

Software Release Notification

VMS 3.16.2 Software Release

Applicability
Vipersat Management System software release (FW-0000010AW) for networking IP modems. Includes all related software and client applications, ViperView.

Revision History		
Rev #	Description	Date
AA	Release Version - 3.11.2.3194	05/27/2013
AB	Release Version - 3.11.3.3264	08/26/2013
AC	Release Version - 3.12.0.3462	01/24/2014
AD	Release Version - 3.12.1.3493	04/04/2014
AE	Release Version - 3.12.2.3554	08/01/2014
AF	Release Version - 3.12.3.3588	08/29/2014
AG	Release Version - 3.12.4.3657	02/13/2015
AH	Release Version - 3.13.0.3886	04/08/2015
AJ	Release Version - 3.12.5.3735	08/17/2015
AK	Release Version - 3.13.1.4263	10/23/2015
AL	Release Version - 3.13.2.4534	08/15/2016
AM	Release Version - 3.14.0.4889	01/23/2017
AN	Release Version - 3.14.1.4907	07/28/2017
AP	Release Version - 3.15.0.5489	07/31/2017
AR	Release Version - 3.15.1.5555	12/11/2017
AT	Release Version - 3.15.1.5564	05/18/2018
AU	Release Version - 3.16.0.6366	07/03/2018
AV	Release Version - 3.16.1.6761	04/15/2019
AW	Release Version - 3.16.2.6885	08/20/2019

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FSCM No. 4J515

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1.0 Introduction

VMS Generation 3 version 16.2 is the 32th revision of the optimized dynamic bandwidth manager software. Comtech EF Data has continued to enhance the VMS on customer feedback and experience gained from using this network software. The changes in the 3.16.2 release are the result of real world implementations and customer applications.

NOTE: VMS FW-0000010AW does not contain Management Encryption Module. Please contact CEFD customer support for details on how to get this option.

Feature Changes

2.0 Roaming Avoidance

The avoidance algorithm utilizes resource availability to guide selection of a beam when a roaming operation is required. To make this decision, it takes into account the availability of outbound symbols, inbound symbols, and demodulator's availability. Then proceeds to broadcast a message to all service area remote modems a preferred list of beams and their loading conditions. This allows remote roaming modems to determine before beam switch to roam to the best available for bandwidth and throughput.

3.0 Software Installation / Upgrade Instructions

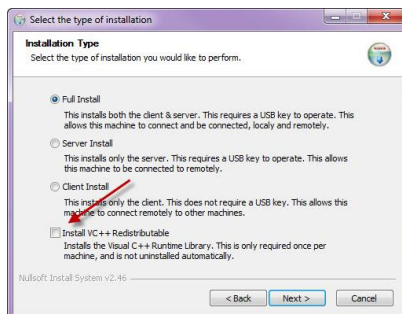
Refer to VMS Users Guide

Vipersat Management System

User's Guide, Manual MN/22156_r16_VMS, Chapter 2 – Installing VMS

4.0 Installation Precaution

This release of 3.16.2 may require a onetime supporting library update if updating from 3.12.x or older. As part of the installation process there is an option to “Install VC ++ Redistributable” files. It is **very important** that this onetime machine (system) update is accomplished before running 3.13.2. After update, any subsequent releases will not require this selection. *Note during this update the installation process will take a longer time than normal. Also, if it is unknown if this update was already applied, it will not harm the system if reapplied.*



If any previous versions of AdvVSAT or Heights device driver were installed, uninstall before upgrading to new installation. If there are new additional drivers, install after VMS. Note drivers must be installed with VOS service not running.

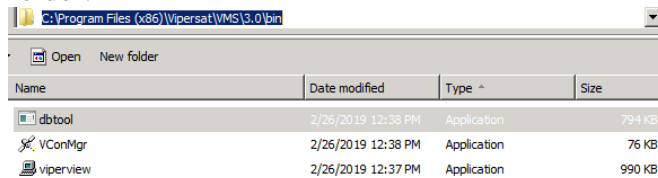
4.1 Hub Resiliency Database Update

VMS 3.16.1 introduces new checks and validations of the hub resiliency at the REST interface level, because of this it may be possible that previously acceptable 3.16.0 configurations for non-primary slots are no longer valid.

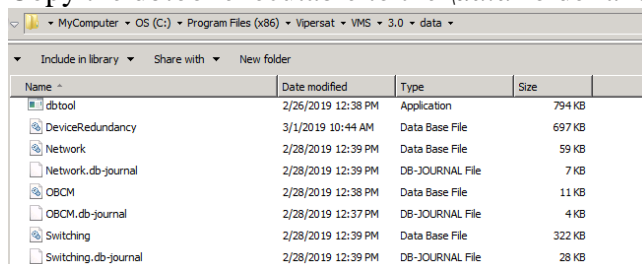
During the 3.16.0 (or 3.16.0-2) to 3.16.1 upgrade may be required to use the dbtool application to verify if there are any problems with the database integrity, and if so, it would be addressed at that time.

Procedure:

1. Take VMS backup
2. Disable Auto Activate under VMS Redundancy
3. Uninstall VMS 3.16.0
4. Install VMS 3.16.1
5. dbtool is updated to match the 3.16.1 database, it's included in the install under the `\bin` folder.



