



Network *Streaming*

SupportDesk Lite

User Guide

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Introduction

Thank you for your purchase of SupportDesk Lite. This guide is designed to help you use the complete functionality of your software. SupportDesk Lite enables you to support your customers remotely through powerful remote control capabilities. It is simple to use and requires minimal configuration for initial setup. With SupportDesk Lite, you are able to direct your customers to a website, have them click a link, and then gain control of their system. After gaining control, you can work on the system as though sitting at their physical console. You can chat with your customer in real time and transfer files to and from the remote system. You can even reboot the remote system and regain control automatically at the completion of reboot without your customer having to do anything. Rather than spending hours on the phone or on the road, you can begin troubleshooting any remote system in a matter of seconds by bringing your customer's desktop to you. . . **from anywhere.**

Benefits and Applications

Increased Productivity

SupportDesk Lite's small download size and unparalleled remote capabilities means that you can gain control quickly, troubleshoot deep into a remote desktop, and move directly to the next user without costly travel time or inefficient phone support. SupportDesk Lite even enables you to troubleshoot multiple remote desktops simultaneously, enabling you to maintain productivity on one system even while rebooting or installing a program on another.

Value

A SupportDesk Lite license is a one-time, self-hosted purchase that enables one support representative at a time to troubleshoot on an unlimited number of remote desktops without any extra cost or monthly fee. This one-time expense quickly translates efficiency gains into company profit. SupportDesk Lite streamlines the process of remote user support, whether users on your LAN or anywhere in the world, into a time and cost effective package that even small businesses can afford.

Customer Satisfaction

The increased efficiency of SupportDesk Lite enables your support representatives to pass efficiency benefits on to your users. With SupportDesk Lite, an engineer can begin troubleshooting remote desktops as soon as a user's problem occurs, eliminating travel and minimizing downtime. For customers who require added security, SupportDesk Lite offers optional end-to-end RC4 encryption. Additionally, since SupportDesk Lite installs as a system service, the engineer is able to thoroughly resolve system issues without requiring the customer to be on hand. Fast, complete problem resolution equals satisfied customers

Product Information

How SupportDesk Lite Works

SupportDesk Lite establishes a point-to-point remote control session between a support technician and a remote customer's system. To do this, the technician runs a Listener, and then directs the customer to a file that the technician has posted on the web. When the customer clicks 'open' on the file, a process runs that installs SupportDesk Lite onto the customer's computer as a system service and then sends traffic across the web to the technician's computer. The Listener running on the technician's computer receives the traffic coming in and the customer's desktop pops up on the technician's screen. The technician is then free to do whatever is needed to repair the remote system.

What you Get When you Purchase SupportDesk Lite

SupportDesk Lite is designed to connect the remote customer to the specific IP address of a support representative. To do this, each file we build for you has your specific IP address, static DNS name, or dynamic DNS built-in. If you are behind a network firewall, your file has a port number or port numbers built in as well on which your Listener(s) will listen for a SupportDesk Lite connection. Our representatives will seek to ensure that you receive the proper files for your application.

Features

Download Size

Only 260 KB is downloaded onto a user's system to install SupportDesk Lite, making it one of the fastest downloads of any remote control software. Connection is fast and efficient even over dial-up. At the end of the remote support session, SupportDesk Lite is completely uninstalled, leaving nothing on the remote system.

Install/Connect Steps

SupportDesk Lite installs "on-demand" when the customer opens the technician's file. As long as the remote user can surf the Internet, he or she can give the technician remote control. You and your user are connected in seconds without leaving anything running on the remote system. This means that you can use SupportDesk Lite to support your entire customer base with zero end-user deployment or maintenance. With SupportDesk Lite's 1 step install, you are able to begin troubleshooting immediately as soon as your user calls in. This drastically reduces time to resolution while making the process of support simple and fast for your customers.

Router, NAT, & Firewall Friendly

Network firewalls are designed to keep hostile traffic out rather than friendly traffic in. A SupportDesk Lite remote session is initiated from the customer's computer, so the session travels outbound through the firewall just like the customer surfing the Internet. Because of this, your customers can give you remote control without compromising their network security or opening a port in their firewall. SupportDesk Lite works within your customer's existing security structure enabling instant access to virtually any system on the web.

