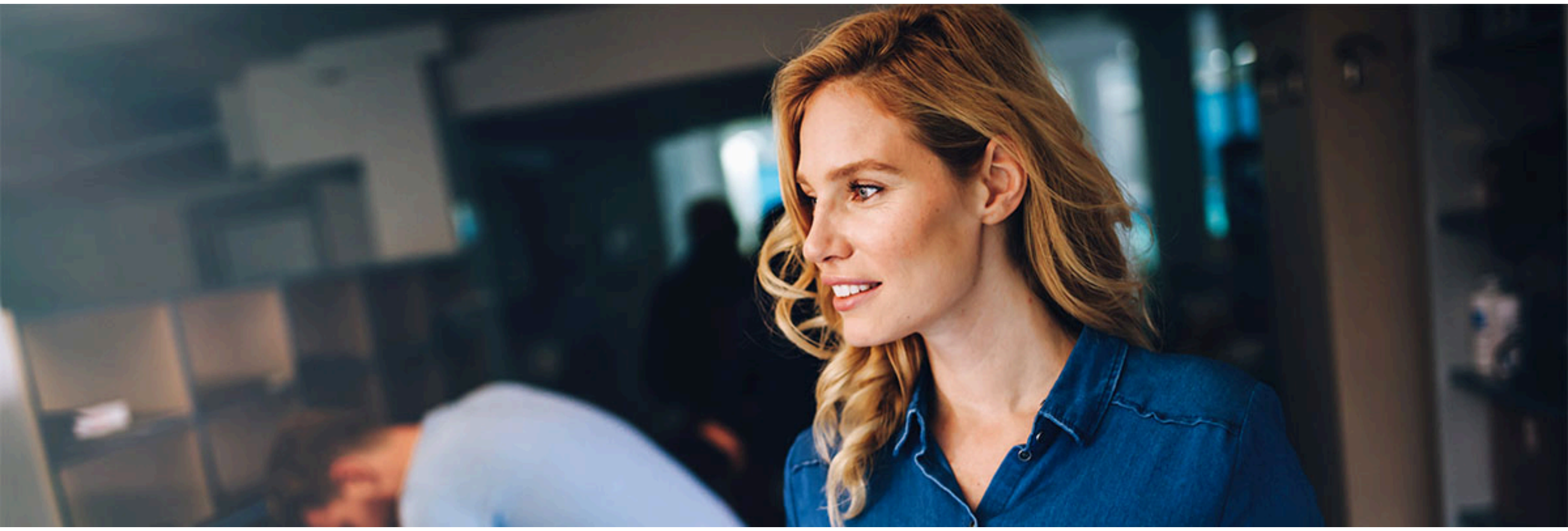


Kofax eCopy ShareScan

Troubleshooter User Guide

Version: 6.5.0

Date: 2021-11-30

Table of Contents

Preface

The Kofax eCopy ShareScan software extends the capabilities of digital copiers and scanners. When installing and setting up a ShareScan system, you must be familiar with the scanning device that you will use with ShareScan, the ShareScan software components, and the basic installation and configuration workflow.

This guide is intended for administrators responsible for the initial installation, configuration, and licensing of eCopy ShareScan. For the device-specific Pre-Installation Checklist (PICL), see the applicable vendor-specific Pre-Installation Checklist and Sizing Guide. For information pertaining to the ShareScan pre-installation, see this guide. For configuration and Administration Console usage, see the Administration Console Help (accessible via pressing F1 on the Administration Console).

This document is written under the assumption that readers are familiar with working within a server-client architecture and environment.

Training

Kofax offers both classroom and computer-based training to help you make the most of your eCopy ShareScan solution. Visit the Kofax website at www.kofax.com for details about the available training options and schedules.

Getting help with Kofax products

The Kofax Knowledge Base repository contains articles that are updated on a regular basis to keep you informed about Kofax products. We encourage you to use the Knowledge Base to obtain answers to your product questions.

To access the Kofax Knowledge Base, go to the Kofax website and select Support on the home page.

> ℹ The Kofax Knowledge Base is optimized for use with Google Chrome, Mozilla Firefox or Microsoft Edge.

The Kofax Knowledge Base provides:

- Powerful search capabilities to help you quickly locate the information you need.

  Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.

  Scroll through the Kofax Knowledge Base home page to locate a product family. Then click a product family name to view a list of related articles. Please note that some product families require a valid Kofax Portal login to view related articles.

- Access to the Kofax Customer Portal (for eligible customers).

  Click the **Customer Support** link at the top of the page, and then click **Log in to the Customer Portal**.
- Access to the Kofax Partner Portal (for eligible partners).

  Click the **Partner Support** link at the top of the page, and then click **Log in to the Partner Portal**.
- Access to Kofax support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.

  Scroll to the **General Support** section, click **Support Details**, and then select the appropriate tab.

Chapter 1

About the ShareScan Troubleshooter

The ShareScan Troubleshooter is an integrated application of ShareScan, which allows you to pinpoint potential and existing issues you may encounter when using ShareScan.

The information provided by the tool is useful when consulting Technical Support if you encounter an issue that you cannot solve based on the information received from the tool.

> ℹ When using a remote SQL server with Windows database authentication, the Windows user who runs the Troubleshooter (typically the currently logged in user) must be:
>
> - The same as the user who runs the ShareScan Agent Windows service or
> - Added to SQL server's users, the User Mapping has to be set to the ShareScan database, and the user’s Database role membership has to be set to db_owner. The user cannot be member of the sysadmin role.

Prerequisites

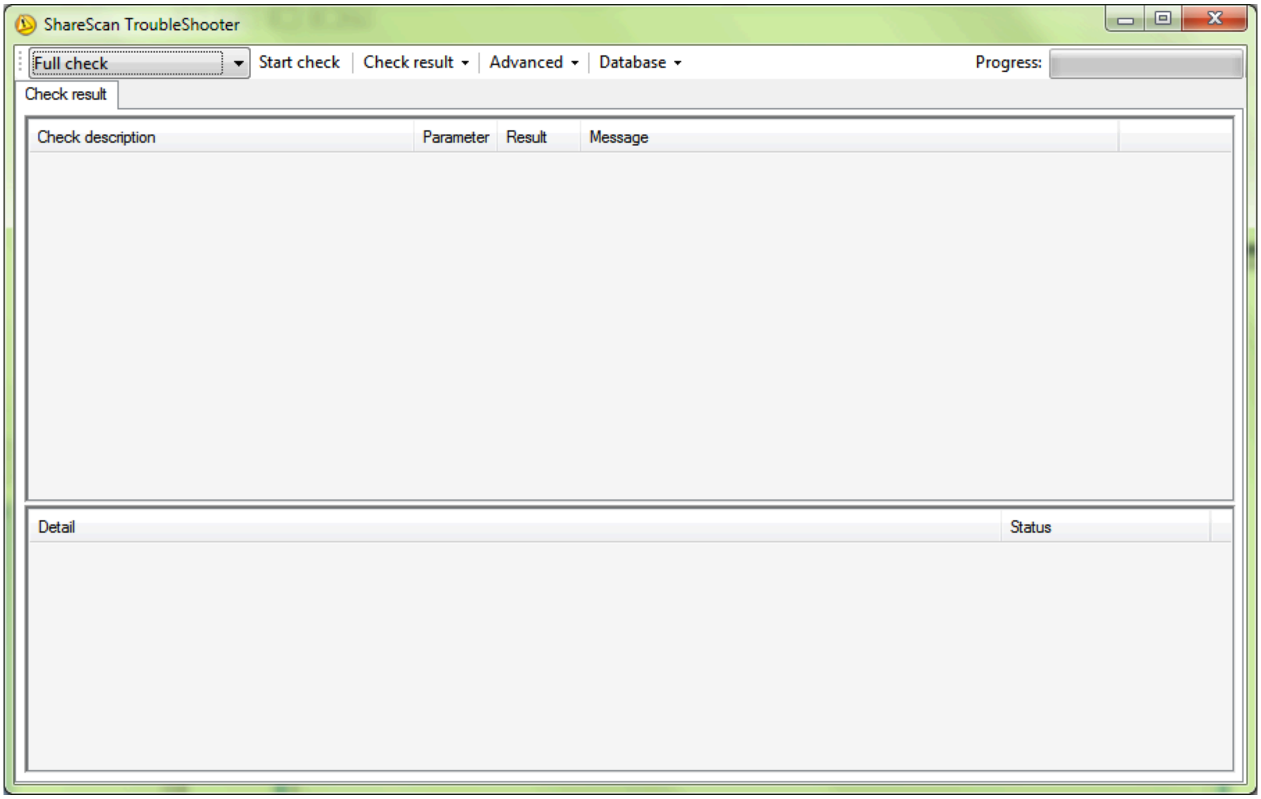
ShareScan Troubleshooter requires .NET Framework 4.8 to function properly.

Start the tool

The ShareScan Troubleshooter is located in the Tools subfolder of your ShareScan installation folder: `c:\%programfiles%\Kofax\ShareScan6.5\Server\Tools\`.

To launch the Troubleshooter:

- Start `ShareScanTroubleshooter.exe`, or
- From the Windows start menu, go to **All Programs** > **eCopy Applications** > **ShareScan 6.5** > **ShareScan Troubleshooter** .



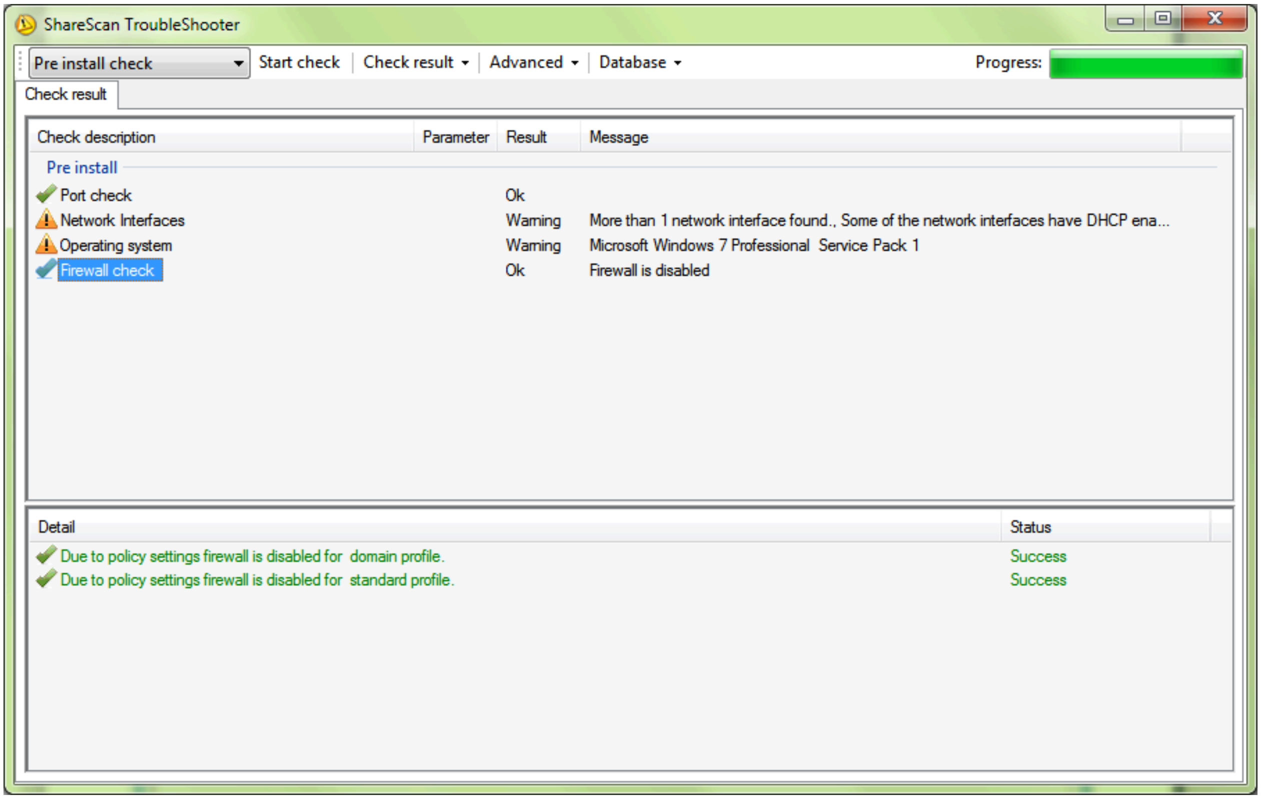
You can use the menu to select between **Preinstall**, **Full**, or **Device** checks, you can **Save** or **Load** your check results in .xml format, and you can perform a number of advanced tests.

