

with the ArchiveSync Add-On Evaluator's Guide







Silver Application Development

Table of Contents

Introduction
System Requirements
Contact Information
Required Add-Ons for ArchiveSync in Real-Time
Communications Agent Add-On
ArchiveSync Add-On4
Other SureSync Add-Ons4
File Locking Add-On4
Commonly Asked Questions4
Example Archive Rules
Normal Documents5
3 Year Documents6
7 Year Documents6
Temporary Files7
Our Scenario
Installation
Launch SureSync for the First Time9
Creating a SureSync Database9
Configuring the Local Communications Agent11
Importing a License12
Installing the SureSync Scheduler
Configuring the Communications Agent Machines14
Creating the Job16
Name Your Job17
Specifying Root Paths17
Selecting Your Rule & Defining Folder Exclusions
Selecting Source Path
Filtering Based on File Masks
Define the Archive Rule
Previewing Your Job
Communications Agent Compression & Encryption25
Creating a Real-Time Monitor
Name Your Monitor
Selecting What Job(s) to Run27
Modifying and Running Your Real-Time Monitor
Configuring E-mail Alerts
Configuring a SMTP Profile
Configuring an Alert User
Configuring the Real-Time Monitor to Send Alerts
Monitoring the Archive Job
Detailed Status
Enterprise Status

Introduction

SureSync is a powerful file replication & synchronization utility that 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. When the ArchiveSync Add-On is licensed, you can also generate versioned backups to devices such as a removable USB hard drive, a NAS, or a SAN. This allows you to protect your critical files automatically, restore to various points in time, and restore files much quicker than possible with traditional methods of backup.

This evaluator's guide is designed to walk you through the initial setup of SureSync with the ArchiveSync Add-On. ArchiveSync jobs can be run in both scheduled and real-time modes of operation. This guide will focus on real-time data protection.

System Requirements

SureSync's basic operating system and hardware requirements are:

- Supported Operating Systems: Windows Server 2012 R2; Windows Server 2012; Windows Server 2008 R2; Windows Server 2008; Windows Server 2003 R2; Windows Server 2003 with SP1 or later; Windows 8.1; Windows 8; Windows 7; Windows Vista; and Windows XP with SP2 or later
- **Processor:** Minimum: 1Ghz (x86 processor) or 1.4Ghz (x64 processor). Recommended: 2Ghz or faster processor (x86 or x64 processor)
- **RAM (total for system):** 1GB (Minimum); 2GB (Recommended)
- Hard Disk: 30MB for application files; 20MB+ for database
- **Display:** 1024x768 high color, 32-bit (Minimum)

SureSync can synchronize data to and from 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 can be run on Windows operating systems hosted in virtualization software such as VMWare or Hyper-V without issue. Each virtual machine involved in the synchronization / replication requires appropriate licensing.

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

- Microsoft Access (default)
- MSDE 2000 / SQL Express 2005 / SQL Express 2008 / SQL Express 2012 / SQL Express 2014
- SQL Server 2000 / SQL Server 2005 / SQL Server 2008 / SQL Server 2012 / SQL Server 2014

To achieve optimal performance, a SQL database is strongly recommended for setups using multi-directional Rule types, environments with more than 50 Jobs 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 installer will inspect your system for these components and offer to upgrade or install them as needed.

- Microsoft .NET Framework 4.5.2 (Windows 2008/Vista and newer)
- Microsoft .NET Framework 4.0 (Windows 2003/XP)
- Microsoft MDAC 2.8 Refresh with Service Pack 1
- Microsoft Visual C++ Runtime 12.0
- Microsoft Windows Installer 3.1
- Microsoft XML Parser 6.0
- Microsoft Jet 4.0 with Service Pack 8

Contact Information

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 ArchiveSync in Real-Time

ArchiveSync can be run in either scheduled or real-time modes of operation. This guide will focus on real-time operation. The Communications Agent Add-on is required for real-time operation but also adds important performance benefits to scheduled ArchiveSync jobs.

Communications Agent Add-On

Ensure high availability and improved replication performance with SureSync's Communications Agent Add-On. The Communications Agent provides technology to perform real-time synchronization/replication and more. Below is a list of features that are included when you license the Communications Agent Add-On.

Real-Time Monitors

Real-Time processing increases data availability by continuously monitoring data for updates. By processing files immediately after they change, SureSync can avoid folder scans that are necessary for scheduled jobs.

- Remote Differential Compression (RDC) RDC copies only the changes made to a file, reducing synchronization time and decreasing the consumption of network resources.
 - RDC 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.

• 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 encrypting each file transmission. Multiple FIPS certified encryption algorithms are available. This is an especially useful and necessary option when transmitting sensitive data across the Internet.

• Change Journal Support for Schedules

When a Schedule is configured to run a Job using the Communications Agent Add-On, SureSync uses the NTFS Change Journal to minimize the amount of scanning performed. Eliminating much of the scanning creates a significant performance improvement for Schedules.

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.

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.

