



Release Notes and Product Information Guide for Open Networking Adapter 1101GT

Release 2.0
NN48800-400
Issue 02.01
May 2016

© 2015-2016, Avaya, Inc.
All Rights Reserved.

Notice

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

Documentation disclaimer

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

Link disclaimer

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

Warranty

Avaya provides a limited warranty on Avaya hardware and software. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this product while under warranty is available to Avaya customers and other parties through the Avaya Support website: <https://support.avaya.com/helpcenter/getGenericDetails?detailId=C20091120112456651010> under the link "Warranty & Product Lifecycle" or such successor site as designated by Avaya. Please note that if You acquired the product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to You by said Avaya Channel Partner and not by Avaya.

"Hosted Service" means an Avaya hosted service subscription that You acquire from either Avaya or an authorized Avaya Channel Partner (as applicable) and which is described further in Hosted SAS or other service description documentation regarding the applicable hosted service. If You purchase a Hosted Service subscription, the foregoing limited warranty may not apply but You may be entitled to support services in connection with the Hosted Service as described further in your service description documents for the applicable Hosted Service. Contact Avaya or Avaya Channel Partner (as applicable) for more information.

Hosted Service

THE FOLLOWING APPLIES ONLY IF YOU PURCHASE AN AVAYA HOSTED SERVICE SUBSCRIPTION FROM AVAYA OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE), THE TERMS OF USE FOR HOSTED SERVICES ARE AVAILABLE ON THE AVAYA WEBSITE, [HTTPS://SUPPORT.AVAYA.COM/LICENSEINFO](https://support.avaya.com/LICENSEINFO) UNDER THE LINK "Avaya Terms of Use for Hosted Services" OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, AND ARE APPLICABLE TO ANYONE WHO ACCESSES OR USES THE HOSTED SERVICE. BY ACCESSING OR USING THE HOSTED SERVICE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE DOING SO (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THE TERMS OF USE. IF YOU ARE ACCEPTING THE TERMS OF USE ON BEHALF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO BIND SUCH ENTITY TO THESE TERMS OF USE. IF YOU DO NOT HAVE SUCH AUTHORITY, OR

IF YOU DO NOT WISH TO ACCEPT THESE TERMS OF USE, YOU MUST NOT ACCESS OR USE THE HOSTED SERVICE OR AUTHORIZE ANYONE TO ACCESS OR USE THE HOSTED SERVICE.

Licenses

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

Avaya grants You a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to You. "Software" means computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products, pre-installed on hardware products, and any upgrades, updates, patches, bug fixes, or modified versions thereto. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Instance" means a single copy of the Software executing at a particular time: (i) on one physical machine; or (ii) on one deployed software virtual machine ("VM") or similar deployment.

Licence types

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

Heritage Nortel Software

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

Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, Hosted Service, or hardware provided by Avaya. All content on this site, the

documentation, Hosted Service, and the product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

Virtualization

The following applies if the product is deployed on a virtual machine. Each product has its own ordering code and license types. Note that each Instance of a product must be separately licensed and ordered. For example, if the end user customer or Avaya Channel Partner would like to install two Instances of the same type of products, then two products of that type must be ordered.

Third Party Components

"Third Party Components" mean certain software programs or portions thereof included in the Software or Hosted Service may contain software (including open source software) distributed under third party agreements ("Third Party Components"), which contain terms regarding the rights to use certain portions of the Software ("Third Party Terms"). As required, information regarding distributed Linux OS source code (for those products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the products, Documentation or on Avaya's website at: <https://support.avaya.com/Copyright> or such successor site as designated by Avaya. The open source software license terms provided as Third Party Terms are consistent with the license rights granted in these Software License Terms, and may contain additional rights benefiting You, such as modification and distribution of the open source software. The Third Party Terms shall take precedence over these Software License Terms, solely with respect to the applicable Third Party Components to the extent that these Software License Terms impose greater restrictions on You than the applicable Third Party Terms.

The following applies only if the H.264 (AVC) codec is distributed with the product. THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com).

