

Turkcell Uses Special Solutions Offered by CA Spectrum for Fiber Infrastructure



CLIENT PROFILE

Industry: Telecommunications

Company: Turkcell Group

Employees: 16,000

BUSINESS

Turkcell is a converged telecommunication and technology services provider, founded and headquartered in Turkey. Turkcell Group companies serve 66.7 million subscribers in 9 countries – Turkey, Ukraine, Belarus, Northern Cyprus, Germany, Azerbaijan, Kazakhstan, Georgia, Moldova as of September 30, 2016

CHALLENGE

Turkcell needed a single platform to run its fixed-access network and fiber infrastructure, and to manage the various products—some from different producers—running on that infrastructure.

SOLUTION

CA Spectrum® scans Turkcell's whole field within the IP range given to devices, and, via root cause analysis capabilities and automated event correlation, can identify specific components responsible for any issues.

BENEFIT

Turkcell uses CA Spectrum to manage thousands of devices from a single point of control, and has significantly reduced time-consuming and costly activities thanks to faster issue detection and remediation.

Business

GSM-based mobile communication in Turkey began when Turkcell commenced operations in February 1994. Turkcell then signed a 25-year GSM license contract with the Ministry of Transportation on April 27, 1998. Since then, it has continuously increased the variety of its services based on mobile voice and data communication, as well as on its quality levels, and as a result, its number of subscribers. Turkcell's shares have been traded on the Borsa Istanbul (BIST) and New York Stock Exchanges (NYSE) since July 11, 2000, and it is the only NYSE listed company in Turkey. Turkcell is also quoted on the Borsa Istanbul Sustainability Index.

As of 2015, Turkcell's target has been to become an integrated communication and technology services player in the region, operating a converged mobile and fixed network platform and offering a wide range of innovative products and services. Turkcell believes that it is important to offer their consumer and corporate customers the full range of their mobile, fixed and broadband services to meet their expectations.

Challenge

Seeking a single, easy-to-use platform

Working with a relatively new fixed-access network and fiber infrastructure, Turkcell was monitoring its environment with numerous, disparate tools, and found it difficult to correlate alarms coming from all those different sources. Using multiple, different products to manage the different brands and products from its various subsidiaries proved challenging as well. The company needed a single platform to consolidate its management efforts and keep tabs on its infrastructure.



Solution

Seeking network management from a single center

CA Technologies started working with Turkcell to offer network equipment monitoring and management services through the CA Spectrum solution. Özge Öksüztepe, Turkcell Network Quality Solutions Product Manager Expert, explains that managing different products of various manufacturers, which provide network services for consumers from a single center is challenging and ongoing. “Our first cooperation with CA Technologies was started with an ‘Umbrella Management System’ in order to monitor and manage the whole network from a single center. The features of the system most liked by the users are its ability to run platform independent, intelligent event correlation and root-cause analysis.”

Network administrators’ effectiveness is measured from data around the performance and availability of devices monitored by CA Spectrum. Performance metrics obtained from equipment are measured in detail with Single Network Management Protocol (SNMP), while the configuration management of fixed-access network devices is carried out from a single center. CA Spectrum issues an alarm when a certain threshold is exceeded, which helps network administrators more quickly resolve problems.

Öksüztepe adds, “Our main focus based on Turkcell’s integrated network strategy was the need to observe the sub-building and collection points network devices used during the process of bringing fiber to houses, in other words the access networks. We also fulfill the requirements such as collecting the backup information and ensuring it gives warning in case of discrepancies, with the help of CA Spectrum. The product efficiency was well above our expectations; it expanded the scope of our work and we also expanded our work fields based on factors such as adding the fiber technology.”

Benefit

Quick issue identification and resolution

Turkcell Superonline brought to Turkey fiber internet at the speed of light, which is now accessible by 2.6 million homes. CA Spectrum supports the infrastructure by quickly identifying any problems associated with expected or unexpected interruptions, enabling Turkcell to take quick action before anything affects the customer experience.

“The features of the [CA Spectrum] system most liked by users are its ability to run platform independent, intelligent event correlation and root cause analysis.”

Özge Öksüztepe

Turkcell Network Quality Solutions Product Manager Expert

With CA Spectrum, a single system administrator within the network operation center team can manage the entire fixed network. Regional solution partners use CA Spectrum to manage the network device operations, 24x7, and can obtain information from devices that are affected by topological structure—the solution can find actual data by observing the field and forming a topological map. CA Spectrum is capable of backing up and comparing the running and startup configurations, which helps identify device configuration bugs and provide alarms for deviations. Through its automated device discovery feature, CA Spectrum scans the whole field itself within the IP range given to devices, and provides root cause analysis.

Özge Öksüztepe, Turkcell Network Quality Solutions Product Manager Expert, highlights that at the beginning of the project, CA Spectrum was used only by the network teams, and that key features within CA Spectrum help enable more efficient network management. “A company at that scale manages a lot of equipment. Therefore, the teams that perform 24x7 network monitoring want as few alarms as possible. If the system gets affected from one location, they want to receive a single alarm, and CA Spectrum can suppress unnecessary or symptomatic alarms. The solution is able to find the real data by observing the field and creating a topological map.”

Lowering total cost of network monitoring and fixing problems faster

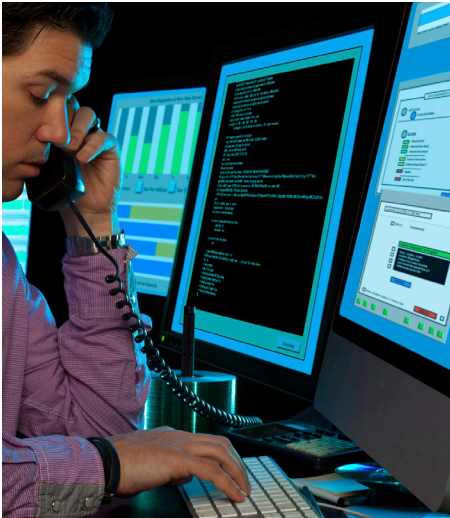
Berke Öncül, CA Technologies Turkey Telco Sales Manager, emphasizes that CA Spectrum speeds issue detection and remediation by removing manual correlation operations through patented technologies that automate device discovery and root cause analysis. “We are pleased that Turkcell, among the few networks throughout the world in terms of size, manages its complex and dynamic IT infrastructure, composed of physical and virtual servers, with the flexible monitoring extensibility of CA Spectrum. The solution’s architecture has grown and expanded over the years in parallel with the increasing capacity needs of the network. Managing tens of thousands of devices from a single point and putting an end to console uncertainty decrease time-consuming and costly operations.”

Turkcell uses CA Spectrum to support 67,000 devices, and plans to increase that number during the company’s planned upgrade in 2017.

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Özge Öksüztepe

Turkcell Network Quality Solutions Product Manager Expert





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