**Advanced: Connecting workstations to remote SQL Server databases**

All Orders is generally setup and run on LANs (Local Area Networks) where all the computers are connected and share information over the same network. In this environment there is usually no need to specify any special information for the All Orders installations on the workstation to connect to the SQL Server database as they are both on the same network. Simply run the server installation package where the database will reside and the client installation package on the workstations. Open the client on the workstation and follow the instructions.

In special circumstances the workstation where the All Orders client is being installed may be required to connect to a SQL Server database which is not on the LAN. In some rare cases even though a local SQL Server database may be on the same network, depending on the configuration and security settings of the network the client may have issues connecting to the database. This article will address both issues and walk step by step through the process of controlling the way the client will be connecting to the SQL Server database.

1. Because SQL Server is a "Network Database", information can be pushed and pulled from the database using multiple protocols. The first step is to ensure that SQL Server is accessible via the TCP/IP protocol. On the computer where the server installation package was run and where the database will reside, go to the Start Menu -> All Programs/Programs -> Microsoft SQL Server 2005/2008 -> Configuration Tools -> SQL Server Surface Area Configuration.
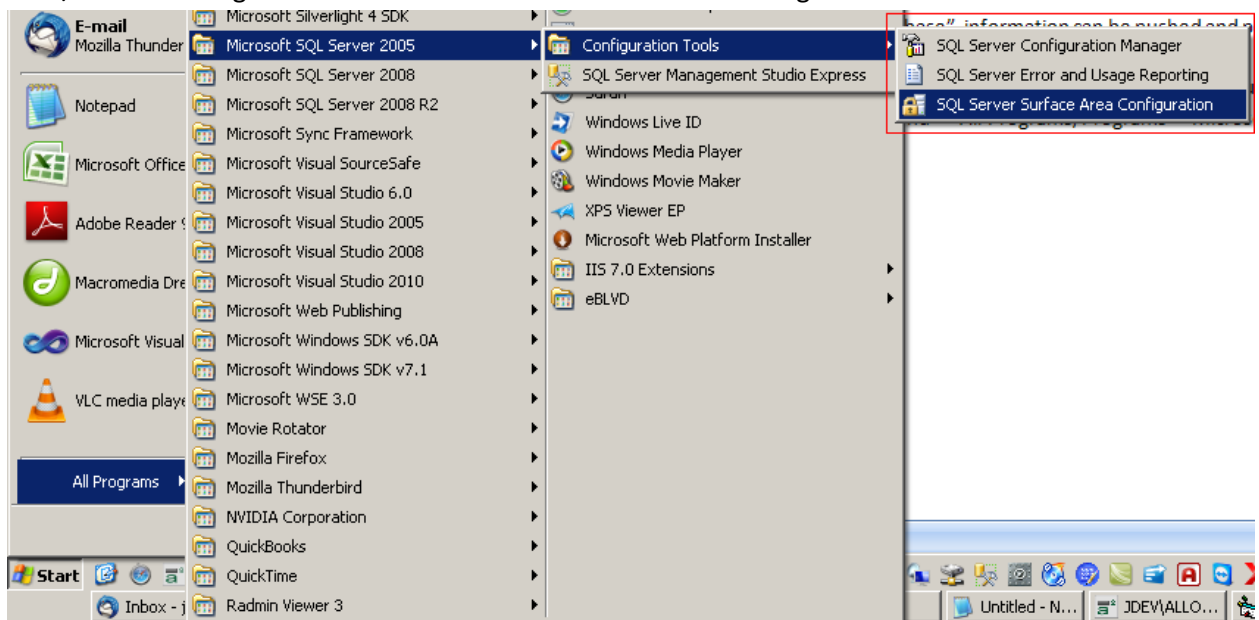
2. Once open click Surface Area Configuration for Services and Connections.
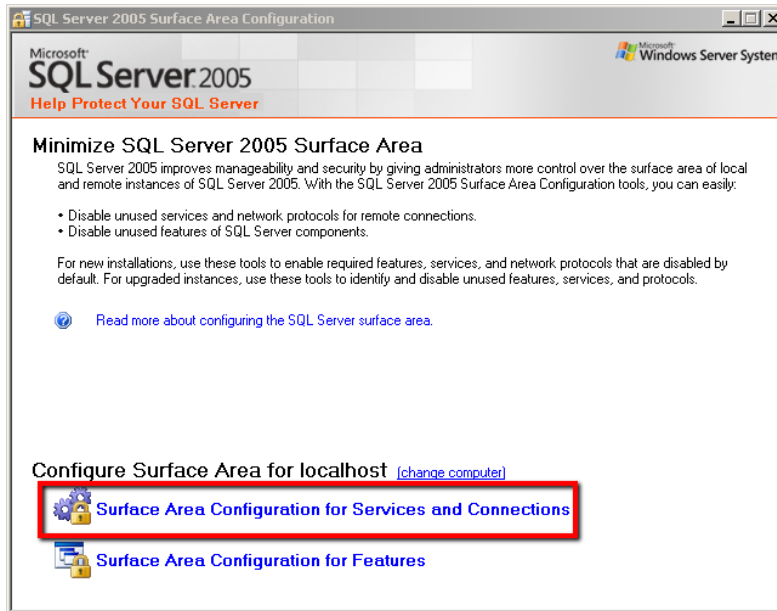
3. Expand the Database Engine node and select Remote Connections. Make sure that Using both TCP/IP and named pipes is select. Clock Apply and then OK.
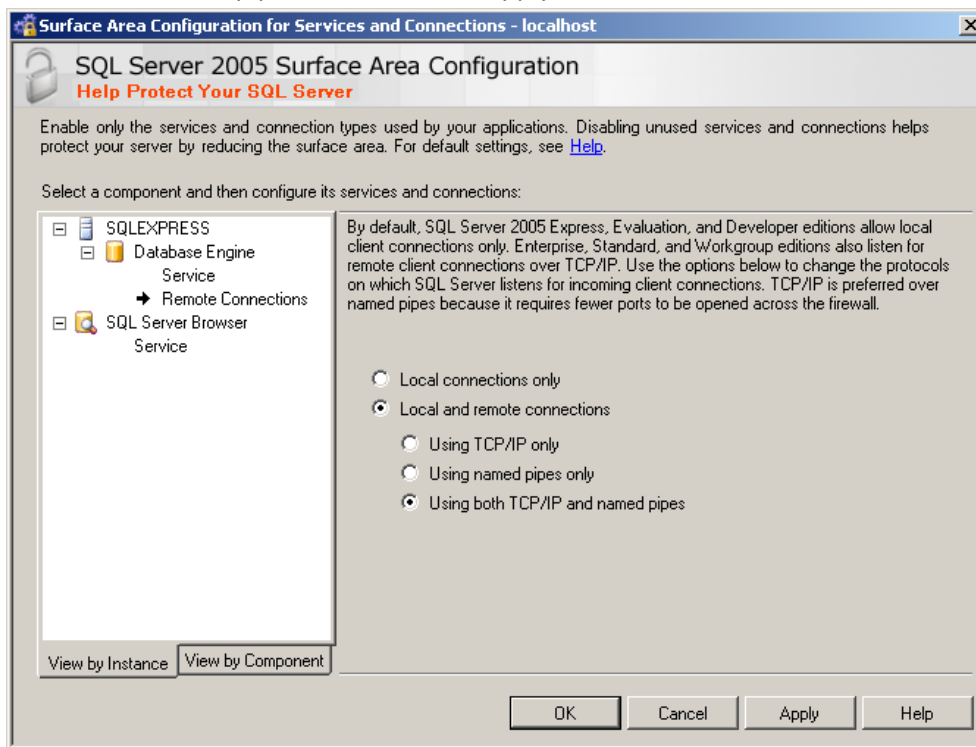

