



CompTIA A+ Lab Series v2

Lab 9: Remote Access

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Introduction

This lab is part of a series of lab exercises designed to supplement coursework and provide students with a hands-on training experience based on real world applications. This series of lab exercises is intended to support courseware for CompTIA A+® certification.

Remote access to PCs is becoming a necessity for both business and leisure activities. Remote desktop software enables users to operate a computer as if they were seated in front of it while using a remote, Internet-enabled computer. Remote access goes beyond simple file access; you can also use the applications installed on the remote PC, stream music, control your webcam, and read work emails. It is affordable and fairly easy to configure, so it is becoming a mainstream technology.

Remote access can provide the opportunity for a better quality of life. By alleviating the need for workers to be physically present in order to use computers at their workplace, telecommuting options beneficial to both the well-being of the worker and meeting the goals of the business can be considered. Remote access can help improve efficiency by making it feasible to allow 24/7 access to systems. Budgets can be reduced with less office space and maintenance costs for physical plants. Many businesses are seeing high return on investment (ROI) when authorizing remote access.

This lab includes the following tasks:

1. Configure Remote Desktop
2. Configure Remote Assistance

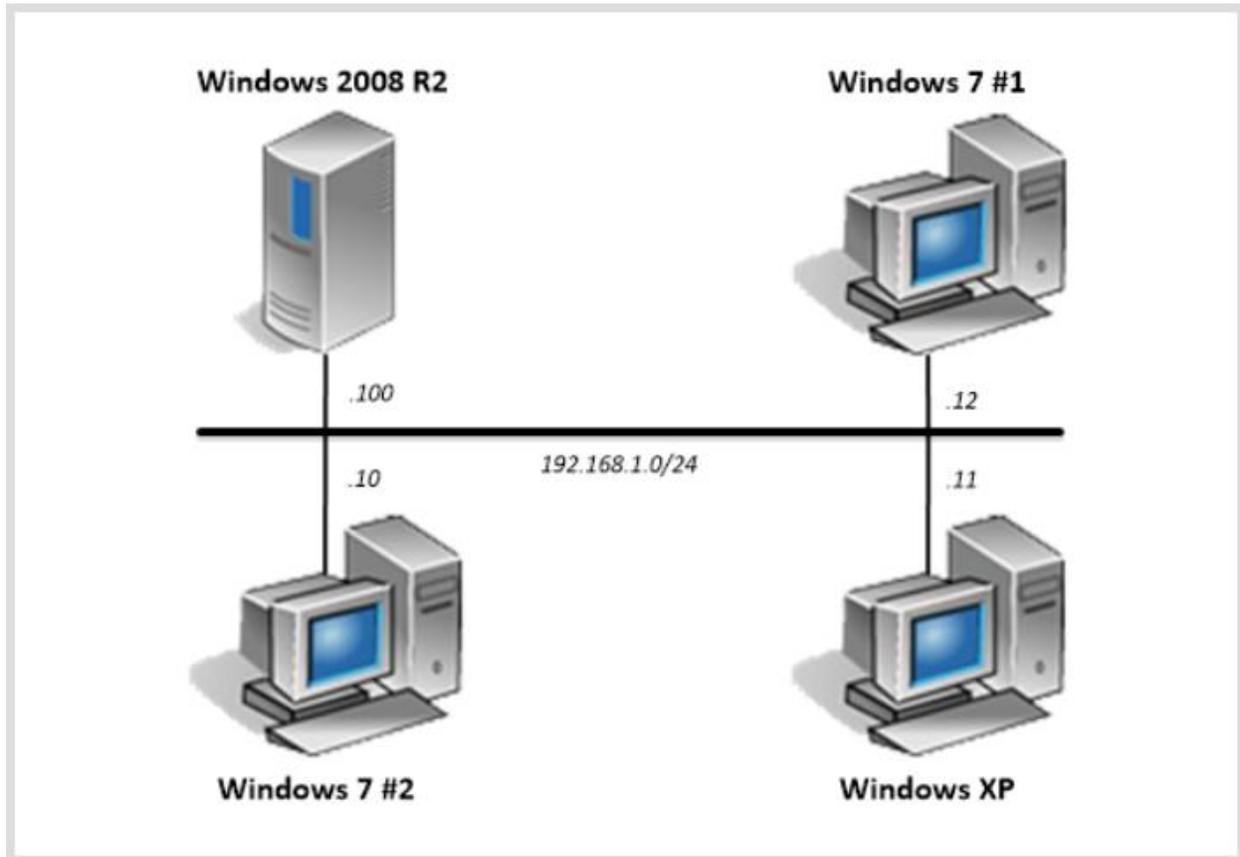
Objective: Configure Remote Access Options

There are two types of remote access. The first enables users to access files and information remotely, and the second enables technicians or authorized users to access and control PCs remotely to work from home or provide support.