Other SureSync Add-Ons

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

File Locking Add-On

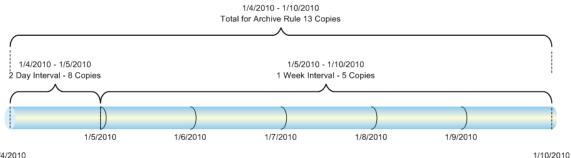
The File Locking Add-On requires the Communications Agent to be licensed and gives you an additional benefit in collaborative file sharing environments. The File Locking Add-On eliminates the possibility that a file could be changed on multiple sides of a synchronization resulting in a more efficient 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.

Please consult the SureSync with File Locking Add-On Evaluator's Guide for further details.

Commonly Asked Questions

What is an Interval?

Understanding the concept of an Interval is essential to configuring ArchiveSync properly. An Interval is simply a period of time. You will configure a set of Intervals to tell ArchiveSync how many versions of a file you wish to keep in those different periods of time.



1/4/2010

The most important thing to understand about Intervals is that they all start at the same point in time. Consider the example timeline above that shows a week (7 days) of time. In this example, two Intervals have been defined. The first Interval is defined as 2 days with 8 copies stored in the archive. The second Interval is defined as 1 week with 5 copies. Note that the 1 week Interval covers the period after the 2 day interval. These two Intervals result in 13 copies in the week.

From what starting time is an Interval calculated?

An ArchiveSync Interval is calculated differently depending on the way that the Job is being run. If you are running a Job on a scheduled basis, the Interval is calculated from the time that the Schedule starts to run. If you are running the Job on a real-time basis, then the Interval is calculated from the time a file changes.

How does ArchiveSync determine which copies to keep in an Archive?

ArchiveSync will spread the number of versions out as evenly as possible throughout an Interval. For example, if you have an Interval defined to keep 7 versions in a week then ArchiveSync will try and space out the versions in the Archive so that they are as close to a copy a day as possible. Older versions fall into the next Interval. If you had a second Interval asking for 3 versions in a month then ArchiveSync would try and keep a version a week for the remaining three weeks of the month.

Example Archive Rules

Understanding how to construct Archive Rules is an essential part of using ArchiveSync to protect your files. The Archive Rules are extremely flexible and allow you to protect data in a variety of ways.

This section of the guide will present some example Archive Rules to assist you in determining the type of Rule construction you will want to use to protect your data. You have a lot of flexibility when defining Archive Rules that allows ArchiveSync to protect a particular data set in just about any way you desire.

Normal Documents

A balanced Archive Rule that will maintain versions for 3 years before thinning versions out of the Archive. This Rule keeps more copies when the file is newer and then just a few over the time past a week.

💐 Archive Rules – 🗆 🗙
Archive Rule
Select Archive Rule Normal Documents *
Rule Normal Documents
Recent Versions to Keep 3 🗘
Days to retain sole version 90 🗘
Cancel New Rule Delete Rule Save Rule
Archive Intervals
For 1 day, keep 3 versions For 1 week, keep 5 versions
For 3 years, keep 5 versions
Interval Ending Age 3 🗘 Years 🔻
Number of Versions to Keep 5 🗘
Cancel New Interval Delete Interval Save Interval

3 Year Documents

This Archive Rule also stores files for 3 years, but you will notice how the copies are more spread out by having the 6 copies in 3 months Interval added.

Archive Rules -
Archive Rule
Select Archive Rule 3 Year Documents *
Rule Name 3 Year Documents
Recent Versions to Keep 2 🗘
Days to retain sole version 90 🗘
Cancel New Rule Delete Rule Save Rule
Archive Intervals
For 1 day, keep 3 versions For 3 months, keep 6 versions For 3 years, keep 3 versions
Interval Ending Age 3 🗘 Years 🔹
Number of Versions to Keep 3 🗘
Cancel New Interval Delete Interval Save Interval

7 Year Documents

The 7 Year Documents Archive Rule is an example for longer term storage of critical files. This is a variation of the 3 Year Documents Rule that expands the time stored in the Archive to 7 years. This Rule maintains fewer copies early in the file lifespan.

🛐 Archive Rules – 🗆 🗙
Archive Rule
Select Archive <u>Rule</u> 7 Year Documents
Rule Name 7 Year Documents
Days to retain sole version 90 ‡
Cancel New Rule Delete Rule Save Rule
Archive Intervals For 2 weeks, keep 5 versions For 3 months, keep 5 versions
For 7 years, keep 4 versions
Interval Ending Age 7 🗘 Years 🔹
Number of Versions to Keep 4 🗘
Cancel New Interval Delete Interval Save Interval

Temporary Files

This Archive Rule is useful in protecting files that are not needed long-term. For example, employees may work on files in one location and transfer final documents to another location for long-term storage. In these cases, you want to protect the temporary work files but not have them maintained for long periods in the Archive. This Rule works perfectly for those types of scenarios.

Archive Rules - 🗆 🗙
Archive Rule
Select Archive Rule Temporary Files *
Rule <u>N</u> ame Temporary Files
Recent Versions to Keep 1 🗘
Days to retain sole version 1
Cancel New Rule Delete Rule Save Rule
Archive Intervals
For 1 day, keep 3 versions
Interval Ending Age 1 🗘 Days 🔹
Number of Versions to Keep 3 🗘
Cancel New Interval Delete Interval Save Interval

Our Scenario

This guide will walk you through the configuration of SureSync using the ArchiveSync Add-On to protect your files in real-time as changes occur. To use a Real-Time Monitor to archive files, all machines involved must be running supported Windows operating systems. ArchiveSync can

generate versioned backups to multiple destinations from a single job. In this scenario, we will be protecting a folder on a machine named *DEV13* and creating an archive that is maintained in realtime on a machine named *SPITEST-WIN2K3*. The folder for this example scenario is C:\SalesData on the DEV13 machine. We will be using the 3 Year Documents Archive Rule defined earlier in this guide.

