

WAMS: in Practice



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Introduction



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Contents

- Introduction
- Windows Azure Media Services
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- WAMS in Practice
- Demo: Windows 8
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Challenges

- Infrastructure costs
- Managing costs
- Monetizing contents
- Digital Rights Management
- Security



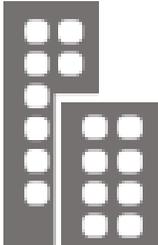
Multiple formats, multiple bitrates

Windows Azure Media Services



WAMS General

Enterprise Developers
Independent Software Vendors
System Integrators
Video on Demand Services
Network Operators
Broadcasters



Windows Azure Media Services



WAMS Components

Windows Azure Media Services



Ingestion



Encoding
& Conversion



Content
Protection



On-Demand
Streaming



Live
Streaming



Analytics &
Advertising

WAMS Components

Windows Azure Media Services



Ingestion



Ingestion

Pre-encrypt files prior to uploading(AES 256)

Secure HTTPS upload

Network level peering for fast HTTP into Azure

Fast upload using UDP with Aspera

Bulk ingest support

WAMS Components

Windows Azure Media Services



Ingestion



Encoding
& Conversion



Encoding
& Conversion

Windows Azure Media Encoder

Supports encoding to H.264 or VC-1 video

Encodes audio to AAC-LC, HE-AAC, Dolby DD+, WMA

Packages to MP4, HLS, Smooth Streaming, HDS, WMV

Partner SDK for enabling 'build-in' encoders

WAMS Components

Windows Azure Media Services



Ingestion



Encoding
& Conversion



Content
Protection



Content
Protection

Windows Azure Media Encryptor

Sources from Smooth Streaming or Apple HLS

Encrypts with PlayReady, Common Encryption, AES

WAMS Components

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On-Demand
Streaming



Live
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Analytics &
Advertising

Windows Azure Media Origin

Managed streaming service... it just works!

Guaranteed bandwidth. Auto recovery/redundancy. High Availability

Integrated Azure CDN support

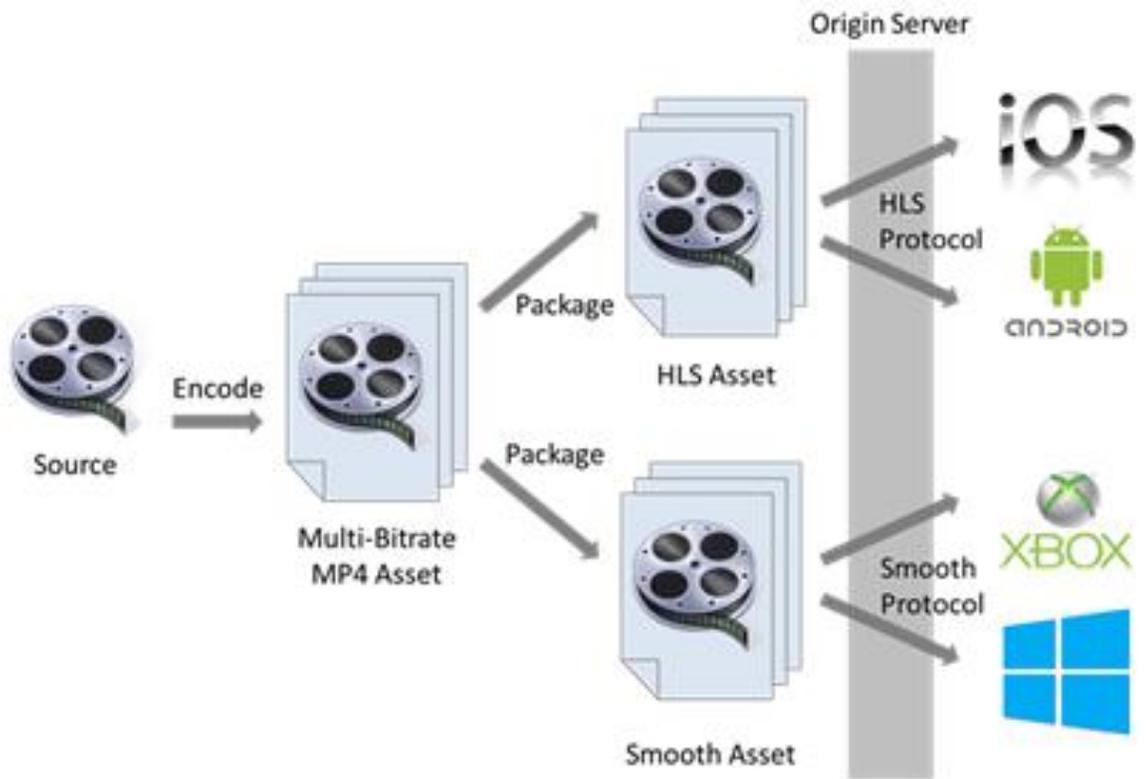
Dynamic Remux support for standard MP4 files



