ClearPath MSP
ClearWatch

SOLUTION BRIEF

from ClearPath MSP®

CLEARWATCH SOLUTION BRIEF · PROXMOX VE

Proxmox VE monitoring, node to guest.

How ClearWatch reads every Proxmox VE node from its own agent: the cluster, quorum, Ceph and storage, every guest and its snapshots, and which guests have no backup.

PUBLISHED NOVEMBER 2026 LENGTH 6 PAGES APPLIES TO PROXMOX VE (PROXMOX VIRTUAL ENVIRONMENT)

EXECUTIVE SUMMARY

Proxmox VE shows the datacenter. It does not call anyone.

The Proxmox VE web interface shows a whole datacenter to whoever has it open. Quorum lost overnight, one Ceph drive slowing the whole pool, a snapshot left behind in March, a new VM nobody added to a backup job: each one is there to be seen, and none of it reaches anybody who is not looking.

ClearWatch puts its agent on every node. The agent reads Proxmox locally, with no API token and nothing opened, and reports the node, the cluster and every guest. Built-in monitors check quorum, nodes, Ceph, storage, backup coverage, the Proxmox services and snapshots, and alerts follow your notification policies.

KEY TAKEAWAYS

- **No API token:** the agent on each node reads Proxmox's own tools locally, so nothing is opened to the network.
- **One check per question:** quorum, offline nodes, Ceph health, each storage, each guest's snapshots.
- **Guests with no backup:** Proxmox's own list, less the guests Veeam, Proxmox Backup Server or Cove protects.
- **Added in one step:** an address and a login, and ClearWatch installs the agent and follows the host in.

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WHO THIS IS FOR

MSPs and IT teams who run Proxmox VE hosts and clusters, for one organization or across many clients.

AT A GLANCE

READ BY
The agent on each node
Locally, as root. No API token, no port opened.

CLUSTER REPORT
Every 10 minutes
From any node: quorum, Ceph, storage, backup jobs.

GUESTS
Devices of their own
Matched to an installed agent by SMBIOS UUID.

RECOGNIZED BY
The pve-manager package
Every Proxmox VE node carries it. Never by a name.

01 THE CHALLENGE

A datacenter view, for whoever has it open

Proxmox VE puts a whole cluster on one screen: nodes, guests, Ceph, storage and backup jobs. But it answers only the person looking, one cluster at a time, and some of its most expensive failures look like nothing at all. A guest that is in no backup job sits beside a page of green jobs, and one drive dragging every client on the pool leaves Ceph reporting HEALTH_OK.

THE QUESTION	PROXMOX VE WEB INTERFACE ALONE	CLEARWATCH
Does the cluster have quorum?	The datacenter summary, when somebody looks	**Cluster has quorum** fails the moment it is lost
Is Ceph healthy?	The Ceph panel, per cluster	HEALTH_WARN warns, HEALTH_ERR fails; **the slowest and fullest OSD** are checks of their own
When does Ceph run out?	Raw usage as it is today	**Days to nearfull**, from the rate it has been filling
Is every guest backed up?	The not-backed-up list under Backup	**Guests with no backup**, after Veeam, PBS and Cove are counted
Who holds an old snapshot?	Each guest's Snapshots tab, one by one	**Oldest snapshot** checked on every guest
Every client's clusters?	One web interface per cluster	**One Hypervisors dashboard**, each cluster drawn as built

Not reported is never healthy

ClearWatch keeps silence apart from good news. Ceph that will not answer is shown as unreadable, with the node that tried and its error, never as healthy or as absent. A storage that reports no size, as a Proxmox Backup Server target does, is not drawn at 0%. Wherever a figure is missing, the page says so in words.

02 HOW CLEARWATCH CONNECTS

The agent on every node, and nothing opened

Proxmox VE runs on Debian, so each node runs the ClearWatch agent like any Linux server. The agent reads Proxmox's own tools locally as root and reports to ClearWatch. No API token is created or stored, and the web interface's port is never exposed.

YOUR NETWORK
ClearBridge
Finds the host by its address and installs the agent over SSH. Needed only to add a host.

→

YOUR NETWORK
Proxmox VE nodes
The agent on each node reports the node and its guests and, from any one node, the cluster.

