DEFINE ADAPTER

The DEFINE ADAPTER command identifies a specific adapter within a 3172, OSA, or 3172-compatible communications controller. This command is valid only when it follows a previously issued DEFINE LINK command that defines a 3172 or OSA.

Syntax:
```
DEFine ADAPter LINKid=id ,IPaddr=ip4addr
,TYPe={ETHERnet|TOKEN_ring|FDDI} [,NUMber=0]] [,MTU=num]
```

Arguments:

LINKid= - This field must specify the ID from the DEFINE LINK command that defines the 3172 or OSA containing this adapter.

TYPE= - Specifies the type of network that this adapter is physically connected to.
  ETHERnet - This is an Ethernet adapter.
  TOKEN_ring - This is a Token_Ring adapter.
  FDDI - This is an FDDI adapter.

NUMber= - Specifies the adapter's position within the 3172. Adapter numbers range from 0 though 99. Most devices use values of 0 through 3. The IBM 2216 N-WAYS control unit supports up to 16 adapters.

IPaddr= - Specifies the IP address to be used with this adapter. This is essential for multi-homing since *TCP/IP for VSE*'s IP address must be consistent with the network to which it is connected. If omitted, the IP address specified in the SET IPADDR command is assigned to the adapter.

MTU= - Specifies the Maximum Transmission Unit size to be used with this adapter. An MTU size of 576 is always valid. This is the minimum value and its acceptance is required of all TCP/IP implementations as part of the standard. This value is also the least efficient one. The recommended values are shown in the table that follows this one. Keep in mind that the value you choose must be supported by each and every device on the network.

MTU Sizes

Adapter Type	Maximum MTU	Default	Notes
Ethernet	1,500	1,500	
Token Ring	4,000	1,500	4-megabit network
Token Ring	8,000	1,500	8-megabit network
FDDI	2,000	1,500	Real memory considerations impose the 2,000 limit

Example:

```
IPN237I  define link,id=link3172,type=osa2,dev=(032,33)

IPN237I  define adapter,linkid=link3172,number=0,type=ethernet, -
IPN237I          ip=192.168.1.161,mtu=1500

IPT100I Internet Link Level (ILL) Processor LCS starting
IPL491I OSA link LINK3172 started on devices 0032 – 0033
IPL491I OSA link LINK3172 started adapter 0 as 192.168.1.161
```

Notes:
- This command must refer to a 3172 or OSA control unit that is already defined with a DEFINE LINK command.
- This command should be issued from the initialization library member. It cannot be issued from the console except under special circumstances (see the example above).
- Once a 3172 or OSA has been defined, all related DEFINE ADAPTER commands must be issued before TCP/IP is permitted to process (other than initialization).
- To issue a set of DEFINE LINK and related DEFINE ADAPTER commands from the console, first issue the STOP command. This prevents TCP/IP from prematurely completing the DEFINE LINK processing before all adapter information is specified. After your definitions are complete, issue the START command to resume processing.
- If you have problems communicating with one or more hosts on your network, try reducing the MTU size.
- Regardless of MTU settings, *TCP/IP for VSE* accepts incoming datagrams of any size.

Related Commands:

DEFINE LINK	-	Create a link between TCP/IP and a network or to a directly-connected stack.
DEFINE ROUTE	-	Add an entry to the TCP/IP routing table.
EXECUTE	-	Execute an operator command script.
QUERY LINKS	-	Displays the status of network links.
SET IPADDR	-	Establishes the default home address for the stack.
START	-	Starts TCP/IP dispatching engine or a "stopped" network link.
STOP	-	Stops the TCP/IP dispatching engine.