Server may need to be removed from the collection if it is no longer used.

To remove an AgilePoint Server:

1. From the AgilePoint Explorer tab, select the AgilePoint Server for which you would like to remove and click the **Remove** button on the toolbar. The AgilePoint Server is removed from the list.

Backing up a Process Model and Associated Dependencies

The Backup function allows for Process Models and associated dependencies on an AgilePoint Server to be backed up into a package file. The process definition will be saved as an XML file, and the associated dependencies will be copied from GAC. After all items are gathered, a package file (.odp) will be created and saved to the location specified. The package file can then be restored in a recovery scenario.

To backup a process model and associated dependencies:

1. From the **AgilePoint Explorer** tab, select the AgilePoint Server for which you would like to backup a Process Model and associated dependencies from and click the **Backup** button on the toolbar. The Backup Process Definition Wizard appears.
2. Click **Next**.
3. Select the Application(s) type(s) for which to backup and click **Next**.
4. Select the Process Model(s) and click **Next**.
5. Select the AgileParts and AgileWorks for which to backup and click **Next**.
6. Type the file path of browse and select the folder location for which to save the package file and click **Next**.
7. Once the backup has been completed successfully, click **Finish**. The package file is saved to the folder specified as an .odp package file that can then be later restored as needed.

Restoring a Process Model and Associated Dependencies

The Restore function allows for the package file (i.e. Process Model and associated dependencies) to be restored on an AgilePoint Server.

To restore a process model and associated dependencies:

1. From the AgilePoint Explorer tab, select the AgilePoint Server for which you would like to backup a Process Model and associated dependencies from and click the **Backup** button on the toolbar. The Restore Process Definition Wizard appears.
2. Add the desired package file(s) (.odp) and click **Next**.
3. Once the restore has been completed successfully, click **Finish**.

Migrating a Process Model and Associated Dependencies

The following provides instructions for migrating a Process Model and associated dependencies from one AgilePoint Server to another.

To migrate a Process Model and the associated dependencies:

In this example, the Document Approval Process Model and associated dependencies will be migrated from the AgilePoint Server on the Dimension4700-01 machine to the AgilePoint Server on the ibmt61-005 machine.

1. Right-click on the AgilePoint Server host machine name that contains the Process Model and dependencies for which you would like to export.
2. Click the **Import Export** button. The **Export & Import Process Definition Wizard** appears.
3. Click **Next**.
4. Select the application type(s) (ASP.NET or SPSIntegration).
5. Select the Process Template(s).
6. Click **Next**. The system automatically selects all the dependencies for the Process Templates.
7. Click **Next**. The list of Process Templates appears.
8. Click **Next**.
9. Select the target machine where AgilePoint Server is installed.
10. Click **Next**. The system moves the Process Template and associated dependencies to the target AgilePoint Server.
11. Click **Finish**.

Rolling back a Process Model and Associated Dependencies

The rollback function can be used if a Process Model and associated dependencies fail to be deployed to a target AgilePoint server, a new project fails to be deployed, or a package file fails to be restored. The AgilePoint Deployment Service records the information in a XML file and provides a way to rollback the migration.

To rollback a Process Model and the associated dependencies:

1. From the **AgilePoint Explorer** tab, select the AgilePoint Server that contains the Process Model and associated dependencies that failed to be migrated to a target AgilePoint server, the project failed to be deployed, or a package file failed to be restored and click the **Rollback** button on the toolbar. The **Rollback Process Definition Wizard** appears.
2. Click **Next**.
3. Select the item(s) (i.e. Process Model and dependencies, project, or package files) and click **Next**.
4. Once the rollback has been completed successfully, click **Finish**.

Creating a Project

If a new edition of a process definition is to be deployed to an AgilePoint Server, a new project can be created. The project includes the Process Model that will be saved in the folder location you have specified. The Process Model should be an XML file.

To create a new project

1. Click the **Local Projects** tab and click **Create**.
2. In the **Name** field, type a name for the project.
3. In the **Location** field, type a file path or browse and select the folder for which to store the project collection.
4. In the **Description** field, type a description for the process.
5. In the **Process** field type a file path to the XML file for a Process Model to add to the project or browse and select it.
6. Click **OK**.



Note: The Process Model must be a XML file.



Note: AgilePoint Envision should NOT be running when creating a project.

Project Functions

Add Project

Once a project is created, you can add a project to the project collection from another place by right-clicking on the project collection name and selecting **Add Project**.

Remove Project

Once a project is created, you can remove a project from the project collection by right-clicking on the project name and selecting **Remove Project**.

Add a Process

Once a project is created, you can add a process to the project by right-clicking on the project and selecting **Add Process**.

Remove a Process

Remove a process from a project by right-clicking on the project and selecting **Remove Process**.

Analyze AgilePart

Once a project is created, you can analyze AgileParts for a Process Model by right-clicking on a project and selecting **Analyze AgilePart**. If an AgilePart has been unintentionally removed, this function will allow you to get all AgileParts associated with the Process Model.

Add AgilePart Assembly

Once a project is created, you can add an AgilePart assembly for a Process Model by right-clicking on an assembly and selecting **Add AgilePart Assembly**.

Exclude AgilePart Assembly

Once a project is created, you can remove an AgilePart assembly for a Process Model by right-clicking on an assembly and selecting **Exclude AgilePart Assembly**.

Analyze AgileWork

Once a project is created, you can analyze AgileWorks for a Process Model by right-clicking on a project and selecting **Analyze AgileWork**. If an AgileWork has been unintentionally removed, this function will allow you to get all AgileWorks associated with the Process Model.

