

## Installation — AC Power Supply Avaya Virtual Services Platform 9000

Release 3.4 NN46250-303 Issue 04.01 September 2013 All Rights Reserved.

#### Notice

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

#### Documentation disclaimer

"Documentation" means information published by Avaya in varying mediums which may include product information, operating instructions and performance specifications that Avaya generally makes available to users of its products. Documentation does not include marketing materials. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of documentation unless such modifications, additions, or deletions were performed by Avaya. End User agrees to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

#### Link disclaimer

Avaya is not responsible for the contents or reliability of any linked websites referenced within this site or documentation provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

#### Warranty

Avaya provides a limited warranty on its hardware and Software ("Product(s)"). Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this Product while under warranty is available to Avaya customers and other parties through the Avaya Support website: <u>http://support.avaya.com</u>. Please note that if you acquired the Product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to you by said Avaya Channel Partner and not by Avaya. "Software" means computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products or pre-installed on hardware products, and any upgrades, updates, bug fixes, or modified versions.

#### Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, HTTP://SUPPORT.AVAYA.COM/LICENSEINFO ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AUTHORIZED AVAYA CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AUTHORIZED AVAYA CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA. AN AVAYA AFFILIATE OR AN AVAYA AUTHORIZED AVAYA CHANNEL PARTNER; AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A

## BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE ("AVAYA").

Avaya grants you a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to you. "Designated Processor" means a Single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users.

#### License types

Designated System(s) License (DS). End User may install and use each copy of the Software only on a number of Designated Processors up to the number indicated in the order. Avaya may require the Designated Processor(s) to be identified in the order by type, serial number, feature key, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

#### Heritage Nortel Software

"Heritage Nortel Software" means the software that was acquired by Avaya as part of its purchase of the Nortel Enterprise Solutions Business in December 2009. The Heritage Nortel Software currently available for license from Avaya is the software contained within the list of Heritage Nortel Products located at <u>http://support.avaya.com/</u> <u>LicenseInfo</u> under the link "Heritage Nortel Products". For Heritage Nortel Software, Avaya grants Customer a license to use Heritage Nortel Software provided hereunder solely to the extent of the authorized activation or authorized usage level, solely for the purpose specified in the Documentation, and solely as embedded in, for execution on, or (in the event the applicable Documentation permits installation on non-Avaya equipment) for communication with Avaya equipment. Charges for Heritage Nortel Software may be based on extent of activation or use authorized as specified in an order or invoice.

#### Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, or hardware provided by Avaya. All content on this site, the documentation and the Product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

#### Third Party Components

"Third Party Components" mean certain software programs or portions thereof included in the Software that may contain software (including open source software) distributed under third party agreements ("Third Party Components"), which contain terms regarding the rights to use certain portions of the Software ("Third Party Terms"). Information regarding distributed Linux OS source code (for those Products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the Documentation or on Avaya's website at: <a href="http://support.avaya.com/Copyright">http://support.avaya.com/Copyright</a>. You agree to the Third Party Terms for any such Third Party Components.

#### **Preventing Toll Fraud**

"Toll Fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of Toll Fraud associated with your system and that, if Toll Fraud occurs, it can result in substantial additional charges for your telecommunications services.

#### Avaya Toll Fraud intervention

If you suspect that you are being victimized by Toll Fraud and you need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support website: <a href="http://support.avaya.com">http://support.avaya.com</a>. Suspected security vulnerabilities with Avaya products should be reported to Avaya by sending mail to: security@avaya.com.

#### Trademarks

The trademarks, logos and service marks ("Marks") displayed in this site, the Documentation and Product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the Documentation and Product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party.

#### Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners. Linux $^{\otimes}$  is the registered trademark of Linus Torvalds in the U.S. and other countries.

#### **Downloading Documentation**

For the most current versions of Documentation, see the Avaya Support website: <u>http://support.avaya.com</u>.

#### Contact Avaya Support

See the Avaya Support website: <u>http://support.avaya.com</u> for product notices and articles, or to report a problem with your Avaya product. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: <u>http://support.avaya.com</u>, scroll to the bottom of the page, and select Contact Avaya Support.

#### Contents

Chapter 1: Regulatory information and safety precautions	7
International Regulatory Statements of Conformity	
Russia Belarus and Kazakhstan Requirement	7
National Electromagnetic Compliance (EMC) Statements of Compliance	8
BSMI statement (Taiwan only)	10
Chinese EMI and safety warnings	10
KCC Notice (Republic of Korea only)	
National Safety Statements of Compliance	11
Información NOM (únicamente para México)	12
National Environmental Statement of Compliance	13
Restriction on Hazardous Substances Directive Compliance Statement	13
WEEE Directive Compliance Statement	14
Safety Messages	
Chapter 2: Introduction	19
Purpose	19
Related resources	19
Documentation	19
Training	19
Avaya Mentor videos	19
Support	20
Searching a documentation collection	
Chapter 3: New in this release	23
Features	23
Other changes	23
Chapter 4: AC power supply fundamentals	25
9006AC power supply	
Minimum number of power supplies required	27
Power supply LEDs	28
Chassis and power supply compatibility	29
Chapter 5: AC power supply installation for the VSP 9010 AC chassis	31
Removing the air inlet cover	
Installing the power supply	33
Removing the power supply	36
Chapter 6: AC power supply installation for the VSP 9012 chassis	39
Removing the logo plate	
Installing the AC power supply	40
Removing the AC power supply	43
Chapter 7: Electrical specifications	
9006AC specifications.	
Chapter 8: Power cord specifications	
Chapter 9: Translations of safety messages	
Class A electromagnetic interference caution statement	
Electrostatic discharge caution statement.	
Electric shock danger statement	

ssary 55
----------

# Chapter 1: Regulatory information and safety precautions

Read the information in this section to learn about regulatory conformities and compliances.

