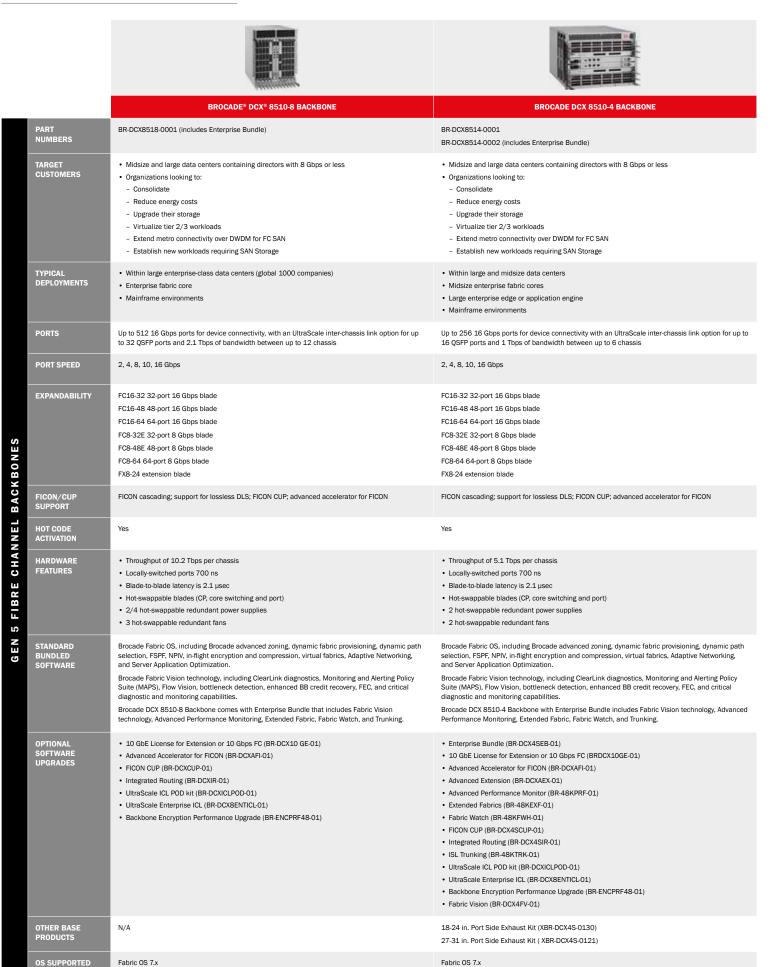


SIMPLY REWARDING RELATIONSHIPS



BROCADE QUICK REFERENCE GUIDE SAN







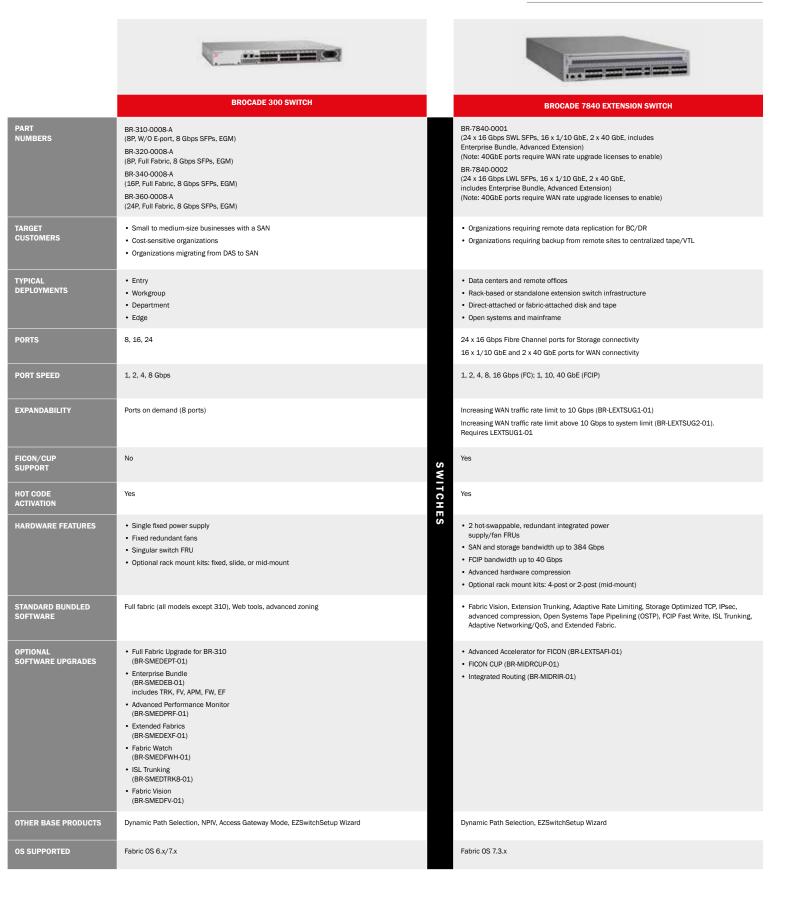
	BROCADE 6520 SWITCH	BROCADE 6510 SWITCH	BROCADE 6505 SWITCH	
PART NUMBERS	BR-6520-48-16G-F (48P 16G, SWL SFP, BR, AC, Non-port side exhaust air flow) BR-6520-48-8G-F (48P 8G, SWL SFP, BR, AC, Non-port side exhaust air flow) BR-6520-48-16G-R (48P 16G, SWL SFP, BR, AC, Port side exhaust air flow) BR-6520-48-8G-R (48P 8G, SWL SFP, BR, AC, Port side exhaust air flow) BR-6520-96-16G-R (96P 16G, SWL SFP, BR, AC, Port side exhaust air flow, includes Enterprise Bundle)	BR-6510-24-8G-F (24P, 8 Gbps SFPs, Non-port side exhaust) BR-6510-24-8G-R (24P, 8 Gbps SFPs, Port side exhaust) BR-6510-024-8G-R (24P, 8 Gbps SFPs, Port side exhaust) BR-6510-24-16G-F (24P, 16 Gbps SFPs, Non-port side exhaust) BR-6510-24-16G-R (24P, 16 Gbps SFPs, Non-port side exhaust) BR-6510-48-16G-F (48P, 16 Gbps SFPs, Non-port side exhaust, includes Enterprise Bundle) BR-6510-48-16G-R (48P, 16 Gbps SFPs, Port side exhaust, includes Enterprise Bundle)	BR-6505-12-0R (12P, 0 SFPs, 1 Power Supply) BR-6505-12-16G-0R (12P, 16 Gbps SFPs, 1 Power Supply) BR-6505-24-16G-1R (24P, 16 Gbps SFPs, 1 Power Supply, includes Enterprise Bundle)	
TARGET CUSTOMERS	 High density enterprise customers looking to refresh or consolidate data centers, servers, or storage to reclaim floor/rack space or reduce energy consumption Storage upgrades due to consolidation, end-of-life/support, lease expiration, or technology refresh Adoption of 16 Gbps Fibre Channel arrays or solid state drive technology Hyper-growth virtualization of tier 2/3 applications and workloads New and emerging workloads like (VDI) and