



Preface

This preface describes the objectives and organization of this document and explains how to find additional information on related products and services. This preface contains the following sections:

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Objectives

This document describes the configuration and troubleshooting of the VPN Services Port Adapter (VSPA) and its associated Services SPA Carrier-600 (SSC-600) in the Catalyst 6500 Series switch.

This document does not contain the instructions to install the VSPA in the Catalyst 6500 Series switch. For information on installing the module, refer to the *Cisco VPN Services Port Adapter Hardware Installation Guide*.

Audience

This publication is for experienced network administrators who configure and maintain VPN systems and the Catalyst 6500 Series switch.

Document Revision History

Table 1 records technical changes to this document. The table shows the Cisco IOS software release number and document revision number for the change, the date of the change, and a brief summary of the change.

Table 1 Document Revision History

Cisco IOS Release No.	Revision	Date	Change Summary
12.2(33)SXI	OL-16406-01	November 2008	First release.

Organization

This document contains the following chapters:

Chapter	Title	Description
Chapter 1	Overview of the VPN Services Port Adapter	Provides an introduction to the VSPA and the command-line interface (CLI).
Chapter 2	Overview of the IPsec Features	Provides a summary of the IPsec modes and features supported by the VSPA.
Chapter 3	Configuring VPNs in Crypto-Connect Mode	Describes the general configuration of the VSPA in crypto-connect mode.
Chapter 4	Configuring VPNs in VRF Mode	Describes the general configuration of the VSPA in VRF mode.
Chapter 5	Configuring IPsec VPN Fragmentation and MTU	Describes the general configuration of IPsec VPN fragmentation and MTU for the VSPA.
Chapter 6	Configuring Quality of Service	Describes the configuration of the Quality of Service (QoS) features of the VSPA.
Chapter 7	Configuring IKE Features	Describes the configuration of the Internet Key Exchange (IKE) features of the VSPA.
Chapter 8	Configuring Enhanced IPsec Features	Describes the configuration of enhanced security and performance features of the VSPA.
Chapter 9	Configuring PKI	Describes the configuration of the Public Key Infrastructure (PKI) features of the VSPA.
Chapter 10	Configuring Advanced VPNs	Describes the configuration of the DMVPN and EasyVPN advanced features of the VSPA.
Chapter 11	Configuring Duplicate Hardware and IPsec Failover	Describes the configuration of IPsec failover using the duplicate hardware capabilities of the VSPA.
Chapter 12	Configuring Monitoring and Accounting	Describes the configuration of the monitoring and accounting features of the VSPA.
Chapter 13	Troubleshooting	Describes techniques that you can use to troubleshoot the operation of the VSPA.

Document Conventions

This document uses the following conventions:



Note

Means reader *take note*. Notes contain helpful suggestions or references to material not covered in the manual.



Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.



Tip

Means *the following information will help you solve a problem*.

Command descriptions use these conventions:

Convention	Description
boldface font	Commands and keywords are in boldface.
<i>italic font</i>	Arguments for which you supply values are in italics.
[]	Elements in square brackets are optional.
[x y z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.

Screen examples use these conventions:

<code>screen font</code>	Terminal sessions and information that the switch displays are in screen font.
<code>boldface screen font</code>	Information that you must enter is in boldface screen font.
<i><code>italic screen font</code></i>	Arguments for which you supply values are in italic screen font.
< >	Non-printing characters, such as passwords, are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or number sign (#) at the beginning of a line of code indicates a comment line.

Related Documentation

Additional information related to the VSPA can be found in the following resources:

- For VSPA hardware installation instructions and guidelines, see the *Cisco VPN Services Port Adapter Hardware Installation Guide* at this URL:
http://www.cisco.com/en/US/docs/interfaces_modules/services_modules/vspa/hardware/ivmhw_book.html
- For detailed information about the security configuration concepts described in this guide, see the *Cisco IOS Security Configuration Guide, Release 12.2* at this URL:
http://www.cisco.com/en/US/docs/ios/12_2/security/configuration/guide/fsecur_c.html
- For detailed information about the cryptographic commands used in this guide, see the *Cisco IOS Security Command Reference* at this URL:
http://www.cisco.com/en/US/docs/ios/security/command/reference/sec_book.html
- For information about configuring the Catalyst 6500 Series switch, see the *Catalyst 6500 Series Switch Software Configuration Guide, Release 12.2SXH* at this URL:
<http://www.cisco.com/en/US/docs/switches/lan/catalyst6500/ios/12.2SX/configuration/guide/book.html>
- For information about managing your system images and configuration files, refer to the *Cisco IOS Configuration Fundamentals Configuration Guide, Release 12.2* at this URL:
http://www.cisco.com/en/US/docs/ios/12_2/configfun/configuration/guide/ffun_c.html
- To understand the Cisco IOS command-line interface and Cisco IOS command modes, see the *Cisco IOS Configuration Fundamentals Command Reference* at this URL:
http://www.cisco.com/en/US/docs/ios/fundamentals/command/reference/cf_book.html

To determine whether a feature is supported by a Cisco IOS release, or to locate the software document for that feature, or to check the minimum software requirements of Cisco IOS software with the hardware installed on your switch, Cisco maintains the Software Advisor tool on Cisco.com. You must be a registered user on Cisco.com to access this tool. To access Software Advisor, click **Login** at Cisco.com, type “Software Advisor” in the SEARCH box, and click **GO**. Click the link for the Software Advisor tool.



Note You can access Cisco IOS software configuration and hardware installation and maintenance documentation on the World Wide Web at <http://www.cisco.com>. Translated documentation is available at the following URL: <http://www.cisco.com/web/siteassets/locator/index.html>.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

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This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

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The implementation was written so as to conform with Netscapes SSL.

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