# Visualization Performance and Fault Manager (VPFM)

AVAYA

# Software Release 3.0.3 GA Release

## 1. Release Summary

GA Date:17 March 2014Purpose:The VPFM 3.0.3 GA Release Notes provides the following information:

- Important Notes Before Installing this Release
- About VPFM 3.0.3
- New Features in VPFM 3.0.3
- Supported Operating systems
- Supported Browsers
- Operational Notes
- Obtaining 1st time and upgrade VPFM 3.0.3 license
- Installing VPFM 3.0.3
- Issues fixed in VPFM 3.0.3
- Known Issues
- Note on future VPFM release

## 2. Important Notes before Installing this Release

VPFM 3.0.3 provides an update installer. This allows you to update from earlier versions of VPFM to VPFM 3.0.3 GA release. **You are not required to uninstall for an update installation.** You can upgrade directly from VPFM release 3.0.1 to release 3.0.3, or from release 3.0.2 to release 3.0.3. If you want to upgrade from a release older than 3.0.1, you must first upgrade to release 3.0.1, then upgrade to release 3.0.3.

When you are installing VPFM, ensure that any errors reported by the pre-Install checks have been addressed. The pre-install validation mechanism within the installer provides a comprehensive check of host server requirements and will not allow installation to proceed if there are any errors.

If you are a customer upgrading from VPFM 3.0.1 and older releases on a virtual machine to Release 3.0.3, take note of the new process to obtain your License Authorization Key based on HOST\_ID and NOTICE as documented in Section 7.

## 3. About VPFM 3.0.3

VPFM 3.0.3 is a feature pack, released both as a standalone application and as part of the Pod Orchestration Suite for the Avaya Collaboration Pod. VPFM release 3.0.3 builds on the core VPFM 3.0 feature set by providing new and updated device discovery, browser, and topology capabilities with the additional support of the new Avaya Collaboration Pods and Avaya Aura® 6.2 Feature Pack 3.This release of VPFM also fixes some previous issues and deficiencies in VPFM 3.0 GA. VPFM 3.0.3 is released as an appliance (OVA) for the Avaya Collaboration Pod and as a software only installer for standalone application. VPFM 3.0.3 is also known as VPFM 3.0.3.1.

## 4. <u>New Features in VPFM 3.0.3</u>

### New and Updated Device and Application Support

The Avaya Collaboration Pod 4200 LVE release 2.0

- Main Pod release 2.0
- Extension Pod release 2.0

The following new Avaya data networking devices are added:

- ERS 3500 v5.1.1
- VSP 4000 series v3.0.1.0
- Avaya Secure Remote Access (SRA) firewall v1.0.1

The following Avaya data networking devices are updated:

• VSP 7000 series v10.2.1

The following Avaya voice devices are added:

- Avaya Aura Messaging (AAM) v6.3.
- Avaya Aura Contact Center Control Manager (ACCCM) v7.0
- Avaya Navigator (A-NAV) v7.0
- Avaya Contact Recorder (ACR) v12.0
- Avaya Call Center (CC) Elite Multi Channel (EMC) v6.3
- Avaya Call Management System (CMS) v17.0
- Avaya Session Border Controller (Sipera SBC) release v6.2
- Avaya G860 Media Gateway (M3K) release v6.2
- Avaya Meeting Exchange (MX) release v6.2
- Avaya Aura Experience Portal (AAEP) v6.0.2

The following Avaya voice devices are updated:

- Avaya Aura Communication Manager (CM) v6.3.4
- Avaya Aura Session Manager release v6.3.4
- Avaya Aura System Manager release v6.3.4
- Application Enablement Service (AES) release v6.3.1
- Avaya Web Licensing Manager (WebLM) v6.3
- Utility Services (US) release v6.3
- Avaya G430/G450/G350/G250 Media Gateway v6.3

The following third party devices are updated:

- VMware ESXi v5.1
- VMware vSphere v5.1 client
- VMware vCenter v5.1

The following third party devices are added:

- Acme Packet Net-Net Session Border Controller (SBC) 4500 v6.3.0
- Sentry Smart CDU v7.0

## UCaaS Pod OVA and CCaaS Pod OVA

This release introduces the Unified Communications as a Service (UCaaS) Collaboration Pod OVA version of VPFM 3.0.3 and the Contact Center as a Service (CCaaS) Collaboration Pod OVA version of VPFM 3.0.3. The VPFM 3.0.3 OVA are not for use outside the Collaboration Pod. Use the software installer for a standalone VPFM or when VPFM is installed in cluster with other Avaya management applications like COM.

