

with the ArchiveSync Add-On Evaluator's Guide



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# Introduction

SureSync is a powerful file replication & synchronization utility that can be used to ensure users on your network are always working off 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 2022; Windows Server 2019; Windows Server 2016; Windows Server 2012 R2; Windows Server 2012; Windows Server 2008 R2 with SP1; Windows 11; Windows 10; Windows 8.1; Windows 8; Windows 7 SP1
- Processor: Minimum: Dual-core CPU of at least 2.5Ghz; Recommended: Quad-core CPU or greater of at least 2.5Ghz
- **RAM (total for system):** 4GB of free memory (recommended minimum)
- Hard Disk: 100MB for application files; 20MB+ for database

For File Locking, ReFS volumes are not supported on Windows 2008 R2, Windows 2012 or Windows 7.

SureSync can synchronize data to operating systems such as Windows 2008, and non-Windows machines such as Mac and Linux via UNC path but the software itself must be installed on one of the supported operating systems.

#### Virtualization

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 Database Requirements

SureSync requires a SQL database to store configuration information. The following versions are supported:

- SQL Express 2012, 2014, 2016, 2017, 2019 and 2022
- SQL Server 2012, 2014, 2016, 2017, 2019 and 2022

While SureSync will operate with older versions of SQL Server, it is strongly recommended to use the newest possible release to take advantage of performance and reliability enhancements in those versions of SQL Server.

SureSync requires some Microsoft components to be installed on the system. The SureSync installer will inspect your system for these components and offer to upgrade or install them as needed.

- Microsoft .NET Framework 4.8
- Microsoft Visual C++ Runtime 14.0 Update 3

Please note that using the SureSync installer to install these prerequisites could result in a reboot being necessary before the setup can continue. If a reboot is necessary, the installer will prompt you. In environments where a reboot is disruptive, we recommend installing the required components manually during your normal maintenance schedules and then proceeding to install SureSync.

# **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.

# 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

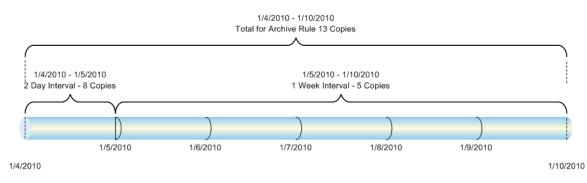
The File Locking Add-On requires the Communications Agent to be licensed and gives you an additional benefit in collaborative file sharing environments. The File Locking Add-On eliminates the possibility that a file could be changed on multiple sides of a synchronization resulting in a more efficient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



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. These example Rules are created by default in a SureSync database to ease configuration. 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 -									
CArchive 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 Rule 7 Year Documents							
Rule Name 7 Year Documents							
Recent Versions to Keep 3 🗘							
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 *DEV40* and creating an archive that is maintained in realtime on a machine named *SPITEST-WIN2K16*. The folder for this example scenario is C:\SalesData on the *DEV40* 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.

SPITEST-WIN2K16

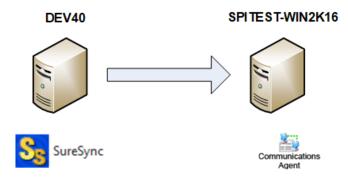
## DEV40



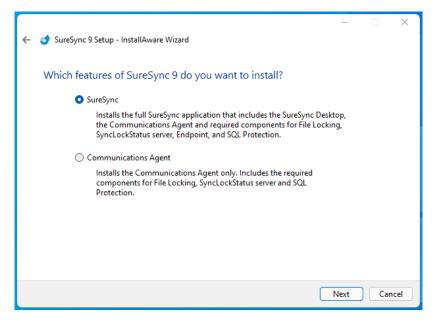
## Installation

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 (*DEV40*) and the Communications Agent will be installed on the other machine (*SPITEST-WIN2K16*) as illustrated below.



On the *DEV40* machine, we will run SureSync9Setup.exe and select SureSync as the installation type in the installer. This will install the complete SureSync application and make *DEV40* the machine where we configure and run our archive job.



On the *SPITEST-WIN2K16* machine, the Communications Agent installation should be performed. This is accomplished by launching SureSync9Setup.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 9 folder and click on the SureSync 9 Desktop icon. This will launch the SureSync Desktop where you will perform your entire synchronization job configuration.

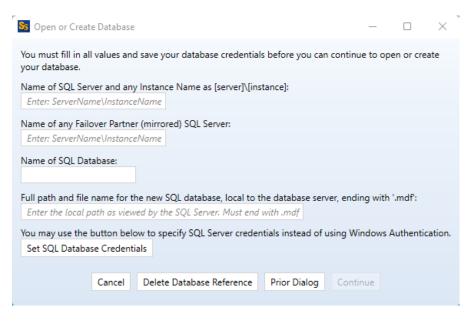
On the first launch of the application, SureSync will present you with a series of questions to aide in completing the initial configuration.

