

Brocade and Ruckus: Wired and Wireless Networking Solutions from the Data Center to the Edge

HIGHLIGHTS

As organizations move to digitize their business, they need an underlying network architecture that supports business agility. This New IP architecture enables the network to become a platform for innovation and for developing, delivering, and securing new applications. The combination of Brocade and Ruckus creates a new type of pure-play networking company, with solutions spanning from the heart of the data center to the wireless network edge.

- **Performance:** Industry-leading Wi-Fi performance enables fewer APs to handle more traffic and deliver better coverage in challenging environments and high-performance switches with no over-subscription and PoE+ on all ports meet ultra-demanding network requirements
- **Flexibility and scalability:** Wireless architectures from on-premise to virtual to cloud to controller-less give customers choice and near-unlimited scalability and campus fabric scale-out architecture delivers ease of upgrade, ease of management and pay-as-you-grow scalability
- **Security:** Cloud-managed, certificate-based device onboarding minimizes password risk, securely connects more users, and minimizes IT burden and core-to-edge security
- **Interoperability:** Tested and certified wired-wireless network interoperability standards ensures a consistent user experience

A Better Network

With three billion people accessing the Internet, and 20 billion Wi-Fi-enabled devices predicted by 2017, network connectivity and mobility are more important than ever. The increase in Wi-Fi-connected devices has made it harder for end users to get a great wireless network experience wherever they are and from any device. Businesses, schools, and venues of all shapes and sizes are scrambling to provide reliable, high-performance wireless connectivity to every user in every corner of their premises, inside and out.

The combination of Brocade and Ruckus enables them to do all that and more. The combined company delivers solutions that span the entire network from the heart of the data center to the wireless edge, meeting escalating demand for connectivity and mobility. The company's solutions and products are open, and agile, enabling customers to build networks as platforms for business innovation.

Brocade and Ruckus deliver access networks with world-class performance, flexibility, and security—leading the industry in providing comprehensive network solutions that enable organizations to seamlessly transition to a virtualized, mobile environment where users can experience anytime, anywhere access to applications and information.

Ruckus Smart Wi-Fi delivers the highest-quality wireless connectivity to tens of thousands of customers worldwide. Brocade® solutions are leveraged by over 90 percent of Global 1000 data centers, as well as large enterprise and service providers, to facilitate network consolidation, convergence, virtualization, and cloud computing. Together, Brocade and Ruckus integrate wired and wireless best-in-class capabilities to help achieve the lowest Total Cost of Ownership (TCO).



Industry-Leading Performance

Both Brocade and Ruckus are known for supporting the most demanding business requirements. Organizations from large mobile operators and enterprises to stadiums and large entertainment venues to school districts that serve hundreds of schools all need responsive networks that keep up with mobile device density and the latest rich-media applications. With Brocade and Ruckus, they get them.

Ruckus delivers unrivaled Wi-Fi performance and coverage enabled, in part, by its patented BeamFlex+ adaptive antenna technology. BeamFlex+ adapts automatically to environmental changes, supporting more concurrent users per AP and providing more stable connections at higher data rates than traditional solutions. Customers can use fewer APs to handle more traffic and provide better coverage in challenging environments.

Brocade delivers the best-in-class wired underlay with industry-leading performance and power options.

Brocade ICX® Switches have a non-blocking architecture with no over-subscription, reducing application latency. Brocade is leap-frogging the 1 Gigabit Ethernet (GbE)-to-10 GbE transition by being the first vendor to deliver 40 GbE to the edge, preparing customer networks for future growth. Brocade ICX Switches can provide Power-over-Ethernet (PoE+) to all ports for even the largest, densest Wi-Fi deployments.

“We used just a little over half the number of APs with Ruckus compared to the old network...[With the Brocade network] we immediately saw that everything was much faster and more stable.”

— Custer Rodriguez, Network Administrator,
Dublin Unified School District

Flexible and Scalable Networking with Campus Fabric and SmartZone

Scalability is a key tenet of Brocade Campus Networks. Brocade ICX Switches provide the highest stacking density and performance, with up to 12 switches (576 ports) per stack and up to 5.76 Tbps of aggregate bandwidth. With 10/40 GbE port density, long-distance stacking, and Brocade Campus Fabric scale-out architecture, Brocade ICX Switches can flexibly expand to meet any networking challenge.

Similarly, the Ruckus SmartZone (SZ) software platform offers “Wi-Fi-as-you-grow”—the capability for networks to expand with and adapt to changing business needs. It scales from one to 300,000 devices from a multi-tenant capable physical or a virtual Wireless Local Area Network (WLAN) controller that can be deployed onsite at a central data center or in the cloud.