ⓘ When reporting issues, attaching a saved check result can be a valuable asset for Technical Support.

Chapter 2

Pre-installation check

Running a pre-installation check allows you to establish whether your system meets all the prerequisites for running ShareScan. To run this check, select the **Pre install check** option from the menu and click **Start check**:



Check description	Parameter	Result	Message
Pre install			
✓ Port check		Ok	
⚠ Network Interfaces		Warning	More than 1 network interface found., Some of the network interfaces have DHCP ena...
⚠ Operating system		Warning	Microsoft Windows 7 Professional Service Pack 1
✓ Firewall check		Ok	Firewall is disabled

Detail	Status
✓ Due to policy settings firewall is disabled for domain profile.	Success
✓ Due to policy settings firewall is disabled for standard profile.	Success

The tool checks the following:

- Ports used by ShareScan (for a comprehensive list of used ports, see the *ShareScan Installation Guide*)
- Network interfaces (status and DHCP enablement)
- Operation system (for a list of supported operating systems, see the *ShareScan Installation Guide*)

> ⓘ Windows 10 limits the maximum number of concurrent connections to 20. Windows Server does not have this limitation.

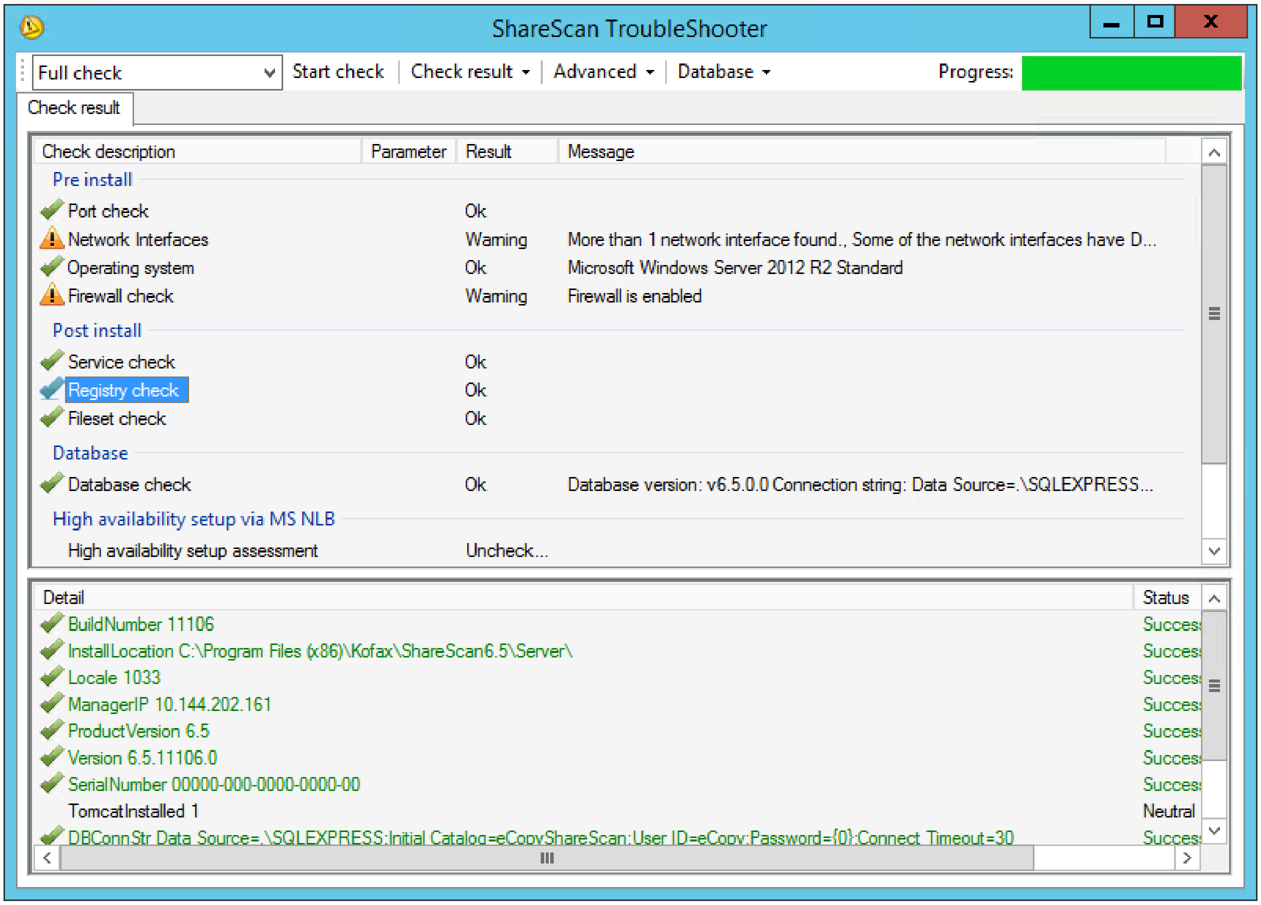
- Firewall (whether it is turned on or ShareScan is added to the firewall exceptions)

Clicking on the desciption names provides more details on the **Detail** pane at the bottom of the screen.

Chapter 3

Full check

A full check includes checking the preinstallation options, as well as installation, runtime, and database checks. To run this check, select the **Full check** option from the menu and click **Start check**:



Check description	Parameter	Result	Message
Pre install			
✓ Port check		Ok	
⚠ Network Interfaces		Warning	More than 1 network interface found., Some of the network interfaces have D...
✓ Operating system		Ok	Microsoft Windows Server 2012 R2 Standard
⚠ Firewall check		Warning	Firewall is enabled
Post install			
✓ Service check		Ok	
✓ Registry check		Ok	
✓ Fileset check		Ok	
Database			
✓ Database check		Ok	Database version: v6.5.0.0 Connection string: Data Source=.\SQLEXPRESS...
High availability setup via MS NLB			
High availability setup assessment		Uncheck...	

Detail	Status
✓ BuildNumber 11106	Succes
✓ InstallLocation C:\Program Files (x86)\Kofax\ShareScan6.5\Server\	Succes
✓ Locale 1033	Succes
✓ ManagerIP 10.144.202.161	Succes
✓ ProductVersion 6.5	Succes
✓ Version 6.5.11106.0	Succes
✓ SerialNumber 00000-000-0000-0000-00	Succes
TomcatInstalled 1	Neutral
✓ DBConnStr Data Source=.\SQLEXPRESS;Initial Catalog=eCopyShareScan;User ID=eCopy;Password={0};Connect Timeout=30	Succes

The tool checks the following:

- Preinstall options (same as the preinstall check).
- Status and location of the installation log files.
- Status and availability of the ShareScan services.
- Status and availability of the registry entries.
- Status and availability of the ShareScan fileset, including full version information.

- Database version and trustworthiness (for a list of supported databases, see the *ShareScan Installation Guide*).
- Status of "Desktop Experience" OS feature (when ScanStation is installed).

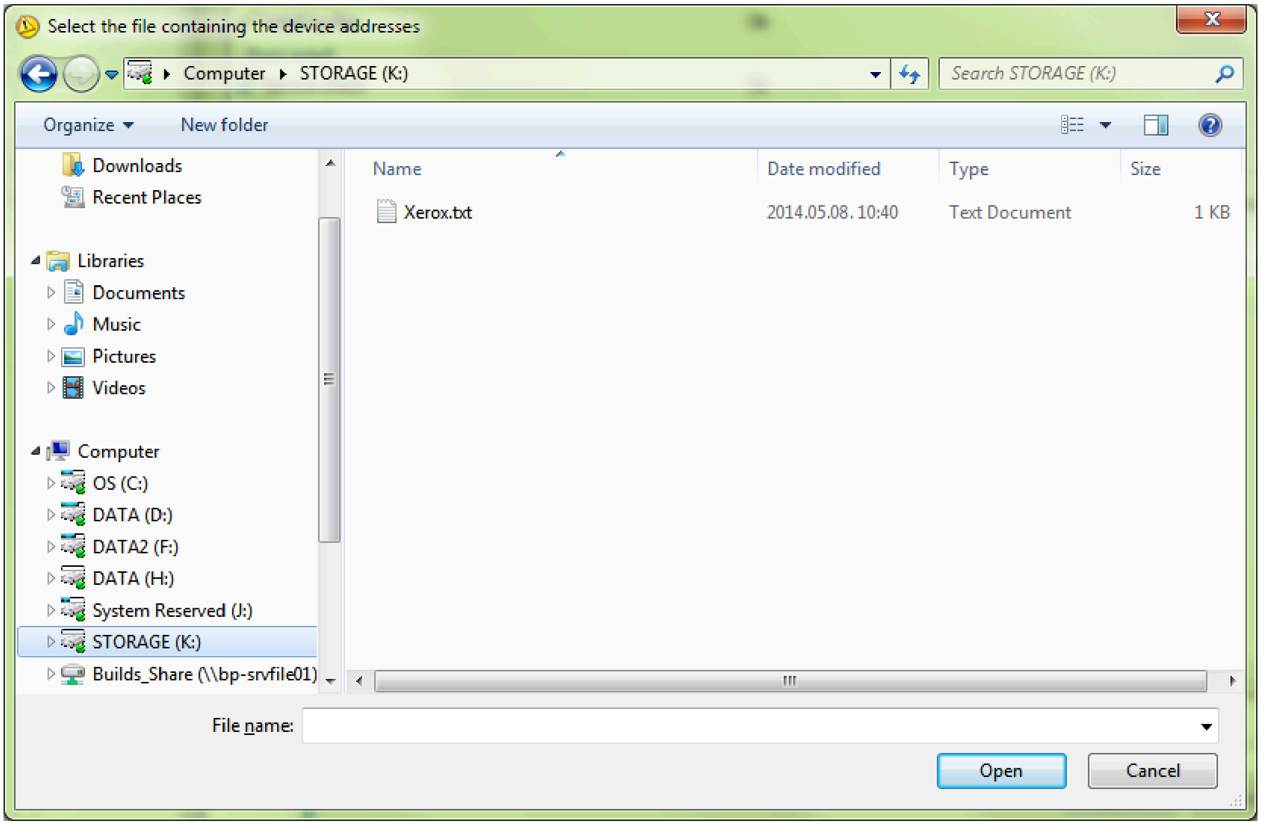
Clicking on the desciption names provides more details on the **Detail** pane at the bottom of the screen.

Chapter 4

Device check

ⓘ Currently available for Xerox devices only.

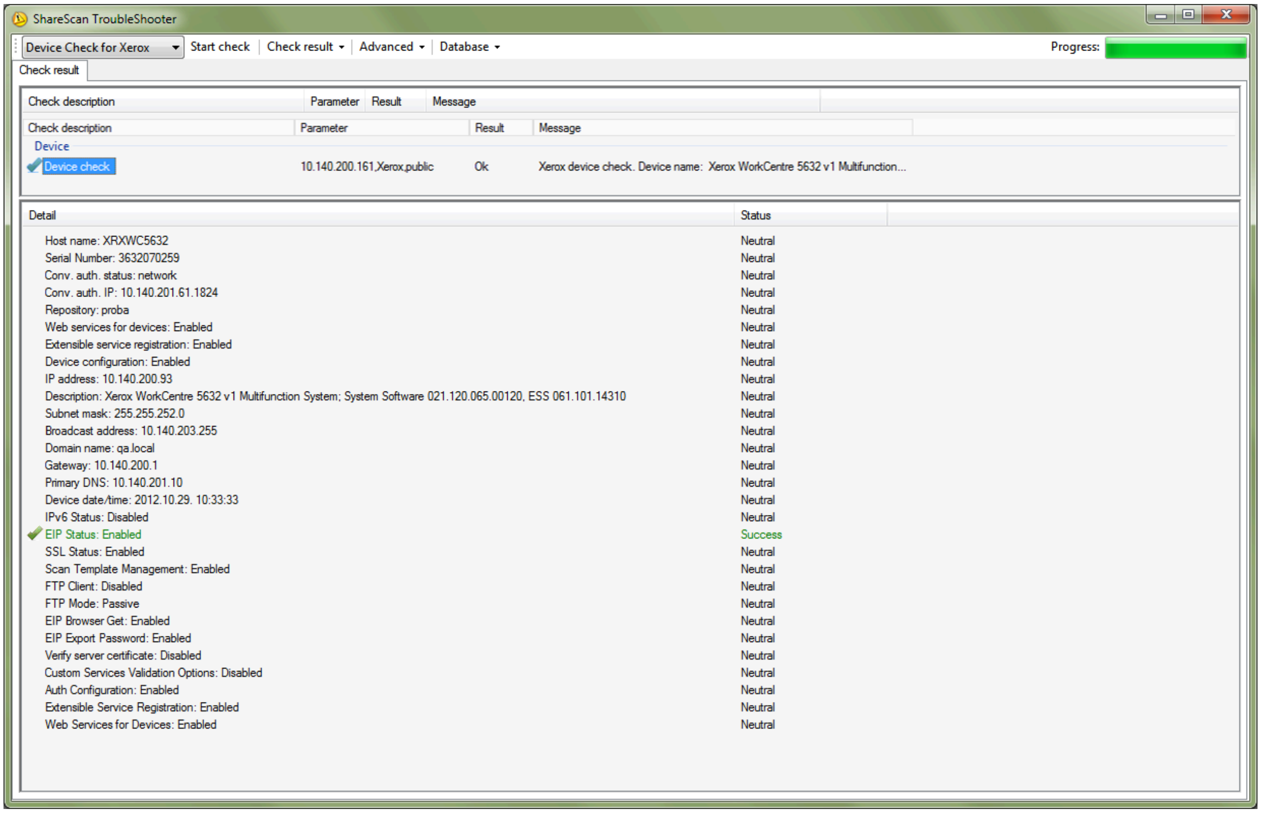
The Device check allows you to test and confirm whether a Xerox device used by ShareScan meets the requirements for establishing communication. To run such a check, select the **Device Check for Xerox** option from the dropdown menu and click **Start check**. This test is especially useful to spot and help correct any device connection issues. The following screen is displayed:



