



Release Notes for V2PC 3.3.4

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This publication describes the features, requirements, dependencies, and caveats for the Cisco Virtualized Video Processing Controller (V2PC) System Release 3.3.4.

For a list of known defects associated with this release, see [Known Defects, page 4](#).

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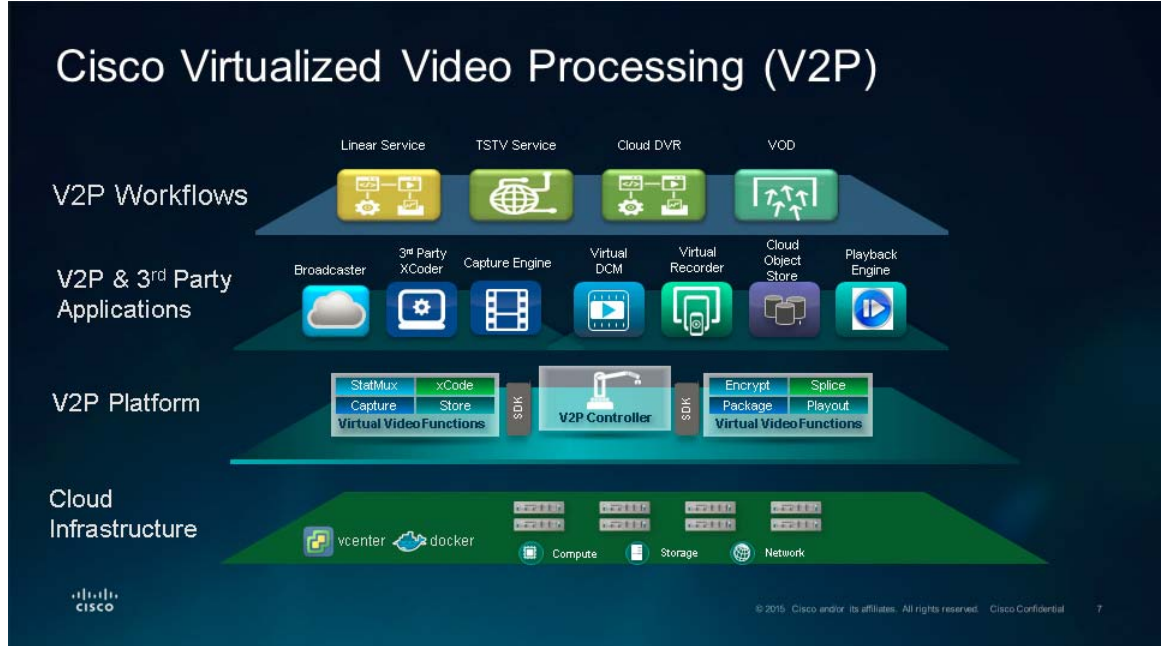
Introduction

V2PC is an open and extensible platform that facilitates deployment and management of Cisco V2P video data plane applications (such as encoders, packagers, and recorders) in the data center cloud environment. These applications are abstracted from the underlying infrastructure such as VMWare or Docker. This enables the rapid deployment of new services such as Live, VOD, or CDVR to OTT consumers while enabling efficiency and reducing costs.

V2PC also supports multi-OS enablement (including CentOS and CoreOS) and VM orchestration over mixed infrastructure (including VMWare, Kubernetes, and Bare Metal).



Figure 1-1 Cisco Virtualized Video Processing (V2P) Platform



New Features

V2PC Release 3.3.4 fixes a number of known defects found in Release 3.3.3. For a list of these defects, see [Known Defects, page 4](#).

In addition, V2PC Release 3.3.4 adds support for the following when used in conjunction with Cisco Virtual Media Packager (VMP) Release 2.12.2:

- Validated Manifest Renaming for Live, VOD, and cDVR use cases
- SCTE 35 Ad Insertion for Live, VOD, and cDVR use cases
- MPEG-4 DASH, HEVC, and Widevine for Live, VOD, and cDVR use cases
- Configurable I-Frame Segment Duration

As part of the V2PC 3.3.x release train, V2PC Release 3.3.4 also provides the following new features and enhancements over previous releases:

- **Dynamic MFC Configuration** – V2PC Release 3.3.4 supports dynamic configuration of the media flow controller (MFC) that integrates applications such as Cisco Virtualized Media Packager (VMP) and Cisco Virtual Media Recorder (VMR) into the V2PC management framework.

