

California Digital Library

- Co-Library with University of California campus libraries at Office of the President

CDL Access & Publishing

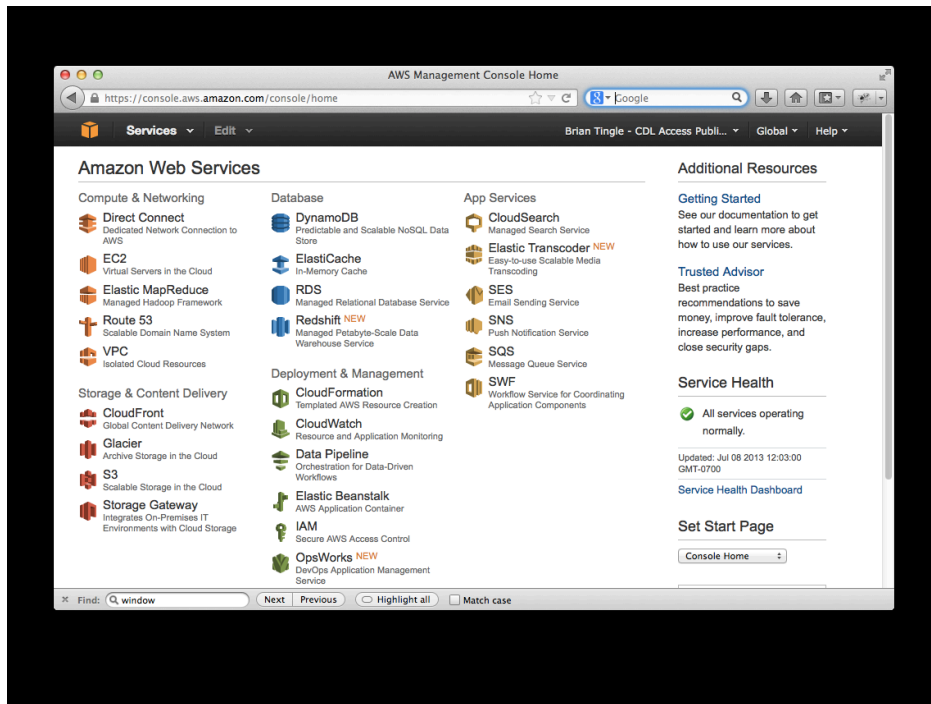
- Digital Special Collections
 - Online Archive of California (EAD)
 - Calisphere (METS)
 - UC Libraries Digital Collection
- Publishing
 - eScholarship repository and journal publishing
 - Open Access Mandate
 - Open Journal Systems partnership

CAVPP

- California Audio/Video Preservation Project
- California State Library, National Endowment for the Humanities, Institute of Museum and Library Services

Amazon Web Services

- "the cloud"
- This project uses S3, and two CloudFront services
- Elastic transcoding service looks interesting



Simple Storage Service

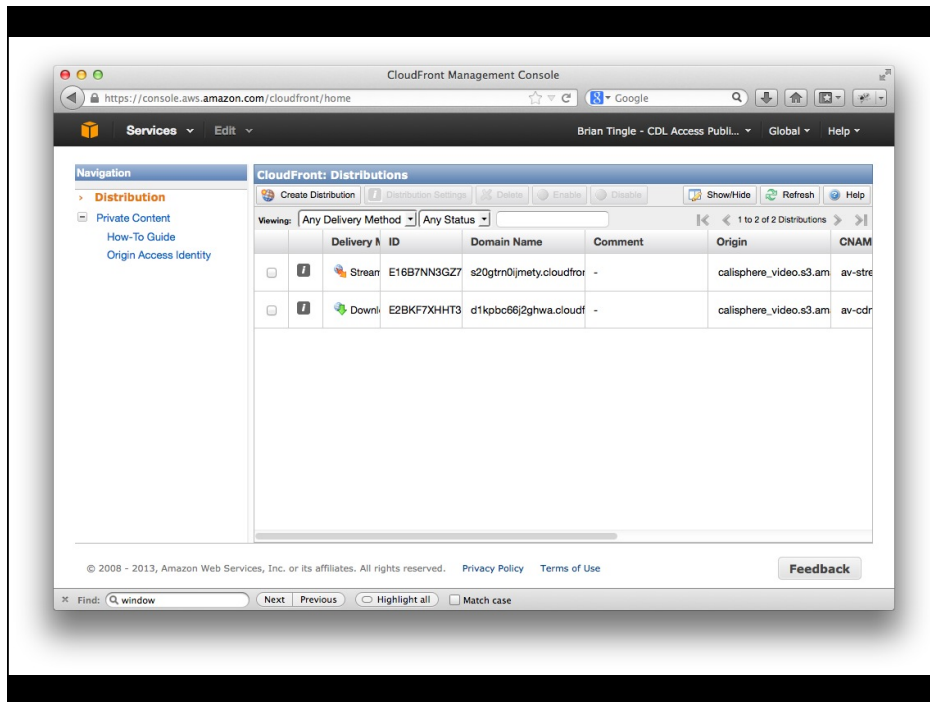
- "buckets" of data with filename like "keys"