→

CLEARWATCH
Hypervisors
The dashboard, the cluster page, a device per guest, checks and alerts.

A node that already runs the agent needs no ClearBridge at all: it is recognized as Proxmox VE from its installed packages.

02 HOW CLEARWATCH CONNECTS, CONTINUED

Add the host, then watch it join

Under Hypervisors, **Add hypervisor** asks for the platform, the host's IP address, the ClearBridge to discover it from 1, and a login that can install packages, usually root 2. A typed login is saved as an SSH credential for that client.

A panel then follows the host through seven steps, from the ClearBridge collecting the job to the host's first report of its virtual machines 3, with a link to the cluster it joined 4. Closing it stops nothing: adding carries on in the background.

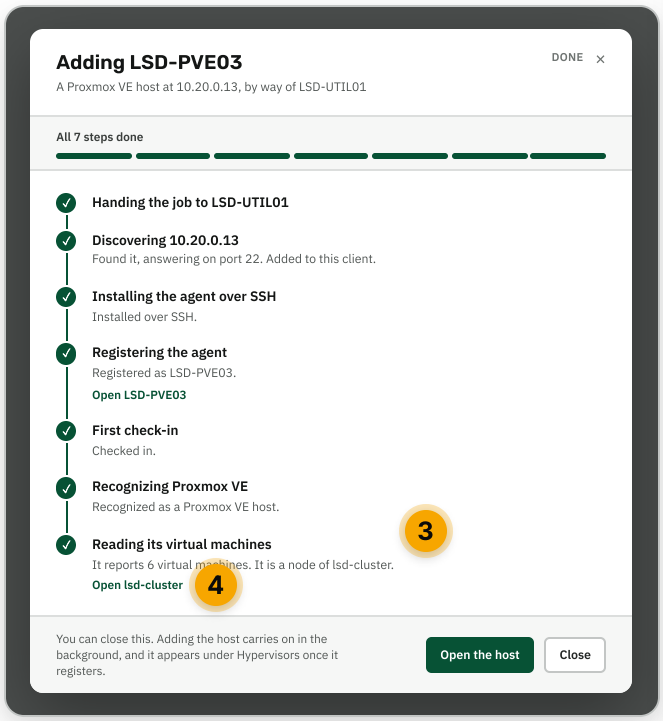


FIGURE 2 The live panel, once the host has joined.

