Cisco AnyRes Packager

Product Overview

The Cisco® AnyRes Packager is a high-efficiency segmentation, encryption, and publishing engine. The AnyRes Packager is designed to extend traditional video services to target multiple endpoints for over-the-top (OTT) video delivery.

This comprehensive platform provides support for the latest adaptive bitrate (ABR) formats and features, including Apple HTTP Live Streaming (HLS), Microsoft HTTP Smooth Streaming (HSS), Adobe® HTTP Dynamic Streaming (HDS), and MPEG Dynamic Adaptive Streaming over HTTP (MPEG-DASH). The AnyRes Packager also provides support for emerging standards within these formats, such as Event Signaling and Management (ESAM) and Encoder Boundary Point (EBP), for enhanced ABR segmentation.

The Cisco AnyRes Packager uses a resource model that supports a fully redundant and synchronized ABR pipeline. The AnyRes Packager's dynamic hot redundancy provides best-in-class uptime, deployment flexibility, and service resiliency. This architecture helps to ensure services continue even during hardware or network-related failures.

By leveraging a modular software-based architecture, the Cisco AnyRes Packager provides the flexibility to fit within any customer network while simultaneously future proofing transcoder investments. The AnyRes Packager provides an ideal complement when paired with Cisco Digital Content Manager (DCM), a dense hardware-accelerated transcoder, or the Cisco Media Processors deployed on the latest x86-based hardware.

The Cisco AnyRes Packager uses the Cisco Linear Stream Manager (LSM) for consolidated management of ABR services using a single intuitive interface. Encapsulation groups and templates make service deployment and scaling easy. Simply add resources, and the LSM will manage load balancing of new services across a pool of AnyRes Packagers.

Features and Benefits

Table 1 summarizes the Cisco AnyRes Packager features and benefits.

Table 1.   Cisco AnyRes Packager Features and Benefits

Feature	Benefit
Input	• Adaptive transport streams (ATS) • Cisco Digital Content Manager • Cisco Media Processor • Third-party transcoders
Segmentation marking	• Encoder boundary point (EBP) • Instantaneous decoder refresh (IDR)

Feature	Benefit
Output	• Apple HTTP Live Streaming (HLS) • Microsoft HTTP Smooth Streaming (HSS) • Adobe HTTP Dynamic Streaming (HDS) • MPEG-DASH Streaming • Common index format to provide on-demand encapsulation using Cisco Videoscape™ Distribution Services Origin Server (VDS-OS) • Microsoft PlayReady DRM • Adobe Access DRM • AES-128 encryption • Closed captioning • Multilanguage support • Ad insertion (SCTE-35, ESAM) • Post/WebDAV/network file server (NFS) transfer
Enhanced ABR redundancy	• N:M hot service redundancy • Service modularity • Publisher resiliency • Dynamic load balancing • Synchronized key rotation • Configurable service relocation thresholds
Management	• Centralized interface for configuration and management of multiple devices • TR101-290 input alarms • Output publisher and system alarms • Simple Network Management Protocol (SNMP) trap generation • RESTful API
Platform	• Bare metal or virtualized

Platform Support and Compatibility

The Cisco AnyRes Packager is a software solution optimized to run on Cisco Unified Computing System™ (Cisco UCS®) B200 and C200 Series hardware. The Cisco AnyRes Packager and LSM Server can be deployed in both bladed or 1 rack unit (1RU) rack mount environments on UCS or comparable third-party hardware.

Recommended Cisco UCS Hardware Configurations

Table 2 summarizes the recommended hardware for Cisco AnyRes Packager installation on a Cisco UCS B Series Blade Server.

Table 2.   Recommended Hardware Configuration on Cisco UCS B Series Blade Server

Product Part Number	Description	Recommended Quantity
UCSB-B200-M3-U	UCS B200 M3 Blade Server	1
UCS-CPU-E5-2665	2.40 GHz E5-2665/115W 8C/20MB Cache/DDR3 1600MHz	2
UCS-MR-1X082RY-A	8GB DDR3-1600-MHz RDIMM/PC3-12800/dual rank/1.35v	16
A03-D300GA2	300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	2
UCSB-MLOM-40G-01	VIC 1240 modular LOM for M3 blade servers	1

Table 3 summarizes the recommended hardware for Cisco AnyRes Packager installation on a Cisco UCS C Series 1RU Server.