#### Creating a SureSync Database

The first dialog displayed is used to create or open an existing SureSync database. The database is used to store your synchronization/replication configuration and related information.

S Open or Create Database	_		×
This form is used to open or create a database. Select an existing SureSync databa for other actions.	se or us	e the but	tons
Select an existing SureSync database: [Select a Database]			
Create a new database Use an empty database			
Open an unlisted database Cancel			

Software Pursuits, Inc. www.SoftwarePursuits.com Click on the 'Create a new database' button to continue.



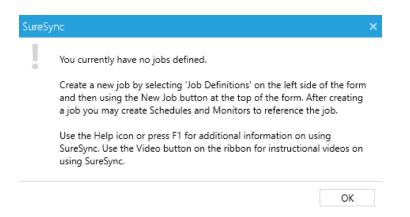
Enter the following information to create the SureSync database:

- Name of the SQL Server and any Instance Name: Enter the name of the SQL server and an instance name if used. For example, dev40\sqlexpress.
- Name of any Failover Partner (mirrored) SQL Server: This is an optional field that allows you to use a SQL Failover Partner. This functionality has been deprecated from SQL but is currently still available. Should be defined as machinename\instancename.
- Name of SQL Database: Enter the name of the SQL database that should be created.
- Full path and file name of the new SQL database: Enter the path on the SQL server where the database files should be created. This folder must already exist. For example, G:\Databases\SureSync.mdf.

If you want to use Windows authentication with the SQL database, you can click 'Continue' to create the database.

If you want to use SQL authentication with the SQL database, you will click on the 'Set SQL Database Credentials' button to provide the credential. After that, you can click 'Continue' to create the database.

Next, the following dialog will be displayed:



Click 'OK' to continue. The help file will be displayed that can either be reviewed now or closed.

#### 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	inc X
	This appears to be a new database that does not have any agents defined. You must create a local agent before you can create any jobs. A New Computer wizard will start to help you define your local computer and provide login credentials for an account to be used to access your files.
	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.

	puter Name									
ac	that will b oint client and a Sche									
ac	machines do not need to be added here. An agent is always required on the machine running the jobs and a Scheduler. When you add a new machine it will receive a default configuration that will listen on TCP port 9032 and will expect to be accessed using it's Computer Name (NetBIOS name). If the computer must be accessed via a DNS name or IP Address you will need to modify your connection definitions when the wizard completes.									
		Computer Name of your machine here, as configured on that machine. This mu qualified with the domain or workgroup name.	ist be the N	letBIOS						
Du	uplicate Computer Nam	nes are not supported.								
	Computer Name	dev40								
I	Default Access Name	inect to this r connectin his name is s machine.	g to also							
_		IP address, DNS Name, or NetBios name								

When the "Create Computer Configuration" wizard loads, the name of the computer SureSync is installed on is automatically filled in. For this example, the machine name is dev40. Click "Next" to continue.

nunications Agent	on this machine				
domain\user					
				nt because f	ull
•••••	Re-enter your passwor	d: ••••••			
			ration before attempti	ng the test.	
	Specify the accoun permissions will be Use us to Agent	Specify the account that will be used to copy permissions will be needed to read and write Re-enter your passwor Use this button to attempt to each of the defined connection location and may be expected	Specify the account that will be used to copy files. This is typically an permissions will be needed to read and write files and copy file perr Re-enter your password: Use this button to attempt to connect from your cur each of the defined connections. Some connections location and may be expected to fail.	Specify the account that will be used to copy files. This is typically an administrator account permissions will be needed to read and write files and copy file permissions.   Re-enter your password: Use this button to attempt to connect from your current machine to this n each of the defined connections. Some connections may not be valid from location and may be expected to fail.	Specify the account that will be used to copy files. This is typically an administrator account because f permissions will be needed to read and write files and copy file permissions. Re-enter your password: Use this button to attempt to connect from your current machine to this machine usin each of the defined connections. Some connections may not be valid from your current

The "Computer Information" panel of the wizard is where you define the user account and password that the Communications Agent should use to access the files on the machine.

To ease initial configuration, the "Run a Communications Agent on this machine" option will be checked. In addition, the account you are logged into the machine as will be prefilled in the "Login Name" field.

If you want the Communications Agent to run under a different user account, you can change it here. The account must be in domain\user or machinename\user format. You can also enter .\username to define a local account.

Enter the password for the defined account twice in the password fields.

When a Communications Agent configuration is saved, a default connection for TCP port 9031 is created automatically. In most environments, only the default connection is used.

