

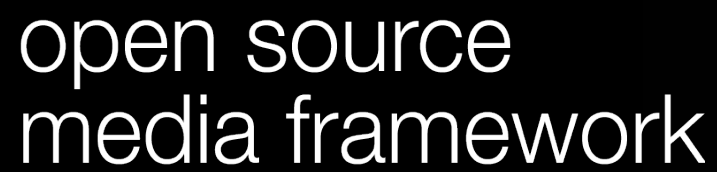
Presentation Overview

This presentation is intended for Adobe User Group Managers as a top level overview of the Open Source Media Framework. OSMF is a free, ActionScript toolkit for video player development.

- Estimated length – 45 minutes (includes 5- 10 minute “demo” if an internet connection is available)..
 - Presentation Outline:
 - A discussion of the pain points that OSMF is intended to solve
 - The feature set planned for OSMF 1.0
 - Some coverage of the details of the OSMF architecture
 - A brief demo
 - Discussion of future plans for OSMF

Created by : Kelly Miller, OSMF PMM on January 14th, 2010

I intend to update this regularly, and improve it based on your feedback. Please contact me if you have any questions on suggestions: kelmille@adobe.com



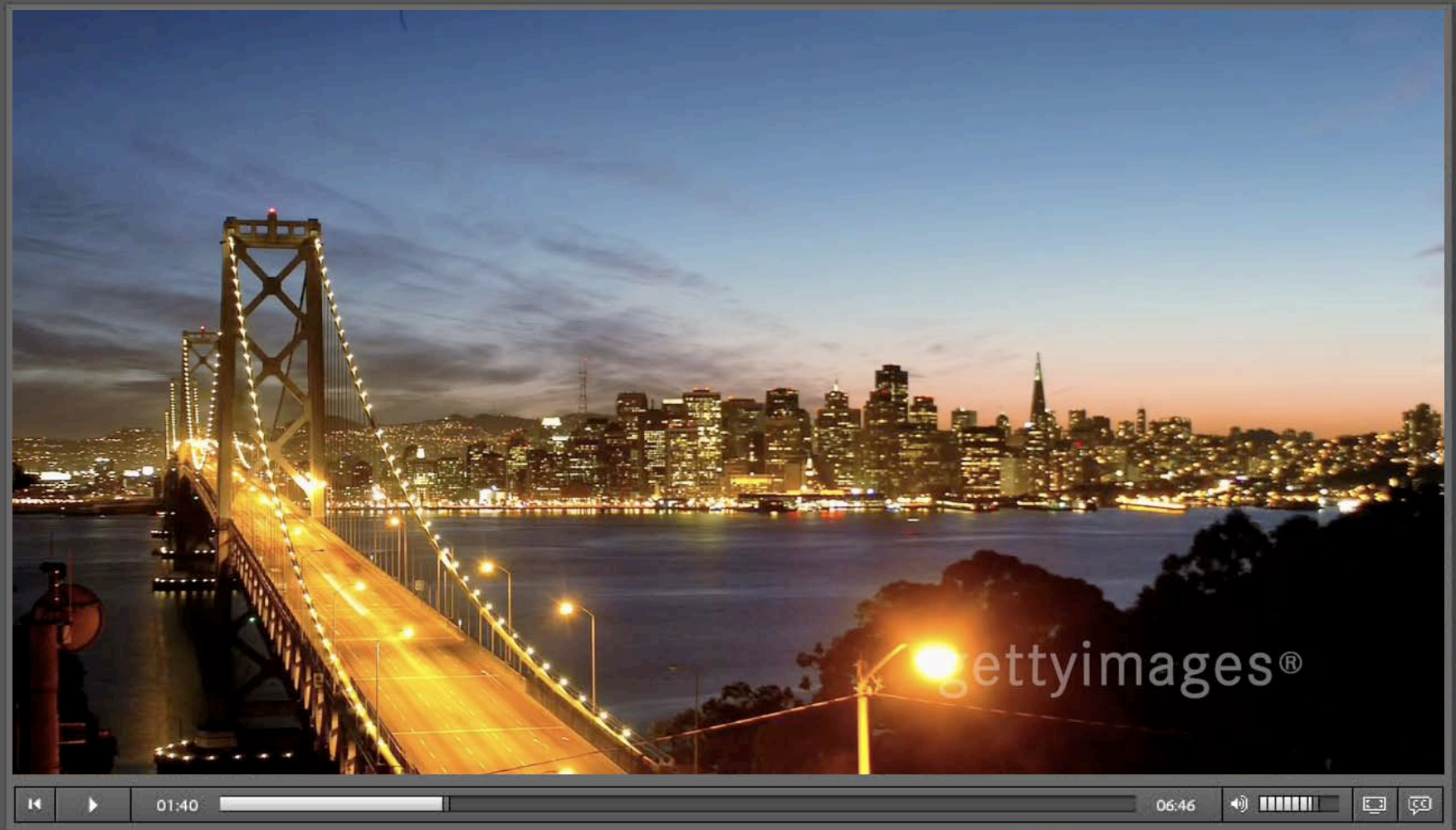
Adobe's standard video player components for monetizing video on the web

