

## **What Is SQL Server Client Network Utility?**

SQL Server Client Network Utility is a graphical tool that allows you to:

- Create network protocol connections to specified servers, and change the default network protocol.
- Display information about the network libraries currently installed on the system.
- Display the DB-Library version currently installed on the system, and set defaults for DB-Library options.

For more information about SQL Server Client Network Utility, see *Managing Clients* in *SQL Server Books Online*.

## General Tab

This table shows the options and their functions available on the **General** tab.

Use this	To do this
<b>Default network library</b>	Specify the default network library used to communicate with Microsoft® SQL Server™.
<b>Server alias configurations</b>	Indicate information about the server aliases of the computers to which the client is connecting.
<b>Server alias</b>	Indicate the server alias used for the computer to which the client is connecting.
<b>Network library</b>	Indicate the client network library used for the configuration entry.
<b>Connection parameters</b>	Indicate any parameters associated with the connection address for the network library configuration.
<b>Add</b>	Add a new network library configuration.
<b>Remove</b>	Remove a network library configuration.
<b>Edit</b>	Edit a network library configuration.

### See Also

[How to change or set the default network library](#)

[How to edit a network library configuration](#)

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to verify that SQL Server is listening on AppleTalk](#)

## Network Libraries Tab

This table shows the options and their functions available on the **Network Libraries** tab.

<b>Use this</b>	<b>To do this</b>
<b>Network library</b>	List the Microsoft® SQL Server™ client network libraries installed on this computer.
<b>Library file name</b>	List the location of the SQL Server client network libraries installed on this computer.
<b>Version</b>	List the version numbers of the SQL Server client network libraries installed on this computer.
<b>File date</b>	List the dates that the SQL Server client network libraries were installed on this computer.
<b>Size</b>	List the file sizes of the SQL Server client network libraries installed on this computer.

### See Also

[How to display the library version numbers](#)

## DB-Library Options Tab

This table shows the options and their functions available on the **DB-Library Options** tab.

<b>Use this</b>	<b>To do this</b>
<b>File name</b>	Indicate the file name and location of the DB-Library installed on this computer.
<b>Version</b>	Indicate the version number of the DB-Library installed on this computer.
<b>Date</b>	Indicate the date that the DB-Library was installed on this computer.
<b>Size</b>	Indicate the file size of the DB-Library installed on this computer.
<b>Automatic ANSI to OEM conversion</b>	Enable DB-Library to convert a character set from OEM to ANSI when communicating with Microsoft® SQL Server™ from the client and from ANSI to OEM when communicating with the client from SQL Server. Selected by default.
<b>Use international settings</b>	Enable DB-Library to get date, time, and currency formats from the system rather than using hard-coded parameters. Selected by default for clients running on Microsoft Windows 32-bit operating systems.

### See Also

[How to set DB-Library conversion preferences](#)

## Add (Edit) Network Library Configuration

This table shows the options and their functions available in the **Add (or Edit) Network Library Configuration** dialog box.

Use this	To do this
<b>Server alias</b>	Specify a unique name for the server running Microsoft® SQL Server™ that listens on the Named Pipes network library.
<b>Network libraries</b>	Specify the network library that will be used to connect to the server. <b>Named Pipes</b> is selected.
<b>Pipe name</b>	Specify the pipe on which SQL Server listens.

### See Also

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to edit a network library configuration](#)

[How to alias to an alternate pipe configuration](#)

## Add (or Edit) Network Library Configuration

This table shows the options and their functions available in the **Add (or Edit) Network Library Configuration** dialog box.

Use this	To do this
<b>Server alias</b>	Specify a unique name for the server running Microsoft® SQL Server™ that listens on the TCP/IP Sockets network library.
<b>Network libraries</b>	Specify the network library that will be used to connect to the server. <b>TCP/IP</b> is selected.
<b>Computer name</b>	Specify the computer that listens for TCP/IP Sockets clients.
<b>Port number</b>	Specify the TCP/IP port that SQL Server listens on when accepting connections from TCP/IP Sockets clients. The default is 1433.

### See Also

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to edit a network library configuration](#)

[How to configure a client to use TCP/IP](#)

## Add (or Edit) Network Library Configuration

This table shows the options and their functions available in the **Add (or Edit) Network Library Configuration** dialog box.