To test the connection, click the "Test Connections to Agent" button.

Click "Finish" to complete Communications Agent configuration for the local agent. You will be taken to the SureSync Desktop.

## Importing a License

A license file should be installed in the new database. This can be a trial license obtained from the Software Pursuits sales team or a purchased license.

If you are new to SureSync, you should request a trial license from <u>https://www.softwarepursuits.com/suresync</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 ( ) 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 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."

Scheduler Services —		Х						
Scheduler Service on this machine								
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.								
	4	Add						
	Re	move						
Start Stop								

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

Scheduler Service Logon Information —		×
The Scheduler credentials are used to access your d lock files, and log or trace files. Files processed by jo credentials specified in the Communication Agent c for each machine.	bs use the	2
Please specify the user name to use for this service i "[domain name]\[user name] " or [computer name]\ You may specify ".\[user name]" for an account on th machine.	[user nam	
For SQL Server databases, the user must be a DB Ov SureSync database.	ner of the	2
User Id [ <domain>\<user id="">]</user></domain>	Cancel	
domain\user	Cancel	
Password	Clear	
•••••	Save	
Confirm Password	save	
•••••		

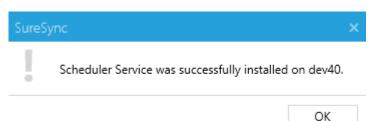
The user account the Scheduler service runs under must be a member of the local administrators group on the SureSync machine.

The account must also be a DBOwner on the SureSync database. Depending on the account you're using and how your SQL Server is configured, you may need to do this manually if the account is not automatically assigned DBOwner on newly created databases.

To do so, launch SQL Server Management Studio. Connect to the instance where the new SureSync 9 database is located. Expand Security and then Logins. Locate the account that the Scheduler will be running under. Right click and select Properties. Click on User Mappings. Make sure there is a checkmark next to the SureSync 9 database and that db\_owner is checked for membership.

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

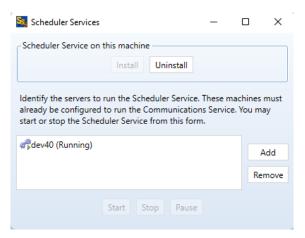
You will receive a confirmation dialog box that the Scheduler service was installed successfully as shown below.



The Scheduler will appear in the dialog with a status of (Stopped).

S	Scheduler Services			_		×	
	Scheduler Service on	this mac					
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.							
4	dev40 (Stopped)		Add move				
		Start	Stop				

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 configuring the environment is to define the remote Communications Agent machines.

To configure a Communications Agent, launch SureSync and click on the "Computer" (<sup>Computer</sup>) button in the ribbon bar.

omputer Name		
accessed by SureSync job	chines that will be running a Software Pursuits Communi os. Machines accessed via UNC paths do not need to be a o be added here. An agent is always required on the mach	dded. SureSync Endpoint client
accessed using it's Comp	chine it will receive a default configuration that will listen uter Name (NetBIOS name). If the computer must be acc connection definitions when the wizard completes.	
	Computer Name of your machine here, as configured on t qualified with the domain or workgroup name. nes are not supported.	hat machine. This must be the NetBIOS
Computer Name	Please enter your new Computer Name	
computer Name	rease enter your new comparer runne	
Default Access Name	This is the default IP address, DNS Name, or NetBios na machine if explicit outbound connections are not define this machine. IPv6 addresses must be enclosed in squar used if the agent announces to other agents how they s omitted, the computer name is used.	d by other agents for connecting to e brackets, like [::1]. This name is also
	This is the default IP address, DNS Name, or NetBios na machine if explicit outbound connections are not define this machine. IPv6 addresses must be enclosed in squar used if the agent announces to other agents how they s	d by other agents for connecting to e brackets, like [::1]. This name is also
	This is the default IP address, DNS Name, or NetBios na machine if explicit outbound connections are not define this machine. IPv6 addresses must be enclosed in squar used if the agent announces to other agents how they s omitted, the computer name is used.	d by other agents for connecting to e brackets, like [::1]. This name is also

The "Computer Name" panel of the Computer wizard is where you define the name of the machine running the Communications Agent that SureSync will be connecting to. This name must be the NetBIOS computer name of the computer.

The computer name entered here must be the NetBIOS computer name of the computer in question. Using an IP address or a random name will result in the connection failing.

