

TFTP Server Log

Optional enhancement

Dec 23, 1997

An optional feature has been added to the TFTP server local application to maintain a diagnostic log of TFTP transactions completed. If a data stream is found defined in the local node with the expected characteristics, a record of each TFTP transaction will be written there. The format of the record is compatible with that used for network frame activities, settings, and Swift Digitizer snapshot commands in order to make it easy to adapt one of those client page applications for presentation of the contents of the data stream log.

Data stream diagnostic record format

<i>Field</i>	<i>Size</i>	<i>Meaning</i>
ipAddr	4	IP address of client node
nBlks	2	#blocks transferred (512 bytes each)
eTime	2	Elapsed time in ms
xDate	8	Time of transaction completion

The sign bit of the nBlks word is used to flag a write transaction, in which the server receives a file from the client. The xDate 8-byte field contains a BCD-formatted date and time as yr, mo, da, hr, mn, sc, cy, and a byte of an unsigned binary value of half-ms into the present cycle.

Data stream characteristics

The data stream defined for this purpose must have the name 'TFTPLOG', where the 8th character is an ascii space (0x20). It should specify a fixed record size of 16 bytes, a user header size of 8 bytes, and a total size (including the 32-byte header) of at least 128 bytes. The number of records that can be held in the data stream queue is $(\text{totSize}-32)/16 - 1$. For example, a data stream defined with a total size of 2K bytes would provide room for 125 records.

As a concrete example of what should be placed in an entry of the DSTRM table, here is the 32-byte entry used by node0562:

```
8001 0010 0008 0800   qType= 1, eSize= 16, uSize= 8, tSize= 2K
0000 5800 0000 0000   qPtr= 0x00005800
5446 5450 4C4F 4720   qName= 'TFTPLOG '
0000 0000 0000 0000
```