Content Distribution Networks

- Also known as Content Delivery Network
- Tries to cache data near the end users in a globally distributed network of edge servers

CloudFront

- CloudFront CDN ([http\[s\]](http[s]))
- CloudFront Streaming (Adobe Flash Media Server)



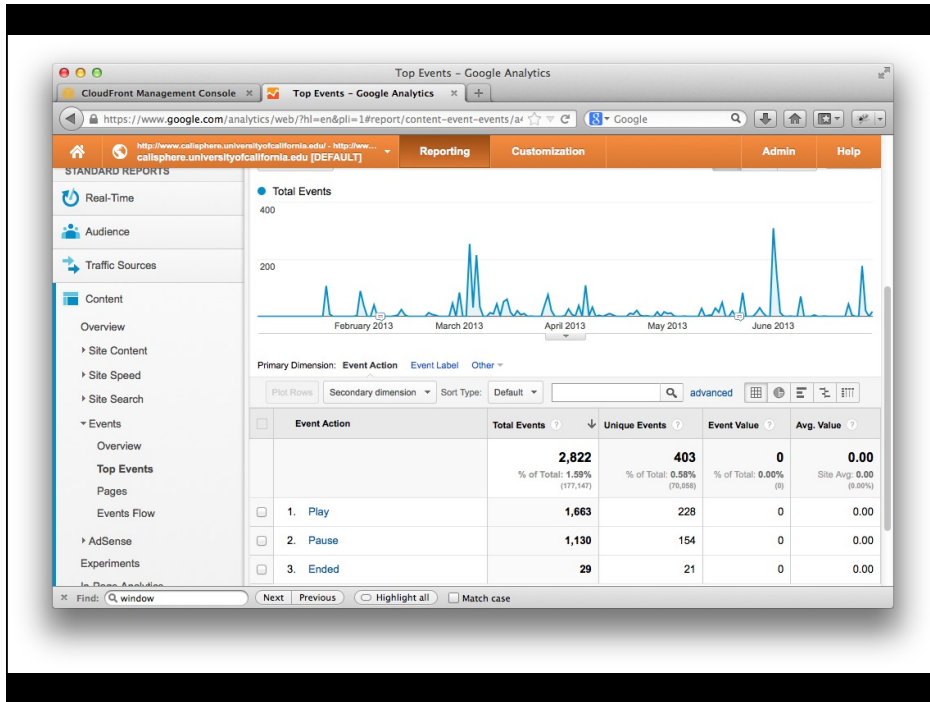
MediaElement.js

- Set of custom Flash and Silverlight plugins that mimic HTML5 MediaElement API
- Means shiny new `<video>` and `<audio>` work; but don't have to worry about supplying different files for different browsers
- Can stream and use `<video>` (`<audio>` streaming not working as of Jan 13)

```
<script xmlns=""
  src="http://cdn.calisphere.org/mediaelementjs/build/mediaelement-and-player.min.js"
  type="text/javascript"></script>
<script xmlns=""
  src="http://cdn.calisphere.org/mediaelementjs/build/mep-feature-googleanalytics.js"
  type="text/javascript"></script>
<script xmlns=""
  src="http://cdn.calisphere.org/mediaelementjs/build/flash_detect_min.js"
  type="text/javascript"></script>

<video controls="controls" width="640" height="480" preload="metadata"
  src="http://av-cdn.calisphere.org/capsca_00001_r1_access.HD.mp4"
  type="video/mp4"
  data-rtmp="rtmp://av-stream.calisphere.org/cfx/st/mp4:capsca_00001_r1_access.HD.mp4">
</video>
```

```
var opts = {
  // http://stackoverflow.com/questions/9113633/replacing-media-source-http-with
  success: function(media, node, player) {
    if (media.pluginType == 'flash' && node.getAttribute('data-rtmp')) {
      media.setSrc(node.getAttribute('data-rtmp'));
      media.load();
      media.play();
    }
  },
  features: ['playpause', 'progress', 'current', 'duration',
    'tracks', 'volume', 'fullscreen', 'googleanalytics'],
  pauseOtherPlayers: true,
};
if(FlashDetect.installed){
  opts.mode='shim';
}
$($('video').mediaelementplayer(opts));
```



Amazon Charges

	Jan	Feb	Mar	Apr	May	Jun
\$27.41						
S3	0.69	1.47	2.11	2.56	2.56	2.57
CF	10.35	0.48	2.36	0.58	0.29	1.39

Collection Extent

- S3: 27GB at 0.095 per GB per Month = 2.57
- CF: GB transfer 0.12 to 0.201

Biggest Challenge

- Metadata/ object prep
- OAC/Calisphere requires METS
- METS "by hand" requires a certain qualities
- METS were \$10 each from vendor; project decided this was not affordable; wants to spend all \$\$ on digitization at preservation quality