Service Provider

THE FOLLOWING APPLIES TO AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS OR SERVICES. THE PRODUCT OR HOSTED SERVICE MAY USE THIRD PARTY COMPONENTS SUBJECT TO THIRD PARTY TERMS AND REQUIRE A SERVICE PROVIDER TO BE INDEPENDENTLY LICENSED DIRECTLY FROM THE THIRD PARTY SUPPLIER. AN AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS MUST BE AUTHORIZED IN WRITING BY AVAYA AND IF THOSE HOSTED PRODUCTS USE OR EMBED CERTAIN THIRD PARTY SOFTWARE, INCLUDING BUT NOT LIMITED TO MICROSOFT SOFTWARE OR CODECS, THE AVAYA CHANNEL PARTNER IS REQUIRED TO INDEPENDENTLY OBTAIN ANY APPLICABLE LICENSE AGREEMENTS, AT THE AVAYA CHANNEL PARTNER'S EXPENSE, DIRECTLY FROM THE APPLICABLE THIRD PARTY SUPPLIER.

WITH RESPECT TO CODECS, IF THE AVAYA CHANNEL PARTNER IS HOSTING ANY PRODUCTS THAT USE OR EMBED THE G.729 CODEC, H.264 CODEC, OR H.265 CODEC, THE AVAYA CHANNEL PARTNER ACKNOWLEDGES AND AGREES THE AVAYA CHANNEL PARTNER IS RESPONSIBLE FOR ANY AND ALL RELATED FEES AND/OR ROYALTIES. THE G.729 CODEC IS LICENSED BY SIPRO LAB TELECOM INC. SEE

WWW.SIPRO.COM/CONTACT.HTML. THE H.264 (AVC) CODEC IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO: (I) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (II) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION FOR H.264 (AVC) AND H.265 (HEVC) CODECS MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://WWW.MPEGLA.COM).

Compliance with Laws

You acknowledge and agree that it is Your responsibility for complying with any applicable laws and regulations, including, but not limited to laws and regulations related to call recording, data privacy, intellectual property, trade secret, fraud, and music performance rights, in the country or territory where the Avaya product is used.

Preventing Toll Fraud

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

Avaya Toll Fraud intervention

If You suspect that You are being victimized by Toll Fraud and You need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support website: <https://support.avaya.com> or such successor site as designated by Avaya.

Security Vulnerabilities

Information about Avaya's security support policies can be found in the Security Policies and Support section of <https://support.avaya.com/security>.

Suspected Avaya product security vulnerabilities are handled per the Avaya Product Security Support Flow (<https://support.avaya.com/css/P8/documents/100161515>).

Downloading Documentation

For the most current versions of Documentation, see the Avaya Support website: <https://support.avaya.com>, or such successor site as designated by Avaya.

Contact Avaya Support

See the Avaya Support website: <https://support.avaya.com> for product or Hosted Service notices and articles, or to report a problem with your Avaya product or Hosted Service. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: <https://support.avaya.com> (or such successor site as designated by Avaya), scroll to the bottom of the page, and select Contact Avaya Support.

Trademarks

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

Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Contents

Chapter 1: Introduction	5
Purpose.....	5
Documentation.....	5
Training.....	5
Viewing Avaya Mentor videos.....	5
Subscribing to e-notifications.....	6
Support.....	8
Searching a documentation collection.....	8
Chapter 2: New in this release	10
Chapter 3: Important notices	11
File names.....	11
Supported operational modes.....	11
Operational considerations.....	12
Technical specifications.....	12
Chapter 4: ONA software upgrade methods	14
Upgrading a deployed ONA in Mode 0.....	14
Upgrading a deployed ONA in Mode 1.....	14
Upgrading a standalone ONA using the Manual Configuration menu.....	17
Chapter 5: Known issues and limitations	19
Known issues in this release.....	19
Limitations in this release.....	19
Chapter 6: Resolved issues in this release	20

Chapter 1: Introduction

Purpose

These Release Notes provide important information about this release of the Open Networking Adapter (ONA). For installation and initial setup information, refer to the ONA Quick Install Guide that came with your ONA.

Documentation

See the Open Networking Adapter (ONA) product page on the Avaya support website, <https://support.avaya.com/> to download the latest documents and software to support the ONA.

