DEFINE NTPD

The DEFINE NTPD command starts a Network Time Protocol Daemon. This service allows other hosts on the network to synchronize with the VSE TOD clock.

Syntax:
```
DEFine NTPd ID=id [,PORt=37] [,PRotocol={Udp|Tcp}] [,GMT=snum]
[,ADJustment=snum]
```

Arguments:

ID=   - A unique name that identifies the Daemon.

PORt=   - The port number to be monitored for time requests. The standard and default port is 37.

PRotocol=   - Keyword

    Udp   - This Daemon will reply to requests using the UDP protocol. This is the default.

    Tcp   - This Daemon will reply to requests using the TCP protocol.

GMT=   - Signed numeric, -99999 through +99999

This is the number of hours to be added/subtracted to the VSE TOD clock setting before transmitting to a client. This is useful if your local clock does not have the proper time-zone offset or if daylight savings time is involved.

ADJustment= - Signed numeric, -99999 through +99999

This is a signed integer number of seconds to be added/subtracted to the VSE TOD clock setting before transmitting to a client. Due to varying calculation of leap seconds and so on, it may be necessary to provide a fine adjustment. The best way to determine this value is to start an NTP Daemon, have a client obtain the time, and determine the adjustment required (if any).

Example:

```
IPN237I define ntpd,id=ntp1
NTP100I NTP Daemon Running
```

Notes:
- The Network Time Protocol simply consists of transmitting the current time as the elapsed number of seconds since January 1, 1900 (the last year of the nineteenth century).
- In addition to leap days added each four years (yes, 2000 is a leap year whether IBM knows it or not), leap seconds have also been added at intervals since 1972.
- NTPD includes leap seconds in its calculations.
- Each remote host requires client software to ask for the time and set the local clock. One such client is Tardis. There is a shareware version that is available from http://www.kaska.demon.co.uk.
- NTP clients attempt to allow for network transmission delay. However, the accuracy of clocks maintained with NTP will probably be only within +/- 2 seconds.

Related Commands:

DELETE NTPD	-	Terminate a Network Time Server Daemon.
QUERY NTPDS	-	Displays status of NTP Daemons