## **DEFINE TRACE**

The DEFINE TRACE command starts a tracing operation for datagrams. IP traffic 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 TRACe ID= <i>id</i> [,IPaddr= <i>ip4addr</i> ] [,PORT= <i>port</i> ] [,SIZe=500] [,KIND={ <u>TCP</u>  UDP ICMP ALL}]		
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 (inbound or outbound) is considered.		
	<ul> <li>KIND= - This parameter allows selection of the type of network traffic that is recorded.</li> <li>TCP - Only datagrams containing TCP payloads are traced. This is the default.</li> <li>UDP - Only datagrams containing UDP payloads are traced.</li> <li>ICMP - Only ICMP (e.g., PING) datagrams are traced.</li> <li>ALL - All datagrams are included in the trace.</li> </ul>		
	PORT= - Limits tracing to a specific port. Only traffic involving the specified port (outbound or inbound) is considered.		
	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 in the range of 10 through 64K.		
Example:			

Example:

```
IPN237I define trace,id=trace2,ipaddr=192.168.1.66,kind=udp
IPN210I Trace ID TRACE2 defined and running.
IPN213I TRACE2 tracing traffic between 192.168.1.161; 21 and 192.168.1.66; 2646
IPN213I TRACE2 tracing traffic between 192.168.1.161; 4109 and 192.168.1.66; 2647
```

Notes:	<ul> <li>Once trace data has been accumulated, the DUMP command can be used to dump the data.</li> <li>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.</li> <li>You can trace multiple addresses simultaneously by issuing multiple DEFINE TRACE commands. Each trace must have a unique ID.</li> </ul>	
Related Commands:	DEFINE SOTRACE DELETE TRACE DUMP QUERY TRACES SEGMENT	<ul> <li>Start a Socket Trace.</li> <li>Terminate a trace and free its storage.</li> <li>Perform a formatted dump of various TCP/IP control blocks.</li> <li>Displays a list of currently-running traces.</li> <li>Segments the SYSLST and log files, making them available for printing.</li> </ul>