

Installing and Administering Avaya Vantage[™]

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Note

Using a cell, mobile, or GSM phone, or a two-way radio in close proximity to an Avaya IP telephone might cause interference.

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Regulatory Statements

Australia Statements

Handset Magnets Statement:



Danger:

The handset receiver contains magnetic devices that can attract small metallic objects. Care should be taken to avoid personal injury.

Industry Canada (IC) Statements

RSS Standards Statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired operation of the device

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1. L'appareil ne doit pas produire de brouillage, et
- L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radio Transmitter Statement

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Radiation Exposure Statement

This equipment complies with FCC & IC RSS102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISEDétablies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Japan Statements

Class B Statement

This is a Class B product based on the standard of the VCCI Council. If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

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取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B

Denan Power Cord Statement



Danger:

Please be careful of the following while installing the equipment:

- Please only use the connecting cables, power cord, and AC adapters shipped with the equipment or specified by Avaya to be used with the equipment. If you use any other equipment, it may cause failures, malfunctioning, or fire.
- Power cords shipped with this equipment must not be used with any other equipment. In case the above

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México Statement

The operation of this equipment is subject to the following two conditions:

- It is possible that this equipment or device may not cause harmful interference, and
- 2. This equipment or device must accept any interference, including interference that may cause undesired operation.

La operación de este equipo está sujeta a las siguientes dos condiciones:

- Es posible que este equipo o dispositivo no cause interferencia perjudicial y
- Este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Power over Ethernet (PoE) Statement

This equipment must be connected to PoE networks without routing to the outside plant.

U.S. Federal Communications Commission (FCC) Statements

Compliance Statement

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- This device must accept any interference received, including interferences that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designated to provide reasonable protection against harmful interferences in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interferences to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 in or 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

EU Countries

This device when installed complies with the essential requirements and other relevant provisions of the EMC Directive 2014/30/EU, Safety LV Directive 2014/35/EU, and Radio Equipment Directive 2014/53/EU. A copy of the Declaration may be obtained from http://support.avaya.com or Avaya Inc., 4655 Great America Parkway, Santa Clara, CA 95054–1233 USA.

WiFi and BT transmitter

- Frequencies for 2412-2472 MHz, transmit power: 19.84 dBm
- Frequencies for 5180-5240 MHz, transmit power: 22.5 dBm

General Safety Warning

- Use only the Avaya approved Limited Power Source power supplies specified for this product.
- · Ensure that you:
 - Do not operate the device near water.
 - Do not use the device during a lightning storm.
 - Do not report a gas leak while in the vicinity of the leak.
 - For Accessory Power Supply Use Only Limited Power Supply Delta Electronics Inc. model:ADP-30HR B ,output: 48Vdc, 0.66A.

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Device Usage Consent

By using the Avaya device you agree that Avaya, from time to time, may collect network and device data from your device and may use such data in order to validate your eligibility to use the device.

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Chapter 1: Introduction

Purpose

This document provides checklists and procedures for installing, configuring, administering, and troubleshooting Avaya Vantage[™]. This document is primarily intended for implementation engineers and administrators.

Change history

Issue	Date	Summary of changes
Release 2.0, Issue 1	July 2018	Added the wired and wireless handset model names in Optional components for the Avaya Vantage device on page 18.
		Removed references to the Kensington lock slot in <u>Specifications</u> on page 19.
		Added the SNTP server configuration requirement in <u>Initial setup</u> <u>checklist</u> on page 26.
		Updated <u>Software and hardware prerequisites</u> on page 27.
		Added a new section <u>Device deployment through Device Enrollment Services</u> on page 37.
		Added information about Device Enrollment Services support in <u>Connecting Avaya Vantage to the network</u> on page 36, <u>Server configuration</u> on page 38, <u>File server configuration</u> on page 40, and <u>Certificate usage by applications</u> on page 48.
		 Added information about using Avaya Aura[®] Utility Services as a file server in <u>File server configuration</u> on page 40.
		Updated <u>Parameter configuration for secure installation</u> on page 49.
		Updated the information about DNS server data configuration in <u>Device configuration checklist</u> on page 65.
		Updated "About this task" in <u>Setting up a file server address</u> on page 68.

Issue	Date	Summary of changes	
		Added information about logging in as an administrator in <u>Setting</u> the Avaya Aura Device Services server address on page 69, <u>Setting up an HTTP proxy and exception</u> on page 70, and <u>Configuring SIP server settings</u> on page 71.	
		Updated <u>Package names of CSDK-based applications</u> on page 80.	
		Added a new chapter: Kiosk mode configuration on page 82.	
		Updated Restoring factory settings from the Settings menu on page 85.	
		Updated information about the local log level in <u>Enabling verbose</u> <u>logging</u> on page 86.	
		Mentioned the Gmail sharing limitation in Generating a debug report on page 87.	
		Updated <u>Device upgrade process</u> on page 93.	
		Updated the cause information in <u>Firmware is corrupted</u> on page 97.	
		Updated parameter descriptions throughout the appendix.	
		Removed information about unsupported configuration parameters.	
Release 2.0, Issue 2	September 2018	• Added information about the Avaya Vantage™ K155 device in the sections under <u>Avaya Vantage overview</u> on page 12.	
		Added <u>Installing the K155 wireless module</u> on page 34.	
		Updated <u>Device deployment through Device Enrollment Services</u> on page 37.	
		Updated the sections under <u>Application setup</u> on page 74. This chapter also includes information about installing applications from unknown sources.	
		Updated the sections under <u>Device upgrade</u> on page 92.	

Chapter 2: Avaya Vantage[™] overview

Avaya Vantage[™] is an Android[™] device that provides telephony and conferencing functionality. Avaya Vantage[™] combines the advantages of a customizable unified communications solution and a fully functional Android device. You can use the Avaya Breeze[™] Client Software Development Kit (CSDK) and custom applications to integrate communications into business processes by using your Avaya Vantage[™] device.

According to your business needs, you can choose from the following Avaya Vantage[™] device variants:

- Avaya Vantage[™] K175: Standard device with an 8-inch screen and an integrated camera for full
 access to video calls and conferences. You can cover the camera by using a mechanical
 camera shutter.
- Avaya Vantage[™] K165: Standard device with an 8-inch screen that does not include an integrated camera. You can still receive video from other users.
- Avaya Vantage[™] K155: Device with a small 5-inch screen. The device also includes a physical keypad and an integrated camera.

Avaya Vantage[™] supports the following communication applications:

- Avaya Vantage[™] Basic
- Avaya Equinox[®]
- Avaya Vantage[™] Open

Note:

- IP Office Release 11.0 only supports Avaya Vantage[™] Basic. IP Office Release 11.0 does not support other clients with Avaya Vantage[™].
- In Release 2.0, the Avaya Vantage[™] K155 device only supports Avaya Vantage[™] Basic. It does not support Avaya Equinox[®] or Avaya Vantage[™] Open.

Device layout

Layout of Avaya Vantage[™] K165 and K175

The standard Avaya Vantage[™] device resembles a tablet in the portrait orientation. The only difference in the layout of the Avaya Vantage[™] K165 and K175 variants is that K175 comes with an integrated camera and a mechanical camera shutter.

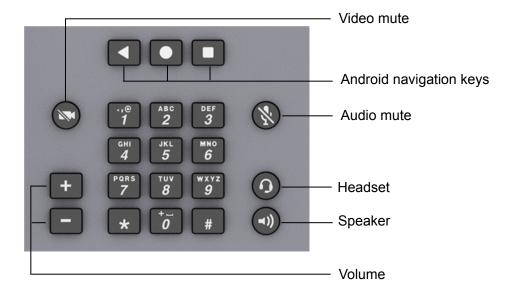


Layout of Avaya Vantage[™] K155



Functional keys on the keypad

The Avaya Vantage[™] K155 device includes a physical keypad.

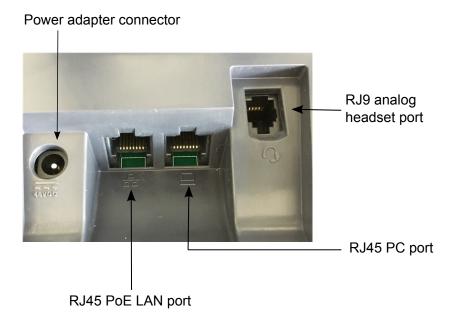


Connectors and controls

The following images show the options available on the Avaya Vantage[™] device.

Rear panel

The rear panel contains a power adapter connector, an RJ9 headset port, and dual Ethernet ports with an internal Ethernet switch.

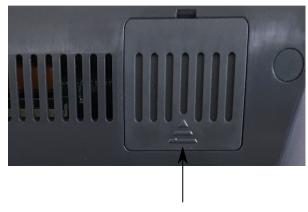


Note:

Avaya Vantage[™] K165 and K175 devices from Release 1.0 only have a single Ethernet port. Devices with hardware version 5 and later support dual Ethernet ports with an internal Ethernet switch.

The K155 device has dual Ethernet ports with an internal Ethernet switch.

K155 devices have an additional wireless module slot in the top-right of the rear panel. The wireless module provides Wi-Fi and Bluetooth connectivity.



Slot for wireless module

Right side panel

On Avaya Vantage[™] K165 and K175, the right side panel contains a 3.5 mm audio jack socket and a USB Type-C port.



On Avaya Vantage[™] K155, the right side panel contains a 3.5 mm audio jack socket and a USB Type-A port.



Left side panel

On all device variants, the left side panel contains a cordless or corded handset cradle connector.



Handset cradle connector

Optional components for the Avaya Vantage[™] device

You can use the following optional components with the Avaya Vantage[™] device:

- · J1B1 wired handset and cradle kit
- · J2B1 wireless handset and cradle kit
- · Replacement handset cord
- AC power adapter (international)
- AC power cord for regions
- Wireless module for K155

You must order these optional components separately.

Wireless handset layout



Specifications

The following table provides Avaya Vantage[™] device specifications. Differences between device models are mentioned as applicable.

Feature	Specifications	
Screen	Avaya Vantage [™] K165 and K175:	
	Capacitive 8-inch touch screen.	
	Resolution: 800×1280 px.	
	• 24-bits color depth.	
	vaya Vantage [™] K155:	
	Capacitive 5-inch touch screen.	
	Resolution: 1280×720 px.	
	• 24-bits color depth.	
Internal storage	16 GB flash memory.	

Feature	Specifications	
Memory	2 GB of RAM.	
Operating system	Android 6.0.1.	
Ethernet	RJ45 primary Gigabit Ethernet (10/100/1000 Mbps) PoE LAN port.	
	RJ45 secondary Gigabit Ethernet (10/100/1000 Mbps) port for personal computer.	
Bluetooth	Bluetooth 4.1 supporting High Speed (HS), Low Energy (LE), and Enhanced Data Rate (EDR) functionality.	
Supported Bluetooth	Headset Profile (HSP) in the Audio Gateway role.	
profiles	Hands Free Profile (HFP) in the Audio Gateway role.	
	Human Interface Device Profile (HID) as the Bluetooth HID host for Bluetooth keyboards and mice.	
	Phone Book Access Profile (PBAP) in the Phone Book Server Equipment (PSE) and Phone Book Client Equipment (PCE) roles.	
	Advanced Audio Distribution Profile (A2DP) in the Source (SRC) role.	
	Object Push Profile (OPP) in the Push server and Push client roles.	
Wi-Fi	Wireless access point mode	
	• Wi-Fi 802.11a/b/g/n/ac	
	Hotspot	
Power	Power over Ethernet EEE 802.3af (Class 3) or 802.3at (Class 4).	
	- Up to 100 mA if using PoE 802.3af.	
	- Up to 500 mA if using PoE 802.3at	
	Dedicated 48V AC power supply. Use Delta Electronics Inc. model ADP-30HR B, output 48V DC, 0.66A.	
Headphone connectors	3.5 mm headset connector.	
	⚠ Warning:	
	Avoid listening at a high volume on devices that are connected to the 3.5 mm connector to prevent hearing damage.	
	RJ9 headset connector for a high-quality wired headset.	
USB port	USB 2.0 general purpose port.	
	Avaya Vantage [™] K165 and K175 have a Type-C USB port.	
	Avaya Vantage [™] K155 has a Type-A USB port.	
	The USB port supports the following types of accessories:	
	Multi-port USB hub.	
	USB pen drive.	
	Mouse.	
	Keyboard.	

Feature	Specifications
	Android devices.
	Support is only limited to charging the Android device. Data transfer is not supported.
	The maximum USB port power is 500mA when the device is connected to an AC adapter or a Class 4 PoE switch. When connected to a Class 3 PoE switch, the maximum power supply is 100mA. USB devices that require more power than 500mA are not supported.
Supported accessories	Wideband Bluetooth headset.
	• 3.5 mm headset.
	RJ9 headset.
Audio	Wideband audio available on all transducers, handset, headset, and handsfree.
	Supported codecs:
	• G.722
	• G.711
	• G.729
	• G.726
	• Opus
Physical keys (for K155	Avaya Vantage [™] K155 includes the following physical keys:
only)	Android keys
	Audio mute
	Video mute
	Headset
	Speaker
	Volume control
	Keypad with the standard keys: numbers 0-9, the asterisk (*), and the pound key (#)
Physical security	Security lock slot.
Stand	Adjustable stand for K165 and K175 that you can use either as a desk stand or a wall-mounted stand.
	Fixed-angle, detachable stand for K155.

Wireless handset specifications

Specification	Avaya Vantage [™] wireless handset
System	Bluetooth 4.1
Bluetooth profiles	Hands-free Profile 1.6
	Headset Profile
Battery	0.56 W, 3.7 V Li-lon battery.
Battery charger	Li-lon battery management system.
Charging system	Contactless charging system: inductive coupling to the cradle.
Controls	Power button.
	Mute button.
	Volume up button.
	Volume down button.
Indicators	Blue LED indicator.
Operating environment temperature	0 to 49 °C (32 to 120 °F).
Battery charging environment temperature	0 to 40 °C (32 to 104 °F).
Weight	170 grams.

Wireless handset features

Range

The handset uses Bluetooth technology. As a Class 2 device, the handset nominal range is 10 meters. In practical use this range might vary depending on the environment. If the handset was out of range, the connection is reestablished automatically when the handset is back in range. When the handset is not in range for more than 22 minutes, it turns off to prevent battery discharge. If the handset was turned off, the connection is reestablished automatically when the handset is turned on and back in range.

Battery service life

If used carefully, the expected service life of the battery is several years. Although the battery capacity is diminished over time, in general it does not affect normal handset use.

Battery talk time

When fully charged, the new battery provides approximately 12 hours of talk time. You might need to charge the battery before the first use to achieve the full talk time. To prevent damage to the battery, the protection system does not allow the battery to discharge below a certain point. Avaya Vantage $^{\text{\tiny M}}$ displays the battery charge level on the Notifications panel.

Battery standby time

When fully charged, the new battery provides approximately 60 hours of standby time. When the handset is not in range or Avaya Vantage $^{\text{TM}}$ is turned off for approximately 22 minutes, the handset is turned off automatically to save battery. To turn on the handset again, press the **Power** button for approximately 2 seconds. The handset is not turned on automatically even if it is returned to the cradle.

Battery charging

The handset supports a contactless charging system. To charge the handset, place it in its cradle. If the battery charge is low, the handset will notify you with warning tones. When you hear the warning tones, return the handset to its cradle to charge the battery.

The handset uses a Lithium-Ion battery with the battery management and protection system. The protection system allows to prevent the following situations:

- Overcharging.
- Over-discharging.
- Charging if the ambient temperature is higher than 40 °C (102 °F).

Battery recharge time

The battery fully recharges in less than 3 hours. You do not need to fully discharge the battery before charging.

Battery disposal

At the end of the service life, remove the battery and deliver it to a battery recycling depot. Do not dispose of the battery in the normal waste stream.

Wireless handset LED indicator

The blue LED indicator shows the current state of the handset and is also used to indicate user actions.

Wireless handset state	LED indication	Notes
Wireless handset is in the Pairing mode.	LED flashes every 0.5 seconds.	Wireless handset exits the Pairing mode in 150 seconds.
Pairing completed successfully.	LED flashes 10 times at 0.1 seconds rate.	None
Wireless handset is used in a call	LED flashes 3 times every 3 seconds	None
Wireless handset is turned on and is connected to its base (Connected mode).	LED flashes 2 times every 5 seconds.	None
Wireless handset is trying to establish connection to its base (Linkback mode).	LED flashes every 0.5 seconds.	None
Wireless handset is out of range and is not trying to establish	LED flashes every 5 seconds.	Wireless handset is turned off after 22 minutes.

Wireless handset state	LED indication	Notes
connection to its base (Standby mode).		
Incoming call.	LED flashes 3 times every 7 seconds.	None
Mute.	LED is on and flashes 3 times every 4 seconds.	None
Wireless handset has been turned on.	LED flashes 4 times.	None
Wireless handset has been turned off.	LED flashes 3 times.	None

Power button

The **Power** button provides the following functionality:

Action	How to use	Handset LED confirmation
Turn on the handset	Press and hold the button for 2.4 seconds	LED flashes 4 times
Turn off the handset	Press and hold the button for 3.2 seconds	LED flashes 3 times
Enable pairing mode	Press and hold the button for 10 seconds	LED flashes at 0.5 seconds rate

Camera specifications

The following Avaya Vantage[™] devices include an integrated camera:

- Avaya Vantage[™] K175.
- Avaya Vantage[™] K155.

If you use Avaya Vantage[™] K165, which does not include an integrated camera, you can still receive video from other devices.

Camera specifications for Avaya Vantage[™] with an integrated camera

- Native resolution of 2 megapixels (1920 x 1080 p).
 However, Avaya Vantage[™] Basic and Avaya Equinox[®] do not utilize the full resolution.
- Fixed focus range of 50 cm to infinity.
- Anti-flicker filter of 50 or 60 Hz.
- · Auto exposure.
- · Auto white balance.
- · Camera activity LED indicator.

Avaya $Vantage^{\mathsf{TM}}$ notifies users that the integrated camera is active by using the green LED indicator.

Mechanical privacy shutter for the K175 device.

Environmental specifications

The following are the permissible environmental specification ranges for operating and storing the Avaya Vantage $^{^{\text{\tiny{M}}}}$ device:

Operating temperature of device 0 °C to 45 °C (32 °F to 113 °F)

Relative humidity 10% to 95% non-condensing

Storage temperature -10 °C to 50 °C (14 °F to 122 °F)

Chapter 3: Initial setup and connectivity

Initial setup checklist

The following checklist describes tasks that you must perform to set up your Avaya Vantage[™] device.

No.	Task	Notes	~
1	Review prerequisite information.	If you do not have all required software and hardware, Avaya Vantage [™] might not function as expected.	
		See <u>Software and hardware prerequisites</u> on page 27.	
2	Gather preinstallation data.	Preinstallation data is required to perform initial parameter setup and to create user accounts for Avaya Vantage [™] .	
3	Configure SNTP servers.	Configure SNTP servers if the default SNTP server addresses, 0.avaya.pool.ntp.org, 1.avaya.pool.ntp.org, 2.avaya.pool.ntp.org, 3.avaya.pool.ntp.org, which are specified in the SNTPSRVR parameter, are not reachable from your network.	
		Configure SNTP servers according to the vendor's configuration instructions. Ensure that the SNTP server is reachable from the network where you are installing Avaya Vantage [™] .	
		You must set the SNTPSRVR value using DHCP option 42 or the 46xxsettings.txt file.	
4	Configure the DHCP and file servers.	See Server configuration on page 38.	
5	Ensure that you have the Avaya Vantage [™] device and all required components.	See Optional components for the Avaya Vantage device on page 18.	
6	Connect a handset.	This step is required only if you want to use a handset with Avaya Vantage [™] .	

No.	Task	Notes	~
		See Connecting a handset to Avaya Vantage on page 31.	
7	Connect Avaya Vantage [™] to your network and, if required, to a power supply.	Connection to a power adapter is only required in certain conditions. For more information, see Power management on page 35 and Connecting Avaya Vantage to the network on page 36.	

Software and hardware prerequisites

Check the following prerequisites before you install Avaya Vantage[™].

Components and other software prerequisites

The following components must be installed and configured on your network. For more information about supported product releases, see Avaya Compatibility Matrix.

- Avaya Aura® or IP Office server components. You can deploy Avaya Vantage[™] with:
 - The latest Avaya Aura® Release 6.3 Service Pack or a higher release.
 - IP Office Release 11.0.
 - IP Office Release 11.0 only supports Avaya Vantage[™] Basic. Other clients are not supported with Release 11.0.
- A DHCP server for providing dynamic IP addresses. The DHCP server also provides the address details of the file server that the device should use.
- A file server for downloading software distribution packages and the settings file.

You can use an external HTTP or HTTPS file server. In the Avaya Aura® environment, you can use Avaya Aura® Utility Services as a file server. In the IP Office environment, the IP Office system can act as a file server for most phones. However, you must use an external HTTP or HTTPS file server for hosting and downloading software distribution packages for Avaya Vantage $^{\mathsf{T}}$ due to the size and number of files.

Note:

Avaya Aura[®] Utility Services does not support ZIP files larger than 800MB. Therefore, Avaya provides two separate Zip files, one containing the software image of K155 and the other containing the software images of both K165 and K175, only to be used on Avaya Aura[®] Utility Services. For all other file servers, you must use the single zip file that contains the software images of K155, K165, and K175.

- Avaya Session Border Controller for Enterprise. You can configure this optional component in networks controlled by Session Border Controller.
- One of the following conference servers for audio and video conference:

In Avaya Aura®: Avaya Aura® Conferencing or Scopia Elite MCU

In IP Office: Avaya Scopia® XT Series

Hardware connection prerequisites

Ensure that the LAN:

- Uses Ethernet Category 5e or Ethernet Category 6 cabling.
- Has the 802.3at or 802.3af PoE specification.

If your network does not support the 802.3at or 802.3af PoE specification, you can use an AC power adapter, which you can order separately.

Preinstallation data

System Manager user profile worksheet

To create a user profile on System Manager for Avaya Vantage[™] Basic or Avaya Equinox[®] in the Avaya Aura[®] environment, you must have the following information:

Identity tab

- First Name
- Last Name
- Login Name
- Password
- Localized Display Name
- Endpoint Display Name
- Language Preference
- Time Zone

Communication Profile tab

Section	Field
Communication Profile section	Communication Profile Password
	Handle Types are for:
	Avaya SIP
Communication Address section	• Avaya E.164
	Avaya Presence/IM if Presence is used
	Handle Fully Qualified Address
Session Manager Profile section	Primary Session Manager

Section	Field
	Secondary Session Manager
	Origination Application Sequence
	Termination Application Sequence
	Survivability Server
	Home Location
CM Finds sint Drafile as ation	System
	Profile Type
	Extension
CM Endpoint Profile section	Use Existing Endpoints
	Endpoint Template
	Voice Mail Number
Messaging Profile section	System
	Mailbox Number
	Template
	Password
	Delete Subscriber on Unassign of Subscriber from User or on Delete User

IP Office SIP user and extension settings

Use IP Office Manager or IP Office Web Manager to configure a SIP user and then configure the extension settings for the user. For information about the key settings to be configured, see *Avaya IP Office* $^{\text{TM}}$ *Platform SIP Telephone Installation Notes* for Release 11.0.

Settings file worksheet

In the following table, populate the parameter values suitable for your deployment. The parameters in the table are for environments with Avaya Vantage $^{^{\text{\tiny{M}}}}$ Basic or Avaya Equinox $^{^{\text{\tiny{B}}}}$ as the Avaya Breeze $^{^{\text{\tiny{M}}}}$ Client Software Development Kit application.

When using Avaya Vantage[™] Open, the following parameters are not required: SIP_CONTROLLER_LIST, SIPDOMAIN, and ACTIVE_CSDK_BASED_PHONE_APP.

Parameter	Your value
SIP_CONTROLLER_LIST	
SIPDOMAIN	
SNTPSRVR	

Parameter	Your value
FILE_SERVER_URL	
TRUSTCERTS	
ADMIN_PASSWORD or PROCPSWD	
ISO_SYSTEM_LANGUAGE	
ADMINTIMEFORMAT	
TIMEZONE	
COUNTRY	
PUSH_APPLICATION	
ACTIVE_CSDK_BASED_PHONE_APP	
USER_INSTALL_APPS_GOOGLE_PLAY_STORE	

Note:

- IP Office Release 11.0 only supports Avaya Vantage[™] Basic. The current IP Office release does not support Avaya Equinox[®] on Avaya Vantage[™].
- In Release 2.0, the K155 device only supports Avaya Vantage[™] Basic. It does not support Avaya Equinox[®] or Avaya Vantage[™] Open.
- Specifying an SNTPSRVR value that is reachable from your network is essential for SIP registration and other setup when you start up Avaya Vantage[™].

DHCP settings worksheet

You need the following information for dynamically assigning IP addresses to Avaya Vantage[™] devices and for initial configuration that is performed through DHCP options. In the following table, populate the following values for your deployment:

Option or parameter	Your value
Range of IP addresses	
DHCP options	
FILE_SERVER_URL	
HTTPSRVR	
TLSSRVR	

Note:

If the FILE_SERVER_URL parameter is defined, Avaya Vantage[™] ignores HTTPSRVR and TLSSRVR.

Connecting a handset to Avaya Vantage

Avaya Vantage[™] provides a built-in speaker and microphone, so a handset is not required to make and manage calls. You can purchase either wired or wireless handsets separately. To use a handset with Avaya Vantage[™], you also need to connect a handset cradle.

Connecting the handset cradle to Avaya Vantage™

About this task

Use this procedure to connect your handset cradle to the Avaya Vantage[™] device. The handset cradle is required for both wired and wireless handsets.



Warning:

When installing the cradle, be careful not to bend the Avaya Vantage[™] connector pins.

Before you begin

- Ensure that you have the following equipment:
 - Avaya Vantage[™] device.
 - Handset cradle with a connection cable.
 - Handset cradle stand, which varies according to the device variant.
 - For K165 or K175, use the adjustable cradle stand with the crossbar that comes with the handset kit. For K155, use the fixed-angle cradle stand that comes with the device.
- Ensure that the Avaya Vantage[™] device is not connected to a power source.

Procedure

- 1. Place the device with the right side touching the table top so that the left side, which is where the handset cradle must be attached, is facing up.
- 2. On the left side of the Avaya Vantage[™] device, remove the rubber gasket that protects the cradle connector pins.
 - One cradle connector pin is closed so that you can position the cradle in the correct
- 3. Connect the handset cradle cable to the cradle connector of the Avaya Vantage[™] device.



Bend the cradle cable to make an arc so that you can join the cable with the cradle connector easily.

- 4. Connect the cradle to the Avaya Vantage[™] device while ensuring that the connection cable is not squeezed between the cradle and the device.
- 5. (Optional) For K165 or K175, connect the handset cradle stand crossbar to the slot in the Avaya Vantage[™] stand.

6. Connect the handset cradle to the cradle stand using the hinge on the rear panel of the cradle.

Next steps

Connect Avaya Vantage[™] to the power source.

Connecting a wired handset

About this task

Use this procedure to connect a wired handset to your Avaya Vantage[™].

Before you begin

Ensure that the handset cradle is connected to the Avaya Vantage[™] device.

Procedure

- 1. Plug the non-spiral end of the handset cord into the handset connector on the handset cradle.
- 2. Plug the other end into the connector on the handset.

Connecting a wireless handset

About this task

Use this procedure to connect or pair a wireless handset with your Avaya Vantage[™] device. You cannot use the wired handset after you connect the wireless handset. You can connect only one wireless handset at a time.

You need administrative privilege to remove the pairing with the wireless handset.

Before you begin

Ensure the following:

- The device startup process is complete and you are logged on to the device.
- The handset cradle is connected to your Avaya Vantage[™] device.
- The handset battery is charged by placing the handset in the cradle.
- · The wireless handset is turned off.

Procedure

1. Lift the wireless handset from the cradle, and press and hold the top **Power** button for at least 10 seconds to enter the pairing mode.