Built-In File Transfer & Chat

SupportDesk enables the technician to initiate chat sessions with the customer to eliminate the need for costly phone support. In addition, the technician can transfer needed files to and from the user's computer during the remote session. Even large files or entire directories can be transferred quickly and easily.

Auto-Reconnect

If the SupportDesk session is ever lost for any reason, it will be reconnected automatically. This means that you can continue troubleshooting on a remote system even if Internet connectivity is temporarily lost. As soon as connectivity is established, the session will reinitiate.

Encryption

SupportDesk Lite offers end to end RC4 encryption as an optional feature designed for working remotely with especially sensitive data. For more information, contact NetworkStreaming.

Screen Scaling

Once connected, you can scale the remote user's screen to the size of yours to make it easier to work on the remote system.

“Safe Mode” Compatibility

SupportDesk can be used to gain control of a system that is running in “Safe Mode”. This enables a technician to troubleshoot a system that will only boot up with the minimum number of drivers installed.

Installs as a System Service

SupportDesk runs below the program level enabling the technician to resolve more complex system problems. This also means that SupportDesk Lite is browser independent.

Allows Log-Off & Log-On

Because SupportDesk installs as a system service rather than a web-based application, the technician is able to log off the customer’s computer and then back on as a different user to solve problems associated with user profiles. This also enables the technician to log back on with administrative rights if the customer only has user rights to his or her local machine.

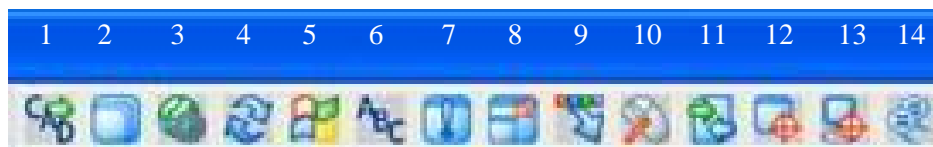
Simultaneous, Multi-System Control per License

SupportDesk Lite is a one-time price that enables one technician at a time to troubleshoot an unlimited number of remotely-accessed desktops without any extra cost. Multiple desktops can even be accessed simultaneously enabling the technician to resolve issues involving the interaction of multiple systems. This feature maximizes efficiency by enabling the technician to troubleshoot on a separate desktop while one desktop reboots, installs a program, etc. The number of customer computers that can be controlled simultaneously is only limited by the technician’s bandwidth.

Reboot & Auto-Reconnect

SupportDesk enables the technician to reboot and auto-reconnect with the customer’s computer without any customer interaction. This allows the technician to install programs, change settings, and continue troubleshooting the remote system completely unassisted, freeing your user to attend to other business while their problem is resolved.

Toolbar Legend



1. **Send a “Ctrl+Alt+Del” to host:** Allows you to send a “Ctrl+Alt+Del” command to the remote computer (unavailable in Windows 95,98, and ME).
2. **Toggle Full Screen View (on/off):** Maximizes session to full screen
3. **Show Connection Options:** Displays the connection options within the session, allowing you to control connection preferences.
4. **Refresh Screen:** Manually refreshes the screen
5. **Send “Start” (Ctrl+Esc) to host:** Brings up the remote computers “Start Menu.”
6. **Send Custom Key:** Allows custom key stroke commands to be sent the remote computer. For example, a “Shift+s” can be sent without effecting the support reps local computer.
7. **Show Status Window:** Shows connection speed between you and the remote computer.
8. **Auto Scale Screen:** Auto-scales screen for best fit.
9. **Hide Toolbar Buttons:** Completely removes the toolbar from the session screen. To restore the toolbar, hold down “Ctrl+Alt+F9”, or right click the blue bar at the top of the session window and select “Show Toolbar.”
10. **Toggle Remote Input and Remote Blank Monitor (on/off):** Disables the remote computers mouse, and blacks out its screen.
11. **File Transfer:** Allows two-way file transfer, allowing you to send/receive single files or whole directories.
12. **Select Single Window:** Selects a single window on remote computer, allowing you to work in a single application.
13. **Select Full Desktop:** Restores Full Desktop View from “Single Window View.”
14. **Open Chat:** Initiates a Chat session with remote user (Note: You will need to minimize the chat window to continue making changes on the remote computer).