“One of the reasons we purchased Brocade, was because it allowed us to feel very comfortable that we would have the equipment for eight to 10 years. So that we could grow as we go, and that the equipment would evolve with us. We could add SDN into the mix if we needed to and that there would be sufficient power to last us well into the future.”

— Kevin F. White, Ph.D., Technology Director,
Lower Dauphin School District

Core-to-Edge Security

As organizations seek to meet demand driven by the proliferation of mobile devices and new applications, they face the challenge of maintaining security levels while meeting service requirements for IP telephony, video streaming, collaboration, and mobility.

Ruckus CloudPath provides cloud-managed, certificate-based device onboarding that eliminates password risk, securely connects more users and minimizes IT burden. Both Brocade and Ruckus IP networking products provide native security and encryption capabilities that deliver flexible, open, and efficient solutions to protect a wide range of network environments. These security solutions deliver a reliable, resilient network infrastructure that is secured from the wireless access to the edge to the core, and from client to server, providing preemptive security that helps ensure business continuity and regulatory compliance.

Open Standards Ensures Compatibility and Interoperability

Both Brocade and Ruckus are committed to supporting open standards in communications protocols such as Transmission Control Protocol/Internet Protocol (TCP/IP), management and reporting standards such as Simple Network Management Protocol (SNMP), and security standards such as 802.1x protocols, for interoperability and a consistent user experience across wired and wireless networks. Ongoing joint testing of hardware and software ensures that these standards are met and independent third-party certification testing confirms reliable compatibility.

“[The network] should be simple, but only Brocade and Ruckus got the approach right.”

— Jim Turner, Network Manager,
Chichester High School

Comprehensive Value-Added Solutions

Consistent with the belief that the network is a platform for innovation, the Ruckus Smart Wireless Services (SWS) portfolio includes a set of Wi-Fi-enabled, cloud-based applications for businesses, public venues, Value-Added Resellers (VARs), and service providers. Ruckus Smart Positioning Technology (SPoT) provides comprehensive location analytics and APIs that enable third-party location-based services. SmartCell Insight (SCI) network analytics provides deep insight into current and historical network performance. Cloudpath onboarding and policy management software transforms BYOD onboarding. These applications enable new customer touchpoints, better network visibility and operations, and a hassle-free, self-service, and secure end-user experience.

Commitment to Deliver New SDN and NFV Capabilities

Software-Defined Networking (SDN) and Network Functions Virtualization (NFV) offer ways to increase network agility, accelerate time-to-market, and reduce both capital expenses (CapEx) and operating expenses (OpEx). As a leading proponent of SDN, Brocade is helping organizations realize the promise of collaborative development and self-service innovation from the data center to the edge. The Ruckus virtual SmartZone (vSZ) NFV architecture virtualizes control plane functionality to deliver cost reductions, improve operational efficiency, and accelerate Wi-Fi deployments.

Brocade and Ruckus will deliver a common approach to centralized control and management of access points, LTE small cells, network infrastructure, and virtual network functions. In turn, organizations will benefit from unprecedented scalability and the security of flexible, easy-to-manage networking solutions.

Unified Technical Support

In today's fast-paced, connected world, networks are mission-critical. They require fast, responsive support. Brocade and Ruckus solutions benefit from extensive interoperability testing and best practices documentation to help proactively prevent issues. In the event of a network issue, customers can call a single number for support and escalations are seamlessly managed to expedite resolutions. Unified technical support ensures that customers are not shuffled between vendors and a support ticket is not closed until the issue is resolved.

Flexible IaaS Pay-as-You-Go Financing

Any Brocade or Ruckus customer can use Brocade Network Subscription, an open-ended financing alternative that enables organizations to acquire network infrastructure with flexible Infrastructure-as-a-Service (IAAS), pay-as-you-go flexibility, with no capital expense and no term commitments.

About Brocade

Brocade (NASDAQ: BRCD) networking solutions help the world's leading organizations turn their networks into platforms for business innovation. With solutions spanning public and private data centers to the network edge, Brocade is leading the industry in its transition to the New IP network infrastructures required for today's era of digital business. For more information, contact a Brocade sales partner or visit www.brocade.com.

About Ruckus Wireless

Ruckus Wireless, a part of Brocade, delivers simply better wireless for more than 65,000 enterprise, service provider, government and small business customers worldwide. The company is focused on technology innovation, partner ecosystems and customer service—yielding the best possible wireless experience for the most challenging indoor and outdoor environments. Its **Smart Wi-Fi** platform delivers scalable, high-performance Wi-Fi with simplified control and management for on-premise and cloud-based Wi-Fi deployments, along with new services for secure onboarding, policy management, location services and analytics that enable new business opportunities. For more information, visit ruckuswireless.com.

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