Select the file containing the device addresses

Name	Date modified	Type	Size
Xerox.txt	2014.05.08. 10:40	Text Document	1 KB

Browse to a `.txt` file containing the device addresses. The file should list each device to be tested in a separate line, in **<IP address>**, **<vendor name>**, **<SNMP community name>** format. After you open a file, the Troubleshooter runs the check; the time required depends on the number of devices. When the check is finished, the following screen is displayed:



Check description	Parameter	Result	Message
Device			
✓ Device check	10.140.200.161,Xerox,public	Ok	Xerox device check. Device name: Xerox WorkCentre 5632 v1 Multifunction...

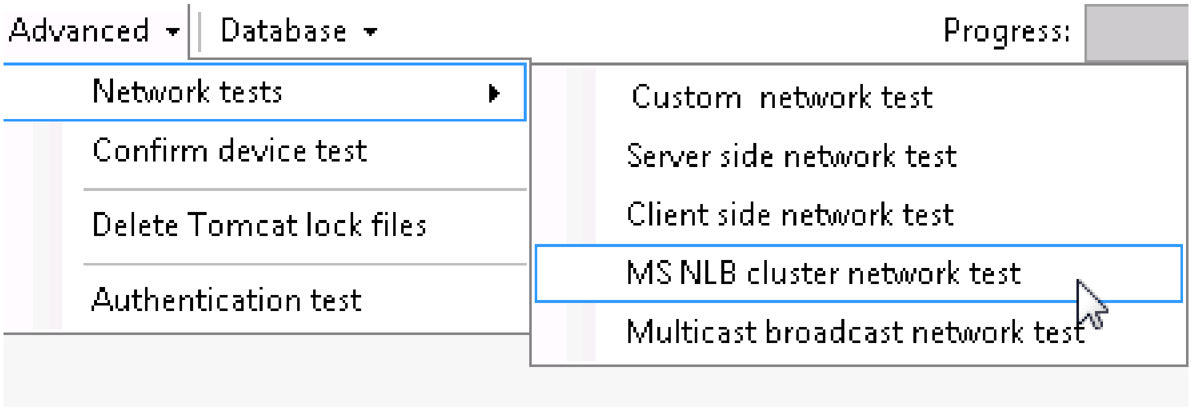
Detail	Status
Host name: XRXWC5632	Neutral
Serial Number: 3632070259	Neutral
Conv. auth. status: network	Neutral
Conv. auth. IP: 10.140.201.61.1824	Neutral
Repository: proba	Neutral
Web services for devices: Enabled	Neutral
Extensible service registration: Enabled	Neutral
Device configuration: Enabled	Neutral
IP address: 10.140.200.93	Neutral
Description: Xerox WorkCentre 5632 v1 Multifunction System; System Software 021.120.065.00120, ESS 061.101.14310	Neutral
Subnet mask: 255.255.252.0	Neutral
Broadcast address: 10.140.203.255	Neutral
Domain name: qa.local	Neutral
Gateway: 10.140.200.1	Neutral
Primary DNS: 10.140.201.10	Neutral
Device date/time: 2012.10.29. 10:33:33	Neutral
IPv6 Status: Disabled	Neutral
✓ EIP Status: Enabled	Success
SSL Status: Enabled	Neutral
Scan Template Management: Enabled	Neutral
FTP Client: Disabled	Neutral
FTP Mode: Passive	Neutral
EIP Browser Get: Enabled	Neutral
EIP Export Password: Enabled	Neutral
Verify server certificate: Disabled	Neutral
Custom Services Validation Options: Disabled	Neutral
Auth Configuration: Enabled	Neutral
Extensible Service Registration: Enabled	Neutral
Web Services for Devices: Enabled	Neutral

Information important for ShareScan is color-coded in the report.

Chapter 5

Advanced options

The advanced options of the ShareScan Troubleshooter are available under the **Advanced** menu. The Network test options are arranged under the Network tests category.



Network tests

As ShareScan is a client-server application, and the client (MFP) and the server (Manager) can be connected via a complicated network infrastructure, sometimes it is very hard to troubleshoot why the client and the Manager are unable to work together.

Use the ShareScan Troubleshooter tool to diagnose such issues.

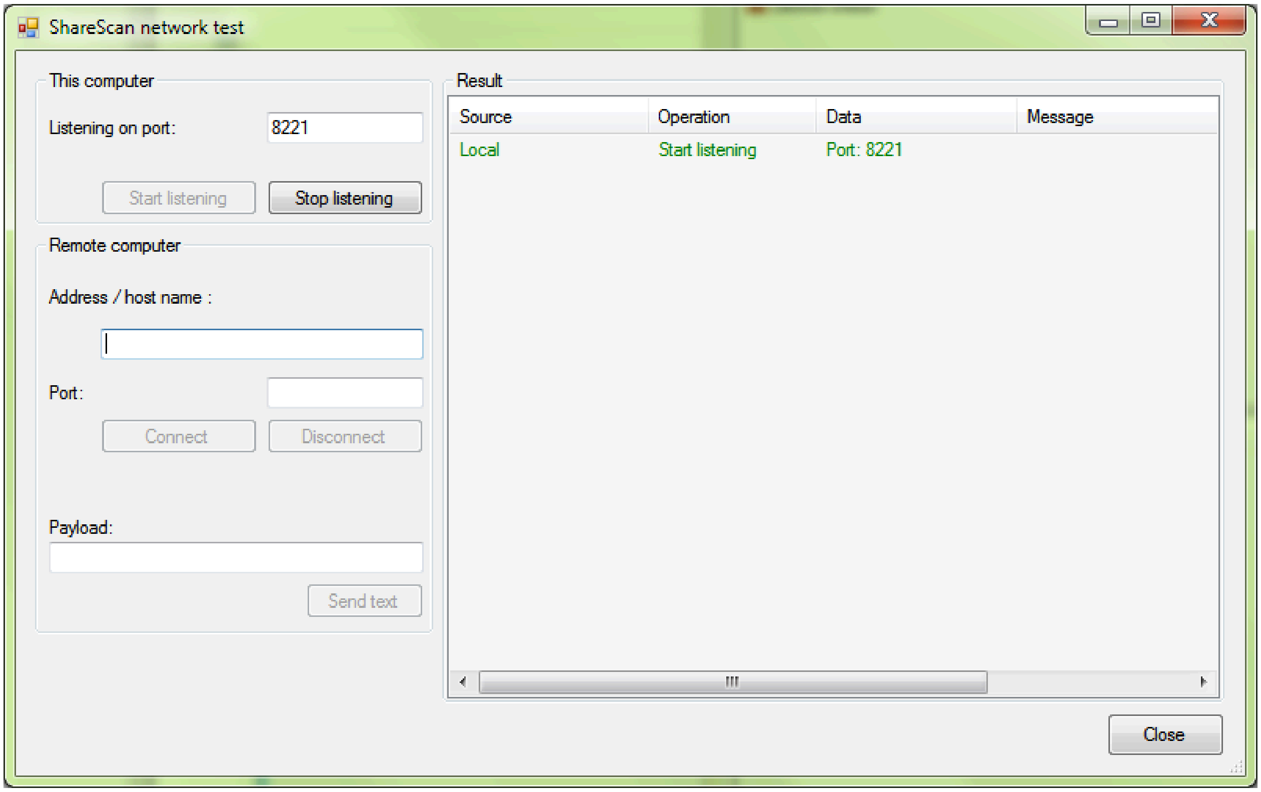
The workflow of a typical network test is as follows:

1. Start the Troubleshooter on the Manager computer.
2. Click the **Advanced** menu, and select **Network tests** > **Server side network test** .
3. Connect the Manager computer to the same subnet the MFP to be tested is connecting.
4. Stop any ShareScan services running on the client computer.
5. Start the Troubleshooter.
6. Click the **Advanced** menu and select **Network tests** > **Client side network test** .
7. On the server, enter the host name (or IP) of the computer simulating the client into the Client address / hostname and some text into the **Payload** field.
8. On the computer simulating the client, enter the hostname or IP of the Manager computer, and some text into the **Payload** field.

9. Click **Connect** on both dialogs.
10. If the network connection is possible, then the **Send text** button is available; click on it to transfer the given payload test to the other end. In there is a connection problem, an error message is displayed.

Custom Network Test

Using this option, you can test the network connection between the current machine and a remote computer. Selecting **Network tests > Custom network test** item in the **Advanced** menu displays the following screen:



Listening on port: 8221

Source	Operation	Data	Message
Local	Start listening	Port: 8221	

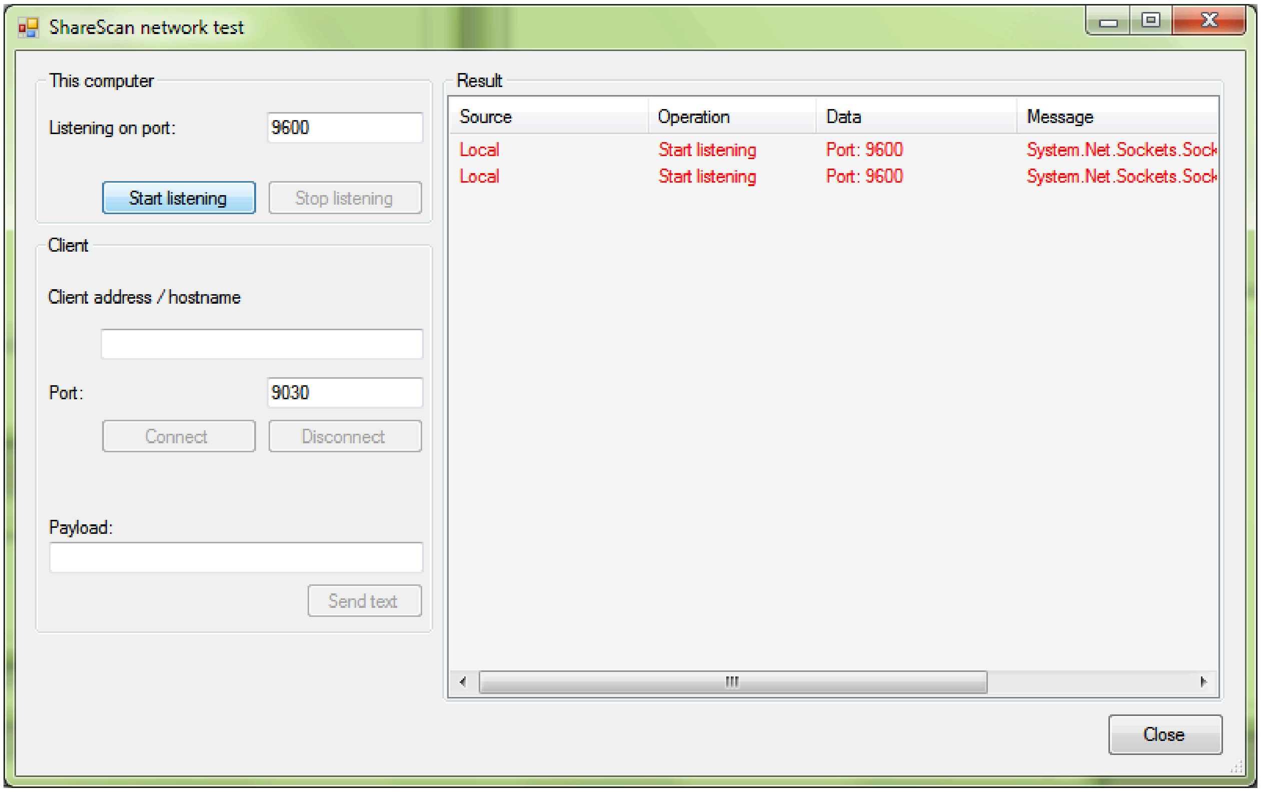
The **This computer** pane allows you to set the port number for listening, as well as **Start** and **Stop** listening.

