DEFINE SOTRACE

The DEFINE SOTRACE command starts a tracing operation for Socket requests. Each Socket request is saved in memory until a corresponding DELETE TRACE command is issued. The DUMP command may be used at any time to output the accumulated trace buffers.

Syntax:
```
DEFine SOTRACe ID=id [,IPaddr=ip4addr] [,PORT=port]
          [,SCOPE={All|Internal|External|Obsolete] [,MAXData=60]
          [,PHASE=member] [,SIZe=500]
          [,KIND={TCP|UDP|FTP|CLIENT|TELNET}]
```

Arguments:

ID=   - A unique name that identifies this trace entry. This name is used in conjunction with the DELETE TRACE and QUERY TRACES commands.

IPaddr=   - Limits tracing to a specific IP address. Only traffic involving the specified address is considered.

PORT=   - Limits tracing to a specific port. Only traffic involving the specified port is considered.

PHASE=   - Limits tracing to a specific phase. Only traffic involving the specified phase is considered. The phase name of a connection can be found with a QUERY CONNECTIONS command.

SCOPE=   -

    Internal - Only socket requests made from within the stack partition are considered.

    External - Only socket requests made from outside the stack partition are considered.

    Obsolete - Only socket requests with obsolete parameter lists are considered. This may be useful when attempting to locate applications that may need to be recompiled.

    All - Default. All Socket requests are considered.

MAXData - The amount of data from each socket call that will be included in the trace. The default is 60 bytes per Socket request. Acceptable values range from 0 through 64K.

SIZe=   - Indicates the maximum message blocks that are to be retained during the trace. Old blocks are discarded in favor of newer blocks. The default is 500. Allowable values are 10 through 64K.

KIND=   - This parameter can be used to limit the trace to specific types of Socket requests. By default, TCP requests are recorded.

    TCP - Trace standard TCP requests. These are the requests most frequently associated with applications using TCP/IP for communication. This is the default.

    UDP - Trace UDP requests. UDP requests are generally used when performance is of the essence. Under UDP, all acknowledgement, retransmission, and content verification are handled by the application.

    FTP - Trace only socket requests that specify a type of FTP.

    CLIENT - Trace socket requests associated with the TCP/IP for VSE client interface. This includes socket requests with types of PING and LPR.

    TELNET - Trace only socket requests that specify a type of telnet.

Example:

```
IPN237I define sotrace,id=trace1,phase=testserv
IPN210I Socket Trace ID TRACE1 defined and running.
```

Notes:
- Once trace data has been accumulated, the DUMP command can be used to dump the data.
- Be sure to terminate your trace with DELETE TRACE after you use the DUMP command. Since all traffic to a traced address is retained in memory, large amounts of virtual storage can be tied up.
- You can trace multiple addresses simultaneously by issuing multiple DEFINE TRACE commands. Each trace must have a unique ID.

Related Commands:

DEFINE TRACE	-	Start a Datagram Trace
DELETE TRACE	-	Terminate a trace and free its storage.
DUMP	-	Perform a formatted dump of various TCP/IP control blocks.
QUERY TRACES	-	Displays a list of currently-running traces.
SEGMENT	-	Segments the SYSLST and log files, making them available for printing.