> While this guide will show you how to run an archive job in a Real-Time Monitor, you can use the exact same steps to configure the archive job in a Schedule. The only difference is you would create a Schedule instead of a Real-Time Monitor. The rest of the configuration is identical.

Schedules can also be used to archive data via UNC path from machines that do not support the installation of the Communications Agent Add-on. This is useful for archiving from old Windows machines and non-Windows machines such as Linux based NAS devices.

DEV13

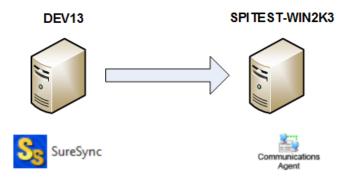




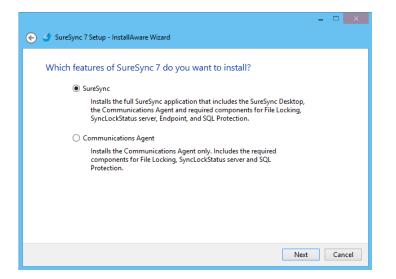
Installation

To begin your SureSync trial, you must install the correct SureSync components on the right machines. SureSync is installed using a Windows Installer (MSI) installer. 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 (*DEV13*) and the Communications Agent will be installed on the other machine (*SPITEST-WIN2K3*) as illustrated below.



On the *DEV13* machine, we will run SureSyncSetup.exe and select SureSync as the installation type in the installer. This will install the complete SureSync application and make *DEV13* the machine where we configure and run our archive job.



On the *SPITEST-WIN2K3* machine, the Communications Agent installation should be performed. This is accomplished by launching SureSyncSetup.exe on that machine and selecting "Communications Agent" as the installation type.

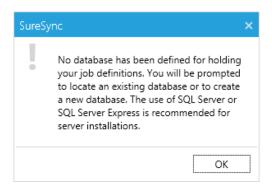
Launch SureSync for the First Time

Now that the required components have been installed, 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 Desktop icon. This will launch the SureSync Desktop where you will perform your entire synchronization job configuration.

On the first launch of the application, SureSync will present you with a series of questions to aide in completing the initial configuration.

Creating a SureSync Database

The prompt displayed below informs you that a SureSync database needs to be created. The SureSync database is used to store all of your synchronization/replication configuration and related information. This database can be either an Access or SQL database.



Click "OK" to continue on with the creation of the database.

The next dialog box allows you to select an existing SureSync database to open with the new installation or allows the creation of a new database. For our example, this is a new installation and "Yes" should be selected to create a new database.

SureSync 7.2.1 - SyncDesktop7	×
Do you want to create a new database? Reply 'Yes' to be prompted to create a new database or 'No' to open an existing database.	
<u>Y</u> es <u>N</u> o Cancel	

On the next panel, the type of database is selected. For our example, we will select "Create a new Access/Jet database".

Signal Create a New SureSync Database - 🗆 🗙
○ Create a new Access/Jet database
○ Create a new SQL Server/MSDE database
Jet Database Path and File Name (*.mdb)
C:\Users\Public\Software Pursuits\SureSync7\SureSync.mdb Browse
Name of SQL Server and any Instance Name Enter: ServerName\InstanceName Name of any Failover Partner (mirrored) SQL Server Enter: ServerName\InstanceName
Name of SQL Database Enter: Database Name
SQL Server account name or blank for Windows authentication
Enter: Account Name
Password for SQL Server account or blank for Windows authentication
Re-enter your SQL Server password
Cancel Continue

The form will change to show the path to the Access/Jet Database. We will select the default location of C:\Users\Public\Software Pursuits\SureSync7\SureSync.mdb.

Create a New SureSync Data	base	-	. 🗆	×
Create a new Access/Jet database]
○ Create a new SQL Server/MSDE database				
Jet Database Path and File Name (*.mdb)				
C:\Users\Public\Software Pursuits\SureSync7\SureSync.n	ndb		Brow	/se
	C	ancel	Cont	tinue

Configuring the Local Communications Agent

The next step in the initial configuration involves defining a credential for the local Communications Agent to run under.

SureSy	/nc	×
	No Communications Agents have been configured. We will now launch the configuration program so you can configure your Communication Agents.	
	ОК	

Click "OK" and the Communications Agent Configuration panel will be launched.

The local Communications Agent must be given a credential for SureSync to function properly. We recommend this account be either a local administrator on the machine or a domain administrator to ensure rights to all the files and folders being synchronized. The local Communications Agent must be configured even if you're not licensed for the Communications Agent Add-on. The Add-on functionality is enabled by a license but the Communications Agent on the SureSync machine is responsible for all the basic I/O as well.

The only exception to the need to configure the local agent is if no paths of any kind, including UNC paths are referenced from the local machine. This scenario is extremely rare.

