**WHY IS SHORETEL SERVER SENDING FROM SOURCE PORTS OUTSIDE THE CONFIGURED SHORETEL PORT RANGE**

**CONTENT**

Shoretel Director has a security-related configuration for a ShoreTel network that specifies a port range that can be used for audio and video traffic throughout the network.This is configured in:

* 14.2 and prior -- in Director under System Parameters -> Security -> Port Configuration (default is 10000 to 14500 - valid option is 1024 or higher)
* Connect -- in Connect Director navigation pane, click Administration > System > Port Configuration. (default is 10000 to 20000 - valid options are 1024–61034)

Unless ShoreTel’s default port range conflicts with ports in the network, you can keep the defaults.

Ports in the configured range are available to all ShoreTel applications and devices, such as ShoreTel voice switches, servers, IP phones, ShoreTel Communicator, and Softphone.

When you specify the first port number, the system automatically adjusts the value of the last port to provide the maximum number of supported ports.

However, packet captures are showing that Shoretel Windows servers are sending "Source" port ranges outside the configured Shoretel port configuration range. The "Destination" port to Shoretel devices is within the specified port configuration range.

This is because the Source port is selected by the Windows Operating System choosing from its default dynamic port range, which Shoretel has no control over.For more information refer to Microsoft [KB832017](http://support.microsoft.com/en-au/kb/832017) "Service overview and network port requirements for Windows".

Microsoft [KB832017](http://support.microsoft.com/en-au/kb/832017) Notes show:

Service overview and network port requirements for Windows  
This article contains several references to the default dynamic port range.   
In Windows Server 2008 and later versions, and in Windows Vista and later versions, the default dynamic port range changed to the following range:

* Start port: 49152
* End port: 65535

Windows 2000, Windows XP, and Windows Server 2003 use the following dynamic port range:

* Start port: 1025
* End port: 5000

What this means for you:

* If your computer network environment uses only Windows Server 2012, Windows Server 2008 R2, Windows Server 2008, Windows 8, Windows 7, or Windows Vista, you must enable connectivity over the high port range of 49152 through 65535.
* If your computer network environment uses Windows Server 2012, Windows Server 2008 R2, Windows Server 2008, Windows 8, Windows 7, or Windows Vista together with versions of Windows earlier than Windows Server 2008 and Windows Vista, you must enable connectivity over both the following port ranges:•High port range 49152 through 65535
* Low port range 1025 through 5000

The Microsoft KB includes additional information and links to related Microsoft KB articles which show how to change the default dynamic port range using the netsh command.