BROCADE IP - INTELLIGENT NETWORKS

Brocade IP technology innovations are built on its 15 year heritage of designing, developing and delivering highly resilient, 100 percent reliable, open architecture, networking solutions. Our IP product portfolio delivers a range of powerful, flexible and intelligent technologies, including routers, switches, application delivery controllers, adapters and management software. Today, Brocade offers a comprehensive family of storage, IP, and converged networking solutions for the data centre and beyond.

Further Information:
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BROCADE IP PRODUCT PORTFOLIO

The Brocade IronWare software suite underpins all Brocade switches and routers, enabling a consistent, manageable framework that reduces the time and resources required to utilise the Brocade solutions.

Brocade Routers:
With industry-leading performance, reliability, and scalability, Brocade routers enable highly available and secure networks from the edge to the core. Brocade offers a complete family of Ethernet routers for enterprise, data centre, and service provider networks.

Brocade Data Centre Switches:
Highly resilient, scalable, and available, Brocade industry-leading IP switches provide the foundation for next-generation data centres, and deliver a low Total Cost of Ownership (TCO) and fast Return on Investment (ROI).

Brocade Campus LAN Switches:
Brocade campus network IP switches let organisations perform without compromise.

Brocade Virtual Cluster Switching (VCS) Technology
Always ahead of the curve, Brocade’s expertise and innovation leadership has also delivered the new networking with VCS™ technology. This evolutionary IP technology brings together Brocade Ethernet fabrics, and the distributed intelligence required for virtualisation to create the foundation for a cloud optimised environment. Brocade VCS technology delivers cloud computing capability through three technology pillars: Ethernet fabric, Distributed Intelligence, and Logical Chassis. As a result, VCS technology helps decrease the operational costs of networking by providing a highly reliable, simple, scalable networking infrastructure.

BROCADE ONE™ – An Innovative Strategy for Migrating to the Cloud

One of the most compelling reasons for migrating to the cloud is greater agility in an increasingly dynamic business environment. Achieving this objective requires a network that reduces complexity, supports distributed applications, and increases overall performance. The Brocade One strategy is designed to simplify the migration to the cloud by:

- Delivering unmatched simplicity by removing architectural complexity and reducing operational costs
- Providing new levels of network scalability, uptime, and performance through non-stop networking
• Supporting current and future applications that run on the network through **application optimisation**
• Delivering **investment protection** with best-in-class solutions and greater choice through an open, multivendor network architecture

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**BROCADE ROUTERS**

**Brocade MLX Series**

**What?** The Brocade NetIron® MLX and new MLXe Core Routers are scalable, high-performance, 100 Gigabit Ethernet (GbE) Routers.

**Where?** Service provider backbones, Metro Ethernet networks, transit/wholesale networks, Internet Service Providers (ISPs), Content Delivery Networks (CDNs), Internet Exchange Points (IXPs), data centres, and distributed enterprises.

**Why?** Delivers unprecedented scale and performance, high reliability, significant cost-saving and operational efficiency.

• Scalable for non-stop networking in HPC and high data volume environments
• Multi-service IP/MPLS Carrier Ethernet routers in 4-, 8-, 16-, and 32-slot modules
• 1 GbE, 10 GbE and 100 GbE wire-speed ports
• High-performance IPv4, IPv6, and Multiprotocol Label Switching (MPLS) capabilities
• Advanced Layer 2 switching capabilities
• Sixth-generation, network processor-based architecture and terabit-scale switch fabrics

**Brocade NetIron XMR Series**

**What?** The Brocade NetIron® XMR Series offers highly versatile, cost-efficient solutions for Internet routing, inter-metro backbones, large scale multi-service backbones, and IP carriers.

**Where?** Service provider environments. Service providers face market challenges that need new solutions. The smooth introduction of new, reliable, and scalable services is crucial to expanding the subscriber base and improving subscriber retention.

**Why?** Simple, cost-efficient scalability.

• Unparalleled performance - up to 2 billion PPS in a 3.4 terabit architecture
• Highly scalable IPv4/IPv6 routing and fast BGP convergence, with advanced MPLS capabilities
• Industry-leading wire-speed of 10 GbE, and POS port density, in 4-, 8-, 16-, and 32-slot modules

**Brocade NetIron CER 2000 Series**

**What?** The Brocade NetIron CER 2000 Series of switches extends wire-speed IP and Multi-Protocol Label Switching (MPLS) services to the network edge.

**Where?** Campus networks and service providers needing a single easy-to-manage, highly scalable platform with IP unicast and multicast routing features.

