



Release Notes for Cisco Virtual Media Packager Release 2.12.2

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This publication describes the requirements, dependencies, and caveats for Cisco Virtual Media Packager (VMP) System Release 2.12.2.

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Introduction

Cisco Virtual Media Packager (VMP) is a component of Cisco Virtualized Video Processing (V2P), a software solution that provides an open, programmable, scalable, and extensible platform for rapid innovation. V2P supports video processing applications in headends and data centers without being tied to the operational features of their underlying infrastructure.

As a component of V2P, VMP provides the linear and just-in-time packaging functions needed for OTT services such as live streaming, VOD, and cloud DVR (cDVR). VMP uses the latest virtualization and cloud orchestration technology to let you elastically instantiate and scale critical media functions independently for deployment flexibility. You can prepare and originate media for distribution to the latest HTTP ABR streaming clients on mobile devices, set-top boxes (STBs), PCs, and laptops.

New Features

This release incorporates features and enhancements from earlier VMP releases. For complete feature descriptions, see the *Cisco Virtual Media Packager 2.12.1 User Guide*.

Additionally, this release resolves certain previously open caveats. For details, see [Caveats, page 4](#).

System Requirements

External Servers

Configuring external DNS and NTP servers is mandatory for all VMP components (MCE, AppEngines, CLS, and MPE).

Cisco UCS

All VMP components run on top of VMware on Cisco Unified Computing System (UCS) B200 M3 Blade Servers. For information about running the VMP components on other types of servers, contact your Cisco representative.

The following table shows the minimum UCS hardware requirements for this VMP release:

Part Number	Description	Quantity
UCSB-B200-M3-U	UCS B200 M3 Blade Server w/o CPU, mem, HDD, mLOM/mezz (UPG)	4
UCS-CPU-E52680B	2.80 GHz E5-2680 v2/115W 10C/25MB Cache/DDR3 1866MHz	2 (Total 40 CPUs)
UCS-MR-1X082RY-A	8GB DDR3-1600-MHz RDIMM/PC3-12800/dual rank/1.35v	16 (Total 128 GB)
A03-D600GA2	600GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	2 (1200 GB total disk space available)
UCSB-MLOM-40G-01	VIC 1240 modular LOM for M3 blade servers	2
UCSB-HS-01-EP	Heat Sink for UCS B200 M3 server	2

VMware, vCenter, vSphere

VMP support for VMs requires the following virtualization software programs and releases:

- VMware ESXi hypervisor version 6.0, Update 3, build 5050593 or later
- VMware vCenter version 6.0 or later
- VMware vSphere version 6.0 or later

VM System Resources

The following table lists the VM and hardware sizing recommended for each VMP component.

Component	Flavor Name	vCPUs	RAM	Hard Drive Partition 1	Hard Drive Partition 2	Network Interfaces
V2PC Masters (3)	2X-Large	8	32 GB	40 GB	–	1 X 10 GE
MCE	2X-Large	8	32 GB	40 GB	–	3 X 10 GE
MPE	2X-Large	8	32 GB	40 GB	–	3 X 10 GE
Repository	2X-Large	8	32 GB	40 GB	–	1 X 10 GE
IPVS Nodes (2) *	X-Large	8	16 GB	40 GB	–	2 X 10 GE
REDIS Nodes (2) **	X-Large	8	16 GB	40 GB	–	2 X 10 GE
HAProxy Nodes (2) **	X-Large	8	16 GB	40 GB	–	2 X 10 GE
AM (2)	X-Large	8	16 GB	40 GB	–	1 X 10 GE
ELK Node	2X-Large	8	32 GB	40 GB	512 GB	1 X 10 GE

* Two required *per service*: one pair for MCE and another pair for MPE.

** Two required *per device type*: one set for SCE-StateCacheEndpoint and one set for VOD service.

System Requirements

Note: Legacy deployments using Cisco Media Origination System (MOS) do not require V2PC Masters or an ELK node, but instead, require VMs for the Platform and Application Manager (PAM) and Centralized Logging Server (CLS). See the *User Guide* for your MOS release for complete deployment information for these nodes.

These recommended minimum system resource numbers are based on the following assumptions:

- Hyper-threading is enabled in the ESXi compute nodes.
- There is no virtual CPU oversubscription. That is, the recommended number of virtual CPUs is the same as the number of actual physical cores.

These numbers include VMware overhead. You may need to adjust these numbers based on your specific deployment.

VMP Service Manager GUI Requirements

The VMP Service Manager GUI can run on the following operating systems and browsers:

- Windows Internet Explorer 9 (IE9) or later for Windows 7
- Mozilla Firefox 20 or later for Windows 7
- Google Chrome 30.x for Windows 7
- Apple Safari 7.x for Windows 7 or MAC OS Version 10.9 or later

The VMP Service Manager GUI requires a display resolution of 1600 x 900 or better.

VMP Software Components

VMP 2.12.2 and V2PC 3.3.4 software components and build numbers at the current release are as follows:

Component	File Name
V2PC 3.3.4 Repo ISO Image	v2p-repo-3.3.4-br_v2pc_3.3.4-17363.iso
VMP 2.12.2 V2PC Bundle Image	vmp-2.12.2-v2p-bundle-3.3.4-17454.tar
VMP 2.12.2 Manifest JSON File	vmp-2.12.2-23349-manifest.json
VMP 2.12.2 Repo Bootstrap RPM File	cisco-mos-repo-bootstrap-2.12.2-23349.x86_64.rpm
VMP 2.12.2 Minimal Repo Bootstrap RPM	cisco-mos-minimal-bootstrap-2.12.2-23349.x86_64.rpm
VMP 2.12.2 OVA Image	2.12.2-cisco-mos-pismo.23349.b20.ova
VMP 2.12.2 ISO Image	2.12.2-cisco-mos-pismo.23349.b20.iso

Installing VMP

For information about installing the VMP software and deploying the VMs, see the *Cisco Virtual Media Packager Release 2.12.1 User Guide*.