Software Pursuits Communications Agent Configuration – 🗆 🗙				
Instructions Computers Connections Publish				
All machines referenced by jobs in your database will be listed here. Machines listed that are not using a Communications Agent are machines accessed using a UNC path.				
Select a computer from the list to edit its settings.				
[Please select a machine from the list] • Add New Machine Delete Machine				
Identified as a server.				
Credentials and Options				
Run a Communications Agent on this machine				
Login Name Enter: domain\username of account to use				
Password ••••••				
Try to automatically discover other SureSync Communication Agent Services				
A SureSync Scheduler Service runs on this machine*				
Test Default Connection				
Diagnostics				
Use these options when directed by Software Pursuits support staff to help diagnose problems. These options only affect the selected machine and must be published to that machine to be recognized.				
The trace options specified here will not trigger tracing of job activity, which must be specified by job. These options only affect service activity that is not directly associated with a specific job. Status traces are never associated with a job.				
Trace I/O Service				
Trace Status Service				
Trace Journal Service				
Trace File Locking Driver				
Trace Output Folder Enter the local path of a folder to receive traces				
Cancel Save				

When the Communications Agent Configuration panel loads, click on the "Computers" tab. From the "[Please select a machine from this list]" dialog, select your local machine. In this case, the machine is "DEV13".

Check the "Run a Communications Agent on this machine" option and enter your credential in the "Login Name" and "Password" fields. The "Login Name" field should be in the format of domain\user or machinename\user. Click the "Save" button to save the credential.

When a Communications Agent configuration is saved, a default connection for TCP port 9033 is created automatically. In most environments, only the default connection is used.

St, S	Software Pursuits Communications Age	ent	Configuration	- 🗆 🗙
Instructions Computers	Instructions Computers Connections Publish			
	by jobs in your database will be listed here. Mac are machines accessed using a UNC path.	chi	nes listed that are not	using a
Select a computer from t	the list to edit its settings.			
DEV13 * Add New Machine Delete Machine				
Operating system type not yet determined. Identified as a server.				
Credentials and Option	15			
Specify options related	d to the Communications Agent Service running	90	n DEV13.	
🖌 Run a Communica	tions Agent on this machine			
Login Name domai	n\user			
Password •••••	•••			
A SureSync Scheduler Service runs on this machine* Test Default Connection				
	en directed by Software Pursuits support staff to			s. These options
The trace options spec	d machine and must be published to that machi cified here will not trigger tracing of job activity, rvice activity that is not directly associated with a	w	hich must be specified	
Trace I/O Service				
Trace Status Servio	ce			
Trace Journal Serv	ice			
Trace File Locking	Driver			
Trace Output Folder	Enter the local path of a folder to receive traces			
	Cancel Save			

If you want to test the configuration, click the "Test TCP Connection" button. Click the red X on the upper right hand corner of the Software Pursuits Communications Agent Configuration panel when done to close the panel and move on with the configuration process.

Importing a License

The SureSync installer does not contain a license file. To enable functionality, you must import a trial license or your purchased license obtained from Software Pursuits.

If you are new to SureSync, you should request a trial license from <u>http://www.softwarepursuits.com/suresync/download_trial.asp</u>. A license file will be generated and sent to you via e-mail. You can also call our sales team at 1-800-367-4823.



Once a license file has been provided to you, click the "Licenses" button (^{Licenses}) in the ribbon bar of the SureSync Desktop and click the "Import License…" button to import the updated file.

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 Schedule to execute at the configured time.

To install the SureSync Scheduler service, click on the Home button in the upper left hand corner of the SureSync Desktop and click on "Scheduler Services."

Sey	Scheduler Services – 🗖 🗙			
Scheduler	r Service on this machine Install Uninstall			
Identify the servers to run the Scheduler Service. These machines must already be configured to run the Communications Service. You may start or stop the Scheduler Service from this form.				
	Add			
	Remove			
	Start Stop Pause			

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

嵡 Scheduler Service Logon Information 🕒		×
The Scheduler credentials are used to access your da lock files, and log or trace files. Files processed by job credentials specified in the Communication Agent co for each machine.	os use th	e
Please specify the user name to use for this service in "[domain name]\[user name] " or [computer name]\[You may specify ".\[user name]" for an account on the machine.	user nam	
For SQL Server databases, the user must be a DB Own SureSync database.	ner of th	e
User Id [<domain>\<user id="">] domain\user</user></domain>	Cance	el
Password	Clear	•
•••••••• <u>C</u> onfirm Password	Save	
•••••		

The user account the Scheduler service runs under must be a member of the local administrators group on the SureSync machine. If using SQL, the account must also be a DBOwner on the SureSync database. 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.

You will receive a confirmation dialog box that the Scheduler service was installed successfully as shown below.

SureSync	×
Scheduler Service was successfully installed on DEV13.	i
OK	
Cabadular Services -	
Scheduler Services	
CScheduler Service on this machine	
Install Uninstall	
Identify the servers to run the Scheduler Service. These machines must already be configured to run the Communications Service. You may start or stop the Scheduler Service from this form.	
Add	
Remove	
Start Stop Pause	

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 Communications Agent Machines

The next step in the configuration is to define the remote Communications Agent machines in SureSync. To do this, launch SureSync, click on the "Home" button, click "Communications Agent" and click the "Configure Communications Agents" button.