The **Remote computer** pane allows you to set the data for the remote computer and enter a payload text to be used in the test.

Click **Close** to return to the Troubleshooter.

Server-side Network Test

Using this option, you can test the network connection from the server > client direction. Selecting **Network tests > Server side network test** item in the **Advanced** menu displays the following screen:



Listening on port: 9600

Client address / hostname:

Port: 9030

Payload:

Source	Operation	Data	Message
Local	Start listening	Port: 9600	System.Net.Sockets.Sock
Local	Start listening	Port: 9600	System.Net.Sockets.Sock

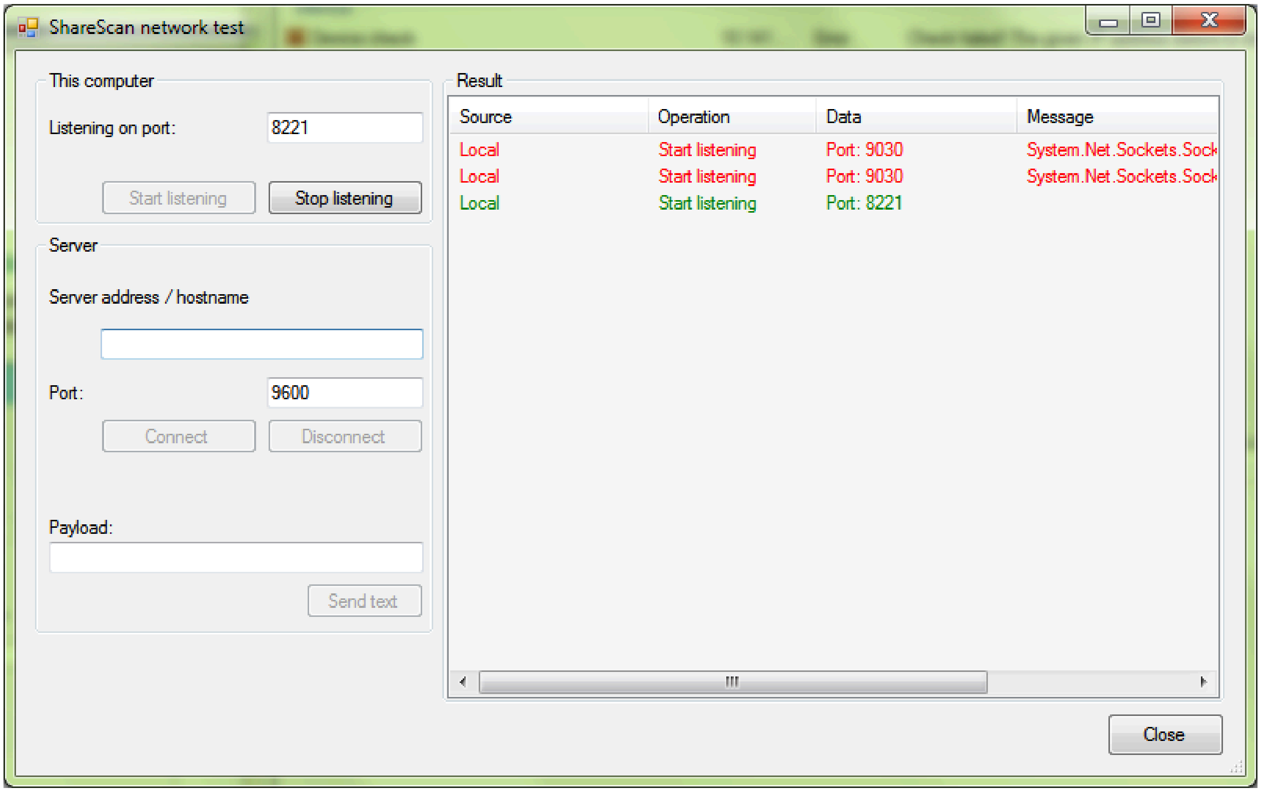
The **This computer** pane allows you to set the port number for listening, as well as **Start** and **Stop** listening.

The **Client** pane allows you to set the client-side data and enter a payload text which will be used in the test.

Click **Close** to return to the Troubleshooter.

Client-side Network Test

Using this option, you can test the network connection from the client > server direction. Selecting **Network tests > Client side network test** item in the Advanced menu displays the following screen:



Listening on port: 8221

Port: 9600

Source	Operation	Data	Message
Local	Start listening	Port: 9030	System.Net.Sockets.Sock
Local	Start listening	Port: 9030	System.Net.Sockets.Sock
Local	Start listening	Port: 8221	

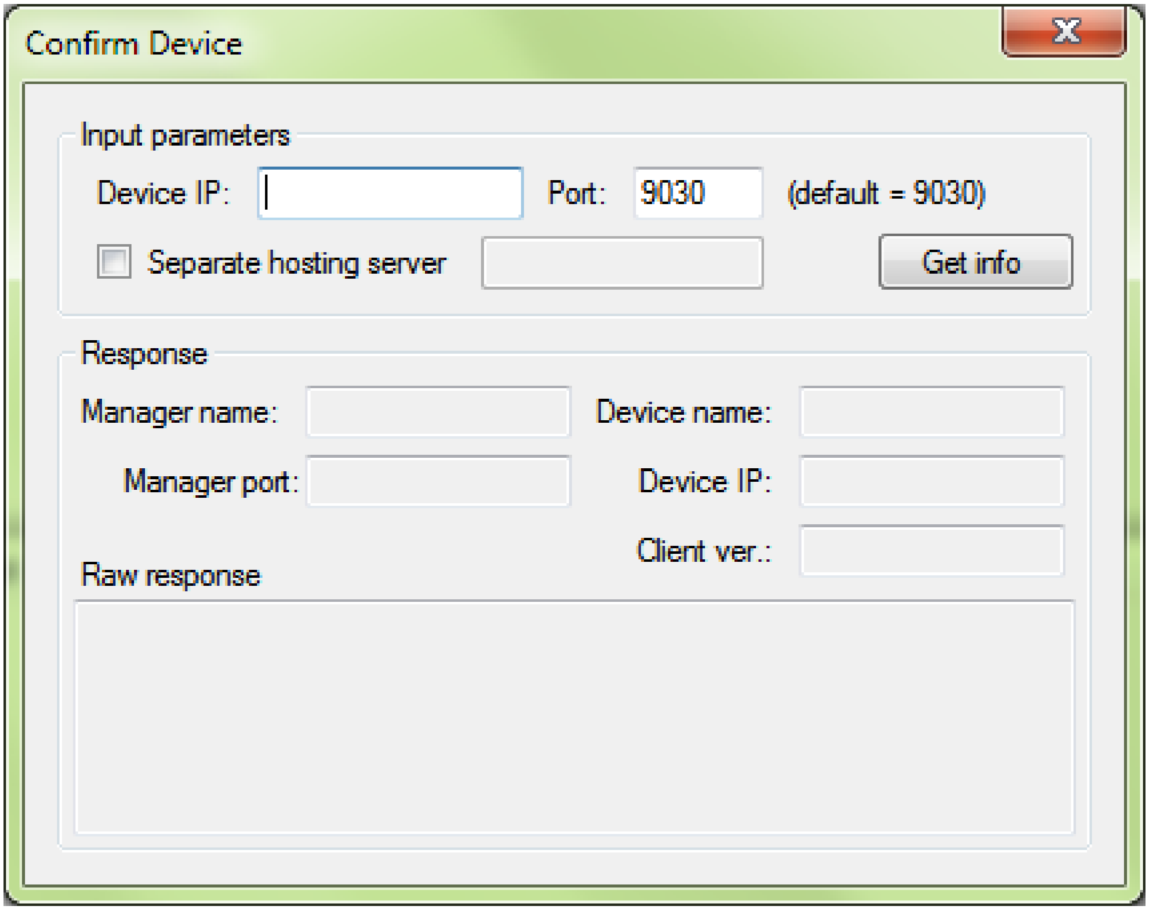
The **This computer** pane allows you to set the port number for listening, as well as **Start** and **Stop** listening.

The **Server** pane allows you to set the server-side data and enter a payload text which will be used in the test.

Click **Close** to return to the Troubleshooter.

Confirm device

You can test the connection between ShareScan and an attached device by clicking **Confirm device test** in the **Advanced** menu.



Confirm Device

Input parameters

Device IP:

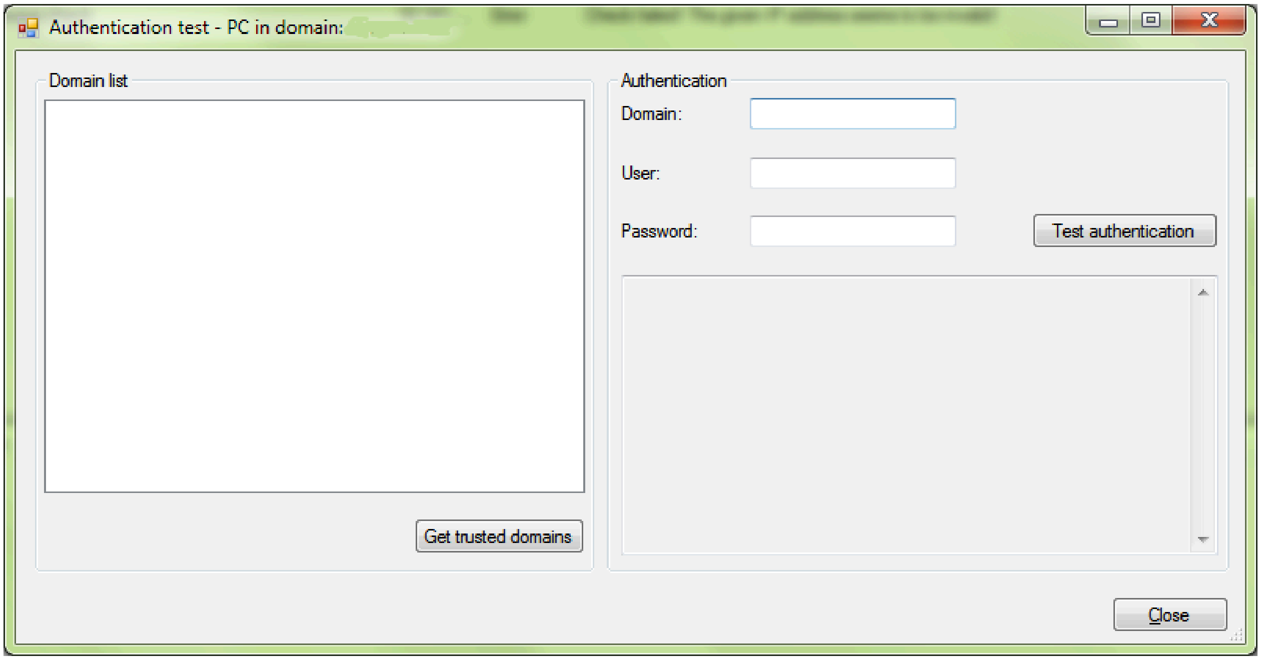
Port: 9030 (default = 9030)

□ Separate hosting server

Complete the Input parameters according to your system setup, and click **Get info**. The system fills in the **Response** fields with the acquired data. The **Raw response** window provides the unfiltered data from the test.

Authentication test

This option allows you to test whether the ShareScan user whose credentials you supply is in the domain to which the ShareScan Manager computer is added. Click **Authentication test** in the Advanced menu to display the following screen:



Select the domain you want to use from the Domain list pane. Click **Get trusted domains** to list all available trusted domains.

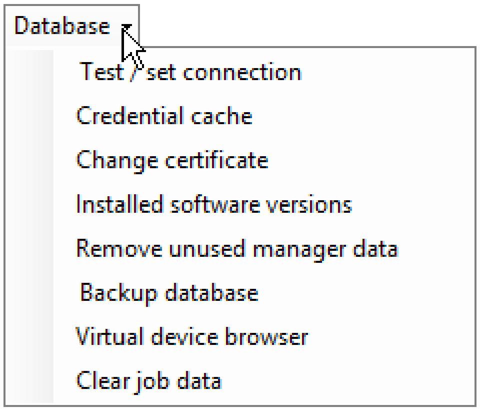
Enter the domain name and user credentials you want to test, and click **Test authentication**.