Updating Publish Templates After Upgrade

VMP 2.12.2 uses a media playback engine (MPE) for VOD playback of Dynamic Adaptive Streaming over HTTP (DASH) formatted content. The MPE supports multiple periods in DASH content, a feature not supported in VMP 2.9.x and earlier VMP releases. As a result, customers with existing VOD DASH content who upgrade from VMP 2.9.x or earlier to VMP 2.12.2 must add a new publish template variant for playback compatibility with the existing VOD DASH content. If this is not done, errors may occur during playback of previously ingested VOD DASH content after upgrading to VMP 2.12.2.

To add the new publish template variant:

1. Log in to the V2PC GUI and, from the navigation menu, choose **Media Workflow Manager > Resources > Templates > Publish Templates**.
2. Choose an existing VOD DASH template and click **Edit** (pencil icon) to open the template for editing.
3. Open the **Package** section of the dialog and click **+ (Add)** to add a new variant.

Note: If the template you selected is already used by one or more existing workflows, the message “This Publishing Template is in use in one or more Media Workflows and cannot be modified” now appears. If you see this message, navigate to **Media Workflow Manager > Media Workflows** and stop the related VOD workflows before continuing.

4. Enter the name **fragDASH** as the name of the new variant.
5. Enter or select the following parameters for the new variant in the fields provided:
 - Selective Publish - choose **TRUE** or **FALSE**
 - Enable SMPTE-TT - choose **TRUE** or **FALSE**
 - Enable WEBVTT - choose **TRUE** or **FALSE**
6. Click **OK** to apply the new variant.
7. From the V2PC GUI navigation menu, choose **Media Workflow Manager > Media Workflows**.
8. Select the VOD media workflow and click **Assets** to view the assets for the workflow.
9. Under Publish assets, confirm that the Publish URL now identifies **fragDASH.mpd** as the publish URL.

Caveats

This section provides a list of open and resolved caveats for this release. This list is not intended to be comprehensive. If you have questions about a particular defect, contact your account representative.

Note: Defects are identified by a case tracking number (Defect ID) and a headline that briefly identifies the case. The headlines in this section are presented exactly as they appear in the issue tracking system.

Caveats

Open Caveats

Defect ID	Headline
CSCvh67000	Telestream ATS - Pause every 10 seconds for VOD content of 6 second segments

Resolved Caveats

Defect ID	Headline
CSCvi28280	play dash hevc live streaming audio http-404
CSCvi43766	dash selective publish based on bitrate did not work
CSCvi62924	end UTC is not first acquisition time stamp of last segment after outage.
CSCvi87565	fix a coredump due to corrupted PMT data
CSCvi92289	ezdrm coredump
CSCvi93090	ABRE Support for Fairplay KMS
CSCvi94733	Failed to playback with lots of 404s
CSCvi94800	Core occurred while playback with 1250 client
CSCvi96365	select iframe based on corresponding video profile
CSCvi96556	MCE needs to correct the audio bandwidth in capture status that will be posted to ZK
CSCvi99615	enable video_frag_/audio_frag for DASH
CSCvj01804	HLS profile ordering by bandwidth should use bandwidth in video SubRepresentation
CSCvj03853	i-frame selection should be based on corresponding video selection instead of i-frame bandwidth
CSCvj03869	set sample_is_non_sync_sample to 0 for DASH WEBVTT
CSCvj04384	MCE needs to add bitrate related parameters to video_frag_auto/audio_frag_
CSCvj04387	Add Ads Insertion related parameters to video_frag_auto
CSCvj05481	scte35 tag insertion point not accurate
CSCvj05867	MCE coredump when capturing a teletext stream
CSCvj06739	add support of event_id in ESAM template
CSCvj10496	fix subtitle timeline error
CSCvj12456	'Live point has drifted' error on MA/recording not getting started
CSCvj21344	"greater than" symbol in 608/708 closed caption not properly trans.
CSCvj21551	Ads insertion remove OUT Event without duration when it moves out of window
CSCvj25624	PresentationTimeOffset in MCE MPD is not updating when the multicast feed has SCTE35 events
CSCvj25803	refine timeline for fragment
CSCvj27052	502 from client audio segment request
CSCvj28485	fix coredump when ac3 audio on enableFragment case
CSCvj35312	only publish one iframe representation if there is disabled iframe
CSCvj35770	remove empty timeline on DASH case
CSCvj41539	ZK clients getting disconnect on MCE causing missing handler
CSCvj52880	add support for SCTE35 pts_adjustment overflow
CSCvj53031	<customer> report timing format in SMPTE-TT is not correct

Related Documentation

Defect ID	Headline
CSCvj53179	Remove codec output in #EXT-X-MEDIA item
CSCvj57512	MOS rpms version are not match with build version causes downgrade issue

Related Documentation

VMP Documentation

Refer to the following documents for additional information about *VMP*:

- *Cisco Virtual Media Packager 2.12.1 User Guide*
- *Cisco Virtual Media Packager 2.10 API Guide*
- *Open Source Used in VMP 2.11.4*

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