### **Customized Interface**

This release introduces Customized Interfaces wherein you can add a customized logo or banner on the application landing page. You can upload, remove, or change the customized logo or banner through the UCM Security Policies web page. Please see Section 7 "Operational Notes" for details.

## 5. Supported Operating systems

Operating system	Version
Windows	• Windows 2003 SP2 32/64-bit Standard/Enterprise
	(only for upgrades, see the note below)
	Windows 2008 Standard/Enterprise
	Windows 2008 R2 Standard/Enterprise
	<b>Notes:</b> Windows 2003 is supported only through upgrade.
	New install of VPFM 3.0.3 on Windows 2003 Operating
	System is not supported.
Linux	RHEL 5.6 32/64-bit

The following table lists the operating systems supported by VPFM 3.0.3

### Support for VMware environment for Windows and Linux Operating system

VPFM 3.0.3 appliance includes the Red Hat Enterprise Linux RHEL 5.6 and the VMware tools. VPFM 3.0.3 is compatible with VMware ESXi 5.1 and Microsoft Hyper-V Server 2012.

Please note that US English is the only supported locale while installing VPFM 3.0.3. The installer as well as the pre-install checks will not allow installation to proceed if the system language is not US English.

## 6. Supported Browsers

The following table lists the web browsers supported by VPFM 3.0.3.

Browser	Version
Microsoft Internet Explorer	9, 10
Mozilla Firefox	24, 25

### <u>Notes</u>

- You will require the Adobe Flash plug-in to be installed for your browser (Internet Explorer and Firefox), in order to view network maps in VPFM 3.0.3. Please refer to the VPFM Configuration Guide for details.
- Although we certify VPFM 3.0 is compatible with Firefox 24, there should be no major issues using the software with any of the later versions of Firefox.
- It is recommended that users not use the zoom controls of the browser to zoom the topology maps. Instead use the zoom slider and text boxes provided on the Network Browser page.
- IE 8 or earlier versions are not supported. IE 9 & IE 10 do not support compatibility mode. It is recommended that you disable this mode on these browsers when using VPFM 3.0.3.
- It had been noticed, intermittently, that after upgrading to VPFM 3.0.3 the VPFM link on System Manager do not redirect correctly. If this happens, clearing the browser cache and restarting the browser should fix the issue.

## 7. Operational Notes

### Inter-operability with other UCM applications

VPFM 3.0.3 can be installed in an UCM cluster running COM 3.0.2, VPS 1.0.3 and IPFM 2.0.3. VPFM 3.0.3 is backward compatible with the above mentioned applications. VPFM 3.0.3 can be used as a member to Avaya Aura System Manager Avaya 6.3 or CS 1000 release 7.6 as primary in the UCM cluster.

### **User Interface**

In the VPFM Network Browser, the Edit Mode button is set to OFF by default, thereby making the nodes non-movable. Be sure to toggle this button to ON if you want to move the nodes around.

Also, the Edit Mode button setting applies only to the current view. When the user moves to a different view, the button again needs to be toggled so that the user can move nodes within that view.

The "Show All" and "Show VOIP Devices" context menu options for routers and switches works only while Edit mode is enabled. Also, these operations work only in Custom Views. When these operations are invoked while in default views, the user is prompted to save as a custom view first, then proceed with the view edits.

The Top-N dashlets shows numbers of rows equal to the configured elements times the number of domains. If wild card \* is chosen it represents all domains. Any element appearing in more than one domain will be listed multiple times.

