

Building tea CLI for Termux

Overview

This documents the process of building the [tea CLI](#) (official Gitea CLI tool) as a Termux package for aarch64 Android devices.

Prerequisites

- Docker installed with user in docker group
- [termux-packages](#) repository cloned
- Android NDK is handled automatically by the Docker builder image

Phase 1 -- Local Build

1. Clone termux-packages

```
git clone https://github.com/termux/termux-packages
```

2. Create package directory and build.sh

File: `packages/tea/build.sh`

Key fields:

Field	Value
TERMUX_PKG_VERSION	0.14.0
TERMUX_PKG_SRCURL	https://gitea.com/gitea/tea/archive/refs/tags/v\${TERMUX_PKG_VERSION}.tar.gz
TERMUX_PKG_SHA256	f509de217ac0e57491ffdab2750516e8c505780881529ee703b9d0c86cc652a3
TERMUX_PKG_LICENSE	MIT

Field	Value
TERMUX_PKG_BUILD_DEPENDS	golang
TERMUX_PKG_BUILD_IN_SRC	true

Critical notes:

- Do NOT set TERMUX_PKG_DEPENDS= (empty value is parsed as a dependency on an empty string -- caused the first build failure)
- Use termux_setup_golang in termux_step_pre_configure()
- Build with CGO_ENABLED=0 for pure Go compilation

3. Build via Docker

```
cd termux-packages
bash scripts/run-docker.sh
# Inside container:
./build-package.sh -f -I tea
```

The -f flag forces rebuild, -I downloads dependencies from Termux repos instead of building them locally.

4. Result

- Output: output/tea_0.14.0_aarch64.deb (6.2MB)
- Install on device: pkg install ./output/tea_0.14.0_aarch64.deb

Phase 2 -- Contribute Upstream

Submitting to termux-packages

1. Fork <https://github.com/termux/termux-packages>
2. Add packages/tea/build.sh to your fork
3. Create PR with commit message: addpkg(main/tea): add tea CLI for Gitea servers

Packaging Policy Compliance

- MIT licensed
- Active project (233+ stars on Gitea)
- Pure Go (no CGO issues, no native deps)

- Not installable via language-specific package manager
- Package size under 100MB

Known Issues Encountered

1. **Empty TERMUX_PKG_DEPENDS** -- Setting TERMUX_PKG_DEPENDS= causes parse error: "depends on non-existing package". Fix: omit the line entirely.
2. **NDK not installed** -- Local build fails without Android NDK. Fix: use Docker builder image instead.
3. **SSH sudo** -- run-docker.sh requires TERMUX_DOCKER_USE_SUDO=1 unless user has sorted sudo permissions.

Build Time

Approximately 5-15 minutes for first build (downloading Go toolchain, fetching all Go module dependencies, cross-compilation). Subsequent builds are faster due to caching.

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