You must download the latest software and read the product documentation before you deploy the ONA 1101GT.

Training

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

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.

Subscribing to e-notifications

Subscribe to e-notifications to receive an email notification when documents are added to or changed on the Avaya Support website.

About this task

You can subscribe to different types of general notifications, for example, Product Correction Notices (PCN), which apply to any product or a specific product. You can also subscribe to specific types of documentation for a specific product, for example, Application & Technical Notes for Virtual Services Platform 7000.

Procedure

1. In an Internet browser, go to <https://support.avaya.com>.
2. Type your username and password, and then click **Login**.
3. Under **My Information**, select **SSO login Profile**.
4. Click **E-NOTIFICATIONS**.
5. In the GENERAL NOTIFICATIONS area, select the required documentation types, and then click **UPDATE**.

GENERAL NOTIFICATIONS

1/5 Notifications Selected

End of Sale and/or Manufacturer Support Notices	<input type="checkbox"/>
Product Correction Notices (PCN)	<input checked="" type="checkbox"/>
Product Support Notices	<input type="checkbox"/>
Security Advisories	<input type="checkbox"/>
Services Support Notices	<input type="checkbox"/>

UPDATE >>

6. Click **OK**.
7. In the PRODUCT NOTIFICATIONS area, click **Add More Products**.

PRODUCT NOTIFICATIONS

Show Details

Add More Products

1 Notices

8. Scroll through the list, and then select the product name.
9. Select a release version.
10. Select the check box next to the required documentation types.

The screenshot shows a web interface with two main panels. The left panel, titled 'PRODUCTS', has a 'My Notifications' link in the top right. It contains a list of products: Virtual Services Platform 7000, Virtualization Provisioning Service, Visual Messenger™ for OCTEL® 250/350, Visual Vectors, Visualization Performance and Fault Manager, Voice Portal, Voice over IP Monitoring, W310 Wireless LAN Gateway, WLAN 2200 Series, and WLAN Handset 2200 Series. The right panel is titled 'VIRTUAL SERVICES PLATFORM 7000' and features a 'Select a Release Version' dropdown menu set to 'All and Future'. Below this are several items with checkboxes: Administration and System Programming, Application Developer Information, Application Notes, Application and Technical Notes (checked), Declarations of Conformity, and Documentation Library (checked). A red 'SUBMIT >>' button is located at the bottom right of the right panel.

11. Click **Submit**.

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.

Searching a documentation collection

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

Before you begin

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

Procedure

1. Extract the document collection zip file into a folder.
2. Navigate to the folder that contains the extracted files and open the file named `<product_name_release>.pdx`.

3. In the Search dialog box, select the option **In the index named <product_name_release>.pdx**.
4. Enter a search word or phrase.
5. Select any of the following to narrow your search:
 - Whole Words Only
 - Case-Sensitive
 - Include Bookmarks
 - Include Comments
6. Click **Search**.

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

Chapter 2: New in this release

The following sections highlight the new features in this release.

SDN Fx Healthcare solution support

SDN Controller Mode (Mode 0) is officially supported in ONA Release 2.0, in addition to Fabric Extend (Mode 1) introduced in Release 1.0.

The ONA has two operational modes:

- SDN Controller Mode (Mode 0, the default mode)
- Fabric Extend Mode (Mode 1)

The SDN Controller Mode (Mode 0) enables the ONA to be controlled with an SDN Controller, which can enable Fabric Attach and other features. In Mode 0, the ONA must communicate with an Avaya SDN Controller to operate correctly. For more information about the SDN Controller, see the SDN Fx Healthcare solution documentation.

Chapter 3: Important notices

This section provides important information for this release.

File names

This section describes the ONA software files.

Software files

The following table provides the details of the ONA software files.

