Visualization Performance and Fault Manager (VPFM)

Software Release 3.0
GA Release Notes

1. Release Summary

GA Date: 26 March 2012
Purpose: The VPFM 3.0 GA Release Notes provide the following information:

- Supported Operating Systems
- Supported Browsers
- Operational Notes
- Obtaining VPFM 3.0 license
- Installing VPFM 3.0
- Issues addressed from earlier releases
- Known Issues
- Note on future releases

2. Important Notes Before Installing this Release

VPFM 3.0 provides an update installer. This allows you to update from VPFM versions 2.3 GA and 3.0 beta drops to VPFM 3.0 GA release. You are not required to uninstall for an update installation.

When you are installing VPFM the first time, ensure that any errors reported by the pre-Install checks have been addressed. The pre-install script provides a comprehensive check for requirements and will not allow installation to proceed if there are any errors.

For users running pre-trial versions of VPFM 3.0, we recommend that you un-install the application and re-install the GA version.

> If you are a customer upgrading from VPFM Release 2.3 to Release 3.0, take note of the new process to obtain your License Authorization Key documented in Section 7.

> There is a issue with the ERS 8600 5.1.x release, in fully scaled networks, where a query to the BRIDGE-MIB tables may cause CPU spikes or the device to reboot. If you have this release of ERS 8600 devices in your network, it is recommended that you exclude them from discovery and monitoring. Please note that this is not a VPFM issue, but impacts VPFM function.
>
> If you have ERS 8600 or ERS 8800 7.1 or later, then ignore this note. Please refer to wi00827188 and wi00983229 for more details.

3.   Features in VPFM 3.0

Summary of VPFM 3.0 key features are as follows:

- **Dashboards**
  - ✓ Fully configurable dashboards
  - ✓ Cascading dashboards for deep dive into network health
  - ✓ Multi-graph dashlet

- **Visualization Improvements**
  - ✓ Toggle button to show slot/port labels on links
  - ✓ New Horizontal Grid and Compact layouts
  - ✓ Custom Views and Layouts
  - ✓ Propagate alarm states to navigation tree

- **Enhanced Trend Charts**
  - ✓ Multi-graph trends shown in single chart for comparing
  - ✓ Option to add a second variable in trend
  - ✓ Auto-ranging on both axes
  - ✓ Thresholds shown as control lines on chart
  - ✓ Popup plot point value display
  - ✓ Update time pre-set or immediate
  - ✓ Remember last time scale
  - ✓ Export to PDF or XML
  - ✓ Select time ranges
  - ✓ Select to / from date and time
  - ✓ Delete / add graph in a plot
  - ✓ Remember auto ranging changes
  - ✓ Average, min and max bars on plot

- **Discovery and Monitoring of Avaya Aura Voice Servers**
  - ✓ Discovers CM, SM, SMGR and Gateways
  - ✓ Discovers Avaya SIP and H323 IP Phones (Models 1600, 4800 and 9600 series)
  - ✓ Dashboards for Avaya Aura System integrated with VPFM
  - ✓ Communication Manager, Session Manager, System Manager and Media Gateway health dashboard
  - ✓ CM Application Alarm monitoring
  - ✓ Gateway Alarm monitoring

- **Discovery of SPBm topology**
  - ✓ Schematic view of SPBm areas in campus
  - ✓ Shows the SPBm area and the switches configured
  - ✓ Show B-VLANs and C-VLANs (Layer 2)
  - ✓ Show VRFs (Layer 3)
  - ✓ SPBm diagnostic tools such as Unicast and Multicast trace, ping and tracetree

- **Discovery and monitoring of Storage**
  - ✓ Discovery of File Systems and Disk Partitions on Windows and UNIX Servers
  - ✓ Monitor file systems for usage and fill rate

- **Discovery of Virtual Machines**
  - ✓ Discovery and topology views of Citrix and VMware based virtual machines and VM hosts

- **Application Discovery**
  - ✓ Discovery of well known service such as FTP, LDAP and Web Server

- **Seed group discovery**

✓ To combine multiple campuses in a single topology

- **Single L2 and L3 device rediscovery**
  - ✓ Rediscovery of single devices to update topology maps in quick time