Your Name Here





Today high quality media experiences online are *possible...*



Rate this: ★★★★★

FILES TELL A FRIEND EMBED

...but it takes a lot of work behind the scenes



- UI and chrome by you
- Playlist from CMS
- Video via HTTP or FMS
- Delivery via CDN
- Ads from ad provider
- Tracking to measurement service
- Social networking features

\$1 million bucks!

Content providers face growing challenges

- Duplicated efforts to solve basic problems
- Deployment of new video features takes too long
- Increasing complexity + fragmentation
- Hindered integration with 3rd party services





Accelerate development of media players

Open Source Media Framework is the standard media player framework from Adobe for monetizing video on the web

- Latest media features of the Flash platform
- Enables workflows and services around video playback
- Pure AS3 with wrapper for Flex
- Pluggable, extensible architecture
- Free!

Content Providers can focus on user experience, not on player plumbing
Ecosystem Partners can focus on their services, not on integrating player code

1 Video Quality of Service

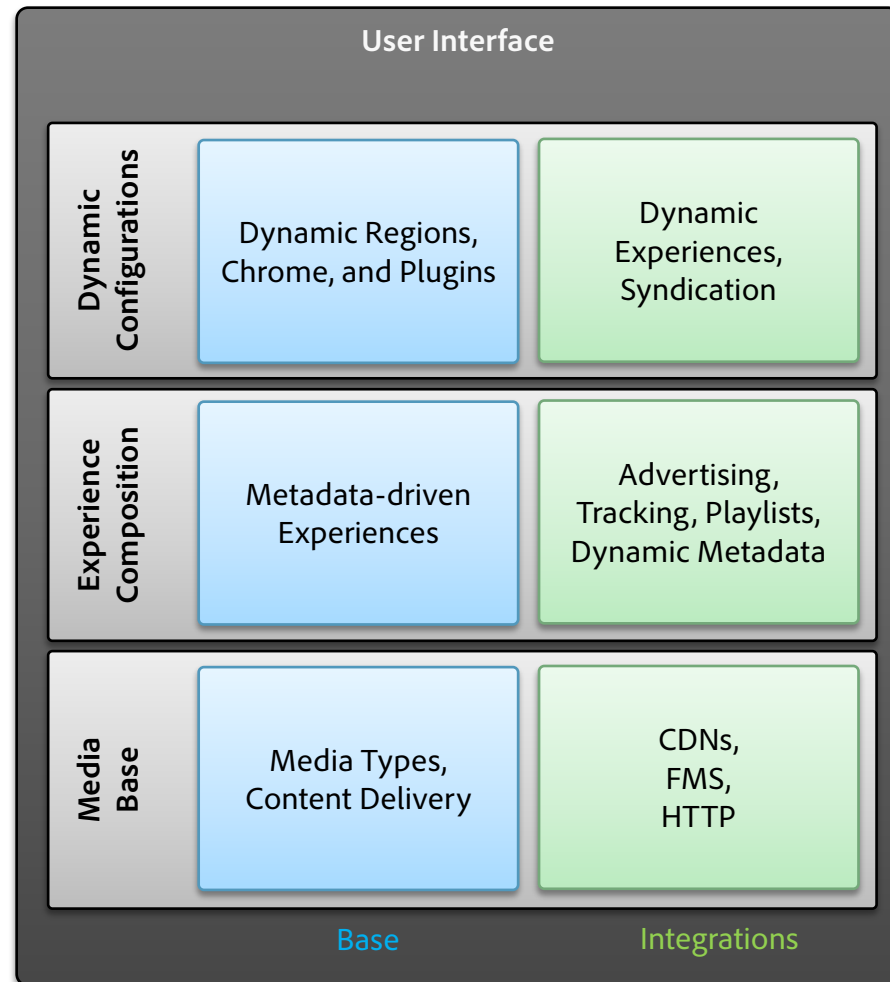
- Dynamic Streaming
- HTTP Streaming
- Content Protection

2 Rich Experiences

- Multiple media types
 - Video, audio, images, SWF
- Visual regions and layout

3 Service Plug-ins

- CDNs
- Advertising
- Analytics



- Multiple delivery protocols
 - Streaming and progressive
 - RTMP and HTTP
- Quick start playback
 - Efficient connection logic
 - Minimize buffering
- Smooth switch to the best bitrate
 - No disruption in audio
 - Switching logic is configurable
- Detect and recover from errors

