Release Notes for Cisco VFrame Data Center 1.1

These release notes are for use with Cisco VFrame Data Center 1.1. They contain the following sections:

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Product Documentation

We sometimes update the printed and electronic documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

Table 1 describes the available VFrame Data Center documentation.

Table 1 VFrame Data Center Documentation

Document Title	Available Formats
Release Notes for Cisco VFrame Data Center 1.1	On Cisco.com.[1]
Cisco VFrame Data Center 1.1 Installation and Configuration Guide	This guide is available in the following formats: • On the product recovery CD-ROM. • On Cisco.com. • Printed document available by order (part number DOC-7817674=).[2]
Cisco VFrame Data Center 1.1 Administration Guide	This guide is available in the following formats: • On Cisco.com. • Included in the online help in HTML and PDF formats.
Cisco VFrame Data Center 1.1 Programmer's Guide	On Cisco.com.
Cisco VFrame Data Center 1.1 Regulatory Compliance Information	Printed document included with the product.
Important Safety Information	Printed document included with the product.
Context-sensitive online help	To access online help, perform any of the following tasks: • Choose **Help > Contents** to open the help system. • Choose **Help > For This Page** to obtain help on the page currently in the window. • Click the **Help** button in a dialog box.

1. All Cisco VFrame Data Center 1.1 documentation can be accessed through the following location: http://www.cisco.com/en/US/products/ps8463/tsd_products_support_series_home.html
2. For information on ordering documentation, see Obtaining Documentation, Obtaining Support, and Security Guidelines, page 15.

Key Features

VFrame Data Center is an appliance-based service orchestration solution for the data center. With VFrame, customers can define end-to-end virtualized application services. VFrame can discover physical resources within the data center. Based on requirements defined for the application infrastructure resources, VFrame can allocate appropriate physical or virtual resources and power the application service network.

Key features of VFrame Data Center 1.1 include the following:

- Service Templates
- Service Networks
- Discovery
- Resource Pooling
- Policies
- Macros
- Lights Out Management Macros
- Storage Macros
- Role Based Access Control
- Server Remote Boot Management
- Server Image Management
- VFrame Data Center Appliance
- VFrame API and SDK

Service Templates

This is a logical definition of the application infrastructure. It defines the building blocks (such as server groups, load balancers, and so on) and the connectivity that is required among them. A template can be used to create multiple service networks.

A template is like a “class” definition in object oriented programming. It defines the basic structure and behavior of the service.

Service Networks

These are instantiations of a service template. These represent the running application service network. Physical resources get mapped to a service network.

A service network is an equivalent of an “object” in object oriented programming. It gets derived out of general “class” (template) but has specific properties associated with the applications that it is running.

Discovery

VFrame discovers x86 based servers, Network attached and Fiber Channel attached storage, Ethernet and Fiber Channel switches and network services modules such as firewalls and load balancers.

Resource Pooling

The discovered physical resources can be grouped into various groups based on capabilities, performance, types, availability, and other user defined filters based on the discovered attributes.

Policies

VFrame has built-in policies that allow changes to the application infrastructure. VFrame monitors server capacity and load through a host-based agent. The built-in policies allow server adds and deletes for CPU or memory-based thresholds, or time-based events.

External policies can be input through the VFrame web services interface.

This allows data center administrators to manage asynchronous workloads much more efficiently by not having dedicated servers that will idle during non-peak hours associated with each application.

Macros

An open scripting interface that uses XML and Perl. This feature allows the execution of custom user commands at predetermined events.

Lights Out Management Macros

Adapter scripts that provide power management functions for servers. These are modular and provide a very flexible way to add server support.

Storage Macros

Modular adapters that provide a simple mechanism for Storage Array integration.

Role Based Access Control

VFrame allows multiple users to be given unique access privileges through role definitions. The management of resources can also be segmented through the use of virtual contexts. Virtual contexts provide separation between different departments or customers accessing a common pool of resources.

Server Remote Boot Management

VFrame can provide PXE-based NFS boot for Linux servers and PXE/SAN-based Fire Channel boot services for both Linux and Windows servers.

Server Image Management

Creates seamless server image snapshots to produce network-stored golden boot images.

VFrame Data Center Appliance

Being a self contained secure appliance makes introducing VFrame into a data center simple. There is no need to install software and integrate.

VFrame API and SDK

VFrame provides a SOAP-based web services API that allows third-party applications to programmatically manage and monitor services offered by VFrame. For more details, see to the VFrame Data Center Programmer's Guide.

