



MONITOR  
INFRASTRUCTURE  
AND USE TIME  
EFFICIENTLY

# PINPOINT PERFORMANCE PROBLEMS AND AVOID WASTING TIME

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Performance problems and long login times can easily cost businesses and organizations time that corresponds to several full-time jobs every year. It can be hard to identify the roots of the problems with traditional solutions.

End-user performance monitoring, however, provides an overview that covers the entire infrastructure – from end users to network and server applications. That provides an accurate, factual basis for correcting current problems and for nipping future problems in the bud.

Salary is among the heaviest budget headings in knowledge-intensive organizations and enterprises. Every wasted hour drags results and economic latitude in the wrong direction. Productivity is paramount in almost any business, and IT tools are central elements in achieving productivity goals. Often, however, the effect of the tools is diametrically opposed to the vision statements with which the tools are introduced – for example “work smarter, not harder!”

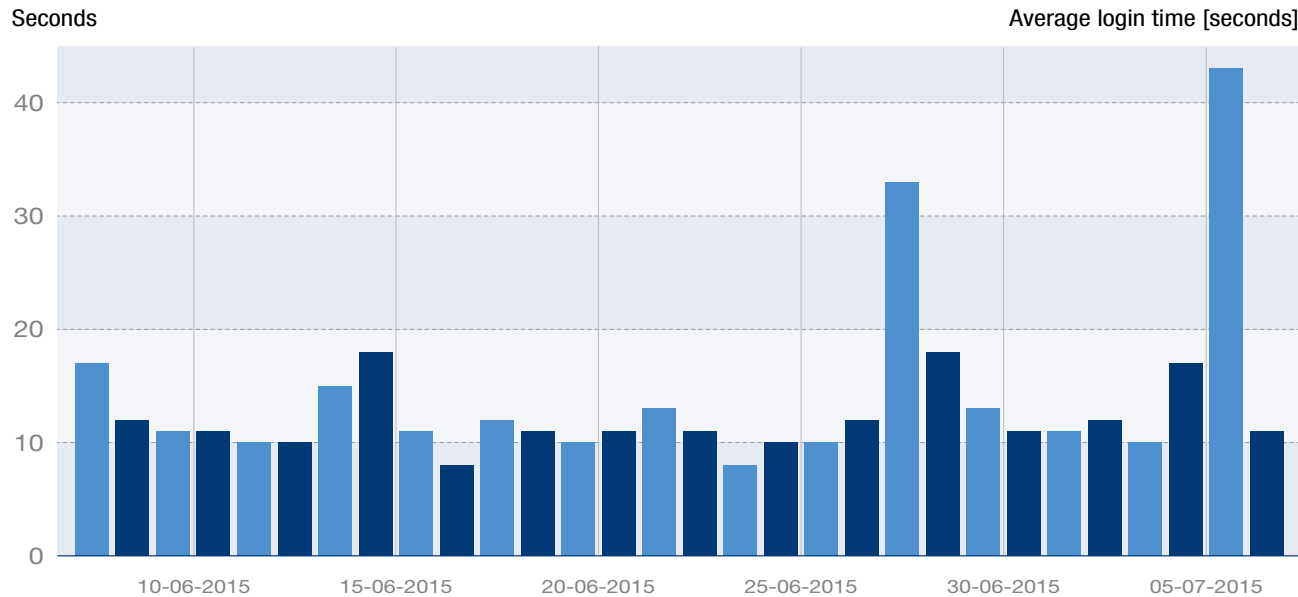
The problem is that while the infrastructure expands and becomes more complex, login and response times often increase too. It is not uncommon for an employee to spend ten minutes per day waiting to be logged in or for systems to respond. In itself that does not sound of much, but with 100 employees it will easily amount to 3,700 hours – or two full-time jobs – per year. In other words, time-wasting can easily amount to a magnitude that is reflected in the bottom line figures.

In reality the amount of wasted time is often even higher. In complex environments with high levels of security and numerous logins per employee per day, the total non-productive time during a typical working day can easily amount to an hour or more per employee. That impedes productivity, credibility and competitiveness, and it limits the potential for providing excellent customer service.

Multiple system elements make it a difficult and time-consuming task to localize the cause of poor performance or long response times. It can be like trying to find the proverbial needle in a haystack.

The solution, however, is not to introduce another handful of point-based scripts that measure on individual elements. The solution is to implement monitoring that works holistically across the entire infrastructure. For example, end-user performance monitoring that reaches every client and server application, is easy to implement, traces problems before they become serious, and can save the business tidy sums of money in the long run.

That is what this white paper is about.



## TAKE A PROACTIVE VIEW ON OPERATIONS AND KEEP ONE STEP AHEAD OF PROBLEMS

The idea behind an end-user performance monitoring solution, such as PerformanceGuard from CapaSystems, is to nip problems in the bud and facilitate easy troubleshooting by:

- monitoring performance and the behavior of networks, applications and users across the entire infrastructure
- acting proactively by registering potential problems before they become real
- providing accurate system data from all parts of the infrastructure that makes it significantly easier for the IT organization to identify the roots of problems
- providing Management with a solid basis for deciding which investments will yield the greatest benefits
- making it possible to measure the exact benefits of having made a given investment
- knowing the extent to which suppliers live up to agreed Service Level Agreements (SLAs)

## Reactive Support Costs Time and Money

One of the main challenges of poor performance is that symptoms can be diffuse, periodic, and difficult to track down. Furthermore, symptoms are virtually always handled reactively. Example of a typical flow:

- Customer Service employees often wait for 20-30 seconds, with customers on the line, while the CRM system fetches information. The queue is growing, customer satisfaction is declining – and employees are unable to work efficiently.
- Service Desk finds that Customer Service's CRM access has indeed become slow, but that traditional solutions cannot fix the problem.
- IT Operations is consulted, but the people in charge of networks and applications point out – each of them referring to diagnoses and point-measurements – that everything works as intended.

