

Inquire – Knowledge Base Article

Product Group: Software

Product: CMSW7700 @ptitude Monitoring Suite

Version: 5.0; 6.0

Abstract

This article serves as a guide on how to configure SQL Server 2008 R2 Express for a network installation.

Overview

By default, the Remote Connections selection is disabled on SQL Server 2008 R2 Express. If a user intends on connecting to SQL Server 2008 R2 Express and Remote Connections has not been enabled, the following error messages may appear:

- A. *"Cannot connect to SQL-Server-Instance-Name\SQLEXPRES"*
Additional Information:
An error has occurred while establishing a connection to the server. When connecting to SQL Server 2008, this failure may be caused by the fact that under the default settings SQL Server does not allow remote connections. (provider: SQL Network Interfaces, error: 28 - Server doesn't support requested protocol) (Microsoft SQL Server)"
- B. *"Cannot connect to SQL-Server-Instance-Name\SQLEXPRES"*
Additional Information:
An error has occurred while establishing a connection to the server. When connecting to SQL Server 2008, this failure may be caused by the fact that under the default settings SQL Server does not allow remote connections. (provider: SQL Network Interfaces, error: 26 - Error Locating Server/Instance Specified) (Microsoft SQL Server)"
- C. *"Cannot connect to SQL-Server-Instance-Name\SQLEXPRES"*
Additional Information:
Login failed for user 'username'. (Microsoft SQL Server, Error: 18456)"

Below is a brief outline on the procedure for enabling remote connections on SQL Server 2008 R2 Express.

- Start SQL Server Browser service. SQL Server Browser identifies incoming requests for Microsoft SQL Server resources and provides information about SQL Server instances installed on the computer.
- Enable the TCP/IP protocol for SQL Server 2008 R2 Express to accept remote connections.
- (Optional) Change Server Authentication to SQL Server and Windows Authentication. By default, SQL Server 2008 R2 Express only allows Windows Authentication mode, however, connection to the SQL Server is possible using current user login credentials. To specify a user to connect to the SQL Server, the Server Authentication must be changed to SQL Server and Windows Authentication.

In SQL Server 2008 R2 Express, SQL Server Surface Area Configuration does not exist. The configuration is done from the *SQL Server Configuration Manager*.

For detailed instructions on enabling remote connections, a step-by-step procedure is as follows:

1. Open the SQL Server Configuration Manager. To do this, select **Start → Programs → Microsoft SQL Server 2008 → Configuration Tools → SQL Server Configuration Manager** (Figure 1).

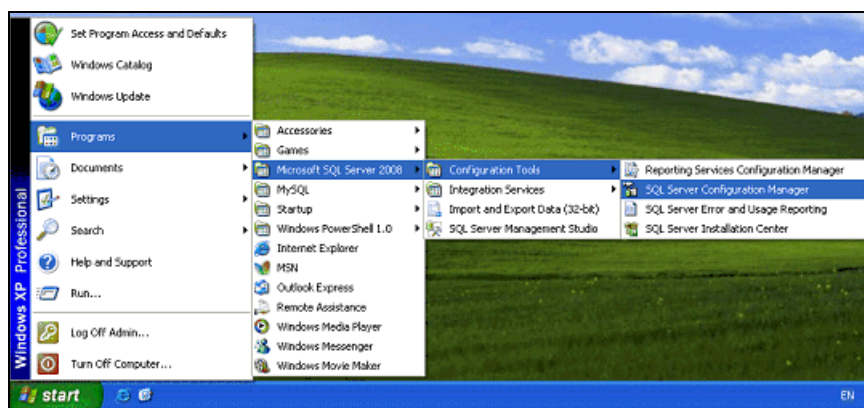


Figure 1. Open SQL Server Configuration Manager

- On SQL Server Configuration Manager, select **SQL Server Services** in the left window. In the right window, if the SQL Server Browser is in a 'Stopped' state, the service must be configured and started (Figure 2). Otherwise, advance to Step 6.

