

# PERSPECTIVE.

powered by **Resolver**

## PERSPECTIVE WORKFLOW INSTALLATION GUIDE

**Version 2.0**

September 2016

Perspective by Resolver™

Perspective Workflow™ Version 2.0

Distributed September 2016

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# Overview

Perspective Workflow™ is a business activity monitoring application that works behind the scenes to help you stay on top of Perspective's reported incidents, ongoing investigations and current assignments. It monitors and auto-responds to critical, time-sensitive data, automatically notifying the necessary personnel and guiding team members through the proper processes and protocols.

To get Perspective Workflow up and running, please follow the instructions provided throughout this guide, in order of appearance.

## Minimum System Requirements

### Web Services Server

#### Available Disk Space<sup>†</sup>

- 1 GB

#### Processor Speed

- Minimum: 2 GHz
- Recommended: 3 GHz+

#### Memory

- Minimum: 1 GB
- Recommended: 2.5 GB+

#### Operating System

- Minimum: Windows Server® 2003 with SP 1
- Recommended: Windows Server 2003 with SP 2

#### .NET Framework

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<sup>†</sup> Depending on the size of your Perspective database, more disk space may be required.

- Version 3.5 SP 1

IIS (Internet Information Services)

- IIS 6.0, WSE 3.0

# Database Setup

The Perspective Workflow database setup procedure depends on what version of Perspective your organization is using and whether the Workflow setup is new or existing. Refer to the procedure below to correctly setup your database.

## New Workflow Setup – Perspective 4.0 and Greater

Follow this procedure if setting up Workflow for the first time and using Perspective 4.0 and greater.

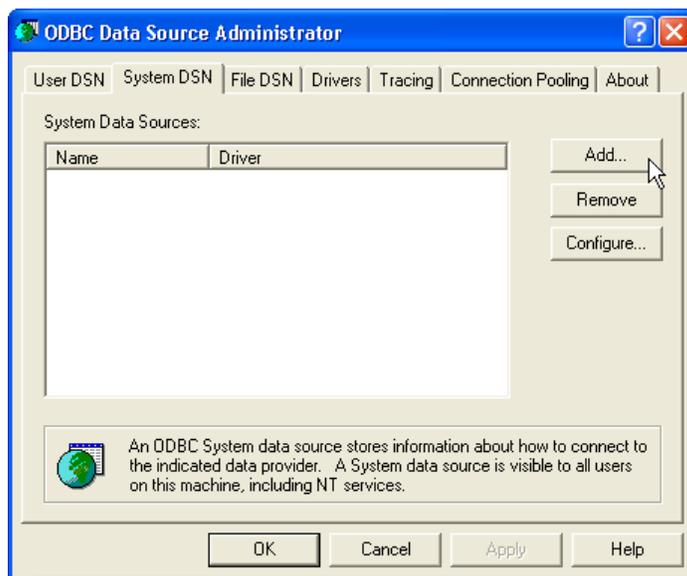
1. Open Microsoft® SQL Server® Management Studio.
2. Run the database views script **PWFDataViews\_v2.0.sql** against the Perspective database being used with Perspective Workflow.

# ODBC Connection Setup

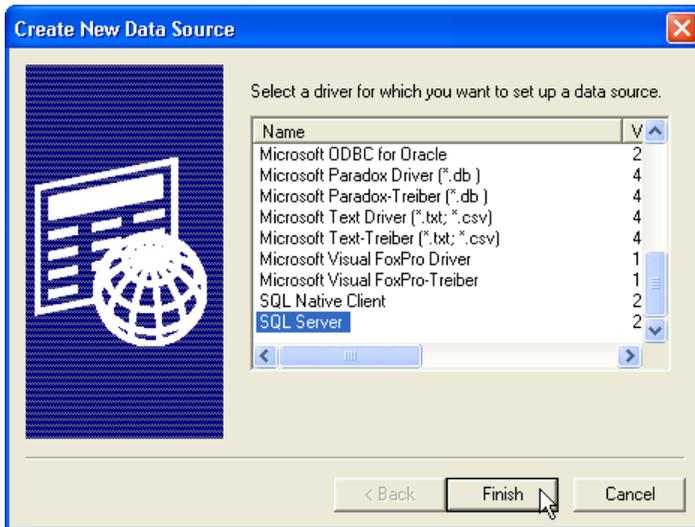
1. Select **Start > Administrative Tools > Data Sources (ODBC)**.

Note: Perspective Workflow uses the 32 bit ODBC manager regardless of whether you are running Workflow on a 32 bit or 64 bit machine. On 64 bit machines, the 32 bit ODBC device manager is typically located in the %winDrive/Windows/syswow64 directory and can be run by executing **ODBCAD32.exe**.

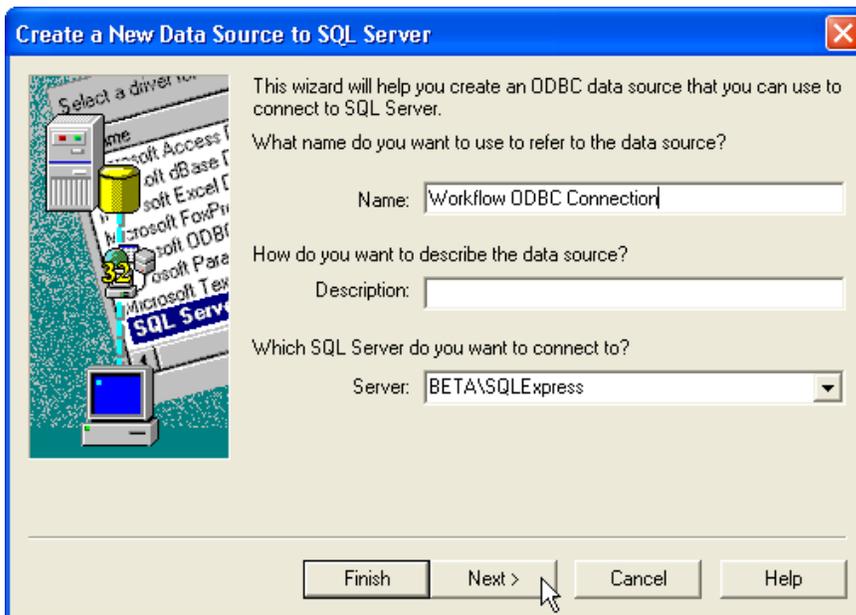
2. Select the **System DSN** tab and click **Add**.



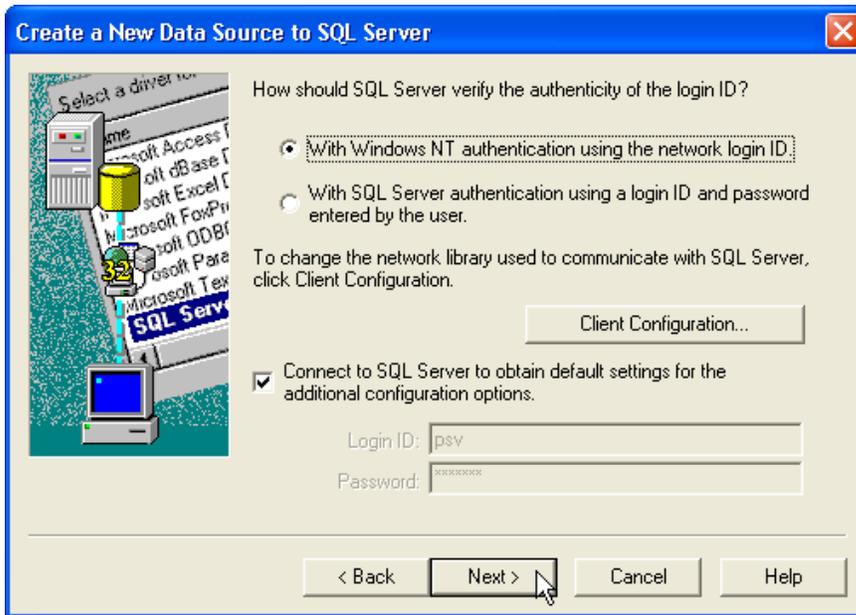
3. Select **SQL Server** and click **Finish**.



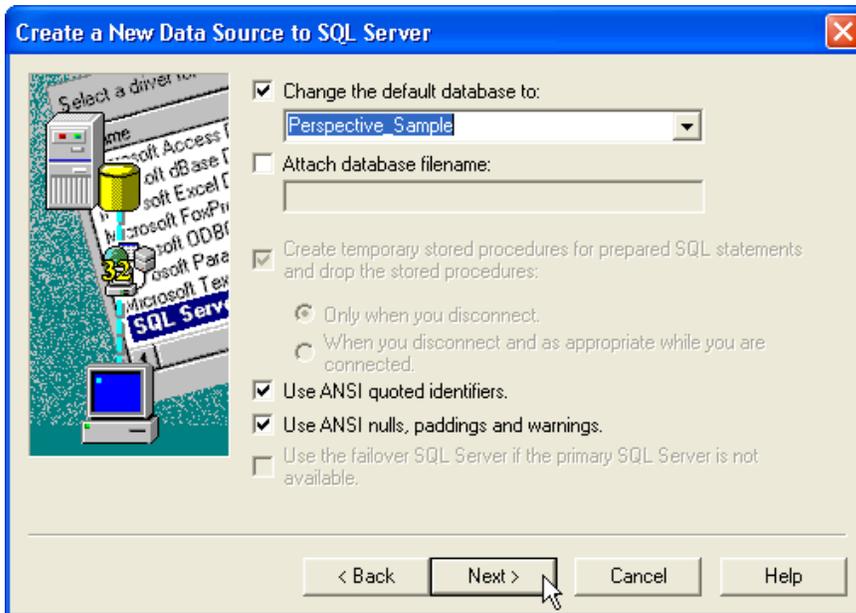
4. Enter a **Name** and **Description** for the ODBC connection; select the name of the SQL server that hosts your Perspective database; and click **Next**.



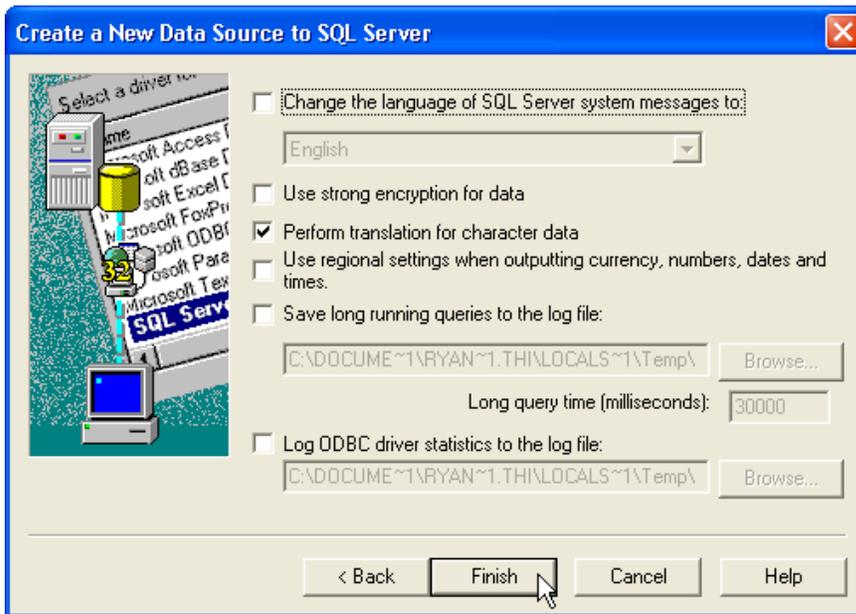
5. Choose the authentication mode you want to use for the ODBC connection (Windows authentication or SQL authentication), and click **Next**.



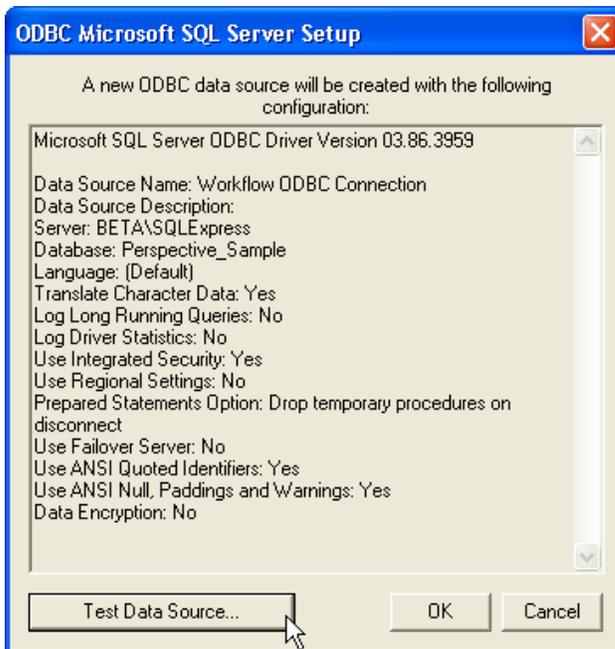
6. Select the **Change the default database to** box and choose the name of your Perspective database from the list below.



7. Ensure the **Use ANSI quoted identifiers** and **Use ANSI nulls, paddings and warnings** boxes are selected, and click **Next**.
8. Click **Finish**.



9. Click **Test Data Source**.



10. When the data source connectivity test is complete, click **OK**.

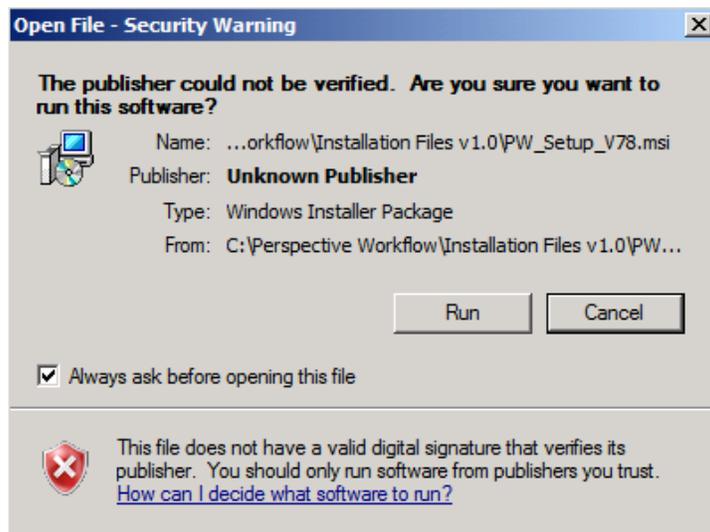


# Workflow Installation

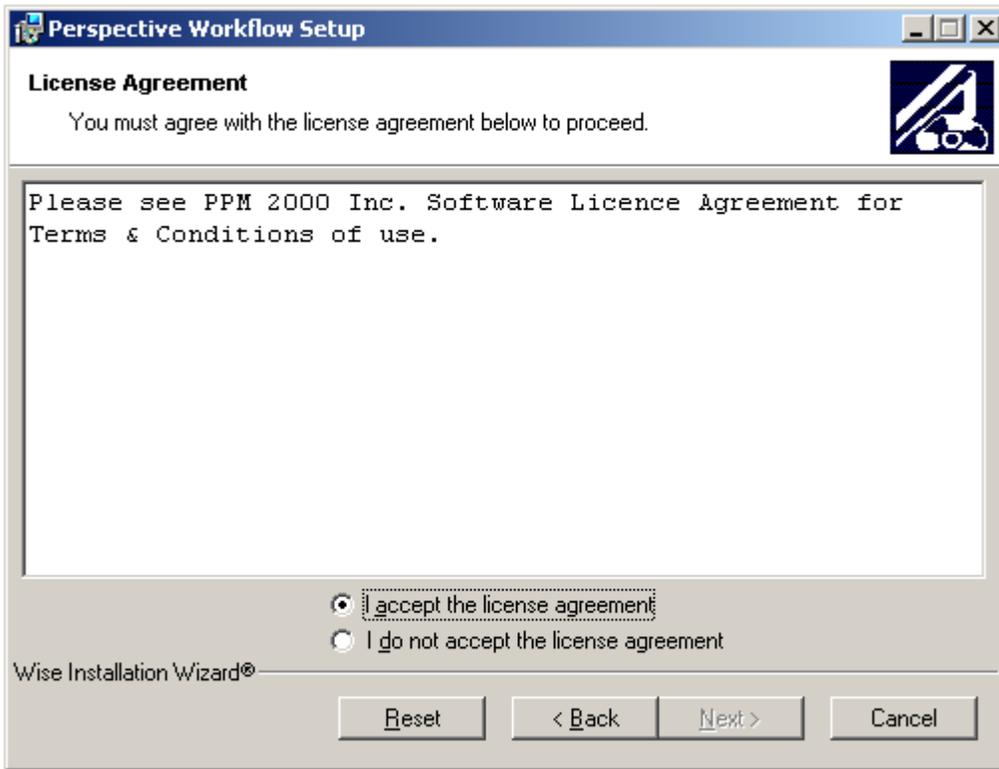
## Important Note

Some users on Windows Server 2012 or later environments may experience difficulty launching the Workflow applications after installation. If you experience this issue, see the [New Workflow Instance Won't Launch After Installation](#) article on the Resolver Support site for a workaround.