### Java Device Manager (JDM)

- JDM can be launched by right-mouse click on a device and choosing "JDM-Launch" from the "Tools" menu. However, there is security vulnerability with older releases of the java plug-in. It is recommended that you upgrade your browser plug-in to the latest java. You will have to set the trusted host settings to launch JDM. On Windows this is done through the Java Control Panel under the security tab. The same applies to launching the G450 element manager.
- VPFM will provide the IP address and the read/write community strings to JDM as part of the launch so that JDM will not prompt the user for these details.
- For JDM to work, JRE 1.6 or greater is required to be installed on the system where the browser is being run.
- Pop-up blockers will have to be disabled on the browsers.
- For Firefox (on both Windows & Linux) when the browser prompts to open a file called "index.jsp" which is of type "JNLP", select the "Open with" option. Click on the dropdown field right beside the "Open with" label in that dialog and select "Other…" This will open a file explorer & using this explorer navigate to the following executable <JRE 1.6 home>/bin/javaws. Then click on OK in that browser dialog. This needs to be done only the first time to associate the right version of the java web start to the file. Henceforward, attempting to launch JDM will still show the browser prompt window (unless the option "Do this automatically for files like this from now on" option was checked) but the correct javaws binary will already be selected.
- In case of Internet Explorer on Windows security settings will have to be altered to remove the information bar. The steps are explained here <a href="http://windows.microsoft.com/en-US/windows-vista/Internet-Explorer-Information-bar-frequently-asked-questions">http://windows.microsoft.com/en-US/windows-vista/Internet-Explorer-Information-bar-frequently-asked-questions</a>. If however you do not wish to alter this security setting, you can directly launch JDM by going to a new browser window/tab & typing <a href="http://<VPFMserver>/jdm/index.jsp">http://<VPFMserver>/jdm/index.jsp</a> in the address bar. As a reminder JRE 1.6 or 1.7 must be installed & must be the default JRE on the system.

### Shortest Path Bridging (SPB)

Users will need to provide SSH or telnet credentials to the SPB devices, in order to use the SPBm diagnostics tools provided in VPFM.

### Discovery of Stacked Units (ERS 5xxx, ERS 45xx, ERS 25xx)

Property table for stack units incorrectly displays SNMP version as v3

### Deleting domains and recovering disk space

There is a known issue where if you delete a VPFM domain, the trend data is not removed. If you need to free up the disk space, you will need to remove this data manually. You can do this by going to the VPFM\_HOME/acqHistory folder and removing the folder with the same name as the domain that was deleted (VPFM\_HOME on Windows is typically C:\Program Files\Avaya\UCM\VPFM and on RHEL is /opt/avaya/ucm/vpfm).

### CPU Utilization display of VSP9000/VSP4000

VPFM - CPU utilization of VSP9000/VSP4000 scale is wrong by a factor of 10. The trend chart and dial gauge in VPFM is using the 5 minutes average to show in the trends and not the current instantaneous utilization.

### **AAM Server Discovery**

There is a possibility that file systems and logical volumes will not be discovered for AAM server with default SSH timeout settings. Please work with your local Avaya SE in order to change these settings and re-install the VPFM service. Also see the documentation on the "Advanced Discovery Options".

### **Certificates Management – Disabling Certificates**

If there is only one Certificate Authority, do not disable it. If disabled, you will not be able to login to UCM again and UCM will no longer be accessible.

### **Customized Interface Management**

You can upload, remove, or change the customized logo or banner through the UCM Security Policies web page. For this, you will have to login to UCM as an administrator. The supported image file formats are JPG, PNG, GIF, and BMP. The supported image dimensions are 100\*51px.

You can perform the customized interface management by selecting "Security->Policies" from the navigation pane. Adding, changing and removal of the customized logo or banner on the application landing page can be performed as follows:

- To add a new customized logo or banner on the application landing page, in the Customized Interface section, click "Edit" and then click "Browse" to navigate to the required file. Click "Save" to upload the file.
- To change the customized logo or banner, in the Customized Interface section, click "Edit" and then click "Browse" to navigate to the required file. Click "Save" to upload the new file.
- To remove the customized logo or banner, in the Customized Interface section, click "Edit" and then click "Remove". To confirm, click "Ok".

For the changes to take effect, refresh the Customized Interface page, or log off and log on to UCM.

## 8. Obtaining first time and upgrade VPFM 3.0.3 license

You may need a new license to enable VPFM 3.0.3, even if you are upgrading from a previous release (3.0.1.0 or earlier). This section describes how to obtain and register a first time customer / upgrade customer License Authorization Code (LAC). The first time installation instructions are also documented in Avaya Visualization Performance and Fault Manager – Installation (NN48014-300).