High-Frequency Trading (HFT), requiring scalable and low-latency SAN storage Large data centers with 4 Gbps or less bandwidth or insufficient port density 	 Midsize and large data centers containing directors with 8 Gbps or less bandwidth or limited port density Organizations looking to consolidate/reduce energy costs Organizations upgrading their storage Organizations virtualizing tier 2/3 workloads Organizations extending their metro connectivity over DWDM for FC SAN Organizations managing new and emerging workloads that require SAN storage Organizations extending their metro connectivity over DWDM for FC SAN 	 Midsize and small data centers with Brocade, Cisco, or QLogic switches with 8 Gbps or less bandwidth Customers looking to refresh or consolidate data centers, servers, or storage to reclaim floor/rack space or reduce energy consumption Organizations looking at storage upgrades due to end-of-life/support, lease expiration, technology refresh, or consolidation Organizations virtualizing tier 2/3 workloads Organizations managing new and emerging workloads that require SAN storage 	
TYPICAL DEPLOYMENTS	Within large data centersAt the enterprise edgeAs a fabric core switch	 Various within midsize and small data centers Core or edge switch Within mainframe environments 	To support an entry-level SAN Edge switch deployment	
PORTS	48, 72, 96	24, 36, 48	12, 24	
PORT SPEED	2, 4, 8, 10, 16 Gbps	2, 4, 8, 10, 16 Gbps	2, 4, 8, 16 Gbps	
EXPANDABILITY	24 ports on demand: 24 x 16 Gbps SW optics (XBR-ENTPOD-16G) 24 x 8 Gbps SW optics (XBR-ENTPOD-8G)	12 ports on demand: 12 x 16 Gbps SW optics (XBR-MIDR12POD-16G) 12 x 8 Gbps SW optics (XBR-MIDR12POD-8G)	12 ports on demand: 12 x 16 Gbps SW optics (XBR-SMED12POD-16G) with ox optics (BR-SMED12POD-01)	