Add AgileWork Assembly

Once a project is created, you can add an AgileWork assembly for a Process Model by right-clicking on an assembly and selecting **Add AgileWork Assembly**.

Exclude AgileWork Assembly

Once a project is created, you can remove an AgileWork assembly for a Process Model by right-clicking on an assembly and selecting **Exclude AgileWork Assembly**.

Analyze Dependency

Once a project is created, you can analyze dependencies for an assembly by right-clicking on an assembly and selecting **Analyze Dependency**. If a dependency has been unintentionally removed, this function will allow you to get all dependencies associated with the assembly.

Add Dependency Assembly

Once a project is created, you can add a dependency assembly for an assembly by right-clicking on an assembly and selecting **Add Dependency Assembly**.

Exclude Dependency Assembly

Once a project is created, you can remove a dependency assembly for an assembly by right-clicking on an assembly and selecting **Exclude Dependency Assembly**.

Opening a Project

This function allows you to add an existing project to the project collection for editing.

To open a project:

1. Click the **Local Projects** tab and click **Open**.
2. Select the project to add or click **More** and browse to select it.

Saving a Project

After a project collection has been created or edited, it must be saved. All items of a project collection including the Process Model XML file and associated dependencies will be saved. When saving a project collection, you have the option to change the name as desired.

Packaging a Project

This function allows you to package an entire project collection and save it to the client machine for archive purposes.

Deleting a Project or Project Collection

This function allows you to delete a project or project collection from the Deployment Services Utility.

Closing Projects

This function allows you to close a project or project collection.

Deploying a Project

This function allows you to deploy a project to a target AgilePoint Server machine.

To deploy a project:

1. Click the **Local Projects** tab and click **Deploy**. The **Deploy Project Wizard** appears.
2. Click **Next**.
3. Select the project(s) to add and click **Next**.
4. Select the target AgilePoint Server and click **Next**.
5. Once the deployment has been completed successfully, click **Finish**.

Viewing Deployment History

This function allows you to view deployment history interaction (e.g. what operations occurred and the result) on an AgilePoint Server machine.

To view deployment history:

1. Click the **Deployment History** tab.
2. Expand the AgilePoint Server for which you would like to view deployment history.
3. Click the date icon to view the deployment history.

To delete deployment history, right-click on a date icon and select **Delete History**.

AgilePart Deployment Wizard Utility

The AgilePart Deployment Wizard is a utility application that allows you to register custom AgilePart assemblies with AgilePoint Server so that those assemblies can be downloaded from AgilePoint Envision and used by AgilePoint Server's workflow engine at run time.

How to Start

- To open the AgilePart Deployment Wizard, Click **Start > All Programs > AgilePoint > AgilePart Deployment Wizard**.

Procedure

1. On the **AgilePart Deployment Wizard**, click **Add**.
2. On the **Deploy AgilePart** window, in the **Assembly** section, click the **Ellipse** button to select the required custom AgilePart dll.
3. Click **OK**.

Performance Tracing Utility

The Performance Tracing utility allows you to report on performance of custom components such as custom AgileParts, AgileWorks, AgileConnectors, AgileStubs, or Web Services. The performance criteria is based on milliseconds, for example you can write a query to return the most time consuming AgileParts. To use this utility, you will need a database that includes a table called WF_PERF_TRACES (it is not recommended to add this table to the AgilePoint database). You will also need to add a PerfTrace.config XML file to the root level folder where AgilePoint Server is installed (e.g. c:\inetpub\wwwroot\AgilePointServer\). The location of AgilePoint Server can be determined from the registry.

To use the utility to perform performance tracing:

1. Create a new table called **WF_PERF_TRACES** in a database as below. It is not recommended to use the AgilePoint database for this table.

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
SET ANSI_PADDING ON
GO
CREATE TABLE [WF_PERF_TRACES] (
  [SOURCE] [varchar] (1024) NULL,
  [CATEGORY] [int] NULL,
  [OBJECT_ID] [varchar] (256) NULL,
  [TIME_STARTED] [datetime] NULL,
  [TIME_SPAN] [int] NULL
) ON [PRIMARY]
GO
SET ANSI_PADDING OFF
```

A sample query may return results as shown below:

	SOURCE	CATEGORY	OBJECT_ID	TIME_STARTED	TIME_SPAN
1	#AgilePart:Ascentn.AgileP...	0	b81fad11691e4ce7a6a92...	2007-08-03 15:56:47.350	171736
2	#AgilePart:Ascentn.AgileP...	0	77fb50b240dc422ebf6e9e...	2007-08-03 16:08:01.440	83109
3	#AgilePart:Ascentn.AgileP...	0	0e5a6fc77c6349f3a86564...	2007-08-03 19:22:50.990	54468
4	#AgilePart:Ascentn.AgileP...	0	5342b4a43d764c4a8b3ca...	2007-08-01 17:25:30.700	54338
5	#AgilePart:Ascentn.AgileP...	0	e3f8d99521bd481d8e6c3...	2007-08-01 19:26:36.017	47184
6	#AgilePart:LabOneAgilePar...	0	3621C4E80B004EBA97E0...	2007-07-20 03:38:29.173	35541
7	#AgilePart:LabOneAgilePar...	0	C19819A8BC6A4FAEA0A...	2007-07-20 03:38:29.253	35460
8	GetEvent	3	T42Z\Administrator	2007-08-05 21:22:11.120	31124
9	#AgilePart:Ascentn.AgileP...	0	e0e9a3590dd94b1984be3...	2007-08-03 17:16:47.443	20229
10	#AgilePart:Ascentn.AgileP...	0	b81fad11691e4ce7a6a92...	2007-08-03 16:00:28.307	16473

2. In a text editor, create a new file with the following content:, and save it with the name **PerfTrace.config**.

