

Emilua 0.4 released

Emilua 0.4 released after over a year of work. A few highlights:

- A new `byte_span` type akin to Go slices is used for IO ops.
- Many new IO ops to list here (TCP, UDP, TLS, file IO, address/service forward/reverse name resolution, UNIX domain sockets, SCM_RIGHTS-style fd-passing, pipes, serial ports, ...).
- A new module for filesystem operations.
- Improved support for system clocks (absolute timeouts to avoid accumulating jitter, high resolution clocks to implement microbenchmarks, ...).
- A new AWK-inspired scanner for formatted (buffered implied) textual input. It should be easy to parse a lot of streaming textual protocols with that (e.g. HTTP, SMTP, redis, Gopher, Gemini, ...) and even classical UNIX files (e.g. `/etc/group`, `/etc/passwd`, `/etc/fstab`, ...).
- Docs can be installed as manpages, downloaded as PDF/ePUB, or viewed online in the new website.
- New interfaces to handle UNIX signals, CLI args, env vars, and process credentials.
- New interfaces to handle process & job control (+ ptys).
- `io_uring` support.
- Linux namespaces support (you can optionally run a Lua VM inside some namespace for practical & cheap sandboxing purposes). Next versions should improve this support and bring FreeBSD's Capsicum and Linux's Landlock to the table as well.
- Improved Windows support (you can even use a few platform-specific APIs such as `TransmitFile()`).
- New module for common stream operations.
- Experimental WebSocket support (API will most likely change in future releases). And going further forward I should just split HTTP+WS out of Emilua core into their own separate plugin (and separate release schedules).
- A basic regex module.