FICON/CUP SUPPORT	Not available	Yes	Not available	
HOT CODE ACTIVATION	Yes	Yes	Yes	
HARDWARE FEATURES	 2 hot-swappable, redundant integrated power supply/fan FRUs Optional rack mount kits: fixed, or mid-mount Optional front to back or back to front air flow 	 2 hot-swappable, redundant integrated power supply/fan FRUs Optional rack mount kits: fixed, or mid-mount 	 1 hot-swappable integrated power supply/fan with optional redundant power supply/fan (XBR-5100-0001) Optional rack mount kits: fixed or mid-mount 	
STANDARD BUNDLED SOFTWARE	Brocade Fabric OS, including Brocade advanced zoning, dynamic fabric provisioning, dynamic path selection, FSPF, NPIV, inflight encryption and compression, virtual fabrics, Adaptive Networking, and Server Application Optimization. Brocade Fabric Vision technology, including ClearLink diagnostics, Monitoring and Alerting Policy Suite (MAPS), Flow Vision, bottleneck detection, enhanced BB credit recovery, FEC, and critical diagnostic, and monitoring capabilities. Brocade 6520 with Enterprise Bundle includes Fabric Vision technology, Advanced Performance Monitoring, Extended Fabric, Fabric Watch, and Trunking.	Brocade Fabric OS, including Brocade advanced zoning, dynamic fabric provisioning, dynamic path selection, FSPF, NPIV, in-flight encryption and compression, virtual fabrics, Adaptive Networking, and Server Application Optimization. Brocade Fabric Vision technology, including ClearLink diagnostics, Monitoring and Alerting Policy Suite (MAPS), Flow Vision, bottleneck detection, enhanced BB credit recovery, FEC, and critical diagnostic, and monitoring capabilities. Brocade 6510 with Enterprise Bundle includes Fabric Vision technology, Advanced Performance Monitoring, Extended Fabric, Fabric Watch, and Trunking.	