## **International Regulatory Statements of Conformity**

This is to certify that the Avaya Virtual Services Platform 9000 chassis and components installed within the chassis were evaluated to the international regulatory standards for electromagnetic compliance (EMC) and safety and were found to have met the requirements for the following international standards:

- EMC—Electromagnetic Emissions—CISPR 22, Class A
- EMC—Electromagnetic Immunity—CISPR 24
- Electrical Safety-IEC 60950, with CB member national deviations

Further, the equipment has been certified as compliant with the national standards as detailed in the following sections.

## **Russia Belarus and Kazakhstan Requirement**

В целях соблюдения действующего законодательства, продукты Компании Авайя, которые поставляются в Россию, Белоруссию и Казахстан, поставляются с конфигурацией, которая соответствует текущим требованиям нормативных актов. Любые изменения предустановленного программного обеспечения или прошивки программно-аппаратного комплекса, включая установку иной прошивки, запрещаются, а в случае таких изменений, лицо или компания их осуществившие несут ответственность на свой страх и риск. Компания Авайя не несет ответственности за внесение каких-либо изменений в продукт, произведенный на или для использования на территории России, Белоруссии и Казахстана, кроме модификации, которые выполнены и сертифицированы Компанией Авайя.

In order to comply with existing laws, Avaya's products that are supplied to Russia, Belarus, and Kazakhstan are supplied with a configuration which is in line with existing legislation. Modifications may lead to product certifications becoming invalid. Any modification of preinstalled software and firmware, including installation of other or more current firmware or software, therefore is done at the responsibility of the person or company executing the changes. Avaya is not responsible for any modifications to the product made on or for use on the territory of Russia, Belarus and Kazakhstan other than modifications executed and certified by Avaya itself.

# National Electromagnetic Compliance (EMC) Statements of Compliance

#### FCC Statement (USA only)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to take whatever measures may be necessary to correct the interference at their own expense.

#### **ICES Statement (Canada only)**

#### **Canadian Department of Communications Radio Interference Regulations**

This digital apparatus (Virtual Services Platform 9000 chassis and installed components) does not exceed the Class A limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

#### Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (Virtual Services Platform 9000 chassis) respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.

#### CE Marking Statement (Europe only)

#### EN 55022 Statements

This is to certify that the Virtual Services Platform 9000 chassis and components installed within the chassis are shielded against the generation of radio interference in accordance with the application of Council Directive 2004/108/EC. Conformity is declared by the application of EN 55022 Class A (CISPR 22).

#### Caution:

This device is a Class A product. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users are required to take appropriate measures necessary to correct the interference at their own expense.

#### EN 55024 Statement

This is to certify that the Virtual Services Platform 9000 chassis is shielded against the susceptibility to radio interference in accordance with the application of Council Directive 2004/108/EC. Conformity is declared by the application of EN 55024 (CISPR 24).

#### EN 300386 Statement

The Virtual Services Platform 9000 chassis complies with the requirements of EN 300386 V1.3.3 for emissions and for immunity for a Class A device intended for use in either Telecommunications centre or locations other than telecommunications centres given the performance criteria as specified by the manufacturer.

#### EC Declaration of Conformity

This product conforms to the provisions of the R&TTE Directive 1999/5/EC.

#### European Union and European Free Trade Association (EFTA) Notice



All products labeled with the CE marking comply with R&TTE Directive (1999/5/ EEC) which includes the Electromagnetic Compliance (EMC) Directive (2004/108/EC) and the Low Voltage Directive (2006/95/EC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms (ENs). The equivalent international standards are listed in parenthesis.

- EN 55022 (CISPR 22)–Electromagnetic Interference
- EN 55024 (IEC 61000-4-2, -3, -4, -5, -6, -8, -11)-Electromagnetic Immunity
- EN 61000-3-2 (IEC 610000-3-2)-Power Line Harmonics
- EN 61000-3-3 (IEC 610000-3-3)-Power Line Flicker

#### VCCI Statement (Japan/Nippon only)

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI) for information technology equipment. If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準 に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波 妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ず るよう要求されることがあります。

## **BSMI** statement (Taiwan only)

#### **BSMI** statement (Taiwan only)

This is a Class A product based on the standard of the Bureau of Standards, Metrology and Inspection (BSMI) CNS 13438 Class A and CNS 14336-1.

#### 警告使用者:

這是甲類的資訊**產品,在居住的環境中使用時,可能會造成射頻** 干擾,在這種情況下,使用者會被要求採取某些適當的對策。

## Chinese EMI and safety warnings

#### Voltage:

#### Risk of injury by electric shock

Before working on this equipment, be aware of good safety practices and the hazards involved with electrical circuits. Use only power cords that have a good grounding path. Ensure that the switch is properly grounded before powering on the unit.

#### ▲ 電壓警告:

#### 觸電受傷的危險性

在此設備上進行作業之前,要認知到良好的安全行為和**涉及電子** 電路可能的危害。使用的電源線需有接地路徑。確保供電給設備 之前,有適當的接地。

#### Warning:

Disconnecting the power cord is the only way to turn off power to this device. Always connect the power cord in a location that can be reached quickly and safely in case of emergency.

### ▲ 警告使用者:

斷開電源線,是關閉該設備電源的唯一方法。始終確保連接電源線的位置,在緊急情況下,是可以快速且安全抵達的一個位置。

#### **Electrostatic alert:**

#### **Risk of equipment damage**

To prevent damage from electrostatic discharge, always wear an antistatic wrist strap connected to an ESD jack when connecting cables or performing maintenance on this device.

▲ 靜電提醒: 設備損壞的風險 為了防止靜電放電的破壞,在此設備上連接纜線或執行維護時, 始終戴上防靜電腕帶並連接到ESD插孔。

## KCC Notice (Republic of Korea only)

This device has been approved for use in Business applications only per the Class A requirements of the Republic of Korea Communications Commission (KCC). This device may not be sold for use in a non-business application.

#### For Class A:

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

## **National Safety Statements of Compliance**

#### **CE Marking Statement (Europe only)**

#### EN 60 950 Statement

This is to certify that the Virtual Services Platform 9000 chassis and components installed within the chassis are in compliance with the requirements of EN 60 950 in accordance with the Low Voltage Directive. Additional national differences for all European Union countries

have been evaluated for compliance. Some components installed within the Virtual Services Platform 9000 chassis may use a nickel-metal hydride (NiMH) and/or lithium-ion battery. The NiMH and lithium-ion batteries are long-life batteries, and it is very possible that you will never need to replace them. However, should you need to replace them, refer to the individual component manual for directions on replacement and disposal of the battery.

