

# Product View of the Bonsai Framework AEM CMS

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# Introduction

To be an enterprise offering you should cover the below topics.

## Users of the System

[illegible]

|                        |                   |                                                                          |   |                                                                                                                                                                                                       |       |    |   |   |                                                                                                                                                                                                           |      |                                                                                                                                                                                                           |
|------------------------|-------------------|--------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AEM Developer          | Enterprise        | Development Standards and Stewardship                                    | ✓ | ✓⚠<br>Devs should only change content, but we know this will be abused. So this is viable only with publishing workflow. The approvals also should meet SOX (ie be under different stream management) | ✓     | ✓  | ✓ | ✓ | ✓⚠<br>Devs should only change content, but we know this will be abused. So this is viable only if using publishing workflow. The approvals also should meet SOX (ie be under different stream management) | ✓    | ⚠<br>Architecture guideline to keep as much load off of AEM Publisher as possible.<br><br>Where ongoing calls are required with integration, recommend using a MicroService with browser front-end calls. |
| Author Head            | Digital Marketing | The largest region. Represents interests and sets standards for authors. | ⚠ | ⚠                                                                                                                                                                                                     | US    | US | ✗ | ✗ | ✗                                                                                                                                                                                                         | US   | ✗                                                                                                                                                                                                         |
| Regional Administrator | Region            | User Management, Compliance                                              | ✗ | ✗                                                                                                                                                                                                     | ✗     |    |   | ✗ | ✗                                                                                                                                                                                                         | ✗    | ✗                                                                                                                                                                                                         |
| Regional AEM Developer | Region            |                                                                          | ✓ | ✓                                                                                                                                                                                                     | FEE ✓ | ✓  | ✓ | ⚠ | ✓                                                                                                                                                                                                         |      |                                                                                                                                                                                                           |
| Author                 | Region            | Day to day update of the website using                                   | ✓ | ✓                                                                                                                                                                                                     | US    | US | ✗ | ✗ | ✗                                                                                                                                                                                                         | US   | ✗                                                                                                                                                                                                         |
| Contributor            | Region            | Access to very limited frequently updated content.                       |   |                                                                                                                                                                                                       | US    | US | ✗ | ✗ | ✗                                                                                                                                                                                                         | USER |                                                                                                                                                                                                           |

|                                                                                                                            |                         |                                                                                                                     |  |  |  |    |    |   |   |  |      |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------|--|--|--|----|----|---|---|--|------|
| Subscriber                                                                                                                 | Business Line to Region | Mainly used for being part of the approval workflow and very very limited area of content to update for the Region. |  |  |  | US | US | X | X |  | USER |
| Have discussed with Adobe to create a ticket based approach for self-hosted. In managed services it's based on concurrent. |                         |                                                                                                                     |  |  |  |    |    |   |   |  |      |
|                                                                                                                            |                         |                                                                                                                     |  |  |  |    |    |   |   |  |      |

Appendix link to Administrations, Super Administrator and Who's Who.

Overview for Authors

- ...
- Roles
  - Local Administrator
  - Workflow

Overview for Author Developers

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| Tier                        | User                                                                        | Endorsed                                                                                     | Comment                                                                                                                                           |
|-----------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Rendered - JavaScript, HTML | Author Developers, Authors                                                  | Client-Side Presentation Logic                                                               |                                                                                                                                                   |
| Adobe Components            | Author Developers                                                           |                                                                                              |                                                                                                                                                   |
| User Components             |                                                                             |                                                                                              |                                                                                                                                                   |
| HTL                         | Author Developers, Authors*                                                 | Server-Side Presentation Logic                                                               |                                                                                                                                                   |
| JSP                         | Author Developers                                                           | Not recommended and with exception.                                                          | This is not necessarily bad, but Adobe is recommending to move to HTL to get the benefits of a higher level more controlled library of functions. |
| Java                        | Not recommended for CMS Server Side ongoing Business Logic and integration. | Not endorsed except of simple key value feeds into the system protected by a facade service. |                                                                                                                                                   |