Brocade Fabric OS, including Brocade advanced zoning, dynamic fabric provisioning, dynamic path selection, FSPF, NPIV, in-flight encryption and compression, virtual fabrics, Adaptive Networking, and Server Application Optimization. Brocade Fabric Vision technology, including ClearLink diagnostics, Monitoring and Alerting Policy Suite (MAPS), Flow Vision, bottleneck detection, enhanced BB credit recovery, FEC, and critical diagnostic, and monitoring capabilities. Brocade 6505 with Enterprise Bundle includes Fabric Vision technology, Advanced Performance Monitoring, Extended Fabric, Fabric Watch, and Trunking.	
OPTIONAL SOFTWARE UPGRADES	 Enterprise Bundle (BR-MENTEB4-01) includes FW, TRK, APM, FV, EF Extended Fabric (BR-MENTEXF-01) Fabric Watch (BR-MENTFWH-01) Advance Performance Monitoring (BR-MENTPRF-01) ISL Trunking (BR-MENTTRK-01) ISL Trunking (BR-MENTTRK-01) Integrated Routing (BR-MENTIR-01) 10 Gbps FC License (BR-MENTI0G-01) Fabric Vision (BR-MENTFV-01) 	 Enterprise Bundle (BR-MIDREB-01) includes TRK, FV, APM, FW, EF Advanced Performance Monitor (BR-3900PRF-02) Extended Fabrics (BR-3900EXF-02) Fabric Watch (BR-3900FWH-02) FICON CUP (BR-MIDRCUP-01) Integrated Routing (BR-MIDRIR-01) ISL Trunking (BR-3900TRK-02) 10 Gbps FC License (BR-MIDR10G-01) Fabric Vision (BR-MIDRFV-01) 	 Enterprise Bundle (BR-SMEDEB-01) includes TRK, FV, APM, FW, EF Advanced Performance Monitor (BR-SMEDPRF-01) Extended Fabrics (BR-SMEDEXF-01) Fabric Watch (BR-SMEDFWH-01) ISL Trunking (BR-SMEDTRK8-01) Fabric Vision (BR-SMEDFV-01) 	
OTHER BASE PRODUCTS	EZSwitchSetup	EZSwitchSetup	EZSwitchSetup	
OS SUPPORTED	Fabric OS 7.1	Fabric OS 7.x	Fabric OS 7.x	