To indicate that the handset is in the pairing mode, the handset LED starts flashing.

- 2. On the Home screen, tap **Applications**.
- 3. Tap **Settings**.
- 4. Tap Bluetooth.
- 5. Turn Bluetooth on.
- In the list of available devices, tap the entry that matches the ID on the handset label.
 When pairing is successful, Avaya Vantage[™] displays the wireless handset in the list of paired devices as connected.

Result

You can now use your wireless handset for calls as long as the handset is turned on. When the handset is turned off, you cannot use it for calls, but it is still paired with Avaya Vantage[™]. When you turn on the handset the next time, you do not need to repeat the pairing procedure.

Installing the K155 wireless module

About this task

Use this procedure to install the wireless module on the K155 device for Wi-Fi and Bluetooth connectivity. The wireless module is an optional component and you can order this module separately.

This procedure is not applicable for the K165 and K175 devices.

Before you begin

Get a flat screwdriver that fits into the opening of the module panel.

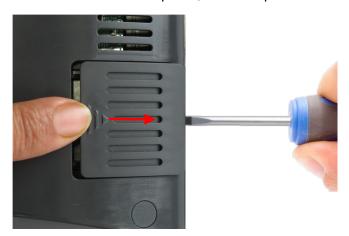
Ensure that the K155 device is not connected to a power source.

Procedure

Insert the screwdriver into the opening of the module panel to release the latch.
 Do not pry open the panel.



2. To remove the module panel, slide the panel out in the direction of the arrow.



3. Insert the wireless module into the slot.



4. Slide the module panel inward to close it.

You do not need a screw to fasten the module. The inside of the module panel has a small protrusion that keeps the module in place.

Power management

Avaya Vantage[™] can receive power from the following sources:

- 802.3af PoE (Class 3)
- 802.3at PoE (Class 4)
- 48 Vdc power supply

If you use the 802.3at networking switch or the power adapter, Avaya Vantage[™] USB port delivers up to 500mA. If you use the 802.3af networking switch, Avaya Vantage[™] USB port delivers up to 100mA.

You can use a 48 volt, 30 watt power adapter to power Avaya Vantage[™] in the following conditions:

- You are using Wi-Fi to connect to the network instead of using an PoE networking switch port.
- The networking switch port does not support the 802.3af or 802.3at PoE specification.
- The device requires more power than 802.3af and 802.3at PoE switch port is not available.
 For example, when a USB device that requires more than 0.5 watt is connected to Avaya
 Vantage™ and only 802.3af PoE ports are available, Avaya Vantage™ must be connected to a
 power adapter.

You must purchase the power adapter separately.

If Avaya Vantage[™] is connected to both a 48 Vdc power supply and a PoE networking switch port, then the following occurs if one of the power sources is disconnected:

- If the power adapter is disconnected, Avaya Vantage[™] reboots. If the networking switch supports either the 802.3at or 802.3af specification, Avaya Vantage[™] continues to work after the reboot.
- If the networking switch is disconnected, Avaya Vantage[™] continues to work without a reboot.

If Avaya Vantage[™] is connected to the PoE networking switch and the power adapter is connected, Avaya Vantage[™] continues to work without a reboot.

Connecting Avaya Vantage[™] to the network

About this task

You can connect Avaya Vantage[™] to your network by using a wireless or an Ethernet connection.

Procedure

- (Optional) Connect a power adapter to the 48-V DC power connector at the back of Avaya Vantage™ and plug the power adapter into an electrical outlet if:
 - Your network does not support the 802.3at (PoE) or 802.3af (PoE) injector specification.
 - · You want to use a Wi-Fi connection.
- 2. To use a wired Ethernet connection:
 - a. Plug one end of an Ethernet cable into the LAN connector at the back of Avaya Vantage[™].
 - b. Plug the other end of the Ethernet cable into an available LAN port in your network.
- 3. To use a Wi-Fi connection:
 - a. Tap **Settings**.
 - b. Tap **Network > Network mode**.
 - c. Select Wi-Fi.
 - d. On the Network screen, tap **Wi-Fi** and choose the required network.
 - e. (Optional) If prompted, enter the network credentials.

If you are using a wireless connection, you must connect Avaya Vantage $^{\mathsf{m}}$ to a power source.

Result

Avaya Vantage[™] starts to initialize.

After the device receives the configuration file server address from DHCP, the device starts downloading the required files from the file server. The startup process can take between 4 to 20 minutes depending on the files to be downloaded.

In a Device Enrollment Services environment, if no file server address is obtained from DHCP or LLDP, Avaya Vantage[™] attempts Device Enrollment Services discovery. This is an automated process. If you configure the file server address manually in the **Settings** menu, Avaya Vantage[™] does not attempt Device Enrollment Services discovery.

In an environment without Device Enrollment Services, the startup process progresses based on the preinstallation data that you configured.

The device might restart as it loads the updated firmware files. After the configuration is complete, the device displays a background, which indicates that you can now log in and use the device.

Device deployment through Device Enrollment Services

Device Enrollment Services

Device Enrollment Services provides a mechanism for Avaya endpoints to be securely authenticated and redirected to the provisioning server. The DNS address of Device Enrollment Services is hard coded to the device firmware. After you connect the out-of-the-box device to the network, Device Enrollment Services redirects the device to the provisioning server and then the installation procedure begins automatically.

For the Device Enrollment Services environment to work, the service provider or enterprise administrator must configure a provisioning server in Device Enrollment Services for the device's MAC address. For more information about Device Enrollment Services, see *Using Avaya Device Enrollment Services to Manage Endpoints*.

Avaya Vantage[™] deployment through Device Enrollment Services

For the Avaya Vantage[™] device to attempt Device Enrollment Services discovery, ensure that:

- DES_STAT is set to 2 in the DHCP site-specific option number (SSON), which is 242 by default.
- FILE SERVER URL, HTTPSRVR, and TLSRVR are not provided by DHCP or LLDP.
- The file server address is not configured manually in the **Settings** menu.

When these conditions are met, the device attempts to communicate with Device Enrollment Services during startup to obtain the provisioning server address. If the device was not associated with a customer site and activated in Device Enrollment Services, then Avaya Vantage $^{\text{TM}}$ prompts for a numeric enrollment code when it is started for the first time. This code is generated through Device Enrollment Services.

After the startup process is completed successfully through Device Enrollment Services, the Avaya Vantage[™] device does not attempt Device Enrollment Services discovery on subsequent reboots. The Avaya Vantage[™] device reattempts Device Enrollment Services discovery only if the administrator performs one of the following while DES STAT is set to 2:

- Resets the device to its factory defaults.
- Activates the service from Settings > More > Auto Provisioning.

The administrator can disable the Device Enrollment Services discovery for Avaya Vantage[™] by setting DES_STAT to 0 or 1 in DHCP SSON.

Chapter 4: Server configuration

To install Avaya Vantage[™] in your telephony environment, you must configure the following servers:

- DHCP server: To dynamically assign IP addresses to the devices and provide device configuration parameters. The DHCP server also provides the device with the address of the SIP controller and file server it should use.
- HTTP or HTTPS file server: To download and save the software distribution package and the 46xxsettings.txt and K1xxSupgrade.txt files that include most of the device configuration. Therefore, the file server address is the most important configuration for the device installation.

In a Device Enrollment Services environment, the DHCP server is mainly used to assign IP addresses to the devices. The device receives the file server address from Device Enrollment Services.

In networks controlled by a Session Border Controller, you can configure Avaya Session Border Controller for Enterprise (Avaya SBCE) to use Avaya Vantage[™] devices. You can manually configure Avaya SBCE only when the file server can be configured by end users.

DHCP and file server configuration checklist

The following checklist describes tasks that you must perform to configure Avaya Vantage[™] service settings.

No.	Task	Notes	~
1.	Ensure that you have all required licenses for the DHCP and file server software.	Contact your server software vendors to obtain information about server licensing.	
2.	Ensure that a DHCP server is installed and configured.	Contact your DHCP server vendor to obtain installation documentation. For configuration information, see DHCP server configuration on page 39.	
		In the IP Office environment, you can choose to use the IP Office system as the DHCP server.	

No.	Task	Notes	~
3.	Ensure that a file server is installed and configured.	Contact your file server vendor to receive installation documentation. For configuration information, see <u>File server configuration</u> on page 40.	
		In the IP Office environment, Avaya Vantage [™] requires an external HTTP or HTTPS file server.	

For more information about setting up the DHCP and file servers in the IP Office environment, see *Avaya IP Office™ Platform SIP Telephone Installation Notes* for Release 11.0.

DHCP server configuration

Configure the DHCP server to:

- Dynamically assign IP addresses to Avaya Vantage[™] devices.
- Provision device and site-specific configuration parameters through various DHCP options.

In a Device Enrollment Services environment, the DHCP server is mainly used to assign IP addresses to the devices. The device receives the file server address from Device Enrollment Services.

Setting up a DHCP server

About this task

Use this procedure to set up a third-party DHCP server. Avaya Vantage[™] supports any DHCP server software as long as the software is correctly configured.

In the IP Office environment, you can use either the IP Office system as the DHCP server or a third-party DHCP server. For more information, see *Avaya IP Office™ Platform SIP Telephone Installation Notes*.

Before you begin

Contact your server software vendor to obtain server software installation and configuration instructions.

Procedure

- 1. Install the DHCP server software according to the server software vendor's instructions.
- 2. Create a DHCP scope to define the range of IP addresses to use.

You can define different scopes from different types of devices.

3. Configure the required DHCP options.

The DHCP site-specific option that you configure must match the Site Specific Option Number (SSON) that Avaya Vantage[™] uses. The default SSON that Avaya Vantage[™] uses is 242.

Related links

Configurable DHCP options on page 54

DHCP site-specific options on page 56

Site-specific configuration parameters on page 57

File server configuration

A file server is an HTTP or HTTPS server that is used for downloading and storing software distribution packages, setting files, and other files required for Avaya Vantage[™] devices.

When Avaya Vantage[™] starts or restarts, it checks for software updates and settings files on the specified file servers.

You can provide file server addresses using one of the following methods:

- DHCP
- LLDP
- The Settings menu on the Avaya Vantage[™] device
- Device Enrollment Services
- 46xxsettings.txt settings file

For DHCP and the settings file, use the FILE_SERVER_URL parameter to assign the file server address. For LLDP, you can specify the file server address in the file server TLV.

In a Device Enrollment Services environment, Device Enrollment Services redirects the device to the file server to be used. The service provider or enterprise administrator configures the file server in Device Enrollment Services for the device. Device Enrollment Services supports a file server URL in either the FQDN or IP address format. While the file server can be an HTTP or HTTPS server, Avaya recommends to use HTTPS with FQDN. For more information about Device Enrollment Services, see *Using Avaya Device Enrollment Services to Manage Endpoints*.

You can also specify the file server address using the following parameters:

- HTTPSRVR, HTTPDIR and HTTPPORT parameters for an HTTP server.
- TLSSRVR, TLSDIR and TLSPORT parameters for an HTTPS server.

If the FILE_SERVER_URL parameter is defined, Avaya Vantage[™] ignores all other parameters.

To use Avaya Aura[®] Utility Services as an HTTPS file server, you must configure the destination TCP port for HTTPS requests as 411 instead of the default 443. You can configure the TCP port value in FILE_SERVER_URL or TLSPORT. In addition, you must include the root CA certificate of

Avaya Aura[®] Utility Services identity certificate in the TRUSTCERTS. Otherwise, the device cannot access Avaya Aura[®] Utility Services after all trusted certificates are downloaded.

In the IP Office environment, Avaya Vantage[™] requires an external HTTP or HTTPS file server for hosting and downloading software distribution packages. Avaya Vantage[™] can accept settings files, including auto-generated settings files, from the IP Office system as a file server. However, the IP Office system always redirects the request for firmware files to the configured HTTP server IP address on the IP Office system. For more information about setting up the file server in the IP Office environment, see *Avaya IP Office* [™] *Platform SIP Telephone Installation Notes*.

Setting up a file server

About this task

Use this procedure to configure an HTTP or HTTPS file server. The file server is used to download and store distribution packages and settings files for Avaya Vantage[™].

Avaya Vantage[™] supports any HTTP or HTTPS server software as long as the software is correctly configured.

Before you begin

Contact your server software vendor to obtain server software installation and configuration instructions.

Procedure

- 1. Install the HTTP or HTTPS server software according to the server software vendor's instructions.
 - For an HTTPS connection, you might have to initially install a trust certificate through an HTTP server and then transfer to an HTTPS server. Ensure that TRUSTCERTS includes the root CA certificate of the HTTPS file server identity certificate.
- 2. Download the software distribution package and the 46xxsettings.txt settings file.
- 3. Extract the distribution package and save the extracted files and the 46xxsettings.txt settings file on the file server.

Avaya Aura[®] configuration for Avaya Vantage[™]

To use Avaya telephony applications or to use Avaya Vantage[™] in the Avaya Aura[®] environment, you can configure the following servers:

- Avaya Aura[®] System Manager: To create users for Avaya telephony applications, such as
 Avaya Equinox[®] and Avaya Vantage[™] Basic and to use Personal Profile Management (PPM).
- Avaya Aura[®] Device Services: To use Unified Login to log in to Avaya Vantage[™] and to manage contacts.

Avaya Aura® System Manager configuration

Configure the Avaya Aura® System Manager server to:

- Create users for telephony applications installed on Avaya Vantage[™], such as Avaya Equinox[®] and Avaya Vantage Basic.
- · Manage public contacts and shared addresses.
- Use Personal Profile Management (PPM).

For information about Avaya Aura® System Manager installation and administration, see:

- Deploying Avaya Aura® System Manager on System Platform
- Administering Avaya Aura[®] System Manager

PPM configuration

Personal Profile Management (PPM) is a service provided by Avaya Aura[®] System Manager. PPM is not supported if you do not use Avaya Aura[®] environment.

Avaya Vantage[™] uses PPM to:

- · Obtain emergency numbers.
- Obtain configuration parameters that impact the Avaya Vantage[™] platform.
- Back up and restore specific user configuration settings, such as language or time format settings. When the user logs in to any registered device, PPM restores user data on the device.

CSDK-based applications, such as Avaya Vantage[™] Basic, use PPM for the following purposes:

- For contact management, such as retrieving and updating of PPM or Avaya Aura® contacts.
- To obtain emergency numbers and Differentiated Service Code Point (DSCP) values.
- To obtain application configuration parameters.

Until SIP registration succeeds, Avaya Vantage[™] uses IP addresses specified in SIP_CONTROLLER_LIST for the getInitialEndpointConfiguration request. If the PPM server is unreachable, Avaya Vantage[™] tries the next IP address from SIP_CONTROLLER_LIST. Similarly, after SIP registration is complete, Avaya Vantage[™] uses IP addresses from SIP_CONTROLLER_LIST to perform all other PPM requests. If the PPM server is unreachable, Avaya Vantage[™] tries the next IP address from SIP_CONTROLLER_LIST.

PPM is disabled if the value of ACTIVE_CSDK_BASED_PHONE_APP is "" (null string), or if the application specified in ACTIVE_CSDK_BASED_PHONE_APP is not installed.

Avaya Aura® Device Services configuration

Configure the Avaya Aura® Device Services server to:

- Use Unified Login credentials for logging in to Avaya Vantage[™].
- Manage contacts.

For information about Avaya Aura® Device Services installation and administration, see:

- Deploying Avaya Aura® Device Services
- Administering Avaya Aura® Device Services

IP Office configuration for Avaya Vantage[™]

Avaya Vantage[™] devices are supported with IP Office Release 11.0 and later. To deploy Avaya Vantage[™] devices in the IP Office environment, the following requirements apply:

- IP Office Server Edition, IP Office Select, or IP500 V2 system running IP Office Release 11.0.
- A separate HTTP file server to host both the Avaya Vantage[™] firmware and APK.

For more information, see the following documents:

- Avaya IP Office[™] Platform Solution Description and Avaya IP Office[™] Platform Feature
 Description for general information about IP Office.
- Avaya IP Office[™] Platform SIP Telephone Installation Notes for information about configuring the IP Office system for Avaya Vantage[™].
- Administering Avaya IP Office[™] Platform with Manager and Administering Avaya IP Office[™] Platform with Web Manager for information about administering IP Office using IP Office Manager or IP Office Web Manager.

Avaya Session Border Controller for Enterprise configuration

The Avaya Session Border Controller for Enterprise (Avaya SBCE) is a network device that controls real-time session traffic between networks. Avaya SBCE manages the endpoints or user agents that are authorized to use a network. If you plan to use Avaya Vantage[™] Basic in networks controlled by Avaya SBCE, you must configure the Avaya Vantage[™] Basic SIP user agent on Avaya SBCE.

An Avaya Vantage Masic SIP user agent uses the Avaya Vantage Basic/<Application Version> (<Build number>;ro.avaya.product.model;<CSDK version>) format, where:

- <Application Version> is the version of the Avaya Vantage[™] Basic application. For example: 1.1.0.0
- <Build number> is the build number of the Avaya Vantage[™] Basic application. For example: 0302
- ro.avaya.product.model is the MODEL4 value.
- <CSDK version> is the Avaya Breeze Client SDK version.

The following is an example of the configured Avaya Vantage $^{\text{M}}$ Basic SIP user agent: Avaya Vantage Basic/1.1.0.0 (0302;K175D02A;261.0.20).

For more information about configuring user agents on Avaya SBCE, see *Administering Avaya Session Border Controller for Enterprise*.

In the IP Office environment, with Avaya SBCE resiliency, remote workers are not supported if networks are controlled by Avaya SBCE and the SIP controller is defined in an IP address format instead of an FQDN format.

Chapter 5: Security configuration

Avaya Vantage[™] provides lock and logout functionality for the protection of user privacy. Each user has their own login and password, so when a user locks Avaya Vantage[™], other users cannot unlock the device. When Avaya Vantage[™] is in a locked state, you can receive calls or make emergency calls. Avaya Vantage[™] restricts access to any user data while in the locked state.

When a user logs out from Avaya Vantage[™], the station is available for other users. However, when another user logs in to the same station, that user cannot access the previous user's data. When a new user logs in, Avaya Vantage[™] clears the previous user's personal data and uninstalls all applications installed by the previous user. However, applications that are installed by the administrator through the PUSH_APPLICATION parameter in the settings file are not affected. When the user logs in again, Avaya Vantage[™] restores the following information:

- User-defined device configuration, such as language settings.
- Application data that is backed up using a personal account, such as a Google[™] account.

As an administrator, you can enable or disable the locked state using the ENABLE_PHONE_LOCK parameter. To enable logout when the device is locked, you can set the ALLOW_LOGOUT_WHEN_LOCKED parameter. For more information, see Phone lock and idle time parameters on page 159. You can also set the locked state manually by using Screen lock in the Settings > Security menu.

For troubleshooting, Avaya Vantage[™] supports the Secure Shell Protocol (SSH) and a secure mechanism for personnel to log in to the device remotely and perform the required operations in a secure environment. By default, SSH users do not have root access or access to private user data, such as:

- Private keys of digital certificates.
- Authentication credentials for SIP, HTTP, 802.1X, and Exchange.
- Contact and call log information.
- Personal browser information, such as bookmarks, URL history, and cookies.

To enable SSH, Avaya Vantage[™] uses the SSH_ALLOWED parameter.

Avaya Vantage[™] does not support non-secure protocols and services, such as FTP, Telnet, TFTP, rlogin, and rsh. The only exception is support of Android Debug Bridge (ADB). By default, ADB remains disabled on Avaya Vantage[™]. If ADB is required for Android application development, the user can enable ADB through the **Settings** menu on the device. When not required, you may completely disable the ADB support by setting the ADBSTAT parameter to 0. When ADBSTAT is 0, users do not get the option to enable ADB through the **Settings** menu.

To enhance security, Avaya Breeze[™] CSDK applications, such as Avaya Vantage[™] Basic or Avaya Equinox[®], support Secure Real-time Transport Protocol (SRTP), which provides confidentiality and message authentication to media traffic going over the LAN infrastructure. This allows Avaya Vantage[™] to encrypt calls between two or more endpoints, to prevent anyone from eavesdropping. The Avaya Breeze[™] CSDK applications also support secure signaling through SIP-TLS.

Some of the other security features are:

- TLS support for all services, such as HTTPS file downloads and SCEP over HTTPS.
- EAP-TLS and EAP-MD5 authentication methods for Ethernet.
- Support for the following Wi-Fi security protocols: WEP, WPA, WPA2 PSK, and 802.1x, including EAP-PEAP, EAP-TLS, EAP-TTLS, and EAP-PWD with phase two authentication.
- Identity certificate and trusted certificate support. Avaya Vantage[™] supports up to 100 trusted certificates in either PEM or DER format.
- Android built-in trusted certificates that can be used by all Android applications installed on Avaya Vantage[™]. According to the value set for the ENABLE_PUBLIC_CA_CERTS parameter, Device Enrollment Services, HTTP or HTTPS file download, PPM, SCEP over HTTPS, and Avaya Aura[®] Device Services use these trusted certificates.
- No built-in Avaya certificates except Avaya Product Root CA. This certificate is only used for software signature validation.
- Application download control using a configurable XML file.
- Installation of applications from unknown sources disabled by default.
- Support for antivirus and antimalware applications.
- Android security features, such as disk encryption, remote wipe, and SELinux running in enforcing mode.

Password security policies

In the SIP login password, you can use:

• Numbers: 0 - 9

Capital letters: A − Z

• Lowercase letters: a - z

Special characters: ~!@#\$%^&*_-+=`|\(){}[]:;"'<>,.?/

In the Avaya Aura[®] environment, you can configure password policies for Avaya Vantage[™] using System Manager.

With IP Office Release 11.0, the SIP user password is required when creating a new user. For more information, see *Avaya IP Office* $^{\text{TM}}$ *Platform SIP Telephone Installation Notes*.

If you use an Exchange account on Avaya Vantage[™], then security policies configured for Avaya Vantage[™] must comply with the security policies configured for the Microsoft Exchange Server. If

the device password does not comply with the Microsoft Exchange Server policies, the user might not be able to configure or use the Exchange account. Microsoft Exchange Server policies must allow the usage of numeric SIP passwords when using the SIP login method. Contact your Microsoft Exchange Server vendor to obtain information about configuring password security policies.

Note:

If you use the Unified Login feature, there are no issues with Microsoft Exchange Server security policies. Avaya Vantage[™] uses the Unified Login credentials to access the Exchange account.

Certificate management

Digital certificates are electronic documents used to confirm the identity of the device or application. A number of Avaya Vantage[™] applications use these certificates, which include built-in Andriod trusted certificates and downloaded trusted certificates.

- Avaya Vantage[™] platform applications:
 - Android: Wi-Fi 802.1x authentication, Exchange and Google accounts, and browsers using HTTPS.
 - Avaya: Configuration and firmware file downloads using HTTPS, SCEP over HTTPS, Avaya Aura® Device Services or Authenticated file server, and PPM.
- Communication applications: Use certificates for different activities, such as SIP connectivity using SIP over TLS and PPM over TLS and connection to Avaya Aura® Device Services servers.

Avaya Vantage[™] downloads trusted digital certificates and a PKCS12 file, and generates the identity certificate using SCEP. When SCEP is set, Avaya Vantage[™] uses the identity certificate generated using SCEP instead of the PKCS12 file.

The downloaded trusted certificates are stored in the Android trust store under the "VPN and APPS" and "Wi-Fi" repositories. These certificates are available for all applications, including third party applications. The "Wi-Fi" repository contains only the downloaded trusted certificates. The "VPN and APPS" repository contains the Android built-in CA certificates and the downloaded trusted certificates.

To store built-in Android certificates and downloaded certificates, Avaya Vantage[™] uses the Android certificate store.

Avava Vantage[™] downloads a PKCS12 file from a URL specified in the PKCS12URL configuration parameter. If the PKCS12PASSWORD configuration parameter does not contain the valid password for the PKCS12 file, Avaya Vantage[™] prompts users to enter the password. If the PKCS12 file contains a trusted certificate, Avaya Vantage[™] installs the PKCS12 file without the trusted certificate. You can specify the list of trusted certificates on Avaya Vantage[™] only through TRUSTCERTS.

Identity certificates are stored in the system credential storage under the "VPN and APPS" and "Wi-Fi" repositories. Only Avaya Vantage[™] platform applications and Avaya applications, such as Avaya Vantage[™] Basic, can access the system credential storage.

You can review certificates installed on Avaya Vantage[™] device:

- The Settings > Security > EASG trusted credentials menu on the device contains EASG certificates.
- The Settings > Security > Trusted credentials menu on the device contains CA certificates.
- The **Settings** > **Security** > **Client credentials** menu on the device contains identity certificates.

Certificate usage by applications

The following table shows certificates that are used by different applications on Avaya Vantage[™]. The use of built-in Android trusted certificates by some applications depends on the ENABLE_PUBLIC_CA_CERTS parameter setting.

Application	Built-in Android trusted certificates	Downloaded trusted certificates	Identity certificate generated using SCEP or PKCS12 file
Wi-Fi 802.1x with EAP- TLS, EAP-TTLS	N	Υ	Υ
Ethernet 802.1x with EAP-TLS	Y Only when ENABLE_PUBLIC_CA_ CERTS is set to 1.	Y	Υ
HTTPS configuration and image files download	Y Only when ENABLE_PUBLIC_CA_ CERTS is set to 1.	Y	Υ
PPM	Y Only when ENABLE_PUBLIC_CA_ CERTS is set to 1.	Y	Υ
SCEP over HTTPS	Y Only when ENABLE_PUBLIC_CA_ CERTS is set to 1.	Y	Υ
Avaya Aura® Device Services or Authentication file server	Y Only when ENABLE_PUBLIC_CA_ CERTS is set to 1.	Y	Υ

Application	Built-in Android trusted certificates	Downloaded trusted certificates	Identity certificate generated using SCEP or PKCS12 file
Device Enrollment Services	Υ		
Redirected file server from Device Enrollment Services	Y	Y ¹	
Browser	Υ	Υ	N
Exchange account	Υ	Υ	Υ
Google account	Υ	Υ	N
Approved third-party applications (included in ID_CERT_APPLICATIO N_LIST)	Y	Υ	Y
Non-approved third-party applications (not included in ID_CERT_APPLICATIO N_LIST)	Y	N	N

Note:

For information about IP Office security certificates, see *Avaya IP Office*™ *Platform SIP Telephone Installation Notes* for Release 11.0.

Parameter configuration for secure installation

For secure installation, configure the following parameters.

Parameter	Set to	Description
TRUSTCERTS	File names of required trusted certificates	Provides the file names of certificates to be used for authentication. It supports both root and intermediate certificates and can contain up to one hundred certificate files. Avaya Vantage [™] supports both PEM and DER file formats.
TLSSRVRID	1	Specifies that the TLS server identification is required. Certificates installed on the servers must have the common name that matches the FQDN of the

If Device Enrollment Services provides private CA certificates, then the private CA is used to validate the identity certificate of the redirected file server. Otherwise, the Built-in Android trusted certificates are used.

Parameter	Set to	Description
		established connection. If it does not match, the connection is dropped.
TLS_VERSION	0 or 1	Specifies which TLS versions are supported with all TLS connections used by Android and Avaya applications. Assign one of the following values:
		0: TLS versions 1.0 and 1.2 are supported.
		1: TLS version 1.2 only is permitted.
AUTH	1	Ensures usage of HTTPS file servers for configuration and software files downloads. Once AUTH is set to 1 and the device downloads the trusted certificates, the device can only download files from the HTTPS server with certificates that can be validated using the trusted certificate repository.
FILE_SERVER_URL	The address of your HTTPS file server	Assigns HTTPS or TLSRVR file servers.
SSH_ALLOWED	0	Keeps Secure Shell (SSH) disabled.
ADBSTAT	0	Keeps Android Debug Bridge (ADB) disabled.

SCEP parameters

Configure the following Simple Certificate Enrollment Protocol (SCEP) parameters.