The focus of the lab is on setting up computers to be accessible across the network.



Lab Topology



Lab Settings

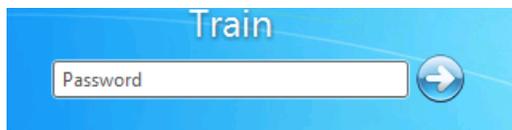
The following table includes settings necessary to complete the lab. The Windows features referenced and used in this lab are consistent with those included with Windows 7.

Log in to the following virtual machines before starting the tasks in this lab:

Virtual Machine	IP Address	Account (if needed)	Password (if needed)
Windows 7 #1	192.168.1.12/24	Train	Train1ng\$
Windows 7 #2	192.168.1.10/24	Train	Train1ng\$

Windows Login (applies to all Windows machines)

1. Click on the icon on the topology that corresponds to the machine you wish to log into.
2. Use the PC menu in the NETLAB+ Remote PC Viewer to send a **Ctrl-Alt-Del** (version 2 viewer), or click the **Send Ctrl-Alt-Del** link in the bottom right corner of the viewer window (version 1 viewer).
3. In the password text box, type **Train1ng\$** and press **Enter** to log in.



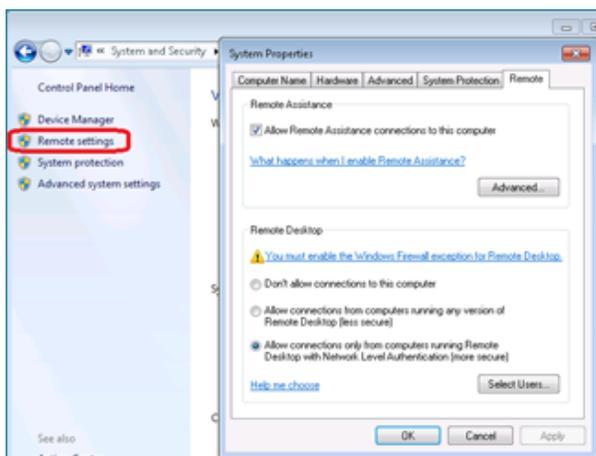
You are using the Train account, which has administrator privileges, to complete the tasks in this lab. You must be an administrator or have administrator privileges to complete some of the tasks in this lab.

1 Configuring Remote Desktop

Remote Desktop connects two computers over a network or the Internet. Once connected, you'll see the remote computer's desktop as if you were sitting in front of it and have access to all its programs and files.

1.1 Remote Desktop

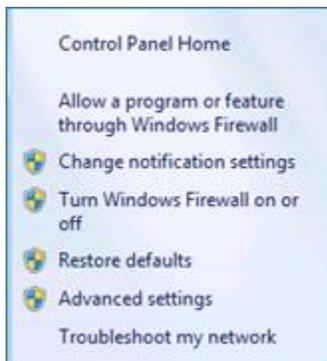
1. Use the instructions in the **Lab Settings** section to log on to the Windows 7 #1 machine.
2. Click **Start->Control Panel->System and Security->System->Remote settings**. This will open the System Properties **Remote** tab.



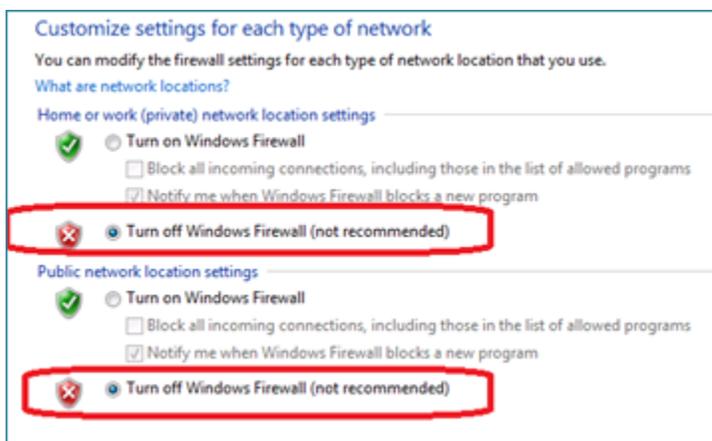
3. Under the Remote Desktop heading, select the radio button next to **Allow connections only from computers running Remote Desktop with Network Level Authentication (more secure)**.
4. Under the Remote Desktop heading, click the **Select Users** button. Check to see which users have access. Since you are logged in as user Train, you will not need to add a user.



