OnBase®
Foundation EP5

Unity Scheduler

Reference Guide

Includes:

Installation Guide

Administration Guide

Foundation EP5

Copyright

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Department/Group ..... Documentation

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Overview

The Unity Scheduler provides the ability to seamlessly automate and execute tasks running on pre-configured schedules. The Unity Scheduler is multi-threaded and allows tasks from single and/or multiple data sources to execute simultaneously. System tasks run silently in the background, allowing users to continue working in OnBase without interruption or awareness the tasks are being executed.

The Unity Management Console provides the ability for administrators to create and configure tasks that should be executed during certain time frames or intervals. Schedules and execution windows can be assigned to the tasks, providing a powerful palette of detail and configuration for when tasks can be executed. Schedules determine specific dates, days, or intervals a task should be executed. Execution windows determine which days and times interval schedules should be run. Multiple schedules and execution windows can be assigned to a single task to provide for granular customization.

Availability of task types you can create within the Unity Management Console depend on system licensing. For example, when licensed for Workflow, you can create tasks that execute Workflow timers.

From within the Unity Management Console, you can also generate audit logs, configuration reports, and execution history reports. These logs and reports can be used to track actions from within the Unity Management Console and view details on task configuration and execution.

Licensing

Beginning in OnBase Foundation EP5, new customers must use simplified licensing to access Unity Scheduler functionality. Existing customers upgrading from a version of OnBase prior to OnBase Foundation EP5 can continue to use legacy licensing to access this functionality.

If you are a new customer as of OnBase Foundation EP5 or greater, see Simplified Licensing on page 1.

If you are upgrading from a version of OnBase prior to OnBase Foundation EP5, see Legacy Licensing on page 2.

Simplified Licensing

The Essential User, Standard User, or Premier User license is required.

Optional Licensing

The Unity Automation API license is required to create Unity Management Console tasks that run Unity Scripts.

Additional Licensing

Additional licensing may be required to create Unity Management Console tasks related to Workflow timers. For Workflow licensing requirements, see the **Workflow** documentation.

Legacy Licensing

A valid Client license is required to log in to the Unity Management Console.

Additionally, at least one of the following licenses is required to create tasks within the Unity Management Console:

- **Reporting Dashboards** - Allows you to create tasks related to the Reporting Dashboards module.
- **Unity Automation API** - Allows you to create tasks that run Unity Scripts.
- **Workflow Client license** - Allows you to create tasks related to Workflow timers.

System Interaction

Beginning in OnBase 18, an instance of the Unity Scheduler Service must be installed and running to ensure that necessary maintenance tasks are automatically performed on the OnBase system.

When upgrading any OnBase component to version 18 or later, any existing instance of the Unity Scheduler Service from a previous version must also be upgraded to version 18 or later.

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Requirements

The following sections outline requirement information specific to Unity Scheduler in OnBase Foundation EP5.

General Requirements

For general requirement information that applies to Unity Scheduler and other modules, see the sections on the following topics in the **Installation Requirements** manual:

- Databases Supported
- Database/File Servers
- Supported Desktop Operating Systems
- Microsoft .NET Framework Requirements
- Microsoft Visual C++ Requirements
- Unity Client Platform Hardware Requirements
- Third-Party Software Compatibility
- About Virtual Environments
- 64-bit Support Statement
- Windows User Account Control Statement

Licensing

See Licensing on page 1 for licensing requirements.

Installation

The Unity Scheduler module requires installation of the following:

Install	Description
Unity Scheduler Service	Installs the Unity Scheduler Service. This is required to run tasks and schedules. Multiple services can be installed, if necessary. If you want to install one instance of the Unity Scheduler Service using the installer, see Running the Unity Scheduler Installer on page 7. If you want to install multiple instances of the Unity Scheduler Service using the command line options, see Installing the Unity Scheduler Service on page 24. **Note:** Unity Scheduler Service Instances created using OnBase Foundation EP5 or later cannot be run using earlier versions.
Unity Management Console	Installs the Unity Management Console. This is required to configure and run tasks and schedules. For more information on installing the Unity Management Console, see, Running the Unity Management Console Installer on page 36.

Installer Requirements

Standard (EXE or MSI) Installers — There are two methods for running OnBase installers: Interactive and silent. An interactive installation requires user interaction with dialog boxes during the installation process. A silent installation does not require user interaction during the installation process.

OnBase installers may consist of both an executable file (**.exe**) and a Windows Installer Package file (**.msi**). When performing an interactive installation, and both an executable file and MSI are available, use the executable file to ensure a complete installation. The executable validates that all prerequisites are met before proceeding with the installation. If any missing prerequisites are identified, the installer alerts the user. Most missing prerequisites can be installed directly from the installer before continuing the installation process.

Note: The Microsoft .NET Framework prerequisite must always be installed separately before running either the EXE or MSI installer.

When performing a silent installation, and both an executable file and MSI are available, use the MSI. Since the MSI package does not validate prerequisites, you must ensure that Windows Installer 3.0 or greater is installed on each workstation and that all other prerequisites are met before running the MSI. If any prerequisites are not met, a silent installation from the MSI will fail without alerting the user.

For more information about configuring a silent installation, see https://docs.microsoft.com/en-us/windows/win32/msi/command-line-options.

ClickOnce Installers — Some OnBase modules are installed for deployment using ClickOnce. ClickOnce is a Microsoft technology that installs a deployment package to a central server. This package can then be accessed by users to install the application on their local workstations. The application is installed entirely under the user's profile, ensuring that it cannot interfere with other applications installed on the workstation.

ClickOnce deployments also have the following advantages:

- Previously installed versions of the module can be easily and automatically updated to the latest version with little or no user interaction, as long as the deployment server and deployment instance name are not changed.
- The module is installed on a per-user basis and does not require administrator privileges for local installation.
- There can be multiple instances of the module deployed, allowing for different versions of the module to be installed on a per-user basis, to match the version requirements of the workstation it is being installed to.

For more information on Microsoft's ClickOnce technology see https://docs.microsoft.com/en-us/visualstudio/deployment/clickonce-security-and-deployment.

Note: ClickOnce-deployed applications are not supported by Microsoft within a Remote Desktop environment.

OnBase modules that are deployed using ClickOnce should either take advantage of the ClickOnce deployment method as an alternative to a Remote Desktop deployment, or the module should be installed using a standard installer and deployed using the Remote Desktop methodology.

Note: Not all OnBase modules that support ClickOnce have a standard installer available. Contact your first line of support if you are unsure how to install and deploy a specific module.

User Account Control (UAC) — If Windows User Account Control (UAC) is enabled, the installer must be run with elevated administrator privileges, even if an administrator is currently logged on. This can be accomplished by right clicking on the installer executable and selecting **Run as Administrator** from the right-click menu. MSI files cannot be run using the **Run as Administrator** option. Instead, you must launch the MSI package using the command line. For more information on installing files through the command line, refer to your Microsoft support information or see https://docs.microsoft.com/en-us/windows/win32/msi/command-line-options.

Silent Installation Using setup.exe — If you are running setup.exe silently from the command line you must use the **/q** switch and the **/CompleteCommandArgs** switch, followed by the required command-line arguments.

The **q** switch specifies quiet mode and is required to suppress the GUI. The **CompleteCommandArgs** switch must be followed by the command-line parameters required to configure and install the desired components.

The complete string of command-line parameters must be included in double quotes after the **CompleteCommandArgs** switch. If a parameter in the string also requires double quotes, those quotes must be escaped using ****. For example: **setup.exe /q /CompleteCommandArgs "INSTALL_PROPERTY=\"my value\" INSTALL_PROPERTY_2=\"my value 2\""**.

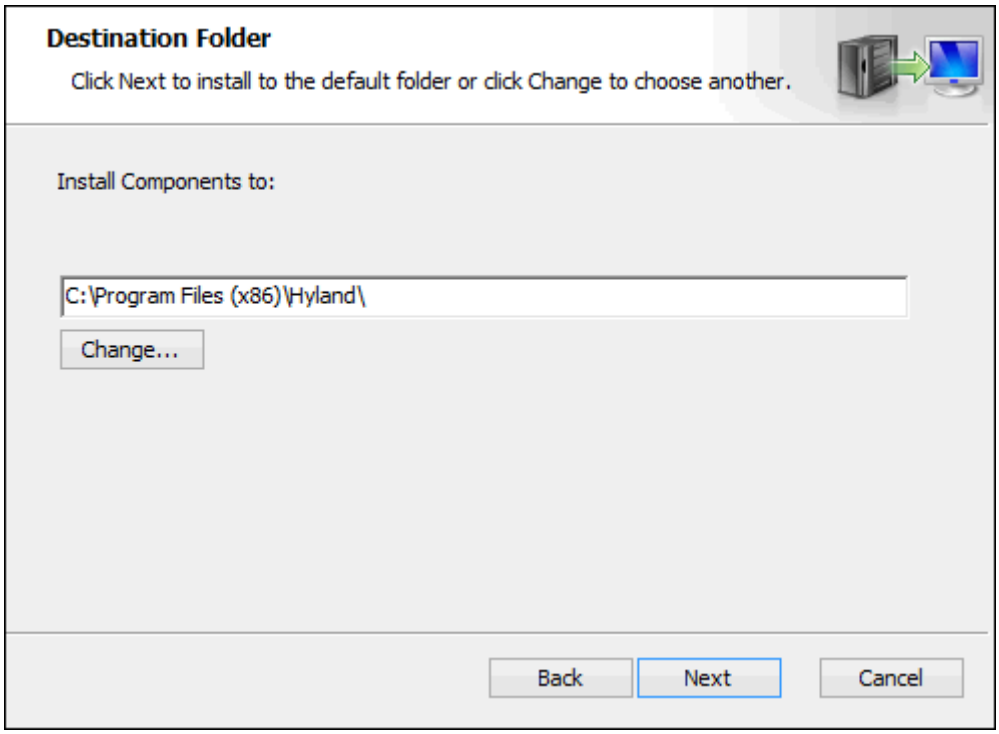
Note: You should check the return value of the setup.exe process. A return value of **0** (zero) indicates success. Any other value returned may indicate that an error was encountered and the installation failed.

Running the Unity Scheduler Installer

The Unity Scheduler installer installs the appropriate files, dependencies, and the Unity Scheduler service.

Launch the Hyland Unity Scheduler installer by executing the **setup.exe** executable. This executable is usually located in the **\install\Unity Scheduler** folder of your source installation files.

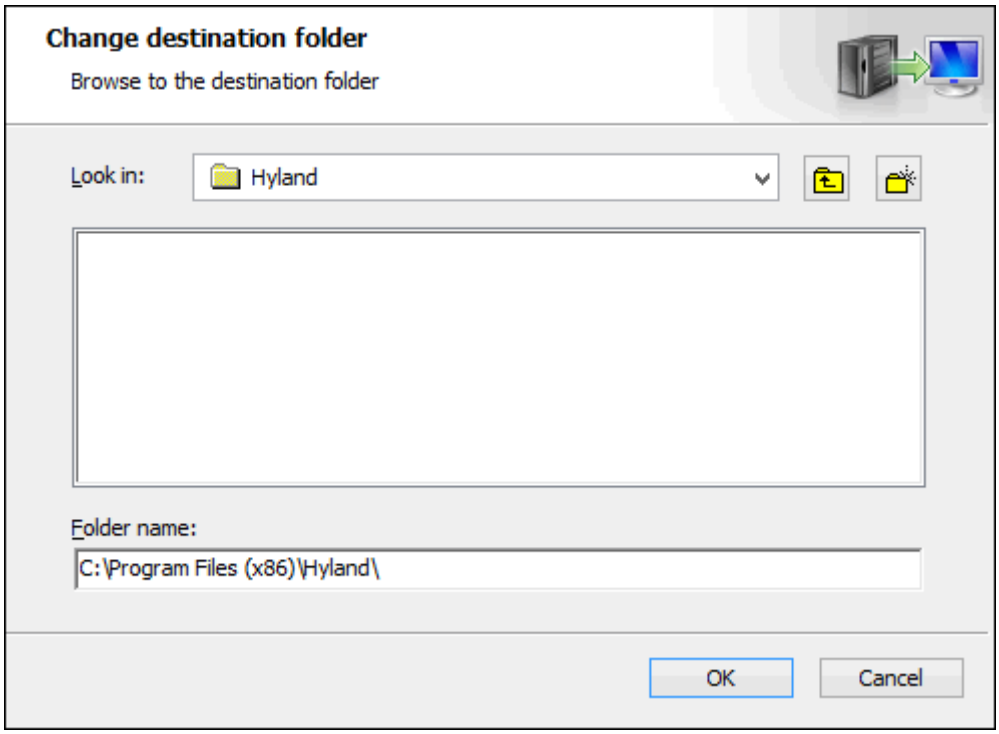
1. The Hyland Unity Scheduler installation welcome dialog is displayed.
2. Click **Next**. The **Destination Folder** dialog box is displayed.



3. Enter the top-level installation directory in the field provided, or click **Change** to browse to it.

Note: This location does not affect components not installed under the top-level directory. If the installer provides for the installation of multiple components, the specific installation locations of each component can be changed later in the installation process.

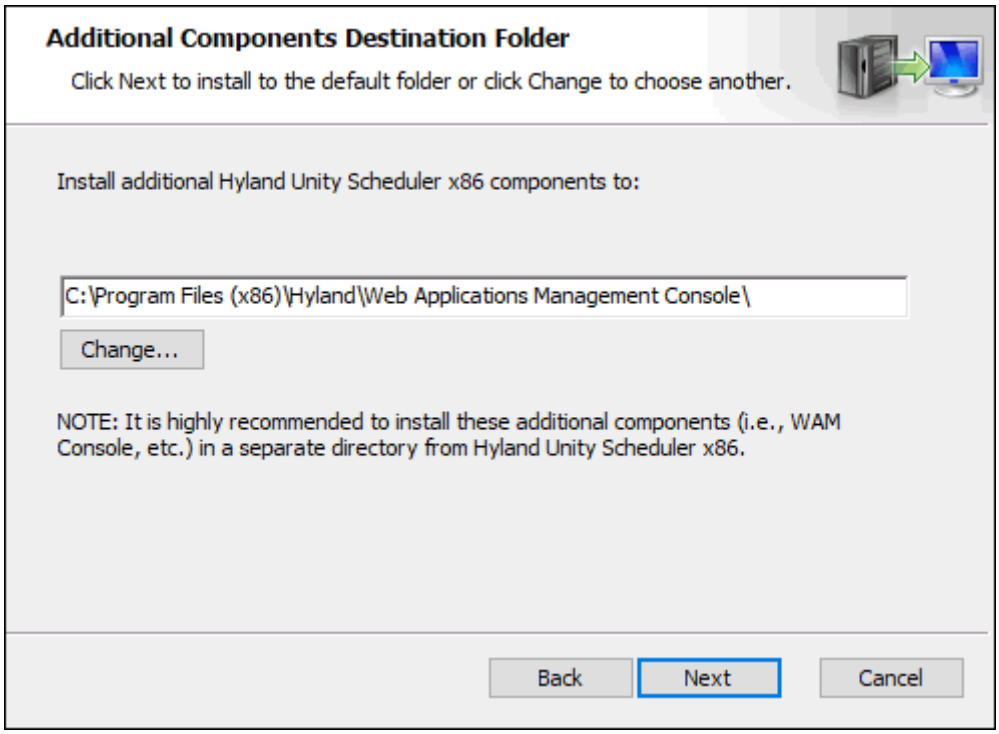
If **Change** is clicked the **Change destination folder** dialog box is displayed.



Enter a **Folder name** in the field provided or select it from the **Look in** drop-down list, then click **OK**.

If the Destination Folder is not changed, the default location is used.

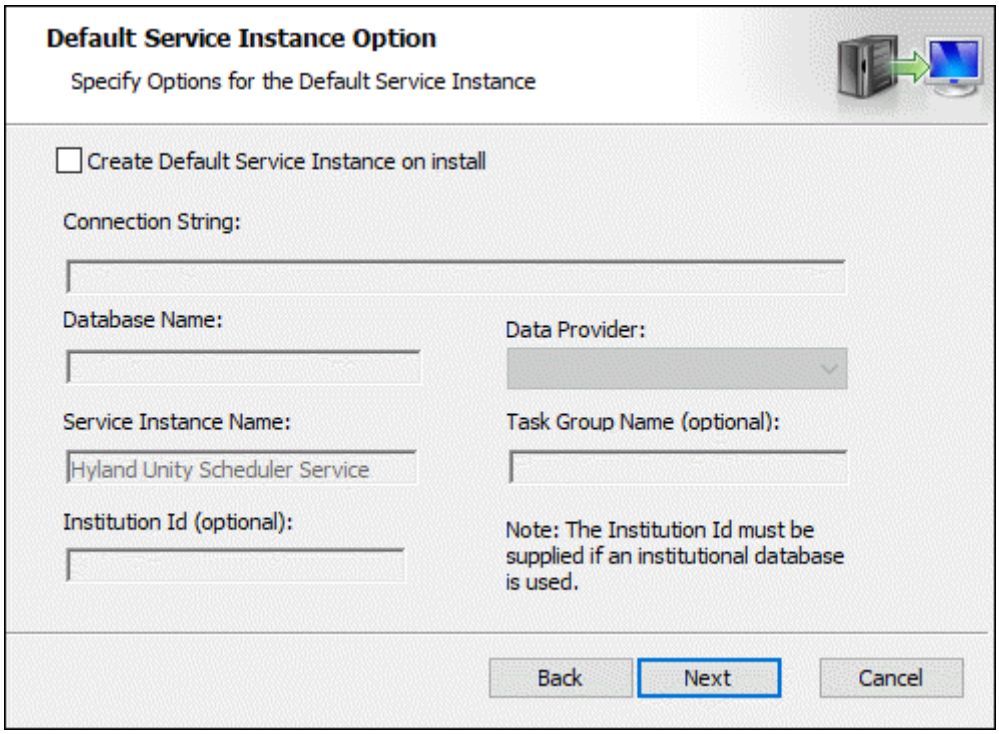
4. Click **Next**. The **Additional Components Destination Folder** page is displayed:



To change the installation location of additional components being installed with the Unity Scheduler (such as the Web Application Management Console), enter a new folder location or click **Change** to navigate to the folder location.

Note: It is highly recommended to install additional components in a separate directory from Unity Scheduler.

5. Click **Next**. The **Default Service Instance Option** dialog is displayed.



6. If you want to create a default service instance of the Unity Scheduler service during the installation process, select the **Create Default Service Instance on install** option.
   If you selected the **Create Default Service Instance on install** option, proceed to the next step.
   Otherwise skip to step 14.

7. In the **Connection String** field, enter a valid connection string that will connect to a data source.

Tip: Connection strings are a .NET Framework concept. If you need assistance in building a valid connection string there are several resources on the Internet that can be used. Microsoft has posted a detailed explanation of connection strings on the MSDN site (**http://msdn.microsoft.com**) under **Working With Data Providers** in the **ADO.NET Entity Framework** library. There is also a Web site devoted entirely to connection strings at **http://www.connectionstrings.com**.

An example of a sample connection string may look like this:

- **SQL:** Data Source=[DATABASE_SERVER];Database=[DATABASE_NAME]; User Id=Username;Password=Password
- **MSOracle:** Data Source=[TNS_NAME];User Id=Username;Password=Password

The following values need to be replaced if the sample connection strings are going to be used as the basis of your connection string:

- **[DATABASE_SERVER]**: For **SQL Server** connection strings, replace this value with the name of your SQL instance. For example **YourMachineName\SQLSERVER**. Do not include the brackets (**[ ]**) in this value. This value may be case sensitive, depending on how the data source is configured.
- **[DATABASE_NAME]**: For **SQL Server** connection strings, replace this value with the actual name of the database to which the Unity Scheduler Service will connect. Do not include the brackets (**[ ]**) in this value. This value may be case sensitive, depending on how the data source is configured.

Note: This is not the data source name of the database connection; it is the actual name of the database.

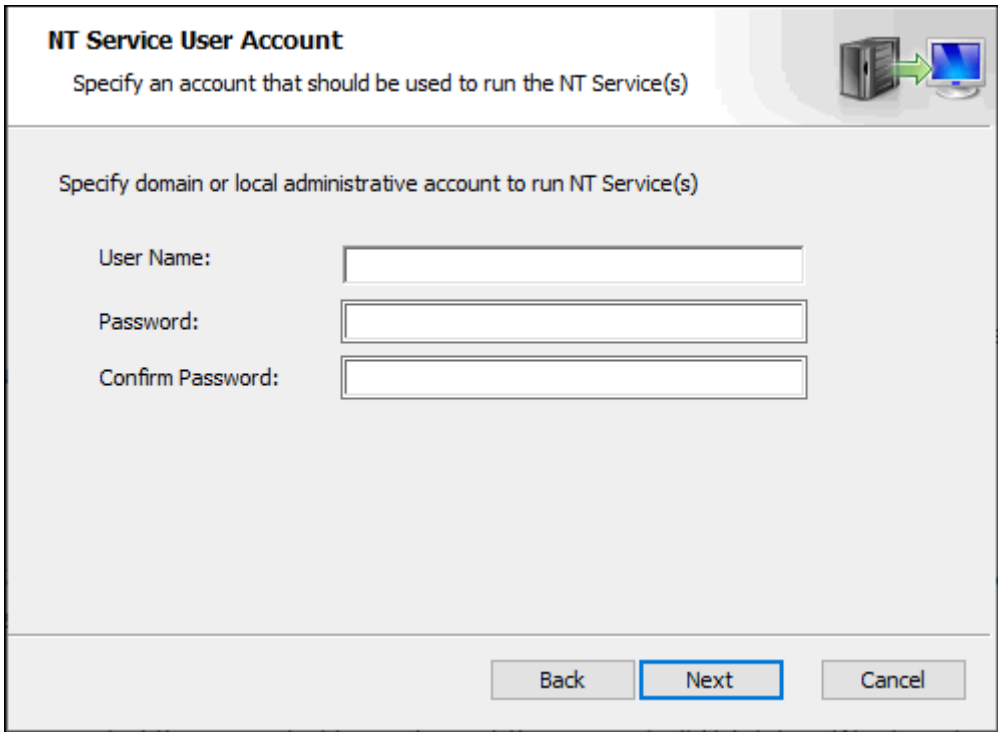
- **[TNS_NAME]**: For **MSOracle** connection strings, replace this value with the Oracle Service Name to which the Unity Scheduler Service will connect. Do not include the brackets (**[ ]**) in this value. This value may be case sensitive, depending on how the data source is configured.

Note: This is not the data source name of the database connection; it is the Oracle Service Name.

- **Username**: This is the username of a user configured with access to the database.
- **Password**: This is the password for the user configured to access the database.

8. In the **Database Name** field, enter the actual name of the database that is referenced in the connection string.
9. In the **Data Provider** drop-down list, select **oracle** if you are connecting to an Oracle data source, or select **sqlserver** if you are connecting to a SQL data source.
10. In the **Service Instance Name** field, enter the name for the default service instance of the Unity Scheduler.
11. If you want to add the default service instance of the Unity Scheduler to a task group, enter the name of a task group in the **Task Group (optional)** field.

12. If an institutional database is used, enter the Institutional Id in the **Institution Id (optional)** field.
13. Click **Next**. The **NT Service User Account** dialog is displayed.

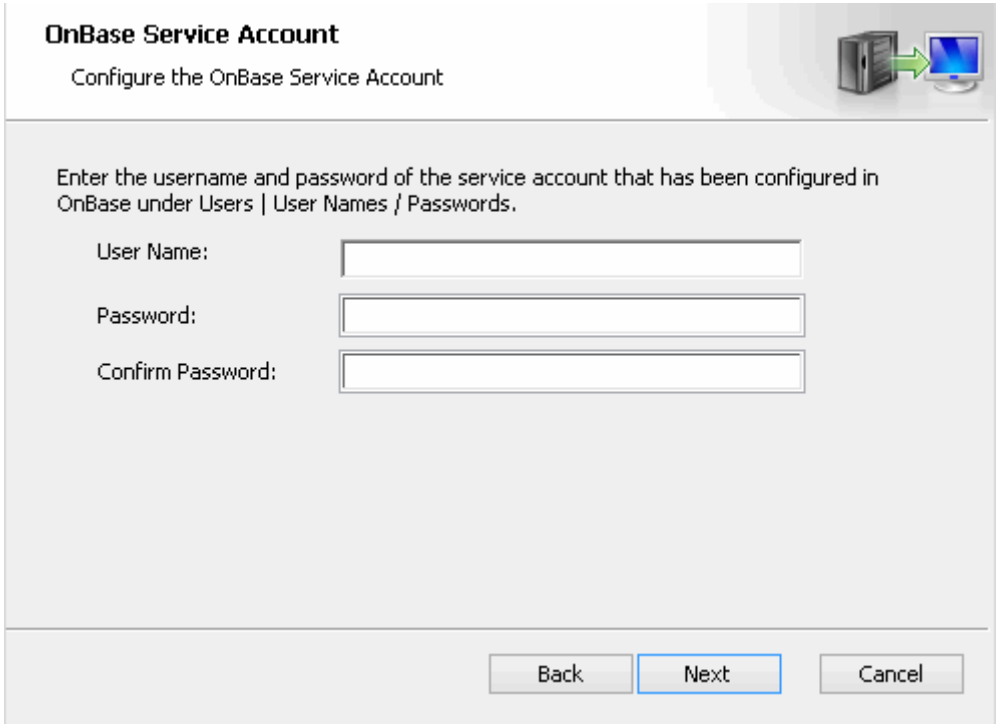


Specify a domain account to run the NT Service.

Note: An NT Service User Account is required to create a default service instance of the Unity Scheduler service during the installation process.

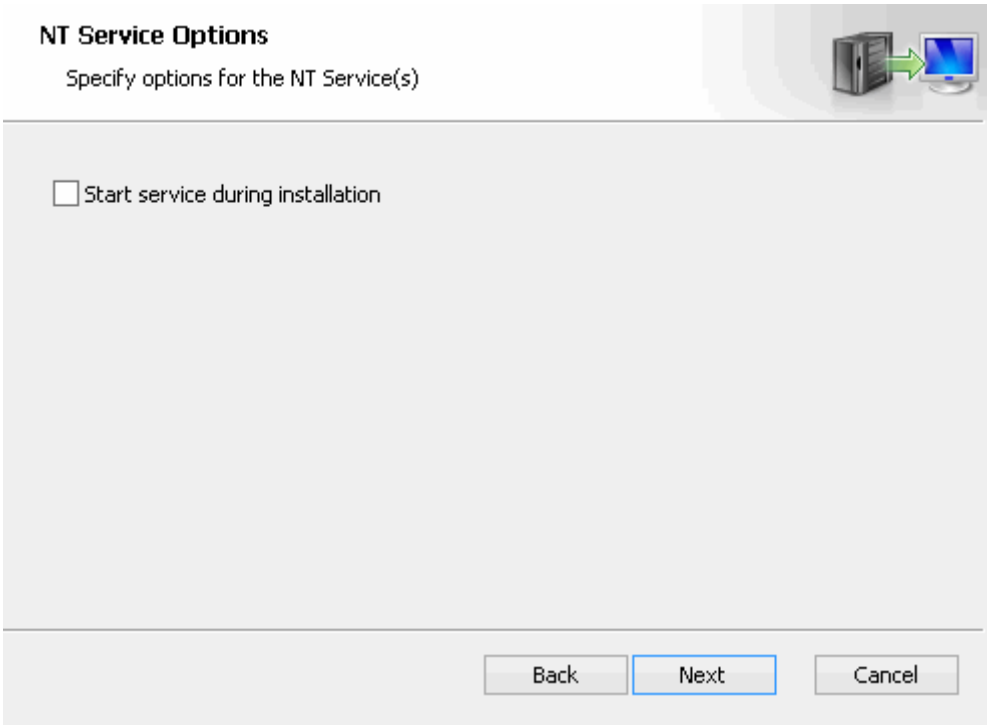
a. In the **User Name** field, enter the user name of the account that will be used to run the NT service.
b. In the **Password** field, enter the password of the account. Enter the password again in the **Confirm Password** field.

14. Click **Next**. The **OnBase Service Account** dialog is displayed.



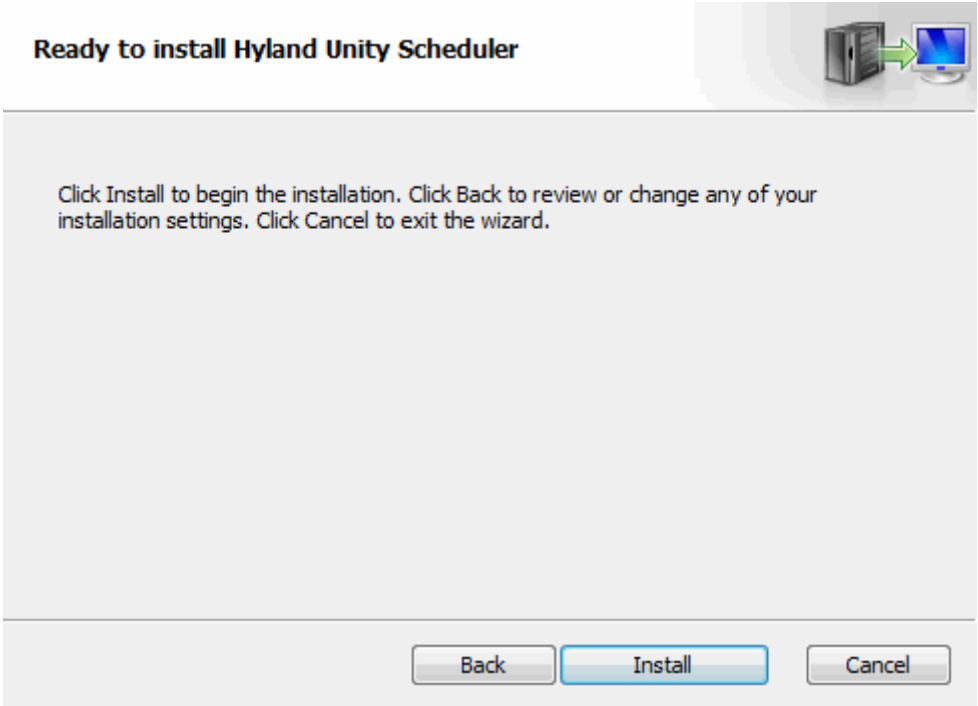
15. In the **User Name:** field, enter the user name of the service account has been configured in OnBase.
16. In the **Password:** field, enter the password of the service account. Enter the password again in the **Confirm Password:** field.

17. Click **Next**. If **Create Default Service Instance on install** was selected, the **NT Service Options** dialog is displayed.



18. If you want the default service instance of the Unity Scheduler to be started during the installation process, select the **Start service during installation** option.

19. Click **Next**. The **Ready to install** dialog is displayed.

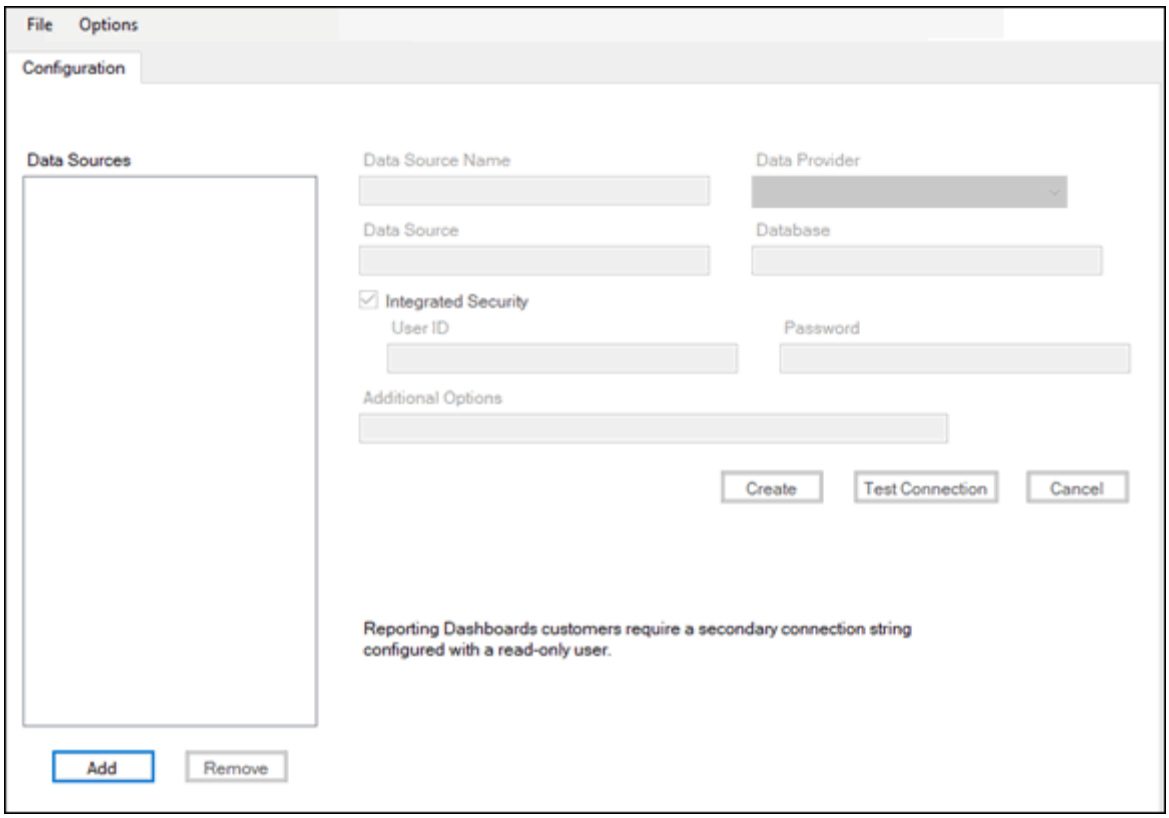


20. Click **Install** to continue with the installation, or click **Cancel** to cancel the installation.
21. When the installation is complete, select the **Launch Web Application Management Console** option in order to configure the connection string used to access the OnBase database.

Note: You must configure a valid connection string in order for the Unity Scheduler service to function properly.

22. Click **Finish**. The connection string configuration window is displayed.

The connection strings dialog box allows you to configure connection strings.



23. To encrypt all connection strings configured in the application's .config file, ensure the **Options | Encrypt Connection Strings** menu option is selected. This option is automatically selected by default every time you open the connection strings dialog box, and the connection strings are encrypted when the .config file is saved.

Caution: It is strongly recommended to encrypt the connection strings. If they are not encrypted, all data source connection information is visible in the .config file and could expose sensitive data, including any entered database user names and passwords.

24. Click **Add** to start creating a new connection string. The fields on the right become available for interaction.
25. If you are configuring Reporting Dashboards with a secondary connection string with a read-only database user account, select **Options | Populate Read-Only User**. This optional feature populates the **User ID** and **Password** fields with the credentials for the read-only user. See the **Reporting Dashboards** documentation for more information.

    If you are creating a connection string for any other purpose, skip this step.

26. In the fields on the right, enter the following information about the data source:

Option	Description
Data Source Name	A unique name that you create to identify the connection string. **Note:** This identifying name may be different from the name of the actual database.
Data Provider	The data provider type used for the database. Select one of the following: • **System.Data.SqlClient**: Select this for a SQL Server database. • **Oracle.ManagedDataAccess.Client**: Select this for an Oracle database. **Note:** Only SQL Server and Oracle data providers can be used to connect to the OnBase database.

27. Depending on your selection for **Data Provider** in the previous step, enter the following database connection information:
    - If **System.Data.SqlClient** is selected (for a SQL Server database):

System.Data.SqlClient Option	Description
Data Source	Enter the server\instance name of the SQL Server instance hosting the database.
Database	Enter the name of the SQL Server database.

    - If **Oracle.ManagedDataAccess.Client** is selected (for an Oracle database):

Oracle.ManagedDataAccess.Client Option	Description
TNS Connection String	Select this option to enter a full TNS connection string to connect to the Oracle database. Deselect the option to use the connection name instead. **Note:** Selecting this option enables the **Host**, **Database**, **Protocol**, and **Port** fields for interaction.
Data Source	Enter the TNS name or connect descriptor of the Oracle database. **Note:** This field is available only if the **TNS Connection String** option is deselected.

Oracle.ManagedDataAccess.Client Option	Description
Host	Enter the host address of the Oracle database.
Database	Enter the name of the Oracle database.
Protocol	Select the protocol to use for connecting to the Oracle database. Options are: • **TCP** • **TCPS**
Port	Enter the port to use for connecting to the Oracle database.

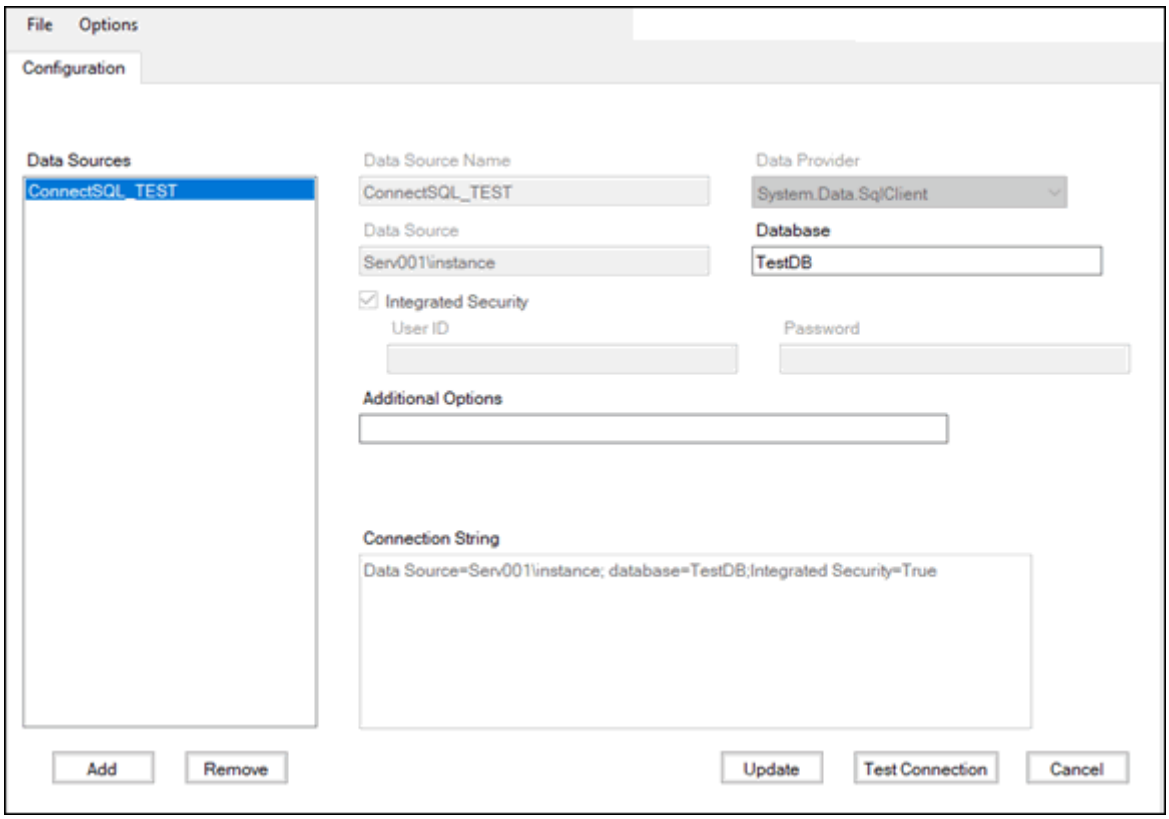
28. Enter the following security information:

Option	Description
Integrated Security	Select this option to use Windows Authentication to connect to the database. **Caution:** It is strongly recommended to use integrated security instead of a database account for authentication. To use integrated security, the Windows user connecting to the database must be the same user that is running the connecting server or service (such as the Application Server). This user must also be configured with the **configgp** role in the database.
User ID	The user name of the database user account accessing the database. **Note:** This user name is for a database user account, not a user account for OnBase.
Password	The password of the database user account accessing the database. **Note:** This password is for a database user account, not a user account for OnBase.

29. Enter any additional options.

Option	Description
Additional Options	Any additional options for the connection string. For more information on available connection string options and syntax, see the documentation for your database provider (SQL Server or Oracle).

30. Click **Test Connection** to test whether the entered information forms a valid connection string.
31. Click **Create** to save the information in the fields and create the connection string. The name of the data source is added to the **Data Sources** list on the left, and the connection string is displayed in the **Connection String** section.



32. Select **File | Save** to save the .config file.
33. Select **File | Close** to exit the connection strings dialog box.

Connection Strings in Web.config

This section explains the required components in an ADO.NET connection string used to connect an application to a database. Examples of connection strings are provided at the end of the section.

Note: ADO.NET and connection strings are Microsoft .NET Framework concepts, but each database provider (such as SQL Server or Oracle) has its own implementation of ADO.NET. For more information on building a valid connection string or using additional options, see your database provider's documentation on connection strings.

It is important to note the following considerations for connection strings:

- It is strongly recommended to use integrated security instead of a database account for authentication. To use integrated security, the Windows user connecting to the database must be the same user that is running the connecting server or service (such as the Application Server). This user must also be configured with the **configgp** role in the database.
- It is strongly recommended to encrypt the connection strings. If they are not encrypted, all data source connection information is visible in the .config file, including the database user names and passwords in the connection strings.

  Encryption can be performed using the **aspnet_regiis** command line utility for IIS or using Web Application Management Console. See the documentation from Microsoft for more information on using the ASP.NET IIS Registration Tool. See the **Web Application Management Console** module reference guide for more information on encrypting connection strings using the OnBase Web Application Management Console.

See the following subsections for information on each element of a connection string:

- Name on page 20
- ConnectionString on page 21
- ProviderName on page 22

For examples of connection strings for all supported database platforms, see Connection String Examples on page 22.

Name

The **name** element is a unique name that you create to identify the data source connection string.

Note: This identifying name may be different from the name of the actual database, which is specified in the **Data Source** and **database** attributes.

Example:

```
name="DataSourceName"
```

ConnectionString

The **connectionString** element contains connection information for the database. The tokens needed for the connection information depend on the database platform used.

SQL Server Connection String Tokens

Use the following connection string tokens in the **connectionString** element when using a SQL Server database.

Token	Description
Data Source	The server\instance name of the SQL Server instance hosting the database.
Database	The name of the database in SQL Server.
User Id	The user name of the user account accessing the database. This is a database user account, not a user account in OnBase. **Note:** If using integrated security, the **User Id** token is not used.
Password	The password of the user account accessing the database. This is a database user account, not a user account in OnBase. **Note:** If using integrated security, the **Password** token is not used.
Integrated Security	A **true** or **false** value specifying whether to use integrated security to access the database.

Oracle Connection String Tokens

Use the following connection string tokens in the **connectionString** element when using an Oracle database.

Token	Description
Data Source	The TNS name or connect descriptor of the database.
User Id	The user name of the user account accessing the database. This is a database user account, not a user account in OnBase. **Note:** If using OS Authentication, enter a forward slash in place of the user name. For example: `User Id=/`
Password	The password of the user account accessing the database. This is a database user account, not a user account in OnBase. **Note:** If using OS Authentication, the **Password** token is not used.

ProviderName

The **providerName** element specifies the data provider type used for the database. Only SQL Server and Oracle data providers can be used to connect to the OnBase database.

Note: Values for the **providerName** element are case-sensitive.

Use one of the following, depending on the database platform used:

Database Platform	ProviderName Element
SQL Server	`providerName="System.Data.SqlClient"`
Oracle	`providerName="Oracle.ManagedDataAccess.Client"`

Connection String Examples

The following sections provide examples of connection strings for SQL Server and Oracle.

Note: The following examples are provided for illustration purposes only. Each database provider has its own implementation of ADO.NET and connection strings, and your particular situation may require including different or additional options than the ones illustrated in these examples. For more information on building a valid connection string or using additional options, see your database provider's documentation on connection strings.

SQL Server Examples

This connection string would create a data source called **ConnectSQL**, used to connect to the database **TestDB** hosted on a SQL Server instance named **Serv001\instance**:

```
<connectionStrings>
   <add name="ConnectSQL" connectionString="Data Source=Serv001\instance;
   Database=TestDB;User Id=username;Password=password"
   providerName="System.Data.SqlClient"/>
</connectionStrings>
```

Similarly, this example would connect to the same database, but it would use integrated security instead of database user authentication:

```
<connectionStrings>
   <add name="ConnectSQL" connectionString="Data Source=Serv001\instance;
   Database=TestDB;Integrated Security=true;"
   providerName="System.Data.SqlClient"/>
</connectionStrings>
```

Oracle Examples

This connection string would create a data source is called **ConnectOracle**, used to connect to the Oracle database **TestDB**:

```
<connectionStrings>
   <add name="ConnectOracle" connectionString="Data Source=TestDB;
   User Id=username;Password=password"
   providerName="Oracle.ManagedDataAccess.Client"/>
</connectionStrings>
```

Similarly, this example would connect to the same database, but it would use OS Authentication instead of database user authentication:

```
<connectionStrings>
   <add name="ConnectOracle" connectionString="Data Source=TestDB;
   User Id=/" providerName="Oracle.ManagedDataAccess.Client"/>
</connectionStrings>
```

The following example would connect to the same database, but it uses the connect descriptor for the Oracle database:

```
<connectionStrings>
   <add name="ConnectOracle"
   connectionString="Data Source=(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)
   (HOST=hostname)(PORT=1521))(CONNECT_DATA=(SERVICE_NAME=TestDB)));
   User Id=username;Password=password"
   providerName="Oracle.ManagedDataAccess.Client"/>
</connectionStrings>
```

Tip: In order to ensure that the required system settings take effect, it is a best practice to restart the installing machine once the installer has finished.

Running the Installer from the Command Line

You can control the installation of components from the command line by passing its feature name to the installer using the **ADDLOCAL** property. The values of the configuration options available in the graphical installation wizard are passed to the installer using the property names associated with the installer options.

This section describes the properties associated with this installer.

Note: Feature and Property names are case-sensitive.

Feature Names

To install the Unity Scheduler, the value of the **ADDLOCAL** property is **UnitySchedulerService**.

The **ADDLOCAL** property is added to the installation command line, as shown here:

msiexec /i "Hyland Unity Scheduler.msi" ADDLOCAL=UnitySchedulerService

Properties

When controlling the installation of components from the command line, you must also configure the settings for the component you are installing by using the **UNITYSCHEDULER_FILES** property. This property determines the location to which the component files are installed.

For example: **UNITYSCHEDULER_FILES="C:\My\Custom\Location\UnitySched**

If the property is not included, the default value is configured for the property. By default, this component is installed to **C:\Program Files\Hyland\Unity Scheduler**

Installing the Unity Scheduler Service

The Unity Scheduler Service can also be installed, deleted, or updated through the command line. This is so that multiple services can be installed and configured on a single workstation.

Note: If you are installing the Unity Scheduler Service in a locale other than US English, the command-line prompts will execute in English or in the language used by the locale.

When entering parameter values, consider the following:

- Values containing spaces must be contained within double quotes. For example:
  `-dn="My Display Name"`
- Values containing double quote characters must include a backslash (****) before each double quote character. For example:
  `-obp=pass\"\"word`

/create Command-line Option

A new instance of the Unity Scheduler Service is created by using the **/create** command line with its associated parameters. This will create the Windows Service, as well as make all the changes necessary to grant access to the OnBase system specified by the command-line parameters.

Note: In order to properly install a Unity Scheduler Service instance using the **/create** command line, you must first modify the **Hyland.Core.Scheduler.NTService.exe.config** file to include a valid connection string. For more information about configuring connection strings, see Connection Strings in Web.config on page 20. Once this connection string has been configured, all created service instances that reference the data source use that connection string. If Windows authentication is specified for the connection string, the current Windows User Account must have Windows authentication connection authority for the SQL Server when registering the Windows service.

Required parameters are added to the **/create** command line, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /create -sn="service name" -
obu="service account name" -obp="service account password" -obd="connection
string name"
```

Optional parameters are added to the **/create** command line with the other required parameters, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /create -sn="service name" -
obu="service account name" -obp="service account password" -obd="connection
string name" -obg="task group name" -dn="display name" -desc="description"
-u="Windows User Name" -p="Windows Password" -st="Start Type"
```

When creating an instance of the Unity Scheduler Service using the command line, you must configure the settings of the Service by using the parameters listed in the following table. If an optional parameter is not included, the default value is configured for that parameter, if available.

Parameter	Description
-sn	Service name. **Note:** This parameter is required. Example: **-sn="My Scheduler"** **Note:** The Unity Scheduler Service instance will have **_UnityScheduler** affixed to the end of the service name.
-obu	Name of the OnBase Service Account that will execute Tasks. **Note:** This parameter is required. Example: **-obu="Service Account"**
-obp	OnBase Service Account password. **Note:** This parameter is required and is case sensitive. Example: **-obp="Password"**
-obd	Name of the ADO.NET connection string configured as the data source. **Note:** This parameter is required. Example: **-obd="Connection String Name"**
-obg	Task Group name. **Note:** If not specified, the default value of this parameter is **<Unassigned>**. Example: **-obg="Production"**
-dn	Unity Scheduler Service display name. **Note:** If not specified, the default value of this parameter is the same as the service name specified with the **-sn** parameter. Example: **-dn="My Display Name"**

Parameter	Description
-desc	Service description. **Note:** If not specified, the default value of this parameter is **Executes Unity Scheduler Tasks**. Example: **-desc="My Description"**
-u	Windows User Account that the Unity Scheduler Service executes under. This account should have access to the OnBase Disk Groups. **Note:** If not specified, the default value of this parameter is **LocalSystem**. Example: **-u="MyDomain\MyAccount"**
-p	The password associated with the Windows User Account under which the Unity Scheduler Service executes. **Note:** This parameter is case sensitive. Example: **-p="MyWindowsPassword"**
-st	Unity Scheduler Service startup type. • Enter **a** to enable automatic startup. • Enter **d** to disable startup. • Enter **m** to enable manual startup. **Note:** If not specified, the default value of this parameter is **Manual**. Example: **-st="a"**

Tip: To verify the service was successfully created, open the Microsoft Management Console and ensure the service is listed. Start the service when it is ready to be used.

/delete Command-line Option

An existing instance of the Unity Scheduler Service can be deleted by using the **/delete** command line with its associated parameters.This will delete the Windows Service and disable the instance of the Unity Scheduler Service in the OnBase system specified.

Parameters are added to the **/delete** command line, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /delete -sn="service name" -obu="service account name" -obp="service account password"
```

When deleting a Unity Scheduler Service using the command line, you must configure the settings of the Service by using the parameters listed in the following table.

Parameter	Description
-sn	Service name. **Note:** This parameter is required. Example: **-sn="My Scheduler"** **Note:** The Unity Scheduler Service instance will have **_UnityScheduler** affixed to the end of the service name.
-obu	Name of the OnBase Service Account that will execute Tasks. **Note:** This parameter is required. Example: **-obu="Service Account"**
-obp	OnBase Service Account password. **Note:** This parameter is required and is case sensitive. Example: **-obp="Password"**

Tip: To verify the service was successfully deleted, open the Microsoft Management Console and ensure the service is not listed.

/deleteall Command-line Option

All existing instances of the Unity Scheduler Service can be deleted by using the **/deleteall** command line. This will delete the Windows Service and disable all instances of the Unity Scheduler Service. The command prompt must be run under Administrative privileges.

Caution: The **/deleteall** command-line option will remove all current Unity Scheduler Service instances. Usage of this command line should be carefully considered.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /deleteall
```

/undeleteall Command-line Option

All previously-deleted instances of the Unity Scheduler Scheduler Service can be restored by using the **/undeleteall** command line. This will restore the Windows Service and re-enable all previously-deleted instances of the Unity Scheduler Service. The command prompt must be run under Administrative privileges.

Caution: The **/undeleteall** command-line option will restore all previously-deleted Unity Scheduler Service instances. Usage of this command line should be carefully considered.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /undeleteall
```

/update Command-line Option

An existing instance of the Unity Scheduler Service can be updated using the **/update** command line with its associated parameters. The **/update** command line can be used to change the OnBase credentials a Service instance uses, the name of the associated data source, or the Task Group Name.

Required parameters are added to the **/update** command line, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /update  -sn="service name" -obu="service account name"  -obp="service account Password"
```

Optional parameters are added to the **/update** command line with the other required parameters, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /update  -sn="service name" -obu="service account name"  -obp="service account Password" -obi="OnBase Institution ID" -obg="task group name"
```

When updating the Unity Scheduler Service using the command line, you must configure the settings of the Service by using the parameters listed in the following table. If an optional parameter is not included, the default value is configured for that parameter, if available.

Parameter	Description
-sn	Service name. **Note:** This parameter is required. Example: **-sn="My Scheduler"** **Note:** The Unity Scheduler Service instance will have **_UnityScheduler** affixed to the end of the service name.
-obu	Name of the OnBase Service Account that will execute Tasks. **Note:** This parameter is required. Example: **-obu="Service Account"**

Parameter	Description
-obp	OnBase Service Account password. **Note:** This parameter is required and is case sensitive. Example: **-obp="Password"**
-obi	The ID of the Institution. **Note:** This parameter is only required if using the Unity Scheduler Service with Institutional databases. Example: **-obi="OnBase Institution ID"**
-obg	Task Group name. **Note:** If not specified, the default value of this parameter is **<Unassigned>**. Example: **-obg="Production"**

/showall Command-line Option

You can view all installed Unity Scheduler Service instances by using the **/showall** command line. The command prompt must run under Administrative privileges.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /showall
```

/createconnect Command-line Option

As of OnBase 18, the Unity Scheduler Service connects to the database using an ADO.NET connection string. You can update an existing Unity Scheduler Service instance with a connection string by using the **/createconnect** command line with its associated parameters. The command prompt must be run under Administrative privileges.