Parameter	Туре	Default value	Description
MYCERTURL	String	Null	Specifies the URL to access the SCEP server. The device attempts to contact the server only if this parameter is set to other than its default value.
MYCERTCN	String	\$SERIA LNO	Specifies the Common Name (CN) for SUBJECT in the SCEP certificate request. The values can either be \$SERIALNO or \$MACADDR.
			If the value includes the string \$SERIALNO, that string will be replaced by the serial number of the phone.
			If the value includes the string \$MACADDR, that string will be replaced by the media access control (MAC) address of the phone.
MYCERTDN	String	Null	Specifies the common part of SUBJECT in the SCEP certificate request. This value defines the part of SUBJECT in a certificate request including Organizational Unit, Organization, Location, State, and Country that is common for requests from different devices.

Parameter	Туре	Default value	Description
MYCERTKEYLEN	Numeric	2048	Specifies the private key length in bits to be created in the device for a certificate enrollment. The supported value is 2048.
MYCERTREPLACE	Numeric	90	Specifies the period of the certificate's validity interval. This period is specified as a percentage. Avaya Vantage™ uses this percentage to calculate the date of the certificate replacement before its expiration. The range is from 1 to 99.
			When the configured period is over, Avaya Vantage [™] generates a new pair of private and public keys and requests to sign the new CSR using SCEP from the CA server.
MYCERTCAID	String	CAldenti fier	Specifies the Certificate Authority Identifier. CA servers might require a specific CA Identifier string in order to accept GetCA requests. If the device works with such a CA, the CA identifier string can be set through this parameter.
PKCS12URL	String	Null	Specifies the URL where a PKCS12 file containing an identity certificate is stored.
PKCS12PASSWORD	String	Null	Specifies a PKCS12 password.
CERT_INSTALL_APPLI CATION_LIST	String	all	Specifies applications that can install trusted and identity certificates on Avaya Vantage [™] .
ID_CERT_APPLICATIO N_LIST	String	all	Specifies applications that can access identity certificates stored on Avaya Vantage [™] .
SCEPPASSWORD	String	\$SERIA LNO	Specifies a challenge password to use with SCEP. The value of SCEPPASSWORD, if non-null, is included in a challengePassword attribute in SCEP certificate signing requests.
			If the value contains \$SERIALNO, \$SERIALNO is replaced by the value of SERIALNO. If the value contains \$MACADDR, \$MACADDR is replaced by the value of MACADDR without the colon separators.

VLAN parameters

Configure the following virtual local area network (VLAN) parameters:

Parameter	Set to	Notes
L2Q	0, 1, or 2	Specifies 802.1Q VLAN tagging mode. Assign one of the following values:
		Auto (0) or Tag (1): The device sends tagged packets on L2QVLAN until the VLANTEST time. If the DHCP server is

Parameter	Set to	Notes
		unreachable, the device sends untagged packets. On Avaya Vantage [™] , the behavior is same for both values.
		Untag (2): The device sends untagged packets.
L2QVLAN	Non- zero value	Specifies the 802.1Q VLAN identifier. This parameter must not have the same value as that of PHY2VLAN.
VLANTEST	0 to 999	Specifies the number of seconds to wait for a DHCPOFFER message reception on a non-zero VLAN. The default value is 60 seconds.
VLANSEP	1	Enables the VLAN separation.
PHY2TAGS	0 or 1	Specifies whether tags are stripped from frames forwarded to the secondary Ethernet interface.
		0: VLAN tags are removed from frames forwarded to the secondary Ethernet interface.
		1: VLAN tags are not removed from frames forwarded to the secondary Ethernet interface.
PHY2VLAN	Non- zero value	Specifies the value of the 802.1Q VLAN identifier for tagged frames through the secondary Ethernet interface. This parameter must not have the same value as that of L2QVLAN.

For a full VLAN separation between the device and computer packets, the VLAN configuration must meet the following conditions:

- VLANSEP is 1
- L2Q is 0 or 1
- L2QVLAN is not equal to 0
- PHY2VLAN is not equal to 0
- · L2QVLAN is not equal to PHY2VLAN
- VLANTEST is 0 or timer is less than VLANTEST

The device tries to obtain an IP address from the DHCP server on the voice VLAN. If the device gets an IP address, the device sends all the tagged packets on the voice VLAN. Set the PHY2VLAN parameter to the data VLAN so that untagged packets from the computer are assigned to the data VLAN. Tagged packets from VLAN computers other than the data VLAN are blocked. PHY2VLAN is important for a *full* VLAN separation between the computer and the device VLANs.

Chapter 6: Device configuration

The following list shows the methods you can use to configure Avaya Vantage[™]. The methods are listed in order of precedence:

- DHCP
 - Standard
 - Option 43
 - Option 242
- 46xxsettings.txt file
- Avaya Aura[®] Device Services for Avaya Aura[®]
- LLDP
- PPM for Avaya Aura[®]
- · Settings menu on the device

Note:

The order might be different for some parameters. For more information, see the required parameter descriptions in "Appendix A, Supported configuration parameters".

Most of the parameters are configurable through multiple methods. When Avaya Vantage[™] receives a new parameter value, it checks precedence rules to determine whether the new value must be applied. Avaya Vantage[™] changes the parameter value only if the precedence level of the new value source is higher than the precedence level of the current value source. If a source precedence level is not defined for a parameter, Avaya Vantage[™] does not use values provided by this source for the parameter.

Avaya Vantage[™] modes

Depending on the ACTIVE_CSDK_BASED_PHONE_APP value, Avaya Vantage[™] operates in the following modes:

If the ACTIVE_CSDK_BASED_PHONE_APP value contains the name of an Avaya Breeze[™] CSDK application, Avaya Vantage[™] operates in the Avaya Breeze[™] CSDK application based mode. When in this mode, Avaya Vantage[™] supports the Login screen and configuration sharing.

Use ACTIVE_CSDK_BASED_PHONE_APP only when the active phone application is an Avaya Breeze [™] CSDK application, such as Avaya Equinox[®] or Avaya Vantage [™] Basic. You can push an Avaya Breeze [™] CSDK application on the device as the active phone application through the PUSH_APPLICATION parameter. If no Avaya Breeze [™] CSDK application is on the device, ACTIVE_CSDK_BASED_PHONE_APP must use the default value.

If ACTIVE_CSDK_BASED_PHONE_APP is set to the default value (""), Avaya Vantage[™] operates in the non Avaya Breeze[™] CSDK application based mode. In this case, some configuration parameters are not supported and some options are not available on the Settings menu of Avaya Vantage[™]. You can still configure unsupported parameters, but Avaya Vantage[™] and telephony applications will not use the configured values. For more information about whether a parameter is supported in the non Avaya Breeze[™] CSDK application based mode, see Appendix A, Supported configuration parameters.

The main non Avaya Breeze[™] CSDK application that Avaya Vantage[™] supports is Avaya Vantage[™] Open. This application is currently supported with third-party SIP registrar and communication platform, such as Broadsoft.

When in the non Avaya Breeze[™] CSDK application based mode, backing up of the user configuration on PPM is not supported. If a parameter supports backing up on PPM and is supported in the non Avaya Breeze[™] CSDK application based mode, then this parameter keeps the configured value unless the user reverts to the factory default settings of the device.

Device configuration using DHCP options

Avaya Vantage[™] connects to the DHCP server during the boot up. Use the DHCP server to provide the following information to the device:

- · IP address
- Subnet mask
- IP address of the HTTP or HTTPS file server.
- · IP address of the DNS server

Configurable DHCP options

The following options can be configured on the DHCP server:

Option	Description
Option 43	Specifies the encapsulated vendor-specific options that clients and servers use to exchange information. To use this option, Avaya Vantage [™] sends option 60 with the value ccp.avaya.com. Option 43 is processed only if the first code in the option is 1 with a value of 6889. All values are interpreted as strings of ASCII characters that are accepted with or without a null termination character. Any invalid value is ignored and the corresponding parameter value is not set.
Option 55	Specifies the parameter request list. Acceptable values are:
	1 for subnet mask.
	3 for router IP addresses.
	6 for domain name server IP address or addresses.
	7 for log server IP address or addresses.

Option	Description
	15 for domain name.
	26 for interface MTU.
	42 for NTP servers.
	43 for vendor-specific information.
	120 for Session Initiation Protocol (SIP) servers.
	DHCP_SSON for DHCP site-specific option numbers. You can assign a value between 128 and 254.
Option 57	Specifies the maximum DHCP message size. The maximum packet size can be up to 1500 bytes. The default value is 1000.
Option 60	Specifies the vendor class identifier. To use option 43, Avaya Vantage [™] sends option 60 with the value ccp.avaya.com.
Option 242	Specifies site-specific options. Option 242 is optional. If you do not configure this option, ensure that key parameters, such as the following, are configured elsewhere:
	• FILE_SERVER_URL
	• HTTPSRVR
	• TLSSRVR

Avaya Vantage $^{\text{\tiny M}}$ sends options 55, 57, and 60 to the DHCP server to provide additional information required to configure the device.

For more information about configurable DHCP options, see RFC 2132.

Codes for option 43

The codes supported by option 43 and the corresponding parameters are listed in the following table:

Code	Parameter
1	Does not set any parameter. The value must be 6889.
2	HTTPSRVR
3	HTTPDIR
4	HTTPPORT
5	TLSSRVR
6	TLSDIR
7	TLSPORT
8	TLSSRVRID
9	L2Q
10	L2QVLAN
15	SIP_CONTROLLER_LIST
18	FILE_SERVER_URL

Avaya Vantage^{$^{\text{TM}}$} uses information from option 43 only if the first code of option 43 is 1 with a value of 6889. All values are interpreted as strings of ASCII characters. Avaya Vantage^{$^{\text{TM}}$} ignores invalid values and does not set the corresponding parameters.

Parameter configuration through DHCPACK

Parameter	Set to
DHCP lease time	The value of Option 51, if received.
DHCP lease renew time	The value of Option 58, if received.
DHCP lease rebind time	The value of Option 59, if received.
DOMAIN	The value of Option 15, if received.
DNSSRVR	The value of Option 6, if received, which might be a list of IP addresses.
HTTPSRVR	The siaddr value, if it is not zero.
	The parameter is not set if the siaddr value is zero.
IPADD	The yiaddr value.
LOGSRVR	The value of Option 7, if received, which might be a list of IP addresses.
MTU_SIZE	The value of Option 26, if received.
NETMASK	The value of Option 1, if received.
ROUTER	The value of Option 3, if received, which might be a list of IP addresses.
ROUTER_IN_ USE	The giaddr value, if this value not equal to zero and the current value of ROUTER_IN_USE is 0.0.0.0. In other cases, the parameter is not set.
SIP_CONTR OLLER_LIST	The value of Option 120, if received, which may be a list of IP addresses or DNS names.
SNTPSRVR	The value of Option 42, if received, which might be a list of IP addresses.

DHCP site-specific options

You can specify configuration parameters for a certain Avaya Vantage[™] device and assign these parameters through DHCP using site-specific options.

DHCP site-specific options allow you to specify configuration parameters for a certain Avaya Vantage $^{\text{m}}$ device and assign these parameters through DHCP. A site-specific option is a sequence of comma-separated name=value pairs, where:

- name is the name of a configuration parameter. name is case-insensitive.
- value is the value that is assigned to a configuration parameter with the name matching to the value of name. The value of value is case-sensitive. To include spaces, tabs, or commas in value, you must use double quotes ("").

The following is an example of a site-specific option that specifies:

- Two HTTPSRVR addresses.
- The ID of the Voice Virtual Local Access Network that the device must connect to.
- The ICMPDU parameter, which defines that Destination Unreachable messages must not be transmitted.

HTTPSRVR="135.51.77.120,135.51.77.139",L2QVLAN=5,ICMPDU=0

The default DHCP option to set the site-specific configuration parameters is 242. You can also use any option ranging between 128 and 254.

Note:

When the device receives DHCP ACK contents options 43 and 242, the device uses option 242.

To use configuration parameters on Avaya Vantage™, you must specify the option in **DHCP Site-**Specific Option Number (SSON) on the device interface.

Site-specific configuration parameters

The following table contains a list of site-specific configuration parameters that you can define for the device.

Parameter	Description
CAPTIVE_PO RTAL_SERV ER	Specifies the URL of a captive portal server.
FILE_SERVE R_URL	Specifies the list of URL for downloading image and configuration files. This parameter has higher precedence over HTTPSRVR, HTTPPORT, HTTPDIR, TLSSRVR, TLSDIR, and TLSPORT.
HTTPDIR	Specifies the path to prepend to all configurations and data files the device might request when starting up, that is, the path, relative to the root of the HTTP file server, to the directory in which the device configuration and date files are stored. The path may contain no more than 127 characters and may contain no spaces. HTTPDIR is the path for all HTTP operations.
	The command is SET HTTPDIR= <path>. In configurations where the upgrade and binary files are in the default directory on the HTTP server, do not use the HTTPDIR=<path>.</path></path>
HTTPPORT	Destination port for HTTP requests. The default value is 80.
HTTPSRVR	IP addresses or DNS names of HTTP file servers used for downloading settings and firmware files during startup.
	Since the firmware files are digitally signed, TLS is not required for security. However, configuration files are not digitally signed, so it is recommended to use HTTPS servers for storing configuration and firmware files.

Parameter	Description
ICMPDU	Controls the extent to which ICMP destination unreachable messages are sent in response to messages sent to closed ports so as not to reveal information to potential hackers.
	The default value is 1. Use this value to send destination unreachable messages for closed ports used by the traceroute command.
ICMPRED	Controls whether ICMP Redirect messages are processed. The default value is 0, which means that redirect messages are not processed.
L2Q	802.1Q tagging mode. The default value is 0 for the automatic tagging mode.
L2QVLAN	VLAN ID of the voice VLAN. The default value is 0.
PROCPSWD	Security string used to access local procedures. The default value is 27238.
SIP_CONTR OLLER_LIST	SIP proxy or registrar server IP or DNS addresses that can be 0 to 255 characters. Enter the IP address in the dot-decimal notation. For example: 127.0.0.1. You can provide several IP addresses separated by commas and without spaces between entries. The default is null, which means there are no controllers.
TIMEZONE	Time zone configuration in the Olson name format. For example, America/New_York or Europe/Isle_of_Man.
TLSDIR	Used as a path name that is prepended to all file names used in HTTPS GET operations during initialization. The string length can be from 0 to 127.
TLSPORT	Destination TCP port used for requests to an HTTPS server ranging from 0 to 65535. The default value is 443, which is the standard HTTPS port.
TLSSRVR	IP addresses or DNS names of Avaya file servers used to download configuration and firmware files. Transport Layer Security (TLS) is used to authenticate the server and to provide encrypted data exchange between Avaya Vantage [™] and the server.
USER_AUTH _FILE_SERV ER_URL	Specifies the user authenticated file server URL. Enter the address using either the dot- decimal or domain name format. Add a port number, if required. In the current release, Avaya Vantage [™] supports Avaya Aura [®] Device Services user authentication servers only.
VLANTEST	The number of seconds to wait for a DHCPOFFER on a non-zero VLAN. The default value is 60 seconds.

Device configuration using a 46xxsettings.txt settings file

You can administer Avaya Vantage $^{\text{M}}$ devices centrally using the 46 xxsettings.txt settings file that Avaya provides with the devices. The settings file is a text file that resides on a file server and contains configuration parameters.

Important:

In an IP Office environment, Avaya strongly recommends that you allow the IP Office system to auto-generate the settings files for devices rather than using the uploaded file. This helps to automatically adjust the settings provided to devices to match changes made in the IP Office

system configuration. For more information, see *Avaya IP Office*™ *Platform SIP Telephone Installation Notes*.

Configuring the settings file

About this task

Use this procedure to modify the settings file with appropriate values to provision the device configuration parameters.

Procedure

- 1. On the file server, go to the location where the 46xxsettings.txt file is downloaded.
- 2. Open the 46xxsettings.txt file in a text editor.
- 3. Set the required parameters.
- 4. Save the 46xxsettings.txt file.

Result

On the next polling period, Avaya Vantage[™] downloads the file and applies the settings.

Customization of the settings file

The 46xxsettings.txt settings file contains configuration parameters required to customize Avaya Vantage[™] for your enterprise. You can customize the settings file to provide different parameters to devices according to various conditions, such as the following:

- Subnet of the your organization's network.
- · IP address of the device.
- · User group.
- · Device model.

You can download the 46xxsettings.txt file from the <u>Avaya Support website</u> and edit it to add your own custom settings. You can use the following:

Item	Description	Structure	Example
Tag	Specifies a string in the file. Avaya Vantage [™] navigates to that string when it interprets the corresponding Goto command.	A single # character followed by a single space character followed by a tag name. Tag name must not include spaces.	# K175SETTINGS
		# <tag_name></tag_name>	

Item	Description	Structure	Example
Goto command	Allows Avaya Vantage [™] to directly navigate to the specified tag skipping all parameters between the Goto command and the tag mentioned in the command.	GOTO followed by a single space character and a tag name in the following format: GOTO <tag_name></tag_name>	GOTO K175SETTINGS
Conditional statement	Compares the value of a specified parameter to a some reference value. If the value of the parameter exactly matches the reference value, Avaya Vantage™ directly navigates to the tag specified in the condition. If the parameter does not exist or values do not match, Avaya Vantage™ ignores the conditional statement. Avaya Vantage™ supports the following parameters as testable parameters: • GROUP • MODEL • MACADDR • IPADDR • SUBNET	IF \$ <parameter_name> SEQ <reference_value> GOTO <tag_name></tag_name></reference_value></parameter_name>	IF \$MODEL4 SEQ K175 GOTO K175SETTINGS
SET command	Assigns a value to the specified parameter. If the value is incorrect, Avaya Vantage™ does not assign it to the parameter. In this case, Avaya Vantage™ continues to use the default or previously assigned value.	SET <parameter_name> <parameter_value></parameter_value></parameter_name>	SET FILE_SERVER_URL http:// 192.168.125.161
GET command	Avaya Vantage [™] tries to download the specified settings file from the file server. If the file exists, Avaya Vantage [™] downloads this file, stops to interpret the current settings file, and tries to interpret the downloaded	GET <file_name></file_name>	GET Settings.txt

Item	Description	Structure	Example
	settings file. If Avaya Vantage™ cannot download the file, it continues to interpret the current settings file.		
Comment	Provides additional information about the configuration process. Avaya Vantage [™] does not interpret comments.	A string started with two pound characters (##). ## <comment></comment>	## The following section contains upgrade-related parameters

The 46xxsettings.txt settings file must use UTF-8 encoding. All commands, parameter names, and tags are case insensitive and must use ASCII symbols.

Avaya Vantage[™] handles the lines of the settings file one by one. Avaya Vantage[™] interprets only one command per line. All arguments of the command must be placed on the same line as the command. To include spaces in an argument value, you must enclose the value using double quotes ("").

User group configuration in the settings file

Use the conditional statements with the GROUP parameter to assign specific parameters or parameter values to different user group.

The following example shows simple settings file configuration for two user groups with the numbers 20 and 35.

```
IF $GROUP SEQ 20 GOTO CALLCENTER
IF $GROUP SEQ 35 GOTO MANAGERS
GOTO END
# CALLCENTER
## Section with parameters for Group 20 ##
GOTO END
# MANAGERS
## Section with parameters for Group 35 ##
# END
```

After configuring user groups in the settings file, you need to assign a specific user group to a device. For more information, see Setting a user group for a specific configuration on page 70.

Device configuration using LLDP

Link Layer Discovery Protocol (LLDP) is an open standards layer 2 protocol that IP deskphones use to advertise their identity and capabilities and to receive administration from an LLDP server. LAN equipment can use LLDP to manage power, administer VLANs, and provide some administration. The transmission and reception of LLDP is specified in IEEE Std 802.1AB-2009.

Avaya Vantage[™] supports transmission and reception of LLDP using Ethernet line interface. Avaya Vantage[™] uses the LLDP_ENABLED parameter to determine whether LLDP is enabled on the device. You can assign one of the following values:

- 0: The transmission and reception of LLDP is disabled.
- 1: The transmission and reception of LLDP is enabled. This is the default value.
- 2: The transmission and reception of LLDP is enabled. The transmission of LLDP is started only after Avaya Vantage[™] receives an LLDP frame. Avaya Vantage[™] transmits the first LLDP frame within 2 seconds after the first LLDP frame is received.

After transmission is started, LLDP Data Units (LLDPDU) are transmitted every 30 seconds.

When Wi-Fi is selected as the network mode, the Ethernet ports on Avaya Vantage[™] are disabled and Avaya Vantage[™] cannot transmit LLDP frames over Ethernet.

After receiving of an LLDP frame, Avaya Vantage[™] encodes the frame and stores the value of the frame in the LLDP_RCV_CONTENT parameter. Avaya Vantage[™] uses the frame data only if the following conditions:

- The received frame has the destination MAC address set to the reserved group multicast address (01:80:C2:00:00:0E)
- The Ethernet protocol type is 88:CC

Avaya Vantage[™] processes the value of LLDP_RCV_CONTENT every time the value of LLDP_RCV_CONTENT changes.

Initial values of parameters transmitting in LLDP frames

The following table shows the initial values of LLDP fields that are set by Avaya Vantage[™] before the first LLDP frame is transmitted.

LLDP field	Value
LLDP_TTL	120
LLDP_SYSTEM_NAME	The host name sent to the DHCP server in DHCP option 12.
LLDP_BRIDGE	0
SNMP_SYS_OID	A string in the dotted-decimal character format that represents the value of the sysObjectID object in the MIB-II system group.
LLDP_MAU	10 if the Ethernet line interface is operating at 10Mbps, half-duplex
	11 if the Ethernet line interface is operating at 10Mbps, full-duplex
	15 if the Ethernet line interface is operating at 100Mbps, half-duplex

LLDP field	Value
	16 if the Ethernet line interface is operating at 100Mbps, full-duplex
	29 if the Ethernet line interface is operating at 1000Mbps, half-duplex
	30 if the Ethernet line interface is operating at 1000Mbps, full-duplex
MANUFACTURER	Avaya
POE_USED	1
POE_TYPICAL	Typical PoE power usage of the device with enabled backlight. The parameter is measured in watts.
POE_MAX	Maximum PoE power usage of the device with enabled backlight. The parameter is measured in watts. Avaya Vantage [™] uses 13 for this parameter.

TLV impact on system parameter values

Avaya Vantage $^{\text{TM}}$ uses data transmitted in LLDP Type-Length-Value (TLV) elements to set configuration parameters. If a received LLDP frame contains a TIA LLDP-MED Capabilities TLV, then Avaya Vantage $^{\text{TM}}$ processes other TLVs in the frame only if the TIA LLDP-MED Capabilities TLV contains a Device Type of 0 or 4. TLVs are processed in the order that they are received.

System parameter name	TLV name	Impact
L2QVLAN and L2Q		L2Q is set to 1 (ON).
	Name	L2QVLAN is set to the VLAN ID contained in the TLV.
		A check is made as to whether a reset is necessary to obtain a new IP address due to a change in the values of the parameters L2Q or L2QVLAN.
		VLAN Name TLV is ignored if:
		The value of USE_DHCP is 0 and the value of IPADD is not 0.0.0.0.
		The current value of L2QVLAN was set by a TIA LLDP MED Network Policy TLV.
		The VLAN name in the TLV does not contain the substring "voice" in lower-case, upper-case or mixed-case ASCII characters anywhere in the VLAN name.
L2Q, L2QVLAN	TIA LLDP MED	L2Q is set to 2 (OFF) if the Tagged Flag T is set to 0
	Network Policy (Voice) TLV	L2Q is set to 1 (ON) if the Tagged Flag T is set to 1.

System parameter name	TLV name	Impact
		L2QVLAN - Set to the VLAN ID in the TLV.
		A check is made as to whether a reset is necessary to obtain a new IP address due to a change in the values of the parameters L2Q or L2QVLAN.
		This TLV is ignored if:
		The value of USE_DHCP is 0 and the value of IPADD is not 0.0.0.0.
		The Application Type is not 1 (Voice) or 2 (Voice Signaling).
		The Unknown Policy Flag (U) is set to 1.
VLAN_IN_USE	TIA LLDP MED	VLAN_IN_USE - set to the VLAN ID in the TLV.
	Network Policy (Voice Signaling)	This TLV is ignored if:
	, J	• The value of USE_DHCP is 0 and the value of IPADD is not 0.0.0.0.
		The Application Type is not 1 (Voice) or 2 (Voice Signaling).
		The Unknown Policy Flag (U) is set to 1.
SIP_CONTROLL ER_LIST	Proprietary Call Server TLV	SIP_CONTROLLER_LIST will be set to the IP addresses specified in the TLV.
TLSSRVR and HTTPSRVR	Proprietary File Server TLV	FILE_SERVER_URL will be set to the IP addresses specified in the TLV.
L2Q	Proprietary 802.1 Q	If the TLV value is 1, L2Q is set to 1 (On).
	Framing	If the TLV value is 2, L2Q is set to 2 (Off).
		If the TLV value is 3, L2Q is set to 0 (Auto).
		A check is made as to whether a reset is necessary to obtain a new IP address due to a change in the values of the parameters L2Q or L2QVLAN.
		This TLV is ignored if:
		The value of USE_DHCP is 0 and the value of IPADD is not 0.0.0.0.
		The current L2QVLAN value was set by an IEEE 802.1 VLAN name.
		The current L2QVLAN value was set by a TIA LLDP MED Network Policy (Voice) TLV.

Device configuration using the Settings menu on the device

Device configuration checklist

The following checklist describes task you must perform to configure Avaya Vantage $^{^{\mathsf{TM}}}$ device settings.

No.	Task	Notes	~
1.	Configure your administration password.	Avaya Vantage [™] does not provide access to Administrator mode if the default administrator password is used.	
		See <u>Administrator password configuration</u> on page 66.	
2.	Ensure that you are using the Administrator mode to configure the device.	Improper modification of some settings can lead to a device malfunction. Therefore, such settings are available to administrators only. See Enabling administrator settings on the	
		device on page 67.	
3.	Configure the file server data.	You must provide an address of a file server that is used to store software distribution packages and settings files. If the file server address is configured through DHCP, LLDP, or Device Enrollment Services, you do not need to configure the file server address. The address can be either an IP address in dotted-decimal format or an FQDN.	
		See <u>Setting up a file server address</u> on page 68.	
4.	Configure the DNS server data.	You must provide the address of the DNS server used in your organization. In most cases, the DNS server address is provided through DHCP. You can also configure DNS server data statically or through the 46xxsettings.txt file.	
		Both the Wi-Fi and Ethernet interfaces use the configured DNS server and domain information. The option to configure DNS information specifically for each Wi-Fi network is unavailable. Therefore, if a user toggles between the Wi-Fi and Ethernet interfaces,	

No.	Task	Notes	•
		then the configured DNS information is applicable for both interfaces.	
		See <u>Setting the DNS name and address</u> on page 68.	
5.	Configure a user group.	You must specify a user group number to provide configuration parameters according to the assigned user group.	
		See Setting a user group for a specific configuration on page 70.	
6.	Configure HTTP proxy server settings.	You must provide an address of a server that acts as a gateway between your organization's local network and other networks. If required, specify addresses that can bypass the proxy server.	
		See Setting up an HTTP proxy and exception on page 70.	
7.	Configure SIP server settings.	You must have a SIP server to make and handle calls. Additional SIP servers can be configured to provide system survivability. If the 46xxsettings.txt file cannot be downloaded, you can configure SIP settings through the Settings menu of the device	
		See Configuring SIP server settings on page 71.	
8.	Configure a DHCP site-specific option number.	You must specify a DHCP site-specific option number to provide configuration parameters according to the assigned site-specific option.	
		See Setting up a DHCP site-specific option number on page 72.	
9.	Configure access to third party applications.	Specify which applications an user can install. See Access to Google Play applications for K165 and K175 on page 77.	

