



## About this Guide

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This preface describes the *ASR 5500VPC-SIUSF System Administration Guide*, how it is organized and its document conventions.

The *System Administration Guide* describes how to generally configure and maintain StarOS running on an ASR 5500 platform. It also includes information on monitoring system performance and troubleshooting.

Cisco Virtualized Packet Core-Single Instance (VPC-SI) consists of a single StarOS instance running in a virtual machine (VM) on a commercial off-the-shelf (COTS) server. This guide describes how to configure and administer the StarOS instance running within a hypervisor-controlled VM.

Cisco Ultra Service Framework (USF) is a pluggable framework for inline, subscriber-aware, enhanced services.



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**Note** Control and User Plane Separation (CUPS) represents a significant architectural change in the way StarOS-based products are deployed in the 3G, 4G, and 5G networks. Unless otherwise specified, it should not be assumed that any constructs (including, but not limited to, commands, statistics, attributes, MIB objects, alarms, logs, services) referenced in this document imply functional parity with CUPS products. References to any CUPS products or features are for informational purposes only. Please contact your Cisco Account or Support representative for any questions about parity between this product and any CUPS products.

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**Note** The documentation set for this product strives to use bias-free language. For purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

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**Note** The current release does not comply fully with Cisco's Security Development Lifecycle. Cisco has analyzed and identified the security vulnerabilities related to this release and closed the high-impacting vulnerabilities. Vulnerabilities will be disclosed in accordance with Cisco's Security Vulnerability Policy.

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This guide describes how to generally configure and maintain StarOS running on a virtualized platform. It also includes information on monitoring system performance and troubleshooting. Supplemental information

related to general StarOS operation and supported network gateway functions can be found in the StarOS documentation.

- [Conventions Used, on page ii](#)
- [Related Documentation, on page iii](#)
- [MIOs and DPCs, on page iv](#)
- [Contacting Customer Support, on page iv](#)

## Conventions Used

The following tables describe the conventions used throughout this documentation.

Notice Type	Description
Information Note	Provides information about important features or instructions.
Caution	Alerts you of potential damage to a program, device, or system.
Warning	Alerts you of potential personal injury or fatality. May also alert you of potential electrical hazards.

  

Typeface Conventions	Description
Text represented as a <code>screen display</code>	This typeface represents displays that appear on your terminal screen, for example:  <code>Login:</code>
Text represented as <b>commands</b>	This typeface represents commands that you enter, for example:  <b>show ip access-list</b>  This document always gives the full form of a command in lowercase letters. Commands are not case sensitive.
Text represented as a <b>command</b> <i>variable</i>	This typeface represents a variable that is part of a command, for example:  <b>show card</b> <i>slot_number</i>  <i>slot_number</i> is a variable representing the desired chassis slot number.
Text represented as menu or sub-menu names	This typeface represents menus and sub-menus that you access within a software application, for example:  Click the <b>File</b> menu, then click <b>New</b>

Command Syntax Conventions	Description
<p>{ <b>keyword</b> or <i>variable</i> }</p>	<p>Required keyword options and variables are those components that are required to be entered as part of the command syntax.</p> <p>Required keyword options and variables are surrounded by grouped braces { }. For example:</p> <pre>sctp-max-data-chunks { limit max_chunks   mtu-limit }</pre> <p>If a keyword or variable is not enclosed in braces or brackets, it is mandatory. For example:</p> <pre>snmp trap link-status</pre>
<p>[ <b>keyword</b> or <i>variable</i> ]</p>	<p>Optional keywords or variables, or those that a user may or may not choose to use, are surrounded by brackets.</p>
<p> </p>	<p>Some commands support multiple options. These are documented within braces or brackets by separating each option with a vertical bar.</p> <p>These options can be used in conjunction with required or optional keywords or variables. For example:</p> <pre>action activate-flow-detection { intitiation   termination }</pre> <p>or</p> <pre>ip address [ count number_of_packets   size number_of_bytes ]</pre>

## Related Documentation

The most up-to-date information for this product is available in the product *Release Notes* provided with each software release.

The following user documents are available on [www.cisco.com](http://www.cisco.com):

- *ASR 5500 Installation Guide*
- *AAA Interface Administration and Reference*
- *Command Line Interface Reference*
- *GTPP Interface Administration and Reference*
- *IPSec Reference*
- *Release Change Reference*
- *SNMP MIB Reference*
- *Statistics and Counters Reference*
- *Thresholding Configuration Guide*

- Product-specific and feature-specific Administration guides

## MIOs and DPCs

The ASR 5500 supports a variety of Management Input/Output and Data Processing Card types.

The currently supported Management Input/Output card types include:

- Management Input/Output (MIO)
- Universal Management Input/Output (UMIO)
- Management Input/Output version 2 (MIO2)

MIO and UMIO card types differ only by the UMIO requirement for a Universal chassis license. The MIO2 is supported on ASR 5500.

The currently supported Data Processing Card types include:

- Data Processing Card (DPC)
- Universal Data Processing Card (UDPC)
- Data Processing Card version 2 (DPC2)
- Universal Data Processing Card version 2 (UDPC2)

DPC and UDPC card types differ only by the UDPC requirement for a Universal chassis license. DPC2 and UDPC2 card types differ only by the UDPC2 requirement for a Universal chassis license. The DPC2/UDPC2 is supported on ASR 5500.

When reference is made to an MIO card or DPC in this guide, it is presumed to apply to all types of these cards as identified above.

## Contacting Customer Support

Use the information in this section to contact customer support.

Refer to the support area of <http://www.cisco.com> for up-to-date product documentation or to submit a service request. A valid username and password are required to access this site. Please contact your Cisco sales or service representative for additional information.