



with the  
**SPIAgent File Locking Add-On  
Evaluator's Guide**



## Table of Contents

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Introduction .....	2
System Requirements.....	2
Contact Information.....	3
Required Add-Ons for SPIAgent File Locking.....	3
SPIAgent Add-On.....	3
SPIAgent File Locking Add-On .....	4
Other SureSync Add-Ons .....	4
ArchiveSync Add-On.....	4
What is SPIAgent File Locking?.....	4
Supported Applications .....	6
Expected Application Behavior when Encountering Locks .....	7
Our Scenario.....	10
Installation.....	11
Launch SureSync for the First Time.....	12
Installing the SureSync Scheduler .....	13
Configuring the SPIAgent Machines .....	14
Creating the Relation .....	15
Name Your Relation.....	16
Specifying Root Paths.....	16
Determining the Best Rule .....	18
Selecting Your Rule .....	18
Selecting Source and Destination .....	19
Filtering Subfolders .....	19
Filtering Based on File Masks .....	20
Previewing Your Relation.....	21
SPIAgent Compression & Encryption .....	22
Creating a Real-Time Monitor .....	22
Name Your Monitor .....	23
Selecting What Relation(s) to Run .....	23
Enabling SPIAgent File Locking.....	24
Modifying and Running Your Real-Time Monitor .....	24
Configuring E-mail Alerts .....	25
Configuring a SMTP Profile.....	25
Configuring an Alert User.....	26
Configuring the Real-Time Monitor to Send Alerts.....	27
Monitoring the Synchronization.....	28
Detailed Status.....	28
Enterprise Status.....	28

## Introduction

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SureSync is a powerful file replication & synchronization utility which can be used to ensure users on your network are always working off of the most recent version of critical files, for disaster recovery purposes, for software distribution, and much more.

This evaluator's guide is designed to walk you through the initial setup of the SureSync product with the SPIAgent File Locking Add-On. By reviewing this guide, you will become familiar with how to utilize SureSync, SPIAgent, and SPIAgent File Locking to implement an efficient and powerful synchronization / replication infrastructure in your network

## System Requirements

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SureSync's basic operating system and hardware requirements are:

- **Supported Operating Systems:** Windows Server 2008 R2; Windows Server 2008; Windows Server 2003; Windows Server 2003 R2; Windows Vista; Windows XP; Windows 7
- **Processor:** 400Mhz Pentium Processor or equivalent (Minimum); 1Ghz Pentium Processor or equivalent (Recommended)
- **RAM (total for system):** 256MB (Minimum); 1GB (Recommended)
- **Hard Disk:** 30MB for application files; 20MB+ for database
- **Display:** 800x600, 256 colors (Minimum); 1024x768 high color, 32-bit (Recommended)

SureSync can synchronize data to machines running operating systems such as Windows 95, Windows 98, Windows NT 4.0, Windows 2000 and non-Windows machines such as Macintosh and Linux machines via UNC path but the software itself must be installed on one of the supported operating systems listed above.

SureSync requires a database which is used to store configuration information. The following formats are supported:

- Microsoft Access (default)
- MSDE 2000 / SQL Express 2005 / SQL Express 2008
- SQL Server 2000 / SQL Server 2005 / SQL Server 2008

To achieve optimal performance, a SQL database is strongly recommended for setups using multi-directional Rule types, environments with more than 50 Relations defined, or environments where hundreds of thousands of files will be processed.

SureSync requires a number of Microsoft components to be installed on the system. The SureSync installer will detect the versions your system is running and offer to upgrade them as needed.

- Microsoft .NET Framework 3.5 with Service Pack 1
- Microsoft MDAC 2.8 Refresh with Service Pack 1
- Microsoft Visual C++ Runtime 9.0 with Service Pack 1
- Microsoft Windows Installer 3.1
- Microsoft XML Parser 6.0
- Microsoft Jet 4.0 with Service Pack 8

## Contact Information

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If you need further information about SureSync or need clarification on anything within this guide, please contact our support group and they will be happy to assist you with your evaluation.

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## Required Add-Ons for SPIAgent File Locking

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In order to use SPIAgent File Locking, you will need to license the base SureSync product, the SPIAgent Add-On and the SPIAgent File Locking Add-On for each machine involved in the synchronization. This section outlines the functionality provided by the required Add-On licenses.

### **SPIAgent Add-On**

The SPIAgent is a powerful Add-On license for SureSync, which contains a number of performance enhancing features. This license is required to perform File Locking.

- **Real-Time Monitors**  
Real-time replication increases data availability by continuously monitoring data for updates. By copying files immediately after they change, SureSync can avoid folder scans that are necessary for scheduled jobs.
- **Adaptive Delta Technology**  
SureSync copies only the changes made to a file, reducing synchronization time and decreasing the consumption of network resources.
  - **Delta Processing to Non-Windows Machines**  
If you map a non-Windows drive to a drive letter on a Windows machine you can process delta copies to that non-Windows machine. This in turn provides bandwidth savings between any machines, regardless of the OS.
- **File Compression**  
Transmit files in a smaller package across your network by compressing them. File compression is particularly useful on slow network connections. SureSync also allows you to specify the level of compression to control the impact on your system.
- **TCP/IP Transmissions**  
Transmissions across the Internet give you more options on how you connect to remote machines. Now it is even easier to keep office branches connected to the information they need.
- **Encryption**  
Ensure your files are being transmitted securely by utilizing the option to encrypt each file transmission. This is an especially useful and necessary tool when transmitting sensitive data across the Internet.
- **Change Journal Support for Schedules**  
When a Schedule is configured to run a Relation using the SPIAgent Add-On, SureSync

utilizes the NTFS Change Journal, which minimizes the amount of scanning a synchronization job must perform. Eliminating much of the scanning creates a significant performance improvement for Schedules.

### **SPIAgent File Locking Add-On**

The SPIAgent File Locking Add-On requires the SPIAgent to be licensed and in turn gives you an additional benefit in file sharing environments. The SPIAgent File Locking Add-On eliminates the possibility that a file could be changed on multiple sides of a synchronization resulting in a more efficient synchronization with zero risk of lost changes. A user who attempts to open a file that is already in use will receive an indication from the application that the file is locked.

## **Other SureSync Add-Ons**

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Software Pursuits also offers additional Add-On products for SureSync which provide additional functionality. The available Add-On products include:

### **ArchiveSync Add-On**

SureSync's ArchiveSync Add-On allows users to create versioned backup copies of files, providing an efficient disk-to-disk backup solution. Versioned file copies allow users to quickly restore files to a specified point-in-time, without sifting through tape backups. Additionally, when archiving or restoring, the ArchiveSync Add-On will allow you to backup and restore security privileges as well.

Archiving can be done in real-time to continuously protect data, effectively eliminating tight backup windows during the evening. ArchiveSync will also automatically thin out your archive to clean storage up.

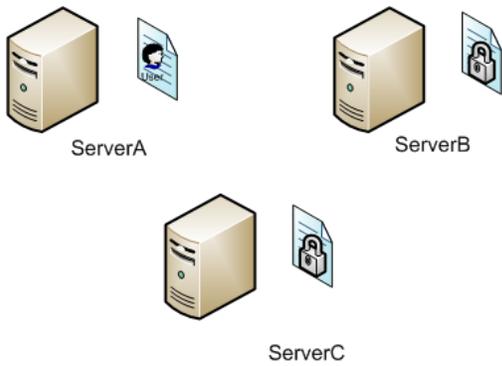
Please consult the [SureSync with ArchiveSync Add-On Evaluator's Guide](#) for further details.