Administrator password configuration

You must set up an administrator password to enable administrator settings on Avaya Vantage $^{\text{TM}}$. Avaya Vantage $^{\text{TM}}$ uses the ADMIN_PASSWORD or PROCPSWD parameters to store the password and provide access to administrator options in the **Settings** menu.

• If ADMIN_PASSWORD is configured, Avaya Vantage[™] uses the ADMIN_PASSWORD value and ignores the PROCPSWD value.

- If ADMIN_PASSWORD is not configured and PROCPSWD has a value different from the default, Avaya Vantage[™] uses the PROCPSWD value. The default value of PROCPSWD is 27238. Avaya Vantage[™] does not use the default value of PROCPSWD.
- If ADMIN_PASSWORD is not configured and PROCPSWD uses the default value, you
 cannot access administrator options in the Settings menu on Avaya Vantage[™].

In an IP Office environment, ADMIN_PASSWORD is added to the automatically-generated 46xxsettings.txt file if the No User Source Number (NUSN) is set for the administrator password in IP Office Manager.

You can change the value of ADMIN_PASSWORD and PROCPSWD using the \mathtt{set} command in the $46\mathtt{xxsettings.txt}$ file. Additionally, you can change the value of PROCPSWD using the following methods:

- name=value pair in a DHCPACK message sent by your DHCP server.
- PPM service configuration. You cannot configure ADMIN_PASSWORD through PPM. For more information about configuring the PROCPSWD value through PPM, see *Administering Avaya Aura*® Session Manager.

Enabling administrator settings on the device

About this task

You can enable administrator settings on Avaya Vantage $^{\text{TM}}$. In the administrator mode, the device displays **Settings** menu options that are unavailable to end users, such as the **SIP proxy settings** menu.

Before you begin

Get the administrator password that is set through ADMIN PASSWORD or PROCPSWD.

In an IP Office environment, set ADMIN_PASSWORD using the <code>SET_ADMIN_PASSWORD=x</code> NUSN, where <code>x</code> is the password that is added to the autogenerated 46xxsettings.txt file. For example:

SET ADMIN PASSWORD=Avaya@1234

Procedure

When you are logged in, do the following:

- 1. On the Home screen, tap **Applications**.
- 2. Tap Settings.
- 3. In the upper-right corner of the screen, tap **Menu > Admin login**.
- 4. Enter the administrator password, and tap **OK**.

When you are logged out, do the following:

5. On the Login screen, tap the **Settings** ((2)) icon.

- 6. In the upper-right corner of the screen, tap **Menu > Admin login**.
- 7. Enter the administrator password, and tap **OK**.

Setting up a file server address

About this task

Use this procedure to set up a file server address for downloading software distribution packages and settings files.

If the file server address is configured through DHCP or LLDP, you do not need to configure the file server address in the **Settings** menu of Avaya Vantage[™]. If Device Enrollment Services is used, then the file server redirection URL information is configured in Device Enrollment Services.

Procedure

- 1. On the Home screen, tap **Applications**.
- 2. Tap Settings.
- 3. Tap More > File server.
- 4. Enter the HTTP or HTTPS address of your file server.

A file server URL must have one of the following format:

- http://hostname[:port][/path]
- https://hostname[:port][/path]

Where:

- hostname is either an IP address in dotted-decimal format or an FQDN.
- port is an optional port number.
- path is an optional path to the directory where distribution packages and other files are stored.

Setting the DNS name and address

About this task

As an alternative to administering DNS using DHCP, you can specify DNS server data manually. Use this procedure to set the domain name and address of your DNS server.

Procedure

- 1. On the Home screen, tap **Applications**.
- 2. Tap Settings.
- 3. Tap **More** > **DNS**.

- 4. Tap DNS Server.
- 5. Enter the IP address of the primary DNS server in **DNS Server 1**.
- 6. (Optional) If required, enter the IP address of the secondary DNS server in DNS Server 2.
- 7. Tap **OK**.
- 8. Tap **Domain**.
- 9. Enter the domain name of the DNS server.
- 10. Tap **OK**.

Setting the Avaya Aura® Device Services server address

About this task

Use this procedure as an alternative to administering the Avaya Aura[®] Device Services server address by using the 46xxsettings.txt file. You can set the server address of Avaya Aura[®] Device Services if you want to use the Unified Login feature.

You must log in as an administrator to configure the Avaya Aura[®] Device Services information on the device through the **Settings** menu.



Avaya Aura® Device Services is supported in the Avaya Aura® environment only.

Before you begin

Get the administrator password that is set through ADMIN PASSWORD or PROCPSWD.

Procedure

- 1. On the Home screen, tap **Applications**.
- 2. Tap Settings.
- 3. In the upper-right corner of the screen, tap **Menu > Admin login**, and enter the administrator password.
- 4. Tap More and then tap Avaya Aura Device Services (AADS).
- 5. Enter the address of the Avaya Aura® Device Services server and tap **OK**.

Related links

<u>Administrator password configuration</u> on page 66
<u>Enabling administrator settings on the device</u> on page 67

Setting a user group for a specific configuration

About this task

You can create several configuration sets and upload a specific set to the Avaya Vantage[™] device according to a group identifier assigned to the device. Use this procedure to set a group identifier to the device. You can only set the group identifier using the **Settings** menu of Avaya Vantage[™].

Procedure

- 1. On the Home screen, tap **Applications**.
- 2. Tap **Settings**.
- 3. Tap More > GROUP.
- 4. Enter the group identifier.

The group identifier must be an integer between 0 and 999 inclusively.

5. Tap **OK**.

Setting up an HTTP proxy and exception

About this task

Use this procedure to specify the address of an HTTP proxy server. You can also enter exceptions to bypass the proxy server.

You can configure the HTTP proxy through the **Settings** menu only as an administrator.

Before you begin

Get the administrator password that is set through ADMIN PASSWORD or PROCPSWD.

Procedure

- 1. On the Home screen, tap **Applications**.
- Tap Settings.
- 3. In the upper-right corner of the screen, tap **Menu > Admin login**, and enter the administrator password.
- 4. Tap More, and tap HTTP/S Proxy Settings.
- 5. Tap Proxy host name[:port].
- 6. Enter the HTTP proxy host name with a port number.
- 7. Tap **OK**.
- 8. (Optional) To bypass the proxy server for some specific addresses, do the following:
 - a. Tap Bypass proxy for.
 - b. Enter one or more server addresses to bypass the proxy server.

Use commas to separate addresses.

c. Tap **OK**.

Related links

<u>Administrator password configuration</u> on page 66
<u>Enabling administrator settings on the device</u> on page 67

Configuring SIP server settings

About this task

Use this procedure to register Avaya Vantage[™] to the SIP server.

You can configure the SIP server and SIP domain through the **Settings** menu only as an administrator.

Before you begin

Get the administrator password that is set through ADMIN_PASSWORD or PROCPSWD.

Procedure

- 1. On the Home screen, tap **Applications**.
- 2. Tap Settings.
- 3. In the upper-right corner of the screen, tap **Menu > Admin login**, and enter the administrator password.
- 4. Tap More, and tap SIP Settings.
- 5. Tap **SIP domain**, enter the domain name for registration, and tap **OK**.
- 6. Do the following to add a SIP server to the SIP servers list:
 - a. Tap SIP proxy settings.
 - b. In the upper right corner, tap **Add**.
 - c. In the SIP proxy server field, enter the address of the SIP proxy server.

You can use either the dotted-decimal or DNS name format.

d. In the **Transport type** field, select the TLS or TCP protocol for the SIP server.

Avaya Vantage[™] does not support UDP.

e. (Optional) In the SIP port field, enter a port number for the server to use.

Avaya Vantage[™] uses the following default port numbers:

- 5060 for TCP
- 5061 for TLS

Related links

<u>Enabling administrator settings on the device</u> on page 67 <u>Administrator password configuration</u> on page 66

Setting up a DHCP site-specific option number

About this task

Use this procedure to assign a Site-Specific Option Number (SSON). Avaya Vantage^{$^{\text{M}}$} uses SSON to determine which set of site-specific parameters must be downloaded from the DHCP server. You can only set the SSON using the **Settings** menu of Avaya Vantage^{$^{\text{M}}$}.

Procedure

- 1. On the Home screen, tap **Applications**.
- 2. Tap Settings.
- 3. Tap More > DHCP Site-Specific Option Number (SSON).
- 4. Enter the required SSON.

The number must be in a range between 128 to 254.

Additional network configuration

Setting the Ethernet interface control

Procedure

- 1. Open the **Settings** menu.
- 2. Tap **Network > Ethernet**.
- 3. Tap Interfaces.
- 4. **(Optional)** If the interface options are disabled, enable the administrator mode.
- 5. To view the Ethernet mode, tap **Ethernet**.

The Ethernet mode is set to auto negotiation and cannot be modified.

- To configure the secondary Ethernet interface, tap PC Ethernet and select one of the following:
 - **Disabled**: To disable the PC Ethernet interface.
 - Auto: To enable and configure the PC Ethernet mode to auto negotiation.

Setting the 802.1x authentication mode

Procedure

- Open the Settings menu.
- 2. Tap **Network > Ethernet**.
- 3. Tap IEEE 802.1x authentication.

You might need to enter the administrator password.

- 4. **(Optional)** To change the setting for the Pass through mode, tap **Pass through mode**, and select one of the following options:
 - On: To enable multicast pass-through without proxy logoff.
 - Multicast pass through and proxy logoff: To enable multicast pass-through with proxy logoff.
 - Off: To disable multicast pass-through.
- 5. **(Optional)** To change the setting for the Supplicant mode, tap **Supplicant mode**, and select one of the following options:
 - Off: To disable the Supplicant operation.
 - On, unicast EAPOL only: To enable the Supplicant operation. The device responds only to received unicast Extensible Authentication Protocol over LAN (EAPOL) messages.
 - On, unicast and multicast EAPOL: To enable the Supplicant operation. The device responds to received unicast and multicast EAPOL messages.
- 6. **(Optional)** To change the Extensible Authentication Protocol (EAP) type to be used for IEEE 802.1x authentication, tap **EAP Type**, and select one of the following options:
 - EAP-MD5
 - EAP-TLS

Chapter 7: Application setup

This chapter describes how to set up applications on Avaya Vantage[™]. Avaya Vantage[™] supports the installation of Avaya telephony applications and third-party applications.

As of Release 1.1 Service Pack 1, the Avaya Vantage[™] Basic and Avaya Equinox[®] Android Package Kits (APKs) are bundled in the Avaya Vantage[™] firmware package file and pushed automatically to the Avaya Vantage[™] device. If you want to use one of these CSDK-based applications as the active telephony application, you can set the ACTIVE_CSDK_BASED_PHONE_APP parameter in the settings file. The application you define in the parameter is installed automatically from the application APKs that are available on the device's local memory. Unless you define one of these bundled applications as the active CSDK-based application, the application remains disabled and hidden. If a newer version of Avaya Vantage[™] Basic or Avaya Equinox[®] becomes available in Google Play, the Avaya Vantage[™] device displays an upgrade notification.

You can install or update applications on Avaya Vantage[™] through the following options:

• The "Push application" method. Using this method, the administrator can initiate automatic installation, upgrade, or uninstallation of applications without any intervention of the end user. To push an application on the device, the administrator uploads the application APK file on the HTTP or HTTPS server and provides the path to the file in the 46xxsettings.txt file through the PUSH_APPLICATION parameter.

! Important:

You must specify each application only once. If you specify an application more than once, Avaya Vantage[™] might not work as expected.

- Google Play. You must enable access to Google Play by using the USER_INSTALL_APPS_GOOGLE_PLAY_STORE parameter. End users can download applications from Google Play for K165 and K175. The system administrator can restrict installation of certain applications by using a configuration file.
- Third-party application stores or unknown sources. You must enable installation of applications from unknown sources by using the USER_INSTALL_APPS_UNKNOWN_SOURCES parameter. This option is disabled by default. When enabled, end users can download application APKs from common third-party application stores or other sources, such as emails or websites, to Avaya Vantage™.

With the telephony application APKs that are bundled with the Avaya Vantage[™] firmware package, you do not need to use the installation options listed above. However, if you choose to install or update using these options, they take priority over the bundled APKs. If you use one of these options, Avaya Vantage[™] Basic and Avaya Equinox[®] will still remain hidden and disabled until one of these applications is defined as the active CSDK-based application.

The installation options, in order of priority, for the Avaya CSDK applications are:

- 1. Google Play store (for K165 and K175)
- 2. PUSH APPLICATION parameter
- 3. Bundled APKs

Note:

IP Office Release 11.0 only supports Avaya Vantage[™] Basic. Other applications, such as Avaya Equinox[®] on Avaya Vantage[™], are not currently supported with IP Office.

Pushing applications onto the Avaya Vantage[™] device

About this task

Use this procedure to push applications to Avaya Vantage[™] without any intervention of the end user. Through the PUSH_APPLICATION parameter, you can initiate automatic installation, upgrade, or uninstallation of applications.

Important:

While setting the PUSH_APPLICATION parameter, you must specify each application only once. If you specify an application more than once, Avaya Vantage[™] might not work as expected.

Before you begin

Ensure that you have uploaded the application APK file on the HTTP or HTTPS file server or a network endpoint.

Procedure

- 1. Open the 46xxsettings.txt settings file in a text editor.
- 2. To push a new application to the device, do one of the following depending on the scenario:
 - The settings file contains the string SET PUSH_APPLICATION <a list of URLs> and the list of URLs contains at least one entry: Enter a comma after the last entry, followed by the URL where the new application package file is located.
 - The settings file does *not* contain the string SET PUSH_APPLICATION <a list of URLs>: Add a new string with the text SET PUSH_APPLICATION, followed by a space and the URL where the application package file is located.

If the application package file is stored in the root directory of the HTTP or HTTPS file server, you can provide the file name only. If the application package file is stored in a subdirectory of your HTTP or HTTPS file server, you must provide a relative path to the file. If the application package file is stored on a network endpoint, you must provide the full path to the package file.

- 3. To upgrade an application that was already pushed to the device, do the following:
 - a. In the string SET PUSH_APPLICATION <a list of URLs>, locate the URL of the previous version of the application package file.
 - b. Replace this URL with the URL where the latest version of the application package file is located.
- 4. Save the settings file.
- 5. Upload the settings file on the file server.

Result

In the next polling period, Avaya Vantage $^{\text{TM}}$ downloads the settings file and the application package and installs the application on the device.

Push command examples

The following is a simple example of using the **Push** command when the application package file is stored in the root directory of your HTTP or HTTPS file server:

```
SET PUSH APPLICATION "com.avaya.android.vantage.basic release 2.0.0.0.apk"
```

The following is a simple example of using the Push command when the application package file is stored on a network endpoint:

```
SET PUSH_APPLICATION "http://www.avaya.com/applications/download/com.avaya.android.vantage.basic_release_2.0.0.0.apk"
```

Uninstalling a pushed application

Procedure

- 1. Open the 46xxsettings.txt settings file in a text editor.
- 2. From the string containing the **SET PUSH_APPLICATION** command, delete the path to the application that must be uninstalled.
- 3. Save the settings file.
- 4. Upload the settings file on the file server.

Result

On the next polling period, Avaya Vantage[™] uninstalls the application from the device.

Access to Google Play applications for K165 and K175

For K165 and K175, Google Play is the main source of Android applications. According to your company's policies, you can determine:

- Whether end users can install applications from Google Play.
- Which applications end users can install from Google Play.

Access to Google Play

You can control access to Google Play by using the USER_INSTALL_APPS_GOOGLE_PLAY_STORE parameter in the 46xxsettings.txt file. To enable installation of third-party applications from Google Play, you must set USER_INSTALL_APPS_GOOGLE_PLAY_STORE to 1.

Access to specific applications

You can determine the availability of certain applications from Google Play by completing a black or white list section in an XML-based configuration file:

- White list: End users can install applications from the white list only. End users cannot install any applications that are not in the white list. If the white list section is configured and the list is empty, users cannot install applications from Google Play.
- Black list: End users cannot install applications that are mentioned in the black list. If the black list is empty, users can install any third-party application from Google Play.

You can configure either a white list or a black list, but not both at a time.

The APPS CONTROL FILE parameter defines the location of the configuration file.

If the configuration file is not specified, users can install any application from Google Play.

Example: XML-based application control file with a white list

Editing a black or white list

Before you begin

If you do not already have one, create an XML-based configuration file for third-party application control.

Procedure

1. Open the XML-based configuration file in a text editor.

- 2. To add or edit the black list, do the following:
 - a. (Optional) If the <allowedUserInstalledAppsUsingGooglePlayStore type="blacklist"> section is not already present in the configuration file, add the section:

```
<allowedUserInstallAppsUsingGooglePlayStore type="blacklist">
</allowedUserInstallAppsUsingGooglePlayStore>
```

b. In the <allowedUserInstalledAppsUsingGooglePlayStore
 type="blacklist"> section, list the applications you want to include.

Use the following format to list the application:

```
<app packagename="<Type the package name here>" />
```

Example:

- 3. To add or edit the white list, do the following:
 - a. (Optional) If the <allowedUserInstalledAppsUsingGooglePlayStore type="whitelist"> section is not already present in the configuration file, add the section:

```
<allowedUserInstalledAppsUsingGooglePlayStore type="whitelist">
</allowedUserInstallAppsUsingGooglePlayStore>
```

b. In the <allowedUserInstalledAppsUsingGooglePlayStore type="whitelist"> section, list the applications you want to include.

Use the following format:

```
<app packagename="<Type the package name here>" />
```

Example:

- 4. Save the configuration file.
- 5. Upload the file on the file server.
- 6. In the settings file, set the APPS_CONTROL_FILE parameter to define the URL that specifies the location of the XML-based configuration file.

Result

On the next polling period, Avaya Vantage[™] downloads the file and applies the settings.

Access to applications from unknown sources

On Avaya Vantage[™], installation of third-party applications from unknown sources is disabled by default. When you enable this option, end users can download application APKs from common third-party application stores and other sources, such as emails and websites, to Avaya Vantage[™].

When installation from unknown sources is enabled, on K155, Application Stores Links (📜) becomes available and provides links to common third-party application stores, such as F-Droid and GetJar.

You can change this installation setting by using the USER_INSTALL_APPS_UNKNOWN_SOURCES parameter in the settings file. You can set the value of USER_INSTALL_APPS_UNKNOWN_SOURCES to one of the following:

- 0: Installation of third-party applications is disabled. End users cannot change the status through the **Settings** > **Security** menu on the device.
- 1: Installation of third-party applications is disabled by default. End users can change the status through the **Settings** > **Security** menu.
- 2: Installation of third-party applications is enabled by default. End users can change the status through the **Settings** > **Security** menu.

Setting up a CSDK-based telephony application as the active application

About this task

If you want to use a CSDK-based telephony application as the active telephony application, you must set up the ACTIVE_CSDK_BASED_PHONE_APP parameter.

As of Release 1.1 SP 1, the Avaya Vantage[™] Basic and Avaya Equinox[®] APKs are bundled in the Avaya Vantage[™] firmware package and pushed automatically to the Avaya Vantage[™] device. However, unless you define one of these bundled applications as the active CSDK-based application, the application remains disabled and hidden.

For more information about parameter values, see <u>Package names of CSDK-based applications</u> on page 80.

Important:

Only one CSDK-based application can be the active telephony application at a time. Therefore, ACTIVE_CSDK_BASED_PHONE_APP must contain only one package name.

Procedure

- 1. Open the 46xxsettings.txt settings file in a text editor.
- 2. If the settings file contains the string SET ACTIVE_CSDK_BASED_PHONE_APP < "application package name">, replace the existing package name with the package name of the required application.

- 3. If the settings file does not contain the string SET ACTIVE_CSDK_BASED_PHONE_APP <"application package name">, do the following:
 - a. Create a new string in the file below the string SET PUSH_APPLICATION <a list of URLs>.
 - b. In the new string, enter the following:

```
SET ACTIVE_CSDK_BASED_PHONE_APP <"name of the application
package">
```

For example:

```
SET PUSH_APPLICATION com.avaya.android.vantage.basic_playstore_2.0.0.0.0406_100718_120334e.apk SET ACTIVE_CSDK_BASED_PHONE_APP "com.avaya.android.vantage.basic"
```

4. Save and upload the e settings file on the file server.

In the next polling period, Avaya Vantage[™] downloads the settings file and applies the settings accordingly.

If not already installed, the telephony application that you define in the ACTIVE_CSDK_BASED_PHONE_APP parameter is installed using the APK available on the device's local memory. Avaya Vantage[™] enables the application for the end user.

Avaya telephony applications supported on Avaya Vantage[™]

In the current release, Avaya Vantage[™] supports the following Avaya telephony applications:

Application	Avaya Breeze [™] CSDK-based?
Avaya Vantage [™] Basic	Yes
Avaya Equinox®	Yes
Avaya Vantage [™] Open	No

If you want to use an CSDK-based telephony application, you also need to set up the ACTIVE_CSDK_BASED_PHONE_APP parameter. For more information, see Package names of CSDK-based applications on page 80.

Note:

Avaya Vantage[™] with IP Office Release 11.0 only supports the Avaya Vantage[™] Basic application. Avaya Equinox[®] and Avaya Vantage[™] Open are not supported.

Package names of CSDK-based applications

The following table shows package names of the CSDK-based phone applications. If you want to use the CSDK-based phone application, you need to set the ACTIVE CSDK BASED PHONE APP parameter using the corresponding package name.

Application	Package name
Avaya Equinox®	"com.avaya.android.flare"
Avaya Vantage [™] Basic	"com.avaya.android.vantage.basic"

Parameter settings for IP Office environments

With IP Office, the KlxxSupgrade.txt file is automatically-generated. This file defines the ACTIVE_CSDK_BASED_PHONE_APP and PUSH_APPLICATION parameters, as shown in the following example:

```
## IPOFFICE/11.0.0.0.0 build 830 10.133.134.138 AUTOGENERATED
SET APPNAME K1xx_SIP-R1_1_0_1_3105.tar
SET ACTIVE_CSDK_BASED_PHONE_APP "com.avaya.android.vantage.basic"
SET PUSH_APPLICATION
com.avaya.android.vantage.basic_playstore_1.1.0.1.0002_280318_8334068.apk
```

Note:

If you include the line GET 46xxsettings.txt, then all lines after this line will be ignored. You must include such lines in the 46xxsettings.txt file.

Chapter 8: Kiosk mode configuration

You can configure Avaya Vantage[™] and supported applications to work in Kiosk mode. With this mode, you can limit the applications that end users can access. Therefore, end users will only be able to access specific applications for a predetermined purpose and will not be able to access the underlying system.

For the device to work as a kiosk, you must pin the Avaya Kiosk application as a special Home screen launcher, where only predefined applications are available to the end user. To avoid getting a scroll bar, Avaya recommends that you define up to six applications to be pinned on the Home screen of the launcher.

When Avaya Vantage[™] is in Kiosk mode:

- The end user cannot change the location of the application icons presented on the Home screen of the launcher.
- The device does not display a notification bar.
- The Android Home button is unavailable.
- Users can only use the Back button to return to the Home screen.

Kiosk mode configuration checklist

No.	Task	Notes	~
1	Push the Avaya Kiosk application to the Avaya Vantage [™] device.	Use the PUSH_APPLICATION parameter to install the Kiosk application on the device.	
		The Avaya Kiosk application APK file is part of the Avaya Vantage [™] firmware distribution package.	
		For more information about pushing applications to the device, see Pushing applications onto the Avaya Vantage device on page 75.	
2	Define the Android applications to be locked on the Home screen.	Use the PIN_APP parameter to pin the required Android applications on the Home screen of the launcher. To avoid getting a scroll bar, Avaya	

Table continues...

No.	Task	Notes	~
		recommends that you define up to six applications to be pinned on the Home screen.	
		You must also include the Avaya Kiosk application package name in the PIN_APP parameter value. For a list of applications that can be pinned in Kiosk mode, see Applications to be pinned in Kiosk mode on page 83.	
		To unpin, see <u>Unpinning applications in Kiosk mode</u> on page 84.	
3	Customize the wallpaper.	Use the CURRENT_LOGO parameter to set a wallpaper of your choice for the Home screen.	
4	Reboot the device.	After you complete the necessary configuration, reboot the device to apply the settings.	
5	Log on to the device and start Kiosk mode.	This is a one-time activity. On subsequent reboots, the special Home screen for Kiosk mode opens automatically.	
		See Starting Kiosk mode for the first time on page 84.	

Applications to be pinned in Kiosk mode

Use the PIN_APP parameter to pin the required applications to the Home screen of the launcher. The following is a list of application packages that must be part of the PIN_APP parameter value:

- "com.avaya.endpoint.avayakiosk": This is the Avaya Kiosk application that provides the special Home screen.
- "com.avaya.endpoint.login" and "com.avaya.endpoint.upgrade": These are required to provide login and upgrade capabilities in Kiosk mode.

To provide telephony capabilities to end users in Kiosk mode, you can pin one of the following Avaya CSDK-based telephony applications:

- "com.avaya.android.vantage.basic": Avaya Vantage[™] Basic.
- "com.avaya.android.flare": Avaya Equinox[®].

Changes to the PIN_APP parameter setting only take effect after you reboot the Avaya Vantage[™] device.

An example of the parameter setting:

```
SET PIN_APP "com.avaya.endpoint.avayakiosk,com.avaya.android.vantage.basic,com.android.chrome,com.avaya.endpoint.login,com.avaya.endpoint.upgrade,com.avaya.endpoint.avayavoiceassistant"
```

Unpinning applications in Kiosk mode

Procedure

To unpin applications, log in using the administrator password defined in ADMIN_PASSWORD or PROCPSWD.

Starting Kiosk mode for the first time

Before you begin

- Complete the configuration tasks. See Kiosk mode configuration checklist on page 82.
- Reboot the Avaya Vantage[™] device.

Procedure

- 1. Log on to the device using the SIP user credentials.
- 2. On the Home screen, tap the Avaya Kiosk application icon.

The device displays the special Home screen of the launcher and the icons for the pinned applications.

On subsequent reboots, the special Home screen opens automatically.

Exiting Kiosk mode

About this task

Use this procedure to exit the Kiosk mode and access the device normally.

Procedure

- 1. On the Home screen of the launcher, tap the **Lock** icon.
- 2. Enter the administrator password that is configured in ADMIN_PASSWORD or PROCPSWD.
- 3. Tap **OK**.

Chapter 9: Maintenance

Restoring factory settings from the Settings menu

About this task

Use this procedure to remove all user information stored on the device and to restore original manufacturer settings. This procedure describes how to perform a factory reset from the **Settings** menu on the device. You can also perform a factory reset from the boot recovery menus.

Resetting a device removes the following information from the device:

- · All administered values
- · User-specified data, including information about all accounts
- Device settings
- Application data and settings that were not loaded as part of the device firmware
- · Wi-Fi network configuration

To be able to recover settings or data after a factory reset, you must back them up using a personal third-party account, such as Google[™] account.

Before you begin

Get the administrator password that is set through ADMIN PASSWORD or PROCPSWD.

In an IP Office environment, you must set the ADMIN_PASSWORD using the SET_ADMIN_PASSWORD=x NUSN, where x is the password that is added to the autogenerated 46xxsettings.txt file. For example:

SET ADMIN PASSWORD=Avaya@1234

Procedure

- 1. On the Home screen, tap **Applications**.
- 2. Tap Settings.
- In the upper-right corner of the screen, tap Menu > Admin login, and enter the administrator password.
- 4. Tap Backup & reset > Factory data reset.
- 5. Tap Reset device.
- 6. Tap Erase everything.

The device restarts. The process takes approximately 20 minutes to complete.

Related links

Firmware is corrupted on page 97

Rebooting Avaya Vantage[™] from the Settings menu

About this task

Use this procedure to restart Avaya Vantage $^{\text{TM}}$ manually. You can also reboot Avaya Vantage $^{\text{TM}}$ to initiate an upgrade.

Procedure

- 1. Go to the **Settings** menu.
- 2. Tap Backup & reset.
- 3. Tap **Reboot** and then tap **Yes** to confirm.