```
<?xml version="1.0" encoding="utf-8"?>
<PerformanceTraceSetting xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Database>
    <Vendor>MSSQLDatabase</Vendor>
    <Connstr>server=localhost;database=lock;trusted_Connection=yes</Connstr>
```

```

</Database>
<Filter>
  <Category>TrackingEvent</Category>
  <Category>WebService</Category>
  <Category>ProcessEventHandler</Category>
  <Category>AgilePart</Category>
</Filter>
<MinimumTimeSpan>10</MinimumTimeSpan>
</PerformanceTraceSetting>

```

3. Save the file to the following path and file name:

```
[AgilePoint Server installation folder]\PerfTrace.config
```

4. Configure **PerfTrace.config** as follows:

- a. Within the **Database** section, enter the database vendor and connection string for your performance tracking database.
- b. The **Filter** section allows you to add the categories for which you want to report on. The categories that are available include:
 - **AgilePart** – Reports on all AgilePart data.
 - **ProcessEventHandler** – Reports on AgileWork and AgileStub data.
 - **TrackingEvent** – Reports on AgileConnector data.
 - **WebService** – Reports on Web Service data.

When doing the reporting, a few of the filtering options that are available include:

- **Exclude Categories** - To exclude one or more of the categories, remove the category from the PerfTrace.config file. For example, remove the <Category>WebService</Category> to tell AgilePoint Server to exclude Web Service tracing data from being recorded to the database.
- When writing your SQL, each category has been assigned a numerical identifier for filtering. This allows you to report only on a certain category. Each category is identified as follows:
 - **AgilePart** – 0.
 - **ProcessEventHandler** – 1.
 - **TrackingEvent** – 2.
 - **WebService** – 3.

A couple of sample query statements are shown below:

```
select * from WF_PERF_TRACES where source like
'%Sample%' order by time_span desc
```