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		BROCADE DCX BACKBONE	BROCADE DCX-4S BACKBONE		
	PART NUMBERS	BR-DCX-0001-A (includes Enterprise Bundle)	BR-DCX4S-0001-A BR-DCX4S-0002-A (includes Enterprise Bundle)		
-	TARGET CUSTOMERS	 Organizations with enormous data centers that support worldwide entities Organizations building out environments for the next 10–15 years Organizations that require scalability to meet growing bandwidth and evolving protocols Organizations looking to leverage existing assets, avoiding rip-and-replace 	 Midsize enterprises (excellent core backbone) Large enterprises (excellent edge backbone) Organizations with multi-tier fabrics with Brocade DCX in the core 		
	TYPICAL DEPLOYMENTS	 Within large enterprise-class data centers (global 1000 companies) Mainframe environments 	 Within large enterprise-class data centers (global 1000 companies) To address security and compliance To scale and support heterogeneous environments 		
	PORTS	Up to 512 8 Gbps ports for device connectivity, with an inter-chassis links option for an additional 512 Gbps of bandwidth between DCX chassis	Up to 256 8 Gbps ports for device connectivity with an inter-chassis links option for an additional 256 Gbps of bandwidth between DCX or DCX-4S chassis		
	PORT SPEED	1, 2, 4, 8, 10 Gbps	1, 2, 4, 8, 10 Gbps		
BACKBONES	EXPANDABILITY	FC8-16 16-port 8 Gbps blade FC8-32 32-port 8 Gbps blade FC8-48 48-port 8 Gbps blade FC8-64 64-port 8 Gbps blade FS8-18 encryption blade FX8-24 extension blade FC0E10-24 FC0E blade	FC8-16 16-port 8 Gbps blade FC8-32 32-port 8 Gbps blade FC8-48 48-port 8 Gbps blade FC8-64 64-port 8 Gbps blade FS8-18 encryption blade FX8-24 extension blade FC0E10-24 FC0E blade		
	FICON/CUP SUPPORT	Yes (with FICON CUP license)	Yes (with FICON CUP license)		
	HOT CODE ACTIVATION	Yes	Yes		
	HARDWARE FEATURES	 Throughput of 4.6 Tbps per chassis Locally-switched ports 700 ns Blade-to-blade latency is 2.1 µsec Hot-swappable blades (CP, core switching and port) 2/4 hot-swappable redundant power supplies 3 hot-swappable redundant fans 	 Throughput of 2.3 Tbps per chassis Locally-switched ports 700 ns Blade-to-blade latency is 2.1 µsec Hot-swappable blades (CP, core switching and port) 2 hot-swappable redundant power supplies 2 hot-swappable redundant fans 		
	STANDARD BUNDLED SOFTWARE	Brocade Fabric OS, including Brocade advanced zoning, dynamic fabric provisioning, dynamic path selection, FSPF, NPIV, virtual fabrics, Adaptive Networking, and Server Application Optimization. Enterprise Bundle, including Fabric Vision, advanced performance monitoring, extended fabric, fabric watch, and trunking. Enhanced Group Management (EGM).	Brocade Fabric OS, including Brocade advanced zoning, dynamic fabric provisioning, dynamic path selection, FSPF, NPIV, virtual fabrics, Adaptive Networking, and Server Application Optimization. Enterprise Bundle, including Fabric Vision, advanced performance monitoring, extended fabric, fabric watch, and trunking. Enhanced Group Management (EGM).		
	OPTIONAL SOFTWARE UPGRADES	 Advanced Accelerator for FICON (BR-DCXAFI-01) Brocade Accelerator for FICON for DCX, including FICON XRC emulation, and tape pipelining (BR-DCXFIA-02) FICON CUP (BR-DCXCUP-01) Integrated Routing (BR-DCXIR-01)ICL kit (DCX-to-DCX), including one ICL (16 Link) license and two cables (BR-DCX-1000) ICL kit (DCX-to-DCX-4S), including one ICL (8 Link) license, and two cables (BR-DCX4S-1000) ICL (8 Link) License (BR-DCX4SICL-01) Backbone Encryption Performance Upgrade (BR-ENCPRF48-01) 	 Enterprise Bundle (BR-DCX4SEB-01) Advanced Accelerator for FICON (BR-DCXAFI-01) Advanced Performance Monitor (BR-48KPRF-01) Brocade Accelerator for FICON for DCX, including FICON XRC emulation, and tape pipelining (BR-DCXFIA-02) Extended Fabrics (BR-48KEXF-01) Fabric Watch (BR-48KFWH-01) FICON CUP (BR-DCX4SCUP-01) Integrated Routing (BR-DCX4SIR-01) ISL Trunking (BR-48KTRK-01) ICL kit, including one ICL (8 Link) license, and two cables (BR-DCX4S-1000) Backbone Encryption Performance Upgrade (BR-ENCPRF48-01) Fabric Vision (BR-DCX4FV-01) 		
	OTHER BASE PRODUCTS	N/A	18-24 in. Port Side Exhaust Kit (XBR-DCX4S-0130) 27-31 in. Port Side Exhaust Kit (XBR-DCX4S-0121)		
	OS SUPPORTED	Fabric OS 6.x/7.x	Fabric OS 6.x/7.x		

