ANTS Performance Profiler

Content and performance drive Citywire website success

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a problem to 10 minutes or less."

Peter Lewis
Development Manager

redgate
ingeniously simple

91% of Fortune 100 companies use Redgate's software

Peter Lewis
Development Manager
Industry sector: Financial
Company: Citywire

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Summary

The financial news website Citywire has high expectations for the speed of their site. A major factor in delivering that speed is finding performance bottlenecks and fixing them. For .NET analysis, Citywire turned to ANTS Performance Profiler. As a result:

- The team can locate bottlenecks without guesswork or methodical labour.
- Finding a bottleneck now takes under ten minutes rather than hours.
- The website response time was reduced from five seconds to less than one second.

Introduction

Citywire, the financial news website, has a simple, but lofty goal. It aims to be "the independent guide to your financial life," helping you make the best decisions about what to do with your money.

Meeting that goal requires two essentials: One is delivering highest-quality, completely impartial financial news and investment analysis, a job fulfilled by award-winning journalists and a totally objective research team. The other is ensuring that the hundreds of thousands of unique visitors to the Citywire website get that content delivered speedily to their PCs, mobiles and tablets. The latter job falls to Peter Lewis, Development Manager for Citywire.

Better website performance

"We are utterly dedicated to our audience," says Lewis. "In fact, we have an entire department, Audience Research, to ensure that we provide them the content they need at the level of engagement our entire business is so very focused on achieving. Our audience uses the content we provide to make time-sensitive investment decisions, so the speed of delivery is key."

Although there were no complaints by users, last year Citywire made a commitment to improve the responsiveness of its website. The website houses a variety of databases ranging from visitor data to data critical to the financial services the company offers. Many of the databases have tables with a million or more tuple counts.

"The performance issue was raised by management," says Lewis. "Their expectations for the speed of the site are very high, so even the slightest slowdown is noticed and commented on."

A major factor in delivering that speed is finding performance bottlenecks and fixing them. For .NET analysis, Lewis and his team turn to ANTS Performance Profiler from Redgate.

In search of simpler, faster

In the past, performance problems had been identified largely by a combination of intuition, experience and methodical procedures. The process wasn't especially fast or simple.

"We stepped through the code in the areas where we had a hunch it would be slow to find out where the bottlenecks were occurring," says Lewis. "On average, this could take about an hour or so. Sometimes we had to take out the suspected bit of code and run it on its own to test it, which can be a lengthier procedure – hours or even a day or more."

Lewis also tried a tracing tool, but found that it was not intuitive to implement or to use to analyze Citywire's sometimes complex code. He also felt the tool provided too much information.

"You could not, at a glance, see where the problems were."

ANTS Performance Profiler fits the bill

One of Lewis' more vexing problems was an area on the website that displayed information from four different data sources – the top UK stocks that the best fund managers invest in, a view of the Citywire research team's 140 favorite investment funds, and two other internal sources.

Based on recommendations from users on the StackOverflow website, Lewis decided to give Redgate's ANTS Performance Profiler a try at identifying the problem. According to Redgate, ANTS Performance Profiler is designed to "identify performance bottlenecks in minutes and optimize .NET performance."

It certainly did that for Citywire. By Lewis' estimation, it took a few minutes to install and about 10 minutes to find the bottleneck.

Four-fold performance increase

"ANTS simply pointed to the URL or executable where the code was slowing down and where in that particular area the code was specifically slow," says Lewis. "In this case, the culprit was when the code was pulling data from the external data sources.

"With ANTS, I can look at the performance graph, find any performance spikes, drill down to the code that was executing at that time and find the problem. We went from an hour or more to identify a problem to 10 minutes or less."

Lewis was able to fix the problem within a day or so and response time was reduced from four to five seconds to under a second – a major gain when time is of the essence for investors.

Recommends to others

Unlike the multitude of factors that go into the ratings of, say, a fund manager, it's said that only one criterion is important in someone's perception of a product: Would you recommend it to others? By that measure, ANTS Performance Profiler is a winner for Lewis.

"I've recommended it to two previous colleagues of mine who now work at a hedge fund and an investment bank and to a couple of developers who joined the company recently."