System Requirements

The VFrame Data Center client must meet or exceed the following minimum system requirements:

- Intel Pentium III, 1.1 GHz
- 512 MB to 1 GB RAM
- 100 MB hard drive space
- Any of the following operating systems:
  - Microsoft Windows XP, Service Pack 1
  - Microsoft Windows 2000, Service Pack 3
  - Microsoft Windows Server 2003
- Any of the following web browsers:
  - Microsoft Internet Explorer 6.0
  - Mozilla Firefox 1.0
- Java Runtime Environment JRE1.5.0_11 or JRE1.5.0_08
- High-resolution monitor, 1024 by 768 pixels, 256 colors

Supported Devices

Table 2 through Table 9 describe the hardware that is supported with VFrame Data Center:

Table 2 Supported Cisco Catalyst Ethernet Switches

Models	Cisco IOS Releases	Supervisor Card	CSM Versions	CSM-S Versions	FWSM Versions	Line Cards
6503-E	12.2(18)SXF6	WS-SUP720-3B	4.2(1)	2.1(2a)	3.1(1)	WS-X6548-GE-TX
6504-E	12.2(18)SXF7		4.2(2)		3.1(3)	WS-X6548V-GE-TX
6506-E			4.2(3a)		3.1(4)	WS-X6748-GE-TX
6509-E						WS-X6316-GE-TX
6513-E,						WS-X6408A-GBIC
						WS-X6416-GBIC
						WS-X6416-GE-MT
						WS-X6502-10GE
						WS-X6516-GBIC
						WS-X6516A-GBIC
						WS-X6516-GE-TX
						WS-X6704-10GE
						WS-X6724-SFP
						WS-X6816-GBIC
						WS-X6148-RJ-45
						WS-X6148V-GE-TX
						WS-X6148-GE-TX
						WS-6748-SFP
						WS-6708-10GE

Table 3 Supported Cisco Storage Switches

Models	SanOS Versions	Supervisor Modules	Fiber Channel Modules	Service Modules
MDS 9120 MDS 9140 MDS 9506 MDS 9509 MDS 9513 MDS 9216A MDS 9216i	3.0(1) 3.0(2) 3.0(3)	Supervisor-1 Supervisor-2	1/2/4 Gb 1/2 Gb	DS-X9304-SMIP 4-Port 1 Gb IP Storage Service Module DS-X9308-SMIP 8-Port 1 Gb IP Storage Service Module

Table 4 Supported Storage Arrays

Manufacturer	Model	Operating System	Management Software
EMC	Symmetrix DMX1000S-M2	DMX microcode c5671	SYMCLI v6.2.0
EMC	CLARiiON CX700	Flare v02.19.700.5.010	Navisphere CLI v6.19.0.4.14 for Linux

Note Storage Array support is provided through a modular interface. The support matrix is constantly expanding. Please check with your account team about support for specific devices in your environment.

Table 5 Supported Network-Attached Storage

Manufacturer	Model	Version
Network Appliance	F820 Filer	7.0.4

Table 6 Supported Servers

Manufacturer	Model	Processor Speed	Memory	LOM Types and Firmware Versions	BIOS Version	Ethernet NICs[1]	Fiber Channel HBA and Driver[2]	Internal SCSI Controller
Dell	PowerEdge 1950 Server	Dual Core 3.0 GHz	2.0 GB	DRAC v1.27	1.2.0	Broadcom NetXtreme	Qlogic v1.12	LSI Logic v5.0.1
Dell	PowerEdge 2950 Server	Quad Core 2.0 GHz	4.0 GB	DRAC v1.27	1.2.0	Broadcom NetXtreme	Qlogic v1.08	LSI Logic v5.0.1
HP	ProLiant DL360 G4 Server	3.0 GHz	1.0 GB	iLO-1 v1.89	P52	Broadcom NetXtreme	Qlogic QLA2340 v1.34	N/A
HP	ProLiant DL360 G4p Server	3.0 GHz	1.0 GB	iLO-1 v1.89	A05	Broadcom NetXtreme	Qlogic QLA2340 v1.43	N/A
HP	ProLiant DL360 G5 Server	Dual Core Xeon 1.6 GHz	1.0 GB	iLO-2 v1.3	P58	Broadcom NetXtreme	None	None
HP	ProLiant DL365 G1 Server	Dual Core 1.8 GHz	1.0 GB	iLO-2 v1.3	A10	Broadcom NetXtreme	None	None
HP	ProLiant DL380 G4 Server	Intel Xeon 3.4 GHz to 3.6 GHz	1.0 GB	iLo-1 v1.89	P51	HP Integrated NC7782 Dual Port LOM	None	HP Smart Array 6i Controller HP Smart Array P600 SAS RAID Controller
HP	ProLiant DL385 G1 Server	Quad Core Dual Processor 2.6 GHz	8.0 GB	iLo-1 v1.89	A05	Broadcom NetXtreme	Qlogic v1.47	HP Smart Array 6i Controller