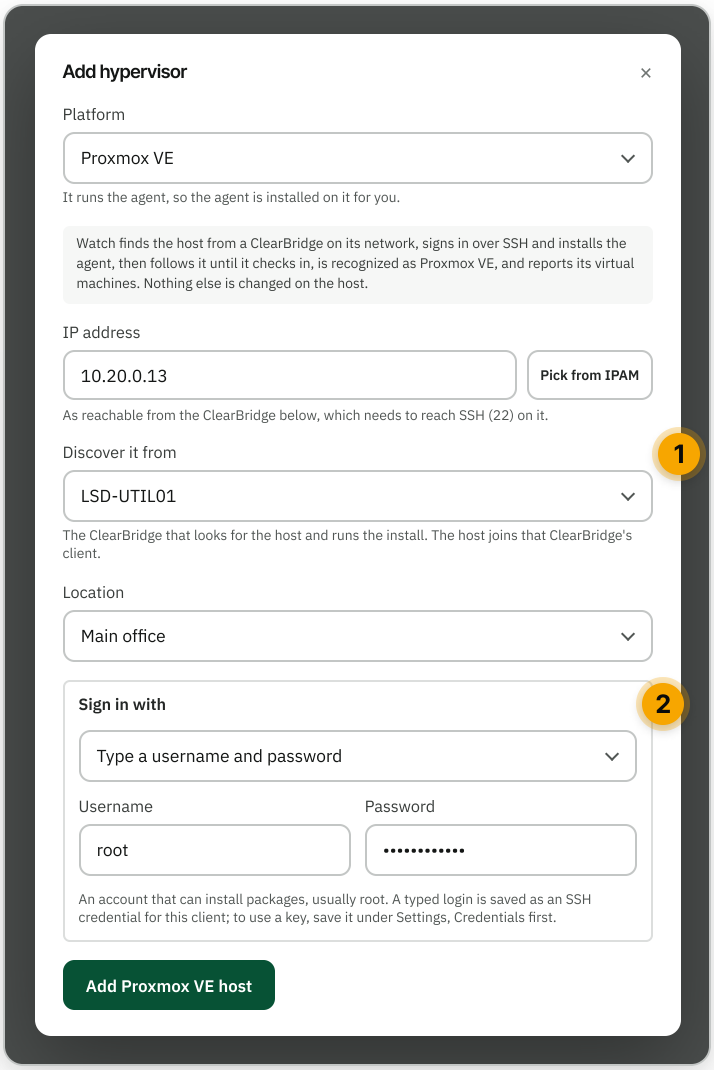


FIGURE 1 Add hypervisor for Proxmox VE, rebuilt from the ClearWatch console with demo data.

REPORTED BY	WHAT IT READS	HOW OFTEN
Each node	Processor, memory, swap, volumes, services and installed packages, like any Linux server.	Every check-in
Any one node	The cluster: quorum, members, Ceph, storages, backup jobs, the guests in no job, high availability.	Every 10 minutes
Each node	Its guests: configuration, power state and snapshots, and through the QEMU guest agent, a guest's addresses and disks.	Every 15 minutes, figures every minute

Recognized by a package, not a name

A host counts as Proxmox VE when its agent reports `pve-manager`, the package every Proxmox VE node carries and nothing else installs. A node called web-01 is recognized; a plain Debian machine called proxmox-spare is not.

A ClearBridge on the host

From a Proxmox VE host's page, a ClearBridge appliance, a small Debian VM, can be deployed onto that host. Proxmox Backup Server, which stores the backups, has a solution brief of its own.

03 CLUSTERS AND CEPH

Every cluster, drawn as it is built

The Hypervisors dashboard draws each cluster the way it is built: quorum, the nodes and their guests, Ceph with every OSD, then the storages.