Good Bandwidth

Bandwidth Trouble

Good Bandwidth



Integration with both standard and proprietary playlist formats

Multiple media regions inside and outside the video player

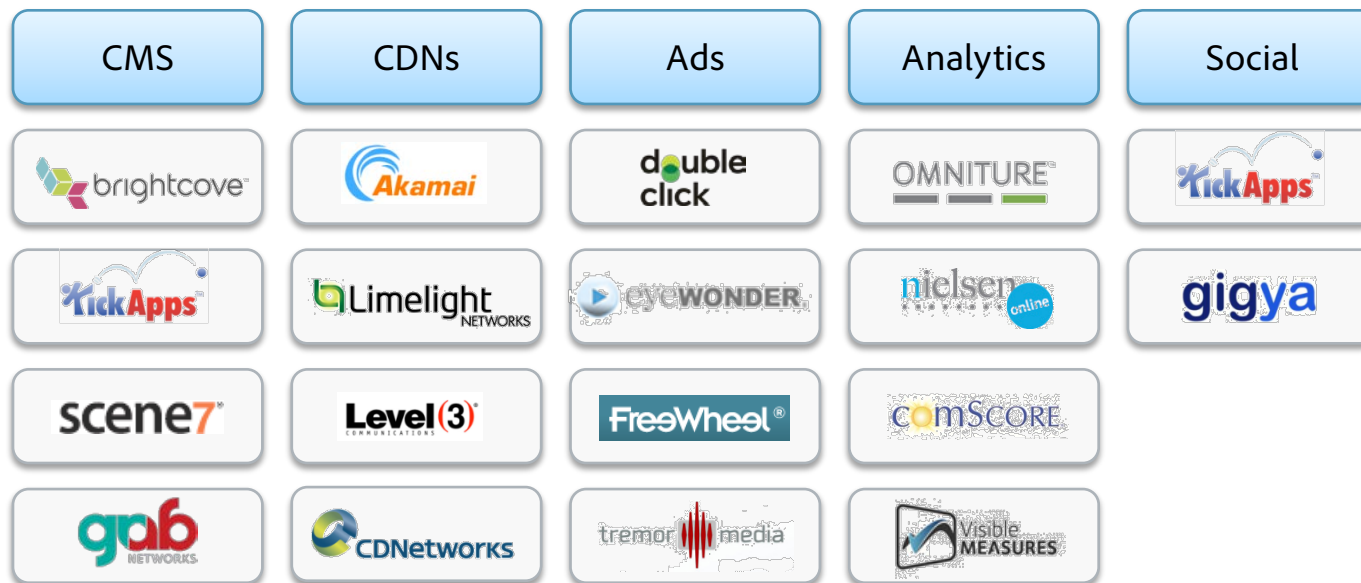


Companion and
leave-behind ad
regions

All regions support
multiple media
types



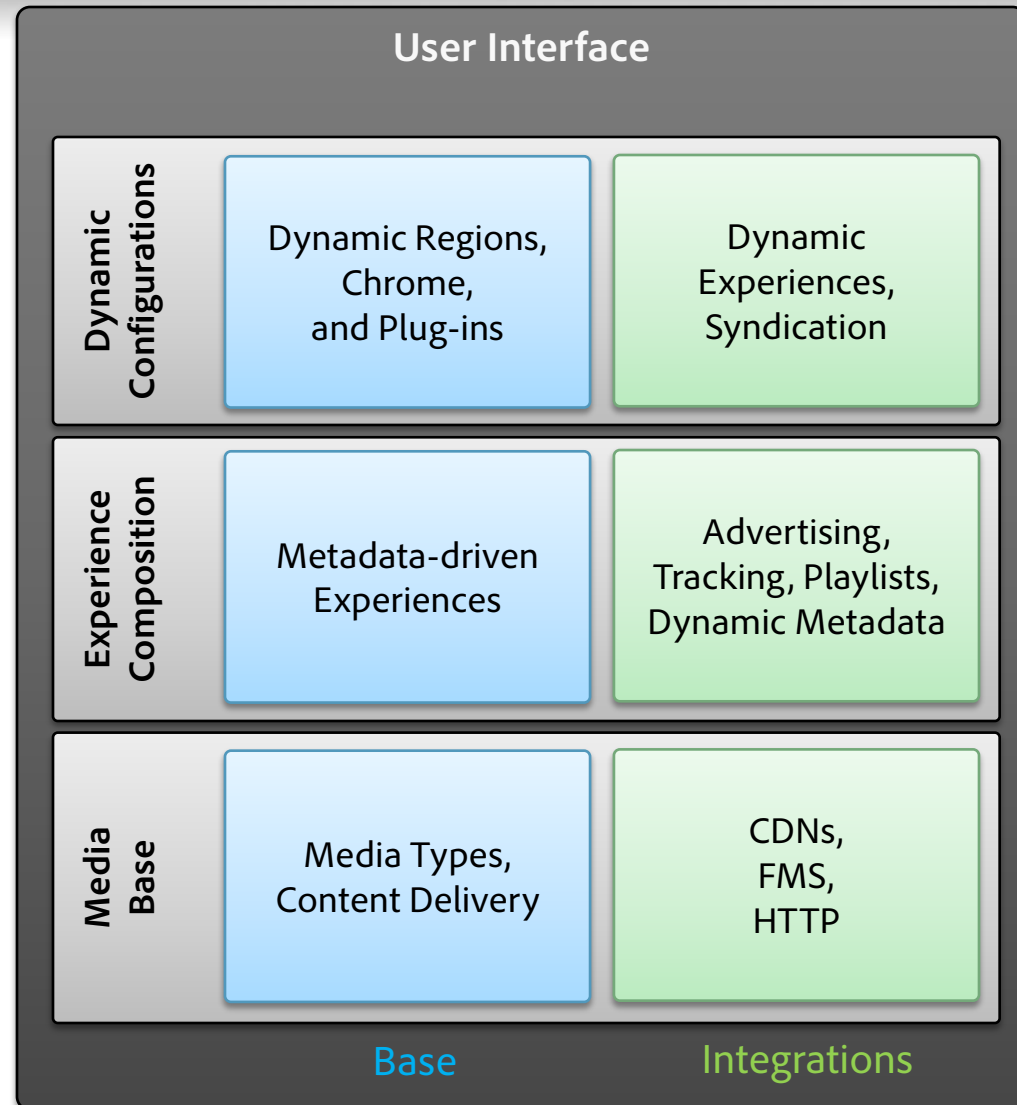