## **What is SPIAgent File Locking?**

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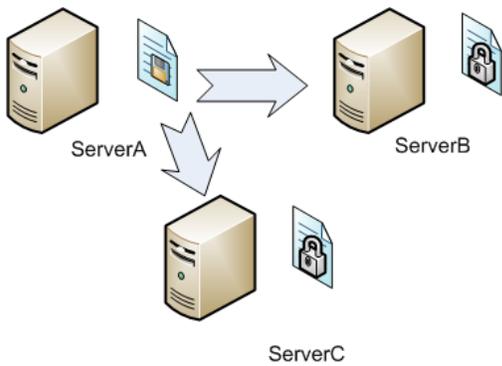
The SPIAgent File Locking Add-On is a powerful enhancement to SureSync that makes it simple to collaboratively share files between multiple offices while ensuring that users cannot make changes to the same files at the same time.

The SPIAgent File Locking Add-On will lock a file on all paths when a user opens the file on one machine. In this example, we have three servers named "ServerA," "ServerB," and "Server C." These machines all contain a copy of a file share that is being synchronized by SureSync with a Real-Time Monitor.

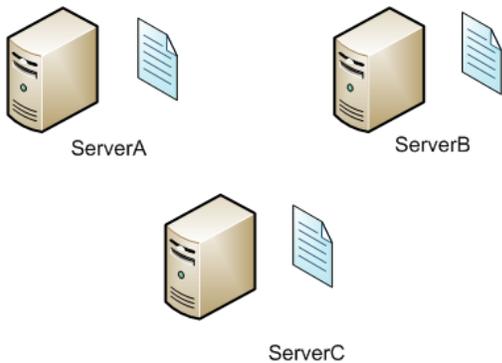


While the file is locked with the SPIAgent File Locking Add-On, no other user can access a write-enabled copy of the file. For example, if a user attempted to open the “Document1.doc” file on “ServerB,” they will open a read-only copy.

Once the user completes their changes to the “Document1.doc” file on “ServerA,” saves those changes and closes the file. SureSync will immediately replicate the changed version of the file to “ServerB” and “ServerC.”



As soon as the file has been synchronized to the other machines, the lock on the file will be released by SureSync. Users can then access the updated file with write access from any of the machines.



If a user opens the file again on one of the paths, then the locking process will repeat itself, ensuring that only one user has write access to the file at any given time.

## Supported Applications

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Generally speaking, applications use handles to open files. Applications can open a file, establish the open file handle and that lets the operating system and other applications know that the file is currently open. Applications that work this way are supported by the SPIAgent File Locking Add-On. An application can also open a file, read the file into memory, and then release the open file handle on the file. With applications that open files in this way, the SPIAgent File Locking Add-On is unable to determine that the file is open and no lock will be established.

The application opening the file determines if locking will function, not the file type. For example, if you open a .txt file in Notepad, that .txt file will not be locked. This is due to the fact that Notepad does not establish and maintain the required handle in the file system when it opens the file. On the other hand, if you open that same .txt file in Microsoft Word a lock will be established because Word properly established and maintains the open handle in the file system.

This list contains applications that Software Pursuits has tested the SPIAgent File Locking Add-On with and have determined that locking will occur. This list is not comprehensive as there are far too many applications available on the market to provide a complete list. We will continue to update this list as we test additional applications and as we receive feedback from customers. If an application that supports multiple file types appears on this list, all compatible file types should be lockable.

### Supported Applications

- Autodesk AutoCAD
- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Publisher
- Microsoft Visio
- Microsoft Access
- Adobe InDesign
- Adobe PageMaker
- QuarkXPress
- OpenOffice.org Writer
- OpenOffice.org Calc
- OpenOffice.org Draw
- OpenOffice.org Impress
- OpenOffice.org Math
- OpenOffice.org Base

### Unsupported Applications

- Adobe Illustrator
- Adobe Photoshop
- Adobe Acrobat
- Macromedia Dreamweaver

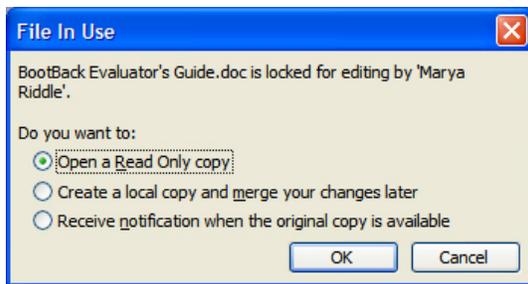
## Expected Application Behavior when Encountering Locks

The SPIAgent File Locking Add-On establishes locks on files at the file system level. It does not provide any form of messaging to the user when they encounter a locked file. The behavior that the end user will encounter depends on the applications in use in the environment. When deploying SureSync with the SPIAgent File Locking Add-On, it is essential that you inform the end users about what they can expect to experience when encountering locks. This section will highlight the behavior of some widely used applications while SPIAgent File Locking is active.

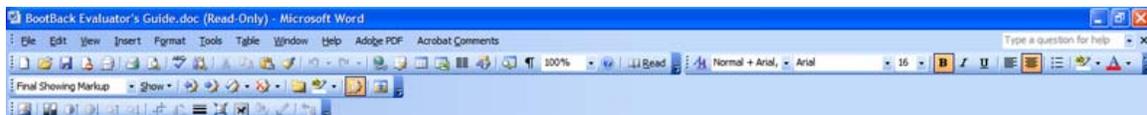
Note: It is important to understand that the behavior you see can be different depending on where the file is locked from with Office applications. If a user opens the file on the same path as the lock, you should see prompts like the one below. This occurs because the Office application's file in use handler grabs the open request and processes it. If the file lock is opened from a remote machine, you should see Read-Only in the title bar of the file. The SyncLockStatus Add-on can provide additional messaging to the end users if additional clarity is needed.

### Word 2003

When opening a file that is locked in Word 2003, the user will be prompted with the following "File In Use" dialog box. Generally, the user will select "Open a Read Only copy."



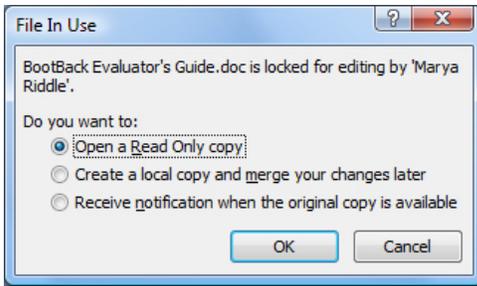
Word will then open a read-only copy of the file as signified by the "[Read-Only]" in the title bar.



Depending on the operating system of the file server, the first "File in Use" screen might not appear. The user may get the Read-Only copy automatically and only see the second screenshot.

### Word 2007

When opening a file that is locked in Word 2007, the user will be prompted with the following "File In Use" dialog box. Generally, the user will select "Open a Read Only copy."



Word will then open a read-only copy of the file as represented by the “[Read-Only]” in the title bar.



Depending on the operating system of the file server, the first “File in Use” screen might not appear. The user may get the Read-Only copy automatically and only see the second screenshot.

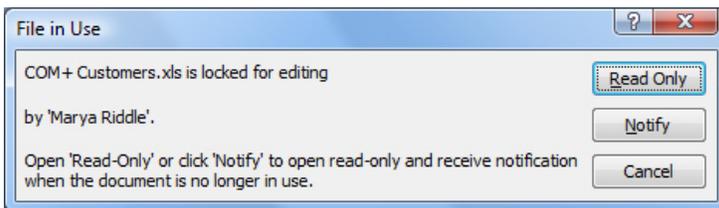
### **Excel 2003**

When a user opens a file in Excel 2003 that is locked, the program will automatically open a read-only copy. This is signified by the “[Read-Only]” in the title bar.



### **Excel 2007**

Excel 2007 will display the following dialog box when opening a file that has been locked. Generally, end users will select “Read-Only,” but they can also choose to be notified when the file becomes available for write access.



Clicking “Read Only” will result in the file being opened and “[Read-Only]” will be displayed in the title bar.



Depending on the operating system of the file server, the first “File in Use” screen might not appear. The user may get the Read-Only copy automatically and only see the second screenshot.

