

NAME

bike - Companion CLI for Bike.app

SYNOPSIS

bike *subcommand* [--version] [--help]

DESCRIPTION

Open, get, and update Bike.app editors and outlines.

Commands default to the frontmost editor and its outline.

Use ids to refer to specific editors, outlines, and rows. Each row has a session id (resets when the outline closes) and may have a (settable) persistent id (saved in the outline file). The ‘id’ field is overloaded: in ‘session’ output it carries the session id (with ‘persistentId’ as a separate field); in every other output format ‘id’ carries the persistent id. ‘session’ is the runtime/API format; the other formats serialize the outline for storage or exchange.

SESSION IDS are stable while the outline remains open. Every row has a session id available (only) using the ‘session’ output format. Session id 0 always refers to the outline root.

EDITOR IDS are UUIDs assigned to outline editors. Stable while the editor exists. The same outline open in two windows has two editors with distinct ids. Use ‘bike get editors’ to discover open editors and their ids.

PERSISTENT IDS are stable cross-session handles. Unlike session ids, for rows persistent ids are optional and assignable. Assignment of existing id transfers to new row.

OUTLINE IDS are stable cross-session handles. They are the same as, stored in, the outline root row’s persistent id.

OUTLINEPATH is a query language for selecting rows. Accepted as a row-ref by ‘get’ and any command that takes ‘<row-refs>’, and as the positional argument to ‘observe outline’ / ‘observe outline rows’. Default ‘//*’ (every row). Examples: ‘//heading’, ‘//task’, ‘/*’. See Bike User’s Guide for details.

ROW REFS identify which rows a command targets. A row ref is one of:

- session id (numeric, UInt32; stable while outline remains open)
- persistent id (string; stable across runs and saves)
- outline path (starts with ‘/’) matching rows
- ‘@selection’ -- the row containing the caret
- ‘@focused’ -- the focused-in row or root

OUTPUT FORMATS (selected with ‘-o’ / ‘--output’):

session -- runtime/API JSON (default, id session)
markdown -- Bike-flavored markdown. (id optional+persistent)
bike -- XML-conforming ‘.bike’ HTML. (id optional+persistent)
opml -- OPML XML. (id optional+persistent)
json -- portable file JSON shape. (id optional+persistent)
txt -- plain text, one row per line. (no ids)

EXIT CODES. 0 when the command ran. Non-zero when the command could not run: validation error, IPC error, etc.

--version

Show the version.

-h, --help

Show help information.

open Open outline.

-h, --help

Show help information.

outline

path Filesystem path or ‘id:<outline-id>’.

--timeout *seconds*

Seconds to wait for open. (default: 5).

--pretty Pretty-print JSON output.

-h, --help

Show help information.

close Close outline.

-h, --help

Show help information.

outline

--outline *outline-id*
Outline persistent id (default: frontmost).

--discard
Discard unsaved changes (default: false).

--pretty Pretty-print JSON output.

-h, --help
Show help information.

get Get editor, editors, outline, outlines, commands.

-h, --help
Show help information.

editor Read editor (default: frontmost, full-state).

--editor *editor-id*
Editor id (default: frontmost).

--pretty Pretty-print JSON output.

-h, --help
Show help information.

editors List editors (frontmost first, shallow-state).

--pretty Pretty-print JSON output.

-h, --help
Show help information.

outline Read the outline encoded in chosen format.

Output is the complete outline encoding in the chosen output format. For just the rows without the surrounding format structure, use ‘bike get outline rows’. Use ‘--refs’ to include only a subset of the outline’s rows.

--refs *row-refs...*

Row refs to read. Default: `//*` (every row). A ref is a session id, persistent id, outline path (starts with `/`), `@selection`, or `@focused`. See `'bike --help'`.

--outline *outline-id*

Outline persistent id (default: frontmost).

--shape *shape*

Row shape: tree (default, nested under matched ancestors) or flat (no nesting).