- Assemble functionality with plug-ins
- Extensible architecture makes writing new plug-ins possible
- Compile in or load dynamically
- Open API



Architectural Overview

Layered, pluggable architecture

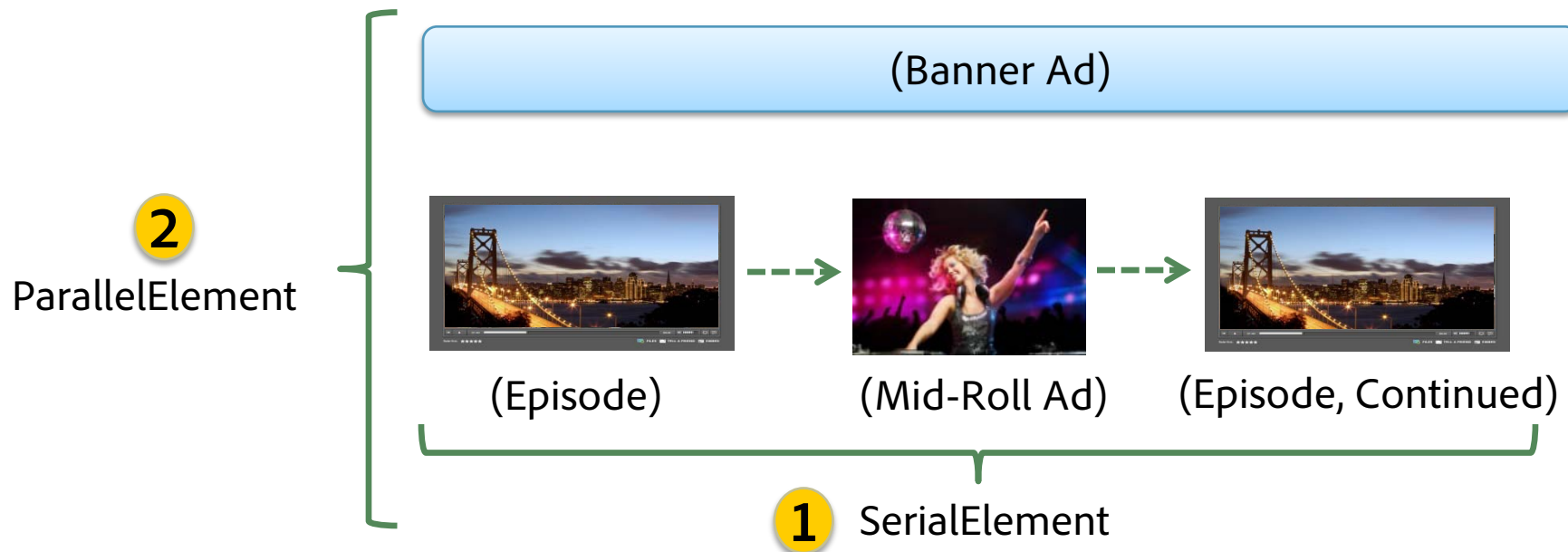
- Integrate at multiple points
- Support a range of use cases
- Take only what you need