You can create a connection string in two ways using the **/createconnect** command-line option:

- Enter the entire connection string using the **-cs** parameter.
- Enter the individual components of the connection string using the **-csds**, **-csdb**, **-csu**, and **-csp** parameters.

If you are using the **-cs** parameter, parameters are added to the **/createconnect** command line, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /createconnect -obd="data
source name" -pt="provider type" -cs="Data Source=data base name; User
Id=user name; Password=password"
```

If you are using the **-csds**, **-csdb**, **-csu**, and **-csp** parameters, parameters are added to the **/createconnect** command line, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /createconnect -obd="data
source name" -pt="provider type" -csds="server\instance" -csdb="database
name" -csu="user ID" -csp="password"
```

When creating connections for the Unity Scheduler Service using the command line, you must configure the settings of the Service by using the parameters listed in the following table. If an optional parameter is not included, the default value is configured for that parameter, if available.

Parameter	Description
-obd	Name of the ADO.NET connection string configured as the data source. **Note:** This parameter is required. Example: **-obd="data source name"**
-pt	The provider type of the connection string. **Note:** This parameter is required. The following values are possible: • **sqlserver** - Creates a SQL Server connection string. • **oracle** - Creates an Oracle connection string. Example: **-pt="sqlserver"**
-cs	The complete connection string. The exact configuration of this connection string will depend on the provider type. **Note:** If you are specifying a complete connection string, this parameter is required. SQL Server connection string example: **-cs="Data Source=server\instance; database="data base name" User Id=user name; Password=password"** Oracle connection string example: **-cs="Data Source=database name; User Id=user name; Password=password"**
-csds	Name of the ADO.NET connection string configured as the data source. **Note:** If this is used with a SQL Server connection string, this parameter is required. If this is used with an Oracle connection string, this parameter is optional, and if it is not specified the value is set to the value of the **-odb** parameter. SQL Server connection string example: **-csds="server\instance"** Oracle connection string example: **-csds="data source name"**

Parameter	Description
-csdb	Name of the database. **Note:** This parameter is only used with SQL Server connection strings. If this parameter is not specified, the value is set to the value of the **-odb** parameter. Example: **-csdb="database name"**
-csu	The user with rights to connect to the database. **Note:** When used with Oracle connection strings, this parameter is required. If used with SQL Server connection strings, this parameter must be accompanied by the **-csp** parameter. If this parameter is omitted from SQL Server connection strings, the connection string will use the current Windows account to connect. Example: **-csu="user ID"**
-csp	The password for the user that will connect to the database. **Note:** When used with Oracle connection strings, this parameter is required. If used with SQL Server connection strings, this parameter must be accompanied by the **-csu** parameter. If this parameter is omitted from SQL Server connection strings, the connection string will use the current Windows account to connect. Example: **-csp="password"**

/deleteconnect Command-line Option

An existing connection string for an instance of the Unity Scheduler Service can be deleted using the **/deleteconnect** command line with its associated parameters. The command prompt must be run under Administrative privileges.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /deleteconnect -obd="data source name"
```

When deleting a connection string from the Unity Scheduler Service using the command line, you must configure the settings of the Service by using the parameters listed in the following table.

Parameter	Description
-obd	Name of the ADO.NET connection string configured as the data source. **Note:** This parameter is required. Example: **-obd="data source name"**

/updateconnect Command-line Option

You can update an existing connection string in a Unity Scheduler Service instance by using the **/updateconnect** command line with its associated parameters. The command prompt must be run under Administrative privileges.

You can update a connection string in two ways using the **/updateconnect** command-line option:

- Enter the entire connection string using the **-cs** parameter.
- Enter the individual components of the connection string using the **-csds**, **-csdb**, **-csu**, and **-csp** parameters.

If you are using the **-cs** parameter, parameters are added to the **/updateconnect** command line, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /updateconnect -obd="data source name" -pt="provider type" -cs="Data Source=data base name; User Id=user name; Password=password"
```

If you are using the **-csds**, **-csdb**, **-csu**, and **-csp** parameters, parameters are added to the **/createconnect** command line, as shown here:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /updateconnect -obd="data source name" -pt="provider type" -csds="server\instance" -csdb="database name" -csu="user ID" -csp="password"
```

When creating connections for the Unity Scheduler Service using the command line, you must configure the settings of the Service by using the parameters listed in the following table. If an optional parameter is not included, the default value is configured for that parameter, if available.

Parameter	Description
-obd	Name of the ADO.NET connection string configured as the data source. **Note:** This parameter is required and must be a valid connection string. Example: **-obd="data source name"**
-pt	The provider type of the connection string. **Note:** This parameter is required. The following values are possible: • **sqlserver** - Creates a SQL Server connection string. • **oracle** - Creates an Oracle connection string. Example: **-pt="sqlserver"**

Parameter	Description
-cs	The complete connection string. The exact configuration of this connection string will depend on the provider type. **Note:** If you are specifying a complete connection string, this parameter is required. SQL Server connection string example: **-cs="Data Source=server\instance; database="data base name" User Id=user name; Password=password"** Oracle connection string example: **-cs="Data Source=database name; User Id=user name; Password=password"**
-csds	Name of the ADO.NET connection string configured as the data source. **Note:** If this is used with a SQL Server connection string, this parameter is required. If this is used with an Oracle connection string, this parameter is optional, and if it is not specified the value is set to the value of the **-odb** parameter. SQL Server connection string example: **-csds="server\instance"** Oracle connection string example: **-csds="data source name"**
-csdb	Name of the database. **Note:** This parameter is only used with SQL Server connection strings. If this parameter is not specified, the value is set to the value of the **-odb** parameter. Example: **-csdb="database name"**
-csu	The user with rights to connect to the database. **Note:** When used with Oracle connection strings, this parameter is required. If used with SQL Server connection strings, this parameter must be accompanied by the **-csp** parameter. If this parameter is omitted from SQL Server connection strings, the connection string will use the current Windows account to connect. Example: **-csu="user ID"**
-csp	The password for the user that will connect to the database. **Note:** When used with Oracle connection strings, this parameter is required. If used with SQL Server connection strings, this parameter must be accompanied by the **-csu** parameter. If this parameter is omitted from SQL Server connection strings, the connection string will use the current Windows account to connect. Example: **-csp="password"**

/protectconnects Command-line Option

Any existing connection strings for an instance of the Unity Scheduler Service can be encrypted using the **/protectconnects** command line. The command prompt must be run under Administrative privileges.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /protectconnects
```

/scriptconnects Command-line Option

Any existing connection strings for an instance of the Unity Scheduler Service can be displayed in an XML format suitable for scripting using the **/scriptconnects** command line. The command prompt must be run under Administrative privileges.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /scriptconnects
```

/showconnects Command-line Option

Any existing connection strings for an instance of the Unity Scheduler Service can be displayed in a report format using the **/showconnects** command line. The command prompt must be run under Administrative privileges.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /showconnects
```

/testconnect Command-line Option

You can test connection strings for an instance of the Unity Scheduler Service using the **/testconnect** command line. The /testconnect command line will verify if a connection string is connecting to a valid data source, is configured correctly, or if the login credentials are valid. The command prompt must be run under Administrative privileges.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /testconnect
```

/showall Command-line Option

The **/showall** command shows the data for each Unity Scheduler Service Instance that would be used to create that Service Instance (excluding passwords). The command prompt must be run under Administrative privileges.

The following is an example of the command line:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /showall
```

/help and /? Command-line Options

You can view all of the Unity Scheduler Service command-line options by using the **/help** or **/?** command lines.

The following is an example of the command lines:

```
"[path]\Hyland.Core.Scheduler.NTService.exe" /help
"[path]\Hyland.Core.Scheduler.NTService.exe" /?
```

Installing the 64-bit Unity Scheduler Service

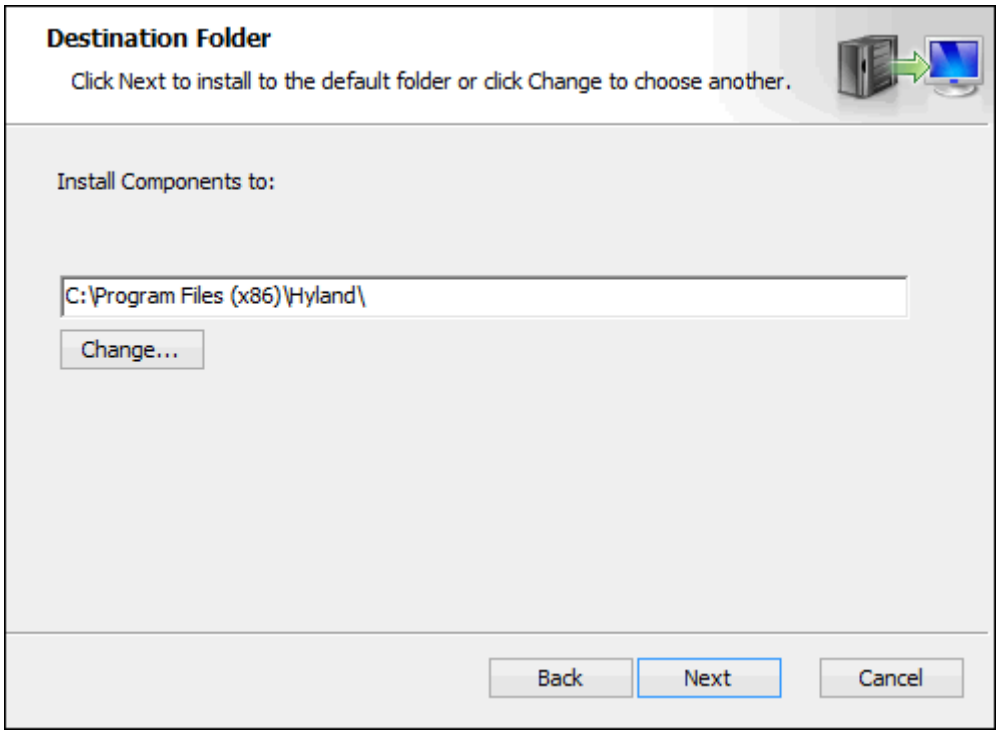
Installing the 64-bit Unity Scheduler is accomplished in the same way as the 32-bit Unity Scheduler, but using the 64-bit installation files. Obtain the 64-bit installation files from your first line of support.

Running the Unity Management Console Installer

The Unity Management Console installer installs the Unity Management Console, which is required to configure and manage schedules and tasks.

Launch the Hyland Unity Management Console installer by executing **Hyland Unity Management Console.msi**. This .msi is usually located in the **\install\Unity Management Console** folder of your source installation files.

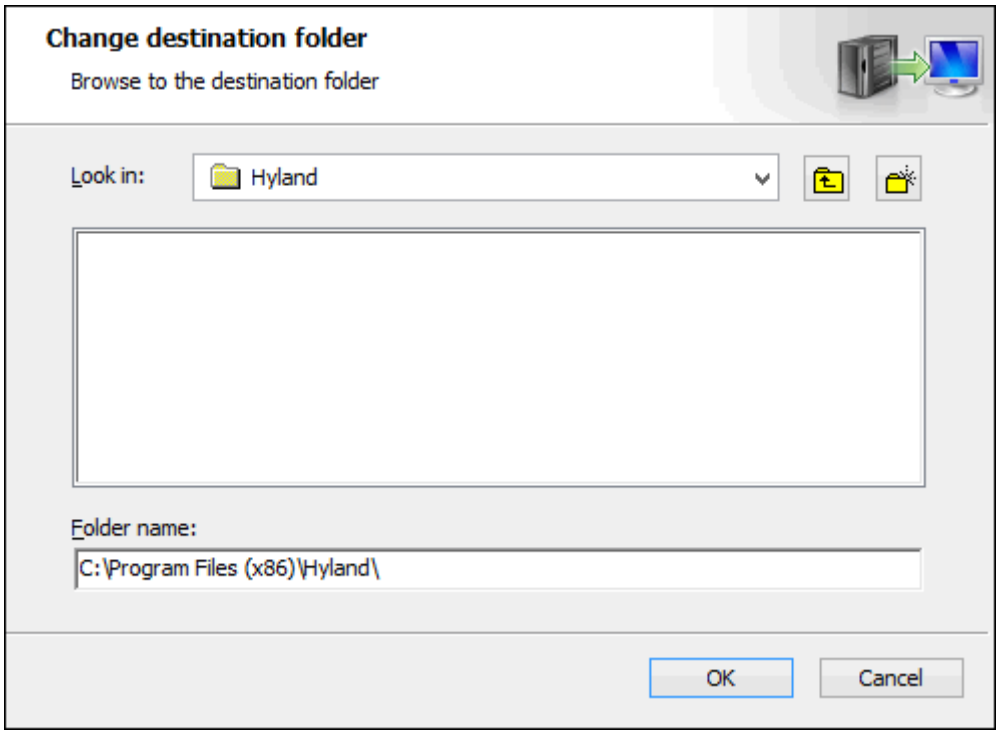
1. The Hyland Unity Management console installation welcome dialog is displayed.
2. Click **Next**. The **Destination Folder** dialog box is displayed.



3. Enter the top-level installation directory in the field provided, or click **Change** to browse to it.

Note: This location does not affect components not installed under the top-level directory. If the installer provides for the installation of multiple components, the specific installation locations of each component can be changed later in the installation process.

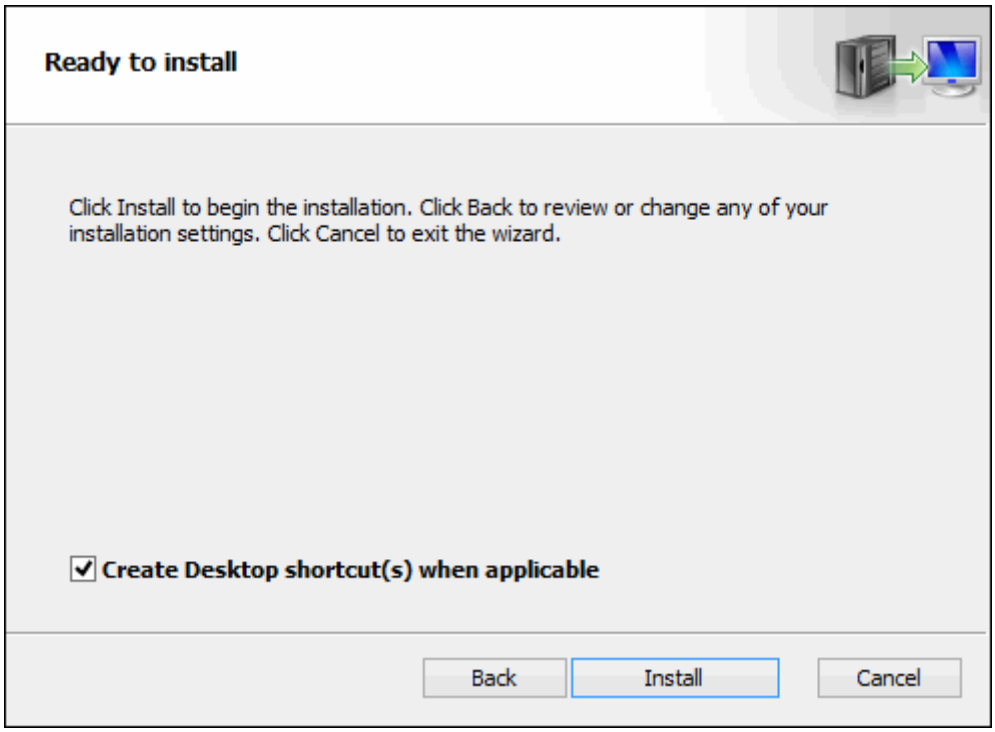
If **Change** is clicked the **Change destination folder** dialog box is displayed.



Enter a **Folder name** in the field provided or select it from the **Look in** drop-down list, then click **OK**.

If the Destination Folder is not changed, the default location is used.

4. Click **Next**. The **Ready to install** dialog is displayed.



5. Select **Create Desktop shortcut(s) when applicable** to create shortcuts to the installed components in the Windows **Start** | **All Programs** | **Hyland** menu, on the Windows desktop, or in both locations, when applicable.
6. Click **Install** to continue with the installation, or click **Cancel** to cancel the installation.
7. When the installation is complete, click **Finish**.

Tip: In order to ensure that the required system settings take effect, it is a best practice to restart the installing machine once the installer has finished.

Running the Installer from the Command Line

You can control the installation of components from the command line by passing its feature name to the installer using the **ADDLOCAL** property. The values of the configuration options available in the graphical installation wizard are passed to the installer using the property names associated with the installer options.

This section describes the properties associated with this installer.

Note: Feature and Property names are case-sensitive.

Feature Names

To install the Unity Management Console, the value of the **ADDLOCAL** property is **UnityManagementConsole**.

The **ADDLOCAL** property is added to the installation command line, as shown here:

msiexec /i "Hyland Unity Management Console.msi" ADDLOCAL=UnityManagementConsole

Properties

When controlling the installation of components from the command line, you must also configure the settings for each component you are installing by using the properties listed in the following table. If a property is not included, the default value is configured for that property.

Property	Description
UNITYMANAGEMENTCONSOLE_FILES	The location to which the component files are installed. By default, this component is installed to **C:\Program Files\Hyland\Unity Management Console** For example: **UNITYMANAGEMENTCONSOLE_FILES="C:\My\Custom\Location\UnityMgtConsole\"**
CREATE_DESKTOP_SHORTCUTS	Set to 1 to add desktop shortcuts for the installed component, or leave empty to not add the shortcuts. By default, this property is empty. For example: **CREATE_DESKTOP_SHORTCUTS="1"** or **CREATE_DESKTOP_SHORTCUTS=""**
CREATE_MENU_SHORTCUTS	Set to 1 to add program menu shortcuts for the installed component, or leave empty to not add the shortcuts. By default, this property is empty. For example: **CREATE_MENU_SHORTCUTS="1"** or **CREATE_MENU_SHORTCUTS=""**

Configuring the Refresh Rate of the Tasks View

You can specify how often the **Tasks** view of the Unity Management Console refreshes by using the Unity Management Console configuration file. The **Tasks** view displays information about configured tasks, including when the task is scheduled to run next and when it last ran.

To configure the refresh rate of the **Tasks** view:

1. In the **<appSettings>** section of the configuration file, find the **SchedulerTasksViewRefreshInterval** option.
   <add key="SchedulerTasksViewRefreshInterval" value="60" />

2. Change the value to the number of seconds between refreshes.

Note: The minimum time you can enter is 30 seconds.

3. Save and close the configuration file when finished.

Tip: The **Tasks** view can be refreshed manually by clicking the **Refresh** button.

Change, Repair, or Remove an Installation

After initial installation, the setup program can be used to change, repair, or remove components from a previous installation. After launching **setup.exe** or the ***.msi** installation package, and clicking **Next** at the welcome dialog, the **Change, repair, or remove installation** dialog box is displayed.

Select the option for the actions you wish to perform:

Option	Description
Change	Add or remove components using the **Custom Setup** dialog. **Note:** This option is not available if the installer has no independently selectable features. The steps for adding selected components are the same as those under the Component Selection section of the installation instructions, if applicable to the installer. **Note: Change** does not allow you to alter configuration options originally set during a previous installation of components contained in the installer.
Repair	Repair errors in the most recent installation of the component, such as missing and corrupt files, shortcuts, and registry entries. **Note:** This option is not available from all installers. **Repair** does not include errors made in the configuration options set by the user during installation. For specific troubleshooting information regarding an installed component, see the module reference guide for that component.
Remove	Removes all previously installed components.

Specifying the Unity Scheduler Secondary Configuration File Location

In order to specify the location of a Unity Scheduler secondary configuration file, you must modify the **Hyland.Core.Scheduler.NTService.exe.config** file. The following node must be added to the configuration file either before or after the **<Hyland.Core.Scheduler.NTService TraceLevel="Trace" />** node:

Note: If the node already exists but is commented out, uncomment the node.

```
<Hyland.Core.Scheduler.NTService.FilePath
PathToConfigFile="[path]\Hyland.Core.Scheduler.NTService.config" />
```

The value of **PathToConfigFile** must equal the location of the configuration file you are using for the Unity Scheduler Service.

If the Unity Scheduler secondary configuration file does not exist in the location specified by the **PathToConfigFile** parameter, it will be created.

Configuring the Unity Scheduler to Use Checksum

If you are using the Unity Scheduler to send notifications that use the checksum feature in DocPop links, you must configure the **Hyland.Core.Scheduler.NTService.exe.config** file in a specific way. Within the **<appSettings>** node of the file, you must add the following line:

```
<add key="DPChecksum" value ="" />
```

Enter the appropriate value in this line. The **DPChecksum** value should match the **DPChecksum** value in the Application Server web.config file and the **checksum** value under **Hyland.Web.DocPop** in the Web Server web.config file.

Configuring the Unity Scheduler to Respect the <FileAccess> Setting

If you require the Unity Scheduler to respect the Distributed Disk Services **<FileAccess>** setting, you must configure the **Hyland.Core.Scheduler.NTService.exe.config** file in a specific way.

Within the **<configSections>** node, add the following line:

```
<section name="Hyland.PlatterManagement"
type="Hyland.Core.PlatterManagement.ConfigurationSettings, Hyland.Core" />
```

Within the **<configuration>** node, add the following lines:

```
<Hyland.PlatterManagement>
        <FileAccess>
            <PMAccessLevel value="1" />
           <!-- 0 or empty for Default, 1 to Always use UNC, 2 to Never to
UNC -->
```

```
    </FileAccess>
</Hyland.PlatterManagement>
```

Note: Configuring the Unity Scheduler to never use UNC can slow down processing.

For more information about the **<FileAccess>** setting, see the **Distributed Disk Services** module reference guide.

Configuring Application Server Settings in Unity Scheduler

This section contains information on how to edit Application Server settings within the Unity Scheduler so that they are compatible with Pop integrations. These settings should match what is used for the corresponding Application Server.

These settings are in the **Hyland.Web.AppServerPop** element in the **Hyland.Core.Scheduler.NTService.exe.config** file.

EnableChecksum

The **EnableChecksum** setting is used to determine whether a checksum will be added to generated Application Server URLs.

If set to **true**, you must also enter a checksum key value in the **ChecksumKey** setting, which is used to create the checksum value in the URL. When a user attempts to navigate to an App Server URL, if the value does not match the Checksum Key, the user is presented with an error. This is to prevent users from modifying query strings and accessing files they should not access.

When set to **false**, no checksum is created.

ChecksumKey

The **ChecksumKey** setting is used for App Server checksum creation. Enter a unique secret key used for checksum creation and validation. For successful validation, the value of the key must match each component in the creation and validation process.

To use the **ChecksumKey** value, the **EnableChecksum** setting must also be set to **true**.

EnableLegacyChecksumCreation

The **EnableLegacyChecksumCreation** setting is used to provide support for legacy checksums in App Server URLs. Legacy checksums are created in versions of OnBase prior to version 14, created without using a unique string value as a checksum key, or created from a version of OnBase after 14 that has the **EnableLegacyChecksumCreation** option in the Application Server web.config file set to **true**. By default, this setting is set to **false**.

Set **EnableLegacyChecksumCreation** to **true** in order to allow legacy checksums to be validated. **EnableChecksum** must also be set to **true**. If both of these settings are set to **true**, any value in the **ChecksumKey** setting is disregarded.

If this option is set to **false**, then legacy checksums will not validate, and users will be unable to view generated URLs that contain a legacy checksum.

Note: Setting the **EnableLegacyChecksumCreation** setting to **true** should be considered a *temporary* method of validating legacy checksums until you can recreate and replace the App Server URLs using the unique string value as the checksum key.

Upgrade Considerations

The following upgrade considerations have been compiled by OnBase subject matter experts. These upgrade considerations are general and applicable to most OnBase solutions and network environments and should be considered each time an upgrade is performed.

Carefully consider the impact of making any changes, including those listed below, prior to implementing them in a production environment.

For additional general information about upgrading OnBase, refer to the Upgrade Guidelines reference manual, and visit the Hyland Community at: https://www.hyland.com/community.

Unity Scheduler Upgrade Considerations

The following information should be considered or noted when upgrading Unity Scheduler deployments. Read this information prior to upgrading your version of OnBase.

General Deployment Considerations — The following should be considered with regard to general deployments:

- As of OnBase 18, the Unity Scheduler Service is required for all OnBase deployments. When upgrading any OnBase component to version 18 or later and an instance of the Unity Scheduler Service from a previous version exists, configuration changes to the service must be made using a version of OnBase Studio prior to version 18.
- Before upgrading to version 18 or later of the Unity Scheduler Service, the database must first be upgraded to OnBase 18 or later.
- When upgrading to this version of Unity Scheduler, you must ensure that all instances of the Unity Scheduler Service are also upgraded to the same version.

Troubleshooting

Configuring the Unity Scheduler for Diagnostics

If you want the Unity Schedule to log diagnostic messages to the Workflow Trace tab of the Diagnostics Console, the **Hyland.Core.Scheduler.NTService.exe.config** file must be modified. Within the **<appSettings>** node, the following line needs to be uncommented:

```
<add key="workflowDefaultTraceLevelSession" value="5"/>
```

You can set the level of messaging you want the Workflow Trace tab to log. Set the value of the **value** element to one of the following values:

- **1** - Logs only error messages.
- **2** - Logs both warning and error messages.
- **3** - Logs warning, error, and informational messages.
- **4** - Logs warning, error, informational, and trace messages.
- **5** - Logs all messages.

Note: 5 is the default setting.

Launching from the Start Menu

After launching the Unity Management Console from the Windows **Start** menu, if no Task Schedulers are listed in the **Console** tree, add the Unity Management Console installation path to the **Start in** field on the **Properties** dialog box of the **Start** menu shortcut. In a typical environment, the **Start** menu shortcut is located in **C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Hyland\Unity Management Console**.

Contacting Support

When contacting your solution provider, please provide the following information:

- The OnBase module where the issue was encountered.
- The OnBase version and build.
- The type and version of the connected database, such as Microsoft SQL Server 2014 or Oracle 12c, and any Service Pack that has been installed.
- The operating system that the workstation is running on, such as Windows 10 or Windows Server 2012 R2, and any Service Pack that has been installed. Check the supported operating systems for this module to ensure that the operating system is supported.
- The name and version of any application related to the issue.
- The version of Internet Explorer and any Service Pack that has been installed, if applicable.
- A complete description of the problem, including actions leading up to the issue.
- Screenshots of any error messages.

Supplied with the above information, your solution provider can better assist you in correcting the issue.

OnBase®
Foundation EP5

Unity Scheduler

Administration Guide

Foundation EP5

Assigning User Group Product Rights

Users must have appropriate User Group product rights to use Unity Scheduler. These rights can be accessed by selecting **Users | User Groups / Rights** in the Configuration module and clicking the **Product Rights** button.

Assign one or more of the following privileges for each appropriate User Group:

Product Right	Description
Unity Scheduler	Allows users without MANAGER or ADMINISTRATOR privileges to log in to the Unity Management Console.
Task Management	Allows users to see every task assigned to every User Group within the Unity Management Console.
Service Details	Allows administrators to view the service name, host name, and data source name of the Unity Scheduler Service that executed each task within the **Unity Scheduler** administration layout.

Depending on the task types you want to create, other User Group rights or privileges may be required. For more information on assigning User Group rights and privileges, see the **System Administration** documentation.

Navigating within the Unity Management Console

The Unity Management Console contains three main parts. From left to right, it contains the **Console** tree, the **View** pane, and the **Action** pane.

The **View** pane displays lists based on your selection in the **Console** tree. To refresh this view, click **Refresh** in the **Action** pane, or select **Action | Refresh**.

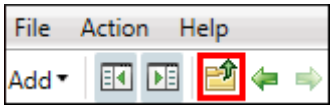
The **Action** pane displays available actions you can perform. Actions can include creating a new item, importing or exporting items, and administering the Unity Management Console. This pane also displays actions based on your selections in the **Console** tree and **View** pane.

To expand your workspace, you can hide the **Console** tree and/or **Action** pane.

Click **Show/Hide Console Tree** button to show or hide the **Console** tree. 

Click **Show/Hide Action Pane** to show or hide the **Action** pane. 

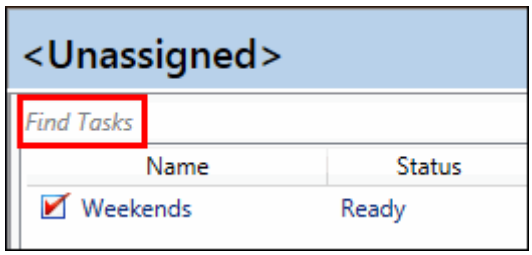
When an item is selected in the **Console** tree, you can click the **Up One Level** button to select the parent item.



Tip: The **Up One Level** button is useful when navigating through items when the **Console** tree is hidden.

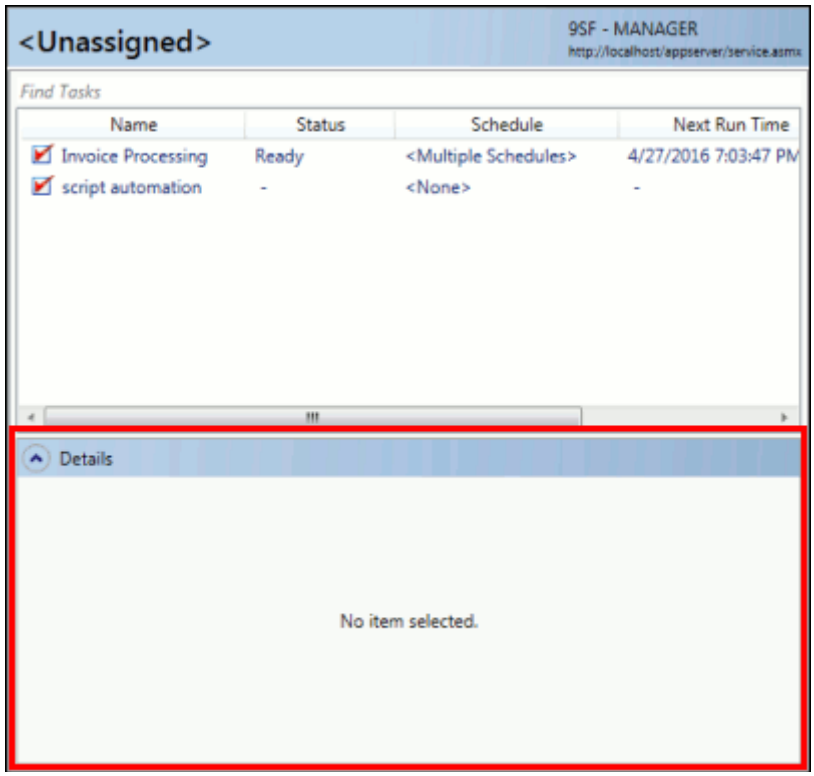
Note: In order to view the service name, host name, and data source name of the Unity Scheduler Service that executed each task, the **Service Details** privilege is required.

When viewing a list in the **View** pane, use the text field to filter the list and search for specific tasks, schedules, or execution windows. The list is filtered as you type.

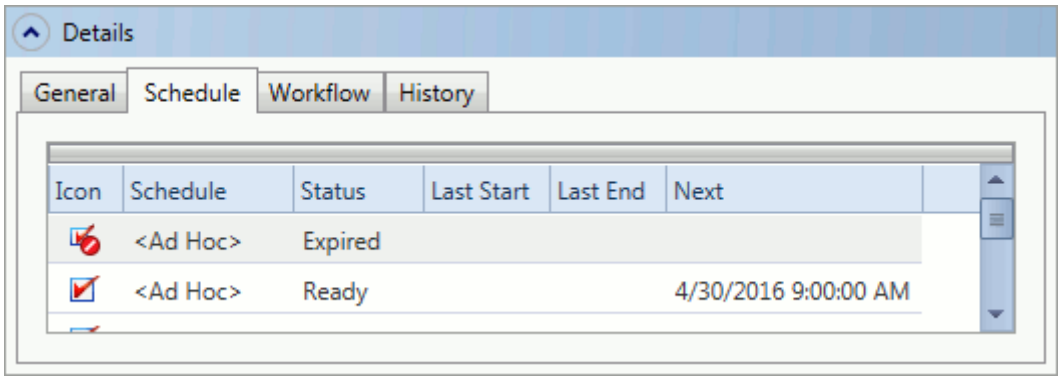


Viewing Task Details

When the **Tasks** view is displayed in the **View** pane, the **Details** pane is displayed below the list.



When a task is selected, the **Details** pane displays tabs, which provide general information on the task, information on the schedules the task is using, and execution history for the task. Depending on the task type, other tabs may be available as well.



The **General** tab includes the name and description of the task.

The **Schedule** tab includes a list of the schedules assigned to the task. Information on these schedules includes the:

- Schedule names
- Current status of the schedule (also reflected in the icon)

- Date and time the schedule last started
- Date and time the schedule last ended
- Date and time the schedule should run next
- Type of schedule configured
- Summary of the configured schedule

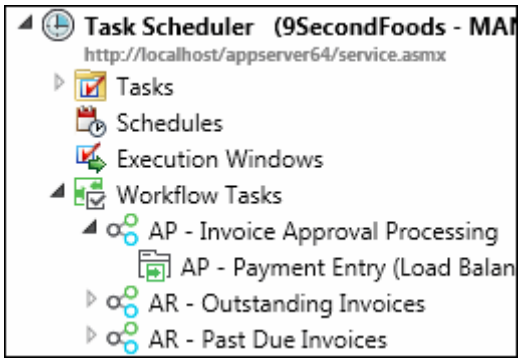
The **History** tab is displayed when the task type is able to process items. It includes a list that details each time the task was executed. Information on each execution includes the:

- Name of the installed scheduler service that ran the task
- Name of the workstation on which the service is located
- Data source affected by the task
- Name of the schedule that ran the task
- Date and time the task started
- Date and time the task ended
- Number of items processed

Other tabs display information about the specific task type configuration. Some tasks do not include these tabs, as some tasks do not require extra configuration.

Viewing Workflow Tasks

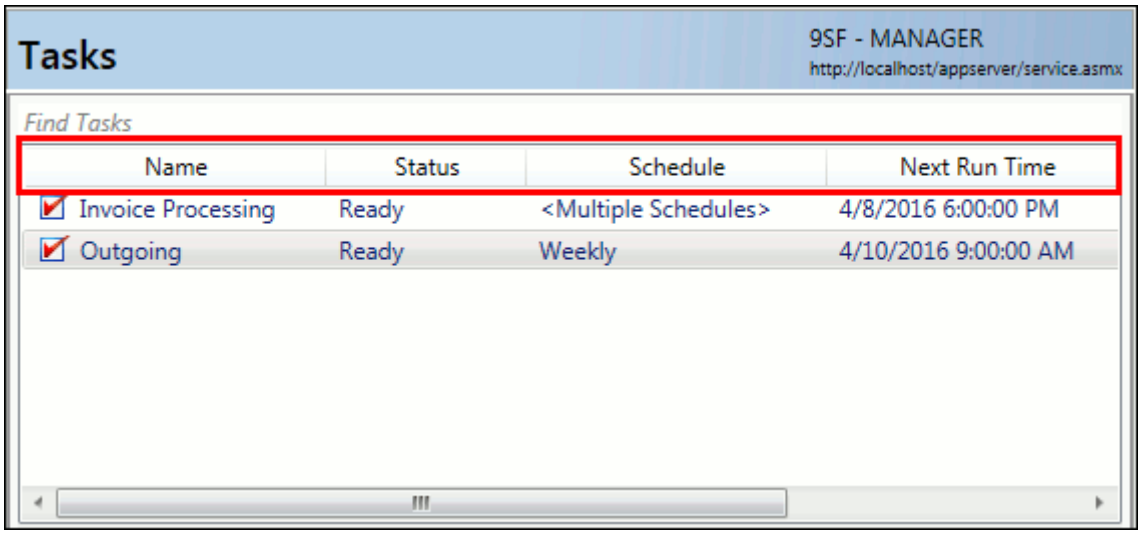
In the **Console** tree, you can view the life cycles and queues that have timers configured as Unity Scheduler tasks.



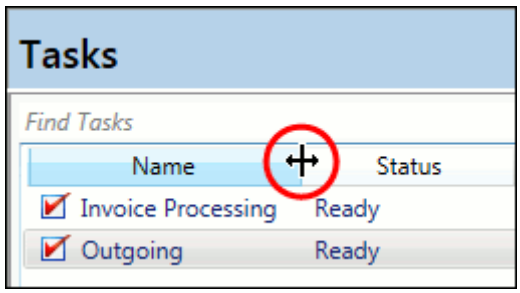
When a life cycle or queue is selected in the **Console** tree, all of the tasks associated with that life cycle or queue are displayed in the **View** pane.

Configuring Display Columns within a Task Scheduler

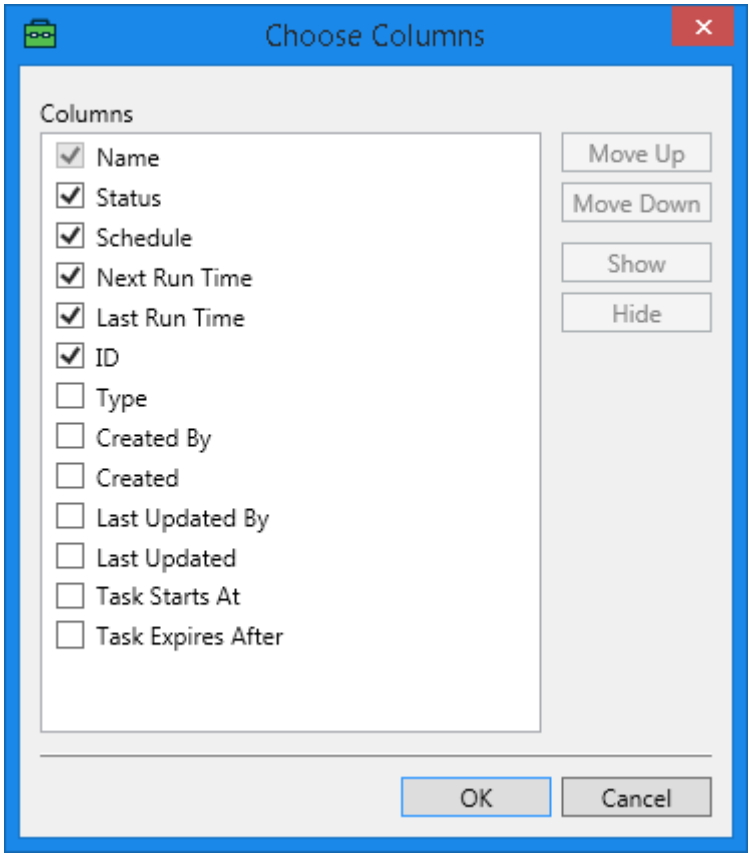
Lists in the **View** pane and **Details** pane contain columns that display information on listed items.



To change the width of a column, click and drag the right border of the column as desired.



To add, remove, or reorder columns, right-click any one of the columns and select **Select Columns**. The **Choose Columns** dialog box is displayed.



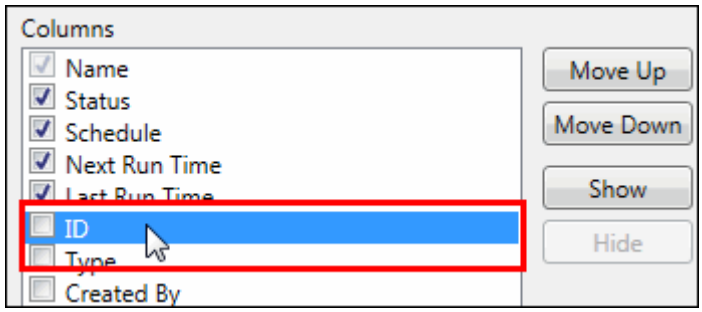
Depending on the context you are currently in, the following columns may be available:

Note: Dates and times are displayed according to user workstation locale.

Column Name	Description
Name	The configured name of the item. **Note:** This column cannot be removed from the display.

Column Name	Description
Status	The current status of a task: • **Canceled** - The task execution was canceled. • **Canceling** - The task execution is being canceled. • **Disabled** - The schedule for the task has been disabled. • **Disabling** - The schedule for the task is still running, but the user clicked the Disable button. • **Error** - There was an error executing the task. Use the Audit Log to help troubleshoot the error. For more information on the Audit Log, see Viewing the Audit Log on page 94. • **Executing** - The task is currently being executed. • **Expired** - The task no longer executes, because the configured expiration date and time has passed. • **Ready** - Indicates the schedule is enabled. This does not indicate the schedule is able to be run. For example, a task can be ready, even if there is currently no active scheduler service for the task's task group.
Schedule	The configured schedule for a task. **<Multiple Schedules>** indicates more than one schedule has been configured for the task.
Next Run Time	The next time the task should run.
Last Run Time	The last time the task was run.
ID	The unique system-assigned ID number for the item.
Type	The type of the listed task or schedule.
Created By	The user who created the listed item.
Created	The date and time the listed item was created.
Last Updated By	The user who last modified the listed item.
Last Updated	The date and time the listed item was last modified.
Task Starts At	The time that the task is configured to start.
Task Expires After	The time that the task is configured to expire.
Description	The configured description for a listed schedule.

To modify an available column, select it.



Select from the following options:

Option	Description
Show	Displays the column in the list. **Tip:** You can also select the check box for the column to display the column in the list.
Hide	Hides the column from being displayed in the list. **Tip:** You can also deselect the check box for the column to display the column in the list.
Move Up	Moves the column one place to the left in the list.
Move Down	Moves the column one place to the right in the list.

Click **OK** to apply the changes to the list. To save the column changes for future sessions, select **File** | **Save** in the Unity Management Console.

Creating, Opening, and Saving Management Console Files

Unity Management Console configurations are saved within Console files. These files contain the application server and data source that the Unity Management Console will use to connect to the repository. The files also contain column display configurations for the Tasks pane, Schedules pane, and the Execution Windows pane.

To create a new Console file, from the Unity Management Console, select **File** | **New**.

To open an existing Console file, from the Unity Management Console, select **File** | **Open**. Navigate to and select the appropriate Console file. Console files use the **.omc** file extension.

To save a Console file, from the Unity Management Console, do one of the following:

- Select **File** | **Save** to save an existing Console file.
- Select **File** | **Save As** to save a new Console file.

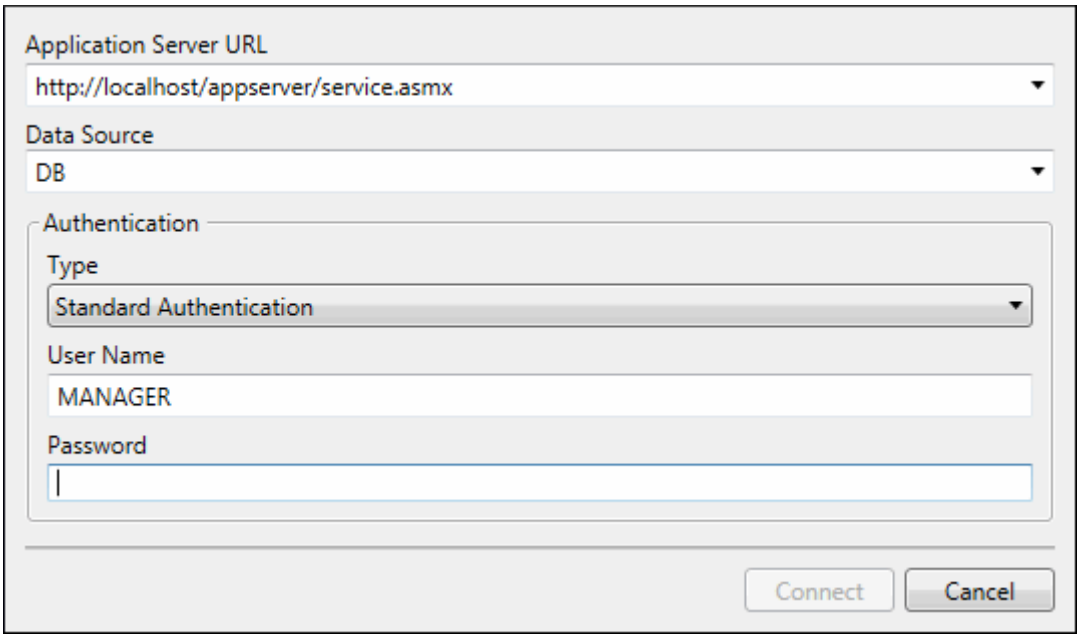
Adding a Task Scheduler

Note: Users without management or administrator privileges require the Unity Scheduler **Task Management** User Group right in order to see all tasks assigned to every User Group. Without these privileges, only the tasks assigned to your User Group are visible.

Note: Users without manager or administrator privileges require the **Unity Scheduler** product right in order to log in to the Unity Scheduler.

Task schedulers can be created to maintain schedules and tasks associated with a data source. Multiple task schedulers can be created to maintain tasks and schedules in different data sources.

To add a new task scheduler, click the **Add** drop-down list, then select **Task Scheduler**. The **Connect** dialog box is displayed.



For information on connecting the task scheduler, see Connecting a Task Scheduler to the Application Server on page 55.

Connecting a Task Scheduler to the Application Server

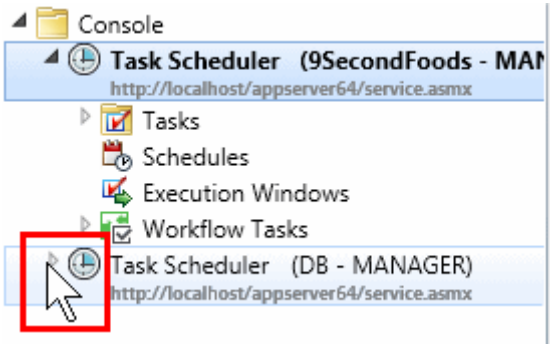
When creating a new task scheduler, you are prompted to connect to an Application Server and data source. You can also connect to an Application Server and data source using an existing task scheduler.

When you log in and connect with an Application Server and data source, you can perform configuration tasks within the task scheduler.

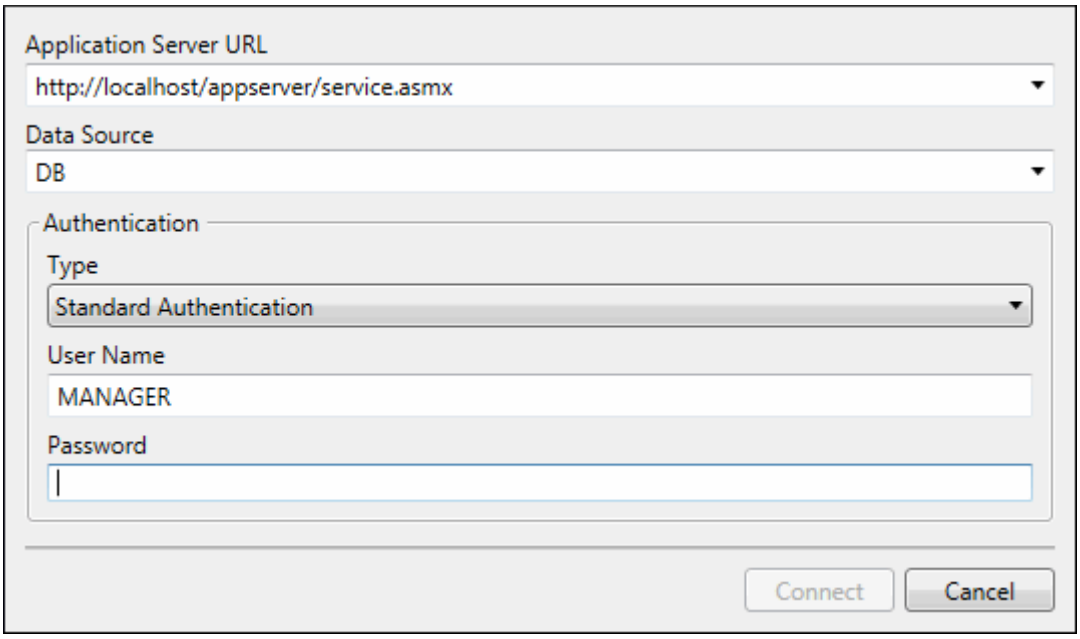
To connect a task scheduler:

1. Do one of the following:
   - Create a new task scheduler. For more information on creating a new task scheduler, see Adding a Task Scheduler on page 54.
   - Select an existing, disconnected task scheduler from the **Console** tree. Click the **Connect** button from the **Action** pane.

- Select an existing, disconnected task scheduler from the **Console** tree. Right-click and select **Connect**.
- Click the expansion arrow for the task scheduler in the **Console** tree.



The **Connect** dialog box is displayed.



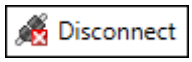
2. Enter an Application Server or select one from the **Application Server URL** drop-down list.
3. Enter a data source or select one from the drop-down **Data Source** list. The data source entered is saved as an option in the **Data Source** drop-down list for future selection once you have connected successfully.

4. Select an **Authentication Type** from the drop-down list. The following options are available:
   - **Standard Authentication** - Select this option to use standard OnBase credentials.
   - **NT Authentication** - Select this option to use Active Directory authentication. To use this option, your system must be configured for Active Directory - Enhanced authentication. For more information, see the **Legacy Authentication Methods** module reference guide.
   - **NT Authentication (Interactive)** - Select this option to enter credentials for Active Directory authentication. The **User Name** must include a domain. To use this option, your system must be configured for Active Directory - Enhanced authentication. For more information, see the **Legacy Authentication Methods** module reference guide.
5. Enter a **User Name** and **Password**.
6. Click **Connect**.

Disconnecting a Task Scheduler from the Application Server

All task schedulers are automatically disconnected from the Application Server when exiting the Unity Management Console. Task schedulers can also be disconnected individually without exiting the Unity Management Console. To disconnect a task scheduler from the Application Server, select it from the **Console** tree, and do one of the following:

- Click the **Disconnect** button from the **Action** pane.



- Right-click the task scheduler and select **Disconnect**.

Tip: To reflect system configuration changes in the task scheduler without exiting the Unity Management Console, disconnect a task scheduler, and reconnect to it after the changes have been implemented. For more information on connecting a task scheduler, see Connecting a Task Scheduler to the Application Server on page 55.

Deleting a Task Scheduler

You can delete a task scheduler from the **Tree** view within the Console file you are working in. This does not remove any existing configurations from the system but rather allows you to remove unnecessary task schedulers from the list.

To delete a task scheduler:

1. Select the appropriate task scheduler from the **Console** tree.
2. Do one of the following:
   - Click the **Delete** button from the **Action** pane.

   - Right-click the task scheduler and select **Delete**.
3. The message **Are you sure you want to delete this task?** is displayed. Click **Yes** to delete the task, or click **No** to keep the task.

Creating Task Groups

A task group is a collection of tasks. A task scheduler service can be configured to process all tasks assigned to a specific task group. For example, task groups can be used to process all tasks meant to run on specific machines.

To create a task group:

1. In the **Console** tree, within the task scheduler in which you want to configure a task group, select the **Tasks** folder.
2. Right-click and select **Create Task Group**, or select **Create Task Group** in the **Action** pane.
3. A new task group is created in the **Tasks** folder. Enter a name for the new task group, then press **Enter**.

Rename a task group by right-clicking on the task group and selecting **Rename**, or, with the task group selected, use the keyboard shortcut **F2**.

Note: A task group must have a Unity Scheduler service assigned to it before tasks within the group can be run. Services are assigned to task groups during service installation.

System Tasks

System Tasks are specialized tasks that perform generic maintenance and cleanup functions on the OnBase database. System Tasks belong to the **<System>** Task Group and are automatically created by the system the first time that the Unity Management Console is opened, or the first time that an instance of the Unity Scheduler Service is run.

Note: A dedicated instance of the Unity Scheduler Service can be installed to execute System Tasks, or any running Unity Scheduler Service instance automatically executes them.

Upon creation, System Tasks each have a default schedule that can be modified as needed.

The following table describes the System Tasks that are created.

