

# Proven Scalability for Monitoring Enterprise Database Systems

## Is your performance monitoring solution keeping up with your data estate?

As your company's data estate continues to grow, you need assurance that your monitoring solution will scale accordingly and won't consume excessive computing resources—which only adds to the performance problems. And are you confident that your solution can monitor physical, virtual, and cloud-based environments?

SentryOne empowers you to manage performance across your entire data estate, including SQL Server, Azure SQL Database, SQL Server Analysis Services, and virtual machines on Windows or VMware.

SentryOne is proven to monitor 800+ SQL Server instances—with one monitoring database, no loss in data, and low overhead—so you can be confident that SentryOne will help you solve and prevent performance problems, not become part of the problem.

**“With its innovative use of SQL Server technologies, SentryOne has shattered barriers to data ingestion and monitors its customer databases without impediment.”**

—SentryOne customer story on [Microsoft.com](https://www.microsoft.com)

## Extreme scalability

How does SentryOne achieve 5x scalability compared with our competitors? Our product and engineering teams collaborated with Microsoft to leverage advanced SQL Server features to deliver the latest performance and scalability technologies:

- Partitioned clustered columnstore indexes (CCI) to increase performance and reduce storage requirements and overhead
- In-Memory OLTP to increase telemetry data ingestion without throughput or bottleneck issues

As an example, a SentryOne customer in the health care industry is monitoring more than 800 targeted SQL Server instances with the SentryOne monitoring database on a virtual machine, with only 16 CPUs and 88GB of RAM.

Additional benefits realized by implementing these advanced technologies in the SentryOne monitoring solution include:

- Reduced I/O
- Decreased storage and memory
- Reduced compute requirements

## Lowest overhead in the industry

The SentryOne team has gone to great lengths to produce consistent and realistic load tests and to analyze the stresses that our monitoring can place on CPU, memory, network, and I/O while a typical load is running against several monitored SQL Server instances.

Our strict adherence to engineering for the lowest possible overhead allows us to capture more data points with higher granularity than any other system without becoming the cause of performance issues. To determine the optimal timing of data collection, our SQL Server experts put careful thought and consideration into:

- What data is truly actionable based on real-world scenarios?
- How will the data pro use the information?
- How often does the data change?
- What is the inherent overhead in collecting the data?

SentryOne uses this information to determine the optimal intervals for collecting various types of data, taking into consideration the volatility and relevance of a data point such as CPU usage or memory.

## 5x scalability keeps databases at peak performance

The result of the SentryOne team's engineering efforts is a monitoring solution that can scale to handle the highest-volume workloads in the industry with one repository—about 5 times the capacity of our competitors. SentryOne is the solution of choice for many companies that place a high demand on their database performance, including Humana, DocuSign, and Subway.

“Not only do customers save time on traditional database maintenance, but they love the fast query response time—about 9 to 10 times faster than before.”

—Melissa Connors, SentryOne Product Education Manager, in the SentryOne customer story on [Microsoft.com](https://www.microsoft.com)

“With our previous monitoring solution, on any given day we were missing anywhere from a few minutes to several hours of monitoring data. It just wasn't coming to the repository. Once we started using SentryOne, we were able to instantly identify the problems and do something about them.”

—Derik Hammer, Data Manager, Subway

Learn more and download a free trial at [SentryOne.com](https://www.sentryone.com).