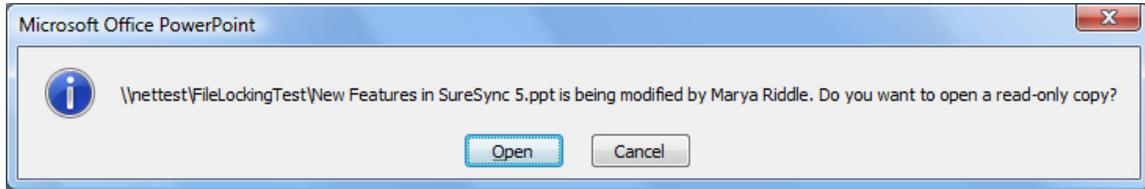
## **PowerPoint 2003**

When a user opens a file in PowerPoint 2003 that is locked, the program will automatically open a read-only copy. This is signified by the “[Read-Only]” in the title bar.



## **PowerPoint 2007**

When a user opens a presentation that is locked with PowerPoint 2007, they will be prompted with the dialog below, and can choose to open a read-only copy or cancel the opening.



If the “Open” button is selected, then PowerPoint will open the file with “[Read-Only]” in the title bar.

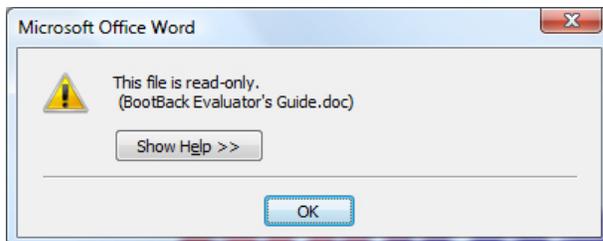


Depending on the operating system of the file server, the first “File in Use” screen might not appear. The user may get the Read-Only copy automatically and only see the second screenshot.

## **Other Notes**

While the SPIAgent File Locking Add-on is running, users may sometimes attempt to save a version of a document over the network version which is locked. This can occur if they save a copy of the file locally, make changes, and then attempt to save them back. This will generate an error because the file is locked and Windows will not allow their version to be saved over the locked version. This is expected behavior but can cause some confusion.

For example, the user might see something like:



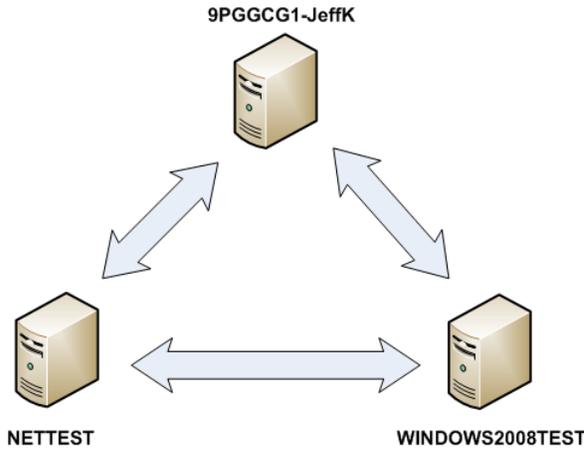
We strongly recommend informing users that this situation can happen. The user should attempt to save the changes again later, as those changes will be allowed when the file has been unlocked.

## **Our Scenario**

This guide will walk you through the configuration of SureSync using the SPIAgent and SPIAgent File Locking Add-Ons to accomplish a multi-directional synchronization between three servers. The three machines in questions are named *9PGGCG1-JeffK*, *NETTEST*, and *WINDOWS2008TEST*. The folder being synchronized will be C:\SalesData on each machine.

With this common scenario, users on any of the machines will be able to make changes to the monitored directories and those changes will be reflected on the other servers. This includes additions, deletions, and modifications. This scenario is further enhanced with file locking.

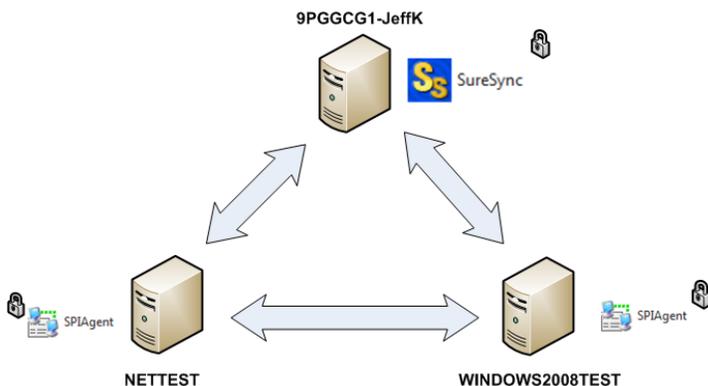
File locking is only available with Real-Time Monitors using multi-directional Rules. File Locking cannot be performed with a Schedule. SPIAgent and SPIAgent File Locking licenses are needed for each machine involved.



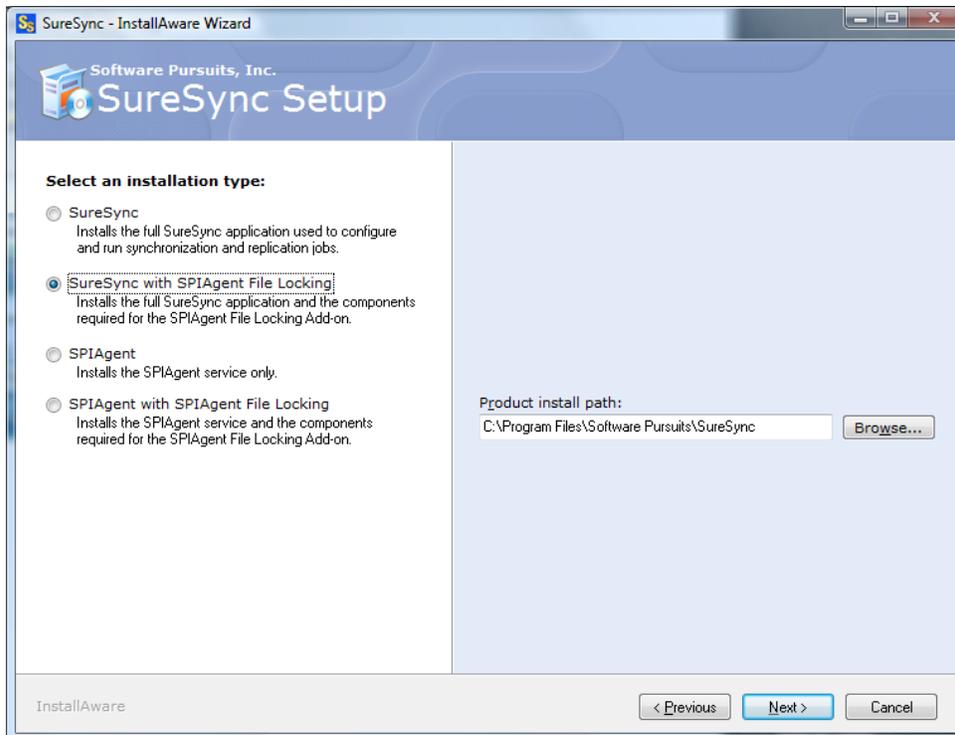
## Installation

To begin your SureSync trial, you must install the correct SureSync components on the right machines. SureSync is installed using a Windows Installer (MSI) driven installation application. SureSync and all Add-On products are installed using the same installer.

For this scenario, the full SureSync application will be installed on one machine (*9PGGCG1-JeffK*) and the SPIAgent will be installed on the other two machines (*NETTEST* and *WINDOWS2008TEST*) as illustrated below. The file locking components will be installed on all machines.