Enter the computer name into the field. For example, spitest-win2k16.

accessed by SureSync jo	achines that will be running a Software Pursuits Communications Agent Service that will be bs. Machines accessed via UNC paths do not need to be added. SureSync Endpoint client o be added here. An agent is always required on the machine running the jobs and a Scheduler.
When you add a new ma accessed using it's Com	achine it will receive a default configuration that will listen on TCP port 9032 and will expect to be puter Name (NetBIOS name). If the computer must be accessed via a DNS name or IP Address you connection definitions when the wizard completes.
	Computer Name of your machine here, as configured on that machine. This must be the NetBIOS qualified with the domain or workgroup name. mes are not supported.
Computer Name	spitest-win2k16
Default Access Name	This is the default IP address, DNS Name, or NetBios name to be used to connect to this machine if explicit outbound connections are not defined by other agents for connecting to this machine. IPv6 addresses must be enclosed in square brackets, like [:1]. This name is also used if the agent announces to other agents how they should connect to this machine. If omitted, the computer name is used.
	IP address, DNS Name, or NetBios name

Click the "Next" button to continue.

The "Computer Information" panel of the wizard is where the credential used for accessing files on this Communications Agent machine is defined.

Login Name domain\user	
Specify the account that will be used to copy files. This is typically an administrator full permissions will be needed to read and write files and copy file permissions.	account because
Password Re-enter your password:	
Using this test button will save your current configuration before a	ttempting the test.

On this panel you will then want to:

- 1. Ensure that "Run a Communications Agent on this machine" is checked. It is by default.
- 2. Enter the account to be used in the "Login Name" field. This should be in domain\user or machinename\user format. .\user can also be used to represent the machine name for local accounts.
- 3. Enter the password for the account in both password fields.

Click the "Test Connections to Agent" button to test the connection.

If the test does not complete successfully, there are some common causes to investigate:

- 1. Ensure the Software Pursuits SureSync 9 Communications Agent service is running on the machine.
- 2. Ensure the name you defined for the Computer name is the NetBIOS name of the computer.
- 3. Ensure that the clocks are accurate for the time zone the machine is in. .NET cryptography will reject requests when the clocks are greater than 5 minutes apart.
- 4. Ensure TCP port 9031 is forwarded to the correct machine in any firewall.

These steps should be done for each Communications Agent that will be used. In the example scenario, *SPITEST-WIN2K16* would be defined

## **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.

# ř

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

#### Name Your Job

<b>S.</b> (	reate New Job	-	-		×
Jo	bb Name				
	What would you like to call this Job?				
	Archive to spitest-win2k16				
	Description				
	Car	ncel <	Back	Next	>

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-win2k16".

## 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 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".

	скир коот рат	hs and s	et many o	her options fro	om a propert	y sheet after	your wizar	d comple	etes.	
Agent Name	<b>T</b> Root Path	<b>T</b> Tes	t Path							
										 ]

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 DEV40
- C:\SalesDataArchive on SPITEST-WIN2K16 (the location of the archive)

First, we will select the local path on DEV40 by browsing to that path through "My Computer", highlighting the directory and clicking "OK.

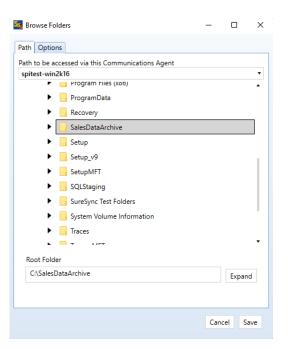
Sea Browse Folders	-		×
Path Options			
Path to be accessed via this Communications Agent			
dev40			•
Recovery			_
SalesData			
🕨 🚞 SeaTemp			_
SourceSafe			
SPILock8			
SQL2019			
SQLStaging			
🕨 🧰 temp			
Users			
Vault2			
🕨 🧰 Web			÷
Root Folder			
C:\SalesData		Expan	d
	Can	icel Sa	ave

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

	Root Path Y	Tact Path			
dev40	C:\SalesData	Test Connection			

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.

Stowse Folders	-		$\times$
Path Options			
<ul> <li>Create root folder if it does not exist</li> <li>Allow copying security objects to this path</li> <li>Verify volume changes when history is used</li> <li>Copy "Date Created" and Access Date for files copied to</li> <li>Monitor folder for content changes</li> <li>This is an Archive Root Path</li> <li>IgNore file name case changes</li> <li>Validate Symbolic Links</li> <li>FTP path is absolute</li> <li>User Name credential. This is not for the Communication</li> </ul>	flicien	t, or you	٦F
		Chang	je
FTP Profile			
(None)			•
	Can	cel 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.


Once all 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.

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 ( - matching folders from the rule. Variables may be used in subfolder values.	) to exclude			
	Cancel <	Back	Next	:>

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

Seate New Job	-		×
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 excl matching folders from the rule. Variables may be used in subfolder values.	ude		
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.

