

PowerScribe® 360 Reporting System Maintenance and Antivirus Requirements

Product: PowerScribe® 360 Reporting **Doc. Num:** 889760 **Version:** 1.x - 3.0.1 **Date:** 5 Dec 2019

Subject: System Maintenance and Antivirus Requirements

This document is only applicable to PS360 Version 3.0.1 and lower. For Antivirus information regarding versions 3.5 and above refer to the PowerScribe® 360 Reporting System Administrator Guide V3.5 - L-3837-004.

Introduction

Nuance provides the *PowerScribe 360 Reporting* System Maintenance information to its customers for record keeping and troubleshooting purposes. Customers are responsible for performing the items listed and are strongly recommended to use this information to keep their systems up to date on a daily basis.



Note: Beginning with PowerScribe 360 Reporting Version 3.5, the system maintenance documentation will be included in the PowerScribe 360 Administrator manual.

Antivirus Exclusions

Most antivirus programs implement a real-time scanning feature that, unless properly configured, can interfere with the normal operation of *PowerScribe 360 Reporting* and the Dragon speech engine.

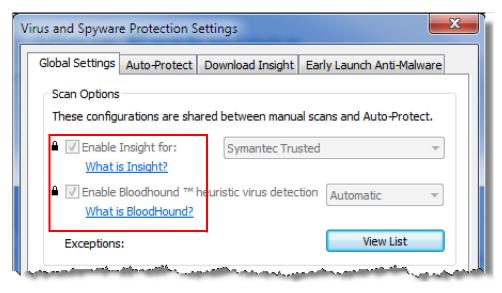
Setting the antivirus exclusions correctly for *PowerScribe 360 Reporting* application installed with Microsoft Windows 2003 Server, Windows 2008 Server, or Windows 2012 Server operating systems (OS), and Client Workstations with Windows 8, Windows 7, and Windows XP OS can help to eliminate the following conflict issues:

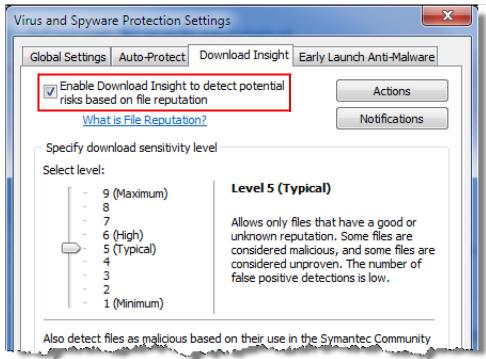
- · Latency at log in or log out
- Latency when opening a report
- Latency when signing a report
- Workstation appears to be locked up or unresponsive
- User profiles and/or language models not processing properly
- Server CPU utilization consistently high

The best practice to prevent interference of *PowerScribe* | *Reporting* with an antivirus and anti-malware programs are to set the following exclusions described in this section.

Advanced Settings

Many antivirus and malware applications have advanced settings that allow the program to look for patterns in files to help it decide if the file is dangerous. Be sure to disable these advanced or heuristic settings. The illustrations below are from Symantec Antivirus. Your antivirus or malware application may use different names or controls.





If your application has a setting to *trust files from trusted Internet sites*, enable the setting. Also, add the *PowerScribe 360 Reporting* system URL to your Internet Explorer **Trusted Sites** settings.

Antivirus Exclusions

Ensure the proper antivirus exclusions are configured on each workstation. Disable the antivirus application before installing the *PowerScribe 360 Reporting* software and re-enable it after a successful installation.

Nuance recommends that the most effective method for AV protection, while preventing the AV from interfering with application operations, is to use process exclusions. Process exclusions in antivirus will ignore any file accessed from the excluded process. This will help prevent latency while allowing the Anti-Virus to monitor file operations initiated by other processes.

