fx JSON viewer and processor

START HERE

`fx <file>`
Browse JSON interactively

`fx <file> .`
Pretty-print

`curl <url> | fx`
Browse piped JSON

`fx <file> .items @.name`
Map over an array

`fx <file> .<key>`
Pick one field

`fx <file> .items '?.active'`
Filter an array

`fx <file> '.items.map(x ⇒ x.id)'`
Transform with JS

`fx --yaml <file>`
Read YAML

Input file or stdin → parse → **Arg 1** .users → x → **Arg 2** @.name → x → **Output** JSON or text

Each argument gets the previous result as x

CONCEPTS

Every argument is a JavaScript function; the result of one is the input x of the next. Start with . to skip x ⇒ x.

fx draws the interactive UI on stderr, so stdout only carries what you print with P or pipe out.

RUN AND INPUT

`fx <file>`
Open a file interactively

`<cmd> | fx`
Open piped JSON interactively

`fx <file> <expr>`
Apply an expression, print result

`<cmd> | fx .`
Pretty-print stdin

`fx <file> <expr1> <expr2>`
Chain expressions

`curl -i <url> | fx`
Show response headers too

`fx --slurp <expr>`
Read a stream as one array

`fx --strict .`
Reject invalid JSON

`fx --version`
Print version

`fx --comp bash`
Print shell completion script
Also zsh and fish: source <(fx --comp zsh)

EXPRESSIONS

`.<key>`
Select a field

`.<key>[0]`
Select an array element

`.<key>[]`
Flatten array items

`x ⇒ x.<key>`
Explicit arrow function

`'.map(x ⇒ x.<key>)'`
Map over an array in JS

`'.filter(x ⇒ x.<key> > 1)'`
Filter an array in JS

`@.<key>`
Shorthand for map

`?.<key>`
Shorthand for filter

EXPRESSIONS (cont.)

`'({...x, <key>: 1})'`
Copy an object with changes

`'Object.keys'`
Call any JS function by name

`'`Hi ${x}`'`
Template string output

`'x.<key> = 1, x'`
Edit, then return the input

`'x.id = 12345678901234567890n'`
Big integers need an n suffix
Numbers above the JS safe limit are parsed as BigInt.

BUILT-IN FUNCTIONS

`len`
Length of array, string or object

`keys / values`
Object keys or values

`sort / sortBy(fn)`
Sort an array

`uniq`
Unique values

`groupBy(fn)`
Group items by a result

`map(fn) / filter(fn)`
Curried map and filter

`flatten`
Flatten nested arrays

`reverse`
Reverse an array

`chunk(<n>)`
Split into groups of n

`walk(fn)`
Apply fn to every value, bottom-up

`list`
Print array as lines for xargs

`save`
Write edits back to the input file

`toBase64 / fromBase64`
Encode or decode base64

`YAML.stringify`
Convert JSON to YAML

`YAML.parse`
Convert YAML text to JSON

FORMATS

`--yaml`
Read YAML

FORMATS (cont.)

`--toml`
Read TOML

`--xml`
Read XML (attributes as "@name")

`--html`
Read HTML

`--edn / --maml`
Read EDN or MAML

`--raw / -r`
Process input line by line as text

`-rs`
Raw lines as one string array

File extensions pick the format automatically (.yaml, .toml, .xml). stdin has no name, so it needs the flag.

fx only writes JSON; convert with fx config.yaml . > config.json.

INTERACTIVE: MOVE

Arrows — Move; h j k l also work

g / G — Top / bottom

Space / b — Page down / up

d / u — Half page down / up

J / K — Next / previous sibling

[/] — Back / forward in history

@
Fuzzy-search a path and jump

Ctrl + G — Go to reference

q — Quit

`:<n>`
Jump to line n

INTERACTIVE: FOLD AND VIEW

Enter / l — Expand node

Backspace / h — Collapse node

L / H
Expand / collapse recursively

e / E — Expand / collapse all

1-9 — Collapse to nth level

z — Toggle string wrap

INTERACTIVE: FOLD AND VIEW (cont.)

s — Show sizes or line numbers

? — Show help

INTERACTIVE: SEARCH AND OUTPUT

. — Open query input

/ — Regex search

n / N — Next / previous match

Tab / Shift + Tab
Complete or cycle in query input

Up / Down
Browse query history in input

Esc — Cancel the query

y — Yank (copy) value

p — Preview value

P
Print value to stdout and exit

d › d — Delete node

`/<re>/`
Case-sensitive search

`/<re>/i`
Explicit case-insensitive search

`:w <file>`
Write on-screen JSON to a file

`:w !<cmd>`
Pipe on-screen JSON to a command
Keep the space before !; :w!x forces a write to a file named x.

`:wq`
Write and quit

RECIPES

Pull one column as lines

```
curl -s <url> | fx .items @.name list
```

Convert YAML config to JSON

```
fx config.yaml . > config.json
kubectl get pod -o yaml | fx --yaml .spec
```

Rename a field in place

```
fx <file> 'x.name = x.name.toUpperCase(), x' save
```

Explore, pick, save

```
curl -s <url> | fx > part.json
# move to a value, press P
```