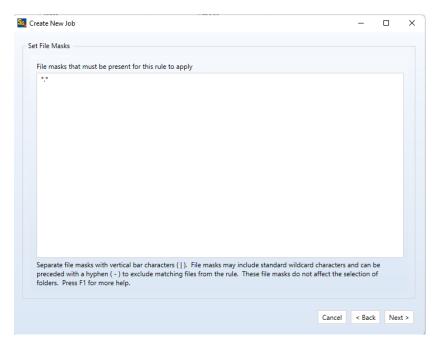
Your wizard panel should look like the one below:

Create New Job		_		×
Set Source Root Path				
Specify the source root path for this Rule.				
[dev40]C:\SalesData			•	
Ca	ncel	< Back	Nex	t >

### 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.



## 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.

## 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.

Create New Job			-		
et Archive Rule					
Specify the Archive Rule to be used by files select selected Archive Rule.	ted by this rule. Each Archive Root	Path will be updated b	ased on	the	
	Archive Rule	3-Year Documents		•	
			Update	Rules	
<ul> <li>Backup security values to the Archive</li> </ul>					
Permissions used for access to the Archive					
<ul> <li>Inherit file permissions on the Archive Dest</li> </ul>	ination				
$\bigcirc$ Copy source file permissions to the Archive	2				
		Cancel	< Bac	k Ein	nish
		Cancel	< Dac	K FI	iisfi

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.

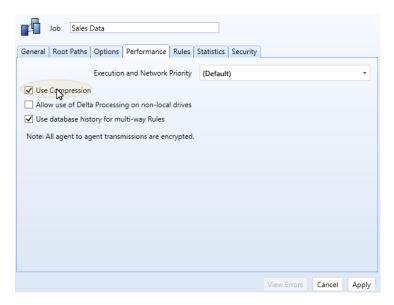
To run a Trial Run, right click on the Job and select "Trial Run." Further details about Trial Run are available in the SureSync help file.

# **Communications Agent Compression & Encryption**

The Communications Agent Add-On provides the ability to compress data during transmission. This feature is 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.



# **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 (<sup>Real-Time Monitor</sup>) 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

Seate New Real-Time Monitor		-		×
Real-Time Monitor Name				
What would you like to call this Real-Time Monitor?				
Archive to spitest-win2k16				
Description				
✓ Stop Real-Time Monitor and place it on hold				
	Car	ncel < Bac	k Nex	t >

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.

e to spitest-win2k16 cking M1-A Jata ata	
Jata	
dtd	

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

eate New Real-Time Monitor					-	
lect Jobs						
Select Jobs that will run when this Schedul the selected Jobs box.	e executes. You	can c	hange the order by dragging and d	ropping	the ite	ms in
Available Jobs			Selected Jobs			
File Locking M1-A			Archive to spitest-win2k16			
Sales Data						
Web Data						
			Ca	ancel	< Bac	k Fir

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 are part of the Alert system within SureSync and 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 e-mail alerts, you should click on the Options (<sup>Options</sup>) button in the Ribbon bar. Click on the "Alerts" tab to access the appropriate configuration panel.

The first item configured is the SMTP Profile. The SMTP Profile provides SureSync with the necessary details about your SMTP e-mail server so the program can send e-mail messages to you.

eneral Logging Alerts Sch	eduler Priorities Ftp			
SMTP Profiles Alert Profiles	System Alert Filters			
A SMTP Profile is needed to o are linked to SMTP profiles. Select an SMTP Profile to disp	efine how email messages are transmitted when an alert r	nessage must be	sent. Ale	ert Profiles
	lay, edit, or delete:	•	New	Remove
<u>P</u> rofile Name	Enter SMTP Profile Name			
SMTP Server	Enter SMTP Server Name			
P <u>o</u> rt	1.0			
	Use TLS encryption			
S <u>e</u> nder Name	Display Name of Alert Sender			
Se <u>n</u> der Address	E-Mail address of alert sender			
Reply Address	E-Mail address for replies			
SMTP Server Credentials	Click to set the SMTP server credentials			

To create a SMTP Profile, click on the "New" button on the SMTP Profiles tab.

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). To define a credential, click the 'Click to set the SMTP server credentials' button. The following fields will be presented:

- **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.
- **Repeat Password:** The password for the username defined in "User Name" should be confirmed here.

Click "Apply" to save the SMTP Profile.

Options		-		
General Logging Alerts Sch	eduler Priorities Ftp			
SMTP Profiles Alert Profiles	System Alert Filters			
A SMTP Profile is needed to d are linked to SMTP profiles.	lefine how email messages are transmitted when an alert message n	nust be sent. A	lert Profiles	;
Select an SMTP Profile to disp	lay, edit, or delete:			
		▼ New	Remove	8
<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	suresync@domain.com			
<u>R</u> eply Address	suresync@domain.com			
SMTP Server Credentials	Click to set the SMTP server credentials			
			Cancel	Арр

## Configuring an Alert Profile

The second part of configuring E-mail Alerts is to define an Alert Profile. The Alert Profile defines the e-mail address(s) that will be sent messages when errors occur. To configure an Alert Profile, click on the Alert Profiles tab and click the "New" button.