Table 6 Supported Servers (continued)

Manufacturer	Model	Processor Speed	Memory	LOM Types and Firmware Versions	BIOS Version	Ethernet NICs[1]	Fiber Channel HBA and Driver[2]	Internal SCSI Controller
HP	ProLiant DL585 G1 Server	AMD 875 Dual-core Opteron 2.2 GHz	2.0 GB	iLO-2 v1.3	A01	HP Integrated NC7782 Dual Port LOM	None	HP Smart Array 5i+ Controller
IBM	xSeries 3950 Server	Dual Core Xeon 2.5 GHz	2.0 GB	RSA II v1.14	3.08	Broadcom NetXtreme	Qlogic v1.12	Adaptec RAID v5.2-0
IBM	xSeries 346 Server	Intel Xeon 3.0 GHz	1.0 GB	RSA II v1.08	1.16	Broadcom NetXtreme	Qlogic v1.47	Adaptec RAID v4.30.11

1. For more information about Supported Ethernet Network Interface cards, see Table 7.
2. For more information on Supported Fiber Channel Host Bus Adapters, see Table 9.

Note Server support is provided through a modular interface. The support matrix is constantly expanding. Please check with your account team about support for specific servers in your environment

Table 7 Supported Ethernet Network Interface Cards

Manufacturer	Model	Driver Version
Broadcom	NetXtreme Gigabit Ethernet (5703, 5704, 5714 chipsets)	3u7-v3.43-rh for Linux 4u2-v3.27-rh for Linux 9.52.0.0 for Windows
HP	Integrated NC7782 Dual Port LOM	bcm5700
Intel	Pro/1000	e1000

Table 8 Supported Server Operating Systems

Manufacturer	OS Version
Microsoft	Windows 2003 Enterprise Edition SP1, 32-bit
RedHat	Enterprise Linux 3, Update 7, 32-bit and 64-bit
RedHat	Enterprise Linux 4, 32-bit and 64-bit

Table 9 Supported Host Bus Adapters

Manufacturer	Model	Speed	Ports	Firmware Version	BIOS Version
Qlogic	SANblade QLA2340	2 Gb	1	3.02.28 3.03.08 3.03.11 3.03.23	1.43 1.47 1.5 0.54
Qlogic	SANblade QLA2344	2 Gb	4	3.03.11	1.47 0.54
Qlogic	SANblade QLA2460 S	4 Gb	1	4.00.13	1.04
Emulex	LP10000	2 Gb	1	1.90A4	1.70A1
Emulex	LP10000DC	2 Gb	2	1.90A4	1.70A1

Open Caveats

Table 10 describes the open caveats for VFrame Data Center 1.1. The caveats describe unexpected behavior in VFrame Data Center 1.1.

You can use Cisco's Bug Toolkit to access detailed information about the caveats listed in this section. For your convenience in locating caveats in Cisco's Bug Toolkit, the caveat titles listed in this section are drawn directly from the Bug Toolkit database. These caveat titles are not intended to be read as complete sentences because the title field length is limited. In the caveat titles, some truncation of wording or punctuation may be necessary to provide the most complete and concise description. The only modifications made to these titles are as follows:

- Commands are in **boldface** type.
- Product names and acronyms may be standardized.
- Spelling errors and typos may be corrected.

Note If you are a registered cisco.com user, access Cisco's Bug Toolkit at http://www.cisco.com/support/bugtools. (You will be prompted to log into Cisco.com.)

To become a registered cisco.com user, go to the following website:

http://tools.cisco.com/RPF/register/register.do

Table 10 Open Caveats

Caveat ID	Description
CSCsg11489	Host route with /32 netmask should be supported in logical server.
CSCsg59019	Network Map Device Filter does not work as expected.
CSCsg83801	Incorrect interface, HBA, and NFS trend counters in Windows VHA.
CSCsh48535	VFrame should not report Null Pointer Exception if NFS Filers are down.
CSCsh70465	The **hbatool** command returns slowly during replication.
CSCsh81325	Macro subroutines not covered in the user documentation.
CSCsh82306	Distorted Discovery Status GUI when vertically scrolling.