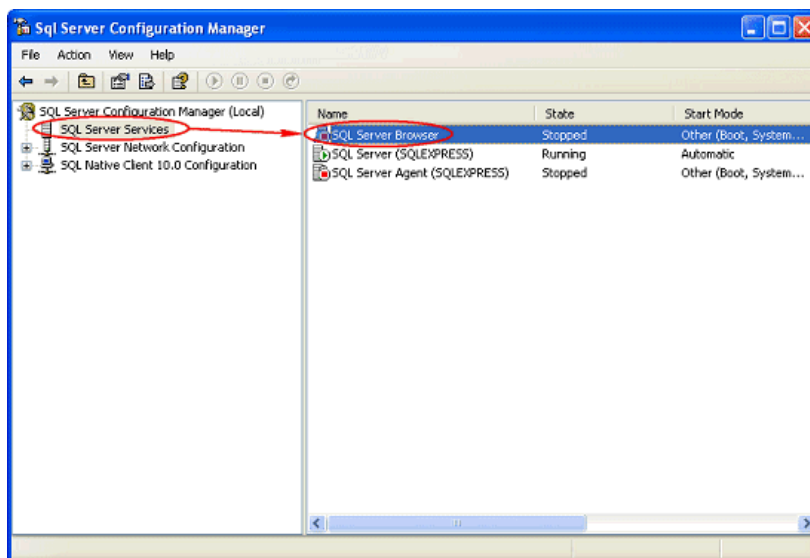


Figure 2. SQL Server Browser in a *stopped* state

- Double-click on SQL Server Browser to display the Properties window. Set the account to start *SQL Server Browser Service*. The example shown in Figure 3 is set to *Local Service* account.

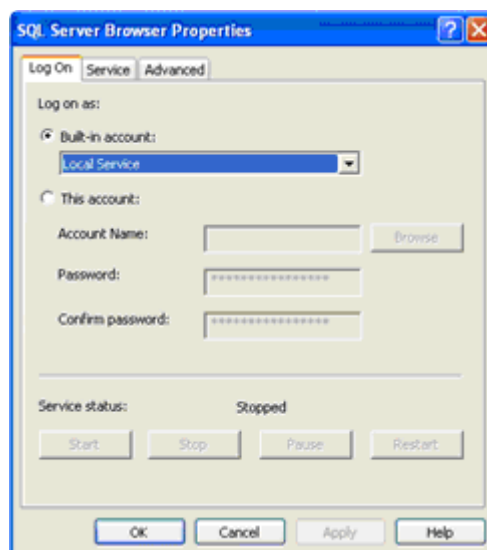


Figure 3. SQL Server Browser Properties

4. Next, select the **Service** tab and change Start Mode to *Automatic* (Figure 4). The service will now start automatically when the computer is powered on. Press [OK] to apply these changes.

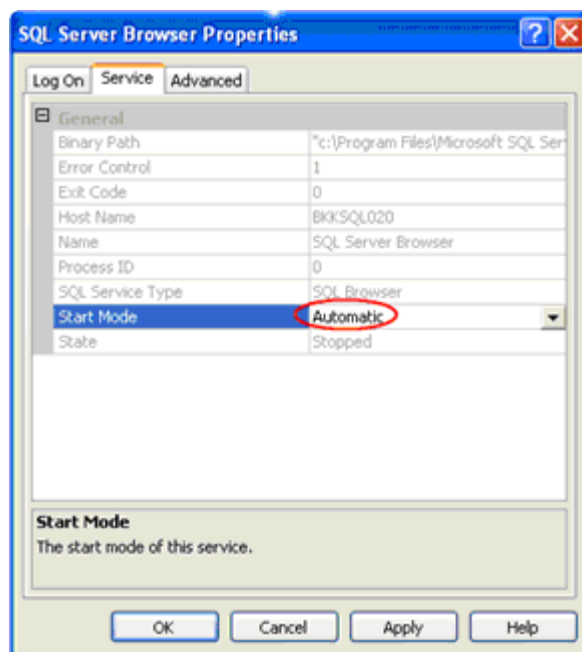


Figure 4. Change Start Mode to *Automatic*

5. Go back into the SQL Server Configuration Manager. In the right window, right-click on **SQL Server Browser** and select *Start* to start the service (Figure 5).