On the *9PGGCG1-JeffK* machine, we will run *SureSyncSetup.exe* and select SureSync with SPIAgent File Locking as the installation type in the installer. This will install the complete SureSync application plus the SPIAgent File Locking driver and designate *9PGGCG1-JeffK* as the machine where we configure and run our synchronization job.



On the *NETTEST* and *WINDOWS2008TEST* machines, the SPIAgent with SPIAgent File Locking installation should be performed. This is accomplished by launching *SureSyncSetup.exe* on those machines and selecting “SPIAgent with SPIAgent File Locking” as the installation type. This setup type installs both the required SPIAgent components and the SPIAgent File Locking Add-On driver.

## Launch SureSync for the First Time

Now that all of the required components have been installed on the machines which will be involved in the synchronization, we can continue with the configuration. To launch SureSync for the first time, go to the Start menu, select the SureSync folder and click on the SureSync icon. This will launch the SureSync desktop application where you will perform all of your synchronization job configuration. On the first launch of the application, SureSync will create an Access database to store your configuration information.

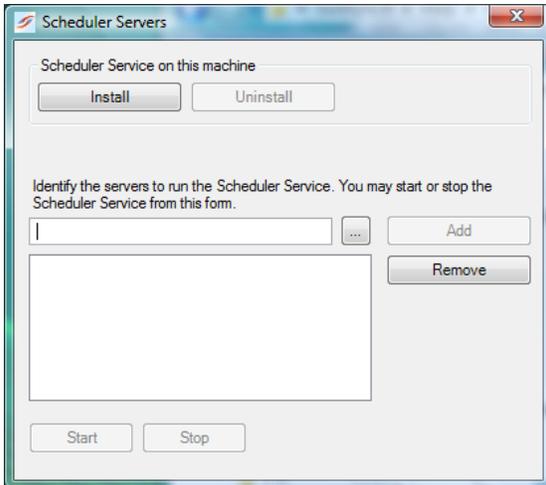
The default database format for SureSync is Microsoft Access. SureSync also supports Microsoft SQL and this database format is recommended for environments running many multi-way Rules or a large number of jobs to achieve optimal performance. Please refer to the [Upgrading from an Access to SQL Database](#) knowledge base topic for more information.

Once the database has been created and the SureSync desktop has loaded, you can proceed forward with your configuration.

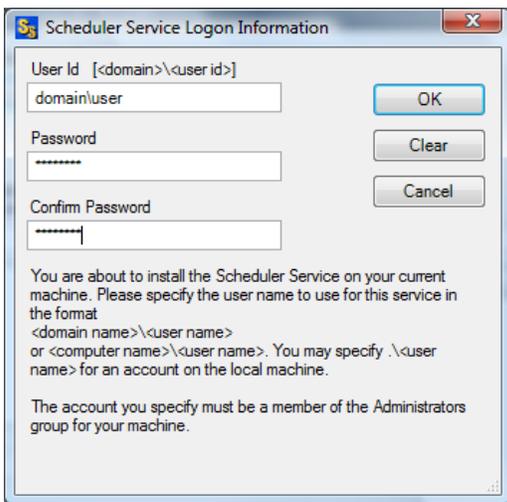
## Installing the SureSync Scheduler

The SureSync Scheduler is a Windows service that runs on the main SureSync machine. This service is responsible for launching Schedules at the correct times and for running Real-Time Monitors. You must have a Scheduler running in order for your Real-Time Monitor to start.

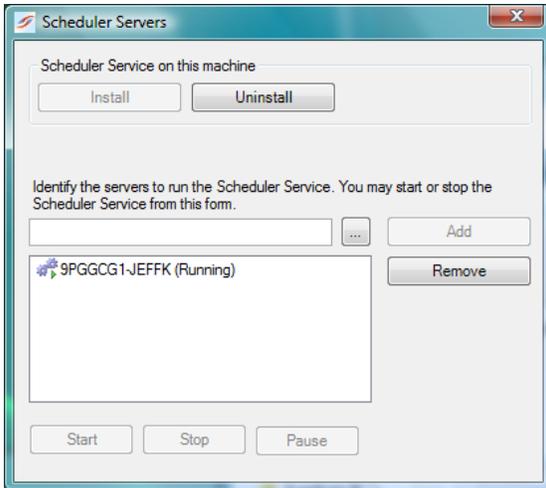
To install the SureSync Scheduler service, go to the Tools menu within SureSync and select “Schedulers...,” which will launch a window like the one below.



To install the Scheduler, click the “Install” button, which will launch a window like the one below.



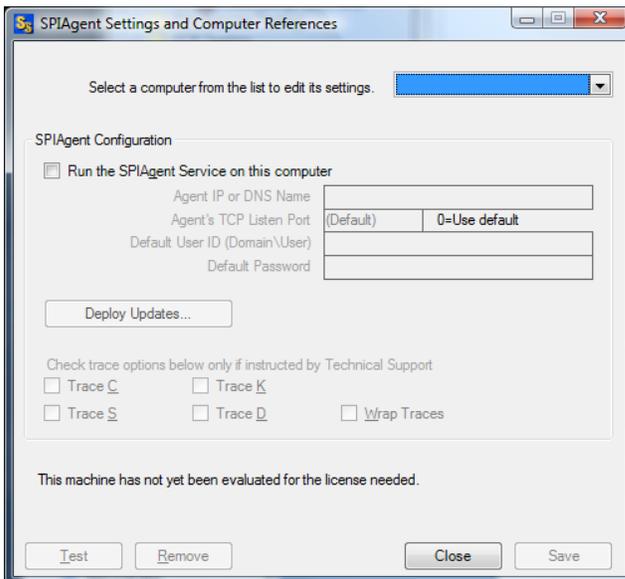
Enter the username formatted as *machinename\username* or *domainname\username*. This account must be an administrator on the machine. Click “OK” to install the service.



Once the service has been installed, click on the machine name and click “Start.” The Scheduler will now be listed as Machine Name (Running).

## Configuring the SPIAgent Machines

The next step in the configuration is to define the remote SPIAgent machines in SureSync. To do this, launch SureSync, click on the “Tools” menu, and then select “SPIAgent Setup.”



Select the SPIAgent from the drop down menu to begin configuring it. If the agent you want to configure does not appear in the list, you may enter a name for it by selecting "Add New Machine" from the drop down menu.

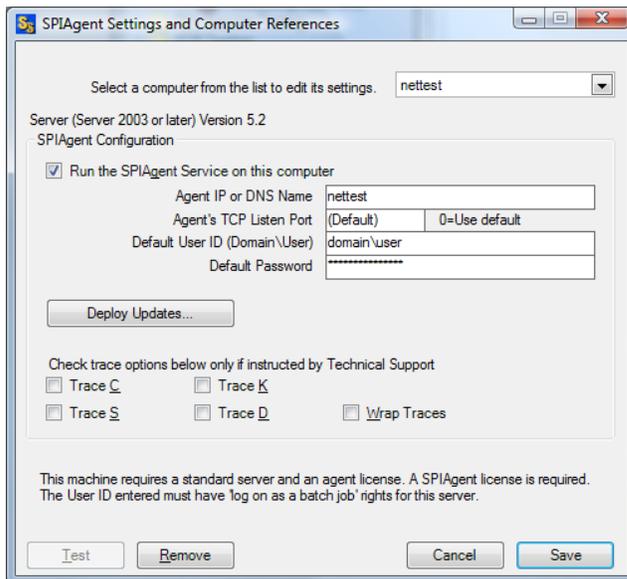
The machine name listed in the "Select a computer from this list to edit its settings" drop down menu must be the actual machine name for the machine you're trying to connect to. Using an IP address or a random name in the drop down menu will result in the test failing.

