

# Guide to Brocade 5600 vRouter Documentation

Supporting Brocade 5600 vRouter 4.2R1

#### ° 2016, Brocade Communications Systems, Inc. All Rights Reserved.

Brocade, Brocade Assurance, the B-wing symbol, ClearLink, DCX, Fabric OS, HyperEdge, ICX, MLX, MyBrocade, OpenScript, VCS, VDX, Vplane, and Vyatta are registered trademarks, and Fabric Vision is a trademark of Brocade Communications Systems, Inc., in the United States and/or in other countries. Other brands, products, or service names mentioned may be trademarks of others.

Notice: This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered or to be offered by Brocade. Brocade reserves the right to make changes to this document at any time, without notice, and assumes no responsibility for its use. This informational document describes features that may not be currently available. Contact a Brocade sales office for information on feature and product availability. Export of technical data contained in this document may require an export license from the United States government.

The authors and Brocade Communications Systems, Inc. assume no liability or responsibility to any person or entity with respect to the accuracy of this document or any loss, cost, liability, or damages arising from the information contained herein or the computer programs that accompany it.

The product described by this document may contain open source software covered by the GNU General Public License or other open source license agreements. To find out which open source software is included in Brocade products, view the licensing terms applicable to the open source software, and obtain a copy of the programming source code, please visit <a href="http://www.brocade.com/support/oscd">http://www.brocade.com/support/oscd</a>.

# Contents

Preface	5
Document conventions	5
Text formatting conventions	5
Command syntax conventions	5
Notes, cautions, and warnings	6
Notes, cautions, and warnings Brocade resources	6
Contacting Brocade Technical Support	
Brocade customers	
Brocade OEM customers	7
Document feedback	
About This Guide	9
Brocade vRouter Documentation Library	11
Documentation map	
Software documentation	
API documentation	

# **Preface**

•	Document conventions	5
•	Brocade resources	6
•	Contacting Brocade Technical Support	6
•	Document feedback	-

## Document conventions

The document conventions describe text formatting conventions, command syntax conventions, and important notice formats used in Brocade technical documentation.

## Text formatting conventions

Text formatting conventions such as boldface, italic, or Courier font may be used in the flow of the text to highlight specific words or phrases.

Format	Description
<b>bold</b> text	Identifies command names
	Identifies keywords and operands
	Identifies the names of user-manipulated GUI elements
	Identifies text to enter at the GUI
<i>italic</i> text	Identifies emphasis
	Identifies variables
	Identifies document titles
Courier font	Identifies CLI output
	Identifies command syntax examples

## Command syntax conventions

Bold and italic text identify command syntax components. Delimiters and operators define groupings of parameters and their logical relationships.

Convention	Description
<b>bold</b> text	Identifies command names, keywords, and command options.
<i>italic</i> text	Identifies a variable.
value	In Fibre Channel products, a fixed value provided as input to a command option is printed in plain text, for example, <b>show</b> WWN.
[]	Syntax components displayed within square brackets are optional.
	Default responses to system prompts are enclosed in square brackets.
{ x   y   z }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
	In Fibre Channel products, square brackets may be used instead for this purpose.
x   y	A vertical bar separates mutually exclusive elements.
<>	Nonprinting characters, for example, passwords, are enclosed in angle brackets.

Convention	Description
	Repeat the previous element, for example, member[member].
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command
	input, enter the entire command at the prompt without the backslash.

## Notes, cautions, and warnings

Notes, cautions, and warning statements may be used in this document. They are listed in the order of increasing severity of potential hazards.

#### NOTE

A Note provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

#### **ATTENTION**

An Attention statement indicates a stronger note, for example, to alert you when traffic might be interrupted or the device might reboot.



#### **CAUTION**

A Caution statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.



#### **DANGER**

A Danger statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations.

## Brocade resources

Visit the Brocade website to locate related documentation for your product and additional Brocade resources.

You can download additional publications supporting your product at <a href="https://www.brocade.com">www.brocade.com</a>. Select the Brocade Products tab to locate your product, then click the Brocade product name or image to open the individual product page. The user manuals are available in the resources module at the bottom of the page under the Documentation category.

To get up-to-the-minute information on Brocade products and resources, go to MyBrocade. You can register at no cost to obtain a user ID and password.

Release notes are available on MyBrocade under Product Downloads.

White papers, online demonstrations, and data sheets are available through the Brocade website.

## Contacting Brocade Technical Support

As a Brocade customer, you can contact Brocade Technical Support 24x7 online, by telephone, or by e-mail. Brocade OEM customers contact their OEM/Solutions provider.