Once the Communications Agent Configuration panel loads, click on the "Computers" tab.

S ₅₇	Software Pursuits Communications Age	nt Configuration	- 🗆 🗙					
Instructions Computer	s Connections Publish							
	All machines referenced by jobs in your database will be listed here. Machines listed that are not using a Communications Agent are machines accessed using a UNC path.							
Select a computer from	the list to edit its settings.							
[Please select a mach	ine from the list] *	Add New Machine	Delete Machine					
Identified as a server.								
Credentials and Optio	ns							
Run a Communic	ations Agent on this machine							
Login Name Enter	domain\username of account to use							
Password ••••								
Try	to automatically discover other SureSync Comm	unication Agent Services	,					
A SureSync Schee	duler Service runs on this machine*							
Test Default Conne	ction							
Diagnostics								
	nen directed by Software Pursuits support staff to	help diagnose problem	s. These ontions					
	ed machine and must be published to that mach		si mese options					
	ecified here will not trigger tracing of job activity, rvice activity that is not directly associated with a							
Trace I/O Service								
Trace Status Serv	ice							
Trace Journal Ser	vice							
Trace File Locking	g Driver							
Trace Output Folder Enter the local path of a folder to receive traces								
Cancel Save								

Select the Communications Agent from the drop-down menu to begin configuring it. If the machine you want to configure does not appear in the list, you may enter a name for it by clicking the "Add New Machine" button.

The machine name listed in the "Select a computer from this list to edit its settings" drop-drop 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-drop menu will result in the test failing.

You will then want to:

- 1. Check the box that says "Run a Communications Agent on this machine."
- 2. Enter a username with adequate permissions to that machine in the "Login Name" 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.
- 3. Enter the password for the account in the "Password" field.
- 4. Click the "Save" button. When a Communications Agent configuration is saved, a default connection for TCP port 9033 is created automatically. In most environments, only the default connection is used.
- 5. If you want to test the configuration, click the "Test TCP Connection" button.

These steps should be done for each remote Communications Agent that will be used. In the example scenario, *SPITEST-WIN2K3* and *SPITEST-WIN2K8* would be defined. An example of a completed Communications Agent configuration is shown in the screenshot below.

Software Pursuits Communications Age	nt Configuration	- 🗆 🗙					
Instructions Computers Connections Publish							
All machines referenced by jobs in your database will be listed here. Machines listed that are not using a Communications Agent are machines accessed using a UNC path.							
Select a computer from the list to edit its settings.							
spitest-win2k3 •	Add New Machine	Delete Machine					
Identified as a server.							
Credentials and Options							
Specify options related to the Communications Agent Service running Run a Communications Agent on this machine Login Name domain/user Password	on spitest-win2k3.						
Password ••••••• Try to automatically discover other SureSync Comm	inisation Agent Services						
A SureSync Scheduler Service runs on this machine*	inication Agent Services						
Test TCP Connection: 'spitest-win2k3', Port 9033							
Diagnostics Use these options when directed by Software Pursuits support staff to		s. These options					
only affect the selected machine and must be published to that mach The trace options specified here will not trigger tracing of job activity, options only affect service activity that is not directly associated with a associated with a job.	which must be specified						
Trace I/O Service							
Trace Status Service							
Trace Journal Service							
Trace File Locking Driver							
Trace Output Folder Enter the local path of a folder to receive traces							
Cancel Save							

Creating the Job

Jobs are the basic building blocks of SureSync. Each Job contains the root paths (source and destination paths) that apply to that Job and options for the Job. Each Job also contains one or more Rules that tell SureSync how to replicate & synchronize data. The Job 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 Job up and running. SureSync is an extremely flexible product with many advanced options. Additional options can be specified on the properties panels for the Job after it has been created.



Click on the Job button (¹⁰⁰) in the ribbon bar to launch the Job Wizard. The Job Wizard will be used to configure your archive.

Name Your Job

S5 ₇	Create New Job -	×	
_ Job ∣	Name		
v	Vhat would you like to call this Job?		
	Archive to SPITest-Win2K3		
D	2escription		
	Cancel < Back	Next >	
	Cancel & book	These P	

The first panel in the wizard allows you to name your Job. Enter the name of the Job and an optional description and click "Next" to continue. The Job name used for this example will be "Archive to SPITEST-WIN2K3".

Specifying Root Paths

The next panel is used to specify the source path and the archive path(s) for the archive job. Later in the wizard, you will specify which path is source and which is destination. In this dialog box you are simply listing the paths, both source and destination, that will be part of this archive job.

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 source and which is destination. If you specify only one path, then the only Rule methods available later in the wizard will be "delete" and "skip".

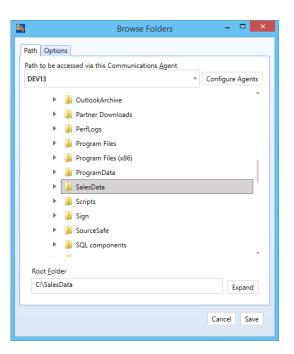
Set Root Paths			
Agent Name 7 Root Path	7		
Add Edit Remove			
		Cancel	< Back Next >

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 DEV13
- C:\SalesDataArchive on SPITEST-WIN2K3 (the location of the archive)

First, we will select the local path on DEV13 by browsing to that path through "My Computer", highlighting the directory and clicking "OK.