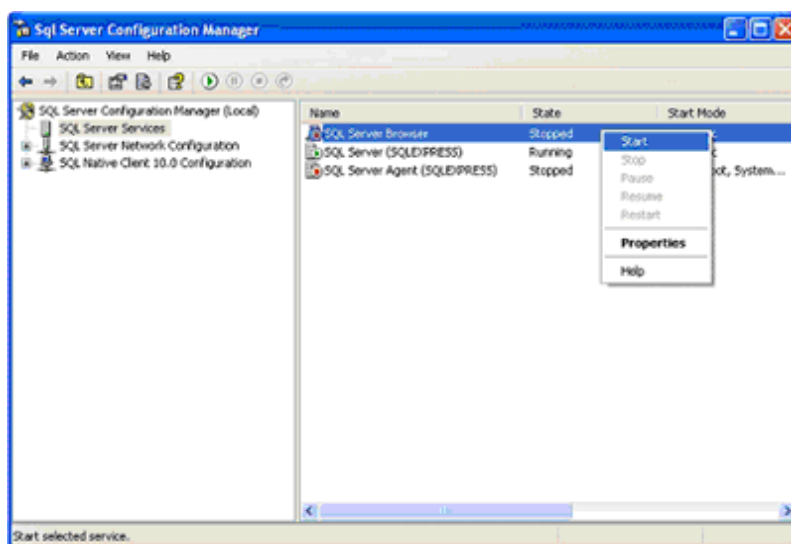


Figure 5. Select Start from the 'right-click' menu

6. In the left window, expand SQL Server Network Configuration by clicking [+] and select **Protocols for SQLEXPRESS**. In the right window, the TCP/IP protocol status shows *Disabled* (Figure 6).