Table 10 Open Caveats (continued)

Caveat ID	Description
CSCsh87224	The **inquire** command returns LUN as invalid.
CSCsh94026	Set up fails if interfaces are down and NFS is the DB back-up location.
CSCsh97117	Root LUN multi-pathing not supported.
CSCsi07286	Verify macro with syntax error still appears to execute successfully.
CSCsi12939	Resource Pool Utilization per Network reports are inconsistent.
CSCsi14719	Serious error messages not shown to user via GUI or e-mail.
CSCsi26271	Server request time out for RMI request: getLOMStationElemntDetails LOM.
CSCsi31460	Database Session Commit Failed while updating power status.
CSCsi43042	Config macro run failure causes LN deployment failure.
CSCsi59229	Able to unmange and manage a VSAN that is in a fault state.
CSCsi64027	The redundant Fabric does not auto-populate.
CSCsi64772	The drop down lists for all resources in a Service Network are Empty.
CSCsi69364	Using the LOM Manager to power on discovered Dell servers causes and error.
CSCsi73071	LOM macro fails if using OpenSSH v4.1 to connect to iLO and iLO2
CSCsi73262	Macro execution fails while deploying servers.
CSCsi82840	VFrame should support SVI monitoring.
CSCsi84350	Basic information is missing from the Windows Model Server properties.
CSCsi91542	Sysprep Validate button gives OK even when the sysprep file is invalid.
CSCsi93780	First attempt of SAN Deployment in a Fabric mode with DMX fails.
CSCsi97096	Bulk managing multiple switches fails and generates database errors.
CSCsi98839	Server re-inventory fails after moving HBA from one server to another.
CSCsi99034	LUN 0 from CLARiiON Array can be selected for additional LUN.
CSCsj00725	Opening the LUN path selection dialog box is slow.
CSCsj00861	Web cache is not cleared when an old client accesses a new build.
CSCsj02427	Model server local disk Image is corrupted after a successful deploy.
CSCsj03799	SAN Mgr Disc Job status is misleading when using a Multi Storage Mgr.
CSCsj06483	No warning msg when HBA port is connected to undiscovered VSAN.

Table 10 Open Caveats (continued)

Caveat ID	Description
CSCsj06507	Ping and Traceroute Utility does not work with Hostname.
CSCsj06532	ProLiant DL360 G5 server failed to form an EtherChannel bonding.
CSCsj09441	ALL CIFS Share option not working in Service Group Config Wizard.
CSCsj10568	DNS name with domain name not accepted in CDP seed.
CSCsj13772	The Max. Results value does not update immediately after it is changed.
CSCsj13789	Show Policy Jobs history filter checkbox not updated.
CSCsj15317	Incorrect macro target applied for dual EtherChannel.
CSCsj15365	SAN Manager discovery failed with Perl macro exception.
CSCsj17261	VFrame does not monitor missing LUN in Array Mode.
CSCsj20147	Acquired FWSM not shown in Service Network Mappings Resource UI
CSCsj22188	Popup for SN Design appears in SN Ops when creating server.
CSCsj22240	VLAN resource deletion error causes time out.
CSCsj22810	Initiator is discovered as target.
CSCsj22878	High disk usage occurs during windows snapshot process.
CSCsj24974	Unable to clear server imaging failed configuration error.
CSCsj29183	Must run Verify Network if one same-chassis FWSM/HA member leaves.
CSCsj29212	Redundancy coup not rejected when remote DB backup cannot be reached.
CSCsj29264	CIFS shares randomly go into fault state, causing Window Deploy failure.
CSCsj29480	The **show fault** {**status** | **history**} command output needs to be changed.
CSCsj30098	With DB Restore, GIs in the GIR are not matched with GIs in DB.
CSCsj31597	LN in Running state, job UI shows Deploy Job as Running.
CSCsj31780	Failed to restore database on first attempt.
CSCsj32035	CIFS Share drop-down menu shows VFrame-created CIFS Share.
CSCsj33496	Server group wizard allows selecting more than 1 PXE interface per SG.
CSCsj33530	LOM jobs fail in multi credential scenario.
CSCsj34950	Deploy Server with Emulex HBA unable to boot up from SAN.
CSCsj35544	The vcc_java service does not stop while stopping all the services in setup.

Table 10 Open Caveats (continued)

Caveat ID	Description
CSCsj36735	Incremental logical network saves cause cleanup-svi failure.
CSCsj36852	GIR mount should be monitored by sysmnt.
CSCsj36872	SAN GIR code needs deprecate the use of LUID.
CSCsj38360	VFrame does not clean up SVI during undeploy after Create SVI failure.
CSCsj38386	Failed to reinitialize database at first try.
CSCsj39570	Critical service Java restarting in loop with backup in time-out state.
CSCsj42362	Stopping two SNs with FWSM at same time generates DB exception error.
CSCsj44774	Setup run on secondary device fails because of problem in setup_ids.sh.
CSCsj49581	No option to restart backup service.
CSCsj51511	Shutting down VFrame interface to filer, switch backup to local fails.
CSCsj55739	NIC teaming for Dell server with BroadCom NIC does not work.
CSCsj59301	Error generated during CSM based service network deployment.
CSCsj63387	IDS will not synch to each other if data VIP is in DNS.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New* in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

This document is to be used in conjunction with the documents listed in the "Product Documentation" section.