# ReadMe — Windows Firewall Configuration

Computer firewall security software is an integral part of a secure computer environment. Unfortunately, the default settings for most firewalls will disable/block the ASTRA software from communicating with Wyatt Technology instruments via a TCP/IP network interface.

**Important:** The ASTRA software package also uses Distributed Component Object Model (DCOM) communication over a TCP/IP network to communicate with certain Wyatt Technology instruments. If you will collect or monitor data from a ViscoStar, ViscoStar-II, or Optilab rEX, you will also need to follow the Windows DCOM configuration instructions:

ReadMe – Windows DCOM Configuration (M6006)

Modification of the firewall configuration is required on computers running ASTRA that will collect or monitor data from any of the following:

- **DAWN HELEOS** (with or without embedded QELS)
- **miniDAWN TREOS** (with or without embedded QELS)
- **Optilab rEX** or **Optilab T-rEX**
- **ViscoStar** or **ViscoStar II**

The ASTRA software installer will add the necessary firewall exceptions to the Windows Firewall during the installation process. If the Windows Firewall exceptions added by the ASTRA installer are modified, you can re-apply the exceptions by running the installer in repair mode.

If a firewall other than the Windows Firewall is used, you must manually configure the firewall with the necessary exceptions as outlined below.

**Note:** Windows Administrator privileges will be required to complete the firewall configuration process.

The following instructions detail how to configure the Windows firewall:

## 1. Required Firewall Exceptions

Several TCP/IP network TCP/UDP ports and installed ASTRA application exceptions are required if the client computer running ASTRA has an enabled firewall and needs to communicate with Wyatt Technology instruments over a TCP/IP network:

A. TCP Port Exception required by ASTRA:
   - 135 (Wyatt Instrument Communication)

B. TCP Port Exceptions for Wyatt Technology instruments
   - 9001 (DAWN HELEOS/TREOS Instrument Communication)
   - 9002 (ViscoStar Instrument Communication)
   - 9003 (QELS Instrument Communication)

   **Note:** The DAWN HELEOS/TREOS instrument has an embedded QELS option. The embedded QELS option requires TCP Port 9003.

C. ASTRA Application Exceptions
   - astra.exe
   - diagnosticmanager.exe
   - wsislocalu.exe

   The default path for these files is based on the installed operating system configuration:
   - 32-bit Windows, “C:\Program Files\WTC\ASTRA 6”
   - 64-bit Windows, “C:\Program Files (x86)\WTC\ASTRA 6”

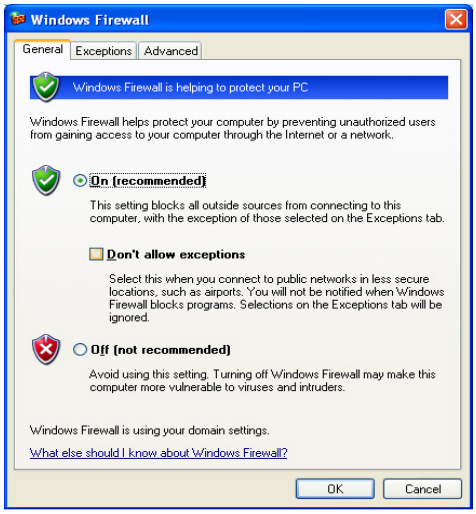
D. Shared Component Application Exceptions
   - isiu.exe
   - wsisu.exe

   The default path for these files is based on the installed operating system configuration:
   - 32-bit Windows, “C:\Program Files\WTC\ASTRA 5.3”
   - 64-bit Windows, “C:\Program Files (x86)\WTC\ASTRA 5.3”

