


# BI xPress Notifications

Last Modified on 17 January 2020

## Introduction

Icon	Description
	Use the <b>Notification Framework</b> to create notification event handlers on events such as OnError, OnWarning, OnSuccess, and OnComplete for any SSIS Packages through the self-contained Notification Framework.

## Feature Highlights

- Add notification to multiple packages at once
- Easy to maintain through XML configuration files
- Send email and SMS text messages

**Note:** You must use the SentryOne Workbench (32-bit) to apply the Notification Engine to SSIS packages on a machine that only contains SSDT for Visual Studio 2015.

Applying the BI xPress Notification Framework to your SSIS Packages will make the following changes to the packages:

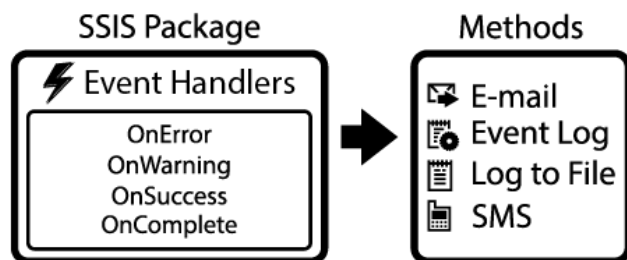
- Configuration File(s) or Package Parameter(s) may be created
- Package level Event Handlers will be created to capture and send runtime information within the OnError, OnWarning, OnSuccess and / or OnComplete Events.

**Note:** These changes are done based on options that are selected during application of the Notification Framework.

## Framework Options

The following framework options are available:

With the **Classic Notification Framework**, the SSIS Package contains a self-contained framework that gathers and sends the notification using the selected method(s).



With the Server Notification Framework, HTTP Requests manage the notification events trigger. Within an SSIS Package, the Notification Engine sends an HTTP Request to the user's BI xPress Server. Once BI xPress Server receives the HTTP Request, BI xPress Server handles the notification, sending all valid events using the event's corresponding provider(s).



**Important:** Do not alter any of the task names or descriptions created by BI xPress because this will cause BI xPress to not recognize any previously created tasks.

The SSIS Package where you are attempting to apply the Notification Engine needs access to a running instance of BI xPress Server to use the BI xPress Server Notification Engine.