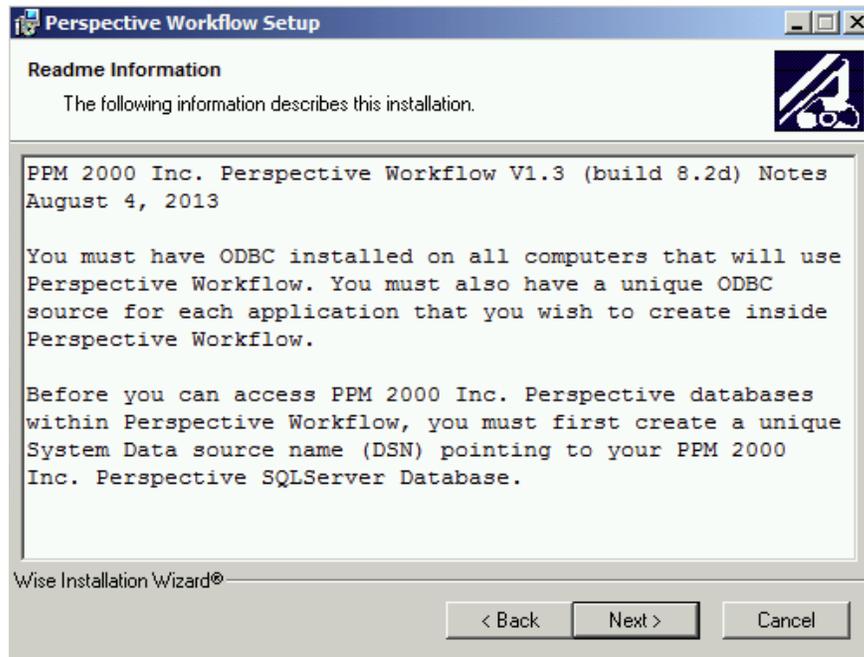
1. Double-click the **PW\_Setup\_V82d.msi** file located inside the **Installation Files v1.0** folder; then click **Run**.



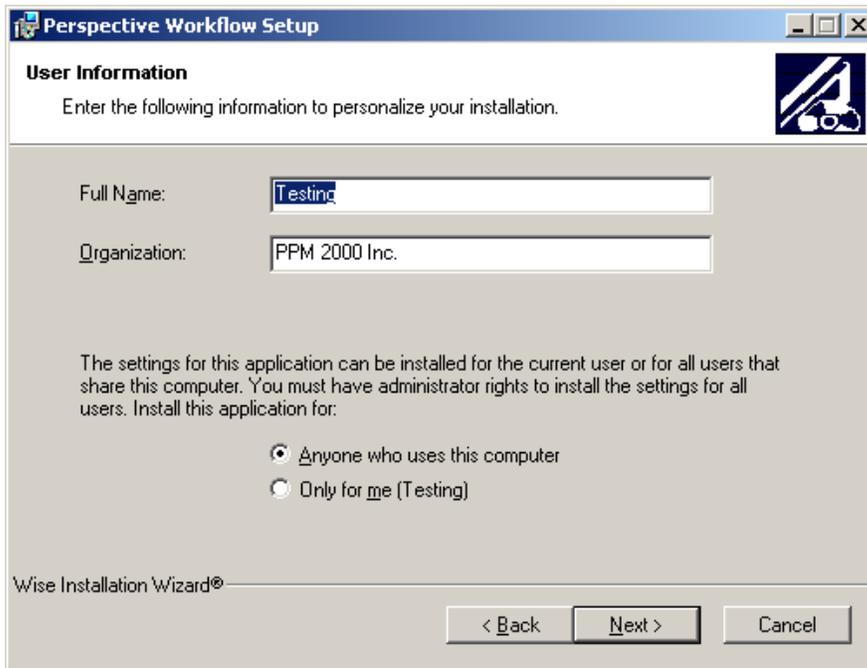
2. Click **Next**.
3. Select the **I accept the license agreement** radio button, and click **Next**.



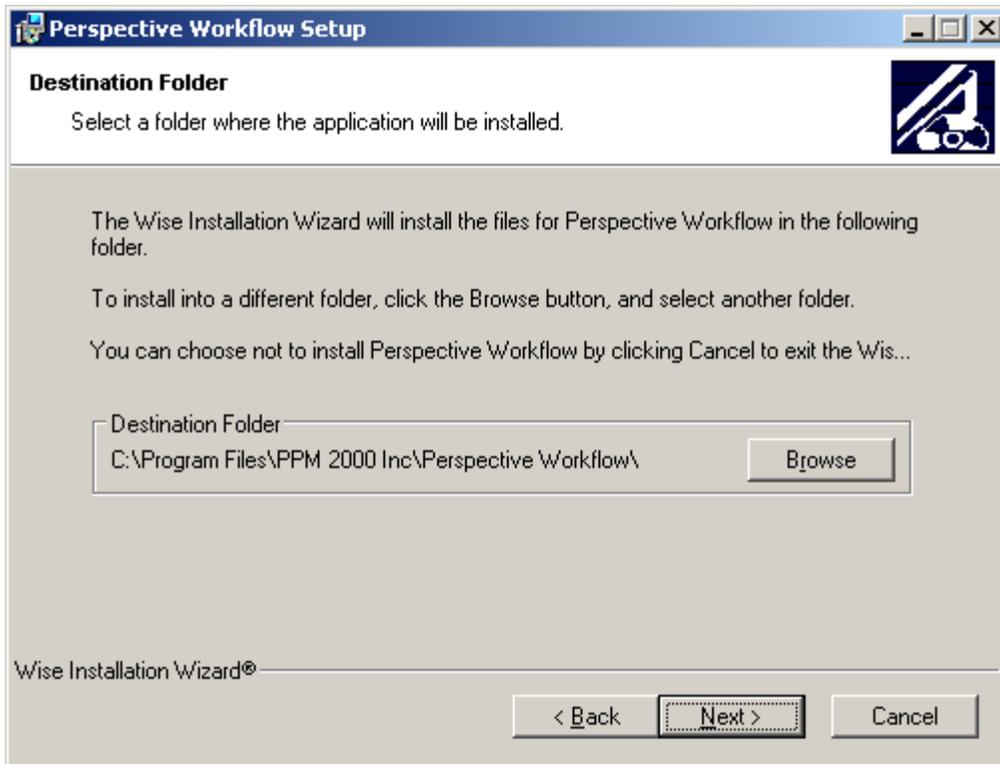
4. Read the installation information, and click **Next** to begin the install.



5. Enter your user information, and click **Next**.

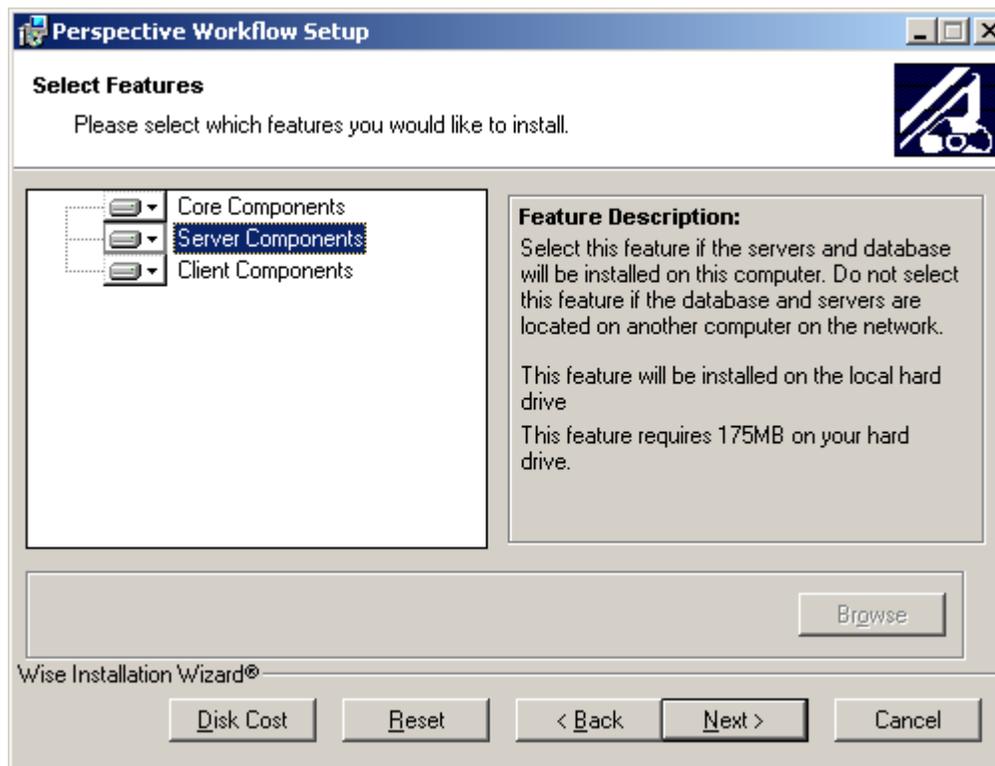


- The default install destination will be displayed. (If a different location is preferred, use the **Browse** button to navigate to the chosen location.) Click **Next**.

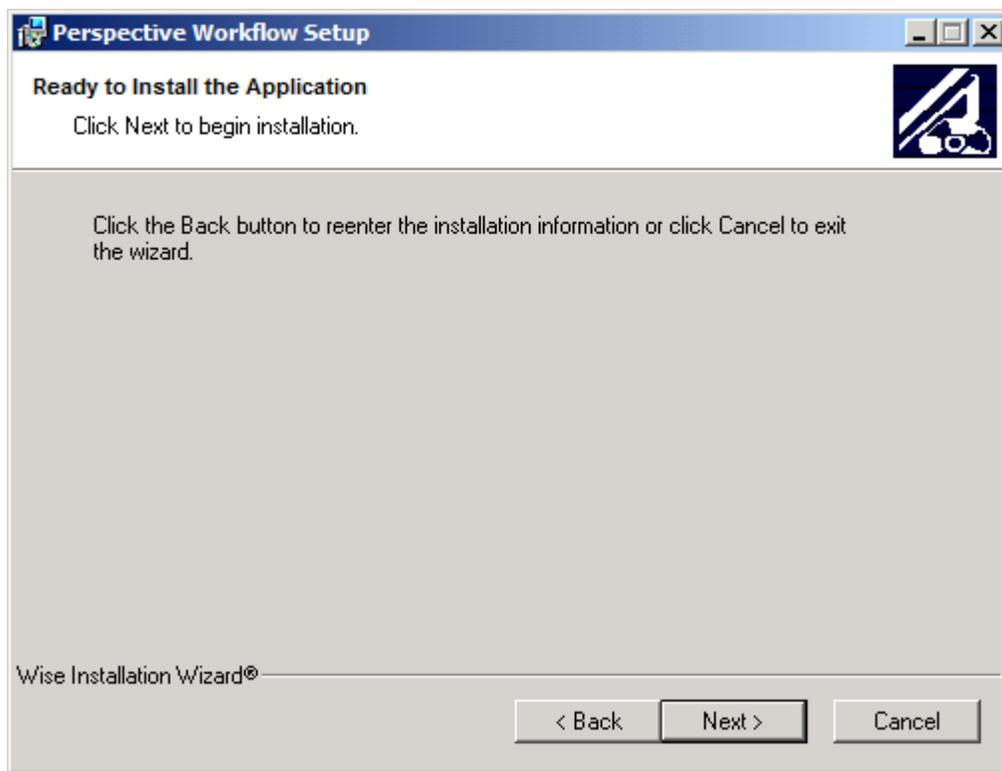


- Accept the default settings for all components by clicking **Next**.

Note: Remote Perspective Workflow clients must be individually licensed in order to run the Workflow application. If you install one or more remote Perspective Workflow clients, you must only install the core and client components on each remote client. You will not need to specify the location of the Workflow database during the installation process; the first time that a remote client is executed, the user will receive a browse button allowing them to locate the Workflow database.

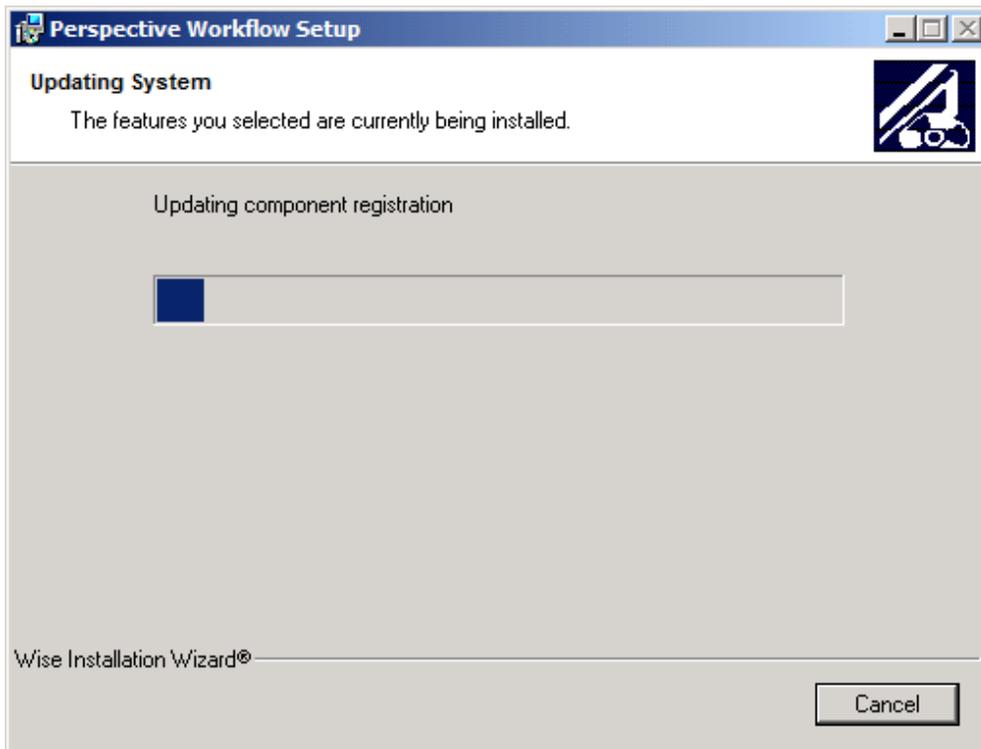
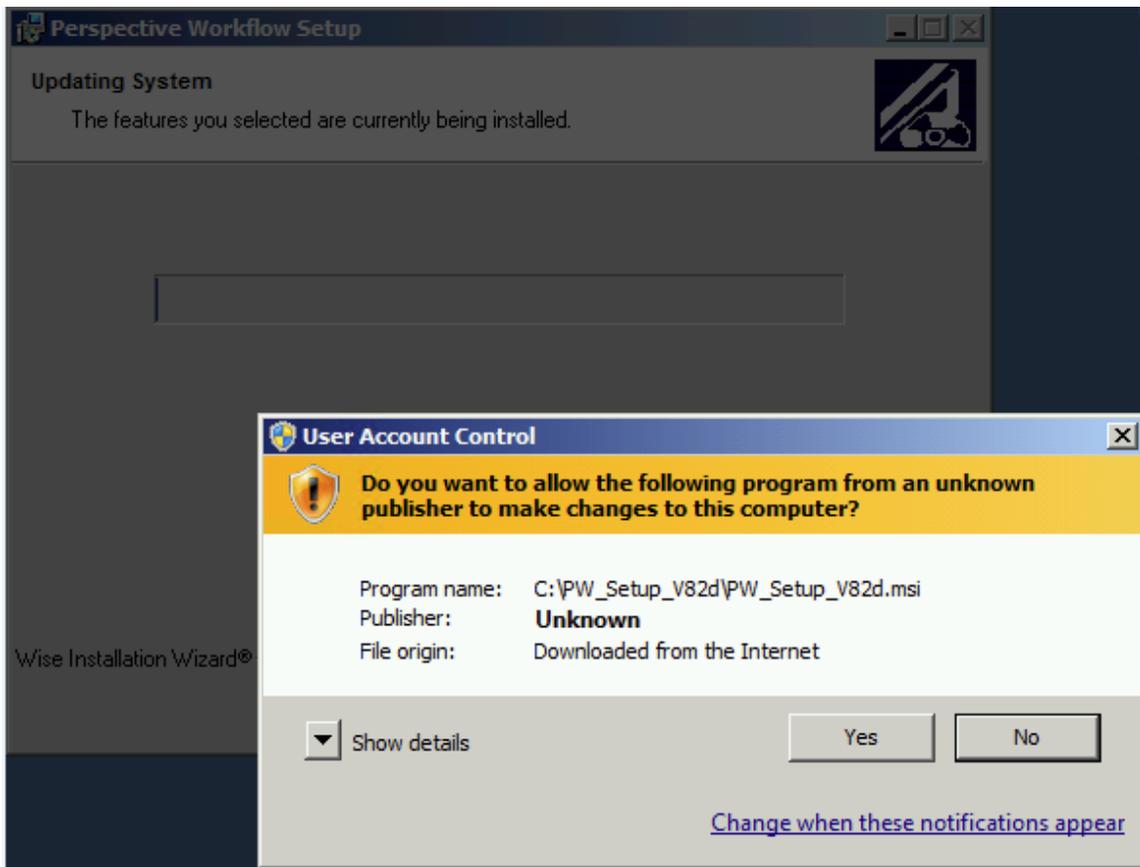


- Click **Next** to begin the installation.