### First time customer – Obtaining the License File

Perform the following procedure to obtain and register a VPFM 3.0.3 license. Please read the entire requirements before you proceed.

### Before you begin

- You require the License Activation Code (LAC) for the software you want to license (this is provided by Avaya at purchase).
- You require the MAC Address (for physical server) or IP Address and Notice information (for Virtual machine) of the server where the VPFM components reside.
- To update the license file and software, your system requires 5MB of additional free disk space.

### Procedure

1. Open a Web browser window and go to the Electronic Licensing Portal: http://www.avayadatalicensing.com.

🗋 Avaya eLicensing Porta	
← → C ff 🗋	www.avayadatalicensing.com
AVAy	Ά
ELECTRONIC LICENSING	ELECTRONIC LICENSING FOR AVAYA NETWORKING
	NOTE: ELECTRONIC LICENSING ACTIVITIES FOR AVAYA DATA NETWORKING PRODUCTS HAS CHANGED.
	PLEASE ENTER INFORMATION BELOW, SELECT THE ACTIVITY YOU REQUIRE, AND PROVIDE ADDITIONAL INFORMATION FOR THE SPECIFIC ACTIVITY TO COMPLETE YOUR REQUEST.
	First Name Last Name
	Phone Number
	SELECT REQUIRED ACTIVITY FOR EACH LICENSE REQUEST:
	Create/Generate a License file for your Avaya data product running on a physical server (provide LAC, MAC, and filename)
	<ul> <li>Create/Generate a VM License file for your Avaya data product running on VM server (provide LAC, NOTICE, IP Address, and filename)</li> </ul>
	Replace or Swap a MAC address in an existing license file (provide LAC if known, new MAC address, and filename)
	O Contract LACs
	Submit Request
	* A confirmation email will be sent to the supplied email address. Please contact <mark>Avaya Data Licensing</mark> with any questions.

2. Type your first name, last name, company name, e-mail address, and phone number in the appropriate fields

at the top of the p	age.	
First Name	Last Name	
Company	E-mail	
Phone Number		

To obtain a license for a physical (non-virtual) server, please follow steps 3-8. To obtain a license for a virtual server, skip to step 9.

### Steps to obtain a VPFM license to be installed on a physical server

3. To obtain the license for a physical (non-virtual) server, select the first radio button

SELECT REQUIRED ACTIVITY FOR EACH LICENSE REQUEST:

$\circ$	Create/Generate a License file for your Avaya data product running on a physical server (provide LAC, MAC, and filename)
0	Create/Generate a VM License file for your Avaya data product running on VM server (provide LAC, NOTICE, IP Address, and filename)
0	Replace or Swap a MAC address in an existing license file (provide LAC if known, new MAC address, and filename)
$\bigcirc$	Contract LACs

#### 4. Once selected the following section will appear

LICENSE INFORMATION REQUIRED
License Authorization Code:
Example: VVS13->0000<>0000
MAC Information:
Example: 0A:XX:XX:XX:XX
Number of Existing Licenses (WLAN 2300/8100 Only): 🔤
Serial Number or Computer Name (WLAN 2300 Only):
Bank Name (Optional):
License File Name (Optional):

- 5. Enter the License Authorization Code, and MAC Information in the appropriate fields. Bank Name and the License File Name are optional fields.
- 6. Hit the "Submit Request" button. A confirmation e-mail will be sent to the supplied e-mail address. You will also receive the license file at the same e-mail address.
- 7. Copy the license file to the server location where the VPFM components reside.
- **8.** Store your License Certificate in a secure place for future reference.