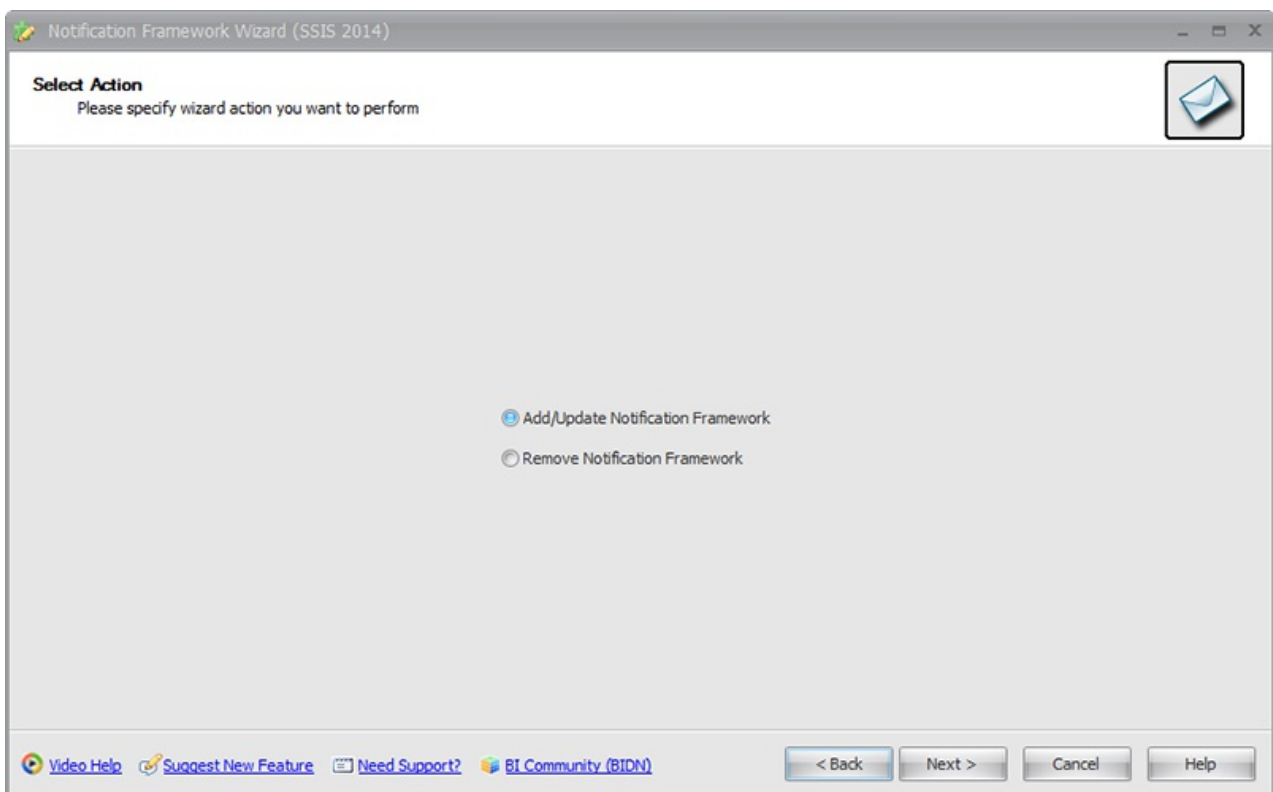
## Using the Notification Framework

Open the Notification Framework by doing one of the following:

- Open the SentryOne Workbench and then select **Notification**
- Open the desired project within Visual Studio, and then select **SentryOne > BI xPress > Add/Remove Notification Framework**
- Open the desired project within Visual Studio, and then right click a package in the Solution Explorer and select **Add/Remove Notification Framework**

**i Note:** After opening the Notification Framework, you will be presented with a series of pages that will help you to configure the Notification Framework for your package(s). These pages change depending on if you want to add or remove the notification framework.

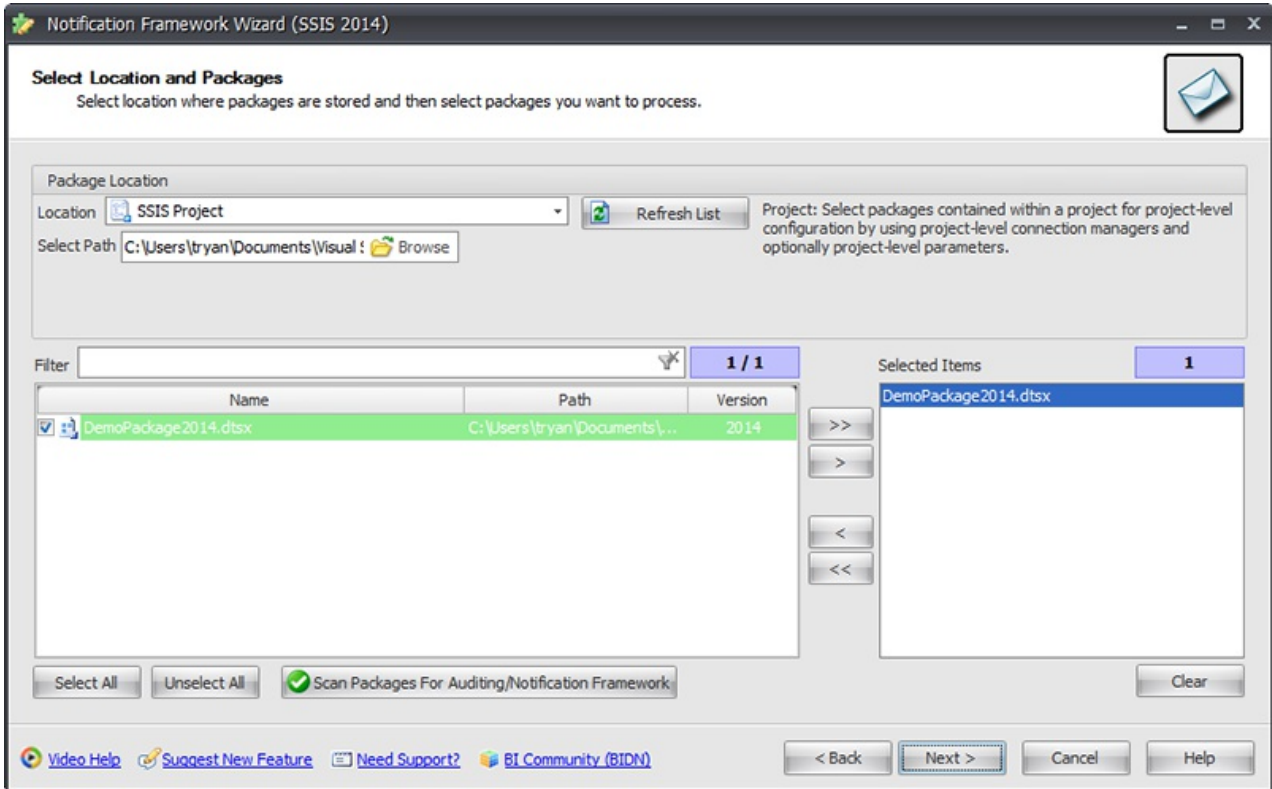
## Select Action



Use the Select Action page to select to **add / update**, or **remove** the Notification Framework from their SSIS package(s). Select **Next** to continue to the **Select Location and Packages** page.