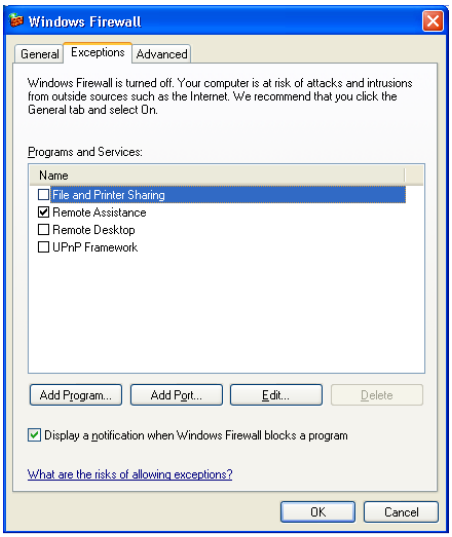
## 2. Configuring the Windows Firewall - Instructions

### A. Windows XP Firewall

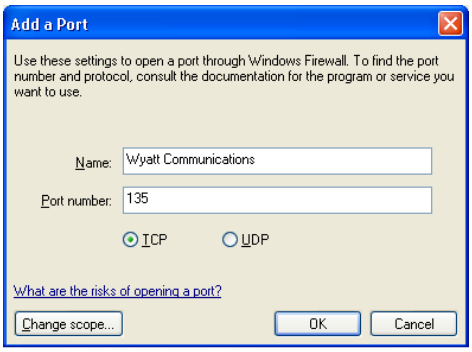
1. From the **Start** menu, choose **Control Panel**.
2. In the **Control Panel**, open the **Windows Firewall**.



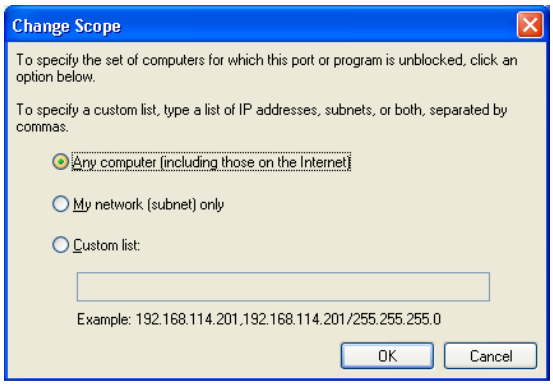

3. If the **Windows Firewall** is **enabled**, verify that the **Don't allow exceptions** option is **NOT enabled**.
4. Select the **Exceptions** tab. You will need to add Port and program exceptions to the **Programs and Services** exception list.




5. Press the **Add Port** button.

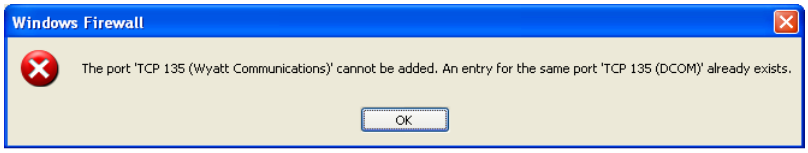


6. Configure the port settings.
   a. Enter **Wyatt Communications** in the **Name** field.
   b. Enter **135** in the **Port number** field.
   c. Set Port Protocol to TCP by selecting the **TCP** radio button.
   d. Press the **Change Scope** button.




   e. Confirm that the **Any computer (including those on the internet)** option is selected. Press **OK** to return to the **Add a Port** dialog.
   f. Press **OK** to complete the **Add a Port** process.

   **Note:** If the port exception already exists, you can safely ignore any error message indicating that the port "cannot be added. An entry for the same port already exists." This error just means another application required TCP Port 135, and has already configured your system appropriately. Go on to the next step.

