Intuit

How Intuit Survives Tax Season and Capitalizes on Future Opportunities for Cloud and SaaS

Intuit Inc. develops financial and tax preparation software and related services for small businesses, accountants, and individuals.

Challenge: Deliver flawless performance during tax season peaks and move more apps to the cloud

Although Intuit is best known for the TurboTax, Quicken, and QuickBooks product lines, the company actually has 170 business units and 800 applications. As the company makes more applications available online, ensuring fast, flawless application performance over the Internet is critical to the company's success.

Intuit's performance challenge is especially daunting, as the company must succeed under some of the most demanding conditions imaginable: U.S. tax season peaks. These are two, two-week-long periods of extraordinary traffic when millions of people log on to TurboTax Online to do their taxes.

The first peak comes in February, when people who are getting a refund file their returns. The second is in April, when people who owe money file to meet the April 15 deadline.

Intuit makes sure that TurboTax Online performs optimally by running a tax war-room during those four weeks, staffed 16 hours a day with representatives from every mission-critical vendor and every group within Intuit related to the delivery of TurboTax Online. Their task is to make sure that the software lives up to the company's goal of having all Web pages paint in two seconds or less.

Hosting the products already online, such as TurboTax Online, QuickBooks Online, and Mint.com requires 17,000 servers. The company's data center in Quincy, Washington has space for many thousands more. Which applications will be moved there is one of the many determinations the company is making as it rearchitects more applications for delivery as software as a service (SaaS).

In Brief

Challenges

- Ensure application performance during peak tax season periods
- Make more applications available as SaaS

Solutions

Riverbed® SteelCentral™

- 24 SteelCentral AppResponse appliances
- SteelCentral Transaction Analyzer
- SteelCentral AppInternals
- SteelCentral NetSensor
- SteelCentral Dashboards

Riverbed Professional Services

- Technical Resident Service
- Application Performance Troubleshooting

Benefits

- Reduces root-cause identification time in tax war-room to minutes
- Decreases troubleshooting time by more than 80%
- Enables other groups within Intuit to use performance-management dashboard functionality to solve problems on their own
- Readies the company to seize opportunities presented by cloud and SaaS

Solution: Performance analysis services team equipped with Riverbed SteelCentral for end-to-end application visibility

Intuit created the Performance Analysis Services team to ensure the performance of critical applications running in the cloud.

Ted Turner, senior network engineer in Performance Analysis Services, which is part of Intuit's Communications Services group, explains how the Performance Analysis Services team came to be: "We're a software company and the developers' big question is, 'Is the network getting in the way?' We started a troubleshooting window on the network team to help developers dig in and identify if issues were application-related or network-related. Then the team was created, and disconnected from the network to focus purely on building the application infrastructure."

Across the organization, Intuit has approximately 72 tools for monitoring and managing some aspect of network or application performance.

The Performance Analysis Services team's preferred tool is the Riverbed SteelCentral solution. Their deployment includes:

- **24 SteelCentral AppResponse appliances**— for network-based application performance and user-experience monitoring, with WTA™ (Web Transaction Analysis) for measuring response time at the page level
- **SteelCentral AppInternals software**— for enterprise-class application performance management (all licenses currently dedicated to monitoring TurboTax Online)
- **SteelCentral NetSensor software**—for agentless infrastructure and synthetic monitoring
- **SteelCentral Transaction Analyzer software**— for transaction trace-analysis and performance prediction
- **SteelCentral Dashboards**

Benefits: Troubleshooting on the fly, seizing opportunities, and sharing the visibility

Turner can troubleshoot from the war room, often identifying the root cause of an issue within minutes. "I can provide that information on the fly in front of everyone," he says. "That gives the appropriate people what they need to resolve the issue."

Three Riverbed Professional Services resident engineers are also on hand in the tax war-room to provide mission-critical support. Through the Technical Resident Service, Intuit has a flexible contract with Riverbed Professional Services that gives them one dedicated engineer throughout the year, with two more brought in during the tax season peaks.

The Riverbed resident engineers lend their vast expertise in application performance management to provide rapid troubleshooting assistance, continuous application monitoring, and hands-on mentoring to help other Intuit team members master the SteelCentral toolset. By coordinating directly with other vendors in the war room, the resident engineers help Intuit gain a complete picture of application performance across all of their solutions. This cross-functional analysis improves communication and coordination in the war room, drastically reducing troubleshooting time.

Turner also performs on-the-fly troubleshooting during load testing, which uses a similar war room setup. On average, Turner says troubleshooting time has dropped by more than 80% because of how quickly he can identify root causes using SteelCentral solutions.

Turner also uses SteelCentral dashboards to roll up and blend performance data. His group publishes dashboards for each of the war rooms to actively identify and resolve problems.

They drill down in the dashboards, launching into the data sources such as AppResponse and NetSensor, to perform forensic work that their other tools can't deliver.

In addition to using the tools for troubleshooting, the Performance Analysis Services team uses Riverbed solutions for tasks such as capacity planning and to aid in the conversion of legacy applications to SaaS, including support for mobile devices. To support these diverse efforts effectively as possible, the team is now working to share the visibility they get from the Riverbed tools more broadly throughout the organization. The resident engineers from Riverbed Professional Services work as solution evangelists, helping Turner and his team drive this cross-department adoption.

"One of our goals is to set things up so that network operations center engineers, service delivery teams, and developers can self-serve all the things I've been doing," says Turner. He appreciates the fact that he can present the information from AppResponse in dashboard format, making it easily understood by others. "The plan is to get to the point where other people can look at the data and solve the problems themselves," he adds.

"Troubleshooting time has dropped by more than 80% because of how quickly Intuit can identify root causes using Riverbed SteelCentral solutions."

Summary

Intuit created a Performance Analysis Services team to support its move to the cloud, while also ensuring the performance of critical applications already there, such as TurboTax Online. While the company has approximately 72 tools for monitoring and managing network and application performance, the Performance Analysis Services team's preferred tool is the Riverbed SteelCentral solution.

The tax war-room uses Riverbed tools for end-to-end visibility to identify the root causes of problems within minutes. On average, troubleshooting time has dropped by more than 80% because of how quickly they can now identify root causes. The team also uses SteelCentral solutions for capacity planning and to aid in the conversion of legacy applications to SaaS, including support for mobile devices.

About Riverbed

Riverbed, at more than $1 billion in annual revenue, is the leader in application performance infrastructure, delivering the most complete platform for the hybrid enterprise to ensure applications perform as expected, data is always available when needed, and performance issues can be proactively detected and resolved before impacting business performance. Riverbed enables hybrid enterprises to transform application performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. Riverbed's 26,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at riverbed.com.

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