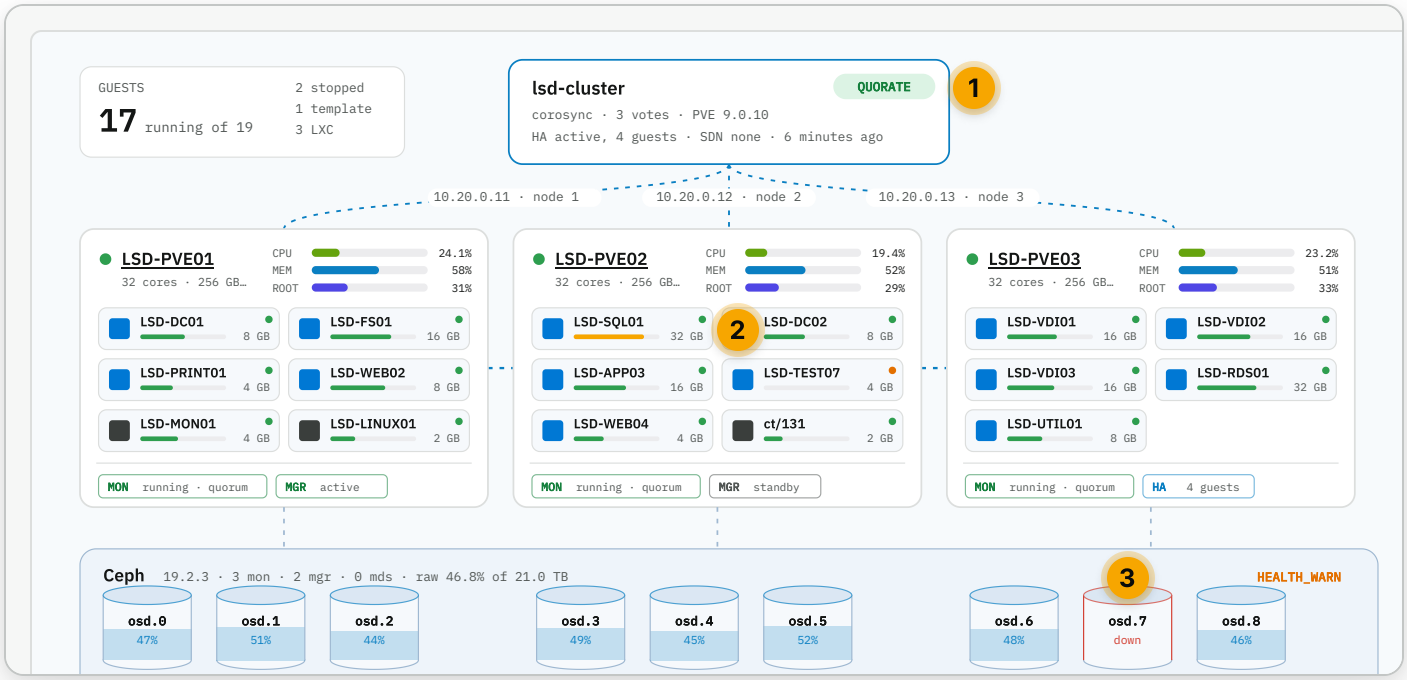


FIGURE 3 A three-node cluster on the Hypervisors dashboard, simplified. The storages below it are cropped.

The cluster box carries its quorum 1 and links to the cluster's page. Each node shows its CPU, memory and root use, its Ceph daemons and its guests, each a chip with a memory bar and a status dot 2 .

Ceph is a layer of its own: every OSD is a cylinder filled to its usage, and an OSD that is down or out is drawn red 3 . Storages close the picture, and a standalone host is drawn the same way, with ZFS pools, RAID arrays or local disks where Ceph would be.

A cluster also has its own page, with a server's tabs: **Overview**, **Hardware** (nodes, OSDs, Ceph pools, storage), **Software** (backup and guests) and **Settings**. Overview opens on a status strip 4 and Ceph's own warnings, word for word 5 .

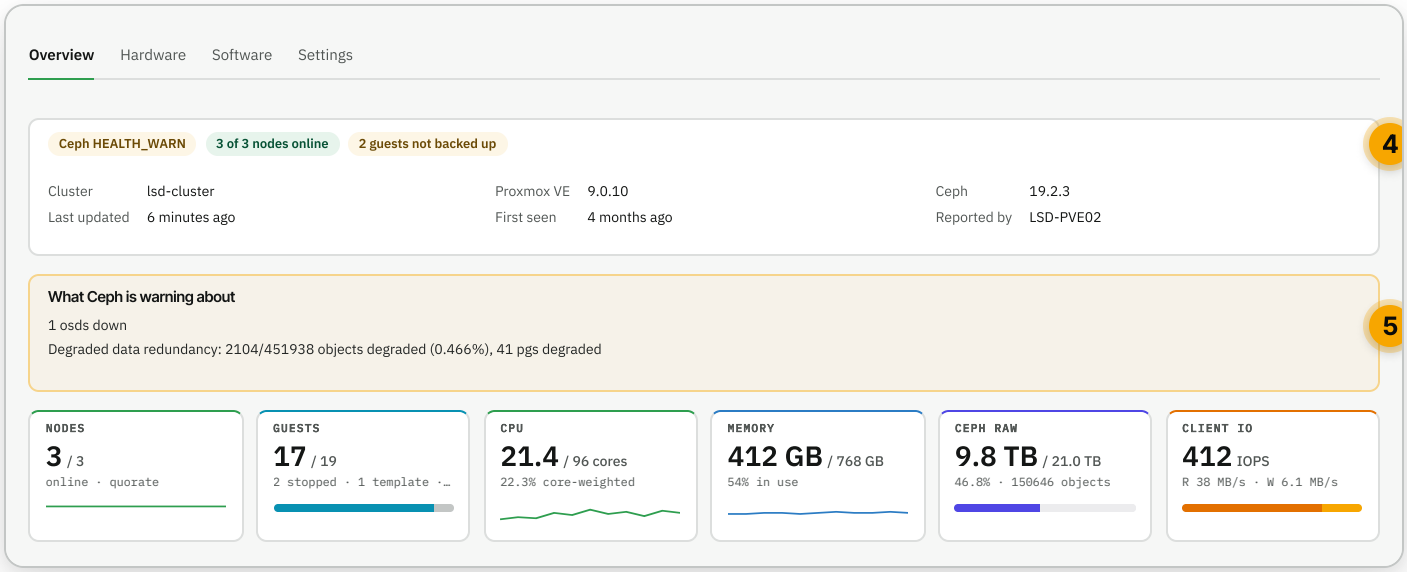
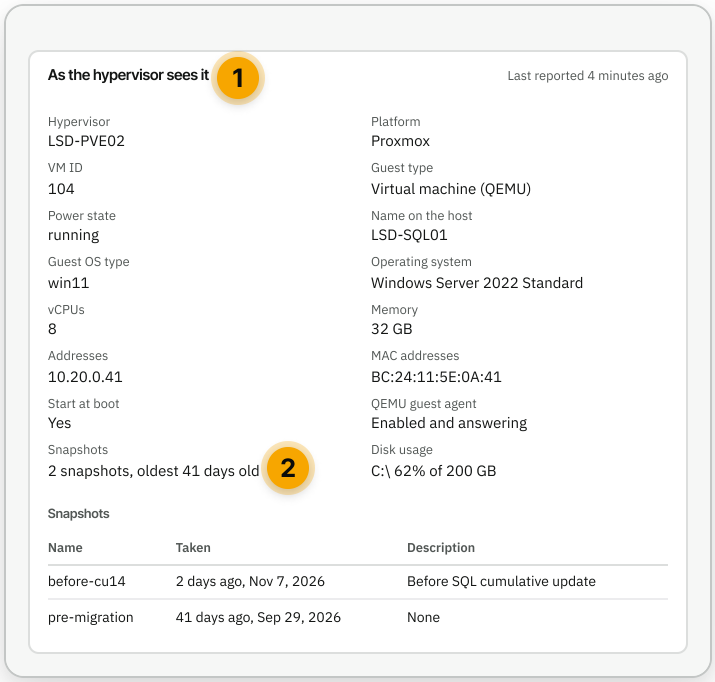