File name	Description	File sizes (bytes)
VEGA1101_GA.v2.0.0.0_oss-notice.txt	Optional: Master Copyright file.	1,187,278
VEGA1101_GA.v2.0.0.0.tgz	System software image for the ONA 1101GT.	47,407,565
VEGA1101_GA.v2.0.0.0.sha512	SHA512 Checksum file for ONA.	155
VEGA1101_GA.v2.0.0.0.sha512.sig	SHA512 Checksum file Digital Signature for ONA.	128
VEGA1101_GA.v2.0.0.0.md5	MD5 hash information.	59
VEGA1101_GA.v2.0.0.0.md5.sig	MD5 Digital Signature for ONA.	128

Supported operational modes

The ONA has two operational modes:

- SDN Controller Mode (Mode 0, the default mode)
- Fabric Extend Mode (Mode 1)

During reboot, the ONA retains the configured mode.

For information about switching the configured mode, see *Avaya Open Networking Adapter 1101GT Installation Job Aid* (NN48800-300)

*** Note:**

To restore the factory default mode and parameters, depress the reset button for at least 5 seconds.

Operational considerations

The ONA 1101GT packet forwarding performance can vary based on several factors, including which mode the ONA is running and which features are enabled.

- In SDN Controller Mode (Mode 0) the ONA has a 100 MB rate limiter enabled on the device port ingress. The rate limiter cannot be disabled in this release.
- In Fabric Extend Mode (Mode 1) the operational considerations are available in VSP 4000 documentation, see *Configuring Avaya Fabric Connect on VSP Operating System Software*, NN47227-510; see the sections on Fabric Extend considerations and ONA considerations.

Technical specifications

The following tables provide the technical specifications for the ONA 1101GT.

Table 1: Physical specifications

Specifications	ONA 1101GT
Height	1.496 in. (38 mm)
Width	2.716 in. (69 mm)
Depth	3.622 in. (92 mm)

Table 2: Electrical specifications

Specifications	ONA 1101GT
Maximum power consumption	9.6 W
Normal operation power	~7.5 W
Input rating when using PoE power from the VSP4000	PoE 54V @ 200 mA
Thermal rating	32.76 BTU/hr @35° C 25.59 BTU/hr @25° C
MTBF rating	@35° C 1,611,922 hours @25° C 2,240,389 hours

The following table lists the specifications for the 10W 100-240 AC power adapter. This adapter is sold separately and comes with four snap-in plug adapters: Type A (U.S. and Japan), Type B (EU), Type G (UK), and Type I (AUS and China). The part number is EC1105E11-E6.

Table 3: Optional AC power adapter specifications

Specifications	ONA 1101GT
Input	110-240 V AC, 50-60 Hz, 0.4 A Max
Output	5V DC, 2A

Table 4: Environmental specifications

Specifications	ONA 1101GT
Operating Temperature	0° C to 35° C (32° F to 95° F)
Storage Temperature	-40° C to 85°C (-40° F to 185° F)
Operating Humidity	0 to 95 percent noncondensing
Storage Humidity	0 to 95 percent noncondensing
Maximum Operating Altitude	3,048m (10 000 feet) above sea level
Acoustic Noise	None

Chapter 4: ONA software upgrade methods

See the following methods to upgrade software on an ONA. Choose the method best suited for your deployment state and ONA operating mode:

- [Upgrading a deployed ONA in Mode 0](#) on page 14 — This method uses the SDN Controller connected to an ONA to perform the upgrade (Mode 0 only).

*** Note:**

You can use this upgrade method to avoid physically disconnecting the ONA from the SDN Fx Healthcare Fabric Attach network when an ONA is deployed in Mode 0.

- [Upgrading a deployed ONA in Mode 1](#) on page 14 — This method uses the VSP 4000 switch connected to an ONA to perform the upgrade (Mode 1 only).

*** Note:**

You can use this upgrade method to avoid physically disconnecting the ONA from the VSP 4000 Fabric Extend network when an ONA is deployed in Mode 1.

- [Upgrading a standalone ONA](#) on page 17 — This method uses a PC and a web browser to access the ONA's Manual Configuration menu to perform the upgrade (any mode).

*** Note:**

You can use this upgrade method before an ONA deployment, such as when you first receive your ONA.

Upgrading a deployed ONA in Mode 0

If the ONA is deployed in an Avaya SDN Fx Healthcare solution, Avaya recommends using the SDN Controller to upgrade the ONA. See *Maintaining Avaya SDN Fx Healthcare*, NN48200-500.

You can use the SDN Controller to perform a software upgrade on an ONA device deployed in Fabric Attach Mode 0.

