**SQL Server 2008 Ports**

**Purpose:** *Use this job aid to view a list of ports used by Microsoft SQL Server 2008*.

Microsoft SQL Server 2008 has various services that each use different ports.

| **Ports used by the SQL Server 2008 Database Engine** | | |
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| **Scheme** | **Port** | **Notes** |
| Default instance of SQL Server running over TCP | TCP Port 1433 | Used by the default installation of the Database Engine or a named instance of SQL Server that is the only instance running on the computer. |
| Named instances of SQL Server in the default configuration | TCP port address is assigned dynamically when the Database Engine starts | Named instances may require UDP port 1434 for the SQL Server Browser service. |
| Named instances of SQL Server configured to use a fixed port | Administrator configures port number | It is recommended that you configure named instances to use fixed ports when a firewall is in use. Dynamically assigned port numbers can change when the SQL Server database engine is restarted. |
| Dedicated Admin Connection | Default service uses TCP port 1434; named instances use other ports | Remote connections to the Dedicated Admin Connection (DAC) are not enabled by default. Remote connections to the DAC can be enabled using the Surface Area Configuration facet. |
| SQL Browser Service | UDP port 1434 | Named instances of the database engine are normally assigned port numbers dynamically. The SQL Server Browser Service listens for incoming connections and provides the TCP port for the named instance requested by the client. It obtains the port number by reading the registry. |
| SQL Server instance running over an HTTP endpoint | Port number is provided when an HTTP endpoint is created; the default for CLEAR\_PORT traffic is 80 and the default for SSL\_PORT is 443 | Connecting to SQL Server using a URL over HTTP. |
| Default instance of SQL Server running over an HTTPS endpoint | TCP port 443 | Connecting to SQL Server using a URL over HTTPS. HTTPS uses Secure Sockets Layer (SSL). |
| Service Broker | TCP port 4022  The port number can be verified by running the following query:  SELECT name, protocol\_desc, port, state\_desc FROM sys.tcp\_endpoints WHERE type\_desc = 'SERVICE\_BROKER' | SQL Server Service Broker is not assigned a default port. Port number 4022 is used as an example in Books Online. |
| Database Mirroring | Port is assigned by the administrator  The port number can be verified by running the following query:   SELECT name, protocol\_desc, port, state\_desc FROM sys.tcp\_endpoints WHERE type\_desc = 'DATABASE\_MIRRORING' | Database Mirroring is not assigned a default port. It is very important not to interrupt an in-use mirroring endpoint. The firewall configuration must avoid interrupting the connection. |
| Replication | Replication uses the assigned ports to connect to the SQL Server Database Engine  Additional ports need to be opened on the firewall to allow web synchronization and FTP/UNC access for replication snapshot  Replication can use FTP (TCP port 21), sync over HTTP (TCP port 80), or File and Print Sharing (TCP port 137, 138, or 139) to transfer initial data and the schema from one location to another | Replication uses the IIS endpoint – port 80 by default – for sync over HTTP. The assigned ports are used by the IIS process to connect to the SQL Server Database Engine.  During web synchronization using FTP, the FTP transfer is between IIS and the SQL Server publisher rather than between the subscriber and IIS. |
| Transact-SQL Debugger | TCP port 135  The IPsec exception may be required. | For Visual Studio, add Devenv.exe to the Exceptions list and open TCP port 135 on the Visual Studio host computer.  For Management Studio, add ssms.exe to the Exceptions list and open TCP port 135 on the Management Studio host computer. |
| **Ports used by Analysis Services** | | |
| **Scheme** | **Port** | **Notes** |
| Analysis Services | TCP port 2383 | Default port. |
| SQL Server Browser Service | TCP port 2382 is required for a named instance of Analysis Services | SQL Server Browser Service listens on port 2382 for client connection requests to named instances of Analysis Services that are not assigned a fixed port number. |
| Analysis Services through IIS/HTTP | TCP port 80 | Used with a URL connecting over HTTP. |
| Analysis Services through IIS/HTTPS | TCP port 443 | Used with a URL connecting over HTTPS. HTTPS is an HTTP connection that uses Secure Socket Layer (SSL). |

| **Ports used by Reporting Services** | | | | |
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| **Scheme** | | **Port** | **Notes** | |
| Reporting Services Web Services | | TCP port 80 | Used with a URL connecting over HTTP. | |
| Reporting Services Web Services configured for HTTPS | | TCP port 443 | Used with a URL connecting over HTTPS, which is an HTTP connection that uses SSL. | |
| **Ports used by Integration Services** | | | |
| **Scheme** | **Port** | **Notes** | |
| Microsoft Remote Procedure Calls (MS RPC).  The Integration Services runtime uses Microsoft Remote Procedure Calls. | TCP port 135 | This port number cannot be changed and is required to be open only when connecting to a remote instance of Integration Services from Management Studio or a custom application. The Integration Services service uses Distributed Component Object Model (DCOM) technology on port 135. DCOM enables software components to communicate directly with other software components over the Internet and intranets. | |