Dynamic configuration allows operators to create and update MFCs without service interruption. For example, a channel lineup can be created, updated, or removed from a linear workflow MFC without having to interrupt service or restart the MFC.

This feature brings additional enhancements, including:

- Improved AIC-MFC communication for better error handling and error logging.
- Manual SLA support to enable dynamic resource allocation of the Cisco Capture Engine (CE) and Playback Engine (PE) components of VMP.

- Expansion and contraction of application clusters in the field through worker node enablement, disablement, and deletion.
- **Swagger UI API Service** – V2PC Release 3.3.4 supports user access to its underlying API through the OpenAPI Specification, also known as Swagger. The open source Swagger UI web interface provides a common gateway both for new Swagger API calls and for legacy Service Manager (SM) APIs. Support for role based access control (RBAC) enhances API access security and robustness.
- **Thick Provisioning and Separate Log Volume** – By default, V2PC Simplified Deployment supports thick provisioning of storage volumes, as well as the creation of a separate log volume to allow for more efficient use of disks and partitions.
- **Enhanced User Interface** – The V2PC graphical user interface (GUI) benefits from enhancements to the Media Workflow Manager and Application Deployment Manager screens, as well as from integration of the Dynamic Configuration interface and the Swagger UI API gateway.
- **Unbundled Deployment** – The V2PC installation ISO now ships unbundled from Cisco VMP so that either application can be deployed independently.
- **Database Upgrade** – V2PC Release 3.3.4 supports the MongoDB Release 3.2.11 database.
- **Logging Enhancements** – V2PC Release 3.3.4 creates log entries as key-value pairs to make logs more searchable through Elasticsearch, and more useful for analysis and troubleshooting. This release also supports remote ELK log servers with the Fluentd open source data collector.
- **Increased Document Size and Robustness** – V2PC Release 3.3.4 replaces Consul with socket.io for media flow communication. This removes the previous 512 kb document file size limit, enabling workflows to support a larger number of channels. Master node file robustness is also improved through master application (AICM) HA handling.

V2PC Deployment Guidelines and Image Location

- The V2PC Master Controller repository node should be deployed as 2x large (8 CPU, 32 GB RAM, 40 GB Disk storage)
- The ELK node should be deployed as 2x large with 500 GB disks space (8 CPU, 32 GB RAM, 500 GB Disk storage)
- V2PC Unmanaged (Self Install) Kubernetes is recommended for new deployments beginning with V2PC Release 3.2.2.
- To access and download the latest V2PC 3.3.4 images, navigate to V2PC Software Download page at:

[https://software.cisco.com/download/release.html?mdfid=286311316&softwareid=286311340&release=3.3\(0\)&relind=AVAILABLE&rellifecycle=&reltype=latest&i=rm](https://software.cisco.com/download/release.html?mdfid=286311316&softwareid=286311340&release=3.3(0)&relind=AVAILABLE&rellifecycle=&reltype=latest&i=rm)



Note

For additional information about deploying and configuring V2PC, see the *Cisco Virtualized Video Processing Controller Deployment Guide* and *Cisco Virtualized Video Processing Controller User Guide*, respectively.

VMware, vCenter, vSphere

V2PC 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

V2P Product Family

The following V2P Product Family is validated as part of V2PC 3.3.4 solution testing with V2PC, VMP, VMR, and COS.

Table 1 V2P Product Compatibility

Product	Description	Version
V2PC	Virtualized Video Processing Controller (V2PC)	V2PC_3.3.4
VMP	Virtual Media Packager (includes MCE and MPE)	VMP 2.12.2
VMR	Virtual Media Recorder (AIC, MFC, Docker Images)	VMR 1.3.3
COS *	Cloud Object Storage (COS)	COS 3.20

* For COS, integration testing with V2PC is based on each product team's test coverage.