How-To

Your SupportDesk Lite license includes these files:

- engineer[port].exe
- customer_[address--port].exe
- How-To.htm
- User Guide.pdf
- License.txt

Initial Configuration

1. Run the "engineer.exe" file on your computer. This file is the Listener and listens by default on port 5500 or 443 for incoming SupportDesk Lite sessions. You will know the Listener is running, when a blue icon appears in your system tray. If no icon appears and you receive an error message, then you may be running Internet Information Services (IIS) which will cause the Listener to be unable to activate on port 443.
2. In order for your customer to give you control, he or she must run the "customer.exe" file that has your IP address or DNS name built-in. This file will connect to the "engineer.exe" Listener on the port specified in the file name (443 or 5500 by default). When the customer runs the "customer.exe" file, a session is initiated outbound from the customer, so no configuration is required to the customer's firewall. **(Note)** If you will only be using SupportDesk Lite behind the same firewall/NAT/router as your customers, or if you are not behind a firewall/NAT/router, then the "engineer.exe" Listener will be able to receive connections and give you control of your customer's systems without configuration to your network and you may skip to step 4.

3. To support customers that are outside of your firewall/NAT/router, you must forward the port number listed on your "engineer.exe" file from the public (outside) IP address of your firewall/NAT/router to the private (inside) IP address of your computer. This configuration routes SupportDesk Lite traffic inbound to your system through your firewall/NAT/router. Also, either disable or reconfigure all your personal firewalls, including Windows XP's firewall, to ensure that they are not blocking SupportDesk Lite sessions.
 - A. If you need the ability to take control of remote systems located both on your LAN and outside your network, refer to **"Share Session" Function** of **Advanced Options** below for a temporary solution, or refer to **Configuration Scenarios** of the **User Guide**.
 - B. If you have multiple technicians using SupportDesk Lite behind the same network firewall, please refer to section 3 of **Configuration Scenarios** in the User's Guide.
4. It is recommended that you post the "customer.exe" file on your website for your customer to download. Please refer to www.NetworkStreaming.com/help/code.html. This enables you to gain control of your customer's systems by simply directing them to a website and having them open your "customer.exe" file. If you choose to send your "customer.exe" file via email, you must zip the file before sending it and have your customer unzip it before opening. Due to the number of additional steps required for both the technician and the customer, emailing the file is not recommended.

Basic Use

1. Activate the SupportDesk Lite Listener to listen for connections, and then direct your remote user to your "customer.exe" file. When your remote user opens your file, it will install automatically and initiate a session outbound to your IP address or DNS name.
2. Your Listener will receive the connection and the customer's desktop will appear as a window on your screen with the remote computer's name and IP address displayed in the top bar of the window. Once connected, you are able to work on the remote system as though actually at your customer's console. The button bar at the top of the window enables you to perform various functions such as send a Ctrl/Alt/Delete to the remote system, transfer files, or chat with your remote user. Right-clicking the title bar will display a list of additional options.
3. At the end of the session, you (the technician) must uninstall SupportDesk Lite by clicking the "X" at the top right-hand corner of the session window. You may also uninstall by right-clicking the Support Desk Lite tray icon on the remote system and selecting "Uninstall."

Advanced Options

“Share Session” Function

If you need to use SupportDesk from a location other than the IP address or DNS name built into your file (and listed in the file name), and your file is not built for a Dynamic DNS name, then wait for the connection to time out (20 seconds) and then tell the remote user to right-click the blue NetworkStreaming icon in their system tray and click "Share session". A dialog box will be displayed for the remote user to type in the IP address of your computer or firewall/NAT/router. The remote user must add one colon and the port number that you are listening on after your IP address (ex: 65.54.43.32:443). If you frequently use SupportDesk from locations other than your main office, then sign up for a free Dynamic DNS service such as www.no-ip.com (recommended) or www.dyndns.org and request that NetworkStreaming build you a file that points to your Dynamic DNS name rather than your IP address. You can find more information regarding Dynamic DNS in the [Configuration Scenarios](#) section of your SupportDesk User's Guide.