You will then want to:

1. Check the box that says "Run the SPIAgent Service on this computer."
2. Enter the IP address or DNS name for the machine running this SPIAgent into the "Agent IP or DNS Name" field.
3. Enter a username with adequate permissions to that machine in the "Default User ID" field. We recommend a domain administrator account. Be sure to configure the account as domain\user. If you wish to use a local account on that computer, it can be formatted as machinename\user.
4. Enter the password for the account in the "Default Password" field.
5. Make sure the user account specified here has "log on as batch job" rights on the machine in question.
6. Click save and then test to verify the configuration.

The "log on as batch job" right can be assigned by going to the Start Menu, selecting Administrative Tools, and then Local Security Policy. under User Rights Assignment you will find the "log on as batch job" right. On domain controllers, you must use the Domain Controller Security Policy applet because they do not have Local Security Policy available.

These steps should be done for each remote SPIAgent that will be used. In the example scenario, *NETTEST* and *WINDOWS2008TEST* would be defined. An example of a completed SPIAgent configuration is shown in the screenshot below.



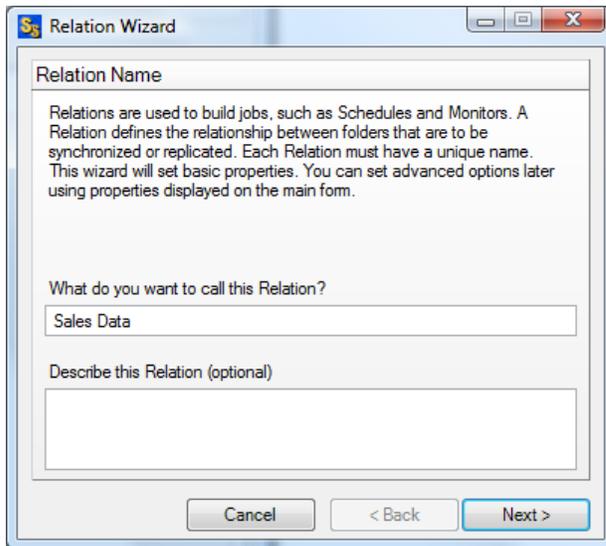
## Creating the Relation

Relations are the basic building blocks of the SureSync application. Each Relation contains the root paths (source and destination paths) that apply to that Relation and options for the Relation. Each Relation also contains one or more Rules which tell SureSync how to replicate & synchronize data. The Relation and the Rule are created together in one wizard.

The wizards are designed to quickly and easily configure the basic options needed to get a Relation up and running. SureSync is an extremely flexible product with many advanced options. Additional options can be specified on the properties panels for the Relation after it has been created.

To create your Relation, launch SureSync and then go to the "File" menu, select "New" and then select "Relation."

### **Name Your Relation**



The first panel in the wizard allows you to name your Relation. Enter the name of the Relation and an optional description and click "Next" to continue. The Relation name used for this example will be "Sales Data."

### **Specifying Root Paths**

The next panel is used to specify the source and destination root paths that you want to synchronize. Later in the wizard you will specify which path is source and which is destination. In this dialog box you are simply listing the source and destination paths, which will be part of this synchronization.

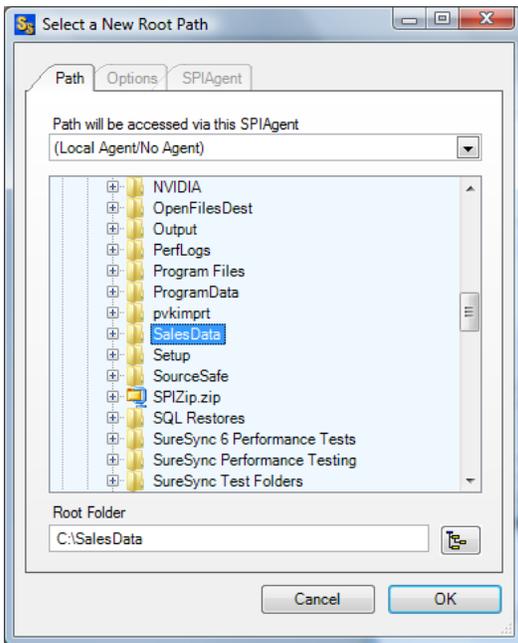
There must be at least two root paths specified (a source and a destination) to have all Rule types available. Later on in the wizard you will get to specify which path is the source and which is the destination. If you specify only one path then the only Rule methods available later in the wizard will be "Delete" and "Skip."

Root paths are added by clicking the "Add" button at the bottom of the panel to display the "Select a new root path" panel shown below.

For this example, our root paths are:

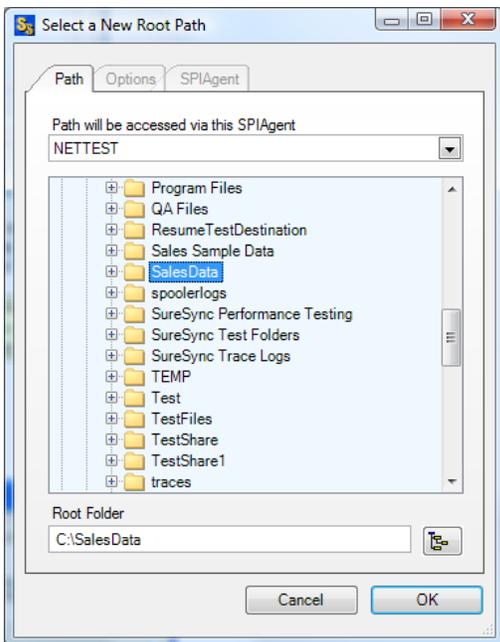
- C:\SalesData on 9PGGCG1-JeffK
- C:\SalesData on NETTEST
- C:\SalesData on WINDOWS2008TEST

First, we will select the local path on *9PGGCG1-JeffK* by browsing to that path through “My Computer,” highlighting the directory and clicking “OK.”

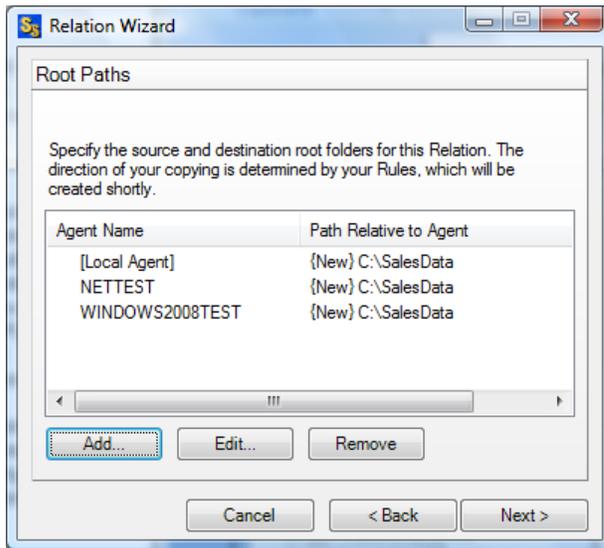


Once that path has been added, we must add the paths for the remote machines. Click the “Add” button again to add a new path. Then you will select the machine name from the “Path will be accessed via this SPIAgent” drop-down menu, browse to the path, and then click “OK.”

When selecting a remote SPIAgent from the drop-down, the browse panel will display the drives and folders from that remote machine as if you were sitting down in front of the computer.



Click "OK" to add the path. Continue clicking "New" and adding paths until all the paths involved in the synchronization are present.



Once all of the paths have been entered, press the "Next" button to continue.

