12

OpenVMS: TELNET Access Method

SAS Support for TELNET on OpenVMS

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 an OpenVMS host for SAS/CONNECT, perform these tasks:

1 Verify that you have met all your site and software requirements.
2 Verify that the resources for the TELNET access method have been defined.

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 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 wish to connect to are attached to a TCP/IP network.
3 Although the remote host does not have to run a TCP/IP package that SAS supports, it must run some type of TCP/IP software 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.

See "System and Software Requirements for SAS/CONNECT and SAS/SHARE" on page 170 for a list of the supported TCP/IP packages for your local host.

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

Local Host Tasks

User or Applications Programmer
To connect an OpenVMS local host to a remote host, perform these tasks:

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 host 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 remote hosts in the HOSTS file or through the name server. A server program supplies name-to-address translation, mapping from domain names to IP addresses. The server processor 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:

```
127.0.0.1       monarch       local
151.174.130.8   omega         remote
```

Specifying the TELNET Communications Access Method

To specify the TELNET access method when making a remote host connection, use the following syntax:

OPTIONS COMAMID=*access-method-id*;

where COMAMID is an acronym for Communications Access Method Identification. TELNET is a terminal application interface written to use the TCP/IP protocol. Example:

options comamid=telnet;

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

Specifying the Remote Node Name

To make a TELNET connection to a remote host, specify the SAS option in the following form:

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

Use the node name of the remote host.

The value of the REMOTE option must be a valid SAS name. See *SAS Language Reference: Dictionary* for details on 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 REMOTE value. Here is an example:

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

Do not choose a macro variable 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 the following 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, depending on which remote host you are connecting to. The sample script files are installed in SAS$ROOT:[TOOLS]. The fileref format follows:

```
FILENAME RLINK 'SAS$ROOT:[TOOLS]script-name';
```

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

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

Table 12.1   OpenVMS TELNET SAS/CONNECT Sign-on Scripts

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

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

You must customize the automatic logon sample scripts to accurately reflect your site's configuration. Failure to do so will produce errors. (Your SAS Software Representative may have altered these scripts as needed.) If someone has altered an automatic logon sample script for users at your installation, you need to load a copy of the modified file on to your local host.
Example:

```
filename rlink 'sas$root:[tools]telcms.scr';
```

Note: The COMAMID option value 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 an OpenVMS local host SAS session to connect to a remote host with the TELNET access method.

```
filename rlink '!sasroot:[tools]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 TELNET communications access method is declared with a connection to the remote host RMTNODE. The SIGNON statement performs the sign-on process.

Remote Host

You do not perform any tasks at the OpenVMS remote host for the TELNET access method.

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