#### Denan Statement (Japan/Nippon only)



- 接続ケーブル、電源コード、ACアダプタなどの部品は、必ず製品に同梱されております添付品または指定品をご使用ください。添付品・指定品以外の部品をご使用になると故障や動作不良、火災の原因となることがあります。
- 同梱されております付属の電源コードを他の機器には使用しないでください。上記注意事 項を守らないと、死亡や大怪我など人身事故の原因となることがあります。

## Información NOM (únicamente para México)

La información siguiente se proporciona en el dispositivo o en los dispositivos descritos en este documento, en cumplimiento con los requisitos de la Norma Oficial Mexicana (NOM):

Exportador:	Avaya Inc. 4655 Great America Parkway Santa Clara, CA 95054 USA
Importador:	Avaya Communication de México SA de CV Av. Presidente Masarik 111 Piso 6 Col Chapultepec Morales Deleg. Miguel HIdalgo México D.F. 11570
Embarcar a:	Model 9006AC:
	100-120 VCA, 47–63 Hz, 13.3 A (100 VCA) - 11.2 A (120 VCA) max. por fuente de poder
	200-240 VCA, 47–63 Hz, 11.8 A (200 VCA) – 9.9 A (240 VCA) max. por fuente de poder

#### NOM Statement (Mexico only)

The following information is provided on the devices described in this document in compliance with the safety requirements of the Norma Oficial Méxicana (NOM):

Exporter:	Avaya Inc. 4655 Great America Parkway Santa Clara CA 95054 USA
Importer:	Avaya Communication de México, S.A. de C.V. Av. Presidente Masarik 111 Piso 6 Col Chapultepec Morales Deleg. Miguel HIdalgo México D.F. 11570
Input:	Model 9006AC:
	100-120 VAC, 47–63 Hz, 13.3 A (100 VAC) - 11.2 A (120 VAC) maximum for each power supply
	200-240 VAC, 47–63 Hz, 11.8 A (200 VAC) – 9.9 A (240 VAC) maximum for each power supply

## **National Environmental Statement of Compliance**

The WEEE Directive 2002/96/EC and RoHS (Restriction of Hazardous Substances) Directive 2002/95/EC set collection, recycling and recovery targets for various categories of electrical products and their waste.

## **Restriction on Hazardous Substances Directive Compliance Statement**

The Restriction on Hazardous Substances Directive (RoHS) (2002/95/EC), which accompanies the WEEE Directive, bans the use of heavy metals and brominated flame-retardants in the manufacture of electrical and electronic equipment. Specifically, restricted materials under the RoHS Directive are Lead (including solder used in PCB's), Cadmium, Mercury, Hexavalent Chromium, and Bromine.

Avaya declares compliance with the European Union (EU) RoHS Directive (2002/95/EC) in that Lead, which is a restricted hazardous substance, is used only in accordance to the exemption(s) to Articile 4(1), item 7 granted by the European Union (EU) RoHS DIrective (2002/95/EC) in the Annex—"lead in solders for network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunication".

## WEEE Directive Compliance Statement



This product at end of life is subject to separate collection and treatment in the EU Member States, Norway, and Switzerland and therefore is marked with the symbol shown at the left. Treatment applied at end of life of these products in these countries shall comply with the applicable national laws implementing Directive 2002/96/EC on Waste of Electrical and Electronic Equipment (WEEE).

Avaya declares compliance with the European Union (EU) WSEEE Directive (2002/96/ EC).

## **Safety Messages**

This section describes the different precautionary notices used in the Avaya Virtual Services Platform 9000 documentation. This section also contains precautionary notices that you must read for safe operation of Avaya Virtual Services Platform 9000.

#### Notices

Notice paragraphs alert you about issues that require your attention. The following sections describe the types of notices. For a list of safety messages used in a document and their translations, see the Translations of safety messages chapter.

#### **Attention Notice**

#### Important:

An attention notice provides important information regarding the installation and operation of Avaya products.

#### **Caution ESD Notice**

#### **Electrostatic alert:**

#### ESD

ESD notices provide information about how to avoid discharge of static electricity and subsequent damage to Avaya products.

#### Electrostatic alert: ESD (décharge électrostatique)

La mention ESD fournit des informations sur les moyens de prévenir une décharge électrostatique et d'éviter d'endommager les produits Avaya.

#### Electrostatic alert:

#### ACHTUNG ESD

ESD-Hinweise bieten Information dazu, wie man die Entladung von statischer Elektrizität und Folgeschäden an Avaya-Produkten verhindert.

#### Electrostatic alert:

#### PRECAUCIÓN ESD (Descarga electrostática)

El aviso de ESD brinda información acerca de cómo evitar una descarga de electricidad estática y el daño posterior a los productos Avaya.

## Electrostatic alert:

#### CUIDADO ESD

Os avisos do ESD oferecem informações sobre como evitar descarga de eletricidade estática e os conseqüentes danos aos produtos da Avaya.

#### Electrostatic alert:

#### ATTENZIONE ESD

Le indicazioni ESD forniscono informazioni per evitare scariche di elettricità statica e i danni correlati per i prodotti Avaya.

#### Caution Notice

#### Caution:

Caution notices provide information about how to avoid possible service disruption or damage to Avaya products.

#### Caution:

#### ATTENTION

La mention Attention fournit des informations sur les moyens de prévenir une perturbation possible du service et d'éviter d'endommager les produits Avaya.

#### Caution: ACHTUNG

Achtungshinweise bieten Informationen dazu, wie man mögliche Dienstunterbrechungen oder Schäden an Avaya-Produkten verhindert.

#### Caution:

#### PRECAUCIÓN

Los avisos de Precaución brindan información acerca de cómo evitar posibles interrupciones del servicio o el daño a los productos Avaya.

