Dynamic Media Support in wcm.io Media Handler

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About the Speaker

- AEM Developer
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diva^e

https://diva-e.com/

PRO!VISION
SOFTWARE CRAFTSMANSHIP

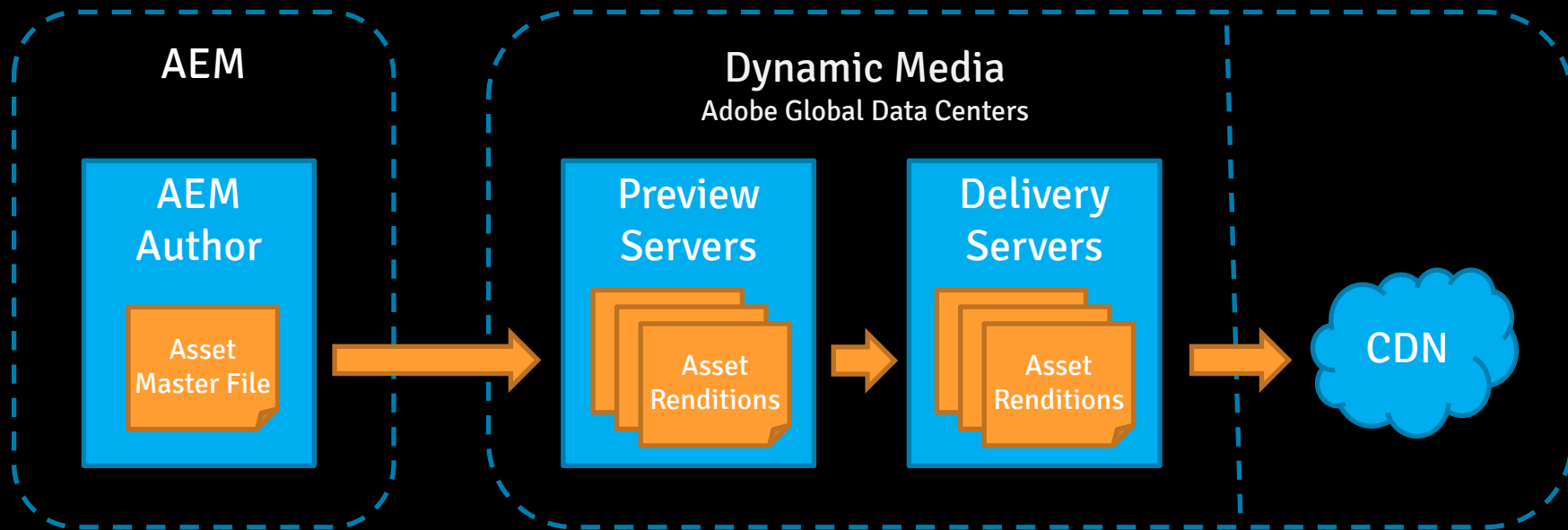# About Dynamic Media

What is Dynamic Media?

- Formerly known as Scene 7
- Rich Media Content Serving Service
  - Dynamic Imaging
  - Dynamic Video
  - Dynamic Delivery (CDN)
  - Hotspots / Personalization and more

- Integration mode "**Dynamic Media – Scene 7**"
    - Works with AEMaaCS and AEM 6.5
    - Uses Dynamic Media Classic as Cloud Service
    - Old "Hybrid" mode should no longer be used
- Licensed separately

Dynamic Media – Scene 7 Mode

Dynamic Media Features

- Dynamic Rendition Generation
- Photoshop-like Image Manipulation via URL
- AI-based Smart Cropping
- Smart Imaging based on Target Devices
- Video Support
- Global CDN, HTTP/2 delivery

Use Dynamic Media in AEM

- Cloud Configuration with DM Credentials
- OOTB Dynamic Media Components
  - A bit outdated, based on DM Viewers
- Core Components
- wcm.io Media Handler
- Use directly

DEMO

Basic Dynamic Media Concepts

- Control processing on **asset upload**
  - Pixel Cropping
  - Smart Cropping (AI)
  - Videos in different resolutions/bitrates