Use this	To do this
<b>Server alias</b>	Specify a unique name for the server running Microsoft® SQL Server™ that listens on the multiprotocol network library.
<b>Network libraries</b>	Specify the network library that will be used to connect to the server. <b>Multiprotocol</b> is selected.
<b>Computer name</b>	Specify the computer that listens for multiprotocol clients.
<b>Additional parameters</b>	Specify additional configuration parameters for the multiprotocol network library. These parameters are optional.

### See Also

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to edit a network library configuration](#)

[How to configure a client to use the Multiprotocol Net-Library](#)

## Add (or Edit) Network Library Configuration

This table shows the options and their functions available in the **Add (or Edit) Network Library Configuration** dialog box.

Use this	To do this
<b>Server alias</b>	Specify a unique name for the server running Microsoft® SQL Server™ that listens on the NWLink IPX/SPX network library.
<b>Network libraries</b>	Specify the network library that will be used to connect to the server. <b>NWLink IPX/SPX</b> is selected.
<b>Specify parameters by</b>	Indicate how parameters are specified. <b>Service name</b> is selected.
<b>Service name</b>	Specify the Microsoft Windows NT® computer name under which SQL Server is running. This information is stored in the bindery of the server.

### See Also

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to edit a network library configuration](#)

[How to configure a client to use the NWLink IPX/SPX network library](#)



## Add (or Edit) Network Library Configuration

This table shows the options and their functions available in the **Add (or Edit) Network Library Configuration** dialog box.

Use this	To do this
<b>Server alias</b>	Specify a unique name for the server running Microsoft® SQL Server™ that listens on the NWLink IPX/SPX network library.
<b>Network libraries</b>	Specify the network library that will be used to connect to the server. <b>NWLink IPX/SPX</b> is selected.
<b>Specify parameters by</b>	Indicate how parameters are specified. <b>Network address</b> is selected.
<b>Address</b>	Specify the MAC address.
<b>Port</b>	Specify the socket number.
<b>Network</b>	Specify the NetWare network number.

### See Also

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to edit a network library configuration](#)

[How to configure a client to use the NWLink IPX/SPX network library](#)

## Add (or Edit) Network Library Configuration

This table shows the options and their functions available in the **Add (or Edit) Network Library Configuration** dialog box.

Use this	To do this
<b>Server alias</b>	Specify a unique name for the server running Microsoft® SQL Server™ that listens on the AppleTalk network library.
<b>Network libraries</b>	Specify the network library that will be used to connect to the server. <b>AppleTalk</b> is selected.
<b>Object name</b>	Specify the service object assigned by your system administrator. See your system administrator for this value.
<b>Zone</b>	Specify the zone used when registering the service.

### See Also

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to edit a network library configuration](#)

[How to configure a client to use the AppleTalk network library](#)

## Add (or Edit) Network Library Configuration

This table shows the options and their functions available in the **Add (or Edit) Network Library Configuration** dialog box.

Use this	To do this
<b>Server alias</b>	Specify a unique name for the server running Microsoft® SQL Server™ that listens using the Banyan VINES network library.
<b>Network libraries</b>	Specify the network library that will be used to connect to the server. <b>Banyan VINES</b> is selected.
<b>Service</b>	Specify the StreetTalk PC-based service name used by the server.
<b>Group</b>	Specify the group to which the service belongs.
<b>Organization</b>	Specify the organization to which the group belongs.

### See Also

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to edit a network library configuration](#)

[How to configure a client to use the Banyan VINES network library](#)

## Add (or Edit) Network Library Configuration

This table shows the options and their functions available in the **Add (or Edit) Network Library Configuration** dialog box.

Use this	To do this
<b>Server alias</b>	Specify a unique name for the server running Microsoft® SQL Server™ that listens using the new network library configuration.
<b>Network libraries</b>	Specify the network library that will be used to connect to the server. <b>Other</b> is selected.
<b>File name</b>	Specify the name and location of the DLL for the network library supplied by the third party.
<b>Parameters</b>	Specify any required parameters and their format.

### See Also

[How to add a network library configuration](#)

[How to delete a network library configuration](#)

[How to edit a network library configuration](#)

[How to configure a client to use a nonstandard network library](#)

## Managing Clients

A client is a front-end application that uses the services provided by a server. The computer that hosts the application is referred to as the client computer. Client software enables computers to connect to a computer running Microsoft® SQL Server™ on a network.

