Delivering Video Consistently is getting harder
The digital world is changing very quickly – and you need consistency to keep up
Simplifying video publishing to multi-device landscape

Webcasting circa 1990

Webcasting has become Broadcasting
Broadcasters trust Adobe technology to stream massive live events to the desktop

Standard Video Codecs: H.264/AAC
Universal Content Protection: (RTMPe/Flash Access)
Consistent Streaming: RTMP, IP Multicast, P2P, HTTP

Broadcasters can reach millions of online users globally
Using the Adobe Flash Platform

However.... The world is changing...
Simplifying video publishing to multi-device landscape

Broadcasters want to reach audiences using multiple devices...

Broadcast workflows are complicated ... and expensive to manage!

Consistent video Experiences
- Live, VOD,
- H.264, AAC
- P2P, HTTP, RTMP

Dynamic Streaming
- Adaptive Bitrate
- Enhanced Seek, DVR

Protected delivery
- Encrypted protocol, SWF V

Video Performance
- Mobile Hardware Acceleration
- Optimized Encoding

Powerful Media Framework

Using Flash to reach multiple devices will simplify your workflows

<table>
<thead>
<tr>
<th>HTML5 Video CODEC fragmentation by browser</th>
</tr>
</thead>
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<td>Ogg</td>
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In-Market Video Delivery Protocols

- Video can be delivered many ways a client
- Delivery protocols are optimized for different scenarios and use cases

- **HTTP Progressive Download** – single bitrate, on demand, limited QOS
- **HTTP Streaming** – multi-bitrate, live, good QOS, high latency, optimized for Mobile
  - Flash: HTTP Dynamic Streaming | Apple: HLS (HTTP Live Streaming)
- **RTMP Streaming** – low latency, multi-way, real time protection, open protocol
  - Adobe Flash Player only
- **RTSP Streaming** – low latency, 1-way, open protocol
  - Windows Media Player and Real Player only
- **IP Multicast** – Enterprise, hardware assisted, single bitrate, live
- **Peer 2 Peer Multicast** – Live, On Demand, single bitrate

Adobe Flash Platform supports all forms of transport except RTSP
Flashing video publishing to multi-device landscape

May 2011

Presented by Kevin Towes, Sr. Product Manager, Adobe Systems Incorporated


Flash Access and Flash Media Server
The right protection and workflow for the use case

<table>
<thead>
<tr>
<th>USE CASES</th>
<th>FLASH MEDIA SERVER 4</th>
<th>FLASH ACCESS 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected Streaming</td>
<td>Ad-supported content</td>
<td>DRM</td>
</tr>
<tr>
<td>RTMPe/SWFv</td>
<td>RTMFP (Multicast / P2P)</td>
<td>Premium Content delivery</td>
</tr>
<tr>
<td>TARGET</td>
<td>• Enterprise</td>
<td>• Online VOD publishers; IPTV</td>
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<tr>
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<td>• Broadcaster</td>
<td>• Enterprise download &amp; play</td>
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<td>• live online publisher</td>
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<tr>
<td></td>
<td>• Enterprise streaming</td>
<td></td>
</tr>
<tr>
<td>FEATURE SET</td>
<td>• Real Time Encryption</td>
<td>• Studio Pre-approval</td>
</tr>
<tr>
<td></td>
<td>• No License Server</td>
<td>• Offline Playback</td>
</tr>
<tr>
<td></td>
<td>• Asset/player binding (SWF Verification)</td>
<td>• Advanced business rules</td>
</tr>
<tr>
<td></td>
<td>• No configuration required</td>
<td>• Persistent encryption</td>
</tr>
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<td>• Asset/player binding (SWF Verification)</td>
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<td></td>
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<td>• Selectable Output Control</td>
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<td>• Revocation and Renewability</td>
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</table>

Simplifying online video broadcast workflows
to reach your entire audience potential

CAPTURE → ENCODE → PACKAGE → PROTECT DELIVERY → EXPERIENCE

COMING SOON FROM ADOBE

HTTP RTMP MULTICAST P2P
Simplifying online video broadcast workflows

To reach your entire audience potential

HTTP Dynamic Streaming (HDS) to Adobe Flash
HTTP Live Streaming (HLS) to Apple iPad2
Live Broadcast workflows to multiple devices

DEMOS
Simplifying online video broadcast workflows to reach your entire audience potential

Capturing video, encoding it, packaging, protecting, and delivering the experience.

Coming soon from Adobe:
- HTML5
- RTMP
- Multicast
- P2P

Changing the world through digital experiences