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

Ctrl+U
Delete to start of 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

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
```

Loops

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

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

test -e *<path>*
True if the path exists

*<a>***; and** *<b>*
Run b only if a succeeds

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>*
Append stdout

<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