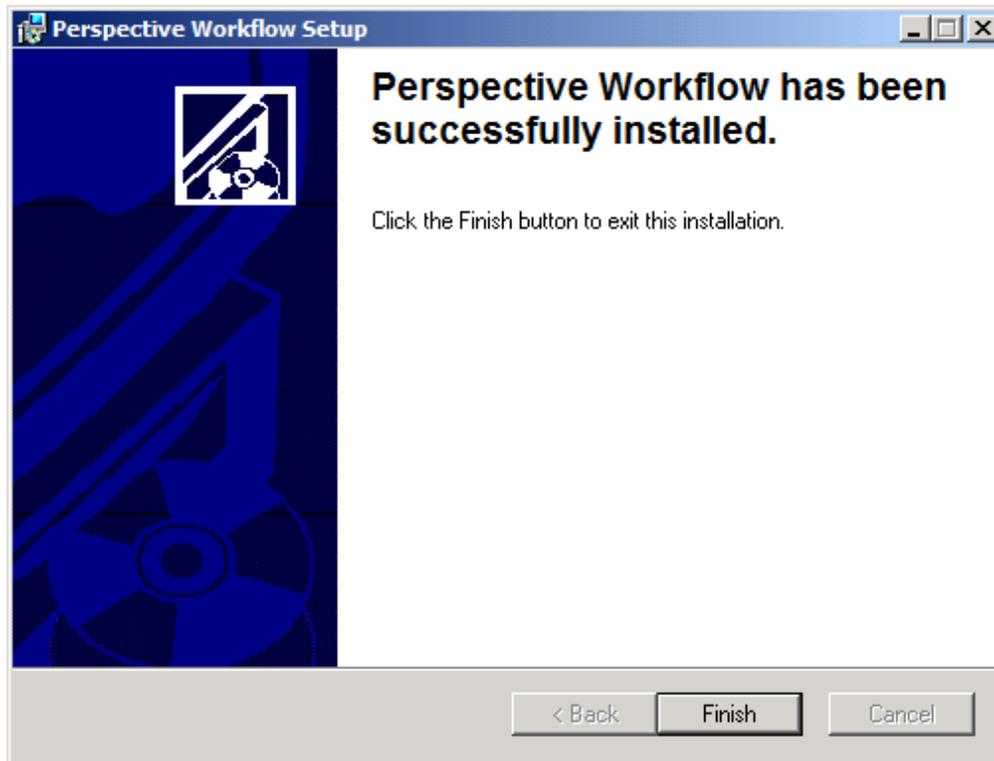


Note: The service needs to run using an account that has local admin rights to the server where workflow is installed.

9. If prompted to confirm the installation, click **Yes**.



- Click **Finish** once the installation is complete.



- Open Windows Explorer.
- Navigate to the destination folder.

*Note: The default location is C:\Program Files\Resolver Inc\PerspectiveWorkflow\*

- Select the bin folder.
- For each of the following executables (ks\_admin.exe, ks\_event.exe, ks\_mon.exe, ks\_serv.exe), right-click, select Properties, the Compatibility tab, Change settings for all users button, and finally, select Run this program as an administrator. Click OK.

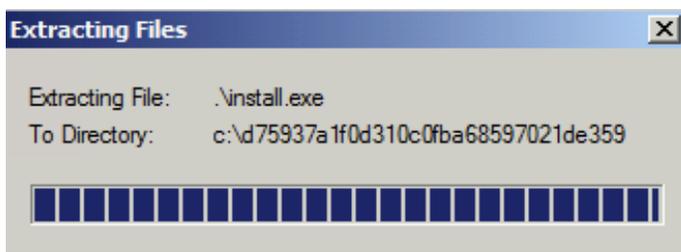
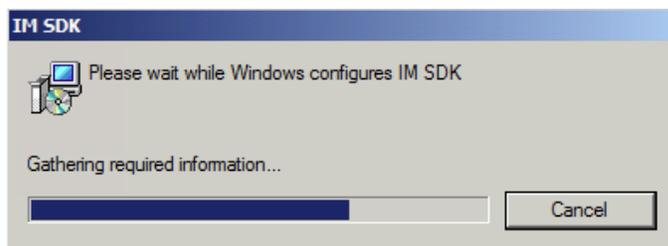
# IM Installation

There are two IM installations: IM32 (for 32 bit machines), and IM64 (for 64 bit machines). As IM is optional, only install it if you will use it.

The IM Accounts option enables you to configure and maintain the Instant Message accounts from which you will send notifications. Note that you can configure multiple IM accounts using multiple IM methods, such as Windows Live Messenger, Google Talk, and ICQ, so that you can receive IM alerts via one method while at work and via a different method while at home.

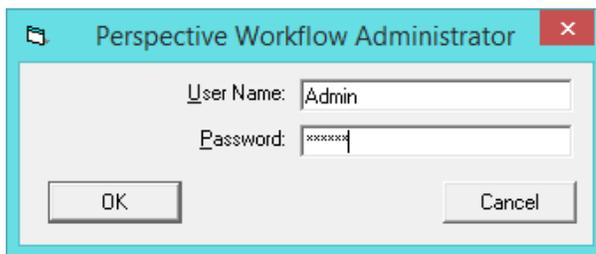
It is suggested that prior to setting up this account that you send IM “invitations” to all the recipients. Note that some IM providers (e.g., Windows Live Messenger) requires an IM recipient to “accept” invitations from an account before the messages can be successfully delivered, whereas other IM providers (e.g., ICQ) require “invitations” but do not require recipient acceptance.

1. Double-click the **IM.msi** or **IM64.msi** (32 bit or 64 bit) file located inside the **Installation Files v1.0** folder; then click **Run**.

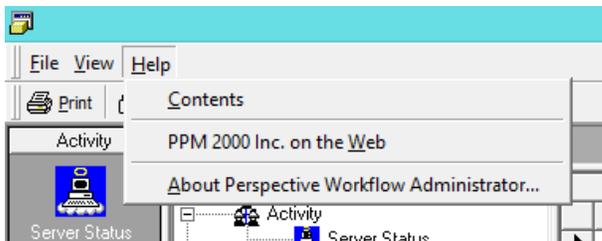


# Licensing & Server Login Information

1. Open the Perspective Workflow Administrator. The application can generally be accessed through **Start > Programs > Perspective Workflow > Administrator**.
2. In the logon window, enter your administrator **User Name** and **Password**, then click **OK**. (The default User Name is **Admin** and the default Password is **master**.)



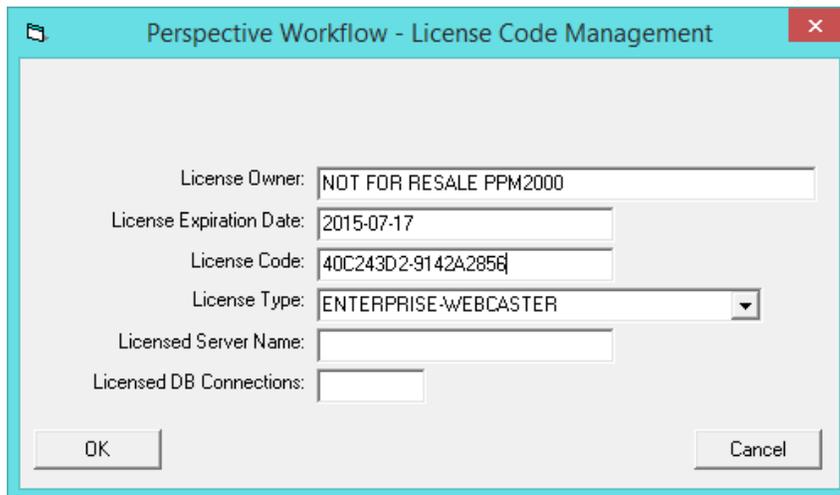
3. Under the **Help** menu, select **About Perspective Workflow Administrator**.



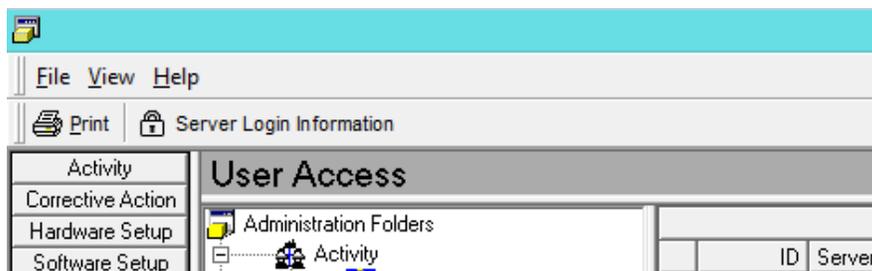
4. Click the **License** button.



5. Enter the license information provided to you by Resolver and click **OK**, then **OK** again.

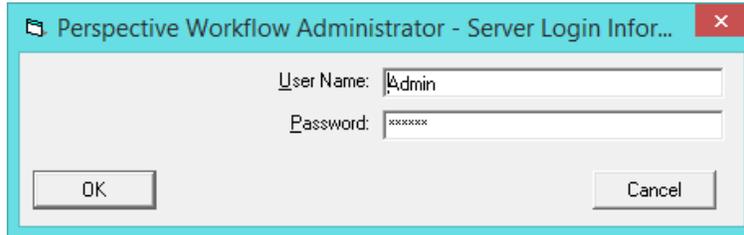


6. Click the **Server Login Information** button on the toolbar.



7. Enter your administrator **User Name** and **Password**, then click **OK**. (The default User Name is **Admin** and the default Password is **master**.)

Note: If the fields are pre-populated, delete the values and re-enter your login information.

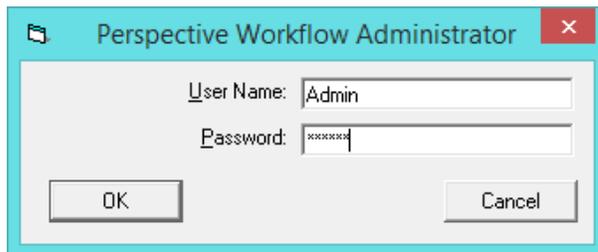


The image shows a Windows-style dialog box titled "Perspective Workflow Administrator - Server Login Infor...". It has a light blue border and a red close button in the top right corner. The dialog contains two text input fields: "User Name:" with the text "Admin" and "Password:" with masked characters "xxxxxx". At the bottom, there are two buttons: "OK" on the left and "Cancel" on the right.

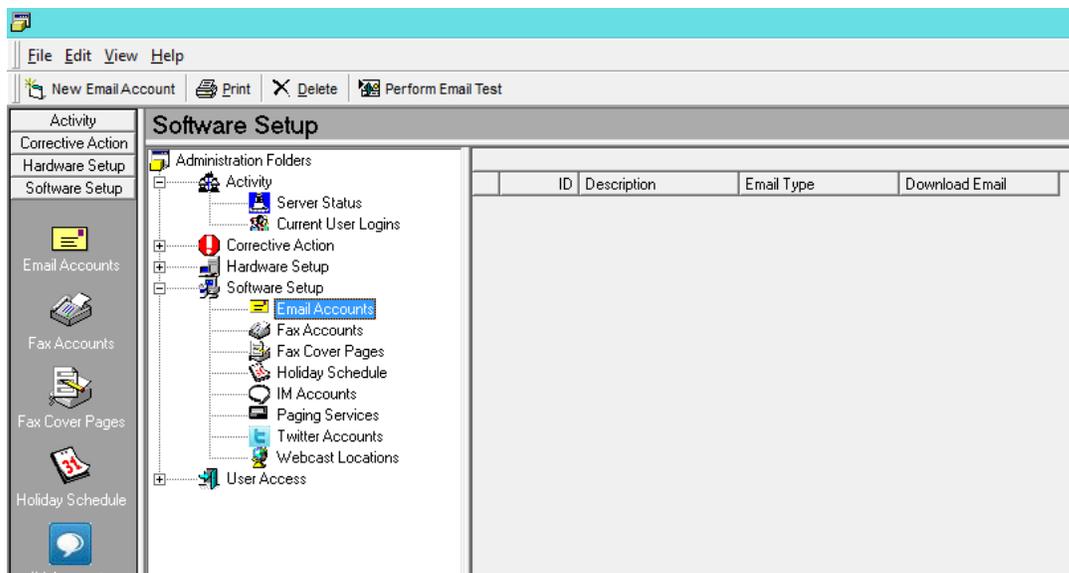
8. Close the Perspective Workflow Administrator; then, start the Perspective Workflow service in Computer Management

# Email Setup

1. Open the Perspective Workflow Administrator. The application can generally be accessed through **Start > Programs > Perspective Workflow > Administrator**.
2. In the logon window, enter your administrator **User Name** and **Password**, then click **OK**. (The default User Name is **Admin** and the default Password is **master**.)

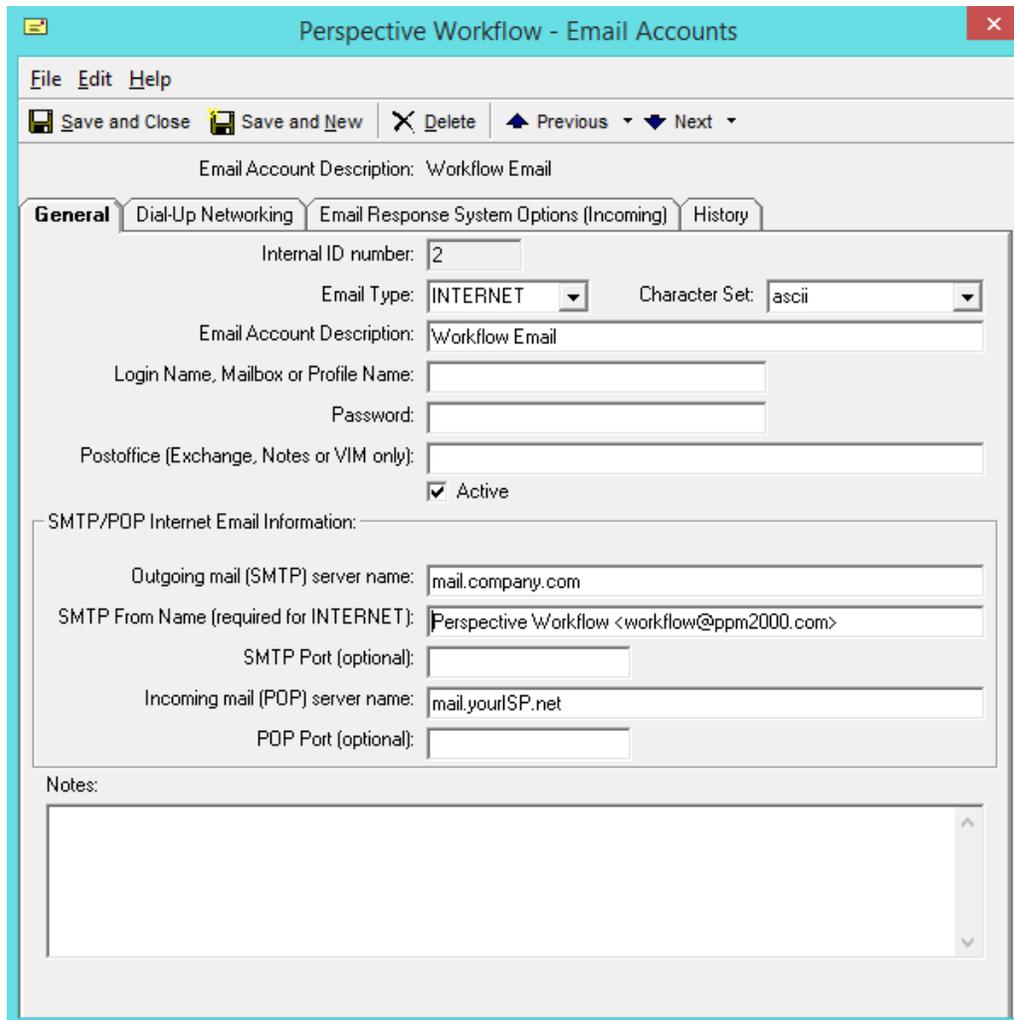


3. Expand the **Software Setup** node, click **Email Accounts** and click the **New Email Account** button in the top-left corner of the window.



4. Select **INTERNET** for the **Email Type** field; populate the **Email Account Description**, **Outgoing Mail (SMTP) Server Name** and **SMTP From Name** fields (the **SMTP From Name** field must be populated with a valid email address); ensure that the **Active** box is checked; and click **Save and Close**.