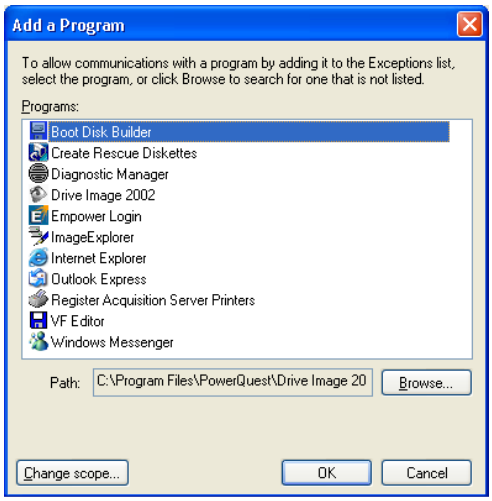



7. Repeat steps 5 and 6 for the following TCP ports:

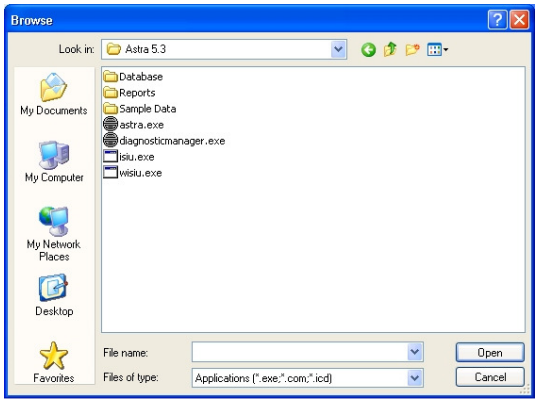
| Label | Port | Protocol |
|---|---|---|
| Wyatt ASTRA 6 (TCP 9001) | 9001 | TCP |
| Wyatt ASTRA 6 (TCP 9001) | 9002 | TCP |
| Wyatt ASTRA 6 (TCP 9001) | 9003 | TCP |

**Note:** If the port exception already exists, you will receive an error (indicating that one of the entries was already in use) for the Step 7 entry, no entry for the attempted duplicate is created and you can safely ignore this and continue with the rest of the configuration.

8. Press the **Add Program** button.




9. Press the **Browse** button.




a. Navigate to the ASTRA install location.

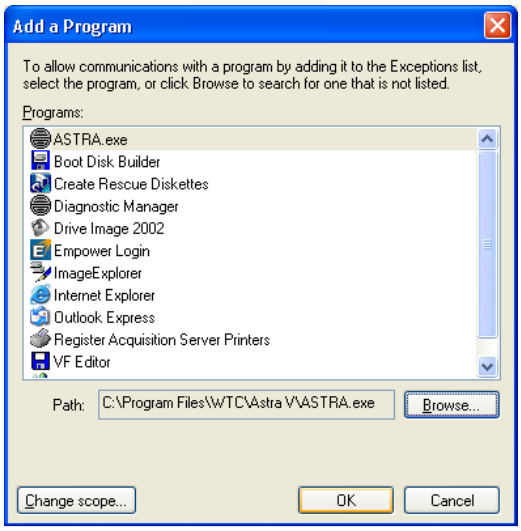
   The default path for these files is based on the installed operating system configuration:

   - 32-bit Windows, “C:\Program Files\WTC\ASTRA 6”
   - 64-bit Windows, “C:\Program Files (x86)\WTC\ASTRA 6”

b. Select **astra.exe**.

c. Press the **Open** button.

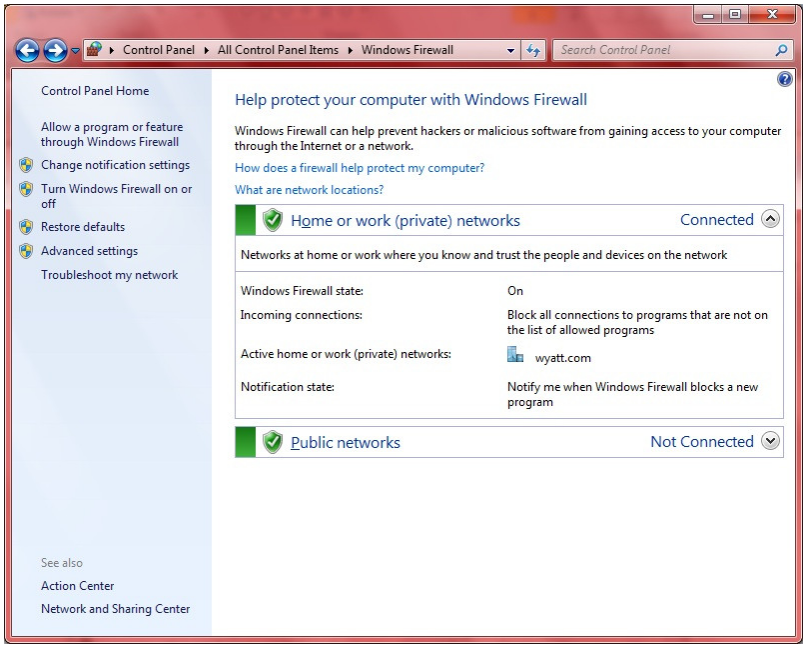
d. The **Add a program** dialog will now include the ‘ASTRA.exe’ program in its list. Click the OK button.