```
select * from WF_PERF_TRACES
where category = 0 and source like '%Move%'
order by time_span desc
```

A sample query may return results similar to below:

	SOURCE	CATEGORY	OBJECT_ID	TIME_STARTED	TIME_SPAN
1	#AgilePart:Ascentn.AgileP...	0	b81fad11691e4ce7a6a92...	2007-08-03 15:56:47.350	171736
2	#AgilePart:Ascentn.AgileP...	0	77fb50b240dc422ebf6e9e...	2007-08-03 16:08:01.440	83109
3	#AgilePart:Ascentn.AgileP...	0	0e5a6fc77c6349f3a86564...	2007-08-03 19:22:50.990	54468
4	#AgilePart:Ascentn.AgileP...	0	5342b4a43d764c4a8b3ca...	2007-08-01 17:25:30.700	54338
5	#AgilePart:Ascentn.AgileP...	0	e3f8d99521bd481d8e6c3...	2007-08-01 19:26:36.017	47184
6	#AgilePart:LabOneAgilePar...	0	3621C4E80B004EBA97E0...	2007-07-20 03:38:29.173	35541
7	#AgilePart:LabOneAgilePar...	0	C19819A8BC6A4FAEA0A...	2007-07-20 03:38:29.253	35460
8	GetEvent	3	T42Z\Administrator	2007-08-05 21:22:11.120	31124
9	#AgilePart:Ascentn.AgileP...	0	e0e9a3590dd94b1984be3...	2007-08-03 17:16:47.443	20229
10	#AgilePart:Ascentn.AgileP...	0	b81fad11691e4ce7a6a92...	2007-08-03 16:00:28.307	16473



Note: It is not necessary to restart IIS upon making changes to the configuration file. AgilePoint Server will begin recording this tracing data to the database within 10-30 seconds. You can delete this file or rename it to stop this service.

APADM Command Line Utility

This topic provides examples using commands for the APADM SharePoint command line utility. The APADM application is a command line utility that can be used to perform some administrative tasks from the command line.

Prerequisites

- To use the ExecutionTimeout argument, you must have a release that includes Intermediate Fix 08.0081.02.
- To use the SyncSocialAccounts argument, you must have AgilePoint v5.0 R2 with Intermediate Fix 08.0082.01.

How to Start

1. In a command prompt, change directories to **[AgilePoint Server installation folder]\Tools**

Procedure

1. Run the following commands as required, using the following format:

apadm.exe [command] [arguments]

Command	Required Arguments	Optional Arguments	Example
-help			
-adduser	<ul style="list-style-type: none"> • [LDAP path] • [AgilePoint Server URL] 	<ul style="list-style-type: none"> • ExecutionTimeout = [seconds] - Specifies a timeout value, in seconds, for the operation. • SyncSocialAccounts - Synchronizes users' email IDs with their Yammer and Lync IDs. 	<ul style="list-style-type: none"> • apadm -adduser LDAP://dc=tusca,dc=com http://localhost/AgilePointServer • apadm -adduser LDAP://dc=tusca,dc=com http://localhost/AgilePointServer ExecutionTimeout=100
-archive	<ul style="list-style-type: none"> • [days] or [process instance ID] or [ProcessDefinitionName:ProcessInstanceName] • [AgilePoint Server URL] 	<ul style="list-style-type: none"> • -Y - Suppresses the interactive proceed with the action. • ExecutionTimeout = [seconds] - Specifies a timeout value, in seconds, for the operation. 	<p>The following example archives all processes that were completed or canceled 10 days ago.</p> <ul style="list-style-type: none"> • apadm -archive 10 http://localhost/AgilePointServer <p>The following example archives the process with the specified process instance ID.</p>

Command	Required Arguments	Optional Arguments	Example
			<ul style="list-style-type: none"> apadm -archive 501630F1C09743dbBA25FAC9C3 http://localhost/ AgilePointServer apadm -archive 10 http://localhost/ AgilePointServer -Y ExecutionTimeout=100
-restore	<ul style="list-style-type: none"> [process instance ID] or [ProcessDefinitionName: ProcessInstanceName] [AgilePoint Server URL] 	<ul style="list-style-type: none"> ExecutionTimeout = [seconds] - value, in seconds, for the operation. 	<ul style="list-style-type: none"> apadm -restore 501630F1C09743dbBA25FAC9C3 http://localhost/ AgilePointServer apadm -restore ExpenseReport:JohnSmith-01-20-2 http://localhost/ AgilePointServer ExecutionTimeout=100
-syncgm	<ul style="list-style-type: none"> [LDAP path] [authentication domain name] [AgilePoint Server URL] 	<ul style="list-style-type: none"> [retry count] - An integer that specifies a number of times to retry the operation before quitting. ExecutionTimeout = [seconds] - Specifies a timeout value, in seconds, for the operation. SyncSocialAccounts - Synchronizes users' email IDs with their Yammer and Lync IDs. 	<ul style="list-style-type: none"> apadm -syncgm LDAP://dc=tusca,dc=com TUS http://localhost/ AgilePointServer <p>In the following example, if synchronization fails, it retries 5 times as specified in the optional last parameter.</p> <ul style="list-style-type: none"> apadm -syncgm LDAP://dc=tusca,dc=com TUS http://localhost/ AgilePointServer 5 ExecutionTimeout=100
-rmprocdef	<ul style="list-style-type: none"> [process definition name] [AgilePoint Server URL] 	<ul style="list-style-type: none"> -Y - Suppresses the interactive confirmation to proceed with the action. ExecutionTimeout = [seconds] - Specifies a timeout value, in seconds, for the operation. 	<ul style="list-style-type: none"> apadm -rmproc PurchaseRequest http://localhost/ AgilePointServer apadm -rmproc PurchaseRequest http://localhost/ AgilePointServer -Y ExecutionTimeout=100

Command	Required Arguments	Optional Arguments	Example
-mgproc	<ul style="list-style-type: none"> • [process migration instruction XML file] • [AgilePoint Server URL] 	<ul style="list-style-type: none"> • -NoSchemaMigrate - Stops upgrading the schema to the latest updated schema. • -Run - Keeps the process running, even if an error occurs while running the operation. By default, if an error occurs, the process moves to a suspended state. • ExecutionTimeout = [seconds] - Specifies a timeout value, in seconds, for the operation. 	<ul style="list-style-type: none"> • <code>apadm -mgproc PurchaseRequest http://localhost/ AgilePointServer</code> • <code>apadm -mgproc PurchaseRequest http://localhost/ AgilePointServer - NoSchemaMigrate -Run ExecutionTimeout=100</code>
-sysinfo	<ul style="list-style-type: none"> • [AgilePoint Server URL] 	<ul style="list-style-type: none"> • ExecutionTimeout = [seconds] - Specifies a timeout value, in seconds, for the operation. 	<ul style="list-style-type: none"> • <code>apadm -systeminfo http://localhost/ AgilePointServer</code> • <code>apadm -systeminfo http://localhost/ AgilePointServer ExecutionTimeout=100</code>
-publishprocdef	<ul style="list-style-type: none"> • [AgilePoint Server URL] • [folder] or [file] • [release date] 	<ul style="list-style-type: none"> • ExecutionTimeout = [seconds] - Specifies a timeout value, in seconds, for the operation. 	<p>In this example, abc is a folder that contains XML files of process definition that need to be published and scheduled to be released on 1/20/2011.</p> <ul style="list-style-type: none"> • <code>apadm - publishprocdef http://localhost/ AgilePointServer abc 1/20/2011</code> • <code>apadm - publishprocdef http://localhost/ AgilePointServer abc 1/20/2011 ExecutionTimeout=100</code> <p>In this example, expensereport.xml is an XML file of process</p>

Command	Required Arguments	Optional Arguments	Example
			definition that needs to be published. <ul style="list-style-type: none"> apadm - publishprocdef http://localhost/ AgilePointServer expensereport.xml
-analyzeclusterlog	<ul style="list-style-type: none"> [cluster log file] 	<ul style="list-style-type: none"> ExecutionTimeout = [seconds] - Specifies a timeout value, in seconds, for the operation. 	<ul style="list-style-type: none"> apadm - analyzeclusterlog 20110521T043713Cluster.log apadm - analyzeclusterlog 20110521T043713Cluster.log ExecutionTimeout=100

APADM Archive Database Command

The APADM utility can be used to manually initiate archiving of AgilePoint Server data to the archive database. Archiving the workflow data will move the data for old processes from the main workflow database to an archive database. Old processes are those that have been Canceled or Completed for at least a specified minimum number of days.

Prerequisites

- Configure a connection to an archive database using the AgilePoint Server Configuration utility.
- Log on to Windows using a user account with the access rights "Archive Process Instance" in AgilePoint.

How to Start

- Open the APADM Command Line Utility:

```
[AgilePoint Server installation folder]\Tools\apadm.exe
```

Procedure

- Run the archive database command:

```
apadm -archive [days] [AgilePointServer URL]
```

The following is an example of using the utility to archive all processes that were completed or canceled at least 170 days ago:

```
D:\>apadm -archive 170 http://[hostname]/AgilePointServer
Connecting AgilePoint Server...You currently logon as 'MYDOMAIN\admin'
Query AgilePoint database...12 process(es) can be archived.
Please enter <Y> to continue, otherwise stop...y
Archiving process '/sites/AgilePointFinancialSite/
ExpenseReport_InfoPath/ER-2005-0032.xml#1'...Done ( 0.334 (s))
```

APADM Synchronize Active Directory Command

The apadm.exe utility can be used to manually initiate a synchronization of AgilePoint Server's users and groups with Active Directory. (This is a manual alternative to the ADSyncModule server extension.)

APADM Bulk Migration Command

The apadm.exe utility can be used to do a bulk migration of process instances. For more information, refer to [Migrating a Process Model and Associated Dependencies](#) in the [Documentation Library](#).

AgilePoint Server Monitor Service

Prerequisites

- AgilePoint Server installed in Windows Service mode.
- AgilePoint Server running in IIS mode.

The AgilePoint Server Monitor is a Windows service application that can be used to monitor the AgilePoint Server application, and to automatically restart the application if IIS should stop and/or recycle the application's process. This service can be useful if you want to prevent your end users from experiencing the occasional delay that may occur during the first use of the application after IIS has recycled the application's worker process.

When running, the service makes a simple request to the AgilePoint Server application once per minute in order to ensure that the application is still initialized and running. If the application isn't running, the request will cause IIS to start it.



Note: The utility will be automatically installed to Windows' Services console when installing AgilePoint Server v3.2.0.2 or later. However, when upgrading from v3.2.0.1 or earlier, you will need to use the .NET Framework's InstallUtil.exe utility to manually register the apsvrmon.exe executable.

The executable is located in your AgilePoint Server folder at:

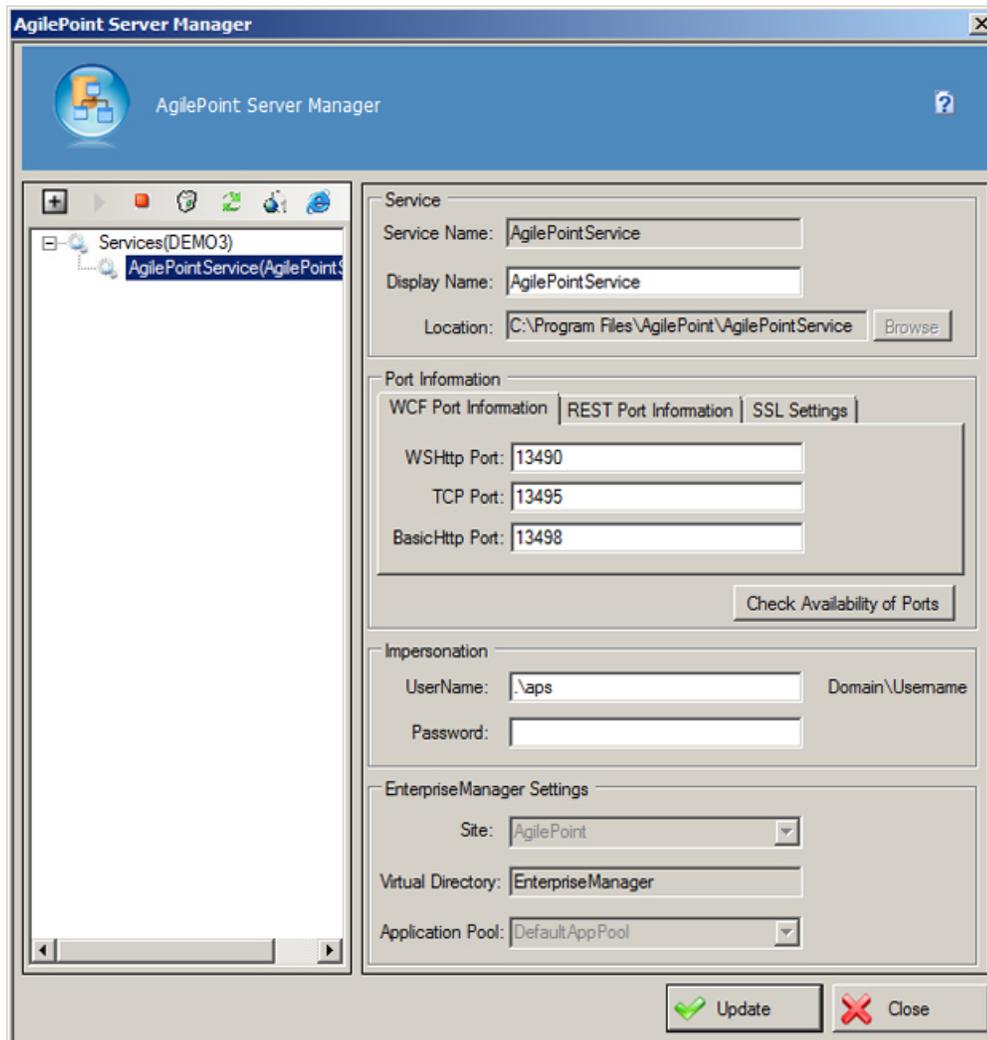
...\AgilePointServer\Tools\apsvrmon.exe

E.g. You could run the following command from the command prompt in the folder where the exe is located:

```
InstallUtil.exe apsvrmon.exe
```

AgilePoint Server Manager

The AgilePoint Server Manager is a sever management application that enables you to start, stop, add, delete, configure, and manage AgilePoint Server instances in a Windows Service environment.



Good to Know

- If you make changes to ports or SSL information on the AgilePoint Server Manager, you must run the Client Utility Tool against any affected web applications. This includes Enterprise Manager and SharePoint.
For more information, refer to [Running the SVC Client Utility Tool](#).

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Server Manager**.

Field Definitions

Field Name	Definition
Service Name	<p><u>Definition:</u></p> <p>Specifies the name you want to use to identify the Windows service associated with the AgilePoint Server instance.</p> <p><u>Allowed Values:</u></p> <p>A single line of text.</p> <p><u>Default Value:</u></p> <p>None</p>
Display Name	<p><u>Definition:</u></p> <p>Specifies the name you want to display to users to identify the AgilePoint Server instance.</p> <p><u>Allowed Values:</u></p> <p>A single line of text.</p> <p><u>Default Value:</u></p> <p>None</p>
Location	<p><u>Definition:</u></p> <p>Specifies the path to the AgilePoint Windows Service instance.</p> <p><u>Allowed Values:</u></p> <p>A valid absolute file path.</p> <p><u>Default Value:</u></p> <p>None</p>
WSHttp Port	<p><u>Definition:</u></p> <p>A free, unique port AgilePoint Server can use for WSHttp binding.</p> <p>This field is required.</p> <p><u>Allowed Values:</u></p> <p>Specifies a valid WSHttpPort number.</p> <p><u>Default Value:</u></p> <p>None</p>

Field Name	Definition
TCP Port	<p><u>Definition:</u></p> <p>Specifies a free, unique port AgilePoint Server can use for TCP binding.</p> <p>This field is required.</p> <p><u>Allowed Values:</u></p> <p>A valid TCP port number.</p> <p><u>Default Value:</u></p> <p>None</p>
BasicHttp Port	<p><u>Definition:</u></p> <p>A free, unique port AgilePoint Server can use for BasicHttp binding.</p> <p>This field is required.</p> <p><u>Allowed Values:</u></p> <p>A valid port number.</p> <p><u>Default Value:</u></p> <p>None</p>
Web HTTP Port	<p><u>Definition:</u></p> <p>Specifies a free, unique port AgilePoint Server can use for REST API calls.</p> <p><u>To Access This Field:</u></p> <p>Click the Rest Port Information tab.</p> <p><u>Allowed Values:</u></p> <p>A valid HTTP port number that can be used for REST API calls.</p> <p><u>Default Value:</u></p> <p>None</p>
Service Factory Binding	<p><u>Opens the Following Window:</u></p> <p>Global Extended Module Window</p> <p><u>Purpose of this Window:</u></p> <p>Specifies the authentication scheme for your REST endpoint.</p> <p><u>To Access This Field:</u></p> <p>Click the Rest Port Information tab.</p>

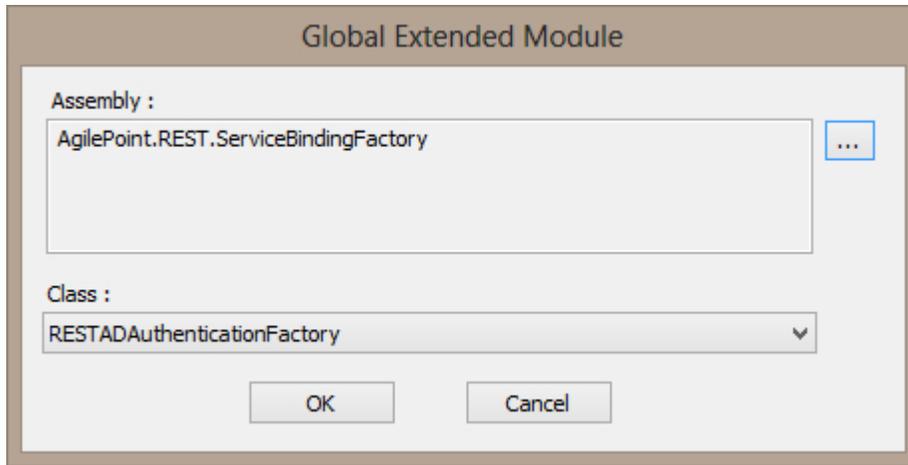
Field Name	Definition
Use Secure Connection (SSL)	<p><u>Definition:</u></p> <p>The common name (CN) or domain name or fully qualified domain name associated with your SSL certificate.</p> <p><u>To Access This Field:</u></p> <p>Click the SSL Settings tab.</p> <p><u>Allowed Values:</u></p> <p>An appSettings key in the following format:</p> <ul style="list-style-type: none"> • Selected - SSL encryption is enabled. • Deselected - SSL encryption is disabled. <p><u>Default Value:</u></p> <p>Deselected</p>
Domain Name	<p><u>Definition:</u></p> <p>The common name (CN) or domain name or fully qualified domain name associated with your SSL certificate.</p> <p><u>To Access This Field:</u></p> <p>Click the SSL Settings tab.</p> <p><u>Allowed Values:</u></p> <p>An appSettings key in the following format:</p> <p>A text string representing your common name or domain name.</p> <p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <p>mydomain.com</p>
Check Availability of Ports	<p><u>Action:</u></p> <p>Tests the specified ports to ensure they are free.</p>
UserName	<p><u>Definition:</u></p> <p>Specifies the user name for the AgilePoint service account.</p> <p><u>Allowed Values:</u></p> <p>A valid user name in the format domain\username.</p>

Field Name	Definition
	<p><u>Default Value:</u></p> <p>None</p> <p><u>Example:</u></p> <p>MYDOMAIN\APServiceUser</p>
Password	<p><u>Definition:</u></p> <p>The password for the authentication account.</p> <p><u>Allowed Values:</u></p> <p>A valid password.</p> <p><u>Default Value:</u></p> <p>None</p>
Site	<p><u>Definition:</u></p> <p>Specifies the web site from the list you created for AgilePoint during pre-installation.</p> <p><u>Allowed Values:</u></p> <p>A valid web site name.</p> <p><u>Default Value:</u></p> <p>AgilePointWebsite</p>
Virtual Directory	<p><u>Definition:</u></p> <p>Specifies the name you want to use for the virtual directory that contains the files for the Enterprise Manager web application.</p> <p><u>Allowed Values:</u></p> <p>A valid virtual directory name.</p> <p>The name EnterpriseManager is suggested.</p> <p><u>Default Value:</u></p> <p>None</p>
Application Pool	<p><u>Definition:</u></p> <p>Specifies the IIS application pool for the Enterprise Manager web application you want to run.</p> <p><u>Allowed Values:</u></p> <p>A valid application pool.</p> <p><u>Default Value:</u></p>

Field Name	Definition
	AgilePointAppPool