Heuristic / Proactive Threat Detection

Apply the same process exclusions as shown below to the Heuristic / Proactive Threat Detection applications. If you do not, this function may see the Dragon and PS360 Application behaviors, such as converting audio files, as a potential threat, and block access to the files.

Malware Detection

Apply the same process exclusions as shown below to the real-time malware detection applications. If you do not, this function may see the Dragon and PS360 Application behaviors, such as converting audio files, as a potential threat, and block access to the files.

Exclude the following processes on the workstations:

Windows 7

- Natspeak.exe
- Nuance.PowerScribe360.exe

If your antivirus application is not capable of excluding processes, you should exclude the following directories and file types. Be sure to apply the same exclusions to Heuristic and Malware functions within the anti-virus application or additional applications.

Windows 7

Exclude the folders:

- C:\Nuance (PACS integration folders for XML integrations)
- C:\ProgramData\Nuance
- C:\Users\<Windows USER ID>\AppData\Roaming\Nuance\Dragon SDK Client Edition12
- C:\Users\<Windows USER ID>\AppData\Local\Nuance\PowerScribe360
- C:\Users\<Windows USER ID>\AppData\Local\Temp
- C:\Users\<Windows USER ID>\AppData\Local\Apps

Exclude the following extensions:

 BD, BIN, DAT, DRA, ENH, GRM, GRX, INI, NWV, SIG, SVC, USR, VER, XML, DICT, LOG, TXT, WAV, ini DGNRenamed, voc DGNRenamed

Note: NOTE: The %TEMP% directory is used for the log-in process of Dragon SDK / PS360. If possible exclude the directory from real-time AV scans for these extensions (tmp, bak).

• When logging in, Dragon downloads the speech profile to the TEMP folder, then moves the required files to the speech profile storage location. Not excluding this may cause latency during log in and log out.

Web/SQL Server(s)

Exclude the following processes:

- C:\Windows\System32\LocalFileManager*.exe
- C:\Windows\PSEXESVC.exe



Note: C:\Windows\PSEXESVC.exe might not yet exist on a Web server until the SUS server has had a chance to run.

Exclude the following folders, subfolders, and/or file extensions:

- X:\Nuance folder and all subfolders
 - DAT, DFT, DRA, ENH, ENWV, INI, LCK, LDF, LOG, MDF, NWV, SIG, SLT, TXT, USR, VER, VOC, WAV, XML
- C:\Windows\Temp\es_export folder and all subfolders (may not exist)
- C:\Program Files (x86)\Nuance\ All files and sub folders

For an Accelerator, add these exclusions:

- <Installation Drive>\Nuance
- %SYSTEMROOT%\system32\config\systemprofile\AppData\Local\Temp\agw\
- %APPDATA%\Local\Temp\smrgw
- %SYSTEMROOT%\system32\config\systemprofile\AppData\Local\Temp\agwdist*

SUS Server

Exclude the following processes:

- C:\Windows\System32\LocalFileManager*.exe
- Natspeak.exe
- For 64-bit (x64) SUS servers:

X:\Program Files (x86)\Nuance\Speech Utility Server\psexec.exe

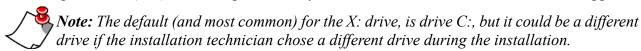
C:\Program Files\Nuance\Speech Utility Server\ Nuance.ConversionServer.ClientApp.exe

Note: The default (and most common) for the X: drive, is drive C:, but it could be a different drive if the installation technician chose a different drive during the installation.