System Task	Description
Clean Old Workstation Monitor Table Entries	Removes information from the database related to stale Workstation Monitor entries. By default, this task executes every day at 2:00 AM.
Import Orphaned Custom Scan Queue Documents	Creates missing entries in the database for documents in custom scan queues. **Note:** This task is for Document Imaging custom processes. For more information, see the Document Imaging module reference guide. By default, this task executes every day at 2:00 AM
Incomplete Commit Queue Processing	Commits any files remaining in the Incomplete Commit Queue. **Note:** This task is for Platter Management. For more information, see the Platter Management module reference guide. By default, this task executes every day at 2:00 AM
Incomplete Delete Queue Processing	Retries deletion of any files remaining in the Incomplete Delete Queue. **Note:** This task is for Document Imaging custom processes. For more information, see the Document Imaging module reference guide. By default, this task executes every day at 2:00 AM
Purge Scheduler System Tasks Execution History	Purges the execution history for the tasks that are part of the <System> Task Group. By default, this task executes every 24 hours and purges the execution history through the last month.
Remove Expired Session Information	Removes information from the database related to expired sessions, and releases licenses being consumed by expired sessions. By default, this task executes every five minutes.
Remove Orphaned Custom Batches	Removes batch entries from the database for batches that no longer exist. **Note:** This task is for Document Imaging custom processes. For more information, see the Document Imaging module reference guide. By default, this task executes every day at 2:00 AM.

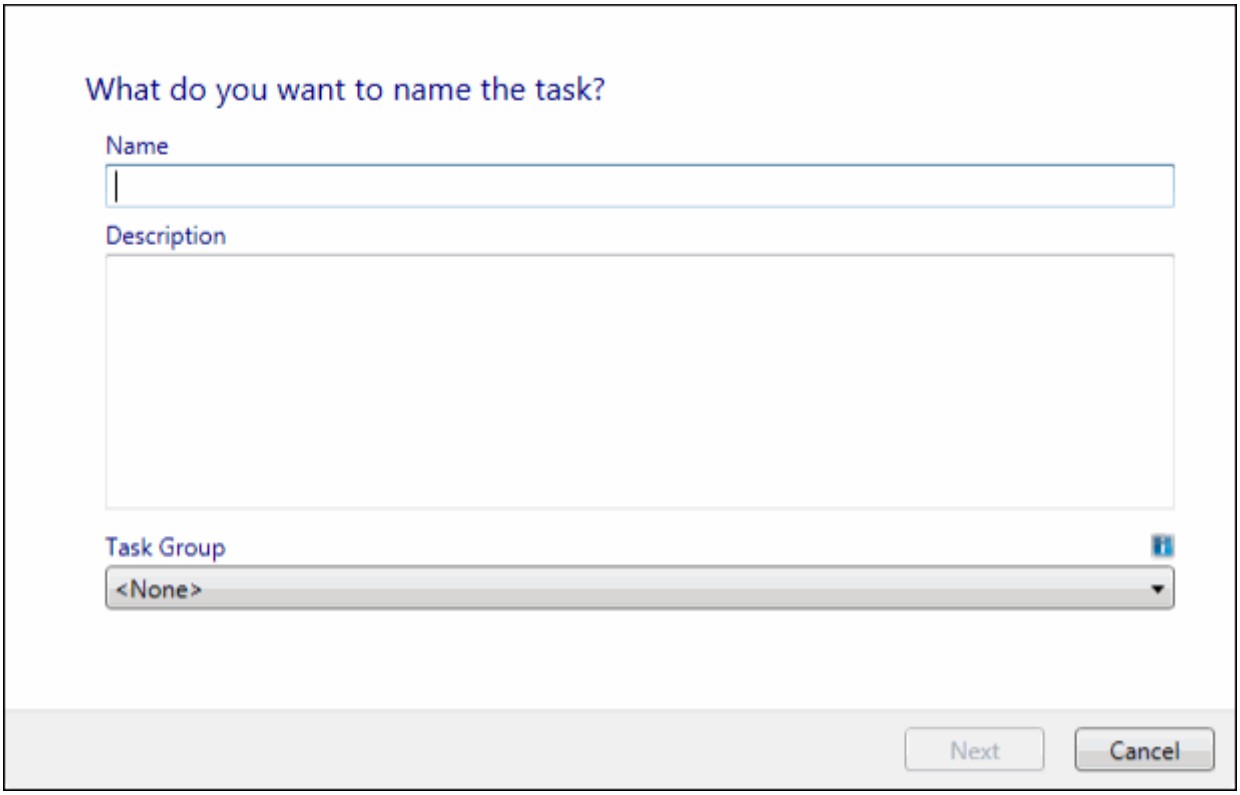
System Task	Description
Remove Orphaned Custom Scan Queue Documents	Removes custom batch documents belonging to batches that no longer exist. **Note:** This task is for Document Imaging custom processes. For more information, see the Document Imaging module reference guide. By default, this task executes every day at 2:00 AM.
Remove Orphaned Scan Batches	Removes batches that do not contain any documents. **Note:** This task is for Document Imaging capture processes. For more information, see the Document Imaging module reference guide. By default, this task executes every day at 2:00 AM.
Remove Orphaned Status Steps	Removes status steps that belong to capture processes that no longer exist. **Note:** This task is for Document Imaging capture processes. For more information, see the Document Imaging module reference guide. By default, this task executes every day at 2:00 AM.
S3 Upload Cache Processing	Uploads the contents of the S3 upload cache to the S3 provider. After uploading, all empty folders remaining in the local cache are deleted. **Note:** This task is used for S3 Disk Groups. For more information, see the Platter Management module reference guide. By default, this task executes every day at 2:00 AM.

Creating Tasks

Tasks can be created to represent processes that should be executed based on certain schedules.

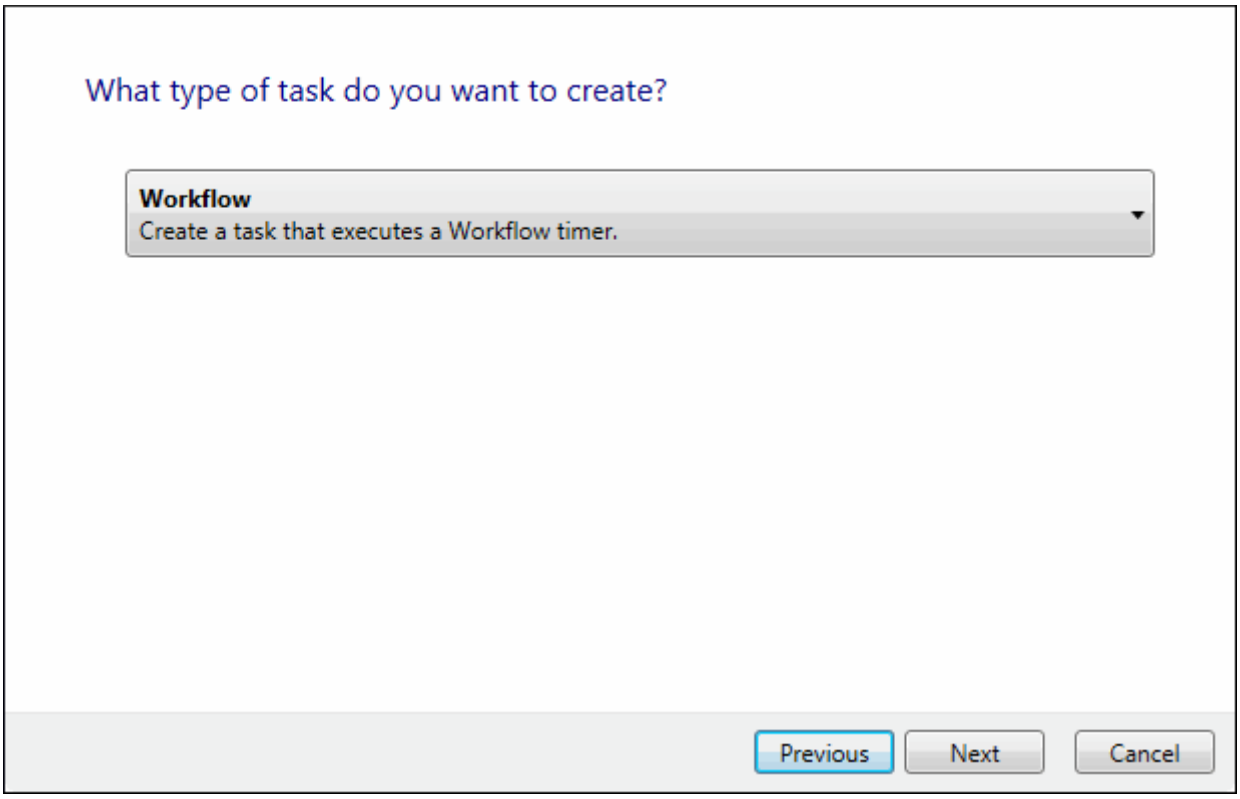
To create a task:

1. In the **Console** tree, select the task scheduler for which you want to add a task.
2. Right-click and select **Create Task**, or select **Create Task** in the **Action** pane.
   The **Task Wizard** is displayed.



3. Enter a unique name for the task in the **Name** field.
4. Enter a description for the task in the **Description** field.
5. Select a task group from the **Task Group** drop-down list. Existing task groups are available for selection. If **<None>** is selected, the task is added to the **<Unassigned>** task group.

6. Click **Next**. The **Task Type Selection** page is displayed.

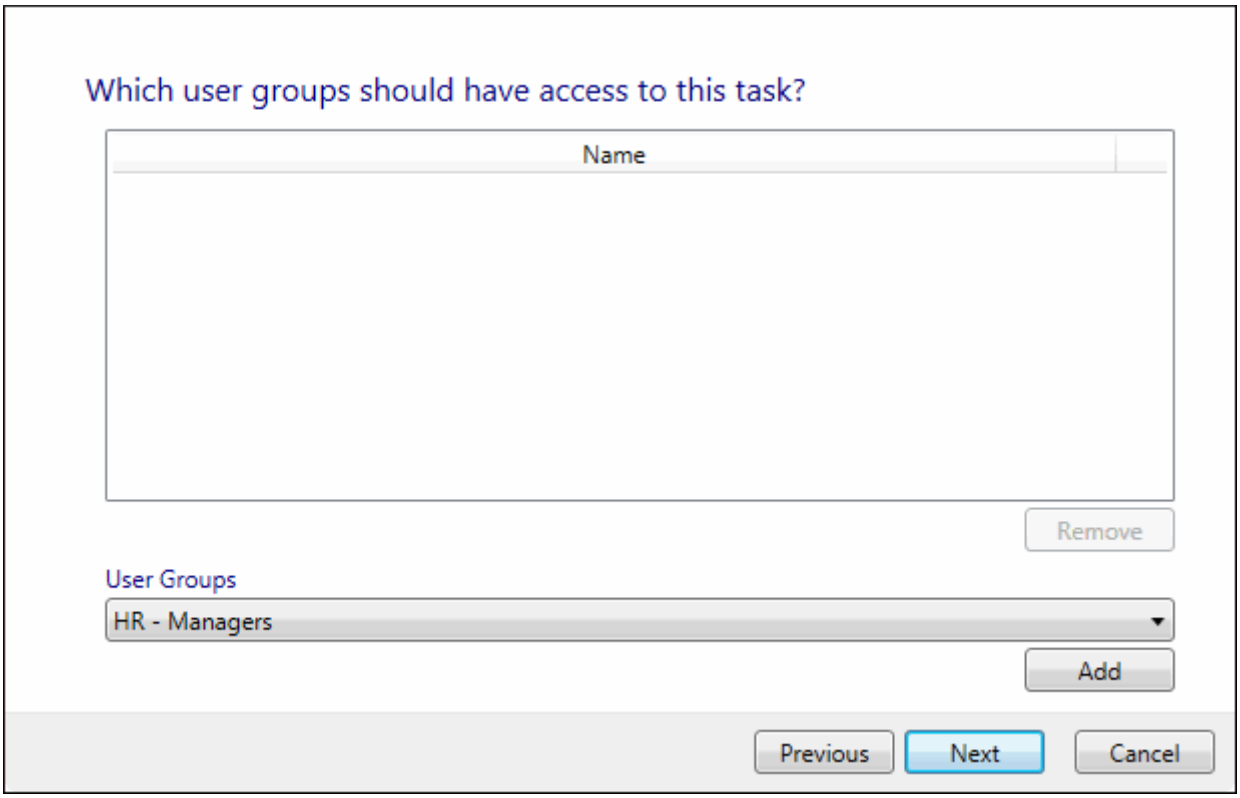


7. From the drop-down list, select the type of task you want to create.
   The types of tasks available depend on licensed modules. For information about each of the different possible task types, see one of the following sections:
   - Unity Scheduler Tasks on page 135
   - Distribution Service Unity Scheduler Task on page 137.
   - Reporting Dashboards Unity Scheduler Tasks on page 138
   - Unity Script Unity Scheduler Task on page 155
   - Workflow Unity Scheduler Tasks on page 156
   - Document Composition Unity Scheduler Task on page 158
   - Document Packaging Unity Scheduler Task on page 159
   - Platter Management Unity Scheduler Tasks on page 160
   - Message Broker Unity Scheduler Tasks on page 165
   - EIS Workflow Messaging Unity Scheduler Tasks on page 167
   - Medical Records Unity Scheduler Tasks on page 169
   - Release Of Information Unity Scheduler Tasks on page 178
   - Denial Management Unity Scheduler Tasks on page 133
   - Deficiency Management for Allscripts Sunrise Acute Care on page 180
   - DICOM Thumbnails Retrieval on page 184
   - Capture Process Designer Unity Scheduler Tasks on page 185

- Business Indexing Connector for use with SAP ArchiveLink Unity Scheduler Tasks on page 186

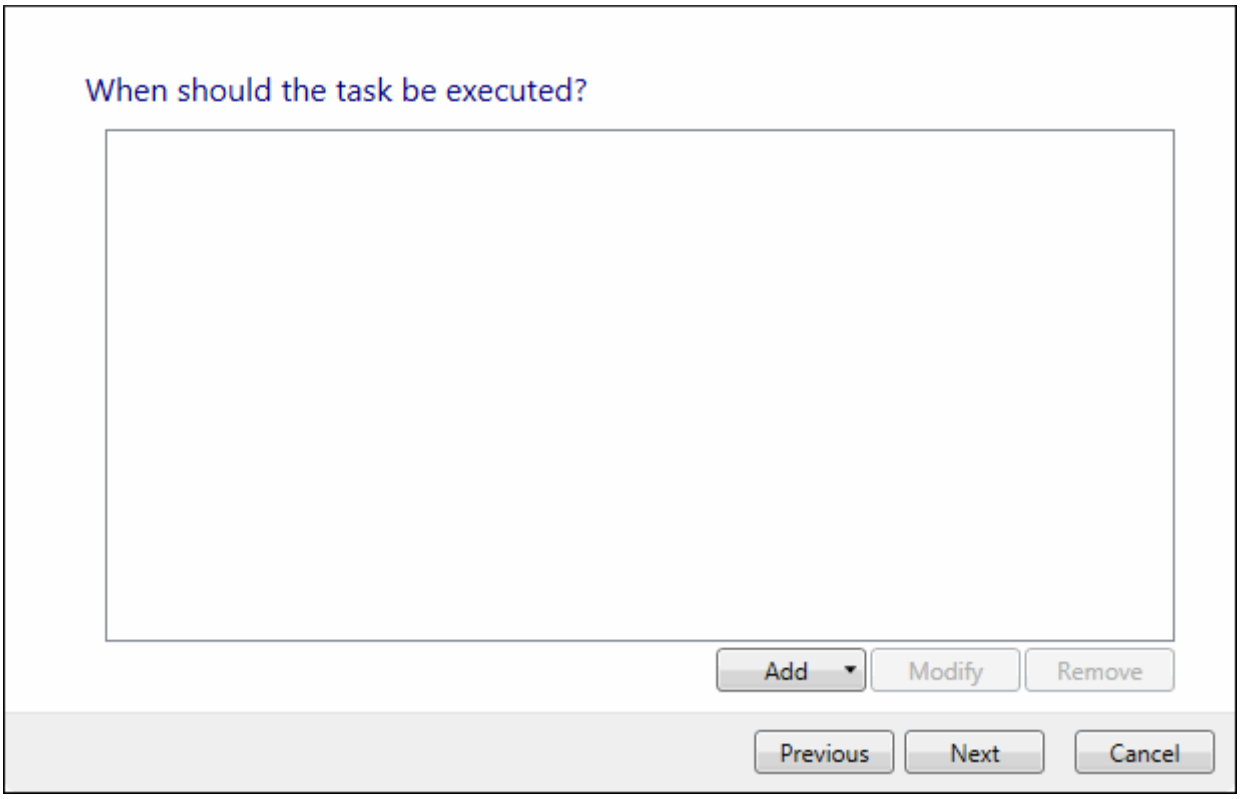
8. Once you have selected and configured your task type, continue and complete the process in the next section, Configuring Tasks on page 63.

Configuring Tasks



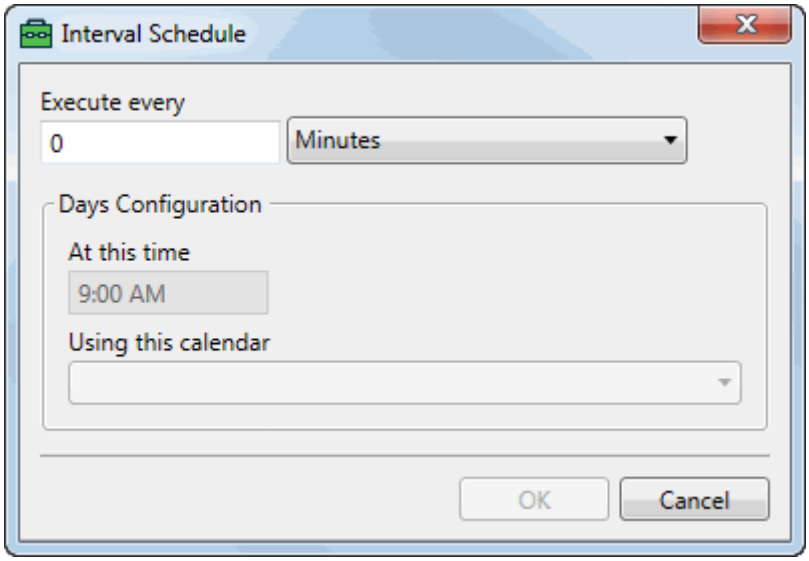
1. Configure the user groups that will have access to manage this task. Select a user group from the **User Groups** drop-down list, then click **Add**.
   To remove a group, select it from the list, then click **Remove**.

2. Click **Next**.



3. Click the **Add** drop-down list to choose a schedule for the task. Select one of the following options:
   - **Interval** - Executes the task once for every specified interval. For example, the task can be scheduled to execute once every two hours.

     The **Interval Scheduler** dialog box is displayed:

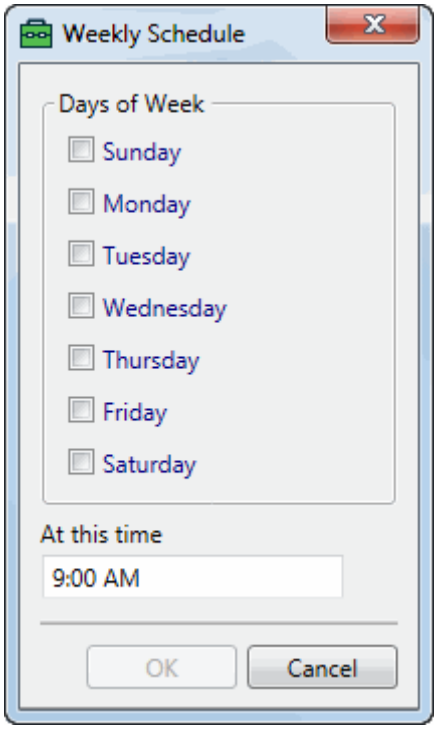


     Enter a numerical value in the **Execute every** field, then choose a unit of time in the drop-down list. If **Days** or **Business Days** is selected, enter a time in the **At this time** field to determine at what time in the day the task should execute. If **Business Days** is selected, select a calendar in the **Using this calendar** drop-down list to specify the calendar that defines business days. Click **OK**.

Note: Timer Intervals below five (5) minutes should only be used for testing and debugging purposes, not in a production system. Using such a short interval in a production environment will create unnecessary database traffic. If an action or task needs to occur very frequently, it should be configured as System Work or an Ad-Hoc task.

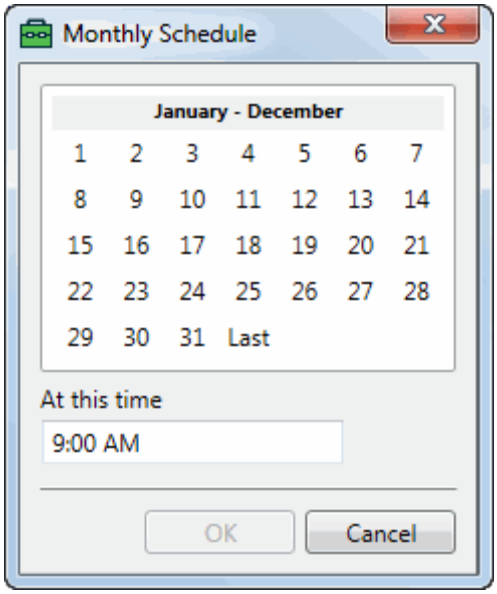
Note: If the **Using this calendar** drop-down list is unpopulated, a calendar has not yet been configured. For more information about configuring calendars, see the Org Charts and Calendars section of the **Workflow** module reference guide.

- **Weekly -** Executes the task every week at a specified time. The **Weekly Schedule** dialog box is displayed:



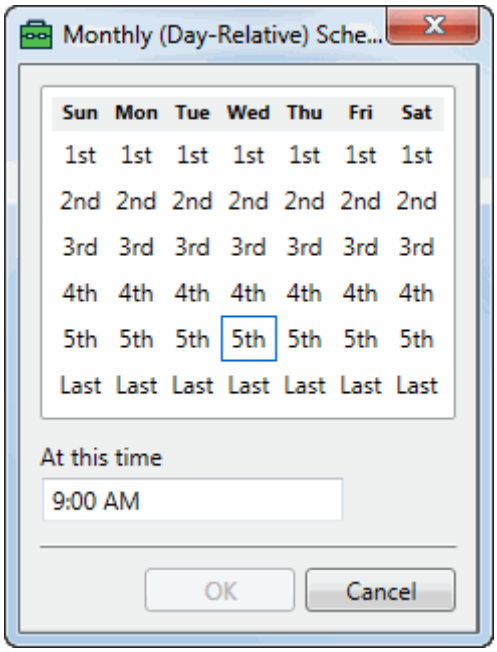
Select the days of the week on which you want this task to execute every week. Enter a time in the **At this time** field to specify the time of day this task should execute, then click **OK**.

- **Monthly** - Executes the task every month at a specified time. The **Monthly Schedule** dialog box is displayed:



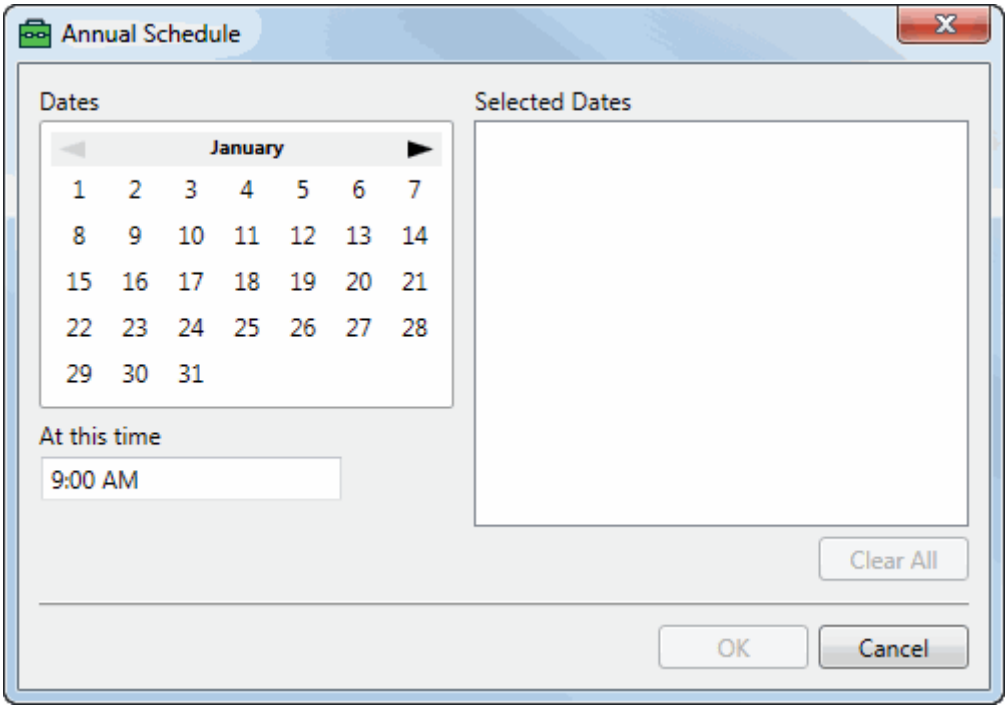
Select the dates on which you want this task to execute every month. Multiple dates can be selected. Select **Last** to schedule the task to execute on the last day of every month. Enter a time in the **At this time** field to specify the time of day at which this task should execute, then click **OK**.

- **Monthly (Day-Relative)** - Executes the task every month on either the first, second, third, fourth, or last instance of a specific day of the week. The **Monthly (Day-Relative) Schedule** dialog box is displayed:



Under the preferred day of the week, select whether you want this task to run on the 1st, 2nd, 3rd, 4th, 5th, and/or last instance of that day in the month. More than one selection can be made; for example, you can choose to schedule this task for both the 1st and 3rd Friday of every month). Enter a time in the **At this time** field to specify the time of day at which this task should execute, then click **OK**.

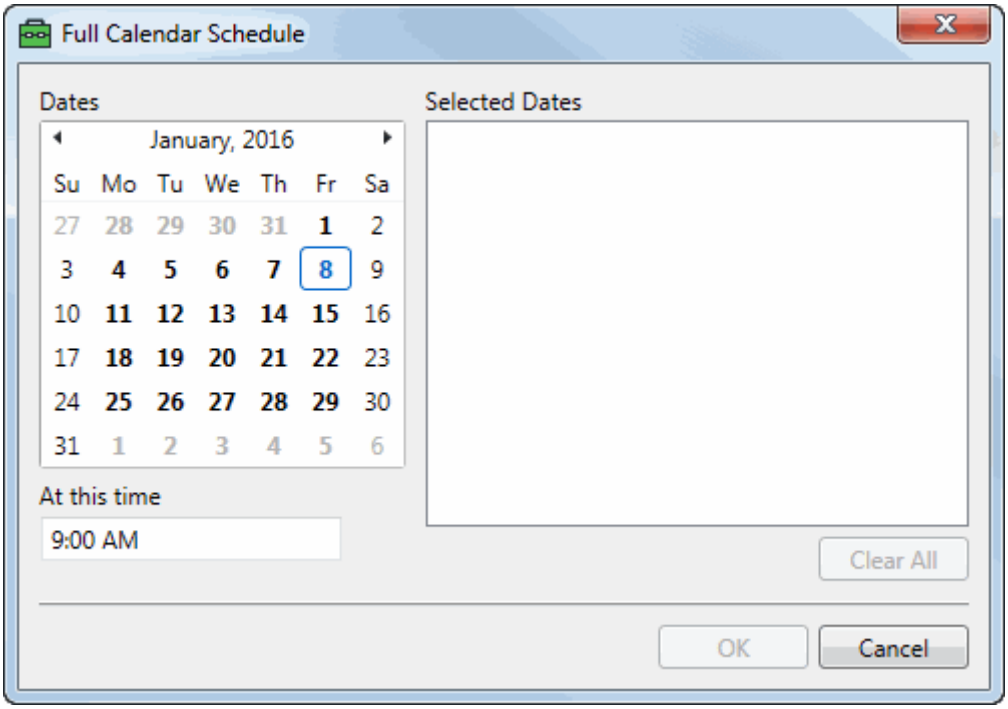
- **Annual -** Executes the task every year on a specified date. The **Annual Schedule** dialog box is displayed:



Select the date on which this task should execute every year. Multiple dates can be selected. Enter a time in the **At this time** field to specify the time of day at which this task should execute, then click **OK**.

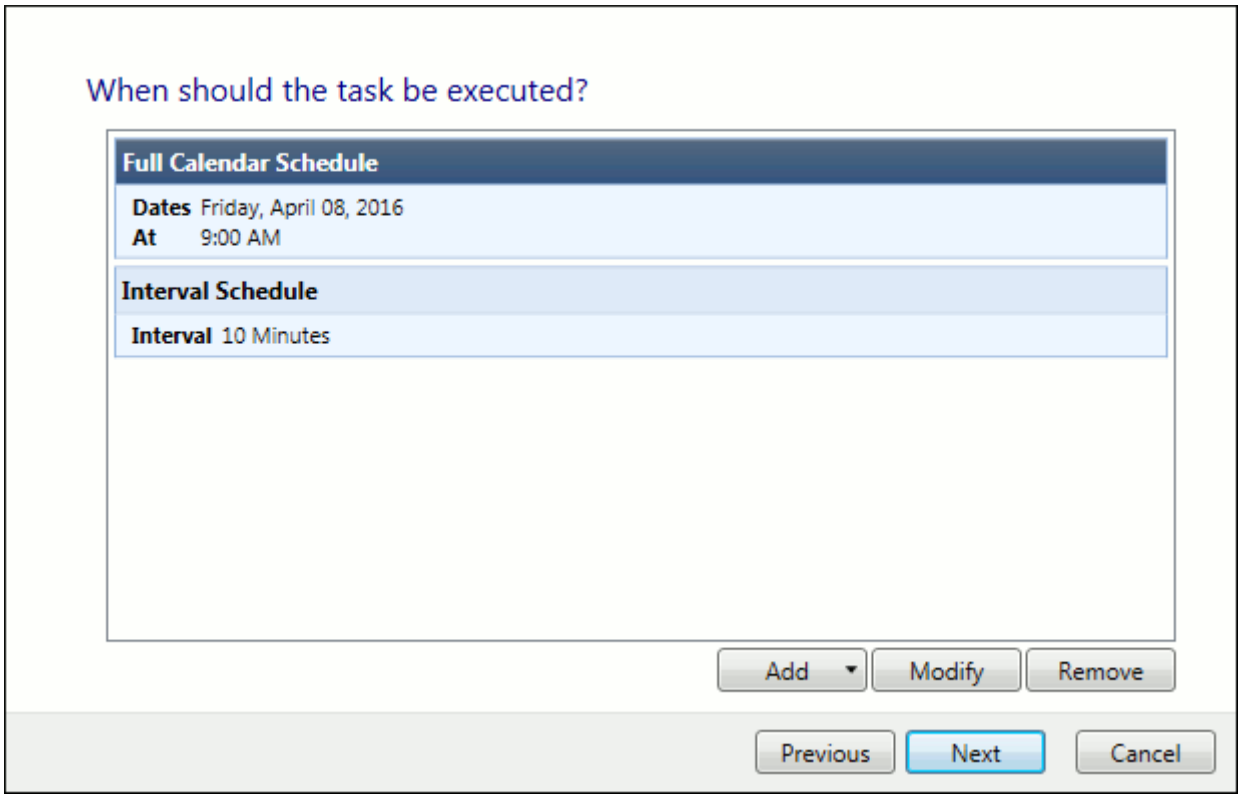
Note: The month of February also contains the **Last** option, so that the task can be scheduled to run on the last day of February every year, regardless of whether or not it is a leap year.

- **Full Calendar** - Executes the task on specific dates in a year. The **Full Calendar Schedule** dialog box is displayed:

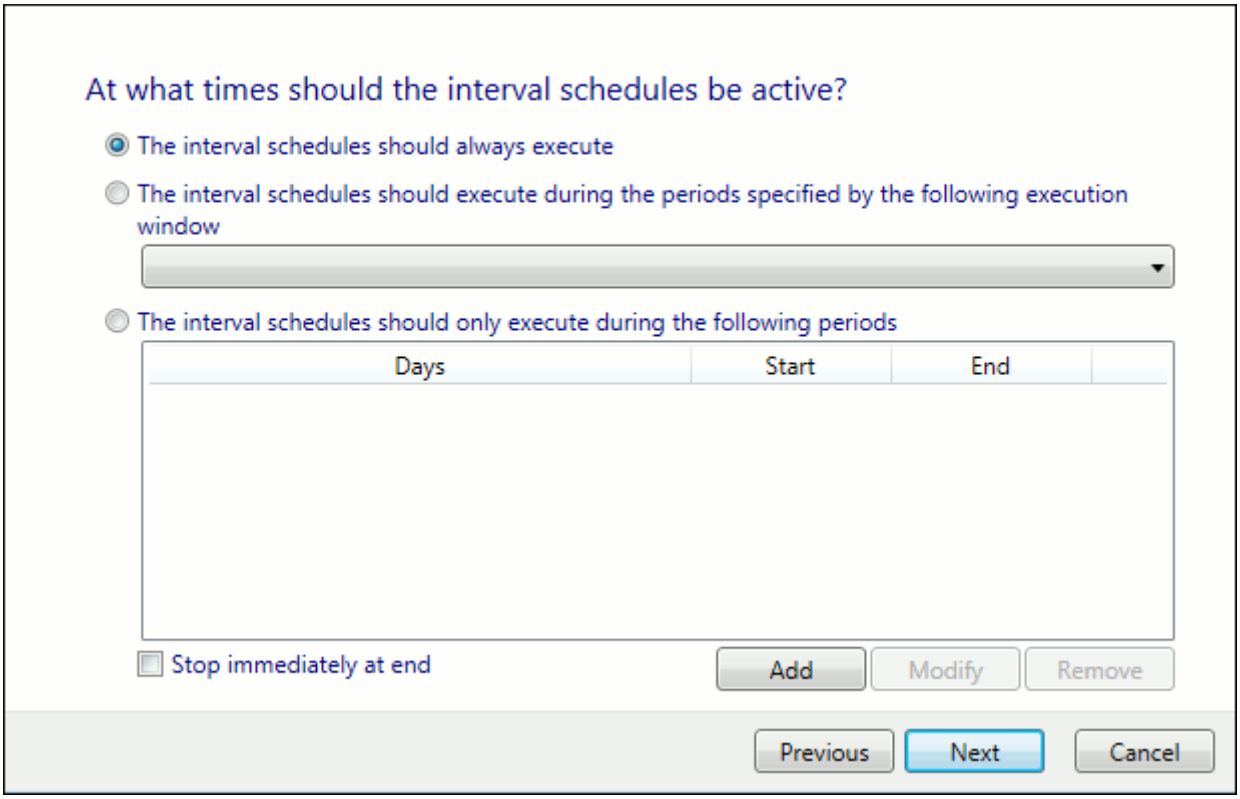


  Select the date on which the task should execute. To remove the selected date, click **Clear All**. Enter a time in the **At this time** field to specify the time of day at which this task should execute, then click **OK**.
- **Existing Schedule** - Choose an existing named schedule that determines when the task should execute. For more information on creating custom schedules, see Creating Schedules on page 76.

The configured schedules are added to the list.



4. Click **Next**. If you added one or more interval schedules, the following dialog box is displayed.

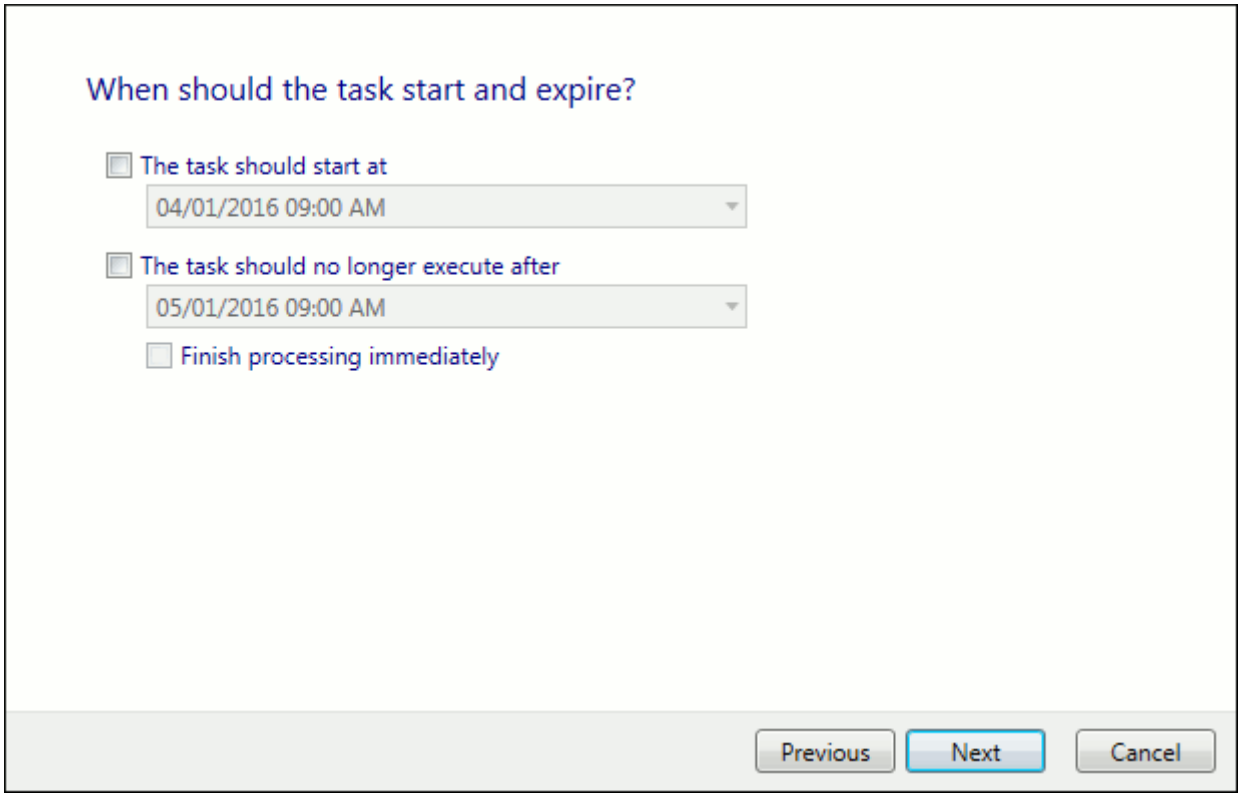


5. Select from the following options to determine when the interval schedules should execute:

Option	Description
The interval schedules should always execute	The interval schedules always execute at their configured times. For example, if an interval schedule is configured for 30 minutes, the interval schedule executes every 30 minutes without restriction.
The interval schedules execute during the periods specified by the following execution window	The interval schedules only execute during the days and times configured within the specified execution window. For example, if an interval schedule is configured for 30 minutes, and the execution window is Saturday, 9 a.m. until 5 p.m., the interval schedule executes at 9 a.m. on Saturday and every 30 minutes until 5 p.m. that Saturday. From the drop-down list, select the appropriate execution window. For more information on creating named execution windows, see Creating Execution Windows on page 84.
The interval schedules should only execute during the following periods	The interval schedules only execute during the time periods configured within the ad hoc execution window. To create an ad hoc execution window, click the **Add** button. Select the days of the week and the time period the interval schedule should be run. Continue adding time periods as necessary. To abort task execution after the ad hoc execution window reaches the end of a time period, select the **Stop immediately at end** option. This makes it so that at the end of a time period, the schedule finishes processing the current item and stops. **Note:** Unity Script scheduler tasks must be written to specifically support the ability to stop immediately.

Note: Interval schedules are run at the earliest allowed time and then continue running for the configured intervals. For example, if an interval schedule is set for 10 minutes, and it begins on the current day, the next run time for the schedule is the time you finish configuration in the Task Wizard. The schedule then runs every 10 minutes for the duration of the specified time period.

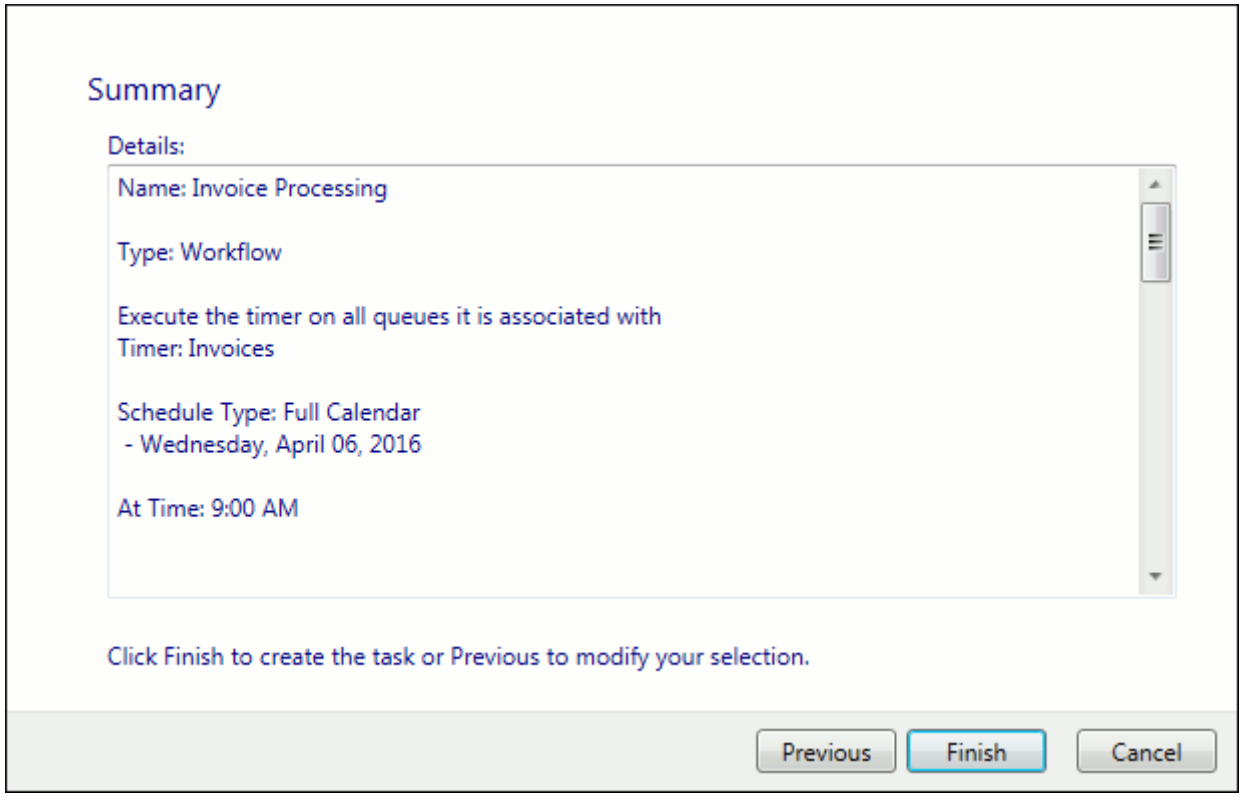
6. Click **Next**.



7. To set a specific start time, expiration time, or both, select from the following options:

Option	Description
The task should start at	Select to set a specific start time for the task. Enter or select the appropriate date and time.
The task should no longer execute after	Select to set a specific end time for the task. Enter or select the appropriate date and time.
Finish processing immediately	When selected, the task ends at its earliest opportunity after the end time passes. When deselected, the task ends after the end time passes and the entire task is completed. **Note:** This option is only enabled when **The task should no longer execute after** option is selected.

8. Click **Next**. The summary of your configuration is displayed.

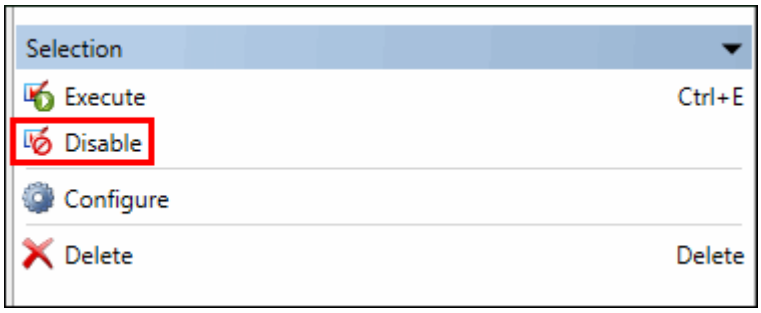


9. Click **Finish** to save the task.

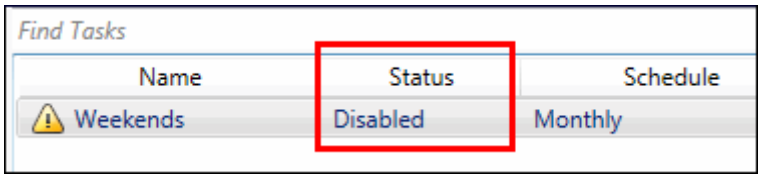
Enabling and Disabling Tasks

When a task is created, it is enabled by default. Enabled tasks are active and will execute at the configured times and dates based on their schedules. Disabled tasks are inactive and will not execute, but retain all configuration information so that they may be re-enabled at a later time. This is useful when a task is not currently required, but you do not want to delete the task.

To disable a selected task, click **Disable** in the **Action** pane.

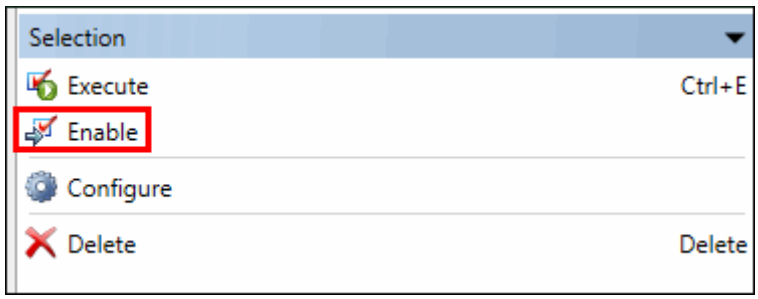


Disabled tasks display a **Disabled** status.

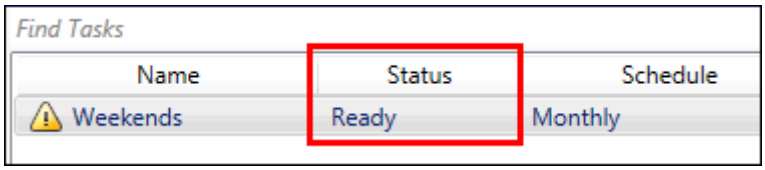


To enable a selected task, click **Enable** in the **Action** pane.

Note: If a disabled task is re-enabled after its **Next Run Time**, the re-enabled task will execute immediately. If a disabled task is re-enabled before its **Next Run Time**, the re-enabled task will execute at the **Next Run Time** interval.



Enabled tasks display a **Ready** status.

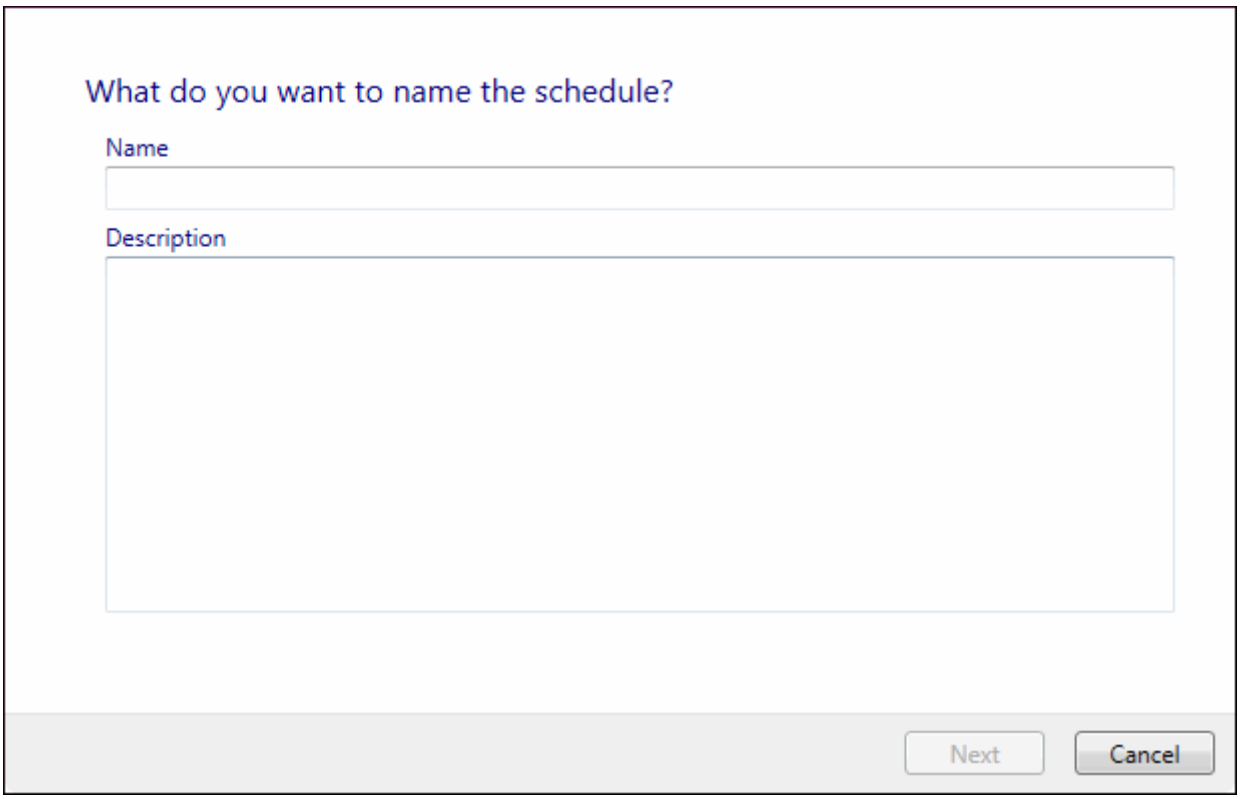


Creating Schedules

For schedules that may need to be used by several tasks, you can create named schedules to avoid configuring them each time you assign them to a task.

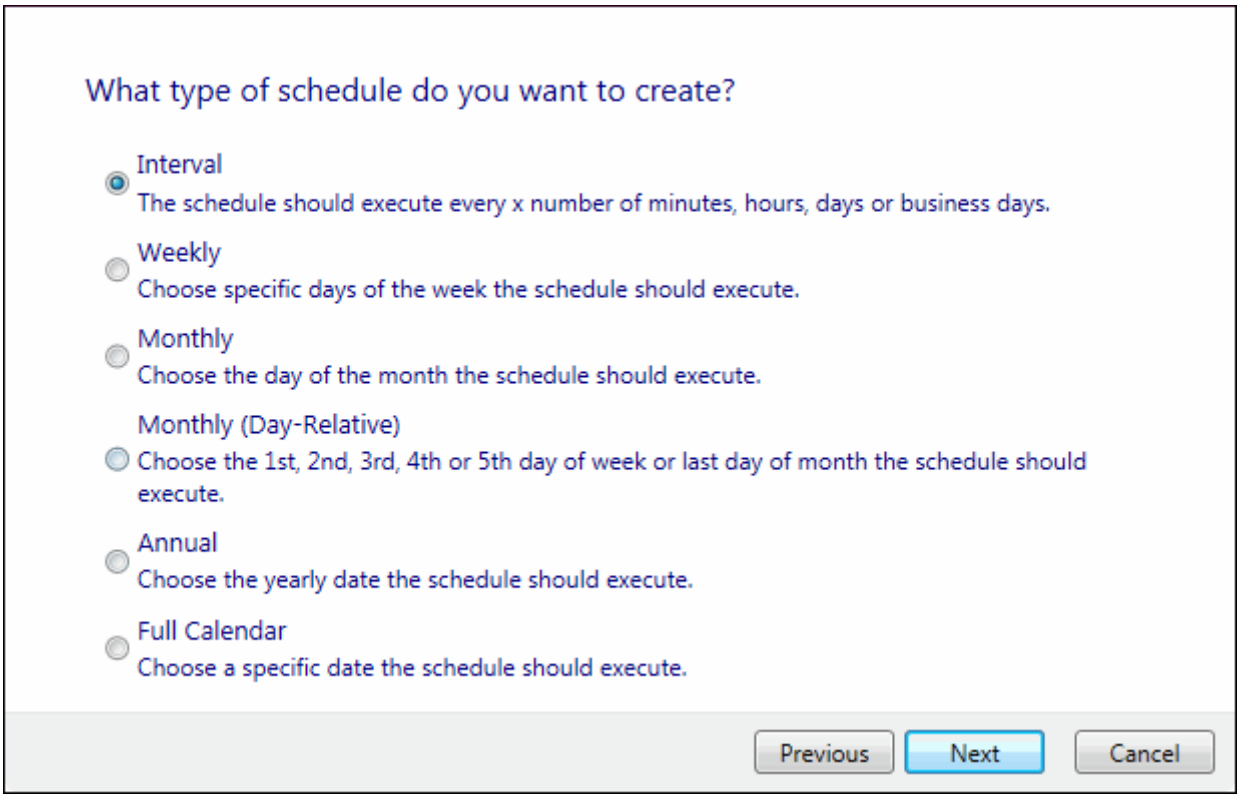
To create a named schedule:

1. Select the task scheduler for which you want to create a schedule, then right-click and select **Create Schedule**, or click **Create Schedule** in the **Action** pane.
   The **Schedule Wizard** is displayed.

