



BROCADE NETIRON CER 2000 SERIES FREQUENTLY ASKED QUESTIONS

Revision 1.0
March 31, 2011

Introduction

Delivering carrier-class Multi-Protocol Label Switching (MPLS) services requires intelligent edge routers that do not compromise on performance and resiliency. The Brocade® NetIron® CER 2000 Series is purpose-built to provide flexible, resilient, and secure IP- and MPLS-based services in a compact form factor.

The NetIron CER 2000 is available in 24- and 48-port 1 Gigabit Ethernet (GbE) copper and hybrid fiber versions with two optional 10 GbE uplink ports. All the ports of the NetIron CER 2000 are capable of forwarding IP and MPLS packets at wire speed without oversubscription. With less than 5 watts per Gbps of power consumption, service providers can push 48 to 136 Gbps of triple-play services through the NetIron CER 2000 while reducing their carbon footprint.

A broad set of MPLS services, highly scalable IP unicast and multicast routing features, and a low total cost of ownership make the NetIron CER 2000 an ideal choice for service providers that want to deliver Layer 2 and Layer 3 business services on a single device.

General Questions and Answers

Q What new enhancements to the NetIron CER 2000 are part of this announcement?

A The most critical enhancement is increased IPv4/IPv6 scalability, driven by the recent exhaustion of IPv4 addresses. Additional IPv4/IPv6 scalability will benefit service provider metro edge routers and peering routers, data center compact border routers, and campus edge routers.

Q What is now the maximum scalability of the NetIron CER 2000?

A The NetIron CER 2000 can scale up to 1.5 million IPv4 routes plus 256 IPv6 routes in hardware.

Q Where on the network should the NetIron CER 2000 be deployed?

A The NetIron CER 2000 is ideal for small to medium-sized service providers that want to push IP and MPLS features to the edge of their networks. As a result, the NetIron CER 2000 can be deployed as a compact and scalable Provider Edge (PE) router capable of converging Layer 2 and Layer 3 business services onto a single platform. With its highly scalable routing features and compact size, it can also be deployed as a campus border router and a Border Gateway Protocol (BGP) route reflector.

- Q Does the new Brocade Multi-Service IronWare release support the NetIron CER 2000 as well?**
- A Yes. The NetIron CER 2000 utilizes the same Brocade Multi-Service IronWare operating system that runs on the field-proven Brocade MLX and Brocade NetIron XMR Series of routers, and all of the new features are supported as well.
- Q When is the premium license required?**
- A The ADV_SVCS_PREM (Advanced Services Premium) license is required for advanced metro features such as MPLS, VPLS, 802.1ad, 802.1ag, and 802.3ah. Most Layer 3 and key Layer 2 functions such as RIP, OSPF, IS-IS, BGP, STP, MRP, and VSRP do not require the advanced license.
- Q Can the NetIron CER 2000 support the complete Internet routing table?**
- A Yes, the NetIron CER 2000 can store the entire Internet routing table in hardware and can support up to 1,500,000 IPv4 routes.
- Q Does the NetIron CER 2000 support IP multicast features?**
- A Yes, the NetIron CER 2000 provides comprehensive support for multicast switching and routing through a variety of protocols, including PIM-SM, PIM-DM, PIM-SSM, IGMP v2/v3, and other platform-independent capabilities.
- Q Is MPLS traffic engineering supported?**
- A The NetIron CER 2000 supports RSVP-TE, OSPF-TE, and ISIS-TE. In addition, it supports advanced resiliency features such as hot-standby Label Switched Paths (LSPs) and Fast Reroute.
- Q Are there any restrictions on which ports can support VPLS?**
- A Any port on NetIron CER 2000 can be designated as an access or core-facing port of a VPLS network. This is applicable for both the 1 GbE and 10 GbE ports.
- Q What is the advantage of PBB?**
- A The IEEE 802.1ah Provider Backbone Bridging (PBB) feature prevents the Provider Edge (PE) routers from learning customer MAC addresses and helps in scaling the VPLS service. The NetIron CER 2000 supports both the Provider Backbone (PB) and PBB features with an advanced software license.
- Q Is the NetIron CER 2000 MEF-certified?**
- A Yes. The NetIron CER 2000 supports the E-Line, E-LAN, and E-TREE services in accordance with the Metro Ethernet Forum (MEF) guidelines. The NetIron CER 2000 is certified for MEF 9, MEF 14, and MEF 21. For additional certifications, visit <http://metroethernetforum.org/> certification page.
- Q Does the NetIron CER 2000 have any QoS capabilities?**
- A Yes, the NetIron CER 2000 supports advanced Quality of Service (QoS) capabilities such as the use of two-rate, three-color traffic policers, egress shaping, and priority remarking. It also supports deep egress buffers capable of buffering 64 to 192 MB of transient traffic bursts.
- Q Can the NetIron CER 2000 monitor traffic?**
- A The NetIron CER 2000 supports hardware-based sFlow sampling that enables extensive Layer 2-7 traffic monitoring for IP and Carrier Ethernet services. In addition, the router supports port and Access Control List (ACL) mirroring based on VLAN-ID or IPv4/TCP/UDP flows.

Q What high-availability features does the NetIron CER 2000 support?

A The NetIron CER 2000 supports best-in-class hardware availability and survivability as well as the following network resiliency features:

- NEBS Level 3 compliance
- Hot-swappable, redundant, load-sharing AC/DC power supplies
- N+1 redundant, replaceable cooling system
- Front-to-back airflow
- Fault detection and recovery in a few milliseconds with Brocade MRP/MRP2MRP
- MRP2 support within PBB and PB networks

Q Is the 2 × 10 GbE module field-insertable?

A The 24-port models of the NetIron CER 2000 have a field-insertable 10 GbE module. The part number for this optional module is NI-CER-2024-2x10G. The 48-port models do not have a field-insertable option.

Q What are the power requirements for the NetIron CER 2000?

A A fully loaded NetIron CER 2000 draws anywhere between 135 to 350 watts, depending upon the model.

Q What services are available to support the NetIron CER 2000?

A Brocade Global Services offers a complete range of customer support, professional services, and the Brocade Network Monitoring Service (NMS) for the NetIron CER 2000.

Learn More

Q How do I find out more about the NetIron CER 2000?

A Contact your Brocade Sales Representative or OEM Partner for details. Or visit www.brocade.com/products.



© 2011 Brocade Communications Systems, Inc. All Rights Reserved. 04/11

Brocade, the B-wing symbol, BigIron, DCFM, DCX, Fabric OS, FastIron, IronView, NetIron, SAN Health, ServerIron, Turbolron, and Wingspan are registered trademarks, and Brocade Assurance, Brocade NET Health, Brocade One, Extraordinary Networks, MyBrocade, VCS, and VDX are trademarks of Brocade Communications Systems, Inc., in the United States and/or in other countries. Other brands, products, or service names mentioned are or may be trademarks or service marks of their respective owners.