• For 32-bit (x86) SUS servers:

X:\Program Files\Nuance\Speech Utility Server\psexec.exe

C:\Program Files (x86)\Nuance\Speech Utility Server\ Nuance.ConversionServer.ClientApp.exe



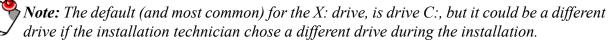
Exclude the following folders, subfolders, and/or file extensions:

- C:\ProgramData\Nuance Folder and all subfolders
 - BD, BIN, DAT, DFT, DRA, DVC, ENH, GSB, GRM, GRX, INI, LCK, LDF, LOG, MDF, NWV, SIG, SVC, USR, VER, VOC, WAV, XML, ZIP
- C:\Users\<Windows USER ID>\AppData\Local\Temp Folder and subfolders
 - BD, BIN, DAT, DFT, DRA, DVC, ENH, GSB, GRM, GRX, INI, LCK, LDF, LOG, MDF, NWV, SIG, SVC, USR, VER, VOC, WAV, XML, ZIP
- C:\Users\<Windows USER_ID>\AppData\Roaming\Nuance\Dragon SDK Client Edition12 (or 10)\
 - Dragon.log
 - Dragon.bak.log
- C:\Users\<Windows USER_ID>\AppData\Roaming\Nuance\Dragon SDK Client Edition12 (or 10)\results\

Interface Server

Exclude the following folders, subfolders, and/or file extensions:

• X:\PowerXpress2008 folder and all of its subfolders



- MDF, LDF

Montage Server

Exclude the following processes:

- Montage
 - Montage.exe
 - Searchd.exe
 - Indexer.exe
- PostgreSQL
 - postgres.exe
- Python
 - Python.exe
 - Pythonservice.exe

Exclude the following folders, subfolders, and/or file extensions:

- C:\Montage folder and all of its subfolders
- C:\MontageBackups folder and all of its subfolders
- X:\Montage\Data (if Montage data is stored to a separate drive)
- Python installation folder (i.e. C:\Python 27) and all of its subfolders
- PostgreSQL installation folder (i.e. C:\Program Files (x86)\PostgreSQL) and all of its subfolders and X:\Program Files (x86)\PostgresSQL and all of its subfolders if Montage data is stored to a separate drive.
- Erlang installation folder (i.e. C:\ Program Files (x86)\erl5.8.5) and all of its subfolders
- RabbitMQ installation folder (i.e. C:\ Program Files (x86)\RabbitMQ Server) and all of its subfolders
- Apache installation folder (i.e. C:\ Program Files (x86)\Apache Software Foundation) and all of its subfolders

Addressing Vulnerabilities

SQL and **IIS** Vulnerabilities: When Microsoft releases new security patches and service packs for the PowerScribe platforms that use IIS and SQL, Nuance Technical Support applies the updates to its QA automation system and verifies that the product runs without issues. The Microsoft security updates are reviewed by the engineering team to assess if there are vulnerabilities that need to be addressed within the product. If a vulnerability is found, Nuance will work on providing a solution to resolve the vulnerability.

Security Issues (such as Heartbleed, POODLE, Shellshock): As security alerts related to industry-known vulnerabilities are received, the vulnerabilities are reviewed by the engineering team to assess if the vulnerabilities need to be addressed within the product. If a vulnerability is found, Nuance will work on providing a solution to resolve the vulnerability.

Third-Party Updates

Applying Microsoft and other non-Nuance service packs and updates is the customer's responsibility. Apply Microsoft and other third-party updates to your servers (web server, SQL server, interface server, and so on) and client workstations according to your organization's third-party patching and update policies.

To determine if new Microsoft of other third-party service pack/patch/hotfix is not recommended, please refer to Nuance Community article <u>PowerScribe 360 Reporting Support for Third-Party Software Updates</u>.

Note: Make sure you reboot each server and workstation after you complete the updates.

SSL Certificates

SSL Certificates are the responsibility of the Customer to obtain and install. Only SSL Certificates from valid vendors (e.g. Veritas, GoDaddy, Symantec, etc.) are supported.

Self-signed certificates are supported and will function properly with *PowerScribe 360 Reporting* software. However, it is the customer's responsibility to manage these certificates and install them on the client workstations and servers.