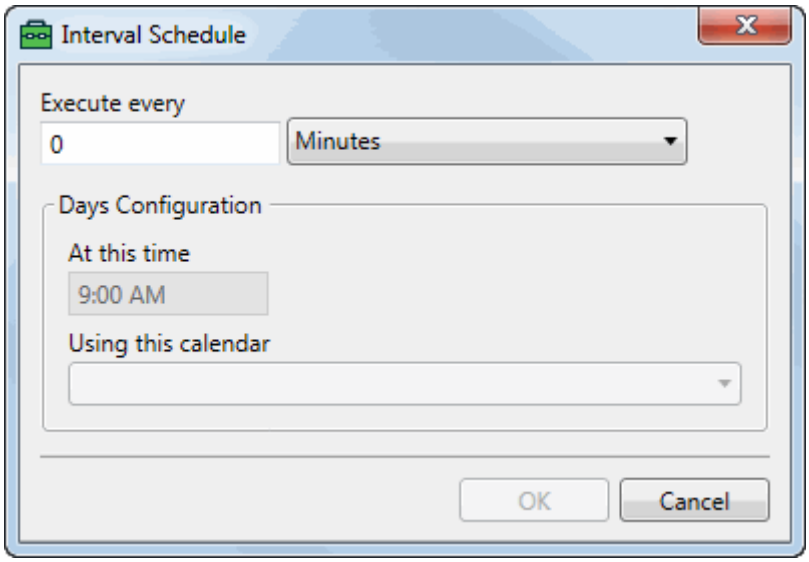


2. Enter a name for the schedule in the **Name** field. Consider creating a name that indicates the type of schedule you are creating, as this will make it easier to identify when assigning the schedule to tasks.
3. Enter a description for the schedule in the **Description** field.

4. Click **Next**.



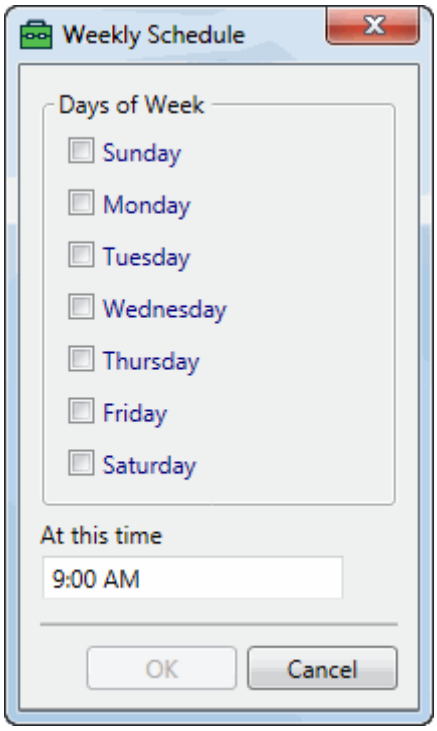
5. Choose the type of schedule you want to create. Select one of the following options:
   - **Interval** - Executes the task after a specified interval.



Enter a numerical value in the **Execute every** field, then choose a unit of time in the drop-down select box. If **Days** or **Business Days** is selected, enter a time in the **At this time** field to determine at what time in the day the task should execute. If **Business Days** is selected, select a calendar in the **Using this calendar** drop-down list to specify the calendar that defines business days.

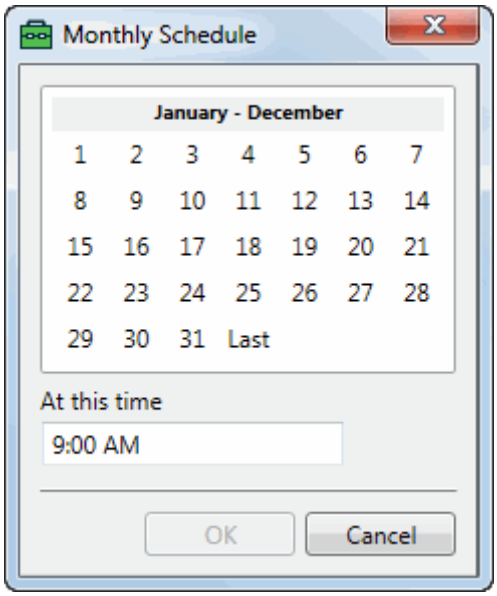
Note: If the **Using this calendar** drop-down list is unpopulated, a calendar has not yet been configured. For more information about configuring calendars, see the Org Charts and Calendars section of the **Workflow** module reference guide.

- **Weekly -** Executes the task every week at a specified time.



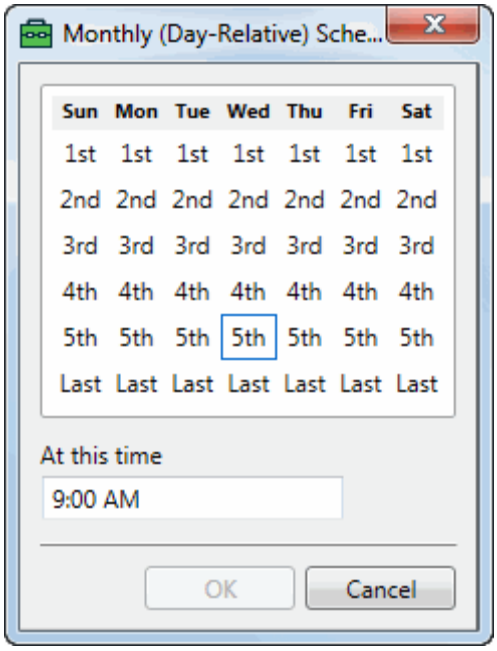
Select the days of the week on which you want this task to execute every week. Enter a time in the **At this time** field to specify the time of day this task should execute.

- **Monthly** - Executes the task every month at a specified time.



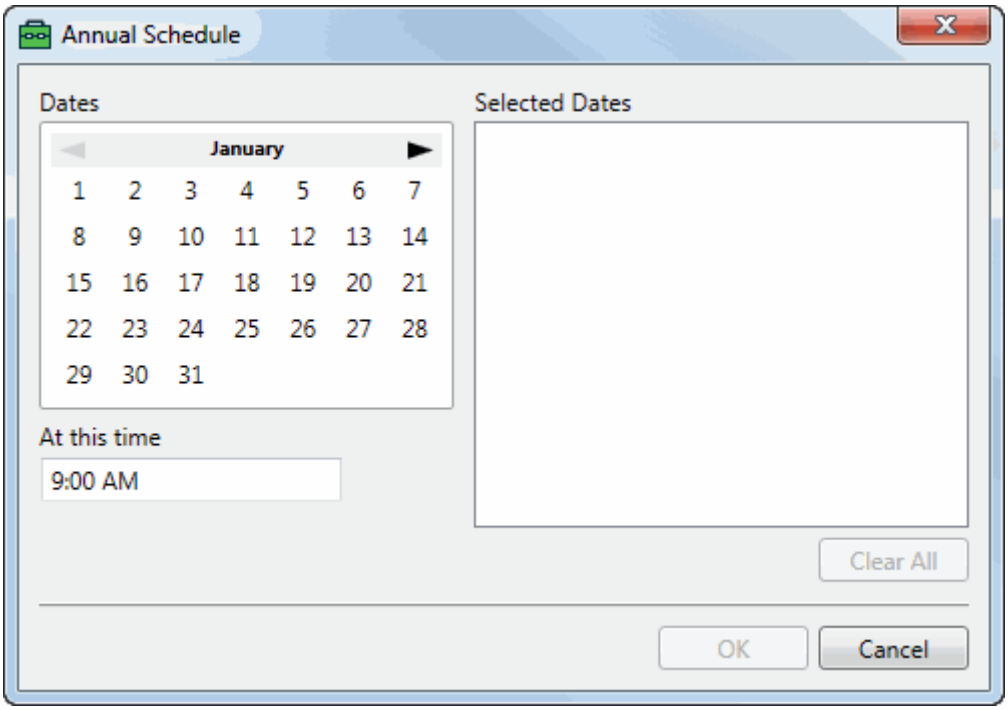
Select the dates on which you want this task to execute every month. Multiple dates can be selected. Select **Last** to schedule the task to execute on the last day of every month. Enter a time in the **At this time** field to specify the time of day at which this task should execute.

- **Monthly (Day-Relative)** - Executes the task every month on either the first, second, third, fourth, or last instance of a specific day of the week.



Under the preferred day of the week, select whether you want this task to run on the 1st, 2nd, 3rd, 4th, 5th, and/or last instance of that day in the month. More than one selection can be made; for example, you can choose to schedule this task for both the 1st and 3rd Friday of every month). Enter a time in the **At this time** field to specify the time of day at which this task should execute.

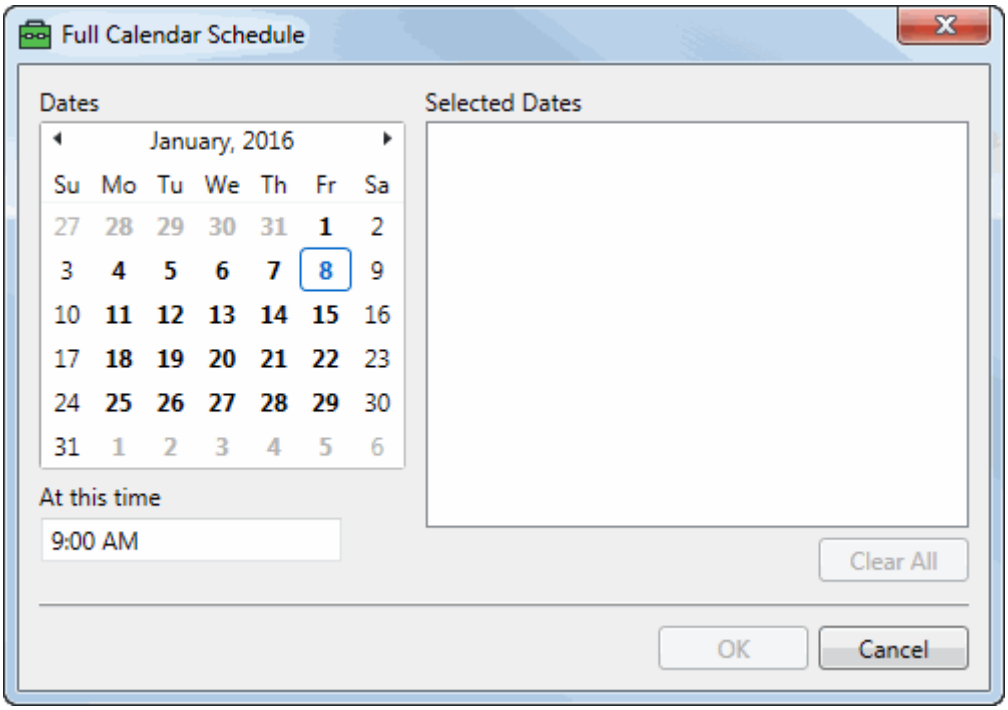
- **Annual -** Executes the task every year on a specified date.



Select the date on which this task should execute every year. Multiple dates can be selected. Enter a time in the **At this time** field to specify the time of day at which this task should execute.

Note: The month of February also contains the **Last** option, so that the task can be scheduled to run on the last day of February every year, regardless of whether or not it is a leap year.

- **Full Calendar** - Executes the task on specific dates in a year.



Select the dates on which the task should execute. To select multiple dates, press and hold **Ctrl** while making your selections. To select multiple consecutive dates, select the first date, press and hold **Shift**, then select the last consecutive date. You can remove all of your selected dates by clicking **Clear All**. Enter a time in the **At this time** field to specify the time of day at which this task should execute.

6. Click **Next** when you have completed configuring the selected schedule type.
7. Review the **Summary** dialog box at the end of the process to ensure the schedule configuration is correct.
8. Click **Finish**.

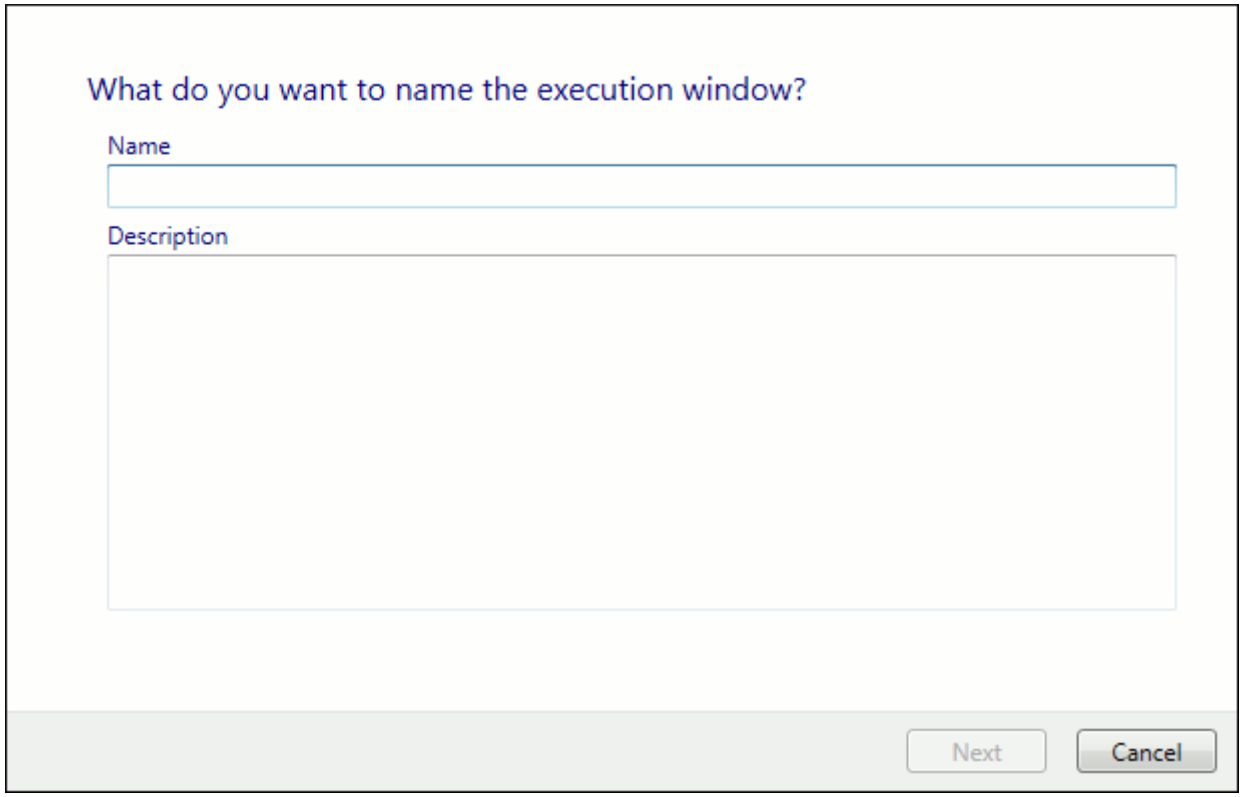
Creating Execution Windows

Execution windows are configured time periods in which a schedule can execute tasks. For execution windows that may need to be used by several tasks, you can create named execution windows to avoid configuring them each time you configure a new task, as opposed to creating the execution window within the task itself.

When changes are implemented to named execution windows, they affect all tasks the execution windows are assigned to. Execution windows configured within tasks are only specific for that task.

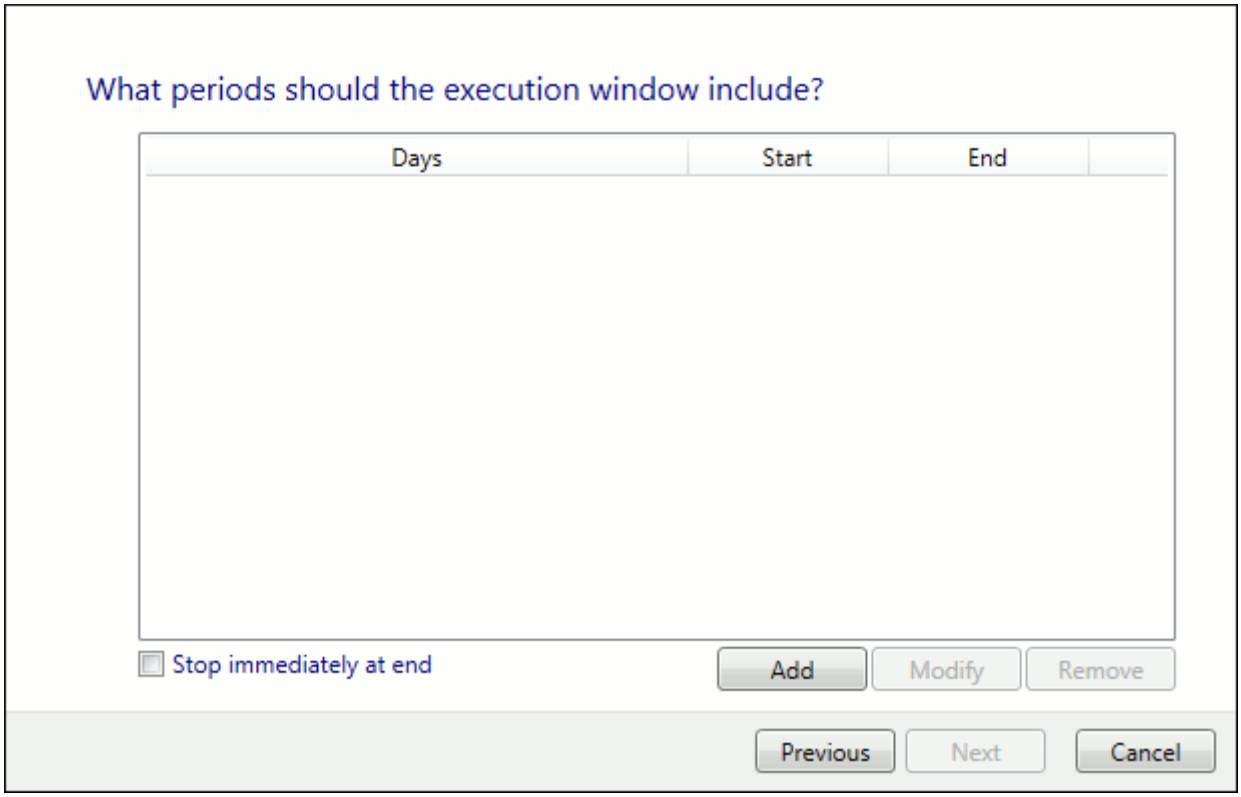
To create an execution window:

1. Select the task scheduler for which you want to create a task window, then right-click and select **Create Schedule**, or click **Create Schedule** in the **Action** pane.
   The **Execution Window Wizard** is displayed.

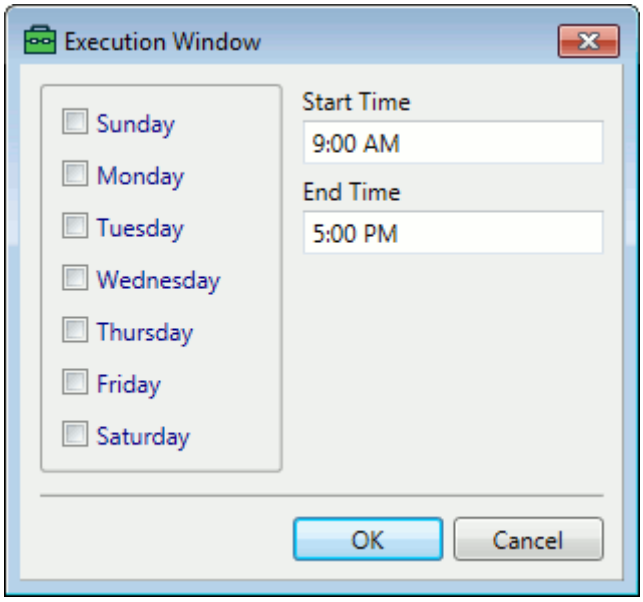


2. Enter a name for the execution window in the **Name** field.
3. Describe the purpose of the execution window in the **Description** field.

4. Click **Next**.



5. Click the **Add** button to add a time period to the execution window. The **Execution Window** dialog box is displayed.



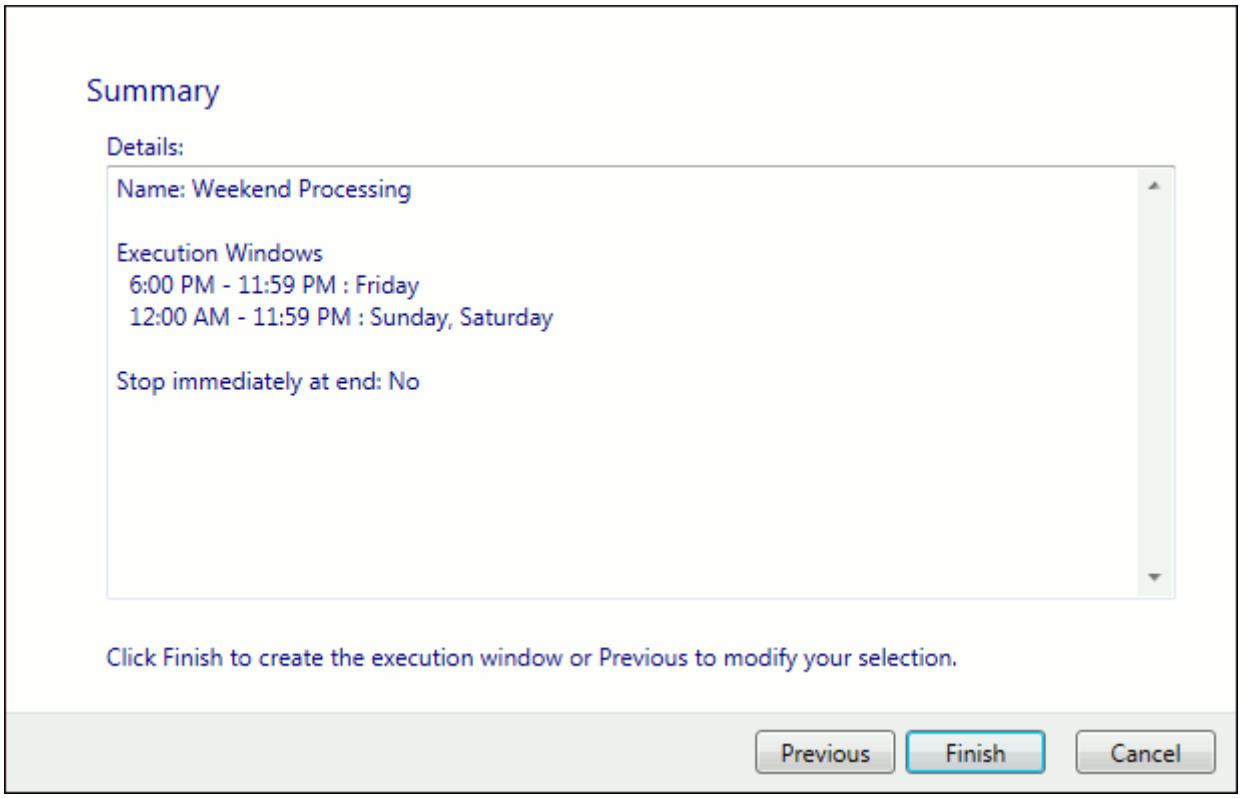
6. Enter the time execution should begin on each selected day in the **Start Time** field.
7. Enter the time execution should stop on each selected day in **End Time** field.

8. Select the days the start and end times should be applied to.
9. Click **OK**.
10. Continue adding time periods to the execution window as needed.

    Continue adding time periods as necessary.
11. To abort task execution after the execution window reaches its expiration time, select the **Stop immediately at end** option. The schedule finishes processing the current item and stops.

Note: Unity Script scheduler tasks must be written to specifically support the ability to stop immediately.

12. Click **Next**. The summary of your configuration is displayed.



13. Click **Finish** to save the execution window.

Updating Tasks

You can modify which User Groups have access to tasks and which named schedules are configured to execute tasks.

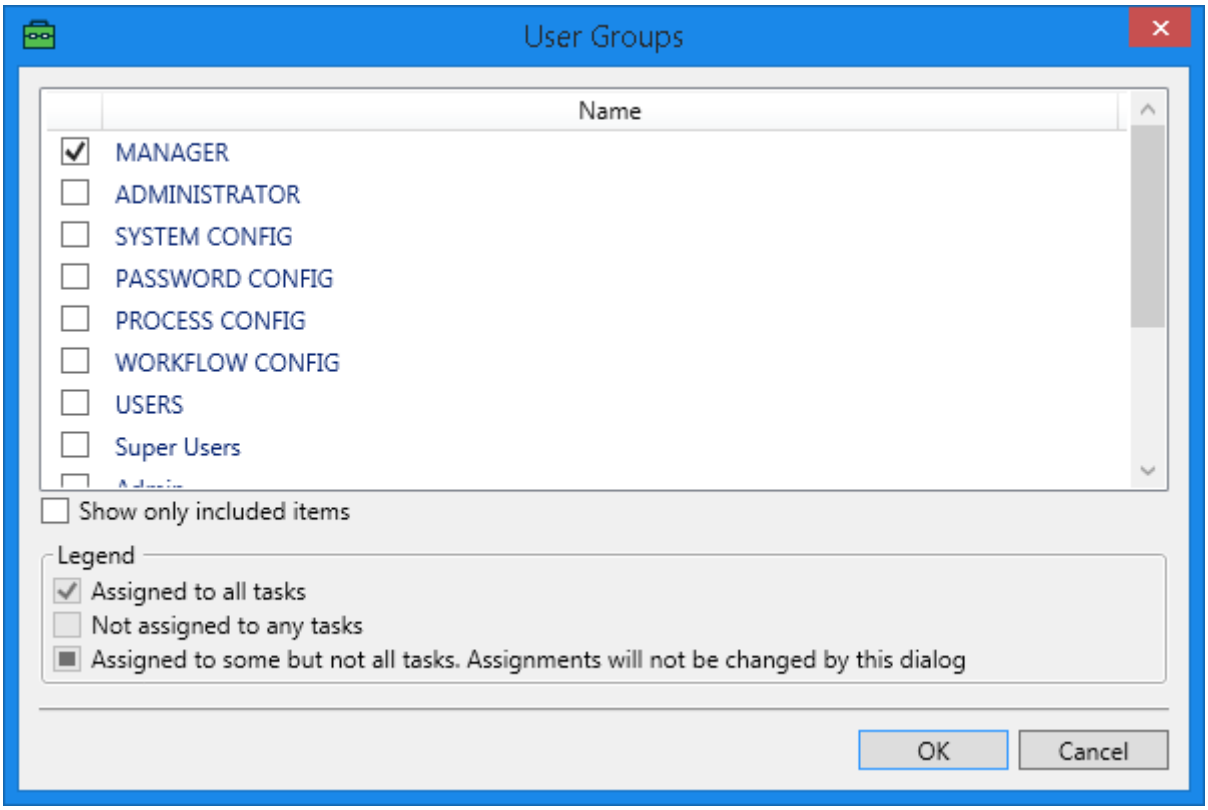
Updating User Groups

To update the User Groups for a task or tasks:

1. In the **View** pane, select a task or tasks, and then click **User Groups** in the **Action** pane or right-click on the task or tasks and select **User Groups**.

Tip: To select multiple tasks, you can select a task, and press and hold the **Ctrl** key to select more tasks. You can also select multiple tasks in a row by pressing and holding the **Shift** key, and then selecting the first and last task in the sequence of tasks you want to select.

The **User Groups** dialog box is displayed.



2. You can add or remove User Groups from the task or tasks by selecting the check box to the left of the User Group in the list. Click the check box to cycle through the selection options.

   If a check box is selected, that User Group is assigned to the task or tasks. If a check box is not selected, that User Group is not assigned to the task or tasks.

   If a check box contains a black square, that User Group is assigned to some but not all of the selected tasks. The User Group assignments will not be changed.
3. When finished assigning User Groups, click **OK** to close the dialog box and save the changes, or click **Cancel** to close the dialog box without saving the changes.

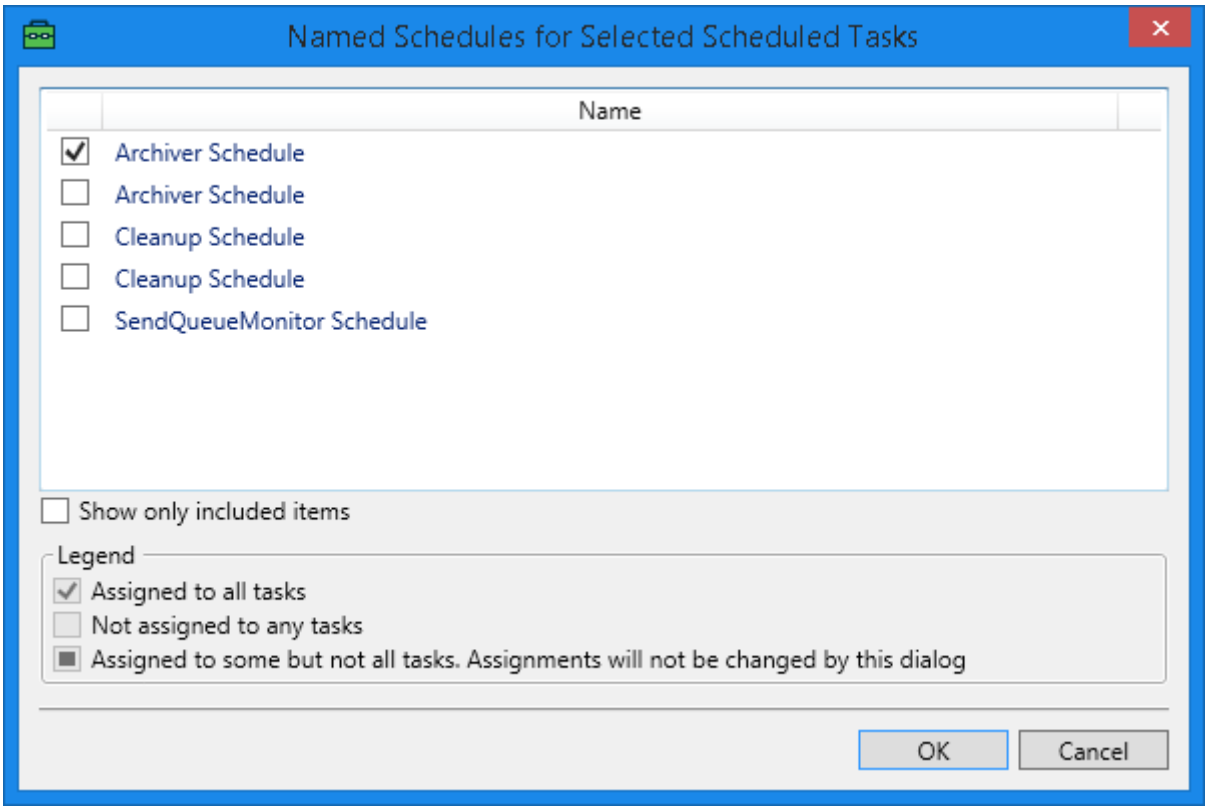
Updating Named Schedules

To update the named schedules for a task or tasks:

1. In the **View** pane, select a task or tasks, and then click **Named Schedules** in the **Action** pane or right-click on the task or tasks and select **Named Schedules**.

Tip: To select multiple tasks, you can select a task, and press and hold the **Ctrl** key to select more tasks. You can also select multiple tasks in a row by pressing and holding the **Shift** key, and then selecting the first and last task in the sequence of tasks you want to select.

The **Named Schedules** dialog box is displayed.



2. You can add or remove named schedules from the task or tasks by selecting the check box to the left of a named schedule in the list. Click the check box to cycle through the selection options.

   If a check box is selected, that named schedule is assigned to the task or tasks. If a check box is not selected, that named schedule is not assigned to the task or tasks.

   If a check box contains a black square, that named schedule is assigned to some but not all of the selected tasks. The named schedule assignments will not be changed.
3. When finished assigning named schedules, click **OK** to close the dialog box and save the changes, or click **Cancel** to close the dialog box without saving the changes.

Scheduler Administration

From within the Unity Management Console, you can perform administrative tasks related to scheduler configuration and execution. See the following sections for more information on these functions:

- Generating Reports on page 90
- Viewing the Audit Log on page 94
- Purging the Execution History on page 96
- Importing and Exporting Scheduler Configuration Items on page 98

Generating Reports

Reports provide detailed information on task configuration and task execution. These reports can be viewed, saved to file, and archived into OnBase.

See the following sections for more information:

- Generating a Configuration Report on page 90
- Generating an Execution History Report on page 92

Generating a Configuration Report

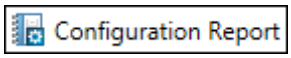
Configuration reports include detailed information on task configuration. This includes all of the information configured within the Task Wizard.

A configuration report includes but is not exclusive to the following items:

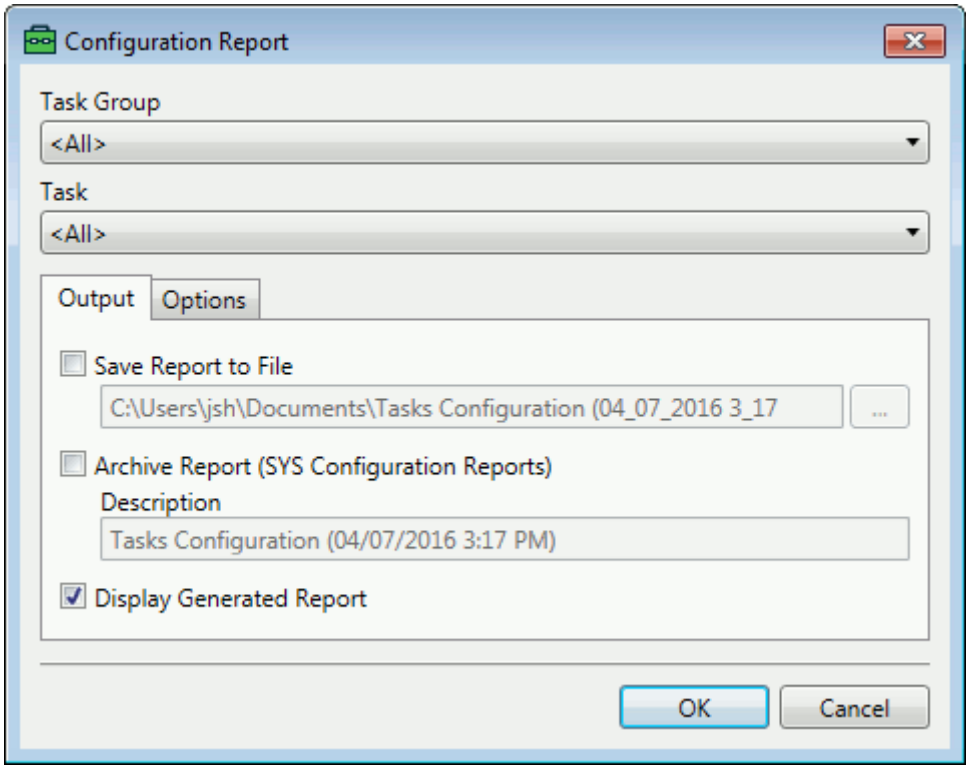
- Each relevant task
- The task group each task belongs to
- Assigned schedules for each task
- Assigned execution windows for each task
- Assigned User Groups for each task

To create a configuration report:

1. From the Unity Management Console, do one of the following:
   - With the **Tasks** group or a specific task selected in the **Console** tree, select **Action** | **Configuration Report**.
   - Click the **Configuration Report** button from the **Action** pane.



   The **Configuration Report** dialog box is displayed.



2. Select a task group from the **Task Group** drop-down list to restrict the report to a specific task group. By default, **<All>** is selected, indicating all task groups are included in the report.
3. Select a task from the **Task** drop-down list to restrict the report to a specific task. By default, **<All>** is selected, indicating all tasks of the selected task group are included in the report.
4. From the **Output** tab, select one or more of the following options to determine how the report is generated:

Output Option	Description
Save Report to File	Saves the report to the specified file location. Enter or browse to a file path for the report in the field.

Output Option	Description
Archive Report (SYS Configuration Reports)	Archives the report to the **SYS Configuration Reports** Document Type in OnBase. Enter a description for the report in the Description field. This value is assigned to the Description Keyword Type for the report.
Display Generated Report	Displays the report in a third-party text viewer.

5. From the **Options** tab, select one or more of the following options to determine which details are included in the generated report:

Option	Description
Include user group assignments	Displays the assigned User Groups for each listed task, as determined by configuration performed in the Task Wizard.
Include schedules	Displays the assigned schedules for each listed task, as determined by configuration performed in the Task Wizard.
Include execution windows	Displays the assigned execution windows for each listed task, as determined by configuration performed in the Task Wizard.
Include last/next execution	Displays the last time a task was executed. This value is also displayed in the **Last Run Time** column for a task.

6. Click **OK** to generate the report. Based on your selection, the report may be displayed.

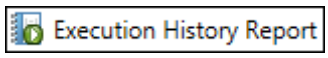
Generating an Execution History Report

Execution history reports include detailed information on task execution. An execution history report includes but is not exclusive to the following items:

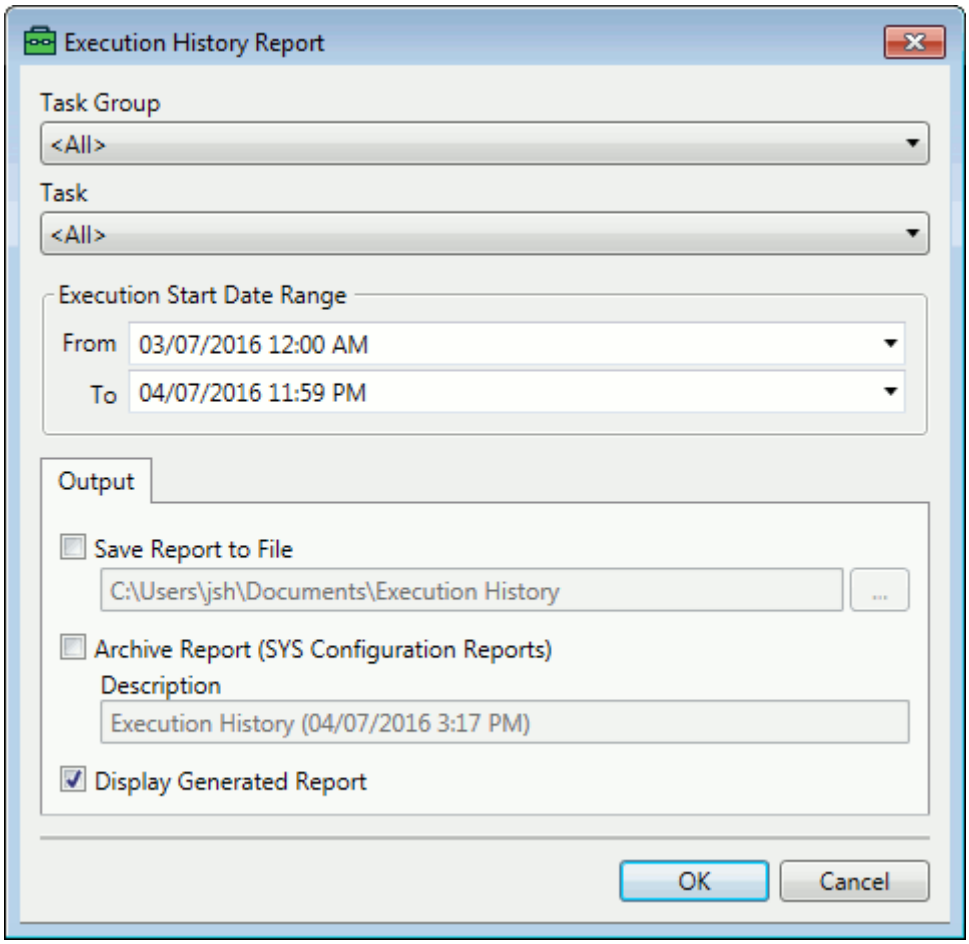
- The task that was executed
- The service used to execute the task
- The type of schedule that was used
- The start and end times of the execution
- The number of items processed during execution
- The location of the Application Server and ODBC

To generate an execution history report:

1. From the Unity Management Console, do one of the following:
   - With the **Tasks** group or a specific task selected in the **Console** tree, select **Action** | **Execution History Report**.
   - Click the **Execution History Report** button from the **Action** pane.



   The **Execution History Report** dialog box is displayed.



2. Select a task group from the **Task Group** drop-down list to restrict the report to a specific task group. By default, **<All>** is selected, indicating all task groups are included in the report.
3. Select a task from the **Task** drop-down list to restrict the report to a specific task. By default, **<All>** is selected, indicating all tasks of the selected task group are included in the report.

4. Specify the range of dates and times the report should include:
   - Select or enter the start date in the From field. By default, this value is the start of the current day a month earlier. For example, if the current day is 04/11/2016, the default value for this field is **03/11/2016 12:00 AM**.
   - Select or enter the end date in the To field. By default, this value is the end of the current day. For example, if the current day is 04/11/2016, the default value for this field is **04/11/2016 11:59 PM**.
5. From the **Output** tab, select one or more of the following options to determine how the report is generated:

Output Option	Description
Save Report to File	Saves the report to the specified file location. Enter or browse to a file path for the report in the field.
Archive Report (SYS Configuration Reports)	Archives the report to the **SYS Configuration Reports** Document Type in OnBase. Enter a description for the report in the Description field. This value is assigned to the Description Keyword Type for the report.
Display Generated Report	Displays the report in a third-party text viewer.

6. Click **OK** to generate the report. Based on your selection, the report may be displayed.

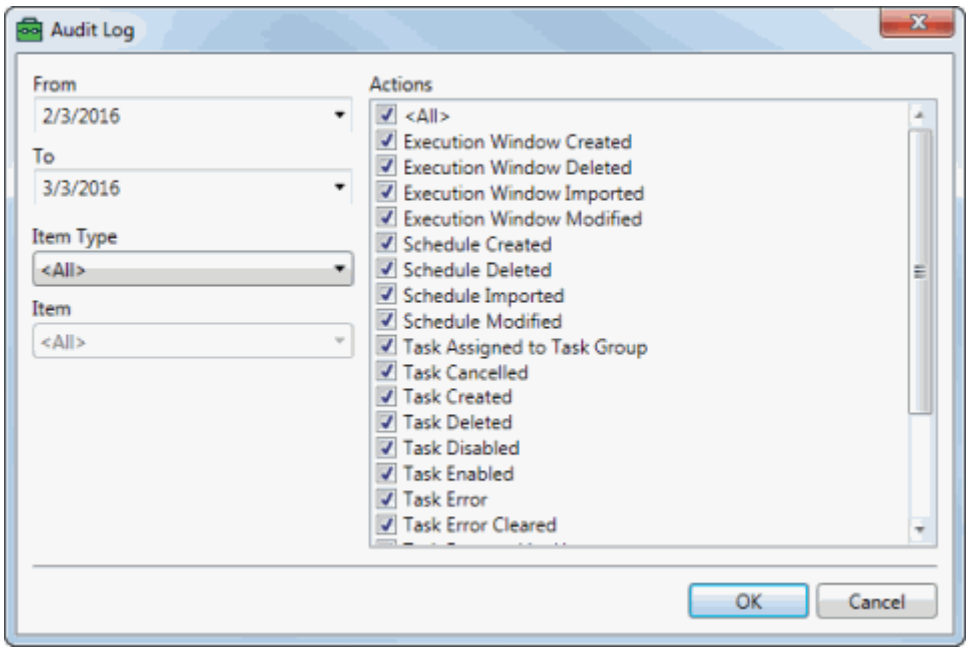
Viewing the Audit Log

The Audit Log allows you to view the changes made to tasks, schedules, and execution windows. The Audit Log displays the time and date a change was made, along with which user made the change.

Note: If the user does not have Manager or Administrator privileges, the **Unity Scheduler Log** privilege is required to view the Audit Log.

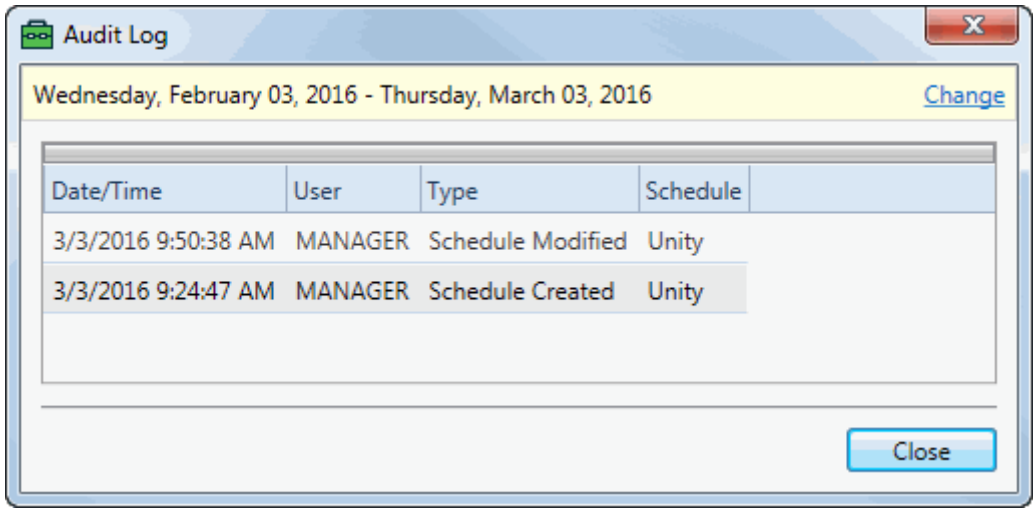
To view the Audit Log:

1. From the **Action** menu or **Action** pane, select **Audit Log.**
2. The **Audit Log** dialog is displayed. In this dialog, you configure the types of information you would like to see in the Audit Log.



   Enter a **From** date to choose the date at which the Audit Log begins.
3. Enter a **To** date to choose the date at which the Audit Log ends. The Audit Log reports changes that occurred on and between the From and To dates.
4. From the **Item Type** drop-down menu, select either:
   - **<All>** - the Audit Log will contain information on all item types and items.
   - **Tasks** - the Audit Log will contain information on changes to Tasks.
   - **Schedules** - the Audit Log will contain information on changes to Schedules.
   - **Execution Windows** - the Audit Log will contain information on changes to Execution Windows.
5. From the **Item** drop-down menu, select the specific Task, Schedule, or Execution Window you would like to view audits for. Or, select **<All>** to view information on all items in your selected item type.
6. Select the **Actions** you would like to include in the Audit Log. Select **<All>** to include all available actions in your audit log.
7. Click **OK** when you are finished configuring the Audit Log.

8. The Audit Log as you configured it is displayed in the **Audit Log** dialog box.



The time span for which the Audit Log was generated, the **Date/Time** of the audit, the **User** who made the audit, the **Type** of audit, and the **Schedule**, **Task**, **Task Group**, or **Execution Window** the audit was performed on is listed here.

Note: Listed column names are dependent on the selected items to be audited.

9. To change the audit window settings, click **Change**.
10. When you are finished viewing the Audit Log, click **Close**.

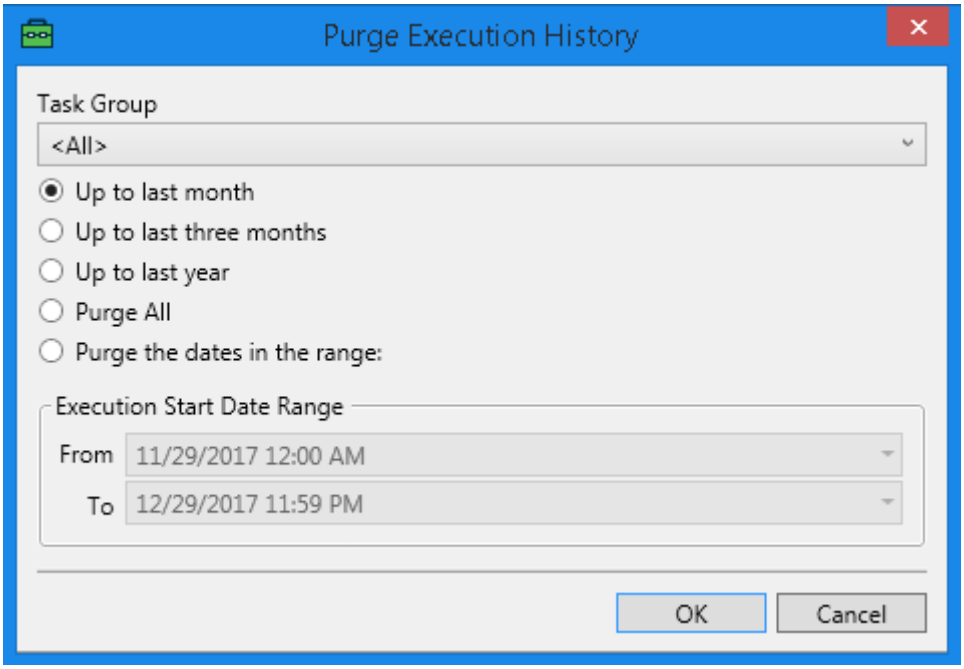
Purging the Execution History

You can purge the Execution History log. This can be done periodically in order to maintain the database.

Tip: You can also create a Unity Scheduler Task that purges the execution history log on a configured schedule. For more information, see Purge Execution History on page 135.

To purge the Execution History:

1. From the **Action** menu or **Action** pane, select **Purge Execution History**. The **Purge Execution History** dialog is displayed.



2. In the **Task Group** drop-down list, select from the following options:
   - **<All>** - Purges the Execution History for all Task Groups.
   - **<Unassigned>** - Purges the Execution History for unassigned Tasks.
   - **<System>** - Purges the Execution History for all System Tasks.

Note: Any created Task Groups that the user has access to can also be selected in the **Task Group** drop-down list.

3. Select from among the following options:
   - **Up to last month** - Purges the Execution History up to the last month.
   - **Up to last three months** - Purges the Execution History up to the last three months.
   - **Up to last year** - Purges the Execution History up to the last year.
   - **Purge All** - Purges the entire Execution History.
   - **Purge the dates in the range:** - Purges the Execution History from within a configured range of dates. In the **Execution Start Date Range** section, select a **From** date and a **To** date.
4. When finished click **OK**, or click **Cancel** to close the dialog without purging the Execution History.

Importing and Exporting Scheduler Configuration Items

The Unity Management Console allows you to seamlessly export configuration items from one database, such as a test database, and import them into another database. Items are exported to an export package. During the import process, you select the export package and choose what type of action you would like to take on items contained in the package. At this time, you can decide whether to create the item in the destination database, map it to an existing item in the destination database, use it to replace an existing item in the destination database, or take no action on the item.

See the following sections for more information:

- Exporting Configuration Items from a Database on page 98
- Importing Configuration Items into a Database on page 110

Note: Depending on system configuration, the Import and Export wizards may enforce certain requirements, such as encryption or file size limits for packages. For more information on these requirements, see your system administrator.

Exporting Configuration Items from a Database

Using the Export Wizard in the Unity Management Console, you can export (copy) configuration items from one database so that they can be imported into another database. The following types of configuration items can be exported:

- Execution Windows
- Schedules
- Tasks

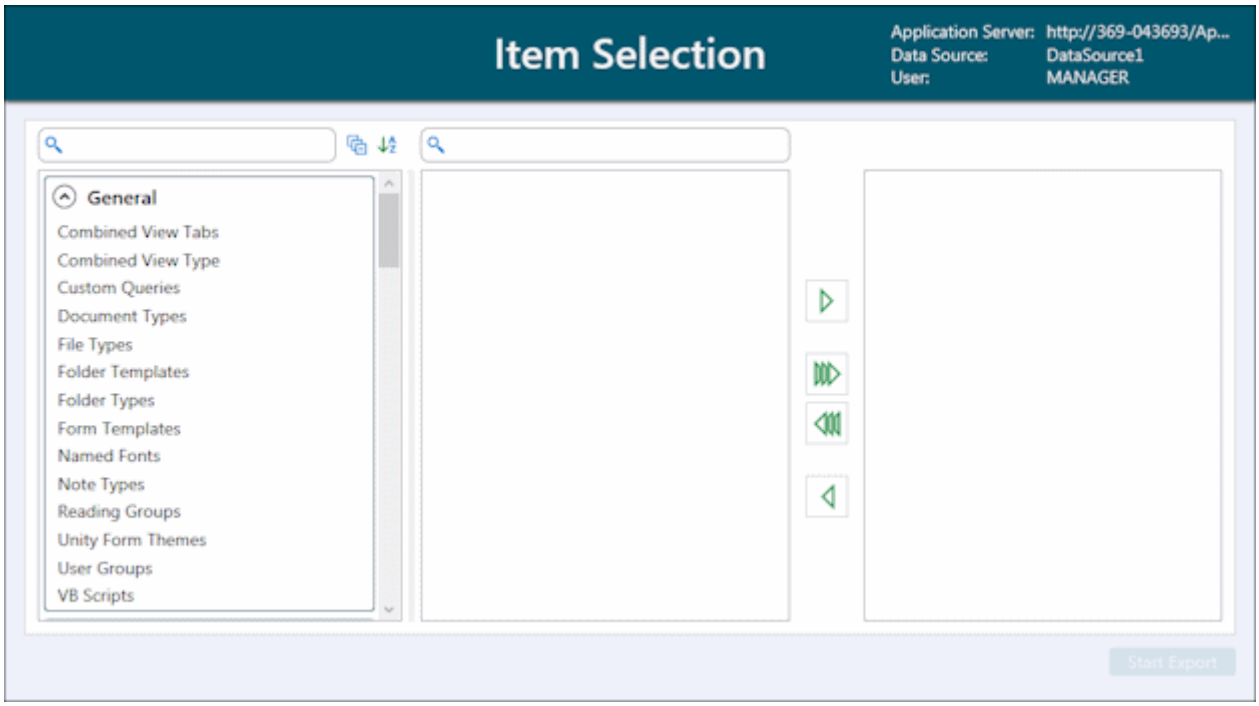
The Export Wizard works by allowing you to manually select specific items from the above categories. These items can then be exported into an export package. The information contained in this package can then be extracted by the Import Wizard in another database.