SQL Server clients can include applications of various types, such as:

- OLE DB consumers.  
These applications use the SQL OLE DB Provider or the OLE DB Provider for ODBC to connect to and converse with SQL Server. The OLE DB providers serve as intermediaries between SQL Server and client applications that consume SQL Server data as OLE DB rowsets.
- ODBC applications.  
These include client utilities installed with SQL Server, such as SQL Server Enterprise Manager and SQL Server Query Analyzer, as well as other applications that use the SQL Server ODBC driver to connect to and converse with SQL Server.
- DB-Library clients, including the SQL Server **isql** command prompt utility and clients written to DB-Library.

Regardless of the type of application, managing a client consists mainly of configuring its connection with the server components of SQL Server. Depending on your site's requirements, client management can range from little more than entering the name of the server computer to building a library of custom configuration entries to accommodate a diverse multiserver environment.

### How to start the SQL Server Client Network Utility (Windows NT, or Windows 95/98 client)

- ▶ To start the SQL Server Client Network Utility
- On the **Start** menu, point to **Programs/Microsoft SQL Server 7.0**, and then click **Client Network Utility**.

### How to display the library version numbers (Client Network Utility)

- ▶ To display the library version numbers
  - Click the **Network Libraries** tab.  
The network library, library file name, version, file date, and size are displayed.

### How to set DB-Library conversion preferences (Client Network Utility)

- ▶ To set the DB-Library conversion preferences (Windows 32-bit operating system client)
  1. Click the **DB-Library Options** tab.
  2. Select or clear **Automatic ANSI to OEM conversion**.
  3. Select or clear **Use international settings**.



### How to change or set the default network library (Client Network Utility)

- ▶ To change or set the default network library
  - On the **General** tab, select a network library from the **Default network library** list.

### How to add a network library configuration (Client Network Utility)

▶ To add a network library configuration

1. On the **General** tab, click **Add**.
2. In the **Add New Network Library Configuration** dialog box, select one of the network libraries.
3. Enter the server alias, and any required parameter information for the network library selected.

### How to edit a network library configuration (Client Network Utility)

- ▶ To edit a network library configuration
  1. On the **General** tab, click the network protocol configuration to edit.
  2. Click **Edit**.
  3. In the **Edit Network Library Configuration** dialog box, edit the information to change.

### How to delete a network library configuration (Client Network Utility)

- ▶ To delete a network library configuration
  1. On the **General** tab, click the network library configuration to delete.
  2. Click **Remove**.

### How to alias a client to an alternate pipe (Client Network Utility)

▶ To alias a client to an alternate pipe

1. On the **General** tab, click **Add**.
2. In the **Add Network Library Configuration** dialog box, click **Named Pipes**.
3. In the **Server alias** box, enter the server alias.
4. In the **Pipe name** box, enter the name of the alternate pipe name. For example, \\myserver\pipe\altpipe.

## How to configure a client to use the Multiprotocol Net-Library (Client Network Utility)

**Note** Before creating a Multiprotocol client configuration, make sure your computer has at least one IPC protocol loaded under Multiprotocol on the server (Named Pipes, NWLink IPX/SPX, TCP/IP, or Windows Sockets).

- ▶ To configure a client to use the Multiprotocol Net-Library
1. On the **General** tab, click **Add**.
  2. In the **Add Network Library Configuration** dialog box, select **Multiprotocol**.
  3. In the **Server alias** box, enter the name of the computer running Microsoft® SQL Server™ and listening on the Multiprotocol Net-Library.
  4. Leave the **Connection parameters** box empty, unless the server requires that specific parameters be used (verify with your network administrator before entering parameters).

## How to configure a client to use TCP/IP (Client Network Utility)

▶ To configure a client to use TCP/IP

1. On the **General** tab, click **Add**.
2. In the **Add Network Library Configuration** dialog box, select **TCP/IP**.
3. In the **Server alias** box, enter the alias of the computer running Microsoft® SQL Server™ and listening on the Windows Sockets Net-Library.

With TCP/IP, you can also specify the server with its IP address instead of its name.

