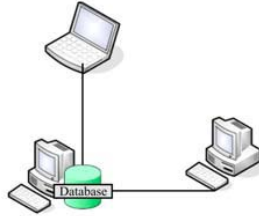# Installing and Configuring a
FFI Database Master-Computer Configuration

General Instructions for Installing SQL and FFI on a Network

These directions assume all your computers are XP machines that will be running FFI.

You should reference the **FFI User Guide** as you work through the installation. The **FFI User Guide** is posted on the FFI Software and Manuals page on the FFI Website at: *http://frames.nbii.gov/ffi*

• Install FFI on each computer as described under *Installation / Installation Process/ Part 1 Installing FFI and Microstoft.NET*

• Install Microsoft SQL Server Express on the computer that is to host the databases as described under *Installation / Installation Process/ Part 2 Installing SQL Server*

• Change the SQL Server settings on the Master computer as described in the next section of this document

The installation of SQL Server on client computers is optional. The only part of the SQL installation you will need on client computers is SQL Browser. SQL Browser searches for SQL instances and populates the dropdown list so you can select the SQL instance you want to connect to. If SQL Browser is not installed you must manually type the SQL instance name to connect to the instance, rather than selecting from dropdown list as normal. If you install SQL Express on client computers you can use SQL Configuration Manager to stop the SQL instance from running but still use SQL Browser to search for instances on the Master computer.

• If you have converted data from FEAT or FIREMON, restore each database on the FFI server as described under *Administration / Managing databases / Restoring a database* (don't create the database before you restore it)

• If you need to create a new database from scratch, see *Administration / Managing databases / Creating a database*

• Test to see if you can login to your databases on the master computer

• Test to see if you can login to your databases on the client computers

Configuring SQL Server Express on a Network

1. **Use SQL Server Configuration Manager to change the default settings for the Protocols for MSSQLServer.**

   Click *Start > All Programs > Microsoft SQL Server 2005 > Configuration Tools > SQL Server Configuration Manager*.