-o, --output *output*

Output format: session (default), markdown, bike, opml, json, or txt. See `'bike --help'` for the OUTPUT FORMATS section.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

rows Read just the matching rows (no format wrapper).

Same options as `'bike get outline'`, but returns only the matched rows without the surrounding format structure/metadata. Pass `<row-refs>` to include only a subset of the outline's rows.

row-refs...

Row refs to read. Default: `//*` (every row). A ref is a session id, persistent id, outline path (starts with `/`), `@selection`, or `@focused`. See `'bike --help'`.

--outline *outline-id*

Outline persistent id (default: frontmost).

--shape *shape*

Row shape: tree (default, nested under matched ancestors) or flat (no nesting).

-o, --output *output*

Output format: session (default), markdown, bike, opml, json, or txt. See `'bike --help'` for the OUTPUT FORMATS section.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

outlines

List open outlines (frontmost first).

--pretty Pretty-print JSON output.

-h, --help

Show help information.

commands

List available Bike commands.

Use these commands in ‘bike evaluate commands’.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

observe

Observe outline changes.

NDJSON stream when using default ‘session’ output. Each line is ‘{subscriptionId, outline, kind, data}’; per-subcommand ‘kind’ and ‘data’ shapes are listed in their own help.

Non-‘session’ output prints each snapshot separated by ‘---’.

A stream may end with a final ‘{kind: "subscription.closed", data: {reason}}’ notification.

Reasons: ‘outlineClosed’ (the observed outline was closed), ‘appQuitting’ (Bike is terminating).

Ctrl-C / SIGTERM end the stream with a bare EOF no terminator is emitted.

-h, --help

Show help information.

outline Stream outline with rows matching the given path.

Initial snapshot + debounced re-evaluation when outline changes. Changes fire only

when the matched rows/shape actually changes. See ‘bike observe --help’ for the wrapper shape and stream lifecycle.

--outline *outline-id*

Outline persistent id (default: frontmost).

--path *path*

Outline path expression to observe. Default: ‘/*’ (every row). Must return a row-set; scalar expressions are rejected.

--shape *shape*

Row shape: tree (default, nested under matched ancestors) or flat (no nesting).

-o, --output *output*

Output format: session (default), markdown, bike, opml, json, or txt. See ‘bike --help’ for the OUTPUT FORMATS section.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

rows Stream rows (only) matching the given outline path.

Initial snapshot + debounced re-evaluation when outline changes. Changes fire only when the matched rows/shape actually changes. See ‘bike observe --help’ for the wrapper shape and stream lifecycle.

--outline *outline-id*

Outline persistent id (default: frontmost).

--path *path*

Outline path expression to observe. Default: ‘/*’ (every row). Must return a row-set; scalar expressions are rejected.

--shape *shape*

Row shape: tree (default, nested under matched ancestors) or flat (no nesting).

-o, --output *output*

Output format: session (default), markdown, bike, opml, json, or txt.
See ‘bike --help’ for the OUTPUT FORMATS section.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

create Create outline, row, rows.

-h, --help

Show help information.

outline Create a new outline.

With no path: opens an Untitled outline in Bike (no file on disk). With a path: writes a new empty outline to that path and opens it. --format wins; else inferred from the path’s extension; else txt.

path Optional filesystem path. When given, a new empty file is written there and opened.

-f, --format *format*

File format: bike, markdown, opml, txt, or json. Defaults to bike for Untitled docs; for path mode, defaults from the path’s extension (txt if unknown).

--pretty Pretty-print JSON output.

-h, --help

Show help information.

row

--outline *outline-id*

Outline persistent id (default: frontmost).

--parent *row-ref*

Parent row ref (default: outline root).

--position *position*

Position: start | end | <integer index>.

--before *row-ref*

Insert before this sibling.

--after *row-ref*

Insert after this sibling.

--text *markdown*

Bike-flavored markdown for one row, single line (default: ``). Use ‘bike create rows’ for multi-row or hierarchical input.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

rows Create row hierarchy from Bike-flavored markdown.

