# Open-Source Observability with the Zerto Resiliency Observation Console

## Gain total insight into your Zerto deployments with Grafana and zROC

Knowledge is a powerful part of application protection: the more knowledge you have about your IT environment, the better prepared you are to protect it.

Two major sources of knowledge are observability and disaster recovery (DR). By embracing observability, users can go beyond mere visibility and tap into a realm of understanding, utilizing data-driven intelligence to gain control over their applications. Meanwhile, DR is a steadfast guardian that protects against unforeseen catastrophes. Together, these forces create an impenetrable shield, offering resilience and assurance in the face of outages, ransomware attacks, natural disasters, and other disruptions.

That's why it is important to work with industry leaders in observability and DR. Zerto, a Hewlett Packard Enterprise company, empowers customers to run an always-on business by simplifying the protection, recovery, and mobility of on-premises and cloud applications. It eliminates the risk and complexity of modernization and cloud adoption across private, public, and hybrid deployments. Grafana is a multi-platform, open-source analytics and interactive visualization web application. It provides charts, graphs, and alerts for the web when connected to supported data sources.

Combined, these two solutions provide the Zerto Resiliency Observation Console (zROC), a Docker Compose–based software stack that allows you to observe standard Zerto API data in a comprehensive and insight-driven dashboard via Grafana. These powerful insights enable immediate action against any disruptions that may arise.
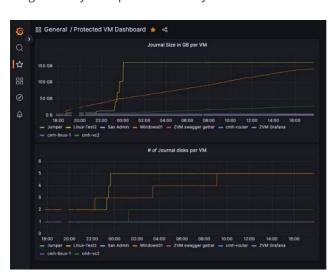


*Figure 1: Example zROC dashboards.*

These dashboards include:

- **Protected Virtual Machines (VMs):** This dashboard shows how much journal storage each protected VM is using, as well as how many journal disks are provisioned for each protected VM. This information is important as you approach VRA maximums.

- **Virtual Replication Appliance (VRA) Metrics:** These metrics help you understand the workload on each of your VRAs. The dashboard displays all VRA-related metrics, from total vCPU and vRAM assigned to each VRA to the total number of recovery volumes attached to each VRA per site.

- **Encryption Detection:** This dashboard can be displayed with the Zerto Encryption Analyzer enabled. Zerto analyzes each write in real time as it streams in and uses intelligent algorithms to assess anomalous encryption behavior that could signal a ransomware attack.

Through zROC, users gain visibility into critical aspects of their applications' protection and recovery. Interacting directly with the Zerto API, zROC provides users with actionable insight. As it monitors journal storage and provisioned disks for protected VMs, the dashboard offers insight into overall Zerto performance, displaying workload distribution and resource allocation at a glance. Furthermore, with the Zerto Encryption Analyzer enabled, zROC can detect anomalous encryption behavior in real time, helping to identify potential ransomware attacks.

## Ready to See for Yourself?

Together, Zerto and Grafana provide deeper knowledge about your IT environment. They unify DR and observability in zROC, a powerful software stack that illustrates trends in application protection and recovery to give you greater control over those processes. Gain total insight into your IT environment with Zerto and Grafana.

See Zerto and Grafana for Yourself by [Cloning the GitHub Repository](#)