

Backing Up Android Devices to the Unified Off-Site Repository

This note distills the earlier phone-backup discussion into a single reference you can drop into the repo.

1 Backup Methods by Phone Type

Method	Root / unlock?	Captures	How it plugs into Restic/Kopia repo
Termux + Restic / Kopia	×	Any folder reachable in <code>/sdcard</code> (DCIM, Download, WhatsApp, etc.)	<code>restic backup /sdcard/DCIM ... --host PHONE-PIXEL8</code> (run via Termux:Boot or Tasker). Uploads straight to the shared repo.
SeedVault (CalyxOS, LineageOS, /e/OS)	×	App APK + data, SMS, call log, user-selected dirs	SeedVault's <i>SFTP</i> destination points at <code>remote:/seedvault-phone/</code> ; a PC cron job then <code>restic backup</code> that folder.
TWRP / Nandroid IMG	✓	Block-level image of system, vendor, data, boot	Copy IMG folder to a PC or USB; <code>restic backup /TWRP/BACKUPS/... --tag NANDROID</code> .
Syncthing Android	×	Real-time mirror of selected folders	PC receives folder → PC's snapshot-to-Restic timer picks it up.

2 Restore Paths

Scenario	Restore Steps
Lost photo / doc	<code>restic mount</code> on any PC → browse to <code>/snapshots/PHONE-*/<path></code> → copy.
New phone (same Google acct)	Google Cloud restores contacts, SMS, settings <i>automatically</i> ; Termux-Restic job restores media after first sync.
New phone (SeedVault ROM)	SeedVault “Restore apps & data” from same SFTP path.
Full rollback after modding mishap	Boot TWRP → push latest IMG from Restic mount to <code>/sdcard/TWRP/BACKUPS/...</code> → “Restore”.

3 Scheduling & Bandwidth

Job	Frequency	Data volume
Termux-Restic file backup	Daily (Termux:Boot cron)	First run 15–20 GB; nightly delta few hundred MB.
SeedVault SFTP push	Nightly (built-in)	App data ZIPs; tens of MB.
Restic prune	Weekly on repo host	Keeps 7 daily / 4 weekly / 6 monthly snapshots.

Backblaze B2 cost \approx \$1.20/month for one 128 GB phone; virtually free on a Hetzner Storage Box (fits under 1 TB).

4 Privacy

- All phone data arrives **already encrypted** (Restic/Kopia AES-256, SeedVault AES+ChaCha).
- Cloud provider never sees plaintext; same encryption keys as PC backups.

5 TL;DR Implementation

1. **Non-root stock phones:** install Termux, Restic binary, schedule daily backup of `/sdcard`.
2. **Custom ROM phones:** enable SeedVault \rightarrow SFTP to the same remote host.
3. **Rooted tinkerer phones:** add periodic TWRP images; store via Restic.
4. No extra cloud accounts — everything lands in the **same encrypted repository** you already pay for.