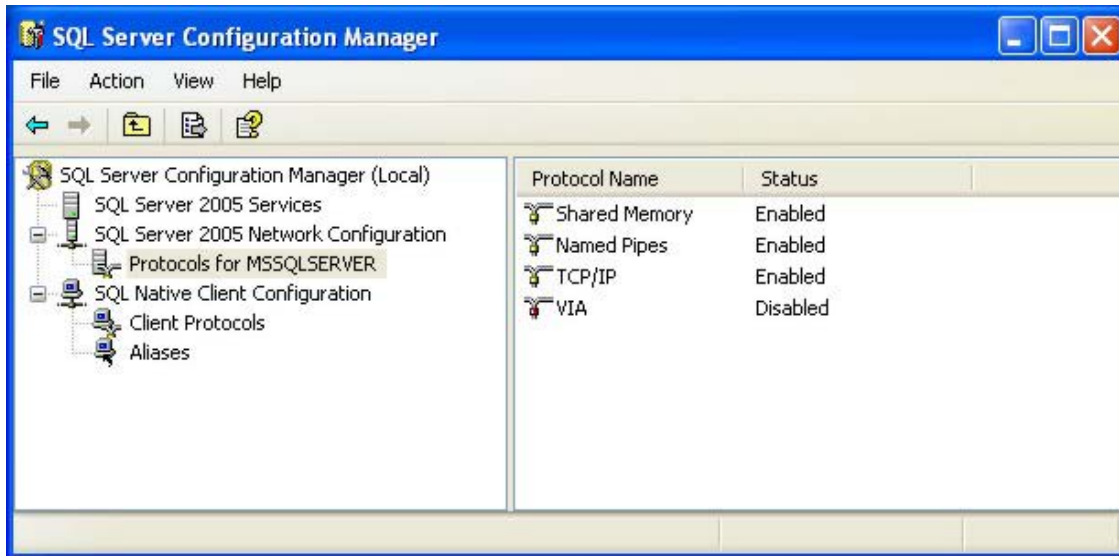   The default settings during installation are for Named Pipes and TCP/IP being disabled.
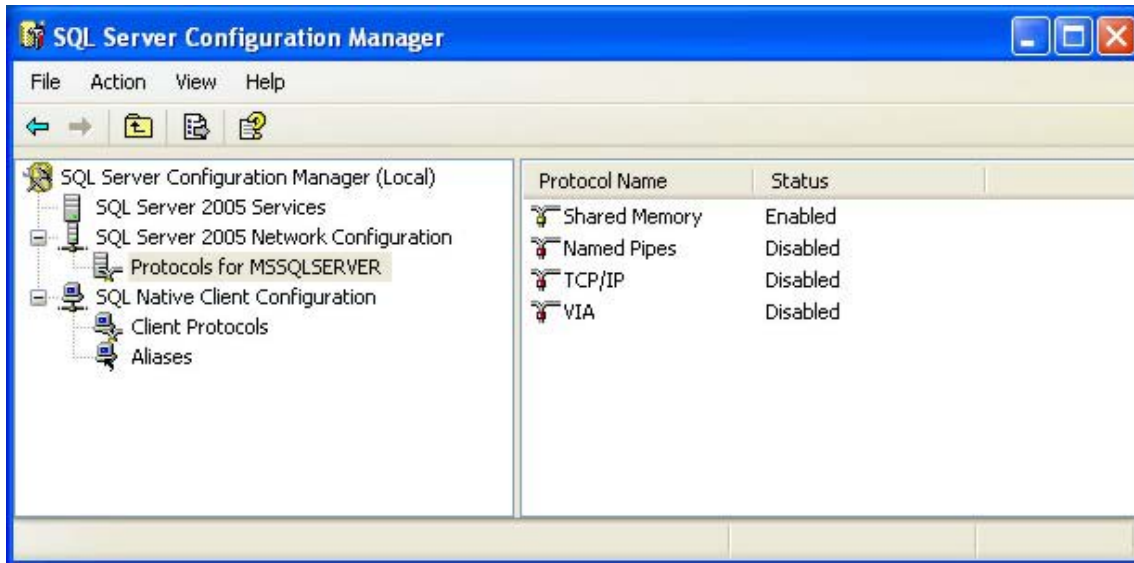
   These protocols must be enabled as displayed in the figure below.
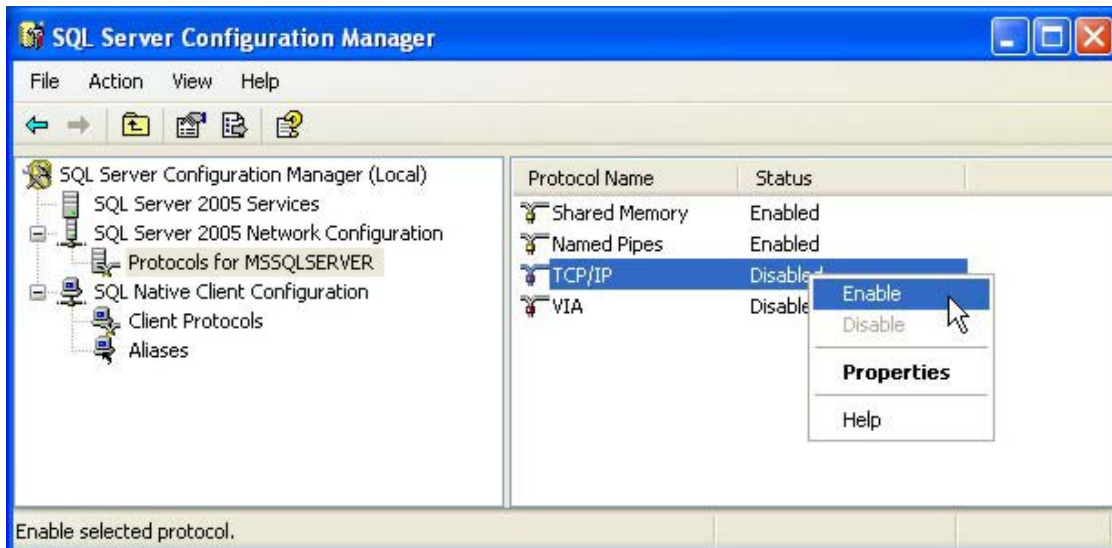
After both protocols are enabled, the status for each protocol should look like the figure below.


