



Release Information for Cisco Virtualized Video Processing Controller (V2PC) System Release 3.2

First Published: October 2016

This publication describes the features, requirements, dependencies, and caveats for the Cisco Virtualized Video Processing Controller (V2PC) System Release 3.2.

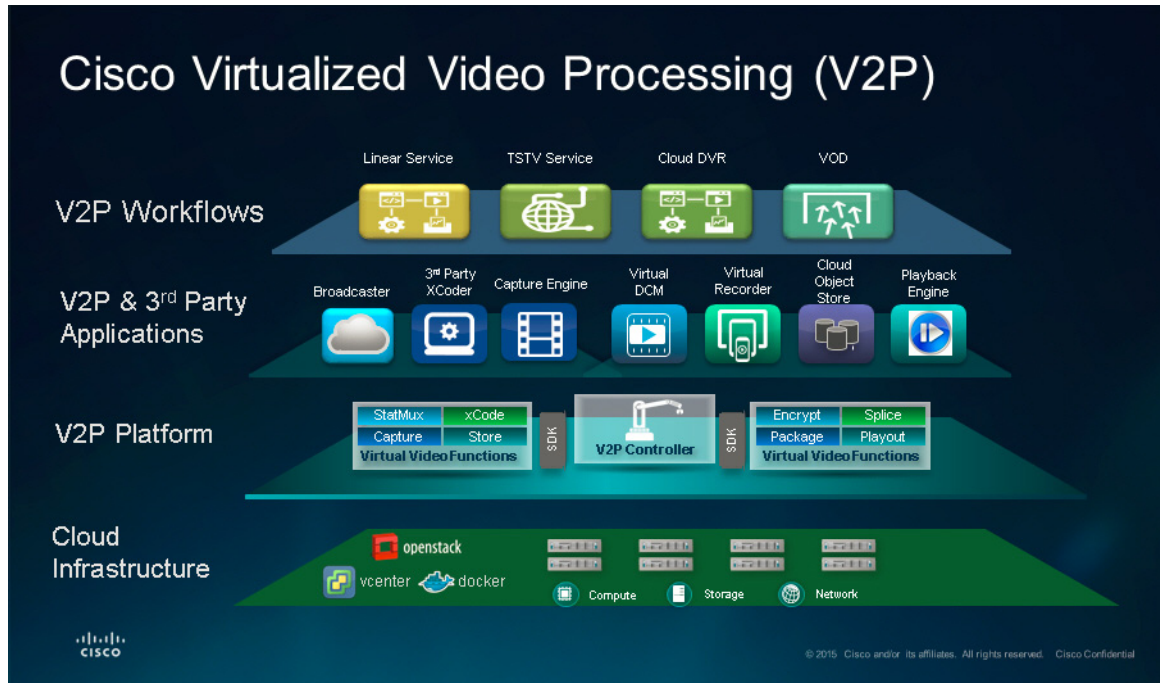
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Introduction

The Cisco Virtualized Video Processing (V2P) Controller is an open and extensible platform that facilitates deployment and manages both Cisco and third-party video data plane applications (such as encoders, packagers, and recorders) in the data center cloud environment. The applications are abstracted from the underlying infrastructure such as VMware, or Docker.

The V2P Controller also provides an SDK for third-party application integration and custom Media Workflow creation, to chain virtual video functions together. This enables the rapid deployment of new services such as Live, VOD, and Cloud DVR to OTT consumers while maintaining multi-vendor flexibility.

Features



Features

The following is a list of V2PC 3.2 Features.

- V2PC 3.2 orchestrates virtual video applications over the following platforms with application lifecycle management (deployment & configuration):
 - VMWare with vCenter 5.5 (U3a), 6.0.
 - Dockers/Kubernetes(K8s)
 - CentOS Linux release 7.0.1406
 - CoreOS 1010.6.0
- V2PC unmanaged Kubernetes (K8s) support
- V2PC managed Kubernetes (K8s) over CoreOS on VMWare
- V2PC un-managed Bare Metal support
- High Availability Support (for V2PC Master nodes)
- Mixed Infrastructure Deployment with VMWare/Kubernetes/Bare Metal
- Multi-OS Enablement (e.g., vDCM is using CentOS 7.2.x)
- KMSProxy support with KeyProfile support for VGC & Nagra
- V2PC 3.2 Operational Features:
 - Simplified Deployment Support
 - Simplified Upgrade & Rollback (Platform, Apps, AIC/MFC/PIC)

Features

- Artifactory Repo & PackageMgr support for Apps to upload RPMs
- Bulk creation of Worker Nodes
- V2P Controller UI
- UX Enhancements & Performance improvement
- Logging / ELK support
- Monitoring / Sensu
- Alarm/Event framework
- Configuration Backup & Restore support
- ShowStatus, Log gathering
- V2P Controller 3.2 Media workflow support:
 - Linear media workflow - see Video Media Packager User Guide for details.
 - VOD media workflow - see Video Media Packager User Guide for details.
 - CDVR media workflow - see Video Media Packager User Guide for details.
- V2P Controller 3.2 SDK Support
 1. AppController SDK enable applications to integrate & onboard 3rd party applications over the V2P Controller.
 - Application SDK guidelines.
 - Sample application for integrating using the V2P Controller SDK.
 2. Media Workflow SDK for chaining applications / V2P Controller
 - Media Workflow SDK Guidelines
 - Mediaflow GUI Integration
 - Sample Media workflow
 3. UI SDK
 - UI SDK Guidelines
- V2P Controller /AWS with Zixi/PNC (POC only)
- Support cDVR Unique/Common copy workflow on the V2P Controller
- Legacy compatibility and workflow support for COS
- Security & Hardening
- V2P Controller APIs with access Token support
- V2P Controller AIC/MFC Configuration data encryption support

Deploying/Configuring the V2P Controller

For information about Deploying/Configuring the V2P Controller, refer to the *Virtualized Video Processing Controller 3.2 Deployment Guide* and *User Guide* respectively.