#### Caution:

#### CUIDADO

Os avisos de cuidado oferecem informações sobre como evitar possíveis interrupções do serviço ou danos aos produtos da Avaya.

#### Caution:

#### ATTENZIONE

Le indicazioni di attenzione forniscono informazioni per evitare possibili interruzioni del servizio o danni ai prodotti Avaya.

#### Warning Notice

#### Warning:

Warning notices provide information about how to avoid personal injury when working with Avaya products.

#### Warning:

#### AVERTISSEMENT

La mention Avertissement fournit des informations sur les moyens de prévenir les risques de blessure lors de la manipulation de produits Avaya.

#### Warning:

#### WARNUNG

Warnhinweise bieten Informationen dazu, wie man Personenschäden bei der Arbeit mit Avaya-Produkten verhindert.

#### Warning: ADVERTENCIA

Los avisos de Advertencia brindan información acerca de cómo prevenir las lesiones a personas al trabajar con productos Avaya.

#### Warning:

#### AVISO

Os avisos oferecem informações sobre como evitar ferimentos ao trabalhar com os produtos da Avaya.

#### Warning:

#### **AVVISO**

Le indicazioni di avviso forniscono informazioni per evitare danni alle persone durante l'utilizzo dei prodotti Avaya.

#### **Danger High Voltage Notice**

#### Voltage:

Danger—High Voltage notices provide information about how to avoid a situation or condition that can cause serious personal injury or death from high voltage or electric shock.

#### Voltage:

La mention Danger—Tension élevée fournit des informations sur les moyens de prévenir une situation ou une condition qui pourrait entraîner un risque de blessure grave ou mortelle à la suite d'une tension élevée ou d'un choc électrique.

#### Voltage:

#### GEFAHR

Hinweise mit "Vorsicht – Hochspannung" bieten Informationen dazu, wie man Situationen oder Umstände verhindert, die zu schweren Personenschäden oder Tod durch Hochspannung oder Stromschlag führen können.

#### Voltage:

#### PELIGRO

Los avisos de Peligro-Alto voltaje brindan información acerca de cómo evitar una situación o condición que cause graves lesiones a personas o la muerte, a causa de una electrocución o de una descarga de alto voltaje.

#### Voltage:

#### PERIGO

Avisos de Perigo—Alta Tensão oferecem informações sobre como evitar uma situação ou condição que possa causar graves ferimentos ou morte devido a alta tensão ou choques elétricos.

## Voltage:

#### PERICOLO

Le indicazioni Pericolo—Alta tensione forniscono informazioni per evitare situazioni o condizioni che potrebbero causare gravi danni alle persone o il decesso a causa dell'alta tensione o di scosse elettriche.

#### Danger Notice

#### Danger:

Danger notices provide information about how to avoid a situation or condition that can cause serious personal injury or death.

#### Danger:

La mention Danger fournit des informations sur les moyens de prévenir une situation ou une condition qui pourrait entraîner un risque de blessure grave ou mortelle.

#### Danger:

#### GEFAHR

Gefahrenhinweise stellen Informationen darüber bereit, wie man Situationen oder Umständen verhindert, die zu schweren Personenschäden oder Tod führen können.

#### Danger:

#### PELIGRO

Los avisos de Peligro brindan información acerca de cómo evitar una situación o condición que pueda causar lesiones personales graves o la muerte.

#### Danger:

#### PERIGO

Avisos de perigo oferecem informações sobre como evitar uma situação ou condição que possa causar graves ferimentos ou morte.

### Danger:

#### PERICOLO

Le indicazioni di pericolo forniscono informazioni per evitare situazioni o condizioni che potrebbero causare gravi danni alle persone o il decesso.

## **Chapter 2: Introduction**

## **Purpose**

This document provides information about the AC power supplies, and provides instructions about how to install an AC power supply in the Avaya Virtual Services Platform 9000 chassis.

## **Related resources**

## **Documentation**

See Avaya Virtual Services Platform 9000 Documentation Roadmap, NN46250-100, for a list of the documentation for this product.

## Training

Ongoing product training is available. For more information or to register, you can access the website at <u>http://avaya-learning.com/</u>.

Course code	Course title
4D00010E	Knowledge Access: ACIS - Avaya ERS 8000 and VSP 9000 Implementation
5D00040E	Knowledge Access: ACSS - Avaya VSP 9000 Support

## **Avaya Mentor videos**

Avaya Mentor is an Avaya-run channel on YouTube that includes technical content on how to install, configure, and troubleshoot Avaya products.

- Go to http://www.youtube.com/AvayaMentor and perform one of the following actions:
  - Enter a key word or key words in the Search Channel to search for a specific product or topic.
  - Scroll down Playlists, and click the name of a topic to see the available list of videos posted on the site.

## Support

Visit the Avaya Support website at <u>http://support.avaya.com</u> for the most up-to-date documentation, product notices, and knowledge articles. You can also search for release notes, downloads, and resolutions to issues. Use the online service request system to create a service request. Chat with live agents to get answers to questions, or request an agent to connect you to a support team if an issue requires additional expertise.

## Searching a documentation collection

On the Avaya Support website, you can download the documentation library for a specific product and software release to perform searches across an entire document collection. For example, you can perform a single, simultaneous search across the collection to quickly find all occurrences of a particular feature. Use this procedure to perform an index search of your documentation collection.

#### Before you begin

- Download the documentation collection zip file to your local computer.
- You must have Adobe Acrobat or Adobe Reader installed on your computer.

#### Procedure

- 1. Extract the document collection zip file into a folder.
- 2. Navigate to the folder that contains the extracted files and open the file named cproduct\_name\_release>.pdx, for example, vsp9000\_3.3x.pdx.
- 3. In the Search dialog box, select the option **In the index named** cproduct\_name\_release>.pdx.
- 4. Enter a search word or phrase.
- 5. Select any of the following to narrow your search:
  - · Whole words only
  - Case-Sensitive
  - Include Bookmarks

- Include Comments
- 6. Click Search.

The search results show the number of documents and instances found. You can sort the search results by Relevance Ranking, Date Modified, Filename, or Location. The default is Relevance Ranking.