Backups

Database, file and system Backups are the responsibility of the customer. Nuance will set up a default backup plan for the SQL server database when the system is first installed. The site should make any modifications they deem necessary to meet their internal requirements. In addition to backing up the database, the site should also set up a backup plan that also protects the file portions of the system.

On a daily basis, make sure that the database and transaction log backups are being performed by checking the backup dates.

To verify the database backups:

- 1. Connect to the SQL server, launch SQL Server Management Studio and connect to your local server.
- 2. In the **Object Explorer** panel to the left, expand your server, expand SQL Agent, and expand **Jobs**.
- 3. Find the jobs labeled Comm4Backup. Hourly Transaction Log Backup and Comm4Backup. Full Backup.
- 4. Right click and select **View History** on each.
- 5. Confirm that there are no error messages under either.

Verify Folder Backups Completed

On a daily basis, back the directories listed below from the Nuance directory. Nuance recommends that backups occur immediately after the database backups have completed.

- X:\Nuance\BridgeLogs (HL7 History)
- X:\Nuance\DragonUsers (Required)
- X:\Nuance\Wave (Audit History)

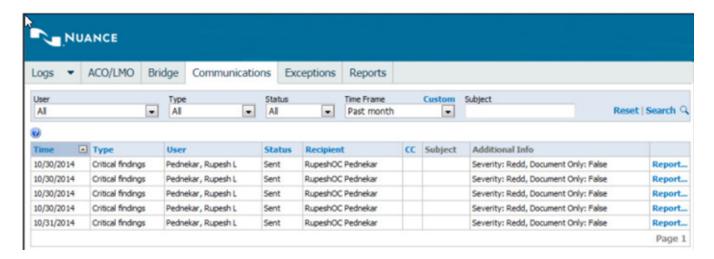
System Logs

The Logs are primarily for Nuance Support and Engineering to use investigating a reported issue. A site administrator does not have to review the logs on a regular basis, but may need to use them on occasion to provide data to Nuance Support.

The following section describes the logs shown in the Administrative Portal.

Communications Logs

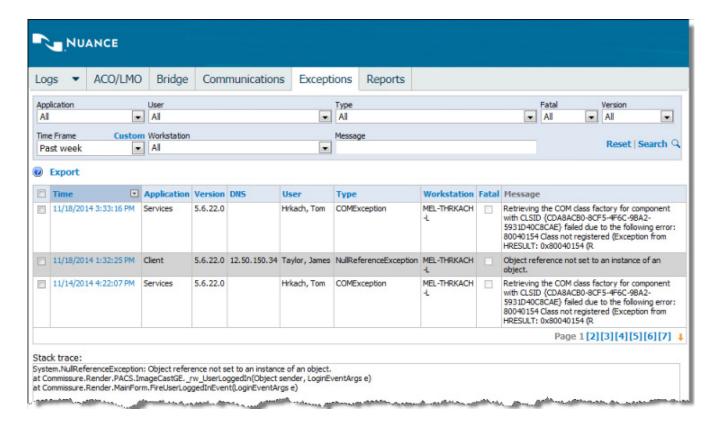
The communication logs display communications from *PowerScribe 360 Reporting* including fax, email, critical findings, and support requests. To review the communication logs sent from *PowerScribe 360 Reporting*, use the **Communications** tab in the **Logs** group. The search box on the **Communications** tab allows you to use various specifications to search for logs.



Exception Logs

When a client machine reports an error or exception, it is stored in the database. This log provides Nuance engineers more data on the error.

Note: You may see various messages posted to this log. The presence of a message does not indicate an issue. These logs are designed for deeper evaluation of issues reported by end users to Nuance support.



Bridge Logs

The *PowerScribe 360 Reporting* Bridge service exists to share patient information and orders with HIS or RIS systems. The Bridge service receives inbound order and patient information and stores it in the *PowerScribe 360 Reporting* database. As radiologists create reports and sign them, the Bridge service sends them out to the HIS or RIS systems in the proper format for the receiving systems.