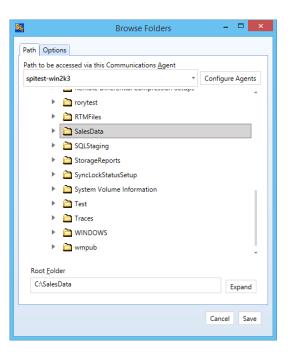


The Root Paths panel will now look like the screenshot below. Click "Add" to add the path for the remote machine.

Ss ₇			C	reate New Job	-		x
_ Se	et Root Paths						_
	Agent Name 🏾	Root Path 🔻					
	DEV13	C:\SalesData	Test Connection				
	Add Edit R	emove					
					Cancel < Back	Next	>

On the "Select a New Root Path" panel, you will select the machine name from the "Path will be accessed via this Communications Agent" drop-down menu, browse to the path, and then click "OK".

When selecting a remote Communications Agent 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.



After selecting the path, click on the "Options" tab and check the "This is an Archive Root Path" option to tell SureSync that this path is the path where the Archive should be stored.

Browse Folders		×
Path Options		
 Create root folder if it does not exist ✓ Allow copying security objects to this path Verify volume changes when history is used Copy "Date Created" and Access Date for files copied to this ✓ Monitor folder for content changes ✓ This is an Artive Root Path Ignore file name case changes FTP path is absolute User Id for UNC Path Access, if the agent credential is not sufficie 	ent, or you	
FTP Profile		
(None)		*
Agent Logon User Id		_
(Default)	Chang	e
Ca	ncel S	ave

Click "OK" to add the path. On the Root Paths panel, note that the Archive path is now represented with a special icon.

		Cre	ate New	Job		-	
Set Root Paths							
Agent Name 🛛 🔻	Root Path 🔻						
DEV13	C:\SalesData C:\SalesData	Test Connection Test Connection					
Add Edit Rem	ove						
					Cancel	< Back	Next >

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

Selecting Your Rule & Defining Folder Exclusions

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

If the panel indicates that only "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 "Archive". The panel will load looking like the screenshot below.

Ssy	Create New Job –		×
-	Set Rule Type		
	Rule Type		
	☑ Also apply Rule to subfolders of the folders specified		
	This rule applies to the following subfolders		
	Separate subfolders with vertical bar characters (). Subfolders can be preceded with a hyphen (-) to exclude matching folders from the rule. Variables may be used in subfolder values.		
	Cancel < Back	Next	:>

To select the Rule Type, pull down the "Rule Type" drop-down and select "Archive."

Ss ₇	Create New Job – 🗖 🗙
S	Set Rule Type
	Rule Type Archive *
	Copy file change and deletion events to an Archive.
	✓ Also apply Rule to subfolders of the folders specified
	This rule applies to the following subfolders
	\
	Separate subfolders with vertical bar characters (). Subfolders can be preceded with a hyphen (-) to exclude matching folders from the rule. Variables may be used in subfolder values.
	Cancel < Back Next >

The "This rule applies to the following subfolders" section of the panel 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.

Click the "Next" button to continue.

Selecting Source Path

The next panel is where you indicate the source root path. To complete this panel, select the source path from the drop-down menu. An archive path cannot be a source so often there will only be one option in this drop-down menu. For our example, this is [DEV13]C:\SalesData.

Your wizard panel should look like the one below:

Ssy	Create New Job	-	×
- S	Set Source Root Path		
	Specify the source root path for this Rule.		
	[DEV13]C:\SalesData		*
	Cancel < 6	Back	Next >

Filtering Based on File Masks

The next panel displayed will let you indicate the files to be included or excluded from the synchronization. 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.

The default file mask is *.* which includes all files. Some common exclusions you could consider adding are: -*.tmp | -~*.doc | -~\$.doc? | -~\$.xls?. This excludes tmp files and some Microsoft Office temporary files.

	Create New Job –	
Set File Masks		
File masks that must be	present for this rule to apply	
~*		
	vertical bar characters (). File masks may include standard wildcard characters and can be (-) to exclude matching files from the rule. These file masks do not affect the selection of re help.	Finish

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

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 Job. The Job Wizard only displays a subset of essential options for a Job. There are many other options that can be configured by modifying the properties of the Job 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.

Define the Archive Rule

The next panel defines the Archive Rule to be used by this Job. For this example, we will expand the Archive Rule drop-down and select the "3 Year Documents" Archive Rule as shown below.

Sy	Create New Job		×
	Set Archive Rule		
	Specify the Archive Rule to be used by files selected by this rule. Each Archive Root Path will be updated selected Archive Rule.	based on the	
	Archive Rule 3 Year Documents	Ŧ	•
		Update Rules	;
	✓ Backup security values to the Archive		
	Permissions used for access to the Archive		
	Inherit file permissions on the Archive Destination		
	○ <u>C</u> opy source file permissions to the Archive		
	Cancel	< Back F	Finish
	Curci	- odek	

Clicking the "Finish" button will create your Job. The Job Wizard only displays a subset of essential options for a Job. There are many other options which can be configured by modifying the properties of the Job 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 Job

SureSync provides two methods to preview the actions that will be performed by a Job. The first option is the Preview that provides a graphical user interface display of all actions that would be performed without actually doing them. To launch a Preview, click on the Job in the SureSync

Desktop and click on the Preview button in the Ribbon Bar. Further details about Preview are available in the SureSync help file.

