



## CHAPTER 30

# Windows: TELNET Access Method

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## SAS Support for TELNET on Windows

*Note:* The TELNET communications access method can be used with the Windows NT, Windows 95, Windows 98, and Windows 32s platforms. For SAS/CONNECT, all Windows platforms are restricted to the local host role only.

However, beginning with Version 7, the Windows 32s platform is not supported. Information about Windows 32s is included here for Version 6 users. Version 8 does not support the TELNET access method. However, information about TELNET is included here for users of Version 6 and earlier releases.  $\Delta$

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## SAS/CONNECT

### *System Administrator*

To use the TELNET access method with a Windows host for SAS/CONNECT, perform this task:

- 1 Verify that you have met all your site and software requirements.

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## System and Software Requirements for SAS/CONNECT

Using the TELNET access method, you can connect to any supported platform that is on the TCP/IP network, and that is running a SAS release that has the corresponding access method support with SAS/CONNECT properly licensed.

Verify the following:

- 1 A supported TCP/IP package has been installed on the local host. See “System and Software Requirements for SAS/CONNECT and SAS/SHARE” on page 416 for a list of supported TCP/IP packages.
- 2 Remote hosts that you want to connect to are attached to a TCP/IP network.  
Although the remote host does not have to run a TCP/IP product that SAS supports, it must run some type of TCP/IP product to allow its node to be accessible through TELNET.

In those cases where your local host has a supported TCP/IP package but your remote host does not, you can use TELNET to establish a connection.

If you have a choice of using either TCP/IP or TELNET, you are encouraged to use TCP/IP. TELNET support is provided primarily for sites in which the local host has an installed TCP/IP product, but the remote host does not.

## Local Host Tasks

### *User or Applications Programmer*

To connect a Windows local host to a remote host, perform these tasks at the local host:

- 1 Configure the local and remote hosts' names and Internet addresses in the local HOSTS file or through the domain server.
- 2 Specify the communications access method.
- 3 Specify a remote node.
- 4 Specify a script for signing on and signing off a remote host.
- 5 Sign on to the remote host.

## Configuring Local and Remote Host Names and Internet Addresses

You must specify the names and Internet addresses of the local and remote hosts in the HOSTS file or through the name server. A name server program supplies name-to-address translation, mapping from domain names to IP addresses. The name server often runs on a dedicated processor, and the host itself is referred to as the name server.

The format for a HOSTS file entry follows:

*Internet-address host-name optional-alias*

Example:

```
172.20.10.200    monarch    local
172.20.10.201    omega     remote
```

## Specifying the TELNET Communications Access Method

You must specify the TELNET communications access method to make a remote host connection. Use the following syntax:

```
OPTIONS COMAMID=access-method-id;
```

where COMAMID is an acronym for Communications Access Method Identification. *access-method-id* identifies the method used by the local host to communicate with the remote host. TELNET is a terminal application interface that uses the TCP/IP protocol.

Example:

```
options comamid=telnet;
```

Alternatively, you may express this OPTION statement in a SAS invocation or in a SAS configuration file.

---

## Specifying the Remote Node Name

To make a connection from a Windows local host to a remote host, use the following syntax:

```
OPTIONS REMOTE=node-name;
```

Example:

```
options remote=monarch;
```

Alternatively, you may express this OPTION statement at a SAS invocation or in a SAS configuration file.

If you use an Internet address (or some other invalid SAS name), you must assign the address to a macro variable and specify the macro variable for the value of the REMOTE= option, illustrated as follows:

```
%let node=internet-address;  
options remote=node;
```

Do not choose a macro name that is also a valid host name on your network. SAS first attempts to reach a network host with the value of the REMOTE= option (in this example, MYNODE).

Example:

```
%let mynode=172.20.10.200  
options remote=mynode;
```

---

## Identifying a Script File for Signing On and Signing Off

To use one of the sample script files that is supplied with SAS/CONNECT for signing on and signing off, assign the RLINK fileref to the appropriate script file, based on the remote host that you are connecting to. The sample scripts are installed at *!sasroot\connect\saslink*. You must customize the sample scripts to accurately reflect your site's logon process. Failure to do so will produce errors.

The FILEREF syntax follows:

```
FILENAME RLINK '!sasroot\connect\saslink\script-name';
```

where *script-name* identifies the script that corresponds to the remote host that you want to connect to.

The following table lists the scripts that are supplied by SAS Institute:

**Table 30.1** Windows TELNET SAS/CONNECT Sign-on Scripts

Remote Host	Script Name
CMS	TELCMS.SCR
CMS (using full-screen 3270 TELNET protocol)	TCPCMS32.SCR
OS/390 (with TSO)	TELTSO.SCR
OS/390 (using full-screen 3270 TELNET protocol)	TCPTSO32.SCR

Remote Host	Script Name
OpenVMS	TELVMS.SCR
AOS/VS	TELAOS.SCR
PRIME	TELPRIM.SCR

Example:

```
FILENAME RLINK '!sasroot\connect\saslink\teltsso.scr';
```

*Note:* The value for the COMAMID option in the sign-on script at a SAS invocation must be set to RASYNC.  $\Delta$

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## Signing On to the Remote Host

To complete your sign on to the remote host, enter the SIGNON statement, as follows:

```
signon;
```

---

## Local Host Example

The following example illustrates the statements that you specify in a Windows local host SAS session to connect to a remote host with the TELNET access method:

```
filename rlink '!sasroot\connect\saslink\telcms.scr'
options comamid=telnet remote=rmtnode;
signon;
```

The first line identifies the script file that you use to sign on to a CMS remote host. The script file prompts for a userid and a password that are valid on the remote host. The TELNET communications access method is declared with a connection to the remote host RMTNODE. The SIGNON statement performs the sign-on process.

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## Remote Host Example

SAS Institute does not provide support for connections to the Windows remote host with the TELNET access method.

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