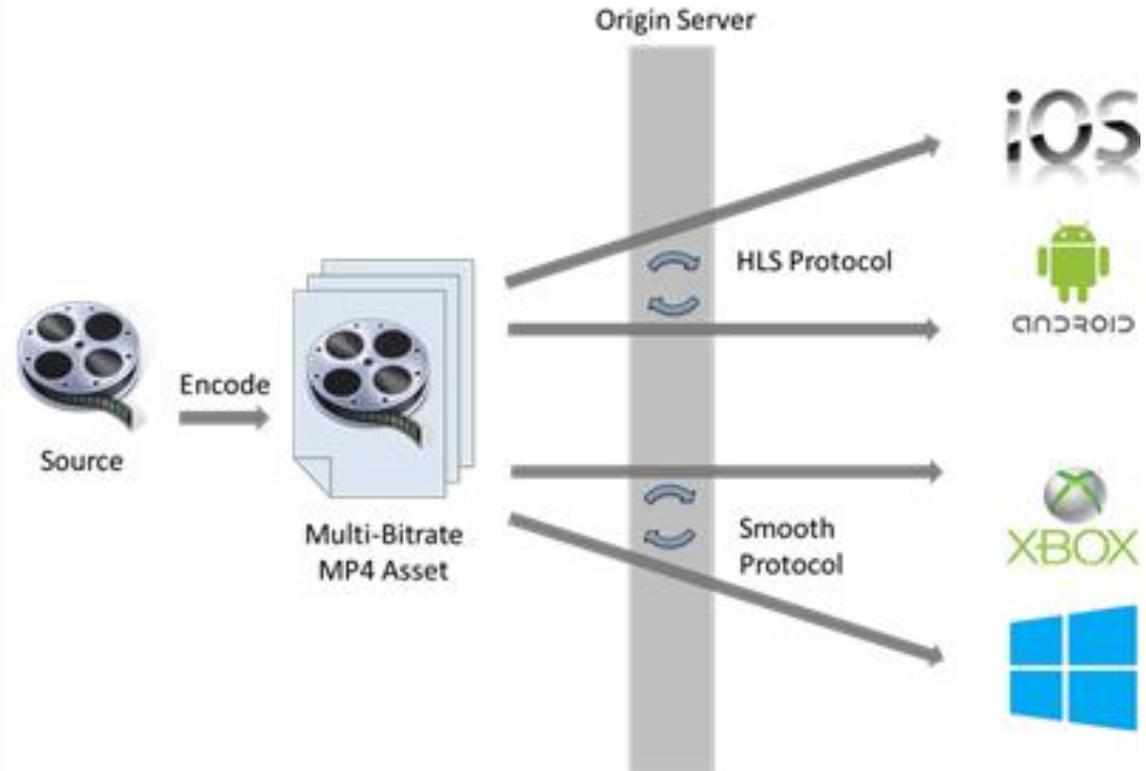
On-Demand
Streaming

Encoding with WAMS

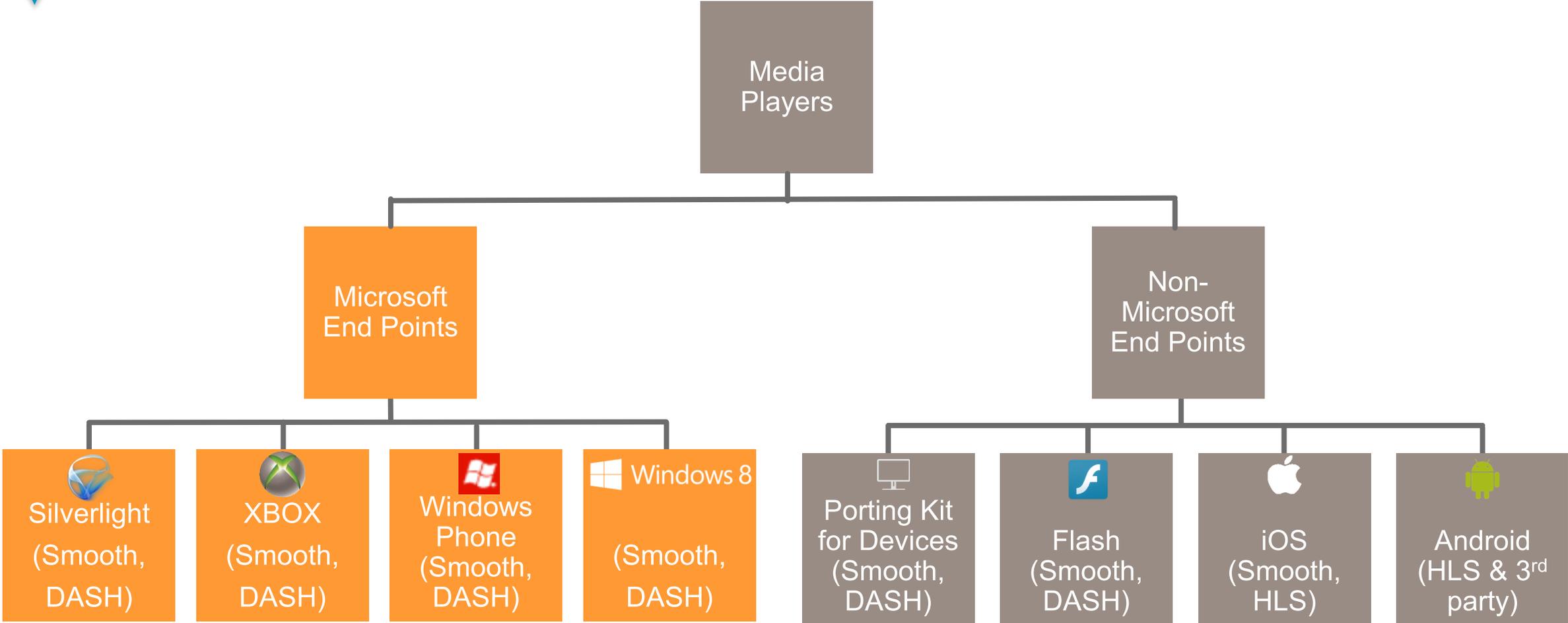
Traditional Encode and Package



Windows Azure Media Services Using Dynamic Packaging



Reach Story



WAMS Architecture

“Build-On” Media Partners and Customers

REST APIs

Media Services

Secure Media Ingest 	Encoding 	On-Demand Origin 	Live Ingest 	Live Origin 	Advertising
Media Job Scheduling 	“Build-In” Partner Media Processors 	Content Protection 	Live Encoding 	Analytics 	Identity Management