Table 3. Recommended Hardware Configuration on Cisco UCS C Series 1RU Server

Product Part Number	Description	Recommended Quantity
UCSC-C220-M3S	UCS C220 M3 Server	1
UCS-CPU-E5-2665	2.40 GHz E5-2665/115W 8C/20MB Cache/DDR3 1600MHz	2
UCS-MR-1X082RY-A	8GB DDR3-1600-MHz RDIMM/PC3-12800/dual rank/1.35v	16
A03-D300GA2	300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	2
UCSC-RAID-11-C220	LSI 2008 SAS RAID Mezzanine Card for UCS C220 server	1
UCSC-PCIE-ITG*	Intel X540 Dual Port 10GBase-T Adapter	1
UCSC-PSU-650W	650W power supply rack servers	2

* UCSC-PCIE-ITG may be interchangeable with N2XX-ABPCI03-M3, depending on deployment requirements.

Table 4 summarizes the recommended hardware for LSM Server installation on a Cisco UCS B Series Blade Server.

Table 4. Recommended Hardware Configuration for LSM Server on Cisco UCS B Series Blade Server

Product Part Number	Description	Recommended Quantity
UCSB-B200-M3-U	UCS B200 M3 Blade Server	1
UCS-CPU-E5-2620	2.00 GHz E5-2620/95W 6C/15MB Cache/DDR3 1333MHz	2
UCS-MR-1X082RY-A	8GB DDR3-1333-MHz RDIMM/PC3-10600/2R/1.35v	2
A03-D300GA2	300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	2
UCSB-MLOM-40G-01	VIC 1240 modular LOM for M3 blade servers	1

Table 5 summarizes the recommended hardware for LSM Server installation on a Cisco UCS C Series 1RU Server.

Table 5. Recommended Hardware Configuration for LSM Server on Cisco UCS C Series 1RU Server

Product Part Number	Description	Recommended Quantity
UCSC-C220-M3S	UCS C220 M3 Server	1
UCS-CPU-E5-2620	2.00 GHz E5-2620/95W 6C/15MB Cache/DDR3 1333MHz	2
UCS-MR-1X082RY-A	8GB DDR3-1600-MHz RDIMM/PC3-12800/dual rank/1.35v	2
A03-D300GA2	300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	2
UCSC-RAID-11-C220	LSI 2008 SAS RAID Mezzanine Card for UCS C220 server	1
N2XX-ABPCI03-M3	Broadcom 5709 Quad Port 1Gb w/TOE iSCSI for M3 Servers	1
UCSC-PSU-650W	650W power supply rack servers	2

Warranty Information

Find warranty information on Cisco.com on the [Product Warranties](#) page.

Ordering Information

To place an order, visit the [Cisco Ordering Home Page](#) or contact your Cisco representative. To download software, visit the [Cisco Software Center](#).

Table 6.   Ordering Information

Product Part Number	Description
CME-SWK	AnyRes Packager Application
SW-CME-02XX	AnyRes Packager Software Release 2.X
CME-CHAN	AnyRes Packager Linear Service Channel
CME-HA	AnyRes Packager High Availability
CME-CF-PUB	AnyRes Packager Common Format Publishing

Cisco Services

Cisco Services brings together people, processes, tools, and partners to accelerate service providers' success in using their IP Next-Generation Network (IP NGN) architectural platforms. Cisco Services focuses on enhancing business outcomes through network, services, and operational transformation. Through a collaborative approach and tailored engagements, Cisco Services can help accelerate time to market, mitigate risk, reduce cost through improving operational efficiencies, and help assure the user experience.

Cisco Services' approach and differentiation in services comes from a heritage of network capabilities and a wealth of experience in providing solutions to service providers in all sectors around the world. This is reflected in over 20 years' involvement in the market with services and solutions that are strategically aligned with those of service providers. Cisco Services has also made a significant research and development commitment to the service provider community, developing innovative roadmaps and solutions to keep the sector ahead of the competition.

For More Information

For more information about the ABR Packager, visit http://www.cisco.com/en/US/products/ps12640/index.html, or contact your local representative.

Printed in USA

C78-727655-00   04/13