fish shell

Friendly interactive shell

CONCEPTS

Universal `-U` all sessions, saved

Global `-g` this shell

Function `-f` inside a function

Block `-l` inside if/for/begin

set scope, widest to narrowest

fish is not POSIX: no word splitting, no $VAR=x, no heredocs. Run bash scripts with bash, not by sourcing them.

SUGGESTIONS & COMPLETION

`Right / Ctrl+F`
Accept the whole autosuggestion

`Alt+Right / Alt+F`
Accept one word of the suggestion

`Tab`
Complete; with several matches open the pager

COMMAND-LINE KEYS

`Ctrl+A / Ctrl+E`
Start / end of line

`Ctrl+W`
Delete the previous path component

COMMAND-LINE KEYS (cont.)

`Ctrl+U`
Delete to start of line

`Ctrl+C`
Cancel the current line

`Alt+E`
Edit the line in $EDITOR

`Alt+S`
Prepend sudo to the line

`Alt+H`
Show the man page for this command

HISTORY & DIRECTORIES

`Up / Down`
Search history for what you typed

`Ctrl+R`
Open history in the pager

`history search` *<text>*
List matching history entries

VARIABLES & LISTS

`set` *<name> <value>*
Set a variable

`set -gx` *<NAME> <value>*
Set global and export

`set -U` *<name> <value>*
Universal: kept across sessions

`set -l` *<name> <value>*
Local to the current block

VARIABLES & LISTS (cont.)

`set -q` *<name>*
Succeeds if the variable is set

`fish_add_path` *<dir>*
Add a directory to PATH (saved)

`set` *<name>* `a b c`
A variable is a list

`$name[2]`
Element 2 (lists start at 1)

`$status`
Exit status of the last command

`$argv`
Arguments of the function or script

EXPANSION

`(`*<cmd>*`)`
Command substitution, one arg per line

`**/*.txt`
Recurse into subdirectories

CONTROL FLOW

Conditions

```
if test -f <file>
    echo yes
else if test -d <file>
    echo dir
else
    echo no
end
```

CONTROL FLOW (cont.)

Loops

```
for f in *.txt
    echo $f
end

while read -l line
    echo $line
end < <file>
```

`math` *<a>* `+` *<b>*
Arithmetic, floats included

FUNCTIONS & ABBREVIATIONS

`function` *<name>* `... end`
Define a function ($argv holds args)

`funcsave` *<name>*
Save a function to ~/.config/fish/functions

`abbr -a` *<name> <text>*
Expand name to text on space or Enter

STRINGS

`string match -r` *'<regex>' <text>*
Regex match, prints the match

`string replace -a` *<old> <new> <text>*
Replace all occurrences

`string split` *<sep> <text>*
Split into list items

REDIRECTION & PIPES

<cmd>* `>` *<file>
Stdout to a file

<cmd>* `&>` *<file>
Stdout and stderr to a file

CONFIG & PROMPT

`~/.config/fish/config.fish`
Runs at every start

`~/.config/fish/functions/`*<name>*`.fish`
Autoloaded one function per file

COMING FROM BASH

bash to fish

bash	fish
`export X=1`	`set -gx X 1`
`$?`	`$status`
`$(cmd)`	`(cmd)` or `$(cmd)`
`${v/a/b}`	`string replace a b $v`
`$((1+2))`	`math 1 + 2`
`<(cmd)`	`(cmd | psub)`
`[[ $a == b ]]`	`test $a = b`
`f() { ...; }`	`function f ... end`
`cmd1 && cmd2`	`cmd1; and cmd2`

HELP

`help` *<topic>*
Open the docs on a topic