

# n11.com



## n11.com embraces Riverbed® Aternity to optimize site efficiency and maximize digital performance.

In 2012, online accounted for just 3% of retail sales in Turkey, however, recently the country has been won over by online retail. Despite a struggling economy and the absence of some of e-commerce's leading players, online sales continue to boom. Today, the central bank says 15% of credit card transactions are spent on e-commerce, and it expects this figure to rise to 25% in the next five years.

At the heart of this rise is n11.com. A pioneer and a leader in this sector, n11.com is the online platform of choice for many of the country's best retailers. It has grown from serving 1,000 concurrent customers to more than 20,000.

n11.com is Turkey's largest e-commerce platform. Formed in 2012, the business has enjoyed six years of rapid growth. Today it has more than six million customers, 100,000 professional sellers, and 80 million visits a month.

Based in Istanbul, n11.com is a joint venture between Doğus Group, one of Turkey's most influential groups, and SK Group, the South Korean telecoms giant.

## Challenge: Intelligence and control to manage rapid growth

As n11.com's business grows rapidly, it faces several major challenges. With success, comes greater expectation. Buyers and sellers demand the platform performs reliably, but the scale of the operation can create intermittent failures.

The competition is about to become a lot more serious: Amazon is expected to launch within the next 12 months. n11.com was experiencing a lack of visibility across the network and applications.

"We run more than 600 virtual machines and nearly 50 apps at any given time. We have app monitoring tools but there are blind spots, particularly with regard to how the applications interact with the network," says Alper Ümit Yılmaz, IT Operations Director. "In e-commerce, superior digital performance is critical. The acceptable page load time is less than two seconds, so the faster the page loads, the higher your sales conversion. We cannot slip on this. If there is a problem, we need to know about it; and to fix the problem, we need to understand it."

**80 million** visits per month

## In Brief

### Challenges

- Lack of visibility into network and application operations
- Insight required to address problems quickly and maintain performance SLAs, such as page load time
- Greater efficiency to enable IT team to support business experiences and rapid growth

### Solution

- Riverbed® Aternity Digital Experience Management
- Riverbed Network Observability
- Riverbed Infrastructure Observability

### Benefits

- Delivery of actionable insight to developer team to help improve digital performance, with faster time to market for new services
- Fast packet capture and analysis for real-time and retrospective troubleshooting, with scale to accommodate continued growth
- Creation of efficiencies across the IT function, with greater automation and proactive alerts

n11.com did not have an application-aware network monitoring solution so was having difficulty identifying the root causes of performance problems.

“E-commerce is a business that is developing rapidly and has needs that must be fulfilled urgently. To gain customer loyalty, it’s always necessary to work with certain performance criteria.

“We need to measure the performance of the site in detail to ensure a positive customer experience and to meet business needs,” says Yilmaz.

“In our fast-changing world, rapidly finding the root causes of problems that could affect the digital experience becomes very important to retain prestige and prevent loss of income.”

“With the Riverbed Aternity and network observability solutions, we were able to identify issues immediately. We had the visibility, the detail, and the technical insight necessary to address the problem. Previously we were sifting through 2MB of data and over 100 variables. Now, if there is an issue, Riverbed Aternity can identify the exact variable. It’s like two solutions in one.”

Alper Ümit Yilmaz,  
Operations Director, n11.com

## Solution: Immediate visibility, actionable insight

Yilmaz led a review of five solution providers, concluding with a proof of concept (PoC) on Riverbed Aternity and network observability solutions. During the two-month PoC, they revealed ten issues that otherwise would have been missed by the team. This evidence alone immediately convinced senior management of the importance of the investment.

For example, the PoC revealed irrelevant GRE traffic in core switches. Vendors accepted that as a bug and fixed it. Balancer issues that were critical to the environment were also found. Many database-related performance issues were also discovered.

Riverbed Aternity delivers superior digital experiences, across all apps and devices. The combination of Riverbed Aternity and network and infrastructure observability blends device-based end-user experience, infrastructure, application, and network monitoring to give n11.com a holistic view of its users' digital experience. Competitor products could capture data, but none could show it adequately.

“Knowledge without visibility is useless. With the Riverbed Aternity and network observability solutions, we were able to identify issues immediately,” says Yilmaz. “We had the visibility, the detail, and the technical insight necessary to address the problem. Previously we were sifting through 2MB of data and over 100 variables.

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The solution was implemented by Yilmaz's in-house team working alongside Riverbed's technical specialists and Quasys, its local partner.

## Benefits: Removing blind spots, maintaining digital performance

Today, 7GB of application data from n11.com runs through the Riverbed Aternity and Riverbed solution and every piece is captured and analyzed. This figure continues to rise daily. Spotting and addressing issues quickly keeps n11.com ahead of its performance SLAs.

The Riverbed observability solutions has enabled n11.com to not only trace all transactions but also classify them by using its powerful search engine to find the root causes of problems more easily. Using the GraphR1 variant, it can now differentiate between problem causes using a feature called RTCC (Response Time Composition Chart) and has started to measure all back-end performance and focus on real performance issues.

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Alper Ümit Yilmaz,  
IT Operations Director, n11.com



“The positive impact has been huge. No other solution matches it. If you want superior visibility and insight into your digital performance, you must have Riverbed Aternity,” says Yılmaz.

Riverbed Aternity’s unique big data approach to performance management gives n11.com complete insight—with full details of every user’s transactions, for any app, at any scale. Yılmaz says; “The DevOps team love this detail. They know exactly where the issue lies, so they’re quicker to solve problems—and have more time to spend on developing new services.”

This last element is crucial, he adds. n11.com’s IT team now have ‘innovation’ as part of their annual KPI. Written into their job description, each employee must find and promote new ideas not yet seen in the

e-commerce sector. “The bigger picture is that we’re promoting an agile approach to the IT function, from development to operations,” he says.

n11.com continues to explore the features and functionality of Riverbed DEM and observability. Yılmaz states that automation and alerts will be the next focus, as the IT team looks to drive further efficiencies.

Riverbed Aternity, he continues, is now at the heart of n11.com. “We now have the insight that enables us to be more proactive and confident in the performance of our digital services. At n11.com we care about building trust. Consumers and sellers now trust us, and a big part of that is the reliable performance of the Riverbed Aternity service.”

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### Riverbed – Empower the Experience

Riverbed is the only company with the collective richness of telemetry from network to app to end user that illuminates and then accelerates every interaction so that users get the flawless digital experience they expect across the entire digital ecosystem. Riverbed provides two industry-leading solutions: the Riverbed Unified Observability portfolio, which integrates data, insights, and actions across IT to enable customers to deliver seamless digital experiences; and Riverbed Acceleration, which offers fast, agile, and secure acceleration of any application over any network to users, whether they are mobile, remote, or on-premises. Together with our thousands of partners, and market-leading customers across the world, we empower every click, every digital experience. Learn more at [riverbed.com](https://riverbed.com).