- **Discovery and visualization switch stacks**
  - ✓ Visual indication of switch stacks
  - ✓ Inventory of switch stacks including hardware revisions and serial numbers

- **New device support**
  - ✓ Avaya Aura Communication Manager 5.2.1, 6.0, 6.0.1 and 6.2
  - ✓ Avaya Aura Session Manager 6.2
  - ✓ Avaya Aura System Manager 6.2
  - ✓ Media Gateway G430, G450, G350, G250 v6.1
  - ✓ IP Phones (SIP and H.323) 9600 v2.6.4 (S) v3.1 (H), 9601 v6.0 (S) v 6.1 (H), 1600 v1.6, 4600 v 2.9
  - ✓ ERS 4800 (v5.6) classification only
  - ✓ VSP 7000 (v10.1) classification only
  - ✓ APC UPS Symmetra, Symmetra 3Phase, Smart, Monitors

- **Update to already supported devices**
  - ✓ ERS8600 v7.1
  - ✓ ERS8800 v7.1
  - ✓ WLAN 8100 v1.1
  - ✓ CS1000 v7.0

- **Fixes from the 2.3 patch releases**
  All the fixes in VPFM patch releases 2.3.0.1 are integrated in this release.

- **Documentation**
  - ✓ Technical Configuration Guide for APC UPS discovery and monitoring
  - ✓ Updated discovery best practices document

4. Supported Operating systems

The following table lists the operating systems supported by VPFM 3.0.

Operating system	Version
Windows	2003 SP2 32/64-bit Standard/Enterprise 2008 32/64-bit Standard/Enterprise 2008 R2 Standard/Enterprise
Linux	RHEL 5.6

Support for VMware environment for Windows and Linux Operating system

VPFM 3.0 bundles the Java Runtime Environment (JRE) Version 1.6 needed for various parts of the application or the applications that are launched by VPFM.

Please note that US English is the only supported locale while installing VPFM 3.0. The installer as well as the pre-install script checks for this and will not allow installation to proceed if the system language is not US English.

5. Supported Browsers

The following table lists the web browsers supported by VPFM 3.0.

Browser	Version
Microsoft Internet Explorer	8.0, 9.0
Mozilla Firefox	6.0

Notes
- 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. Please refer to the VPFM Configuration Guide for details.

- Although we certify VPFM 3.0 with Firefox 6.0, there should be no major issues using the software with any of the later versions of Firefox, such as 9.0 or 10.0.

- 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 & IE 9 do not support compatibility mode. It is recommended that you disable this mode on these browsers when using VPFM 3.0.

- It had been noticed, intermittently, that after upgrading to VPFM 3.0 the network maps do not load with Firefox. If this happens, clearing the browser cache and restarting the browser should fix the issue.

6. Operational Notes

Inter-operability with other UCM applications

VPFM 3.0 can be installed on UCM platforms running COM 2.3, EPM 5.3.1 and IPFM 2.0.1 (and vice-versa). VPFM 3.0 is backward compatible with the above mentioned applications as well as Avaya CS 1000 rel 6.0.

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 first prompted to save it as a custom view after which the results of the operation are displayed.

The Top-N dashlets shows numbers of rows equal to the configured number times the number of domains, if the * is chosen as the domain for the dashlet. * represents all domains.

Java Device Manager (JDM)

- JDM can now be launched by right-mouse click on a device and choosing "JDM-Launch" from the "Tools" menu.
- 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.
- In order for JDM to work , JRE 1.6 or greater is required to be installed on the system where the browser is being run from.
- Pop-up blockers will have to be disabled on the browsers..
- In case of 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 - http://windows.microsoft.com/en-US/windows-vista/Internet-Explorer-Information-bar-frequently-asked-questions. 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 http://<VPFMserver>/jdm/index.jsp in the address bar. As a reminder JRE 1.6 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.

Virtual Machine Discovery

Users might need to increase the SNMP and ICMP timeouts and retry values to fully discover the VM and VM hosts. Please work with your VPFM SE in order to change these settings and re-install the VPFM service.

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).

7. Obtaining 1st time and upgrade VPFM 3.0 license

You will need a new license to enable VPFM 3.0, even if you are upgrading from a previous release (2.3). 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 (no changes in this release)

Perform the following procedure to obtain and register a VPFM 3.0 license, carefully noting the requirements before the procedure.