If the file server contains a new version of software, Avaya Vantage[™] downloads and installs updates according to the configured upgrade policy.

Failover and survivability

If the control server that is currently active fails, the exact behavior of a communication application is determined by the application's internal policies. The exact list of operations that can be performed during failover might be different for each application.

Debugging and monitoring the device

Enabling verbose logging

About this task

Use this procedure to set the scope of log messages and the events to be included in log messages.

Before you begin

Get the administrator password that is set through ADMIN_PASSWORD or PROCPSWD.

Procedure

1. On the Home screen, tap **Applications**.

- 2. Tap Settings.
- 3. In the upper-right corner of the screen, tap **Menu > Admin login**, and enter the administrator password.
- 4. Tap **Debugging options**.
- 5. Tap Log.
- 6. Tap Log Categories and select the log categories to be included in log messages.
- Tap Remote Logging to configure parameters for system logging.
 - a. Select the **Remote Logging** check box to enable system logging.
 - From the Remote Log Level list, select the events to be included in log messages.
 By default, logs only include errors.
 - c. In the **Remote log server** field, provide the address of the server where you want logs to be stored.
- 8. Tap **Local logging** to configure parameters for local logging.
 - a. Select the Local Logging check box to enable local logging.
 - b. From the Local Log Level list, select the events to be included in log messages.
 The default setting is 4, which displays warnings.
 - c. Tap Clear Local Log Files to delete local logging files and core dump files.

Generating a debug report

About this task

Use this procedure to generate a debug report. The debug option is also available when you are logged out of the device.

You can save the report in the internal flash memory of Avaya Vantage[™], on a USB mass storage device, or on an HTTP or HTTPS server. When you generate a debug report, Avaya Vantage[™] overwrites any existing report, if applicable. The report remains available in the internal flash memory for up to 14 days.

Record the encryption password carefully because you cannot decrypt the report without the password.

Procedure

- 1. Tap **Settings**.
- 2. Tap Debugging options > Generate debug report.
- 3. Enter the password for encryption and decryption of the report.
- 4. Select one of the following destinations:
 - Internal flash memory

- · HTTP/S file server
- USB flash drive

The **USB flash drive** option is available only when a USB mass storage device is connected to Avaya Vantage[™].

5. Tap Generate.

Avaya Vantage[™] generates a debug report, debugreport.tar.gz, and stores it in the internal flash memory at /mnt/sdcard/AvayaVantageLogs. If you selected the USB or HTTP/S option, a copy of the report is saved in the selected destination.

6. (Optional) On K165 and K175, to share the report, click <.

You can share the report through most email systems, with the exception of Gmail, which does not support tar.gz files. Instead of Gmail, you can use Google Drive.

The success of the sharing operation depends on the file size and the selected option. For example, while most email systems support an attachment that is up to 20 MB only, Google Drive can support up to 10 GB.

The < icon is not available if you are logged out of the device.

Generating an audio report

About this task

Use this procedure to generate a separate audio report instead of a complete debug report. The audio debugging option is also available when you are logged out of the device.

You can save the report in the internal flash memory of Avaya Vantage[™], on a USB mass storage device, or on an HTTP or HTTPS server. When you generate an audio report, Avaya Vantage[™] overwrites any existing report, if applicable. The report remains available in the internal flash memory for up to 14 days.

Ensure that you record the encryption password carefully because you cannot decrypt the report without the password.

Procedure

- Tap Settings.
- 2. Tap **Debugging options > Generate audio report**.
- 3. Enter the password for encryption and decryption of the report.
- 4. Select one of the following destinations:
 - Internal flash memory
 - HTTP/S file server
 - · USB flash drive

The **USB flash drive** option is available only when a USB mass storage device is connected to Avaya Vantage[™].

5. Tap Generate.

Avaya Vantage[™] generates an audio report, media_report.tar.gz, and stores it in the internal flash memory at /mnt/sdcard/AvayaVantageLogs. If you selected the USB or HTTP/S option, a copy of the report is saved in the selected destination.

6. (Optional) On K165 and K175, to share the report, click <.

You can share the report through most email systems, with the exception of Gmail, which does not support tar.gz files. Instead of Gmail, you can use Google Drive.

The success of the sharing operation depends on the file size and the selected option. For example, while most email systems support an attachment that is up to 20 MB only, Google Drive can support up to 10 GB.

The < icon is not available if you are logged out of the device.

Opening a debug or audio report

About this task

Use this procedure to decrypt a debug or audio report. To review log data, you must decrypt the reports.

Procedure

- 1. Copy the report to a folder on your computer.
- Open the command line interface and navigate to the folder where you copied the report.
- 3. Run one of the following commands:
 - To decrypt the debug report:

```
openssl aes-128-cbc -d -salt -k <password> -in debugreport.tar.gz
-out debugreport.decrypted.tar.gz
```

To decrypt the audio report:

```
openssl aes-128-cbc -d -salt -k <password> -in
media_report.tar.gz -out media_report.decrypted.tar.gz
```

Replace *password* with the password that you provided when generating the report.

On Windows-based computers, you can install OpenSSL from binaries to run the openss1 command.

The decrypted reports are saved in the following archive files:

- **Debug report**: debugreport.decrypted.tar.gz
- Audio report: media report.decrypted.tar.gz
- 4. To extract the decrypted archive file, do one of the following:
 - On Windows-based computers, use any program that can extract zip archives.

• On Linux systems, run the following command:

tar -zxvf <archive file name>

Configuring the SSH server settings

About this task

Use this procedure to enable challenge-response authentication on SSH.

Before you begin

Get the administrator password that is set through ADMIN_PASSWORD or PROCPSWD.

Procedure

- 1. Tap Settings.
- 2. In the upper-right corner of the screen, tap **Menu > Admin login**, and enter the administrator password.
- 3. Tap Debugging options > SSH server settings.
- 4. **(Optional)** To enable SSH remote access, select the **SSH server mode** check box.
- 5. (Optional) To enable sroot access, select the SSH server root mode check box.

Enabling port mirroring

About this task

Use this procedure to copy the Ethernet packets that are transmitted or received on the network to the secondary Ethernet port.

This functionality is only available if you have an embedded Ethernet switch on Avaya Vantage™.

Before you begin

Get the administrator password that is set through ADMIN PASSWORD or PROCPSWD.

Procedure

- 1. Tap **Settings**.
- 2. In the upper-right corner of the screen, tap **Menu > Admin login**, and enter the administrator password.
- 3. Tap **Debugging options > Port mirroring**.
- 4. Select the **Port mirroring** check box.

Pinging a device on the network

About this task

Use this procedure to ensure that Avaya Vantage $^{\mathsf{TM}}$ can reach a particular IP address or a host on the network.

This option is also available when you are logged out of the device.

Procedure

- 1. Tap **Settings**.
- 2. Tap **Debugging options** > **Host to ping**.
- 3. Enter the IP address or host name of the device.
- 4. Tap **OK**.

If Avaya Vantage[™] can resolve the IP address, it displays the ping statistics that include the number of packets transmitted and received, packet loss percentage, and time taken.

Chapter 10: Device upgrade

You must upgrade the Avaya Vantage[™] firmware to keep the device up-to-date, gain access to new features, and enhance stability and security.

Avaya Vantage[™] downloads upgrade images and configuration files from a file server by using HTTP or HTTPS.

Firmware upgrade options

You can perform the device firmware upgrade in the following ways:

- Automatic: Configure the device to poll periodically for a newer version of the software in the file server and automatically download the upgraded software.
- Manual: Upgrade the device manually without the device waiting for a polling interval by:
 - Using the **Update now** option in the **Settings > About Avaya Vantage > Software information** menu on the device. With this option, the device immediately downloads and installs the software if an updated software version is available.
 - Rebooting the device from the **Settings** > **Backup & reset** menu on the device, System Manager, IP Office System Status Application, or IP Office System Monitor. If an updated version of software is available, then the device upgrades immediately after the reboot or later according to the upgrade policy configured for the device.

Firmware upgrade prerequisites

Before upgrading the device firmware, perform the following actions:

- Download the newest distribution package and updated 46xxsettings.txt settings file on the file server.
- Ensure that the upgrade related parameters, such as UPGRADE_POLICY and UPGRADE_POLLING_PERIOD, are set correctly in the 46xxsettings.txt file according to your requirement. For more information, see Upgrade related parameters on page 154.
- Provide a path to the file server in the FILE SERVER URL configuration parameter.

Note:

If FILE_SERVER_URL is not defined, Avaya Vantage[™] uses HTTPSRVR, HTTPPORT, and HTTPDIR for an HTTP file server, or TLSSRVR, TLSPORT, and TLSSIR for an HTTPS file server.

Device upgrade process

Avaya Vantage[™] upgrade images consist of packages. During the upgrade process, Avaya Vantage[™] downloads and installs only new or changed packages from the upgrade image. The upgrade image stores information about packages in a Package.gz file. This file contains a list of all packages in the image and provides information about versions of each package. Using packages can reduce download times, network traffic, and the resets required to complete the upgrade.

To perform an upgrade, Avaya Vantage[™] does the following:

- 1. Receives the file server address from DHCP, LLDP, Device Enrollment Services, or the device interface.
- 2. Connects to the file server and searches for the KlxxSupgrade.txt file.
 - If IP Office is the file server, it auto-generates an appropriate file unless one has been uploaded to its file storage.
- 3. Compares its software version with the version specified in the KlxxSupgrade.txt file.
- 4. If a newer version of the software distribution package is available, downloads Packages.gz from the file server and determines which packages can be upgraded.
- Downloads the required packages.
- 6. Restarts and applies the new software.
- 7. Locates and downloads the 46xxsettings.txt settings file that is specified in the K1xxSupgrade.txt file.

You must ensure that the 46xxsettings.txt file is available on the file server. Otherwise Avaya VantageTM does not apply the software updates.

If IP Office is the file server, it auto-generates an appropriate file and adjusts various settings in that auto-generated file to match the settings in the IP Office system configuration.

Automatic upgrades

You can configure the settings file to allow Avaya Vantage[™] to periodically check for a newer version of the software on the file server. If the file server contains new software, Avaya Vantage[™] automatically downloads and installs upgrade files. Avaya Vantage[™] downloads upgrade files in the background so the download does not affect the user experience.

You can specify the following upgrade policies in the settings file:

- Schedule download for a specific time and day in a week.
- Schedule installation on a specific date and time.

• Set the polling interval for a new image file.

For more information about parameters to be set for upgrade policies, see <u>Upgrade related</u> <u>parameters</u> on page 154.

Automatic upgrades do not interrupt active calls. Avaya Vantage[™] starts the upgrade after all calls are completed.

Upgrading Avaya Vantage[™] using the Update option

About this task

Use this procedure to manually check for upgrade files and to download and install upgrade files immediately if updated software is available.

Procedure

- 1. Go to the **Settings** menu of the device.
- 2. Tap About Avaya Vantage > Software information.
- 3. Tap **Update now**.

If the file server contains new software, Avaya Vantage[™] starts the upgrade. If Avaya Vantage[™] has the latest software, the Your phone is up to date message is displayed on the screen.

Upgrading Avaya Vantage[™] using System Manager

About this task

Use this procedure to perform a bulk upgrade of Avaya Vantage[™] in the Avaya Aura[®] environment.

The actual procedure might differ depending on the System Manager version you are using. For more information, see *Administering Avaya Aura*® *System Manager*.

Procedure

- 1. Log in to System Manager.
- 2. In the System Manager interface, provide the range of Avaya Vantage[™] IP addresses that require an upgrade.
- Click Reboot.

After reboot, Avaya Vantage[™] downloads the upgrade file from the file server. Avaya Vantage[™] compares the current version of the software with the version specified in the upgrade file. If the file server contains the newer version of software, Avaya Vantage[™] performs the upgrade.

Upgrading Avaya Vantage[™] using IP Office

About this task

Use this procedure to perform an upgrade of Avaya Vantage[™] in the IP Office environment.

Procedure

To upgrade a specific Avaya Vantage[™] device, do the following:

- 1. Restart the device using one of the following IP Office applications:
 - System Status Application
 - System Monitor

For more information, see *Using Avaya IP Office*[™] *Platform System Monitor* and *Using Avaya IP Office*[™] *Platform System Status Application*.

If an updated version of software is available for Avaya Vantage $^{\text{TM}}$, then the device upgrades immediately after the reboot.

To upgrade all Avaya Vantage[™] devices, do the following:

- 2. Upgrade the IP Office system using the Upgrade Wizard of IP Office Manager.
- 3. Select the check box to restart all SIP devices in the environment after the system upgrade.

For more information about upgrading through IP Office Manager, see *Administering Avaya IP Office*™ *Platform with Manager*.

The upgrade process updates any SIP phone firmware files held on the system. If an updated version of software become available for Avaya Vantage $^{\text{TM}}$, then the device upgrades immediately after the reboot.

CSDK-based application upgrades

Avaya Vantage[™] Basic or Avaya Equinox[®] can be configured as the active CSDK-based telephony application on Avaya Vantage[™]. You can update the CSDK-based application on Avaya Vantage[™] through the following options:

- The "Push application" method. Through the PUSH_APPLICATION parameter, you can initiate automatic installation of the latest version of the application without any intervention from the end user.
- Google Play. If a newer version of Avaya Vantage[™] Basic or Avaya Equinox[®] becomes available in Google Play, Avaya Vantage[™] displays an upgrade notification. End users can update the application from Google Play for K165 and K175.
- Android Package Kits (APKs). These APKs of the CSDK-based applications are bundled in the Avaya Vantage[™] firmware package file and pushed automatically to the Avaya Vantage[™]

device. If installation of applications from unknown sources is enabled, then end users can also download application APKs from other sources, such as emails or websites.

For more information about installing and updating applications on Avaya Vantage $^{\text{m}}$, see the sections under Application setup on page 74.

Chapter 11: Troubleshooting

This chapter describes known troubleshooting issues that customers might encounter while performing installation, configuration, and maintenance.

Firmware is corrupted

Condition

Firmware is corrupted so you must restore firmware to its original state.

Cause

Firmware corruption can occur because of a power outage when the device is upgraded, or because of a corrupt system file or an invalid checksum file.

Solution

Use the boot recovery procedure to clear the device and restore Avaya Vantage $^{\text{TM}}$ to its factory settings.

Use the boot recovery menu options only when the device does not boot up properly for some reason. The boot recovery menu provides you options to delete all stored data or swap the boot banks on the device and try to bring up the Android operating system again.

- 1. Connect an external USB keyboard to the device.
 - If the keyboard is USB Type-A, then you require a USB Type-A to Type-C adapter to connect to the USB Type-C port on the K165 or K175 device.
- 2. Reboot the device.
- 3. Press and hold Volume Up.

After the boot, Avaya Vantage[™] displays the Recovery menu.



You can navigate within the Recovery menu using the following buttons:

- To navigate between menu options, press Volume Up or Volume Down.
- To select the menu option, press and hold **Volume Up** or **Volume Down**.
- 4. Tap **Enter BRM** to navigate to Avaya Vantage[™] boot recovery options.
- 5. Enter the administrator password using the external USB keyboard connected to the device.

Avaya Vantage[™] starts the boot recovery procedure and displays a list of options.

- 6. Select one of the following options:
 - **Reboot**: Stops the boot recovery procedure and reboots the device.
 - Clear phone : Resets the device to its factory settings.
 - Erase /cache only: Erases the cache partition of the device that is primarily used to store recovery logs and temporary files.
 - Erase /data only: Erases the data stored on the device.
 - Swap memory banks: Swaps the boot banks on the device so the primary boot bank becomes the secondary boot bank. Avaya Vantage[™] always has 2 copies of firmware:
 - Current firmware. Avaya Vantage[™] uses this firmware to boot up.
 - Previously installed firmware. This firmware is updated every time the firmware on the device is upgraded.
 - Force SELinux Permissive mode: Starts the system with SELinux in Permissive mode. When Permissive mode is enabled, the SELinux security policy is disabled, but the system still logs all events related to the security policy.

Chapter 12: Resources

Documentation

See the following related documents at http://support.avaya.com.

Title	Use this document to:	Audience					
Overview							
Avaya Aura [®] Session Manager Overview and Specification	Understand characteristics and capabilities, including feature descriptions, interoperability, performance specifications, security, and licensing requirements of Avaya Aura® Session Manager.	 Customers Sales, services, and support personnel 					
Implementing							
Deploying Avaya Aura® Session Manager	Deploy Avaya Aura® Session Manager.	Implementation personnel and service administrators					
Upgrading Avaya Aura® Session Manager	Upgrade Avaya Aura [®] Session Manager.	Implementation personnel and service administrators					
Deploying Avaya Aura® System Manager on System Platform	Deploy Avaya Aura® System Manager.	Implementation personnel and service administrators					
Deploying Avaya Aura® Conferencing: Basic Installation	Deploy Avaya Aura [®] Conferencing.	Implementation personnel and service administrators					
Avaya IP Office [™] Platform SIP Telephone Installation Notes	Deploy SIP endpoints on IP Office.	Implementation personnel and service administrators					
Administering							
Administering Avaya Aura [®] Session Manager	Administer and maintain Avaya Aura® Session Manager.	System administrators					

Table continues...

Title	Use this document to:	Audience
Administering Avaya Aura® System Manager	Administer and maintain Avaya Aura® System Manager.	System administrators
Administering Avaya Aura® Conferencing	Administer Avaya Aura® Conferencing.	System administrators
Administering Avaya Session Border Controller for Enterprise	Administer Avaya Session Border Controller for Enterprise.	System administrators
Administering Avaya IP Office™ Platform with Manager	Perform administration tasks using IP Office Manager.	System administrators
Administering Avaya Vantage [™] Open	Administer the Media and Provisioning Server required to perform calls using Avaya Vantage [™] Open.	System administrators
Maintaining		
Maintaining Avaya Aura® Session Manager	Maintain Avaya Aura [®] Session Manager.	System administrators and IT personnel
Troubleshooting Avaya Aura® Session Manager	Troubleshoot known issues for Avaya Aura® Session Manager.	System administrators and IT personnel
Using		
Using Avaya Vantage [™] and Avaya	Use Avaya Vantage [™] and Avaya Vantage [™]	End users
Vantage [™] Basic	Basic.	Support personnel
Using Avaya Equinox® for Android,	Use Avaya Equinox®.	End users
iOS, Mac, and Windows		Support personnel
Using Avaya Vantage [™] Open	Use Avaya Vantage [™] Open.	End users
		Support personnel
Using Avaya Device Enrollment Services to Manage Endpoints	Use Device Enrollment Services to manage endpoints or devices.	Non-Avaya users, including service providers and resellers

Finding documents on the Avaya Support website

Procedure

- 1. Navigate to http://support.avaya.com/.
- 2. At the top of the screen, type your username and password and click Login.
- 3. Click Support by Product > Documents.
- 4. In **Enter your Product Here**, type the product name and then select the product from the list.
- 5. In **Choose Release**, select an appropriate release number.

6. In the **Content Type** filter, click a document type, or click **Select All** to see a list of all available documents.

For example, for user guides, click **User Guides** in the **Content Type** filter. The list displays the documents only from the selected category.

7. Click Enter.

Avaya Documentation Portal navigation

Customer documentation for some programs is now available on the Avaya Documentation Portal at http://documentation.avaya.com/.

Important:

For documents that are not available on the Avaya Documentation Portal, click **Support** on the top menu to open http://support.avaya.com/.

Using the Avaya Documentation Portal, you can:

Search for specific content.

To perform a search:

- Type a keyword in the **Search** field.
- Type a keyword in **Search**, and select the filters to search for content by product, release, and document type.
- Select the appropriate product or solution and then select the appropriate item from the list.
- Search for a document from the Publications menu.
- Publish a PDF of the content. You can publish a PDF of the current section only, the section and its subsections, or the entire document.
- Add content to your collection using My Docs (☆).

From the **My Content > My Docs** menu, you can:

- Create, rename, and delete a collection.
- Add content from various documents to a collection.
- Save a PDF of selected content in a collection and download it to your computer.
- Share content in a collection with others through email.
- Receive content that others have shared with you.
- Add yourself as a watcher to the content using the Watch icon (

From the My Content > Watch list menu, you can:

- Set how frequently you want to be notified, starting from every day to every 60 days.

- Unwatch selected content, all content in a book, or all content on the Watch list page.

As a watcher, you will be notified when content is updated or deleted from a document, or if the document is removed from the portal.

- Share a section on social media platforms, such as Facebook, LinkedIn, Twitter, and GooglePlus.
- · Send feedback on a section and rate the content.

Note:

Some functionality is only available when you log in to the portal. The available functionality depends on the role with which you are logged in.

Viewing Avaya Mentor videos

Avaya Mentor videos provide technical content on how to install, configure, and troubleshoot Avaya products.

About this task

Videos are available on the Avaya Support website, listed under the video document type, and on the Avaya-run channel on YouTube.

Procedure

- To find videos on the Avaya Support website, go to http://support.avaya.com and perform one of the following actions:
 - In Search, type Avaya Mentor Videos to see a list of the available videos.
 - In **Search**, type the product name. On the Search Results page, select **Video** in the **Content Type** column on the left.
- To find the Avaya Mentor videos on YouTube, go to 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 website.

Note:

Videos are not available for all products.

Support

Go to the Avaya Support website at http://support.avaya.com 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.

Using the Avaya InSite Knowledge Base

The Avaya InSite Knowledge Base is a web-based search engine that provides:

- Up-to-date troubleshooting procedures and technical tips
- · Information about service packs
- · Access to customer and technical documentation
- Information about training and certification programs
- · Links to other pertinent information

If you are an authorized Avaya Partner or a current Avaya customer with a support contract, you can access the Knowledge Base without extra cost. You must have a login account and a valid Sold-To number.

Use the Avaya InSite Knowledge Base for any potential solutions to problems.

- 1. Go to http://www.avaya.com/support.
- Log on to the Avaya website with a valid Avaya user ID and password.The system displays the Avaya Support page.
- 3. Click Support by Product > Product Specific Support.
- 4. In Enter Product Name, enter the product, and press Enter.
- 5. Select the product from the list, and select a release.
- Click the **Technical Solutions** tab to see articles.
- 7. Select relevant articles.

Appendix A: Supported configuration parameters

Parameters for controlling configuration parameter downloads

Parameter	Туре	Default value	Is set to default on reset	Description
GROUP	Numeric	0	Yes	Group identifier to download a specific configuration set for a dedicated user group during startup.
				The range is from 0 to 999.
				The parameter can be used in conditional statements in the 46xxsettings.txt settings file.
				For provisioning, use the Settings > Wireless & networks > More > Group menu on the device.
				This parameter is supported in all modes.
AUTH	Numeric	0	No	Authentication flag for all file downloads, including configuration files and image files, and Avaya Aura® Device Services configuration retrieval.
				Assign one of the following values:
				 0: Secure file downloading is not required. Avaya Vantage[™] downloads firmware and configuration files from HTTP or HTTPS servers.
				 1: Secure file downloading is required. Avaya Vantage[™] downloads firmware and configuration files from HTTPS servers only.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				This parameter is supported in all modes.

Phone parameters

Parameter	Туре	Default value	Is set to default on reset	Description
MODEL	String	Factory settings	No	Model identifier of the telephone, which includes the first 8 characters of the telephone's apparatus code.
				The length is from 8 to 10 ASCII characters.
				This parameter can be used in conditional statements in the 46xxsettings.txt file.
				This parameter cannot be modified.
				This parameter is supported in all modes.
MODEL4	String	Factory settings	No	Name of the telephone model or the truncated model identifier.
				This parameter can have one of the following values:
				 K175 for the standard Avaya Vantage[™] device with a camera.
				 K165 for the standard Avaya Vantage[™] device without a camera.
				 K155 for the Avaya Vantage[™] device with a small screen and a physical keypad.
				This parameter can be used in conditional statements in the 46xxsettings.txt file.
				This parameter cannot be modified.
				This parameter is supported in all modes.
MACADDR	String	Factory settings	No	Media Access Control (MAC) address of the device. MACADDR always refers to the Ethernet MAC address.
				MACADDR contains six pairs of ASCII hexadecimal characters separated by colons.
				This parameter can be used in conditional statements in the 46xxsettings.txt file.
				This parameter is supported in all modes.

General phone functionality

Audio parameters

Parameter	Туре	Default value	Is set to default on reset	Description
BRANDING_VOLU ME	Numeric	5	Yes	Specifies the level of the Avaya audio brand. Assign one of the following values:
				8: 9 db above nominal
				• 7: 6 db above nominal
				6: 3 db above nominal
				• 5: nominal
				• 4: 3 db below nominal
				3: 6 db below nominal
				2: 9 db below nominal
				1: 12 db below nominal
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
RINGTONES	String	Null		Specifies a list of audio files to be downloaded as ring tones and offered to users for selection.
				The list can contain 0 to 1023 octets of UTF-8 characters.
				Values are separated by commas without any intervening spaces. If the audio files are stored in the same directory configured in FILE_SERVER_URL, you can list the file names in the following format: ring1.wav,ring2.wav,ring3.mp3,rin4.ogg. If the file is stored in a different location, then use the tuple format: <filename sufix="" with="">=<path>/<filename>. For example: name.ogg=URI.</filename></path></filename>
				If you are using .mp3 or .ogg files that include the ID3 metadata container with a non-empty title field, the title field is displayed by Android in the list of ringtones. If the .mp3 or .ogg file includes a metadata container with an empty title field, the file name is displayed. If a .wav file is used, the filename is always presented.

Table continues...

Parameter	Туре	Default value	Is set to default on reset	Description
				When using the tuple format, the file name must include the audio file suffix. Changing the file suffix only with the same file name will not trigger a new download.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				For example:
				SET RINGTONES "swhistle.wav,chorn.wav,ring4.mp3"
				SET RINGTONES "swhistle.wav=tones/ swhistle.wav,ring4.mp3=mp3files/ ring4.mp3"
RINGTONESTYLE	Numeric	0		Specifies the style of ring tones that are offered to the user for personalized ringing.
				Assign one of the following values:
				0: North American ring tones are offered (default).
				1: European ring tones are offered.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Display parameters

Parameter	Туре	Default value	Is set to default on reset	Description
LOGOS	String	Null		Specifies a list of tuples describing the logo or the wallpaper to be used as the phone display background.
				Logo tuples are separated by commas without any intervening spaces. Each tuple consists of a display name followed by an equal sign (=) followed by a relative or absolute path to the file. To include spaces in display names, the entire list must be quoted.
				Avaya Vantage [™] supports the following file types: PNG, JPG (JPEG), GIF, and BMP. GIF is presented without animation.
				The screen of the K165 and K175 devices is 8 inches with a resolution of 800x1280 pixels.

Table continues...

Parameter	Туре	Default value	Is set to default on reset	Description
				Therefore, Avaya recommends that you use the following image sizes:
				800x1280: Fits the entire screen and appears on all pages.
				600x1280, 2400x1280, or 3200x1280: Provides scrolling on all pages.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				For example:
				SET LOGOS "Red Balloon=redballoon.jpg,Blue Balloon=https://123.456.7.8./ blueballoon.jpg,Purple=/purple.jpg"
CURRENT_LOGO	String	Null		Specifies whether a custom logo or wallpaper is currently selected for display.
				When the value is null, the built-in default logo or wallpaper is displayed.
				To use a custom logo or wallpaper, the resource information must be defined in the LOGOS parameter. You can set the value of CURRENT_LOGO as the display name of one of the logos that are defined in LOGOS.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				For example:
				If LOGOS is defined as "Red Balloon=redballoon.jpg,Blue Balloon=blueballoon.jpg", then you can set CURRENT_LOGO as one of the following:
				• SET CURRENT_LOGO "Red Balloon"
				• SET CURRENT_LOGO "Blue Balloon"

Phone UI related settings

Common operations

Parameter	Туре	Default value	Is set to default on reset	Description
HEADSETBIDIR	Numeric	0	Yes	Specifies whether bidirectional signaling is supported on the headset interface. Bidirectional signalling allows you to forward off-hook events and incoming call alerts from Avaya Vantage [™] to a headset when a headset base station is connected to the headset connector.
				Assign one of the following values:
				0: Disabled.
				1: Switch hook and alert signaling are both enabled.
				2: Only switch hook signaling is enabled.
				Important:
				This parameter must only be used when using a wireless headset if the base station is connected to the headset connector of the device. In other cases, such as when using a wired headset, the value must be set to 0.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings > Audio settings > Headset signalling menu on the device.
				This parameter is supported in all modes.
				This parameter can be stored on the PPM or backup server.
CLICKS	Numeric	1	No	Specifies whether touch sounds are enabled.
				0: Touch sounds are disabled.
				1: Touch sounds are enabled.
				This parameter is supported in all modes.
				For provisioning, use the Settings > Sound & notification > Other sounds > Touch sounds menu on the device.

