MiniServe contains servers for three simple protocols: Time Service (both PUP and XNS versions) and PUP ID Service. The servers are intended to run in the background on an 1108 or 1186 on networks that lack other sources of these services.

Requirements

The time must be correctly set on the machine running MiniServe (see "NS Time Service" below).

Installation

Load MINISERVE.LCOM from the library.

Either set the variable NS.TO.PUP.ALIST correctly, or make sure that the variable NS.TO.PUP.FILE is the name of a file containing a single form which will be used to set NS.TO.PUP.ALIST (see "PUP ID Service" below).

Evaluate (STARTMINISERVER).

Functions

(STARTMINISERVE) [Function]

This function has no arguments; it adds three background processes to the environment, one for each of the protocols that miniserve handles. These processes and protocols are:

\NSTIMESERVER	Provides the XNS Time Service
\PUPTIMESERVER	Provides the PUP Time Service
\PUP.ID.SERVER	Provides the PUP ID Service

XNS Time Service

XNS Time Service answers requests for the time using the XNS Time Protocol.

You must already have set the correct date and time on your workstation, either via one of the installation utilities or by evaluating

```
(SETTIME "dd-MMM-yy hh:mm:ss").
```

If you are not in the Pacific time zone, you should also make sure the following variables are set correctly:

\BEGINDST [Variable]

The ordinal day of the year (1 = January 1, 366 = December 31) on or before which daylight saving time starts in your area. Set it to 367 if your area does not observe daylight saving time.

\ENDDST [Variable]

The ordinal day of the year on or before which daylight saving time ends.

\TIMEZONECOMP [Variable]

The number of hours west of Greenwich; e.g., Eastern standard time = 5.

PUP Time Service

PUP Time Service is like NS Time Service, but using a PUP protocol. This service is not required by any Xerox workstation as long as XNS Time Service is available, but may be of use to other workstations.

You can disable it by evaluating

```
(MOVD 'NILL '\PUPTIMESERVER).
```

PUP ID Service

PUP ID Service supplies workstations with PUP host numbers, given their 48-bit XNS host numbers, so that they may communicate via PUP protocols.

NS.TO.PUP.FILE [Variable]

The name of a file containing a single form which will be used to set NS.TO.PUP.ALIST. Either this variable or NS.TO.PUP.ALIST must be set for the PUP ID Service to work.

NS.TO.PUP.ALIST [Variable]

A list which maps a workstation's XNS host number to a pup host number. Elements of this list are dotted pairs of the form:

```
((NSHOSTNUMBER A B C) . PUPNUMBER)
```

where *A, B, C* are the three 16-bit components of the workstation's 48-bit XNS host number (the value of the variable \MY.NSHOSTNUMBER), and PUPNUMBER is the corresponding PUP host number to be assigned to the workstation. PUP host numbers are integers in the range [1,254], and must be unique among hosts on a single net.

To set up this list correctly you can do the following on each workstation which will use the service (including the workstation running MiniServe):

1. Decide on a unique PUP host number for this workstation. It must be an integer inthe range [1,254]. For example we'll choose PUP Host number 2.

2. Get the workstation's NS host number and add it to the PUP host number. Evaluate the following form:

   (CONS \MY.NSHOSTNUMBER *YOURPUPNUMBER*)

   Using our chosen PUP host number of "2" and an example value for \MY.NSHOSTNUMBER the result might be:

   ```
   ((NSHOSTNUMBER 0 43520 14312) . 2)
   ```

3. Back on the workstation which is about to run MINISERVE, insert the dotted pair into NS.TO.PUP.ALIST.

Restarting MiniServe

If you need to restart MiniServe:

Use the PSW window to kill the three processes that were started by STARTMINISERVE.

Evaluate (STARTMINISERVE).