Windows Azure

Partner CDNs

- Windows 8
- iOS
- XBOX 360

Azure CDN

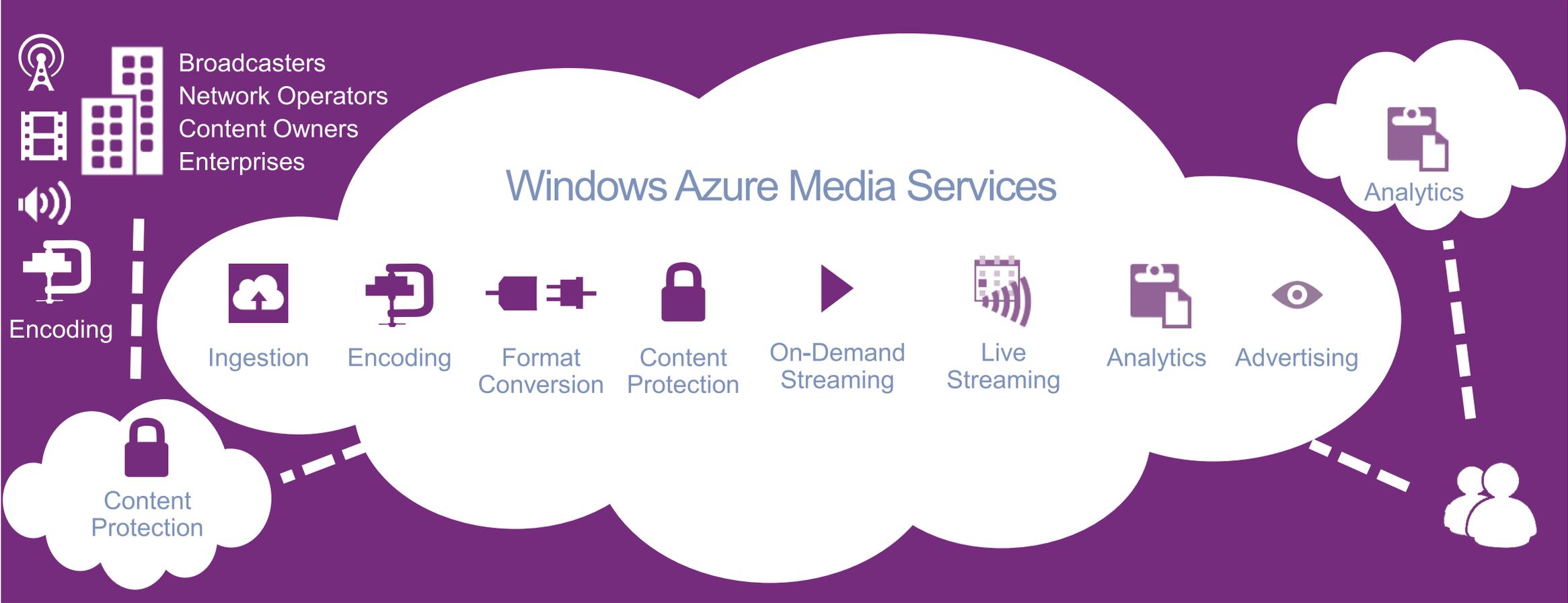
- HTML 5
- Windows Phone
- Silverlight
- Flash

Origin
Caching

Adaptive Streaming Porting Kits

How Can I Use Media Services?

Combine with On-Premises or Other Network-based Resources



How Can I Use Media Services?

