HDOS FTP Reference Manual

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Introduction

This document describes details of an implementation of Networking on HDOS using a simplified version of “ftp” designed for HDOS and use with CP/NET servers. As such, the program operates as a network-oriented command shell.

Usage

FTP.ABS takes one optional argument, the hexadecimal server ID. If this argument is present, then FTP will perform an “open” command to that server ID before prompting. Otherwise, the user must do an “open” command before remote files can be accessed. When FTP is ready for user commands, it will display the prompt “ftp>”.

The command “help” will display a list of available commands.

The “status” commands shows the current status of the FTP session. This includes the remote connection status as well as the current local HDOS device.

The FTP session maintains the notion of current local (HDOS) device and current remote drive. All operations are executed within this context, and these current drives cannot be overridden with command arguments. In other words, a file argument cannot be prefixed with a drive or device. Note that the remote drive name is always reset to “A:” after an “open” command.

Commands

open *sid*

> Opens a connection (socket) to the specified server ID, designated as a hexadecimal number between 0 and FE. The server ID must have been set-up in the network configuration (e.g. see **wizcfg** for WIZnet networks). There must not be a connection open.

close

> Close the current connection. This must be done in order to open a new connection (e.g. to a different server).

quit

Quit ftp, closing any connection.

cd *drive*

Change the remote drive. Since remote servers are CP/NET, *drive* is designated using CP/M nomenclature A: through P:. Default is A:. Resets to default on opening a connection.

lcd *device*

Change the local HDOS device. Default is SY0:. The local device name is not affected by “open” or “close” commands.

status

Display connection status, including current remote drive and local HDOS device.

dir [*pattern*]

List remote files on current remote drive, filtered by *pattern*.

ldir [*pattern*]

List local files on current HDOS device, filtered by *pattern*.

size *file*

Show size of (remote) *file*, in 1K resolution.

get *remote-file* [*local-file*]

Download *remote-file*, optionally renaming to *local-file*. If *remote-file* contains wildcards then *local-file* is not allowed. Local files are overwritten without warning.

put *local-file* [*remote-file*]

Upload *local-file*, optionally renaming to *remote-file*. If *local-file* contains wildcards then *remote-file* is not allowed. Remote files are overwritten without warning.

Note that commands which operate on multiple files (including “ldir”) require memory to store the file list. If a directory contains an excessive number of files, there may not be enough memory for the list. The size of the list may be reduced by using a wildcard pattern to limit the number of files.

WIZCFG

For information on using WIZCFG and the WIZnet module, see:

https://github.com/durgadas311/cpnet-z80/blob/master/doc/CPNET-WIZ850io.pdf

The HDOS version of WIZCFG does not support CP/NET client device maps or MP/M Server setup.

Note that the WIZnet chip will lose it’s configuration on RESET (in addition to power off). For this reason, the configuration is stored in NVRAM and the command “WIZCFG R” is used to restore the configuration to the WIZnet chip after booting HDOS.

In order for a server to be reachable, it must have a WIZnet socket configured with the necessary TCP/IP connection information. A maximum of 8 sockets (servers) may be configured in the WIZnet, at any given time. Also note that firewalls, routers, etc. must be configured to pass the traffic. This is generally done based on TCP/IP port numbers, which are determined by the server configuration.

CP/NET Servers

For information on setting up a CP/NET Server, see:

https://github.com/durgadas311/cpnet-z80/blob/master/doc/CpnetSocketServer.pdf

Note that this version of “ftp” does not support network printers, or network booting. The JAR file for the server is located here:

https://github.com/durgadas311/cpnet-z80/blob/master/contrib/CpnetSocketServer.jar