### **Determining the Best Rule**

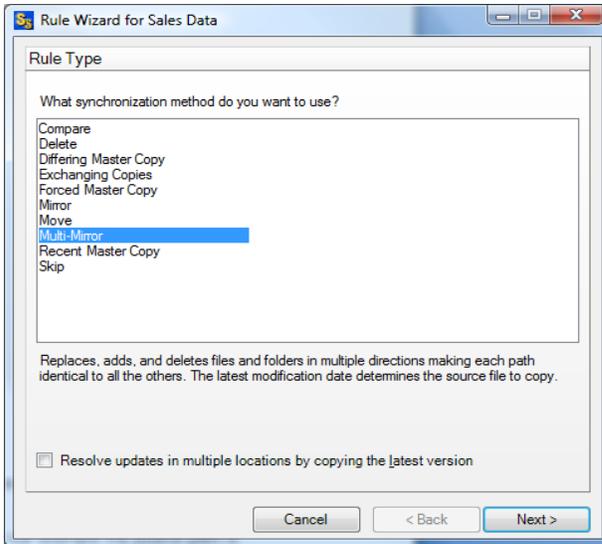
SureSync offers a number of different replication & synchronization methods, allowing a great deal of flexibility in how your data is handled. A chart detailing each of these Rules can be found in the help file under "Rule Methods Summary."

### **Selecting Your Rule**

On this next panel we will specify the Rule to use for this job.

If the panel indicates that only the "Delete" and "Skip" Rules are available, you have selected only one root path. You should use the "Back" button to return to the root path entry panel and add your other root path(s).

The type of Rule we will be using in this example is "Multi-Mirror." Click on the Rule you wish to use.

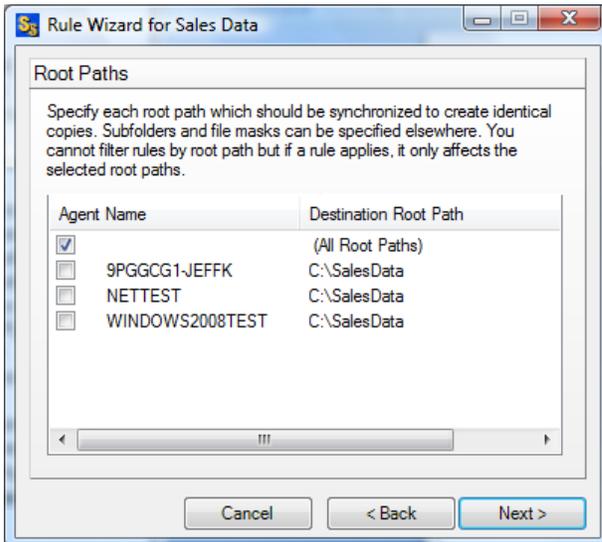


Click the "Next" button to continue.

**Selecting Source and Destination**

The next panel is where you indicate which root path is to be used as a source and which is to be used as a destination. This panel will look different for one-way and multi-way synchronization Rules. With a one-way Rule, there will be a source and destination section of the panel. With a multi-way Rule like the Multi-Mirror we are using in this example, SureSync will just list the paths to be included in the synchronization job. This is because all paths in a Multi-Mirror are both a source and a destination, depending on where the changes occur.

Your wizard panel should look like the one below:



**Filtering Subfolders**

The next panel in the wizard allows you to include or exclude specific subfolders. The default “\” means to include all subfolders. You can enter subfolders into the text field, or select them using the checkboxes in the browse dialog on the lower portion of the wizard panel. Folders are

excluded by placing a minus character (-) in front of the folder name. Multiple folder entries are separated by the vertical bar character (|).



### Examples

| To synchronize only two subfolders named "FolderA" and "FolderB," you would enter the following:

```
\FolderA\ | \FolderB\
```

| To synchronize all subdirectories except for subfolders "FolderA" and "FolderB," you would enter the following:

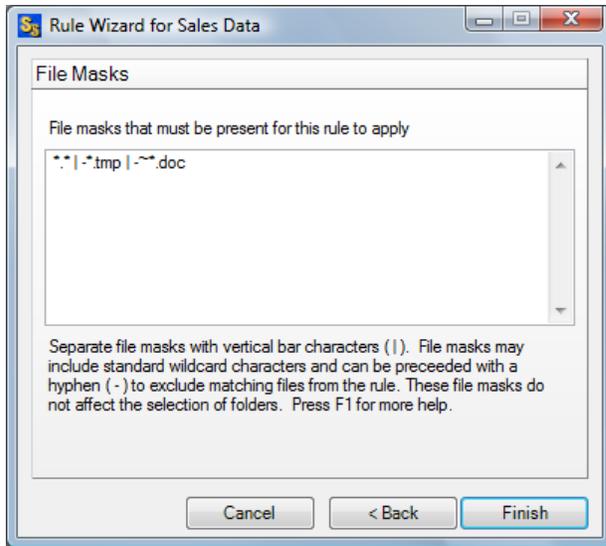
```
\ | -\FolderA\ | -\FolderB\
```

For our example scenario, the default "\" option will be used to process all subfolders.

To learn more about how to include and exclude subfolders, press the "F1" key on this panel.

### **Filtering Based on File Masks**

The next panel displayed will let you indicate the files to be included or excluded from the job. Each entry in this panel should be separated by a vertical bar (|) character. To exclude a file name or file type, place a minus sign (-) in front of the mask.



### Examples

To synchronize only \*.doc files and a file named "Test.txt," you would enter the following:

```
*.doc | Test.txt
```

To exclude \*.tmp files, \*.doc files, and a file named "Test.txt," you would enter the following:

```
-.tmp | -.doc | -Test.txt
```

The default setting for this panel is \*.\* | \*.tmp | ~\*.doc | ~\$.doc? | ~\$.xls?. This tells SureSync to synchronize all files except \*.tmp files and some commonly used Microsoft Office programs temporary files. This is the setting we will use for this example.

To learn more about how to include and exclude files based on file masks, press the "F1" key on this panel.

Clicking the "Finish" button will create your Relation. The Relation Wizard only displays a subset of essential options for a Relation. There are many other options that can be configured by modifying the properties of the Relation using the SureSync Desktop. Pressing the "F1" key on any tab in the application will display context sensitive help detailing the options on that tab.

### **Previewing Your Relation**

Once the Relation has been created SureSync will prompt you to preview the newly created Relation. The preview displays the actions that SureSync would perform without actually executing them. This is a great way to determine if your Relation will perform as expected. You should *always* preview a Relation after making changes.

When prompted to preview, click on the "Yes" button.

There are different displays available for the preview by selecting options under the "View" menu. Please consult the *SureSync Help File* for more information about the preview window.

You may browse through the folders in this window and see how your files are affected. A legend can be accessed from the "Help" menu by selecting "Legend." This will detail what the various preview icons mean.

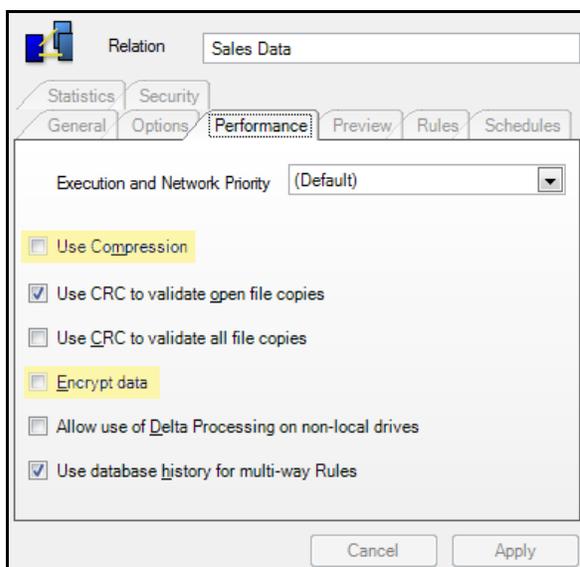
When you are done with the preview, close the preview window. This will perform no action. You can also click the “Run” button to run from the Preview.

## SPIAgent Compression & Encryption

---

The SPIAgent Add-On also provides the ability to compress and encrypt data during the transmission. This functionality is very useful when dealing with slow lines or public lines like the Internet. For example, if you’re synchronizing over the Internet, turning compression and encryption on is recommended. This minimizes bandwidth consumption and secures the data stream that is being transmitted.