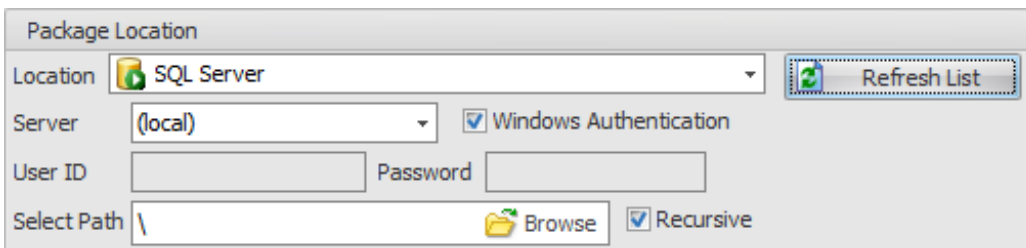
**Note:** Depending on the action you select, the available pages will change.

## Select Location and Packages



Use the **Select Location and Packages** page allows to select the packages you want to have the Notification Framework added / updated or removed. The page is divided into the Package Location and Selection areas:

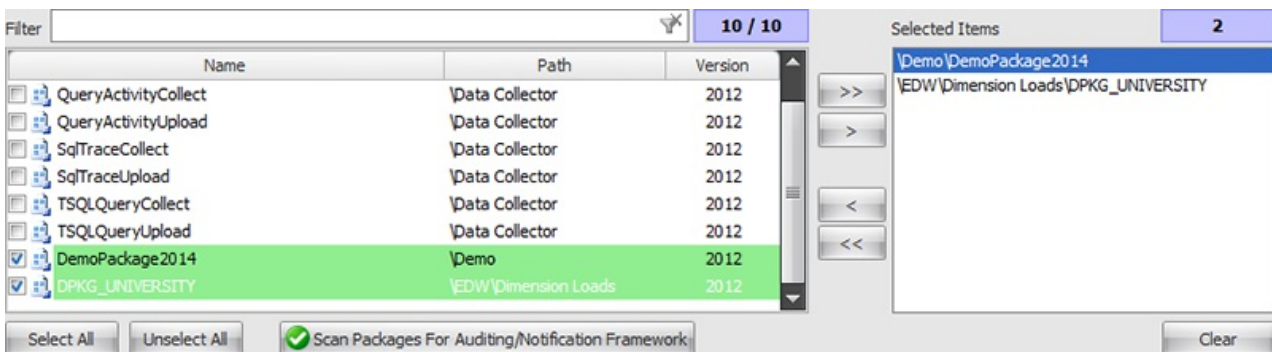
### Package Location



Use the **Package Location** section to Controls search for the SSIS packages that you want to have the Notification Framework added / updated or removed. There are five locations the you can select:

Location	Description
File System	The Notification Framework will search the File System, using the selected path, for SSIS Packages. Users can check the Recursive option to scan the select File System folder and sub-folders for SSIS Packages.
SQL Server	The Notification Framework will search SQL Server, using the provided connection information, for SSIS Packages deployed.
SSIS Project	The Notification Framework will search an SSIS Project File (*.dtproj), using the selected path, for SSIS Packages.
SSIS Package Store	The Notification Framework will search the SSIS Package Store, using the provided connection information, for SSIS Packages deployed. Using this location requires the Notification Framework to be running as the Administrator account.
Visual Studio Solution	The Notification Framework will search a Visual Studio Solution (*.sln), using the selected path, for SSIS Packages contained within SSIS Projects associated with the selected solution.