Organization Standards for the Enterprise

... change into a table with why and if will be something open in future,

## Year 1

- Establish Operational Guidelines,
  - DAM will be Web Dam, only web optimized only content
- Establish Presentation Logic Guidelines,
  - Passthrough Form Data for Client-Side validation
  - Direct connect from client browser to external application of Microsite over SSL
  - No Business Logic on AEM, but through AJAX calls to external application (sub-domains can be provided to allow for seamless integration)
  - Integration through AJAX and Front-End Micro-services
- Internally Classified Data we additional note of majority Public and internal data (before publishing) has intention of being published. Any time sensitive data must be applied just-in-time.
- Operational Schedules,
  - Disaster Recovery Exercise
  - Upgrade Management
    - Timing
    - Who Ok's and Approves
    - Scheduling
  - Resync of Environments
- WEB DAM low fidelity assets for Authoring (not a General Dam),
  - Max Revisions #
  - Media Content Max #
- Offline Backup of Content #
- Offline Backup of Code #
- Manual and Basic Script Based Deployment
- CDN Implementation
- Migration via CDN Cloudlet Technology

## Year 2

- Search Engine Refinement
- Forms Architecture matching Security Classification
- Deployment with Marketing Technology Stack
- Fragments (Public Data) integrated with CDN Segment
- Reference Implementation of Front-End Components and Microservices by AJAX
- CMS Automation Pipeline for Operations and Administration Driven Deployment
- CICD for basic Template and Content
- Pilot Enterprise DAM
- Optimize Code
- Optimize CDN
- Review Healthchecks
- Tune Monitoring and Alerts

## Year 3

- Wired Components
- Fragment Integration with other Web Applications
- MicroServices
- Campaign Delivery
- Incorporate dynamic elements in a static page by using client-side JavaScript, Edge Side Includes (ESI), or web server level Server Side Includes (SSI).

## Services Provided by the Digital Operations

Ensure costs here if that makes sense,

## Recurring Tuning and Maintenance

- Bulk Scan and Cleanup of Stale Content
- Redirects (limited # per Month)
- Software and System Currency

- Interval Uploads to Information Security for Server-Side Code (note here still responsibility of Author Development Department)
- Interval Tuning of Queries and Backend Code
- System Health Check
- Reporting on Traffic Utilization
- Governance to keep Product Pure
- Unofficial - Provide a Zero Footprint Development Environment
- Syncing of Common Components btw Instances
- ...

## Consulting

### General

- Akamai Flushing, Redirects
- Backup and Restore between Environments
- Compliance Arms Length Day-2-Day Operations (audits, security hardening, ect...)
- Web Server Configurations (redirects, vanity urls ect...)

Backend Integration (provided we follow the rules of keeping CMS to CMS) \*

- AEM Job Development
- Micro Services Development

Backend Advanced Consulting \$,

- Advanced Queries
- Bulk Queries and Exports
- Java Code Review and Tuning
- Front-End Augmentation around the Product (ie working with Security Scanning team)

### Enterprise Governance Services

- Facilitation of component sharing

### Free Best Effort

- The team happens to be good and share...

## Financials

Base package for a new region.

Reduction of costs as new regions enter.

Fund language support requirements.

Model of seat licence charges and bandwidth caching charges.

## Expected of Author Teams

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## Expected of Author Development Teams

- Files kept in enterprise source control
- No Outbound Server-Side Calls
- Server-Side Presentation Logic is OK
- Queries limited to # of results and # of depth
- No Confidential Information
- AEM Author Packages Can Only Contain,
  - HTL, JavaScript, CSS, HTML, (other static component)
  - JSP (only with approval and code review from AEM Operations Team)
- Responsible for Upload and Download of AEM Author Packages
- Ensure Security and Code practices are followed,
  - Code Review
  - Security Scans (server-side and presentation)

- Release Management
- Source Control
- Notification to AEM Operations Team with Release Notes
- Participation and Commitment to Software Currency

## Roadmap in Next 3 Years

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## Checklist

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## Appendix

### Service Level Agreement

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### Maintenance Hamster Values

- Cloud
- Upgrades + with Notificaiton Bulletin for Developers
- DR Orchestration
- Pruning
- Standardizations

### Product Selection

Top Reasons,

- [Leader in Gartner Quadrant in 2016](#), now [6 years in a row](#).
- Adobe also leader in **other Marketing Tech Stacks**,
  - Adobe Cloud Analytics ([2016](#) leader)
  - Adobe Cloud Target
- Growing integration among its designer products (Adobe Creative Cloud) and

Additional Technical Reasons,

- Built on established Open Source Products
- [Zero Footprint](#)
- Linux Unix based

## Enterprise Functions

Experience Fragments - include content and layout for channels that can be managed from within or independent of Experience Manager. Control brand content on owned web properties, or affiliated properties, like Pinterest and Facebook.

Content Fragments - authoring modular and abstracted content delivery not bound to channel. Sites automatically creates versions content to synchronize variations across pages, channels and devices.

Read up on difference between fragments (Experience versus Content)