

## **Addressing Application Performance Management in a Complex IT Environment**

To drive success in this new landscape, businesses need to turn distance and location into a competitive advantage by ensuring flawless application performance and the best user experience, regardless of location. In order to keep up with this new fluid environment, CIOs need to have full visibility and control across an application performance infrastructure that is also location-independent.

Today, organisations have more business critical applications, operate on larger global networks and they depend on smartphones and tablets to drive productivity. Similarly the introduction of new initiatives such as cloud, virtualisation and data centre consolidation means that diagnosing and spotting problems is becoming increasingly difficult.

When choosing a visibility solution, here are a few things to take into consideration:

### **Measure performance where it matters**

Consider how a human responds to an application and how those responses will impact their usage. An end-user's experience with an application can mean the difference between success and failure. So, whenever possible, measuring the actual performance as experienced by the end-user on their system from their browser is the best determinant of the quality of their experience.

### **Visibility across the Enterprise**

As applications are shifted around the data centre or to the cloud as a result of consolidation, cost savings or virtualisation, it's not always practical to quickly relocate the monitoring tools to avoid loss of visibility. Therefore, organisations should leverage monitoring solutions that are an embedded part of the infrastructure.

### **Flexible Deployment**

It is critical to implement a visibility solution that is as flexible as the application itself. If a virtualised application is migrated to a different set of servers, the monitoring components must be easy to relocate as well without loss of visibility.

### **Performance Matters**

Quickly resolving complex application problems requires access to a lot of detailed metrics. So having a solution that can efficiently store and retrieve the relevant data quickly can make the difference between solving a problem in minutes versus hours or even days.

Ideally the product should have user friendly workflows that enable IT teams to quickly drill down from summary level views to low level metrics.

### **Measuring Performance in to the Code**

Being able to instrument and measure the performance of a running application is an important aspect of any performance management solution. For modern applications, this involves supporting development environments, like Java and .NET, that are commonly used to build enterprise applications.

### **Testing Critical Application Capabilities**

Implementing automated tests to validate an application either in pre-production (test) or in production will ensure applications are operating as expected. These tests can be simple or arbitrarily complex and if a test fails, IT can address the problem ideally before end-users

notice the failure.

### **Scalability and Analytics**

As you might expect, collecting detailed data about transactions in a running application or capturing all of the network traffic for that same application requires highly scalable data repositories that can be searched quickly. Instead comprehensive analytics that are always monitoring the incoming data for signs of trouble provide the needed visibility and scalability.

### **Support for Software Defined Networks**

As network virtualisation becomes more commonplace, having tools that understand both the logical network and how that relates to the physical infrastructure is critically important.