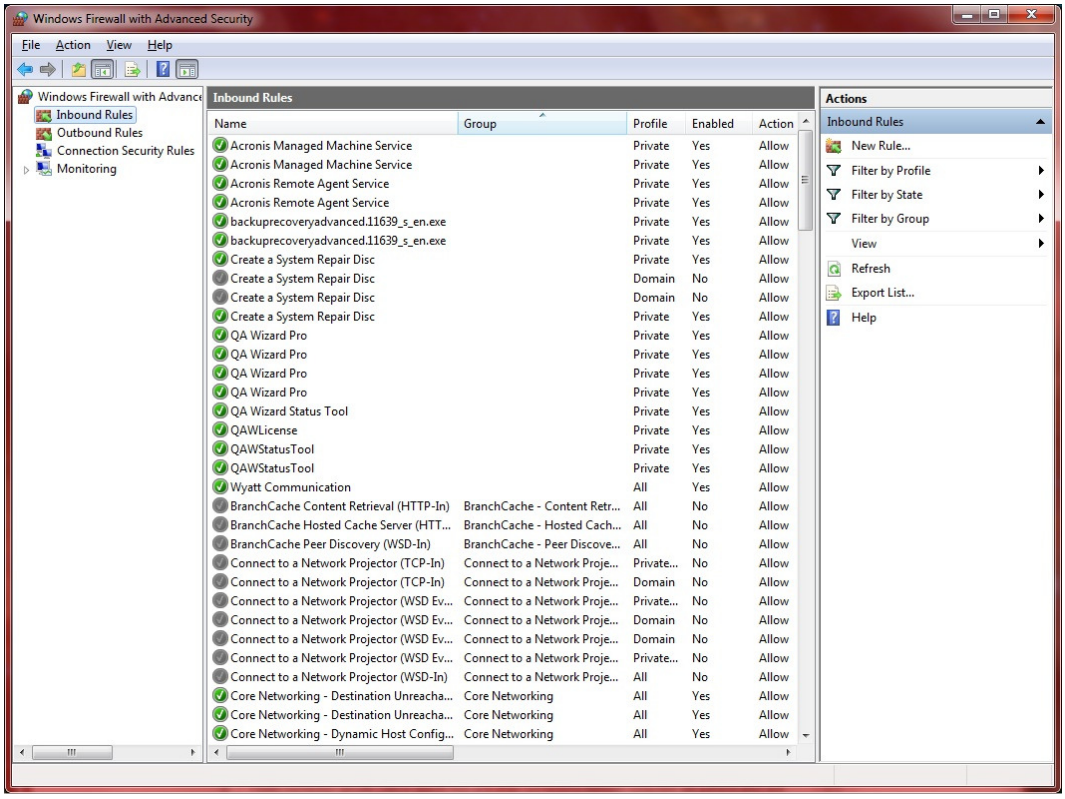
10. Repeat steps 8 and 9 for the following applications.
    a. ASTRA Files in the same directory as astra.exe
        - **diagnosticmanager.exe**
        - **wisilocalu.exe**
    b. Shared files in “C:\Program Files\WTC\ASTRA 5.3”
        - **isiu.exe**
        - **wisiu.exe**
11. Press **OK** to save all settings and close the **Windows Firewall**.