BROCADE QUICK REFERENCE GUIDE SAN





	BROCADE 7800 EXTENSION SWITCH
PART NUMBERS	BR-7800-0001-A (4 x 8 Gbps SWL SFPs, 2 x 1 GbE ports enabled) BR-7800F-0001-A (16 x 8 Gbps SWL SFPs, 6 x 1 GbE ports enabled) BR-7800F-0002-A (16 x 8 Gbps LWL SFPs, 6 x 1 GbE ports enabled)
TARGET CUSTOMERS	 Organizations requiring remote data replication for BC/DR Organizations requiring backup from remote sites to centralized tape/VTL
TYPICAL DEPLOYMENTS	 Data centers and remote offices Rack-based or standalone extension switch infrastructure Direct-attached or fabric-attached disk and tape Open systems and mainframe
PORTS	Up to 16 x 8 Gbps Fibre Channel ports for Storage connectivity Up to 6 x GbE ports for WAN connectivity
PORT SPEED	1, 2, 4, 8 Gbps (FC); 1 GbE (FCIP)
EXPANDABILITY	7800 4/2 to 7800 16/6 upgrade software: 12 x 8 Gbps SWL SFPs (XBR-7800UG-0001-A) 12 x 8 Gbps LWL SFPs (XBR-7800UG-0002-A)
FICON/CUP SUPPORT	Yes
HOT CODE ACTIVATION	Yes
HARDWARE FEATURES	 2 hot-swappable, redundant integrated power supply/fan FRUs SAN and storage bandwidth up to 128 Gbps FCIP bandwidth up to 6 Gbps Advanced hardware compression Optional rack mount kits: fixed, slide, or mid-mount
STANDARD BUNDLED SOFTWARE	FCIP Fast Write, Open Systems Tape Pipelining, Storage-Optimized TCP, advanced compression, IPsec, Adaptive Networking/QoS.
OPTIONAL SOFTWARE UPGRADES	Advanced Extension: Advanced Extension: FCIP Trunking and Adaptive Rate Limiting (BR-EXTSAEX-01) Advanced Accelerator for FICON (BR-EXTSAFI-01) Enterprise Bundle (BR-EXTSEB-01) includes FV, TRK, APM, FW, EF Advanced Performance Monitoring (BR-EXTSPRF-01) Extended Fabrics (BR-EXTSEXF-01) Fabric Watch (BR-EXTSFWH-01) FICON CUP (BR-EXTSCUP-01) Integrated Routing (BR-EXTSIR-01) ISL Trunking (BR-EXTSRK-01) Fabric Vision (BR-EXTSFV-01)
OTHER BASE PRODUCTS	Dynamic Path Selection, EZSwitchSetup Wizard

BROCADE VDX 6730 SWITCH BR-VDX 6730-16-F/-R BR-VDX 6730-24-F/-R BR-VDX 6730-40-F/-R BR-VDX 6730-60-F/-R Organizations with LAN and SAN connectivity Customers seeking server I/O consolidation · As a 10 GbE fixed port FCoE switch with Brocade VCS Fabric technology • To converge storage traffic (FCoE, iSCSI) in the • Ethernet fabric; multi-hop FCoE · As native FC ports bridging Brocade VCS fabric to FC SAN Up to 24 10 GbE/1 GbE SFP+ ports for FCoE and 8 FC ports on 6730-24 Up to 60 10 GbE/1 GbE SFP+ ports for FCoE and 16 FC ports on 6730-600 10 Gbps (CEE), 1, 2, 4, 8 Gbps (FC) VDX 6730-16: 8-port POD (BR-VDX 6730-24POD-01) VDX 6730-40: 10-port PODs (BR-VDX 6730-60POD-01) FCoE POD FABRIC EXTENSION VDX 6730-24: 8-port FC POD (XBR-VDX FCOE-01), includes 8 x 8 Gbps FC SWL optics VDX 6730-60: 16-port FC POD (XBR-VDX FCOE-02), includes 16 x 8 Gbps FC SWL optics No No · Up to 1456 Gbps switching capacity; wire-speed on all ports ISL trunking in hardware · Ports on demand Direct-attached copper and optical transceiver cabling options · Hot-swappable, redundant power and cooling · Reversible front-to-rear airflow • 2 hot-swappable and redundant power supplies Brocade VCS Fabric technology to build Ethernet fabrics · Automatic migration of port profiles • Full Layer 2 feature set VMware network automation VDX 6730-24: VCS License (BR-VDX6730-24VCS-01) • FCoE License (XBR-VDXFCOE-01), includes 8x 8 Gbps FC SWL optics VDX 6730-60: VCS License (BR-VDX6730-60VCS-01) FCoE License (XBR-VDXFCOE-02), includes 16 x 8 Gbps FC SWL optics

