

AWS Elemental Conductor



Unified Video Management

AWS Elemental Conductor is a video network management system for live or file-based video workflow applications. The software-based solution offers high availability, secure administration, and comprehensive monitoring of video encoding and delivery tasks through an easy-to-use web-based user interface. AWS Elemental Conductor Live offers customer-defined 1+1, N+M or N+1 redundancy to provide continuous signal flow and service delivery. Alerting and reporting capabilities simplify status monitoring, maintaining quality of service and providing operational confidence. AWS Elemental Conductor delivers operational efficiencies by reducing the complexity of cluster management while enabling scalability and stability of multi-instance deployments.

Experience the Benefits

Simplified System Management Lowers Operating Expense

Manage multiple AWS Elemental encoders from a single graphical interface. An intuitive user interface allows command and control of multiscreen and linear channel outputs operating on a fleet of AWS Elemental encoders, from on-site or remote locations to significantly reduce equipment costs and management overhead.

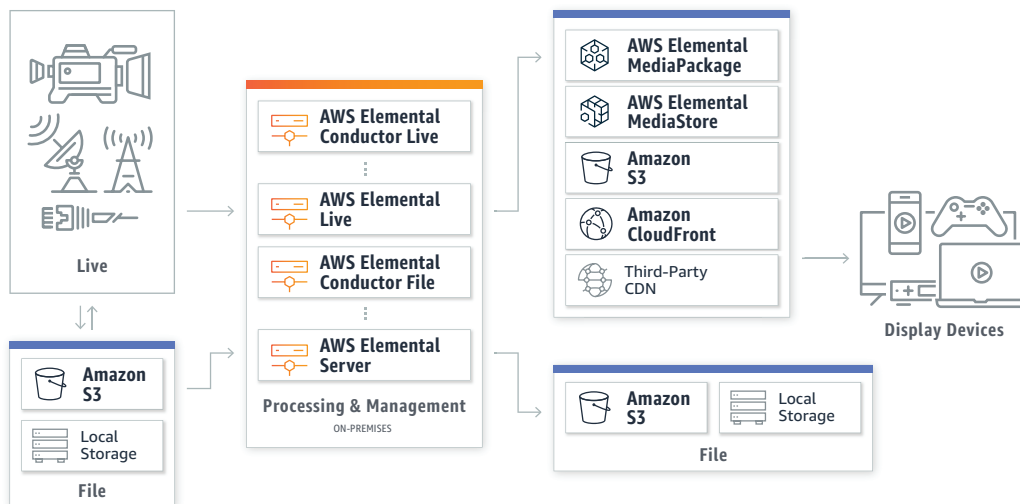
High Availability for Uninterrupted Video Service

AWS Elemental Conductor Live seamlessly detects, diagnoses, contains, and repairs anomalies in a multi-system cluster with customer-defined 1+1, N+M and N+1 redundancy. AWS Elemental Conductor management software automatically performs node-based failover and recovery of channels for round-the-clock uptime and guaranteed content delivery to consumers.

Reduce Configuration Complexity and Administration

REST / XML APIs and a Linux-based operating system allow for easy integration into existing operations. Predictable failover allows operators to prioritize critical channels and gain operational efficiencies.

AWS ELEMENTAL CONDUCTOR WORKFLOW





AWS Elemental Conductor Live

AWS Elemental Conductor Live offers the features and functionality for linear workflows required by pay TV operators. Capabilities that allow multiple channels to be stopped, started, and edited simultaneously simplify the management of hundreds of channels while ensuring configurations are synchronized. The combined capabilities of profile-based channel configuration and secure authentication provide confidence that channels are configured with the desired settings and only by authorized users.

Ensure Operational Efficiencies and Uptime

Tasks

Start, stop, and edit channels with confidence. Task-based controls provide a streamlined approach for simultaneously controlling multiple channels.

Profile-Based Channel Configuration

Simplify channel configuration and avoid time-consuming and error-prone tasks associated with creating video services. Provide operators the confidence channels are operating in expected configurations.

Flexible Redundancy

Intuitively configure 1+1, N+M and N+1 redundancy groups with manual or automatic redundancy switching and customer-defined input source failover conditions.

Real-Time Controls

A web-based user interface enables real-time system controls for linear video delivery.

Maintain Quality of Service

Channel Monitoring

Visually preview activity on each encoder via video thumbnails. Alert and message aggregation with advanced filtering simplifies fault management.

Secure Administration

Authenticated user access for system control and monitoring with configurable user levels. Audit logs are maintained for user actions and modifications, providing cluster management oversight.

Ease of Maintenance

Reduce operational maintenance windows. Benefit from software enhancements and feature additions. Upgrade individual nodes to verify software enhancements and feature additions before updating an entire cluster.

SOFTWARE-BASED VIDEO

SCALABILITY

Seamlessly add capacity to keep pace with growth

ELASTICITY

Quickly adjust resources as demand fluctuates

FLEXIBILITY

Accommodate multiple workflow scenarios

AFFORDABILITY

Replace capital investments with operational expenses





AWS Elemental Conductor File

AWS Elemental Conductor File provides centralized control and management for on-demand video processing and delivery workflows. The software-based solution offers high availability, secure administration, and comprehensive monitoring of multiple AWS Elemental jobs through an easy-to-use web-based UI.

Comprehensive Monitoring and Management

High Density Video Processing

Convert content with unprecedented speed and throughput. A unique software

architecture provides maximum performance and scalability. Jobs are submitted to AWS Elemental Conductor File, which manages the queue as jobs are dynamically retrieved by transcoding resources.

Node Management

Centralized and intuitive web UI for transcoding node management. Configure network settings, cluster mount points, firewall and advanced settings, or manage software version control for nodes in the cluster.

Redundancy Management

In the case of a power failure or other unexpected system interruption, AWS Elemental

Conductor File returns jobs in process back to the queue for transcoding by another AWS Elemental Server system.

System Monitoring

Monitor all video processing jobs simultaneously from any location on the network. Verify system health for individual encoding units and transcoding tasks in operation.

Reduce Management Overhead

Use REST / XML APIs, the web-based interface, or watch folders for tasks such as system setup, CMS integration, job queuing, and job prioritization.

SPECIFICATIONS			
ENCODER CONTROL	RESILIENCY	COMMUNICATION	OPERATING SYSTEM
<p>Live Content: Create Channels Start Channels Stop Channels Delete Channels Schedule Channels MPTS Management</p> <p>File-Based Content: Start Jobs Cancel Jobs Archive Jobs RESTful job priority</p>	<p>Live Content: Operator-defined Redundancy Groups 1 + 1 N + 1 N + M Simulated Switchover Cold Backup SDI Router Switching</p> <p>SYSTEM CONTROL View all Nodes Monitor Cluster Status Schedule Backups Conductor File: Push Upgrades Load Balancing</p>	<p>RESTful API HTML-based UI Channel XML Job XML</p> <p>ALERTS & MESSAGES SNMP Trap Emit Alert Email Notification Configurable Alerts Alert History WebCallBack</p>	<p>CentOS Linux RHEL Linux VMWare Hypervisor Conductor File: KVM Hypervisor</p> <p>OTHER FEATURES High Availability Profile Parameters</p>

