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

Default network Specify the default network library used to communicate with Microsoft® SQL Server™. library

Server alias Indicate information about the server aliases of the

configurations computers to which the client is connecting.

Server alias Indicate the server alias used for the computer to

which the client is connecting.

Network library Indicate the client network library used for the

configuration entry.

Connection Indicate any parameters associated with the parameters

connection address for the network library

configuration.

Add Add a new network library configuration. Remove Remove a network library configuration. Edit 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.

Use this To do this

Network library List the Microsoft® SQL Server™ client network

libraries installed on this computer.

Library file name List the location of the SQL Server client network

libraries installed on this computer.

Version List the version numbers of the SQL Server client

network libraries installed on this computer.

File date List the dates that the SQL Server client network

libraries were installed on this computer.

Size List the file sizes of the SQL Server client network

libraries installed on this computer.

See Also

<u>How to display the library version</u> <u>numbers</u>

DB-Library Options Tab

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

Use this To do this

File name Indicate the file name and location of the DB-Library

installed on this computer.

Version Indicate the version number of the DB-Library

installed on this computer.

Date Indicate the date that the DB-Library was installed

on this computer.

Size Indicate the file size of the DB-Library installed on

this computer.

Automatic ANSI

to OEM conversion

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.

Use international

settings

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

<u>How to set DB-Library conversion</u> <u>preferences</u>

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

Use this To do this

Server alias Specify a unique name for the server running

Microsoft® SQL Server™ that listens on the Named

Pipes network library.

Network libraries Specify the network library that will be used to

connect to the server. Named Pipes is selected.

Pipe name Specify the pipe on which SQL Server listens.

See Also

How to add a network library How to edit a network library

<u>configuration</u> <u>configuration</u>

How to delete a network library How to alias to an alternate pipe

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

Server alias Specify a unique name for the server running

Microsoft® SQL Server™ that listens on the TCP/IP

Sockets network library.

Network libraries Specify the network library that will be used to

connect to the server. TCP/IP is selected.

Computer name Specify the computer that listens for TCP/IP Sockets

clients.

Port number 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

How to edit a network library

<u>configuration</u> <u>configuration</u>

How to delete a network library How to configure a client to use

configuration TCP/IP

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

Use this To do this

Server alias Specify a unique name for the server running

Microsoft® SQL Server™ that listens on the

multiprotocol network library.

Network libraries Specify the network library that will be used to

connect to the server. Multiprotocol is selected.

Computer name Specify the computer that listens for multiprotocol

clients.

Additional Specify additional configuration parameters for the parameters

multiprotocol network library. These parameters are

optional.

See Also

How to add a network library How to edit a network library

configuration configuration

How to delete a network library How to configure a client to use the

configuration Multiprotocol Net-Library

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

Use this To do this

Server alias Specify a unique name for the server running

Microsoft® SQL Server™ that listens on the NWLink

IPX/SPX network library.

Network libraries Specify the network library that will be used to

connect to the server. NWLink IPX/SPX is selected.

Specify Indicate how parameters are specified. **Service**

parameters by name is selected.

Service name 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 How to edit a network library

<u>configuration</u> <u>configuration</u>

How to delete a network library How to configure a client to use the

<u>configuration</u> <u>NWLink IPX/SPX network library</u>

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

Use this To do this

Server alias Specify a unique name for the server running

Microsoft® SQL Server™ that listens on the NWLink

IPX/SPX network library.

Network libraries Specify the network library that will be used to

connect to the server. NWLink IPX/SPX is selected.

Specify Indicate how parameters are specified. **Network**

parameters byaddress is selected.AddressSpecify the MAC address.PortSpecify the socket number.

Network Specify the NetWare network number.

See Also

How to add a network library How to edit a network library

<u>configuration</u> <u>configuration</u>

How to delete a network library

How to configure a client to use the

configuration NWLink IPX/SPX network library

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

Use this To do this

Server alias Specify a unique name for the server running

Microsoft® SQL Server™ that listens on the

AppleTalk network library.

Network libraries Specify the network library that will be used to

connect to the server. AppleTalk is selected.

Object name Specify the service object assigned by your system

administrator. See your system administrator for this

value.

Zone Specify the zone used when registering the service.

See Also

How to add a network library How to edit a network library

<u>configuration</u> <u>configuration</u>

How to delete a network library How to configure a client to use the

<u>configuration</u> <u>AppleTalk network library</u>

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

Use this To do this

Server alias Specify a unique name for the server running

Microsoft® SQL Server™ that listens using the

Banyan VINES network library.

Network libraries Specify the network library that will be used to

connect to the server. Banyan VINES is selected.

Service Specify the StreetTalk PC-based service name used

by the server.

Group Specify the group to which the service belongs.

Organization Specify the organization to which the group belongs.

See Also

How to add a network library How to edit a network library

<u>configuration</u> <u>configuration</u>

How to delete a network library How to configure a client to use the

configuration Banyan VINES network library

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

Use this To do this

Server alias Specify a unique name for the server running

Microsoft® SQL Server™ that listens using the new

network library configuration.

Network libraries Specify the network library that will be used to

connect to the server. Other is selected.

File name Specify the name and location of the DLL for the

network library supplied by the third party.

Parameters Specify any required parameters and their format.

See Also

How to add a network library

How to edit a network library

<u>configuration</u> <u>configuration</u>

How to delete a network library How to configure a client to use a

<u>configuration</u> <u>nonstandard network library</u>

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 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 numbersClick 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.