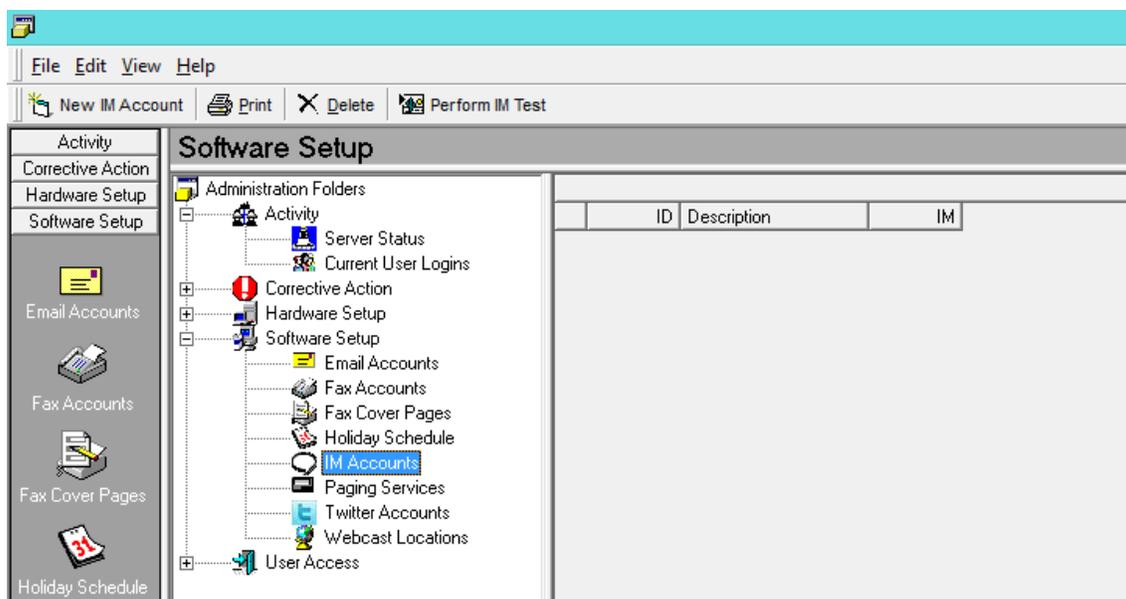
Note: You must create a separate Perspective Workflow email account for each email address that you want email notifications to be delivered from. For instance, if you would like employees in different departments to receive email notifications from different email accounts, you must create a Perspective Workflow email account for each department. (Keep in mind that each event can only use one email account to send notifications from.)



5. Close the Perspective Workflow Administrator.

# IM Setup

1. Open the Perspective Workflow Administrator. The application can generally be accessed through **Start > Programs > Perspective Workflow > Administrator**.
2. In the logon window, enter your administrator **User Name** and **Password**, then click **OK**. (The default User Name is **Admin** and the default Password is **master**.)
3. Expand the **Software Setup** node, click **IM Accounts**.



4. **Service Provider:** Select from Windows Live Messenger, Google Talk, Yahoo! Messenger, and ICQ.

**Account Description:** A description of the account that will be used for sending IM notifications.

**Username:** The user name for this IM account. Note that different IM methods (such as Windows Live Messenger and ICQ) require different types of login information. Typically, Windows Live Messenger uses an email address whereas ICQ uses a unique numeric identifier. Please refer to the documentation/help text for your preferred IM provider for details.

**Password:** The password of this IM account.

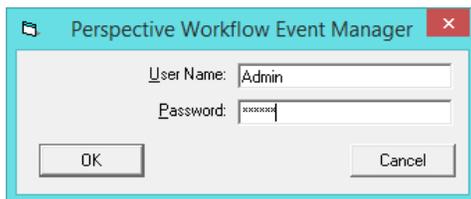
**Active:** Whether this account is currently available for sending IM alerts (you can configure an

account without enabling it for immediate use)

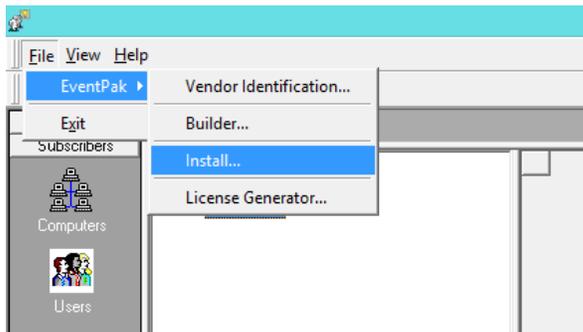
Note: Each IM alert message may not exceed 1,500 characters (including spaces) in length.

# Workflow Event Pak Installation

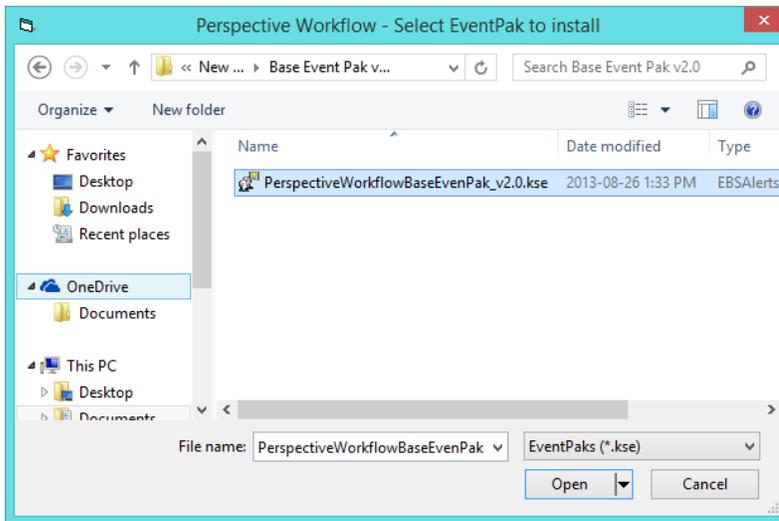
1. Open the Perspective Workflow Event Manager. The application can generally be accessed through **Start > Programs > Perspective Workflow > Event Manager**.
2. In the logon window, enter your administrator **User Name** and **Password**, then click **OK**. (The default User Name is **Admin** and the default Password is **master**.)



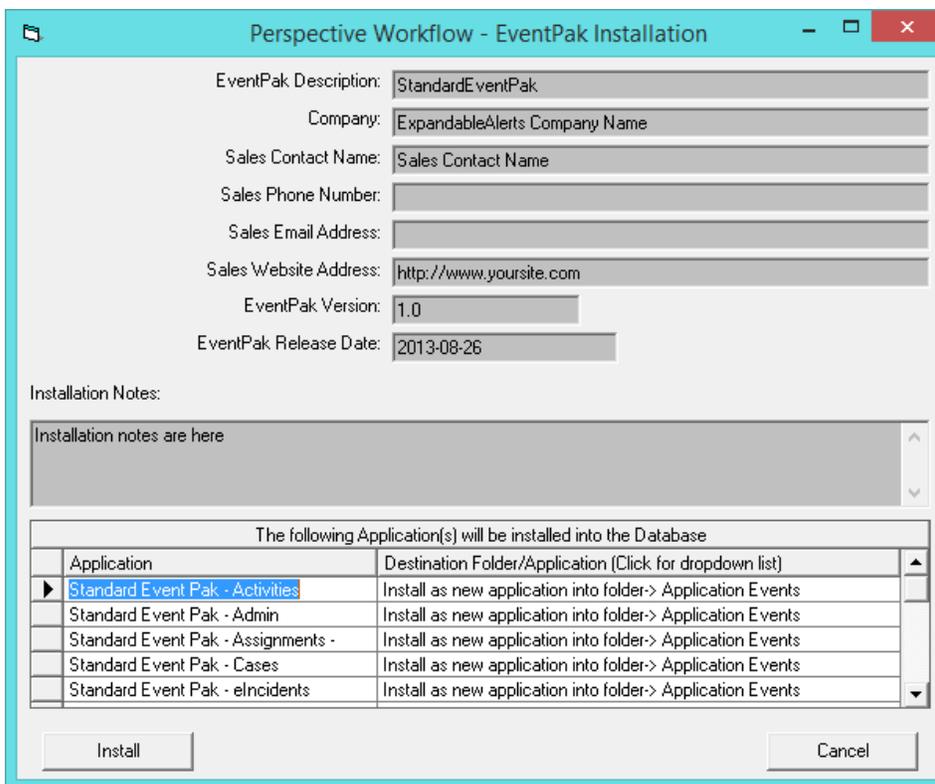
3. Under the **File** menu, select **Event Pak** then click **Install**.



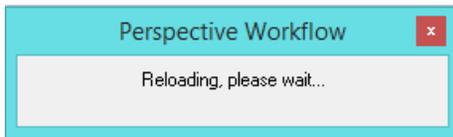
4. Browse to the location of the **PerspectiveWorkflowEventPak\_v2.0.kse** file (included in the **Event Pak** folder); then, click **Open**.



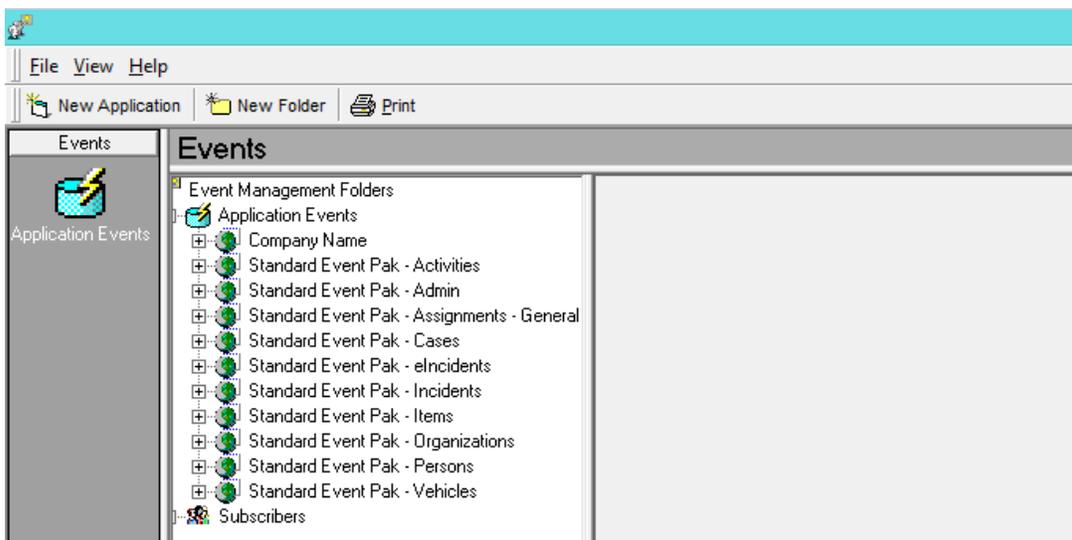
5. Click **Install**.



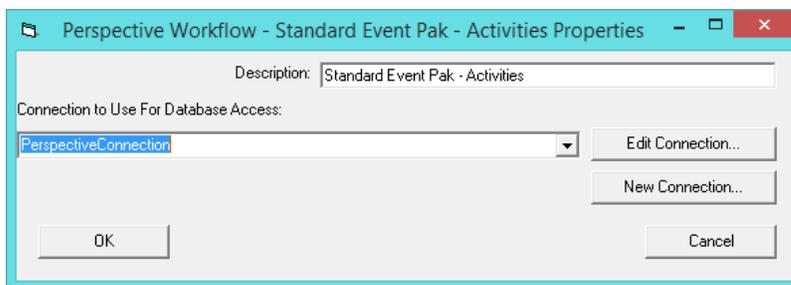
6. When the **Finished** message appears at the bottom of the window, click **Close**.



7. Select one of the **Standard Event Paks** under **Application Events**.
8. Click the **Properties** button to bring up the database connection window.
9. Delete all connections that currently exist by selecting them, clicking **Edit Connection**, and **Delete**.



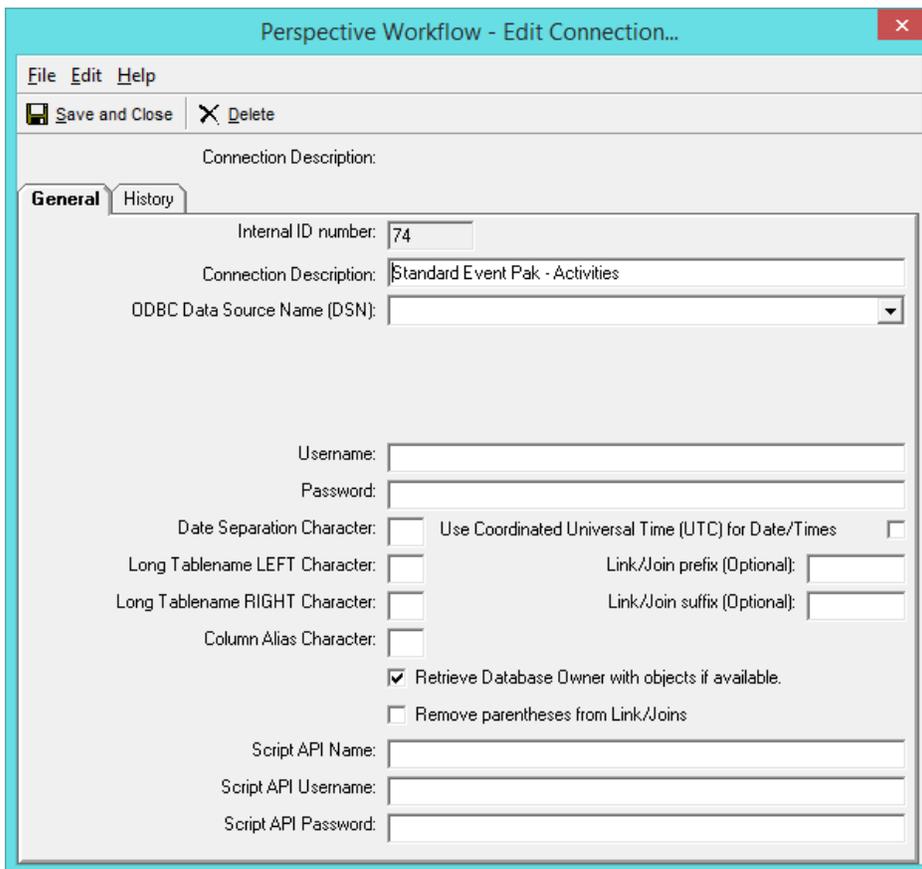
10. With **Perspective Connection** selected in the **Connection to Use For Database Access** field, click the **Edit Connection** button.



11. In the **ODBC Data Source Name (DSN)** field, select the ODBC connection that you created in the **ODBC Connection Setup** phase of this installation process; click **Save and Close**; and then click **OK**.

*Note: Customers are advised to move to a non-encrypted SQL connection, if TLS 1.0 isn't supported.*

Note: If SQL authentication was used for the ODBC connection, you must also enter your SQL credentials in the **Username** and **Password** fields. These will be the same credentials that Perspective uses to connect to the database, not the username and password used to get into Perspective.



Perspective Workflow - Edit Connection...

File Edit Help

Save and Close Delete

Connection Description:

General History

Internal ID number: 74

Connection Description: Standard Event Pak - Activities

ODBC Data Source Name (DSN):

Username:

Password:

Date Separation Character:  Use Coordinated Universal Time (UTC) for Date/Times

Long Tablename LEFT Character:  Link/Join prefix (Optional):

Long Tablename RIGHT Character:  Link/Join suffix (Optional):

Column Alias Character:

Retrieve Database Owner with objects if available.

Remove parentheses from Link/Joins

Script API Name:

Script API Username:

Script API Password:

# Subscriber Configuration

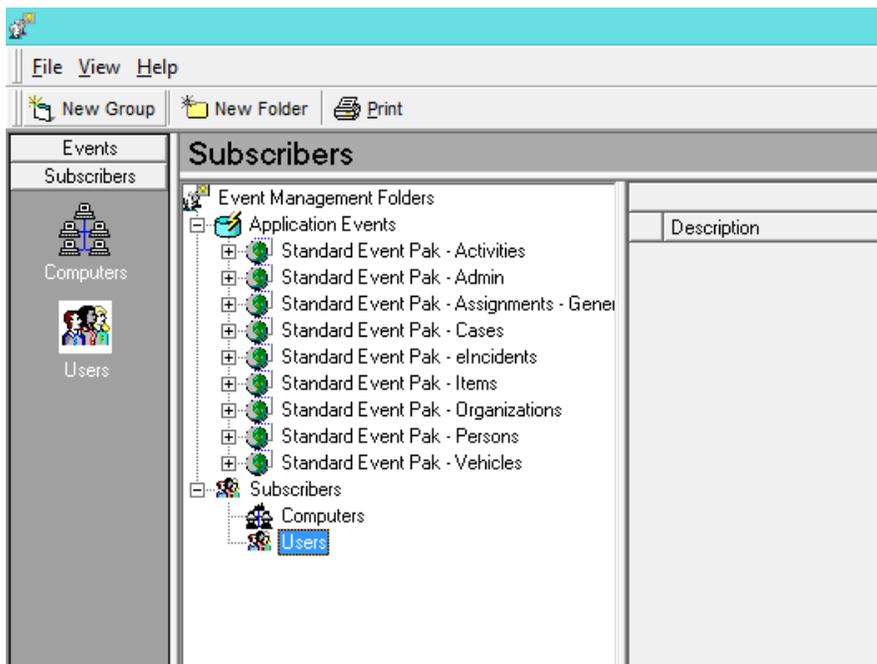
In Perspective Workflow, individuals who receive email notifications when events are triggered are known as "subscribers." Each event must have one or more subscribers associated with it, but before you can choose subscribers for each of your events, you must either manually create subscriber records within Perspective Workflow or link user records in your Perspective database to Perspective Workflow's subscriber list.