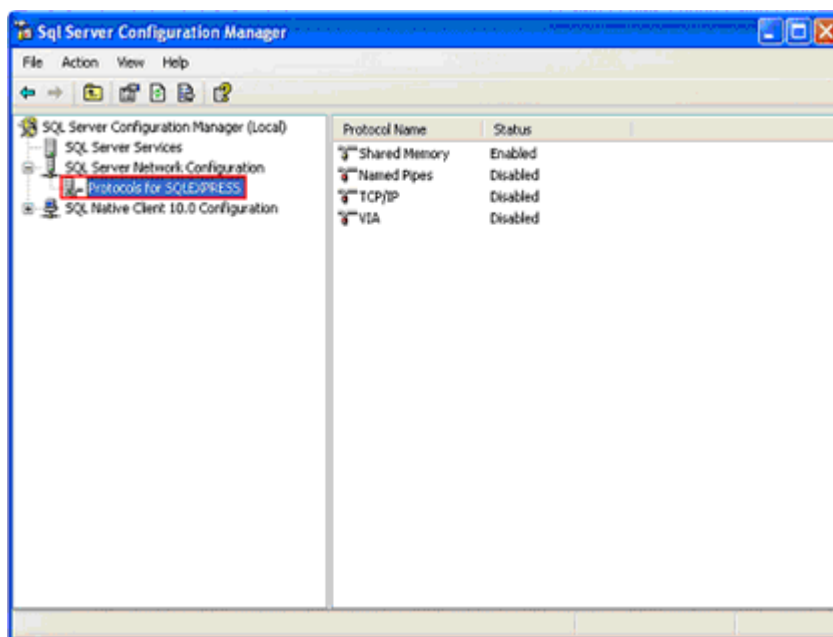


Figure 6. TCP/IP status disabled

7. Right-click on TCP/IP under the **Protocol Name** field, and select *Enable* to enable the protocol (Figure 7).

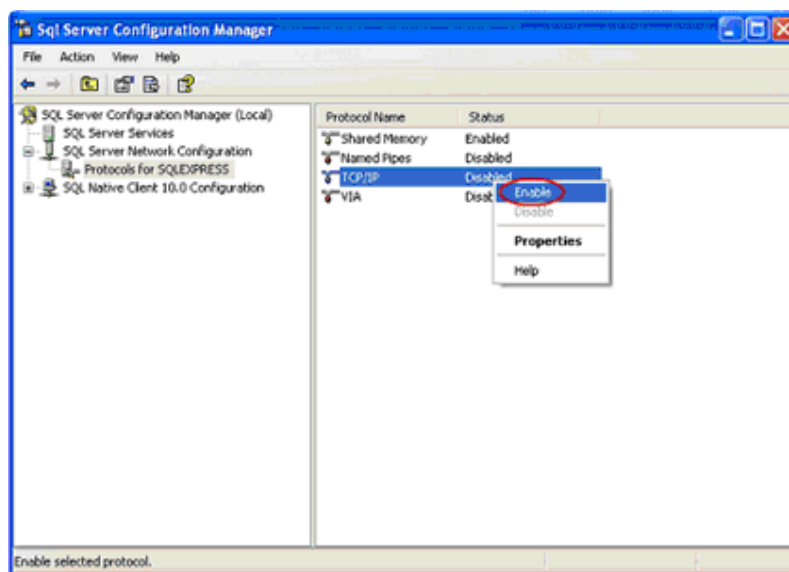


Figure 7. Select Enable from the 'right-click' menu

8. A message will appear advising the user that the SQL Service must be restarted for any changes to take effect. Press the [OK] button.
9. In the left window, select **SQL Server Services**. Now, select SQL Server (SQLEXPRESS) in the right window and then right-click it. Select *Restart* from the 'right-click' menu (Figure 8). The SQL Server service will be restarted.

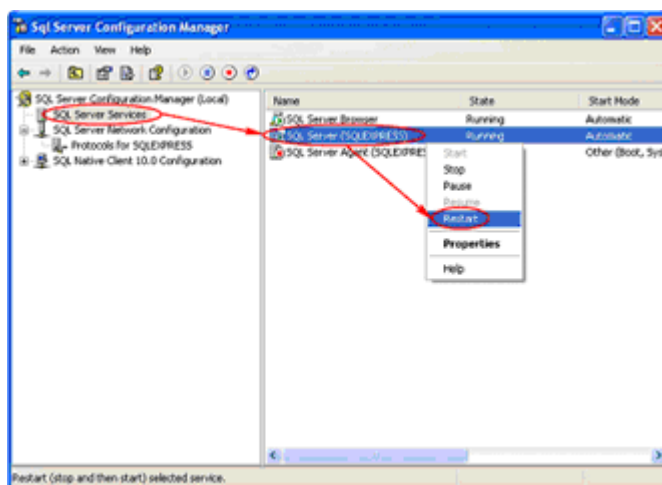


Figure 8. Select Restart from the 'right-click' menu

10. Open Microsoft SQL Server Management Studio and connect to the SQL Server 2008 Express.
11. Right-click on the SQL Server Instance and select *Properties* from the menu (Figure 9).

