ZYVOR

GuestKit

Know it will boot, before you power it on. Offline VM readiness and migration assurance.

THE PROBLEM

Broken disks are found at 2 a.m.

Hypervisor migrations tend to fail the same way: the disk problem shows up in the cutover window, after power-on.

1

Surprises at cutover

Whether a VM will boot is only answered once it is powered on.

2

Hand-edited repairs

Repairs are manual edits inside a mounted image, with no audit trail.

3

Guessed migration order

Teams rely on scripts and tribal knowledge to plan waves.

What GuestKit is

GuestKit reads a VM disk while the guest is off, scores first-boot readiness from 0 to 100, repairs it through a plan you can read, and certifies cutover with a signed Passport.

WHAT IT DOES

What you get.

Each one is a behaviour of the product, taken from its documentation.

1

Boot-readiness score

An offline doctor gives a 0-100 first-boot score with a root-cause chain for each blocker.

2

Migration plans

Hypervisor-aware plans for kvm, proxmox, qemu, kubevirt, aws, azure, gcp and hyperv.

3

Readable repairs

Fix plans applied with backups and rollback; nothing is changed implicitly.

4

Signed Cutover Passport

A signed record per disk of what was checked.

5

Fleet wave planning

Dependency-aware waves for ordering a migration.

6

CI gate

A GitHub Action that fails a build below a chosen score.

7

Many interfaces

CLI, terminal UI, Python, web console, in-guest agent and an MCP server.

HOW IT WORKS

Inspect the disk, not the running VM.

No appliance daemon: the guest stays powered off while it is assessed.

Disk in
qcow2, VMDK, VHDX, VHD, VDI or raw.

→

Engine
Pure-Rust engine reads it through NBD or a loop mount.

→

Assess
Doctor score and migration plan.

→

Repair
Reviewable fix plan, applied with rollback.

Certify
Passport, CI gate or assured QEMU launch.

BENEFITS

What your team gets.

Written for the people who run the business, not only the developers.

FOR	BENEFIT
Migration teams	Find boot blockers before the cutover window.
Operations	Repairs go through a plan you can read, with backups and rollback.
Auditors and managers	A signed Passport as evidence per disk.
DevOps	The same score can gate a CI pipeline.
Finance	Open source under Apache-2.0 for personal, lab and commercial production use.

WHAT IS INCLUDED

What is in the box.

Open source edition

Offline doctor, migrate-plan, repair, fleet and policy; CLI, TUI, Python and self-hosted web.

Enterprise edition

Separate: command center, OIDC/RBAC/audit, SLA and air-gap options; 30-day trial available.

Docs and gallery

Quickstart, architecture and feature guides in the repository.

HONEST STATUS

Where it stands today.

We would rather you know the limits before you plan around them.

AREA	STATUS	DETAIL
Pure-Rust parsing and assurance	**Shipped**	Partition tables, filesystem signatures, boot engine and assurance APIs.
Web UI	**Shipped**	Inventory, Assurance, Profiles and Files.
In-process QCOW2 read	**Partial**	Format detection and selective reads; full cluster walk defers to qemu-nbd.
File access in guests	**Host mount**	Through loop devices or qemu-nbd; needs Linux and root or sudo.
Disk shrink	**Narrow**	One last ext2/3/4 partition; no LVM or LUKS.
Web stack (GHCR)	**Eval only**	Unauthenticated; do not expose beyond localhost.

> Apache-2.0 open source. Enterprise features are a separate paid edition. Needs a Linux host with qemu-utils and the loop and nbd kernel modules.

Next steps

- Run guestkit doctor on a test disk
- Book a demo or 30-day proof of concept at zyvor.dev
- Email sales@zyvor.dev about Enterprise

github.com/zyvorai/zyvor-guestkit · zyvorai.github.io/zyvor-guestkit