Introduction

## **Chapter 3: New in this release**

The following sections describe what is new in *Avaya Virtual Services Platform* 9000 Installation — AC *Power Supply*, NN46250– 303, for Release 3.4.

## **Features**

See the following sections for information about feature-related changes.

#### Virtual Services Platform 9010 AC chassis

Release 3.4 adds support for a 10-slot AC chassis, the Virtual Services Platform 9010 AC. For more information, see <u>AC power supply installation for the VSP 9010 AC chassis</u> on page 31.

## Other changes

See the following section for information about changes that are not feature-related.

#### **New Introduction chapter**

The Introduction chapter replaces the Purpose of this document and Customer service chapters.

New in this release

# Chapter 4: AC power supply fundamentals

This chapter provides basic information about the Avaya Virtual Services Platform 9000 AC power supplies. Each power supply contains its own fans and independently draws cooling air in from the front of the power supply and exhausts air out the back of the power supply. Unpopulated slots do not affect cooling of populated slots.

## 9006AC power supply

The input voltage range for the 9006AC power supply is 90–140 VAC for a 120 VAC nominal connection, and 185–275 VAC for a 240 VAC nominal connection.

The output power for the 9006AC is limited to 1,200 W maximum at 90–140 VAC input voltage conditions. To obtain full output power of 2,000 W, you must connect the 9006AC power supply to a 185–275 VAC input voltage source.

#### Important:

For proper load balancing, Avaya recommends that you power all supplies in a chassis from different circuits with the same voltage source, and that you use power supplies of the same model.

This power supply is hot swappable; you can remove the power supply from the Virtual Services Platform 9000 without powering off the system.

The AC power supply is keyed so that you can insert it only into an AC-compatible chassis.

The 9006AC power supply measures 1.625 inches (in.) x 4 in. x 13.875 in. (41.3 millimeter [mm] x 101.6 mm x 352.4 mm) and weighs 5 pounds (2.27 kilograms).

See <u>Electrical specifications</u> on page 45 for AC input power specifications.

The total input power consumption of the components (modules and cooling modules) must not exceed the output power rating of the 9006AC power supply.

#### 9006AC power supply features

The 9006 power supply contains the following features:

- AC input under-voltage and over-voltage protection
- DC output over-voltage and over-current protection
- over-temperature warning and protection
- power factor correction (meets EN/IEC 61000-3-2 and EN60555-2 requirements)

- redundant, parallel operation with active load sharing
- internal front-to-back cooling with variable-speed fan control

#### **Redundant power configuration**

If a chassis has a redundant power supply configuration and one power supply fails, the chassis continues to operate with no interruption of service. The chassis continues to supply the same output power with the remaining power supplies.

If a chassis has the minimum power supply configuration (nonredundant configuration) and one power supply fails, the system loses power and network connectivity. A trap and syslog message indicates that the configuration is nonredundant.

With a minimum configuration and a power supply failure, the software powers down lower priority interface modules until it establishes the positive power margin. For more information about how to configure the slot priority, see *Avaya Virtual Services Platform 9000 Administration*, NN46250–600.

#### Important:

Avaya recommends that you operate the Virtual Services Platform 9000 system in a redundant configuration at all times to ensure a maximum network up time.

The following figure shows a redundant power supply configuration using six 9006AC power supplies in a Virtual Services Platform 9012 chassis.



Figure 1: Redundant power supplies in the VSP 9012 chassis

You can operate the 9006AC power supplies separately, or in parallel, or parallel redundant configurations.

#### Important:

Avaya recommends that you install each power supply on its own dedicated branch circuit for electrical installation reasons.

## Minimum number of power supplies required

To configure a Virtual Services Platform 9000 system, consider the total power consumption to ensure proper system performance. For more information about the number of power supplies required for your configuration, see *Avaya Virtual Services Platform 9000 Installation* — *Chassis*, NN46250-304.

To determine how many power supplies you need, you can also download *ERS 8000 / VSP 9000 Power Supply Calculator*, NN48500–519 from the **System Management & Planning** 

section of the Virtual Services Platform 9000 product documentation at <u>https://support.avaya.com</u>.

If the total power provided by the power supplies falls below the switch requirement, the polling software displays the following message on the console: chCheckPowerUsage: One or more cards running low on power.

You can view the total amount of power the switch uses, and the total amount of power the power supplies provide by using the following commands:

- Shows power information show sys-info power
- Shows power management information show sys power

## Power supply LEDs

The following table describes the LED operation for the AC power supplies.

Table	1:	Power	supply	LEDs
-------	----	-------	--------	------

AC OK (green)	DC OK (green)	Service (amber)	Fault (red)	Condition
On	On	Off	Off	OK
On	On	On	Off	Thermal alarm (5C before shutdown)
On	Off	On	On	Thermal shutdown
On	Off	Off	On	Defective fan
On	Off	Off	On	Blown AC fuse in unit
Off	On	Off	Off	No AC for less than 15 ms on a single unit
blinks	Off	Off	Off	AC present but not within limits
Off	Off	Off	Off	AC not present
On	Off	Off	On	Boost stage failure
On	Off	Off	On	Over voltage latched shutdown
On	On	Off	On	Non-catastrophic internal failure
On	Off	Off	Off	Standby

The 9080CP module also provides LEDs for the power supplies. Software on the 9080CP module automatically determines whether you have installed the 9080CP module in the Virtual

Services Platform 9010 chassis or the Virtual Services Platform 9012 chassis. You do not have to update the configuration.

The 9080CP module provides six LEDs for power supplies. The Virtual Services Platform 9010 chassis can use a maximum of eight power supplies. On the 9080CP module installed in a Virtual Services Platform 9010 chassis, the LED for Auxiliary module 1 corresponds to power supply 7, and the LED for Auxiliary module 2 corresponds to power supply 8.

For more information about the LEDs on the 9080CP module, see Avaya Virtual Services *Platform 9000 Installation — Modules*, NN46250–301.

## Chassis and power supply compatibility

The following table indicates the compatibility between chassis and AC power supply models.

