# 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 /sdcard (DCIM, Download, WhatsApp, etc.) | restic backup /sdcard/DCIM … --host PHONE‑PIXEL8 (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 *SFTP* destination points at remote:/seedvault-phone/; a PC cron job then restic backup that folder. | | **TWRP / Nandroid IMG** | √ | Block‑level image of system, vendor, data, boot | Copy IMG folder to a PC or USB; restic backup /TWRP/BACKUPS/... --tag NANDROID. | | **Syncthing Android** | ✕ | Real‑time mirror of selected folders | PC receives folder → PC’s snapshot‑to‑Restic timer picks it up. | |
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| ## 2 Restore Paths | Scenario | Restore Steps | |———-|—————| | **Lost photo / doc** | restic mount on any PC → browse to /snapshots/PHONE-\*/<path> → copy. | | **New phone (same Google acct)** | Google Cloud restores contacts, SMS, settings *automatically*; 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 /sdcard/TWRP/BACKUPS/... → “Restore”. | |

## 3 Scheduling & Bandwidth

| Job | Frequency | Data volume |
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| 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 ≈ $1.20/month for one 128 GB phone; virtually free on a Hetzner Storage Box (fits under 1 TB).

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| ## 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 → 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.