*Note: Subscriber linking is dynamic; in other words, updates to your Perspective user records will automatically be reflected in your Perspective Workflow subscriber list.*

For more information on subscriber configuration, please refer to the *Subscriber Maintenance* section of the *Perspective Workflow User's Guide*.

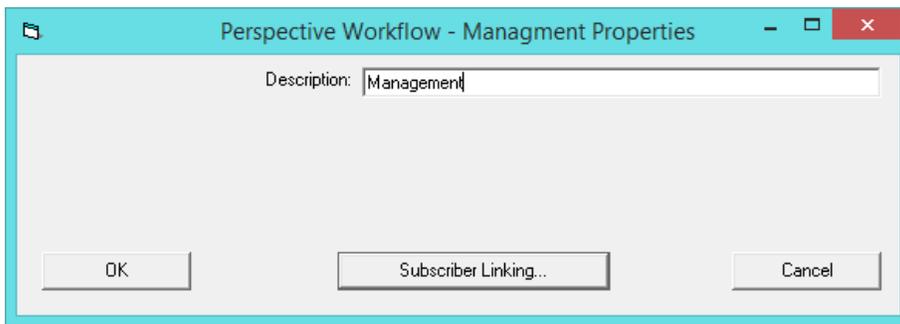
## Manually Creating a Subscriber

1. In Perspective Workflow Event Manager, expand the **Subscribers** node and select **Users**.

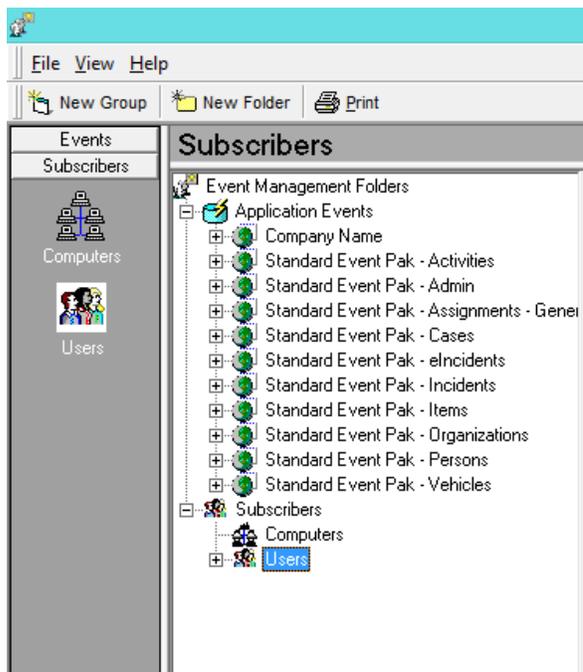


2. Click the **New Group** button in the top-left corner of the window.

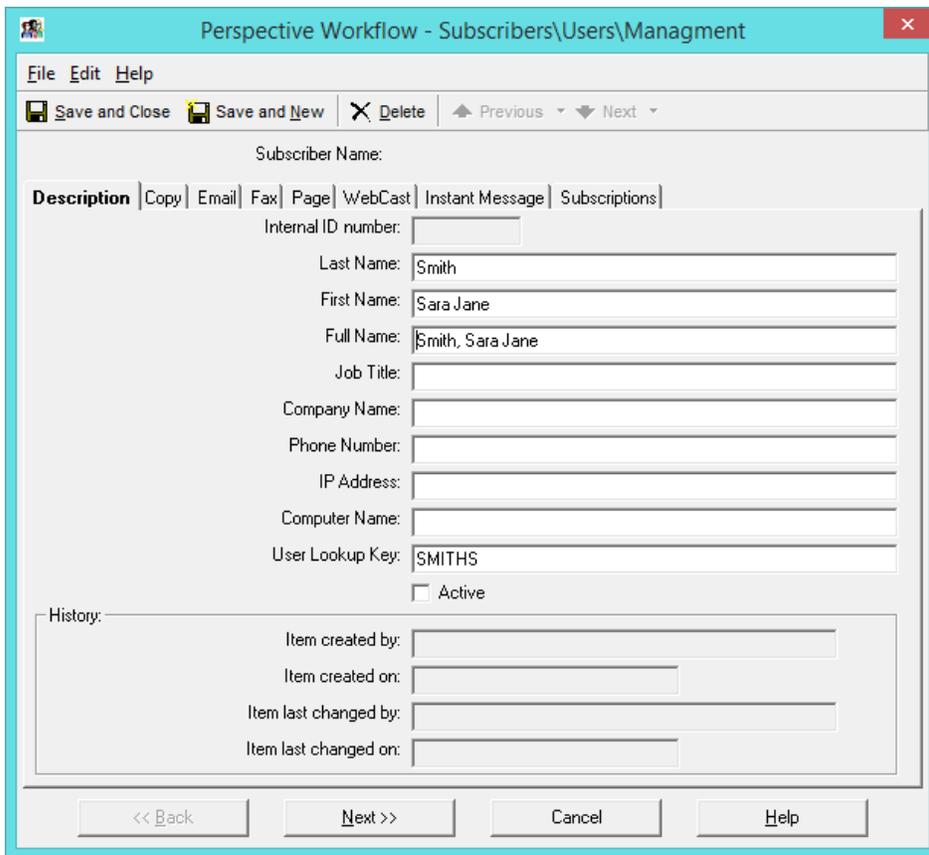
3. Enter a **Description** for your group; then click **OK**.



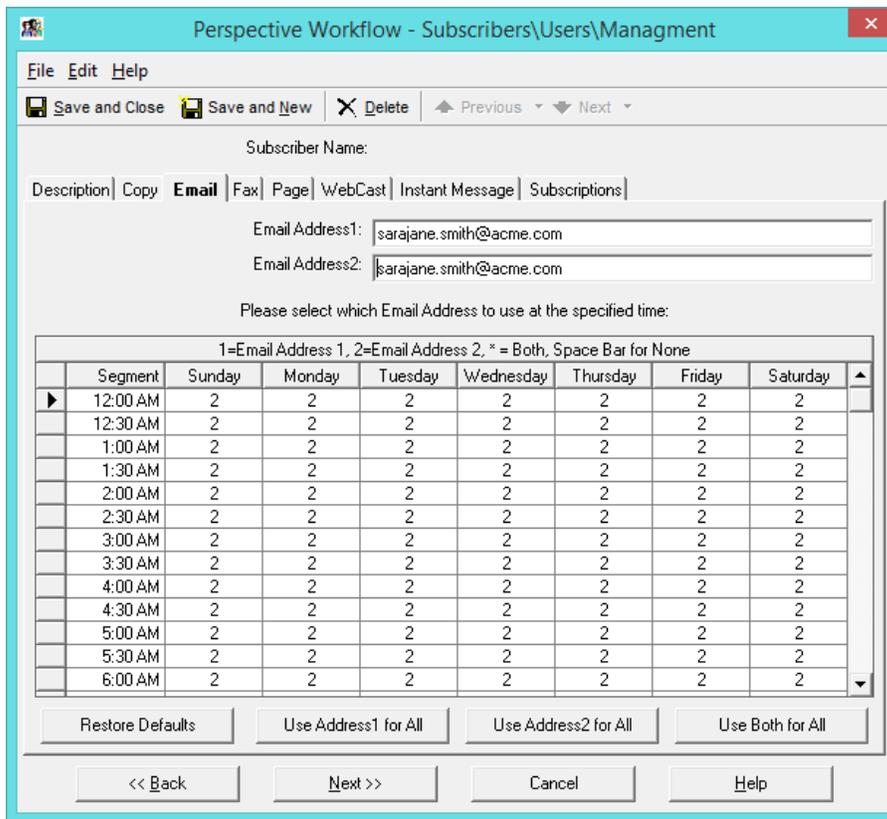
4. Select your new group under the **Users** node, and click the **New User** button.



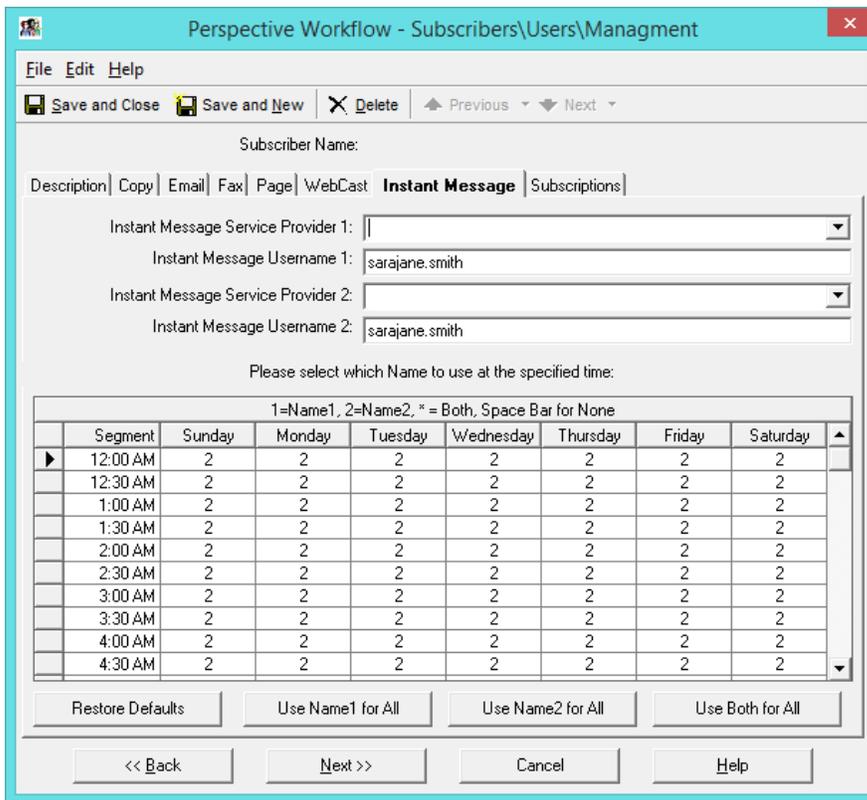
5. Complete the **Last Name** and **First Name** fields, and check the **Active** box. (The **Full Name** field will automatically populate.)



6. Select the **Email** tab, specify the subscriber’s primary email address in **Email Address 1** and, if applicable, enter their secondary email address in **Email Address 2**.
  
7. Indicate which email address (**1** or **2**) should be used on various days of the week and times of day to notify the subscriber of an event’s occurrence. To indicate that both addresses should be used in a given time slot, enter an asterisk (\*), or you may leave the slot blank to indicate that neither email address should be used. Alternatively, you can click the **Use Address 1 for All**, **Use Address 2 for All**, or **Use Both for All** buttons to quickly apply settings to all time slots.



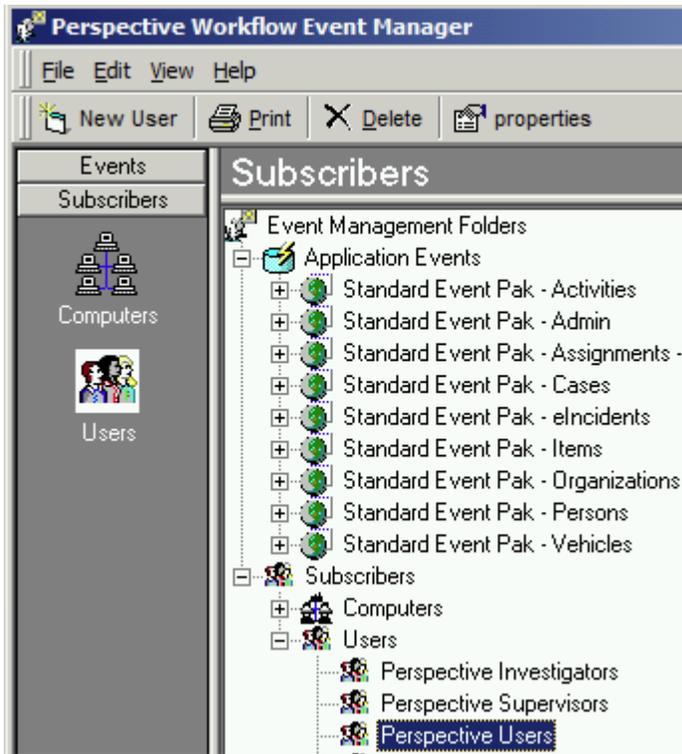
8. **IM Setup for Subscriber:** Select the Instant Message tab, select the Instant Message Service Provider, and finally, select the IM Username of the subscriber (the person who will be receiving the IM notifications).



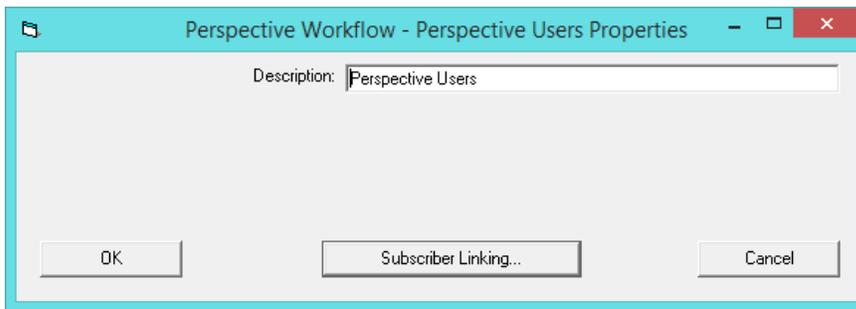
9. Click **Save and Close**.
10. Continue to apply these steps to manually create additional subscribers as needed.

## Linking a Subscriber Group

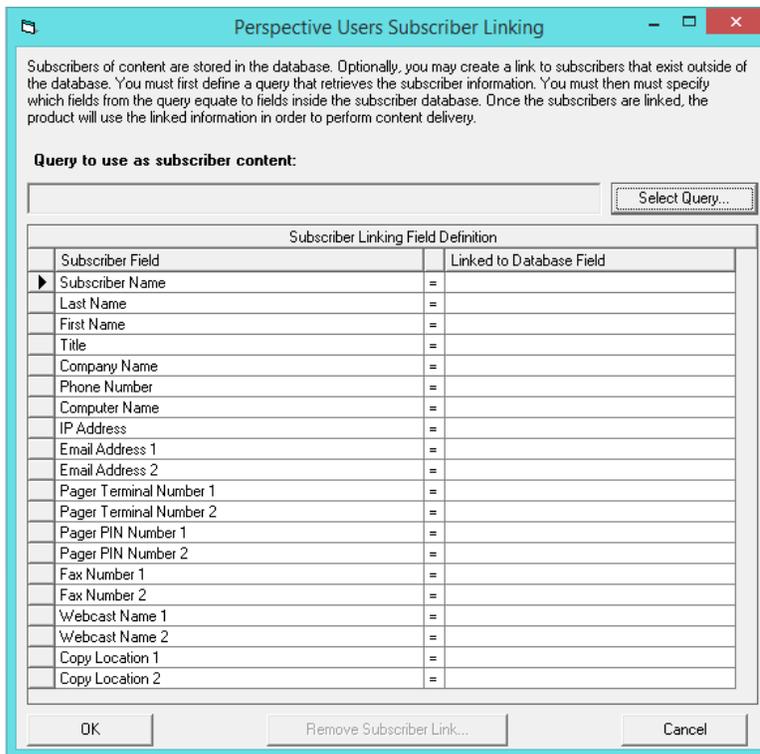
1. In the Perspective Workflow Event Manager, select one of the default groups under **Subscribers > Users** (i.e., **Perspective Users**, **Perspective Supervisors** or **Perspective Users**). Then, click the **Properties** button at the top of the window.



