

N9LYA TECHNICAL GUIDES

Termux Supreme Training & Reference Guide

Android Linux. Master the shell.

Jerome M. Kutche

N9LYA

Second Edition · September 2026

Termux Supreme Training & Reference Guide

N9LYA Technical Guides — Book 17

Master Android's terminal environment: shell fundamentals, Python and Git, network diagnosis, SSH, and safe automation, with a guided 30-day path from first launch to independent troubleshooting.

Jerome M. Kutche (N9LYA)

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How to Use This Guide

Outcome: by the end, you will be able to work safely in the shell, manage files and packages, use Python and Git, diagnose your own network, connect with SSH keys, and automate repeatable tasks on Android through Termux.

This edition corrects the installation guidance, replaces brittle commands, explains Android-specific limits, adds safe backup and SSH procedures, fixes a sequencing gap in the 30-day plan around GitHub authentication, expands the Termux:API automation chapter, and adds sourced, dated notes next to any claim that could change with a future Termux or Android release.

Read Parts I and II in order. After that, use the project chapters and command index as a field reference. Type every command yourself. Replace example names and addresses with your own values.

Command Notation

Pattern	Meaning
\$ command	Run as a normal Termux user. Do not type the dollar sign.
<name>	Replace the placeholder, including the angle brackets.
# comment	An explanation; Bash ignores text after #.
Ctrl+C	Hold Ctrl and press C. In Termux, Volume Down often acts as Ctrl.

Safety rule: commands that delete, overwrite, expose a server, or scan a network are labeled. Read the entire block before running the first line.

What Changed From the First Edition

- Fixed a sequencing problem where Day 20 of the training plan assumed GitHub push access before the guide had explained how to get it. GitHub authentication now appears on Day 18, ahead of the first push.
 - Expanded Chapter 11 (Termux:API) from one command block into a full walkthrough with five practical automations and a dedicated troubleshooting row.
 - Added a “last verified” date next to any instruction that depends on a specific app, version, or platform policy, since those are the details most likely to drift.
 - Expanded the reference list with short notes on what each source is good for, instead of a bare link list.
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Part I — Install and Understand Termux

Termux is an Android terminal application plus a package ecosystem compiled for Android. It is Linux-like, but it is not a conventional GNU/Linux distribution and it is not a virtual machine. Its packages run directly on Android through the app sandbox, which is why several commands and assumptions from desktop Linux tutorials do not carry over cleanly.

1. Choose the Right Build

Use the official Termux project releases from F-Droid or the project’s GitHub Releases. As of this edition, the upstream project still treats its old Google Play listing as a separate, largely unmaintained branch — *(last verified September 2026; check the project’s own README before you install, since app-store policies for terminal emulators have shifted before and could again)*. Do not mix the main app and plug-ins (Termux:API, Termux:Styling, Termux:Float, and so on) from different sources, because their signing keys differ and Android will refuse to let mismatched signatures talk to each other.

Source	Use it when	Important note
F-Droid	You want straightforward installation and automatic updates.	Download the APK from the official F-Droid page or use the F-Droid client app.
GitHub Releases	You want a release directly from the Termux project, or a newer build than F-Droid currently carries.	Verify the repository is termux/termux-app. Choose the correct APK variant for your device’s CPU architecture.
Google Play	Only if you deliberately want that separate, older branch.	Not the recommended source for this guide. Features, update cadence, and plug-in compatibility can differ.

Do not install random APKs or “one-click hacking bundle” repackages of Termux. They may be outdated, tampered with, or designed to steal tokens and credentials stored in your shell history or `.ssh` directory.

2. First Launch and Safe Setup

Let the bootstrap finish before you touch anything. Then update the base system before adding a large tool set. Install only what you will actually use — fewer packages mean less storage pressure, fewer update conflicts, and a clearer learning environment while you’re still building muscle memory.

```
pkg update
pkg upgrade
pkg install git python openssh nano curl wget tmux
termux-info
```

Answer package configuration prompts carefully. If a “keep the old config / use the new one” prompt appears for a file you’ve customized, don’t blindly pick the new one — read the diff and keep a backup first (see Chapter 6).

Shared Storage

```
termux-setup-storage
ls -la ~/storage
ls -la ~/storage/downloads
```

Android will show a permission dialog. The command creates convenient symlinks under `~/storage`. Shared storage is suitable for documents, media, exports, and finished backups — **not** for executable projects, SSH private keys, or Git repositories. It may not preserve Unix permissions and can silently prevent scripts from executing.

A Clean Working Layout

```
mkdir -p ~/projects ~/bin ~/notes ~/backups
printf '%s\n' 'Termux training started' > ~/notes/training-log.md
ls -la ~
```

Keep active code in `$HOME`. Copy finished exports to Downloads only when you need them in another Android app.

3. How Android Changes Linux

Topic	Termux reality
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End of the free sample

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That was the first 5 of 18 pages. The full book continues with the practical detail, worked examples and recovery steps that don't fit in a sample.

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