## Package Selection

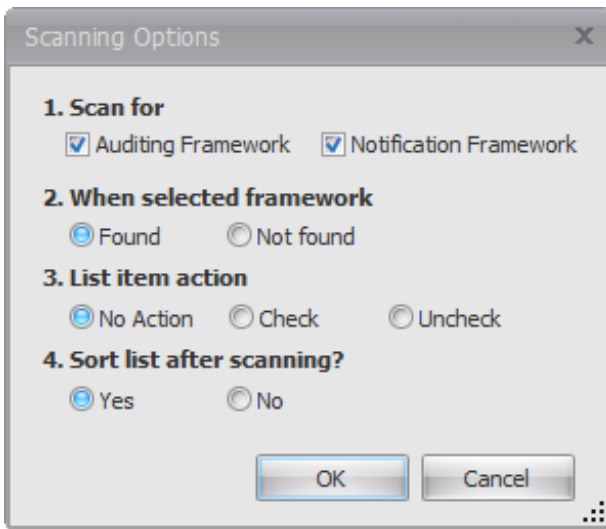


Use the Package Selection to select packages from the selected package location. The following options are available:

Option	Description

Filter Option	Description
Browser	The Browser contains all packages from the location that have not been filtered.
Selection Buttons	Quickly select or deselect all packages from the browser.
Scan Packages Button	Quickly select or deselect packages based on a set of parameters. Select Scan Packages to open the Scanning Option window.
Selected Items	Selected Items displays all the currently selected packages in the Browser that will have the Notification Framework added / updated or removed.

### Scanning Options window



Option	Description
Scan For	Controls the frameworks (Auditing and / or Notification) that the Notification Framework scans for within each package.
When selected framework	Controls whether the Notification Framework is searching for the presence or absence of the selected frameworks.
	Controls the action (select, unselect, or ignore) that the

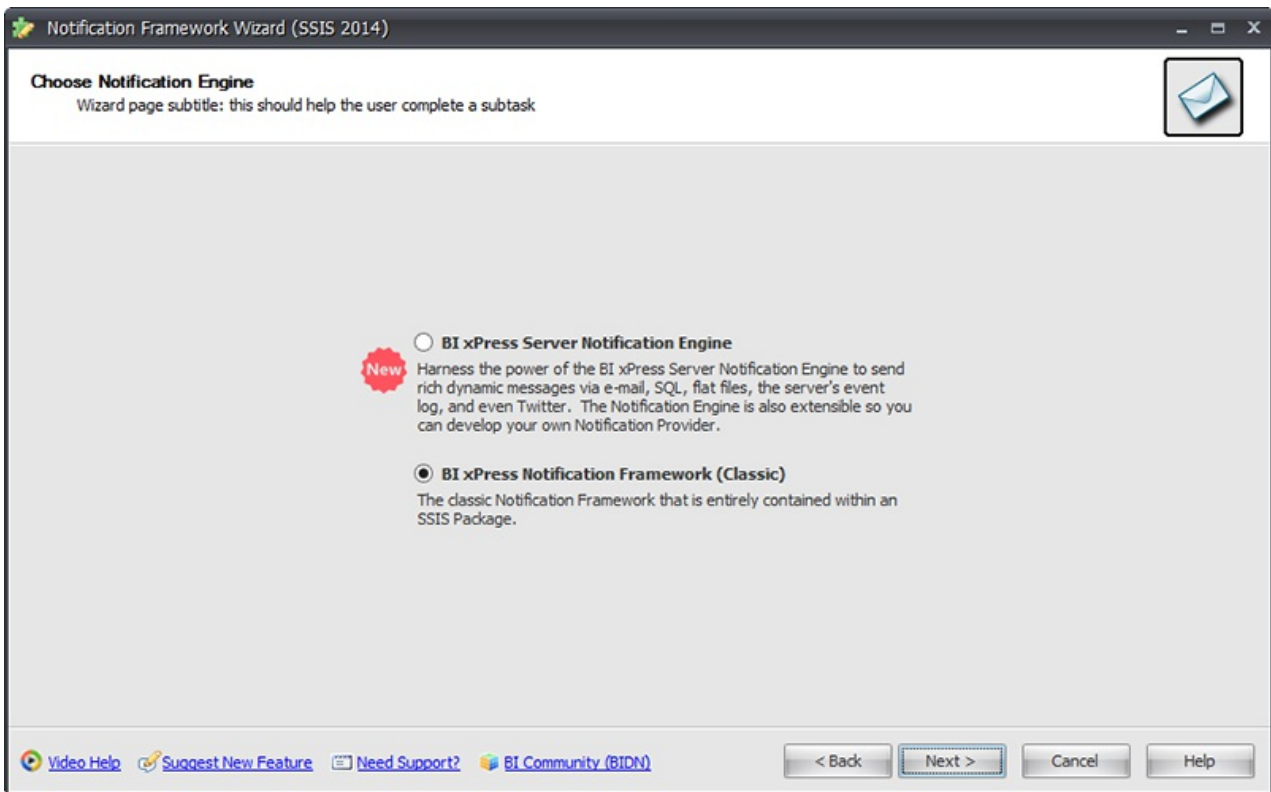
List item action <b>Option</b>	<b>Description</b> Notification Framework takes when a package meets the parameters selected in step 1 and 2
Sort list after scanning?	Controls whether to sort the list of packages after scanning for the Auditing or Notification framework.