Use the **Bridge** tab in the **Logs** group to monitor inbound and outbound activity through the Bridge service. You can use various search criteria to narrow your search to the activity you want to see. For example, you can look for outbound orders that failed, or successful activity during the past two weeks. Some commonly-used searches are predefined for your use; these search links show totals in each category where events exist.

To use a pre-defined search:

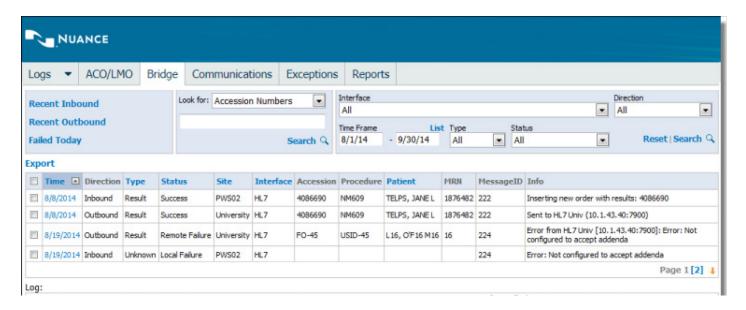
- Click **Recent Inbound** to view incoming messages during the past hour.
- Click Recent Outbound to view outgoing messages during the past hour.
- Click Failed Today to view messages that failed to be sent today or were rejected today.

To search for messages by accession or patient name or MRN:

- 1. In the **Logs** group, select the **Bridge** tab.
- 2. In the Look for drop-down list, select Accession numbers, Patient last name, or Patient MRN.
- 3. Enter all or part of the accession number, name, or MRN.
- 4. Click **Search**. Any items that meet your criteria appear in the list.

To search for messages by other criteria:

- 1. In the **Logs** group, select the **Bridge** tab.
- 2. Select one or more criteria:
 - Interface: Select the Bridge interface from the list.
 - Direction: Inbound, Outbound, or All.
 - Time frame: Select a period of time, or select **Custom** and select the beginning and ending dates and times.
 - Type: Select All, Ack (acknowledged), ADT (admission, discharge, or transfer), Order, Result, or Unknown.
 - Status: All, All Failed/Rejected, Error, Ignored, Local Failure, Remote Failure, Remote Reject, or Success.
- 3. Click **Search**. Any messages that meet your criteria appear in the results grid.



ACO/LMO Logs

The ACO/LMO logs are for the Nuance Support Engineers to use when investigating reported issues with a profile not processing ACO/LMO.

Daily Client Workstation Reboot

Reboot all client workstations on a daily basis. This is a recommendation by Nuance and Microsoft due to the large amount of memory reads and writes that the applications and PACS systems perform. Rebooting allows the operating system and applications to run optimally for best performance.

Daily Server Checks

Verify Services Running

To verify that the Services are running, select **Start > Settings > Control Panel > Administrative Tools > Services**. (The path may differ slightly, depending on the operating system.)

Verify that the following services are running:

- · SQL Server
- SQL Server Agent
- World Wide Web
- Nuance RadBridge

Check the drive space for the following:

- Operating System Drive (C): 10 GB free space minimum
- Data Drive (D or E): 20 GB free space minimum

SUS Server

Go to **Start > Settings > Control Panel > Administrative Tools > Services**. (The path may differ slightly, depending on the operating system.)