5. Click **OK**.
6. Click **Apply->OK** to close **System Properties** window.
7. Click **Start->Control Panel->System and Security->Windows Firewall->Turn Windows Firewall on or off**.
8. Click **Turn Windows Firewall on or off** in the left panel.



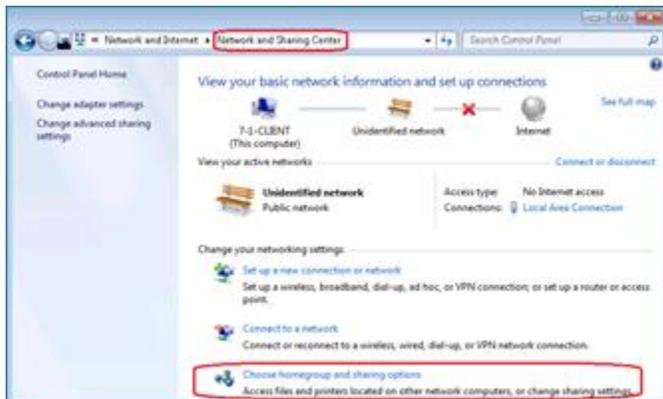
9. Select the radio buttons next to **Turn off Windows Firewall (not recommended)**. Click **OK**.



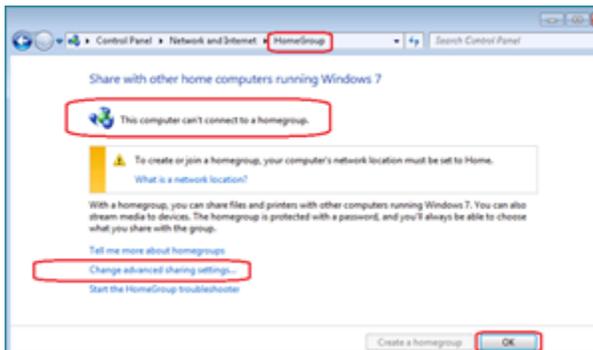
10. Close any remaining open windows.
11. Left-click the **Network and Sharing Center** icon on the taskbar and then click **Open Network and Sharing Center**.



12. Click on **Choose homegroup and sharing options** to access the HomeGroup page.

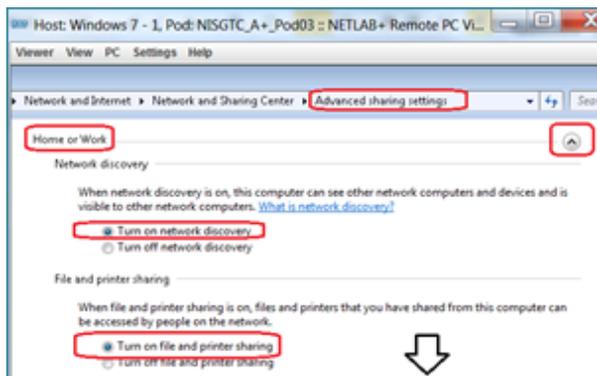


13. Click **Change advanced sharing settings** on the HomeGroup page; this will open the **Advanced sharing settings** page.

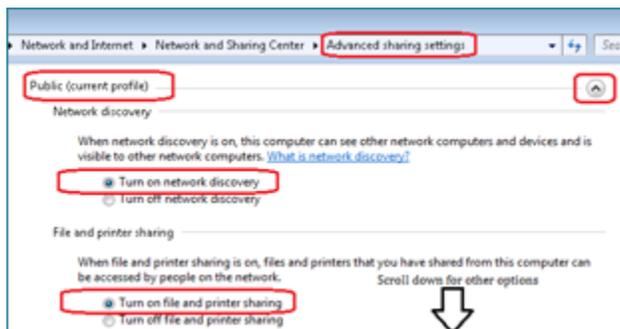


14. Click the drop-down arrow next to **Home or Work** on the **Advanced sharing settings** page.

- a. Click on **Turn on network discovery**.
- b. Click on **Turn on file and print sharing**.
- c. Click on **Turn on sharing so anyone with network access can read and write in the Public folders**.
- d. Scroll down and click on **Use user accounts and passwords to connect to other computers**.