Parameter	Туре	Default value	Is set to default on reset	Description
				This parameter can be stored on the PPM or backup server.
LARGEFONT	Numeric	2	Yes	Specifies the size of the font.
				Assign one of the following values:
				3: Huge font size.
				2: Large font size.
				1: Normal font size.
				0: Small font size.
				This parameter is supported in all modes.
				For provisioning, use the Settings > Display > Font size menu on the device.
				This parameter can be stored on the PPM or backup server.
INITIAL_SCREEN	String	ADMIN	Yes	Specifies the initial screen presented to a user after logging in to Avaya Vantage [™] .
				Assign one of the following values:
				• PHONE
				HOMESCREEN
				• ADMIN
				For provisioning, use the Settings > Display > Screen presented after login menu on the device.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				This parameter can be stored on the PPM or backup server.
ADMIN_INITIAL_S CREEN	String	HOME	Yes	This parameter specifies whether the Home screen or Telephony screen is presented as the initial screen after the user logs in to Avaya Vantage [™] .
				Assign one of the following values:
				• PHONE
				HOMESCREEN
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Specific audio settings

Parameter	Туре	Default value	Is set to default on reset	Description
AGCHAND	Numeric	0	No	Specifies Automatic Gain Control (AGC) for the handset. The options are:
				0: AGC is disabled.
				• 1: AGC is enabled.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				 The Settings > Audio settings > Auto gain control (AGC) > Handset Auto Gain Control menu on the device.
				This parameter can be stored on the PPM or backup server.
AGCHEAD	Numeric	0	No	Specifies Automatic Gain Control (AGC) for the headset. The options are:
				0: AGC is disabled.
				• 1: AGC is enabled.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings > Audio settings > Auto gain control (AGC) > Headset Auto Gain Control menu on the device.
				This parameter can be stored on the PPM or backup server.
AGCSPKR	Numeric	0	No	Specifies Automatic Gain Control (AGC) for the speaker. The options are:
				0: AGC is disabled.
				• 1: AGC is enabled.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.

Parameter	Туре	Default value	Is set to default on reset	Description
				The Settings > Audio settings > Auto gain control (AGC) > Speaker Auto Gain Control menu on the device.
				This parameter can be stored on the PPM or backup server.
AUDIOSTHD	Numeric	0	Yes	Specifies headset sidetone settings. The options are:
				0: Normal level.
				1: Three levels softer than normal.
				• 2: Off (inaudible).
				3: One level softer than normal.
				4: Two levels softer than normal.
				5: Four levels softer than normal.
				6: Five levels softer than normal.
				7: Six levels softer than normal.
				8: One level louder than normal.
				9: Two levels louder than normal.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
AUDIOSTHS	Numeric	0	Yes	Specifies handset sidetone settings. The options are:
				0: Normal level.
				1: Three levels softer than normal.
				• 2: Off (inaudible).
				3: One level softer than normal.
				4: Two levels softer than normal.
				5: Four levels softer than normal.
				6: Five levels softer than normal.
				7: Six levels softer than normal.
				8: One level louder than normal.
				9: Two levels louder than normal.

Parameter	Туре	Default value	Is set to default on reset	Description
				This parameter is supported by wired handsets only.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
HEADSET_PROFI LE	Numeric	0	Yes	Specifies the headset audio profile selected by the user.
				The range is from 0 to 20. If the value of HEADSET_PROFILE is 0, the headset audio profile is not selected.
				This parameter is supported in all modes.
				For provisioning, use the Settings > Audio settings > Headset profile menu on the device.
				This parameter can be stored on the PPM or backup server.
HEADSET_PROFI LE_DEFAULT	Numeric	1	Yes	Specifies the number of the default headset audio profile.
				The range is from 1 to 20.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
HEADSET_PROFI LE_NAMES	String	Null	Yes	Specifies names to be displayed for headset audio profile selection.
				The value of the parameter is a list of profile names separated by commas without any spaces between entries. If profile names include spaces, the list must use quotations. Names must not contain commas or double quote characters. To retain the default name of a specific profile, do not provide a new name for the profile.
				The parameter can contain up to 0 to 255 octets of UTF-8 characters.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				For example, to rename the first and third profiles and to retain the default name of the second profile, enter the following: SET

Parameter	Туре	Default value	Is set to default on reset	Description
				HEADSET_PROFILE_NAMES "Profile 1,,Profile 3"
HANDSET_PROFI LE	Numeric	0	Yes	Specifies the handset audio profile selected by the user.
				The range is from 0 to 20. If the value of HANDSET_PROFILE is 0, the handset audio profile is not selected.
				This parameter is supported in all modes.
				For provisioning, use the Settings > Audio settings > Handset profile menu on the device.
				This parameter can be stored on the PPM or backup server.
HANDSET_PROFI LE_DEFAULT	Numeric	1	Yes	Specifies the number of the default handset audio profile.
				The range is from 1 to 20.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
HANDSET_PROFI LE_NAMES	String	null string	Yes	Specifies names to be displayed for handset audio profile selection.
				The value of the parameter is a list of profile names separated by commas without any spaces between entries. If profile names include spaces, the list must use quotations. Names must not contain commas or double quote characters. To retain the default name of a specific profile, do not provide a new name for the profile.
				The parameter can contain up to 0 to 255 octets of UTF-8 characters.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				For example, to rename the first and third profiles and to retain the default name of the second profile, enter the following: SET HANDSET_PROFILE_NAMES "Profile 1,,Profile 3"

Language and country settings

Parameter	Туре	Default value	Is set to default on reset	Description
ISO_SYSTEM_LA	String	en_US	Yes	Specifies the device system language.
NGUAGE				ISO_SYSTEM_LANGUAGE uses the LL[_CC] format where:
				LL is a language code. The language code is represented by two lowercase letters. For example: en. For more information about codes, see <u>ISO 639-1</u> .
				CC is an optional country code. The country code is represented by two uppercase letters. For example: GB. For more information about codes, see ISO 3166-1 .
				If you use an optional country code, then the language code and the country code must be separated by the underscore symbol.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
COUNTRY	String	USA	Yes	Specifies a country where Avaya Vantage [™] is used. This parameter is used for country-specific Wi-Fi and anti-flickering frequency settings. If Avaya Vantage [™] cannot identify the country specified in the parameter, it applies default settings.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Date and time settings

Parameter	Туре	Default value	Is set to default on reset	Description
TIMEZONE	String	Etc/GM T	Yes	Specifies the time zone in the Olson name format. For example: America/New_York. For more information about the name format and for a list of time zones, see the Time Zone Database. This parameter is supported in all modes. For provisioning, use:
				DHCP option 242.

Parameter	Туре	Default value	Is set to default on reset	Description
				• The SET command in the 46xxsettings.txt file.
				With IP Office, set this parameter in the 46xxspecials.txt file.
ADMINTIMEFORM AT	Integer	0	No	Specifies whether Avaya Vantage [™] uses the 12-hour or 24-hour time format. The options are:
				0: Use the 12-hour time format.
				1: Use the 24-hour time format.
				Avaya Vantage [™] uses the selected time format in all areas that displays time, including the top bar, call log, and calendar.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				This parameter is supported in all modes.

Server addresses and ports

Parameter	Туре	Default value	Is set to default on reset	Description
DES_STAT	Numeric	2		Specifies whether to attempt Device Enrollment Services discovery if there is no configuration file server provisioned on the device. Discovery is attempted when the device is starting.
				You can assign one of the following values:
				0: Device Enrollment Services discovery is disabled and can only be enabled by resetting the device to its default settings.
				 1: Device Enrollment Services discovery is disabled and can be enabled by changing the value of DES_STAT to 2.
				2: Device Enrollment Services discovery is enabled.
				When DES_STAT is set to 2 and FILE_SERVER_URL is not retrieved from DHCP or LLDP, the device attempts to communicate with Device Enrollment Services during startup to obtain

Parameter	Туре	Default value	Is set to default on reset	Description
				the provisioning or file server address. In addition, if the file server is configured through Settings , Device Enrollment Services discovery will not be triggered.
				For provisioning, use:
				DHCP option 242. The precedence is 3.
				• The SET command in the 46xxsettings.txt file. The precedence is 5.
DNSSRVR	String	0.0.0.0	Yes	Specifies up to three IP addresses of DNS servers in the dotted decimal format.
				The value of the parameter is a list of IP addresses separated by commas without any spaces between entries. Avaya Vantage [™] tries to connect to the DNS servers in the order specified in the parameter.
				Both the Wi-Fi and Ethernet interfaces use the configured DNS server and domain information. An option to configure DNS information specifically for each Wi-Fi network is unavailable. Therefore, if a user toggles between the Wi-Fi and Ethernet interfaces, then the configured DNS information is applicable for both interfaces.
				This parameter is supported in all modes.
				For provisioning, use:
				The Option 6 value in a DHCPACK message.
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
DOMAIN	String	Null	Yes	Specifies a domain name.
				Avaya Vantage [™] uses domain names when DNS names in configuration parameter values are resolved to IP addresses. If DOMAIN is null, all DNS names must be fully qualified. If servers in a network are in more than one sub-domain, server DNS names must include the sub-domain name and DOMAIN must be set to the lowest level common domain.
				This parameter is supported in all modes.

Parameter	Туре	Default value	Is set to default on reset	Description
				For provisioning, use:
				The Option 15 value in a DHCPACK message.
				• The SET command in the 46xxsettings.txt file.
FILE_SERVER_U RL	String	Null	Yes	Specifies the configured file server URLs for downloading firmware and configuration files. Avaya Vantage [™] tries to connect to file servers in the order specified in the parameter.
				The value of the parameter is a list of file server addresses separated by commas without any spaces between entries. A file server URL must use one of the following formats:
				• http://hostname[:port][/path]
				• https://hostname[:port][/path]
				In the URL:
				hostname is either an IP address in the dotted decimal format or a domain name.
				port is an optional port number.
				path is an optional path to a directory where distribution packages and other files are stored.
				Users can provide URLs of HTTP servers without the leading http://. Users must explicitly specify https:// for HTTPS servers. The default port for HTTP is 80. The default port for HTTPS is 443.
				To use Avaya Aura [®] Utility Services as an HTTPS server, you must specify the TCP port as 411 instead of 443.
				If this parameter is set, Avaya Vantage [™] ignores the HTTPSRVR, HTTPPORT, HTTPDIR, TLSSRVR, TLSSRVRDIR, and TLSPORT parameters.
				This parameter is supported in all modes.
				For provisioning, use:
				LLDP Avaya/Extreme Proprietary File Server TLV. The precedence is 1.
				DHCP option 43. The precedence is 2.
				A name=value pair in a DHCPACK message. The precedence is 2.

Parameter	Туре	Default value	Is set to default on reset	Description
				 The siaddr field value in the DHCPACK message. The precedence is 2. Only the dotted decimal format is supported. Avaya Vantage[™] considers addresses received using this method as HTTP server addresses.
				• The SET command in the 46xxsettings.txt file. The precedence is 3.
				The Settings menu on the device. The precedence is 5.
HTTPPROXY	String	Null	Yes	Specifies an address of an HTTP proxy server. A proxy server address uses the hostname[:port] format, where:
				hostname is either an IP address in the dotted decimal format or a domain name.
				• port is an optional port number.
				This parameter is not a URL and it must not begin with http://.
				The range is the default string length.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
HTTPEXCEPTION DOMAINS	String	Null	Yes	Specifies domains that are excluded for use of the HTTP proxy server.
				The value of the parameter is a list of domains separated by commas without any spaces between entries. The range is the default string length.
				A HTTP connection for SCEP is set up through HTTPPROXY only if the rightmost part of the domain specified in MYCERTURL does not match any domain specified in this parameter.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.

Parameter	Туре	Default value	Is set to default on reset	Description
HTTPSRVR	String	0.0.0.0	Yes	Specifies a list of IP or DNS addresses of HTTP file servers for downloading firmware and configuration files.
				Avaya Vantage [™] uses this parameter only if FILE_SERVER_URL and TLSSRVR are not set. The value of the parameter is a list of HTTP file server addresses separated by commas without any spaces between entries. The value can contain up to 255 ASCII characters.
				This parameter is supported in all modes.
				For provisioning, use:
				LLDP Avaya/Extreme Proprietary File Server TLV. The precedence is 1.
				DHCP option 43. The precedence is 2.
				• A name=value pair in a DHCPACK message. The precedence is 2.
				The siaddr field value in the DHCPACK message. The precedence is 2. Only the dotted decimal format is supported.
				• The SET command in the 46xxsettings.txt file. The precedence is 3.
TLSSRVR	String	0.0.0.0	Yes	Specifies a list of IP or DNS addresses of HTTPS file servers for downloading firmware and configuration files.
				Avaya Vantage [™] uses this parameter only if FILE_SERVER_URL is not set. The value of the parameter is a list of HTTPS file server addresses separated by commas without any spaces between entries. The value can contain up to 255 ASCII characters.
				This parameter is supported in all modes.
				For provisioning, use:
				LLDP Avaya/Extreme Proprietary File Server TLV. The precedence is 1.
				DHCP option 43. The precedence is 2.
				A name=value pair in a DHCPACK message. The precedence is 2.

Parameter	Туре	Default value	Is set to default on reset	Description
HTTPDIR	String	Null	Yes	Specifies a path to the directory of the HTTP file server where configuration files and software images are stored.
				The path is relative to the root of the HTTP file server. Avaya Vantage [™] prepends the parameter value to all file names used in HTTP GET operations. Avaya Vantage [™] uses this parameter only if FILE_SERVER_URL is not set.
				The parameter value can contain up to 127 characters.
				Do not use this parameter in configurations where files are stored in the default directory of the HTTP server.
				This parameter is supported in all modes.
				For provisioning, use:
				• A name=value pair in a DHCPACK message.
				DHCP option 43.
				• The SET command in the 46xxsettings.txt file.
TLSDIR	String	Null	Yes	Specifies a path to the directory of the HTTPS file server where configuration files and software images are stored.
				The path is relative to the root of the HTTPS file server. Avaya Vantage [™] prepends the parameter value to all file names used in HTTPS GET operations. Avaya Vantage [™] uses this parameter only if FILE_SERVER_URL is not set.
				The parameter value can contain up to 127 characters.
				This parameter is supported in all modes.
				For provisioning, use:
				• A name=value pair in a DHCPACK message.
				DHCP option 43.
				• The SET command in the 46xxsettings.txt file.
HTTPPORT	Numeric	80	Yes	Specifies the destination TCP port for HTTP requests. The range is from 0 to 65535.

Parameter	Туре	Default value	Is set to default on reset	Description
				Avaya Vantage [™] uses this parameter only if FILE_SERVER_URL is not set.
				This parameter is supported in all modes.
				For provisioning, use:
				• A name=value pair in a DHCPACK message.
				DHCP option 43.
				• The SET command in the 46xxsettings.txt file.
TLSPORT	Numeric	443	Yes	Specifies the destination TCP port for HTTPS requests. The range is from 0 to 65535.
				Avaya Vantage [™] uses this parameter only if FILE_SERVER_URL is not set.
				To use Avaya Aura [®] Utility Services as an HTTPS server, you must set the TCP port to 411 instead of the default 443.
				This parameter is supported in all modes.
				For provisioning, use:
				A name=value pair in a DHCPACK message.
				DHCP option 43.
				• The SET command in the 46xxsettings.txt file.
SIP_CONTROLLE R_LIST	String	Null	Yes	Specifies a list of IP addresses of SIP proxy or registrar servers.
				The value of the parameter is a list of SIP proxy server addresses separated by commas without any spaces between entries. Each entry in the list has the following format:
				host[:port][;transport=xxx], where:
				host is an IP address in the dotted decimal or DNS format.
				 port is the optional port number. If you do not specify a port number, Avaya Vantage[™] uses the following default values:
				- 5060 for TCP
				- 5061 for TLS

Parameter	Туре	Default value	Is set to default on reset	Description
				 transport is the optional transport type. The supported options are TLS or TCP. By default, Avaya Vantage[™] uses the TLS transport type.
				The parameter value can have up to 255 characters.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use:
				LLDP Avaya/Extreme Proprietary Call Server TLV. The precedence is 1.
				DHCP option 43. The precedence is 3.
				A name=value pair in a DHCPACK message. The precedence is 3.
				• The SET command in the 46xxsettings.txt file. The precedence is 4.
				The value stored on the PPM or backup server. The precedence is 5.
				The Settings menu on the device. The precedence is 5.
SIPDOMAIN	String	Null	Yes	Specifies the SIP domain name used for SIP registration. The value of the parameter can have up to 255 characters.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The value stored on the PPM server.
				The Settings menu on the device.
SNTPSRVR	String	0.avaya. pool.ntp.	Yes	Specifies a list of Simple Network Time Protocol (SNTP) server FQDNs or IP addresses.
		org, 1.avaya. pool.ntp. org, 2.avaya. pool.ntp. org,		Avaya Vantage [™] uses this parameter to retrieve date and time information from SNTP servers. The value of the parameter is a list of SNTP server FQDNs or IP addresses using either the dotted decimal or DNS format. Entries in the list are separated by commas without any spaces between

Parameter	Туре	Default value	Is set to default on reset	Description
		3.avaya. pool.ntp.		entries. The parameter value can contain up to 255 characters.
		org		This parameter is supported in all modes.
				For provisioning, use:
				DHCP option 42.
				• The SET command in the 46xxsettings.txt file.
LOGSRVR	String	Null	Yes	Specifies an address of a server where syslog messages are stored.
				LOGSRVR can store one IP address of the syslog server in the dotted decimal or DNS format. The parameter value can have up to 255 characters.
				This parameter is supported in all modes.
				For provisioning, use:
				DHCP option 7 in a DHCPACK message.
				The Settings menu on the device.
USER_AUTH_FILE _SERVER_URL	String	Null	Yes	Specifies a list of user authenticated file server URLs.
				 If this parameter is configured, Avaya Vantage[™] displays the Unified Login screen. In the current release, Avaya Vantage[™] supports Avaya Aura[®] Device Services user authentication servers only. If you did not provide the user's SIP extension and password in Avaya Aura[®] Device Services, Avaya Vantage[™] will also prompt the user to enter the SIP extension and password.
				 If this parameter is not configured, Avaya Vantage[™] displays the SIP Login screen. In this case, the user only needs to enter the SIP extension and password to log in to Avaya Vantage[™].
				The value of the parameter is a list of file server addresses separated by commas without any spaces between entries. A file server URL must use one of the following formats:
				• http://hostname[:port]
				• https://hostname[:port]

Parameter	Туре	Default value	Is set to default on reset	Description
				In the URL:
				hostname is either an IP address in the dotted decimal format or a domain name.
				port is an optional port number.
				Users can provide URLs of HTTP servers without the leading http://. Users must explicitly specify https:// for HTTPS servers. The default port for HTTP is 80. The default port for HTTPS is 443.
				This parameter is supported in all modes.
				For provisioning, use:
				A name=value pair in a DHCPACK message.
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.

Network settings

The following sections describe network configuration settings, such as Ethernet, VLAN, QoS, and IEEE 802.1X.

General settings

Parameter	Туре	Default value	Is set to default on reset	Description
IPADD	String	0.0.0.0	Yes	Specifies the IP address of the Avaya Vantage [™] device. The range is from 7 to 15 ASCII characters. This is a testable parameter.
				The parameter can be used in conditional statements in the 46xxsettings.txt file.
				This parameter is supported in all modes.
				For provisioning, use:
				The yiaddr field value in the DHCPACK message.

Parameter	Туре	Default value	Is set to default on reset	Description
				 For provisioning, use the Settings > Network > Ethernet > IP interface > Static IP settings menu on the device.
ROUTER	String	0.0.0.0	Yes	Specifies an IP address or a list of addresses of default routers or gateways in the IP network.
				Entries in the list are separated by commas without any spaces between entries. The parameter can contain up to 127 characters.
				This parameter is supported in all modes.
				For provisioning, use:
				The Option 3 value in a DHCPACK message.
				 For provisioning, use the Settings > Network > Ethernet > IP interface > Static IP settings menu on the device.
NETMASK	String	0.0.0.0	Yes	Specifies an IP subnet mask.
				This parameter specifies one IP address in the dotted decimal format. The range is from 7 to 15 ASCII characters.
				This parameter is supported in all modes.
				For provisioning, use:
				The Option 1 value in a DHCPACK message.
				 For provisioning, use the Settings > Network > Ethernet > IP interface > Static IP settings menu on the device.
SUBNET	String	0.0.0.0	Yes	Specifies the subnet of the telephone. A value of SUBNET is a value of a bitwise AND operation performed on values of IPADD and NETMASK.
				This parameter is supported in all modes.
				The parameter can be used in conditional statements in the 46xxsettings.txt file.
USE_DHCP	Numeric	1	Yes	Specifies whether Avaya Vantage [™] uses a static IP address or receives the IP address through DHCP. The options are:
				0: Use a static IP address configured on the device.
				1: Obtain the IP address automatically through DHCP.

Parameter	Туре	Default value	Is set to default on reset	Description
				This parameter is supported in all modes.
				For provisioning, use the Settings > Network > Ethernet > IP interface > Use DHCP menu on the device.
DHCP_SSON	Numeric	242	Yes	Specifies the site-specific option number for DHCP.
				The range is from 128 to 254.
				This parameter is supported in all modes.
				For provisioning, use the Settings > Wireless & networks > More > DHCP Site Specific Option Number (SSON) menu on the device.
DHCPSTD	Integer	0	Yes	Specifies the DHCP lease violation flag. Assign one of the following values:
				 1: To comply with the DHCP standard. When the DHCP lease expires, Avaya Vantage[™] immediately releases an IP address.
				 0: To enter the proprietary state. When the DHCP lease expires, Avaya Vantage[™] continues to use the IP address.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
ICMPDU	Integer	1	Yes	Specifies whether Avaya Vantage [™] generates Internet Control Message Protocol (ICMP) Destination Unreachable (DU) messages to inform the source host that a port is unreachable. Assign one of the following values:
				0: DU messages are not transmitted.
				1: DU messages are only transmitted for a UDP port that ranges from 33,434 to 33,523.
				2: DU messages are transmitted.
				This parameter is supported in all modes.
				For provisioning, use:
				A name=value pair in a DHCPACK message.
				• The SET command in the 46xxsettings.txt file.

Parameter	Туре	Default value	Is set to default on reset	Description
ICMPRED	Integer	0	Yes	Specifies whether Avaya Vantage [™] processes ICMP redirect messages. Assign one of the following values:
				 0: Avaya Vantage[™] does not process received redirect messages.
				 1: Avaya Vantage[™] processes received redirect messages according to RFC 1122.
				This parameter is supported in all modes.
				For provisioning, use:
				• A name=value pair in a DHCPACK message.
				• The SET command in the 46xxsettings.txt file.
MTU_SIZE	Integer	1500	Yes	Specifies the Maximum Transmission Unit (MTU) size. Assign one of the following values:
				• 1496
				• 1500
				This parameter is applicable for wired Ethernet connections only and is not used for Wi-Fi. Avaya Vantage™ uses MTU_SIZE to provide compatibility with Ethernet switches that do not support the longest maximum frame length possible with tagged frames.
				This parameter is supported in all modes.
				For provisioning, use:
				A name=value pair in a DHCPACK message.
				The Option 26 value in the DHCPACK message.
				• The SET command in the 46xxsettings.txt file.
NETWORK_MODE	Numeric	1	Yes	Specifies the active network interface. The available options are:
				1: Wired Ethernet connection is active.
				2: Wi-Fi connection is active.
				This parameter is supported in all modes.
				For provisioning, use the Settings > Network > Network mode menu on the device.

Parameter	Туре	Default value	Is set to default on reset	Description
IPV6STAT	Numeric	1		Controls whether Avaya Vantage [™] blocks all incoming and outgoing IPv6 traffic.
				For Avaya Vantage [™] , set this parameter to 0 to block IPv6 traffic because Avaya Vantage [™] does not support IPv6.
				This parameter is applicable for both wired Ethernet and wireless connections.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
BLUETOOTHSTAT	Integer	1	Yes	Specifies whether Bluetooth is allowed for user configuration. Assign one of the following values:
				0: Bluetooth and the Bluetooth menu are disabled in Settings on the device. The user cannot enable Bluetooth.
				 1: Bluetooth and the Bleutooth menu are enabled in Settings on the device. The user can enable or disable Bluetooth.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
BLUETOOTH_FEA TURES_SHARED_ VIA_STAT	Integer	0	Yes	Specifies whether users have access to Shared via Bluetooth options in the Setting menu on the device.
				0: Users cannot use Shared via Bluetooth.
				1: Users can use Shared via Bluetooth.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
TRUST_AGENTS_	Integer	1	Yes	Specifies whether users can configure trust agents.
STAT				0: Users cannot access Trust agents in the Settings menu. All trust agents are disabled.
				1: Users can access Trust agents in the Settings menu. Users can enable or disable the available trust agents
				This parameter is supported in all modes.

Parameter	Туре	Default value	Is set to default on reset	Description
				For provisioning, use the SET command in the 46xxsettings.txt file.
TRUST_AGENTS_ SMARTLOCK_STA	Integer	1	Yes	Specifies whether users can configure the Google Smart Lock feature.
Т				0: Users cannot access Smart Lock in the Settings menu. Smart Lock (Google) is disabled.
				1: Users can access Smart Lock in the Settings menu. Users can enable or disable the Smart Lock (Google) feature.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
TRUST_AGENTS_ AVAYA_SMARTLO	Integer	1	Yes	Specifies whether users can configure the Avaya Smart Lock feature.
CK_STAT				0: Users cannot access Avaya Smart Lock in the Settings menu. The Avaya Smart Lock feature is disabled.
				1: Users can access Avaya Smart Lock in the Settings menu. Users can enable or disable the Avaya Smart Lock feature.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
WIFISTAT	Integer	1	Yes	Specifies whether users can configure Wi-Fi.
				0: Wi-Fi is disabled. Users cannot enable Wi-Fi.
				1: Wi-Fi is enabled. Users can configure Wi-Fi settings from the Settings > Wi-Fi menu.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
WIFIAPSTAT	Numeric	0	Yes	Specifies whether users can configure the WI-FI access point.
				0: WI-FI access point is disabled. Users cannot enable the access point.
				1: Users can enable and configure the access point.
				This parameter is supported in all modes.

Parameter	Туре	Default value	Is set to default on reset	Description
				For provisioning, use the SET command in the 46xxsettings.txt file.
WIFI_CON_STATU S_ON_LOGOUT	Numeric	1	Yes	Specifies whether Avaya Vantage [™] keeps information about wireless connections after logout.
				0: Avaya Vantage [™] deletes information about Wi- Fi connections, such as Wi-Fi passwords.
				 1: Avaya Vantage[™] keeps information about Wi-Fi connections and the active wireless connection, such as Wi-Fi passwords.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use the SET command in the 46xxsettings.txt file.
ADBSTAT	Numeric	1	Yes	Specifies whether Android Debug Bridge (ADB) is enabled.
				0: ADB is disabled and the option to enable ADB from the Settings menu of the device is disabled.
				 1: ADB is disabled, but you can enable it from the Settings > Developer options > Debugging menu.
				Since ADB is a non-secure protocol, Avaya recommends that you enable ADB for Android application development only. Otherwise, set ADBSTAT to 0.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
GRATARP	Integer	0	Yes	Specifies whether an existing Address Resolution Protocol (ARP) cache entry is updated with a MAC address received in a gratuitous ARP message. Assign one of the following values:
				0: Avaya Vantage [™] ignores gratuitous ARP messages.
				1: Avaya Vantage [™] uses gratuitous ARP messages to update the existing ARP cache entry.
				This parameter is supported in all modes.