#### Table 2: Chassis and AC power supply compatibility

Power supply	VSP 9010AC chassis	VSP 9012 chassis
9006AC	Supported	Supported

AC power supply fundamentals

# Chapter 5: AC power supply installation for the VSP 9010 AC chassis

This chapter describes the procedures to install AC power supplies in the Avaya Virtual Services Platform 9010 AC chassis. The Virtual Services Platform 9010 AC chassis provides eight slots for power supplies.

You need qualified service personnel to install and replace Virtual Services Platform 9000 components.

#### Before you begin

#### Voltage:

#### Risk of injury by electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

#### About this task

For information about the minimum software version required to support the hardware, see Avaya Virtual Services Platform 9000 Release Notes, NN46250-401.

#### Important:

Avaya recommends that you install each power supply on its own dedicated branch circuit for electrical installation reasons.

The following table lists the estimated time to install an AC power supply for the Virtual Services Platform 9010 AC. The installation time depends on the number of power supplies you are installing.

#### Table 3: Estimated time

Task	Estimated Time
Removing the air inlet cover	Less than 1 minute
Installing the AC power supply	1 minute

The Virtual Services Platform 9010 chassis ships with no installed power supplies. In the front of the chassis, power supply slots are numbered increasing from left to right, with 1, 2, 3, and 4 on the first row, and then 5, 6, 7, and 8 on the second row. Install the first power supply in the top-left slot.

The individual on and off power switches and inlet connectors at the back of the Virtual Services Platform 9010 AC chassis are numbered decreasing from left to right, with 4, 3, 2, and 1 on the first row, and then 8, 7, 6, and 5 on the second row.

## Removing the air inlet cover

Before you can install or remove a power supply or cooling module, you must remove the air inlet cover from the chassis.

#### Procedure

- 1. Grasp the cover on each side.
- 2. Lift the cover up and away from the chassis.



## Installing the power supply

Install the power supply to provide a power source to the system and components.

#### Before you begin

- Remove the air inlet cover.
- Remove the existing power supply or power supply filler panel.

#### Voltage:

#### Risk of injury from electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

#### Caution:

If you must reinsert a power supply, ensure that the power supply fans stop spinning. When the fans stop spinning, the power supply is discharged and ready to be reinserted.

#### About this task

You can only install the power supply one way. The power supplies are blocked to prevent accidental upsidedown installation. If you meet resistance, you may have the module upsidedown.

#### Procedure

1. Use two hands to slide the power supply into the slot until the action lever clicks.



2. Rotate the action lever closed to seat the power supply and engage the retaining clip.





3. At the back of the chassis, connect an AC power cord from the AC power inlet to a power outlet.

4. Replace the air inlet cover.

## Removing the power supply

Remove a power supply to replace it with a new power supply. After you remove a power supply, the LED on the power supply turns off, and the chassis automatically redistributes the load to the remaining power supplies.

#### Before you begin

• Remove the air inlet cover.

#### Voltage:

#### Risk of injury from electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

#### About this task

When you remove a power supply, turn off power to a power supply, or remove the power cord that connects to a power supply, you must wait 15 seconds before you return power to that power supply. The power supply must fully power down before it can initialize again.

If you remove a power supply and do not have a replacement power supply, you must install a filler panel in the empty power supply slot. If you do not have a replacement power supply or filler panel, leave the original supply in place. Do not operate the Virtual Services Platform 9010 chassis with empty power supply slots.

#### Procedure

- 1. Turn off the power supply switch at the back of the chassis.
- 2. Press the retaining clip to release the action lever.


- 3. Rotate the action lever open to unseat the power supply, moving it slightly forward.
- 4. Use both hands to pull the power supply from the chassis.
- 5. Install a new power supply or power supply filler panel in the empty slot.
- 6. Replace the air inlet cover.

# Chapter 6: AC power supply installation for the VSP 9012 chassis

This chapter describes the procedures to install AC power supplies in the Avaya Virtual Services Platform 9012 chassis. The Virtual Services Platform 9012 chassis provides six slots for power supplies.

#### About this task

• You need qualified service personnel to install and replace Virtual Services Platform 9000 components.

#### Voltage:

#### Risk of injury by electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

For information about the minimum software version required to support the hardware, see Avaya Virtual Services Platform 9000 Release Notes, NN46250-401.

#### Important:

Avaya recommends that you install each power supply on its own dedicated branch circuit for electrical installation reasons.

The following table lists the estimated time to install an AC power supply for the Virtual Services Platform 9012 chassis. The installation time depends on the number of power supplies you install.

#### Table 4: Estimated time

Task	Estimated Time
Removing the logo plate	1 minute
Installing the AC power supply	1 minute

The Virtual Services Platform 9012 chassis ships with no installed power supplies. In the front of the chassis, power supply slots are numbered increasing from left to right, with 1, 2, and 3 on the first row, and then 4, 5, and 6 on the second row. Install the first power supply in the top-left slot.

The individual on and off AC power switches and AC IEC60320 inlet connectors at the back of the Virtual Services Platform 9012 chassis are numbered decreasing from left to right, with 3, 2, and 1 on the first row, and then 6, 5, and 4, on the second row.

# Removing the logo plate

Remove the logo plate to access the power supply in a slot.

#### Procedure

1. Use a Phillips screwdriver to loosen the four captive screws, which secure the plate to the chassis, until the plate disengages.



2. Pull the plate from the chassis.

# Installing the AC power supply

Install the AC power supply to provide a power source to the system and components.

#### Before you begin

• Remove the logo plate, if required. Save the logo plate in case you need to operate the Virtual Services Platform 9012 chassis with a power supply removed.

#### Voltage:

#### Risk of injury from electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

#### **Caution:**

If you must reinsert a power supply, ensure that the power supply fans stop spinning. When the fans stop spinning, the AC power supply is discharged and ready to be reinserted.