4. The **Port number** box contains the port number that SQL Server is listening on. The box contains a default value of 1433, the port number that Windows Sockets Net-Library generally uses for SQL Server. In most cases, use the default port number. The port number is usually specified in the HOSTS file, if it is different from 1433 and you need to locate it:
  - For a client running Microsoft Windows® for Workgroups, the HOSTS file is located in the \Windows directory by default.
  - For a client running Microsoft Windows NT®, the HOSTS file is located in the \Windows\System32\Drivers\Etc directory by default.
  - For other TCP/IP protocols that support Windows Sockets, see your TCP/IP documentation.

## How to configure a client to use the NWLink IPX/SPX network library (Client Network Utility)

- ▶ To configure a client to use the NWLink IPX/SPX network library
1. On the **General** tab, click **Add**.
  2. In the **Add Network Library Configuration** dialog box, select **NWLink IPX/SPX**.
  3. In the **Server alias** box, enter the alias of the computer running Microsoft® SQL Server™ and listening on the NWLink IPX/SPX Net-Library.
  4. Under **Connection parameters**, select either **Service name** or **Network address**.
  5. If you selected **Service name**, enter the service name.
    - **Service name** is the Microsoft Windows NT® computer name under which SQL Server is running, and is stored in the Bindery of the server computer.
  6. If you selected **Network address**, enter the address (the MAC address), port (socket number), and network (NetWare network number).



### How to configure a client to use the AppleTalk network library (Client Network Utility)

- ▶ To configure a client to use the AppleTalk network library
1. On the **General** tab, click **Add**.
  2. In the **Add Network Library Configuration** dialog box, select **AppleTalk**.
  3. In the **Server alias** box, enter the name of the computer running Microsoft® SQL Server™ and listening on the AppleTalk Net-Library.
  4. Enter the AppleTalk object name and optional zone identifiers.

### How to configure a client to use the Banyan VINES network library (Client Network Utility)

- ▶ To configure a client to use the Banyan VINES network library
1. On the **General** tab, click **Add**.
  2. In the **Add Network Library Configuration** dialog box, select **Banyan VINES**.
  3. In the **Server alias** box, enter the alias of the computer running Microsoft® SQL Server™ and listening on the Banyan VINES Net-Library.
  4. Enter the service and the VINES organization. You should be able to use the default value of MSSQL for group.

## How to configure a client to use a nonstandard network library (Client Network Utility)

- ▶ To configure a client to use a nonstandard network library
1. On the **General** tab, click **Add**.
  2. In the **Add Network Library Configuration** dialog box, select **Other**.
  3. In the **Server alias** box, enter the alias of the computer running Microsoft® SQL Server™ and listening on the Net-Library you plan to install.
  4. Enter the file name (file must be a DLL) of the installed Net-Library. Do not enter the DLL extension.
  5. If necessary, enter any additional information in the **Connection parameters** box (such as username and password). Use comma separators between parameters.

## How to verify that SQL Server is listening on AppleTalk and can accept a client connection (Client Network Utility)

- ▶ To verify that SQL Server is listening on AppleTalk and can accept a client connection
1. Copy the client AppleTalk Net-Library (Dbmsadsn.dll) from the \Mssql7\Binn directory of the server to the same directory of a remote computer running Windows NT or Windows 2000 Services for Macintosh®.
  2. On the remote workstation, start SQL Server Client Configuration.
  3. In the **Default network library** box, on the **General** tab, change the default network protocol to **AppleTalk**.
  4. Click **OK**.
  5. Attempt an ISQL connection with the AppleTalk service object name. For example:

```
isql -Usa -P -Sservicename
```

If you can connect with ISQL and execute queries, the server is properly configured to listen on AppleTalk and is accepting connections.

**Note** The Microsoft Win32® AppleTalk (ADSP) client side Net-Library (Dbmsadsn.dll) is included for testing ADSP connections and troubleshooting AppleTalk connections between Macintosh clients and Microsoft SQL Server™. This Net-Library is intended to be used only when testing a connection from a remote client to SQL Server. If you attempt to make local connections through the ADSP Net-Library to a server running SQL Server and listening on AppleTalk, the following network error is generated:

```
Net-Library error 11: getsockopt().
```

**See SQL Server Books Online to review this topic.**