The second option is called a Trial Run. This method produces a tab delimited file containing the actions that would be performed. This file can easily be opened in Microsoft Excel to be viewed. To run a Trial Run, right click on the Job and select "Trial Run." Further details about Trial Run are available in the SureSync help file.

Communications Agent Compression & Encryption

The Communications Agent Add-On provides the ability to compress data during transmission. These features are useful when processing data over slow connections or public networks such as the Internet. For example, compression is recommended to be enabled when synchronizing files over the Internet.

Encryption is always enabled when using the Communications Agent. The default encryption method is a basic United States Federal Information Processing Standard (FIPS) certified Transport Layer Security (TLS) with Certificate encryption. A series of other encryption methods are available. Additional details can be found in the SureSync help file in the "Communications Agent Configuration – Connections" topic.

To enable compression, you must click on the "Performance" tab of the Job in question and check the "Use Compression" option.

Job Sales Data			
General Root Paths Options Performance Rules Statistics Security			
Execution and Network Priority (Default)			•
Allow use of Delta Processing on non-local drives			
✓ Use database history for multi-way Rules			
Note: All agent to agent transmissions are encrypted.			
	View Errors	Cancel	Apply

Creating a Real-Time Monitor

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

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

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

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



To begin configuring your Real-Time Monitor click on the Job button (^{Real-Time Monitor}) in the ribbon bar. This will launch the Real-Time Monitor wizard that is used to configure your Job to be run in real-time.

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

Ssy	Create New Real-Time Monitor 🛛 🗕 🗖 🗙
L E	Real-Time Monitor Name
	What would you like to call this Real-Time Monitor?
	Archive to SPITest-Win2K3
	Description
	✓ Stop Real-Time Monitor and place it on hold
	Cancel < Back Next >

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 Job(s) to Run

The next panel is where you specify which Job you would like this Real-Time Monitor to run. Jobs are selected by performing a drag and drop operation from the "Available Jobs" column to the "Selected Jobs" column.

Multiple Jobs can be run under one Real-Time Monitor. To do so, add all the Jobs you want this Real-Time Monitor to run under the "Selected Jobs" column.

Ssj	Create New R	eal-Time Monitor 🛛 🗕 🗖 🗙
Γ	Select Jobs	
	Select Jobs that will run when this Schedule executes. You the selected Jobs box.	can change the order by dragging and dropping the items in
	Available Jobs	Selected Jobs
	Archive to SPITest-Win2K3	
	Sales Data	
		Cancel < Back Finish

For our example, drag and drop the "Archive to SPITest-Win2K3" Job into the "Selected Jobs" column. The panel should now look like this:

S , (Create New Real-Time Monitor	- 🗆 🗙
Select Jobs		
Select Jobs that will run when this Schedul the selected Jobs box.	e executes. You can change the order by dragging and dro	pping the items in
Available Jobs	Selected Jobs	
Sales Data	Archive to SPITest-Win2K3	
	Can	cel < Back Finish

Software Pursuits, Inc. www.SoftwarePursuits.com Click the "Finish" button to create the Real-Time Monitor.

Modifying and Running Your Real-Time Monitor

When the wizard is complete, you will be returned to the SureSync desktop and the Real-Time Monitor you created will be displayed.

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, it may be started by selecting the Monitor and clicking the "Start" button in the Ribbon Bar. The Real-Time Monitor will switch to an "Active" status.

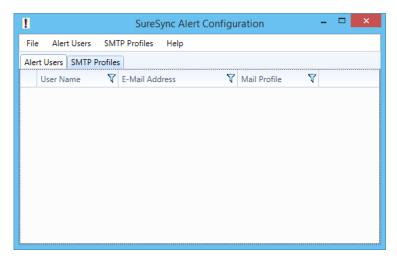
Configuring E-mail Alerts

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

Configuring a SMTP Profile

To start the configuration of alerts, you must launch the SureSync Alerts 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 SureSync Alerts Configuration utility, open SureSync, click on the "Home" button and click on "Alert User List"



To create a SMTP Profile, go to the SMTP Profiles menu and select "New SMTP Profile"

1	Edit SMTP Profile 🛛 🗕 🗙							
<u>P</u> rofile Name	SMTP Server							
<u>S</u> MTP Server	smtp.domain.com							
P <u>o</u> rt	25 🗘							
	Use TLS encryption							
S <u>e</u> nder Name	SureSync Admin							
Se <u>n</u> der Address	uresync@domain.com							
<u>R</u> eply Address	ss suresync@domain.com							
SMTP Sever Aut	hentication							
<u>U</u> ser Nar	me username							
<u>P</u> asswo	and *******							
<u>C</u> onfirm Passwo	******							
	Cancel Save							

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.
- Port: The SMTP port for the SMTP server. The default SMTP port is 25.
- Use TLS Encryption: If your SMTP server requires encryption, check this box.
- 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 "Save" to create the SMTP Profile. Clicking on the SMTP Profile tab of the SureSync Alert Configuration utility will show the new profile.