**Why?** Compact, high-performance scalability.

• Available in 24-port and 48-port 1 GbE versions with two optional 10 GbE uplink ports
• Up to 136 Gbps of non-blocking wire-speed performance
Complete suite of IPv4/IPv6 unicast and multicast routing with fast convergence times
- Save on space, power, and cooling without compromising performance
- Low Total Cost of Ownership (TCO)

BROCADE DATA CENTRE SWITCHES

Brocade VDX™ 6710 Switch
What? Brocade VDX™ 6710 Switches deliver cost-effective 1 Gigabit Ethernet (GbE) connectivity with full switching capability to simplify network architectures and enable cloud computing. They improve network utilisation, maximise application availability, increase scalability, and simplify network architecture in virtualized data centres. By leveraging Brocade VCS fabric technology, they support data centre Ethernet fabrics—revolutionizing the design of Layer 2 networks.
Where? Existing data centres ready to enhance classic hierarchical network architectures and organisations ready to deploy flatter scale-out fabrics for virtualized data centers.
Why? Simplifies network architectures and enables cloud computing by delivering Brocade VCS technology
- Maximizes performance through wire-speed ports with 600 nanosecond port-to-port latency and hardware-based Inter-Switch Link (ISL) Trunking
- Provides multi-homed active-active server connections for Ethernet networks
- Creates scale-out Ethernet fabrics for virtualized data centers
- Simplifies management by maintaining network policies as Virtual Machines (VMs)
- move throughout the data center with Automatic Migration of Port Profiles (AMPP)
- Provides dynamic configuration and secure communication to VMware vCenter via Brocade VM-aware network automation

Brocade VDX 6720 Data Centre Switches
What? The Brocade VDX™ 6720 Data Centre Switches leverage Brocade VCS technology. Brocade VCS delivers Cloud Computing capability through three technology pillars: Ethernet fabric, Distributed Intelligence, and Logical Chassis. As a result, VCS technology helps decrease the operational costs of networking by providing a highly reliable, simple, scalable networking infrastructure. Highly resilient, scalable, and available 10 GbE switches.
Where? Data centres needing simple, reliable, bullet-proof solutions.
Why? Helps reduce operational costs and complexity by enabling the entire fabric to be managed as a single switch.
- Enables Brocade VCS technology, creating Ethernet fabrics for lower TCO and increased scale and non-stop networking
- VDX delivers Ports on Demand flexibility with 16-, 24-, 40-, 50-, and 60-port 10 GbE models

Brocade VDX 6730 Data Centre Switches
What? The Brocade VDX 6730 Data Centre Switch is specifically designed to improve network utilisation, maximise application availability, increase scalability, and dramatically
simplify network architecture in virtualised data centres. By leveraging Brocade VCS fabric technology, this switch enables organisations to build data centre Ethernet fabrics—revolutionising the design of Layer 2 networks and providing an intelligent foundation for cloud computing.

Where? Within organisations that want to enhance their classic hierarchical network architectures, deploy flatter fabrics, or converged networks.

Why? Reduce the number of server adapters, cabling and switch ports for lower infrastructure costs, and less power and cooling.

- Simplifies network architectures and enables cloud computing by delivering
- Brocade VCS technology
- Provides Ethernet storage connectivity for Fibre Channel over Ethernet (FCoE), iSCSI, and NAS
- Protects existing investments by bridging Fibre Channel Storage Area Networks (SANs) and Ethernet fabrics
- Maximises performance through wire-speed ports with 600 nanosecond port-to-port latency and hardware-based Inter-Switch Link (ISL) Trunking
- Creates scale-out Ethernet fabrics for virtualised data centres
- Simplifies management by maintaining network policies as Virtual Machines (VMs) move throughout the data centre with Automatic Migration of Port Profiles (AMPP)
- Provides dynamic configuration and secure communication to VMware vCentre
- Brocade VM-aware network automation

Brocade Data Centre Switches Brocade TurboIron 24X

What? A 1U, high-density top-of-rack data centre switch for 1/10 GbE server access and aggregation in high density, mission critical and HPC environments.

Where? Data centres needing to mix 10 GbE and 1 GbE servers, protect current IT investments and streamline migration to 10 GbE-capable server farms.

Why? With an ultra-low-latency, cut-through, non-blocking architecture the TurboIron® 24X is ideal for HPC, iSCSI storage, real-time application environments.