SMTP Profiles Alert Profi	les System Alert Filters	
	set of email recipients, options for sending alerts to the	e person or group, and a link to the SMTP
Profile used for sending e	email.	
Select an Alert Profile to	display, edit, or delete:	
		New Remove
<u>P</u> rofile Name	Enter Alert Profile Name	
Recipient Address(es)	Enter recipient's email address	
<u>S</u> MTP Profile	Select an SMTP Profile	v
	Send Test Message	
	bend rest message	

The following fields need to be configured:

- **Profile Name:** The name of the profile.
- **Recipient Address(es):** The e-mail address(es) that SureSync will send the alert messages to.
- **SMTP Profile:** 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 for receiving e-mail alerts from the Real-Time Monitor is to define an Alert Filter on the Real-Time Monitor.

A global Alert Filter can be defined on the Alerts tab of Options. These global Alert Filter settings are inherited by all Jobs, Schedules and Real-Time Monitors defined in the database. Global Alert Filters can be overwritten for a specific Job, Schedule or Real-Time Monitor as appropriate.

You can also define an Alert Filter on a specific Job, Schedule or Real-Time Monitor. This is what will be done in this guide.

Click on the "Sales Data" Real-Time Monitor and click on the "Alert Filters" tab.

Real-Tim	e Monitor Sales Dat	a		
General Jobs Ir	ntervals Options Scrip	ots Logging	Alert Filters See	curity
Filters used to co	item in the desktop ribl ontrol email messages se llow you to create Alert I	ent on certain	types of errors.	
Alert Filters. Any remain in effect.	system defined Alert Fil	ter that is not	listed and overrid	den here will
Alert Name	Address			
			New Alert Filter	Delete Filters
			View Errors	Cancel Apply

Click on the "New Alert Filter" button.

Creat	Alert Filter	-		>
Select	Alert Profile			
Se	lect the Alert Profile to be used with this Rule Set. These alerts will be in addition to any configured	default al	lerts.	
9	upport Group			•
	Cancel	< Ba	ck N	lext >

From the drop-down menu on the "Select Alert Profile" panel select the Alert Profile you want to configure. Click "Next" to continue.

Filter Type	T	
Job Failure	Alert 🔹	An alert is sent if a job, monitor, or schedule aborts unexpectedly.
Offline	Alert •	An alert is sent if a path is offline for more than a specified number of minutes. (Zero = every occurrence.)
Schedule Missed	Inherit 🔻	An alert is sent if a Scheduled execution time is missed or a Schedule is terminated due to a Termination Time.
File changed in multiple locatio	ns Inherit 🔻	An alert is sent if a file is changed in multiple locations and the condition must be manually resolved.
Unlicensed	Inherit 🔹	An alert is sent if an unlicensed machine or product is accessed.
Machine Identification	Inherit 🔻	An alert is sent if a machine's identity failed verification. This could be ar attempt at unauthorized access.
Login Failure	Inherit 🔻	An alert is sent if an agent or UNC path login fails. This could be an attempt at unauthorized access.
Other Warnings	Inherit 🔻	An alert is sent for all other a warning level errors that persists after any retries.
Other Exceptions	Inherit 💌	An alert is sent for all other exception level errors.
Completion	Inherit 🔻	An alert is sent upon completion of a Job or Schedule

On the next panel, you can define the types of alerts you would like to receive via e-mail. For a full description of all available options, press F1 to launch the context sensitive help.

Click "Finish" to create the Alert Filter. It will be displayed in the Schedule properties.

		Real-Ti	ime Monito	or Sale	s Data					
Ge	eneral	Jobs	Intervals	Options	Scripts	Logging	Alert Filters	Security		ğ
F 1 4	Use the Options item in the desktop ribbon bar to configure and view the default Alert Filters used to control email messages sent on certain types of errors. This panel will allow you to create Alert Filters that can override individual system defined Alert Filters. Any system defined Alert Filter that is not listed and overridden here will remain in effect.									
	Alert Name Address									
Support Group support@domain.com										
							New Alert Fil	ter De	lete Filters	
							View Erro	rs Car	ncel Appl	y

# Monitoring the Synchronization

Monitoring your synchronization job is important, and SureSync makes this process easy using 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.

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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 (<sup>Status</sup>) in the Ribbon Bar.