OSMF Traits





```
1 var serial:SerialElement = new SerialElement();
    serial.addChild( /* MediaElement for Episode */ );
    serial.addChild( /* MediaElement for Mid-Roll Ad */ );
    serial.addChild( /* MediaElement for Episode, Continued */ );

2 var parallel:ParallelElement = new ParallelElement();
    parallel.addChild( /* MediaElement for the Banner Ad */ );
    parallel.addChild( serialElement );
```



OSMF Plug-ins

- Plug-ins define additional behavior for media, a new type of media, or both.
- Media Plug-ins
 - define new MediaElements and behavior, or override traits of existing MediaElement
 - CDN connection plug-in
- Reference Plug-ins
 - a MediaElement that can control, change properties, invoke methods on one or more live MediaElements
 - Overlay ad that controls the main content
- Proxy Plug-ins
 - Wrapper on existing MediaElements to monitor and handle events or block traits
 - Tracking and reporting plug-in

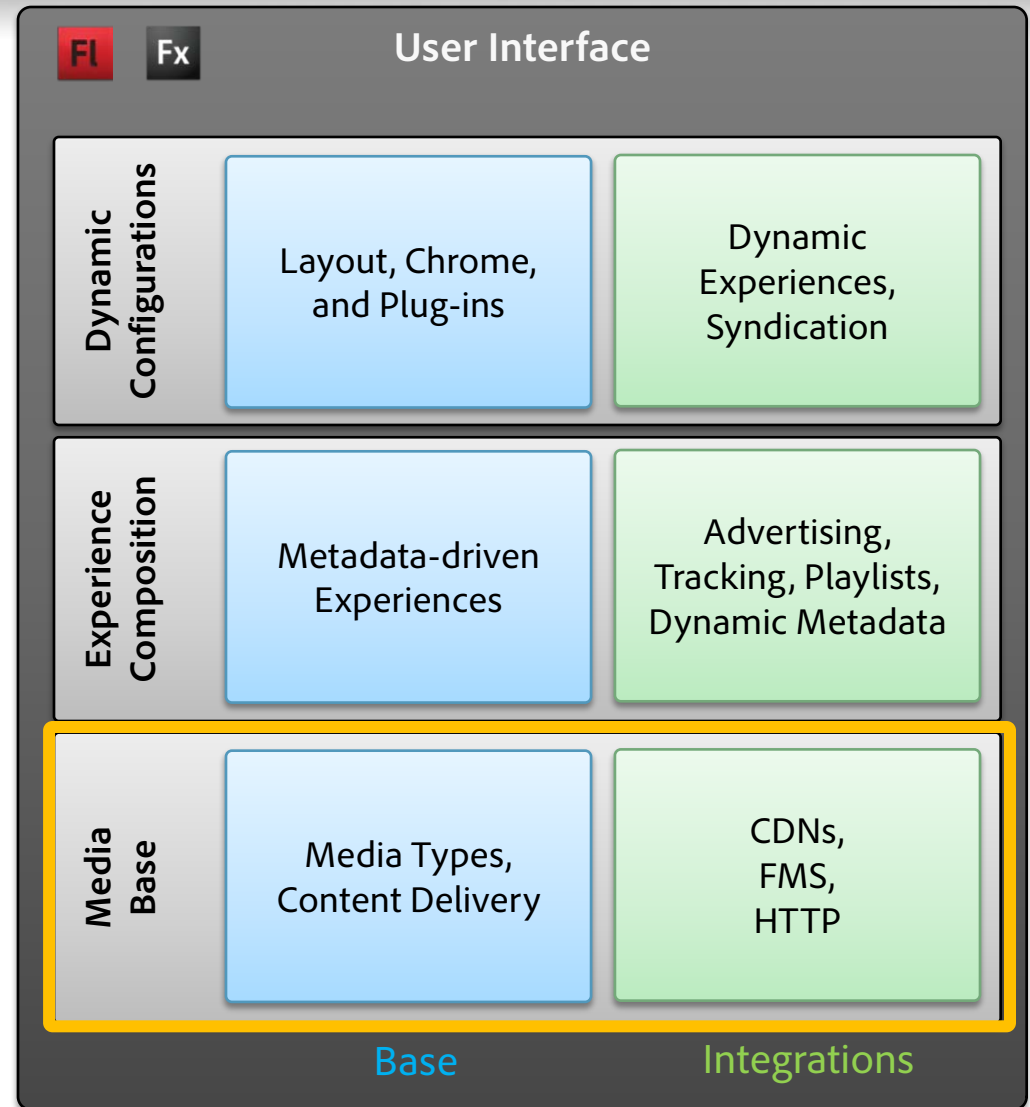


Demo

Integration Levels

Level 1: Media Base

- Latest client code for video
- Small footprint
- Basic integration
 - HTTP Streaming
 - Dynamic Streaming
 - CDN plug-ins
- Call into specific classes/methods directly
- Hook into your own higher level logic and UI via APIs