### Brocade customers

For product support information and the latest information on contacting the Technical Assistance Center, go to http://www.brocade.com/services-support/index.html.

If you have purchased Brocade product support directly from Brocade, use one of the following methods to contact the Brocade Technical Assistance Center 24x7.

Online	Telephone	E-mail
Preferred method of contact for non-urgent issues:  • My Cases through MyBrocade  • Software downloads and licensing tools  • Knowledge Base	Required for Sev 1-Critical and Sev 2-High issues:	support@brocade.com  Please include:      Problem summary     Serial number     Installation details     Environment description

## **Brocade OEM customers**

If you have purchased Brocade product support from a Brocade OEM/Solution Provider, contact your OEM/Solution Provider for all of your product support needs.

- OEM/Solution Providers are trained and certified by Brocade to support Brocade® products.
- Brocade provides backline support for issues that cannot be resolved by the OEM/Solution Provider.
- Brocade Supplemental Support augments your existing OEM support contract, providing direct access to Brocade expertise. For more information, contact Brocade or your OEM.
- · For questions regarding service levels and response times, contact your OEM/Solution Provider.

## Document feedback

To send feedback and report errors in the documentation you can use the feedback form posted with the document or you can e-mail the documentation team.

Quality is our first concern at Brocade and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you. You can provide feedback in two ways:

- Through the online feedback form in the HTML documents posted on www.brocade.com.
- By sending your feedback to documentation@brocade.com.

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.

# **About This Guide**

This guide describes all the guides that compose the documentation for the Brocade 5600 vRouter (referred to as a virtual router, vRouter, or router in the guide).

# Brocade vRouter Documentation Library

•	Documentation map	1
•	Software documentation	12
	API documentation	1.

## Documentation map



## Software documentation

## **TABLE 1** Overview documents

Document title	Description
Guide to Brocade 5600 vRouter Documentation	Describes all the guides that compose the documentation for the Brocade vRouter.
Brocade 5600 vRouter Quick Start Guide	Gets you started using and configuring the Brocade vRouter. It describes how to deploy the router and introduces you to the CLI and web GUI interfaces that you can use to access, configure, and manage the router.
Brocade 5600 vRouter IPv6 Support Configuration Guide	Describes IPv6 support on theBrocade vRouter.

## TABLE 2 Licensing

Document title	Description
Brocade 5600 vRouter License and Entitlement Management Configuration Guide	Introduces procedures for the management of evaluation licenses on the Brocade vRouter.

## TABLE 3 Software installation and upgrades

Document title	Description
Brocade 5600 vRouter Deployment Options	Outlines deployment options for the Brocade vRouter.
Installing and Upgrading Brocade 5600 vRouter AMI	Describes the Brocade vRouter Amazon Machine Image (AMI) and how to install it within the Amazon Web Services (AWS) cloud.
Installing and Upgrading Brocade 5600 vRouter on Hard Disks and Persistent Devices	Describes how to install and upgrade software on a persistent device, such as a hard disk, flash drive, or USB stick on the Brocade vRouter.
Installing and Upgrading Brocade 5600 vRouter on Hyper-V	Describes how to install and upgrade the Brocade vRouter image for Hyper-V systems.
Installing and Upgrading Brocade 5600 vRouter on Linux KVM	Describes how to install and upgrade the Brocade vRouter image for Linux KVM systems.
Installing and Upgrading Brocade 5600 vRouter on VMware	Describes how to install and upgrade the Brocade vRouter image for VMware systems.
Installing and Upgrading Brocade 5600 vRouter on XenServer	Describes how to install and upgrade the Brocade vRouter image for XenServer systems.
Installing the Brocade 5600 vRouter Using PXE Boot	Describes how to boot the Brocade vRouter over the network by using the Preboot eXecution Environment (PXE) protocol.
Using LiveCD to Run Brocade 5600 vRouter	Describes how to create and use a LiveCD for the Brocade vRouter.

### **TABLE 4** System and services

Document title	Description
Brocade 5600 vRouter ALG Configuration Guide	Describes the ALGs available on the Brocade vRouter.
Brocade 5600 vRouter BFD Configuration Guide	Describes how to run and configure the Bidirectional Forwarding Detection (BFD) protocol on Brocade vRouter.
Brocade 5600 vRouter Basic System Configuration Guide	Describes the architecture of the Brocade vRouter and basic system concepts. It also describes how to use the CLI of the router, perform basic system management and monitoring tasks, manage user accounts, access system logs, and hot-plug interfaces.
Brocade 5600 vRouter Bridging Configuration Guide	Describes how to configure Layer 2 bridging on the Brocade vRouter.
Brocade 5600 vRouter NAT Configuration Guide	Describes how to configure NAT on the Brocade vRouter.
Brocade 5600 vRouter Remote Management Configuration Guide	Describes how to configure SSH, Telnet, Web GUI access (HTTPS), NETCONF and SNMP for remote management of the Brocade vRouter.
Brocade 5600 vRouter Services Configuration Guide	Describes how to configure the DHCP, DHCPv6, DNS, flow monitoring, NHRP, sFlow,TWAMP, and port monitoring services on the Brocade vRouter.