- 	SureSync Detailed Status - Software Pursuits									
Stop Log Viewer		ise Status Freeze/Th Actions	aw Display O	otions	Help					
Folder		Server dev40 Schedule Schedule V Job Publish We xamined \Folder04\ Waiting fo		plete.						
718 Files 0 Journ 16 Activ 50 Actio	nal Even e Action	ts* 0 Is 0	Added Replaced Removed Altered		0 Exceptions 0 Warnings & Errors 0 Retries Queued 3 Scans Queued*	129.3MB Copied OKB Bytes Transmitted* 00:00:31 Elapsed				
File Name	Action	Bytes Copied	% Complete	Duration	Source Folder					
Test465Model.mdb	Сору	416KB of 416KB	100%	0:00:02	[dev40]C:\Web\Folder04\					
Test466.txt	Сору		0%	0:00:02	[dev40]C:\Web\Folder04\					
Test466Model.xls	Сору	49KB of 49KB	100%	0:00:02	[dev40]C:\Web\Folder04\					
Test467.txt	Сору		0%	0:00:02	[dev40]C:\Web\Folder04\					
Test467Model.xlsm	Сору	22KB of 22KB	100%	0:00:02	[dev40]C:\Web\Folder04\					
Test468.txt	Сору		0%	0:00:02	[dev40]C:\Web\Folder04\					
Test468Model.xlsx	Сору	22KB of 22KB	100%	0:00:02	[dev40]C:\Web\Folder04\					
Test469.txt	Сору	OKB of 1.8MB	0%	0:00:02	[dev40]C:\Web\Folder04\					
Test470.txt	Сору		0%	0:00:02	[dev40]C:\Web\Folder04\					
Test470Model.accdb	Сору	584KB of 584KB	100%	0:00:02	[dev40]C:\Web\Folder04\					
Test471.txt	Сору		0%	0:00:02	[dev40]C:\Web\Folder04\					
Test471Model.doc	Сору	0KB of 54KB	0%	0:00:02	[dev40]C:\Web\Folder04\					
Test472.txt	Сору		0%	0:00:01	[dev40]C:\Web\Folder04\					
Test472Model.docx	Сору	0KB of 24KB	0%	0:00:01	[dev40]C:\Web\Folder04\					
Test473.txt	Сору		0%	0:00:01	[dev40]C:\Web\Folder04\					

## Enterprise Status

The Enterprise Status panel can be used to view the 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 9 and then "SureSync 9 Enterprise Status."

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

Image: Start All Monitors Stop All Jobs       Image: Start Stop View	eleted Altered
the "spin down" button to the left of a row to expand a group or to display additional details. Click on a column heading to sort by tart column. **   **   **   **  **  **  **  **  **	0 0
Image: Note of the state of	0 0
*         Dob Group: Job Definitions         0         0         4.368         0K8         16         0         0         4.3123         0           *         Image: ComplexStructure         0         0         0         4.068         0K8         0         0         0         39.097         0           *         Image: File Lacking M1-A         0         0         0         0K8         0K8         0	
*         File Lacking M1-A         0	0 0
Schedule Web Data         0         0         0         359.8MB         0KB         16         0         4,026         0	0
	0 0
rent Job Status	0 0
Waiting for tasks to complete. Scanning: VFolder08\SubFolderE\       2,106 Files Scanned     4,026 Added       0 Journal Events"     0 Replaced       0 Journal Events"     0 Replaced	
16 Actions Queued 0 Altered 4 Scans Queued 00:01:17 Elapsed	
Image: Base of the second se	0 0

# **Methods of Restoring Files**

SureSync makes the process of restoring files easy, using two different methods.

#### Windows Explorer

Windows Explorer can be used to rapidly restore a file when you are looking to restore a single file. The files in an archive are full copies of the versions of the file. Each file has an extension added to the file name that indicate the version and type of file backup.

The extension format is ~####F.~~A

The ~####F is a version in the archive. For example ~0001F. F indicates a full copy of the file. An A indicates an attribute change. The ~~A indicates the file is a file backed up with ArchiveSync. The files you want to restore are the ones with F in the name.

The modified timestamp on the file is the timestamp on the file when it was added to the archive. The older the date, the older the backup copy.

For example, assume the file you want to restore is named Document.docx. In the archive, you want to look for files named something like Document.docx~0005F.~~A.

Select the version you want to restore, copy it to another location and rename it to remove the ~####F.~~A. You will now have a full copy of the file you can restore the desired location.

#### **Restore Wizard**

If you are looking to restore multiple files or a larger folder structure, the Restore Job Wizard can be used. This will create a Job in SureSync that restores files from the ArchiveSync archive. The files are restored with the ArchiveSync extension removed so the files are immediately usable.