Layer 2 Ethernet, Dynamic Path Selection, Security

Network OS 2.x

OS SUPPORTED

Fabric OS 6.x/7.x

ETHERNET FABRIC DATA CENTER SWITCHES WITH NETWORK OS

	SAN PROFESSIONAL	SAN PROFESSIONAL PLUS	SAN ENTERPRISE	SAN PROFESSIONAL PLUS WITH IP	SAN ENTERPRISE WITH IP		
PART NUMBERS	Free download	BR-NTWADV-SAN-PLU	BR-NTWADV-SAN-ENT	BR-NTWADV-BPLU	BR-NTWADV-BENT		
MAXIMUM PORTS, FABRICS, DEVICES	Up to 300 SAN switch ports (~150 devices) and 2 SAN fabrics	Up to 2560 SAN switch ports and 100 SAN fabrics	Up to 15,000 SAN switch ports and 100 SAN fabrics	Up to 2560 SAN switch ports, 100 SAN fabrics, and 150 IP devices	Up to 15,000 SAN switch ports, 100 SAN fabrics, and 550 IP devices		
FEATURES	A fully-featured 120-day evaluation version is also available for download from http://www.brocade.com/networkadvisor						
	For full features list by product version and license type, refer to the Brocade Network Advisor Software Licensing Guide in Documentation folder						
OTHER LICENSE OPTIONS	N/A	 Upgrade to SAN Enterprise (BR-NTWADV-SAN-PLU-UPG), Minimum of one year support required Add IP Base License (BR-NTWADV-ADD-IP-BASE) Add SAN Professional Plus to IP Base (BR-NTWADV-ADD-SAN-PLU), Minimum of one year support required 	 Add IP Base License (BR-NTWADV-ADD-IP-BASE) Add SAN Enterprise to IP Base (BR-NTWADV-ADD-SAN-ENT), Minimum of one year support required 	 BR-NTWADV-IP-100 BR-NTWADV-IP-500 BR-NTWADV-IP-1000 BR-NTWADV-IP-2500 BR-NTWADV-MPLS-10 BR-NTWADV-MPLS-25 BR-NTWADV-MPLS-50 	 BR-NTWADV-IP-100 BR-NTWADV-IP-500 BR-NTWADV-IP-2000 BR-NTWADV-IP-2500 BR-NTWADV-MPLS-10 BR-NTWADV-MPLS-25 BR-NTWADV-MPLS-50 	NETWORK MA	
SYSTEM REQUIREMENTS	 Small: Intel Core 2 Duo, 2 GHz or equivalent. 8 GB RAM, 20 GB disk. Medium: Intel Core 2 Duo Dual-CPU, 2.4 GHz or equivalent. 8 to 16BG RAM GB RAM, 60 GB disk. Large: Intel Core 2 Duo Dual-CPU, 2.4 GHz or equivalent. 8 to 16BG RAM GB RAM, 80 GB disk. 				MANAGEABILITY		
OS SUPPORTED	 Windows Server 2008 R2 Standard, Data Center, and Enterprise Editions Windows Server 2012 Standard, Data Center, and Enterprise Editions Windows 7 Enterprise Windows 8 Enterprise Red Hat Enterprise Linux 6.1, 6.2, 6.3 Adv Oracle Enterprise Linux 6.1, 6.2, 6.3 Guest VMs for all the above: VMware ESXi 5.0, KVM, and Microsoft Hyper-V (Hyper-V Server 2008 R2 SP1) 				BILITY SOFTWARE		
SUPPORTED PLATFORMS AND HARDWARE	Brocade ServerIron® ADX® Series Application Delivery Switches Brocade FastIron® ADX® series Brocade FastIron® SX Series Brocade Exattron WS Series Brocade MLX® Series Brocade MLX® Series Brocade MLX® Core Routers Brocade MLX® Core Routers Brocade NetIron® CER 2000 Series Brocade VDX switches Brocade VDX switches Brocade VDX switches Brocade VDX switches Brocade IVX switches Grocade LVX switches Brocade			WARE			
UPGRADES	Brocade provides a non-disruptive path for upgrades from Brocade IronView® Network Manager (INM) or Brocade Data Center Fabric Manager (DCFM®).						
CONTACT	For additional ordering scenarios or questions, or BMI quoting instruction on support SKUs, please contact your Brocade representative.						

BROCADE²⁸

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