Verify that the following services are running:

- SQL Service
- SPARK Host Manager Service
- SPARK Speech Node Manager
- SPEECH Utility Server
- SPARK Core Services

Check the drive space for the following:

- Operating System Drive (C): 10 GB free space minimum
- Data Drive (D or E): 20 GB free space minimum

Interface Server

Verify that the following services are running:

• PX2008

Hot Spare

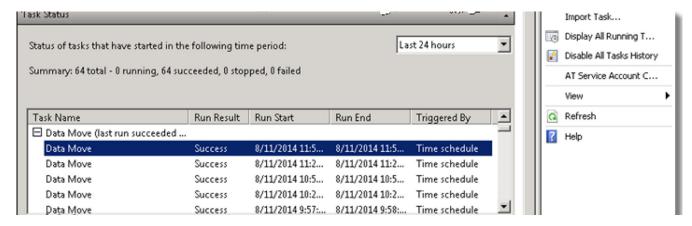
Verify that the following services are running:

- SQL Server
- SQL Server Agent
- · World Wide Web
- Nuance RadBridge (This service needs to be disabled unless making the hot spare system the active system.)
- PX2008 (This is typically on a separate interface server and should be disabled unless making the hot spare system the active system.)

Verify the Scheduled Tasks

If your site has a hot spare, verify that the Robocopy job is processing as expected:

- 1. Click Control Panel > Administrative Tools > Task Scheduler.
- 2. Verify that the **Data Move** task exists, that the task status is **Enabled**, and that the task has been running successfully.

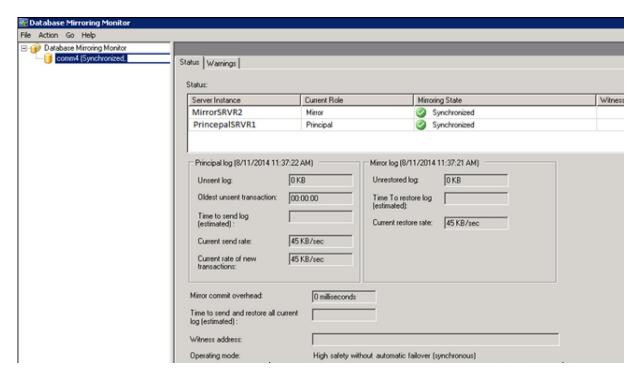


Verify SQL Mirroring

If your site has a hot spare, verify that the mirror you created is functioning and the mirroring data exists.

To verify SQL mirroring:

- 1. Remote Desktop to the Mirror Server and open SQL Server Management Studio.
- 2. Right-click **Comm4** and select **Tasks**, then select **Launch Database Mirroring Monitor**. The Database Mirroring Monitor dialogs opens.
- 3. Verify that the **Mirroring State** of both the Principal and Mirror servers is **Synchronized**.



Rebooting Your System

Nuance does not require routine server rebooting to maintain normal PowerScribe 360 performance. Servers/systems should be rebooted according to your facility's internal guidelines to maintain optimal performance, and after applying third-party updates such as Microsoft and antivirus.



Note: It is the customer's/site personnel's responsibility to schedule and reboot the servers at each site.

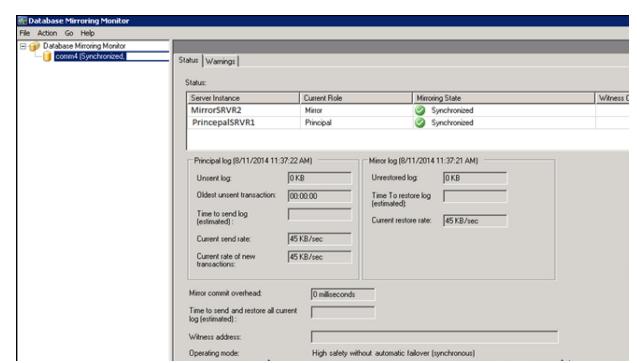
Reboot Your System

Reboot the servers using the following steps:

- 1. Log all users off of the system.
- 2. Stop the following service on the **Interface Server** (HL7 server), if used:
 - PX2008
- 3. Stop following service on the SUS Speech Node Server(s):
 - SPARK speech node manager
- 4. Stop following services on the SUS Server(s):
 - SPARK core services
 - SPARK host manager service
 - SPARK speech node manager
 - Speech utility server
- 5. Stop the following services on the Application (Web) Server:
 - Nuance RadBridge
 - IIS Admin Service
- 6. Stop the following services on the MSSQL Server:
 - SQL Server
- 7. Reboot the MSSQL Server (if separate from the Application server).
- 8. Reboot the **Application (Web) Server**.
- 9. Reboot the **Interface Server** (HL7 server), if used.
- 10. Reboot the SUS Server(s).
- 11. Reboot the SUS Speech Node Server(s).
- 12. Select **Start > Settings > Control Panel > Administrative Tools > Services** (the path may differ slightly, depending on the operating system) and verify that the following services are running on each of the servers:
- On the Application/SQL Server:
 - SQL Server

- SQL Server Agent
- World Wide Web
- Nuance RadBridge
- On the SUS Server:
 - SQL Service
 - SPARK Host Manager Service
 - SPARK Speech Node Manager
 - SPEECH Utility Server
 - SPARK Core Services
- On the Interface Server:
 - PX2008
 - Accelarad Gateway (if using PowerShare)
- On the Hot Spare Server (if you have a hot spare):
 - SQL Server
 - SQL Server Agent
 - World Wide Web
 - Nuance RadBridge (This service needs to be disabled unless making the hot spare system the active system.)
 - PX2008 (This is typically on a separate interface server and should be disabled unless making the hot spare system the active system.)
- 13. Have a user log in and verify that the system is operating as expected.
- 14. Reboot each of the Add-On Servers that the facility / site may have (there is no particular order to rebooting these servers):
 - a. Mobile Server
 - b. Montage Server
 - c. ModLink Server
- 15. **If you have a hot spare and will** *not* **be restarting it**, verify that the database mirroring is operational:
 - a. Log into the production SQL server and open SQL Server Management Studio.
 - b. Right-click Comm4 and select Tasks, then select Launch Database Mirroring Monitor.

 The Database Mirroring Monitor dialogs opens.



c. Verify that the Mirroring State of both the Principal and Mirror servers is Synchronized.

- d. The **Status** panel should display the status of the database mirroring session. It should show either **Synchronizing** or **Synchronized**.
 - **Synchronizing**: The contents of the mirror database are lagging behind the contents of the principal data-base. The principal server instance is sending log records to the mirror server instance, which is applying the changes to the mirror database to roll it forward.
 - **Synchronized**: The mirror database contains the same data as the principal database. Manual and automatic failover are possible only in the synchronized state.

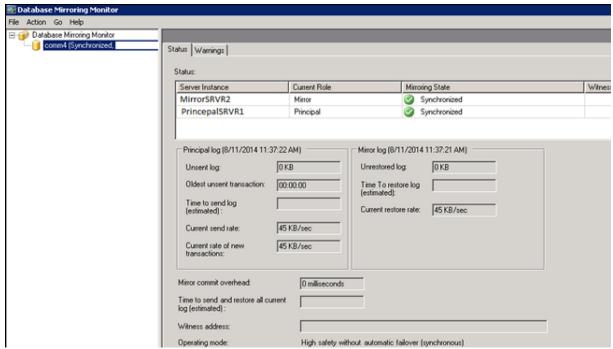
Rebooting Your Hot Spare (If You Have a Hot Spare)

- 1. Reboot the production system as indicated above.
- 2. Once the production system is back up and operating, follow the same process for the hot spare solution.
- 3. Select **Start > Settings > Control Panel > Administrative Tools > Services** (the path may differ slightly, depending on the operating system) and verify that the following services are running on each of the Hot Spare servers:
 - On the Application/SQL Server:
 - SQL Server
 - SQL Server Agent
 - World Wide Web
 - Nuance RadBridge
 - On the SUS Server:
 - All services should be disabled and stopped
 - On the Interface Server:
 - All services should be disabled and stopped
- 4. Once the hot spare system has been rebooted, your DBA should log into the *production* SQL server to verify the mirror status.