#### Procedure

1. Loosen the 4 captive screws to remove the logo plate.



- 2. Push the power supply firmly into the slot until the action lever clicks.
- 3. Close the action lever on the power supply grill to lock the power supply in place.
- 4. Replace the logo plate and tighten the 4 captive screws.
- 5. Connect a power cord from the power inlet to an AC power outlet.



#### Important:

Avaya recommends that you install each power supply on its own dedicated branch circuit for electrical installation reasons.

6. Turn on the power switch on the back of the chassis.



# Removing the AC power supply

Remove a power supply to replace it with a new power supply. After you remove a power supply, the LED on the power supply turns off, and the Virtual Service Platform 9012 chassis automatically redistributes the load to the remaining power supplies.

#### Before you begin

• Remove the logo plate.

#### Danger:

#### Risk of injury from electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

#### Procedure

- 1. Turn off the power supply switch on the back of the chassis.
- 2. Disconnect the power cord from the power outlet and from the power supply.



- 3. Press the retaining clip to release the action lever.
- 4. Rotate the action lever open to unseat the power supply, moving it slightly forward.
- 5. Use both hands to pull the power supply from the chassis.



# **Chapter 7: Electrical specifications**

This chapter lists the electrical specifications and provides power ratings for the AC power supplies.

# 9006AC specifications

This section provides the input and output power specifications for the 9006AC power supply.

#### AC input power specifications

The following table describes the technical specifications for AC input power for the 9006AC power supply.

Parameter	Specification at input voltage 90-140 VAC	Specification at input voltage 185-275 VAC
Input current	13.3 A (100 VAC) - 11.2 A (120 VAC)	11.8 A (200 VAC) – 9.9 A (240 VAC)
Operating frequency range	47–63 Hz	47–63 Hz
Input volt-ampere (VA)	1445 VA	2325 VA
Efficiency	85% minimum, 90% typical	88% minimum, 93% typical
Input power consumption	1,416 W	2,277 W
Heat dissipation (thermal output)	724 British Thermal Unit (BTU)/hour	933 BTU/hour
Hold-up time (See note 1.)	25 ms	20 ms
Note 1: Measurement starts at zero crossing of the AC voltage. Measurement made at full load and voltage is allowed to decay to 44 VDC.		

#### Table 5: Input power specifications

#### DC output power specifications

The following table describes the technical specifications for the DC output power for the 9006AC power supply.

#### Table 6: Output power specifications

Parameter	Specification at input voltage 90–140 VAC	Specification at input voltage 185–275 VAC
Maximum main output power	1,200 W	2,000 W
Maximum main output current	22 A	37 A
Auxiliary output voltage / power	5 VDC / 3.75 W	5 VDC / 3.75 W
Output voltage set-point	54 VDC	54 VDC
Mean time between failures (See note 1.)	400,000 hours	400,000 hours
Note 1: Per telcordia SR-332, 25 C, full load, method 1, case III		

# **Chapter 8: Power cord specifications**

Power cords are included with the AC power supplies.

The following table lists specifications for international power cords for the AC power supply.

#### Important:

If you use the NEMA5-20 male plug power cord AA0020076-E6, which is rated for lower input voltage conditions, the power supply output power is limited to 1140 watts (W).

#### Table 7: International power cord specifications for the AC power supplies

Avaya order number	Country Plug/Receptacle description	Specifications	Typical plug
AA0020076-E6	North America:	125 VAC/20 A 12 AWG	
	NEMA5-20 male plug	length: 2.5 m	
AA0020077-E6	North America: • NEMA6-15 male plug	250 VAC/15 A 14 AWG length: 2.5 m	11093FA
AA0020083-E6	North America: • NEMA6-20 twist-lock male plug	250 VAC/20 A 12 AWG length: 8.2 ft	11094FA
AA0020087-E6	North America:	250 VAC/15 A 14 AWG	
	NEMAL6-15 twist-lock male plug	length: 8.2 ft.	11191FA
AA0020082-E6	International: • IEC60309 male plug	230 VAC/16 A 1.5 mm <sup>2</sup> length: 2.5 m	E
			11098FA

Avaya order number	Country Plug/Receptacle description	Specifications	Typical plug
AA0020078-E6	Continental Europe: • CEE7/7 male plug	250 VAC/16 A 1.5 mm <sup>2</sup> length: 2.5 m	228FA
AA0020079-E6	Italy: • CEI 23-50 S17 male plug	250 VAC/16 A 1.5 mm <sup>2</sup> length: 2.5 m	11095FA
AA0020080-E6	Israel: • SI-32 male plug	250 VAC/16 A 1.5 mm <sup>2</sup> length: 2.5 m	11096FA
AA0020081-E6	India/South Africa: • BS-546 male plug	250 VAC/15 A 1.5 mm <sup>2</sup> length: 2.5 m	11097FA
AA0020084-E6	Australia: • AS/NZ5 3112 male plug	250 VAC/15 A 1.5 mm <sup>2</sup> length: 2.5 m	11229FA
AA0020085-E6	United Kingdom and Ireland: • BS 1362	250 VAC/13 A 1.5 mm <sup>2</sup> length: 2.5 m	11230FA
AA0020086-E6	Greater China: • GB 11918-89	250 VAC/16 A 1.5 mm <sup>2</sup> length: 2.5 m	11229FAnew

# Chapter 9: Translations of safety messages

This chapter describes the translations of safety messages which you need to be aware of while executing the installation of AC power supply.

### **Class A electromagnetic interference caution statement**

#### Caution:

#### **Risk of electromagnetic interference**

This device is a Class A product. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users are required to take appropriate measures necessary to correct the interference at their own expense.

#### Caution:

#### ATTENTION

Le périphérique est un produit de Classe A. Le fonctionnement de cet équipement dans une zone résidentielle risque de causer des interférences nuisibles, auquel cas l'utilisateur devra y remédier à ses propres frais.

#### Caution:

#### ACHTUNG

Dies ist ein Gerät der Klasse A. Bei Einsatz des Geräts in Wohngebieten kann es Störungen des Radio- und Fernsehempfangs verursachen. In diesem Fall muss der Benutzer alle notwendigen Maßnahmen ergreifen, die möglicherweise nötig sind, um die Störungen auf eigene Rechnung zu beheben.

