Engineer

Built dead-man's-switch host monitoring

Built dead-man's-switch monitoring that pings only while memory and disk are healthy, so a degraded host raises an alert by going silent — and caught six variable names saying "free" where the check correctly measured "available", an order of magnitude apart on a 464 MB box.

September 2026

a host that raises the alarm by going quiet

Situation. Two important failure risks for a 464 MB host running a forge and a web server are memory exhaustion and a full disk. Monitoring can expose warning signs, although the timing depends on the workload and the conditions observed.

Task. The host needed an alarm that works when the host does not — which rules out anything that has to send a message at the moment of failure.

Action. The answer is a dead-man’s switch on a timer. Every fifteen minutes with jitter, a small script measures available memory and free disk and pings an external service only if both are above their thresholds. Silence is the alert. A machine that has run out of memory, lost its network or stopped booting produces exactly the same signal as one that is unhealthy, which is the correct behaviour and the reason this shape was chosen over an agent that reports a status. The measurement is available memory, not free memory, and that distinction turned into the most instructive part of the work: the script had been reading the right column all along while six variable names around it said “free”. On a healthy Linux box free memory is near zero because the kernel uses idle memory for cache, so a reader checking those names against a ten per cent threshold would see twelve megabytes free on a 464 MB machine, conclude the check was broken, and fix it with a one-character change that converts a working alarm into one that breaches permanently and gets muted inside a week.

Result. The host gained an alarm that fires when the expected signal is absent, and the misleading names were corrected. A received signal confirms that the script ran and its available-memory and free-disk thresholds passed; it does not certify general host health or that the site is serving.

Bring this experience to your project

Use “Built dead-man's-switch host monitoring” as a starting point for a similar challenge in your organisation. The services behind this work are available for your project. The whole setup written down as files, so it can be recreated exactly and never lives only in one person's head.

Explore our services Get in touch →

Look behind the result

Read the situation, decisions and result in this example. We can discuss which parts transfer to your constraints and which need another approach. Built dead-man's-switch host monitoring — a host that raises the alarm by going quiet

Explore our services Get in touch →

Would silence from a server reach you as an alert?

Talk through your project with the engineer responsible for delivery. We agree the scope, price basis and handover in writing before work begins.

Role context: Site Reliability Engineer. It draws on Infrastructure, Automation & CI/CD, Reliability & Backups, Monitoring & Observability, Linux & Servers and Performance Tuning. And while you are here, we are rather good at Infrastructure as Code, Site Reliability & Monitoring and System Administration.

Get in touch Explore our services

One piece of **a longer record** — and it is all on this site.

Every entry is written the same way: the situation, the task, what we did and what changed.

See the whole record

Define the improvement you need

Bring the deployment path, the operational risks and the people on call. We can scope a change with checks, a recovery route and clear ownership.

See what it costs Get in touch →

Would silence from a server reach you as an alert?

Ask about the decisions behind “Built dead-man's-switch host monitoring”. You will speak with the people who can explain the work and assess your own project.

Explore our services

welcome@engineer.company +45 50 10 61 84 Copenhagen, Denmark

Take this page with you

Contact card

Carefully Crafted With Love by D.

CVR 45969703 · Tagensvej 105C, 3. th, 2200 København N

Copyright © 2025 – present · Engineer ApS · All rights reserved.

Printed from https://engineer.company/portfolio/built-dead-mans-switch-host-monitoring/