



## At a Glance

### INDUSTRY

Hospitality

### LOCATION

Breda, the Netherlands

### EMPLOYEES

100

### USE CASE

Near real time monitoring at the system level, not just the machine level

### WHY NEW RELIC

Recommended by Azure gurus as the top monitoring solution on the market

### HIGHLIGHTS

- Gained a big picture view of a complex Azure environment for proactive identification and remediation of performance issues
- Discovered underutilization of VMs, prompting a switch to smaller machines for major cost savings
- Enabled the diagnosis of new performance issues in minutes rather than hours, improving key application response times by a factor of three

# iTesso Optimizes Utilization of Azure Platform with Help from New Relic

**iTesso** (formerly Hotel Concepts - Brilliant) creates software for the global hospitality industry. For more than two decades, the company has developed comprehensive solutions for hotels and hotel chains including InterContinental Hotel Group, Best Western International, Van der Valk and select properties in the

Groupe du Louvre. Headquartered in the Netherlands, with regional offices in Paris, London, Sydney and Atlanta, iTesso is uniquely able to provide global hotel companies with regional and local support in rolling out chain-wide solutions.

## Environment

iTesso's flagship SaaS product, also called iTesso, is a cloud-native enterprise lodging system built on the **Windows Azure** platform. The application engine is

a Windows Communication Foundation (WCF) service running in an Azure web role, and the test cell runs entirely on the .NET framework.

## Challenges

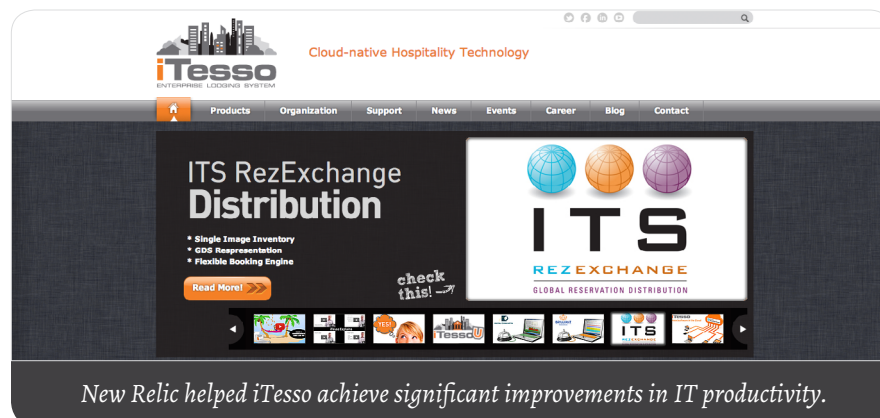
Cloud environments offer many advantages – but not without the occasional drawback. Just ask Maarten Groeneweg, quality assurance agent at iTesso, whose primary responsibility is the performance of the company's Azure environment. "I'm basically in a DevOps role, so I have a pretty clear idea of the tradeoffs between on-premise and cloud," he says. "With on-premise, you have system admins who watch all the hardware, along with QA agents who rely on log files to diagnose emerging issues. But once you move to the cloud, you put less emphasis on system administration and more emphasis on DevOps. You're paying for an outside party to make sure that the hardware simply works."

With no system admins to identify performance issues, Groeneweg and his team rely on native platform tools that provide excellent performance data, but only at the machine level. "It can be very helpful to know if a particular machine is running smoothly," he says. "But if you're running multiple third party services and Azure databases, just knowing the status of one CPU on a single VM is not enough. The iTesso system is complex and full of dependencies. One of those dependencies might decrease performance in other parts of the environment, so we want to monitor everything as a whole – not just separate components."

With limited visibility into a vast array of moving parts, iTesso was often unaware of performance issues until customers started calling the contact center to complain. “We don’t want our end users to serve as our first line of defense,” says Groeneweg. “We have to know about issues before they ever get to the end user. And in many cases, the feedback from customers can be very difficult to validate. They might simply say ‘It’s running slow.’ At that point we don’t know whether the issue is time-specific, or if it might be related to a certain kind of usage, or if it is a problem with the local network. All we know is that something may be wrong somewhere, which makes it difficult to know where to start looking. We obviously require a more comprehensive approach to monitoring our application.”

## Solution

At first, the iTesso team considered developing a homegrown monitoring solution, but that idea soon lost its appeal. “You want developers to build cool new features in your application,” says Groeneweg. “You don’t want them to spend their valuable time creating a monitoring tool, especially not when a proven solution is already available. We don’t need nor want to be in the performance monitoring software business. We want to keep focus on our core competencies.”



“After we implemented New Relic, I noticed that our VMs were only at 30 or 40 percent usage for both CPU and memory, and that we hadn’t crossed the 50% threshold in weeks. Based on that evidence, we switched to smaller machines, with the option to scale up as necessary. Not only are we saving money, but we’re making better use of the Azure platform, which is specifically designed for scaling.”

**Maarten Groeneweg**

*Quality Assurance Agent, iTesso*

Finally, in Spring 2013, Groeneweg attended Microsoft TechDays in Amsterdam and found what he was looking for. “I talked to several Azure gurus at the conference, and I told them about our monitoring challenges,” he says. “They immediately recommended **New Relic**. I downloaded the free trial, and it didn’t take long for me to determine that this is exactly what iTesso needed.”