1	SureSyn	c Alert (Configuration	-		×
File Alert Users	SMTP Profiles H	elp				
Alert Users SMTP Pro	ofiles					
Profile Name 💙	SMTP Server 🛛 💙	Port 🏹	Sender Name 🟹	Sender Address	V	Rep
SMTP Server	smtp.domain.com	25	SureSync Admin	suresync@doma	in.com	sure

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 "New Alert User"

1	Edit User 🛛 🗖 🗙
<u>U</u> ser Name	Support Team
<u>E</u> -Mail Address	user@domain.com,user2@domain
<u>M</u> ail Profile Name	SMTP Server *
	Cancel Save

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 Schedule to use the Alert User, and at what level of errors to send alerts. This is accomplished by clicking on the Schedule in the SureSync desktop, clicking on the Alerts tab, selecting the Alert User from the drop-down menu and then clicking "Apply."

Real-Time N	Monitor Sales Data
General Jobs Inte	rvals Options Alerts Scripts Logging Security
Specify a user to re	cceive an e-mail alert if Schedule encounters errors.
User to notify	Support Team 🔻
Alert Level	3 - Warnings, Job Failures, and Severe Errors 💌
📃 Alert if Schedu	led time is missed
	Alert Users
	View Errors Cancel Apply

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

Monitoring the Archive Job

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 and click on the "Status" button (^{Status}) in the Ribbon Bar.

<u></u>			1	SureSync S	status - Software Pursuits			- 🗆 🗙
								~ @
Stop Log Viewer	Enterprise	Status Freeze/TI Actions	Haw Display (Dptions	Help			
	eal-Time M	Server DEV13 onitor 4 Path Loc mined \Folder01	-					
122 Jour 5 Acti	s Scanned mal Events* ve Actions ons Queuec	0	Added Replaced Removed Altered		0 Exceptions 0 Warnings & Errors 0 Retries Queued 0 Folders Scanned*	13.3MB Copied 17.1MB Bytes Transmitted* 00:02:42 Elapsed		
File Name 🛛 💙	Action 🝸	Bytes Copied	% Complete	Duration	Source Folder		7	
Test37Model.xls	Сору	74KB of 74KB	100%	0:00:03	[DEV13]C:\SureSync Test Folde	ers\File Locking M1-A\Folder01 -	Сору\	
Test41Model.accdb	Сору	876KB of 876KB	100%	0:00:03	[DEV13]C:\SureSync Test Folde	ers\File Locking M1-A\Folder01 -	Сору\	
Test48.txt	Сору	1.5MB of 2.3MB	66%	0:00:03	[DEV13]C:\SureSync Test Folde	ers\File Locking M1-A\Folder01 -	Сору\	
Test50Model.doc	Сору	0KB of 81KB	0%	0:00:03	[DEV13]C:\SureSync Test Folde	ers\File Locking M1-A\Folder01 -	Сору\	
Test51Model.docx	Сору	0KB of 36KB	0%	0:00:03	[DEV13]C:\SureSync Test Folde	ers\File Locking M1-A\Folder01 -	Сору\	
		378 Files Lock	ed 💿 Dor	ot display	locks 🔿 Display all locks 🔅	 Display only blocked users 		

Enterprise Status

The Enterprise Status panel can be used to view the current status of jobs from SureSync installations anywhere on your network. 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 7 and then "SureSync Enterprise Status."

			SureSync Ent	erprise Status - S	oftware Pur	auits					-	. 🗆	×
Start Stop Status	Log Viewer Schedulers Start All Monitors Stop	All Jobs											~ 6
	Actions												
Drag a column header and dr	op it here to group by that column												
Scheduler 🛛	V Name V	Warnings & Errors	Exceptions	Bytes Copied	Active Locks	Journal Events	Scanned	Added	Replaced	Deleted	Altered		
DEV13	Windows 2012 R2 Test	0	0	OKB	0	0	0	0	0	0	0		
DEV13	4 Path Locking	0	0	285.3MB	1,956	530	941	2,775	0	9	0		
SPIWEBSVR	Archive F: to SPIWebSvr	0	0	125.9MB	0	5,966	122,409	578	0	1,108	0		
SPIPRODVM1	Archive Local Websites	0	0	30.5MB	0	922	10	3	0	1	0		
SPIWEBSVR	Archive Local Websites	0	0	30.5MB	0	922	10	3	0	2	0		
SPIPRODVM1	Archive SPIWebSvr F: to SPIProdVM1	0	0	125.9MB	0	5,982	61,674	578	0	709	0		
	Archive to SPIExch2	0	0	34.2MB	0	3,230	1,027	51	0	29	1		
SPIPRODVM1	Archive to SPIProdVM1	0	0	20.1MB	0	3,230	5,579	82	0	320	22		
SPIWEBSVR	Archive to SPIWebSvr	0	0	24.2MB	0	3,230	12,210	119	0	639	12		
SPITESTVM	Monitor Archive SPIWebSvr to SPITestVM	0	0	128.6MB	0	5,973	117,704	591	0	1,117	0		
SPITESTVM	Multi-Mirror to SPITestVM	0	0	72.6MB	29	5,293	2,714	42	54	19	8		

You can also click on the "Ent Status" button (Ent Status) in the Ribbon Bar.