Click **Close** to return to the Troubleshooter.

Chapter 6

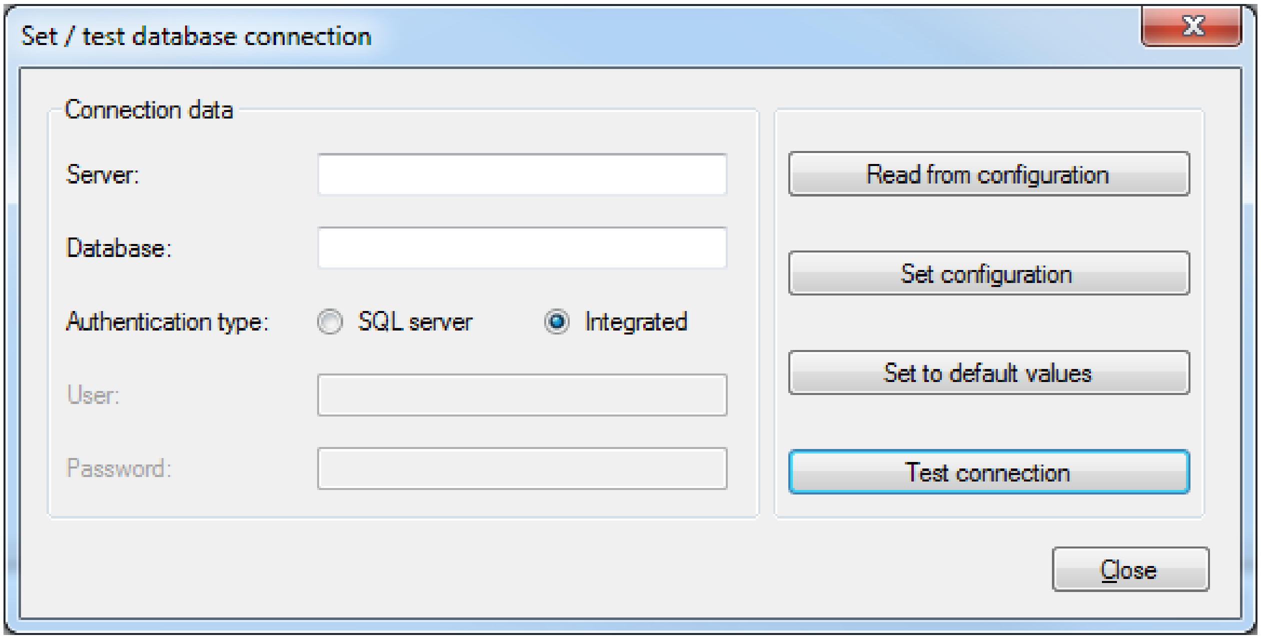
Database option

The ShareScan Troubleshooter database options (valid for the whole system) are available by clicking the **Database** menu.



Testing or setting connection

Use this option to check and optionally configure the database connection data. This test is especially useful if your database is on a remote server. Clicking the **Test / set connection** option displays the following screen:



Authentication type: ○ SQL server ● Integrated

The following options are available:

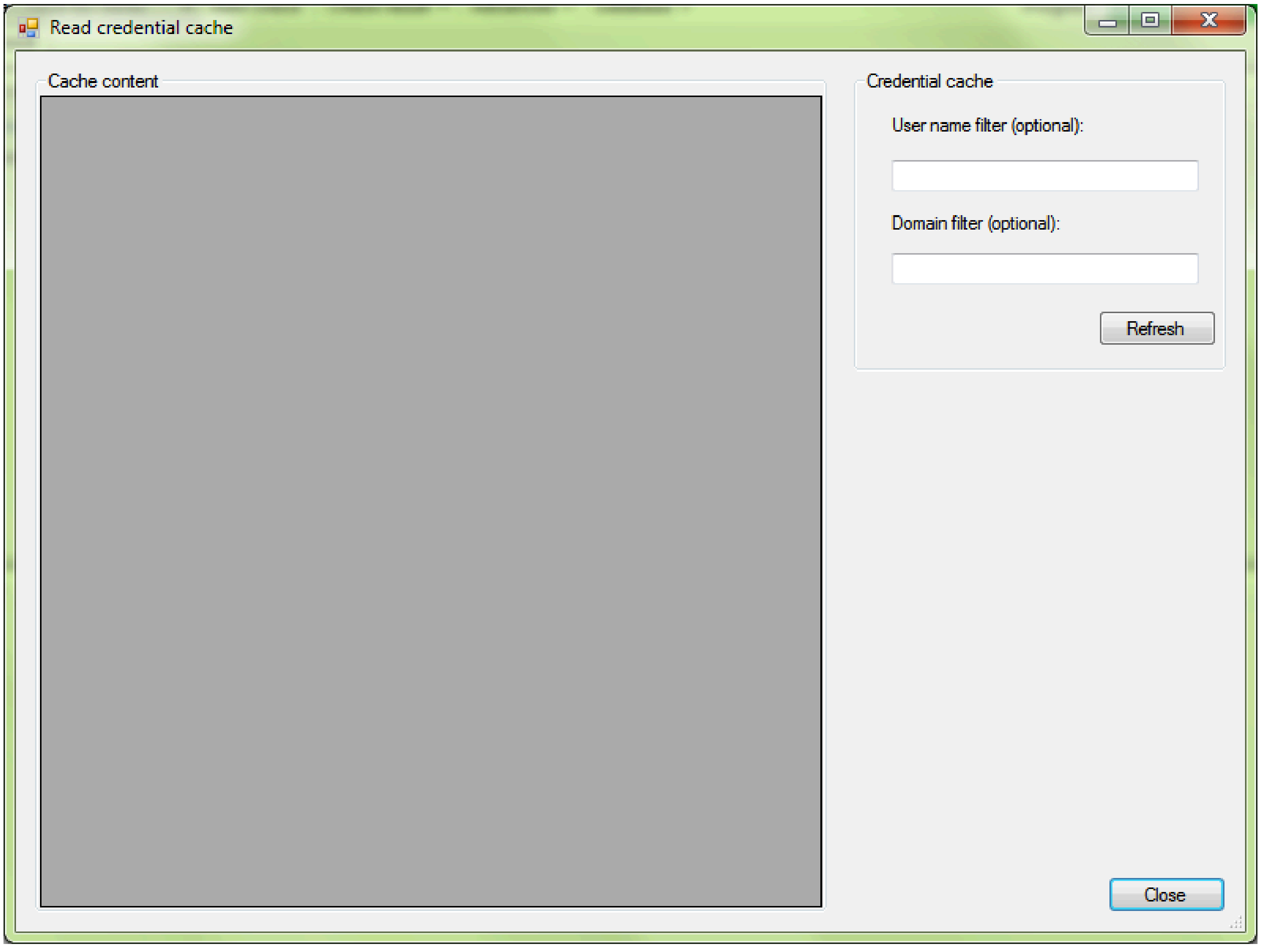
- **Read from configuration**: Populates the Connection data based on your currently installed ShareScan version.
- **Set configuration**: Allows you to enter the connection data manually.
- **Set to default values**: Allows you to discard changes and return to the defaul values.
- **Test connection**: Tests the database connection.

For the user running the Troubleshooter tool, the following rights must be granted: Database role membership: db_owner, default schema: ShareScan.

Click **Close** to return to the Troubleshooter.

Credential cache

This option is only useful if you have the Single Sign-On Extender installed, and enable the relevant Session Logon settings via the ShareScan Administration Console. Click **Credential cache** to display the following screen:

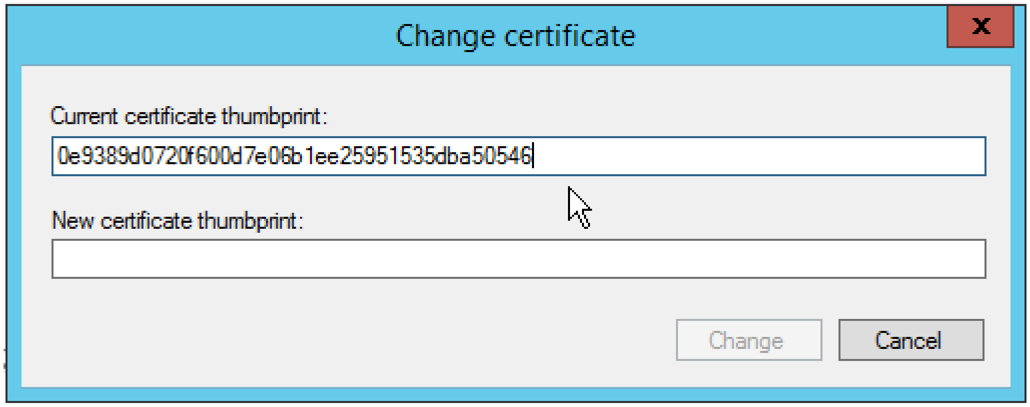


The Cache content pane displays the entries of the credential cache used by the Session Logon component of ShareScan. You can use the Credential cache pane to filter the contents if you are looking for a particular user name or domain, and you can use the Operations pane to delete the content of the credential cache.

Click **Close** to return to the Troubleshooter.

Change certificate

This option allows you to change the certificate assigned to the ShareScan Manager and re-encrypt data with the new certificate. Click **Change certificate** to display the following screen:


Change certificate

Current certificate thumbprint:

0e9389d0720f600d7e06b1ee25951535dba50546

New certificate thumbprint:

The Current certificate thumbprint shows the thumbprint of the certificate assigned currently to the ShareScan Manager.

Enter the new certificate thumbprint and click on the **Change** button to replace the certificate assigned to the ShareScan Manager and to re-encrypt the cached passwords if any.

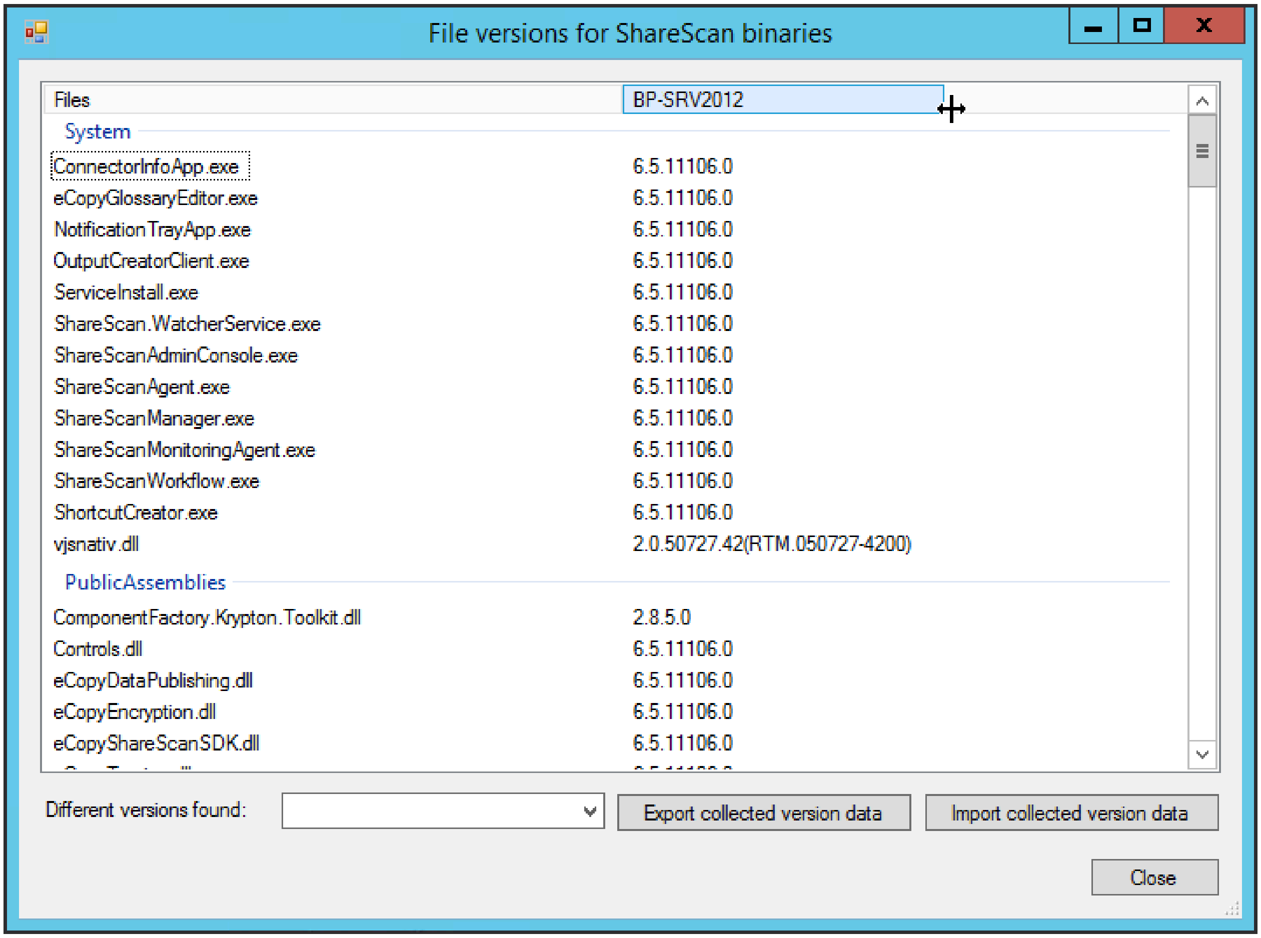
- After changing the ShareScan Manager certificate, the ShareScan Manager windows service must be restarted.
- The new certificate must be installed into the Trusted People container in the Windows Certificate store, and the user who runs the ShareScan Manager windows service must have access right to it.