Upgrading a deployed ONA in Mode 1

Use this procedure to upgrade the software on an ONA that has already been deployed.

Perform the steps in this procedure on the VSP 4000 connected to the ONA that you want to upgrade.

! Important:

The following upgrade procedure is applicable for Fabric Extend Mode 1 only.

Procedure

1. Enter Global Configuration mode:

```
enable
configure terminal
```

2. Configure the boot flag to enable the SSH daemon:

```
boot config flags sshd
```

3. Enable SSH globally on the switch:

```
ssh
```

4. Verify that SSH is globally enabled:

```
show ssh global
```

! Important:

You must enable **both** the SSH boot flag daemon and SSH globally.

5. Verify that the SSH daemon and server are enabled:

```
show logging file
```

6. Go to the Avaya Support website, <http://support.avaya.com> and download the ONA software image that you want to use.

7. Verify that the ONA has an IP address, and is up and running. This includes the Network and Device ports:

```
show khi fe-ona detail
```

*** Note:**

Before the ONA can get an IP tunnel source address from the VSP 4000, the following steps must be taken:

- Connect the Device and Network ports on the ONA to the VSP 4000.
- Make sure that the ONA is connected to a DHCP server. If a DHCP server is unavailable, statically configure an IP tunnel source address on the ONA.
- Create a Management VLAN on the ONA that includes the Network port.
- Designate the Device port for the IP tunnel source address in the configuration file.

The syntax for the IP tunnel source address is: **ip-tunnel-source-address** <A.B.C.D> port <slot/port> [mtu <750-1950>] [vrf WORD<1-16>].

8. Upgrade the ONA:

```
fe-ona image-upgrade <ONAReleaseFile> [Username] [Password]
```

*** Note:**

The Username and Password are required. This is only optional if you did not change the defaults from `rwa/rwa`.

9. Check the status of the upgrade:

```
show khi fe-ona status
```

*** Note:**

When the upgrade finishes, the ONA automatically reboots.

Example

```
Switch(config)# boot config flags sshd
Switch(config)# show ssh global
Total Active Sessions : 0
  version                : v2only
  port                   : 22
  max-sessions           : 4
  timeout                : 60
  action rsa-host key    : rsa-hostkeysize 2048
  action dsa-host key    : dsa-hostkeysize 1024
  rsa-auth               : true
  dsa-auth               : true
  pass-auth              : true
  sftp enable            : true
  enable                 : false

Switch(config)# ssh
CP1 [10/27/15 13:40:05.882:UTC] 0x000d861c 00000000 GlobalRouter SSH INFO SSH Server
Enabled

Switch(config)# show ssh global
Total Active Sessions : 0
  version                : v2only
  port                   : 22
  max-sessions           : 4
  timeout                : 60
  action rsa-host key    : rsa-hostkeysize 2048
  action dsa-host key    : dsa-hostkeysize 1024
  rsa-auth               : true
  dsa-auth               : true
  pass-auth              : true
  sftp enable            : true
  enable                 : true

Switch(config)# show logging file
CP1 [10/27/15 13:40:05.882:UTC] 0x000d861c 00000000 GlobalRouter SSH INFO SSH Server
Enabled
CP1 [10/27/15 13:40:05.882:UTC] 0x0000461f 00000000 GlobalRouter SNMP INFO SSH server
enabled

Switch(config)# show khi fe-ona detail
=====
                        ONA RUNTIME INFORMATION
=====
ONA Port Number : 1/8
ONA Management Address : 11.1.1.100
```



```
Tunnel Source IP Address : 40.1.1.4
ONA LLDP Port Status : Enabled
ONA Device Port Status : UP
ONA Device Status : UP
MTU : 1950
ONA Network Port Number : 1/6
ONA Mac(ARP) Address : 10:cd:ae:69:c6:d0
ONA Source VlanId : 11
ONA Source Vlan IP : 11.1.1.1
ONA Gateway IP: 11.1.1.1
ONA Management IP Mask : 255.255.255.0
ONA Bootmode : 1
ONA Uptime : 2 days, 12:07:11
pbit-to-dscp-map p0=0 p1=0 p2=10 p3=18 p4=26 p5=34 p6=46 p7=46

Switch(config)# fe-ona image-upgrade VEGA1101_GA.2.0.0.0.tgz
CP1 [10/26/15 10:51:07.294:UTC] 0x00378603 00000000 GlobalRouter ONA INFO Periodic ONA
Image upgrade status :DOWNLOAD_IN_PROGRESS

Switch(config)# show khi fe-ona status
=====
ONA STATUS
=====
ONA Device Status : UP
Running Release Name : VEGA1101_beta.2.0.0.0int018
Image Upgrade Status : DOWNLOAD_IN_PROGRESS
Image File Is Being Used For Upgrade: VEGA1101_GA.2.0.0.0.tgz
-----

Switch(config)# show khi fe-ona status
=====
ONA STATUS
=====
ONA Device Status : UP
Running Release Name : VEGA1101_GA.2.0.0.0
Last Image Upgrade Status : UPGRADE SUCCESS
Last Image File Used For Upgrade: VEGA1101_GA.2.0.0.0.tgz
-----
```