Technician-Initiated Inbound Connections

If you need to leave SupportDesk running on a remote user's computer/server to enable you to access it later, then you will need to set a password on the computer/server. To do this, double-click the blue, NetworkStreaming icon in the server's system tray to open the "Current User Properties" dialog box. Set a password and then click "OK". The computer/server will now accept incoming connections initiated by you. In order to disconnect without uninstalling, click the red "X" in the top right-hand corner of your screen and select "No" to leave SupportDesk installed for inbound connections. Next, double-click the Listener running in your system tray to open the "Connection" dialog box. Type in the IP address or DNS name of the computer/server and then click "Connect". Type the password and then click "Log On". Inbound connections will not work if the computer/server is behind a firewall unless you have a VPN to the remote user's network.

Remote Users Without Administrative Rights

If the customer does not have administrative rights to their local machine, SupportDesk Lite will run as an application rather than install as a system service. If you need to log off or reboot the remote system without losing the session while you are connected using SupportDesk Lite as an application, you will need to download the "customer.exe" file to the customer's machine and then right-click the file and select "Run as" to rerun the customer executable as an administrator. (Note: if you are using Win2000, you must hold down the Shift key when you right-click the file in order to select the "Run as" command.

Desktop Background Suppression and Reboot/Auto-Reconnect

By default, SupportDesk Lite suppresses the desktop background of the remote machine during a session to speed the rate of screen updates. If for any reason the desktop background is still displayed during the session, then disable the desktop background temporarily in Display Properties. When SupportDesk Lite automatically reconnects after a reboot of the remote computer, the desktop background is not suppressed and performance will decrease. To suppress the background after an automatic reconnect using SupportDesk Lite 7.0 and above, simply close the viewer window and the customer's computer will automatically reinitiate the connection to you with the desktop background suppressed.

Transferring a SupportDesk Lite session

SupportDesk enables you to hand off a remote session to another support rep. To do this, right-click the blue, NetworkStreaming icon in the remote computer's system tray and select "Share session". Type in the public IP address of the other support rep followed by one colon and the listening port number of the other support rep (ex. 65.54.43.32:443). The other support rep must be running the Listener and have traffic forwarded to his private IP address on the correct port number for the Listener

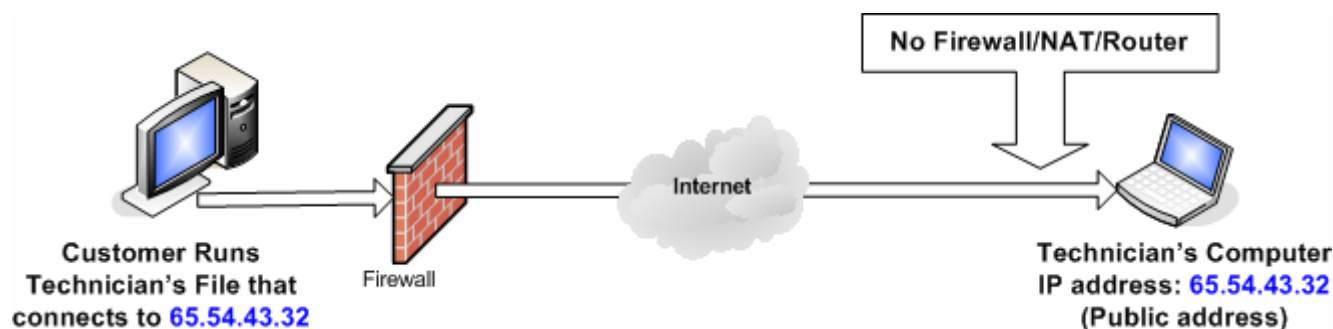
Configuration Scenarios

No configuration is needed at the customer's end

1. Direct Internet Connection Via a Public IP Address

No configuration is required if your system is sitting out on the Internet and does not route traffic through a firewall/NAT/router. The files we build for you are hard-coded to your specific IP address or DNS name, so that when you run the SupportDesk Lite Listener, any customer worldwide who clicks on your file will be routed to your computer.