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 of the server where the VPFM components reside.
- You require the name and password to the license bank if you want to deposit the license into an existing license bank.
- 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 Avaya eLicensing Portal: http://www.avayadatalicensing.com.
2. Type your first name, last name, company name, and e-mail address in the appropriate fields at the top of the page.
3. In the **License Bank** area, specify the name and password for an existing license bank where you want to deposit.
4. Specify your e-mail notification options.
5. In the **Submit** field at the bottom of the page, type your LAC.
6. Click the **Activate License**.
   The system deposits a license in your License Bank and sends a message to the e-mail address specified in step 4 to confirm that the license was created.
7. Log on to your license bank using the name and password specified in step 3.
8. Click **Download**.
9. On the Generate License page, type the MAC address for the server where the VPFM components reside. Use capital letters, separated by colons (XX:XX:XX:XX:XX:XX).
10. Click **Create License File**.
    A confirmation message informs you that the license was created. The system sends a license (.lic) file to the e-mail address specified in step 4.
11. Copy the license file to the server location where the VPFM components reside.
12. Store your License Certificate in a secure place for future reference.

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

Upgrading from VPFM R2.3 to VPFM R3.0 (NEW IN THIS RELEASE)

If you have a valid customer support contract that includes upgrade privileges release over release, perform the following procedure to obtain and register a VPFM 3.0 License Authorization Code when upgrading from a previous release to VPFM Release 3.0, carefully noting the requirement before the procedure.

Before you begin

You will require your valid VPFM Entitlement (Upgrade/Product Support) <u>contract number</u>. This number is obtained from the completed purchase order for the purchase of VPFM and VPFM product support coverage including upgrade privileges release over release. Note that product and support may have been submitted on different purchase orders. If you do not know your contract number, contact your company's purchasing agent to obtain this information.

Procedure

1. Open a Web browser window and go the Avaya eLicensing Portal http://www.avayadatalicensing.com.
2. Click "Contract LACs" from the left panel

3. When the MY LAC page displays, enter your contract ID number (see Before you begin)
4. Click "List LACs"

5. If you have a valid customer support contract the system will return a list of your valid LAC numbers as shown in the example below.

6. Highlight the desired LAC (confirm correct product).
7. Right click and select Copy for a cut-and-paste activity.
8. Click Activate from the left pane menu.
9. Paste the LAC as shown in the License Authorization Code box as shown in the example below.

10. Click "Submit."

8. Installing VPFM 3.0

Please refer to the Install Guide for more details.

Domains created with VPFM version 2.3 will work with VPFM 3.0. If you are installing VPFM 3.0 from scratch, meaning you first un-install 2.3 and then install 3.0, you will need to make sure that these domains are backed up before un-installing 2.3.Please refer to the VPFM 3.0 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 without un-installing 2.3.

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 seen by right-clicking on the My Computer icon and selecting properties).

9. Issues with VPFM 2.3 addressed in VPFM 3.0

The following table lists the issues in the older VPFM releases, that have been addressed in VPFM 3.0 .

Table 1 –

wi00730806	email action doesn't work
wi00871673	VSP 9000 sometimes does not show correct interfaces and links
wi00438430	Devices behind NSF not discovered
wi00848828	VPFM 2.2 crash after adding RAPID-CITY-8600 MIB through the VPFM Administrator client
wi00563752	100514-45299 MJ:ES:IBM:VPFM:Color change not happening on links
wi00887359	VPFM 2.2.0.1 - multiple instances of the same switches displayed in topology map
wi00563871	Actions UI always displays contents of first selected command action
wi00889149	launch JDM from VPFM returns a blank screen
wi00730568	VPFM 2.2 can't sustain 300 traps per sec overnite (2008 64 bit)
wi00729968	Monitoring (collecting trend and availability data) of certain 8600 and 5600 interfaces takes a long time to initiate.
wi00435437	No links for Bussiness Secure Router 222
wi00563753	MJ:ES:IBM:ENSM:NA:Slow response on HTTP to VPFM Server.
wi00729962	Event Type and Subject lists takes up to 3 minutes to show up in the Event History filter dialog.
wi00435816	Events should stay in the event browser, even though the trap is cleared
wi00871671	Event History query filter takes too long to setup
wi00435760	CS1K SS v6.0 has an external classification of unrecongonized end node
wi00563754	MJ:ES:IBM:VPFM:2.1:WSS links not discovered
wi00435573	A locate button is needed in the network browser