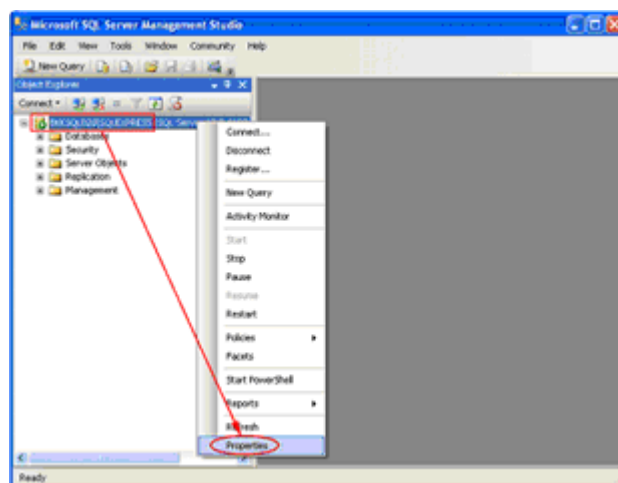


Figure 9. Select Properties from the 'right-click' menu

12. Under Server Properties, select Security in the left window. Then, select *SQL Server and Windows Authentication mode* under Server authentication (Figure 10). Press the [OK] button.

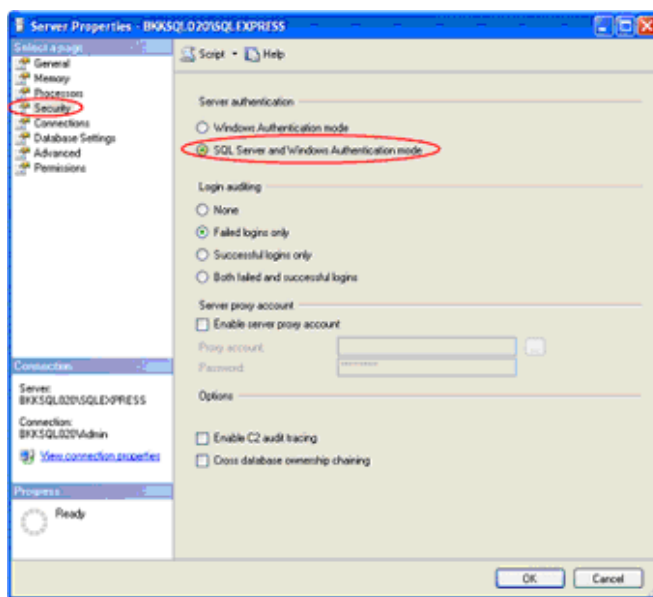


Figure 10. Server Properties

13. A second message will appear advising the user that the SQL Service must be restarted for any changes to take effect. Press the [OK] button. Then right-click on the SQL Server Instance and select Restart from the menu (Figure 11).

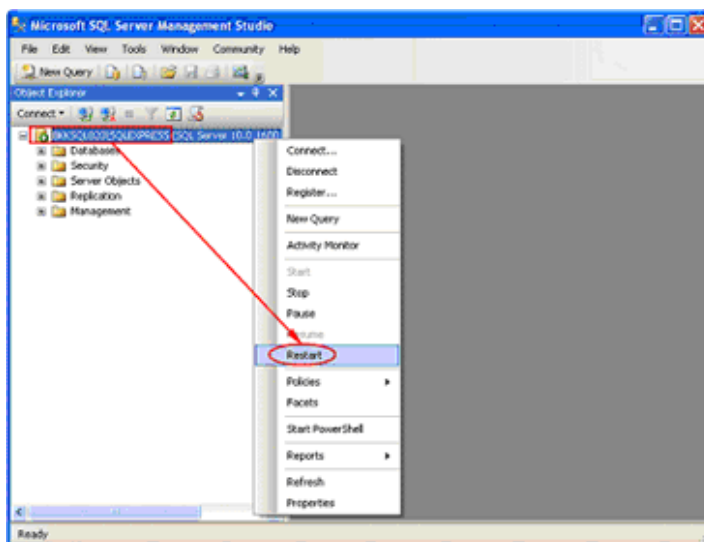


Figure 11. Select Restart from the 'right-click' menu

14. Finally, log in to the SKF @ptitude Analyst application.

For further assistance, please contact the Technical Support Group by phone at 1-800-523-7514 option 8, or by email at tsg-americas@skf.com.