- Simplifies network architecture and reduces administration demands
- 24 x 10 GbE SFP+/1 GbE SFP dual-speed ports and 4 x 1 GbE RJ45 ports
- Embedded per-port sFlow capabilities to support scalable traffic monitoring
- Less than 1.5 microsecond for layer 2 and layer 3

Brocade Data Centre Switches Brocade 8000

What? Brocade 8000 switches integrate into existing Fibre Channel environments, providing DCB/FCoE into their data centres without disrupting existing SAN operations or IT management practices.

Where? Data centres needing simple, reliable, bullet-proof solutions for Fibre Channel over Ethernet (FCoE) consolidation.

Why? Reduce the number of server adapters, cabling and switch ports for lower infrastructure costs, and less power and cooling.

- Data Centre Bridging (DCB) and FCoE protocols enable access to LAN and SAN over a common server connection
- Cut-through, non-blocking architecture delivers line-rate performance across 24 x 10 Gbps DCB ports with 8 x 8 Gbps Fibre Channel ports
• Link Aggregation Control Protocol (LACP) and frame-based trunking maximise network bandwidth
• Reduce capital and operating costs

Brocade NetIron CES 2000 Series


Where? Busy data centres needing Quality of Service (QoS), resiliency, and security.

Why? Extend intelligence and high-touch processing capabilities to the network edge.
• Compact 1U, multiservice edge/aggregation switches offering high performance and availability
• Advanced Layer 2, IPv4, IPv6, and MPLS
• MEF 9, MEF 14, and MEF 21 certified, with comprehensive OAM capabilities and 24-port and 48-port configurations in both Hybrid Fibre (HF) and RJ45 versions to suit versatile access/aggregation media

BROCADE CAMPUS LAN SWITCHES

Brocade ICX™ 6610 Switch

What? The Brocade ICX™ 6610 Switch redefines enterprise networking possibilities by combining the performance and availability of a chassis with the flexibility and affordability of a stackable switch. Its next-generation, class-leading capability optimizes the use of mission-critical applications and offers unprecedented stacking bandwidth – in a completely scalable format.

Where? Existing data centres looking to improve network performance while maximizing return on investment by buying only what they need today, giving them the option to scale up as demand grows and new technologies emerge.

Why? Chassis-like capabilities optimize user experience for video streaming, Virtual Desktop Infrastructure (VDI), Unified Communications (UC) and other mission-critical campus applications
• Unrivalled 320 Gbps of stacking bandwidth removes inter-switch bottlenecks
• Up to 1 Tbps of total switching capacity with up to 384 1 GbE and 64 10 GbE per stack
• for campus network edge and aggregation layers
• Unmatched availability with four fully-redundant 40 Gbps stacking ports per switch
• Low-cost entry point allows organizations to buy only what they need - and scale easily
• Brocade Assurance Limited Lifetime Warranty provides peace-of-mind

Brocade FastIron CX Series

What? Brocade FastIron® CX Series are enterprise-class stackable Layer 2/3 edge switches with 24 or 48 10/100/1000 Mbps ports in compact 1U form factors, and optional 10 GbE uplinks. They also provide a single-cable solution for edge devices such as Voice over IP (VoIP) phones, video surveillance cameras, and wireless access points.
Where? Enterprise campus and data centre networks, requiring enterprise class stacking technology. Providing new levels of cost-effective performance, scalability, and flexibility.

Why? The CX Series deliver performance and intelligence to the network edge in a flexible 1U form factor that helps reduce infrastructure and administrative costs.

- Chassis-like capabilities with the economical value of a fixed-port solution
- Expandable up to 384 ports through vertical or horizontal stacking
- 24 or 48 10/100/1000 Mbps ports in compact 1U form factors, and optional 10 GbE uplinks
- Deliver both power and data across network connections, providing a single-cable solution for edge devices

Brocade FastIron SX Series

What? The Brocade FastIron® SX Series of switches provide control from the network edge to the backbone, with intelligent network services, including superior Quality of Service (QoS), predictable performance, advanced security, comprehensive management and integrated resiliency.

Where? Enterprise networks needing a scalable foundation that can deliver improved operational efficiency and respond immediately to business change.


- Compatibility with a common operating system, plus shared interface and power supply modules reduce cost of ownership - minimising operational expenses.
- Scalable, secure, low-latency, and fault-tolerant infrastructure for 1 GbE and 10 GbE enterprise deployments
- 8- and 16-slot chassis providing up to 36 x 10 GbE, and 384 x 1 GbE ports in a single chassis supporting IPv4/IPv6-capable Layer 2/3 switching and routing

Assurance Limited Lifetime Warranty

Brocade FastIron WS Series

What? The Brocade FastIron WS Series, entry-level enterprise campus switches, that provide cost-effective connectivity, PoE for VoIP and a rich feature set for optimising the network all the way to the edge.

