Solution Brief

NetApp E-Series + Grafana: Performance Monitoring

The E-Series Performance Analyzer is a powerful and easy-to-use tool to monitor the performance of your E-Series storage system

Key Benefits

- Simple and fast Grafana deployment
- Clear, informative charts and graphs for performance metrics
- Customizable dashboards and charts
- Historical and real-time data reporting
- Integration with existing monitoring
- Available for download at github.com/netapp/eseries-perf-analyzer

The Challenge

NetApp® E-Series storage systems are defined by best-in-class performance. Performance is a primary reason that customers choose E-Series as their storage system solution. Our customers demand robust analysis options to make sure that the performance of their storage systems is optimal.

Although the embedded NetApp SANtricity® software offers storage performance metrics, its emphasis is on monitoring a single system. Typically, achieving a customizable and flexible monitoring solution that is capable of collecting data from multiple sources is a time-consuming process with a tool that requires assembling various third-party components.

The power of having a completely personalized picture of storage system performance should be accessible to all users. The point of entry for this type of functionality should not be limited to those with extensive open-source development knowledge. The most effective way of clearing this obstacle is to provide all users with a monitoring solution that is easy to install and configure.

The Solution

Grafana is an open-source data visualization tool that offers time-series analytics and monitoring. Grafana enables you to view data through clear, informative charts and dashboards from such divergent sources as E-Series storage systems, end-user applications, servers, and switches. Grafana supports compatibility for a variety of database back ends, to preserve metrics for later analysis. Once data is stored and accessible, you can use the Grafana tool to perform analysis.

A powerful monitoring tool like Grafana is a significant advantage for E-Series customers. To make this advantage easily accessible, a NetApp E-Series Grafana performance monitoring solution is available through GitHub. The E-Series Performance Analyzer is an all-in-one, fully automated deployment that requires minimal user interaction. Using Docker-Compose, Ansible, and other tools, installation of the E-Series Performance Analyzer is complete in minutes. Along with streamlined deployment, default charts and dashboards are included with the tool. With these presets, you can start monitoring your E-Series system performance immediately.

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Figure 1) A NetApp E-Series dashboard.

Custom Dashboards

You can customize the dashboard to meet your unique analysis needs. The intuitive design of the Grafana interface enables you to easily define your metrics and create personalized visual results.

From the dashboard view, you can view real-time E-Series system performance metrics or historical data in a variety of charts and tables.

The E-Series Performance Analyzer is configured to 1-year data retention by default, with 15-minute granularity. It has been tested with more than 100 systems to support monitoring needs of all sizes.

Share Your Work with Others

You can easily share your dashboard with colleagues, which can facilitate discussion and decision making related to your storage system. Through the same GitHub project used to download the E-Series Performance Analyzer, you also can share your customized metrics, dashboards, and additional improvements with other users.

With multiple users sharing their customized dashboards and metrics on GitHub, the E-Series Performance Analyzer is expected to be an evolving user-driven tool.

Conclusion

The E-Series Performance Analyzer is the ideal solution for analyzing system performance. Streamlined installation and configuration ensure accessibility for all users. The easy-to-use and customizable interface make the experience of monitoring system performance rewarding and empowering. More importantly, the E-Series Performance Analyzer enables you to get the best performance out of your system.

About NetApp

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