To view the status of a database mirroring session:

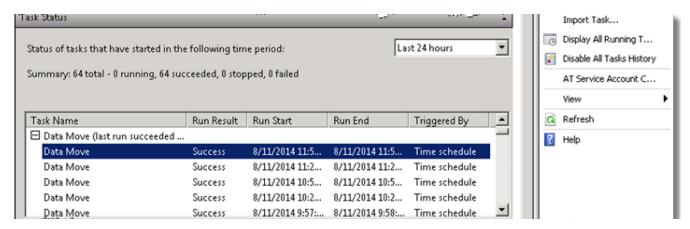
- a. Log into the SQL management Studio (on the production SQL Server).
- b. After connecting to the principal server instance, in Object Explorer, click the server name to expand the server tree.
- c. Expand Databases, and select the COMM4 database.

d. Right-click the database, select **Tasks**, and then click **Mirror**. This opens the **Mirroring Monitor** page of the Database Properties dialog box.



- e. The **Status** panel should display the status of the database mirroring session. It should show either **Synchronizing** or **Synchronized**.
- Synchronizing: The contents of the mirror database are lagging behind the contents of the
 principal data-base. The principal server instance is sending log records to the mirror server
 instance, which is applying the changes to the mirror database to roll it forward.
- Synchronized: The mirror database contains the same data as the principal database. Manual
 and automatic failover are possible only in the synchronized state.

- 5. Check the Robocopy job:
 - a. Click Control Panel > Administrative Tools > Task Scheduler.
 - b. Verify that the **Data Move** task exists, that the task status is **Enabled**, and that the task has been running successfully.



Customer Support

Microphone Replacement

For microphone/foot pedal replacement, call 800-339-7683. You must have your microphone serial number and customer account number on hand when you call.

iSupport Documentation and Assistance

iSupport is an Internet-based support site where you can search Nuance's dynamic knowledge base for answers to your questions, access the library of operational manuals and quick reference guides, view the latest product enhancements and fixes, and submit online requests for service.

In order to use the full feature of iSupport and/or contact Technical Support, you must be a registered iSupport User. Complete instructions for registering can be found by going to the following link:

Getting Started with iSupport in the PowerScribe Family of Products

This link opens a document which provides step-by-step instructions on how to register, configure, and use iSupport. It also includes a link to access an online recorded training session which demonstrates every learning objective included in the document. You may have to paste the link in your web browser to access this document.

For help with iSupport, send an email to <u>isupport.admin@nuance.com</u>.



Note: You must be a registered iSupport User to access the iSupport Knowledge Base Solution and documentation references in this manual.

eTIPS

Nuance also has Customer Support in the form of eTIPS Newsletters. Click the link below to access eTIPS registration and sign up for Newsletters:

Register for eTIPS and Sign Up for Newsletters

In addition, refer to solution #14415 in iSupport to search for and view archived eTIPS.

Nuance Healthcare Technical Support

A dedicated Nuance Healthcare Technical Support team, available 24x7x365, services our *PowerScribe 360 Reporting* customers who have an active maintenance contract with Nuance.

Our team can offer assistance via remote on-line connectivity to your systems, and it is available toll-free 800 833-7776 via our *Say Anything* menu. At the prompt, say: "PowerScribe 360 Reporting Support."

Or, you can access the Nuance Healthcare Support Center through our iSupport, Internet-based website at https://isupport.nuance.com. If you are not an iSupport subscriber, click **iSupport Timesaver** for information about how you can get started.

Nuance Depot Repair Service

<u>Click here</u> for a Web Form to submit a Depot Repair Service Request for a Connexions Station (C-phone), Optic Mic, PowerMic, Philips Speech Mic, tape-based recording device, digital recorder, and so on. iSupport members can save time by logging in to iSupport (https://isupport.nuance.com) and submitting a service request, choosing **Depot** as the Request Type.