To launch the Restore Wizard, click on the Restore button in the SureSync Desktop's ribbon bar.

Sa C	reate New Restore Job		-		×
Jo	b Name				
	What would you like to call this Job?				
	Document Restore				
	Description				
		ncel	< Back	Next	
	Ca	ncei	< Back	Nex	

The first panel of the wizard is where you define the name of the Restore Job and an optional description.

Click "Next" to continue.

Agent Name 🛛	Root Path			
	C:\SalesDataArchive			

The next panel is where you define the source for the restore. This should be the archive path and there should only be one path listed.

One you have added the archive path, click "Next" to continue.

The next panel defines the path(s) that the files should be restored to. You can restore to multiple paths if needed.

sciect subiolae	rs later. Only files cre	ated with Archi	veSync will be eli	location for you gible for restori	ing.		
Agent Name	Root Path						
dev40	C:\Restore						
	Remove						

Once you have defined the destination path(s), click "Next" to continue.

The next panel defines the type of restore rule to be used.

The rule types available are:

- **Restore Differing Files (recommended)**: Restore files and folders, replacing existing files if they have different dates, adding missing files and deleting files to match the point in time.
- **Restore All Files**: Restore files and folders, replacing all existing files and deleting files to match the point in time specified.
- **Restore If Later Version**: Restore files and folders, replacing exsiting files if the archive has a later date, add missing files to the point in time specified.

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 restore only two subfolders named "FolderA" and "FolderB," you would enter the following:

\FolderA\ | \FolderB\

To restore 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 restore all subfolders.

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

Set Rule Type		-		×
Rule Type Restore Differing Files	1.4.1.4.4	- 61		
the point in time specified. (Recommended)	a deletin	g nies to	match	
$\checkmark$ 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 ( - ) t matching folders from the rule. Variables may be used in subfolder values.	to exclud	de		
Ca	ncel	< Back	Next	>

Click the "Next" button to continue.

Fi	le masks that must be present for this rule to apply		
	•		
р	eparate file masks with vertical bar characters (   ). File masks may include standard wildcard characters a receded with a hyphen ( - ) to exclude matching files from the rule. These file masks do not affect the se iders. Press F1 for more help.		

The next panel displayed will let you indicate the files to be included or excluded from the restore. 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 \*.\* definition tells the Restore Rule to restore all files.

#### Examples

To restore 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.

Click "Next" to continue.

Set Restore Options Specify a "Point in Time" to be used to select archived files and folders to restore. You can select individual file versions using a Preview. Caution: You may have archived a "Delete" state as the latest event for your files, especially if using a Real-Time Monitor. Consider using a "Point in Time"  Restore files to this Point in Time  Restore the files to the lats state saved in the Archive, which could be a deleted state. Files marked as deleted in the Archive will not be restored.  Restore files as they existed in the Archive as of the date and time below. 3/17/2022 12:52 PM  Restore security settings	Create New Restore Job		-		×
using a Preview. Caution: You may have archived a "Delete" state as the latest event for your files, especially if using a Real-Time Monitor. Consider using a "Point in Time" when you knew the file existed.  Restore files to this Point in Time  Restore files to the last state saved in the Archive, which could be a deleted state. Files marked as deleted in the Archive will not be restored.  Restore files as they existed in the Archive as of the date and time below. 3/17/2022 12:52 PM  Restore security settings	Set Restore Options				
Consider using a "Point in Time" when you knew the file existed.  Restore files to this Point in Time  Restore the files to the last state saved in the Archive, which could be a deleted state. Files marked as deleted in the Archive will not be restored.  Restore files as they existed in the Archive as of the date and time below.  3/17/2022 12:52 PM  Restore security settings		t archived files and folders to restore. You can selec	t individual file v	versions	
Restore the files to the last state saved in the Archive, which could be a deleted state. Files marked as deleted in the Archive will not be restored. Restore files as they existed in the Archive as of the date and time below. 3/17/2022 12:52 PM Restore security settings			sing a Real-Time	Monitor	
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3/17/2022 12:52 PM ■		d in the Archive, which could be a deleted state. File	es marked as de	leted	
Restore security settings	$\bigcirc$ Restore files as they existed in the Arc	chive as of the date and time below.			
	3/17/2022 12:52 PM				
	Restore security settings				
Cancel < Back Finisl					

The next panel defines the point in time to restore to.

The default "Restore the files to the last state saved in the archive" will restore each file to the most recent file version stored in the archive. If a file is marked as deleted in the archive, it will not be restored.

The "Restore files as they existed in the Archive as of the date and time below" allows you to restore files back to how they exist in the archive as of the point in time defined.

Click "Finish" to complete the wizard. You will be presented with a prompt to preview, run the job or take no action (you can run it later).