

# CONTENT DELIVERY NETWORKS WITH SITECORE



# About Me

- Kamruz Jaman
- Freelance Sitecore Consultant
- Sitecore Technology MVP 2013-2015



# ARM

# Not me!



@kamsar

# Find Me

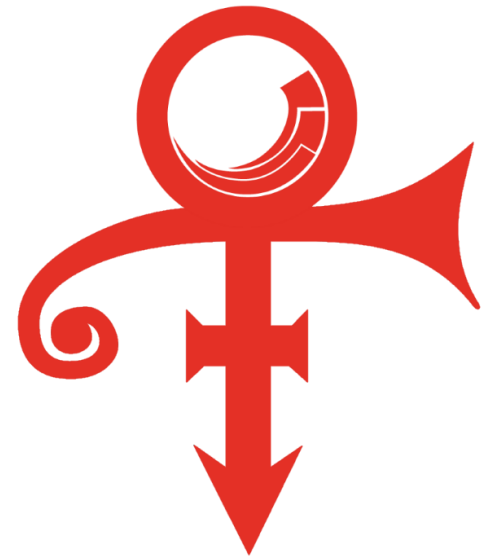
- Blog: [jammykam.wordpress.com](http://jammykam.wordpress.com)

- Twitter

Stackoverflow

@jammykam

Sitecore Slack



# Content Delivery Networks

- Why?
  - Reduce HTTP requests to CD server
    - Offload requests
  - Serve request closer to user
    - Reduce latency
  - Large files
  - Streaming
  - Browser connection limits per domain

# Why?



# Why?



# Why?





# With Sitecore

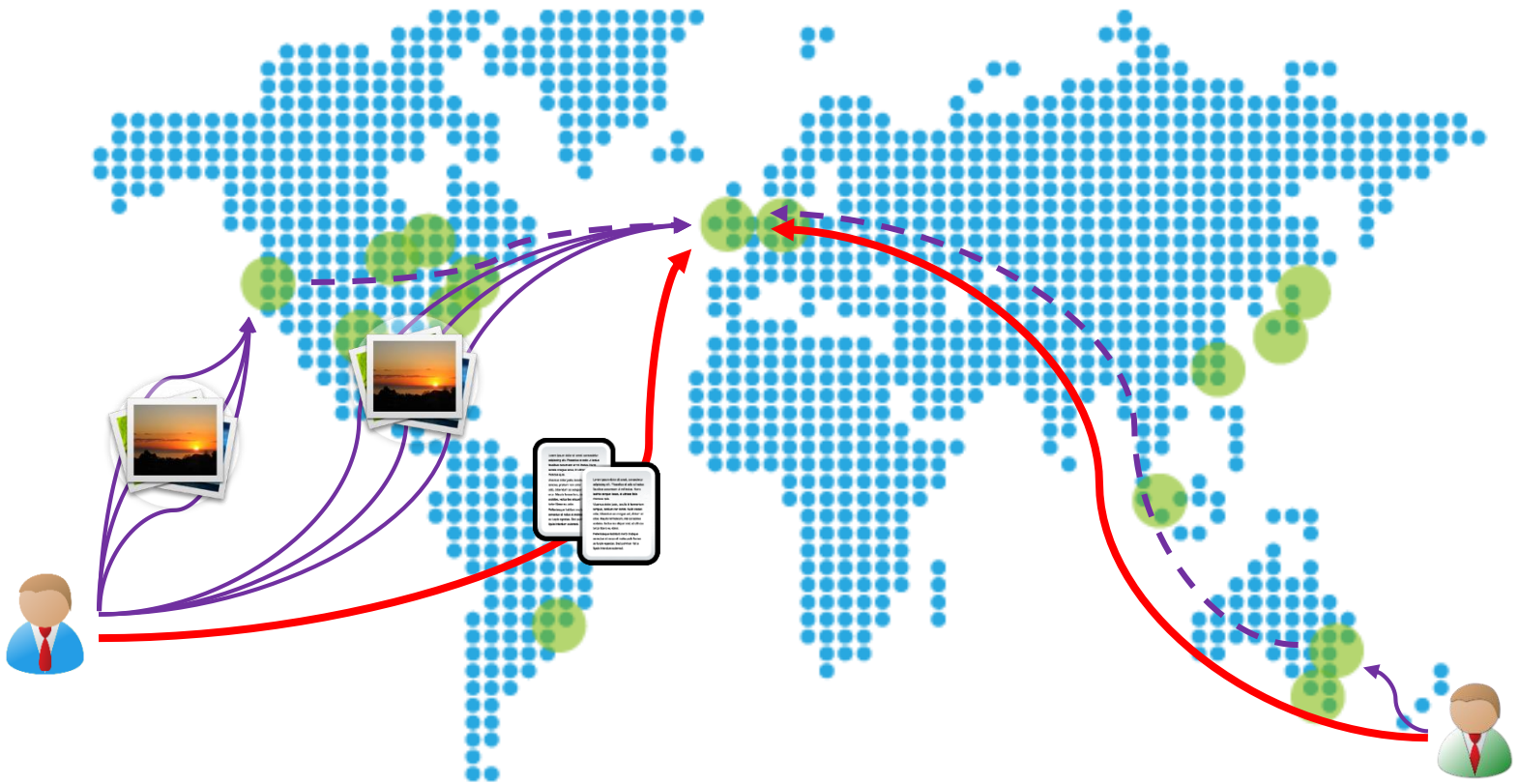
---

- How?
  - Edge Caching
  - CDN Endpoint with Azure WebRoles
  - DAM connector
  - Faux CDN with Sitecore
  - Custom CDN Integration