Double check the default settings for the SQL Native Client Configuration – Client Protocols. They should be in the same order and enabled / disabled as illustrated below. If not, reorder and/or enable as necessary.
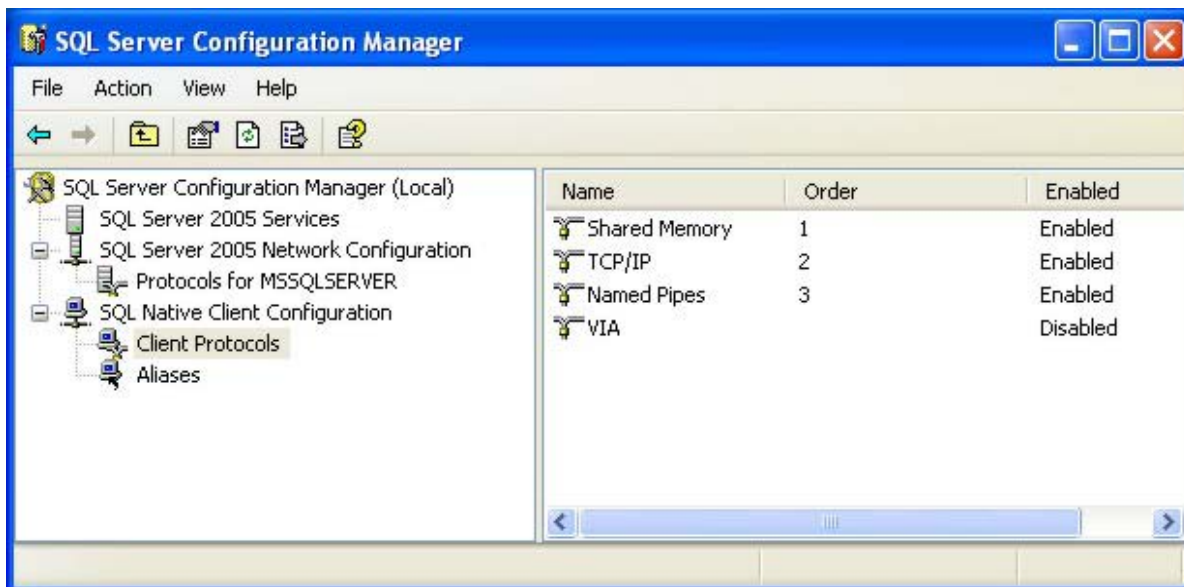
You must now restart the SQL Server service for the changes to take effect.
