



CHAPTER 37

TCP/IP SERVICES File

Configuring the SERVICES File 485

Configuring the SERVICES File

You must have an entry in the SERVICES file for each of the following services, as necessary:

- TELNET service
- spawner program
- SAS/SHARE server
- DOMAIN server.

Note: If you have access to a UNIX system, see the **services(4)** manual page for more information about this file. Δ

The location of the SERVICES file is based on the platform. For example, the UNIX services file is located at **/etc/services**.

An excerpt of a SERVICES file is shown on the next page. Here is an explanation for each field.

official service name

specifies the name of the service. Service names must meet the criteria for a valid SAS name. (See *SAS Language Reference: Concepts* for details about SAS naming rules.) For example, you need a service named **spawner** for the UNIX spawner program. See “Starting the UNIX Spawner Program” on page 479 for information about invoking the UNIX spawner. You will need the TELNET service when signing on to any host that does not use a PC or a UNIX spawner program.

You will also use the service name as the value for the REMOTE= option or in the SIGNON statement to perform a remote host sign on. See the appropriate platform and access method chapter in this book for information about the REMOTE= option.

For SAS/SHARE, you will specify the service name in the SERVER= option in the PROC SERVER statement when creating a server and in the PROC OPERATE and LIBNAME statements when accessing a server. See the appropriate platform and access method chapter in this book for information about specifying the SERVER= option.

When using the DOMAIN server, you must also specify its service name in the SERVICES file.

port number

is a unique number that is associated with the service name. Each reference to that service in other node SERVICES files must match exactly the service's port

number. Port numbers 0 through 255 are reserved for standard services. Port numbers that are greater than 255 are available for user-created services.

protocol name

identifies the protocol. Protocol names must meet the criteria for a valid SAS name. (See *SAS Language Reference: Concepts* for details about SAS naming rules.) Failure to specify a service name and port number in the SERVICES file results in an error when you try to access the server. **telnet** and **tcp** are examples of protocol names.

Note: In this context, the service name and the protocol name are the same only for **telnet**. Δ

alias name

is an optional synonym for the service. Alias names can be application- or user-dependent. For example, one application may refer to the server as c0123 while another refers to the same server as c0121. Aliases may be useful in low-volume applications, each referencing the same service that is assigned to the same port. As an application's volume increases, the alias could be replaced by a different service name that is assigned to a different port number.

comments

describe the service.

```
# The form for each entry is:
# <official service name> <port number/protocol name> <alias name>
# <comments>
#
# Spawner and server services
#
telnet          23/telnet          # TELNET service
spawner        4016/tcp           # UNIX or OS/390 spawner
mktserve       4017/tcp           # Server for Marketing & Sales
server1        5010/tcp           # SAS/SHARE server 1
sassrv2        5011/tcp           # SAS/SHARE server 2
```

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