Add (+)	Creates a new AgilePoint Windows Service instance.
Start (▶)	<u>Action:</u> Starts the selected AgilePoint Windows Service instance.
Stop (■)	<u>Action:</u> Stops the selected AgilePoint Windows Service instance.
Delete (🗑)	<u>Action:</u> Deletes the selected AgilePoint Windows Service instance.
Refresh (🔄)	<u>Action:</u> Refreshes the selected AgilePoint Windows Service instance.
Server Configuration (🔧)	<u>Action:</u> Opens the AgilePoint Server Configuration window for the selected AgilePoint Windows Service instance.
Enterprise Manager (🔗)	<u>Action:</u> Opens Enterprise Manager for the selected AgilePoint Windows Service instance.
Update	<u>Action:</u> Saves changes to an AgilePoint Windows Service instance configuration.

Global Extended Module Window

Specifies the authentication scheme for your REST endpoint.



How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Server Manager**.
2. On the **AgilePoint Server Manager** window, select your AgilePoint service.
3. Click the **Rest Port Information** tab.
4. On the **Rest Port Information** tab, in the **Service Factory Binding** field, click **Browse**.

Fields

Field Name	Definition
Assembly	<p><u>Definition:</u></p> <p>Specifies the .dll file that provides server side authentication for REST services. In some circumstances you must create a custom authentication module.</p> <p>For more information, refer to Server Side Authentication Using WCF Endpoints for AgilePoint Server.</p> <p><u>Allowed Values:</u></p> <p>A valid assembly name.</p> <p><u>Default Value:</u></p> <p>None.</p> <p>The default .dll is [AgilePoint Server installation folder]\bin \AgilePoint.REST.ServiceBindingFactory.dll</p>
Class Name	<p><u>Definition:</u></p> <p>Specifies the implementation of the IWFSERVICEBindingFactory interface.</p>

Field Name	Definition
	<p><u>Allowed Values:</u></p> <p>A valid class name</p> <p><u>Default Value:</u></p> <p>None</p>

Adding a Server Instance

To add a server instance, in AgilePoint Server Manager, click the **Add** button.

Deleting a Server Instance

To delete a server instance, in AgilePoint Server Manager, click the **Delete** button.

Starting a Server Instance

To start a server instance, in AgilePoint Server Manager, click the **Start** button.

Stopping a Server Instance

To stop a server instance, in AgilePoint Server Manager, click the **Stop** button.

Configuring a Server Instance

To configure a server instance, in AgilePoint Server Manager, click the **Configure** button. The AgilePoint Configuration window opens. Follow the instructions for the AgilePoint Server Configuration utility in this document.

Managing a Server Instance

To manage a server instance, in AgilePoint Server Manager, click the **Internet Explorer** icon. Enterprise Manager opens in Internet Explorer. Follow the instructions for Enterprise Manager in this document and the Enterprise Manager online help.

Running the SVC Client Utility Tool

Once you have upgraded to AgilePoint BPMS v5.0 R2, you must run the SVC Client Utility Tool on each instance of AgilePoint Enterprise Manager in your environment.

This topic provides the standard instructions for running the SVC Client Utility on any ASP.NET web application.

Prerequisites

- AgilePoint Server running in Windows Service mode.
- You have applied the AgilePoint BPMS v5.0 R2 upgrade on all applicable AgilePoint machines.
- You have [updated your AgilePoint Server instances](#).
- Create a backup copy of the configuration file for the application you are configuring before using this utility.
- If you are using SharePoint or AgileForms Server on a machine that is not the AgilePoint Server machine (typically the case), copy the **web.config** file from the SharePoint or AgileForms machine to AgilePoint Server machine. The following are the default locations of the target web.config files:
 - **SharePoint** - c:\inetpub\wwwroot\wss\VirtualDirectories\[port number]
 - **AgileForms** - [AgileForms Server installation folder]\Webroot

How to Start

Do one of the following:

1. On the AgilePoint Server machine, navigate to **[AgilePoint Server Installation]\SVCUtilityTool\AgilePointWindowsServiceClientUtilityTool.exe**
2. Open the AgilePoint installation file, and click **Utilities and Other Support Files > AgilePoint Windows Service Client Utility Tool**.

Procedure

1. In the AgilePoint Windows Service Client Utility Tool dialog box, complete the following fields:
 - **Service Address** – The URI for the Windows Service for which you are creating the binding. The information required to build this URI is provided in the AgilePoint Server Manager window.
 - **HTTP** - http://[APServer Machine Name]: [Http Port]/AgilePointServer
 - **Target Config** – The file name and location of the configuration file for the application you are configuring. This is required for SharePoint Integration. For other applications, you only need to run this utility if you are prompted.
 - **SharePoint Integration** – The web.config for the SharePoint web application you want to bind.
 - **Enterprise Manager** – The web.config for the Enterprise Manager web application.
 - **Data Services** – DataServicesWindowsService.exe.config in the Data Services installation folder. The default location is C:\Program Files\AgilePoint\AgilePoint Data Services\