## B. Windows Vista & Windows 7 Firewall

1. From the **Start** menu, choose **Control Panel**.
2. In the **Control Panel**, open the **Windows Firewall**.

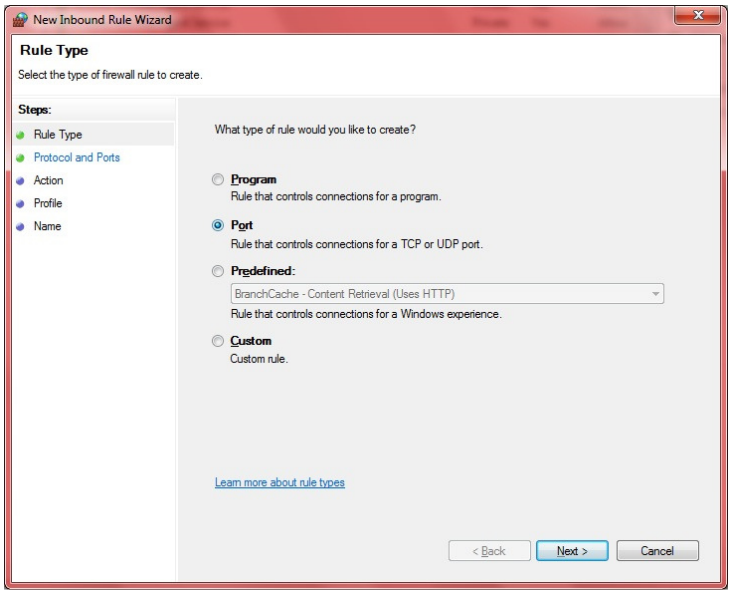



3. Select **Advanced settings** on the left-hand side of the window. The **Windows Firewall with Advanced Security** window will be displayed.




4. Click on the **Inbound Rules** option on the left hand side of the window.

5. Select **New Rule** from the right hand side of the window, to open the **New Inbound Rule Wizard**.

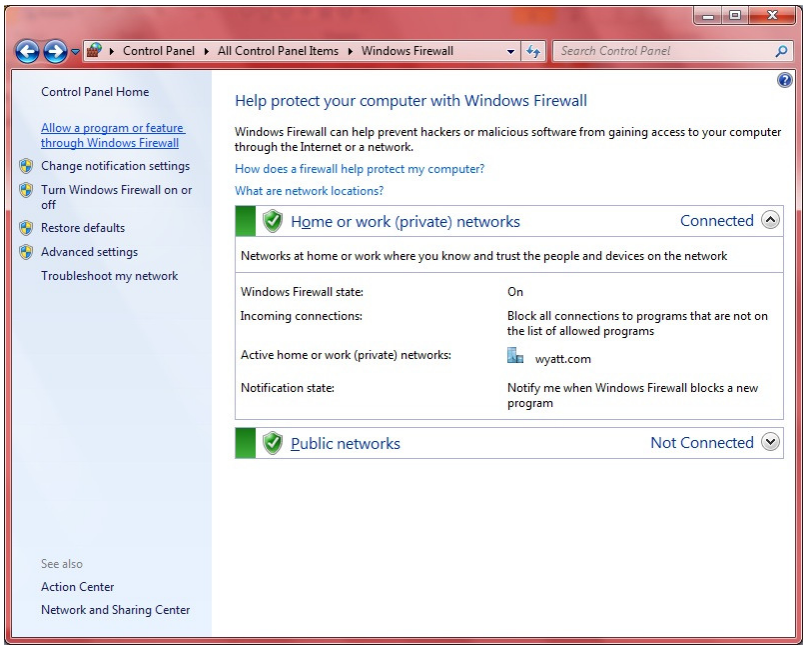



6. Select the **Port** radio button and press the **Next** button.
   a. Select the **TCP** option, enter **135** in **Specific local ports** then press the **Next** button.
   b. Select **Allow the connection** then press **Next**.
   c. Enable **Domain**, **Private** and **Public** then press **Next**.
   d. Enter **"TCP Port 135"** for the **Name** then press **Finish**.
7. Repeat steps 5 and 6 for the following TCP ports:

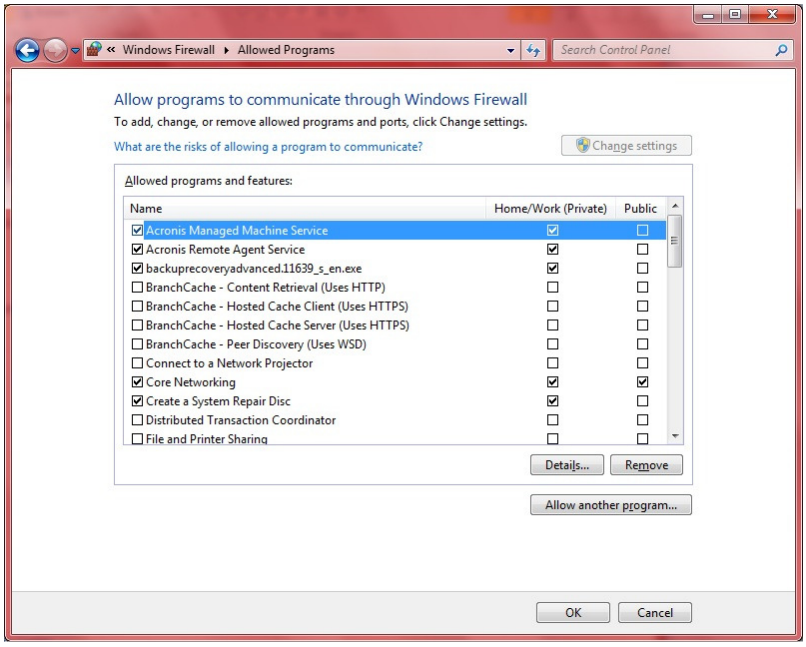
| Label | Port | Protocol |
|---|---|---|
| Wyatt ASTRA 6 (TCP 9001) | 9001 | TCP |
| Wyatt ASTRA 6 (TCP 9001) | 9002 | TCP |
| Wyatt ASTRA 6 (TCP 9001) | 9003 | TCP |

8. Close the **Windows Firewall with Advanced Security** window.

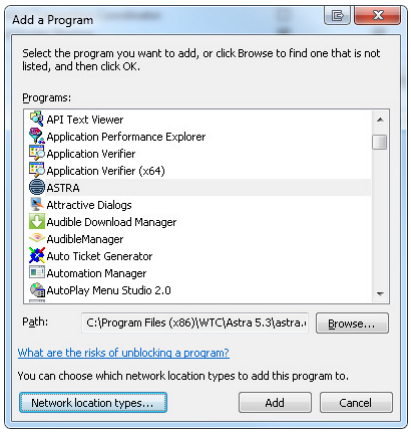
9. Select **Allow a program or feature through Windows Firewall** on the left-hand side of the **Windows Firewall** window. The **Allowed Programs** window will be displayed.



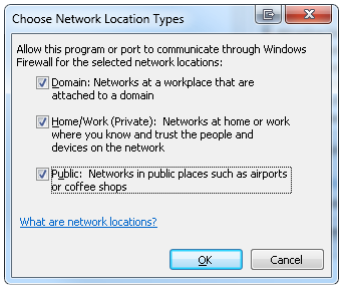

10. Press the **Change Settings** button to enable the **Allow another program** button.



11. Select **Allow another program**, to open the **Add a program** dialog.




    a. Press **Network location types** and enable **Domain**, **Home/Network** and **Public**, then press **OK** to accept the location type and close the dialog.




    b. Press the **Browse** button.

    c. Navigate to the ASTRA install location.

    The default path for **astra.exe** is based on the installed operating system configuration:

    - 32-bit Windows, “C:\Program Files\WTC\ASTRA 6”
    - 64-bit Windows, “C:\Program Files (x86)\WTC\ASTRA 6”

    a. Select **astra.exe** and press the **Open** button.

    b. Press **Add** to update the allowed programs and features list.

12. Repeat step 10 for the following applications:

    a. ASTRA Files in the same directory as astra.exe

    - **diagnosticmanager.exe**
    - **wisilocalu.exe**

    b. Shared files in “C:\Program Files\WTC\ASTRA 5.3”

    - **isiu.exe**
    - **wisiu.exe**

12. Press **OK** to close the **Allowed Programs** window.