Restart SQL Server and SQL Server Browser as illustrated below. *Note that if you are running SQL Express, you will only have the SQL Server and SQL Browser services installed. These illustrations are from SQL Server 2005.*
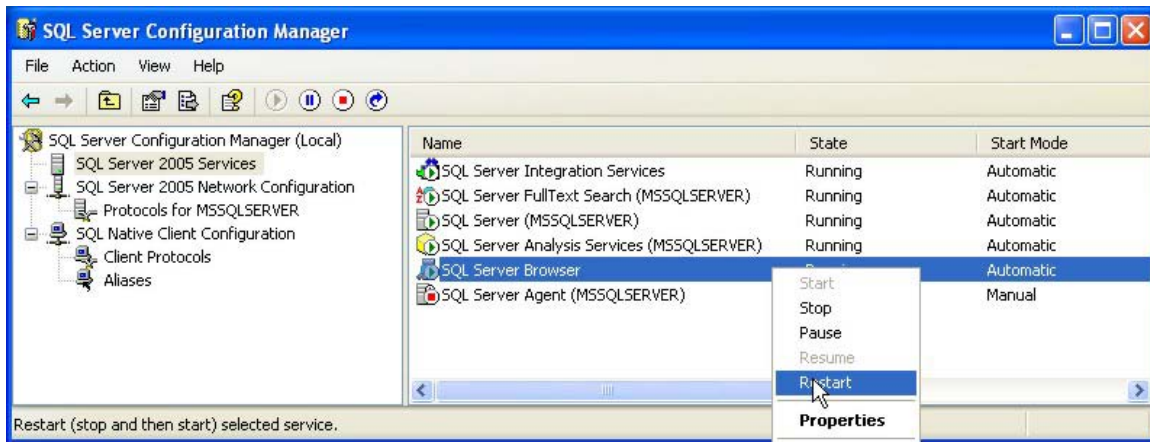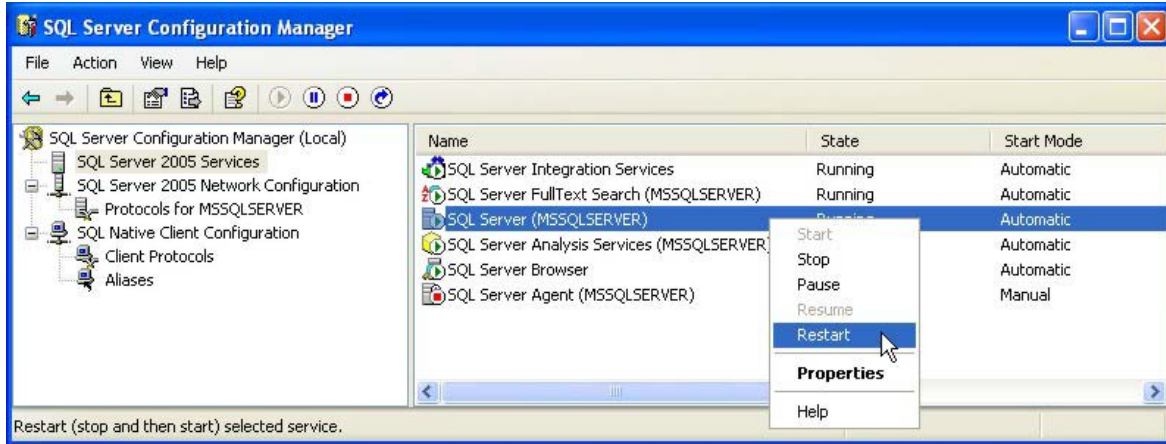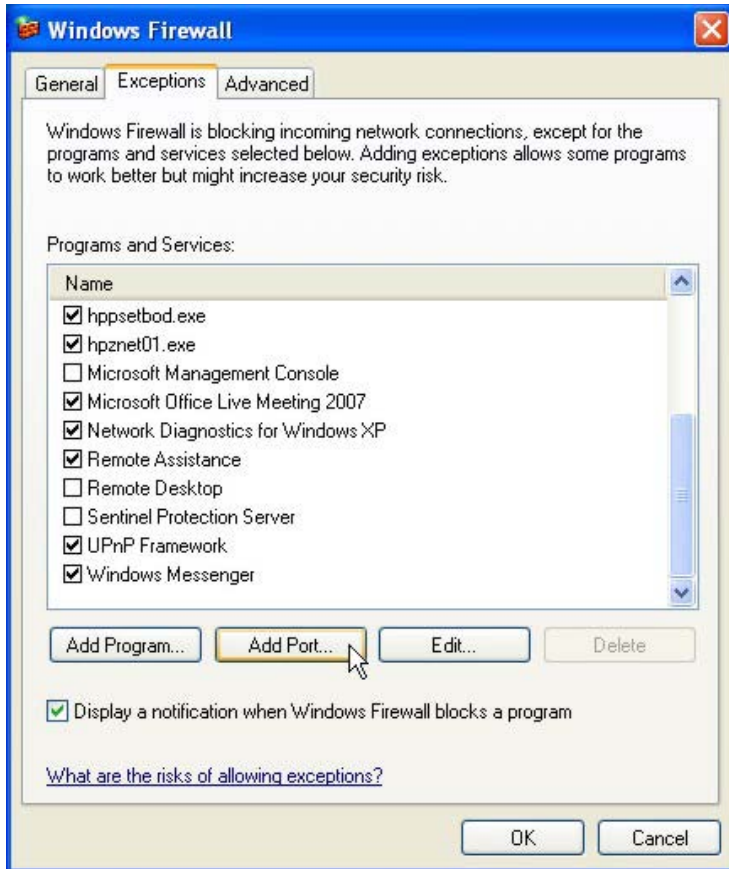