If you want to enable compression and/or encryption, simply click on the Performance tab of the Relation and check the “Use Compression” and “Encrypt Data” checkboxes.



## Creating a Real-Time Monitor

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A Real-Time Monitor is used in place of a Schedule to constantly monitor changes in files. When a change is detected, the associated Relation/Rule is applied, and the synchronization is immediately performed.

The real-time feature requires the use of the optional SPIAgent component on each machine involved in the real-time synchronization. A SPIAgent license is also required for the local machine that will be running the job. (if that machine is involved in the synchronization)

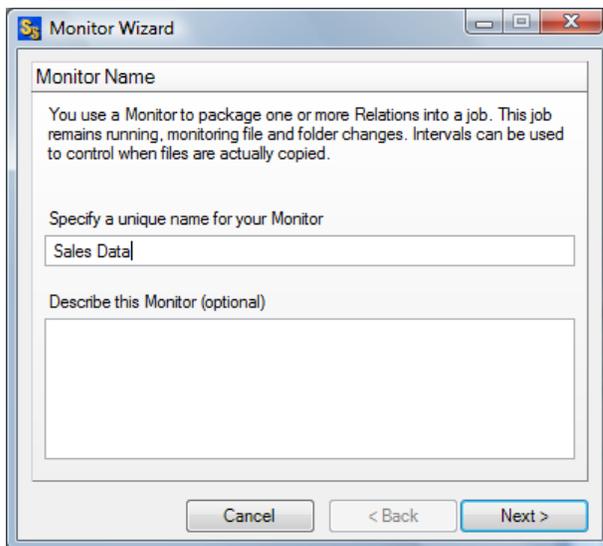
In this example, we will create a Real-Time Monitor to process changes to our Relation as they occur.

A Relation can only be running in one instance at a given time. If you are planning to run a Relation with a Real-Time Monitor then you should not attempt to run a Schedule of that same Relation at the same time. You will get errors about the Relation already being busy. If a Schedule exists to run a Relation you’re going to run with a Real-Time Monitor, it should be placed on hold or deleted.

To begin configuring your Real-Time Monitor, go to the File menu, select “New,” and then “Monitor.”

The wizards are designed to quickly and easily configure the basic options needed to get a Real-Time Monitor up and running. SureSync is an extremely flexible product with many advanced options. Additional options can be specified on the properties panels for the Real-Time Monitor after it has been created.

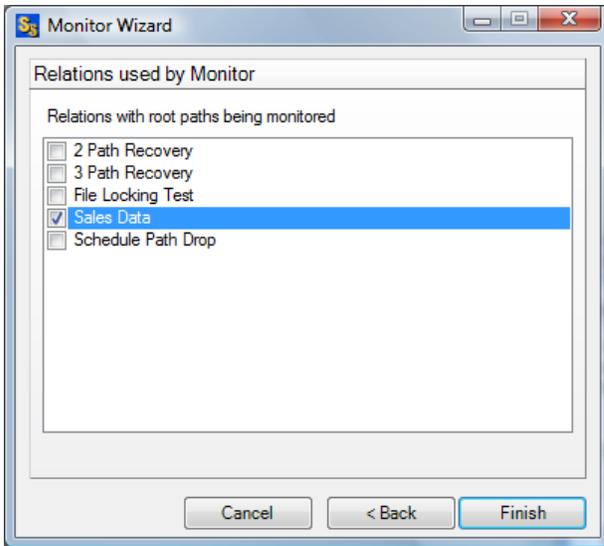
### **Name Your Monitor**



The first panel allows you to name your Real-Time Monitor. Enter the name of the Real-Time Monitor and an optional description. Then click “Next” to continue.

### **Selecting What Relation(s) to Run**

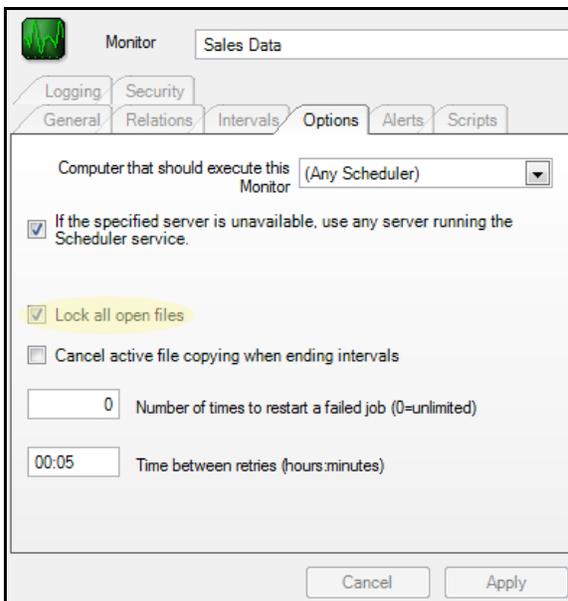
The next panel is where you specify which Relation you would like this Real-Time Monitor to run. Specify these Relations by checking the box next to their name. You can run multiple Relations under one Real-Time Monitor.



Click the “Finish” button to create the Real-Time Monitor.

### **Enabling SPIAgent File Locking**

When the wizard is complete you will be returned to the SureSync desktop and the Real-Time Monitor you created will be displayed. To enable SPIAgent File Locking, you must turn an option on before starting your Real-Time Monitor. Click on the Real-Time Monitor, go to the “Options” tab, and check the box for “Lock all open files.”



Click “Apply” to save the change. Now when the Real-Time Monitor is started, file locking will be used.

### **Modifying and Running Your Real-Time Monitor**

You can make changes to the options for your Real-Time Monitor in the main SureSync window by first clicking on the Real-Time Monitor you wish to modify. You can then look through the tabs

on the right side for options to change. Pressing “F1” while on any tab will bring up context sensitive help describing the options in detail.

Now that the Real-Time Monitor is created and fully configured, it may be started by right-clicking on the Real-Time Monitor name and clicking "Start Monitor," You may also uncheck the box that says "Stop Monitor and place it on hold" on the General tab of the Real-Time Monitor. Then click apply to start the Real-Time Monitor. Next to the Real-Time Monitor name will be the message "Waiting to start," which will change to "Active" automatically after a few moments.

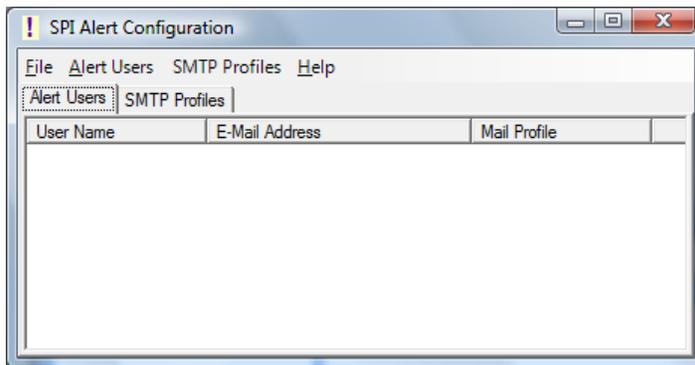
## Configuring E-mail Alerts

E-mail alerts can be a useful way of notifying the SureSync administrator of a problem which should be investigated.

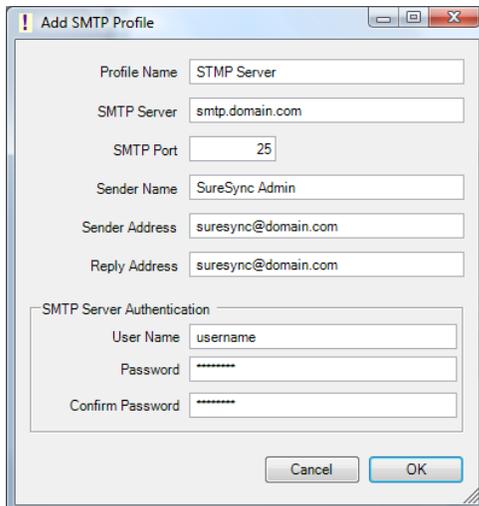
### Configuring a SMTP Profile

To start the configuration of alerts, you must launch the SPIAgent Configuration utility and create a SMTP profile. The SMTP profile provides SureSync with the necessary details about your SMTP e-mail server so the program can send messages to you.