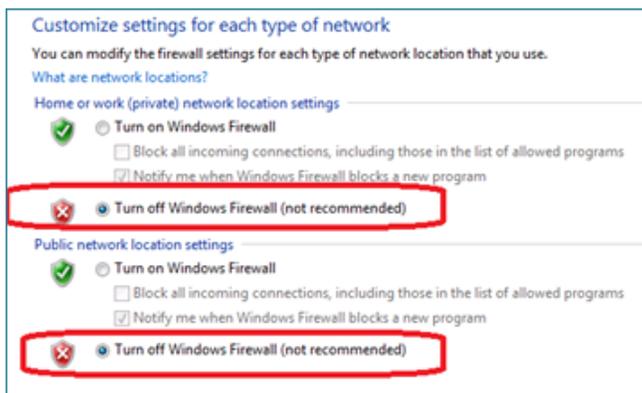
15. Click the drop-down arrow next to **Public (current profile)** on the **Advanced sharing settings** page.
 - a. Click on **Turn on network discovery**.
 - b. Click on **Turn on file and print sharing**.
 - c. Click on **Turn on sharing so anyone with network access can read and write in the Public folders**.



16. Click the **Save Changes** button.
17. Click **Log off now**.
18. Use the instructions in the **Lab Settings** section to log on to the Windows 7 #2 machine.
19. Click **Start->Control Panel->System and Security->Windows Firewall->Turn Windows Firewall on or off**.



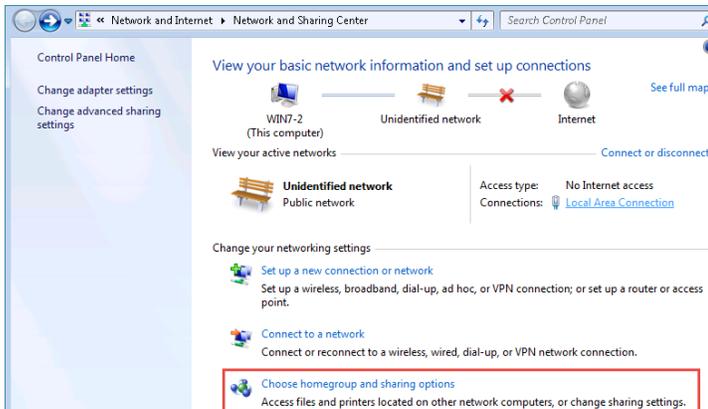
20. Select the radio buttons next to **Turn off Windows Firewall (not recommended)**. Click **OK**.



21. Close any remaining open windows.
22. Left-click the **Network and Sharing Center icon** on the taskbar and then click **Open Network and Sharing Center**.



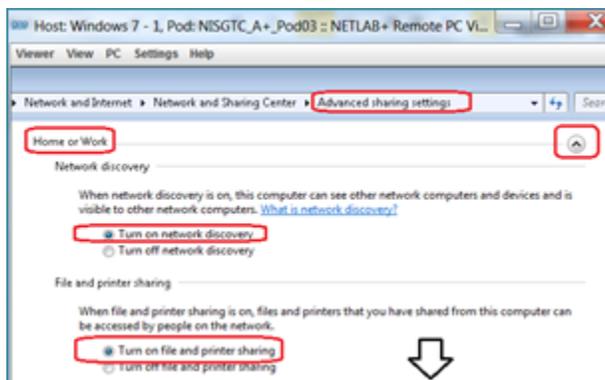
23. Click on **Choose homegroup and sharing options** to access the HomeGroup page.



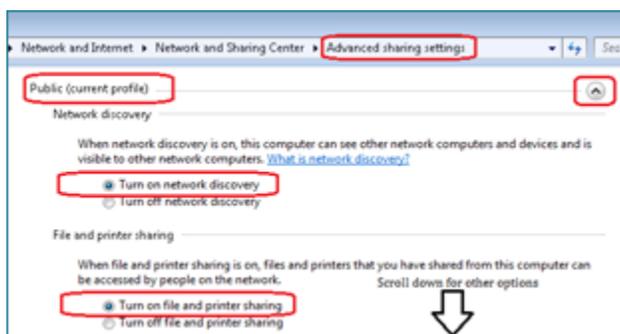
24. Click **Change advanced sharing settings** on the HomeGroup page; this will open the **Advanced sharing settings** page.



