

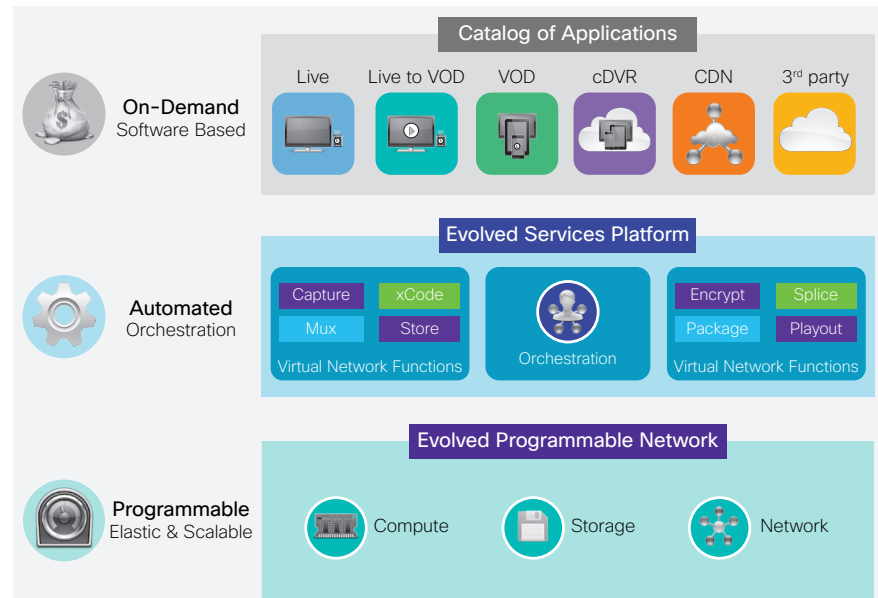


# Cisco Virtualized Video Processing

## Overview

Reduce the cost and complexity of supporting video services within your physical and virtual infrastructure with Cisco Virtualized Video Processing (V2P). Built on an Openstack-based cloud infrastructure, Cisco V2P (Figure 1) enhances your business agility by reducing the complexity of video workflow operations. Part of the Cisco® [Evolved Services Platform](#), V2P uses Network Functions Virtualization (NFV), open APIs and advanced orchestration to let you add virtualized video functions, as needed, and to orchestrate video workflows across your environment. V2P applies proven data center models so you can radically simplify how you manage and modify video workflows in your headend, including video acquisition, processing, recording, storage, packaging, layout, and delivery.

Figure 1. Cisco Virtualized Video Processing (V2P)



## Benefits

- **Accelerate time to revenue** with agile service creation and faster deployments
- **Simplify operations** with open and programmable cloud scaling, and reduce errors with workflow automation
- **Reduce costs** by improving infrastructure utilization for all services across physical and virtual resources

“Cisco’s approach to video processing, is totally aligned with what is needed by service providers today to meet the ever-changing demands of the media delivery industry - more content to more eyeballs.”

**Tamara Leemans**

Vice President and CTO  
at Belgian Cable Operator VOO

## Why Cisco V2P Is Exceptional

Pay-TV operations are under tremendous pressure. New market opportunities are emerging with the potential for monetizing more immersive video experiences leveraging 4K, 8K and HDR quality along with more dynamic channel lineups and greater on-demand viewing options. Supporting these trends, Cisco VNI forecasts that by 2019, 80% of IP traffic by will be video, 68% of IP video traffic will be HD/UHD, and mobile devices will drive most of the growth, comprising 42% of IP traffic.

“The era of multiscreen viewing has made service delivery increasingly complex... A good starting point [for moving to the cloud for greater ease and efficiency] is a virtualized data plane that can be shared by what would previously have been separate delivery workflows created by the need to target tablets, mobiles, set-top boxes and IP set-top boxes, among other things. Cisco is determined to lead the television industry into the cloud era.”

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**John Moulding**  
Editor, Videonet

## Next Steps

For more information about Cisco Service Provider Video, please visit our [website](#).

Successfully capturing and monetizing these opportunities requires a video processing infrastructure with the flexibility to innovate rapidly and the ability to scale cost effectively. Yet, pay-TV operations are stifled by complex operations along with rigid infrastructure stove-pipes limiting the ability to innovate.

Until now, video services for different screens and services have been provided to subscribers on separate production lines with dedicated equipment and then hard-wired together to create specific video outputs. But this model cannot effectively scale. With Cisco V2P, video service and content providers gain a much simpler and faster solution for deploying and modifying video applications and services.

Many vendors are working on pieces of video application virtualization and workflow orchestration. However, Cisco stands out through our ability to virtualize and orchestrate the entire video workflow, from ingest and processing to delivery. Solutions like Cisco V2P offer an important advantage: They flexibly combine best-in-class capabilities from an open ecosystem of technologies from any vendor to support a complete, end-to-end video workflow. Imagine being able to quickly respond to market opportunities with the business service models you need and greatly reduce the total cost of capturing new revenues.

## How Cisco V2P Works

With Cisco V2P, you can orchestrate virtual video functions – such as encoding, multiplexing, ad splicing, encrypting, transcoding, recording, packaging, playout, and delivery – so you can operate a single production line for all video workflows. This accelerates support for multiple video services such as live, video on demand, time-shifted, and Cloud DVR.

Cisco V2P abstracts your video workflows from the underlying physical resources. It results in more simplified operations which allow you to more flexibly manage and modify video workflows while increasing efficiency across your existing hardware and software resources. V2P utilizes the openness and modularity of Cisco Service Provider Video solutions and can integrate with third-party components, such as encryption, encoding, content management, and delivery solutions so that you can flexibly combine best-in-class capabilities across a multivendor ecosystem.

Cisco V2P applies industry standards such as European Telecommunications Standards Institute (ETSI) models for network function virtualization (NFV) to video applications along with Openstack extensions for orchestrating video services. The result is an extensible set of modular capabilities that let you optimize your video infrastructure, applications, and services to more efficiently create, manage, and modify services as business needs dictate, making them available when and where they are needed.