 - **AgileForms** - The web.config file in the AgileForms installation folder. The default location is C:\Program Files\AgilePoint\AgileForms Server\Webroot
 - **Deployment Service** - apds.exe.config file in the Deployment Service installation folder. The default location is C:\Program Files (x86)\AgilePoint\AgilePoint Deployment Service\
2. Click **Settings** to configure the following fields:
 - **Max Buffer Size**
 - **Max Buffer Pool Size**
 - **Max Received Message Size**
 - **Max String Content Length**

- **Max Array Length**

Guidance for modifying these values can be found at the following articles on MSDN:

- [http://msdn.microsoft.com/en-us/library/ms731361\(v=VS.100\).aspx](http://msdn.microsoft.com/en-us/library/ms731361(v=VS.100).aspx)
- [http://msdn.microsoft.com/en-us/library/ms731325\(v=VS.100\).aspx](http://msdn.microsoft.com/en-us/library/ms731325(v=VS.100).aspx)

3. If you are using SharePoint or AgileForms Server on a machine that is not the AgilePoint Server machine, copy the modified web.config file back to its original location on the SharePoint or AgileForms Server machine.

Enabling SSL in AgilePoint Server Manager

To enable the SSL Settings in AgilePoint Server Manager, do the following.

Prerequisites

- You must have an SSL certificate. To create one, see [Creating a Self-signed SSL Certificate](#)
- Your certificate must be bound to AgilePoint Server. For more information, refer to [Binding the SSL Certificate to AgilePoint Server Port](#)

How to Start

1. On the AgilePoint Server machine, click **Start > All Programs > AgilePoint > AgilePoint Server Manager**.

Procedure

1. On the **AgilePoint Server Manager**, select your AgilePoint Windows Service instance.
2. On the **SSL Settings** tab, select **Use secure connection (SSL)**.
3. On the **Domain Name** field, enter the common name or domain name for your SSL certificate.
4. Restart the AgilePoint Server instance.

Creating a Self-signed SSL Certificate

To create a self-signed SSL certificate, do the following.

Prerequisites

- Microsoft Visual Studio installed.

How to Start

1. Click **Start > All Programs > Visual Studio > Visual Studio Tools > Visual Studio Command Prompt**.

Procedure

1. On the Visual Studio command prompt, enter the following command:
Makecert -sv SignRoot.pvk -cy authority -r signroot.cer -a sha1 -n "CN=[your certification name]" -ss my -sr localmachine
2. To move your SSL certificate from **Personal** folder to **Trusted Root Certificate Authorities** folder, complete the following steps:
 - a. In the Visual Studio command prompt, enter **mmc**.
 - b. On the **Console Root** window, click **File > Add/Remove Snap-in**.
 - c. On the **Add or Remove Snap-ins** window, select **Certificates**, and click **Add**.
 - d. On the **Certificates snap-in** window, click **Computer account**.
 - e. On the **Select Computer** window, click **Local computer**.

- f. On the **Console Root** window, click the **Right arrow** to expand **Certificates (Local Computer)**
 - g. Drag your SSL certificate from the **Personal** folder to the **Trusted Root Certificate Authorities** folder.
3. To give your SSL certificate URL name, enter the following command:
Makecert -iv SignRoot.pvk -ic signroot.cer -cy end -pe -n CN="SSL-Url-Name" -eku 1.3.6.1.5.5.7.3.1 -ss my -sr localmachine -sky exchange -sp "Microsoft RSA SChannel Cryptographic Provider" -sy 12

More Information

- <http://msdn.microsoft.com/en-us/library/bfskty3.aspx>

Binding the SSL Certificate to AgilePoint Server Port

To bind the SSL Certificate to AgilePoint Server Port, do the following.

Prerequisites

- AgilePoint Server installed on premises in Windows Service mode.
- The ports you use for binding in AgilePoint Server. You can find these in [AgilePoint Server Manager](#).
- You must have an SSL certificate. To create one, see [Creating a Self-signed SSL Certificate](#)

How to Start

1. Click **Start > All Programs > Visual Studio > Visual Studio Tools > Visual Studio Command Prompt**.

Procedure

1. In the Visual Studio command prompt, enter **mmc**.
2. On the **Console Root** window, click **File > Add/Remove Snap-in**.
3. On the **Add or Remove Snap-ins** window, select **Certificates**, and click **Add**.
4. On the **Certificates snap-in** window, click **Computer account**.
5. On the **Select Computer** window, click **Local computer**.
6. On the **Console Root** window, click the **Right arrow** to expand **Certificates (Local Computer)**
7. Click the **Right arrow** to expand **Personal** folder.
8. Right-click the **Certificates** folder.
9. Select **All Task > Import**.
10. On the **Certificates Import wizard**, click the **Next** button.
11. In the **File name** field, browse your SSL certificate.
12. Double-click your SSL certificate.
13. Select the **Details** tab.
14. In the **shown** field, select **ALL**.
15. Select **Thumbprint**.
16. Copy the value of the thumbprint.

17. On the Visual Studio command prompt, enter the following command:

```
netsh http add sslcert ipport=0.0.0.0:portnumber certhash=SSL-Certificate-thumbprint-value-without-spacesappid={c929c857-e10a-48c4-b123-5713faba528e}
```