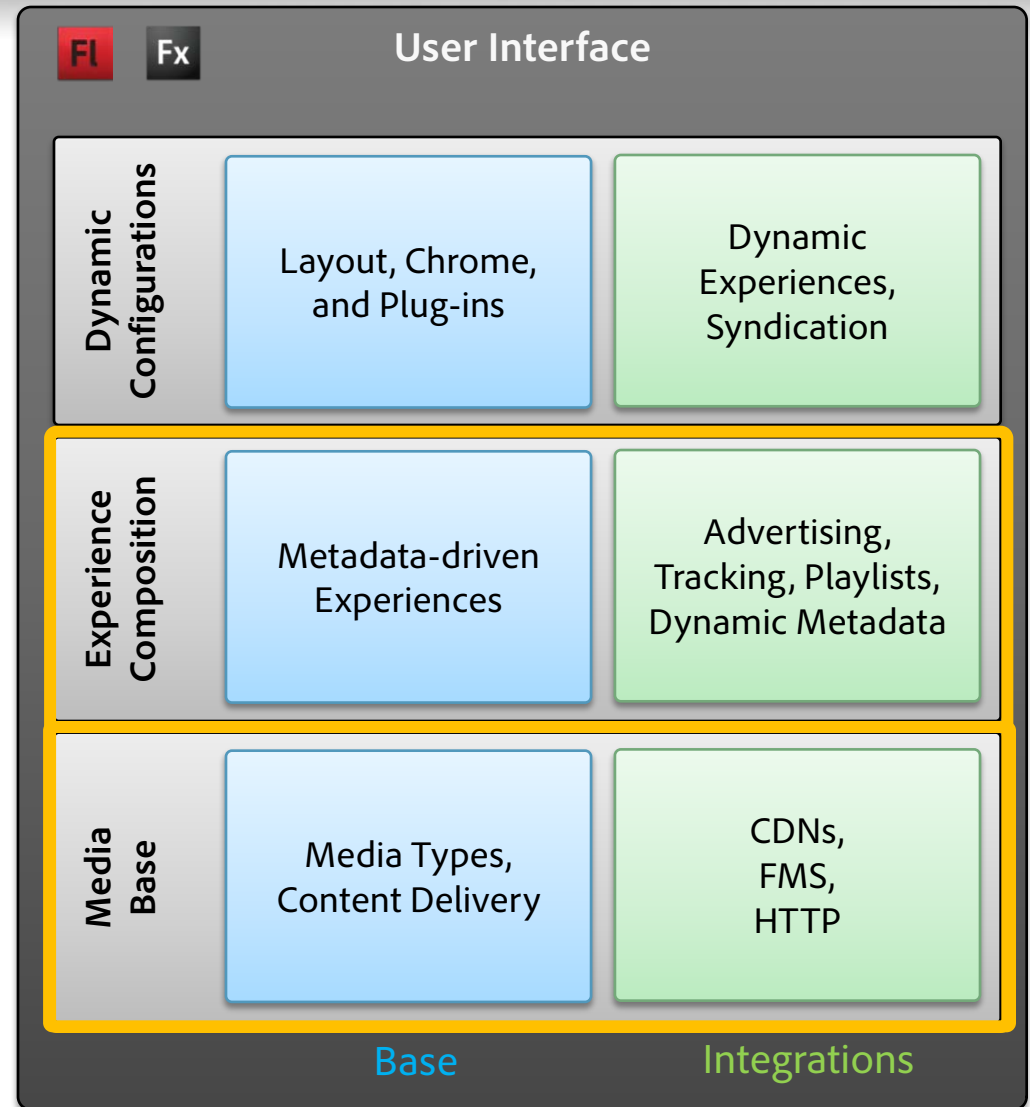


Integration Levels

Level 1: Media Base

Level 2: Media + Experience Composition

- Latest video code
- Flexible monetization workflows
- Ecosystem support for plug-in architecture
- Value Meal
 - Video QoS, CDNs
 - Content playlists
 - Ad + Tracking plug-ins
- Hook into custom logic and UI





