# **Utilities Reference**

#### for release version 0.2.12

#### mu-sys

#### mu-server

#### mu-exec

## forge

Name: forge - system development tool
Synopsis: forge command [options...]

*Commands*: 0.0.17

help this message
version lade version
init init./ as workspace
env print dev environment
clean clean all artifacts

build release build system

debug

symbols reference [--module=name]
 crossref [--module=name]
 metrics [--module=name]
 symbol reports

install release system-wide, may

need sudo(8)

commit rustfmt and clippy,

pre-commit linting

test run regression test suite

bench base [--ntests=number]
 current [--ntests=number]
 footprint [--ntests=number]
 run benchmarks

General options:

--verbose verbose operation
--recipe show recipe

### mu-listener

Name: listener - mu system REPL

Synopsis: listener

Description: 0.0.2

listener is a generalized command-line REPL that can
be configured to load and run in any of the mu namespaces.

It is intended for debugging and exploration during development.

listener has no command-line arguments, it is configured
by a JSON-format dotfile named .listener. An example
dotfile can be found in /opt/mu/lib/listener. If a
listener is not found in the current directory, the
user's home directory will be searched and if found there
will be used. listener does not require a listener
file.

```
{
    "config": "npages: 2048",
    "namespace": "core",
    "rc": "listener.rc"
}
```

The configuration syntax can specify three options, none of which are required.

The *config* option supplies a mu Env configuration specification in JSOM format, see the mu-ref refcard environment section for details. If this option is not specified, the mu Env will be created with default values.

The *namespace* option supplies the namespaces that should be loaded, see the *mu-ref* refeard *namespaces* section for details. If this option is not specified *mu-listener* will load only the *mu* namespace.

The  $\it rc$  option supplies the name of a source file to be loaded before the REPL runs. Additional symbols may be supplied there.