After selecting the packages where you want to have the action, select **Next** to continue.

**Note:** You will be sent to different pages depending on the action that's selected on the Select Actions page:

- Add / Update Notification Framework - If you selected to add / update the Notification Framework, selecting Next opens the Choose Notification Engine page.
- Remove Notification Framework - If you selected to remove the Notification Framework, selecting Next opens the Summary page to begin the process of removing the Notification Framework.

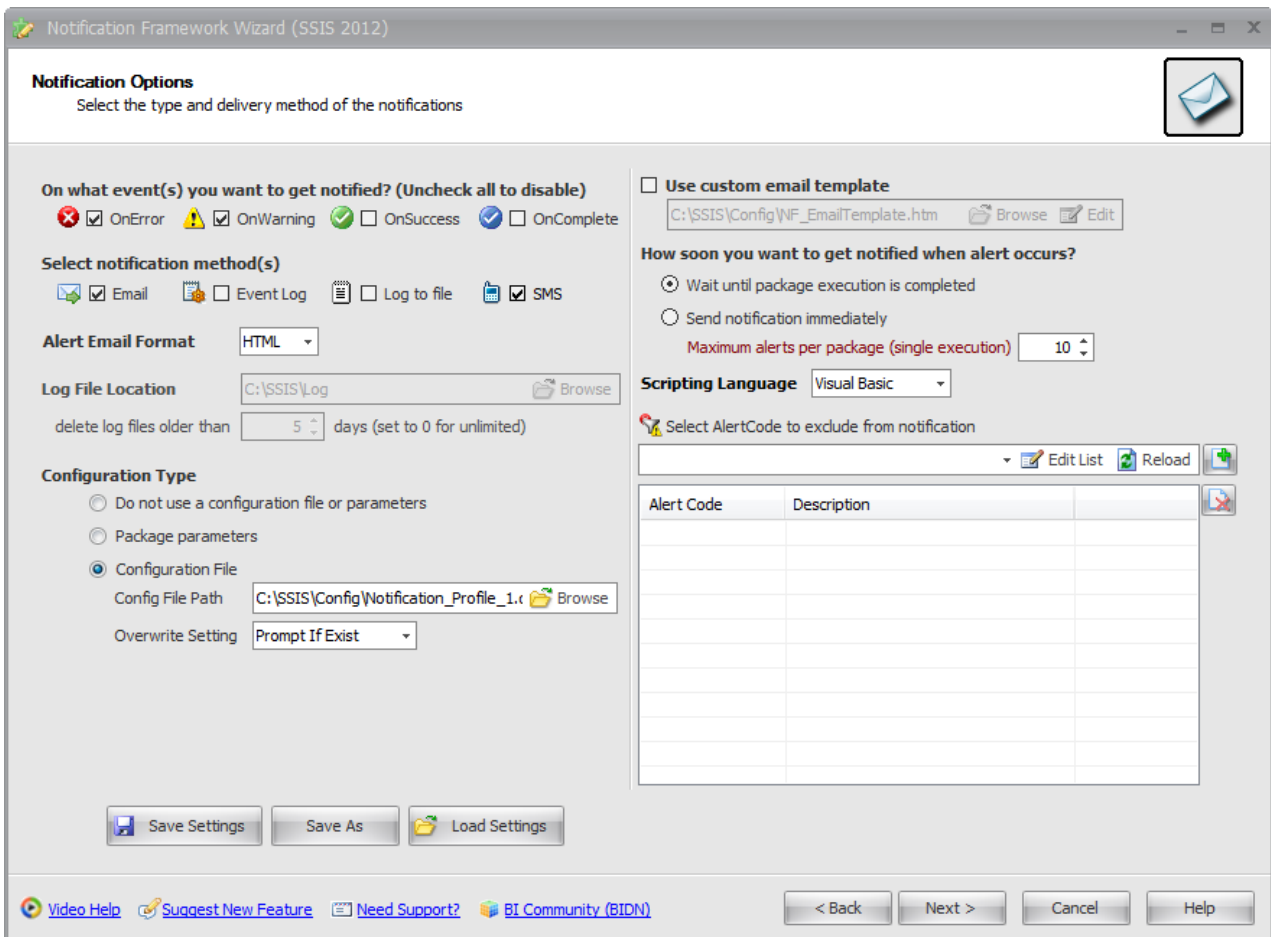
## Choose Notification Engine



When adding or updating the Notification Framework, use the Choose Notification Engine page to choose between the classic Notification Framework or the new BI xPress Server Notification Engine. Select the Framework that you want to use, and then select **Next** to continue to your selected options page.