System Requirements

- V2PC master controller, Repo node should be deployed as 2x large (8 CPU, 32GB RAM, 40GB Disk storage)
- ELK node should be deployed as 2x large with 500 GB disks space (8 CPU, 32GB RAM, 500GB Disk storage)

V2PC Product Family

The V2P Controller can be integrated with the following products:

Product	Description	Version
V2PC	Virtualized Video Processing Controller	3.2.0 (b10353)
VMP	Virtual Media Packager (MCE + MPE)	2.7.1(b20554)
VMR	Virtual Media Recorder	1.0.400202
COS	Cisco Object Store	COS build:3.8.2b5
vDCM	Virtual DCM	3.0.0

Known Defects and Limitations

Defects

This section provides a list of open 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.

Defect ID	Headline
CSCvb33062	MFC is in active state although required app instances went to error state (workaround available)
CSCvb47296	In a rare condition, few channels go to failed state after v2pc-master failover
CSCvb56319	Zookeeper leader failover - recovery period is 15 minutes (workaround available)
CSCvb51147	Deleting an mfc in error state requires using the SM API
CSCva87537	Restart salt minion after redeploying single master in HA cluster
CSCvb41290	Rare Sensu false check-disk-usage alarm
CSCvb49198	showstatus utility not supported
CSCva90268	disable ce app instance stuck in inprogress when one of haproxy down (corner case)
CSCvb27926	Worker creation with incorrect IP went through (workaround available)
CSCvb25024	For alarms, refer to the "Alarms and Events" page on UI
CSCvb59507	On a rare occasion, GUI allows re-disable when mediaflow stuck in inservice state

Known Defects and Limitations

Defect ID	Headline
CSCvb14878	Deployed Applications > Create New Application does not show dropdown (Safari Only)
CSCvb62604	Misconfigured AIC requires force delete [workaround available]
CSCvb62946	After enabling an application, don't immediately attempt to delete, until enablement is complete
CSCvb65747	Managed K8S Cluster went to error state after platform upgrade (need to bypass error warning)

Limitations

The following limitations are recorded for this release.

1. Application Instance should be enabled sequentially
2. AIC/MFC Configuration change via GUI:
 - Linear/VOD/cDVR Configuration change is supported when MFC is not in service
 - Dynamic Configuration change for AIC is not supported
3. Multi-region support is a POC feature
4. V2PC/AWS support is a POC feature
5. V2PC/Openstack (Kilo) is a POC feature
6. vDCM support for V2PC 3.2:
 - Maximum number of Media Workflows supported on V2PC 3.2 with the latest V2PC-VSM-vDCM package is 80
 - Supports single-channel, not multi-channel Media Workflows. The maximum number of supported channels is 80
 - Supports vDCM OTT App version 3.0 (no higher version supported)
 - Supports VSM 8.2
 - V2PC platform upgrade does not work for vDCM (as custom OS images are not supported)
7. COS requires MPC/COS PAM for management
8. Bulk Worker Nodes creation/deletion limited to 10 per batch
9. SM API JSON body validation not supported for this release
10. VMR Supports VMR AIC version 1.0.400202

Follow the steps below to upload the correct VMR AIC version to the V2PC:

- a. Delete existing vmr-aic from Repo server (as v2pc user):


```
-bash-4.2$ /opt/cisco/v2p/v2pc/python/v2pPkgMgr.py --delete --pkgtype aic --vendorid cisco --appid cisco-vmr --appversion 1.0.400302
```
- b. Download vmr-aic 1.0.400202 from VMR releases webpage:


```
-bash-4.2$ wget http://172.22.110.186/vmr-releases/vmr-cisco-1.0.4\_002/v2pc-npm-packages/cisco-vmr-1.0.400202.tgz
```

V2PC Image Location

- c. Upload vmr-aic (version:1.0.400202) to Repo server:
`-bash-4.2$ /opt/cisco/v2p/v2pc/python/v2pPkgMgr.py --import --pkgtype aic --sourcepath /tmp/aic/`

V2PC Image Location

Navigate to the following location to access/download the V2PC 3.2 images.

- <https://software.cisco.com/download/special/release.html?config=eb6cf27e014f6b634fcbf9b4e23b20fd>

Related Documentation

V2P Controller Documentation

Refer to the following documents for additional information about the *V2P Controller*:

- *Cisco Virtualized Video Processing Controller User Guide*
- *Cisco Virtualized Video Processing Controller 3.2 API Guide*
- *Cisco Virtualized Video Processing Controller Open Source*
- *Cisco Virtualized Video Processing Controller Deployment Guide*

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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