Parameter	Туре	Default value	Is set to default on reset	Description
				For provisioning, use the SET command in the
				46xxsettings.txt file.

Ethernet interface settings

Parameter	Туре	Default value	Is set to default on reset	Description
PHY1STAT	Numeric	1	Yes	Specifies the speed and duplex mode of Ethernet line interface.
				The accepted value of this parameter is 1, which specifies auto negotiation of speed and duplex.
				This parameter is supported in all modes.
PHY2STAT	Numeric	1	Yes	Disables the secondary Ethernet line interface or specifies its speed and duplex mode.
				Assign one of the following values:
				0: The secondary Ethernet interface is disabled.
				1: Speed and duplex mode of the secondary Ethernet interface are auto negotiated.
				For provisioning, use:
				• A name=value pair in a DHCPACK message.
				DHCP option 43.
				• The SET command in the 46xxsettings.txt file.
				The Settings > Network > Ethernet > Interfaces > PC Ethernet menu on the device.
PHY2_AUTOMDIX _ENABLED	Numeric	1		Specifies whether auto-MDIX is enabled on the secondary Ethernet port.
				Assign one of the following values:
				0: Auto-MDIX is disabled.
				• 1: Auto-MDIX is enabled.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Parameter	Туре	Default value	Is set to default on reset	Description
PORT_MIRRORIN G	Numeric	0		Specifies whether Ethernet packets transmitted or received on the primary Ethernet port are copied to the secondary Ethernet port.
				Assign one of the following values:
				0: Disabled.
				• 1: Enabled.
				For provisioning, use the Settings > Debugging options > Port mirroring menu on the device.

VLAN settings

Parameter	Туре	Default value	Is set to default on reset	Description
L2Q	Numeric	0	Yes	Specifies 802.1Q tagging mode. Assign one of the following values:
				• 0: Auto
				• 1: On
				• 2: Off
				This parameter is supported in all modes.
				For provisioning, use:
				A name=value pair in a DHCPACK message. The precedence is 1.
				DHCP option 43. The precedence is 1.
				• The SET command in the 46xxsettings.txt file. The precedence is 3.
				LLDP. The precedence is 4.
				- The Avaya/Extreme Proprietary 802.1Q Framing TLV.
				- The parameter is set indirectly by receiving a VLAN name with the "voice" prefix in the IEEE 802.1 VLAN Name TLV.
				The T flag in the TIA LLDP MED Network policy TLV.

Parameter	Туре	Default value	Is set to default on reset	Description
				 The Settings > Network > Ethernet > VLAN > VLAN tagging (802.1Q) menu on the device. The precedence is 5.
L2QVLAN	Numeric	0	Yes	Specifies the 802.1Q VLAN identifier.
				The range is from 0 to 4094.
				This parameter is initialized from L2QVLAN_INIT after turning the device on. The parameter is not initialized from L2QVLAN_INIT after reset.
				This parameter is supported in all modes.
				For provisioning, use:
				A name=value pair in a DHCPACK message. The precedence is 1.
				DHCP option 43. The precedence is 1.
				• The SET command in the 46xxsettings.txt file. The precedence is 3.
				LLDP. The precedence is 4.
				- The parameter is set indirectly by receiving a VLAN name with the "voice" prefix in the IEEE 802.1 VLAN Name TLV.
				- The TIA LLDP MED Network policy TLV.
				The Settings > Network > Ethernet > VLAN > VLAN menu on the device. The precedence is 5.
VLANTEST	Numeric	60	Yes	Specifies the number of seconds that Avaya Vantage [™] waits for DHCPOFFER message reception on a non-zero VLAN. The range is from 0 to 999.
				This parameter is supported in all modes.
				For provisioning, use:
				• A name=value pair in a DHCPACK message.
				• The SET command in the 46xxsettings.txt file.
				The Settings > Network > Ethernet > VLAN > VLAN test timer menu on the device.
PHY2TAGS	Numeric	0		Controls whether VLAN tags are stripped from frames forwarded to the secondary Ethernet interface.

Parameter	Туре	Default value	Is set to default on reset	Description
				Assign one of the following values:
				0: VLAN tags are removed from frames forwarded to the secondary Ethernet interface.
				1: VLAN tags are not removed from frames forwarded to the secondary Ethernet interface.
				For provisioning, use the SET command in the 46xxsettings.txt file.
PHY2VLAN	Numeric	0		Specifies the value of the 802.1Q VLAN identifier that is used to identify tagged frames through the secondary Ethernet interface.
				Valid values are 0 through 4094.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file. The precedence is 3.
				LLDP. The precedence is 4.
VLANSEP	Numeric	1		Specifies whether the VLAN separation is enabled or disabled.
				Assign one of the following values:
				0: Disabled.
				• 1: Enabled.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Note:

The parameters VLANSEP, PHY2TAGS, PHY2VLAN, DOT1X, PHY2_AUTOMDIX_ENABLED, and PHY2STAT are supported by K165 and K175 devices that have an embedded Ethernet switch.

All K155 devices have an embedded Ethernet switch.

IEEE 802.1X settings

Parameter	Туре	Default value	Is set to default on reset	Description
DOT1X	Numeric	0	Yes	Specifies whether the IEEE 802.1X Pass through operating mode is enabled on Avaya Vantage [™] .

Parameter	Туре	Default value	Is set to default on reset	Description
				Pass through is the forwarding of Extensible Authentication Protocol over LAN (EAPOL) frames between the device's Ethernet line interface and its secondary (PC) Ethernet interface.
				The options are:
				0: EAPOL multicast pass-through is enabled without proxy logoff.
				1: EAPOL multicast pass-through is enabled with proxy logoff.
				2: EAPOL multicast pass-through is disabled.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings > Network > Ethernet > IEEE 802.1x authentication > Pass through mode menu on the device.
DOT1XSTAT	Numeric	0	Yes	Specifies whether the IEEE 802.1X supplicant operating mode for Ethernet is enabled on Avaya Vantage [™] . The options are:
				0: Supplicant operation is disabled.
				 1: Supplicant operation is enabled. Avaya Vantage[™] responds only to received unicast Extensible Authentication Protocol over LAN (EAPOL) messages.
				 2: Supplicant operation is enabled. Avaya Vantage[™] responds to received unicast and multicast EAPOL messages.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings > Network > Ethernet > IEEE 802.1x authentication > Supplicant mode menu on the device.
DOT1XEAPS	String	MD5	Yes	Specifies a list of Extensible Authentication Protocol (EAP) methods for IEEE 802.1x authentication. Assign one of the following values:
				• TLS

Parameter	Туре	Default value	Is set to default on reset	Description
				• MD5
				The range is a default string length.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				 The Settings > Network > Ethernet > IEEE 802.1x authentication > EAP Type menu on the device.
DOT1XID	String	Ethernet MAC	Yes	Specifies the IEEE 802.1X Supplicant identifier for the Ethernet option.
		Address of the		This parameter is supported in all modes.
		device		For provisioning, use:
	DDR	(\$MACA DDR) without		• The SET command in the 46xxsettings.txt file.
		the colon separato		The Settings > Network > Ethernet > IEEE 802.1x authentication > 802.1x credentials menu on the device.
DOT1XPSWD	String	Null	Yes	Specifies the IEEE 802.1X password for the Ethernet option.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings > Network > Ethernet > IEEE 802.1x authentication > 802.1x credentials menu on the device.

Other operational parameters and settings

The following sections describe configuration parameters that control Avaya Vantage $^{^{\text{\tiny{M}}}}$ behavior, but do not relate to network operations or UI appearance.

Active phone application

Parameter	Туре	Default value	Is set to default on reset	Description
ACTIVE_CSDK_B ASED_PHONE_AP	String	null string	Yes	The package name of an active CSDK-based phone application.
P				Only one CSDK-based application can be active at a time.
				When the parameter is set to the default value, Avaya Vantage [™] operates in the non Avaya Breeze [™] CSDK application based mode. In this case, the Login screen and configuration sharing are not supported. Some configuration parameters are also not supported.
				Important:
				The ACTIVE_CSDK_BASED_PHONE_APP must only be used when the active phone application is an Avaya Breeze [™] CSDK application, such as Avaya Equinox [®] or Avaya Vantage [™] Basic. Otherwise, this parameter must use the default value.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				With IP Office, this parameter is automatically- generated and is present in the KlxxSupgrade.txt file.

Applications settings

Parameter	Туре	Default value	Is set to default on reset	Description
PUSH_APPLICATI ON	String	null string	Yes	Specifies a list of applications that administrators define for installation on Avaya Vantage [™] . Each entry in the list represents a URL of the application.
				The URL can be specified using:
				The relative path format. The origin is the directory specified by the FILE_SERVER_URL or

Parameter	Туре	Default value	Is set to default on reset	Description
				HTTPDIR and TLSDIR parameters depending on whether the download uses HTTP or HTTPS.
				The absolute path format. In this case, the URL must begin with http://orhttps://.
				Each entry of the list must be separated by commas without any spaces between entries. Each entry consists of an application's display name followed by an equal sign (=) and a file name or URL. If display names contain space characters, you must enclose the list using double quotes.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				With IP Office, this parameter is automatically- generated and is present in the KlxxSupgrade.txt file.
APPS_CONTROL_ FILE	String	null string	Yes	Specifies a path to a file containing third-party applications installation rules for end users (black and white lists). The path is represented by a URL.
				The URL can be specified using:
				Relative path format. Origin is the directory specified by the FILE_SERVER_URL or HTTPDIR and TLSDIR parameters depending on whether the download uses HTTP or HTTPS
				Absolute path format. In this case, the URL must begin with http://orhttps://
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
USER_INSTALL_A PPS_GOOGLE_PL	Numeric	1	Yes	Specifies whether end users can install applications from Google Play.
AY_STORE				Assign one of the following values:
				0: End users cannot install applications.
				1: End users can install applications.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Parameter	Туре	Default value	Is set to default on reset	Description
				With IP Office, configure this parameter in the 46xxspecials.txt file.
PIN_APP	String	null string	Yes	Specifies the package name of the application that must be pinned after a device restart. If this parameter is configured and the specified application is installed, Avaya Vantage [™] shows this application after login. Users cannot switch to another application or navigate to the Home screen.
				You can also specify a comma-separated list of package names for applications to be pinned using an Avaya Launcher. You must push the launcher onto the device using the PUSH_APPLICATION parameter. PIN_APP can include a list of application, login, and upgrade package names.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				Examples:
				SET PIN_APP "com.avaya.android.vantage.basic"
				SET PIN_APP "com.avaya.android.vantage.basic,com.a vaya.endpoint.avayakiosk,com.avaya.end point.login,com.avaya.endpoint.upgrade "
USER_INSTALL_A PPS_UNKNOWN_ SOURCES	Numeric	0	Yes	Specifies whether third-party applications from unknown, non-Google Play sources can be installed on Avaya Vantage [™] .
				Assign one of the following values:
				0: Installation of third-party applications from unknown sources is disabled. End users cannot change the status through the Settings menu on the device.
				1: Installation of third-party applications from unknown sources is disabled by default. End users can change the status through the Settings menu.
				2: Installation of third-party applications from unknown sources is enabled by default. End users can change the status through the Settings menu.

Parameter	Туре	Default value	Is set to default on reset	Description
				When installation of applications from unknown sources is enabled, end users can download application APKs from non-Google Play sources, such as common third-party application stores, emails, and websites.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Dial plan parameters

Parameter	Туре	Default value	Is set to default on reset	Description
PHNEMERGNUM	String	Null string	Yes	Specifies the emergency number. Avaya Vantage [™] dials this number when uses taps Emergency call .
				The parameter value can contain up to 30 characters. You can use 0-9, *, and # characters.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use PPM.
PHNMOREEMER	String	Null	Yes	Specifies additional emergency numbers.
GNUMS	list	string		The value of the parameter is a list of emergency numbers separated by commas without any spaces between entries. The parameter value can contain up to 100 numbers. Each number can contain up to 30 characters. You can use 0-9, *, and # characters.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use PPM.

Protocol-specific parameters

Certificates configuration parameters

Parameter	Туре	Default value	Is set to default on reset	Description
TRUSTCERTS	String	null string	Yes	Specifies file names of trusted certificates, which are used for authentication.
				If you are providing several file names, use commas to separate them. You can upload up to 100 trusted certificates on Avaya Vantage [™] . The maximum length of the parameter value is 1024 symbols. Avaya Vantage [™] supports both the PEM and DER file formats.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
MYCERTURL	String	null string	Yes	Specifies a URL of the Simple Certificate Enrollment Protocol (SCEP) server. Avaya Vantage [™] attempts to contact the server if the parameter value is not the default.
				A valid URL must start with http://.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
MYCERTCN	String	\$SERIA LNO	Yes	Specifies the Common Name (CN) for SUBJECT in a SCEP certificate request.
				If the parameter value contains the \$SERIALNO string, Avaya Vantage [™] replaces this string with the device serial number.
				If the parameter value contains the \$MACADDR string, Avaya Vantage [™] replaces that string with the device MAC address.
				Note:
				The parameter value must not contain the * symbol. If the parameter value contains this symbol, Avaya Vantage [™] considers the value to be invalid.
				This parameter is supported in all modes.

Parameter	Туре	Default value	Is set to default on reset	Description
				For provisioning, use the SET command in the 46xxsettings.txt file.
MYCERTDN	String	Null	Yes	Specifies the common part of SUBJECT in a SCEP certificate request. This value defines the part of SUBJECT that is common for requests from different devices, such as Organizational Unit, Organization, Location, State, and Country.
				The parameter value must start with the slash (/) symbol.
				Note:
				Do no use the asterisk (*) symbol. If the value contains this symbol, Avaya Vantage [™] considers the value to be invalid.
				For example: /C=US/ST=CA/L=MILPITAS/ O=Avaya
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
MYCERTKEYLEN	Integer	2048	Yes	Specifies the RSA private key length in bits. The private key is used on the device for certificate enrollment. Avaya Vantage [™] only supports keys with a length of 2048 bits.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
MYCERTCAID	String	CAldenti	Yes	Specifies the Certificate Authority Identifier (CAI).
		fier		Certificate Authority servers might require a specific CAI string in order to accept GetCA requests. If Avaya Vantage [™] works with such a Certificate Authority, the CA identifier string must be set through this parameter.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
SCEPPASSWORD	•	\$SERIA	Yes	Specifies a password to use with SCEP.
		LNO		The non-null value of SCEPPASSWORD is included in a challengePassword attribute in SCEP certificate signing requests.

Parameter	Туре	Default value	Is set to default on reset	Description
				If the value contains \$SERIALNO, \$SERIALNO is replaced with the value of SERIALNO. If the value contains \$MACADDR, \$MACADDR is replaced with the value of MACADDR without the colon separators.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
MYCERTREPLAC E	Numeric	90	Yes	Specifies the period of the certificate's validity interval. This period is specified as a percentage. Avaya Vantage [™] uses this percentage to calculate the date of the certificate replacement before its expiration. When the configured period is over, Avaya Vantage [™] tries to download the newest version of the certificate from the SCEP server.
				The range is from 1 to 99.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
ENABLE_PUBLIC_ CA_CERTS	Numeric	0	Yes	Specifies whether embedded Android trusted certificates are used by the trusted certificate repository for file download using HTTPS, Avaya Aura® Device Services, 802.1x, EAP-TLA, SCEP, and PPM.
				You can assign one of the following values:
				0: The services do not use Andriod trusted certificates.
				1: The services use Android trusted certificates.
				In the following cases, this parameter is enforced to 1 even if it was configured as 0:
				 When Avaya Vantage[™] is installed in a Device Enrollment Services environment.
				 When Avaya Vantage[™] obtains the provisioning server address from a redirect from Device Enrollment Services.

Parameter	Туре	Default value	Is set to default on reset	Description
				When Device Enrollment Services was used before and no private CA is retrieved from Device Enrollment Services.
				For provisioning, use the SET command in the 46xxsettings.txt file.
CA_CERT_BLACK LIST	String	Null	Yes	Specifies a list of comma-separated SHA-1 signatures of Android embedded trusted certificates, which must be blocked.
				Use this parameter to disable specific trusted certificates due to certificate revocation or if you do not trust the certificate. Only add certificates that are not already disabled in Android. You can find the list of these certificates in the /data/misc/keychain/pubkey_blacklist.txt file.
				This parameter can contain up to 1024 characters.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				For example: SET CA_CERT_BLACKLIST 410f36363258f30b347d12ce4863e433437806 a8,c4f9663716cd5e71d6950b5f33ce041c95b 435d1
PKCS12URL	String	Null	Yes	Specifies the URL to be used to download a PKCS #12 file. This file contains an identity certificate and its private key.
				The parameter value can contain up to 255 ASCII characters.
				The address can contain the following options:
				• \$SERIALNO: This options is replaced with the Avaya Vantage [™] serial number
				 MACADDR: This option is replaced with the Avaya Vantage[™] MAC address without colons
				For example: An Avaya Vantage device has the 00-24-D7-E4-2E-98 MAC address. The URL of the PKCS file is specified as http:// <path_to_the_file>/pkc12file_</path_to_the_file>
				\$MACADDR.cer. In this case, the PKCS file for the device must have the pkc12file_0024D7E42E98 name.
L				numo.

Parameter	Туре	Default value	Is set to default on reset	Description
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
PKCS12PASSWO	String	Null	Yes	Specifies a PKCS #12 file password.
RD				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
PKCS12_PASSWD _RETRY	String	3	Yes	Specifies the number of failed attempts to enter the password for the PKCS#12 file. If the user fails to enter the correct password, Avaya Vantage [™] will not install the PKCS#12 file.
				The range is from 0 to 100, where 0 means that the user cannot retry to enter the password.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
CERT_INSTALL_A PPLICATION_LIST	String	all	Yes	Specifies which applications can install trusted and identity certificates on Avaya Vantage [™] . Assign one of the following values:
				all: All applications can install certificates.
				Null string: No application can install certificates.
				• A list of comma-separated application package names: Only the specified applications can install certificates. List entries are separated by commas. For example: SET CERT_INSTALL_APPLICATION_LIST flare.avaya.com, vantage.basic.avaya.com
				For provisioning, use the SET command in the 46xxsettings.txt file.
ID_CERT_APPLIC ATION_LIST	String	all	Yes	Specifies which applications can access the identity certificate stored on Avaya Vantage [™] . Assign one of the following values:
				all: All applications can access certificates.
				Null string: No application can access certificates. The exception is an active phone application

Parameter	Туре	Default value	Is set to default on reset	Description
				defined in ACTIVE_CSDK_BASED_PHONE_APP.
				• A list of comma-separated application package names: Only the specified applications can access certificates. For example: SET CERT_INSTALL_APPLICATION_LIST flare.avaya.com, vantage.basic.avaya.com
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
DELETE_MY_CER T	String	0	Yes	Specifies whether Avaya Vantage [™] should delete the installed identity certificate. Assign one of the following values:
				0: The installed identity certificate remains on the system.
				1: The installed identity certificate will be deleted from the system.
				This parameter is supported in all modes.
				For provisioning, use:
				DHCP option 242.
				• The SET command in the 46xxsettings.txt file.
CERT_WARNING_ DAYS	Numeric	60	Yes	Specifies the number of days before the certificate expiry date when Avaya Vantage ™starts to display certificate expiration warning messages. Avaya Vantage ™ displays the warning message every seven days. This parameter relates to trusted certificates, OSCP certificates, EASG certificates, and the identity certificate.
				The range is from 0 to 99. If the value set to 0, Avaya Vantage [™] does not display certificate expiration warning messages.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
EASG_SITE_CER TS	String	null string	Yes	Specifies EASG site certificate file names. These certificates are used by technicians when they do

Parameter	Туре	Default value	Is set to default on reset	Description
				not have access to the Avaya network to generate EASG responses for SSH login.
				The value of the parameter is a list of file names separated by commas without any spaces between entries. The value can contain up to 255 ASCII characters.
				To delete the EASG trusted certificate from the device, remove the corresponding file name from EASG_SITE_CERTS.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
EASG_SITE_AUT H_FACTOR	String	null string	Yes	Specifies the EASG site authentication factor code associated with the EASG site certificate. The value of the parameter can contain from 10 to 20 alphanumeric characters.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Captive Portal

Parameter	Туре	Default value	Is set to default on reset	Description
CAPTIVE_PORTA L_SERVER	String	connecti vitychec k.gstatic .com	Yes	Specifies the URL of the captive portal server for HTTP authentication to use the Internet. Use the [http://]hostname[:port][/path] format, where:
				hostname is either an IP address in the dotted decimal format or a domain name.
				port is an optional port number.
				• path is an optional path to the server.
				If you want to disable the detection mechanism, use the null string as the parameter value.
				This parameter is supported in all modes.
				For provisioning, use:
				DHCP option 242.
				• The SET command in the 46xxsettings.txt file.

TLS

Parameter	Туре	Default value	Is set to default on reset	Description
TLSSRVRID	Integer	1	Yes	Specifies whether the TLS server identification is required. Assign one of the following values:
				0: Certificate validation is not required. TLS connection is established in all cases.
				1: Certificate match required. TLS connection is established only if the server identity matches the servers certificate.
				This parameter is supported in all modes.
				For provisioning, use:
				DHCP option 43.
				• The SET command in the 46xxsettings.txt file.
TLS_VERSION	Numeric	1	Yes	Specifies which TLS versions are supported with all TLS connections used by Android and Avaya applications. Assign one of the following values:
				0: TLS versions 1.0 and 1.2 are supported.
				1: TLS version 1.2 only is permitted.
				Note:
				Before upgrading to Release 1.1 or 2.0, you must verify that the TLS version 1.2 is enabled on the HTTP/S file server if HTTP/S is used. Otherwise, the device cannot download configuration and image files from the HTTP/S file server.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

LLDP

Parameter	Туре	Default value	Is set to default on reset	Description
LLDP_ENABLED	Integer	1	Yes	Specifies whether LLDP is enabled. Assign one of the following values:
				• 0: Disabled.
				• 1: Enabled.

Parameter	Туре	Default value	Is set to default on reset	Description
				 2: Enabled. Avaya Vantage[™] starts to transmit LLDP frames only after receiving of an LLDP frame.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Logging and debugging parameters

Parameter	Туре	Default value	Is set to default on reset	Description
SYSLOG_ENABLE D	Integer	0	Yes	Specifies whether Avaya Vantage [™] generates syslog messages. Assign one of the following values:
				0: Syslog messages are disabled.
				1: Syslog messages are enabled.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
SYSLOG_LEVEL	Integer	3	Yes	Specifies the severity level of syslog messages. Avaya Vantage [™] sends a syslog message if a severity level of an event is equal or less than the value specified in this parameter. Assign one of the following values:
				• 3: Error
				• 4: Warning
				• 5: Notice
				6: Informational
				• 7: Debug
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.

Parameter	Туре	Default value	Is set to default on reset	Description
				The Settings menu on the device.
LOCAL_LOGS_EN ABLED	Integer	1	Yes	Specifies whether Avaya Vantage [™] stores log messages. Assign one of the following values:
				0: Local log storage is disabled.
				1: Local log is storage is enabled.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
LOCAL_LOG_LEV EL	Integer	4	Yes	Specifies the severity level for local log messages. Avaya Vantage [™] stores a log message if a severity level of an event is equal or less than the value specified in this parameter. Assign one of the following values:
				• 3: Error
				• 4: Warning
				• 5: Notice
				6: Informational
				• 7: Debug
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
LOG_CATEGORY	String	ALL	Yes	Specifies a list of logging categories.
				The parameter value is a list of comma-separated keywords representing logging categories.
				Logging implementation blocks all traces at the Warning or lower severity levels unless the category corresponding to a given trace is enabled. The device filters all ANDROID and KERNEL syslog or log categories in the following cases:
				You do not configure this parameter for these categories.

Parameter	Туре	Default value	Is set to default on reset	Description
				The parameter value is not set to ALL.
				If the log level is set to Warning or a lower level, this parameter enables low-level traces from adaptors or managers. This parameter applies to both syslog and local logging mechanisms.
				The supported categories are: ALL, ANDROID, 8021X, ADAPMGR, CERTMGMT, CONFIG, CONFIG_MULTI, CORE, DATETIME, DAVDATA, DEVICE, DHCP, EEPROMDATA, ENCRYPT, EXTAPP, FAILOVER, FAVORITE, HISTORY, HTTP, KERNEL, LLDP, LOCALDATA, MSGMGR, MSG_ROUTING, NETADAP, NETMGR, ONEXPAUCDATA, PERSLABELS, PLATFORM_COMP, PPMDATA, PPMMESSAGE, POWER, QOS, SCRIPT, SCRIPTDATA, SECURITY, SSHDADAP, THREADWDOG, UI, UPGRADE, VMM, and WEB.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
SSH_ALLOWED	Integer	0	Yes	Specifies whether the Secure Shell (SSH) is enabled. Assign one of the following values:
				0: Disabled.
				1: Enabled, with challenge and response authentication.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
SSH_BANNER_FI LE	String	Null	Yes	Specifies a file name or URL of a file containing a warning message. This message is displayed on a SSH client before authentication.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Parameter	Туре	Default value	Is set to default on reset	Description
SSH_IDLE_TIMEO UT	Integer	10	Yes	Specifies the number of minutes of inactivity after which an SSH connection is terminated. The range is from 0 to 32767. Assign one of the following values:
				0: No timeout.
				1 –32767: Number of minutes of inactivity after which SSH is disabled.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
SSH_ROOT_ALLO WED	Numeric	0	Yes	Specifies whether sroot access is allowed. Assign one of the following values:
				0: sroot access is disabled.
				1: sroot access is enabled.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.

USB parameters

Parameter	Туре	Default value	Is set to default on reset	Description
ENABLE_USB_GE NERAL_PURPOS	Numeric	1	Yes	Specifies whether the USB general purpose port is enabled.
E				Assign one of the following values:
				0: USB port is disabled.
				1: USB port is enabled.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				PPM does not back up or restore the parameter.

Upgrade related parameters

Upgrade related parameters

Parameter	Туре	Default value	Is set to default on reset	Description
UPGRADE_POLLI NG_PERIOD	Integer	60	Yes	Specifies the polling interval between two consecutive attempts of polling both the firmware image and settings file. The polling interval is measured in minutes. Assign one of the following values:
				0: Disabled
				• 1-10080: Enabled
				This parameter is supported by Avaya Vantage [™] with a range of 0 to 65535.
				This parameter has no effect on any upgrade command that is triggered by the management application or UI.
				UPGRADE_POLLING_PERIOD is not affected by UPGRADE_DLOAD_START and UPGRADE_DLOAD_END parameters.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
UPGRADE_DLOA D_START	String	00	Yes	Specifies a time when Avaya Vantage [™] starts to download upgrade image files.
				The value of parameter is a string in the <code>[Ddd]hh</code> format, where:
				 [Ddd] is a day of the week. The valid values are Sun, Mon, Tue, Wed, Thu, Fri, or Sat. This component is optional. If the component is omitted, Avaya Vantage performs polling every day.
				hh is one or two numeric digits representing the hour of the day. The range is from 0 to 23.
				If the value of UPGRADE_DLOAD_START is equal to the value of UPGRADE_DLOAD_END, then no polling period is specified and Avaya Vantage [™] can download upgrade files at any time. UPGRADE_DLOAD_START is ignored if UPGRADE_POLICY is set to 0.