For more information on the Import Wizard, see Importing Configuration Items into a Database on page 110.

To create an export package:

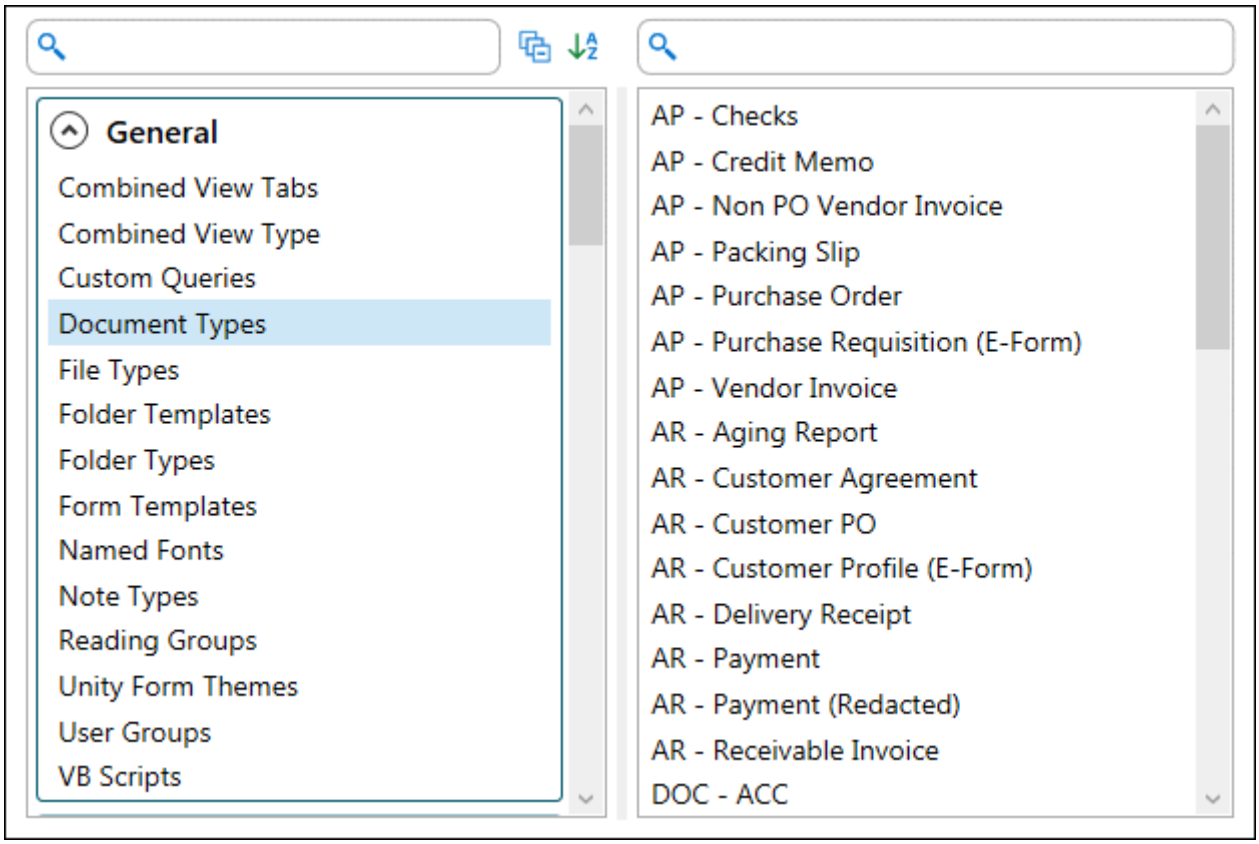
1. From the Unity Management Console, do one of the following:
   - Select **Action** | **Export**.
   - Click the **Export** button from the **Action** pane.

The Export wizard **Item Selection** page is displayed:



2. Verify that the information listed for the **Application Server** and **Data Source** is correct.

3. Select a configuration item type from the item type selection list to display all available items in the database for that configuration item type:



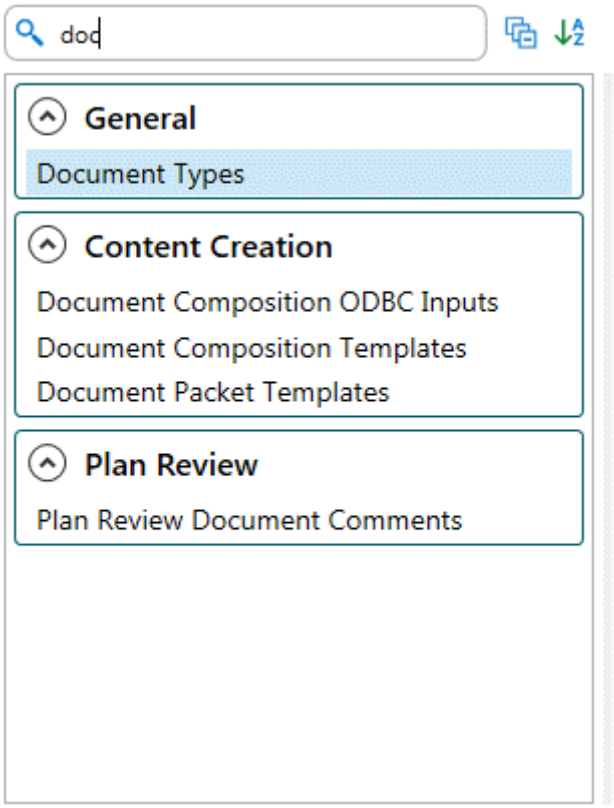
Note: The configuration item types displayed in the selection list is dependent on your licensing and the context from which you access the Export wizard.

By default, configuration item types are organized in groups. To collapse all groups, click **Collapse All**:

To ungroup configuration item types, click **Ungroup Items**:

To regroup configuration item types, click **Group Items**:

To search for a specific configuration item type, enter a search term in the search field. The selection list is filtered as you type:

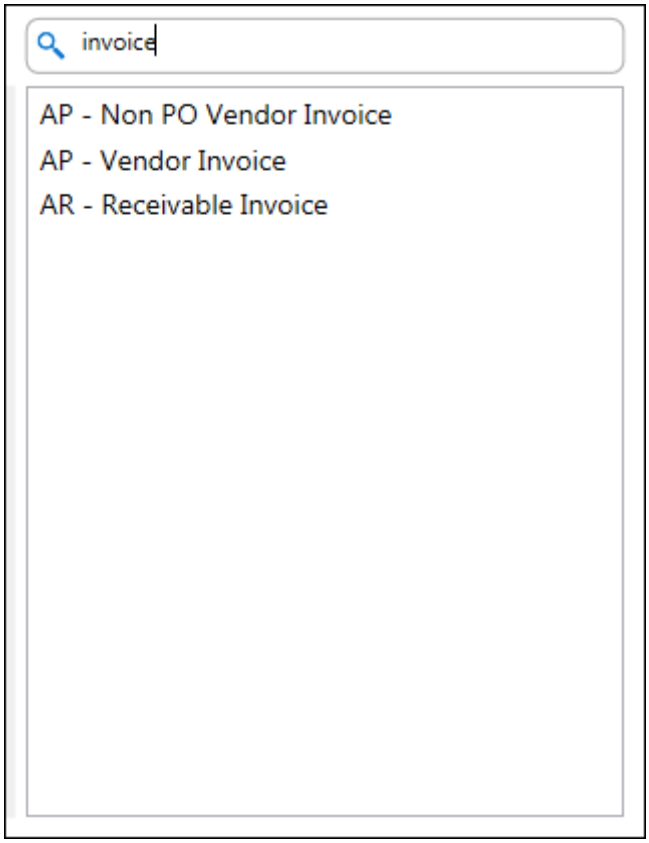


4. Select one or more configuration items from the configuration item selection list.

   To select multiple configuration items, do one of the following:

   - Hold **Ctrl** and click individual configuration items.
   - Select a configuration item, hold **Shift**, and click another configuration item to select all configuration items listed between the two.

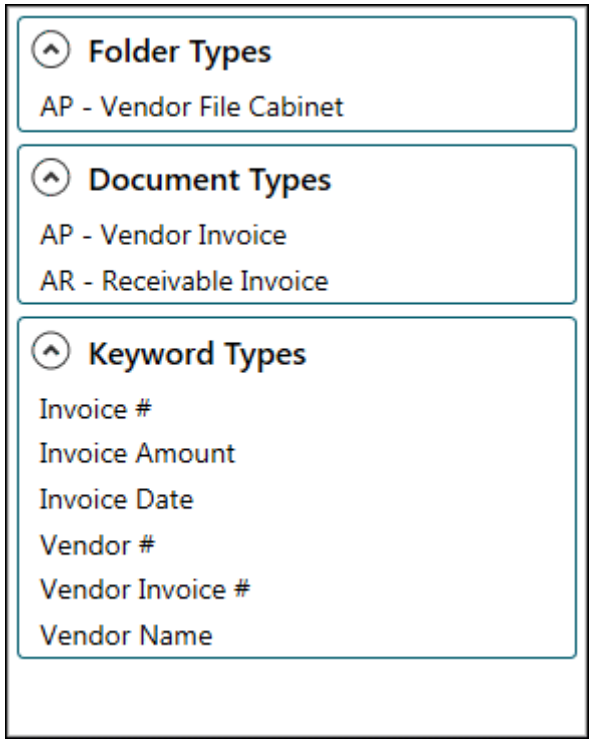
   To search for a specific configuration item, enter a search term in the search field. The selection list is filtered as you type:



5. Click **Add** to add the selected configuration items to the export package:

   To add all configuration items in the selection list to the export package, click **Add all**:

6. Repeat the process as necessary to add different types of configuration items. The configuration items are listed and grouped by configuration item type in the export package list:



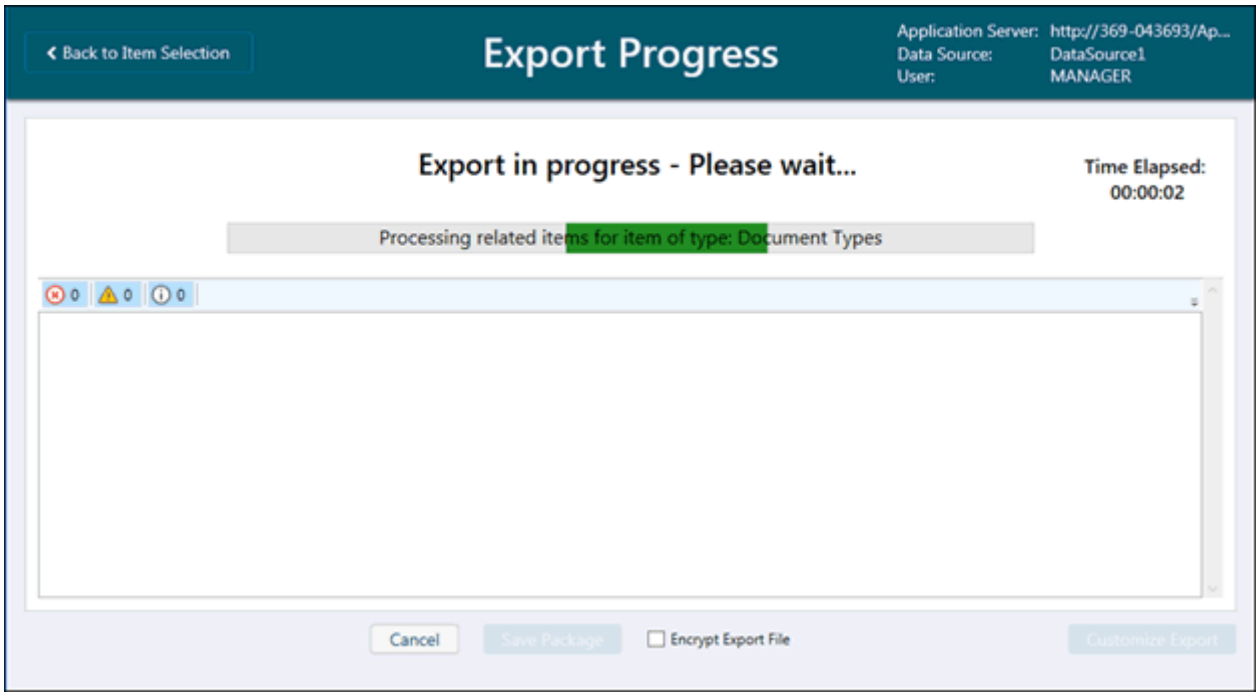
To collapse a configuration item group in the export package list, click the collapse button:

To remove selected configuration items from the export package list, click **Remove**:

To remove all configuration items from the export package list, click **Remove all**:

Note: When clicking **Remove all**, you are prompted to confirm the action.

7. Click **Start Export**. The **Export Progress** page is displayed and the export process begins:



8. When the export process is complete, the **Export Results** page is displayed and any relevant errors, warnings, or informational messages are listed in order of severity, sorted by event type.

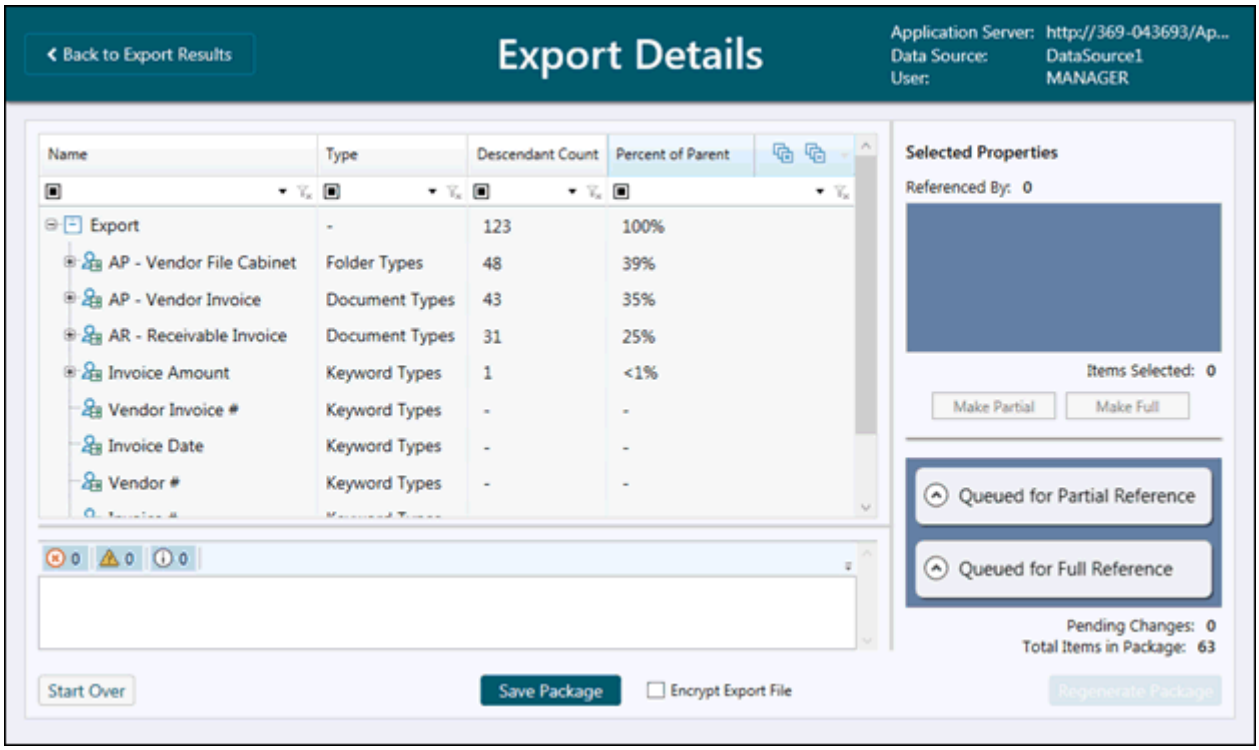
   Warnings cause the export to be partially successful, allowing you to still download and save the export package. Errors cause the export to fail, preventing you from downloading and saving the export package. An example of an error is that a required document, such as a template, could not be exported.

   To toggle whether errors, warnings, or informational messages are shown, click **Show Errors**, **Show Warnings**, or **Show Informational Messages**, respectively:

Tip: You can copy errors, warnings, and informational messages to your clipboard by right-clicking the message pane and selecting **Copy** or by selecting a message and pressing **Ctrl + C**.

If changes to the export package are necessary, click **Back to Item Selection** to return to the **Item Selection** page.

9. To customize the export package, click **Customize Export**. The **Export Details** page is displayed:



To return to the **Export Results** page without regenerating the export package, click **Back to Export Results** and skip to step 1.

To return to the **Item Selection** page, click **Start Over**.

10. In the export package item list, the following columns are displayed:

Column	Description
Name	The name of the configuration item.
Type	The configuration item type.
Descendant Count	The number of configuration item descendants. Descendants are configuration items that are implicitly added to the export package due to a reference to another configuration item in the export package. Configuration items explicitly selected are considered as descendants of the overall export process.
Percent of Parent	The percentage the configuration item makes up of its parent configuration item. Parents are configuration items that are referenced by other configuration items in the export package. The overall export process is considered as the parent of all explicitly selected configuration items. To view all descendants of all configuration items in the export package item list, click **Expand All**:  To hide all descendants of all configuration items in the export package item list, click **Collapse All**: 

To view the descendants of a configuration item, click expand:

To hide the descendants of a configuration item, click collapse:

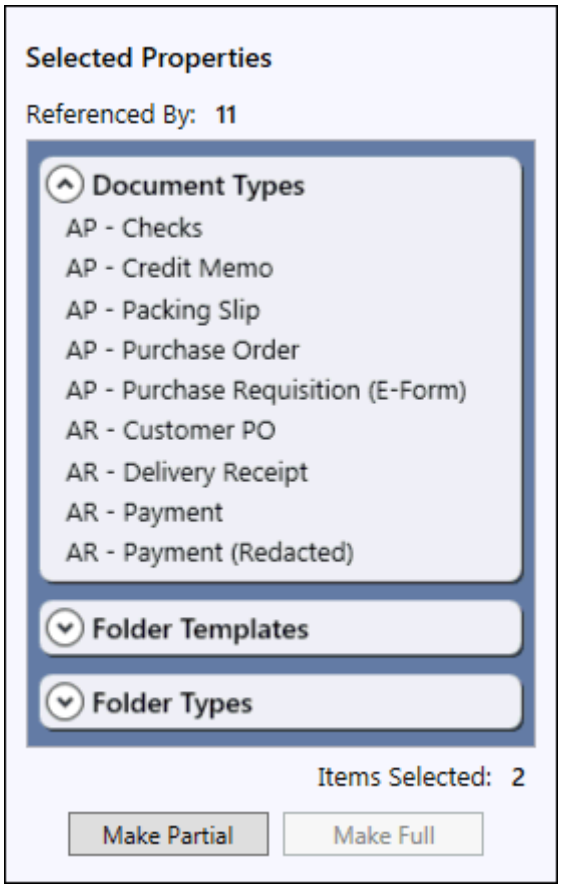
Note the following:

- The item list can be filtered and sorted by each column. By default, the list is sorted in descending order by Percent of Parent.
- Configuration items explicitly selected for the export package are designated with the User Exported Item icon:

- Configuration items that reference multiple items in the export package are displayed as descendants under each referenced item. If a displayed descendant is also the descendant of a configuration item more closely related to the configuration items explicitly selected for the export package, it is designated with the following icon:

- Configuration items that cannot be customized are designated with the Map Only Item icon:

11. Select a configuration item to view its descendants in the **Selected Properties** pane. If multiple configuration items are selected, all descendants of all selected configuration items are displayed. The number of configuration items selected and the number of descendants that reference the selected configuration items are displayed:

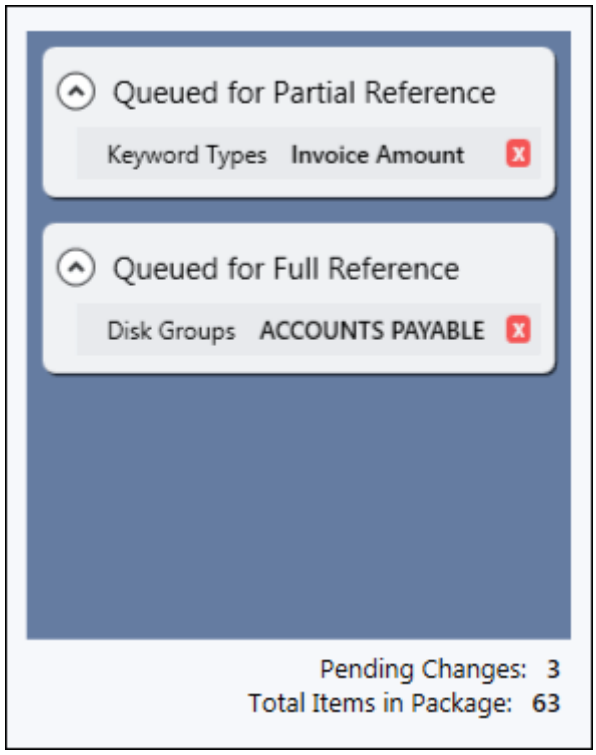


Descendants are grouped by configuration item type. To collapse a configuration item group, click the collapse button:

12. To queue the selected configuration items for partial reference, click **Make Partial**. To queue the selected configuration items for full reference, click **Make Full**.

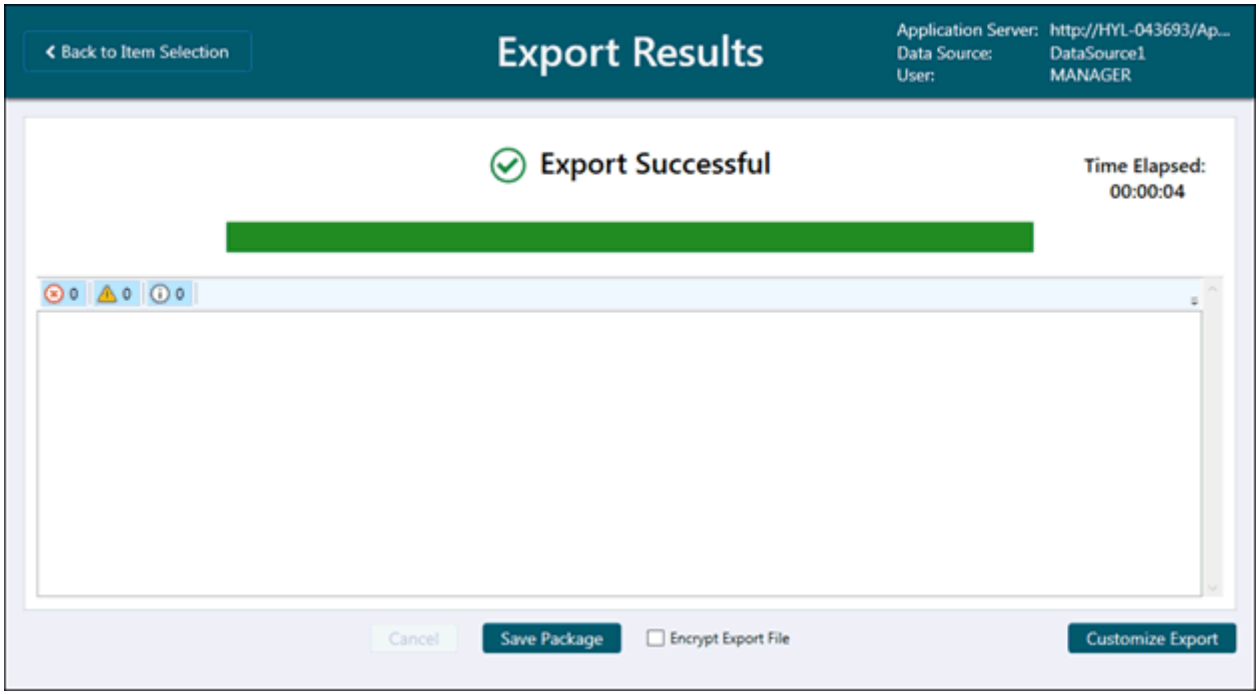
Note: Configuration items explicitly selected for export cannot be queued for partial reference.

The queued configuration items are displayed. The number of changes to be made to the export package and the total number of unique configuration items to be included in the export package are displayed:



To remove a configuration item from a reference queue, click remove:

13. Click **Regenerate Package**. The **Export Progress** page is displayed. With the customizations applied, the export process begins again, and the **Export Results** page is displayed when the export process is complete:



14. Do one of the following to specify the encryption of the export package:
    - To encrypt and require a password for the export package, select **Encrypt Export File**.
    - To export the package without encryption and password protection, deselect **Encrypt Export File**.

Note: Depending on system settings, the **Encrypt Export File** option may be enabled or disabled. If the option is enabled, entering a password for the package is optional. If the option is disabled, entering a password for the package is required.

15. Click **Save Package**.
16. If **Encrypt Export File** was selected, enter a password in the **Password** field, and reenter it in the **Confirm** field.

    Keep this password in a safe place. It is required when uploading the package in the Import wizard. If the password is lost, it cannot be retrieved.

Note: Passwords must adhere to any displayed requirements. All passwords must be at least 14 characters in length. If a password policy is being used and it requires fewer than 14 characters, the export cannot be completed.

17. In the Windows **Save As** dialog box, specify a location and enter a file name for the export package. Ensure that **Export package files (*.expk)** is selected as the **Save as type**.

18. Click **Save**.
19. Close the **Export** dialog box.

Considerations for Exporting Configuration Items

The following items are considerations to keep in mind when importing certain configuration item types into the system:

- When exporting certain configuration items, related configuration items may also automatically be exported, although they are not displayed in the export summary or available to select for export. For example, associated Disk Groups, User Groups, and Document Type Groups are exported and available to import into a destination database.
- When exporting a configuration item, not all of its related configuration items are automatically exported, since not all configuration items are supported for import. Therefore, certain items may require manual configuration after import. For a complete list of configuration items supported for import, see the following section.

Importing Configuration Items into a Database

Using the Import Wizard in the Unity Management Console, you can import configuration items from another database. The following types of configuration items can be imported:

- Execution Windows
- Life Cycles
- Queues
- Schedules
- Task Groups
- Tasks
- Timers

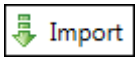
The Import Wizard works by referencing an export package created by the Export Wizard. Once the Import Wizard extracts the information from the package, you can manually select specific items from the package to import into the database.

For more information on exporting configuration items, see Exporting Configuration Items from a Database on page 98.

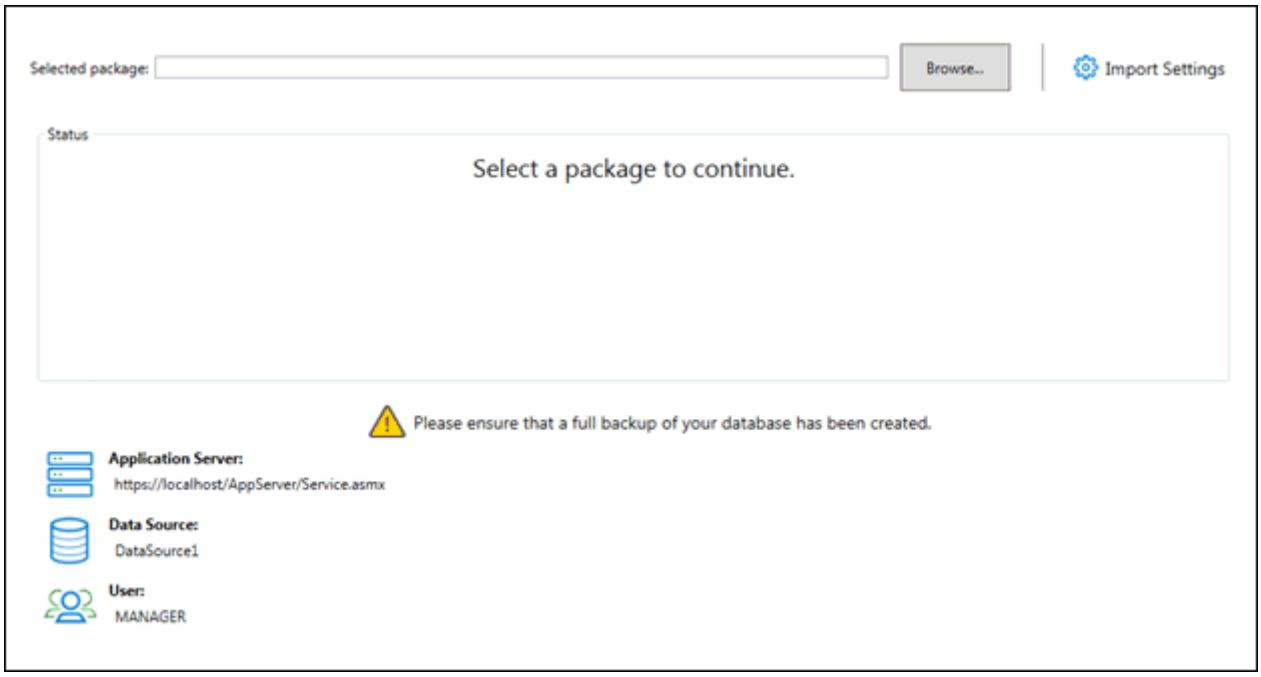
Caution: It is strongly recommended that you back up your database before importing configuration items into it. Importing items into your database has widespread implications and can have adverse effects on existing processes if not properly managed.

To extract and import configuration items from an export package:

1. From the Unity Management Console, do one of the following:
   - Select **Action** | **Import**.
   - Click the **Import** button from the **Action** pane.



The **Import** wizard is displayed:



2. Verify that the information listed for the **Application Server** and **Data Source** is correct.

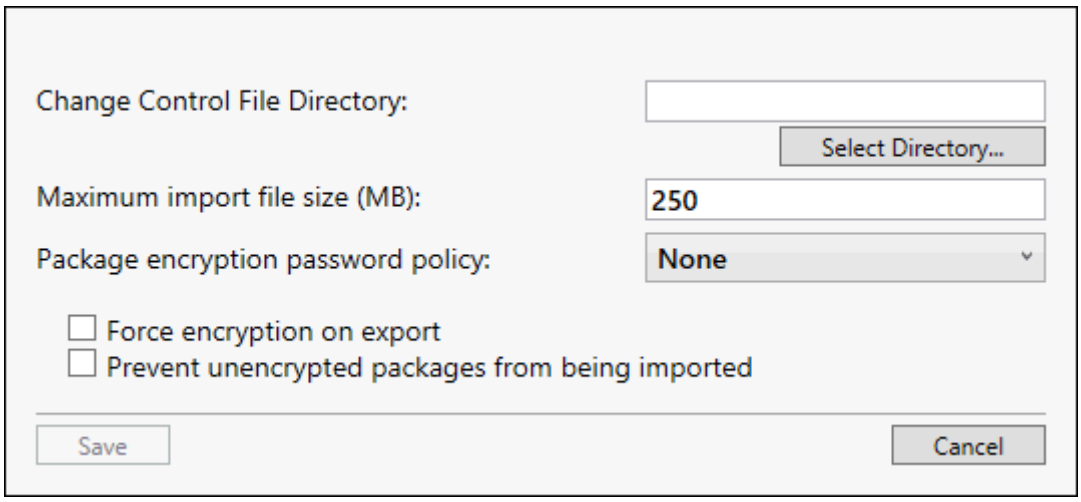
Note: You are notified if a previous import was left incomplete. You cannot perform a new import until the previous import is completed. To resolve the previous import, evaluate and complete it in Import Management, or contact your first line of support. For more information on Import Management, see the section on viewing import history in the **System Administration** module reference guide.

If change control settings have not been configured, continue to step 3. Otherwise, skip to step 7.

Note: Access to import settings is also available from the import layout.

3. Configure change control settings by selecting **Import Settings | Change Control Settings**.

The **Change Control Settings** dialog box is displayed:



4. Enter a directory path in the **Change Control File Directory** field, or click **Select Directory** to browse for and select a directory.

Note: A Change Control File Directory must be specified in order for users to perform an import.

When specifying a directory, consider the following:

- The specified directory must be accessible to all Application Servers and clients.
- The specified directory must be writable by all Application Servers.
- The Change Control File Directory is used during the import process to store external files associated with configuration items that are imported. After import, the imported external files are stored in a subdirectory of the specified directory.
- An **Import** folder is created in the specified directory if one does not already exist.

5. Select or enter a value for the following options:

Option	Description
Maximum import file size (MB)	Specifies the largest allowed file size (in megabytes) for a package being imported through the Import wizard.
Package encryption password policy	Enforces a password policy to encrypted export packages. When the administrator enters a password for an export package, the password must adhere to the selected password policy before the package is exported. Select **None** to allow the administrator to use a password that does not adhere to a password policy. For more information on password policies, see the section on enforcing user password security in the **System Administration** module reference guide.

Option	Description
Force encryption on export	When selected, selects and disables the **Encrypt Export File** option in the Export wizard. This forces the administrator to enter a password for the package being exported. When deselected, enables the **Encrypt Export File** option in the Export wizard. This allows the administrator to optionally enter a password for the package being exported.
Prevent unencrypted packages from being imported	When selected, only encrypted password-protected packages can be imported through the Import wizard. When deselected, any valid package can be imported through the Import wizard.

6. Click **Save**.
7. If necessary, select **Import Settings** | **Import Management** to view import history. For more information, see the Viewing Import History section of the **System Administration** module reference guide.

Note: Access to import settings is also available from the import layout.

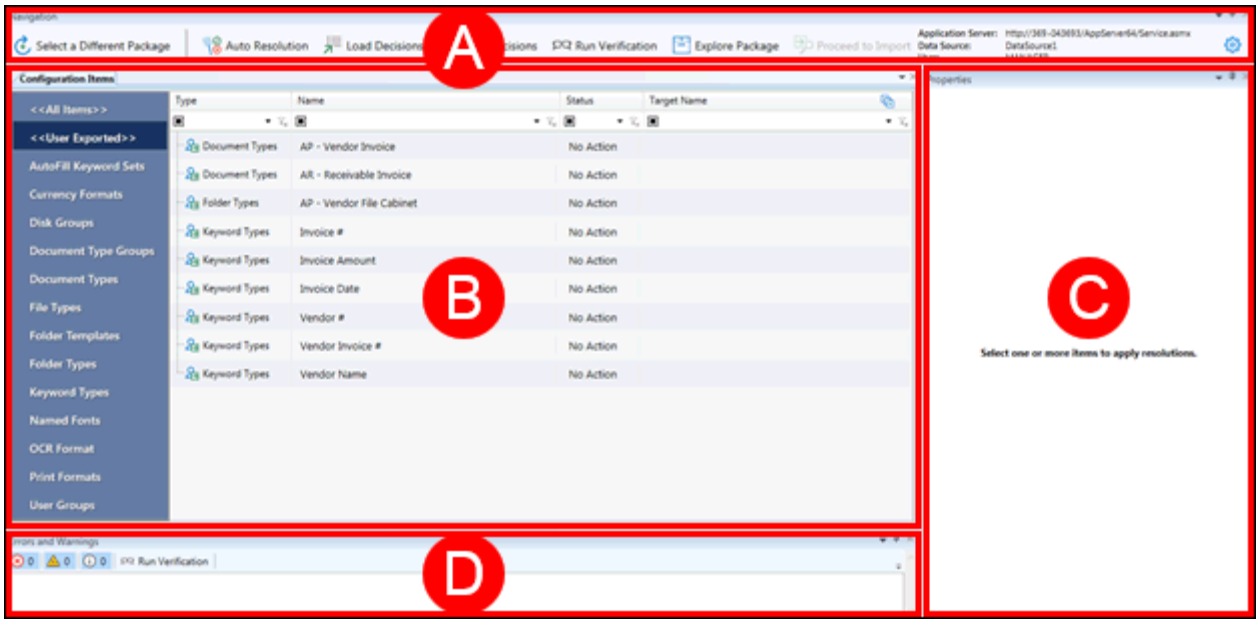
8. In the **Selected package** field, enter the directory and file name of the export package to import, or click **Browse** to locate and select it. Export packages have a file extension of **.expk**. If you select any other file type, an error is displayed in the **Status** area of the **Import** dialog box.

Note: If the export package is open or has been modified outside of OnBase, an error is displayed, and you are prevented from importing the package. If the package is open (e.g., using a zip program), close the package file. If the export package was modified outside of OnBase, select a different export package, or create a new one.

9. If the package is encrypted, you must enter the password for the package and click **Decrypt**:

Note: Certain packages may not be valid for import. Configuration settings may restrict packages due to file size or lack of encryption. Also, depending on the context from which you are accessing the Import wizard, certain packages may be invalid for the current context. For example, if you attempt to import a package to the Reporting Dashboards Import wizard that was exported from the Configuration Export wizard, an error is displayed in the **Status** area below the package selection area.

10. The import layout is displayed:

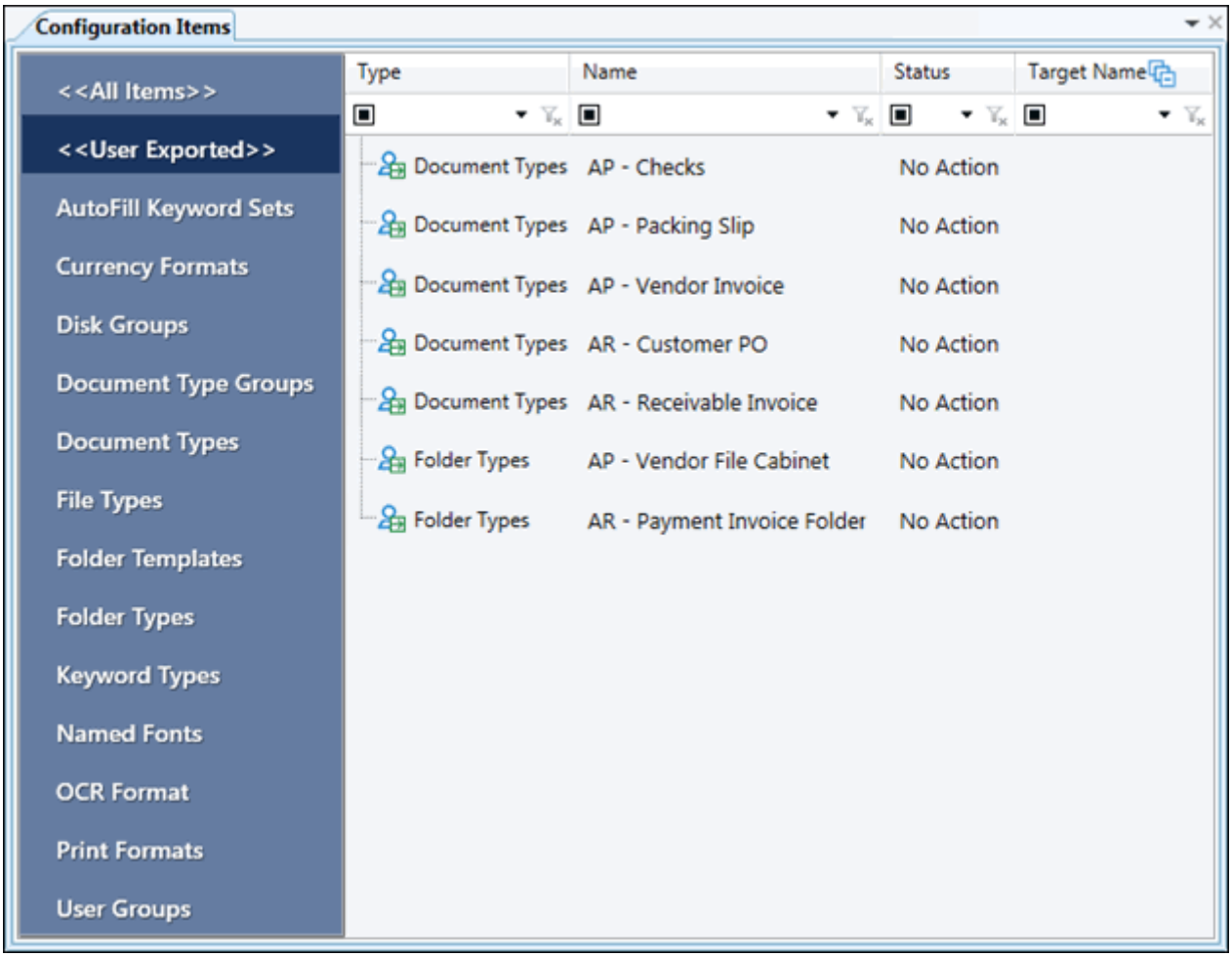


Item	Description
A	**Navigation** bar
B	**Configuration Items** pane
C	**Properties** pane
D	**Errors and Warnings** pane

The Application Server, data source, user, and package name are displayed in the **Navigation** bar.

Note: Import settings can be accessed by clicking the gear icon.

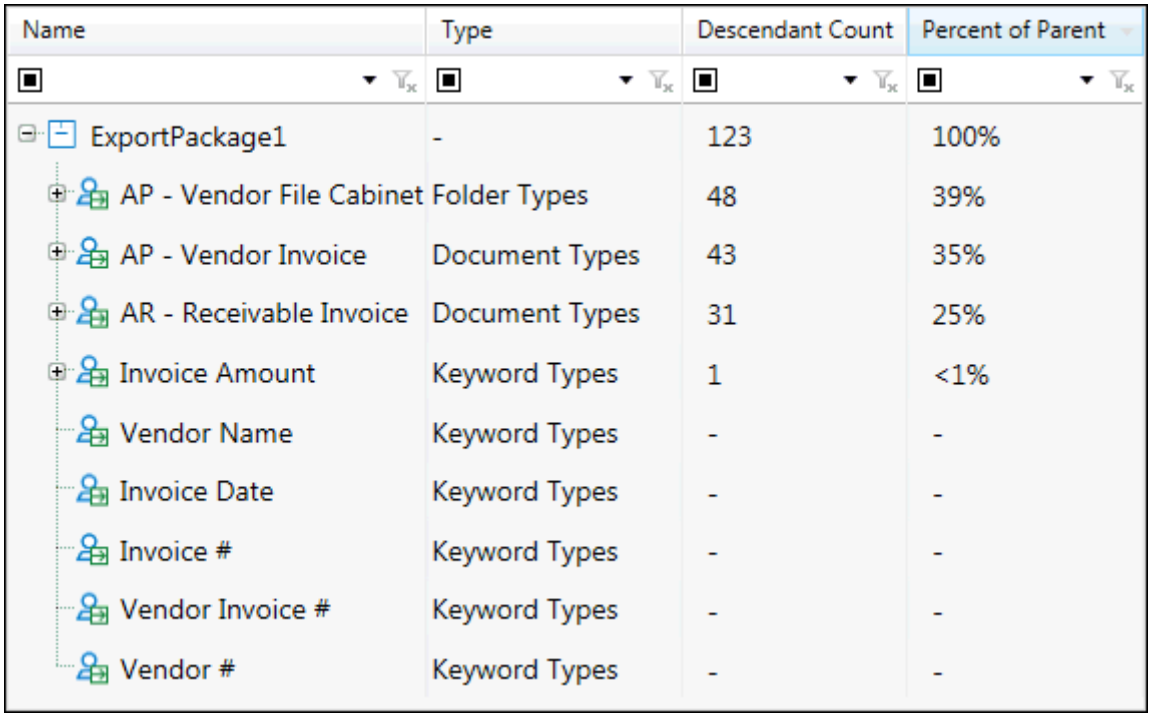
11. In the **Configuration Items** pane, all configuration items included in the export package are listed. By default, **<<User Exported>>** is selected in the left pane, and the configuration items explicitly selected by the user who created the export package are displayed:



To view all configuration items included in the export package, select **<<All Items>>** in the left pane. To view explicit and implicit configuration items by type, select a configuration item type in the left pane.

To cancel the current import process and start a new import process using a different export package, click **Select a Different Package** on the **Navigation** bar. Any decisions made during the current import process are not saved, and you are returned to the initial **Import** wizard page.

12. To view more information about user-selected items and the relationship between all items in the export package, click **Explore Package** on the **Navigation** bar. The explore package dialog box is displayed:



Name	Type	Descendant Count	Percent of Parent
ExportPackage1	-	123	100%
AP - Vendor File Cabinet	Folder Types	48	39%
AP - Vendor Invoice	Document Types	43	35%
AR - Receivable Invoice	Document Types	31	25%
Invoice Amount	Keyword Types	1	<1%
Vendor Name	Keyword Types	-	-
Invoice Date	Keyword Types	-	-
Invoice #	Keyword Types	-	-
Vendor Invoice #	Keyword Types	-	-
Vendor #	Keyword Types	-	-

13. In the export package item list, the following columns are displayed:

Column	Description
Name	The name of the configuration item.
Type	The configuration item type.
Descendant Count	The number of configuration item descendants. Descendants are configuration items that are implicitly added to the export package due to a reference to another configuration item in the export package. Configuration items explicitly selected are considered as descendants of the overall export process.
Percent of Parent	The percentage the configuration item makes up of its parent configuration item. Parents are configuration items that are referenced by other configuration items in the export package. The overall export process is considered as the parent of all explicitly selected configuration items. To view all descendants of all configuration items in the export package item list, click **Expand All**:  To hide all descendants of all configuration items in the export package item list, click **Collapse All**: 

To view the descendants of a configuration item, click expand:

To hide the descendants of a configuration item, click collapse:

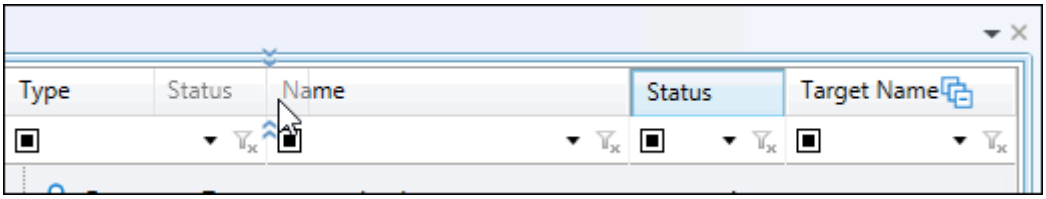
Note the following:

- The item list can be filtered and sorted by each column. By default, the list is sorted in descending order by Percent of Parent.
- Configuration items explicitly selected for the export package are designated with the User Exported Item icon:

- Configuration items that reference multiple items in the export package are displayed as descendants under each referenced item. If a displayed descendant is also the descendant of a configuration item more closely related to the configuration items explicitly selected for the export package, it is designated with the following icon:

- Configuration items that cannot be customized are designated with the Map Only Item icon:

14. Close the explore package dialog box to return to the import layout.
15. The columns on the **Configuration Items** pane can be customized in the following ways:
    - To sort configuration items alphabetically by **Type**, **Name**, **Status**, or **Target Name**, click the corresponding column header.
    - To reorder columns, click and drag a column header to the edge of another column header:



    - To filter configuration items, use the filter controls at the top of each column. For more information, see Filtering Import Configuration Item Columns on page 37.
    - To search for a specific value in a column, enter the value in the filter control for that column. For example, enter the name of a configuration item in the **Name** field to search for that item by name. The configuration item list is filtered as you type.

Tip: Click and drag the borders of the columns in the **Configuration Items** panel to resize them.

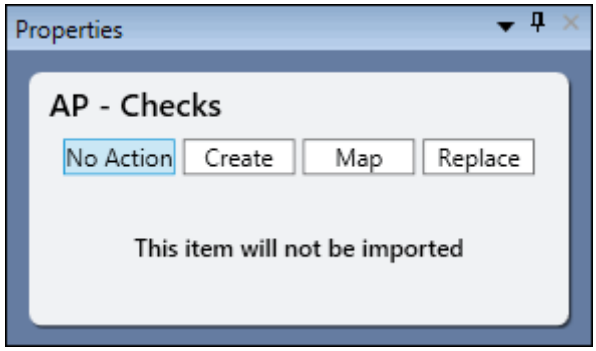
16. Each configuration item must be configured with a decision option. To decision configuration items, see the following:
    - To manually decision configuration items, continue to step 17.
    - To automatically decision configuration items, see Auto Resolution on page 126.
    - To load decisions previously saved to an XML file, see Load Decisions on page 127.

Note: By default, all configuration items included in the export package are configured to not be imported, and the decision status **No Action** is displayed in the **Status** column.

17. One or more configuration items can be decisioned at a time. To decision configuration items, see the following:
    - To decision a single configuration item, continue to step 18.

- To decision multiple configuration items simultaneously, skip to step 19.

18. To decision a single configuration item:
    a. Select a configuration item in the **Configuration Items** pane. The available decision options are displayed in the **Properties** pane:



Note: Available decision options may vary based on the configuration item.

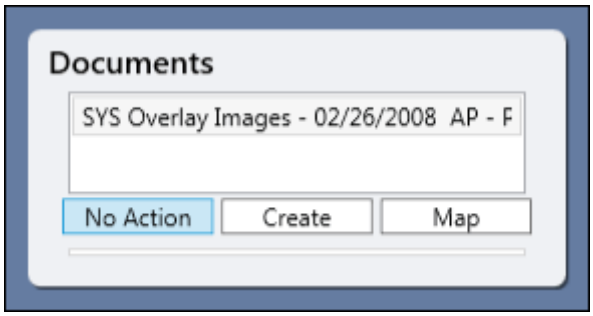
    b. Select one of the following decision options:

Decision Option	Description
No Action	The selected item will not be imported into the destination database.
Create	The selected item will be created in the destination database. After selecting **Create**, the **New Name** field is displayed. If necessary, enter a different name for the item to be created in the destination database. The **New Name** field respects the maximum number of characters allowed for names belonging to the configuration item type.

Decision Option	Description
Map	The selected item will be mapped to a configuration item in the destination database. For example, if you are importing an AutoFill Keyword Set, you can map its Keyword Types to Keyword Types already in the destination database if the appropriate Keyword Type names already exist. After selecting **Map**, a list of available configuration items in the destination database is displayed. The ID number of each configuration item is included in parentheses. Select the appropriate item to which to map. When selecting **Map**, consider the following: • Selecting **Map** does not modify the configuration items being mapped to in the destination database. • When **Map** is selected for configuration items that are associated with items that are not set to **Map**, after import, the associated items are then associated with the configuration items to which the selected configuration items were mapped. For example, if a Document Type is set to **Create** and its Keyword Types are set to **Map**, after import, the Document Type created in the destination database is associated with the Keyword Types to which its Keyword Types were mapped. • When **Map** is selected, a configuration item in the destination database is automatically selected if it matches the name of the configuration item being imported. If the configuration item selected in the **Configuration Items pane** has associated children configuration items, **Apply Decision To Children** is enabled. Click **Apply Decision To Children** to use the decision options selected for the parent configuration item for all its children configuration items. **Note:** If a configuration item is mapped to a destination configuration item that has already been targeted for Map or Replace by another configuration item in the import package, a warning is displayed, but the decision is allowed.

Decision Option	Description
Replace	The selected item will replace a specified configuration item in the destination database. After selecting **Replace**, the **New Name** field is displayed, along with a list of available configuration items in the destination database. Select the appropriate item to replace. If necessary, enter a different name for the item in the destination database. The **New Name** field respects the maximum number of characters allowed for names belonging to the item type you are updating. **Note:** When **Replace** is selected, an item in the destination database is automatically selected if it matches the name of the item being imported. If the configuration item selected in the **Configuration Items** pane has associated children configuration items, **Apply Decision To Children** is enabled. Click **Apply Decision To Children** to use the decision options selected for the parent configuration item for all its children configuration items.

c. If the configuration item selected is a Document Type with associated overlays, the **Documents** section is displayed:

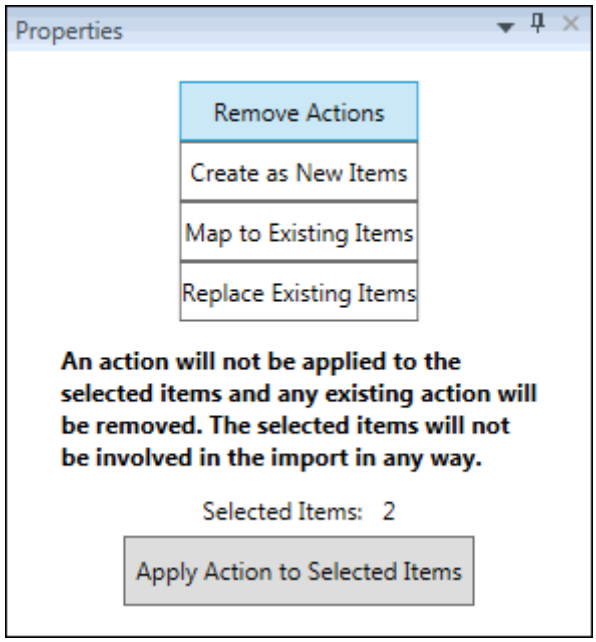


For each overlay listed, select **No Action**, **Create**, or **Map**. If **Map** is selected, select an overlay to map to from the list that is then displayed.

d. Continue to step 20.