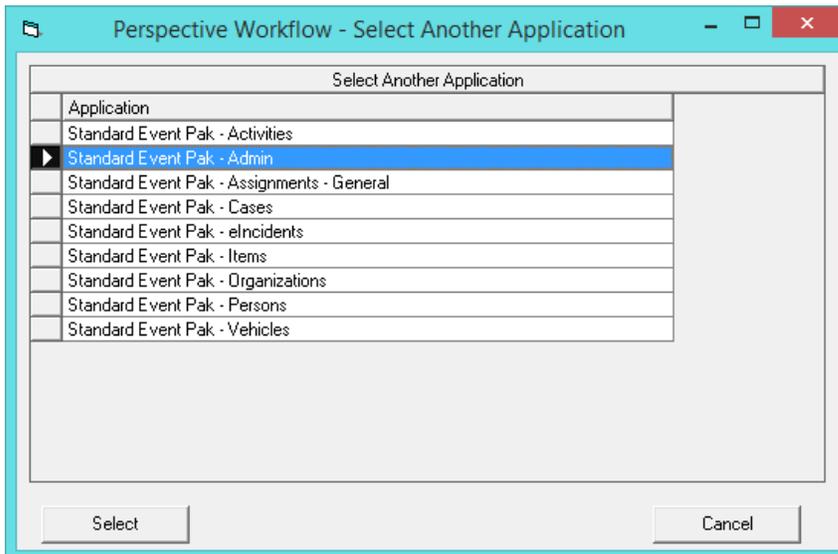
2. Click the **Subscriber Linking** button.



3. Click the **Select Query** button.



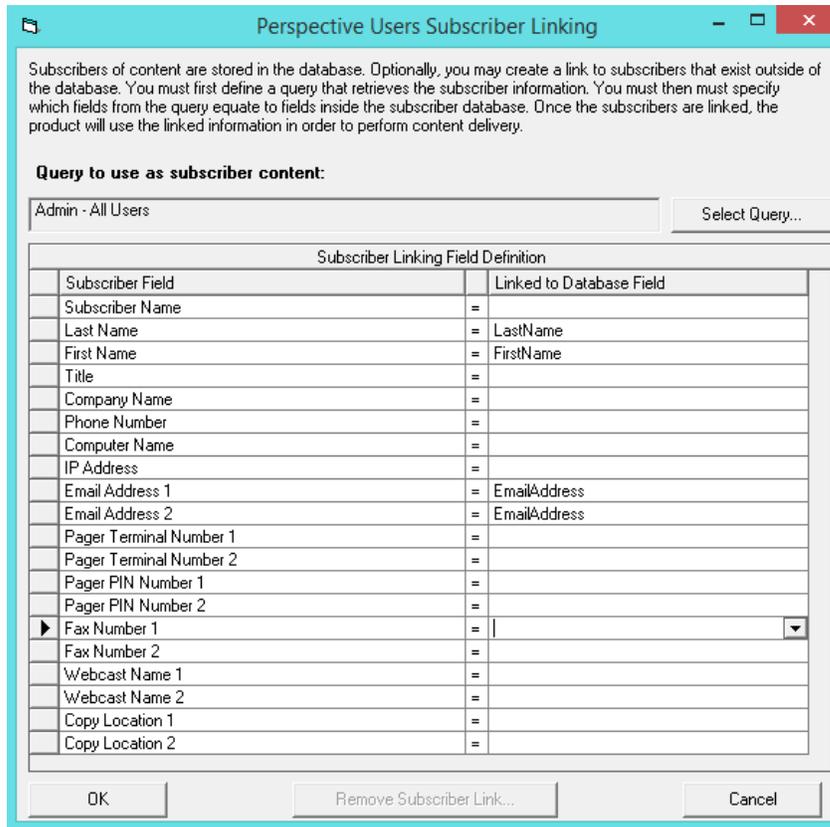
4. Select the **Standard Event Pak - Admin** application from the list by clicking on the arrow to the left of the name; then click the **Select** button.



5. Select **Admin – All Users with Primary Email**.
6. Then, click the **Select** button.

- In the **Linked to Database Field** column on the right, select only the values shown in the following screenshot and click **OK**; then, click **OK** again.

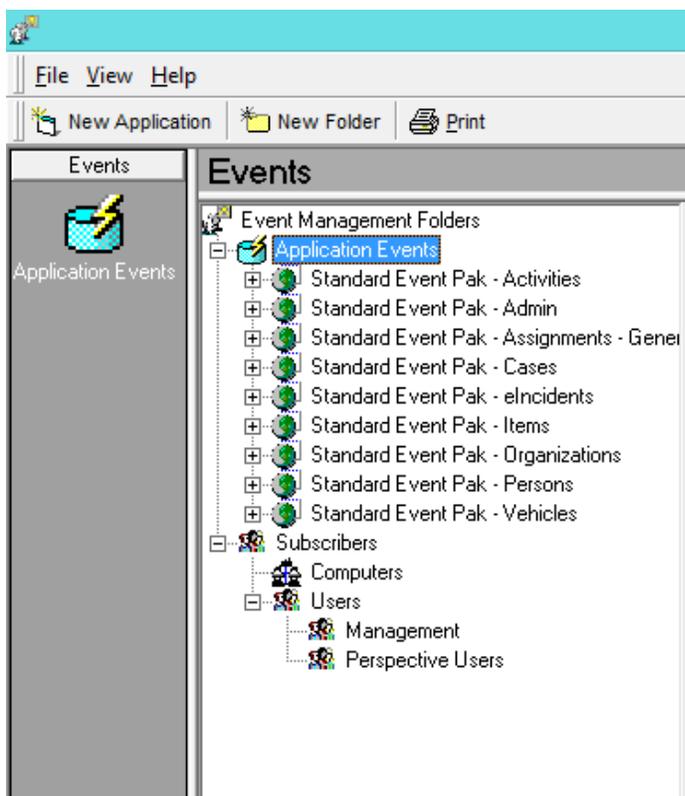
Note: This will link only to each subscriber's primary email address in Perspective (the email address that appears in the subscriber's **Person** record with the **Primary** box checked.)



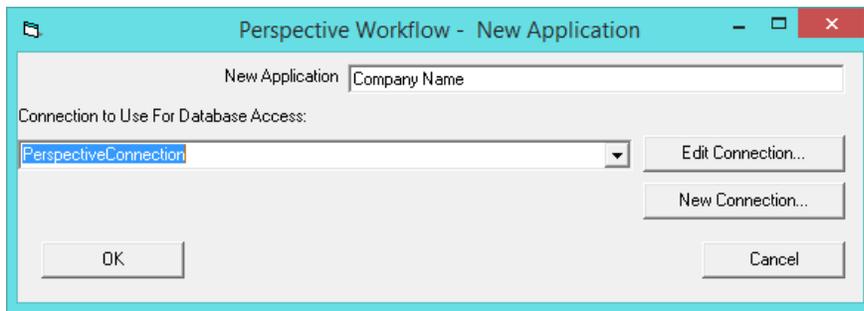
# Application Creation

Before using any of the events in your Perspective Workflow Event Pak, you must complete the following steps:

1. Select **Application Events**.



2. Click **New Application**.
3. A pop-up will appear telling you to name the application. Select the ODCB connection that was created earlier.



4. Click **OK**.

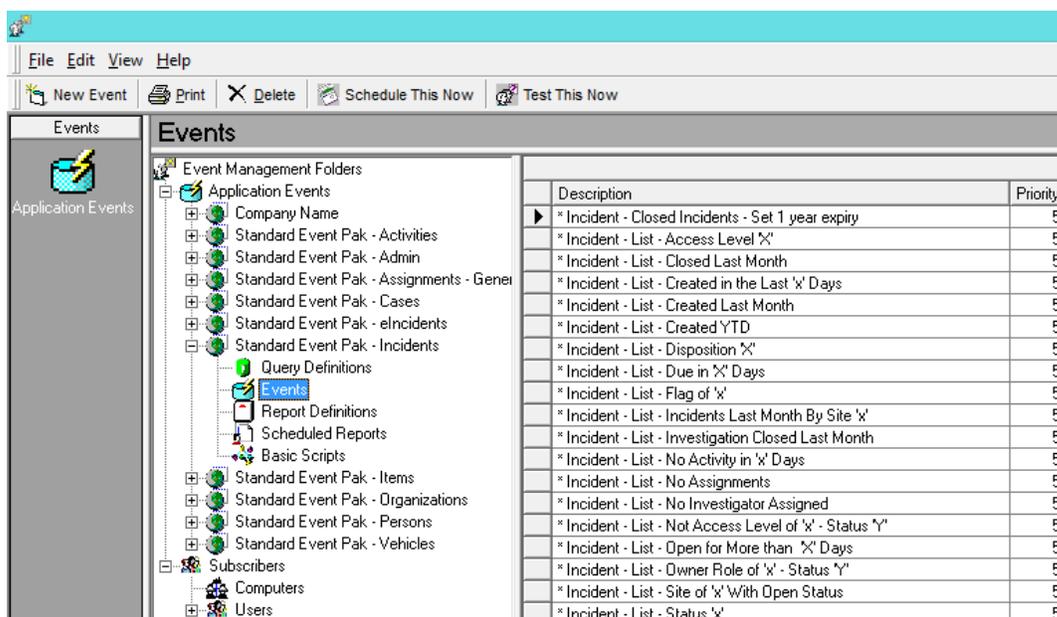
# Event Configuration

Before using any of the events in your Perspective Workflow Event Pak, you must complete the following steps:

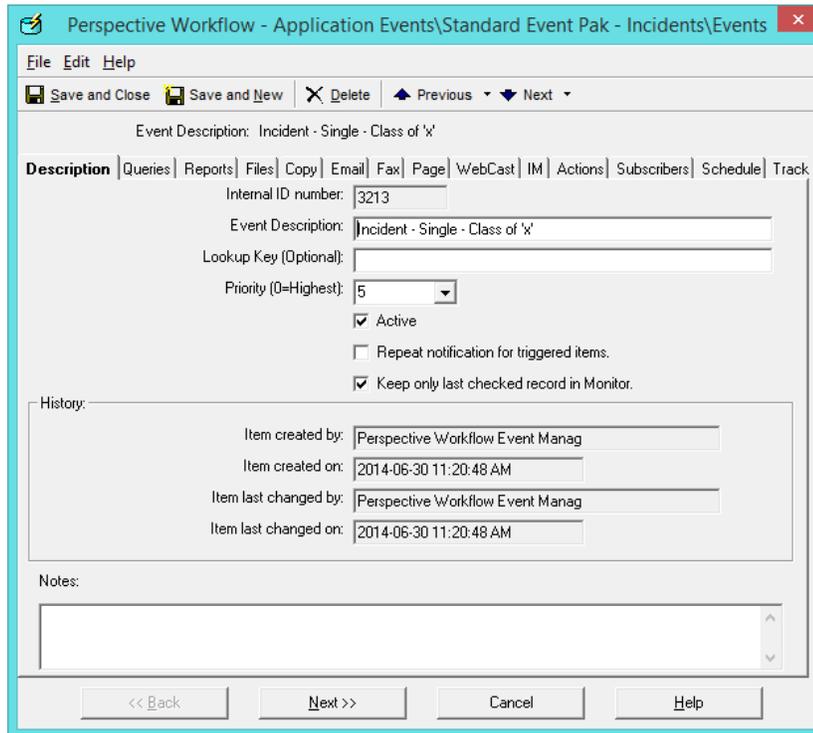
- Specify the filter values that each event’s queries will use (if applicable).
- Run each event once using the Schedule This Now option.
- Set each event to "Active" status.
- Select the email account that each event’s alert messages will be sent from.
- Ensure that each event has at least one subscriber with the Email box checked.
- Enter a schedule for each event.

For more information on configuring events, including designing events of your own, please refer to the Event Designing section of the *Perspective Workflow User’s Guide*.

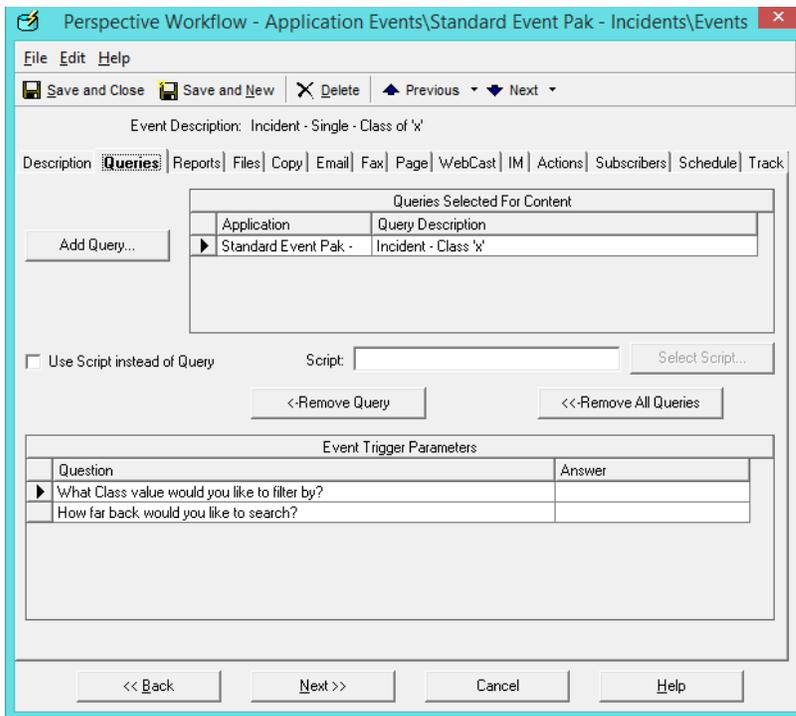
1. In the Perspective Workflow Event Manager, expand the **Standard Event Pak - Incidents** node and select **Events**.



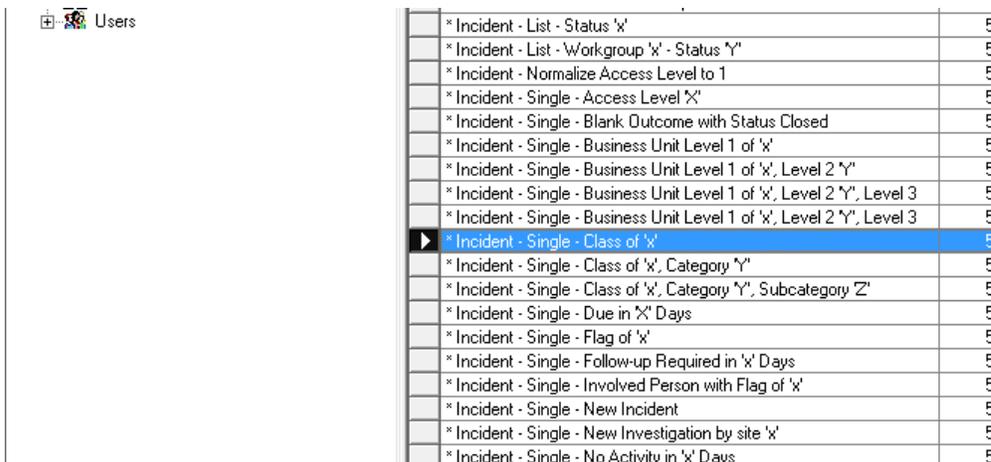
2. Double-click an event in the list on the right that meets your requirements (consult the *Workflow Event Paks* document).
  - For this example, we are going to use **Incident – Single – Incident Class ‘x’**.



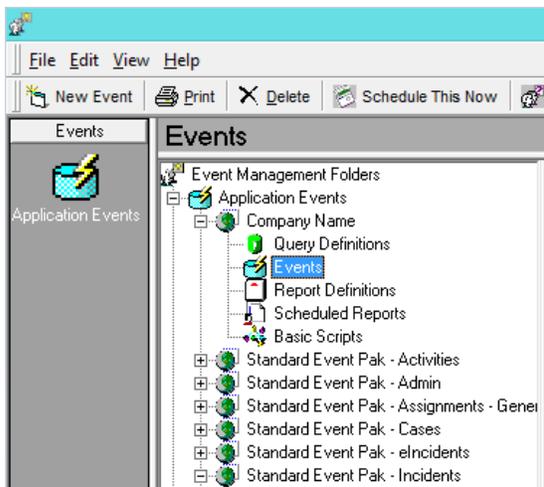
3. Double-click the Event to open it.
4. Click the Queries tab.



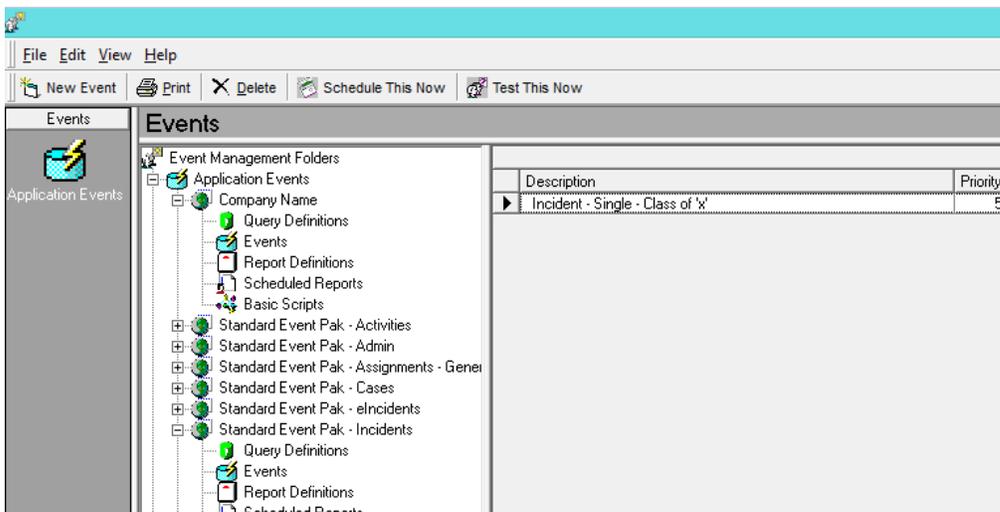
5. Make a note of the query it is using.
6. Close the window.
7. Highlight the Event and CTRL + C.



