rebar3 Erlang build tool

rebar.config deps, profiles → `compile` → **rebar.lock** pinned deps → `build` → **_build/<profile>** beams, deps, rel → `release / tar` → **Release** relx, start script

CONCEPTS

rebar3 is the Erlang build tool: one rebar.config per project, builds land in _build/<profile>. Run rebar3 help to list tasks, including plugin ones.

Profiles pick the build variant: default, test (used by eunit and ct) and prod. Select with rebar3 as <profile> <task>.

PROJECTS

rebar3 new app *<name>*
OTP application with supervisor

rebar3 new lib *<name>*
Library without a supervisor

rebar3 new release *<name>*
Umbrella project for releases

rebar3 new escript *<name>*
Command-line escript project

BUILD & RUN

rebar3 compile
Fetch deps and compile all apps

BUILD & RUN (cont.)

rebar3 clean
Remove compiled beams

rebar3 shell
Shell with apps and deps loaded

rebar3 shell --sname *<name>*
Shell as a named node

rebar3 shell --apps *<a>*,*<b>*
Start only these apps

rebar3 shell --config *<file>*
Use a sys.config file

rebar3 do *<task>*,*<task>*
Run several tasks in a row

rebar3 escriptize
Package an escript executable

rebar3 version
Show rebar3 and Erlang versions

TEST

rebar3 eunit
Run all EUnit tests

rebar3 eunit --module=*<mod>*
Tests of one module

TEST (cont.)

rebar3 eunit --test=*<mod>*:*<fun>*
Run one test function

rebar3 eunit --application=*<app>*
Tests of one app

rebar3 ct
Run all Common Test suites

rebar3 ct --suite=*<path>*
Run one suite

rebar3 ct --suite=*<path>* **--case=***<c>*
Run one test case

DEPENDENCIES

rebar3 deps
List deps and lock status

rebar3 tree
Show the dependency tree

rebar3 upgrade
Upgrade all dependencies

rebar3 upgrade *<dep>*
Upgrade one dependency

deps in rebar.config

```
{deps, [
  cowboy,
  {jsx, "~> 3.1"},
  {mylib, {git, "<url>",
{tag, "1.0.0"}}},
  {other, {git, "<url>",
{branch, "main"}}}
]}.
```

DEPENDENCIES (cont.)

List every dependency in the .app.src applications list too, or it will not start with your app.

PROFILES

rebar3 as *<profile>* *<task>*
Run a task in a profile

profiles in rebar.config

```
{profiles, [
  {test, [{deps, [meck]}]},
  {prod, [{erl_opts,
[no_debug_info]}]}
]}.
```

QUALITY

rebar3 dialyzer
Build the PLT and check types

rebar3 xref
Cross-reference check

RELEASES

rebar3 release
Build a dev release

rebar3 as prod release
Release with ERTS, no symlinks

RELEASES (cont.)

rebar3 as prod tar
Release as a .tar.gz

_build/*<profile>*/rel/*<name>*/bin/*<name>* **console**
Start a release in a shell

bin/*<name>* **foreground**
Run in foreground (systemd, Docker)

bin/*<name>* **daemon**
Run as a background node

bin/*<name>* **remote_console**
Attach to a running node

relx in rebar.config

```
{relx, [
  {release, {<name>,
"0.1.0"}, [<name>, sasl]},
  {dev_mode, true},
  {include_erts, false},
  {extended_start_script,
true}
]}.
```

CONFIG & PLUGINS

Plugins

```
{plugins, [rebar3_auto]}.
{project_plugins, [erlfmt]}.
```

HEX

rebar3 hex publish
Publish package and docs