2. **Add SQLBrowser to your Firewall exceptions.**
    ** You may need Administrator Privileges to complete this section **

    If you still can't connect to SQL Server over your network after making the above changes, you must add SQLBrowser to your firewall exceptions. The process will vary between firewalls and the illustrations below are for the Windows firewall.

Click *Start > Control Panel > Windows Firewall* and select the *Exceptions* tab.

Add SQLBrowser.exe and UDP Port 1434 as illustrated below.
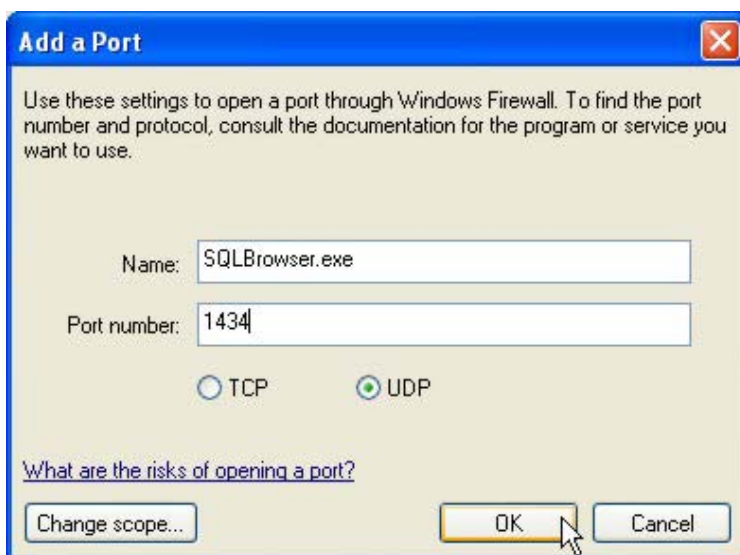
You should now see SQLBrowser.exe added to the firewall exceptions.
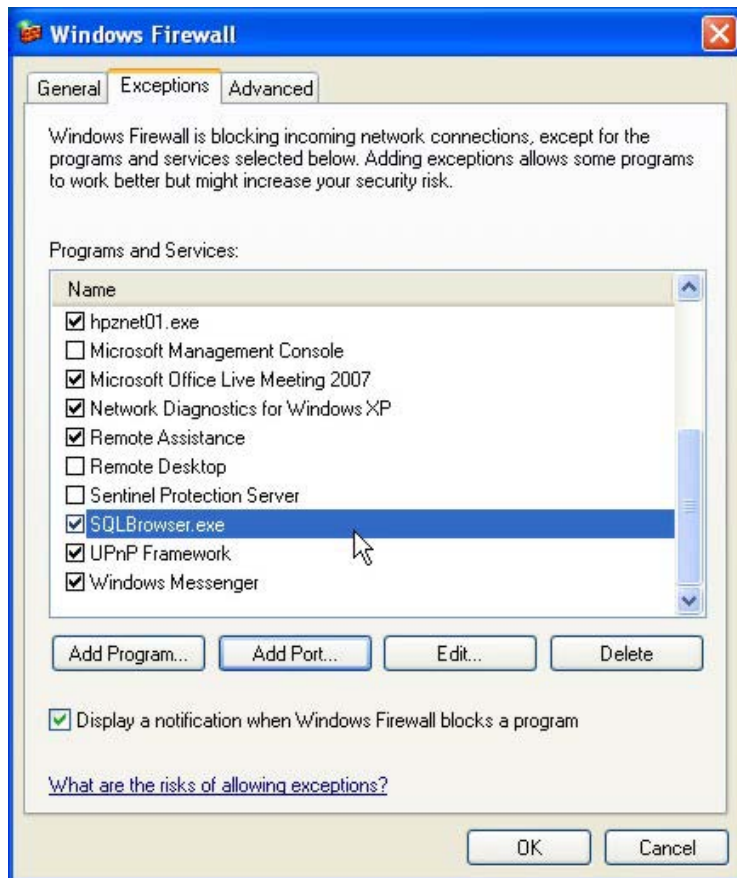
3. **Additional support.**

The above configurations will solve the most common problem with connecting to SQL Server over a network. This relates to SQL Server error: 26 – Error Locating Server/Instance Specified. These configuration changes will solve this problem, but you might encounter other errors. You can Google the error number and you will most likely find the site below as the first link in the Google search results.

http://blogs.msdn.com/sql_protocols/default.aspx

This site has a wealth of information on configuring SQL Server 2005 and SQL Express.

If you have trouble connecting from the master computer, SQL Server may be installed incorrectly. See *SQL Settings for FFI.pdf* on the Files page of the FFI Google Group for more information.