Parameter	Туре	Default value	Is set to default on reset	Description
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
UPGRADE_DLOA D_END	String	00	Yes	Specifies a time when Avaya Vantage [™] stops tires to download upgrade image files.
				The value of the parameter uses the <code>[Ddd]hh</code> format, where:
				• [Ddd] is a day of the week. The valid values are Sun, Mon, Tue, Wed, Thu, Fri, or Sat. This component is optional. If the component is omitted, Avaya Vantage performs polling every day.
				hh is one or two numeric digits representing a hour of the day. The range is from 0 to 23.
				If the UPGRADE_DLOAD_START value is equal to the UPGRADE_DLOAD_END value, then no polling period is specified and Avaya Vantage [™] can download upgrade files at any time. UPGRADE_DLOAD_END is ignored if UPGRADE_POLICY is set to 0.
				Avaya Vantage [™] completes any ongoing downloads if time specified in UPGRADE_DLOAD_END is reached when downloading files.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
UPGRADE_INSTA LL_DATE_TIME	String	1970-01 -01T00:	Yes	Specifies the date and time when Avaya Vantage [™] starts to install upgrade files.
		00		The value of the parameter uses the YYYY-MM-DDThh: mm format, where:
				YYYYY is four numeric digits representing the year
				• MM is two numeric digits representing the month.
				dd is two numeric digits representing the day of the month.
				• T is a time separator.
				hh is two numeric digits representing a hour of the day. The range is from 0 to 23.

Parameter	Туре	Default value	Is set to default on reset	Description
				mm is two numeric digits representing minutes of the hour. The range is from 0 to 59.
				If the default value is used, Avaya Vantage [™] installs upgrades immediately after downloading.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
UPGRADE_POLIC Y	Integer	2	Yes	Specifies the upgrade policy. Assign one of the following values:
				 0: Avaya Vantage[™] performs the upgrade procedure after a reboot only. If the upgrade configuration policy is changed, Avaya Vantage[™] implements these changes after a reboot. Use this value for IP Office deployments.
				 1: Avaya Vantage[™] performs the upgrade procedure according to policy rules and management application settings. Avaya Vantage[™] does not perform the upgrade after a reboot.
				• 2: Avaya Vantage [™] performs the upgrade procedure after any reboot and according to policy rules and management application settings.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
DLOAD_RND_AFT ER_RESET	Integer	0	Yes	Specifies the maximum length of the interval Avaya Vantage [™] waits after reboot before starting the download. The interval is measured in seconds. Assign one of the following values:
				• 0: The interval is not specified. Avaya Vantage [™] starts the download immediately after reboot.
				• 1 – 32767: After reboot, Avaya Vantage [™] delays the download. The exact delay interval is determined as a random number in a range between 0 and the DLOAD_RND_AFTER_RESET value.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Parameter	Туре	Default value	Is set to default on reset	Description
DLOAD_RND	Integer	3600	Yes	Specifies the maximum length of an interval between two consecutive attempts of background downloading. The interval is measured in seconds. Assign one of the following values:
				 0: The interval is not specified. Avaya Vantage[™] performs background download attempts without delay.
				• 1 – 32767: Avaya Vantage [™] inserts a delay between two background download attempts. The exact delay interval is determined as a random number in a range between 0 and the DLOAD_RND value.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

General account IDs & passwords

Parameter	Туре	Default value	Is set to default on reset	Description
SIPUSERNAME	String	Null	Yes	Specifies the user's account to register on a SIP server.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use:
				Enter the user account name on the Login screen.
				Use the SET command in the settings file from Avaya Aura® Device Services. The 46xxsettings.txt file from the HTTP or HTTPS server is not supported.
SIPPASSWORD	String	Null	Yes	Specifies the user's password used to register on a SIP server.
				The parameter value can contain up to 255 alphanumerical characters.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.

Parameter	Туре	Default value	Is set to default on reset	Description
				For provisioning:
				Enter the user account name on the Login screen.
				Use the SET command in the settings file from Avaya Aura® Device Services. The 46xxsettings.txt file from the HTTP or HTTPS server is not supported.
SIPHA1	String	Null	Yes	Specifies the HA1 hash value of the user's password used to register on a SIP server. HA1 is calculated as MD5 (username:domain:password).
				The parameter value can contain up to 255 alphanumerical characters.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				This parameter is only configurable from Avaya Aura® Device Services. The 46xxsettings.txt file from the HTTP or HTTPS server is <i>not</i> supported.
PROCPSWD	String	27238	Yes	Specifies the password required to access local administrator menu options in the Settings menu on Avaya Vantage [™] .
				The parameter value can contain from 4 to 7 numeric characters.
				If both PROCPSWD and ADMIN_PASSWORD have default values, you cannot access administrator options in the Settings menu.
				This parameter is supported in all modes.
				For provisioning, use:
				• A name=value pair in a DHCPACK message.
				• The SET command in the 46xxsettings.txt file.
				The value stored on the PPM server.
ADMIN_PASSWO RD	String	Null	Yes	Specifies the complex password required to access local administrator options in the Settings menu on Avaya Vantage [™] .
				The range is the default string length.
				• If ADMIN_PASSWORD is configured, Avaya Vantage [™] ignores PROCPSWD.

Parameter	Туре	Default value	Is set to default on reset	Description
				 If ADMIN_PASSWORD has the default value, Avaya Vantage[™] uses PROCPSWD to provide access to administrator options in the Settings menu. If PROCPSWD has the default value, you cannot access administrator menu options.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.
				This parameter is supported in the Tablet mode.

Phone lock and idle time parameters

Parameter	Туре	Default value	Is set to default on reset	Description
ENABLE_PHONE_ LOCK	Numeric	0	No	Specifies whether the Lock screen is enabled on the device.
				0: The Lock screen is disabled.
				1: The Lock screen is enabled.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
PHONE_LOCK_ID LETIME	Numeric	60	No	Specifies the maximum interval of idle time in minutes after which Avaya Vantage [™] is locked automatically.
				The range is from 1 to 10080.
				Avaya Vantage [™] ignores this parameter if ENABLE_PHONE_LOCK is 0.
				The user can choose a smaller idle time than this parameter value in the in the Settings > Security > Automatically lock menu. Avaya Vantage [™] uses this parameter value to determine the number of options it shows to the user in the Settings > Security > Automatically lock and Settings >

Parameter	Туре	Default value	Is set to default on reset	Description
				Display > Sleep menus. By default, the Automatically lock and Sleep fields have the following options: 1, 2, 5, 10, 30 minutes, 1 hour, 2 hours, 5 hours, 10 hours, 1 day, 2 days, and 1 week. The minimum value is 1 minute. The maximum value is the minimum value between the PHONE_LOCK_IDLETIME value and the value specified by the Exchange policy.
				For example, if the PHONE_LOCK_IDLETIME value is 145 and the value specified by the Exchange policy is 123 minutes, then the Automatically lock field provides options from 1 minute to 2 hours inclusively.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use the SET command in the 46xxsettings.txt file.
PHONE_LOCK_PA SSWORD_FAILED	Numeric	8	Yes	Specifies the number of failed login attempts before Avaya Vantage [™] becomes locked.
_ATTEMPTS				The range is from 8 to 20. If the parameter set to 0, then the number of failed attempts is unlimited.
				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use the SET command in the 46xxsettings.txt file.
LOCK_SCREEN_L OCK_AFTER_TIM	Numeric	5	Yes	Specifies the Lock screen inactivity timeout in minutes. The range is from 1 to 10080.
EOUT				This parameter is <i>not</i> supported in the non Avaya Breeze [™] CSDK application based mode.
				For provisioning, use the Settings menu on the device.
ALLOW_LOGOUT _WHEN_LOCKED	Numeric	1	Yes	Specifies whether users can log out from the Lock screen. Assign one of the following values:
				0: A user cannot perform logout when the device is locked.
				1: A user can perform logout from the Lock screen.
				2: When device is locked, an administrator can perform logout through the Settings menu only. In addition, the logout option is available only for

Parameter	Туре	Default value	Is set to default on reset	Description
				administrator when the device is unlocked and logged in.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The settings file received from AADS.
BAKLIGHTOFF	Numeric	10	Yes	Specifies the idle time in minutes after which the display backlight on the device is turned off.
				The range is from 0 to 999.
				For K155, the range is from 1 to 60.
				A value of 0 means that the display backlight is not turned off automatically when the phone is idle.
				This parameter is supported in all modes.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file.
				The Settings menu on the device.
				This parameter can be stored on the PPM or backup server.

Security parameters

Parameter	Туре	Default value	Is set to default on reset	Description
SELINUX_MODE	Numeric	1	N/A	Specifies the SELinux mode.
				0: Sets the permissive mode.
				1: Sets the enforcing mode.
				Setting the SELinux mode triggers a device reset. End users get the options to reset immediately or later.
				This parameter is supported in all modes.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Avaya Breeze[™] CSDK parameters

The following parameters are supported by Avaya Breeze™ CSDK-based applications.

Avaya Aura® Device Services parameters

Parameter	Туре	Default value	Is set to default on reset	Description
ACSENABLED	Numeric	0	Yes	Specifies whether Avaya Vantage [™] Basic uses contacts stored on Avaya Aura [®] Device Services. You can assign one of the following values:
				 0: Avaya Vantage[™] Basic does not use contacts from Avaya Aura[®] Device Services. Instead, Avaya Vantage[™] Basic uses PPM contacts.
				• 1: Avaya Vantage [™] Basic uses contacts from Avaya Aura [®] Device Services. Avaya Vantage [™] Basic does not use PPM contacts.
				For provisioning, use the SET command in the 46xxsettings.txt file.
ACSSRVR	String	Null string	Yes	Specifies the address of Avaya Aura® Device Services contact services. The address is either an IP address in the dotted decimal format or a domain name.
				For provisioning, use the SET command in the 46xxsettings.txt file.
ACSPORT	Numeric	443	Yes	Specifies the port number Avaya Vantage [™] Basic uses to connect to Avaya Aura [®] Device Services contact services.
				For provisioning, use the SET command in the 46xxsettings.txt file.
ACSSECURE	Numeric	1	Yes	Specifies whether a secure connection is used. Assign one of the following values:
				• 0: Secure connection is not used. Avaya Vantage [™] Basic uses HTTP over TCP.
				• 1: Secure connection is used. Avaya Vantage [™] Basic uses HTTPS over TLS.
				For provisioning, use the SET command in the 46xxsettings.txt file.

RTP parameters

Parameter	Туре	Default value	Is set to default on reset	Description
RTP_PORT_LOW	Numeric	5004	Yes	Specifies the minimum UDP port range value to be used by RTP/RTCP or SRTP/SRTCP connections.
				You can assign a value between 1024 and 65503.
				For provisioning, use the SET command in the 46xxsettings.txt file.
RTP_PORT_RAN GE	Numeric	40	Yes	Specifies the UDP port range that Avaya Vantage [™] Basic uses for RTP/RTCP or SRTP/SRTCP connections.
				You can assign a value between 32 and 64511.
				The maximum value of the range is calculated as a sum of the RTP_PORT_LOW and RTP_PORT_RANGE values.
				For provisioning, use the SET command in the 46xxsettings.txt file.

SRTP parameters

Parameter	Туре	Default value	Is set to default on reset	Description
MEDIAENCRYPTI ON	String	1,2,9	Yes	Specifies which media encryption options are supported.
				The value of the parameter is a list of up to 3 options, which must be separated by commas. The following options are available:
				• 1: aescm128–hmac80
				• 2: aescm128–hmac32
				• 9: none
				• 10: aescm256–hmac80
				• 11: aescm256–hmac32
				For provisioning, use the SET command in the 46xxsettings.txt file.
ENCRYPT_SRTCP	Numeric	0	Yes	Specifies whether RTCP packets are encrypted. SRTCP is only used if encryption is enabled using MEDIAENCRYPTION.

Parameter	Туре	Default value	Is set to default on reset	Description
				Assign one of the following values:
				0: SRTCP is disabled.
				• 1: SRTCP is enabled.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Audio parameters

Parameter	Туре	Default value	Is set to default on reset	Description
ENABLE_OPUS	Numeric	1	Yes	Specifies whether the OPUS codec is enabled. Assign one of the following values:
				0: Disabled.
				• 1: Enabled WIDEBAND_20K.
				2: Enabled NARROWBAND_16K.
				3: Enabled NARRWOBAND_12K.
				For Avaya Vantage [™] Basic, this parameter is supported in both the Avaya Aura [®] and IP Office environments.
				For provisioning, use the SET command in the 46xxsettings.txt file.
OPUS_PAYLOAD_ TYPE	Numeric	116	Yes	Specifies the RTP payload type that is used for the OPUS codec. The range is from 96 to 127.
				This parameter is used when media offer is sent to the far end in INVITE or 200 OK when INVITE with no SDP is received.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Video parameters

Parameter	Туре	Default value	Is set to default on reset	Description
VIDEO_MAX_BAN DWIDTH_ANY_NE TWORK		1280	Yes	Specifies the maximum bandwidth for video calls. The bandwidth is measured in kilobits per second (kbps).

Parameter	Туре	Default value	Is set to default on reset	Description
				You can assign one of the following values:
				0: Video is blocked.
				1 to 10000: Maximum allowed bandwidth.
				For provisioning, use the SET command in the 46xxsettings.txt file.
ENABLE_VIDEO	Numeric	1	Yes	Specifies whether video is enabled or disabled.
				You can assign one of the following values:
				0: Video is disabled.
				• 1: Video is enabled.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Logging parameters

Parameter	Туре	Default value	Is set to default on reset	Description
LOG_VERBOSITY	Numeric	0	Yes	Specifies whether verbose logging is enabled. Assign one of the following values:
				0: Only Info log messages are collected.
				1: Debug and Info log messages are collected. Use this value to collect logs for debugging purposes.
				If the parameter value is changed, changes will be applied after reboot.
				Note:
				To collect application logs, you must also enable logging and set up the local and remote logging level on Avaya Vantage [™] . Assign one of the following values to the SYSLOG_LEVEL and LOCAL_LOG_LEVEL parameters:
				Debug: To collect Debug log messages.
				Notice: To collect Info log messages.
ANALYTICSENAB LED	Integer	1		Defines whether to allow Avaya to collect data using Google Analytics on behalf of the administrator's user community. Assign one of the following values:
				0: Data collection is disabled.

Parameter	Туре	Default value	Is set to default on reset	Description
				1: Data collection is enabled.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Dialing rule parameters

Parameter	Type	Default value	Is set to default on reset	Description
ENHDIALSTAT	Numeric	1	Yes	Specifies whether the dialing rules are used during certain dialing activities. Assign one of the following values:
				0: To disable the dialing algorithm.
				1: To enable the dialing algorithm for all outgoing calls.
PHNCC	String	Null string	Yes	Specifies the country code. Valid values are from 1 to 999.
PHNIC	String	Null string	Yes	Specifies the access code that you dial to make international calls.
				The value can be of 0 to 4 characters in length. The allowed characters are 0-9, *, and #.
PHNLD	String	Null string	Yes	Specifies the access code that you dial to make long distance calls.
				Valid values are from 0 to 9, and null string (""). If long distance access code is not required, set the value to ""
PHNDPLENGTH	String	Null string	Yes	Specifies the length of internal extension numbers. The value must match the extension length set on the call server.
				The valid range is from 3 to 13.
PHNLDLENGTH	String	Null string	Yes	Specifies the length of national phone numbers of the country that is considered in the dial plan.
				Valid values are from 5 to 15.
PHNOL	String	Null string	Yes	Specifies the outside line access code, which is the number you press to access an external line.

Parameter	Туре	Default value	Is set to default on reset	Description
				The value can be of 0 to 2 characters in length. The allowed characters are 0-9, *, and #.
APPLY_DIALINGR ULES_TO_PLUS_ NUMBERS	Numeric	0	Yes	Specifies whether to apply dialing rules on phone numbers with the plus sign (+) at the beginning.
				Assign one of the following values:
				0: To ignore the dialing rules for phone numbers that begin with the plus sign (+).
				1: To replace the plus sign (+) with dial plan digits.
				Whenever possible, configure the plus (+) dialing option in Session Manager instead of enabling this parameter.
AUTOAPPLY_ARS _TO_SHORTNUM BERS	Numeric	1	Yes	Specifies whether to disable the dialing rules logic that automatically appends the outside line access code (PHNOL) to numbers that are shorter than the shortest extension length.
				Assign one of the following values:
				0: To disable the logic. The PHNOL code is not appended to numbers that are shorter than the shortest extension length.
				1: To enable the logic. The PHNOL code is appended to numbers that are shorter than the shortest extension length.
PHNREMOVEARE ACODE	String	0	Yes	Specifies whether the area code must be removed for local calls.
				This parameter is obsolete. While it is still supported for backward compatibility, Avaya recommends that you use the newer parameter, DIALPLANLOCALCALLPREFIX.
DIALPLANLOCAL CALLPREFIX	String	0	Yes	Indicates whether the area code must be removed for local calls. Assign one of the following values:
				0: To disable the removal of the area code for local calls.

Parameter	Туре	Default value	Is set to default on reset	Description
				1: To enable the removal of the area code for local calls.
				★ Note:
				The area code is configured using DIALPLANAREACODE.
DIALPLANNATION ALPHONENUMLE NGTHLIST	String	Null string	Yes	Specifies a list of national phone number length (PHNLDLENGTH) values separated by commas.
				This parameter takes precedence over PHNLDLENGTH.
				Example:
				SET DIALPLANNATIONALPHONENUMLENGTHLI ST 10,11
DIALPLANEXTEN SIONLENGTHLIST	String	Null string	Yes	Specifies a list of internal extension length (PHNDPLENGTH) values separated by commas.
				This parameter takes precedence over PHNDPLENGTH.
				Example:
				SET DIALPLANEXTENSIONLENGTHLIST 7,8
DIALPLANPBXPR EFIX	String	Null string	Yes	Specifies the PBX main prefix.
PHNPBXMAINPRE	String	Null string	Yes	Specifies the PBX main prefix.
FIX				This parameter is obsolete. While it is still supported for backward compatibility, Avaya recommends that you use the newer parameter, DIALPLANPBXPREFIX.
DIALPLANAREAC ODE	String	Null string	Yes	Specifies the area or city code.
SP_AC	String	Null string	Yes	Specifies the area or city code.
				This parameter is obsolete. While it is still supported for backward compatibility, Avaya recommends that you use the newer parameter, DIALPLANAREACODE.

Conferencing parameters

Parameter	Туре	Default value	Is set to default on reset	Description
CONFERENCE_F ACTORY_URI	String	Null string		Specifies the URI that defines the adhoc conference resource to be used by the device.
				The URI consists of a dial string followed by @, followed by a domain, which must match the routing pattern configured in System Manager for adhoc conferencing. Depending on the dial plan, the dial string might need a prefix code, such as 9, to get an outside line. The domain portion of the URI can be in the form of an IP address or an FQDN.
				Example:
				SET CONFERENCE_FACTORY_URI "93375000@avaya.com"
				With IP Office, this parameter is automatically generated.

Avaya Vantage[™] Basic parameters

Layer 3 QoS parameters



The following layer 3 QoS parameters are only used in the IP Office environment. In the Avaya Aura® environment, the value is taken from PPM and configured through System Manager.

Parameter	Туре	Default value	Is set to default on reset	Description
DSCPAUD	Numeric	46	Yes	Specifies the decimal presentation of Differentiated Services Code Point (DSCP) for audio frames generated by the device.
				You can assign a value between 0 and 63.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file. The precedence is 3.

Parameter	Туре	Default value	Is set to default on reset	Description
				The TIA LLDP MED Network policy TLV. The precedence is 4.
DSCPSIG	Numeric	34	Yes	Specifies the decimal presentation of DSCP for signaling frames generated by the device.
				You can assign a value between 0 and 63.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file. The precedence is 3.
				The TIA LLDP MED Network policy TLV. The precedence is 4.
DSCPVID	Numeric	34	Yes	Specifies the decimal presentation of DSCP for video frames generated by the device.
				You can assign a value between 0 and 63.
				For provisioning, use:
				• The SET command in the 46xxsettings.txt file. The precedence is 3.
				The TIA LLDP MED Network policy TLV. The precedence is 4.

Call option parameters

Parameter	Туре	Default value	Is set to default on reset	Description
ENABLE_REDIAL	Numeric	1	Yes	Specifies whether the Redial button is available to users.
				Assign one of the following values:
				0: The Redial button is unavailable.
				1: The Redial button is available.
				For provisioning, use the SET command in the 46xxsettings.txt file.
CCBTNSTAT	Numeric	1	Yes	Specifies whether you can enable or disable the conferencing, call transfer, call hold, and mute features separately using the corresponding parameters.
				Assign one of the following values:
				0: Avaya Vantage [™] Basic uses the values of parameters related to these features. You can

Parameter	Туре	Default value	Is set to default on reset	Description
				configure the availability of each feature separately.
				 1: Avaya Vantage[™] Basic ignores the values of parameters related to these features. All features are available to users.
				When CCBTNSTAT is set to 0, use the following parameters to configure feature availability:
				CONFSTAT: For conferencing
				HOLDSTAT: For call hold
				MUTESTAT: For mute
				XFERSTAT: For call transfer
				For provisioning, use the SET command in the 46xxsettings.txt file.
HOLDSTAT	Numeric	1	Yes	Specifies whether the Hold button is available to users. Avaya Vantage [™] Basic ignores this parameter if CCBTNSTAT is set to 1.
				Assign one of the following values:
				0: The Hold button is disabled.
				• 1: The Hold button is enabled.
				For provisioning, use the SET command in the 46xxsettings.txt file.
MUTESTAT	Numeric	1	Yes	Specifies whether the Mute button is available to users. This option controls muting for both audio and video. Avaya Vantage [™] Basic ignores this parameter if CCBTNSTAT is set to 1.
				Assign one of the following values:
				0: The Mute button is disabled.
				• 1: The Mute button is enabled.
				For provisioning, use the SET command in the 46xxsettings.txt file.
CONFSTAT	Numeric	1	Yes	Specifies whether the Conference button is available to users. Avaya Vantage [™] Basic ignores this parameter if CCBTNSTAT is set to 1.
				Assign one of the following values:
				0: The Conference button is disabled.
				• 1: The Conference button is enabled.

Parameter	Туре	Default value	Is set to default on reset	Description
				For provisioning, use the SET command in the 46xxsettings.txt file.
XFERSTAT	Numeric	1	Yes	Specifies whether the Call transfer button is available to users. Avaya Vantage [™] Basic ignores this parameter if CCBTNSTAT is set to 1.
				Assign one of the following values:
				0: The Call transfer button is disabled.
				1: The Call transfer button is enabled.
				For provisioning, use the SET command in the 46xxsettings.txt file.
POUND_KEY_AS_	Numeric	1		In off-hook dialing, specifies whether:
CALL_TRIGGER				Pressing the pound key (#) triggers a call.
				The pound key is considered a dialed digit.
				Assign one of the following values:
				0: The pound key is considered a dialed digit.
				1: The pound key triggers a call.
				In the IP Office environment, set POUND_KEY_AS_CALL_TRIGGER to 0.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Audio parameters

Parameter	Туре	Default value	Is set to default on reset	Description
ADMIN_CHOICE_ RINGTONE	String	Default	Yes	Specifies the ring tone that Avaya Vantage [™] Basic uses for incoming calls.
				When the parameter is set to "Default", the Avaya built-in ringtone is used for incoming calls.
				Otherwise, you can specify the name of one of the ringtones available on the device.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Contact parameters

Parameter	Туре	Default value	Is set to default on reset	Description
ENABLE_MODIFY	Numeric	1	Yes	Specifies whether users can modify contacts.
_CONTACTS				Assign one of the following values:
				0: Users cannot modify contacts.
				1: Users can modify contacts.
				For provisioning, use the SET command in the 46xxsettings.txt file.
NAME_SORT_OR	String	last,first	Yes	Specifies how contact names are sorted.
DER				You can assign one of the following values:
				 last,first: Avaya Vantage[™] Basic sorts contacts according to the last name and then the first name.
				 first,last: Avaya Vantage[™] Basic sorts contacts according to the first name and then the last name.
				For example: SET NAME_SORT_ORDER "first, last".
				For provisioning, use the SET command in the 46xxsettings.txt file.
NAME_DISPLAY_	Numeric	0	Yes	Specifies how contact names are displayed.
ORDER				You can assign one of the following values:
				0: Avaya Vantage [™] Basic displays the last name followed by the first name.
				 1: Avaya Vantage[™] Basic displays the first name followed by the last name.
				For provisioning, use the SET command in the 46xxsettings.txt file.

Display parameters

Parameter	Туре	Default value	Is set to default on reset	Description
BRANDING_FILE	String	null string	Yes	Specifies the URL of a branding image. Avaya Vantage [™] Basic displays this image on the top left corner of all screens instead of the Avaya logo.
				Specify the URL using the absolute path format, where the URL must start with either http://orhttps://.

Parameter	Туре	Default value	Is set to default on reset	Description
				The image must use the following settings:
				Resolution: 142x56.
				File format: PNG, JPG, JPEG, GIF, or BMP.
				For provisioning, use the SET command in the 46xxsettings.txt file.

IP Office parameters

When used as a file serve, the IP Office system autogenerates the 46xxsettings.txt file with the parameters that specify the settings of the Avaya Vantage[™] device. The autogenerated 46xxsettings.txt file includes parameter settings that are required for IP Office operation, including those that are automatically adjusted to match the configuration of the IP Office system. The following tables only list new IP Office parameters that are supported on Avaya Vantage[™].

Note:

The autogenerated settings file does not include all the settings for Avaya Vantage $^{\text{T}}$; for example, emergency numbers. You can add additional parameter settings either in the 46xxsettings.txt file or in an additional file, 46xxspecials.txt on the system. When enabled, you can use the special file for additional device settings or override selected settings in the auto-generated file. For more information about using a 46xxspecials.txt file, see Avaya IP Office Platform SIP Telephone Installation Notes.

New parameters supported on IP Office

The following table lists a subset of new IP Office settings parameters that are supported on Avaya Vantage $^{\text{TM}}$.

Parameter	Туре	Default value	Description
ENABLE_IPOFFICE	Numeric	0	Specifies whether the deployment environment is IP Office.
			The parameter takes one of the following values according to the deployment environment:
			0: Non IP Office environment.
			1: IP Office environment.
			For provisioning, use the SET command in the settings file.
SUBSCRIBE_LIST_N ON_AVAYA	String	reg, message-	Specifies a comma-separated list of event packages to subscribe to after registration.

Parameter	Туре	Default value	Description
		summary, avaya-	Possible values: reg, dialog, mwi, ccs, message- summary, and avaya-ccs-profile.
		ccs- profile	The values are not case sensitive.
		prome	For IP Office, the recommended value is "reg, message-summary, avaya-ccs-profile".
			For a third-party SIP call control environment, the value can be set to "message-summary".
USER_STORE_URI	String	Null	Specifies the URI to be used for backup and retrieval of IP Office contacts. The parameter specifies the IP Office directory path to the backup file, but does not specify the backup file name.
			With IP Office, set this parameter to the IP Office IP address or FQDN for Avaya Vantage [™] to fetch IP Office contacts.
			For provisioning, use:
			The SET command in the settings file.
			The settings file received from AADS (not applicable with IP Office).
PSTN_VM_NUM	String	Null	Specifies the telephone number to be dialed automatically when the telephony user presses the Messaging button. The specified number is used to connect to the user's voice mail system.
			PSTN_VM_NUM is used with IP Office and third-party SIP call control environments instead of MSGNUM.

New parameters supported on both IP Office and Avaya Aura®

The following table lists the new parameters supported on Avaya Vantage $^{^{\mathrm{TM}}}$ for both IP Office and Avaya Aura $^{^{\mathrm{CM}}}$.

Parameter	Туре	Default value	Description
SIMULTANEOUS_RE GISTRATIONS	Numeric	3	Specifies the number of Session Manager instances with which the device can simultaneously register. The range is from 1 to 3.
			In an IP Office environment, the value of the parameter is set to 1.
REGISTERWAIT	Numeric	900	Specifies the number of seconds between re-registrations with the current server. Valid values are from 30 to 86400.

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