Address all the Scenarios and Devices/Platforms you care about



Demo: Windows 8



WAMS in Practice



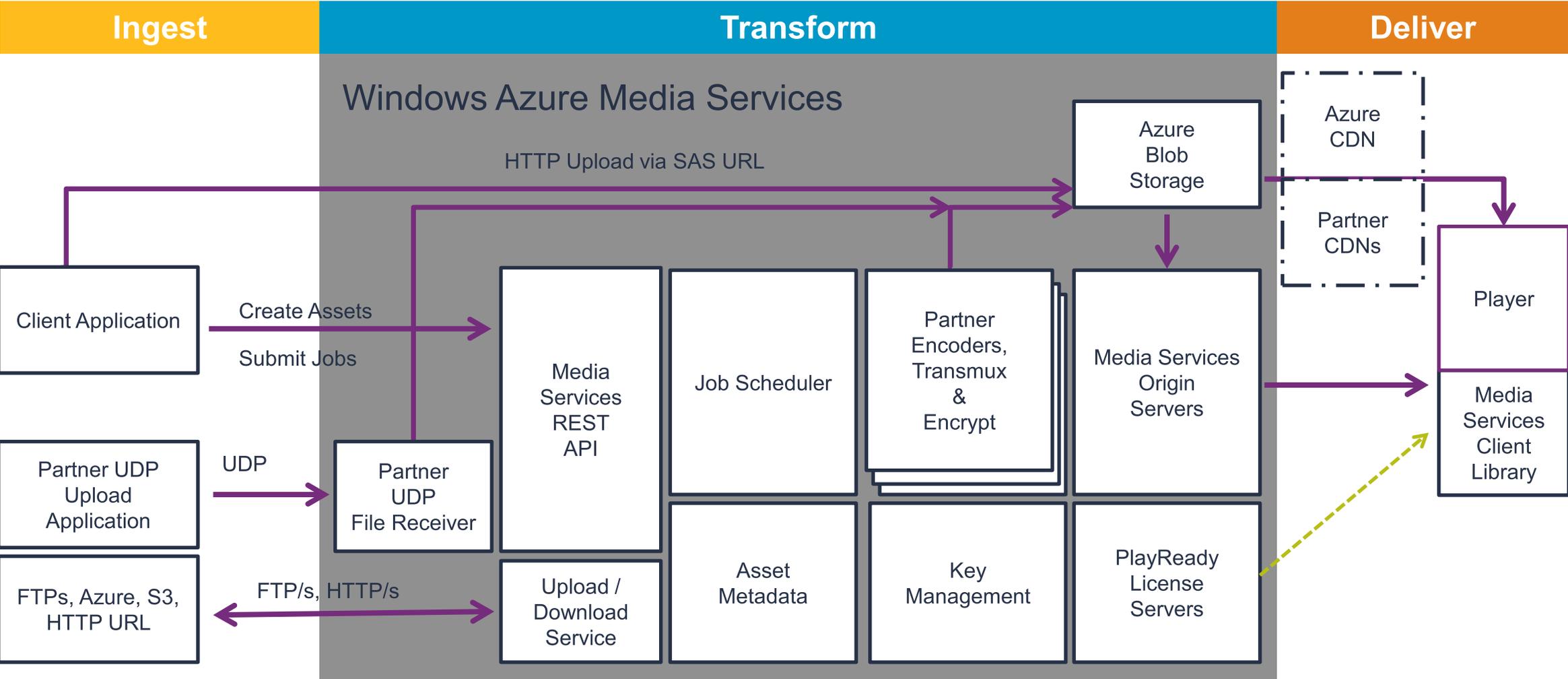
Application functionality

- Support for strategic business programs
- Creation and visualization of transformation roadmaps
- **Playing/recording of video messages**
- **Distribution of text and video messages**
- Visualization of real-time information concerning budgeting and planning
- Multi-platform support

Why WAMS?

- Application development started before the release of WAMS
- Problems with encoding/converting the different file formats
- WAMS as a solution to the problems with recording videos

WAMS internal workflow



Future improvements

- Auto-scaling
 - Reactive rules using MEL 5.0 Integration Pack
- Caching
 - Azure CDN or 3rd party provider
- Push notifications
- DRM
 - PlayReady

Demo: Windows 8



Wrap-up



Wrap-up

- What is WAMS?
- How to use WAMS in practice?
- Using WAMS with Windows 8 and iOS

Questions



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