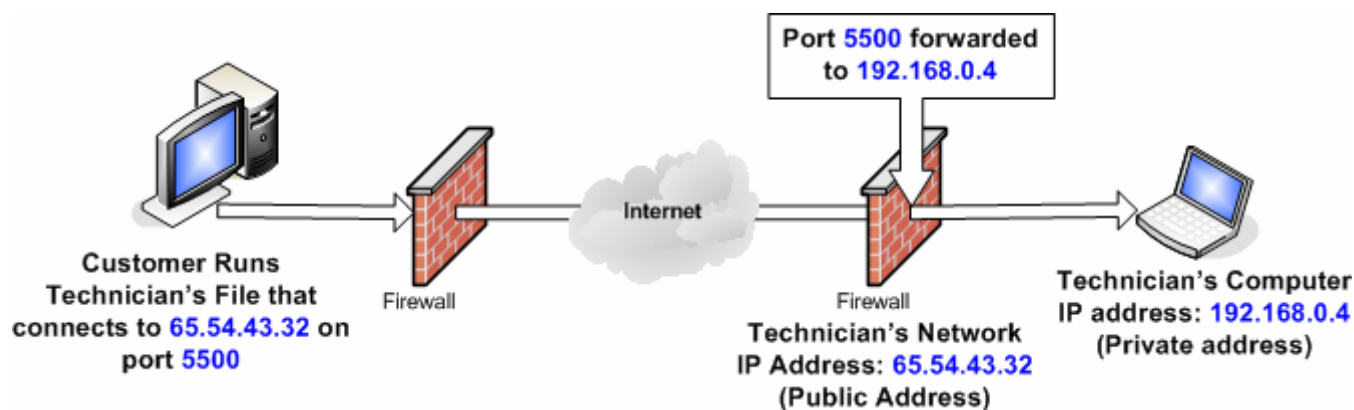
Example 1.



2. Connection Through a Technician's Firewall

SupportDesk Lite traffic from the customer is outbound (similar to web surfing), so traffic goes straight through the customer's firewall without any configuration. Since traffic at the technician's end is inbound from the customer, port forwarding is required to route SupportDesk Lite traffic through the technician's firewall. This simple procedure involves forwarding SupportDesk Lite traffic from the network's public IP address to the technician's private IP address. The technician listens for the customer's connection on a specific port, so that when the customer's traffic comes in on that port, it is forwarded to the technician.

