



# BOOST RED HAT OPENSIFT MICROSERVICES PERFORMANCE WITH NECANDO

PARTNER SOLUTION BRIEF

## FOR CRITICAL, HIGH-VOLUME, TIME SENSITIVE ENVIRONMENTS

Necando Synchro tracks millions of metrics simultaneously and processes hundreds of thousands value changes every second.<sup>1</sup>

NECANDO SOLUTIONS

## FOR GRANULARITY

By default, all data in Synchro is kept at the second-level precision and can be historized for years, if required.<sup>2</sup>

SYNCHRO SOFTWARE USER GUIDE

Red Hat® OpenShift® Container Platform automates and streamlines developer workflows, helping IT organizations provision microservices quickly, build code efficiently, and bring applications to market faster. While monitoring tools are included to assist in building applications, there are times when businesses may require even finer-grained data monitoring to improve application performance. That's where the real-time data-gathering and visualization capabilities of Necando Synchro can help.

Synchro is a real-time monitoring tool and dashboard that allows organizations to manage information from across their business, regardless of data type or platform. The data could be from line of business information, sensors in an Internet of Things (IoT) environment, big data, or logs. It tracks key performance indicators (KPIs) and other metrics in real time, identifying patterns and triggering alerts when warranted. The ability to process hundreds of thousands of time-series updates every second<sup>1</sup> and compare it to historical data allows Synchro to predict future performance based on mathematical algorithms. These predictions help organizations respond quickly to potential issues and make adjustments as needed.

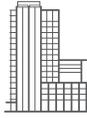
Such behavior analysis benefits developers working in OpenShift environments by helping them proactively manage multiple microservices running concurrently in containers to avoid failures. The data collection, visualization, and analytics segmentation enables applications or microservices owners to monitor the performance of their code across development, test, and production environments. They can use the information to predict performance and refine it for future deployments.

## MONITOR AND ANALYZE DATA—FOR BETTER PERFORMANCE

Necando Synchro offers precise, fine-grained, scalable, high-performance, time-series data collection, visualization, and analytics. It tracks millions of metrics simultaneously and processes hundreds of thousands of value-changes every second.<sup>1</sup> Synchro displays these data streams in a graphical form, easily tailored by the user. The user can monitor the data in real time, analyze it against historical data, and identify root causes of issues.

By capturing multiple data streams at uniform time intervals, Synchro helps users make a direct correlation between application performance measurements, like application responsiveness, or latency, and application load. In an OpenShift environment, understanding the underlying infrastructure system resource usage, actions, and events helps developers precisely pinpoint the causes of performance issues and take the appropriate steps to amend their code.

Synchro's data collectors can be installed on-premise or in the cloud. A subset of the Synchro collector can be installed either in a container or a dedicated container within a pod to collect and process application-level data. If multiple instances of OpenShift are running, perhaps one on a public cloud and another on-premise, data collectors are installed on each instance. The data is then streamed back to a centralized Synchro server. A separate concentrator can be used to filter out unnecessary data and compress data streams to optimize traffic over the network and reduce costs.



## ABOUT RED HAT

Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to provide reliable and high-performing cloud, Linux, middleware, storage, and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.

**NORTH AMERICA**  
1 888 REDHAT1

**EUROPE, MIDDLE EAST,  
AND AFRICA**  
00800 7334 2835  
europe@redhat.com

**ASIA PACIFIC**  
+65 6490 4200  
apac@redhat.com

**LATIN AMERICA**  
+54 11 4329 7300  
info-latam@redhat.com



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## RED HAT OPENSIFT

Red Hat OpenShift brings Linux® containers and Kubernetes to the enterprise, helping organizations develop, build, deploy, and manage new and existing applications across physical, virtual, or public cloud infrastructures. It accelerates application development with automated workflows that make it easy to move from source code to production-ready container images for deployment.

## NECANDO AND RED HAT STRATEGIC ALIGNMENT

Necando and Red Hat are leaders in providing enterprise tools for open source environments on-premise, in the cloud, and in the world of IoT. They are committed to providing solutions based on community-led innovation. Necando's integration and testing with Red Hat OpenShift means that customers benefit from solutions that are proven to work together.

## CONCLUSION

Necando Synchro provides real-time data visibility into your container development environment. Synchro is:

- **Efficient.** Each Synchro instance can process a sustained load of more than 200,000 data updates per second while tracking millions of metrics on industry-standard server hardware.<sup>1</sup>
- **Granular.** Data in Synchro is, by default, historized efficiently at second-level precision. It can be maintained in archives for years, if necessary.<sup>2</sup>
- **Insightful.** By proactively recalculating masses of statistics every second, and allowing for aggregation and smoothing of data, Synchro provides real-time insights into changes being made and impacts of those changes.
- **Scalable.** Light and flexible, Synchro scales to easily support data volume fluctuations.

With Synchro, you will enjoy a comprehensive view into the data that sustains your development environment. With constant, current information and insights into behavior, you can avoid issues before they occur.

## LEARN MORE

For more information, visit [necando.com](http://necando.com). To contact Necando, email [synchro@necando.com](mailto:synchro@necando.com) or call 1 514 360 4000.

## ABOUT NECANDO

Necando Solutions advises and guides businesses in implementing technology solutions that enable operational excellence, collaboration across enterprise functions, and data-based decision making. Drawing on years of experience in business process optimization and data handling for large companies, Necando can help lower operating costs and speed up decision making. Necando works with companies to improve operating speed and agility, helping them to retain their competitive edge.