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## 1 DESCRIPTION

“FSCK” is an abbreviation for File System Consistency check), as commonly found on Unix and Linux systems. This programme scans a CP/M 2.2 file system, and reports any error it finds. It does not attempt any kind of repairs. FSCK.COM is intended to run under CP/M 2.2. It should run under any such system.

In this document, the following style conventions are used:

Machine output  
User commands  
Comments

## 2 USAGE

To scan a disk, simply enter fsck <drive> from the CP/M prompt. For example:

```
A>fsck b:
*** CP/M File System Checker V1.0 ***

Directory checks complete
Errors and warnings: 0
Files found: 32
Unused directory entries: 477
Blocks used: 100

Block map ('D': directory, 'F': file and '-': unused).
DDDDDDDDFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFF-----
-----
-----
-----
-----
-----
-----

Checking all blocks are readable (surface scan)
Track: 95
Scan complete
Returning to CP/M.
```

Each directory entry is scanned in turn, and a list (internally called `files_info`) is constructed with one entry per file. This contains a bitmap of physical extents encountered, so it is possible to discover "holes" (also known as sparse files) as well as duplicated extents. Once the directory scan is complete, a block map is displayed. This shows how blocks are distributed on the disk. Finally, a surface scan is performed to ensure that all sectors are readable. This includes sectors not allocated to any file.

### **3 FURTHER DEVELOPMENT**

So far, this programme has only been tested on ZARC. It would be interesting to try it on a period Z80 CP/M system.