Files11 -- PDP-11 File System Management

The Files11 utility is a command line interface that provides some useful commands to manage a files-11 disk file.

The code is based on the DEC Files-11 Specification document from April 1981. All references within the source code refer to this document.

Supported commands

The supported commands are:

- CAT or TYPE
- CD
- DEL or RM
- DIR
- DMPHDR
- DMPLBN
- EXPORT or DOWNLOAD
- FREE
- HELP
- IMPORT or UPLOAD
- LSFULL
- PWD
- VFY

CAT or TYPE

```
>CAT <file-spec>
>TYPE <file-spec>
```

Display the content of a file. If the file contains binary, a binary dump will be displayed instead.

CD

```
>CD [nnn,mmm]
>CD [dirname]
```

Change the current working directory

DEL or RM

```
>RM [<UFD>]<file-spec>
>DEL [<UFD>]<file-spec>
```

Delete file(s) from a directory. The file specification can include the directory. The file must specify a version number or '*' to delete all versions of the file(s).

DIR

```
>DIR <UFD>[file-spec]
```

List the content of the specified directory/directories The directory and file specification can include '*' wildcard character.

Example:

```
>DIR [*]          : List content of all directories.
>DIR [2,*]        : List content of all directories in group 2.
>DIR [2,54]       : List all files in directory [2,54].
>DIR [*]FILE.CMD : List all highest version instances of file 'FILE.CMD' in any
directory.
>DIR FILE.CMD;*  : List all version(s) of 'FILE.CMD' on the current working
directory.
```

DMPHDR

```
>DMPHDR <file-spec>
```

Dump the content of a file header (similar to PDP-11 'DMP /HD' command.)

DMPLBN

```
>DMPLBN <lbn>
```

Dump the content of logical block number 'lbn'. lbn must be a positive integer from 0 to number of blocks on the file system. lbn is octal if prefixed with a '0'. lbn is hexadecimal if prefixed with a 'x' or 'X' character. otherwise lbn is decimal.

EXPORT or DOWNLOAD

```
>EXPORT <local-file-spec> [host-directory]";
>EXP    <local-file-spec> [host-directory]";
>DOWN   <local-file-spec> [host-directory]\n";
```

Export or download PDP-11 files to the host file system. Example:

```
>EXP [*]
```

Export the whole PDP-11 volume to the host current working directory
under a sub-directory named **'<volume-name>'**.

```
>EXP [100,200]
```

Export the content of the [100,200] directory to the host current working directory
under a sub-directory named **'<volume-name>/100200'**.

```
>EXP [3,54]*.CMD
```

Export the latest version of all .CMD files under the [3,54] directory to the host
current working directory under a sub-directory named **'<volume-name>/003054'**.

FREE

```
>FREE
```

Display the amount of available space on the disk, the largest contiguous space, the number of available
headers and the number of headers used. This command is similar to PDP-11 'PIP /FR' command.

HELP

```
>HELP [<command>]
```

The HELP command displays a brief description of a command usage. Enter the command name argument for
more details.

IMPORT or UPLOAD

```
>IMPORT <host-file-spec> [local-file-spec]
>IMP    <host-file-spec> [local-file-spec]
>UP     <host-file-spec> [local-file-spec]
```

This command import/upload files from the host file system to the PDP-11 disk.
The host file specifications can include wildcard and uses '/' directory delimiter.

The local file specifier can specify a destination directory or default to the current directory.
A specific local file can be specified if uploading a single file (useful if the host file doesn't
match the 9.3 naming restrictions.)

Example:

```
>IMP data/*.txt [100,200]
```

Upload all .txt files from the host data directory to the [100,200] directory.

```
>IMPORT longfilename.txt [100,200]LONG.TXT
```

Upload longfilename.txt files to a file named 'LONG.TXT' in the [100,200] directory.

LSFULL

```
>LSFULL
>LSFULL <out-file>
```

List all files on the file system to the standard output or to 'out-file'. The output format is :

- Filename;version
- number of blocks used
- creation date
- (file number, file sequence)
- header lbn
- file owner and protection

PWD

```
>PWD
```

Displays the current working directory.

VFY

```
>VFY
>VFY /DV
```

Verify the integrity of the file system. The /DV switch validates directories against the files they list.