19. To select the same decision options for multiple configuration items simultaneously:
    a. Select multiple configuration items in the **Configuration Items** pane using one of the following methods:
        - Hold **Ctrl** and click multiple configuration items.
        - Press **Shift + Down Arrow** to select the configuration item below the selected configuration item in addition to the selected configuration item.
        - Press **Shift + Up Arrow** to select the configuration item above the selected configuration item in addition to the selected configuration item.
        - Press **Ctrl + Shift + End** to select all configuration items below the selected configuration item, including the selected configuration item.
        - Press **Ctrl + Shift + Home** to select all configuration items above the selected configuration item, including the selected configuration item.
        - Hold **Shift** and click two configuration items to select them and all configuration items between them.

        The available decision options are displayed in the **Properties** pane:



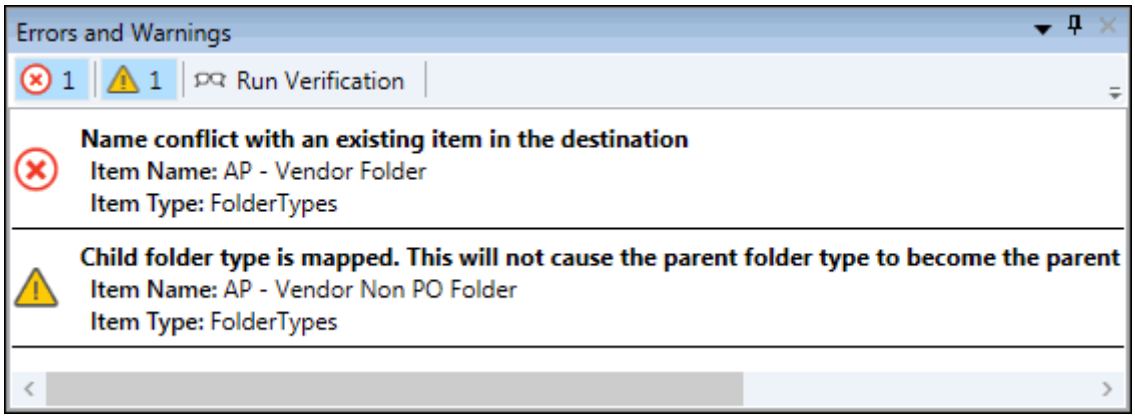
    b. Select one of the following decision options:

Decision Option	Description
Remove Actions	The selected items will not be imported into the destination database. Previous decisioning for any of the selected configuration items will be removed.
Create as New Items	The selected items will be created in the destination database.

Decision Option	Description
Map to Existing Items	The selected items will be mapped to configuration items in the destination database whose names match exactly. For configuration items whose name does not have an exact match, no action will be taken.
Replace Existing Items	The selected items will replace configuration items in the destination database whose names match exactly. For configuration items whose name does not have an exact match, no action will be taken.

c. Click **Apply Action to Selected Items**.

20. After all configuration items have been decisioned, click **Run Verification**.
21. If errors or warnings result from verification, they are listed in the **Errors and Warnings** pane in order of severity, sorted by event type:



Errors must be resolved before proceeding to import. An example of an error is that a configuration item with the decision option **Create** is configured to use the name of a configuration item that already exists in the system.

Warnings indicate import may produce unexpected results, but are not required to be resolved before proceeding to import. An example of a warning message is that mapping a child folder will not cause the parent folder type to become the parent of the mapped folder type. If information in the warning message describes unintended behavior, resolve the warning before proceeding to import. For more information about specific warning messages, contact your first line of support.

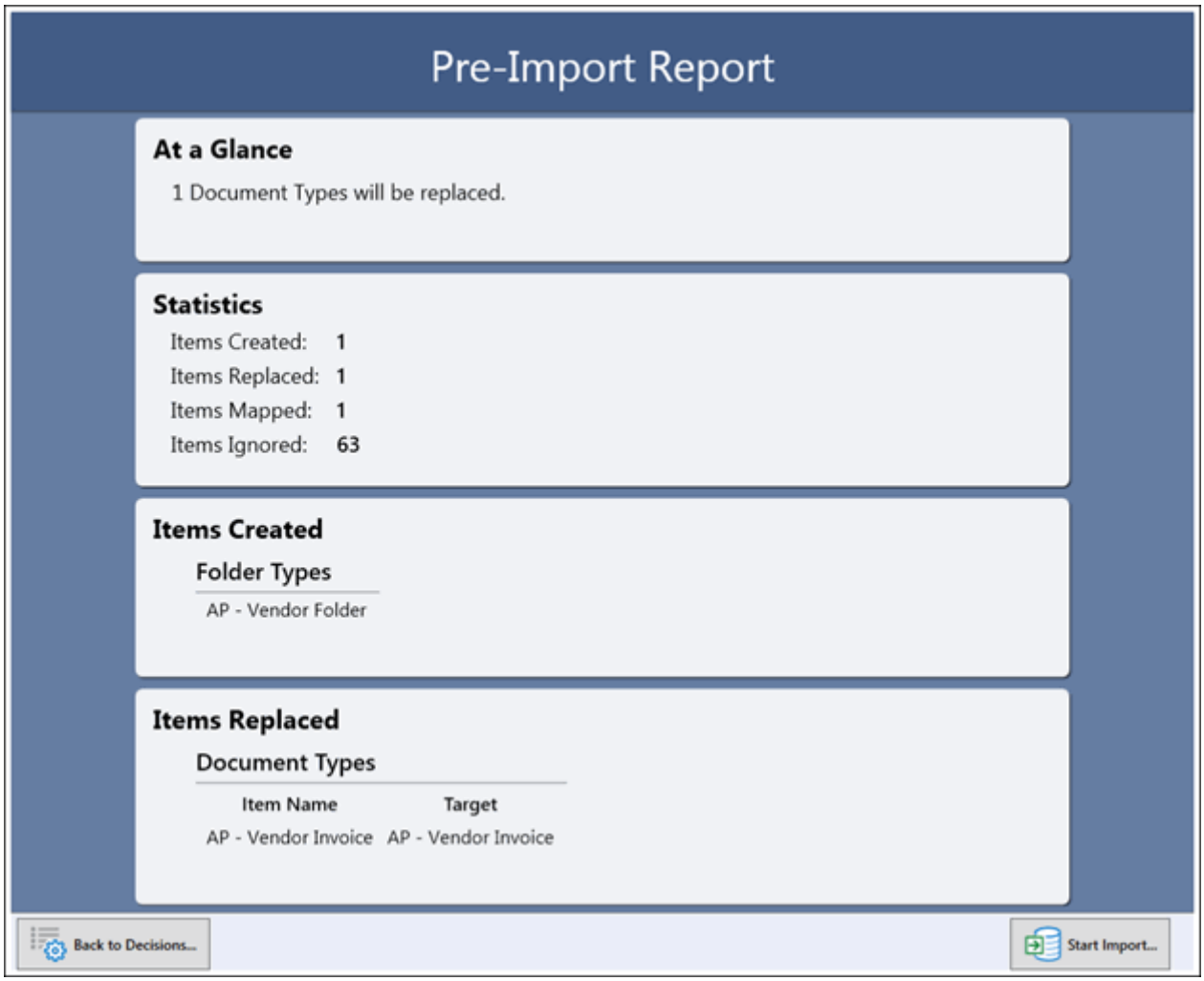
Tip: Double-click on an error or warning to select the affected configuration item in the **Configuration Items** pane and display its selected decision option in the **Properties** pane.

Tip: You can copy errors and warnings to your clipboard by right-clicking the **Errors and Warnings** pane and selecting **Copy** or by selecting a message and pressing **Ctrl + C**.

After resolving errors and warnings, click **Run Verification**.

22. Click **Proceed to Import**.

23. The **Pre-Import Report** page is displayed:



The following sections are displayed:

Section	Description
At a Glance	Displays a summary of the actions that will be taken during the import process.

Section	Description
Statistics	Displays the number of configuration items selected for each decision option: • **Items Created**: the number of configuration items decisioned as **Create**. • **Items Replaced**: the number of configuration items decisioned as **Replace** • **Items Mapped**: the number of configuration items decisioned as **Map** • **Items Ignored**: the number of configuration items decisioned as **No Action**
Items Created	Lists the configuration items decisioned as **Create**, organized by configuration item type.
Items Replaced	Lists the item name and target name of the configuration items decisioned as **Replace**, organized by configuration item type.

To return to the previous page and edit decisions, click **Back to Decisions**.

To verify the information displayed in the **Pre-Import Report** and begin import, click **Start Import**.

24. Once the import is complete, the **Post-Import Report** is displayed and indicates whether the import was successful:

If the import is unsuccessful or partially successful, errors or warnings are listed. For more information about specific error or warning messages, contact your first line of support.

Information regarding the import is stored in a **SYS Verification Reports** Document Type document that is automatically generated.

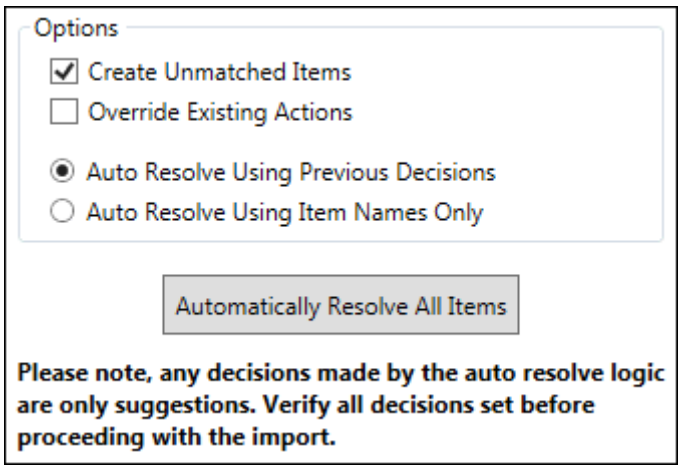
Note: Configuration items decisioned as **No Action** are not displayed in the import verification report document.

25. Click **Finish**.

Auto Resolution

To automatically decision all configuration items listed in the export package:

1. Click **Auto Resolution**. The Auto Resolution dialog box is displayed:



2. Select **Create Unmatched Items** to assign the **Create** decision option to any configuration items for which a matching item cannot be found to map to. Without this option selected, any configuration items that do not have a match will not have their decision option changed. This option is selected by default.
3. Select **Override Existing Actions** to allow automatic resolution to override and reassign any decision options that have already been selected by the user.
4. To automatically resolve items based on decisions made for those items during a previous import, select **Auto Resolve Using Previous Decisions**. To automatically resolve items based on item name only, select **Auto Resolve Using Item Names Only**.

Note: If a configuration item has not been previously imported, it will be resolved based on item name.

5. Click **Automatically Resolve All Items**.

Caution: Any decisions made by the automatic resolution logic are only suggestions. Verify all decisions before proceeding to import. Depending on how the decision options are automatically assigned, you still may need to manually decision some configuration items.

Save and Load Decisions

Decisions made during the import process can be saved to an XML file and loaded during another import process.

Save Decisions

To save decisions:

1. Click **Save Decisions**. The **Save As** dialog box is displayed.
2. Specify a file name and select a location to save the file.
3. Click **Save**.

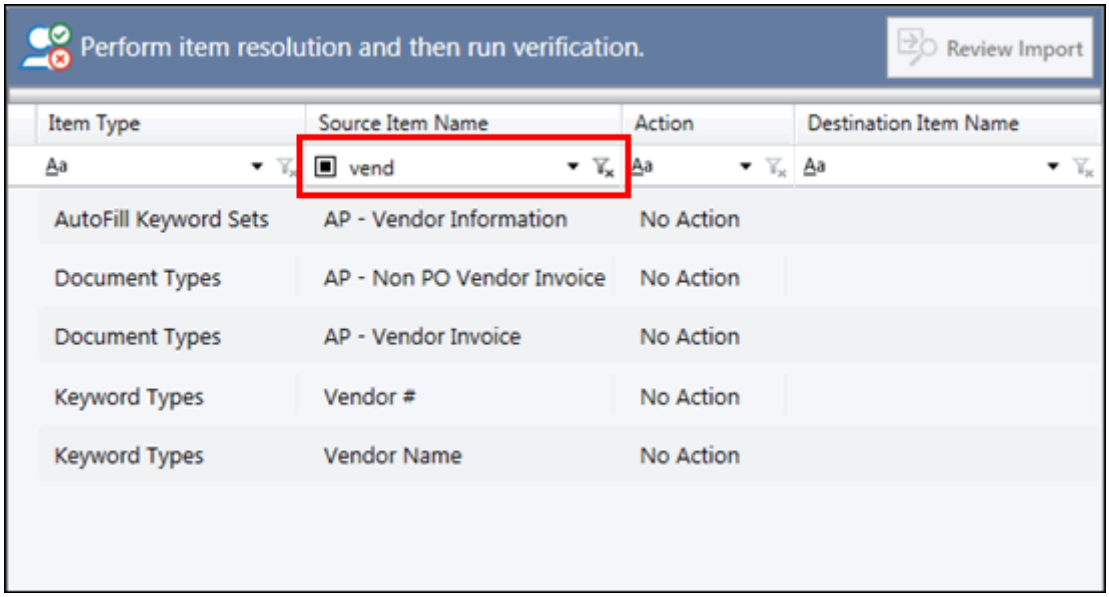
Load Decisions

To load previously saved decisions:

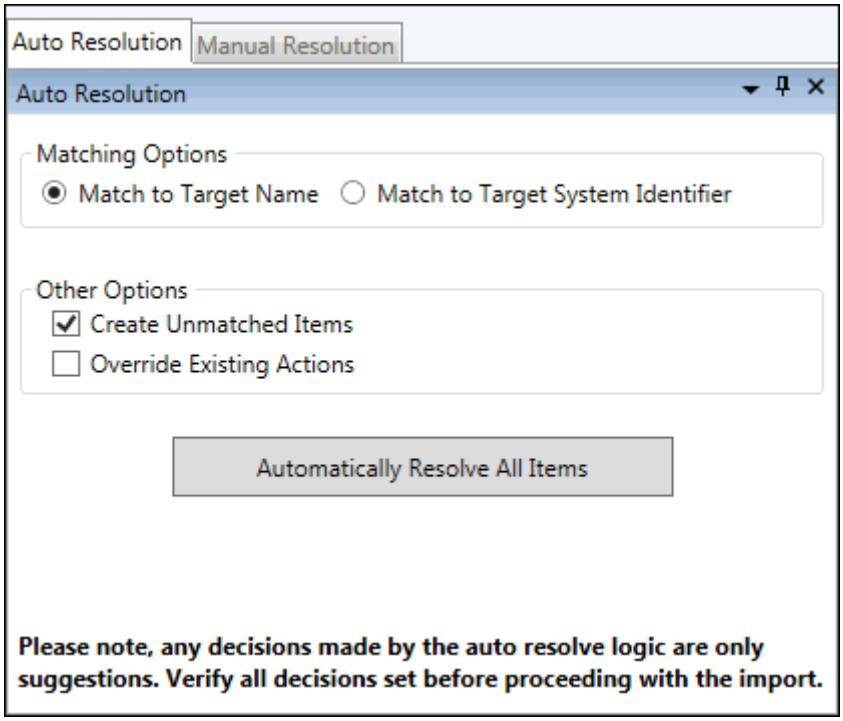
1. Click **Load Decisions**. The **Open** dialog box is displayed.
2. Navigate to and select a previously saved decisions XML file.
3. Click **Open**. The decision options of the configuration items in the **Configuration Items** pane are updated.

   By default, all items contained in the export file are configured to not be imported. This is signaled by **No Action** being displayed in the **Action** column.

4. To filter the list of items, use the filter controls at the top of each column. To search for a specific item in a column, enter the search term in the filter control for that column. The list is filtered as you type. (For example, enter the name of a configuration item in the **Source Item Name** field to search for that item by name.)



5. Use the **Auto Resolution** panel to automatically assign actions to all items listed in the export package:
   a. Navigate to the **Auto Resolution** panel by clicking the **Auto Resolution** ribbon button or panel tab.



   b. Select one of the following **Matching Options**:
      - **Match to Target Name**: Match items in the export package to items in the destination database if they have the same name. This matching option is selected by default.
      - **Match to Target System Identifier**: Match items in the export package to items in the destination database if they have the same system identifiers (IDs).

Note: The **Match to Target System Identifier** option is usually not the recommended way to match items, because configuration items often do not have the same IDs across multiple systems.

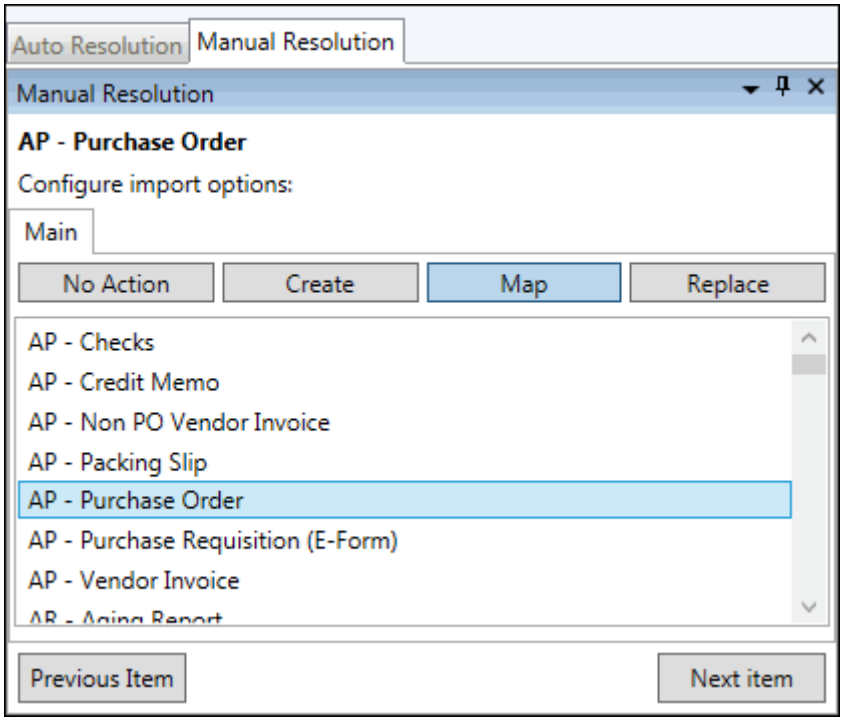
c. Select any applicable **Other Options**:
   - **Create Unmatched Items**: Assign the **Create** action to any items for which a matching item cannot be found to **Map**. Without this option set, any items that do not have a match will not have their actions changed. This option is selected by default.
   - **Override Existing Actions**: Automatic resolution will override and reassign any actions that have already been set by the user.

d. Once all matching and resolution options are set, click **Automatically Resolve All Items**. All configuration items are automatically assigned one of the following actions.

Note: Any decisions made by the automatic resolution logic are only suggestions. You should still verify all decisions before proceeding with the import. Depending on how the actions are automatically assigned, you still may need to manually resolve some configuration items.

Action	Description
No Action	The selected item will not be imported into the destination database.
Create	The selected item will be created in the destination database. After selecting **Create**, the **New Name** field is displayed, in which you can enter a different name for the item in the destination database, if necessary. The **New Name** field respects the maximum number of characters allowed for names belonging to the item type you are creating.
Map	The selected item will be mapped to a configuration item in the destination database. For example, if you are importing the **AP - Checks Information** AutoFill Keyword Set, you might choose to map its Keyword Types to Keyword Types already contained in the database if the appropriate Keyword Type names already exist in the destination database. After selecting **Map**, a list of available configuration items in the destination database is displayed. Select the appropriate item. **Note:** When this action is selected, an item in the destination database is automatically selected if it matches the name of the item being imported.
Replace	The selected item will replace a configuration item in the destination database. After selecting **Replace**, the **New Name** field is displayed, along with a list of available configuration items in the destination database. Select the appropriate item, and enter a different name for the item in the destination database, if necessary. The **New Name** field respects the maximum number of characters allowed for names belonging to the item type you are updating. **Note:** When this action is selected, an item in the destination database is automatically selected if it matches the name of the item being imported.

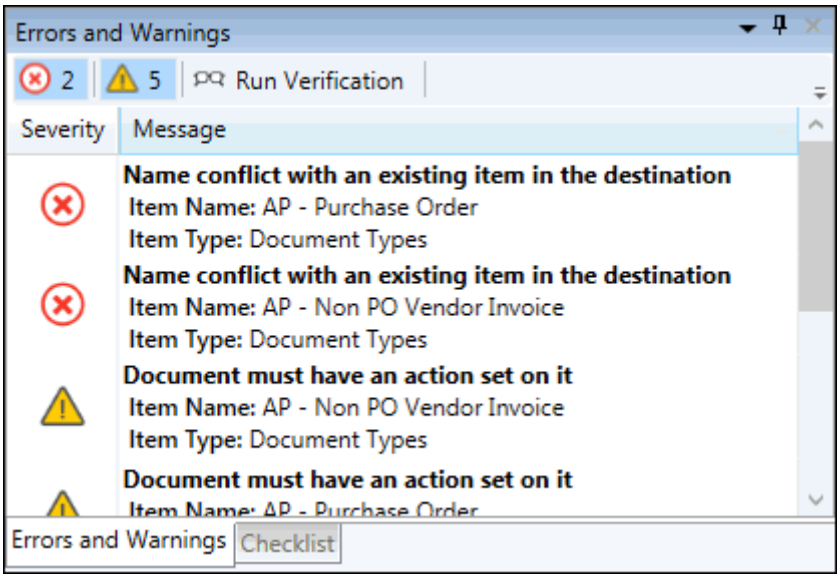
6. To manually resolve a configuration item, navigate to the **Manual Resolution** panel by clicking the **Manual Resolution** ribbon button or panel tab.



7. For each item that you want to manually resolve, select the item from the **Configuration Items** panel and select the desired action (**No Action**, **Create**, **Map**, or **Replace**) in the **Manual Resolution** panel. See the table in step 5 for more information on each action type.

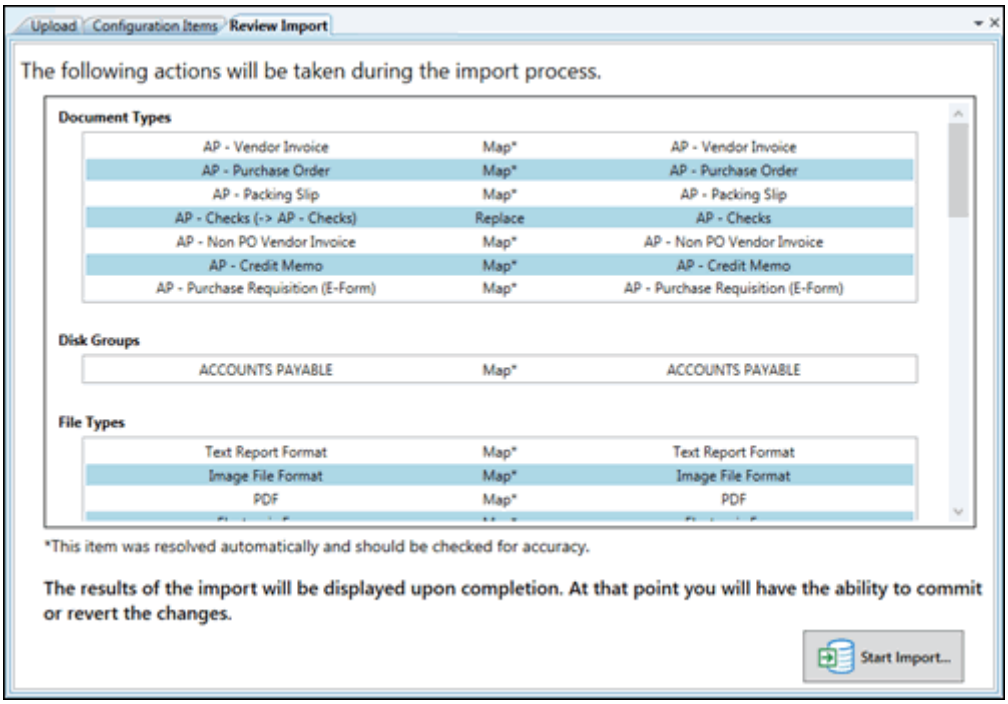
Note: For system items (i.e., items created automatically when the database is created), it is considered a best practice to leave the action set to **Map** to avoid unexpected behavior.

8. After you have configured actions for the desired items, click the **Run Verification** button. Any errors and/or warning messages are displayed in the **Errors and Warnings** panel. If there are no errors or warnings, you are notified the verification was successful.
   - Errors prevent you from moving forward in the process. An example of an error is that an item you are attempting to create from the export package does not have a unique name (i.e., the name already exists for that item type in the system).
   - Warnings do not prevent you from moving forward in the process, but they indicate the import may produce unexpected results. An example of a warning message is that you created the export package on a different version of OnBase, or you are attempting to create and duplicate a system item that already exists in the system. If you have any concerns about a warning message, contact your first line of support.

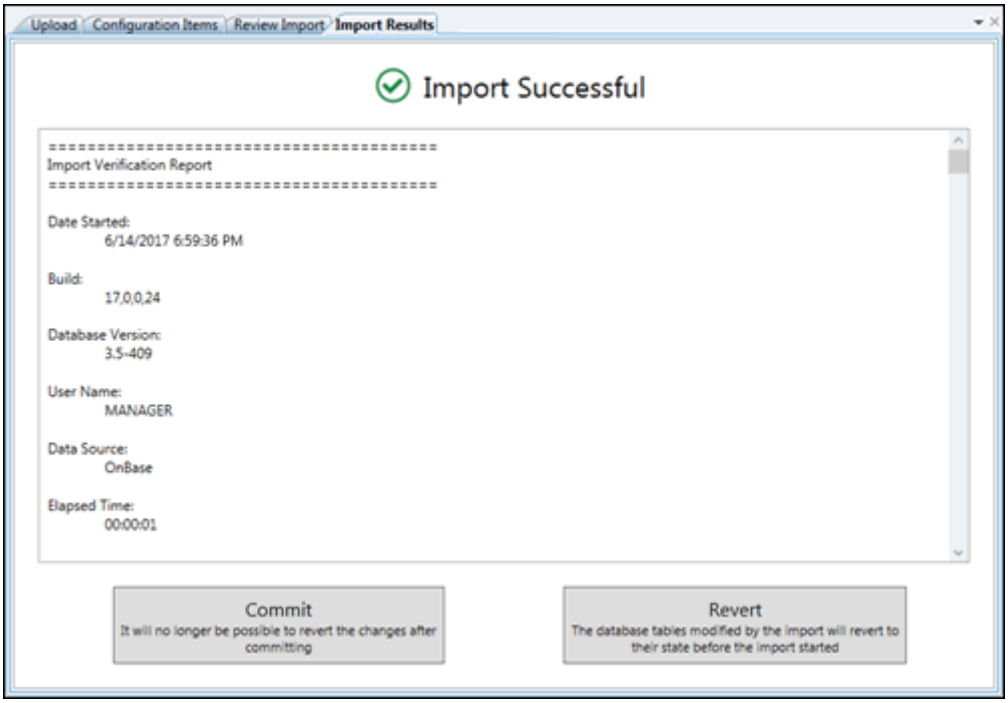


Note: You must verify the import after making any changes to any configuration item's resolution.

9. After running a verification with no errors, the **Review Import** button becomes available. Click **Review Import**. The **Review Import** panel is displayed.



10. Review the configured items and the actions associated with each item.
11. Click the **Start Import** button. The **Import Results** page is displayed and you are notified whether the import process was successful.



12. View the displayed Import Verification Report to confirm all performed actions. The verification report lists the configuration item type, followed by action type. The appropriate configuration items are listed under the action type specified earlier in the process. If the import yielded any errors or warnings, those are described as well.

Note: Items designated as **No Action** are not displayed in the Import Verification Report.

    The verification report is stored in the **SYS Verification Reports** Document Type so it can be retrieved for future reference.
13. Do one of the following to either commit or revert changes in the system:
    - Click **Commit** if the Import Verification Report lists the configuration items and the appropriate actions as expected. The changes listed in the verification report are implemented in the system.
    - Click **Revert** if the Import Verification Report does not list the configuration items and the appropriate actions as expected. The changes listed in the verification report are not implemented in the system.
14. Click **Finish**.

Considerations for Importing Configuration Items

The following items are considerations to keep in mind when importing certain configuration item types into the system:

- You can only map Workflow items, such as life cycles, queues, and timers.
- You can only create and map task groups.

Keyboard Shortcuts

The following keyboard shortcuts are available:

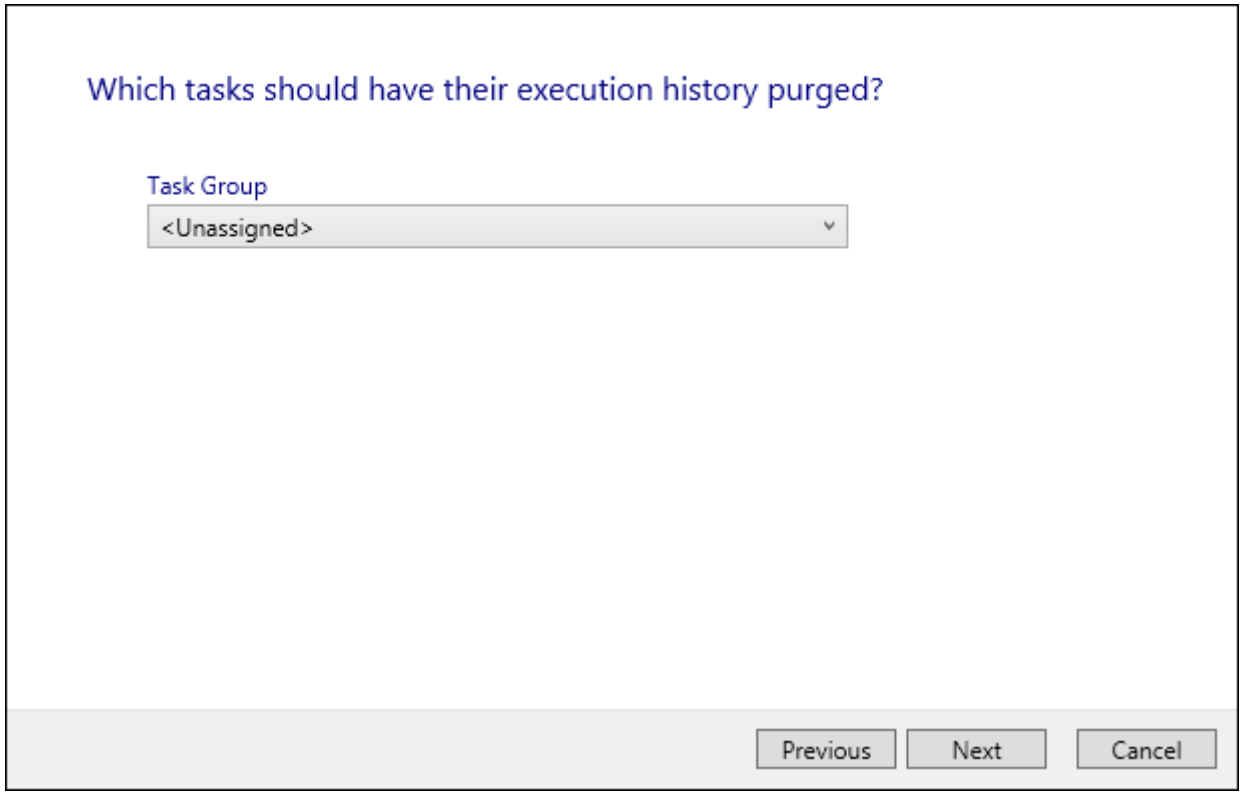
Shortcut	Description
Ctrl + T	Creates a new task.
Ctrl + G	Creates a new task group.
Ctrl + H	Creates a new schedule.
Ctrl + S	Saves the opened Console file.
Ctrl + W	Creates a new execution window.
F2	Rename the selected task group.
F5	Refreshes the **View** pane.

You can create Unity Scheduler Tasks to schedule certain Unity Scheduler administrative processes.

Purge Execution History

Purge Execution History purges the execution history of Unity Scheduler Tasks. To configure a task to purge the execution history:

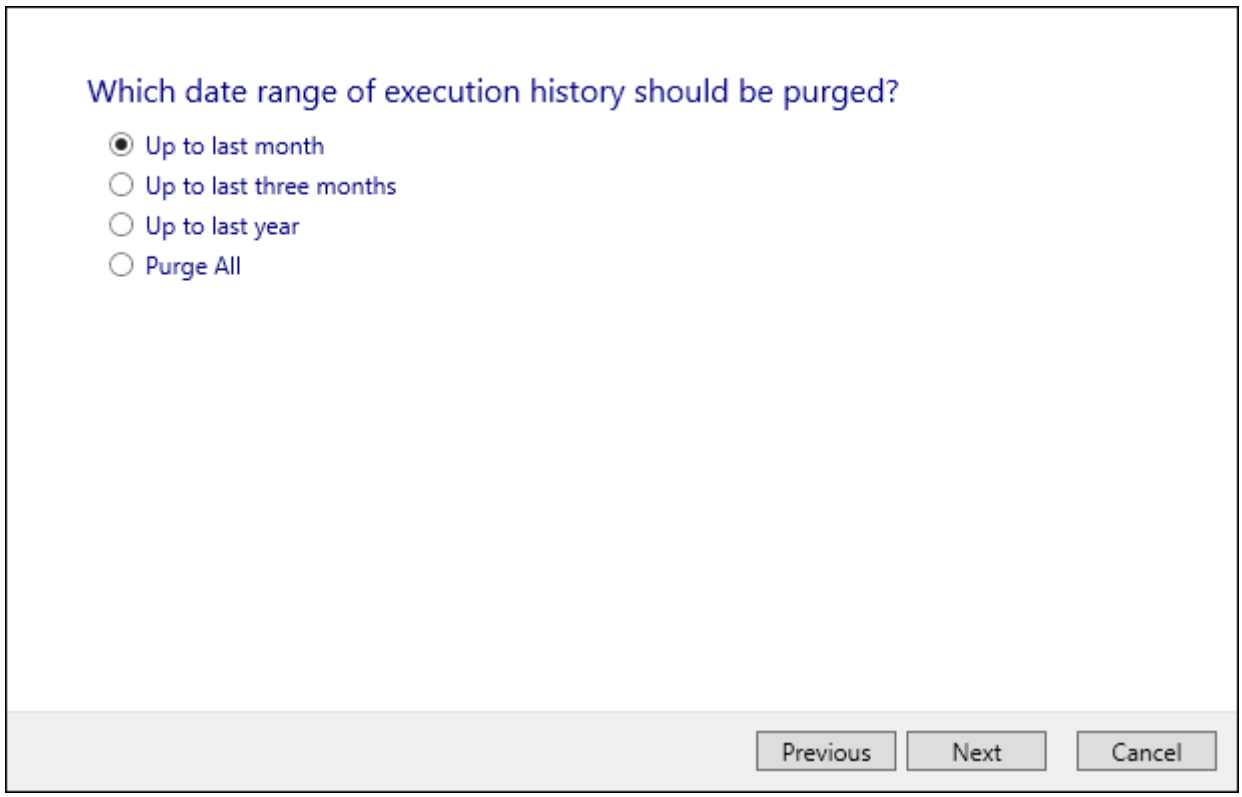
1. Select **Purge Execution History** from the drop-down list and click **Next**.



2. From the **Task Group** drop-down list, select the Task Group for which the execution history should be purged.

Note: If you select **<All>**, the execution history for every Task is purged.

Click **Next**.



3. Select one of the following options to configure the date range of the execution history that should be purged:
   - **Up to last month** - Purges the Execution History up to the last month.
   - **Up to last three months** - Purges the Execution History up to the last three months.
   - **Up to last year** - Purges the Execution History up to the last year.
   - **Purge All** - Purges the entire Execution History.
4. Click **Next**. The User Group select page of the Task Wizard is displayed.

To finish configuring the task, continue to Configuring Tasks on page 63.

The Distribution Service integrates with several OnBase modules, allowing email notifications to be sent through a centralized mail service.

In order to configure the Distribution Service, you must create and configure at least one **Email Sending** Unity Scheduler task.

Note: For more information on configuring the Hyland Distribution Service, see the **Distribution Service** module reference guide.

Email Sending Task

In order for the Hyland Distribution Service to function correctly, a corresponding **Email Sending** Unity Scheduler task must be created.

Note: If you are upgrading from a version of OnBase prior to Foundation EP1, you must uninstall the previous version of the Hyland Distribution Service. Also, any firewall settings configured to accommodate of the previous version of the Hyland Distribution Service must be updated to accommodate the Unity Scheduler.

To configure an **Email Sending** task, select **Email Sending** from the drop-down list when prompted to select the type of task you want to create.

To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

Several Reporting Dashboards tasks can be executed in the Unity Scheduler. For information on configuring these tasks within the Unity Scheduler, see:

- Reporting Dashboards Data Provider Export on page 138
- Reporting Dashboards Report Export on page 147

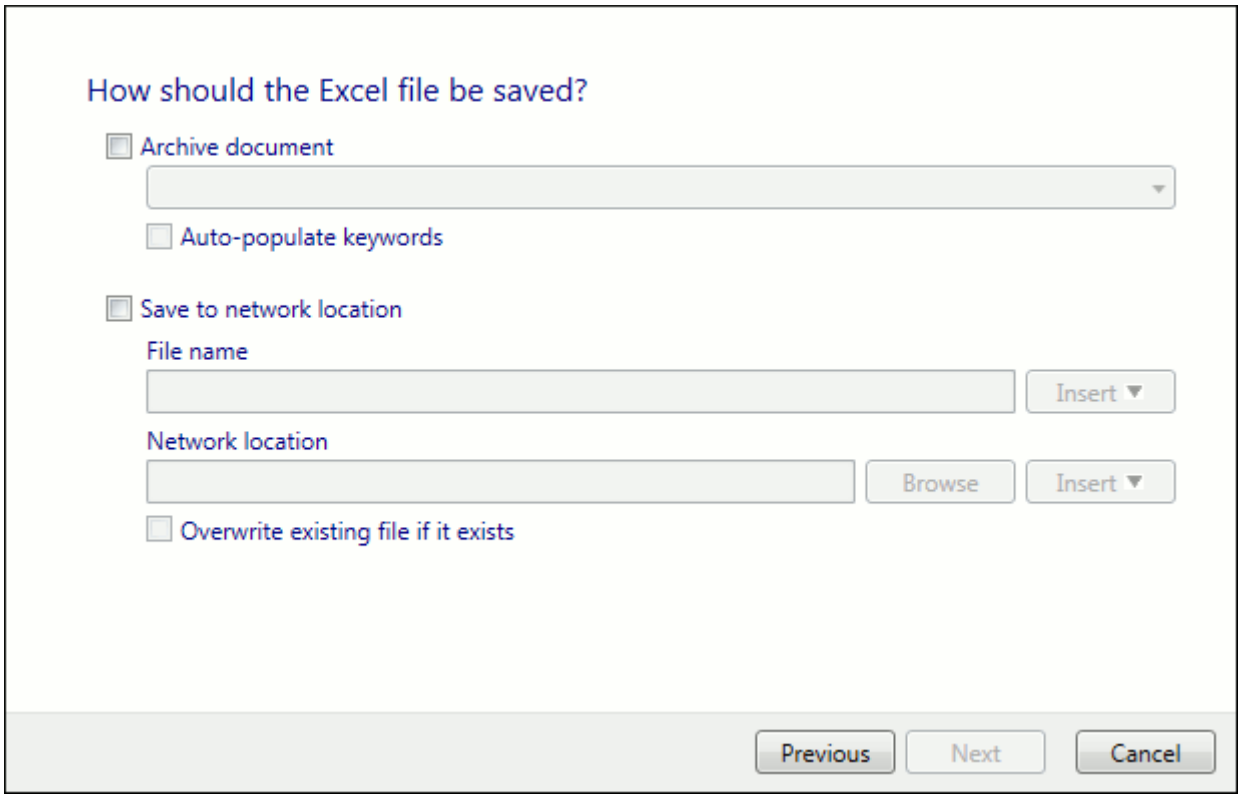
For more information on Reporting Dashboards, see the **Reporting Dashboards** module reference guide.

Reporting Dashboards Data Provider Export

The **Reporting Dashboards Data Provider Export** task is used to export the contents of a Reporting Dashboards data provider to a Microsoft Excel file.

Note: A Reporting Dashboards license and the **Administrator Access** Dashboard User Group privilege are required to create a **Reporting Dashboards Data Provider Export** task. For more information on Reporting Dashboards configurations, see the **Reporting Dashboards** documentation.

1. Select **Reporting Dashboards Data Provider Export** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**.



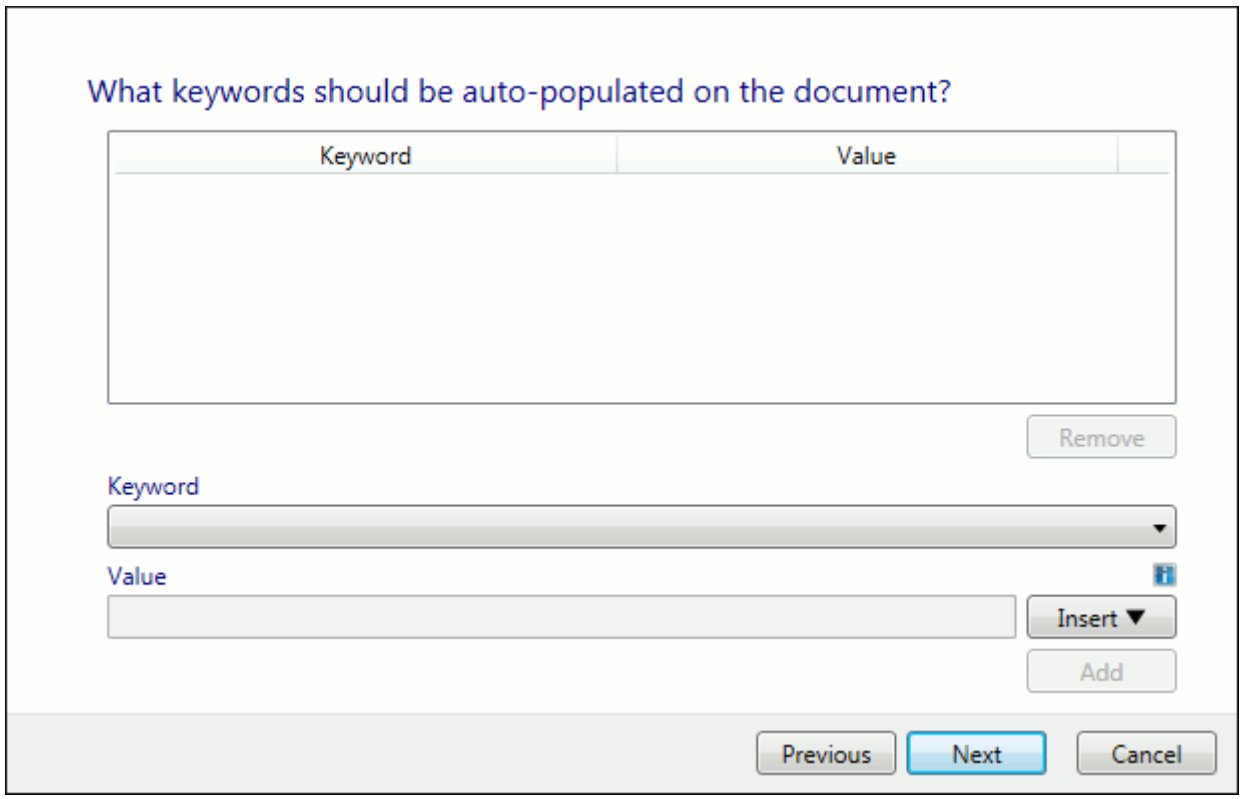
3. Select one of the following options to determine how the generated spreadsheet should be saved:

Option	Description
Archive Document	Archives the spreadsheet file into OnBase. From the drop-down list, select the Document Type the file should be archived to. To automatically assign Keyword Values to the stored document, select the **Auto-populate keywords** option. Continue the process to configure values as needed.

Option	Description
Save to network location	Saves the spreadsheet file to a specified location. Enter the desired file name for the spreadsheet in the **File name** field. Browse for or enter the location the spreadsheet should be saved to. **Note:** To ensure the file is always saved to the correct location, use a UNC path. When entering both the file name and location, click the **Insert** drop-down button to insert variables. These variables are added to the file name or location and dynamically updated at the time the file is saved: • **%CD** - Inserts the current date. • **%CT** - Inserts the current time. • **%CN** - Inserts the task creator's user name. • **%CRN** - Inserts the task creator's configured Real Name. • **%DP** - Inserts the name of the Data Provider name associated with the task. When followed with a number, inserts the name of that number of data provider. For example, "%DP2" inserts the name of the second data provider. Select the **Overwrite existing file if it exists** option to overwrite an existing file by the same name in the same location. If this option is not selected, no existing files are deleted.

4. Click **Next**. If you selected to archive the document and auto-populate the document keywords, you are prompted to specify which values to auto-populate.

   If you did not select to auto-populate document keywords, proceed to step 9.



5. From the **Keyword** drop-down list, select the Keyword Type whose value should be auto-populated.

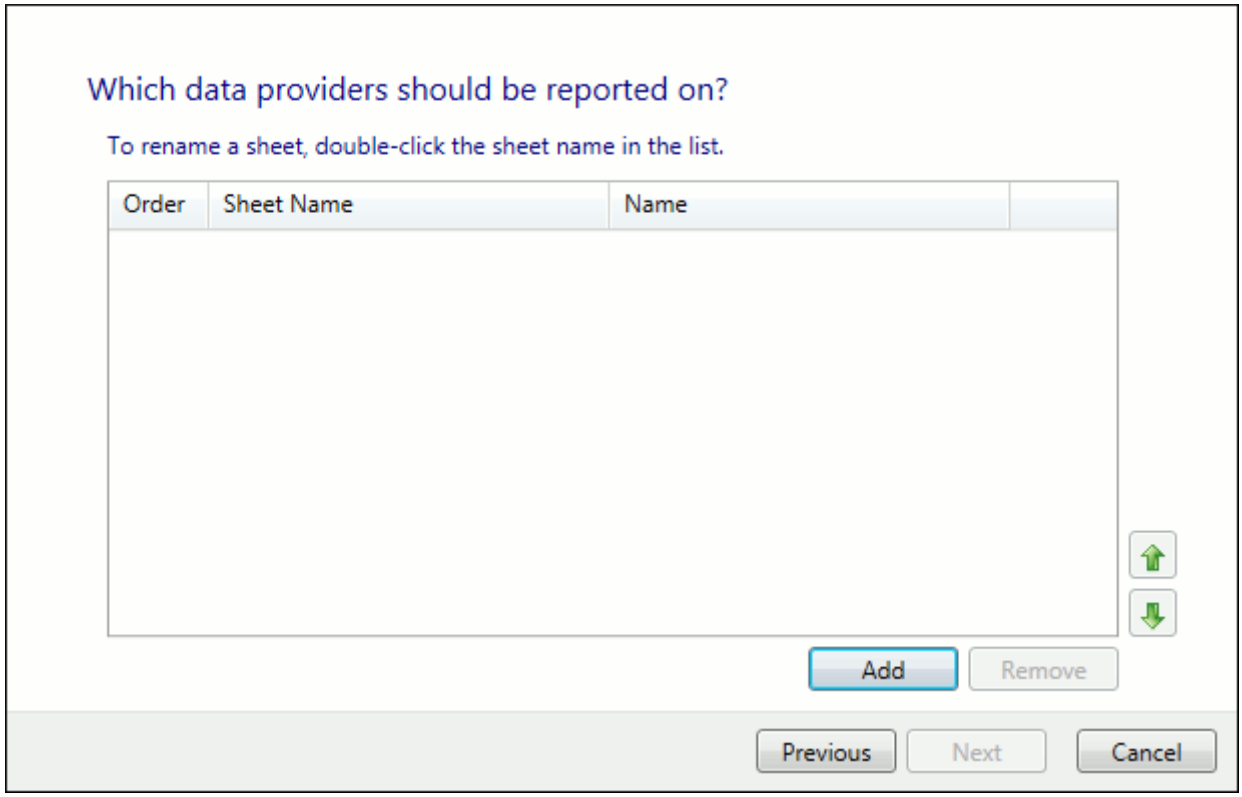
6. Enter the value that should be populated for the Keyword Type in the **Value** field. Click the **Insert** drop-down button to insert variables. These variables are added to the Keyword Value and are dynamically updated at the time of upload:

Variable	Description
%CD	Inserts the current date.
%CT	Inserts the current time.
%CN	Inserts the task creator's user name.
%CRN	Inserts the task creator's configured Real Name.
%DP	Inserts the name of the Data Provider name associated with the task. When followed with a number, inserts the name of that number of data provider. For example, "%DP2" inserts the name of the second data provider.

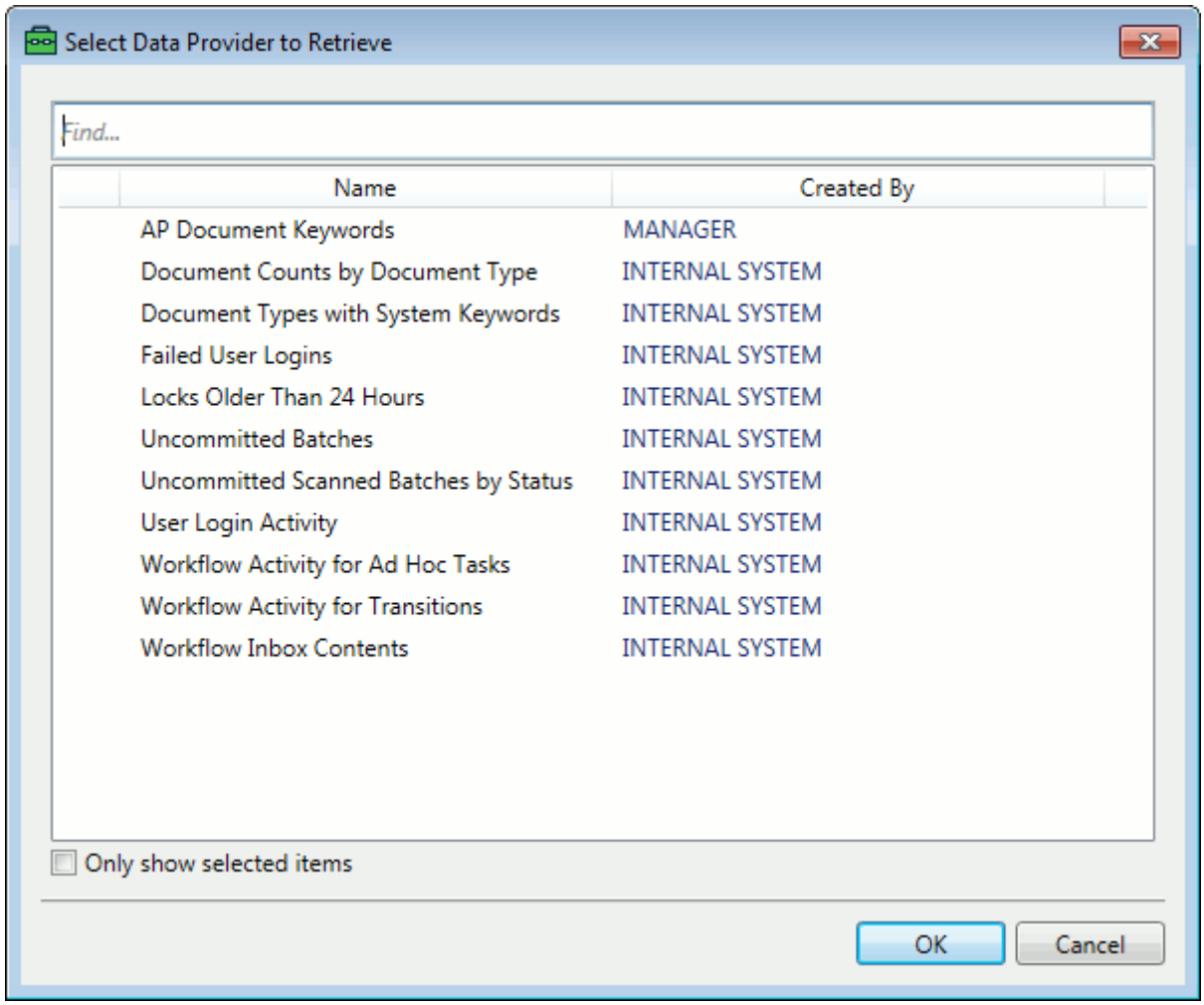
Note: To avoid errors during task execution, ensure entered Keyword Values comply with the Keyword Type settings, such as the maximum length of the Keyword Value.