4. Go to the Start Menu -> All Programs/Programs -> Microsoft SQL Server 2005/2008 -> Configuration Tools -> SQL Server Configuration Manager. Expand the SQL Server 2005/2008 Network Configuration node and select Protocols for ALLORDERS (That is the name of the default SQL instance installed by All Orders. If you are using a different instance select the one

you want to use.). Once selected you will see a list of protocols in the right pane. If TCP/IP is disabled, right click on it and enable it.
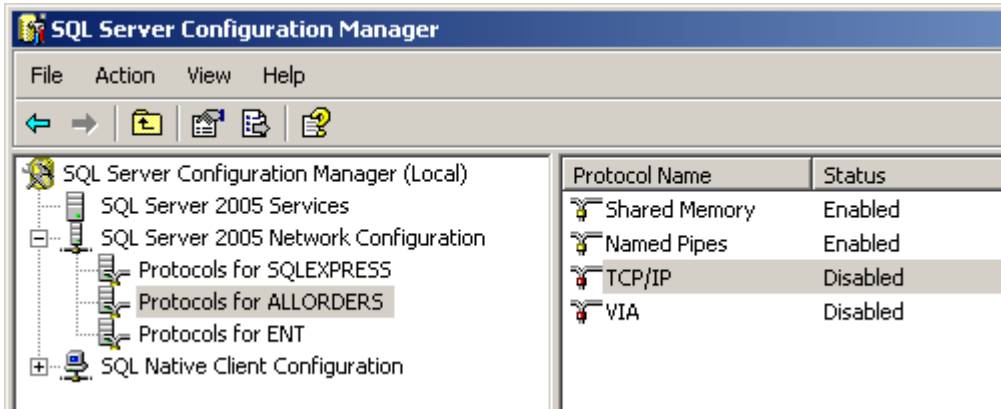

5. Once it is enabled, right click TCP/IP in the right pane and click Properties. Select the IP Addresses tab and scroll to the bottom to the IPALL section. Make sure that nothing is in the TCP Port field and a specific port for SQL Server to run over is entered into the TCP Dynamic Ports field. In this example we will be using port 5000. Click Apply and OK.
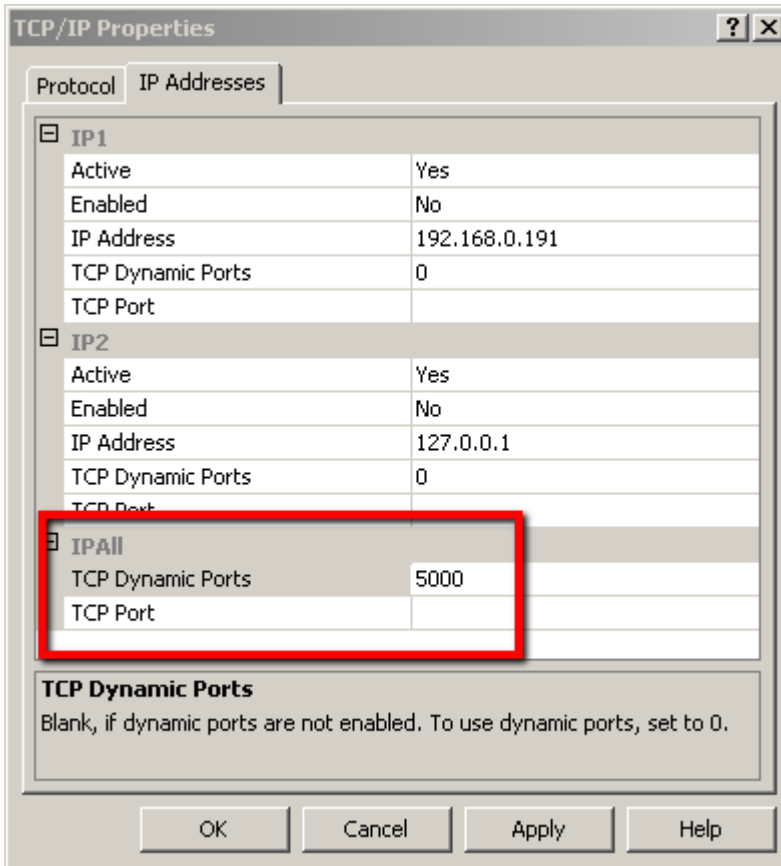

6. In the left pane select SQL Server Services. Find SQL Server (ALLORDERS) in the right pane and right click it and select Properties. Under the Service tab make sure that Start Mode is

