# ABOUT

d64fm is a tool that works with one or several c64 prg files. For this purpose, it uses a virtual 64kb space similar to the memory of an emulated C64, just without emulation. With this tool you can:

- Add start bytes to a file (-a)
- Remove start bytes from a prg file (-s)
- Load several files into the virtual memory and save any memory region with or without start bytes

Commands can be supplied within a separate file (-src) or as string (-data).

You can also output the used memory regions as csv format (-csv).

#### USAGE

```
64fm [-data "cmd 1,cmd 2,cmd3,.."] [-src commands.cfg] [-csv]
[-s file.prg out.prg]
[-a 0xADDR file.prg out.prg]
```

## DESCRIPTION

Following commands can be used in the command file: l name [target [len [from\_src]]] r name target [len [from\_src]] s name from to w name from to

All commands load into or save from a virtual 64kb space. l and s use two start bytes. r and w do not. l (load) may be supplied with an optional target. r (read) requires a target. s and w (save and write) require from and to addresses. from\_src allows you to skip bytes in the source. Hex values must start with \$ or 0x.

## 64fm.exe -src 64fm.cfg

Load commands form config file.

| C:\Windows\System32\cmd.exe   | _ | × |
|---|---|---|
|   |   | ~ |
| D:\work\64\CBM_prg_Studio\Loopy>64fm.exe -src 64fm.cfg<br>> l LoopyBasicCompact.prg |   |   |
| Loaded data from \$0801 to \$0daa (1450 bytes)                                      |   |   |
| > 1 LoopyPetscii.prg 0x400 1000 \$60  |   |   |
| Loaded data from \$0400 to \$07e7 (1000 bytes)                                      |   |   |
| > 1 "300" -1 0xff   |   |   |
| Loaded data from \$0300 to \$03fe (255 bytes)                                       |   |   |
| > 1 carl.prg  |   |   |
| Loaded data from \$0326 to \$034e (41 bytes)  |   |   |
| > l init.prg  |   |   |
| Loaded data from \$0350 to \$035a (11 bytes)  |   |   |
| > l levels.bin  |   |   |
| Loaded data from \$0360 to \$03ff (160 bytes)                                       |   |   |
| > l init2A7.prg   |   |   |
| Loaded data from \$02a7 to \$02c2 (28 bytes)  |   |   |
| > l LoopySfx.prg  |   |   |
| Loaded data from \$0dc0 to \$0ee7 (296 bytes)                                       |   |   |
| > l clear.prg   |   |   |
| Loaded data from \$0ef1 to \$0f6e (126 bytes)                                       |   |   |
| > 1 checker.prg   |   |   |
| Loaded data from \$0f80 to \$0ff0 (113 bytes)                                       |   |   |
| > s "Loopy.prg" 0x02A7 0x0fff   |   |   |
| Saving file 'Loopy.prg'   |   |   |
| Done !  |   | ~ |

#### 64fm.exe

Command file 64fm.cfg is implicitly loaded.

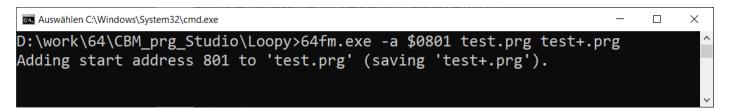
```
C:\Windows\System32\cmd.exe
                                                                                      ×
D:\work\64\CBM_prg_Studio\Loopy>64fm.exe
> l LoopyBasicCompact.prg
Loaded data from $0801 to $0daa (1450 bytes)
> l LoopyPetscii.prg 0x400 1000 $60
Loaded data from $0400 to $07e7 (1000 bytes)
> 1 "300" -1 0xff
Loaded data from $0300 to $03fe (255 bytes)
> l carl.prg
Loaded data from $0326 to $034e (41 bytes)
> l init.prg
Loaded data from $0350 to $035a (11 bytes)
> l levels.bin
Loaded data from $0360 to $03ff (160 bytes)
> l init2A7.prg
Loaded data from $02a7 to $02c2 (28 bytes)
> 1 LoopySfx.prg
Loaded data from $0dc0 to $0ee7 (296 bytes)
> l clear.prg
Loaded data from $0ef1 to $0f6e (126 bytes)
> 1 checker.prg
Loaded data from $0f80 to $0ff0 (113 bytes)
> s "Loopy.prg" 0x02A7 0x0fff
Saving file 'Loopy.prg'...
Done!
```

Example, how a cfg could look like:

| l LoopyBasicCompact.prg            |  |
|------------------------------------|--|
| l LoopyPetscii.prg 0x400 1000 \$60 |  |
| l "300" -1 0xff                    |  |
| l carl.prg                         |  |
| l init.prg                         |  |
| l levels.bin                       |  |
| l init2A7.prg                      |  |
| l LoopySfx.prg                     |  |
| l clear.prg                        |  |
| l checker.prg                      |  |
| s "Loopy.prg" 0x02A7 0x0fff        |  |

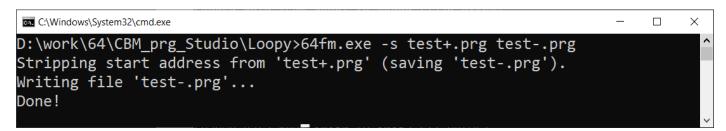
64fm.exe -a \$0801 test.prg test+.prg

Add start bytes \$0801.



64fm.exe -s test+.prg test-.prg

Remove start bytes.



64fm.exe -csv -src 64fm.cfg

Enable csv option.

| C:\Windows\System32\cmd.exe                                 | _ | ×      |
|---|---|--------|
| D:\work\64\CBM_prg_Studio\Loopy>64fm.exe -csv -src 64fm.cfg |   | ^      |
| LoopyBasicCompact.prg;\$0801;\$0daa;1450                    |   |        |
| LoopyPetscii.prg;\$0400;\$07e7;1000                         |   |        |
| 300;\$0300;\$03fe;255                                       |   |        |
| carl.prg;\$0326;\$034e;41                                   |   |        |
| init.prg;\$0350;\$035a;11                                   |   |        |
| levels.bin;\$0360;\$03ff;160                                |   |        |
| init2A7.prg;\$02a7;\$02c2;28                                |   |        |
| LoopySfx.prg;\$0dc0;\$0ee7;296                              |   |        |
| clear.prg;\$0ef1;\$0f6e;126                                 |   |        |
|   |   | $\sim$ |