## Notification Options





Selecting the **BI xPress Notification Framework** and selecting **Next** opens the Notification Framework Options screen. Specify the events you want to be notified about, and by which method(s) you want to be notified. You can choose to be notified OnError, OnWarning, OnSuccess, and OnComplete. You can also choose to be notified after the task has completed execution, or the entire package has completed execution. Configuration files can be enabled by checking the Enable Configuration box and specifying the configuration file path and overwrite setting. You can receive alerts in the following methods:

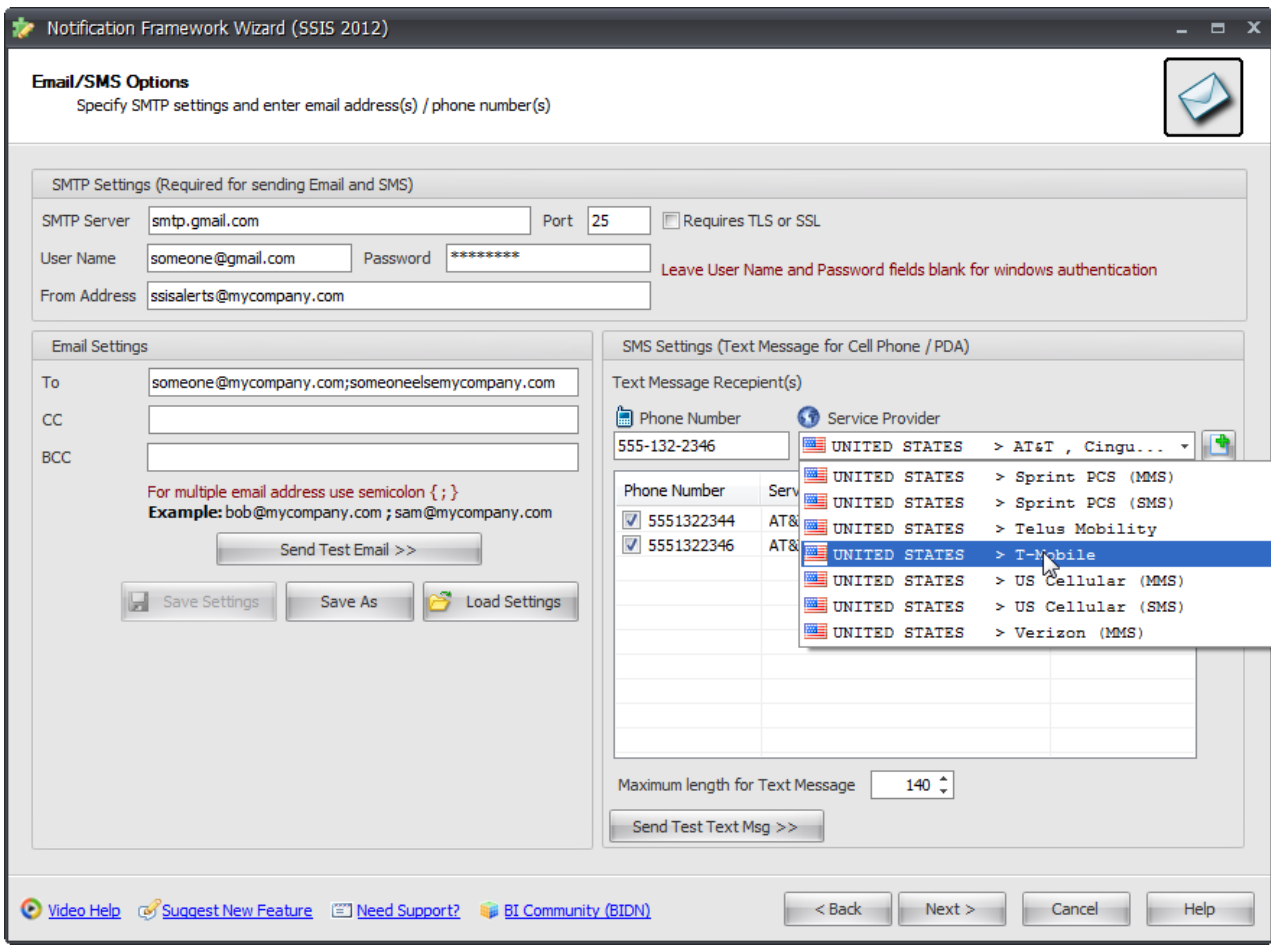
Method	Description
Email	Using this method you can receive HTML or Text email notifications whenever selected events occur. You can also create your own email format using Custom Email Template.
SMS (Text Message)	Using this method you can receive SMS notifications on a Cell Phone/PDA or Blackberry whenever selected events occurs.