25. Click the drop down arrow next to **Home or Work** on the **Advanced sharing settings** page.
 - a. Click on **Turn on network discovery**.
 - b. Click on **Turn on file and print sharing**.
 - c. Click on **Turn on sharing so anyone with network access can read and write in the Public folders**.
 - d. Scroll down and click on **Use user accounts and passwords to connect to other computers**

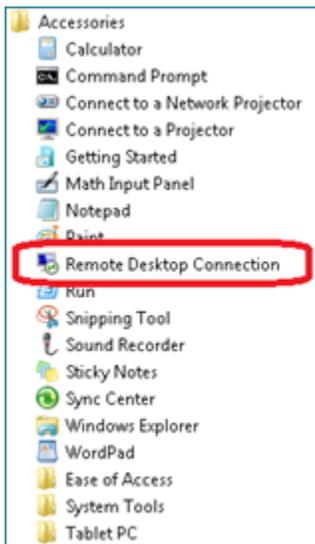


26. Click the drop down arrow next to **Public (current profile)** on the **Advanced sharing settings** page.
 - a. Click on **Turn on network discovery**.
 - b. Click on **Turn on file and print sharing**.
 - c. Click on **Turn on sharing so anyone with network access can read and write in the Public folders**.



27. Click the **Save Changes** button.
28. Click **Log off now**, Log back on the Windows 7 #2 machine using the **Train** account.

29. Click **Start->All Programs->Accessories->Remote Desktop Connection** to open **Remote Desktop Connection** window.



30. Type **win7-1** in the Computer field and click **Connect**.



31. You will be prompted to enter your credentials. In the **User name** field, type **Train**. For the password, type **Train1ng\$**.



32. Click **Connect**. It may take a few minutes to resolve.
33. Click **Yes** when asked about the certificate.



34. From the Windows 7 #2 machine, right-click the **desktop** of the Windows 7 #1 machine and select **New->Folder** and name the folder **RDP**.
35. Right-click the **RDP** folder and then click **Properties->Sharing->Advanced Sharing**. Put a check in the **Share this folder** checkbox. Keep the default name **RDP** and click **OK**.
36. Click the **Security** tab. Make sure the user name of the Windows 7 #1 machine is listed.
37. Click **Close**.
38. Click **Start->Log off->Disconnect**.

1.2 Conclusion

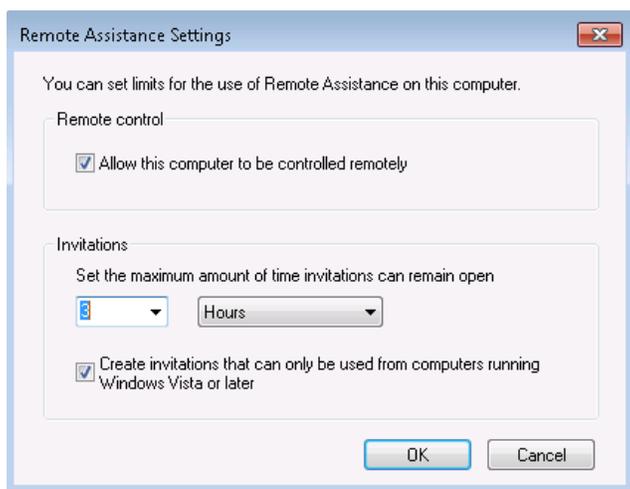
Remote Desktop is a popular way to provide connectivity for teleworkers. The opportunity to telecommute can be positive and motivating for employees and a cost savings for employers. Workers and home users can access a system from a remote station and have the exact same user experience as if they were sitting locally at their computer.

2 Configuring Remote Assistance

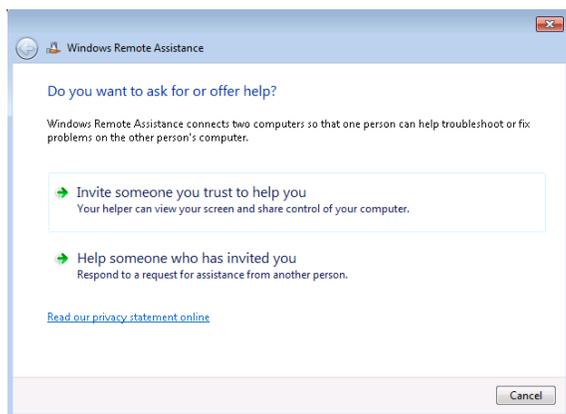
Remote Assistance allows a user to invite a trusted person running a compatible operating system to have shared access and control of their machine. The trusted person can then provide assistance in order to resolve a problem.