6. Copy the dbtool executable to the `\data` folder and open a command prompt from there



7. At the data folder command prompt, issue the command `> "dbtool verify"`
If any problems are detected, then issue command `> "dbtool repair"`
8. Verify again to ensure that it was fixed.

```
C:\Program Files (x86)\Vipersat\VMS\3.0\data>dbtool verify
Problem Description:
The 'device' vms:/vipersat/mac/00:00:7a:9b:93:3e for group 1 slot 2 has a logical link even though the slot does not have a primary role.
Recovery Action:
Clear logical link for device vms:/vipersat/mac/00:00:7a:9b:93:3e in group 1 slot2.
Correctable Errors Detected: 1
Uncorrectable Errors Detected: 0
Total Errors Detected: 1
C:\Program Files (x86)\Vipersat\VMS\3.0\data>dbtool repair
Correctable Errors Detected: 1
Uncorrectable Errors Detected: 0
Total Errors Detected: 1
repairs complete
C:\Program Files (x86)\Vipersat\VMS\3.0\data>dbtool verify
No problems detected.
C:\Program Files (x86)\Vipersat\VMS\3.0\data>
```

9. Start VMS service
10. Activate VMS

5.0 Package Updates

This installation package includes the following component updates:

- VMS Core/Client v3.16.2.6885 (Installed Service & Client Application)
- VMS v3.16.2.6885 MIB Files
- 570/564 Parameter Editor (.dll) support v1.5.4.77 - v1.6.22.161 (HDLC WAN Framing only)
- 570AL/564AL Parameter Editor (.dll) support v1.3.1.159 - v1.5.2.170
- 5650A/NP Parameter Editor (.dll) support v1.4.0.57 - v1.11.2.152
- AdvVSAT/Heights Series Configuration Editor (.dll's) support (v1.5.2 – v1.7.1.1), (v2.1.1 – v2.5.x, v3.1.x, 3.3.x, 3.7.x)

Note all older parameter editor versions are currently supported in this release. All above noted editors are integral to this version of VMS software, however as newer version become available they are supported as external driver install updates. Contact PSO service department for installs when available.

5.1 Device Types Supported

VMS version 3.16.2 includes support the following devices:

Device	Management
CDM-570/570L	Inband/OOB
CDM-570AL	Inband/OOB
CDD-564/564L/562L	Inband
CDD-564AL/562AL	Inband
SLM-5650A/B w/NP	Inband/OOB
SLM-5650AD/ w/NP	Inband/OOB
CTOG-250/CDM-800	Managed
CDM-840	Inband
CDD-880	Inband
HTO-1/HTX-450	Managed
HRX-16/64/H-PRO	Inband
H8/16/32/64/H-PRO/H-PLUS, H-PICO	Inband
ROSS	Managed
CDM-600/600L	OOB
CDM-700	OOB
CDM-750	OOB
SLM-5650	OOB
CDM-625	OOB
CDM-625A	OOB
CDM-760	OOB
SENTRY3/SENTRY4 AC Power Management CDU	Managed
APC Power Management PDU	Managed
QUINTECH RF Matrix Switch, QRM & QX1-XTREME 32	Managed
Cisco Catalyst 3850	Managed

6.0 List of Fixed Problems and Modifications

[The following lists problems that were corrected in this release:](#)

These corrections within this release are based on previous build versions, 3.16.1 and older.

Ticket #1513 – Duplicate allocatable devices in table cause VOS to crash.

It was determined that the failure was invoked by a cascade of flaws which resulted in a corrupt VMS database that would crash whenever a switch completed on the affected satellite.

When provisioning new demodulators on a satellite, the user presses a button in NetVue to enable the allocation of a demodulator. Due to potential delays in processing the user's request, NetVue may batch process multiple clicks as a request to add the same device multiple times.

Protection was added to not duplicate and return an error to client.

Ticket #1676 – VOS crash when removing a filter in event log view.

7.0 Version Compatibility

The following is the list of all fully compatible release versions:

MODEL	BASE MODEM VERSION	IP INTERFACE VERSION	TRANSEC	NOTES
NetVue		4.0.6		Interface v5.0 - v7.0
CDM-570/570L	1.6.19	(Ver-1) 1.6.23 (Ver-2) 2.6.23		Inband Unit Support
CDD-56x/56xL		1.6.23		Inband Unit Support
SLM-5650A, B	1.4.3(A) 1.1.2(B)	1.12.1	1.2.0	Inband Unit Support
CDM-570AL	1.5.2	1.5.2		Inband Unit Support
CDD-56xAL		1.5.2		Inband Unit Support
SLM-5650AD	1.4.3	1.11.2	1.2.0	Inband Unit Support
AdvVSAT Series		1.4.x – 1.7.1.1		Inband Unit Support
Heights Series		1.6.1 – 2.5.x		Inband Unit Support, HTO/HTX, HRX, H
Heights Series – HDNA		3.1.x – 3.7.x		Inband Unit Support, HTO/HTX, HRX, H
ROSS		1.5.1.1113		Managed, CDM-570
CDM-600	2.3.1	CiM-25, 1.0.8		OOB Unit Support
CDM-600L	1.5.7	CiM-25, 1.0.5		OOB Unit Support
CDM-625	2.2.4	1.3.6		OOB Unit Support
CDM-625A	1.4.1	1.4.9		OOB Unit Support
CDM-760		1.2.11		OOB Unit Support
Server Tech – PDU Sentry 3		7.1b		SNMP Managed Device, Redundancy Manager
Server Tech – PDU Sentry 4		8.0n		SNMP Managed Device, Redundancy Manager
QUINTECH QRM		4.53		SNMP Managed Device, Redundancy Manager
QUINTECH QX1-XTREME		2.02		SNMP Managed Device, Redundancy Manager
Cisco Catalyst – 3850		16.3.x		SNMP Managed Device, Redundancy Manager

Note all older versions not listed are still supported but may not operate correctly with newer features. For additional compatibility questions of versions not listed, contact your local support representative.

8.0 Known Issue(s)

Functional

Accepted Functional Known Issues –

None

Note for more detailed information on issues listed above please contact your Comtech EF Data representative.