7. Click **Add**. The Keyword Type and value are added to the list.
   To remove an added Keyword Type and value, select them, and click **Remove**.
8. Continue adding Keyword Types and values as necessary.

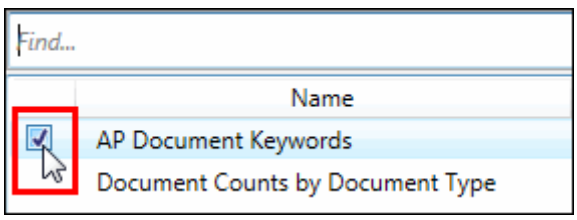
9. Click **Next**.



10. Click **Add** to add the Data Providers that should be reported on.
    The **Select Data Provider to Retrieve** dialog box is displayed.



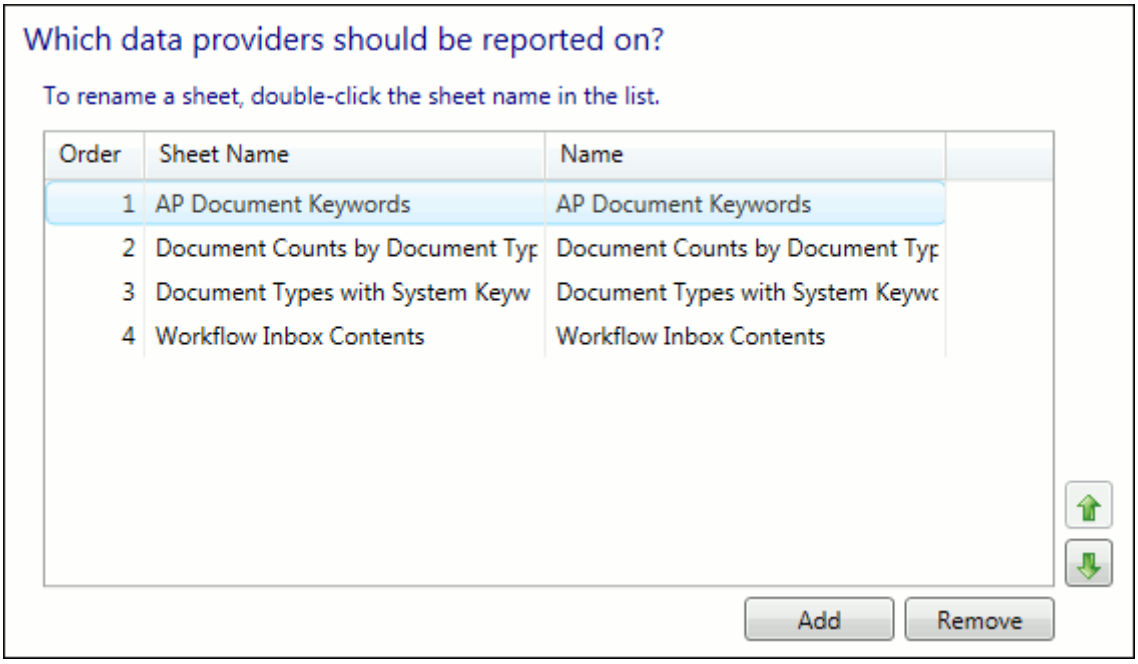
11. Select a Data Provider by resting the cursor on the provider and clicking the corresponding check box.



To only show the selected providers in the list, select the **Only show selected items** option.

To search for a specific provider in the list, begin typing the name of the item in the **Find** field. The list is filtered as you type.

12. Click **OK**.
    All selected providers are added to the list.

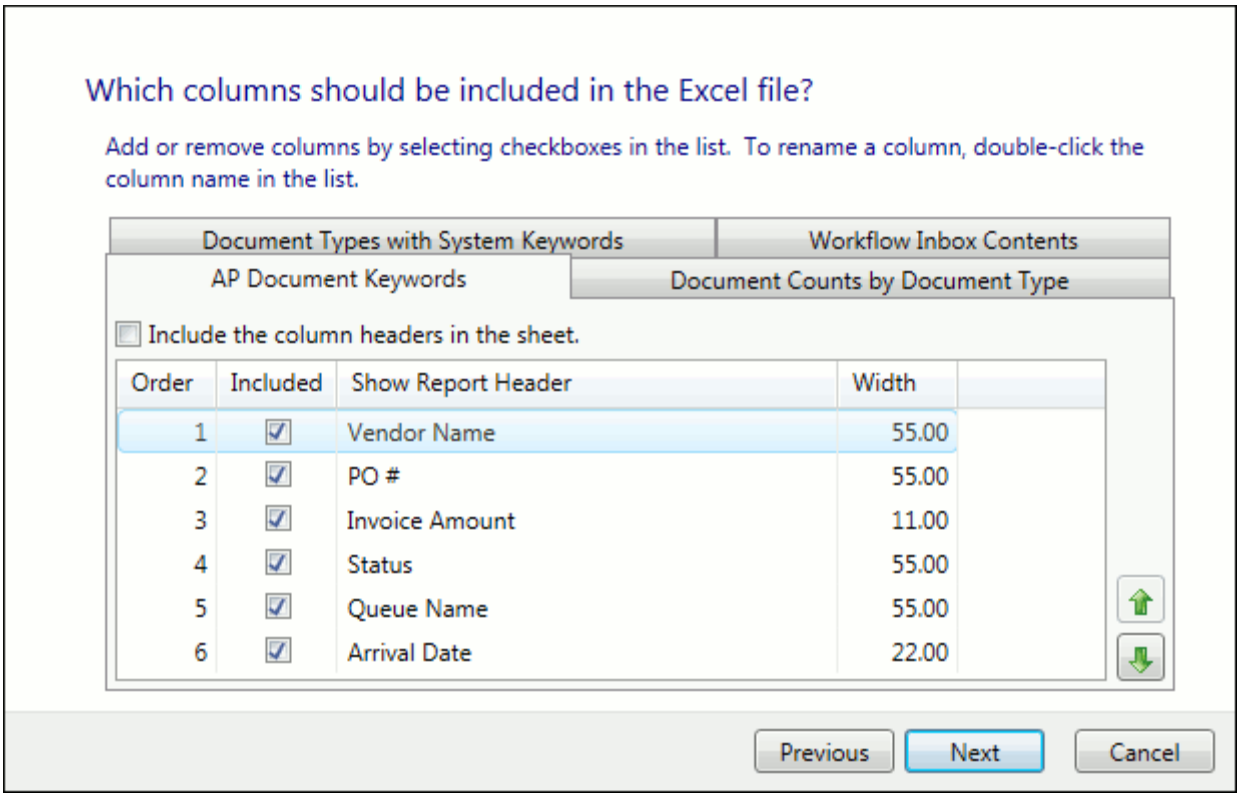


13. To change the order of the Data Provider spreadsheets, select a provider and use the up or down arrow buttons to move the order of the provider up one place or down one place, respectively.

To rename the spreadsheet of a Data Provider, double-click the name in the **Sheet Name** column and modify the name as necessary.

To remove a Data Provider from being reported on, select the provider and click **Remove**.

14. Click **Next**. If any of the Data Providers require input parameter values, those must be defined on the following screen. Click **Next** after defining those values.



15. For each Data Provider spreadsheet, configure the display columns for the spreadsheet appropriately:
    a. Select the tab of the Data Provider spreadsheet you would like to configure.
    b. Select the **Include the column headers in sheet** option to include the column names in the spreadsheet.
    c. To change the order of a column, select it and use the up or down arrow buttons to move the order of the column up one place or down one place, respectively.

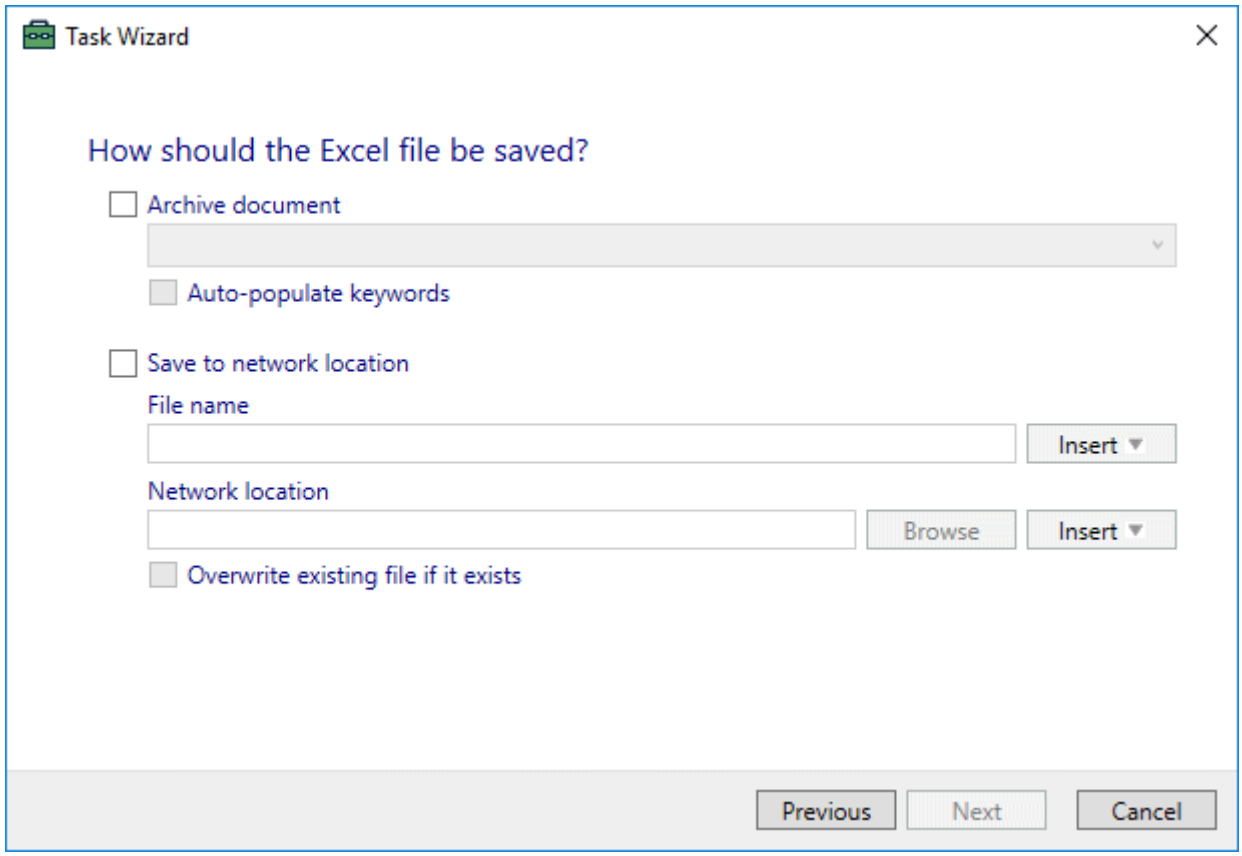
    d. To exclude a column from being included in the spreadsheet, deselect the **Included** check box for the column.
    e. To rename a column, double-click the **Show Report Header** name for the column and modify the name as necessary.
    f. To change the width of a column, double click the **Width** value for the column and modify it as necessary. The value for width represents the number of characters that can fit into the column header using the standard Excel font.
    g. Continue configuring display columns as necessary. Click **Next** when complete.

16. To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

Reporting Dashboards Report Export

The Reporting Dashboards Report Export task creates a Microsoft Excel file from a Reporting Dashboards report.

1. Select **Reporting Dashboards Report Export** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The **How should the Excel file be saved?** dialog box is displayed.



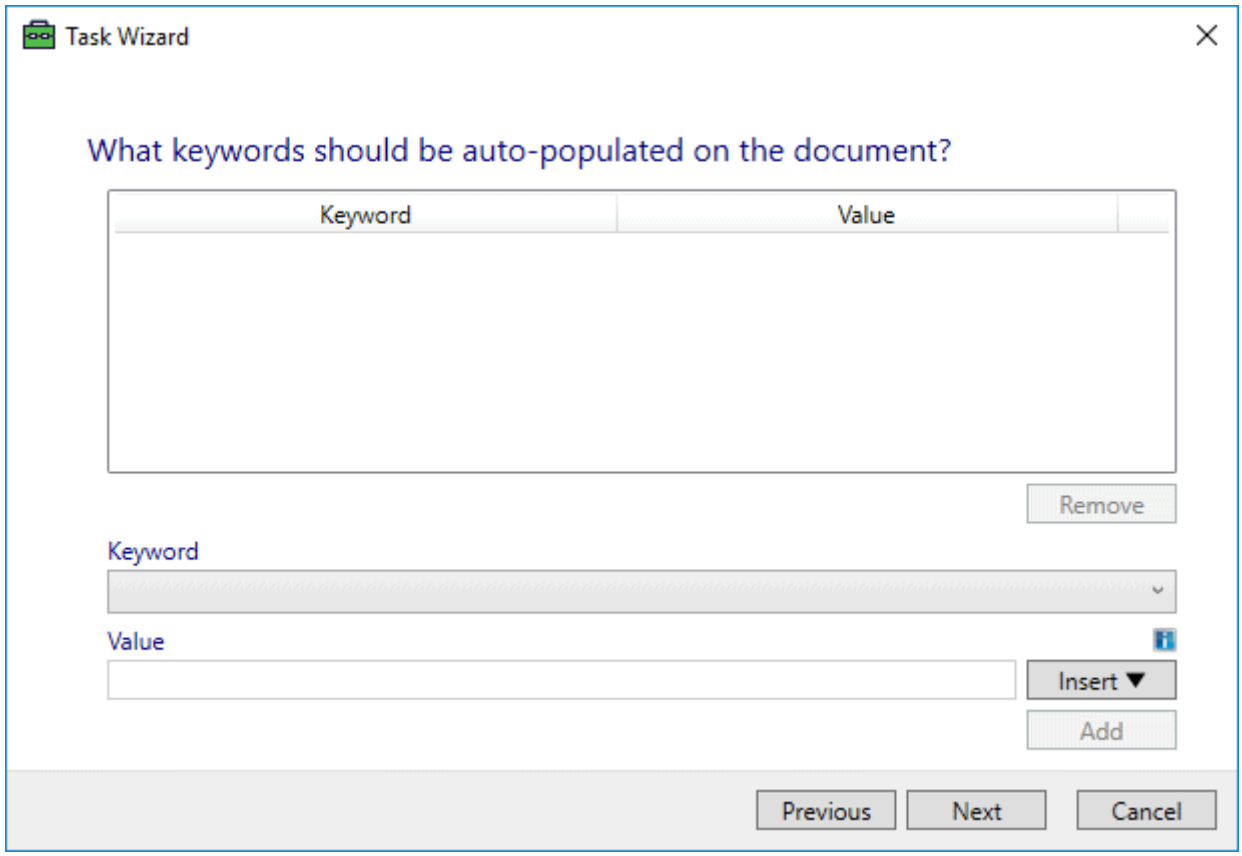
3. Select one of the following options to determine how the generated spreadsheet should be saved:

Option	Description
Archive Document	Archives the spreadsheet file into OnBase. From the drop-down list, select the Document Type the file should be archived to. To automatically assign Keyword Values to the stored document, select the **Auto-populate keywords** option. Continue the process to configure values as needed.

Option	Description
Save to network location	Saves the spreadsheet file to a specified location. Enter the desired file name for the spreadsheet in the **File name** field. Browse for or enter the location the spreadsheet should be saved to. **Note:** To ensure the file is always saved to the correct location, use a UNC path. When entering both the file name and location, click the **Insert** drop-down button to insert variables. These variables are added to the file name or location and dynamically updated at the time the file is saved: • **%CD** - Inserts the current date. • **%CT** - Inserts the current time. • **%CN** - Inserts the task creator's user name. • **%CRN** - Inserts the task creator's configured Real Name. • **%DP** - Inserts the name of the Data Provider name associated with the task. When followed with a number, inserts the name of that number of data provider. For example, "%DP2" inserts the name of the second data provider. Select the **Overwrite existing file if it exists** option to overwrite an existing file by the same name in the same location. If this option is not selected, no existing files are deleted.

4. Click **Next**. If you selected to archive the document and auto-populate the document keywords, the **What keywords should be auto-populated on the document?** dialog box is displayed.

   If you did not select to auto-populate document keywords, proceed to step 9.



5. From the **Keyword** drop-down list, select the Keyword Type whose value should be auto-populated.

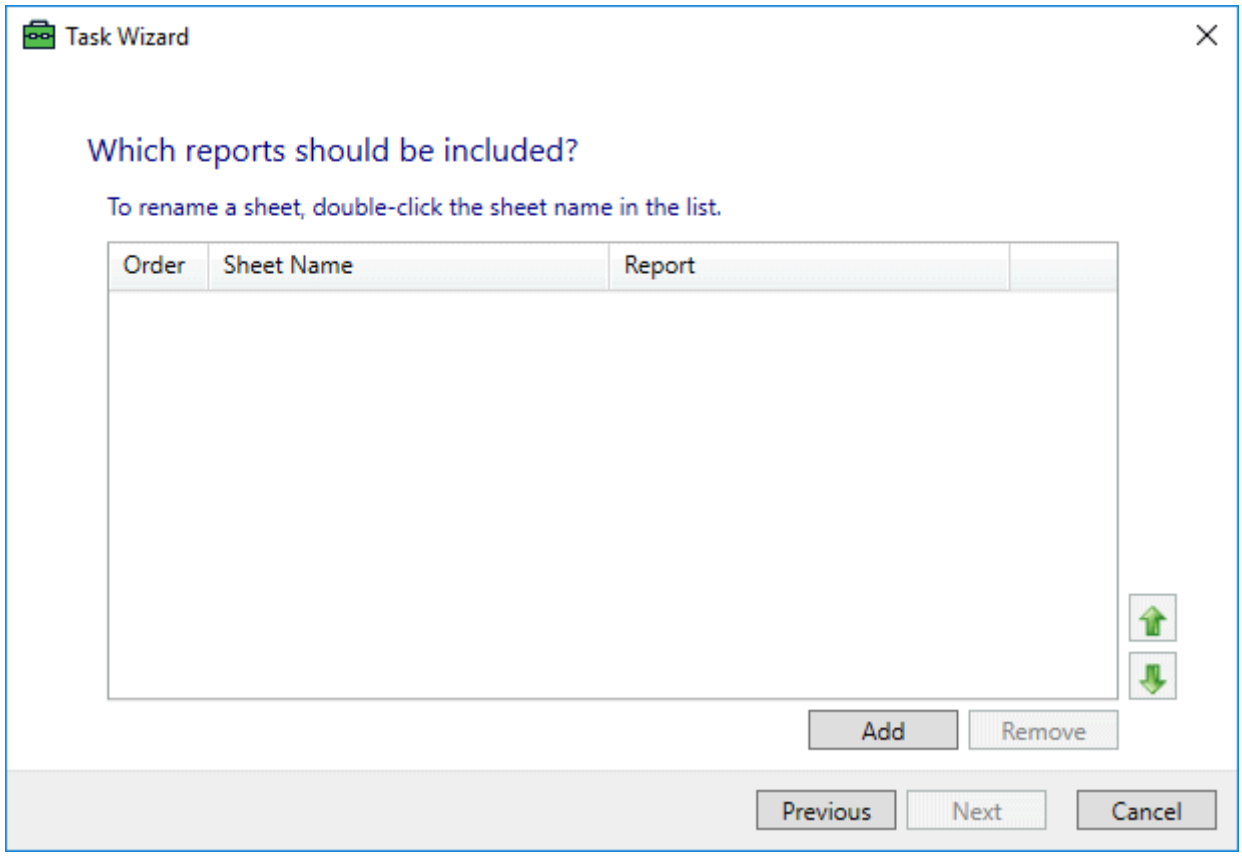
6. Enter the value that should be populated for the Keyword Type in the **Value** field. Click the **Insert** drop-down button to insert variables. These variables are added to the Keyword Value and are dynamically updated at the time of upload:

Variable	Description
%CD	Inserts the current date.
%CT	Inserts the current time.
%CN	Inserts the task creator's user name.
%CRN	Inserts the task creator's configured Real Name.
%DP	Inserts the name of the Data Provider name associated with the task. When followed with a number, inserts the name of that number of data provider. For example, "%DP2" inserts the name of the second data provider.

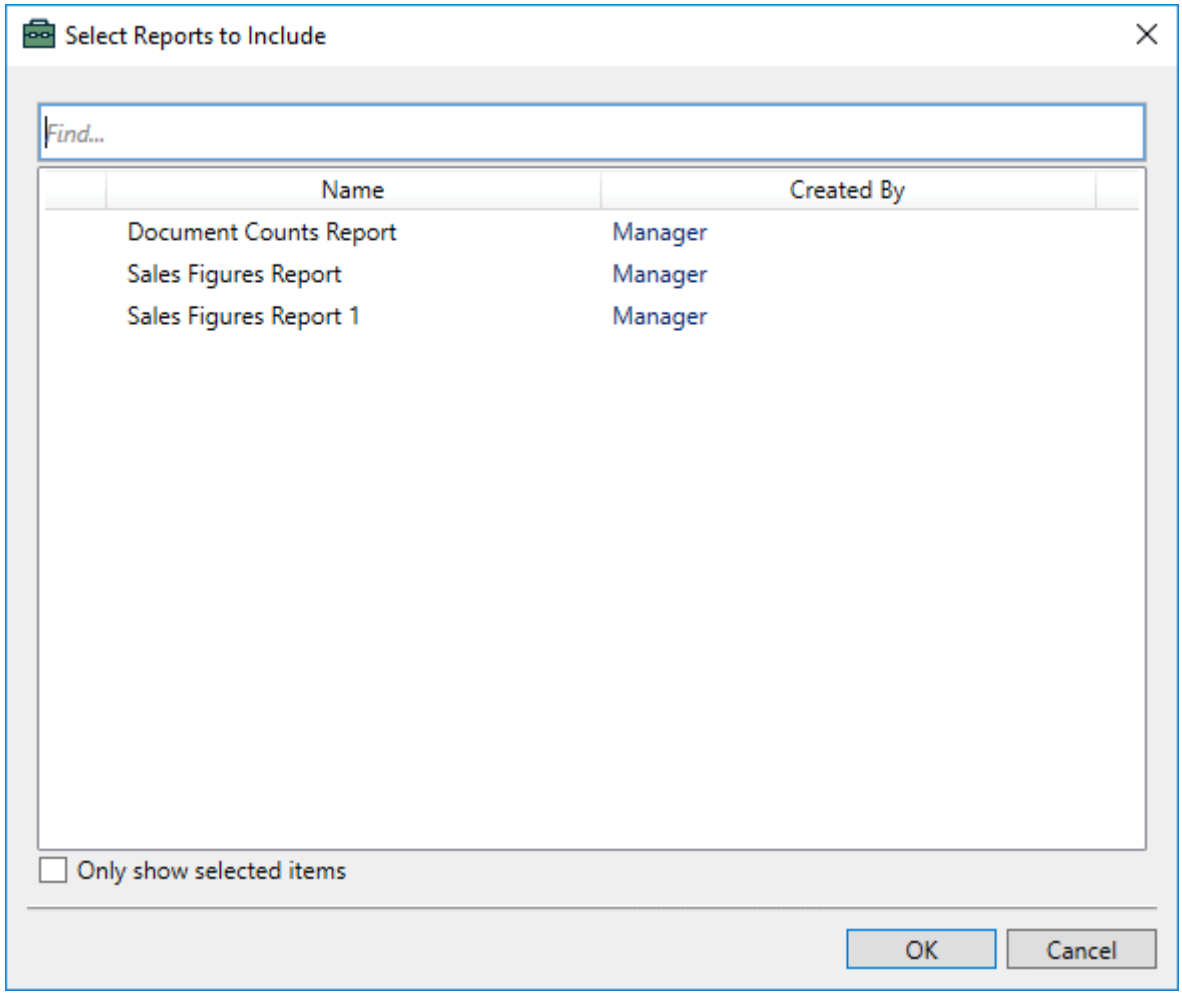
Note: To avoid errors during task execution, ensure entered Keyword Values comply with the Keyword Type settings, such as the maximum length of the Keyword Value.

7. Click **Add**. The Keyword Type and value are added to the list.
   To remove an added Keyword Type and value, select them, and click **Remove**.
8. Continue adding Keyword Types and values as necessary.

9. Click **Next**. The **Which reports should be included?** dialog box is displayed.

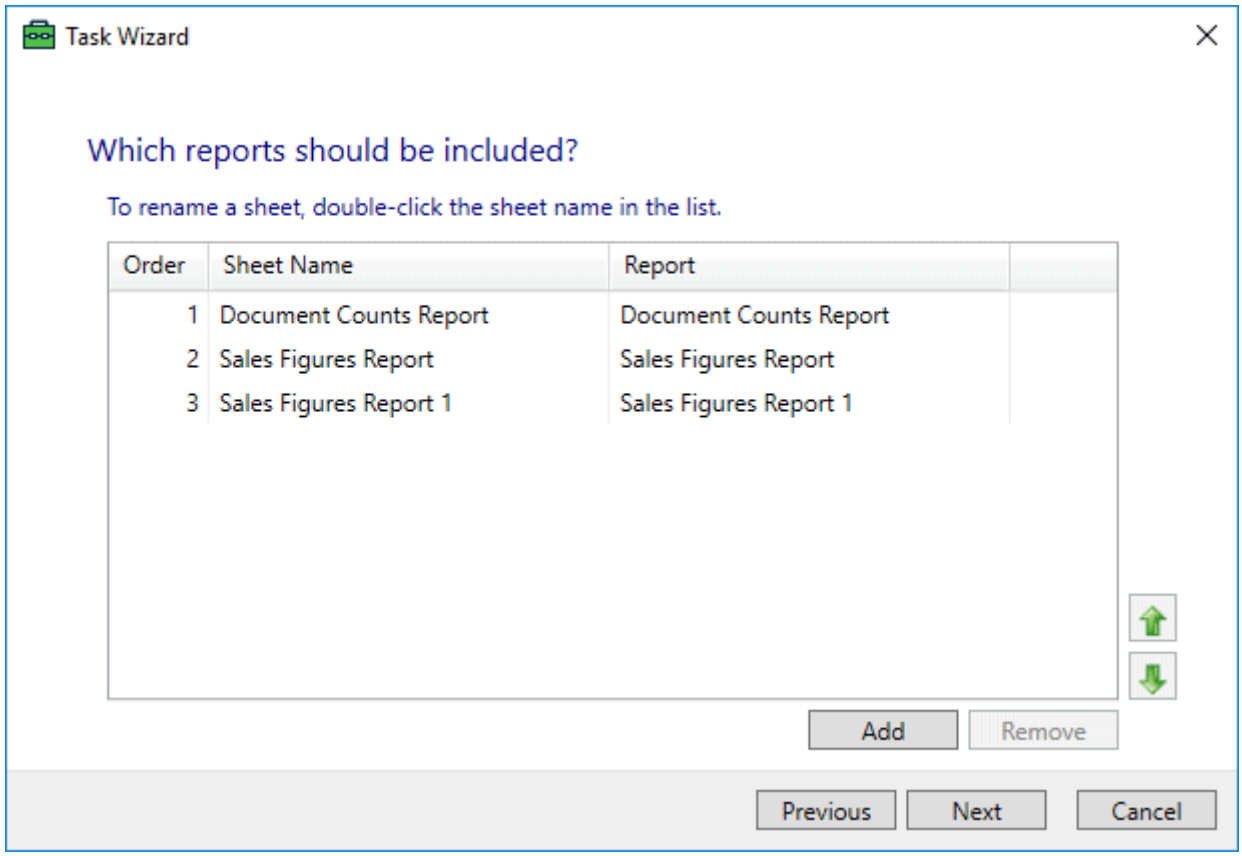


10. Click **Add** to add the Data Providers that should be reported on.
    The **Select Reports to Include** dialog box is displayed.



11. Select a report by resting the cursor on the report and clicking the corresponding check box.
    To only show the selected reports in the list, select the **Only show selected items** option.
    To search for a specific report in the list, begin typing the name of the item in the **Find** field. The list is filtered as you type.

12. Click **OK**. All selected reports are added to the list.



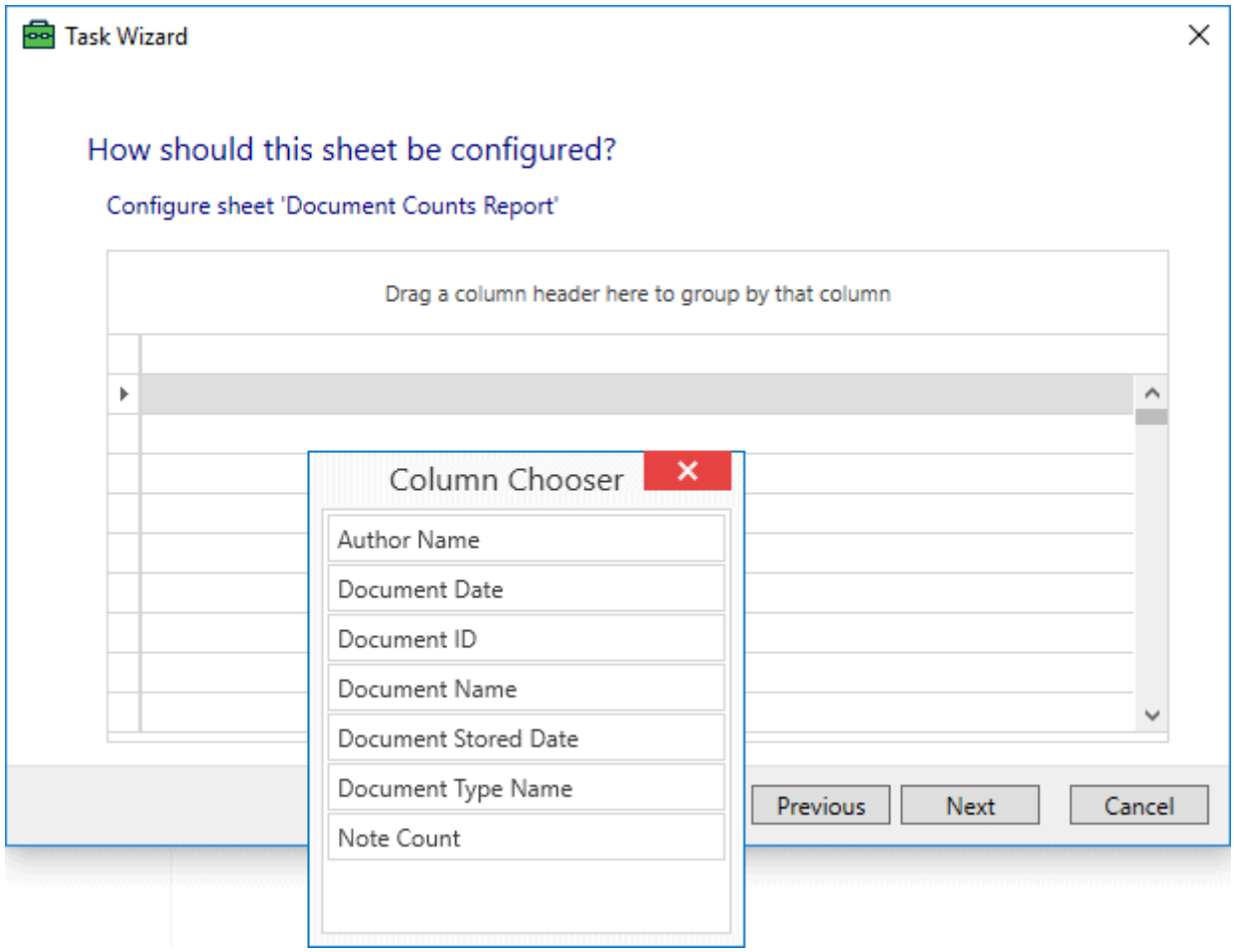
13. To change the order of the report spreadsheets, select a report and use the up or down arrow buttons to move the order of the report up one place or down one place, respectively.

To rename the spreadsheet of a report, double-click the name in the **Sheet Name** column and modify the name as necessary.

To remove a report from being reported on, select the report and click **Remove**.

14. Click **Next**. If any of the reports require input parameter values, the **What values should be used for the parameters?** dialog box appears. If none of the reports require input parameter values, proceed to step 16.

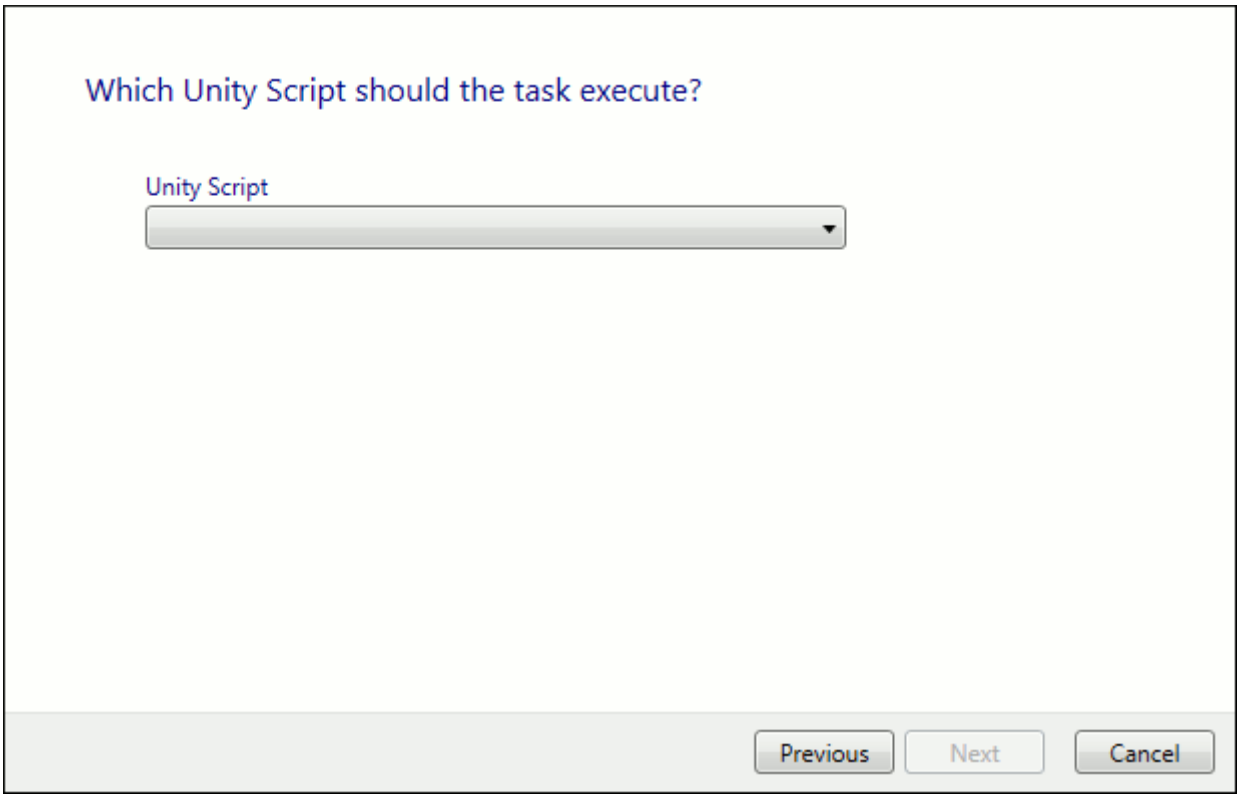
15. Select the desired parameters and click **Next**. The **How should this sheet be configured?** dialog box and **Column Chooser** dialog box are displayed.



16. Drag the columns you want to display in the Excel sheet from the **Column Chooser** dialog box to the top row of the **How should this sheet be configured?** dialog box. If you want to group the data in the report by any of the columns, drag that column from the **Column Chooser** to the **Drag a column header here to group by that column** area.
17. Click **Next** once you have selected the proper columns and groupings.
18. To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

Note: The **Unity Automation API** license is required to create a Unity Script task. API certification is required to configure Unity Scripts. For more information on API certification, contact your first line of support.

1. To configure a task that executes a Unity Script, select **Unity Script** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**.



3. From the **Unity Script** drop-down list, select the Unity Script the task should execute.

Note: Only Unity Scripts configured to be allowed for execution in the Unity Scheduler are available from the drop-down list.

To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

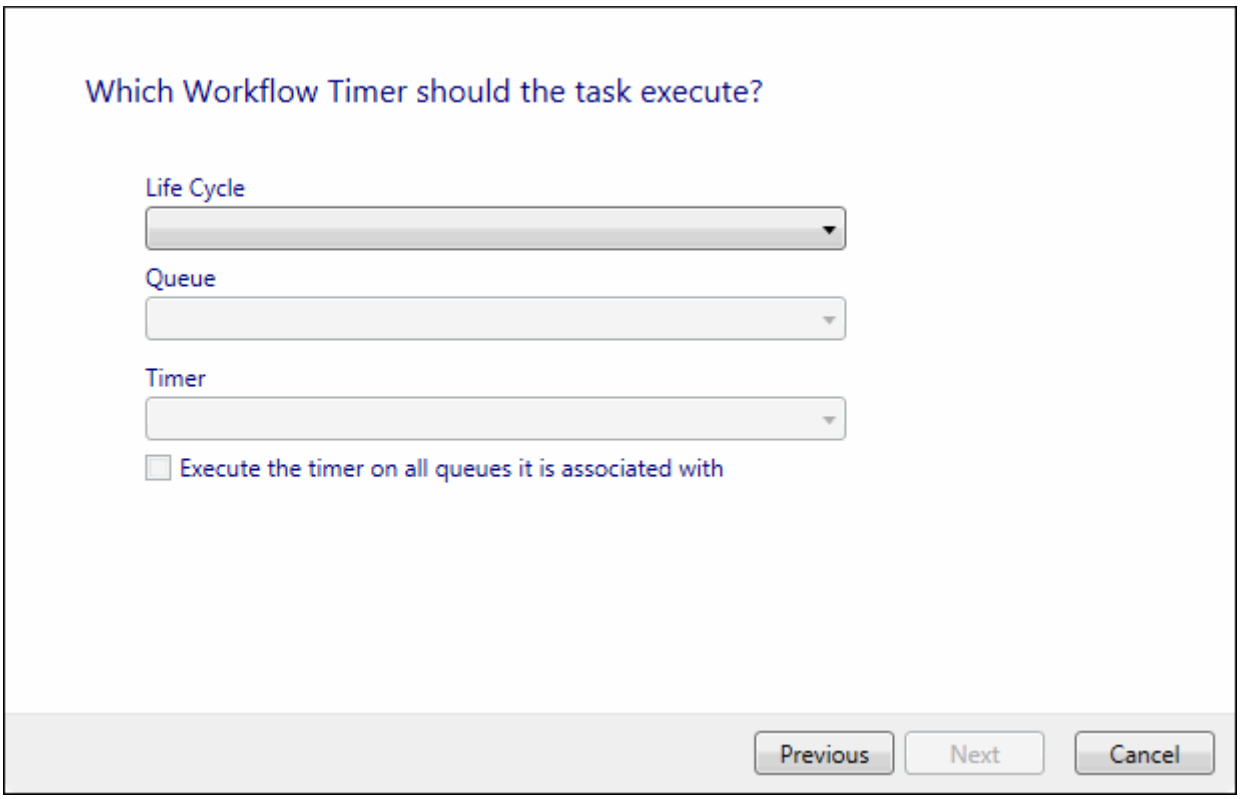
Note: A Workflow Client license and the **Workflow Configuration** configuration right are required to create a Workflow timer task.

In order for tasks to be configured for Workflow timers, the Workflow timers must use the **Unity Scheduler Timer** timer type. The **Unity Scheduler Timer** timer type can be selected during the creation of a new timer.

For more information on Workflow configurations, see the Workflow module reference guide.

Tip: Existing **Legacy Timers** that need to be executed by the Unity Scheduler need to be converted to **Unity Scheduler Timers** using the Timer Conversion utility available in OnBase Studio. For more information, see the Workflow module reference guide.

1. To configure a task for a Workflow timer, select **Workflow** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**.



3. Select the **Life Cycle** in which the timer resides.

Note: If a life cycle that uses a Unity Scheduler timer task is deleted, the associated task is also deleted.

4. Select the **Queue** in which the timer resides.
   If the timer is associated with more than one queue and you want this task to execute the timer against all queues with which it is associated, select **Execute the timer on all queues it is associated with**.

Note: The **Execute the time on all queues it is associated with** option is disabled when a rule queue is selected from the **Queue** drop-down list.

5. Select the **Timer** this task will execute.
6. To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

Note: A **Document Composition** license or an **Enterprise Document Composition** license is required to create a **Document Composition** task.

The Document Composition Service can be used to automatically compose and store documents in OnBase. The Document Composition Service is required to use Enterprise Document Composition. The Document Composition Service can also be used with Document Composition.

In order to configure the Document Composition Service, you must create and configure at least one **Document Composition** Unity Scheduler task.

Note: For more information on Document Composition, Enterprise Document Composition, and the Document Composition Service, see the **Document Composition** module reference guide.

Document Composition Task

In order for the Document Composition Service to function correctly, a corresponding **Document Composition** Unity Scheduler task must be created.

Note: If you are upgrading from a version of OnBase prior to Foundation EP2, you must uninstall the previous version of the Document Composition Service. Also, any firewall settings configured to accommodate of the previous version of the Document Composition must be updated to accommodate the Unity Scheduler.

To configure an **Document Composition** task, select **Document Composition** from the drop-down list when prompted to select the type of task you want to create.

To finish configuring the task, click **Next** and continue to Creating Tasks on page 60.

Note: The **Document Packets** license and the **Document Packets** privilege are required to create a **Document Packets** task.

The **Document Packets** task can be used to schedule the automatic creation of Document Packets.

Document Packets Task

To configure a task that creates Document Packets, select **Document Packets** from the drop-down list when prompted to select the type of task you want to create.

To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

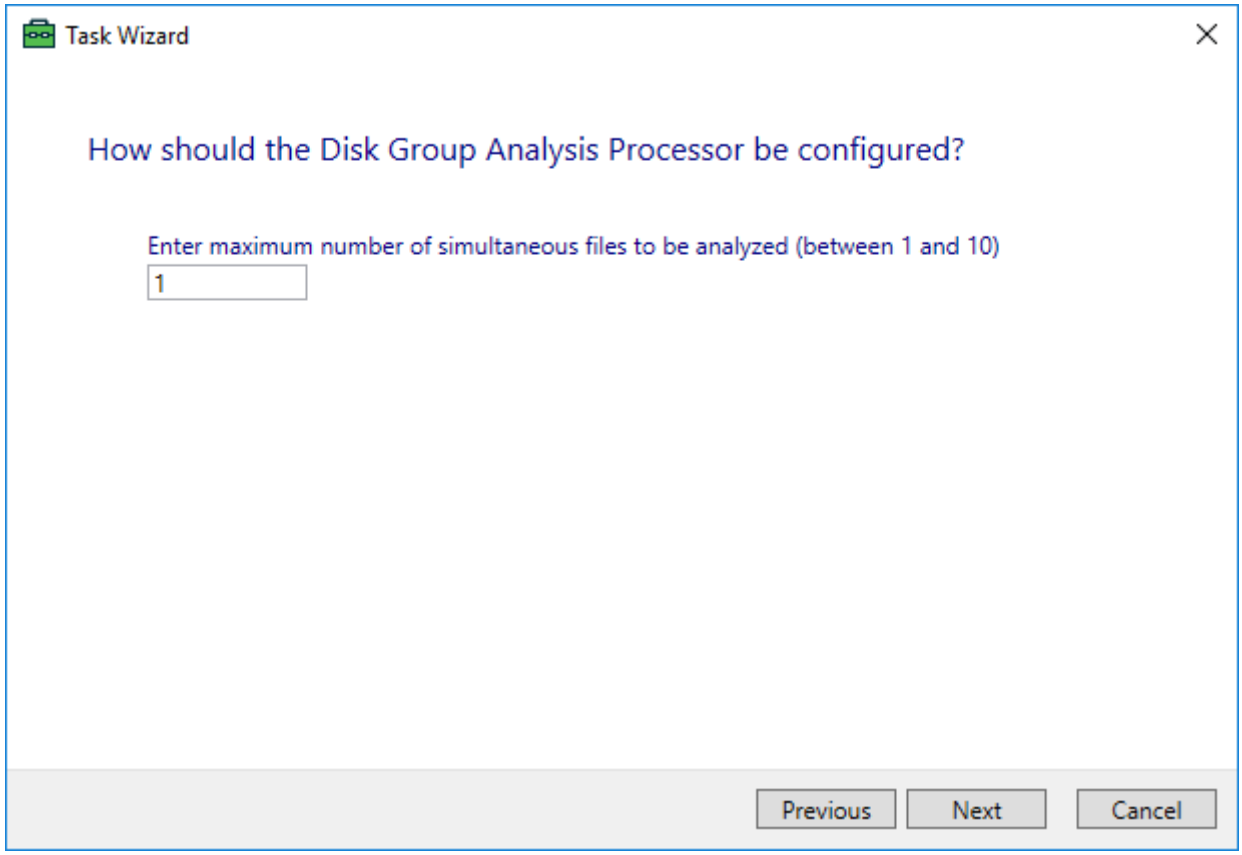
Several Platter Management tasks can be executed in the Unity Scheduler. For information on configuring these tasks within the Unity Scheduler Task Wizard, see:

For more information on Platter Management, see the **Platter Management** module reference guide.

Disk Group Analysis Processing

The **Disk Group Analysis Processing** task performs all of the analysis jobs configured. For more information on analysis jobs, see the **Platter Management** module reference guide. To configure a task to perform disk group analysis:

1. Select **Disk Group Analysis Processing** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The **Disk Group Analysis Processor** page is displayed.



3. Select the maximum number of simultaneous files to be analyzed.

Note: The recommended maximum number of simultaneous files to be analyzed is 2. Higher settings are available, but users will need to monitor their systems to ensure the higher setting does not negatively impact performance.

4. Click **Next**. The User Group selection page of the **Task Wizard** is displayed.

To finish configuring the task, continue to Configuring Tasks on page 63.

Incomplete Commit Queue Processing

The **Incomplete Commit Queue Processing** task commits any documents remaining in the Incomplete Commit Queue. If the automatic commit fails upon an ad hoc (single document) import, the document is added to the Incomplete Commit Queue. The **Incomplete Commit Queue Processing** task is a system task that is automatically configured in the Unity Scheduler. The task is run each day at 2am.

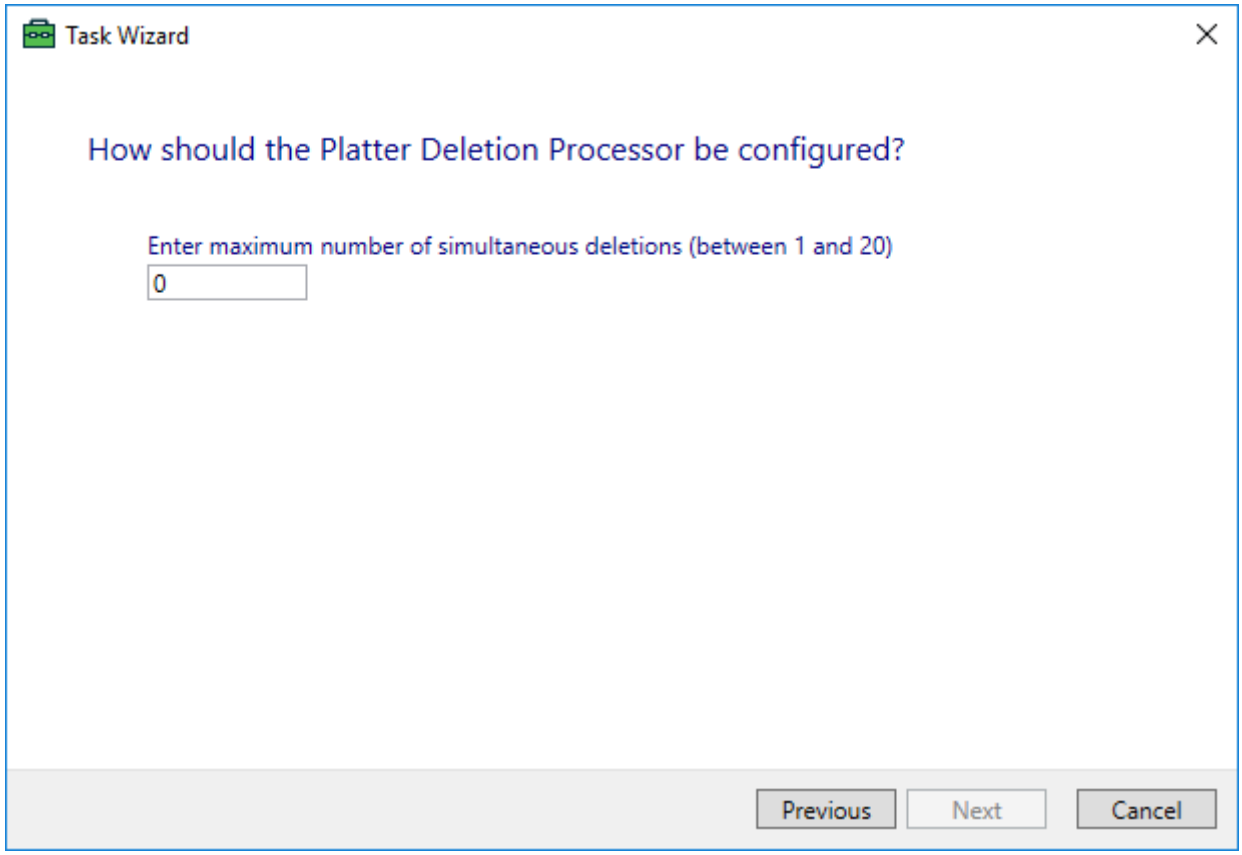
Incomplete Delete Queue Processing

The **Incomplete Delete Queue Processing** task deletes any items in the Incomplete Delete Queue in Platter Management. If deletion cannot be completed on these items due to issues with permissions, connections, a lack of access, or another reason, these items remain in the Incomplete Delete Queue.The **Incomplete Delete Queue Processing** task is a system task that is automatically configured in the Unity Scheduler. The task is run each day at 2am.

Platter Deletion Processing

The **Platter Deletion Processing** task executes any platter deletion jobs that have been approved in Platter Management Administration. To configure platter deletion processing:

1. Select **Platter Deletion Processing** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The **Platter Deletion Processor** page is displayed.



3. Type the maximum number of simultaneous deletions into the field. The value entered into this field must be between 1 and 20.

Note: The recommended maximum number of simultaneous deletions is 2. Higher settings are available, but users will need to monitor their systems to ensure the higher setting does not negatively impact performance.

4. Click **Next**. The User Group selection page of the **Task Wizard** is displayed.

To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

S3 Upload Cache Processing

The **S3 Upload Cache Processing** task moves the data in the S3 upload cache of an S3 Disk Group from the local location to the cloud storage on a configured S3 provider. For more information on the S3 Disk Groups, see the Platter Management module reference guide. A single S3 Upload Cache Processing task is automatically configured when the Unity Scheduler is launched.

To configure an additional S3 Upload Cache Processing task:

1. Select **S3 Upload Cache Processing** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the **Task Wizard** is displayed.

To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

Disk Group Migration Processing

The Disk Group Migration Processing task executes and Disk Group Migration jobs that have been previously configured in the OnBase Client. For more information on Disk Group Migration, see the Platter Management module reference guide.

To configure a Disk Group Migration Processing task:

1. Select **Disk Group Migration Processing** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the **Task Wizard** is displayed.

To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

Disk Group Analysis Processing for S3 Disk Groups

The Disk Group Analysis Processing for S3 Disk Groups task performs any S3 disk analysis rules that have been created and queued for processing. For more information on creating analysis rules and queuing analysis jobs, see the Platter Management module reference guide.

To configure an additional **Disk Group Analysis Processing for S3 Disk Groups** task:

1. Select **Disk Group Analysis Processing for S3 Disk Groups** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the **Task Wizard** is displayed.

To finish configuring the task, click **Next** and continue to Configuring Tasks on page 63.

You can use Unity Scheduler to create tasks that perform Message Broker maintenance processes on a specified schedule. These tasks work in conjunction with the maintenance and error handling settings configured for each Message Broker project.

See the following sections for information on each Message Broker task:

Message Broker Archiver

The **Message Broker Archiver** task archives completed and canceled Message Broker messages.