Known Defects

Open Defects

This section provides a list of open defects 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.

[Table 3](#) lists the open defects in V2PC Release 3.3.4.

Table 2 Open Defects in V2PC Release 3.3.4

Bug ID	Description
CSCvi83640	Sensu process restart overwrites config file customizations

Resolved Defects

This section provides a list of resolved defects 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.

Table 3 lists the resolved defects in V2PC Release 3.3.4.

Table 3 Resolved Defects in V2PC Release 3.3.4

Bug ID	Description
CSCvf06172	Subtitles add-ons IPVS ports are not persistent and redundant
CSCvf81059	change .gitattribute in application folder to ignore package-template.json during merge
CSCvh87232	Upgrade of worker nodes failed:/var/log disc getting full (td-agent buffering issue)
CSCvh87411	V2PC Platform: AIC independent of platform
CSCvi05497	SR 683979594 V2PC/cdrrspr-ffld01 100% Disk utilization
CSCvi14938	Addition of 'isIframeEncrypt' field to asseresolver.xml
CSCvi19464	Delete Alarms and Events should be enabled by default (MongoTTL)
CSCvi20278	V2PC Platform: smp_affinity configuration
CSCvi35481	AppController upgrade HTTP get/put timeout (3 secs) needs to be relaxed
CSCvi37234	Suppress tar warnings (due to increased VMP bundle size).
CSCvi44428	Bypass td-agent reconfiguration during worker upgrade.
CSCvi45512	0-Failed configure DASH selective with only resolution parameter on GUI
CSCvi45786	v2pc must be upgraded when using latest VMP bundle vmp-2.12.0-v2p-bundle-3.3.4-17209.tar
CSCvi46170	Unable to access V2P UI on <URLs deleted>
CSCvi46250	Fix for removing self-signed certificate entry in ssl_multicert config
CSCvi47057	AppWorker upgrade enhancements
CSCvi54843	PE aic parallel disable/enable worker nodes
CSCvi56954	MPE IPVS ARP size need to increase
CSCvi57009	add more search domain in /etc/resolv.conf
CSCvi61905	V2PC AIC controller upgrade doesn't return non-zero exit status on AIC error status
CSCvi64680	Cannot login on V2PC UI/ High CPU load
CSCvi68608	ABR profile in ATS channels displays wrong information
CSCvi71991	GUI backend support for configurable iframe segment duration
CSCvi82648	https playback does not work with IPVS
CSCvi99393	GUI backend support for bandWidth display
CSCvj01762	Renamed v2pctools/ -> v2pctools-docker/
CSCvj04409	increase the max number of open files for docserver

Table 3 **Resolved Defects in V2PC Release 3.3.4**

Bug ID	Description
CSCvj06102	Stream Configuration - bitrate only not work
CSCvj06349	asset input bitrate not sync with bandwidth in mpd
CSCvj07788	Reduce scp connection attempts when accessing worker's version file.

Upgrading from V2PC Release 3.2.x to 3.3.x

For full instructions on upgrading from V2PC Release 3.2.x to V2PC Release 3.3.x, see the **V2PC Upgrade** section of the *Cisco Virtualized Video Processing Controller Deployment Guide*.

Upgrade Enhancement for V2PC Release 3.3.4

V2PC Release 3.3.2 supports the option of specifying the worker nodes to be upgraded by their IP addresses. To add such a list, include the following line in the **platform_upgrade.json** file:

```
"workerIp": ["<worker_ip1>", "<worker_ip2>", ... "<worker_ipn>"]
```

where **<worker_ip1>** and so on are the IP addresses of the specific worker nodes to be upgraded.

If this line is omitted, the upgrade process defaults to the behavior of earlier releases and updates all worker nodes.

Related Documentation

V2PC Documentation

Refer to the following documents for additional information about V2PC:

- *Cisco Virtualized Video Processing Controller User Guide*
- *Cisco Virtualized Video Processing Controller Deployment Guide*
- *Cisco Virtualized Video Processing Controller API Guide*
- *Cisco Virtualized Video Processing Controller API Service Guide*
- *Cisco Virtualized Video Processing Controller Open Source*

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