CHAPTER

21

UNIX: TELNET Access Method

SAS Support for TELNET on UNIX

Note: Version 8 does not support the TELNET access method. However, information about TELNET is included here for users of Version 6 and earlier releases. △

SAS/CONNECT

System Administrator

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

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

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.

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 SAS 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 at 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 UNIX 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 to connect to.

4 Specify a sign-on script.

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 the remote hosts in the **/etc/hosts** file or through the name server. A 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:

```
149.999.228.6      monarch      local
149.999.228.7      omega        remote
```

Specifying the TELNET Communications Access Method

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 an access method identifier for the terminal application interface that uses the TCP/IP protocol.

Example:

```
options comamid=telnet;
```

Alternatively, you may specify this option at a SAS invocation or in a SAS configuration file.

Specifying the Remote Node Name

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

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

where *node-name* is the name of the remote host.

The value of the REMOTE= option must be a valid SAS name. See *SAS Language Reference: Dictionary* for details about SAS naming rules.

Example:

```
options remote=monarch;
```

Alternatively, you may specify this option 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 by using the value of the REMOTE= option (in this example, MYNODE).

Example:

```
%let mynode=130.97.27.79;
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* **/ misc/connect**. 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/misc/connect/script-name';
```

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

Table 21.1 on page 313 lists the scripts that are supplied by SAS Institute.

Table 21.1 UNIX 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`

Ask your system administrator for the locations of the script files on your local host. These sample script files are included with SAS/CONNECT and should be installed when the product is installed.

Example:

```
filename rlink '!sasroot/misc/connect/teltso.scr';
```

Note: The value for the COMAMID option in the sign-on script must be set to RASYNC. △

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 UNIX local host SAS session to connect to a remote host with the TELNET access method:

```
filename rlink '!sasroot\misc\connect\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 contains a prompt 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.

Remote Host Example

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

**Communications Access Methods for SAS/CONNECT and SAS/SHARE Software,
Version 8**

The Institute is a private company devoted to the support and further development of its
software and related services.