wi00840232	VPFM2.2 - JDM launch should pass device credentials and connect, like COM does
wi00924431	Issues with running UCM with 2 VNICs.
wi00438293	View Details of Fault on a device from Network Browser
wi00860361	In the campus detail view duplicate links are shown for 8600s
wi00435431	Need of a filter for the message browser - like the one from trap receiver
wi00435791	allow the user to modify the schematic properties without making any changes
wi00843146	VPFM: VSP9000 IST link not being displayed in network browser
wi00435438	The navigation tree menu should be implemeted
wi00438149	Add a dynamic sub-menu tree for vendors under "Applications -> Voice"
wi00435466	Discovery - The display of the help and bookmark tool tips is too far away
wi00435812	SONMP links not created for ERS 8306 devices with sysOID 2272.50
wi00563773	100514-45291 MJ:ES:IBM:VPFM:2.1:ENMS LB links not discivered
wi00923966	link up and link traps from ERS5600 stack aren't being correlated into events
wi00892314	VPFM doesn't discover the VLAN configured on ERS 8600/8000 v7.1properly
wi00435602	AP7215-7220 doesn't appear under 'OSPF Routers' scope when a discovery is made
wi00892813	Distributed: Duplicate link for VPFM under UCM
wi00435672	MLT/SMLT aggregated parallel point-to-point links graphicallygrouped labeled IST
wi00959955	Unable to export TopN report
wi00435619	Need a way to test Email action from within VPFM
wi00438405	path trace: user should be allowed to enter the name of source and destination

10. Known issues -

The following table lists the limitations in VPFM 3.0 GA release.

Table 2

wi00957090	no DN info displayed in the IP Phone properites (both thick client and Web GUI)
wi00964332	Receive "Err 500 Couldn't get AcquisitionManager" err msg when open Monitoring Details in VPFMLite
wi00969454	Zoom in/Out is working reversely in trend chart windows
wi00962077	inferred link remained even after the physical links are added to the custom view.
wi00967931	some VLAN names under L2 hierarchy have an extra word "VLAN" added to the VLAN name
wi00963549	scroll bars flickers when move horizontal scroll bar to the far right in the discovery problem report screen
wi00973799	The secondary B-VLAN name doesn't match the vlan name from device cli command
wi00974577	display the SPBm schematic view when the SPBm perspective is selected.

wi00987588	Dial gauge dashlet does not mention the info for which percent is seen if scope is selected instead of a particular device
wi00974772	Right click on event in message browser and selecting Configure menu - supervision settings/mark for removal does not populate corresponding values in the message browser
wi00969228	need to support layout in custom view or improve the view layout when create custom view from scratch
wi00969449	RuntimeDataException is shown in VPFM server log while rediscovering domains
wi00988955	Save button is not functioning for Transient Dashboards. Note: Use "Save As" when saving transient dashboards. The "Save" button will be disabled for transient dashboards in the next release.
wi00976475	Handle BGP-VPNs for SPBm discovery
wi00989266	Auto-refresh set to a minimun time interval (15sec or 30 sec) affects the creation of custom views.
wi00979555	In Trend chart dashlet, when all devices are selected as a group, the next button does not get enabled
wi00978237	ERS4800 has unknown external classification in device properites and missing a device type
wi00989053	VPFM Email Action is not functioning if user customizes the Subject Type, Event Type and Related Event Type fields.
wi00970237	Element Status Summary values should be in same format for similar variables
wi00976140	The links between devices in some layouts are not aligned correctly
wi00957428	In L3 hierarchy, the communication manager utility server template has an unmanaged icon
wi00985850	Exported topology map looks different from the original topology view in VPFM Note: You will need to use the full version of Visio, as opposed the Visio plug-in or the Visio reader, to view the exported topology maps.
wi00983229	SNMP walk on scaled box causes 100% CPU utilization

11. 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
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 an earlier version than 2.3 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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