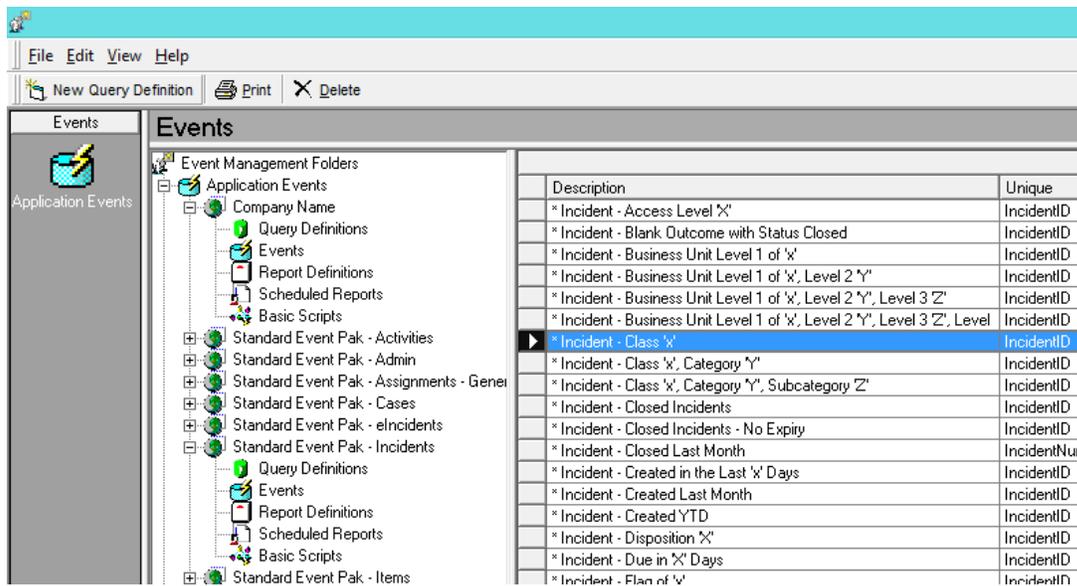
8. Go to the application that you created earlier.
9. Expand it and click Events.



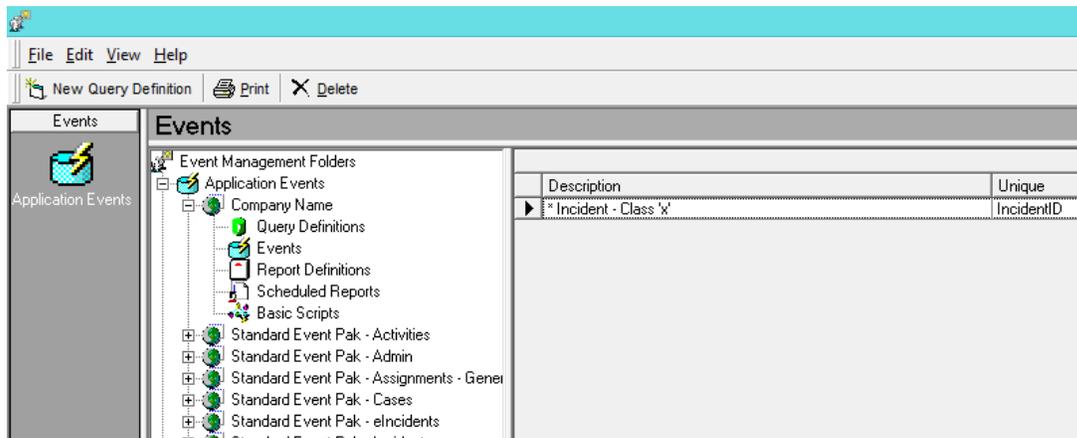
10. Make the Description window active by clicking inside of it.
11. Type CTRL + V to move the Event.



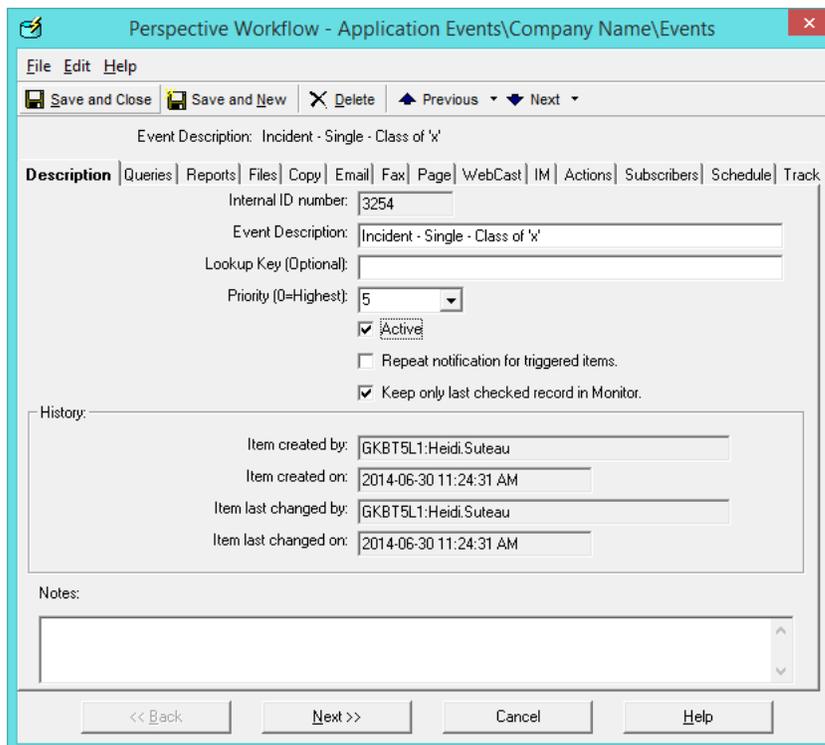
12. Go back to Standard Event Pak Incidents.
13. Click Query Definitions.
14. Find the name of the query noted above. In this example, it is Incident – Incident Class ‘X’.



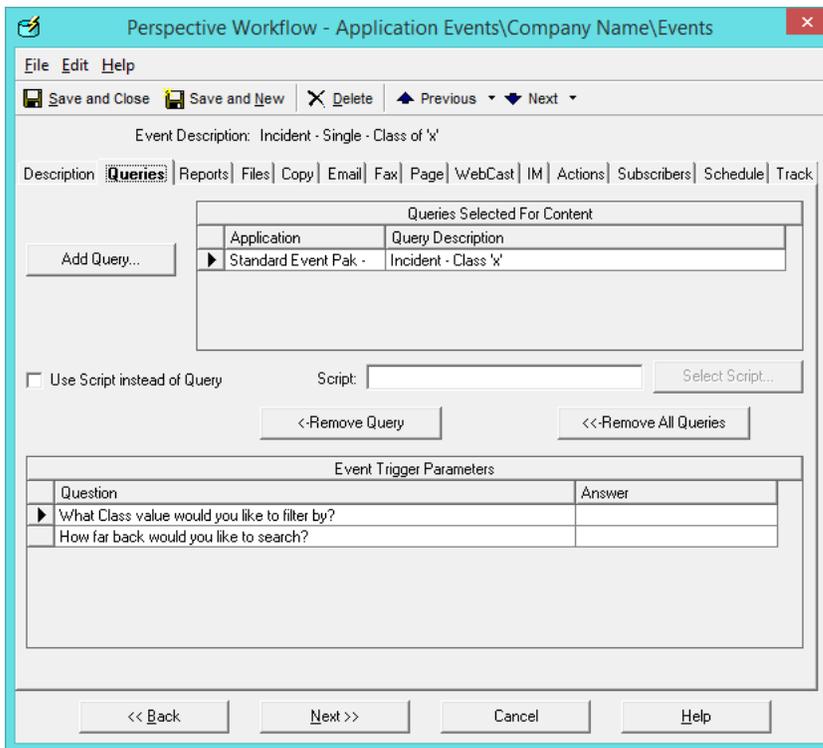
15. Highlight the Incident – New Incident and type CTRL + C.
16. Go to the new application and click Query Definitions.
17. Make the Description window active by clicking inside of it.
18. Type CTRL + V to move the Query.



19. Go back to the new application events.
20. Double-click the **Incident – Single – Incident Class 'X'**.

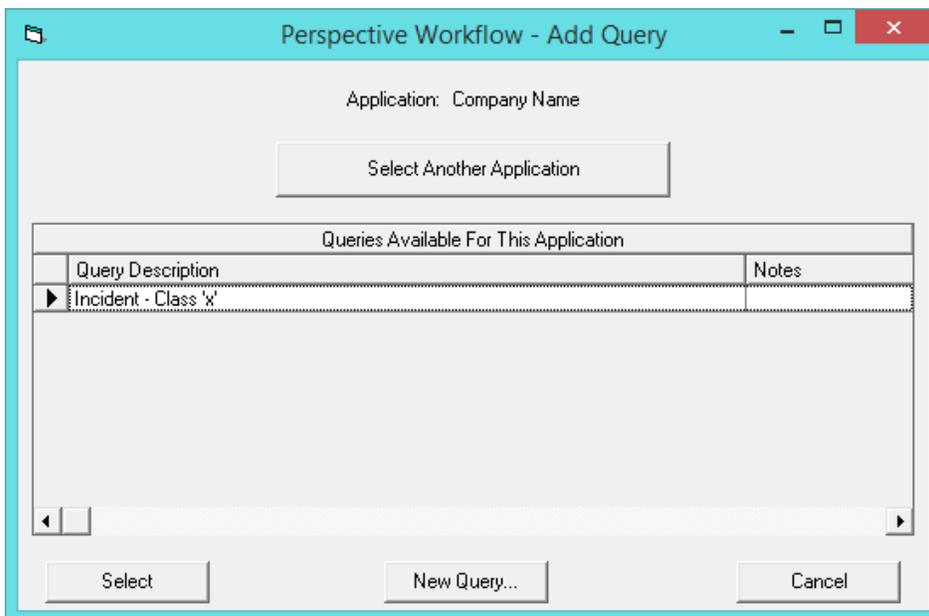


21. In the Description tab, check the Active box.
22. Click the Query's tab. Note: Where Application still has Standard Event Pak.



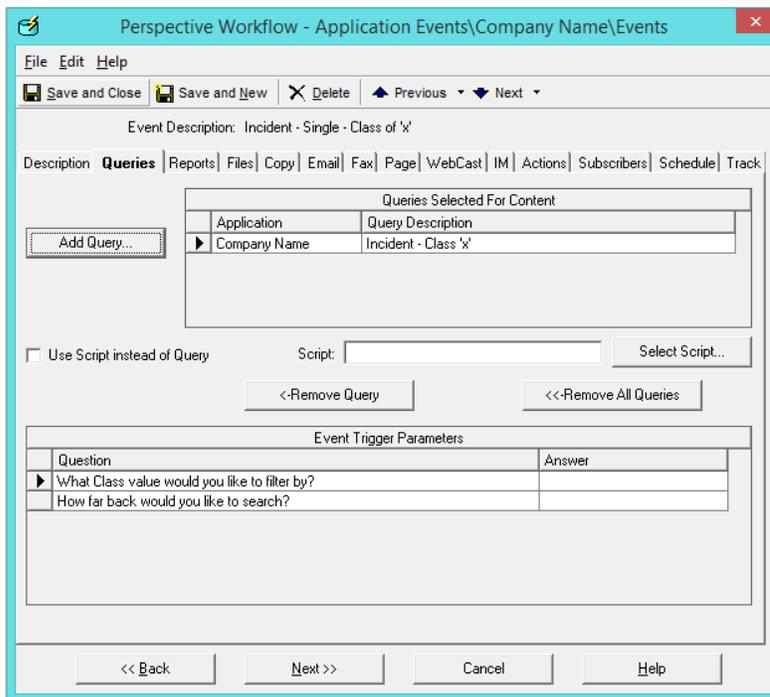
23. Click the Remove All Queries button.

24. Click New Query.



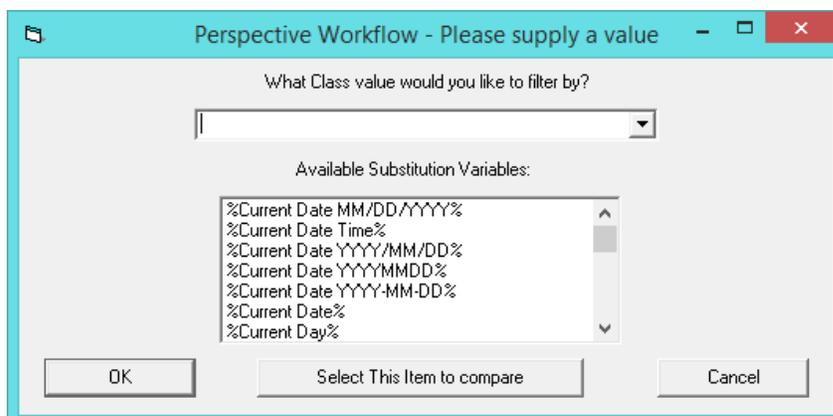
25. Select Incident – New Incident Query.

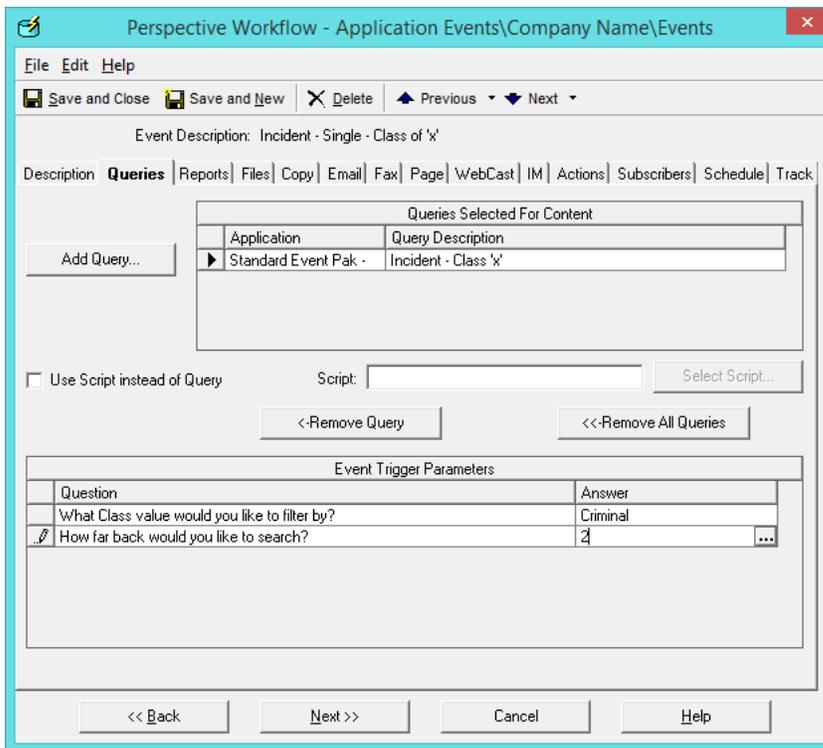
26. Click Select. Note: The application changes.



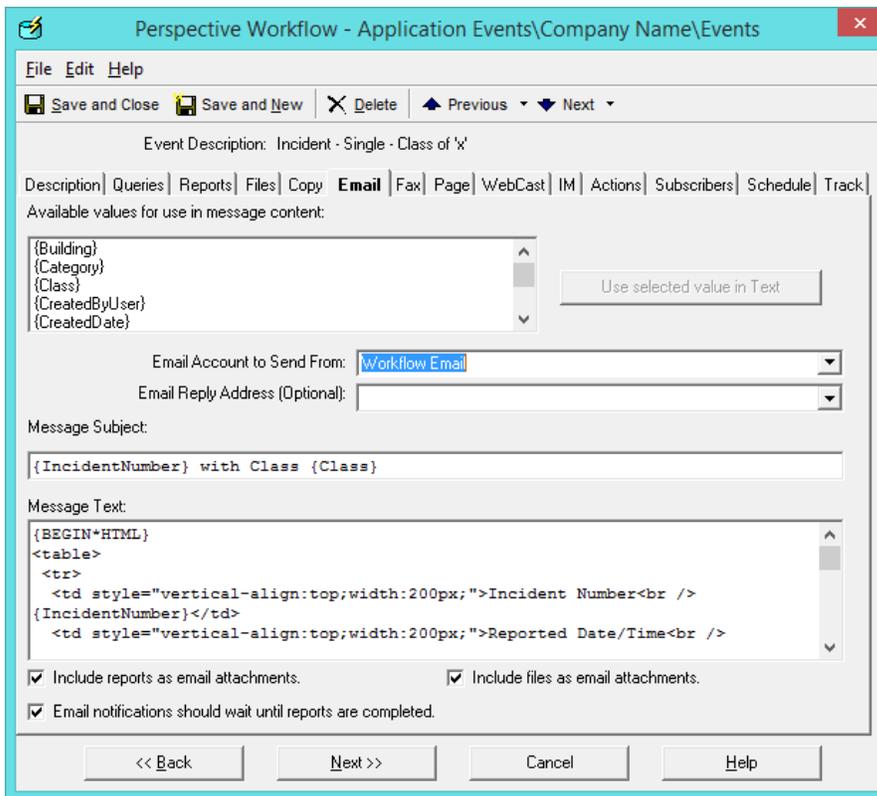
27. If there is an 'X' in the name, you can enter a parameter in the Event Trigger Parameters field by clicking the ellipsis and selecting a value, or entering it directly in the text field.