- Assigned to **asset folders**

What happens on Asset Upload

- **Automatic Upload to Dynamic Media**
  - Generate renditions
  - Apply Smart Cropping
  - Initially "unpublished" on DM

- **S7 metadata in Asset metadata**
  - Replicated to publish instances

- **`/is/image`**
  - Dynamic image renditions
  - Image Manipulation
- **`/is/content`**
  - Static content – download files,
    SVGs, animated GIFs, small video files

Basic Syntax

`/is/image/<Catalog>/`**`<Object><Modifiers>`**

Examples

`/is/image/`**`Catalog1/Img1`**

Object name
`dam:scene7File` Property

`/is/image/Catalog1/`**`Img1`**`?`**`wid=300`**`&`**`op_sharpen=1`**`&`**`qlt=90`**

Resize
width=300px

Sharpen
image

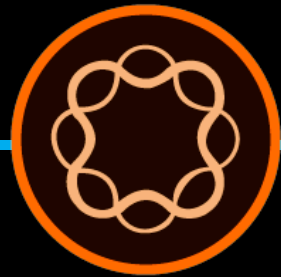Quality 90%

Command Reference

Image Presets

- **Predefined set** of image manipulation params
  - E.g. resize and sharpening
- Replaces modifiers in URL with macro name

```
/is/image/Catalog1/Img1?wid=300&op_sharpen=1&qlt=90


/is/image/Catalog1/Img1?$MyPreset$
```

Core Components and Dynamic Media

Core Components

- Dynamic Media Support since 2.13
- **Image** component
- Image Presets and Smart Cropping

DEMO

Core Components – Limitations

- Dynamic Media Support not easy reusable in custom components

- Preset or Smart Cropping needs to be assigned for each asset reference and content page

wcm.io Media Handler and Dynamic Media

wcm.io Media Handler

- Adds image handling "aspect" to any component

- Responsive media formats

- wcm.io Core Components with wcm.io Handler Support

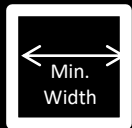https://wcm.io/handler/media/
https://wcm.io/wcm/core-components/

See also: adaptTo() Talk 2019

Assets and Links in AEM Projects
Stefan Seifert, pro!vision GmbH

https://adapt.to/2019/en/schedule/assets-and-links-in-aem-projects.html
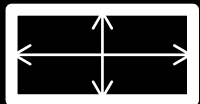
16:9 Landscape

1:1 Square, min. 500px width

Exactly 1000 x 500 pixel

Download asset (PDF)

DEMO

- **Transparent switching** between DM- and Publish-generated renditions
  - Use fallback for sandboxes, local instances
- **Responsive behavior** via content policies
- **Smart cropping** based on media formats
- Use full power of DM by just **switching it on**
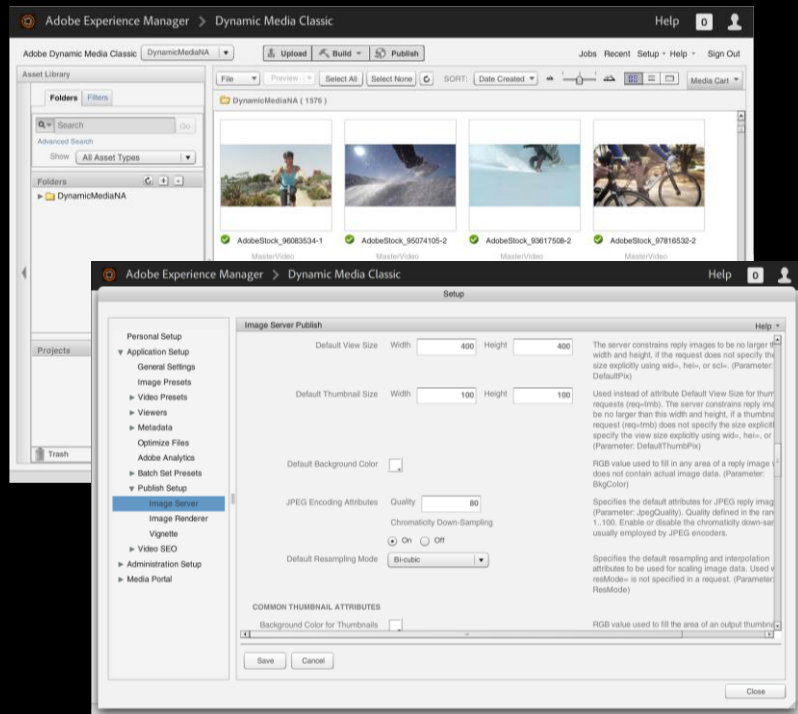
Dynamic Media Tips & Pitfalls