FIGURE 4 The top of a cluster's Overview: the status strip, Ceph's warnings and six figures with their trends.

04 GUESTS AND BACKUPS

Every guest a device, with its snapshots and its backup

Each node lists its guests, and each can become a ClearWatch device of its own, checked like any other machine. When the agent is later installed inside a guest, it lands on that same device, matched by the SMBIOS UUID both ends report.



A guest's page shows it as the hypervisor sees it 1 : its node, VM ID, power state, CPUs, memory, addresses, and whether the QEMU guest agent is answering.

Snapshots are counted and aged 2 , and the age that matters is the oldest one's. A snapshot taken this morning is somebody working; one from March is a delta that has been growing ever since. The VM snapshots monitor warns at 7 days and fails at 30.

Importing guests as devices is a choice, made for a client or for one host, and it is off until somebody turns it on, because each imported guest uses a license.

To put the agent inside a guest, Install now on its page hands the install to its node, which runs it through the QEMU guest agent, and a window follows each step until the new agent checks in.

FIGURE 5 A guest as its node reports it, on the guest's own page.

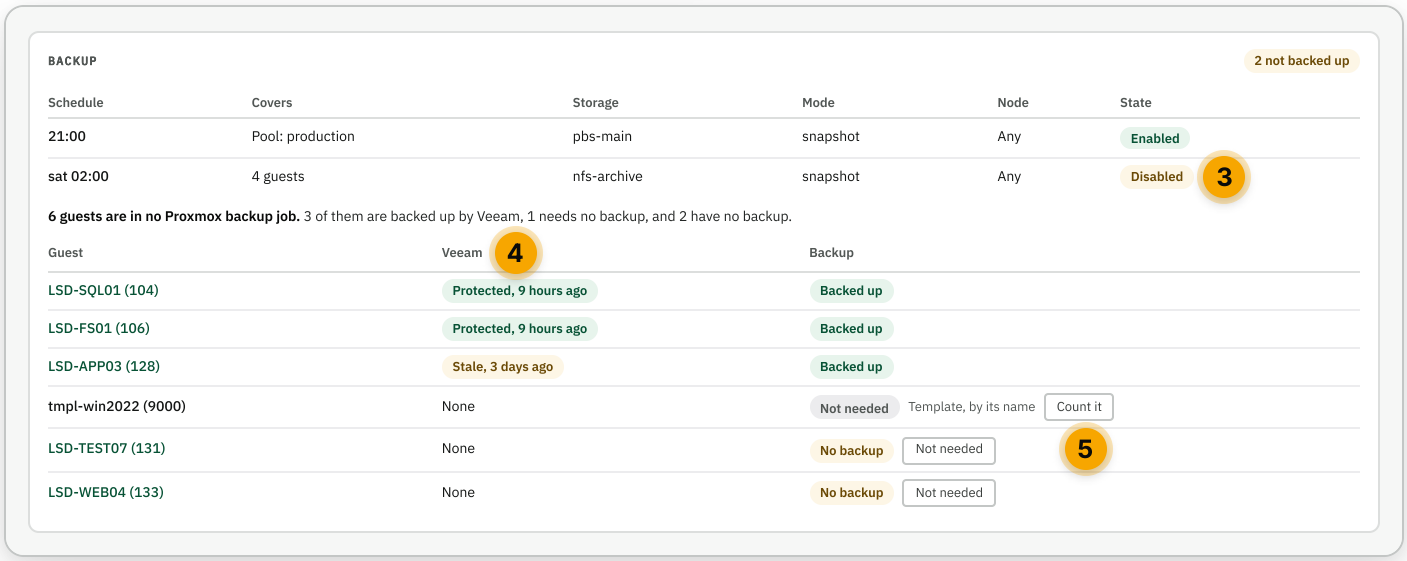


FIGURE 6 The cluster's Backup section: its jobs, then every guest Proxmox lists as in no job.

The jobs are listed as Proxmox holds them, and one switched off is flagged 3 : a job turned off for maintenance and left off has quietly stopped.

Proxmox counts only its own jobs, so each guest it lists is looked up in Veeam, Proxmox Backup Server and Cove 4 ; only guests nothing covers count.

What is left has no backup 5 . A guest that needs none can be marked Not needed with a written reason; Count it puts it back.

05 CHECKS AND ALERTS

What raises an alert, out of the box

The templates **Proxmox VE node**, **Proxmox VE cluster** and **VM snapshots** put the built-in monitors on the right devices once you switch them on. Every level is a default you can change, for everyone or one device.

CHECK	WARNING	FAILED
PROXMOX VE NODE · ON EACH NODE		
Service is running for each of six Proxmox services	None	Not running
Swap usage (%)	20%	50%
Hypervisor resources processor, memory, disk free	90%, 95%, 15% free	95%, 98%, 10% free
PROXMOX CLUSTER HEALTH, PROXMOX STORAGE, PROXMOX BACKUP · ON THE CLUSTER		
Cluster has quorum	None	Quorum lost
Cluster nodes offline	None	1 node
Storage is available, Storage used (%) PER STORE	80% used	Not available, or 90% used
Guests with no backup	1 guest	3 guests
Backup jobs switched off	1 job	Warns only
PROXMOX CEPH · ON THE CLUSTER, WHERE CEPH IS CONFIGURED		
Ceph health	HEALTH_WARN	HEALTH_ERR, or an unknown word
Ceph OSDs down	1 OSD	2 OSDs
Ceph raw capacity used, fullest OSD (%)	75%, 85%	85%, 95%
Ceph OSD latency, latency spread	60 ms, 4 times the median	150 ms, 8 times the median
Ceph slow ops, slowest blocked request	1 request, 30 s	10 requests, 120 s
Ceph days to nearfull	60 days	21 days
VM SNAPSHOTS · ON EACH GUEST		
Snapshots held, Oldest snapshot (days)	1 snapshot, 7 days	3 snapshots, 30 days

The six services are pve-cluster, pvedaemon, pveproxy, pvestatd, pvescheduler and qmeventd. Swap, processor, memory and the Ceph drive figures wait for five readings in a row. Two more are applied by hand: **Proxmox VE cluster node** (corosync and the high availability services) and **Proxmox subscription**, which only warns and ships switched off.

06 GOOD TO KNOW

Requirements

- The agent on every node, or a ClearBridge that reaches SSH (22) and a login that can install packages.
- Guests as devices: import on, a license each.
- The QEMU guest agent in a guest, for its addresses and disks.

Limits

- A standalone node sends no cluster report: the node, its services and its guests are watched; quorum, Ceph, storage and backup job checks do not apply.
- Proxmox Backup Server is read on its own; see its solution brief.

See every Proxmox VE cluster on one console.

Start a free trial, or ask us to walk your Proxmox VE hosts through it with you.

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