### **TABLE 5** Interfaces

Document title	Description
Brocade 5600 vRouter LAN Interfaces Configuration Guide	Describes how to configure data plane, loopback, VLAN, L2TPv3, Q-in-Q, IP unnumbered, and Ethernet link bonding interfaces on the Brocade vRouter.

## **TABLE 6** Encapsulations and tunnels

Document title	Description
Brocade 5600 vRouter Tunnels Configuration Guide	Describes how to configure GRE, mGRE, IP-in-IP, and SIT tunnels on the Brocade vRouter.

## **TABLE 7** Unicast routing

Document title	Description
Brocade 5600 vRouter BGP Configuration Guide	Describes how to configure BGP on the Brocade vRouter.
Brocade 5600 vRouter Basic Routing Configuration Guide	Describes how to configure forwarding and routing on the Brocade vRouter.
Brocade 5600 vRouter OSPF Configuration Guide	Describes how to configure OSPF on the Brocade vRouter.
Brocade 5600 vRouter OSPFv3 Configuration Guide	Describes how to configure OSPFv3 on the Brocade vRouter.
Brocade 5600 vRouter Policy-based Routing Configuration Guide	Describes how to define and configure routing policies on the Brocade vRouter.
Brocade 5600 vRouter RIP Configuration Guide	Describes how to configure Routing Information Protocol (RIP) on the Brocade vRouter.
Brocade 5600 vRouter RIPng Configuration Guide	Describes how to configure Routing Information Protocol next generation (RIPng) on the Brocade vRouter.
Brocade 5600 vRouter Routing Policies Configuration Guide	Describes how to configure routing policies on the Brocade vRouter.

## **TABLE 8** Multicast routing

Document title	Description
Brocade 5600 vRouter IGMP and MLD Configuration Guide	Describes how to configure IGMP and MLD on the Brocade vRouter.
Brocade 5600 vRouter MSDP Configuration Guide	Describes how to configure and run the Multicast Source Discovery Protocol (MSDP) protocol for Brocade vRouter.
Brocade 5600 vRouter Multicast Routing Configuration Guide	Describes how to configure and run multicast routing for Brocade vRouter
Brocade 5600 vRouter PIM Configuration Guide	Describes how to configure PIM on the Brocade vRouter.

## **TABLE 9** Security

Document title	Description
Brocade 5600 vRouter Firewall Configuration Guide	Describes firewall functionality on the Brocade vRouter.

#### TABLE 10 VPN

Document title	Description
Brocade 5600 vRouter DMVPN Configuration Guide	Describes how to configure DMVPN on the Brocade vRouter.
Brocade 5600 vRouter Guide to VPN Support	Describes the VPN support available on the Brocade vRouter.
Brocade 5600 vRouter IPsec Site-to-Site VPN Configuration Guide	Describes how to configure site-to-site IPsec VPNs on the Brocade vRouter.
Brocade 5600 vRouter OpenVPN Configuration Guide	Describes how to configure OpenVPN on the Brocade vRouter.

## TABLE 10 VPN (continued)

Document title	Description
Brocade 5600 vRouter Remote Access IPsec VPN Configuration Guide	Describes how to configure Remote Access VPN on the Brocade vRouter.

## TABLE 11 QoS

Document title	Description
Brocade 5600 vRouter QoS Configuration Guide	Describes the QoS architecture and how to configure QoS on the Brocade vRouter.

### **TABLE 12** Availability

Document title	Description
Brocade 5600 vRouter High Availability Configuration Guide	Describes how to configure the Brocade vRouter to provide high availability.

# **API** documentation

## TABLE 13 API documentation

Document title	Description
Brocade 5600 vRouter Remote Access API Reference Guide	Describes how to use the Remote Access API 2.0 to remotely run commands on the Brocade vRouter over HTTPs.
Brocade 5600 vRouter Scripting Reference Guide	Describes how to use the Brocade 5600 vRouter Scripting API to create scripts that programmatically configure and administer the vRouter. Also describes how to create vcli scripts to access CLI commands on the vRouter.