### Steps to obtain a VPFM license to be installed on a virtual machine

#### 9. To obtain the license for a virtual server, select the second radio button

SELECT REQUIRED ACTIVITY FOR EACH LICENSE REQUEST:

O Create/Generate a License file for your Avaya data product running on a physical server (provide LAC, MAC, and filename)

- Create/Generate a VM License file for your Avaya data product running on VM server (provide LAC, NOTICE, IP Address, and filename)
- Replace or Swap a MAC address in an existing license file (provide LAC if known, new MAC address, and filename)
- Contract LACs

#### 10. Once selected, the following section will appear

LICENSE INFORMATION REQUIRED	
License Authorization Code:	
	Example: WS13-xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
IP Address:	
	Example IPv4: 192.168.255.255
NOTICE:	
	Example: 564DAC8D-2591-6067-1805-07FCB439AC6E Help me find this?
Bank Name (Optional):	
VM License File Name (Optional):	
Bank Name (Optional): VM License File Name (Optional):	

- 11. Enter the License Authorization code, IP Address and the Notice information in the appropriate fields. You can click on "Help me find this" link for instructions on how to find the "Notice" information.
- 12. Hit the "Submit Request" button. A confirmation e-mail will be sent to the supplied e-mail address. You will also receive the license file at the same e-mail address.
- 13. Copy the license file to the server location where the VPFM components reside.
- 14. Store your License Certificate in a secure place for future reference.

More information about obtaining the IP and Notice information without installation or after installation of VPFM can be obtained from the document **Avaya Visualization Performance and Fault Manager** – **Installation (NN48014-300)**.

For more information about adding a license file after the installation, see **Common Services Fundamentals Unified Performance Management (NN48014-100)**.

### Upgrading from VPFM R3.x to VPFM R3.0.3

If upgrading from VPFM R3.x to VPFM R3.0.3 **on a physical server**, there are no changes required for licenses. VPFM R3.x licenses will continue to work on VPFM R3.0.3.

However, if the upgrade is done **on a virtual machine**, you will need to get new virtual machine based licenses (IP Address and Notice). Please follow the steps specified in the section above "<u>to</u> <u>obtain a VPFM license to be installed on a virtual machine</u>"

## 9. Installing VPFM 3.0.3

**Please refer to VPFM 3.0 GA Install Guide for more details.** (Installation of VPFM 3.0.3 patch release is same as VPFM 3.0 GA release)

Domains created with VPFM version 3.0.2 will work with VPFM 3.0.3. If you are installing VPFM 3.0.3 from scratch, meaning you first un-install 3.x and then install 3.0.3, you will need to make sure that these domains are backed up before un-installing 3.x. Please refer to the VPFM 3.0.2 Installation Guide for details on backup and restore.

Note that you do not need to restore the backed up domain if you are running the upgrade installer i.e., installing 3.0.3 without un-installing 2.3/3.0.

After upgrading from VPFM 3.0.1 and older releases to VPFM 3.0.3, the users will need to rediscover from scratch on all domains that contain the stack devices for the CPU and memory information to show up in the dashlets.

It has been noticed, on Windows servers, that even though the FQDN of the server is well formed, if the full computer name is not (i.e., the DNS suffix is missing), the installation is successful, but the application will not come up. Please ensure that the FQDN matches the full computer name (the full computer name can be seen by right-clicking on the My Computer icon and selecting properties).

## 10. Issues fixed in VPFM 3.0.3

Work Item	NNC	Description
wi00858830	NNC-4107	rcnCPLinitShutDown event does not list port # in message detail
wi00979092	NNC-3548	V3 information no longer display in the device properties table
wi01053444	NNC-4083	VPFM3.0-receiving "KHI IST status warning" even thou there is no IST configured at all on the monitored device.
wi01057245 NNC-4104 VSP7000 R10.2 Trials:VFPM is not seeing IST connection between VSP		VSP7000 R10.2 Trials:VFPM is not seeing IST connection between VSP7Ks
wi01067482 NNC-4071 VPFM3.0- creating thousands of Unknown MIT problem alerts		VPFM3.0- creating thousands of Unknown MIT problem alerts
wi01074841	NNC-4077	VPFM isn't polling stack unit trends. e.g. Processor2 memory free, Processor 1 memory used,etc.
wi01076552 NNC-4109 Few VoipToggle traps are not getting corelated to events		Few VoipToggle traps are not getting corelated to events
wi01081187	NNC-4079	VPFM 3.0 direct link between switches show high util. after reboot of VPFM server