# Edge Caching

- Requests cached by Provider
- Acts as reverse proxy
- Required assets Pulled from origin
- No code required
- Must change DNS to provider
- Akamai / CloudFlare / Amazon CloudFront

# Edge Caching



# Azure CDN Endpoint

- Requires Azure WebRoles
- Configure CDN endpoint
- Must make config changes
- Enable cache by QueryString
  
- As of June 2015
  - ▣ Custom Origin Support
  - ▣ Any location, any folder, any service

# Code Sample

```
<setting name="Media.MediaLinkPrefix" value="cdn/media" />

<customHandlers>
  <handler patch:before="*[@trigger='~/media/']“
    trigger="cdn/media/" handler="sitecore_media.ashx" />
</customHandlers>

<mediaLibrary>
  <mediaPrefixes>
    <prefix value="cdn/media"/>
    <prefix value="~/media"/>
  </mediaPrefixes>
</mediaLibrary>
```

# DAM Connector

- Third party Digital Asset Management
- Various available
  - ▣ ADAM Software
  - ▣ Digizuite DAM for Sitecore
  - ▣ PicturePark
  - ▣ Brightcove / Ooyala
- Integration directly in Media Library
- Fully featured
- Workflow
- Image / Video Manipulation

# Faux CDN

- Domain sharding
- Increase available connection pool
- Can be used with Edge Caching
  
- Fake CDN
  - ▣ None of the cache benefits
- Increase in simultaneous server load

# Browser Connection Limits

Browser	Connections Per Hostname
IE 9	6
IE 10	8
IE 11	13
Safari 7.0.1	6
Chrome 34	6
Firefox 27	6
Android 2.3	8
Android 4	6
Chrome Mobile 18	6



# Code Sample

```
<setting name="Media.MediaLinkServerUrl" value="//media.domain.com" />
```

```
<site name="mysite" ... hostName="domain.com|media.domain.com" />
```

```
<!-- or can use a wilcard to handle all sub-domains: *.domain.com -->
```

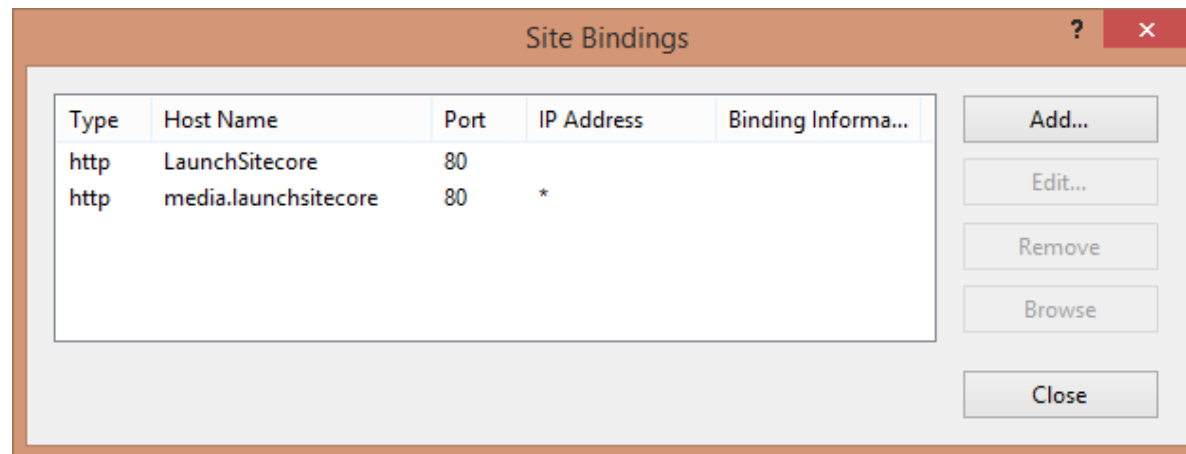
```
<linkManager>
```

```
  <providers>
```

```
    <add name="sitecore" alwaysIncludeServerUrl="true" ... />
```

```
  </providers>
```

```
</linkManager>
```



# Custom Integration

- Requirements:
  - Using Azure Blob Storage
    - CDN Endpoint
  - Specific parts of Media Library
  - Media managed through Sitecore interface
  - Large files of 1-2GB approx
  - Media NOT stored in database

# Code Parts

- Azure API – Windows Azure Storage nuget package
- Hook into existing Sitecore Pipelines
  - uiUpload
  - attachFile
- Custom Pipeline for integration
  - Allow multiple processors for distinct operations
- Non-UI blocking
  - Sitecore Job to upload Files
- Intercept media requests
- Override Link Manager
- Content/Experience Editor integration

DEMO





# TODO

---

- Versioned Media
- Workflow

# Caching Strategy

- ❑ Be careful about Content Expiration
  - ❑ CDN may crash too aggressively
  - ❑ Azure CDN defaults to 7 days
- ❑ Enable caching by URL parameters
- ❑ Override Link Manager
  - ❑ Append Updated Date or Revision Guid



QUESTIONS



# Links

- Domain Sharding Media Requests in Sitecore  
<https://goo.gl/rt5WF3>
- Storing Files in Azure Cloud Storage through the Sitecore Media Library  
<https://goo.gl/4mDGwS>  
<https://goo.gl/zE2P5R>
- Azure WebRoles with CDN Endpoint  
<http://goo.gl/QXLAcR>