Upgrading a standalone ONA using the Manual Configuration menu

Use this procedure to upgrade the ONA when you first receive it. This method uses a PC to access the ONA's Manual Configuration menu.

Procedure

1. From the PC that you are going to use for this upgrade procedure, go to the Avaya Support website, <http://support.avaya.com>, and download the ONA software image that you want to use.
2. Connect a PC to the RJ-45 port on the Device side of the ONA.

*** Note:**

Make sure the PC's network port is enabled with DHCP client.

3. Insert a paper clip into the reset switch. Press and hold the reset button before applying power to the ONA.
4. Connect the cable from the network switch to the Network side of the ONA for PoE power. If PoE power is unavailable, connect an external power adapter.
5. Continue pressing and holding the reset button until the Status LED cycles through a steady red/green/blue. Then release the reset button and the Status LED flashes a steady amber, which indicates that the Manual Configuration menu is running.

*** Note:**

After this step, wait for a few seconds so that the PC gets an IP address for the ONA over DHCP.

6. On the PC, use a browser to connect to the ONA configuration menu with the address `http://192.168.100.1`.

*** Note:**

You cannot go directly to this web page. You must complete steps 1–5 first.

7. Click **Upgrade Software**.
8. Select the software upgrade package that you want to upload.
9. Click **Send** to upload the image to the ONA. This may take up to five minutes.

*** Note:**

Do not refresh or close the webpage during the upgrade.

10. Click **Return to Configuration page**.
11. Click **Reboot into Operational Mode**.
12. Disconnect the PC.

Chapter 5: Known issues and limitations

This chapter details the known issues and limitations found in this release. Where appropriate, use the workarounds provided.

Known issues in this release

This section identifies the known issues in this release.

Issue number	Description	Workaround
VEGA 158	The ONA software continuously monitors the operating temperature of the device. If the high temperature threshold value of 65 degrees Centigrade is exceeded, the operating CPU frequency of the ONA lowers to reduce heat and a notification is sent to the SDN controller. The controller then reads the current ONA operating temperature and adds a new entry to the list of notifications for that ONA device. The current temperature value read by the SDN controller and recorded in the notification could show as below the established threshold, since the ONA cools while running at reduced CPU frequency.	Ensure proper placement and operating environment. Check that the ONA is not within 6 inches of any additional heat source or obstruction that blocks air flow around the device and inhibits cooling.

Limitations in this release

This section lists known limitations and expected behaviors that may first appear to be issues.

Issue number	Description
wi01234289	HTTP management of the ONA is not supported when it is in Mode 1 deployed with a VSP 4000 Series switch, or Mode 0 deployed with an SDN Controller.

Chapter 6: Resolved issues in this release

This section identifies the resolved issues in this release.

Issue number	Description	Workaround
VOSS-1693	In Mode 1 deployed with VSP 4000 switch, the ONA upgrade command (<code>fe-on image-upgrade</code>) requires that you enter a username and password if you changed the defaults (rwa/rwa). This command does not support special characters.	Do not use ampersands, slashes, asterisks, or other special characters in passwords.