

Key Attributes of the Video On the Web Architecture

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With the explosion of video & media it has become increasingly critical for the SPs to determine how to be the value provider and aggregator in addition to being the best quality and price point bandwidth provider with a differentiated QoS. Following are some of the key attributes of the architecture that needs to be created to deliver on the Video on the Web promise/opportunities.

Network, Server, and Storage

The network, server, and storage architectures will have to evolve to monetize these new "opportunities". A "right" mix of broadcast, unicast, peer-to-peer, and caching architecture for the video would be needed to profitably deliver the next generation user experience(s) for the converged media/video. "Media-aware" tiered storage and file system would become a key requirement along with codecs and transcoding engines to deliver video to a variety of devices and form factors.

Rights Management & Privacy

The issues of rights management and privacy will need to be addressed for the professional/licensed and user-generated content. One such approach to rights management would be the open source based Open Media Commons initiative that Sun has been working on. Another dimension that will become central to solving these challenges is federated users' identity, profile, and privacy that are under user's control.

Metadata & Search

As the volume of video content grows beyond traditional search mechanisms, delivering personalized content/media will become critical to service providers' profitability. This will require innovations on the search and metadata front, i.e., how to discover/search, tag and organize the data about the professional and user-generated video content such that it can be easily discovered in a timely manner and delivered to users' context and interests. Metadata and "media-aware" search will be needed to profitably drive the consumption of media/content.

Enable New Business Models

The changing dynamics in the video landscape has created challenges and opportunities to innovate on traditional and new business models. It has become critical for the service providers (existing and new) to deliver combination of subscription, on-demand, and targeted advertising supported business models. The architecture needs to be provide the flexibility to attach various business models to the video assets based upon the criteria such as type of content, user identity, and the context with in which the asset if getting consumed.