Automatic. Under the Log On tab click Start if it is enabled. Otherwise click Restart. Click OK and close out of the configuration manager.
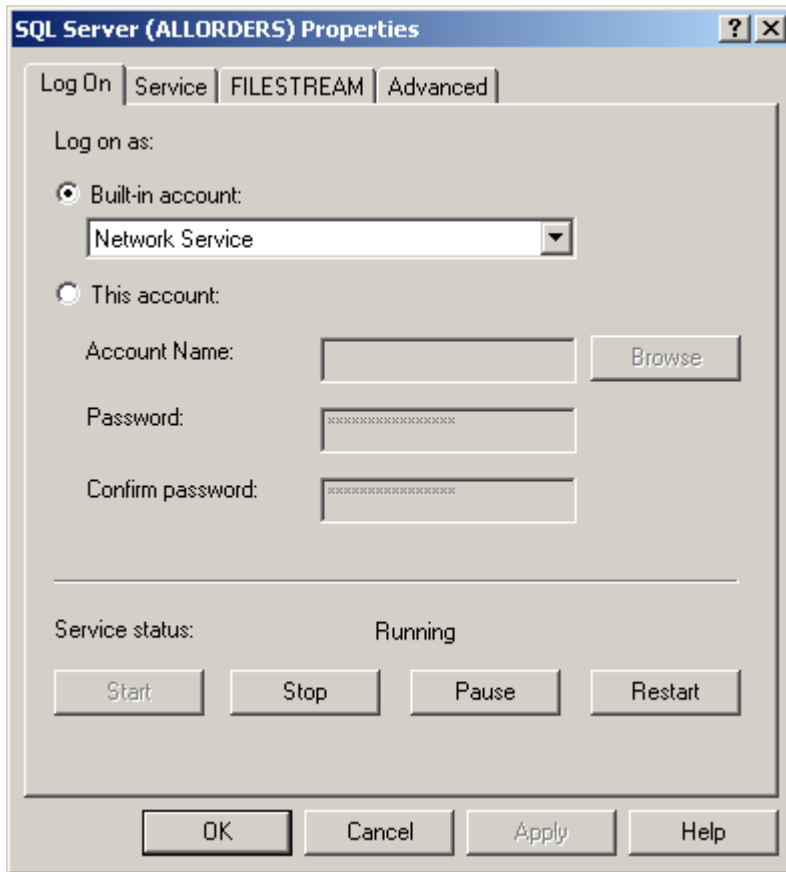
7. To review we have now ensured that SQL Server is running on TCP/IP on the port we specified and that remote connections are allowed. The next step will be to open the port in the Windows Firewall for SQL Server.

8. **Windows XP/Server 2003:** To open a port in the Windows Firewall go to the Control Panel (Start Menu ->Control Panel) and find the Windows Firewall. Double click to edit the firewall. If it is turned off skip to step 9. If it is turned on, make sure the "Don't Allow Exceptions" checkbox is unchecked. Next select the Exceptions tab and click the Add Port button. Enter any descriptive name, such as "All Orders SQL", and then enter the port. In this example we will enter 5000. TCP should be selected. Click OK when you are done.
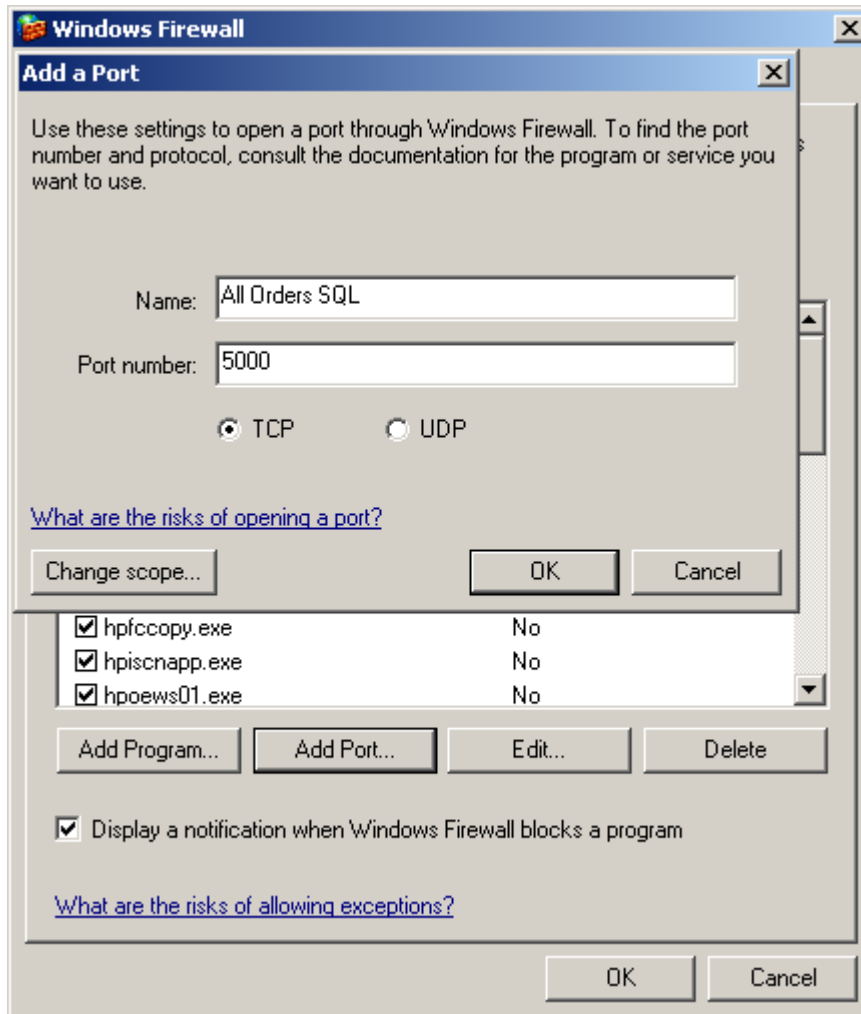
Windows 7/Server 2008: To open a port in the Windows Firewall go to the Control Panel (Start Menu ->Control Panel) and click the System and Security link and find the Windows Firewall. Double click to edit the firewall. If it is turned off skip to step 9. If it is turned on, click the Advanced Settings link on the left hand side. Next, on the left, click Inbound Rules. Then, on the right, under Actions, click the New Rule link. Select the option marked Port and click Next. Select TCP and Specific Local Ports and in the Specific Local Ports box, type the port you want to open, in our example 5000, and then click Next. Choose Allow the Connection and click Next. Check the boxes for everything listed (Domain,Private,Public), and then click Next. Enter any descriptive name, such as "All Orders SQL". Description can be left empty. Click Finish.