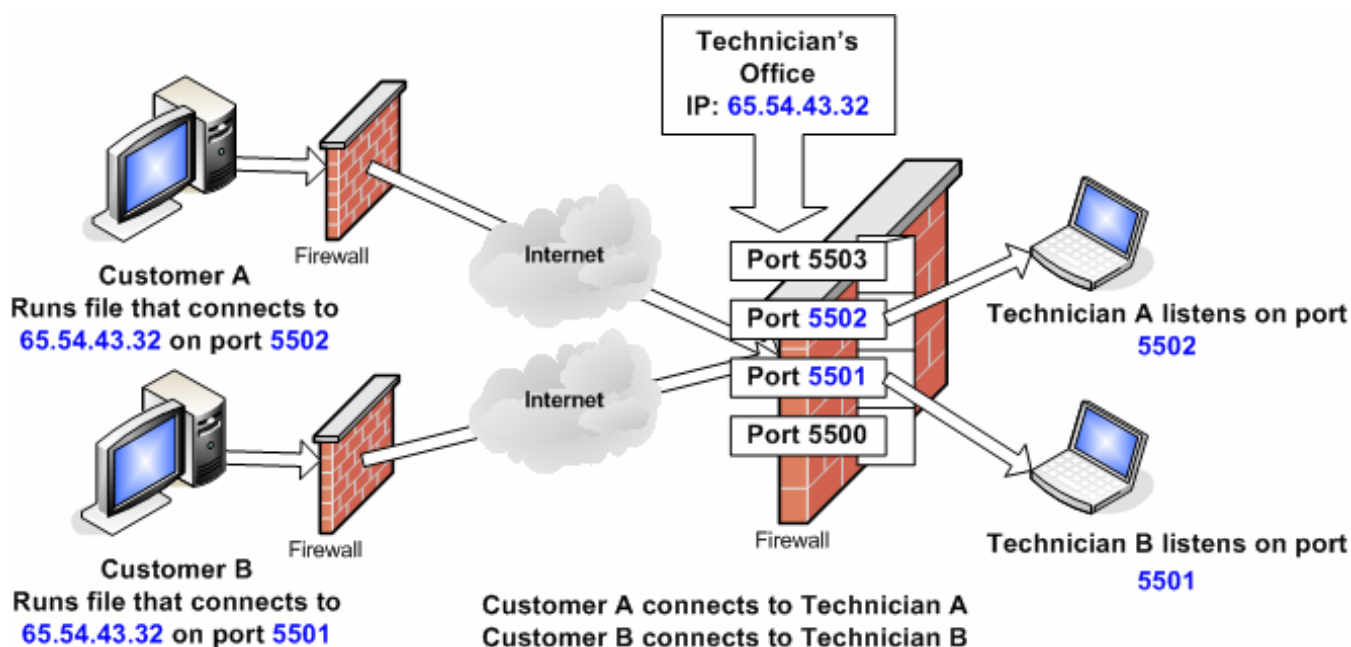
Example 2.



3. Technicians Using SupportDesk Lite Behind the Same Network Firewall

- A.** Each of the technicians within your office would have a custom file that connects to the same public IP address, but on different port numbers. Each technician would listen for connections on a different port. Each connection would be forwarded from the listening port to a static, private IP address within the network. Traffic to various technicians would be port specific so that each technician had a separate SupportDesk Lite connection.

Example 3A. Technician A listens on port 5502. All traffic on port 5502 is forwarded to Technician A. Technician B is behind the same firewall, but listens on port 5501. All traffic on port 5501 is forwarded to Technician B.



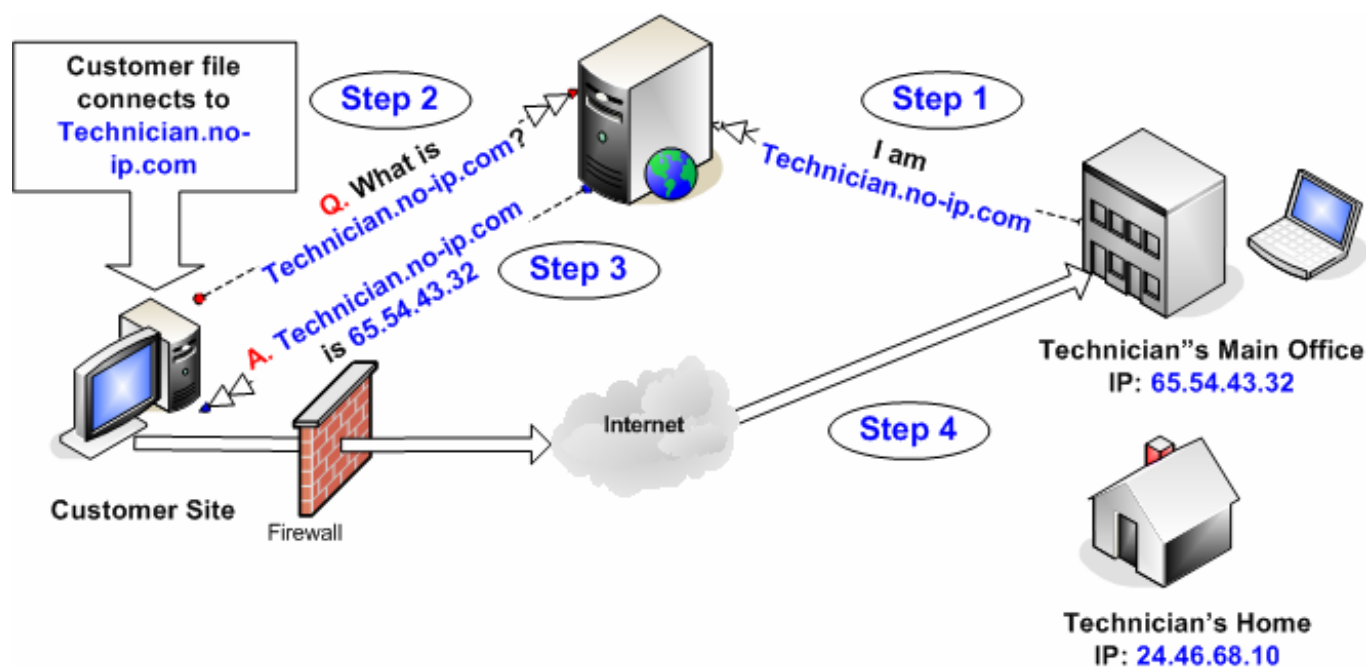
- B.** If multiple public IP addresses are available, then it is possible to have multiple technicians listening on the same port number behind the same firewall. Each technician would be assigned a separate public IP address that forwards to his or her private IP address.