  (For details, see the **Install the certificate on the ShareScan Manager computer** section of the *High Availability Deployment Guide*).
- The certificate which can be changed here differs from the one used by ShareScan web-based clients.

For successful data re-encryption when using the ShareScan database with Windows integrated authentication, run the ShareScan Troubleshooter tool with the ShareScan Agent Windows service user, or a user who is not an SQL administrator. The latter user should have the same permissions as the ShareScan Agent Windows service user on the SQL Server where the ShareScan Database resides.

Installed software versions

Use this option to check the version of the various ShareScan components installed on this computer. The compiled list can be a great asset when contacting eCopy technical support, as the list enables narrowing down any issues which are specific to component versions. Click **Installed software versions** to access the list:



File versions for ShareScan binaries

Files	BP-SRV2012
System	
ConnectorInfoApp.exe	6.5.11106.0
eCopyGlossaryEditor.exe	6.5.11106.0
NotificationTrayApp.exe	6.5.11106.0
OutputCreatorClient.exe	6.5.11106.0
ServiceInstall.exe	6.5.11106.0
ShareScan.WatcherService.exe	6.5.11106.0
ShareScanAdminConsole.exe	6.5.11106.0
ShareScanAgent.exe	6.5.11106.0
ShareScanManager.exe	6.5.11106.0
ShareScanMonitoringAgent.exe	6.5.11106.0
ShareScanWorkflow.exe	6.5.11106.0
ShortcutCreator.exe	6.5.11106.0
vjsnativ.dll	2.0.50727.42(RTM.050727-4200)
PublicAssemblies	
ComponentFactory.Krypton.Toolkit.dll	2.8.5.0
Controls.dll	6.5.11106.0
eCopyDataPublishing.dll	6.5.11106.0
eCopyEncryption.dll	6.5.11106.0
eCopyShareScanSDK.dll	6.5.11106.0

Different versions found:
Export collected version data
Import collected version data
Close

Click **Export collected version data** to save the list into an xml file.

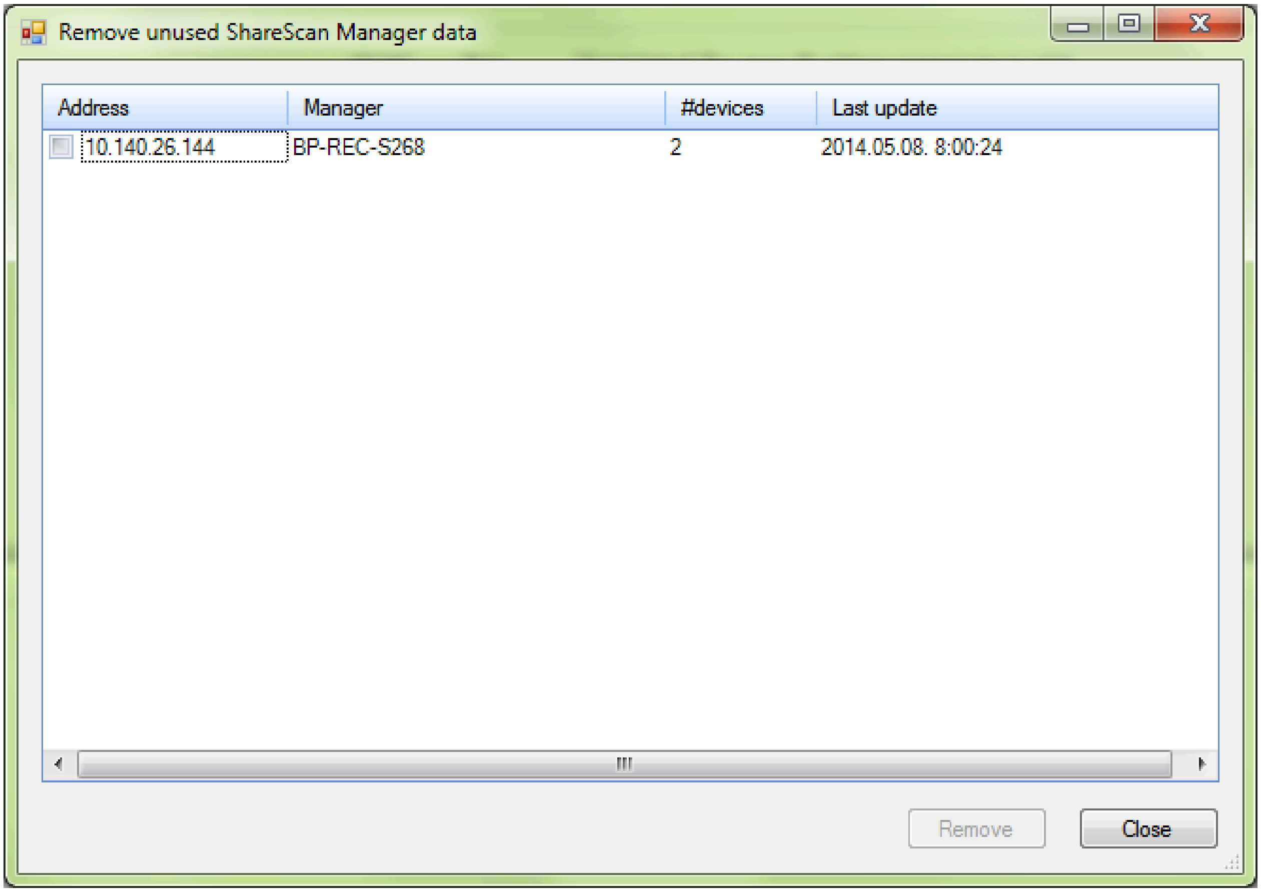
Click **Import collected version data** to import data from a previously saved xml file.

Click **Close** to return to the Troubleshooter.

The entries listed on the screenshot are only examples.

Remove unused ShareScan Manager data

This option allows you to remove superfluous data (obsolete logs and trace files, temporary process data, and so forth) from the selected ShareScan Managers. Click **Remove unused manager data** to display the removal screen:



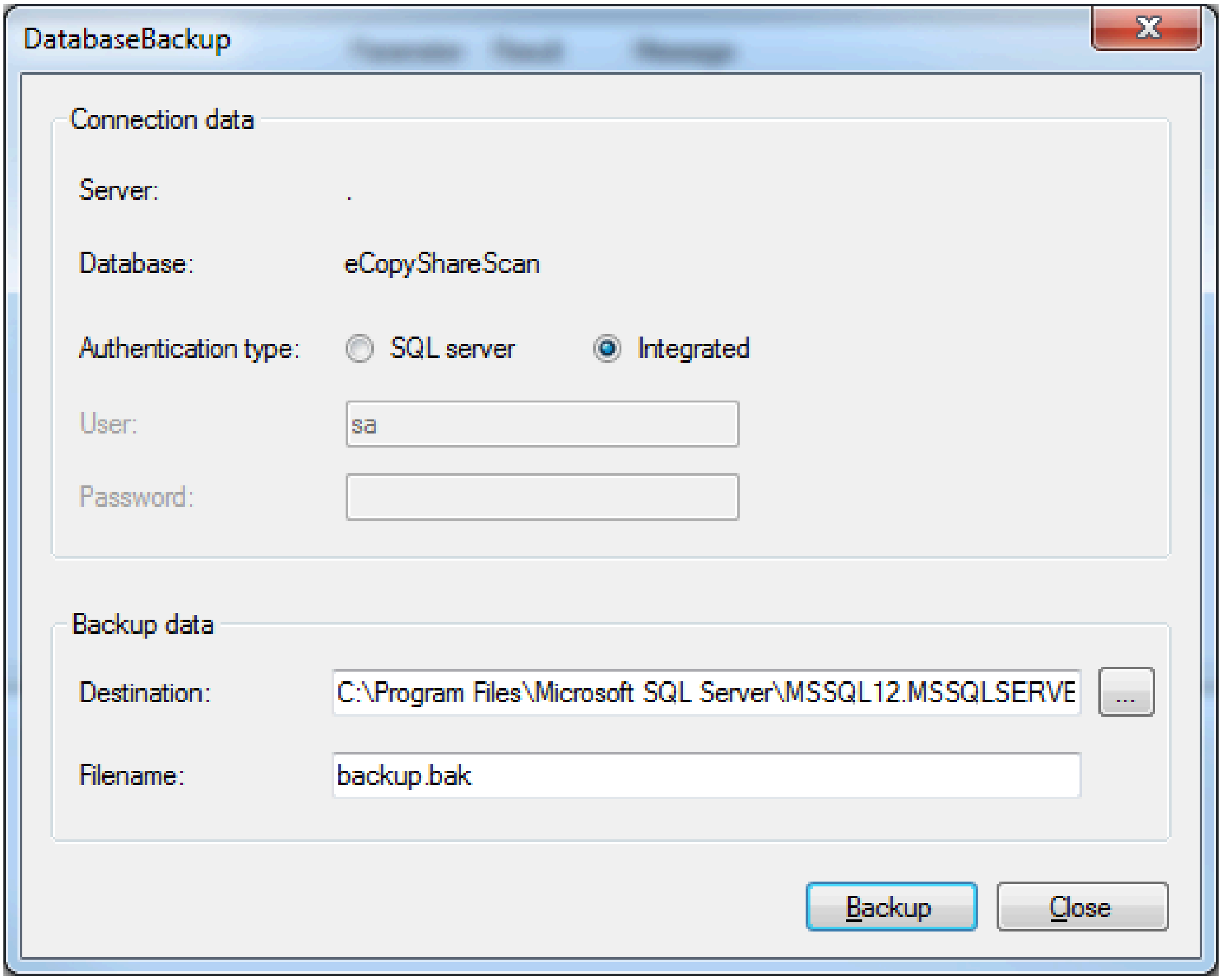
Address	Manager	#devices	Last update
□ 10.140.26.144	BP-REC-S268	2	2014.05.08. 8:00:24

Mark the check box in front of the Manager whose data you want to remove, and click **Remove**.

Click **Close** to return to the Troubleshooter.

Backup database

This option allows you to remove superfluous data (obsolete logs and trace files, temporary process data, and so forth) from the selected ShareScan Managers. Click **Remove unused manager data** to display the removal screen.



Server: .

Database: eCopyShareScan

Authentication type: ○ SQL server ● Integrated

User: sa

Password:

Destination: C:\Program Files\Microsoft SQL Server\MSSQL12.MSSQLSERVE

Filename: backup.bak

The Connection data pane lists the credentials of the connected ShareScan database.

The Backup data pane allows you to select a Destination and a Filename for the backup data.

Click **Backup** to start the database backup process.

Click **Close** to return to the Troubleshooter.

When you perform a backup / restore in the Administration Console, all system configuration data is backed up and restored.

This includes the Tomcat configuration files: most importantly, the Tomcat web server certificate file, important whenever HTTPS connection is used for web-based devices.

If you perform the backup from the Troubleshooter tool (or via the command line scripts provided), the Tomcat web server certificate file is not stored with the backup. This is not a limitation if you do not have the ShareScan web client installed or if the Tomcat certificate file is not changed (regenerated or changed otherwise) since installation.

For successful database backup, db_owner, db_creator and db_backupoperator role memberships must be granted to the user running the Troubleshooter tool.

