Enterprise Streaming Delivery Solution

IBM ECDN and Cisco ISR 4000

With the IBM Enterprise Content Delivery Network (ECDN) and Cisco 4000 Series Integrated Service Router (ISR 4000), companies can remove network bottlenecks associated with using streaming video. This enables robust, highly scalable video delivery from a company's headquarters all the way down to remote offices.

Company-wide scalability and bandwidth reduction

IBM ECDN supports large-scale viewership of live and on-demand streaming video within enterprises. It empowers massive simultaneous user scale, while reducing WAN (Wide Area Network) strain by delivering a single copy of a video stream regardless of the number of viewers. With Cisco ISR 4000, companies can support all office locations, removing network strain out to the edge without requiring smaller branches to run additional appliances or servers. IBM ECDN service:
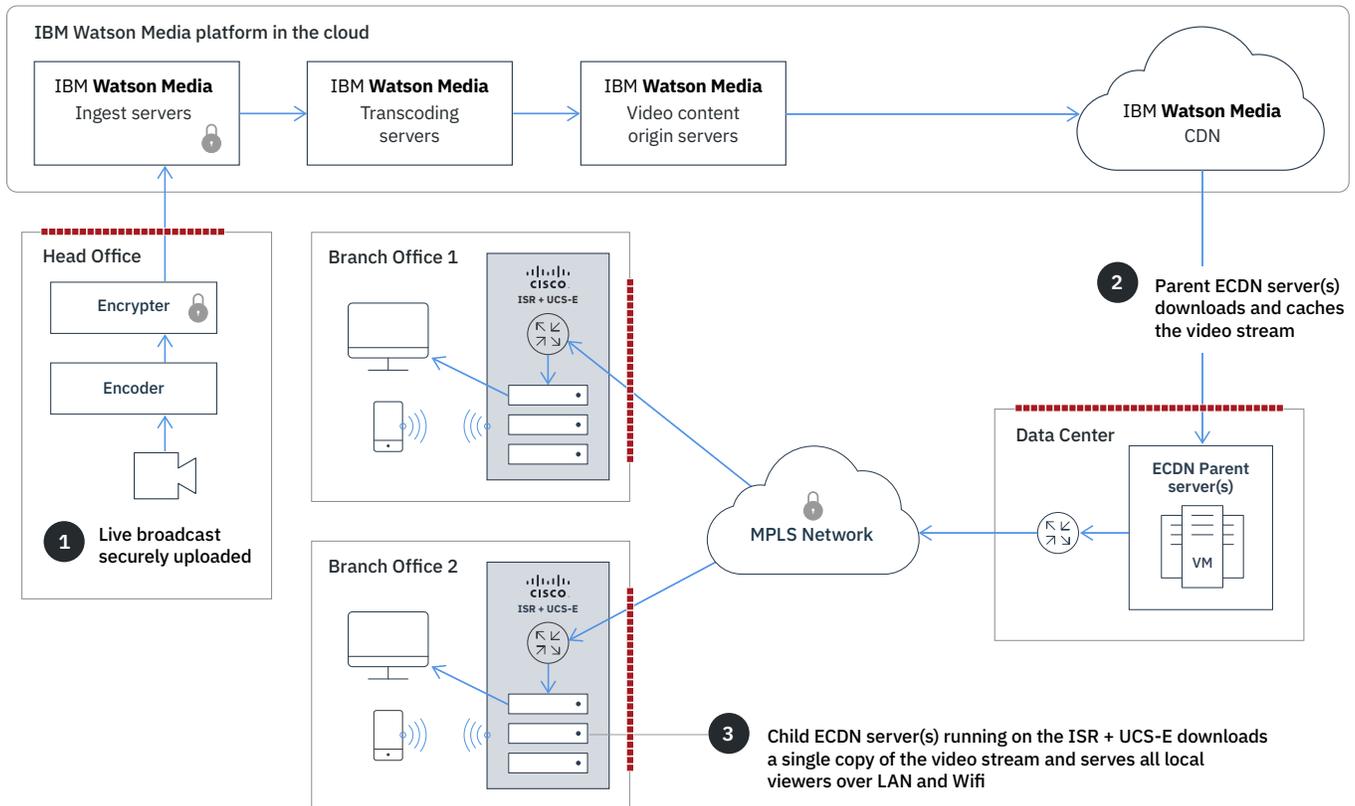
- Enables companies to scale distribution of high quality video streams, reducing travel expenses to events and company meetings that are replaced with all-hands video
- Reduces network bandwidth requirementsand utilization to support video streaming
- Supports video delivery to both desktop and mobile devices with adaptive bitrates
- Supports global enterprises through the installation of multiple instances of ECDN servers in hierarchical topologies
- Provides built-in load balancing with no additional hardware or software required
- Is deployed for high-availability and includes an optional fallback feature to use external CDNs

Do more with less using an ISR 4000 and UCS E-Series server

Cisco 4000 Series ISRs enable branch and remote offices to do more with less. These digital-ready routers provide secure hybrid WAN and Software-Defined WAN (SD-WAN) management. They also provide flexibility for application deployment through virtualization: as a service container within Cisco IOS® XE software or virtual machine on the embedded Cisco UCS E-Series Servers.

- Lessens the need for rack space
- Lowers companies' costs for maintenance, power, and cooling
- Decreases the time spent by IT staff managing multiple hardware and software contracts
- Decreases the time needed to roll out new services to the branch
- Enhances the branch security posture by providing integrated IPS, NG Firewall, and Advanced Malware Protection
- Combines video, voice, and data services into one box
- Delivers application-aware network services while maintaining a high level of performance

IBM ECDNs with Cisco ISR + UCS-E delivers video to remote branches

Installation and solution components

ECDN is installed as a virtual server, through VMware® ESXi or Microsoft® Hyper-V™, on the Cisco UCS E-Series router-integrated branch server.

ECDN service:

– Includes a web-based administrative portal accessible by any modern browser
– Measures video usage and bandwidth consumption with detailed reporting
– Works behind corporate firewalls (needs outbound-to-Internet port 80 for HTTP and port 443 for HTTPS)
– Provides an analytic dashboard showing CPU usage, physical memory usage, disk usage, network I/O, and concurrent users on each server
– Managed, updated and optimized automatically by IBM Watson Media
– IBM professionals assist with a comprehensive network assessment for installation

System requirements for ECDN instances

ECDN can be hosted on a dedicated or shared server. Multiple instances per location are suggested to take advantage of the built-in load balancing and high availability. Cache size per instance is increased based on the available memory and storage.

CPU	Minimum 4 CPUs required
Memory	Minimum 4 GB RAM required
Storage	Minimum 4 GB disk space required
Network interface on host hypervisor	1Gbps or 10Gbps NIC

For ECDN services, call to talk to an IBM Watson Media expert **1-800-778-3090**
For ISR 4000 solutions, call to talk to a Cisco expert **1-800-553-6387**