DCM Origin Product Overview

DCM Origin Server is used to distribute source content in any types of forms, generally HTTP and HTTPS delivery traffic. In the video industry, the origin server serves content towards the Content Delivery Network for scalability purpose. DCM origin server processes and responds to any incoming requests from any type of client devices, precisely connected TV, PC/Mac, tables, smartphones, delivering manifests, segments and fragments using adaptive bit rate technologies, such as Apple HLS, Microsoft Smooth and MPEG DASH.

Adaptive Bit Rate technology adds processing delays in the complete delivery chain, typically 30 seconds to a minute. Service Providers are challenged to improve consumer experiences, especially during live or prime time events such as sports games. The DCM Origin in combination with the DCM Packager has been designed to help customers improving the end-to-end workflow. It has a large set of functionalities such as chunk transfer encoding, high throughput and flexible Content Delivery Network integration. The deployment model is based on multiple offers such as appliance, virtual machine or container. Loggings and Metrics are fundamental functionalities allowing Service Providers to operate the platform in an easy way. DCM Origin is part of the converged headend that offers a full set of functions, such as Encode, Packager, Content Delivery Network and Management layer – refer to the following link for more details about Converged Headend.

Features and Benefits

Low Latency

DCM Origin supports low latency by nature. It uses Chunk Transfer Encoding (CTE) allowing delivery of partial media segments, called chunks to the Adaptive Bit Rate clients.

Scalability

DCM Origin is deployed through bare metal or virtual machine and part of the DCM suites.

Resiliency

As a result of the containerized infrastructure, Media Scalable Origin has multiple resiliency mechanisms.

Loggings and Metrics

Loggings and metrics functionalities expose a large set of data and information, the operators can easily ingest and process in an efficient operations cycle.

Detailed functionalities

- Low latency origin by essence – Chunk Transfer Encoding CMAF.
- Infrastructure virtualization – RedHat Linux.
- Seamless add-on into the converged headend.
- In-Memory Storage.
- S3 storage interface.
- Single or Multi Nodes deployment.

Product Specifications

Table 1. DCM Origin Server specifications

DCM Origin Server	Description
Deployment Model	RedHat Openshift
Low Latency Support	Chunk Transfer Encoding – DASH CMAF
Internal Storage	In-memory
External Storage	Cloud Object Storage
Incoming traffic	HTTP
Outgoing traffic	HTTP
Management	VSM and Web UI
Loggings and Metrics	Logging, Alerting and Monitoring – Kibana

Ordering Information

DCM Origin SW licenses	Item Number
Synamedia vDCM Applications	R-VDCM-APPS
Virtual DCM XGRESS License, 1 credit	L-VDCM-XGRESS-P1

DCM Origin HW	Item Number
VN Compute Node L, 12x8GB, 2xHDD, 2xAC-750, US	VN-NODE-L-2AC-US
VN Compute Node M, 12x8GB, 2xHDD, 2xAC-750, US	VN-NODE-M-2AC-US

Please consult your sales representative for RAM and drives expansion.

Synamedia

Service and Support

Using the Synamedia Lifecycle Services approach, Synamedia and its partners provide a broad portfolio of end-to-end services and support that can help increase your network's business value and return on investment. This approach defines the minimum set of activities needed by technology and by network complexity to help you successfully deploy and operate Synamedia technologies and optimize their performance throughout the lifecycle of your network.

Warranty Information

Detailed warranty information can be found on Synamedia.com

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