Note: Only values that have been saved in at least one record in your database will be available for selection using the **Browse (...)** button. If you wish to specify a filter value that is not available, you must type it in the **Answer** field.





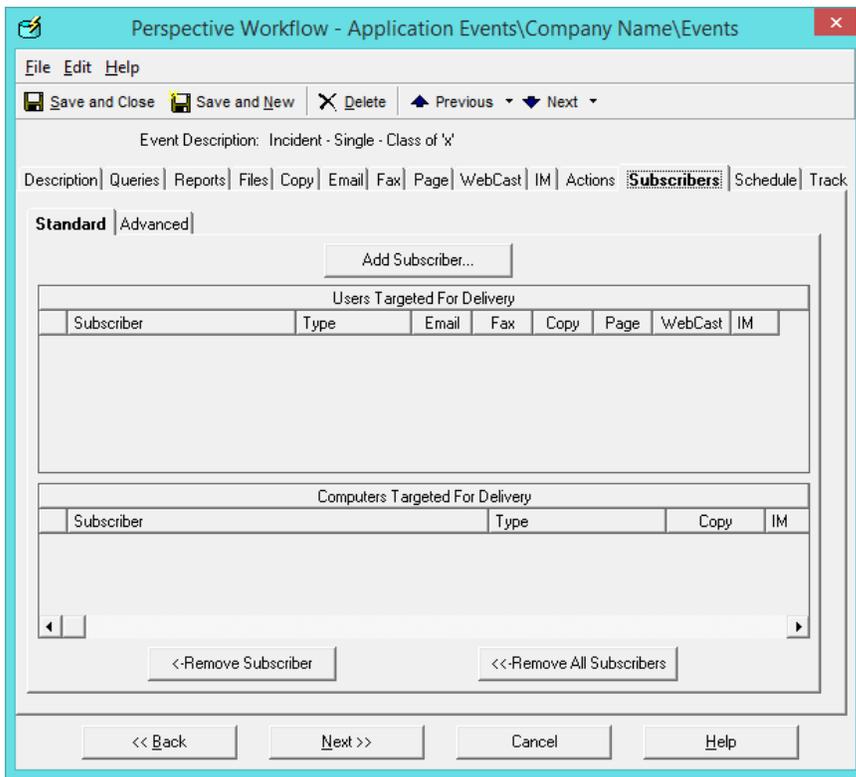
28. Select the **Email** tab, and choose an option for the **Email Account to Send From** field. (This indicates the account that all email alert messages for this event will be sent from.)



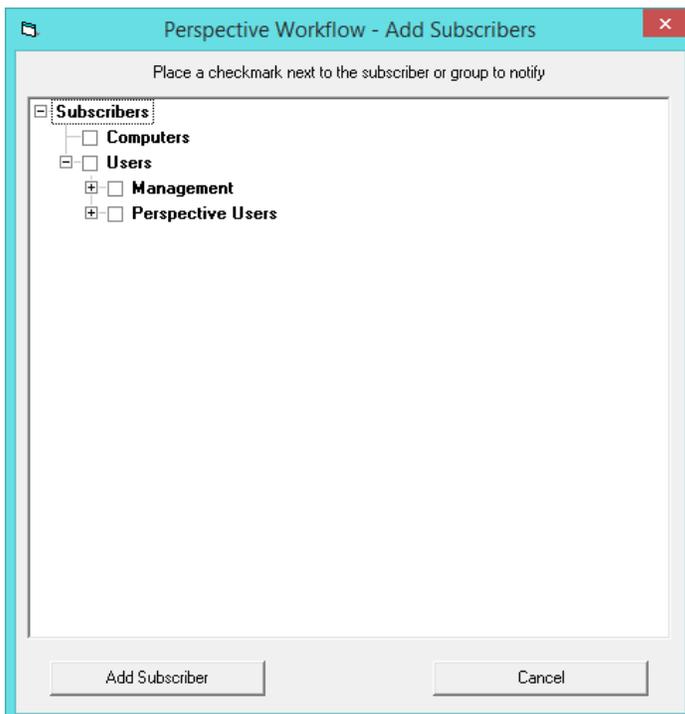
29. Feel free to edit the message subject, but do not edit text enclosed in curly brackets, such as **{AccessLevel}**. This text will be automatically replaced by data drawn from the specific record(s) triggering the event.

*Note: If you have someone who knows HTML, have someone edit the Message Text but do not alter the curly brackets.*

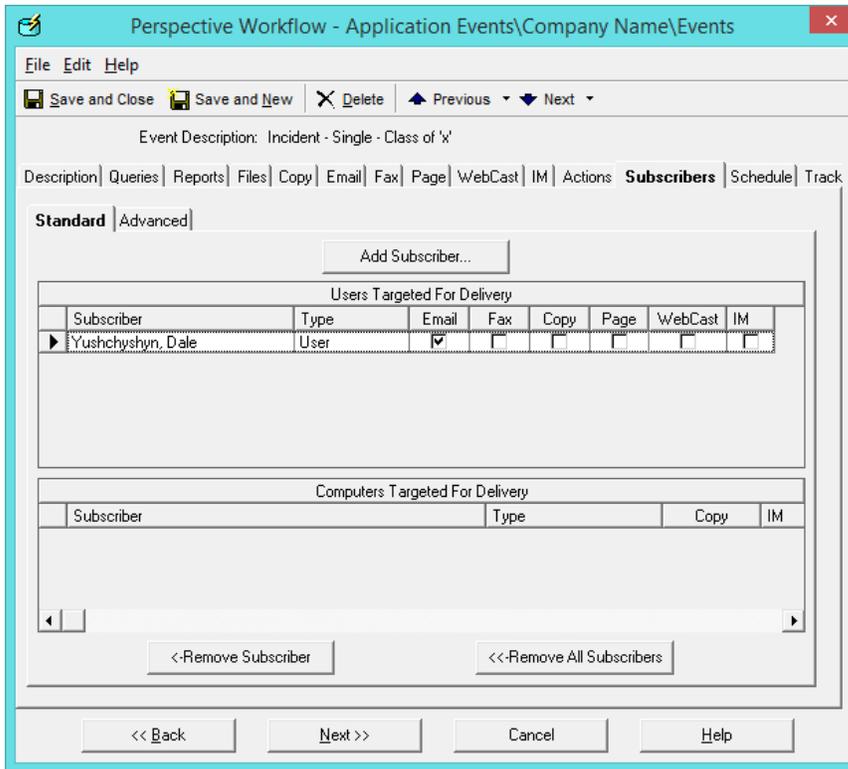
30. Select the **Subscribers** tab, and then select the **Standard** sub-tab.



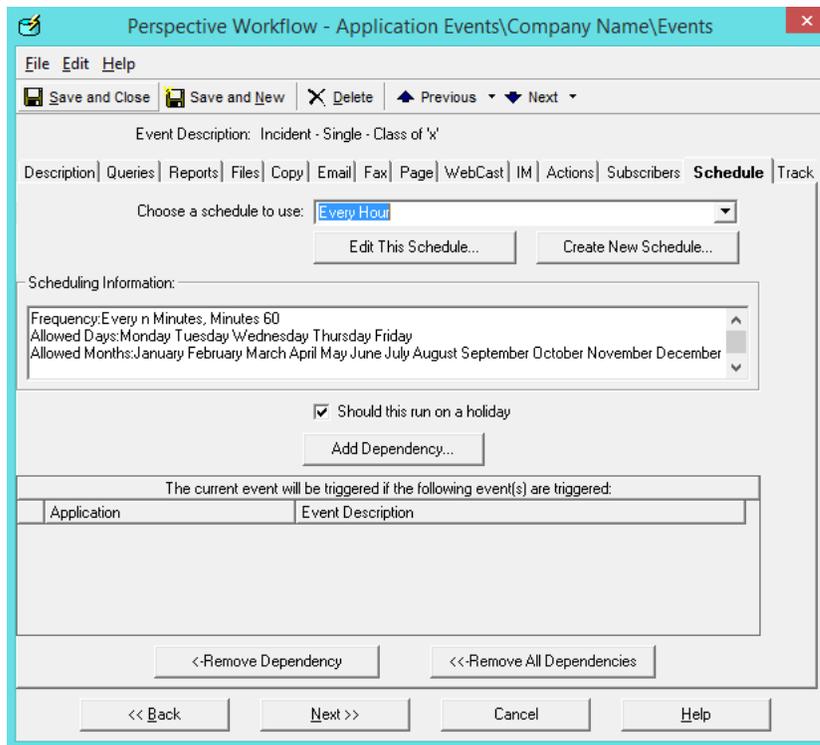
31. Click Add Subscriber.



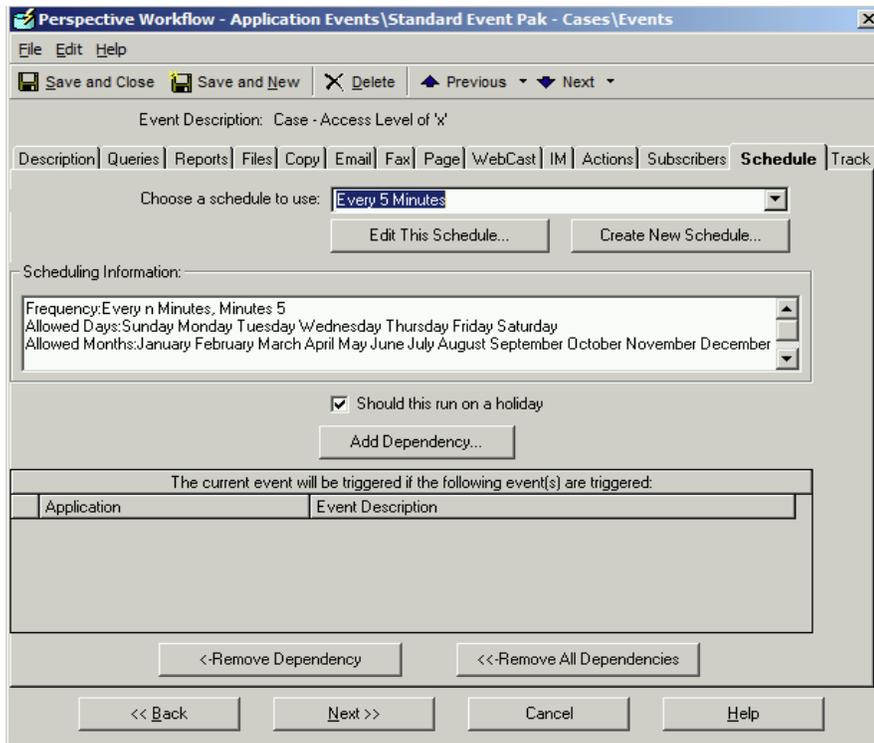
32. Select the users who will be receiving this e-mail.
33. Click Add Subscriber.



34. Select the **Schedule** tab.

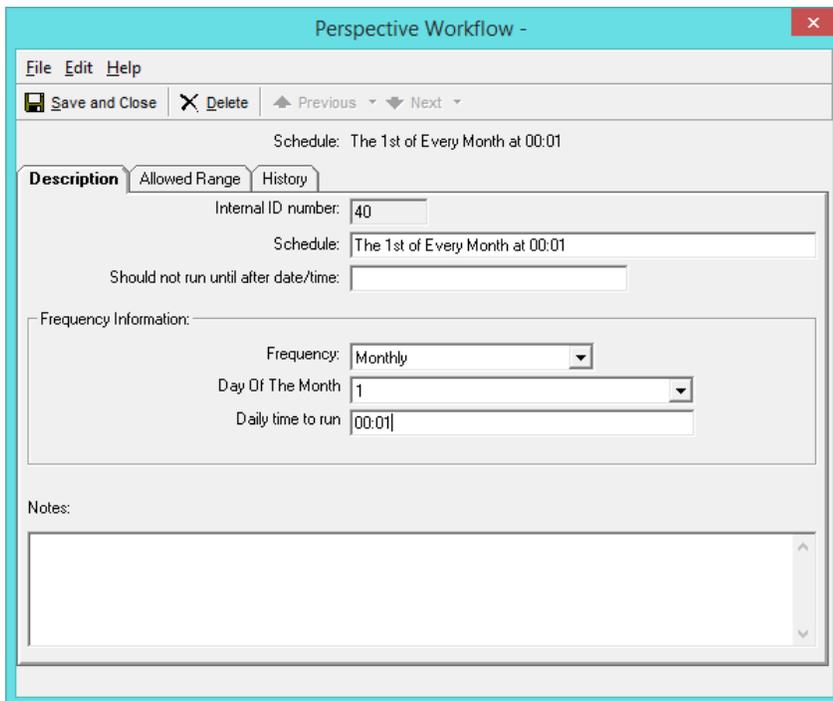


- a. Select an option for the **Choose a schedule to use** field (e.g., Every Hour, Every Monday at 9:00 AM, etc.).

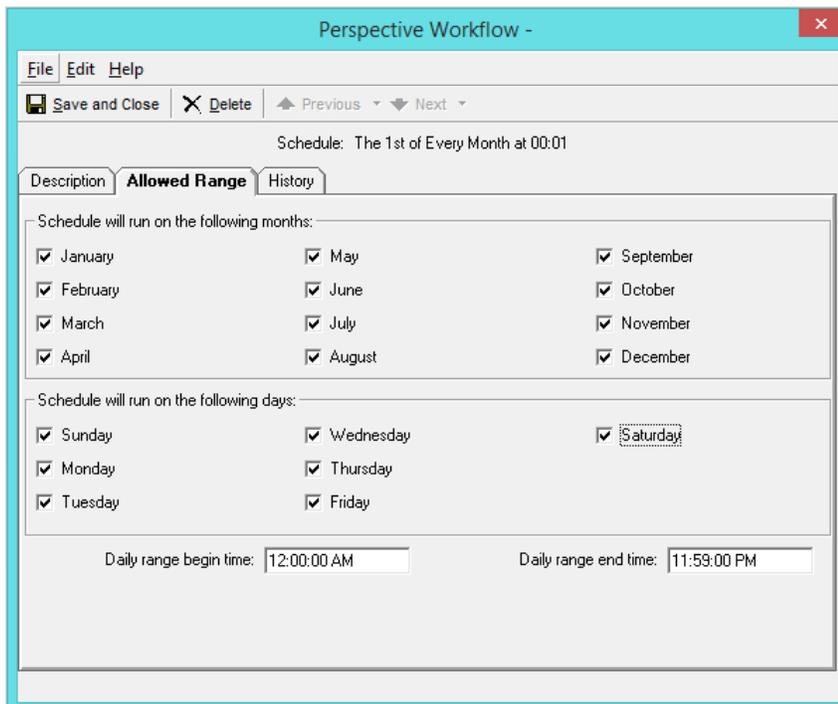


OR

- b. Click the **Create New Schedule** button.
  - i. In the **Schedule** field, enter a description for your new schedule.
  - ii. In the **Should not run until after date/time** field, enter a future date when events using this schedule will begin to run, or leave the field blank if you want the schedule to be activated immediately.
  - iii. In the **Frequency** field, choose an option for the schedule's rate of recurrence (e.g., Every n Minutes, Daily, Weekly, etc.); then, in the new field that appears below, specify additional details for the frequency, such as the time of day for the event to run or the day of the week.



- iv. Under the **Allowed Range** tab, specify the months of the year, days of the week and hours of the day that the event is eligible to run. (Times are inclusive.)



v. Click **Save and Close**.

35. Click **Save and Close**. The event is now activated and will run according to the specified schedule alerting the subscribers indicated.

36. Continue to apply these steps to all events you would like to activate.

*Note: Please make sure you close any Workflow modules at the end of the day so that Workflow can do its nightly scheduled maintenance.*

# Contact Information

## Technical Support

**Toll Free:** 1-877-776-2995  
**Phone:** (780) 448-0616  
**Email:** [support@resolver.com](mailto:support@resolver.com)  
**Website:** <https://support.resolver.com>

## Resolver Inc.

**Toll Free:** 1-888-776-9776  
**Phone:** (780) 448-0616  
**Fax:** (780) 448-0618  
**Email:** [information@resolver.com](mailto:information@resolver.com)  
**Website:** <http://www.resolver.com>