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Release Notes for Cisco Virtual Media Packager System Release 2.10.2

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This publication describes the requirements, dependencies, and caveats for Cisco Virtual Media Packager (VMP) System Release 2.10.2.

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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 VMP release incorporates feature enhancements and resolves certain previously open caveats. For complete feature descriptions, see the *Cisco Virtual Media Packager 2.10 User Guide*.

System Requirements

External Servers

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

System Requirements

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

System Requirements

VM System Resources

We recommend the following minimum system resources for VMP VMs:

VMP Component	CPUs	RAM	Hard Drive	Network Interfaces
PAM	4	16 GB	32 GB	One 10 Gbps Ethernet
CLS (Large)	12	48 GB	256 GB	Three 10 Gbps Ethernet (only one used)
MCE-Worker	8	32 GB	32 GB	Three 10 Gbps Ethernet (up to three used)
MPE	8	32 GB	32 GB	Three 10 Gbps Ethernet (up to three used)
AppEngines	8	32 GB	32 GB	Three 10 Gbps Ethernet (up to three used)

The log server can be one of three sizes:

- VMP_LOG_SMALL uses a 32 GB and 64 GB drive (total VMs in VMP system < 10)</p>
- VMP_LOG_MEDIUM uses a 32 GB and 512 GB drive (total VMs in VMP system < 100)</p>
- VMP_LOG_LARGE uses a 32 GB and 1 TB drive (total VMs in VMP system < 200</p>

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.

Installing VMP

Installing VMP

For information about installing the VMP software and deploying the VMs, see the *Cisco Virtual Media Packager Release* 2.10 User Guide.

Updating Publish Templates After Upgrade

VMP 2.10 uses a new media playback engine (MPE) for VOD playback of Dynamic Adaptive Streaming over HTTP (DASH) formatted content. The new 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 2.10 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 2.10.

To add the new publish template variant:

- 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		
CSCve89940	Power off active MCE after started cdvr recording Loss of video 64s when channel moved to other MCE		
CSCvf12644	Channel relocation failed during dynamic channel configuration		
CSCvf40156	Playback fails for in-progress recording/widevine DRM using DASH multi arm player		
CSCvf53406	MCE return 403 when setting mce instance0 to maintenance		
CSCvf86394	QTplayer and Safari will freeze if choose subtitle " cc1" or "svc1"		
CSCvf88219	Recording getting frozen for some time after channel restart		
CSCva98610	vod playout fails when master redis fails with haproxy		
CSCvf93896	Recording is looping/freeze while playback cdvr recording - multi period		

Resolved Caveats

Defect ID	Headline
CSCvg69478	MCE stuck in forever loop, cherry-pick stensing's commit r22299
CSCvg28912	Fix RingBuf overflow issues
CSCvg14343	ebp time drift due to wrong parsing of LSB 32 bit, cherry r22216 from morro_bay branch
CSCvg68513	Disable EventLogging in LookUpservice to avoid CPU spikes
CSCvg64814	Adobe drm profile not working with V2P deployment
CSCvg28912	mce report 404 for the last ts with the special vod source
CSCvg68105	KMSProxy Core Dump due to Rewriting HTTP Response
CSCvg65984	output incorrect audio codec
CSCvg09603	double commit
CSCvg58900	fix 608/708 subtitle missing issue
CSCvg12578	core dump and 404 when enable packet filter, cherry-pick r22139 from morro_bay
CSCvg12276	Live could not display webvtt if DCM fragment duration and V2P publish template configure 6sec
CSCvg12252	Could not display DVBBitmap to ID3 if DCM fragment duration and V2P publish template configure 6sec;
CSCvg10422	VOD ingest does not need the profile delay change done for live
CSCvg44247	fix SPS parsing scaling_list
CSCvg21296	vod ezdrm playback failed on 2.11
CSCvg39481	only publish one profile's 608/708 subtitle
CSCvg27148	MCE: live capture core dump, initialize m_PngBuffersIndex
CSCvg19222	fix multiple subtitle with same language issue for HLS
CSCvg85174	add correct ttml attribute in DASH XML
CSCvg53259	use a different hashing function for thread balance
CSCvg59720	change ATS parameter for load test
CSCvg61582	CENC-DASH VGC Widevine playout fail without License Acquisition URL

Related Documentation

Related Documentation

VMP Documentation

Refer to the following documents for additional information about VMP:

- Cisco Virtual Media Packager 2.10 User Guide
- Cisco Virtual Media Packager 2.10 API Guide
- Open Source Used in VMP 2.10.2

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html.

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