- Problems persist, and ultimately end up on Top Management's agenda. The CIO sets up a task force to investigate the scope and nature of the problem. After a number of weeks it is established that the performance problems are caused by a router that does not function optimally.
- The malfunctioning network unit is updated. The case is closed.

This course of events has cost the business a substantial decline in productivity for several weeks. At the same time employees across the IT organization have spent considerable time – not to mention a small fortune in consultant's fees – on fixing the problem.



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With PerformanceGuard we are able to pinpoint specific problems in our infrastructure very quickly and without the need for external consultants.

**Allan Christiansen**

*Head of Infrastructure, the Capital Region of Denmark,  
Center for IT, Medico & Telephony*

### **GAIN AN EDGE BY MONITORING ACTUAL USAGE SCENARIOS**

PerformanceGuard works by placing a tiny application – an agent – on every client and application server. The agent registers everything from application and web usage to latency, resource consumption and response times when its host connects to other units in the infrastructure.

All of this data is consolidated on the PerformanceGuard server, from which the IT organization has near real-time access to the information. They are also able to define exactly which situations and threshold values should generate alerts – either based on their own needs or on built-in best practice-based templates.

Instead of just waiting for users to report problems one can constantly monitor if performance drops below a certain level. Exact data about each client's or application's interaction with servers, applications and network units makes it much faster to pinpoint where in the infrastructure a problem is hiding.

End-user performance monitoring furthermore has the advantage of being based on actual usage scenarios. Traditional monitoring methods are to a much larger extent based on statistics, script-based monitoring of predefined calls and data streams rather than the reality that end-users experience. That increases the risk of overlooking

performance problems in places or situations that one does not actively monitor.

### **IMPROVE COMMUNICATION AND HOLD SUPPLIERS RESPONSIBLE**

End-user performance monitoring like PerformanceGuard makes it possible to thoroughly analyse virtually any aspect of an infrastructure. That provides unambiguous information that helps improve communication across the IT organization – information that is relevant for the Service Desk, IT operations as well as Management and that reflects the reality that end-users experience.

This makes it easier to build up a common fact-based frame of reference and make informed decisions about handling actual or potential problems. It also makes it easy to document the value of investments, including whether they have had the desired effect or not. That makes it possible to hold suppliers responsible for adhering to Service Level Agreements, based on precise and unambiguous facts.

### **KEEP AN EYE ON ALL PARTS OF THE INFRASTRUCTURE**

The growing trend of basing business' infrastructure on hybrids also places demands on the monitoring solution for providing insight on a holistic level – even when the solution portfolio is based on a mix of on-premise, hosting, cloud or Citrix structures. WANs can also be challenging because they multiply the number of potential bottlenecks.

PerformanceGuard works across all elements, and one can quickly and easily place monitoring agents on Windows-based applications and server installations.

Likewise, it is possible to measure communication with external elements, such as Linux-based servers.

That provides the best possible basis for assessing how many resources are available at any given time of the day in any part of the infrastructure – no matter whether one observes the current situation or historical data in order to identify, for example, spikes in load rates and get to the roots of a problem.

### FOCUS ON ACTUAL APPLICATION AND RESOURCE USAGE

The ability to monitor how fast employees are able to log in to business-critical systems, and how fast the systems process requests, is important.

However, it is equally important to be aware of exactly which applications and web services are used, and how much they are used. Some services and applications may use excessive amounts of system resources or conflict with business security policies.

With efficient end-user performance monitoring the IT organization as well as Management can command the actual use of individual applications and web services. This provides a factual basis for introducing special guidelines for their use.

PerformanceGuard provides accurate insight based on fine-grained and verifiable data – highly useful for the IT organization as well as Management.

### FAST IMPLEMENTATION FOR IMMEDIATE INSIGHT

Many monitoring solutions are characterized by requiring a carefully planned analysis, planning and implementation flow. In some cases one can also anticipate a long period of adjusting and fine-tuning before one is ready to benefit from the investment.

PerformanceGuard, on the other hand, is based on a relatively simple architecture that makes it possible to roll out the server application as well as agents on the entire infrastructure – from servers to every end-user client – in a matter of days, even in enterprises and organizations with several thousands of users.

Best practice-based monitoring and alerting templates coupled with automatic registration of units and applications makes it easy to start collecting data and use the solution on a day-to-day basis. That ensures a high degree of ROI and saves time, resources and consultant's fees.

Read more about PerformanceGuard and how your business can quickly start using the solution on <http://www.capasystems.com/it-performance-monitorin>



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Today we have access to data that lets us solve performance problems quickly and efficiently.

**Thomas Ulrich**

*Head of IT Infrastructure, Saxo Bank A/S*



## CAPAINSTALLER

Capalnstaller is software that helps you automate installation and update processes, stay in control and use your time effectively. With Capalnstaller's centralized distribution features you'll no longer need to manually install software on users' computers – no more driving back and forth between locations. You'll have more time for important tasks, and you'll be able to respond more quickly to user queries. Fast responses mean more efficient and satisfied users – parameters that any IT department is being assessed against.

## PERFORMANCEGUARD

PerformanceGuard helps you identify IT problems whenever and wherever they occur, whatever the cause, and whichever end-user they affect. It does this by monitoring the actual quality and quantity of IT service deliveries from the end-user perspective. With PerformanceGuard you can identify downtime, monitor user experiences, measure and evaluate defined KPIs, etc.

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**PerformanceGuard webinars** take place 31.8, 28.9, 26.10, 30.11, 14.12, 11.1.

All days at 11.00-11.30 AM CET.

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