#### Caution:

#### PRECAUCIÓN

Este es un producto clase A. El uso de este equipo en áreas residenciales puede causar interferencias nocivas, en cuyo caso, se requerirá que los usuarios tomen cualquier medida necesaria para corregir la interferencia por cuenta propia.

#### Caution:

#### CUIDADO

Este dispositivo é um produto Classe A. Operar este equipamento em uma área residencial provavelmente causará interferência prejudicial; neste caso, espera-se que os usuários tomem as medidas necessárias para corrigir a interferência por sua própria conta.

#### Caution:

#### ATTENZIONE

Questo dispositivo è un prodotto di Classe A. Il funzionamento di questo apparecchio in aree residenziali potrebbe causare interferenze dannose, nel cui caso agli utenti verrà richiesto di adottare tutte le misure necessarie per porre rimedio alle interferenze a proprie spese.

# **Electrostatic discharge caution statement**

#### Electrostatic alert:

#### ESD

To prevent damage from electrostatic discharge, always wear an antistatic wrist strap connected to an electrostatic discharge (ESD) jack when performing maintenance on this product. Ensure that the wrist strap makes contact with your skin.

#### **Electrostatic alert:**

#### ATTENTION

ESD (décharge électrostatique)

Pour prévenir tout dommage dû à une décharge électrostatique, vous devez toujours porter un un bracelet antistatique connecté à une prise pour décharge électrostatique (ESD) lors de l'exécution d'opérations de maintenance sur ce produit. Assurez-vous que le bracelet antistatique est en contact avec votre peau.

#### Electrostatic alert:

#### ACHTUNG

ESD

Um Schäden durch elektrostatische Entladung zu verhindern, tragen Sie bei der Instandhaltung dieses Produkts immer ein antistatisches Band am Handgelenk, das mit einer ESD-Buchse verbunden ist. Stellen Sie sicher, dass das Band am Handgelenk Kontakt zur Haut hat.

#### **Electrostatic alert:**

#### PRECAUCIÓN

ESD (Descarga electrostática)

Para prevenir el daño producido por una descarga electrostática, use siempre una pulsera antiestática conectada a un enchufe de descarga electrostática (ESD) al realizar el mantenimiento de este producto. Asegúrese de que la pulsera antiestática haga contacto con su piel.

#### **Electrostatic alert:**

#### CUIDADO

ESD

Para evitar danos com descarga eletrostática, sempre use uma pulseira antiestática que esteja conectada a uma tomada de descarga eletrostática (ESD) quando estiver realizando a manutenção deste produto. Certifique-se de que a pulseira esteja em contato com sua pele.

#### Electrostatic alert:

#### ATTENZIONE

ESD

Per evitare danni derivanti da scariche elettrostatiche, indossare sempre un polsino antistatico collegato a una presa di scarico elettrostatico (ESD) durante la manutenzione del prodotto. Accertarsi che il polsino sia a contatto con la pelle.

### Electric shock danger statement

#### Danger:

#### Risk of injury by electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

#### Voltage:

#### DANGER

Risques de blessure par choc électrique

Avant de manipuler cet équipement, vous devez prendre connaissance des pratiques de sécurité appropriées et des risques associés aux circuits électriques. Utilisez uniquement des cordons d'alimentation possédant un conducteur de terre. Assurez-vous que le commutateur est correctement relié à la terre avant de mettre l'unité sous tension.

#### Voltage:

#### GEFAHR

Verletzungsrisiko durch Stromschlag

Informieren Sie sich über entsprechende Sicherheitsmaßnahmen und die mit Stromkreisen verbundenen Gefahren, bevor Sie mit diesem Gerät arbeiten. Verwenden Sie nur Netzkabel mit Erdungspfad. Stellen Sie sicher, dass der Schalter ordnungsgemäß geerdet ist, bevor Sie das Gerät einschalten.

#### Voltage:

#### PELIGRO

Riesgo de lesión por electrocución

Antes de trabajar con este equipo, infórmese acerca de las medidas de seguridad adecuadas y de los peligros relacionados con los circuitos eléctricos. Utilice sólo cables de corriente que tengan puesta a tierra. Asegúrese de que el interruptor tenga puesta a tierra antes de encender la unidad.

#### Voltage:

#### PERIGO

Risco de ferimentos por choque elétrico

Antes de começar a trabalhar com o equipamento, esteja ciente das práticas de segurança adequadas e dos perigos inerentes a circuitos elétricos. Use apenas cabos de alimentação que tenham ligação à terra. Certifique-se de que o switch esteja devidamente aterrado antes de ligar o aparelho.

#### Voltage: PERICOLO

Rischio di scosse elettriche

Prima di utilizzare questa apparecchiatura, considerare le appropriate pratiche di sicurezza e i pericoli correlati ai circuiti elettrici. Utilizzare esclusivamente cavi di alimentazione dotati di un percorso per il collegamento a terra. Prima di attivare l'alimentazione dell'unità, accertarsi che l'interruttore sia adeguatamente collegato alla messa a terra.

Translations of safety messages

### Glossary

cooling module (9010CM)	The cooling module is a hot swappable fan tray used to cool the Control Processor, I/O, and Switch Fabric modules in the Virtual Services Platform 9010. Two cooling modules are installed horizontally in the front of the chassis.
Electromagnetic Interference (EMI)	Electromagnetic radiation released from an electronic device that disrupts the operation or performance of another device.
Electrostatic Discharge (ESD)	The discharge of stored static electricity that can damage electronic equipment and impair electrical circuitry that results in complete or intermittent failures.
I/O cooling module (9012FC)	The I/O cooling module is a hot swappable fan tray used to cool the I/O and CP modules in the Virtual Services Platform 9012.
light emitting diode (LED)	A semiconductor diode that emits light when a current passes through it.
Switch Fabric (SF) cooling module (9012RC)	The SF cooling module is a hot swappable fan tray used to cool the Switch Fabric (SF) modules in the Virtual Services Platform 9012.

Switch Fabric (SF) cooling module (9012RC)