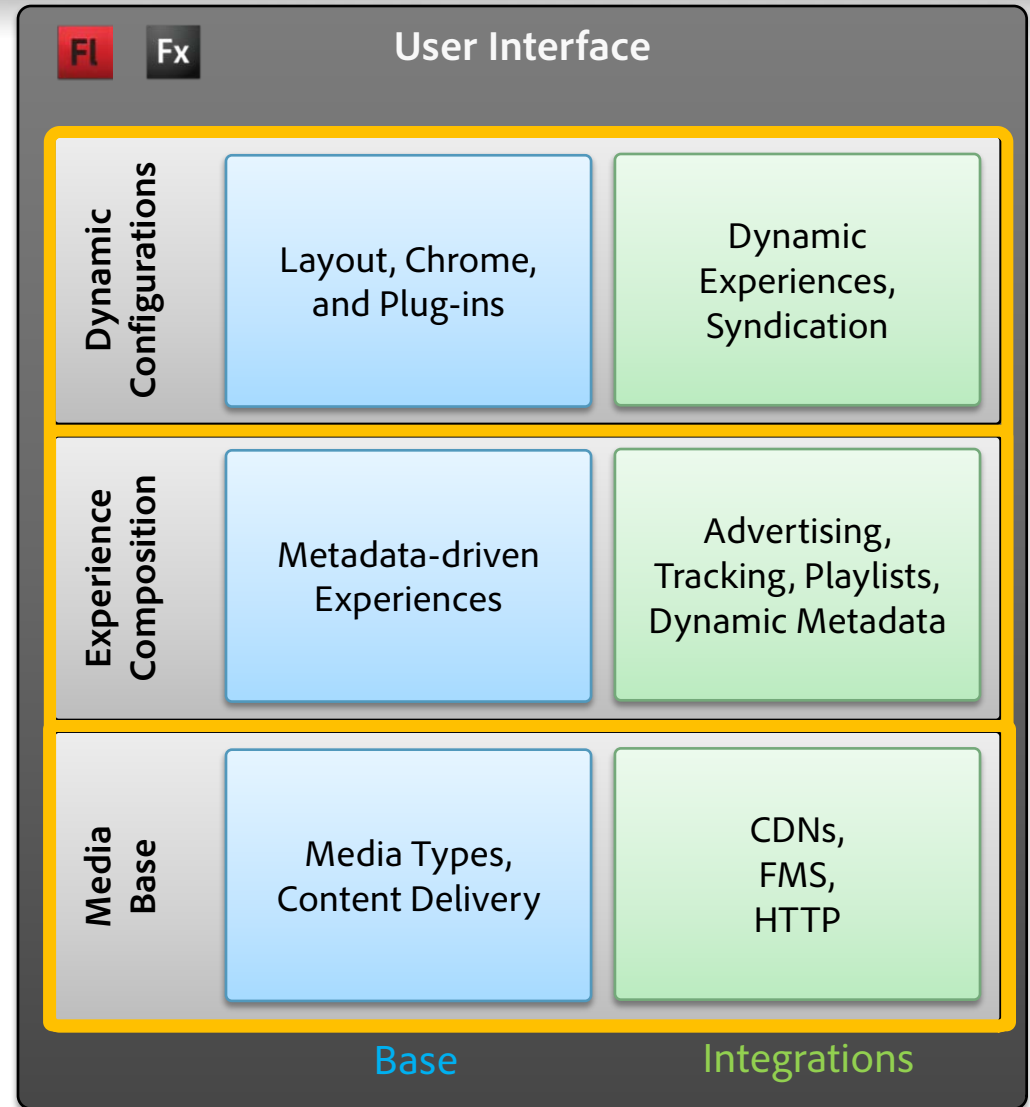
Integration Levels

Level 1: Media Base

Level 2: Media + Experience Composition

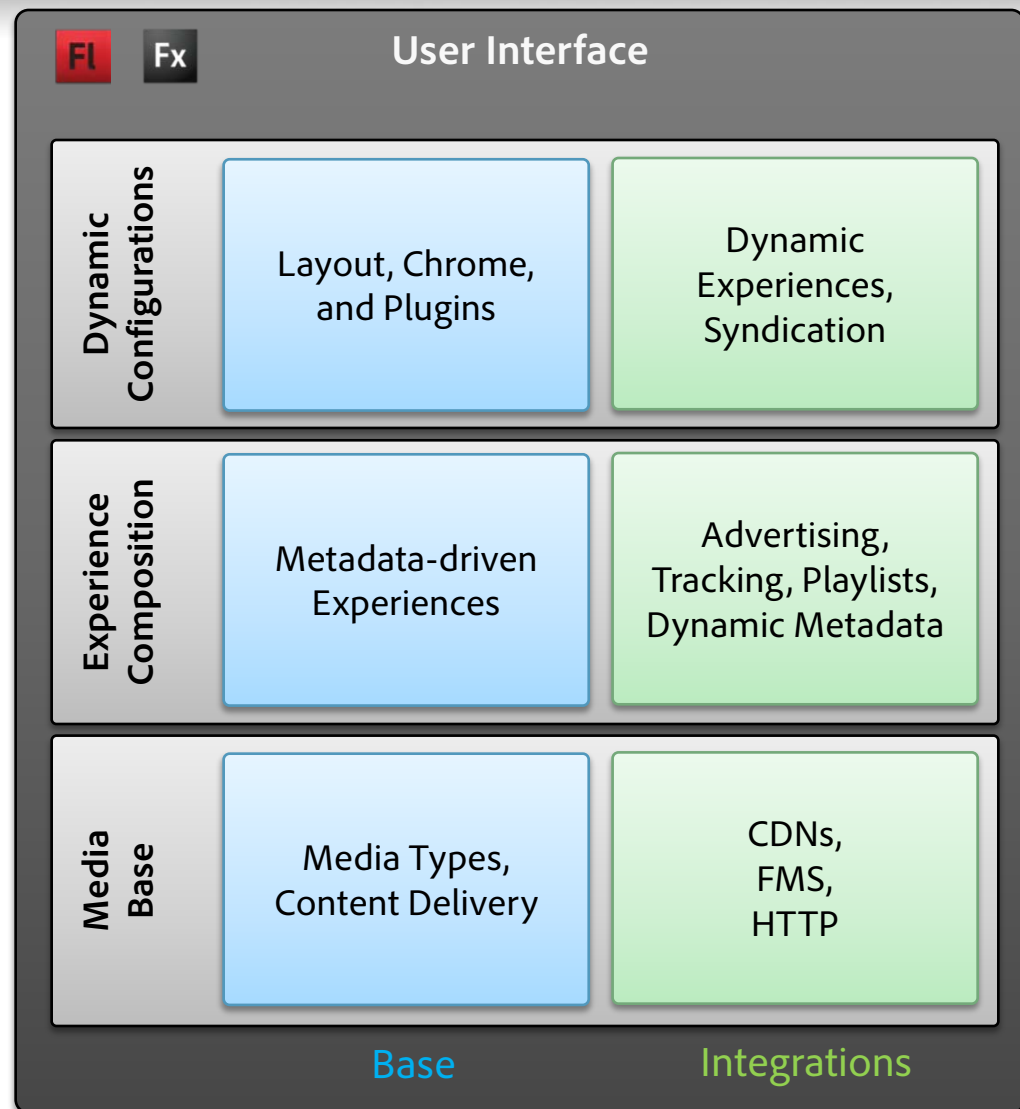
Level 3: Full OSMF Framework

- Latest video code
- Plug-ins
- Configurable experiences
- Supersize
 - Video QoS, CDNs
 - Playlists, Ads, Tracking
 - Layout media regions
 - Dynamic chrome
- Compile or drive dynamically



Take the base, add plug-ins, configure, deploy, upgrade

1. Start with OSMF as the foundation of your player
2. Add plug-ins for advertising, analytics, CDNs, social
3. ***Design a fabulous UI for your audience***
4. Deploy the player
5. Over time, upgrade to get new features





Product Roadmap

OSMF 1.0 (Q2 2010)

- Video QoS
 - On-demand and Live
 - Streaming (RTMP and HTTP)
 - Progressive Download
 - FMS 3.5: Dynamic Streaming and DVR
 - Flash Access 2.0
- Rich Experiences
 - Layout inside and outside player
 - Media: video, audio, images, SWF
 - Playlists: sequential and parallel compositions
 - Cue points
 - Metadata-driven experiences
- Plug-ins for Services
 - Ad server calls and ad rendering
 - Tracking and reporting events
 - CDN connections

What's Next

- Monitor QoS metrics
- External configuration of chrome, layout, plug-ins
- Default chrome
- Flash Authoring visual component
- Ready-to-deploy compiled SWF
- Mobile optimizations

Stable builds every month

Major releases every 4-6 months

OSMF accelerates development of media players

- Latest and greatest Flash media features ready for deployment
- Best practices = industry leaders' expertise available to all
- Standard service integrations = don't get locked in, change at will





Next steps



open source
media framework

- 1.0 planned for Q2 2010
- Code available *now*
www.OSMF.org
- Check it out today!



Next steps



open source
media framework

- New OSMF Users' Group

<http://groups.adobe.com/groups/7af970e6e4/summary>

- Tutorial

http://www.adobe.com/devnet/flash/articles/video_osmf.html

- OSMF Presentation from Max

<http://max.adobe.com/online/session/332>



Next steps



open source
media framework

- The OSMF Blog

<http://blogs.adobe.com/osmf/>

- The Adobe Developer Forums on OSMF

<http://forums.adobe.com/community/opensource/osmf/developers>