2.1 Remote Assistance

1. Use the instructions in the **Lab Settings** section to log on to the Windows 7 #1 machine.
2. Click **Start->Control Panel->System and Security->System->Remote settings**.
3. Click the **Advanced...** button, opening the **Remote Assistance** window.
4. Verify there is a check mark in the **Allow this computer to be controlled remotely** checkbox, set the invitation to 3 Hours and place a check mark in the **Create invitations that can only be used from computers running Windows Vista or later** checkbox.
5. Click **OK**.



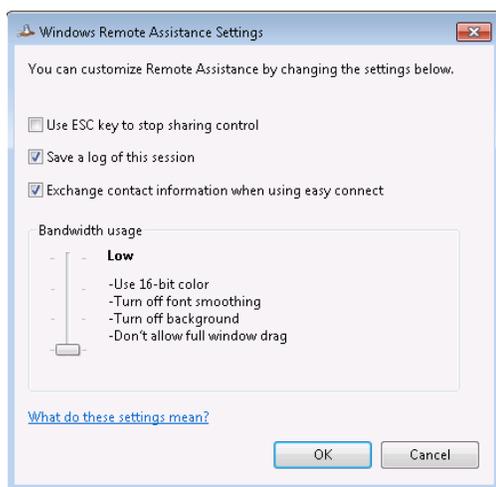
6. Click **Apply**, then **OK**, on the **System Properties** window.
7. Click **Start->All Programs->Maintenance->Windows Remote Assistance** to open the **Windows Remote Assistance** dialog box.
8. Click **Invite someone you trust to help you**.



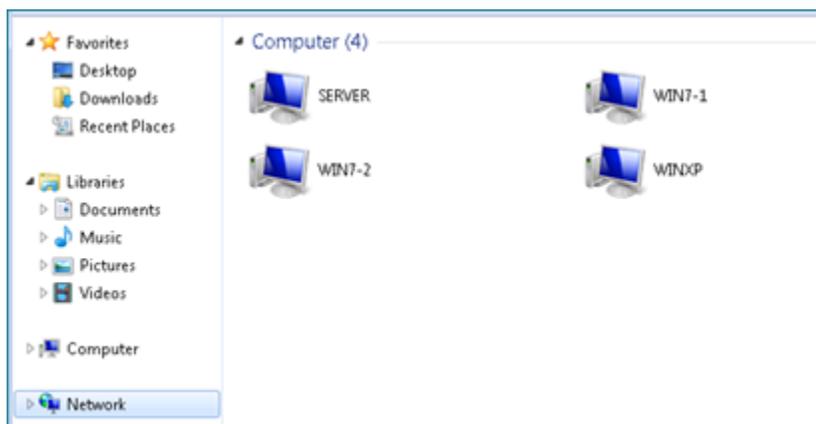
9. Click the **Save this invitation as a file** in the **How do you want to invite your trusted helper?** window, this opens a save dialog window.
10. Navigate to the RDP folder you saved to the Desktop, click on RDP, leave the file name **Invitation**, and click **Save**.
11. The Windows Remote Assistance window will open with an invitation password. Write down the password: _____

You will need to enter the invitation password in a later step of this task.

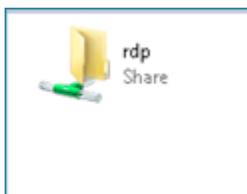
12. Click **Settings**.



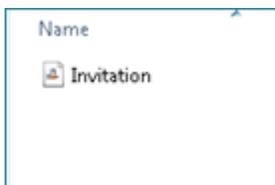
13. Check the **Use ESC key to stop sharing control**.
14. Click **OK**.
15. Use the instructions in the **Lab Settings** section to log on to the Windows 7 #2 machine.
16. Go to **Start->Computer->Network**
17. Double-click on the **WIN7-1** icon.