4. Using SupportDesk Lite From Outside the Technician's Main Office

A free dynamic DNS client (such as www.no-ip.com) can be installed on the remote technician's computer. In this instance, your SupportDesk Lite files would be specific to your dynamic DNS name rather than to your IP address. When the customer opens your file, it will establish a connection to your dynamic DNS name. Your Dynamic DNS name will dynamically resolve to whatever public IP address you are using within seconds of the time you plug into an Internet connection. Port forwarding is required to route SupportDesk Lite traffic through any firewall that the technician may be behind just as in a configuration scenario 2 above. Following are two diagrams describing how Dynamic DNS routes SupportDesk Lite traffic from outside the technician's main office.

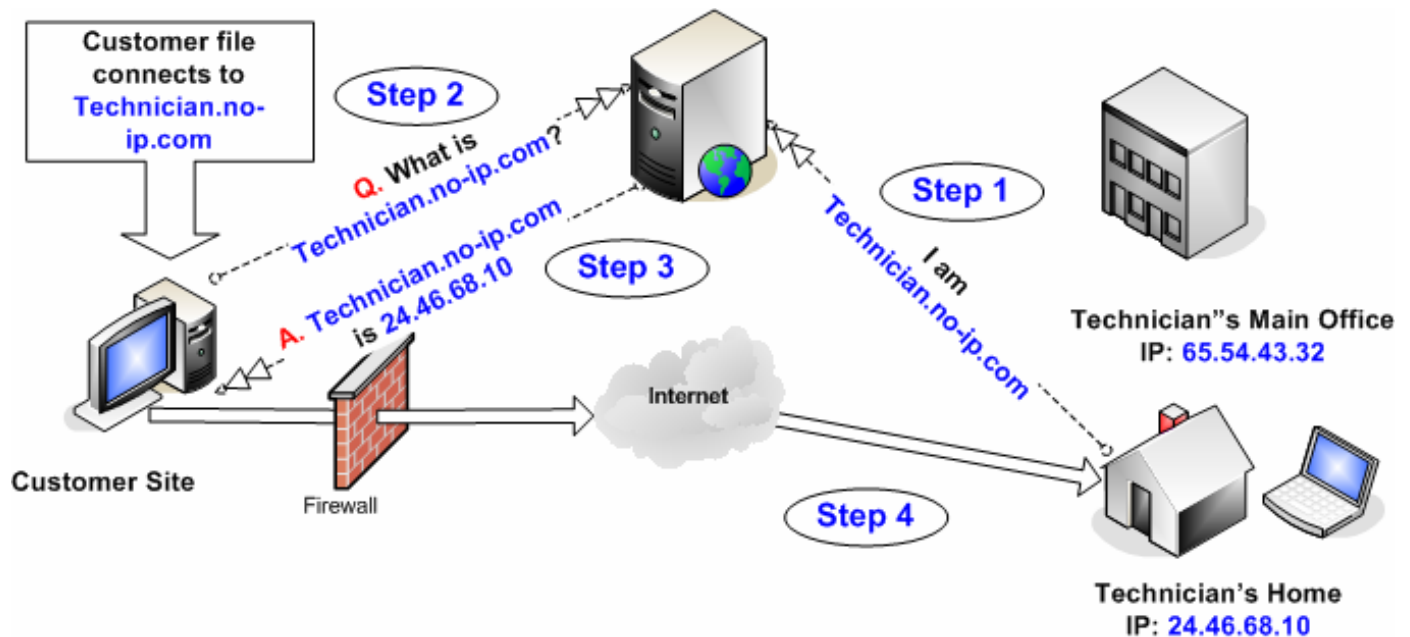
Example 4B¹: Main Office Connection

1. The No-IP client that is installed on the technician's computer automatically informs the No-IP DNS server that **technician.no-ip.com** is the public IP address of the technician's Main Office (**65.54.43.32**)
2. When the customer runs the technician's file, it queries the No-IP DNS servers to find out the IP address of **technician.no-ip.com**.
3. The server answers the query by resolving **technician.no-ip.com** to the technician's public IP address (**65.54.43.32**)
4. The SupportDesk Lite session is initiated to **65.54.43.32**



Example 4B²: SupportDesk Lite use from Home with Dynamic DNS (Next Page)

1. When the technician plugs in to his or her home Internet connection, The No-IP client that is installed on the technician's computer automatically informs the No-IP DNS server that **technician.no-ip.com** is the public IP address of the technician's Home (**24.46.68.10**).
2. When the customer runs the technician's file, it queries the No-IP DNS servers to find out the IP address of **technician.no-ip.com**.
3. The server answers the query by resolving **technician.no-ip.com** to the technician's public IP address (**24.46.68.10**).
4. The SupportDesk Lite session is initiated to **24.46.68.10**



Troubleshooting SupportDesk Connections

- Step 1.** Make sure your Listener is activated