Event Log Method	Description
Log to File	Using this method you can log to files and also delete log files older than specified days.

You can also specify any error/warning filters that you the Notification Framework to ignore. When those errors are encountered, the Notification Framework will ignore them. In the Select Alert Code drop down menu, you can choose from a list of alert codes to filter out. Once you have selected an alert code to filter notifications, add the alert code to the filter list by selecting the **add** button.

After configuring the notification options, select **Next** to open the Email / SMS Options page to specify settings for sending SMTP Emails and SMS.

### Email / SMS Options



The **Email and SMTP** settings must also be specified to receive notifications through their respected methods. If the Notification Framework is set to only notify through the Event Log or Log to File method, this page can be skipped.

In the **SMS Settings** box, you can specify multiple telephone numbers to receive notification of the events applied by the Notification Framework. To add a telephone number to the list of text message recipients, type in the telephone number in the Phone Number text box, select your service provider from the drop down menu, and then select the add button.

Select **Next** when you are finished to continue to the **Summary** page.

## BI xPress Server Notification Engine Options

The screenshot shows the 'Notification Framework Wizard (SSIS 2014)' window. The main title is 'BI xPress Server Notification Engine Options' with the subtitle 'Specify the server address and options for applying the Notification Engine.' The dialog contains several sections:

- Address:** A text box containing 'http://' followed by a blurred address, with a 'test' button to its right.
- Event Name:** A dropdown menu set to 'SsisNotificationEvent', with a 'refresh' button to its right.
- Severity:** A dropdown menu set to 'Medium'.
- Parameters:** A table with columns 'Name' and 'Value'. The table contains several rows, including 'MachineName', 'ExecutionAccount', 'WasInteractive', 'PackageStartTime', 'PackageEndTime', 'FrameworkVersion', 'Alerts', 'CustomPackage', 'CustomProject', 'CustomVariable', and 'CustomStaticValue'. Each row has a small 'x' icon in the right margin. To the right of the table are 'add' and 'delete' buttons.
- Language:** A dropdown menu set to 'C#'.
- On what event(s) you want to get notified? (Uncheck all to disable):** A group of checkboxes: 'OnError' (checked), 'OnWarning' (checked), 'OnSuccess' (unchecked), and 'OnComplete' (checked).
- How soon you want to get notified when alert occurs?:** A group of radio buttons: 'Wait until package execution is completed' (selected) and 'Send notification immediately' (unselected).

At the bottom of the dialog, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'. There are also several links at the bottom left: 'Video Help', 'Suggest New Feature', 'Need Support?', and 'BI Community (BIDN)'.

The Notification Engine allows you to connect and manage your packages' notification settings directly from within BI xPress Server. The Notification Engine can send rich, dynamic messages through E-mail, SMS, SQL, Text Files, Event Logs, and even Twitter.