Deployment was a breeze. Groeneweg and his team installed New Relic in less than an hour, and then spent the better part of a day conducting tests before running the software in production. “Right away, we could see a number of processes that were slower than expected,” he says. “As we went into more detail, we were surprised to find many performance improvements were very easy to execute. In many cases, we were able to make big improvements with a very small time investment. But without New Relic, we wouldn’t have known that any of those problems existed in the first place.”

For Groeneweg, New Relic is now a fundamental part of every workday. “We only deployed this solution a few months ago, so we’re still playing catch up in terms of monitoring,” he says. “Every morning, I dedicate time

to review transactions from the previous day. I identify the slowest processes, perform an initial analysis and determine next steps.”

Groeneweg relies on the Transaction Traces feature to discover the root causes of these slow transactions, then lets other iTesseo team members do the rest. “My job isn’t to capture the nitty-gritty details behind every single error or sluggish response,” he says. “My job is to identify problems in our system, pinpoint where the problems originate, and hand them off to a developer for further investigation and remediation. New Relic provides me with a clear overview of the problem – just enough for me to determine the next best step. That means I can spend more time addressing and prioritizing issues that are just bubbling to the surface.”

For Groeneweg, that kind of big picture visibility isn’t just valuable for developers. It also provides context and inspiration for every employee at iTesseo. “In our office, we have a giant monitor that displays the

## Results

With New Relic, the iTesseo team is able to gain new insights into the efficiency of its Azure environment. “In Azure, you want to keep your machines small, because that improves scalability,” says Groeneweg. “After we implemented New Relic, I noticed that our VMs were only at 30 or 40 percent usage for both CPU and memory and that we hadn’t crossed the 50 percent threshold in weeks. Based on that evidence, we switched to smaller machines, with the option to scale up as necessary. Not only are we saving money, but we’re making better use of the Azure platform, which is specifically designed for scaling.”

Soon after deployment, New Relic alerted Groeneweg and his team to an error that was causing a major slowdown at a critical moment in the reservation process. “Within five minutes of investigating the problem, I could see that the issue arose from an error in one of our databases,” he says. “We spent a few hours testing and deploying a patch, and that simple fix immediately improved call times to the database by a factor of three. Without New Relic, the issue might’ve gone undiscovered.

“When I discover the root cause of a performance issue, I simply press a button on the dashboard to deliver the relevant information to the right developer. That’s fast and easy, but it’s also fun. If a tool can make your job more fun while driving efficiency and improving performance, I’d say it’s a keeper.”

### Maarten Groeneweg

*Quality Assurance Agent, iTesseo*

latest New Relic data for everyone to see,” says Groeneweg. “That helps underscore the importance of speed and consistency in our business, and it helps unify all of our teams in the shared task of providing a first rate experience for the end user.”

And even if we did discover it, finding the root cause would’ve probably taken five hours, not five minutes.” Using New Relic, iTesseo achieved a 50% improvement in ‘reservation save time’ – a key transaction in the reservations process. Additionally the team improved the average response time overall by 30 percent in just two months.

With the New Relic mobile app, Groeneweg can track application performance on the go and even resolve emerging issues on his iPhone. “A few weeks back, I was sitting on the patio of a Belgrade hotel, and New Relic alerted me that our Apdex numbers were down,” he says. “I looked into it right away, and within five minutes I was able to determine that the issue arose from a problem in our SQL server. I did a quick historical comparison to confirm that performance was, in fact, far below baseline levels, and I sent an action plan to our team of developers. I was able to do all of that on my iPhone – all without leaving the hotel patio.”

With that kind of functionality and convenience at his fingertips, it should be no surprise that Groeneweg has observed significant improvements in IT productivity since deploying New Relic at iTesso. “When I discover the root cause of a performance issue, I simply press a button on the dashboard to deliver the relevant information to the right developer,” he says. “That’s fast and easy, but it’s also fun. If a tool can make your job more fun while driving efficiency and improving performance, I’d say it’s a keeper.”

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## About New Relic

**New Relic** is a software analytics company that makes sense of billions of metrics about millions of applications in real time. Our comprehensive SaaS-based solution provides one powerful interface for web and native mobile applications and consolidates the performance monitoring data for any chosen technology in your environment. Our 50,000 customers use our cloud solution every day to optimize more than 118 billion metrics for 2 million applications. When your brand and customer experience depends on the performance of modern software, New Relic provides insight into your overall environment. Learn more at [newrelic.com](http://newrelic.com).

## About iTesso

**iTesso** (formerly known as Hotel Concepts -Brilliant) is a leading global provider of advanced software solutions to the global hospitality industry. The company’s premier product is the iTesso Enterprise Lodging System, the world’s first true Cloud-native Property Management (PMS) and Central Reservation System (CRS), operating on the Microsoft Windows Azure platform. This revolutionary new concept in hospitality software helps hotels to improve operational efficiency and significantly reduce the total cost of IT system ownership. Founded in 1994 and based in The Netherlands, iTesso maintains four main offices on three continents in order to provide local support to their hotel clients around the world. For more information, please visit [itesso.com](http://itesso.com).