-f, --file *file*

Path to a markdown file, or ‘-’ for stdin.

--outline *outline-id*

Outline persistent id (default: frontmost).

--parent *row-ref*

Parent row ref (default: outline root).

--position *position*

Position: start | end | <integer index>.

--before *row-ref*

Insert before this sibling.

--after *row-ref*

Insert after this sibling.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

update Update editor, rows.

-h, --help

Show help information.

editor

--focus *row-ref*

Focus into this row.

--select *row-ref*

Move the selection to this row.

--select-head *row-ref*

Optional selection head. Requires --select.

--expand *row-refs...*

Row refs to expand. See 'bike --help'.

--collapse *row-refs...*

Row refs to collapse. See 'bike --help'.

--outline *outline-id*

Outline persistent id (default: frontmost).

--pretty Pretty-print JSON output.

-h, --help

Show help information.

rows The same updates apply to every referenced row.

row-refs...

Row refs (default: @selection). See 'bike --help'.

--outline *outline-id*

Outline persistent id (default: frontmost).

--text *markdown-or-json*

Replace the row's text. Bike-flavored markdown, or a JSON array of '{string, attrs?}' runs.

--append *markdown-or-json*

Append to the row's text. Same input forms as --text.

--prepend *markdown-or-json*

Prepend to the row's text. Same input forms as --text.

--type *type*

Row type (body, heading, task, note, quote, code, hr, ordered, unordered).

Switching to a type that carries no text (e.g. 'hr') clears the row's text; undo in Bike restores it.

--attr *attr...*

Set attribute key=value (repeatable).

--unset *unset...*

Remove attribute by key (repeatable).

--persistent-id *persistent-id*

Assign a persistent id (requires exactly one row ref). See 'bike --help'.

--pretty Pretty-print JSON output.**-h, --help**

Show help information.

move Move rows.

-h, --help

Show help information.

rows

row-refs...

Row refs (default: @selection). See 'bike --help'.

--to *row-ref*

Destination parent. Required unless `--before` or `--after` is given.

--position *position*

Position under `--to`: start | end (default) | <integer index>.

--before *row-ref*

Move before this sibling. Required unless `--to` or `--after` is given.

--after *row-ref*

Move after this sibling. Required unless `--to` or `--before` is given.

--outline *outline-id*

Outline persistent id (default: frontmost).

--pretty Pretty-print JSON output.

-h, --help

Show help information.

delete Delete rows.

-h, --help

Show help information.

rows Delete rows + descendants.

row-refs...

Row refs (default: @selection). See ‘bike --help’.

--outline *outline-id*

Outline persistent id (default: frontmost).

--pretty Pretty-print JSON output.

-h, --help

Show help information.

evaluate

Evaluate script, commands.

-h, --help

Show help information.

script Evaluate JavaScript in Bike's extension context.

Evaluate JavaScript in Bike's app context (JavaScriptCore). Pure JS only - no TypeScript syntax, no 'import'/ESM. The script's return value (last expression) is the JSON result.

The app API hangs off the 'bike' global. Full type surface: <https://github.com/bike-outliner/extension-kit/tree/main/api> ('.d.ts' translate to JS at the call site.)

Example:

```
((() => bike.frontmostOutlineEditor?.selection?.word)())
```

-f, --file *file*

Path to a JavaScript file, or '-' for stdin.

--input *text*

Input forwarded to the script if it evaluates to an arrow function.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

commands

Perform one or more named editor commands. Use 'bike get commands' to list available commands.

ids... Command id(s) to evaluate in order (e.g. 'row:block-move-up', 'format:heading', 'fold:collapse-all').

--editor *editor-id*

Editor id (default: frontmost). See 'bike get editors'.

--pretty Pretty-print JSON output.

-h, --help

Show help information.

mcp MCP Server on stdio.

-h, --help

 Show help information.

help Show subcommand help information.

subcommands...

EXIT STATUS

The **bike** utility exits 0 on success, and >0 if an error occurs.