To launch the SPIAgent Configuration utility, open SureSync, go to the “Tools” menu and select “Alert user list...”



To create a SMTP Profile, go to the SMTP Profiles menu and select “Add New SMTP Profile...”



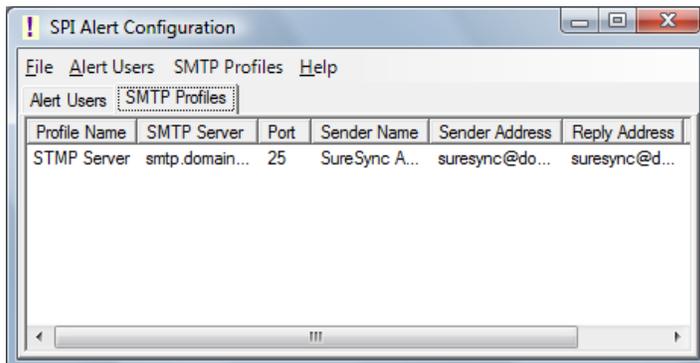
The “Add SMTP Profile” panel allows you to define the SMTP settings for your mail server. The following fields must be configured:

- **Profile Name:** The name of the profile that you are configuring. For example, you might use the name of the SMTP server.
- **SMTP Server:** The server address of the SMTP server. For example, smtp.mail.com.
- **SMTP Port:** The SMTP port for the SMTP server. The default SMTP port is 25.
- **Sender Name:** The name that will appear in the From: field of messages sent by SureSync.
- **Sender Address:** The e-mail address that will appear on messages sent by SureSync.
- **Reply Address:** The reply address that will appear on messages sent by SureSync.

You can also define SMTP Server Authentication settings if your SMTP server requires a valid logon to send messages (most do). The following fields can optionally be configured:

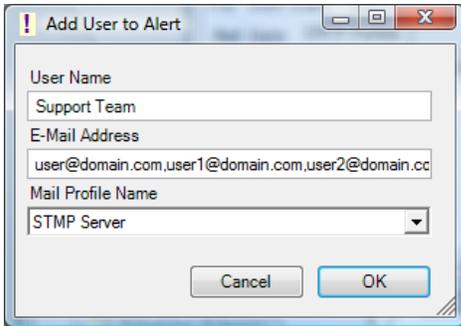
- **User Name:** The username that SureSync will log into this SMTP server with when sending an e-mail alert.
- **Password:** The password for the username defined in "User Name" should be entered here.
- **Confirm Password:** The password for the username defined in "User Name" should be confirmed here.

Click “OK” to create the SMTP Profile. Clicking on the SMTP Profile tab of the SPIAlert Configuration Utility will show the new profile.



### **Configuring an Alert User**

The second part of configuring E-mail Alerts is to define an Alert User. The Alert User defines the e-mail address(s) that will be sent messages when errors occur. To configure an Alert User, click on the “Alert Users” menu and select “Add User...”



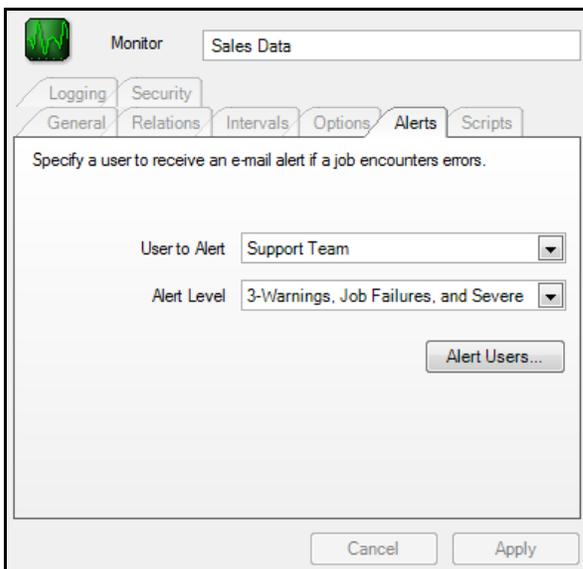
The “Add User to Alert” field has the following fields to be configured:

- **User Name:** The username that will be used in SureSync to represent this e-mail address.
- **E-mail Address:** The e-mail address that SureSync will send the alert messages to.
- **Mail Profile Name:** The SMTP profile that will be used to send the message.

Multiple e-mail addresses can be added by separating the addresses with commas (,) or semi-colons (;). This allows you to easily send messages to a group of SureSync administrators.

### **Configuring the Real-Time Monitor to Send Alerts**

The final step of the alerts configuration is to tell the Real-Time Monitor to use the Alert User and at what level of errors to send alerts. This is accomplished by clicking on the Real-Time Monitor in the SureSync desktop, clicking on the Alerts tab, selecting the Alert User from the drop-down menu and then clicking “Apply.”



Additional details about the E-mail Alert levels available can be found by pressing “F1” while on the Alerts tab.

## Monitoring the Synchronization

Monitoring your synchronization job is important, and SureSync makes this process easy through the use of two different status panels.

### Detailed Status

The detailed status panel will show you file level activity for a current job as well as common counters such as files added and files deleted. If you want to take an in-depth look at a particular job, you will want to use Detailed Status.

To launch Detailed Status, right click on the job and select “Job Status.” You can also select the job, go to the “View” menu and select “View Job Status.”

File Name	Action	Bytes Copied	% Complete	Duration	Lockouts	Locking User	Source Folder
SureSync2008.exe	Copy	17.9MB of 543.2MB	3%	00:00:03	0		[local agent]C:\SureSync 6 Pe
Session-080829 08-49.lo	Copy	413KB of 413KB	100%	00:00:00	0		[local agent]C:\SureSync 6 Pe
SyncFiles-080829 08-49.l	Copy	1.7MB of 1.7MB	100%	00:00:00	0		[local agent]C:\SureSync 6 Pe
Srv-DMSession-080829 (	Copy	892KB of 892KB	100%	00:00:00	0		[local agent]C:\SureSync 6 Pe

### Enterprise Status

The Enterprise Status panel can be used to view the current status of jobs from SureSync installations anywhere on your network. To see detailed status, you can launch the Detailed Status panel for a particular job right from the Enterprise Status application. The Enterprise Status panel provides an easy way to stay current on the status of your jobs, no matter where they are running.

Enterprise Status can be launched by going to the Start menu, selecting SureSync and then “SureSync Enterprise Status”. You can also click on the “View” menu and select “Enterprise Status,” or click on the “Enterprise Status” button in the menu bar.

SureSync Enterprise Status

Actions

Click on the bar below to display status in groups. Click on column names to sort and hold Ctrl to sort on additional columns.

gr Type by area

Scheduler

MonitorHeld (4 items)

MonitorRunning (5 items)

Scheduler	Job Name	Errors	Exceptions	Added	Replaced	Bytes Copied	Deleted	Altered	Scanned
NAS3	Real-Time Archiving	1	0	86	54	28.6MB	163	7	6,041
NAS3	Monitor Mirrors	0	0	0	1	231KB	2	0	10,025
SPIWEBSVR	Mirror Archive to ArchiveBackup1 (l)	0	0	111	0	2.2GB	1,068	0	14,006
SPIWEBSVR	Mirror Archive to ArchiveBackup2 (h)	0	0	70	0	1.5GB	644	0	14,111
SPIWEBSVR	Real-Time Archiving	0	0	0	0	0KB	0	0	0

ScheduleHeld (6 items)