Video Limitations

- ## Video Smart Crop is great
  - ### Limited to max. 5min/9000 frames
- ## Video limits for uploading
  - ### max. 30 min, max. 15GB/file
- ## No URI-based API for Videos

https://experienceleague.adobe.com/docs/experience-manager-cloud-service/assets/dynamicmedia/video.html?lang=en

No "Configuration as Code"

- Adobe Air Desktop App
- Configuration only possible via UI Dialogs
  - For each Tenant/Catalog

Asset metadata

Dynamic Media stores Tenant/Catalog-specific metadata in content

- Not updated when transferred via content packages
- Clean up manually
- "Reprocess Assets"

Content Resource (OOTB & Core Components)

Not the case when using wcm.io Media Handler

Asset Bulk Import

- AEMaaCS "Asset Bulk Import" tool
  - Import assets from AWS or Azure Blob Store
  - Massively parallelizes asset processing
  - Includes Dynamic Media processing

https://experienceleague.adobe.com/docs/experience-manager-cloud-service/assets/manage/add-assets.html?lang=en#bulk-upload
https://www.youtube.com/watch?v=pY6A9hzKN2M

- # Ruleset: "mod_rewrite" for DM

- # Not as powerful, but very useful

  - ## Rewrite URIs
  - ## Send HTTP Headers
  - ## Stackable

```xml
<ruleset>
  <!-- Send header for static content suffixed with '?cdh=attachment' -->
  <rule RequestType="static">
    <expression>\?cdh=attachment$</expression>
    <substitution></substitution>
    <header Name="Content-Disposition">attachment</header>
  </rule>

  <!-- Rewrite scaled image URI -->
  <rule RequestType="is">
    <expression>^product/(jpg|png)/scaleWidth/(\d+)/([^\?/]+)$</expression>
    <substitution>$3?wid=$2</substitution>
  </rule>
</ruleset>
```

https://experienceleague.adobe.com/docs/dynamic-media-developer-resources/image-serving-api/image-serving-api/rule-set-reference/c-rule-set-reference.html

References

Dynamic Media Classic

- Documentation
  https://experienceleague.adobe.com/docs/dynamic-media-classic/using/intro/introduction.html?lang=en

- Developer Resources
  https://experienceleague.adobe.com/docs/dynamic-media-developer-resources.html?lang=en

- Dynamic Media Desktop App
  https://experienceleague.adobe.com/docs/dynamic-media-classic/using/intro/dynamic-media-classic-desktop-app.html?lang=en

- Showcase
  https://landing.adobe.com/en/na/dynamic-media/ctir-2755/

Dynamic Media and AEM

- Working with Dynamic Media
  - AEMaaCS: https://experienceleague.adobe.com/docs/experience-manager-cloud-service/assets/dynamicmedia/dynamic-media.html?lang=en
  - AEM 6.5: https://experienceleague.adobe.com/docs/experience-manager-65/assets/dynamic/dynamic-media.html
- Dynamic Media Overview: https://experienceleague.adobe.com/docs/experience-manager-learn/assets/dynamic-media/dynamic-media-overview-feature-video-use.html
- Dynamic Media AEM Built-In Components https://experienceleague.adobe.com/docs/experience-manager-cloud-service/assets/dynamicmedia/adding-dynamic-media-assets-to-pages.html?lang=en
- Dynamic Media with AEM Sites Core Components https://experienceleague.adobe.com/docs/experience-manager-learn/assets/dynamic-media/dynamic-media-core-components.html?lang=en
- wcm.io Media Handler with Dynamic Media Support: https://wcm.io/handler/media/
  - Demo project for this talk: https://github.com/adaptto/2021-aem-dynamic-media

Questions?