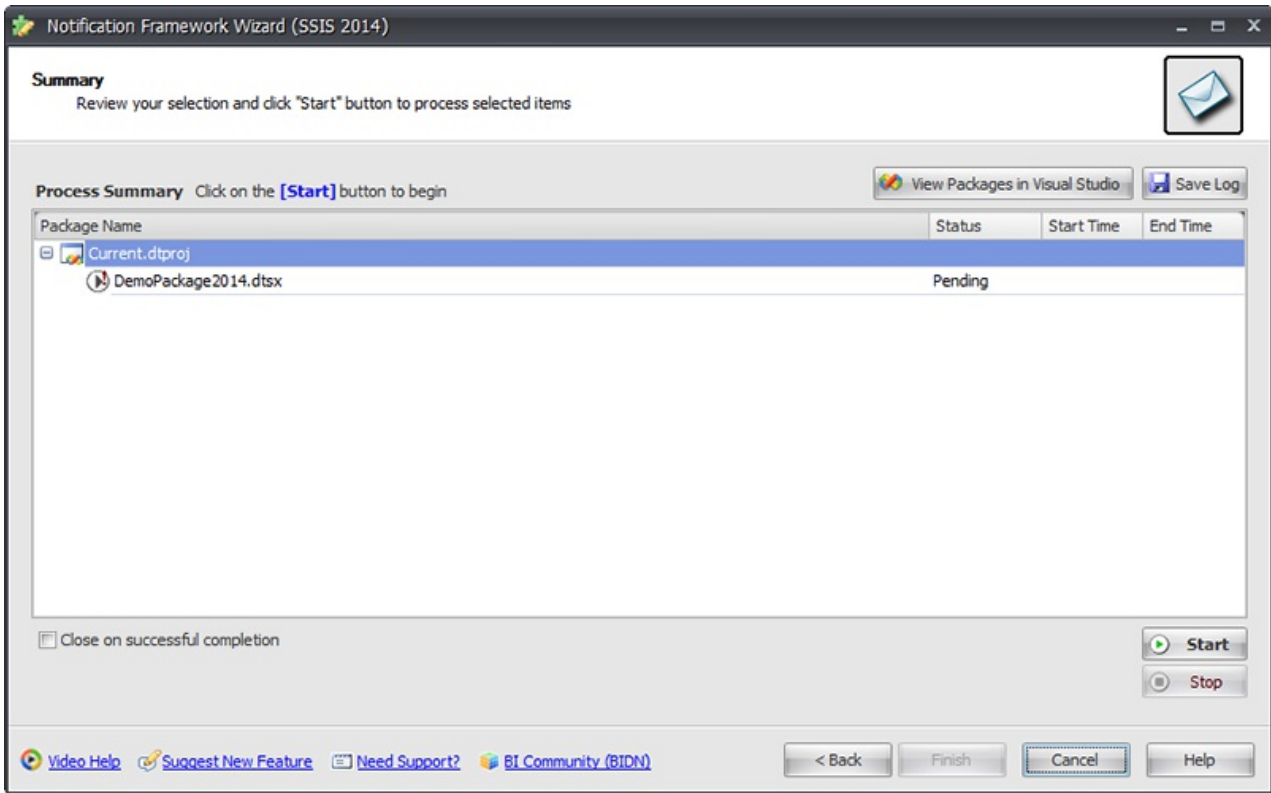
**Note:** Before connecting to BI xPress Server's Notification Engine, you need at least one event configured within the BI xPress Server Notification Engine.

The following options are available:

Option	Description
Address	The URL used to connect to Workbench Server. select the Test button to confirm a successful connection.
Event Name	The name of the event that BI xPress Server will send once it receives the notification from the SSIS Package. Once the Address is populated, select the Refresh button to query BI xPress Server for a list of all configured events that can be used.
Severity	The Severity level of the notification that will be sent to Workbench Server. All Events with the same event name and a priority less than or equal to the listed severity will trigger once BI xPress Server receives the notification from the SSIS Package.
Parameters	A detailed list of all parameters that will be sent along side the notification to BI xPress Server. There are two types of parameters, reserved and custom parameters.
Events to Notify	<p>Events to Notify allows users the ability to specify upon which event(s) they wish to have the Notification Engine send to BI xPress Server:</p> <ul style="list-style-type: none"><li>• OnError - The Notification Engine will notify BI xPress Server to trigger the selected event when when an error occurs.</li><li>• OnWarning - The Notification Engine will notify BI xPress Server to trigger the selected event when when a warning occurs.</li><li>• OnSuccess - The Notification Engine will notify BI xPress Server to trigger the selected event upon a successful execution of the SSIS Package(s).</li><li>• OnComplete - The Notification Engine will notify BI xPress Server to trigger the selected event once the SSIS Package(s) have completed executing.</li></ul>
How soon to be notified?	Specifies when the you want the Auditing Framework to send the notification to BI xPress Server

Select **Next** when you are finished to continue to the **Summary** page.

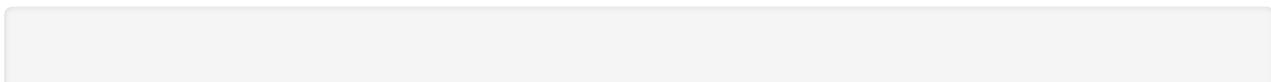
## Summary



The **Summary** page provides displays information, warnings, and errors that may occur during the application or removal of the Notification Framework. You can review your selections and make any necessary changes by selecting the **Back** button. Once you are satisfied with your settings, select **Start** to add / update or remove the Notification Framework.

**Note:** The application of the Notification Framework could take anywhere from a few seconds to a few minutes depending on how many packages you have selected.

After selecting start and adding / updating or removing the Notification Framework, a green check displays by all of the packages that had the Notification Framework successfully added / updated or removed.



**Note:** If the **Close on successful completion** option is enabled, the Notification Framework add-in closes automatically if the process completed successfully without warnings.

Select **Finish** to close the Notification Framework.

---