Where? Small and medium businesses (SMB), branch offices, and distributed enterprises with changing business needs and metro area networks connecting branch offices with 1GbE uplinks.

Why? Combining Fast Ethernet, Gigabit Ethernet, PoE, and intelligent fault detection with a feature rich, secure, highly reliable solution, the FastIron WS Series offers maximum productivity and investment protection.

- Supports new applications such as IP telephony, wireless access, WebTV, video surveillance, building management, triple play - voice, video and data, and remote video kiosks
- Available in 24- and 48-port 10/100 or 10/100/1000 Mbps models, with or without IEEE 802.3af Power over Ethernet (PoE), for enterprise edge networking, security, and Unified Communication (UC) needs
- Brocade Metro Ring Protocol for building resilient ring-based topologies
BROCADE APPLICATION DELIVERY SWITCHES

Brocade ServerIron ADX Series

What? The Brocade ServerIron® ADX Series of high-performance application delivery switches provides a broad range of application optimisation functions to ensure the reliable delivery of critical applications, and seamless IPv6 migration.

Where? Large-scale, low-latency environments including enterprise, service provider, and e-commerce data centres. Also as a high-performance proxy for DNS server farms, delivering up to 1.8 million DNS queries per second.

Why? Delivers IP, Web, and VoIP applications with Brocade application delivery and traffic management solutions to enable high-performance, always-on, and secure IP services delivery.

- Industry-leading application delivery performance - up to 3 million HTTP connections per second, and up to 70 Gbps of HTTP application throughput
- Improves application availability while making efficient use of existing infrastructure
- Low-latency, high-performance delivery of critical applications using data centre-class application switches — and your current network infrastructure
- Optimises delivery of web applications from BEA, IBM, Microsoft, Oracle, SAP, and Siebel, and infrastructure services such as DNS, RADIUS, firewalls, and cache services
- Application optimisation and IPv6 migration for seamless services and application delivery

NETWORK MANAGEMENT APPLICATION

Brocade Network Advisor

Brocade offers comprehensive IP management solutions that simplify administration, improve efficiency and reduce costs, these applications are designed to unify network management in highly dynamic networking environments.

What? Brocade Network Advisor is the industry’s first unified network management solution for data, storage, application delivery, wireless, and converged networks. It supports Fibre Channel SANs, FCoE, IP switching and routing, and MPLS networks — providing end-to-end visibility across different network types through a seamless and unified user experience.

Where? Any organisation wanting to reduce operational expenditures by leveraging the same management solution across different environments, including Data Centre, Enterprise Campus, and Service Provider networks.

Why? Brocade Network Advisor provides comprehensive lifecycle management capabilities across different networks through a seamless and unified user experience. It consists of many easy-to-use tools in an intelligent dashboard which provides a view into the entire SAN and IP network environment.

- Enables configuration, monitoring, and management of the Brocade DCX® Backbone,
- Brocade IP switches and routers, Host Bus Adapters (HBAs),
- Converged Network Adapters (CNAs), and FCoE switches
- Provides unified network management solutions across Brocade Fibre Channel
SANs, Fibre Channel over Ethernet (FCoE), Layer 2/3 IP switches and routers, Wireless, 
Layer 4/7 Application Delivery networks and Multiprotocol Label 
Switching (MPLS) networks 
Features a robust Role-Based Access Control (RBAC) mechanism that gives 
different network administrators complete control over their environments 
Campus

Alliance Partner Network Programme
The Brocade Alliance Partner Network (APN) programme prepares and rewards partners who 
invest in developing knowledge-rich practices to address new technology trends. The programme 
offers a full set of intelligent, customisable tools that assist partners in selling Brocade solutions 
and supports the needs of partners as they help their customers make the transition towards 
network convergence.

The Brocade APN programme includes four distinct partnership levels: Distributor, Elite, Premier 
and Select. All levels have been designed with specific requirements and benefits to help 
partners leverage and benefit from their networking product knowledge and solution support 
expertise.

Partners are responsible for meeting specific programme requirements based on their level of 
participation in the programme. They receive tiered benefits based on these requirements and 
levels of participation.
Programme benefits:
• Comprehensive sales programmes
• Deal registration programmes
• Marketing and sales support
• Pre-sales technical support
• SE support, knowledgebase
• Sales and technical training discounts
• Demonstration equipment discounts
• Access to sales and marketing tools on the MyBrocade™ partner portal
• Brocade Rewards eligibility for all reseller partners

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