Chapter 7

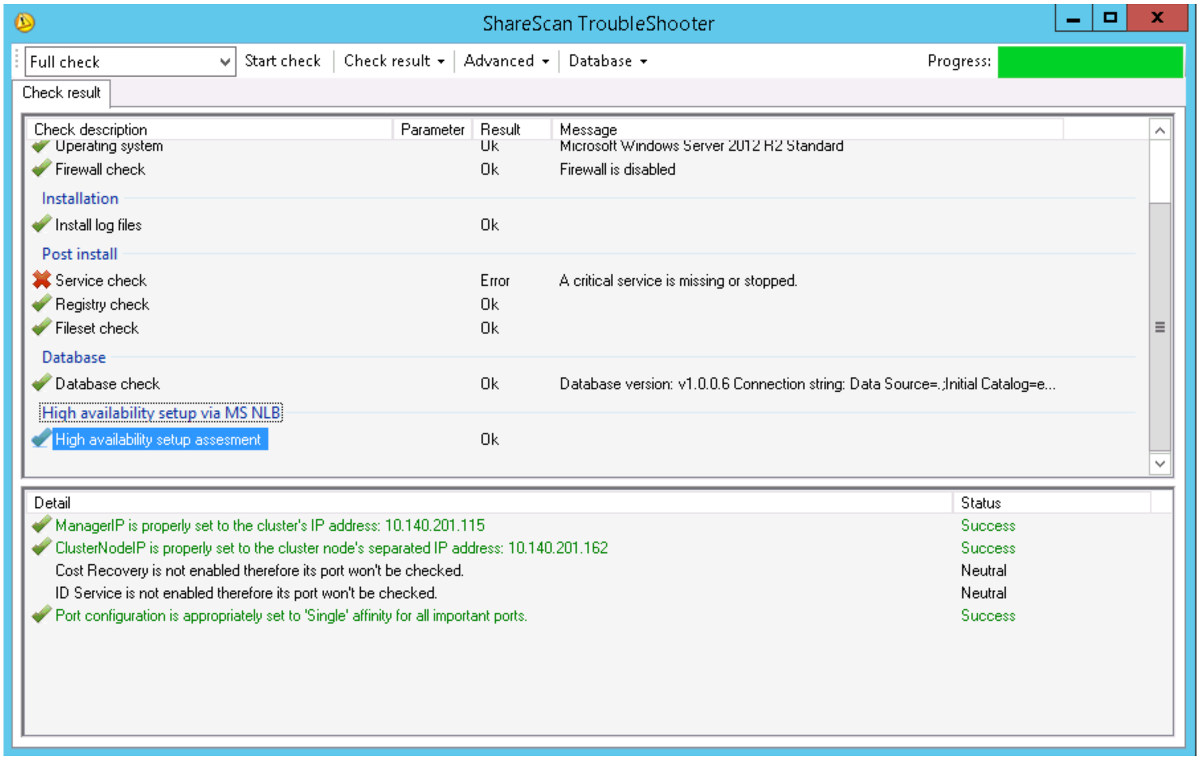
Verify and troubleshoot the high availability setups

The ShareScan Troubleshooter has the following new options to help to verify and troubleshoot the high availability setups built on the Microsoft Network Load Balancing infrastructure.

Before testing, make sure the MS NLB and the ShareScan registry settings are set properly, in accordance with the *High Availability and Load Balancing Deployment Guide*.

1. The **Full Check** option (started by the **Start check** button) on the menu bar performs a check to determine if the MS NLB based cluster is configured.

   The checker adds a last section to the report, with a section named **High Availability setup via MS NLB**.

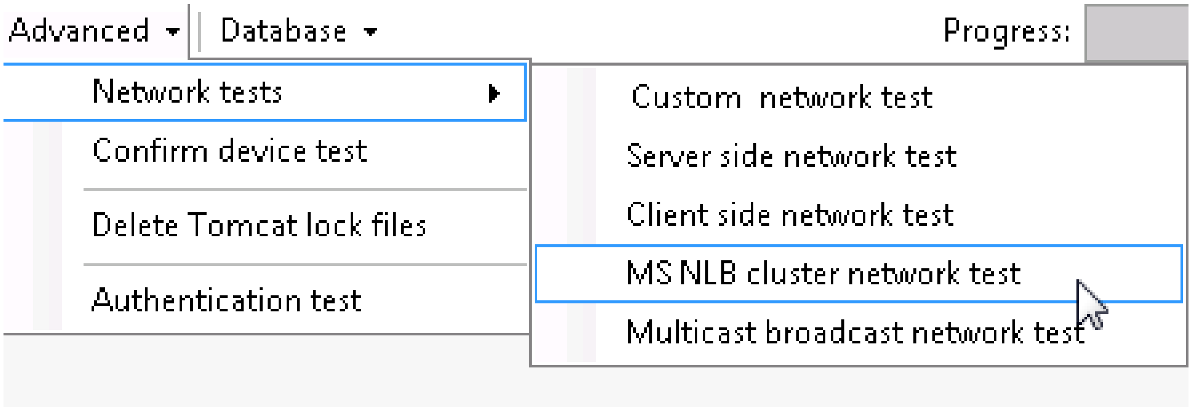


Check description	Parameter	Result	Message
✓ Operating system		Ok	Microsoft Windows Server 2012 R2 Standard
✓ Firewall check		Ok	Firewall is disabled
Installation			
✓ Install log files		Ok	
Post install			
✗ Service check		Error	A critical service is missing or stopped.
✓ Registry check		Ok	
✓ Fileset check		Ok	
Database			
✓ Database check		Ok	Database version: v1.0.0.6 Connection string: Data Source=.;Initial Catalog=e...
High availability setup via MS NLB			
✓ High availability setup assesment		Ok	

Detail	Status
✓ ManagerIP is properly set to the cluster's IP address: 10.140.201.115	Success
✓ ClusterNodeIP is properly set to the cluster node's separated IP address: 10.140.201.162	Success
Cost Recovery is not enabled therefore its port won't be checked.	Neutral
ID Service is not enabled therefore its port won't be checked.	Neutral
✓ Port configuration is appropriately set to 'Single' affinity for all important ports.	Success

If there is an inconsistency or missing item in the configuration settings (ManagerIP, ClusterName and ClusterNodeIP settings in the registry) or if these are not in sync with the actual settings of the Microsoft NLB system or the network adapters, then alert lines in red appear in this section.

2. There are two new menu items.



- MS NLB cluster network test

  This is a client-server communication test, to see if MS NLB is set up properly and the requests from the outside of the cluster (the part of the network where the devices exist) are dispatched to one of the server nodes in the cluster. During multiple repeated connection tests, the routing of the individual request should vary sometimes (once the response should arrive from server node X, next time from server node Y, etc.), proving that NLB 'spreads' the requests across the server nodes.

  > ⓘ This test is performed on TCP port 9599, which should be configured with Node affinity: None option in the Port Rule editor of the MS NLB Manager as it is documented in the High Availability and Load Balancing Deployment Guide, allowing the new TCP connections to assign to a server node randomly. This mode is NOT used for the normal ShareScan device-server connections, but for Cost Recovery and Identification services. However, the test is useful to prove the proper configuration of the MS NLB system.

  How to set up and perform a test:

  a. Start the ShareScan Troubleshooter tool on all of the tested cluster nodes – these instances of the Troubleshooter tool will be called "server agents".

  b. Copy the following files to a folder on a computer connecting to the same network to which the MFP devices are connected (or will be connected), and launch the ShareScan Troubleshooter tool – this instance is called "client agent".

  c. Select the MS NLB cluster network test menu option (on all nodes).

  d. A dialog appears.

  e. Click the Start listening button on the dialog on all the "server agents".

  f. On the "client agent" instance enter the IP address of the cluster (the IP address used in the ManagerIP registry entry) into the text field.

  g. Click the Connect button on the "client agent".

  h. If the request sending / response receiving is successful, then you should see 3 lines:

  - Local / Connect / Cluster IP:9599 (in green)
  - Cluster IP:9599 / Received / Hey, it's X or Hi, I'm X or Hello, this is X (in blue), where X is the ClusterNode IP of the responding server node

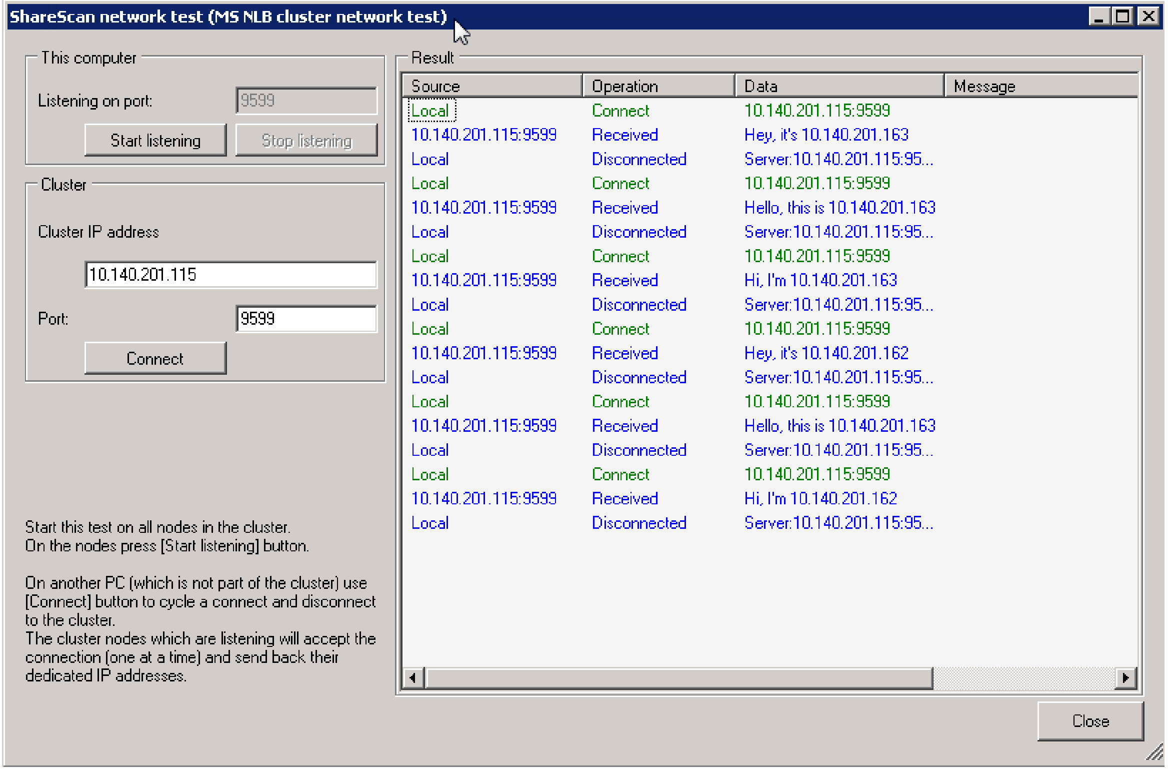
- Local / Disconnected / ClusterIP:port

i. In the console of the “server agents” (always only in the instance that actually gets the request) you should see lines appearing saying <IP:port> Connected in blue, where <IP:port> should correspond to the “client agent”.

If you click the **Connect** button several times (wait until all the 3 lines are listed) you should see different IP addresses in place of X, representing the different server nodes.

If you can see the ClusterNodeIP of all of the nodes at least once, then the entire test is successful.

🛈 One should not expect that the server nodes are hit by the requests in a round-robin manner. As the TCP connection-server node assignment is decided by the MS NLB based on the client IP and the source port (which is selected randomly by the “client agent”) it is not guaranteed that the next server node is hit next, nor that the requests are spread evenly – this is out of scope for this simple test tool.



