Grenke: Database Monitoring in 75% less time

Redgate Monitor

redgate

Redgate Monitor goes beyond time savings and enhanced visibility at Grenke. It helps them make quick decisions with explanations and evaluation aids, so bottlenecks and errors are actioned before...

Contents

The Customer

Grenke are a financial partner for small and medium-sized enterprises, with over 40 years' experience in the market. Their head office is in Baden-Baden, Germany, with locations in more than 30 countries worldwide.

The Challenge

They require rapid and stable operation around the clock, with distinct peaks in demand during the mornings, end of day, and month-end closings. However, their existing monitoring solution was not fit for purpose.

The Solution

Redgate Monitor summarized all relevant measurement data on a clearly laid out dashboard. It was also able to process the large number of readings efficiently and rapidly, without any negative impact on performance.

The Results

Redgate Monitor goes beyond time savings and enhanced visibility. It helps Grenke make quick decisions with explanations and evaluation aids, so bottlenecks and errors are actioned before they can impact customers.

"First, we tried to expand our oversight by using in-house solutions but the manual evaluation of these tools was costly and time-consuming."

Thomas Kronawitter, Head of Data-Driven Applications & Services

The Customer

Grenke has been active on the market for more than 40 years and is a leading global, listed financing partner for small and medium-sized enterprises, freelancers and tradespeople. With its leasing offers, the company promotes investments – not least in the digital and ecological transformation.

As a specialist in small-ticket leasing, Grenke effectively occupies a niche, with the average value of their contracts less than €10,000. The company ensures that smaller but essential investments are implemented quickly, easily and in line with the customer's situation using lease financing. To this end, Grenke works with a dealer network of more than 39,000 trading partners worldwide and currently has around 670,000 customers.

In total, the financing partner has more than €1million leasing contracts in its portfolio. The acquisition value of the leased objects amounts to a total of €9.4 billion. Grenke has around 2,200 employees in more than 30 countries to ensure that business runs smoothly.

The Baden-Baden, Germany, based company's comprehensive financial services require an equally reliable and secure IT infrastructure. This is provided by Thomas Kronawitter, Head of Data-Driven Applications & Services, and his teams at the internal service provider Grenke Digital GmbH. *"The backbone of our application landscape is the more than 5,000 SQL server databases that run on 160 data-base servers. Our data volume amounts to around 250 terabytes, and this extremely large infrastructure is managed by our comparatively small data platform team, consisting of five database administrators (DBAs)."*

"It took just 20 minutes for Redgate Monitor to be up and running. The complete set-up took a little longer, of course, but the result was nonetheless impressive."

Thomas Kronawitter, Head of Data-Driven Applications & Services

The Challenge

The 160 SQL servers that form the backbone of the company's application landscape, and their branches all over the world require rapid and stable operation around the clock. There are distinct peaks in demand, especially in the mornings and for daily and month-end closings, which must be managed by the servers.

Availability and performance are closely monitored by the system engineers. However, the interface of their existing monitoring solution was too static for this purpose. Thomas identified this as a major shortcoming, *"The monitoring applications we had been using up to this point only helped us to a very limited extent. For example, relevant SQL Server metrics were overlaid with irrelevant benchmarks and a series of alerts that were completely irrelevant to the operation of our databases. What we therefore needed was a tool specializing in the management and monitoring of SQL databases that would enable our DBAs to really recognise when the servers were causing problems and where they were occurring."* Any emerging bottlenecks and errors should be recognized before they can affect the applications that depend on those SQL databases, and ultimately their customers.

In contrast to conventional monitoring solutions that monitor static values such as CPU loads, in the database environment more dynamic processes need to be monitored by Thomas's team of system engineers. *"When it comes to databases, there are many highly dynamic processes going on that keep us busy. Some of our databases process tens of thousands of queries per second on a typical morning, whereas in the afternoon there are only a few thousand. If the number hardly changes throughout the day, we can assume that something is wrong somewhere. Our previous monitoring solution was unable to capture or map these dynamics. As a result, we were often only able to react when users reported errors."*

The data platform team tried to expand the existing tool with homebrew solutions, but this required manual analysis and was both costly and time-consuming. Thomas decided that a new, third-party solution was what they needed.

"The time we save with Redgate Monitor is massive. It also provides us with clearly visible metrics, explanations and evaluation aids to helps us make quick decisions"

Thomas Kronawitter, Head of Data-Driven Applications & Services

The Solution

A needs analysis carried out by the database team and employees of Grenke Digital GmbH project management set out the soft and hard requirements of a new monitoring solution. A clear and intuitive user interface was at the top of the list. However, the monitoring solution of choice should not only provide clear dashboards, but also have the ability to record, process and correlate all relevant metrics and measured values. In addition, it had to be able to cope with the extreme system load that is the norm during the intensive quarterly closings, while at the same time not having a negative impact on server performance at these peak times.

During the process of evaluating Redgate Monitor, the team were particularly impressed by the fact that all the relevant measurement data was summarized on a clearly laid out dashboard. Dashboards from other providers were overloaded with metrics, making it impossible to see what was essential. *"In that initial test run, it took just 20 minutes for Redgate Monitor to be up and running at Grenke. The complete set-up took a little longer, of course, but the result was nonetheless impressive,"* emphasizes Thomas.

In the subsequent intensive software test, Redgate Monitor was able to process the large number of readings efficiently and rapidly. This was also the case with the extreme system load required for quarter-end closing. It was particularly notable that even in these circumstances there did not appear to be any negative impact on the monitoring system.

For Grenke, an important core aspect of Redgate Monitor is that there is no need to install an agent that could pose an additional security risk. The tool receives all information via WMI or SQL Calls to the company's internal SQL server. This is a particularly important factor for Grenke as a BaFin regulated financial services provider.

The Results

The implementation of Redgate Monitor has resulted in significant time savings at Grenke. Before it was introduced, all production systems had to be monitored each day during their 'morning check-in', a process that took around two hours. There was also weekly monitoring of the non-prod systems that took four to five working hours. With Redgate Monitor these checks now only take 30 minutes and gives the team confidence that no important problems have been overlooked. *"We've gained massive time savings with regard to the health check of our infrastructure,"* says Thomas Kronawitter.

With Redgate Monitor, he and his team can now see at a glance on a very intuitive user interface whether there is a problem with one of the SQL servers. The assets are sorted according to a traffic light system (red, yellow, green) based on industry standards, and threshold values can also be configured individually. This makes it immediately visible where there are problems.

Thomas explains that Redgate Monitor goes beyond just providing this enhanced visibility *"the software does not merely display well-presented figures, it also offers explanations and help with evaluating these metrics at each point. This is a big advantage for discrepancies that occur less frequently, and it is helpful for junior systems engineers as it allows them to quickly become more independent and effective."*

A timeline shows access, utilization and data flow peaks, which Thomas and his team can examine and analyze using the zoom function. The numerous metrics and measured values create holistic transparency so that the IT experts at Grenke can see exactly what happened when and where. This allows them to determine whether a problem occurred at process, application, VM or query level. In addition to the standard metrics, Thomas and his team can also define their own metrics in the form of SQL queries and set up corresponding alerts.

After Redgate Monitor was introduced, Thomas was also *"extremely satisfied with the customer support and the documentation was very comprehensive. We were immediately allocated a contact person who offered us extra documentation. I found that very positive"*. He outlines that two feature requests have already been implemented smoothly, following direct contact with Redgate product development.