Note: To be archived by this task, message items must first be marked for archiving by the Message Broker project's **Archive Message Item** settings on the **Maintenance** tab of the **Properties** pane in OnBase Studio. See the section on editing a Message Broker project in the **Studio** documentation for more information on configuring a Message Broker project's maintenance settings.

To create an Message Broker Archiver task:

1. Select **Message Broker Archiver** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the Task Wizard is displayed.

Configuring a **Message Broker Archiver** task does not require any task-specific configuration in the Task Wizard. To finish configuring the task, continue to Configuring Tasks on page 63.

Message Broker Cleaner

The **Message Broker Cleaner** task cleans up the Message Broker messages queue and routes messages to the appropriate queues. This task deletes or purges messages, depending on each message's maintenance settings.

Note: To be deleted or purged by this task, message items must first be marked for deleting or purging by the Message Broker project's **Delete Message Item** and **Purge Message Item** settings on the **Maintenance** tab of the **Properties** pane in OnBase Studio. See the section on editing a Message Broker project in the **Studio** documentation for more information on configuring a Message Broker project's maintenance settings.

To create an Message BrokerCleaner task:

1. Select **Message Broker Cleaner** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the Task Wizard is displayed.

Configuring an **Message Broker Cleaner** task does not require any task-specific configuration in the Task Wizard. To finish configuring the task, continue to Configuring Tasks on page 63.

Message Broker Send Queue Monitor

The **Message Broker Send Queue Monitor** task monitors the Message Broker send queue.

To create an EIS Workflow Messaging Cleaner task:

1. Select **EIS Workflow Messaging Cleaner** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the Task Wizard is displayed.

Configuring an **Message Broker Send Queue Monitor** task does not require any task-specific configuration in the Task Wizard. To finish configuring the task, continue to Configuring Tasks on page 63.

EIS Workflow Messaging Unity Scheduler Tasks

You can use Unity Scheduler to create tasks that perform EIS Workflow XML Messaging maintenance processes on a specified schedule. These tasks work in conjunction with the maintenance settings configured for each message item type, which specify when to archive, delete, or purge message items.

See the following sections for information on each EIS Workflow Messaging task:

- EIS Workflow Messaging Archiver on page 167
- EIS Workflow Messaging Cleaner on page 168

EIS Workflow Messaging Archiver

The **EIS Workflow Messaging Archiver** task archives completed EIS Workflow Messaging message items. Completed message items are marked for archiving, and message items marked for archiving are archived.

Note: To be archived by this task, message items must first be marked for archiving according to the message item type's **Archive Message Item** settings on the **Maintenance** tab of the **Properties** pane in OnBase Studio. See the section on editing a message item type in the **Studio** documentation for more information on configuring a message item type's maintenance settings.

To create an EIS Workflow Messaging Archiver task:

1. Select **EIS Workflow Messaging Archiver** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the Task Wizard is displayed.

Configuring an **EIS Workflow Messaging Archiver** task does not require any task-specific configuration in the Task Wizard. To finish configuring the task, continue to Configuring Tasks on page 63.

EIS Workflow Messaging Cleaner

The **EIS Workflow Messaging Cleaner** task cleans up the volume of completed and archived EIS Workflow Messaging message items in the database. This task deletes or purges message items, depending on each message item type's maintenance settings.

Note: To be deleted or purged by this task, message items must first be marked for deleting or purging according to the message item type's **Delete Message Item** and **Purge Message Item** settings on the **Maintenance** tab of the **Properties** pane in OnBase Studio. See the section on editing a message item type in the **Studio** documentation for more information on configuring a message item type's maintenance settings.

To create an EIS Workflow Messaging Cleaner task:

1. Select **EIS Workflow Messaging Cleaner** from the drop-down list when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the Task Wizard is displayed.

Configuring an **EIS Workflow Messaging Cleaner** task does not require any task-specific configuration in the Task Wizard. To finish configuring the task, continue to Configuring Tasks on page 63.

Several medical records tasks can be executed in the Unity Scheduler. For information on configuring these tasks within the Unity Scheduler, see the following:

- Medical Records Assigning Authority Initializer on page 169
- Medical Records Document Attachment Updater on page 171
- Medical Records Orphan Documents Processor on page 174
- Medical Records Relevant Date Updater on page 175

Note: You system must be licensed for either the Basic HL7 Listener or the HL7 Listener to create and configure these tasks.

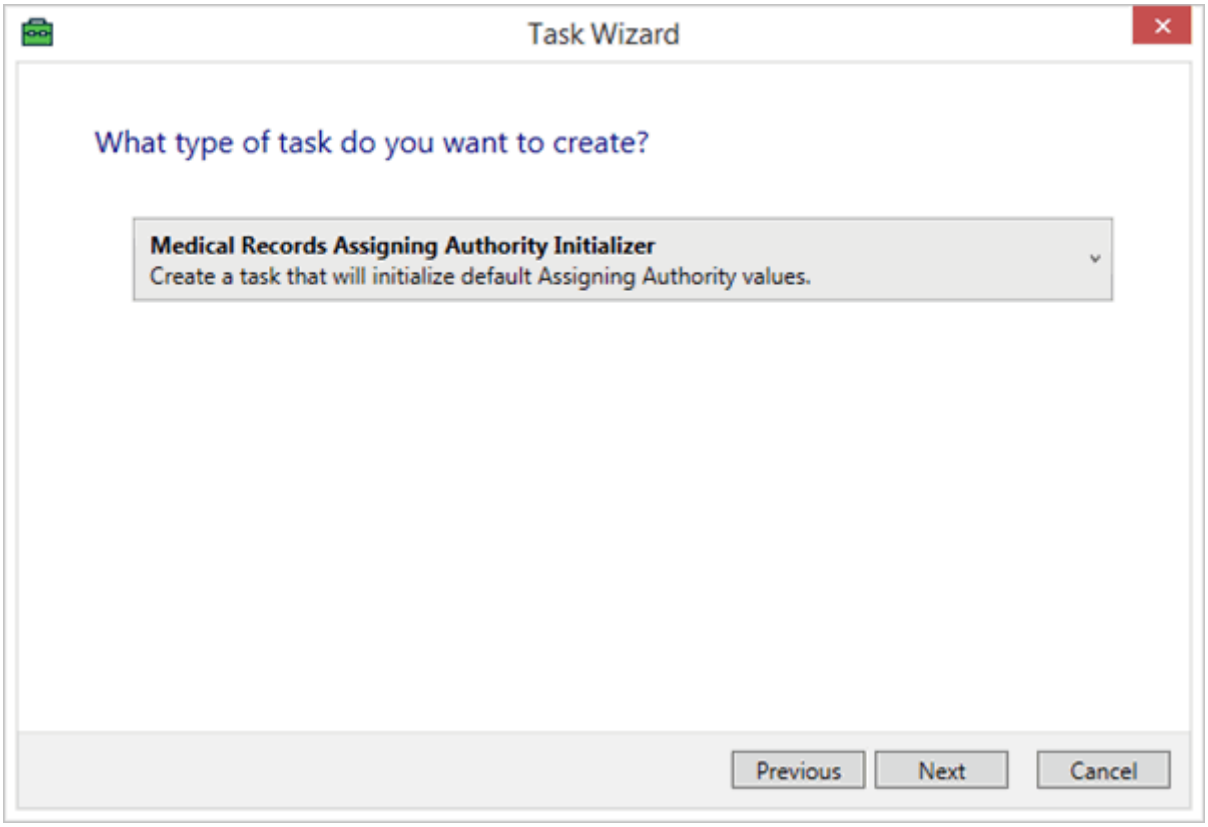
For more information on the medical records configuration related to these tasks, see the **HL7 Module** documentation.

Medical Records Assigning Authority Initializer

When introducing assigning authorities for medical record identifiers (MRN, MPI, or Chart ID), you must run an initializer task to configure default assigning authorities. Assigning authority fields cannot have blank or null values, so this task ensures that records include a default assigning authority for the specified identifiers.

To create an assigning authority initializer task:

1. Select **Medical Records Assigning Authority Initializer** from the drop-down list when prompted to select the type of task you want to create.

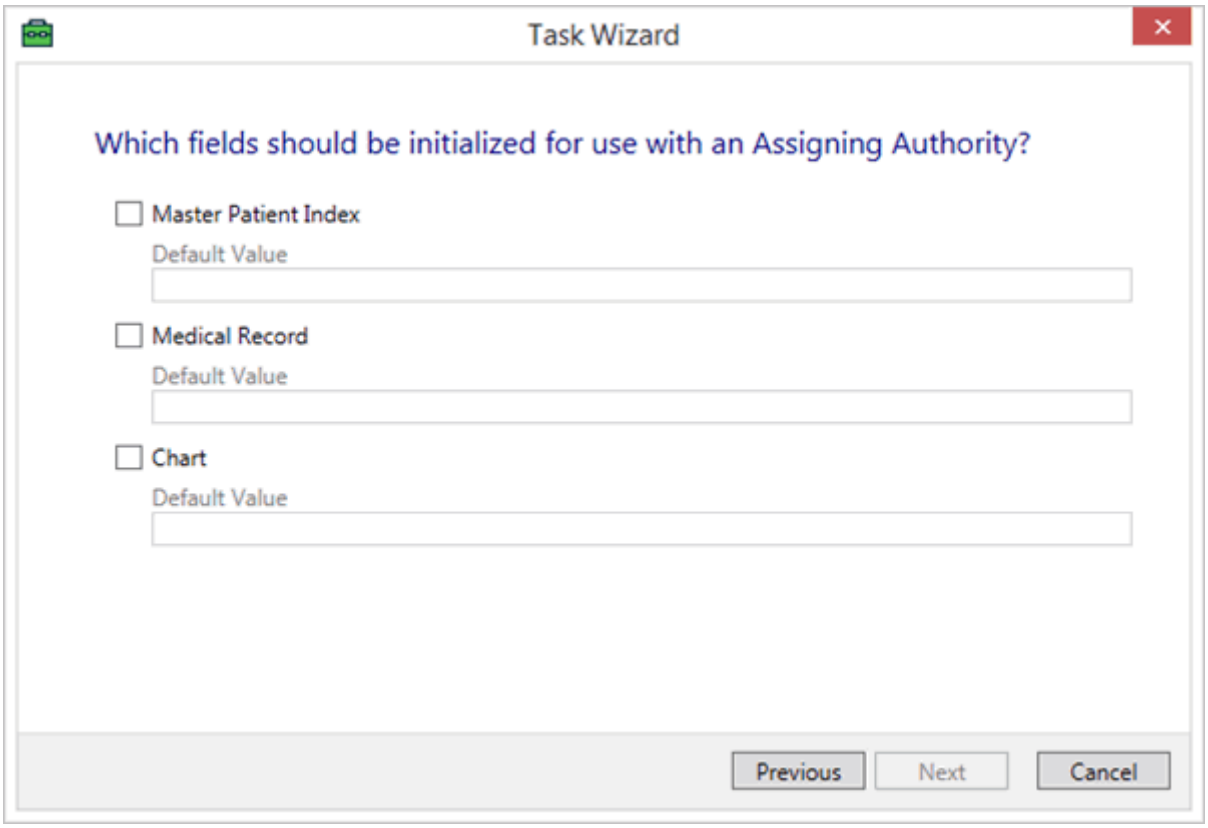


Note: You can create multiple **Medical Records Assigning Authority Initializer** tasks, however, only one task will run at a time.

2. Click **Next**. Special instructions for the task are displayed on the next page of the wizard.

Caution: Before executing the assigning authority initializer, ensure that assigning authority fields have been properly configured. The changes made by the initializer task cannot be undone. Use a test environment to ensure unwanted changes are not introduced before initializing assigning authorities in production systems.

3. Click **Next**. The next page of the wizard is used to specify which identifier fields should be initialized with a default assigning authority value.



4. Select one or more of the **Master Patient Index**, **Medical Record**, or **Chart** options to initialize that identifier with an assigning authority.
5. For each selected identifier field, enter the assigning authority value to use in the **Default Value** field.

Note: If any medical record documents are locked because their attached charts have been closed, their Keyword Values are not updated by the Assigning Authority Initializer. After the task is executed, these documents are listed in the **Document Errors** tab, and can be re-indexed manually as needed.

6. Click **Next**. The next page allows you to assign User Groups to the task.

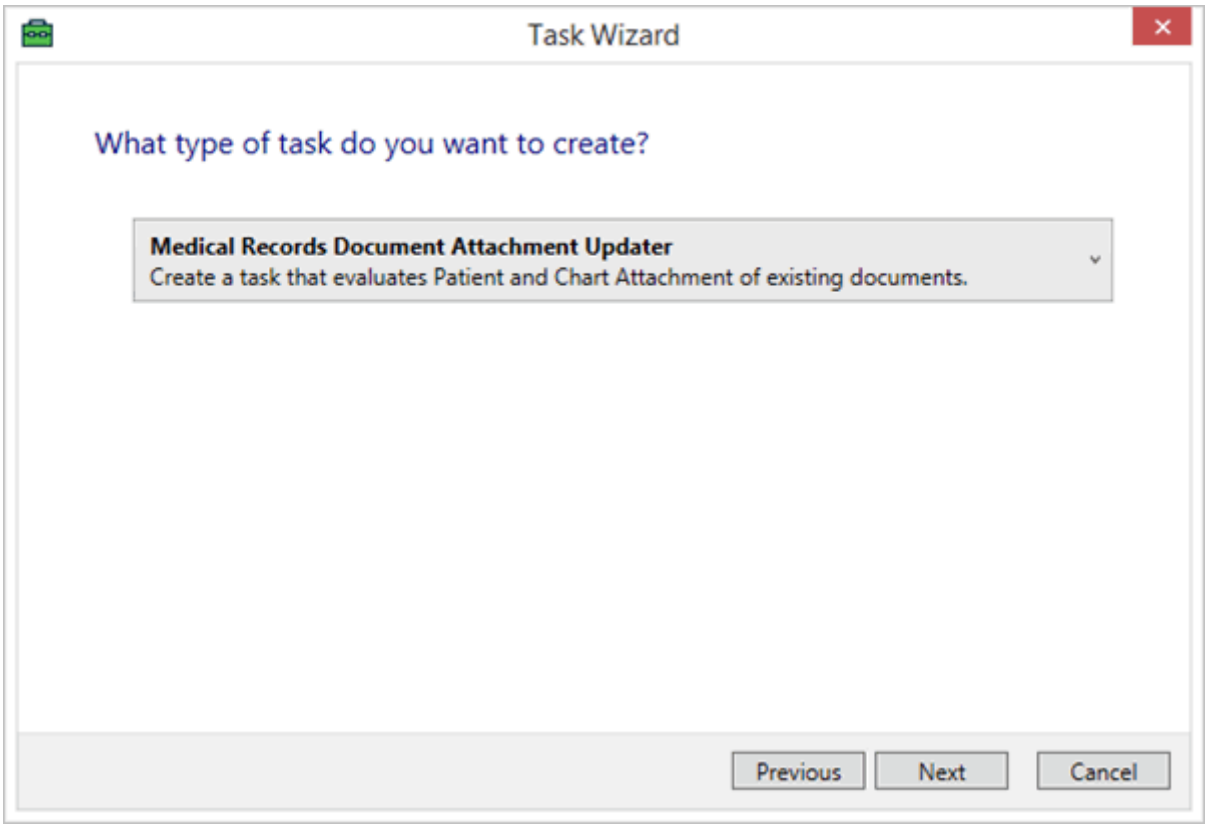
To finish configuring the task, continue to Configuring Tasks on page 63.

Medical Records Document Attachment Updater

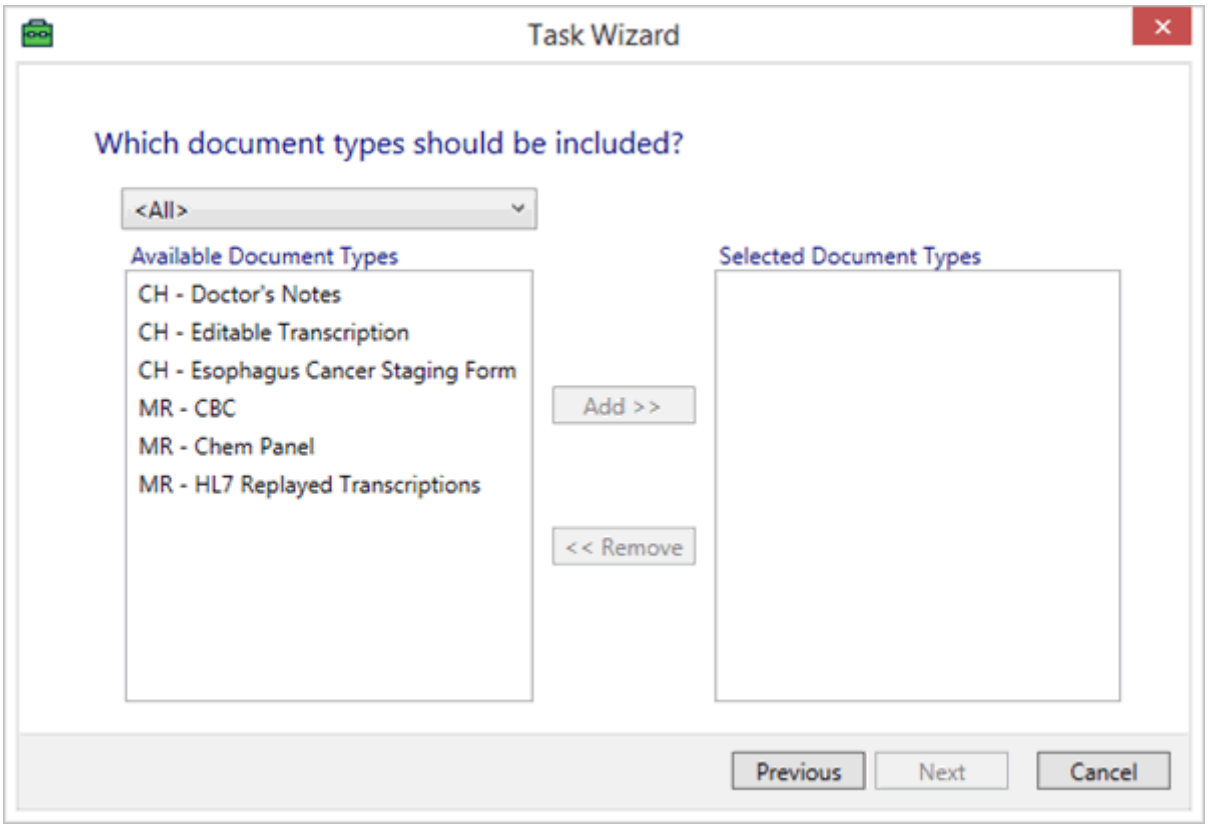
You can use a Unity Scheduler processing task to evaluate medical record documents and attach them to their corresponding patient records and charts.

To create a document attachment updater task:

1. Select **Medical Records Document Attachment Updater** from the drop-down list when prompted to select the type of task you want to create.



2. Click **Next**. The next page lists available medical record Document Types for the task to include in evaluation.



3. Select a Document Type from the **Available Document Types** list and click **Add** to include documents of that type in the evaluation task. You can use the drop-down list to filter the **Available Document Types** list by Document Type Group.
4. When one or more Document Types have been selected, click **Next**. The next page asks you to specify which documents to evaluate.
5. Select one of the following options to limit which documents within the selected Document Types are evaluated as part of the attachment task:
   - Select **Evaluate documents based on Medical System Settings** to align the behavior of the task with the **Perform Medical Records Document Attachment** option set in the **Medical System Settings** dialog box, accessed in the Configuration module. See the section on Medical System Settings in the **HL7** documentation for more information.

     The description of this option informs you of the setting that is currently selected in the **Medical System Settings** dialog box.
   - Select **Evaluate all documents** to apply no limit to the task. All documents belonging to the selected Document Types are evaluated for attachment.
   - Select **Evaluate documents based on DIP Format** to attempt to perform medical records attachment on documents imported though a DIP process using the **Perform Asynchronous Attachment** setting.

6. Click **Next**. The next page of the wizard allows you to configure additional settings for the medical records attachment.
   - Select **Perform Medical Records AutoFill Keyword Set Expansion** to search for related MPI-based AutoFill Keyword Sets and use their values to update the Keyword Values on the document with current values.
   - Select **Use inactive identifiers to attempt attachment** to perform a secondary search for medical records identifying values if active values are not found in the system. These identifiers may have changed in the system since the documents were created, but records of previous values are retained, and can be used to attach documents with this setting.
   - Select the **From:** and **To:** date range options to restrict the documents evaluated for medical records attachment to those which were imported within the specified time frame.
7. Click **Next**. The next page of the wizard requires you to set the User Groups that have access to this task. Use the **User Groups** drop-down and the **Add** button to select groups as needed.
8. Click **Next**. The next page of the wizard allows you to configure a schedule for the task to run on. See the **Unity Scheduler** documentation for details on configuring task schedules.

Note: The Medical Records Document Attachment Processor task, once executed, runs continuously, checking for new batches of documents every 60 seconds. It will only stop when manually disabled or at the end time of an execution window.

9. Click **Next**. The next page of the wizard allows you to configure interval schedules for the task. See the **Unity Scheduler** documentation for details on configuring interval schedules.
10. Click **Next**. The next page allows you to set a start and expiration date for the task. If needed, select the option for a start or expiration date and use the date controls.
11. Click **Next**. The summary of the created task is displayed. Review it for accuracy, then click **Finish**.

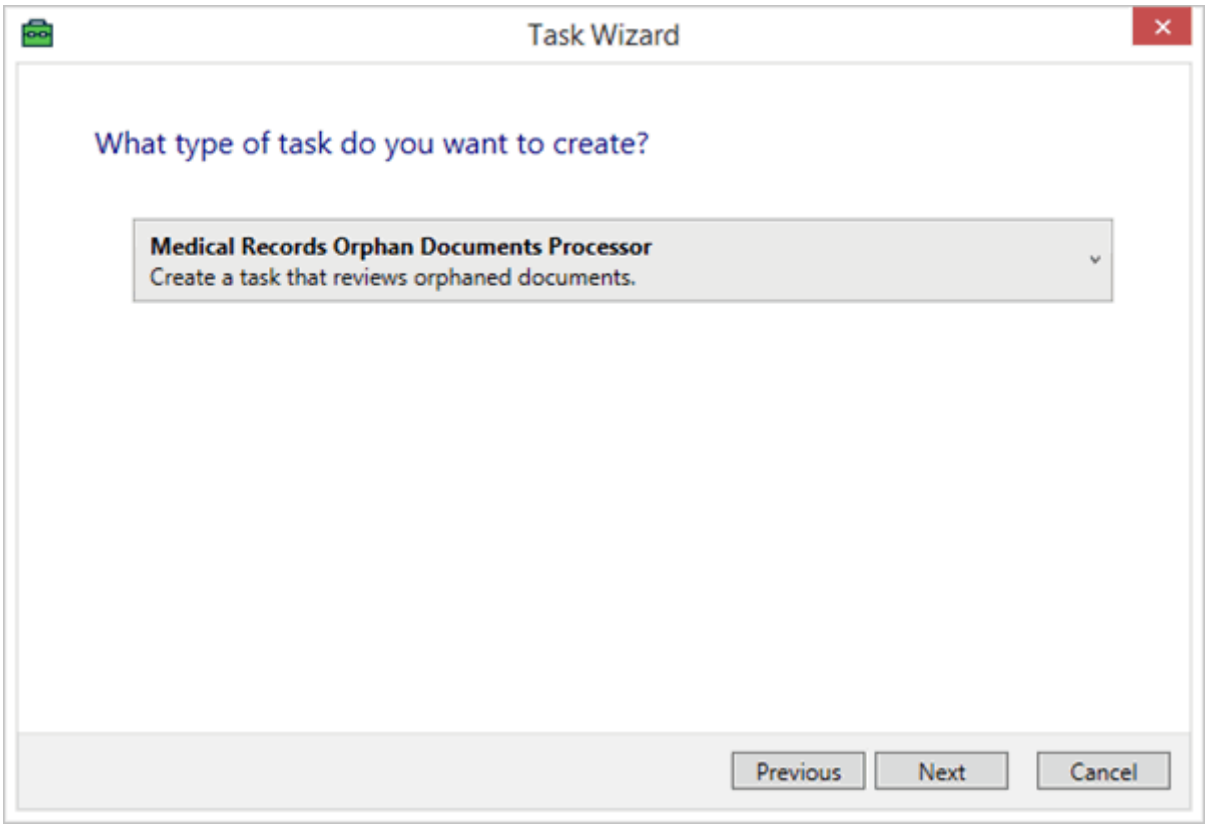
To finish configuring the task, continue to Configuring Tasks on page 63.

Medical Records Orphan Documents Processor

You can create a Unity Scheduler task to review orphan documents and attach them to corresponding patient records and charts which have been created since the documents were designated as orphaned.

To create a orphaned documents review task:

1. Select **Medical Records Orphan Documents Processor** from the drop-down list when prompted to select the type of task you want to create.



Note: You can create multiple **Medical Records Orphan documents Processor** tasks, however, only one task will run at a time.

2. Click **Next**. The next page of the wizard warns you that the HL7 Listener service must be restarted in order for the processor to run.
3. Click **Next**. The next page allows you to assign User Groups to the task.

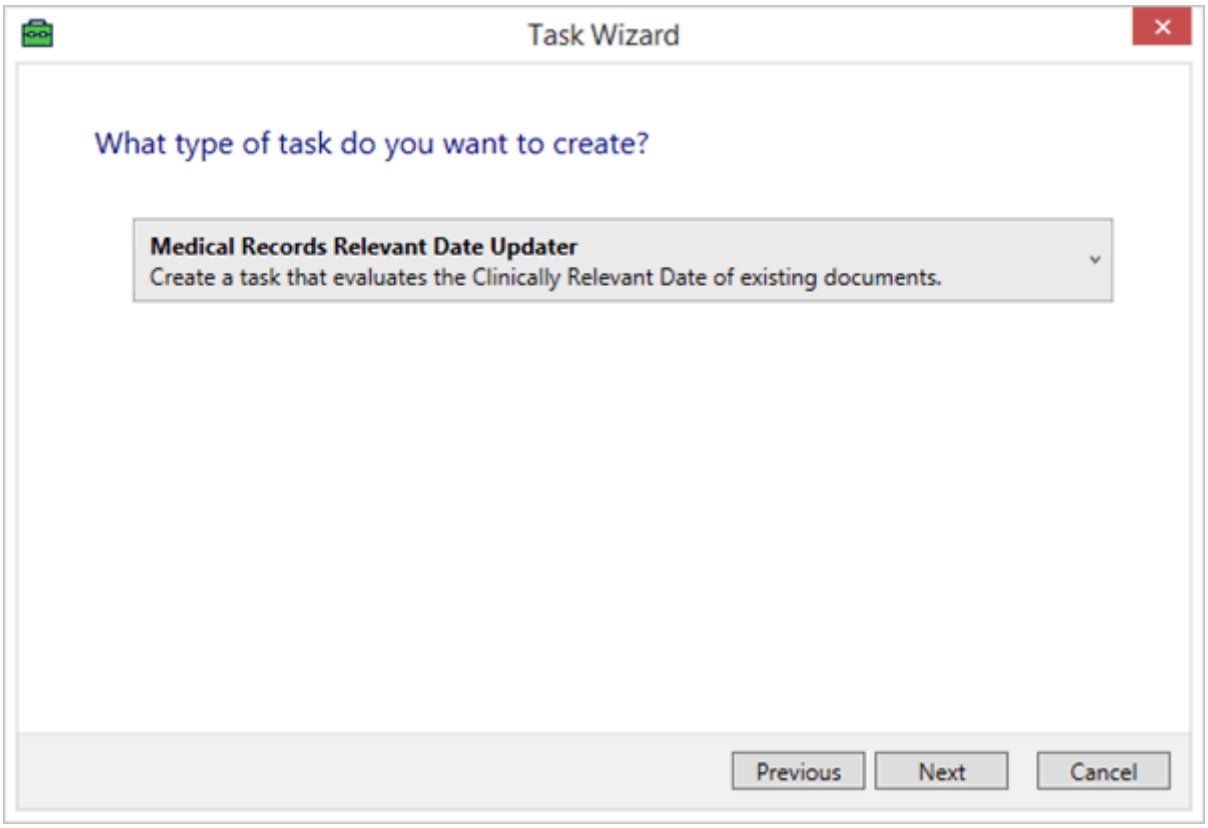
To finish configuring the task, continue to Configuring Tasks on page 63.

Medical Records Relevant Date Updater

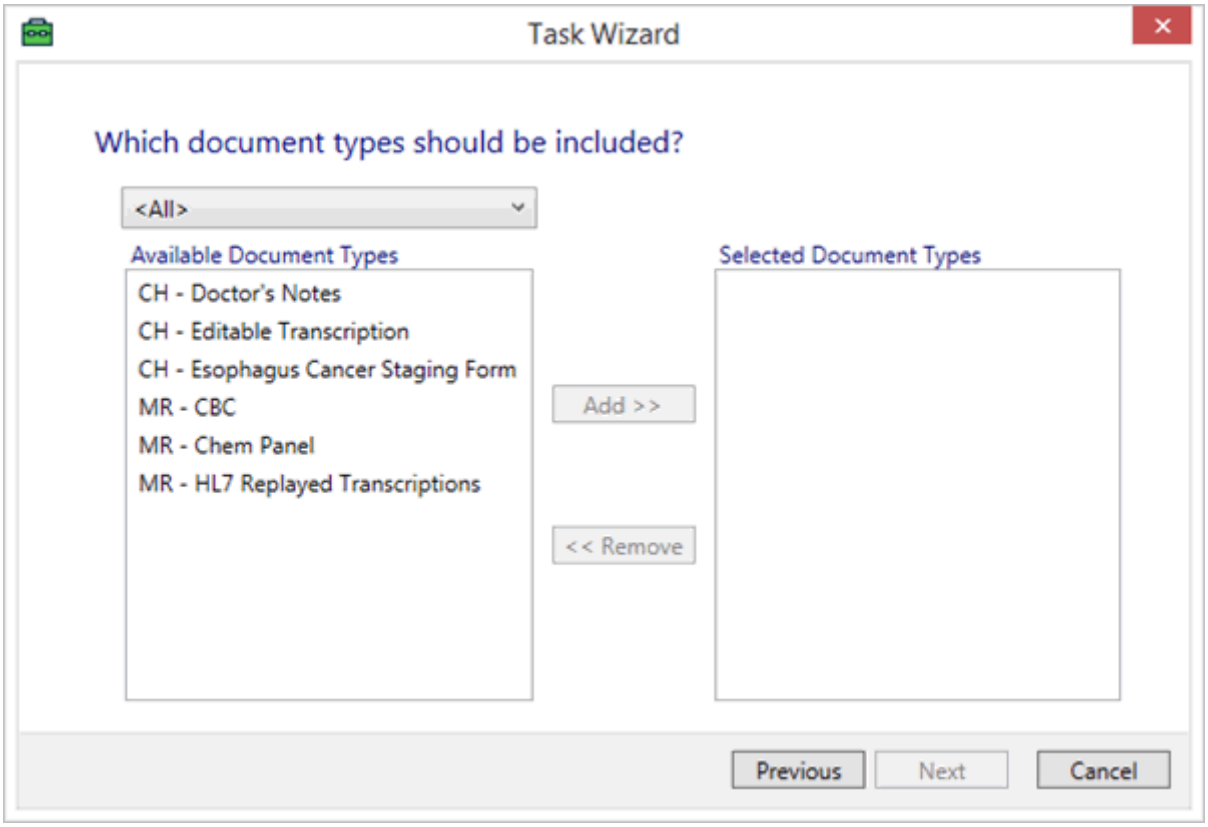
A scheduled task must be created in order to propagate changes made to clinically relevant date configurations for medical records Document Types to the existing documents within those Document Types. When changes are made to clinically relevant dates, this updater task can apply the new configuration to documents on either an ad hoc or scheduled basis.

To create a relevant date updater task:

1. Select **Medical Records Relevant Date Updater** from the drop-down list when prompted to select the type of task you want to create.



2. Click **Next**. The next page lists available medical record Document Types for the task to include in evaluation.



3. Select a Document Type from the **Available Document Types** list and click **Add** to include documents of that type in the evaluation task. You can use the drop-down list to filter the **Available Document Types** list by Document Type Group.
4. Click **Next**. The next page allows you to assign User Groups to the task.

To finish configuring the task, continue to Configuring Tasks on page 63.

The Unity Scheduler module allows you to schedule Release of Information (ROI) tasks to generate ROI packets at a regular interval.

Release of Information Task Group

Before creating a task for ROI packet generation, you must create a task group. When you create the ROI Packet Generation service, you will need to specify the name of the task group containing the packet generation task.

Note: As a best practice, assign only one task to this task group.

To create a task group:

1. Open the Unity Management Console.
2. Add or connect to a task scheduler for the appropriate data source.
3. Expand the task scheduler in the **Console** pane.
4. Right-click **Tasks** and select **Create Task Group**.
5. Enter a name for the task group that will run the packet generation task.

Release of Information Task

The Release of Information task type generates packets based on ROI requests managed in the Medical Records Unity Client. You must create a Release of Information task in order for ROI packets to be generated.

The following settings are recommended for the Release of Information task. Detailed steps follow this table.

Task Wizard Prompt	Value / Setting
Name	Generate ROI Unity Packets
Task Group	The task group you created for packet generation. Only one task should be assigned to this task group.
What type of task do you want to create?	Release of Information
Which user groups should have access to this task?	The User Group that needs to manage the task using the Unity Management Console.

To create a Release of Information task:

1. In the Unity Management Console, connect to the task scheduler for the appropriate data source.
2. Right-click the task scheduler and select **Create Task**.
3. Name the new task **Generate ROI Unity Packets**.
4. Type an optional description for the task.
5. From the **Task Group** drop-down, select the task group that will run the packet generation task.
6. Click **Next**.
7. Select **Release of Information** from the task type drop-down.
8. Click **Next**.
9. Select the User Group responsible for managing the task using the Unity Management Console, and then click **Add**.
10. Click **Next**.
11. On the scheduling page, click **Add**, and then select **Interval**.
12. Set the interval according to your packet generation needs.
13. Click **OK**.
14. Click **Next**.
15. Select **The interval schedules should always execute**.
16. Click **Next**.
17. Optionally, specify when the task should start and expire. Because the ROI Packet Generation service should always execute, it is recommended to leave these options disabled.
18. Click **Next**.
19. Click **Finish**.

Deficiency Management for Allscripts Sunrise Acute Care

If OnBase is licensed for the Integration for Allscripts Sunrise Acute Care, you can use a scheduler service to retrieve deficiency information from Allscripts Sunrise Acute Care and create external deficiencies in OnBase. The Allscripts external deficiency service establishes a secure connection to an Allscripts Sunrise HIM Deficiencies web service, authenticated by Helios Security Services, and checks for new deficiency data at configured intervals. This data is used to create, update, or delete external deficiencies in OnBase.

To configure the external deficiency service for Allscripts:

1. In the Unity Management Console, create and configure a **Deficiency Management for Allscripts Sunrise Acute Care** task. See Create the Deficiency Management Scheduled Task on page 180 for details.
2. Using the command prompt, install the scheduler service which executes the deficiency management task. See Create the Scheduler Service on page 183 for details.
3. In the Allscripts Helios Gateway Client, configure the endpoint connection and authentication settings. Refer to the relevant Allscripts documentation for details.

Create the Deficiency Management Scheduled Task

The first step in setting up the Allscripts external deficiency service is to create a **Deficiency Management for Allscripts Sunrise Acute Care** task in the Unity Management Console.

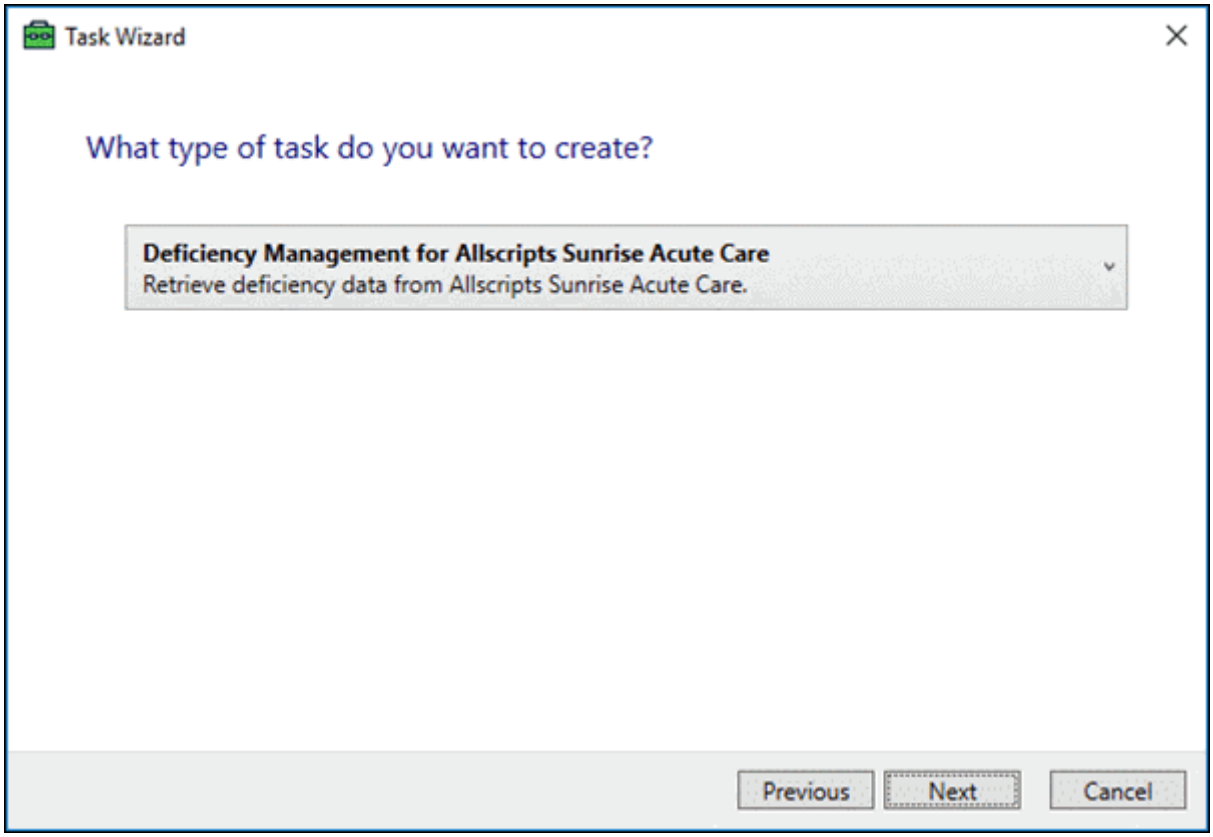
Note the following prerequisites:

- The **Integration for Allscripts Sunrise Acute Care** license is required to create a **Deficiency Management for Allscripts Sunrise Acute Care** task.
- A Deficiency Management task is only successful when the task is run as a Windows Service. This is due to a requirement that an OnBase User Account that is configured as a Service Account is leveraged. Executing this process through the Unity Management Console will *not* result in deficiencies being synced between Allscripts Sunrise Acute Care and OnBase.

To create a deficiency management task:

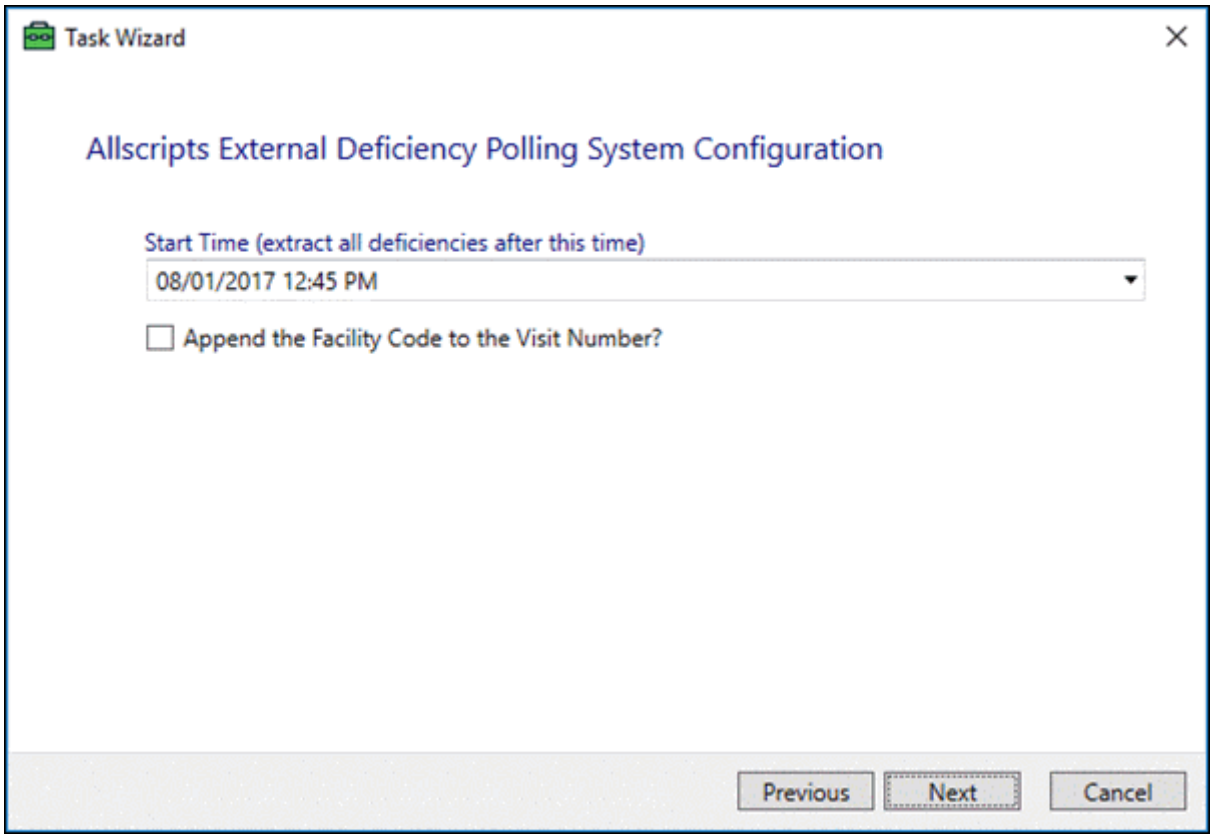
1. From the provided build directory, navigate to **\OEM\AllscriptsECM\AppServer** and locate the files **Hyland.Integrations.Allscripts.ExternalDeficiencies.dll** and **SXA.HIM.Entities.dll**.
2. Copy the DLLs to the Application Server's **\bin** folder. Typically, the path to this folder is **C:\inetpub\wwwroot\AppServer\bin**.
3. Open the Unity Management Console, and connect to the Application Server with either an existing or new task scheduler.
4. In the **Console** tree, expand the task scheduler, select **Tasks**, then click **Create Task Group** from the **Action** pane.

5. Enter a name for the new task group. This task group is used by the scheduler service to identify the deficiency management task to execute, and should contain only a single deficiency management task.
6. Click **Create Task** in the **Action** pane. The **Task Wizard** is displayed.
7. Enter a name for the new task in the **Name** field.
8. Enter a description for the task in the **Description** field.
9. Add the new task to the task group you created by selecting it from the **Task Group** drop-down list.
10. Click **Next**. The next page asks you to choose a type of task to create.



11. Select **Deficiency Management for Allscripts Sunrise Acute Care** from the drop-down list.

12. Click **Next**. The next page contains options specific to the task type.



13. In the **Start Time** field, enter the date and time which corresponds to the earliest Allscripts deficiencies you want to send to OnBase. The Allscripts Sunrise database will be polled for deficiencies created from this time forward.
14. If chart identifiers in OnBase are formed by combining the Visit Number and Facility Code from Allscripts, then select **Append the Facility Code to the Visit Number**.

    Do not select this option if OnBase chart IDs exactly match the Visit Numbers from Allscripts. The external deficiency service supports the use of assigning authorities to distinguish between charts with matching identifiers.
15. Click **Next**.
16. Select a user group from the **User Group** drop-down list and click **Add** to give that group access to the task.

Note: Regardless of the user group it is assigned to, the **Deficiency Management for Allscripts Sunrise Acute Care** task can only be executed by an OnBase service account. This also means that it cannot be run manually by clicking **Execute** in the Unity Management Console.

17. Click **Next**.
18. Configure the task's schedule to set how often Allscripts is checked for new deficiency data. See the **Unity Scheduler** documentation on Configuring Tasks for more information on scheduling.
19. Click **Next**.

20. If you added an interval schedule to the task, select **The interval schedules should always execute**.
21. Click **Next**.
22. Leave both **The task should start at** and **The task should no longer execute after** deselected. If the task is allowed to expire, the scheduler service will stop checking Allscripts for new deficiencies.
23. Click **Next**.
24. Review the summary of the task settings, and then click **Finish**.
25. See Create the Scheduler Service on page 183 for how to install the service which runs the task you have just created.

Create the Scheduler Service

After the **Deficiency Management for Allscripts Sunrise Acute Care** task has been configured in the Unity Management Console, you need a service to execute it.

Note the following prerequisites:

- The Unity Scheduler and the deficiency management scheduler service must be installed on the same computer as the Allscripts Helios Gateway Client in order to be authenticated by Helios Security Services.
- It is considered a best practice to create an independent Windows Service to run the Allscripts deficiency management task.This is primarily to ensure that the OnBase User Account leveraged by the process is a Service Account. This also mimics the deployment methodology followed by Services.

To create the service:

1. Run the Unity Scheduler installer to install the Unity Scheduler. For more information, see the Installation chapter of the **Unity Scheduler** documentation.
2. Copy the Allscripts integration DLLs to the folder where the Unity Scheduler is installed.
   a. In the provided build directory, browse to **\OEM\AllscriptsECM\Apps\NTServices\Hyland.Scheduler** and locate the files **Hyland.Integrations.Allscripts.ExternalDeficiencies.dll** and **SXA.HIM.Entities.dll**.
   b. Copy these files to the Unity Scheduler install directory. The default location is **C:\Program Files\Hyland\Unity Scheduler**.
3. If necessary, use the command line to create a separate instance of the Unity Scheduler service to run the Allscripts deficiency management task. This step is necessary only if the default instance of the Unity Scheduler is not set up to execute the deficiency management task.

Note: Only one instance of the deficiency management scheduler service should be run at a time. Stop and uninstall any previously created deficiency management scheduler services before proceeding.

For information about creating an instance of the Unity Scheduler service using the command line, see the Installation chapter of the **Unity Scheduler** documentation.

The **DICOM Thumbnails Retrieval** task retrieves thumbnail images of DICOM studies from the Nil server, a component of the NilRead Enterprise Viewer. These thumbnails are stored as renditions of existing studies imported by the HL7 DICOM Processor. When the studies are retrieved using OnBase Patient Window, the document list can display the thumbnail images, allowing users to quickly identify the study or series they are looking for.

Note: Thumbnails can be retrieved only for image-based modalities. If a thumbnail cannot be retrieved for a study document, Patient Window will use a generic thumbnail indicating the document is a DICOM study.

The **DICOM Thumbnails Retrieval** task is available only on systems licensed for Medical Imaging Viewer - NilRead. This task requires components of the HL7 DICOM Processor and the NilRead integration to be correctly configured. For configuration requirements, see the **Medical Imaging Viewer - NilRead** module reference guide.

Creating a DICOM Thumbnails Retrieval Task

To configure the thumbnail retrieval task:

4. Select **DICOM Thumbnails Retrieval** from the drop-down list.
5. Click **Next**. The User Group selection page is displayed.

To finish configuring the task, continue to Configuring Tasks on page 63.

Error Handling for Thumbnail Retrieval Jobs

When processing a thumbnail retrieval job, the Unity Scheduler waits up to 100 seconds for a response from NilRead. If there is no response, the job times out with an error.

If a thumbnail job errors out, the job is eligible to be retried after five minutes. Once eligible, the job is retried after the Unity Scheduler finishes processing all other thumbnail retrieval jobs in the queue.

Thumbnail jobs that error out are deleted after six months if they are still in an error state.

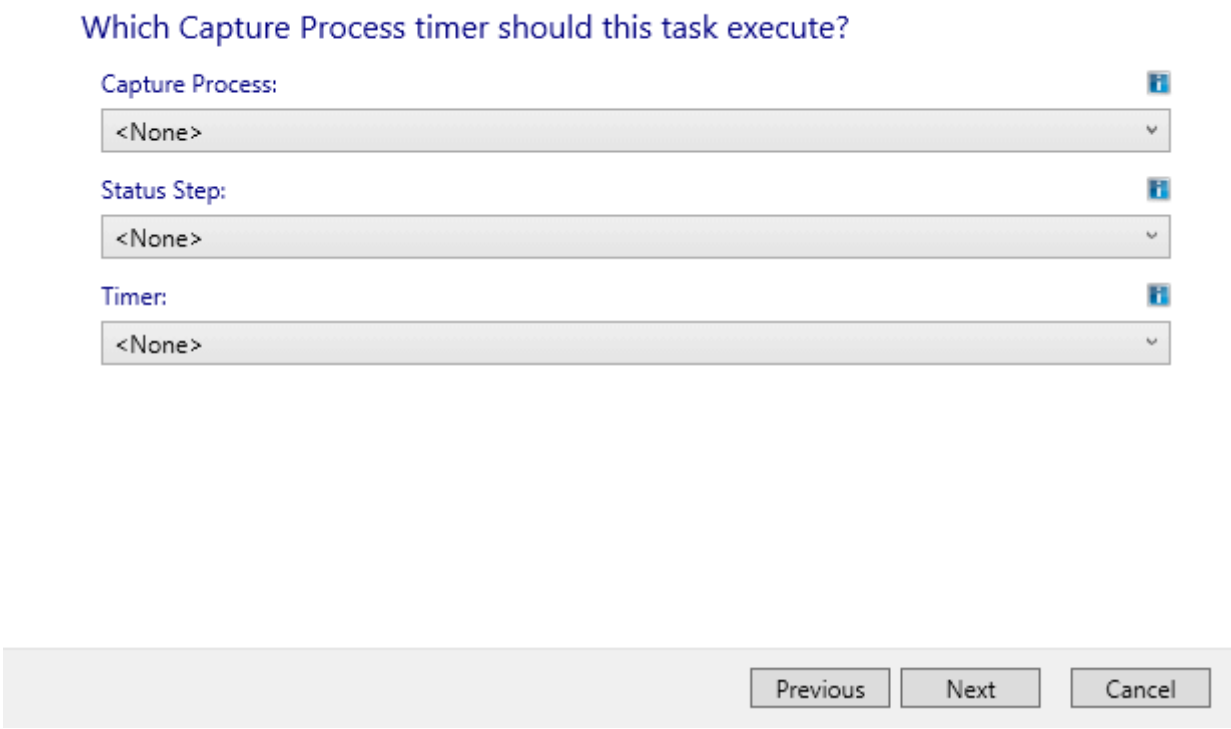
Capture Process Designer Unity Scheduler Tasks

The Unity Scheduler module allows you to schedule Capture Process Designer tasks for execution at a specified time. Tasks can be created to represent timers that should be executed based on certain schedules. Before creating these tasks, ensure that the timers and their associated timer actions have been configured for the appropriate custom capture processes within OnBase Studio.

Creating a Capture Process Designer Task

To create a Capture Process Designer task:

1. From the task type drop-down list, select **Capture Process**.
2. Click **Next**. The timer selection page is displayed.



3. From the **Capture Process** drop-down list, select the appropriate capture process.
4. From the **Status Step** drop-down list, select the appropriate status step.
5. From the **Timer** drop-down list, select the timer on which the task will execute.
6. Click **Next**. The User Group selection page is displayed.

To finish configuring the task, continue to Configuring Tasks on page 63.

Business Indexing Connector for use with SAP ArchiveLink Unity Scheduler Tasks

Several Business Indexing Connection for use with SAP ArchiveLink tasks can be executed in the Unity Scheduler.

For information on configuring these tasks within the Unity Scheduler Task Wizard, see:

- SAP BIC Log Purge on page 186
- SAP BIC Transaction Log Purge on page 186

For more information on Business Indexing Connector for use with SAP ArchiveLink, see the **Business Indexing Connector for use with SAP ArchiveLink** module reference guide.

SAP BIC Log Purge

A Unity Scheduler task can be configured to purge BIC process log entries. To configure the **SAP BIC Log Purge** task to purge log entries:

1. Select **SAP BIC Log Purge** from the drop-down select list of the Task Wizard when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the Task Wizard is displayed.

To finish configuring the task, continue to Configuring Tasks on page 63.

SAP BIC Transaction Log Purge

A Unity Scheduler task can be configured to permanently purge transaction logs that are no longer needed. To configure the **SAP BIC Transaction Log Purge** task to purge transaction logs:

1. Select **SAP BIC Transaction Log Purge** from the drop-down select list of the Task Wizard when prompted to select the type of task you want to create.
2. Click **Next**. The User Group selection page of the Task Wizard is displayed.

To finish configuring the task, continue to Configuring Tasks on page 63.