Listening on port: 9599

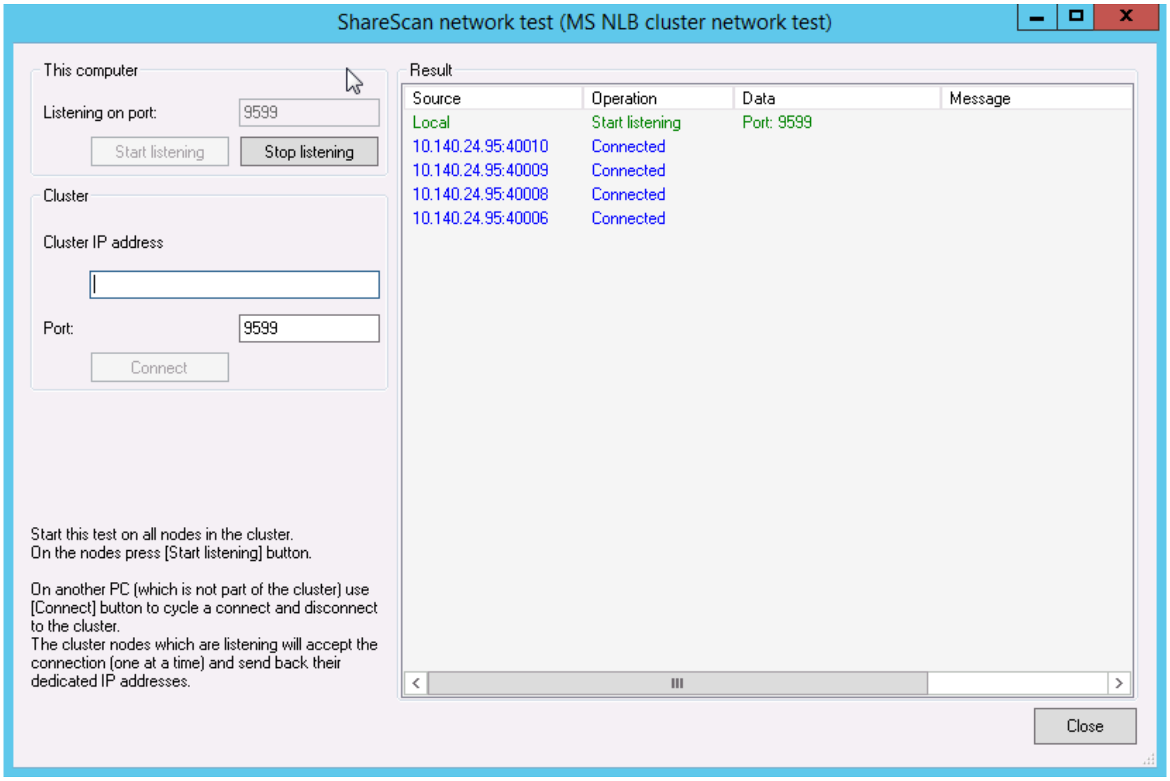
Cluster IP address: 10.140.201.115

Port: 9599

Source	Operation	Data	Message
Local	Connect	10.140.201.115:9599	
10.140.201.115:9599	Received	Hey, it's 10.140.201.163	
Local	Disconnected	Server:10.140.201.115:95...	
Local	Connect	10.140.201.115:9599	
10.140.201.115:9599	Received	Hello, this is 10.140.201.163	
Local	Disconnected	Server:10.140.201.115:95...	
Local	Connect	10.140.201.115:9599	
10.140.201.115:9599	Received	Hi, I'm 10.140.201.163	
Local	Disconnected	Server:10.140.201.115:95...	
Local	Connect	10.140.201.115:9599	
10.140.201.115:9599	Received	Hey, it's 10.140.201.162	
Local	Disconnected	Server:10.140.201.115:95...	
Local	Connect	10.140.201.115:9599	
10.140.201.115:9599	Received	Hello, this is 10.140.201.163	
Local	Disconnected	Server:10.140.201.115:95...	
Local	Connect	10.140.201.115:9599	
10.140.201.115:9599	Received	Hi, I'm 10.140.201.162	
Local	Disconnected	Server:10.140.201.115:95...	

Start this test on all nodes in the cluster.
On the nodes press [Start listening] button.

On another PC (which is not part of the cluster) use [Connect] button to cycle a connect and disconnect to the cluster.
The cluster nodes which are listening will accept the connection (one at a time) and send back their dedicated IP addresses.



Listening on port: 9599

Cluster IP address

Port: 9599

Source	Operation	Data	Message
Local	Start listening	Port: 9599	
10.140.24.95:40010	Connected		
10.140.24.95:40009	Connected		
10.140.24.95:40008	Connected		
10.140.24.95:40006	Connected		

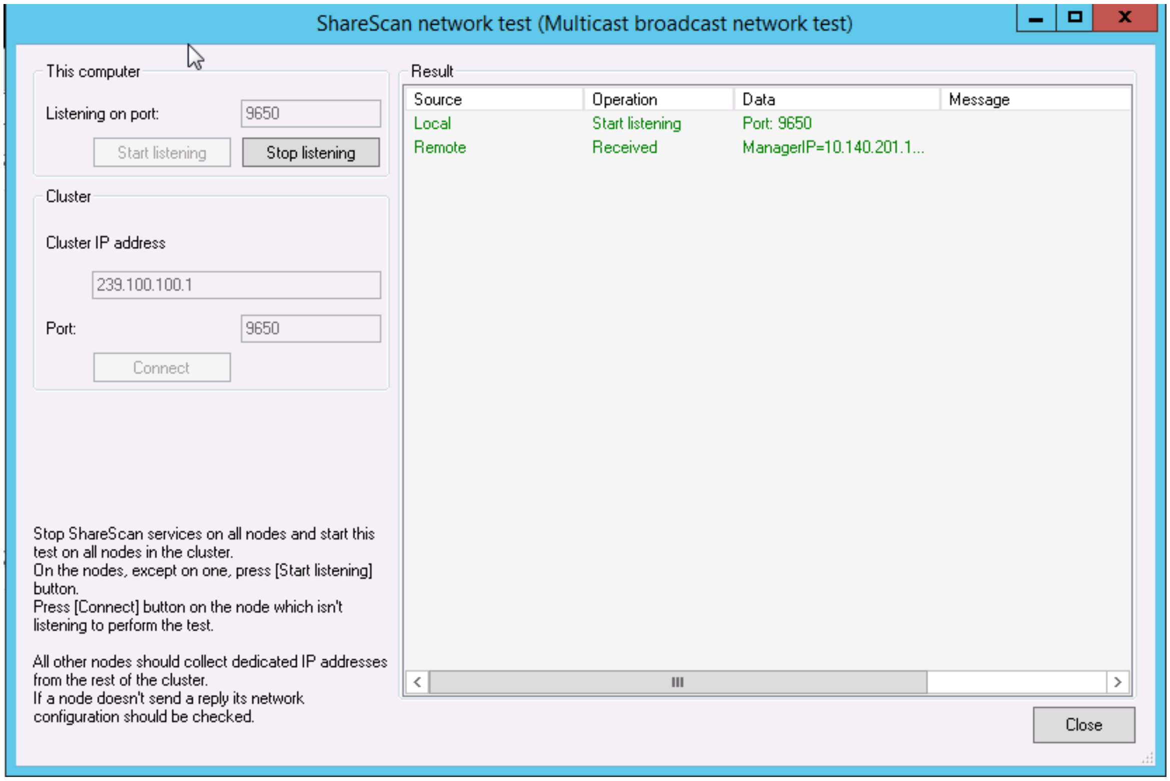
Start this test on all nodes in the cluster.
On the nodes press [Start listening] button.

On another PC (which is not part of the cluster) use [Connect] button to cycle a connect and disconnect to the cluster.
The cluster nodes which are listening will accept the connection (one at a time) and send back their dedicated IP addresses.

- Multicast broadcast network test

  To test the Multicast broadcast functionality of the network, click the **Advanced** > **Network tests** > **Multicast broadcast network test** menu item on all ShareScan server nodes.

  On the dialog that appears, click the **Start listening** button on all the server nodes (these will be the test servers), except one (which will be used as the message sender).



Listening on port: 9650

Cluster IP address: 239.100.100.1

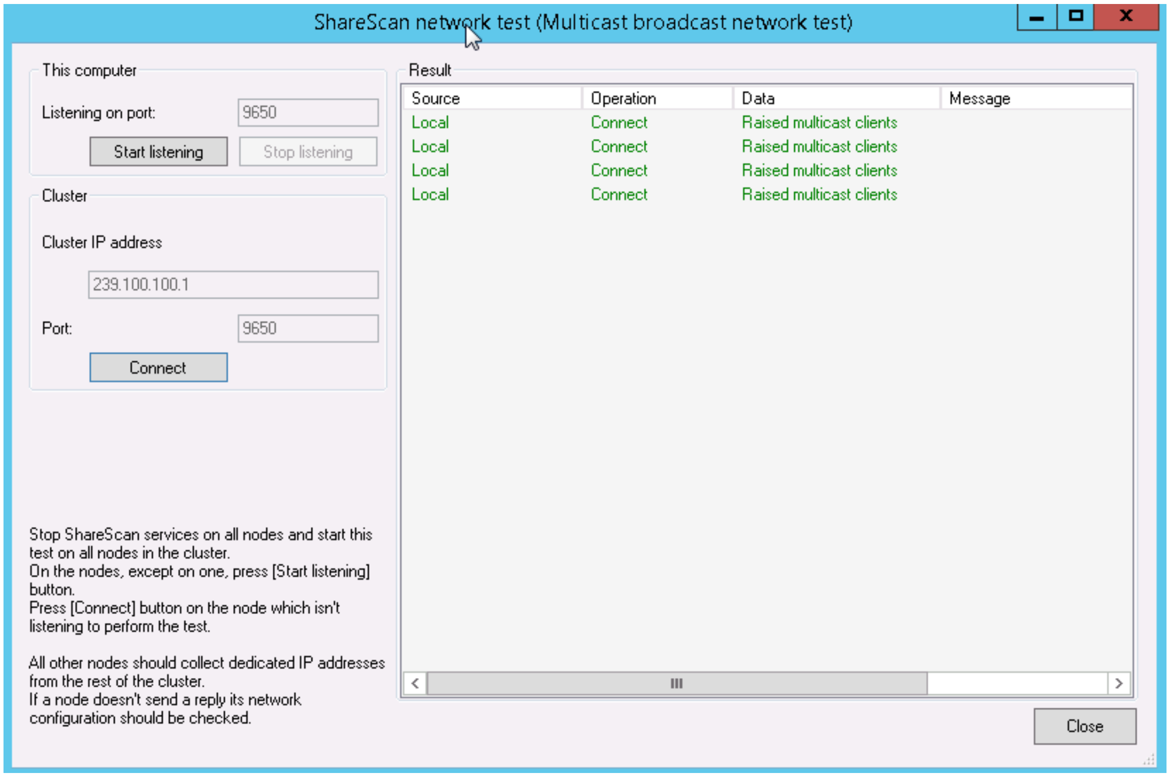
Port: 9650

Source	Operation	Data	Message
Local	Start listening	Port: 9650	
Remote	Received	ManagerIP=10.140.201.1...	

Stop ShareScan services on all nodes and start this test on all nodes in the cluster.
On the nodes, except on one, press [Start listening] button.
Press [Connect] button on the node which isn't listening to perform the test.

All other nodes should collect dedicated IP addresses from the rest of the cluster.
If a node doesn't send a reply its network configuration should be checked.

  On the single node you use as a message sender, click the **Connect** button.



ShareScan network test (Multicast broadcast network test)

This computer

Listening on port: 9650

Cluster

Cluster IP address: 239.100.100.1

Port: 9650

Result

Source	Operation	Data	Message
Local	Connect	Raised multicast clients	
Local	Connect	Raised multicast clients	
Local	Connect	Raised multicast clients	
Local	Connect	Raised multicast clients	

Stop ShareScan services on all nodes and start this test on all nodes in the cluster.
On the nodes, except on one, press [Start listening] button.
Press [Connect] button on the node which isn't listening to perform the test.

All other nodes should collect dedicated IP addresses from the rest of the cluster.
If a node doesn't send a reply its network configuration should be checked.

When you click the **Connect** button, a broadcast message is sent to all the test servers, listening on UDP port 9650.

If these test servers receive the message, they write out a line into the right-hand list, with the text Receive also indicating the IP address of the sender.

This line should be shown on all the servers where the network test dialog was started with the Start listening button.

If the test was successful, it should be repeated on all nodes, so all of the nodes should act as a message sender once, while the others are listening.

To check which Manager serves the actual device request, a diagnostic feature is included:

If you create a registry setting: HKEY_LOCAL_MACHINE\SOFTWARE\Kofax\ShareScan\ShowClusterNodeIP (string value, true/false) then the ClusterNodeIP value (which can be used to uniquely identify the Manager, and is set by the registry settings at HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Kofax\ShareScan\ClusterNodeIP) of the Manager serving the request will be displayed on the Main screen, in the section where usually the

“Place a document into the feeder…” instruction appears. This can be used to determine if the devices are connected to a specific Manager.

Another method to determine the MFP-Manager assignments is detailed below:

- Turn on verbose tracing on the Manager – if the High Availability system is already set up via MS NLB, then it is enough to turn on the tracing on a single Administration Console instance.
- Use the devices.
- Export the traces (from all server nodes).
- Open the Trace.txt file of a given Manager, and search for \xxx.yyy.zzz.www where xxx.yyy.zzz.www is the IP address of the device you need.

If the string is found, then the MFP is served by that Manager.

ℹ The MFP – Manager node assignment is constant only until a Manager node is removed or added to the cluster – in case of a change, the device – Manager node assignments are recalculated by MS NLB.