9. If you have a hardware firewall or a router with a built in firewall you may need an IT Professional to open the ports for you there as well. If you are not sure you can still continue to the next step and attempt o connect the client.

10. Now we want to go to the workstation that we want to connect to the SQL Server database. Open All Orders. If All Orders attempts to connect to the SQL Server database but has an error

connecting cancel out of the error screen. If a screen is displayed prompting you to open an existing file or create a new one, cancel out of it. Go to the File menu and click Maintain. Under the Advanced tab click Server Settings.

 If the NCD file at the top is empty, click browse and select where you want to place the .NCD and then give it a name and .NCD extension and save. In our example I browse to a shared folder on the network where my Quickbooks file is stored and enter the name MyCompany.NCD for the file name. Now whenever someone else want to browse for an open the All Orders file they can just go to the shared Quickbooks folder and open the .NCD file from there.

Under the Computer click the "Select instance of SQL Server" checkbox. If the SQL Server is listed in the drop down, select it and add a comma to the end of it and then the port number. In our example ",5000" would be added to the end. If you are going to be connecting to a remote server which is not in the list you will need to manually type in the server information. For example if I want to connect to a remote server with the public IP of 10.20.30.40, I would enter "10.20.30.40,5000" (without the quotes).

If the Data Base field is empty, click browse to find the .MDF file that was created for the database on the network. If you do not know where it was created you may need to ask an IT professional or call NumberCruncher support. If it is a remote database that cannot be browsed for in the local networks file system, you will have to trick the system a bit by creating a dummy .MDF file and selecting it. Open Notepad and go to the file menu and click save. Type a file name of XXXX.mdf where XXXX matches the name of the remote database. Save the file somewhere you can browse to and then back in All Orders click the browse button next to the database fields to browse for and select the dummy .MDF file.

The User Name for the default All Orders SQL Server installations is sa and the password is Sysadmin1. If you have a custom installation of SQL Server, enter the user name and password you have setup here. All Orders only uses SQL Authentication, not Windows Authentication, so a user name and password are required.

Once you have entered all the information click Save to save and open the .NCD file and if everything was entered properly you should be prompted to log into All Orders. Other workstations can now open the same .NCD file which was created and contains all the connection information without having to go through all these steps again.

Modify Server Setting

NCD File: C:\Dev\AllOrders6\samp.NCD

[Browse..]

Server: JDEV\ALLORDERS,5000

☑ Select instance of SQL Server

Data Base: C:\Dev\AllOrders6\SAMPLE_PRODUCT-BASEDBUSINESS.MDF

[Browse..]

User Name: sa

Password: **

Re-type password: **

Connection Timeout 240   Command Timeout 240

[Save] [Cancel]