- Step 2.** Have the remote user run the file again
- Step 3.** Make sure the remote user has Internet connectivity.
- Step 4.** Right-click your NetworkStreaming tray icon and click "Test Listener." Ensure that the proper port is open and the Listener is detected. You should get a "Network Activity detected" box. If the test says that the port is closed, check the port forwarding settings in your router. Check the port number listed in your customer file's name to ensure that it is the same as the port that you have forwarded to the Listener on your system. Also, disable any software firewalls that may be blocking connections. Some examples of these include XP firewall, Norton Security, and Zone Alarm.
- Step 5.** Verify that the DNS name is resolving to the Public IP address of the customer's PC. You can check the DNS resolution by using the "Test Listener" feature. If the numbers don't match up, check your A record. If you are using a dynamic DNS client, make sure it has been updating properly.
- Step 6.** Have the customer uninstall SupportDesk, reboot their system, and then run your customer file again.
- Step 7.** Verify that the remote user can resolve your DNS name. Have the remote user pull up a DOS window and ping your DNS name. If it's resolving correctly they should get the public IP address of your network.
- Step 7.** Make Sure that your customer is not behind a proxy server or Semantec Velociraptor firewall. SupportDesk Lite may not connect through these two customer configurations.

If following these steps fails to make a connection, contact NetworkStreaming support:

Ph: (601) 914-2444

Email: Support@NetworkStreaming.com

Licensing Restrictions

One SupportDesk Lite license enables one support rep at a time to troubleshoot an unlimited number of remote computers. Two or more licenses (1 per support rep) are required to enable multiple support reps to troubleshoot simultaneously.

Our Guarantee

Each NetworkStreaming purchase comes with a 30-Day 100% Satisfaction Money-Back Guarantee. If you are not completely satisfied with SupportDesk Lite within thirty days of purchase, please let us know the reason you are dissatisfied and we will completely refund your money.

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