The following table lists the issues and deficiencies that have been addressed in VPFM 3.0.3

wi01083717	NNC-4059	UCM application list doesn't show the correct release version for VPFM 3.0.2
wi01083720	NNC-4060	unable to drill down on device after a re-discovery
wi01083722	NNC-4058	java exceptions in the VPFM log file
wi01086839	NNC-4080	VPFM 2.3 fails discovering Cisco and Juniper switches
wi00956573	NNC-4070	Host is missing from the table of available values for network exclusions.
wi01007409	NNC-3800	Background size varies with the placement of icons in schematic browser window
wi01039946	NNC-3879	VPFM3.0-discovery fails to get complete and accurate DN information for ACD and IP phones.
wi01098268	NNC-4115	unable to collect dn/tn data from Call server when in shared environment
wi00435738	NNC-1592	VPFM, network browser doesn't show physical links between 8600 and Cisco
wi01143642	NNC-4292	Security vulnerability using port 7979
wi01134068	NNC-4277	VPFM-SSL Weak Cipher Strength Supported
wi01120457		VPFM3.0.2-upgrade install fails at preinstall check for supported operating system.
wi01086839		VPFM 2.3 fails discovering Cisco and Juniper switches
wi01095715	NNC-4132	VPFM3.0.2-dashboard does not display cpu or memory for 4524gt stacks
wi01098268	NNC-4115	VPFM3.0.2- unable to collect dn/tn data from Call server when in shared environment with multiple sig servers
wi01098272	NNC-4093	VPFM3.0.2-receiving incorrect temperature events for VSPs
wi01119133	NNC-4243	VPFM 3.0.1 UCM Put and Delete method vulnerability

## 11. Known Issues

The following table lists the limitations in VPFM 3.0.3 GA release.

WorkItem	Description	Origin Release
wi01016066 After PDF export of network overview Name column of "IP Phone		VPFM 3.0.1
wi01092241	For message boards created with names starting with semicolon (;), the message board view pops up a dialog with an error message "no MessageBoardModel found named;". It is not possible to delete these message boards too.	VPFM 3.0.0
wi01092966	When "Launch Telnet" action is added to device launch menu, it gets listed in device menu. When telnet session is launched using launch telnet option in device menu (only for the device which has telnet enabled), a pop up comes up with a selection option for "internet shortcut shell extension DLL". For the telnet to start, this option has to be made.	VPFM 3.0.2
wi01113439	VPFM3.0.2-unable to install on red hat 5.6 server when it has over 1TB free space. This is with an NFS mounted disk. It is recommended not to use NFS	VPFM 3.0.2

	mounted disk drives to install VPFM.		
wi01128985	SSH timeout needs to be increased to discover filesystems and logical	VPFM 3.0.3	
	volumes for AAM		
wi01126062	Manageable devices count is exceeded the license limit count during the	VPFM 3.0.3	
WI01130002	first discovery		
wi01144087	Voice objects discovery takes a very long time	VPFM 3.0.2	
	VPFM3.0.2-cannot unhide network element in custom view. After hiding a		
wi01144388	network element in custom view (edit mode), you cannot enable it back	ick VPFM 3.0.2	
	to appear again in the topology.		
	The tmp and work folders of JBoss need to be deleted after installation and		
wi01144610	Jboss needs to be restarted when VPFM and COM are co-resident on the	VPFM and COM are co-resident on the	
	same server.		
wi01152352	SPBm multicast and unicast paths got cleared after a refresh	VPFM 3.0.3	
wi01152713	Device icon for few esxi in L3 view tree menu is wrong	VPFM 3.0.3	
wi01156702	VPFM / IO/SF/CP card removal does not trigger an appropriate event on		
WI01156793	VPFM	VPFINI 3.0.3	
	VPFM - No event exists for traps		
wi01159095	private.enterprises.rapidCity.rcMgmt.rcTraps.rcTrapsMib.rcnHaCpuState.	VPFM 3.0.3	
	A rcnHaCpuState trap signifies that the state of the HA-CPU.		

## 12. Note on future VPFM release

- a) Next major release may deprecate certain OS version e.g., Windows 2003
- b) Next major release may add support for certain OS e.g., CentOS or RHEL 5.7
- c) Next major release will support only 64-bit versions of the OS
- d) Next release on Avaya Aura System Manager Platform may require uninstall of Primary, Member and re-install on new base if a version earlier than 3.1 was installed
- e) In next major release VPFM will be on a new base System Manager Common Services. This platform will provide all the same functionality that UCM provides and there will be a better integration with Avaya Aura System Manager and other components

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