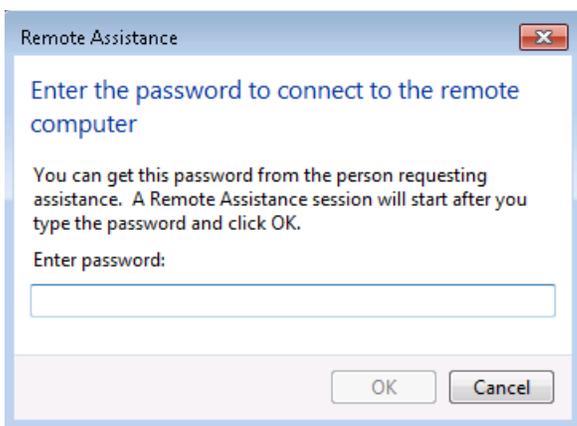
18. Double-click on the **RDP** folder.



19. Double-click on the **Invitation** file.



20. Type in invitation password that you wrote down (see Step 11).

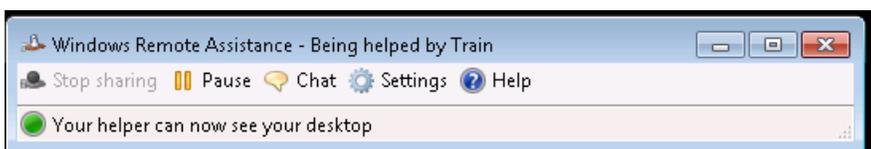


21. Click **OK**.

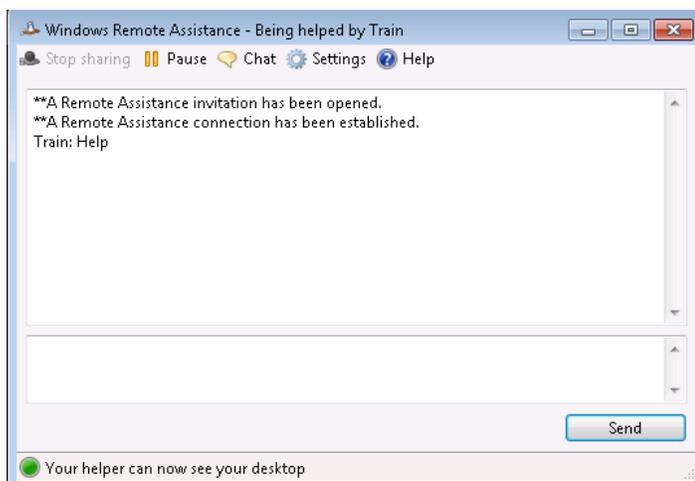
22. Use the instructions in the **Lab Settings** section to log on to the Windows 7 #1 machine.

23. When asked **Would you like to allow Train_Win7-1 to connect to your computer?** click **Yes**.

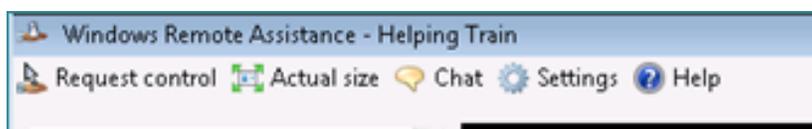
24. Click **Chat** in the Windows Remote Assistance – Being helped by Train window.



25. Type in a help request to Train and click **Send**.



26. Go back to the Windows 7 #2 machine and click the **Request control** button in **Windows Remote Assistance** menu bar.



27. On the Windows 7 #1 machine, click **Allow Train to respond to User Accounts Control** prompts.
28. Click **Yes**. Now, user Train_WIN7 #2 can remotely access and assist the user on the Windows 7#1 machine for tech support.
29. On the Windows 7 #1 machine, click **Stop sharing** in the Windows Remote Assistance menu bar to disconnect the session.
30. On Windows 7# 1 and Windows 7#2 machines, close the Windows Remote Assistance window and all other open windows.
31. On the Windows 7#1 machine, delete the **RDP** folder from the **Desktop**.
32. On the Windows 7#1 machine, click **Start->Control Panel-> System and Security ->System->Remote settings**, this will open the System Properties **Remote** tab.
33. On the **Remote** tab, select the radio button next to **Don't allow connection to this computer**.
34. Click **OK**.

2.2 Conclusion

Remote Access is a useful tool for supporting remote systems. Remote Assistance can be used to get help by allowing a user to invite a trusted person running a compatible operating system to have shared access and control of their machine, in order to provide assistance to resolve a problem.



References

1. Remote Desktop Connection:
<http://windows.microsoft.com/en-us/windows/connect-using-remote-desktop-connection#connect-using-remote-desktop-connection=windows-7>

