



# Enhancing Adobe Experience Manager (CQ5) with Varnish



Authorized  
Advanced  
Integration  
Partner

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## About netcentric

Founded 2012 focused on

### **Web Experience Projects**

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80 Employees in

**München, Zürich, London und Barcelona**

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Focus on

**Adobe CQ5**

- 
- 1 Adobe Experience Manager (AEM)**
  - 2 Caching with AEM**
  - 3 Varnish with AEM**
  - 4 Q & A**
-

A large, dark blue, stylized number '1' is positioned on the left side of the slide. It is set against a light blue background that features a white diagonal stripe running from the top left towards the bottom right. The number '1' is thick and has a modern, sans-serif appearance.

# ADOBE EXPERIENCE MANAGER

# What is Adobe Experience Manager (AEM)?

An easy-to-use  
unified **web  
content  
management**  
solution

Create,  
and **deliver**  
personalized online  
experiences

Formerly known  
as **"CQ5"**

Easy to use, great look and feel

The screenshot displays the Geometrixx website interface. The header features the Geometrixx logo with the tagline "CREATING SHAPES FOR CENTURIES" and a navigation menu with links for PRODUCTS, SERVICES, COMPANY, EVENTS, SUPPORT, and COMMUNITY. The main content area is titled "CERTIFICATION AND TRAINING" and includes a sub-header "English » Services »". The text below reads: "Whether you're a recent graduate constructing a right angle or a seasoned professional navigating through a curved Hilbert-space, you know that having the right skills is the key to ensuring successful results. This is". A sidebar on the left contains three image thumbnails labeled "train\_statio...", "train\_statio...", and "train\_platfo...". A CQ5 sidebar on the right lists various content types: General, Carousel, Chart, Download, Flash, Image, Collaboration, Columns, Form, and Other. A chat window in the bottom right corner shows a message from "admin (today)" stating: "Great copy - can we adapt that to the new messaging".

Geometrixx  
CREATING SHAPES FOR CENTURIES

PRODUCTS SERVICES COMPANY EVENTS SUPPORT COMMUNITY

English » Services »

## CERTIFICATION AND TRAINING

Whether you're a recent graduate constructing a right angle or a seasoned professional navigating through a curved Hilbert-space, you know that having the right skills is the key to ensuring successful results. This is

### Courses

Our trainers are fully licensed teachers who also happen to be on the core team of shapes. They are always two trainers for each ten-person class, ensuring direct, one-to-one interaction through every training course are eligible for the trainer's course, which give them the tools and knowledge to enable teaching their own colleagues and saving a dime in the process.

Start of 3 Columns | Edit | Delete | New... | Paste

MOST POPULAR TRAINING SERVICES

That's why our training courses are offered in the following locations

CQ5

General

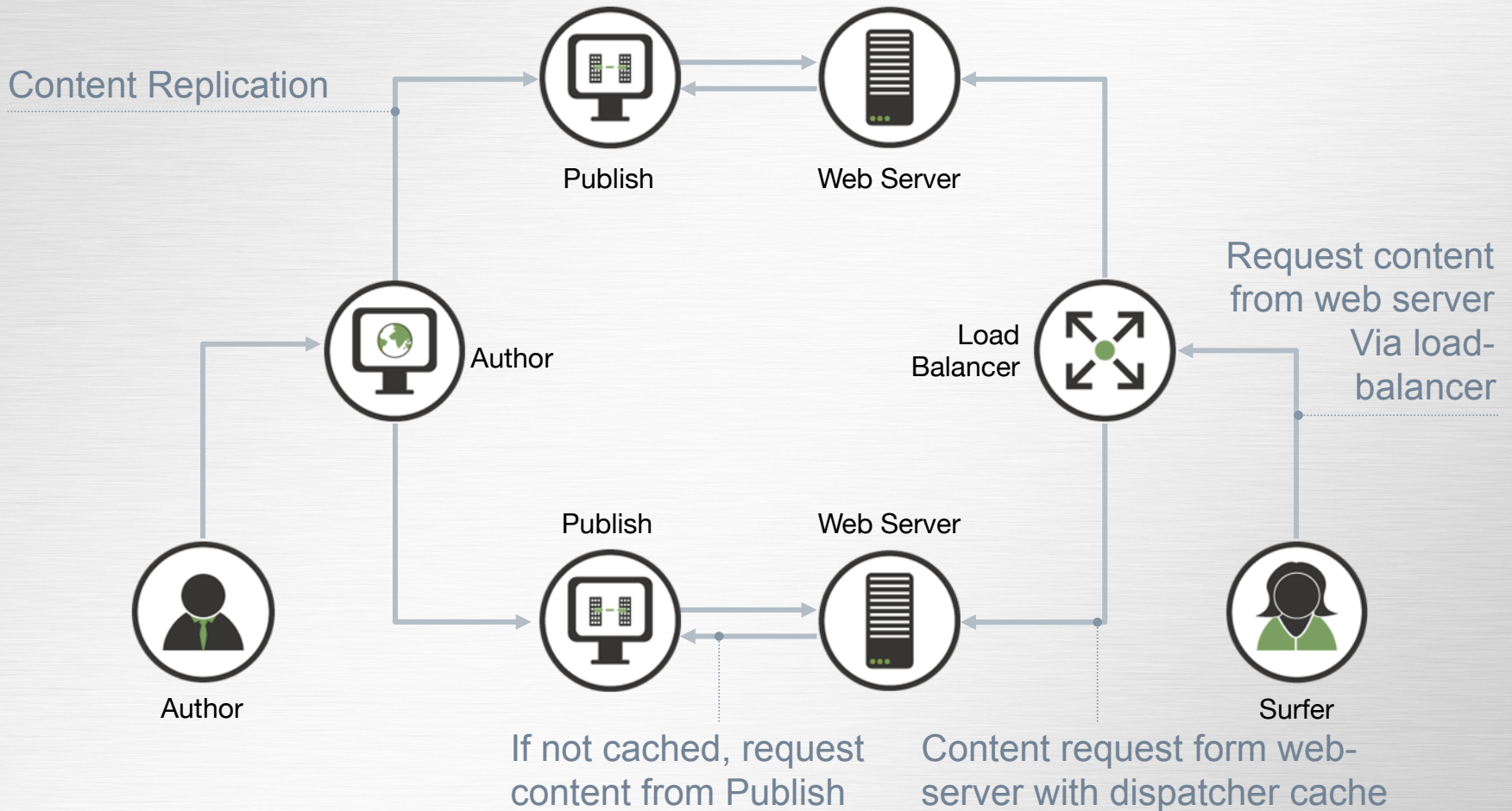
- Carousel
- Chart
- Download
- Flash
- Image
- Collaboration
- Columns
- Form
- Other

Great copy - can we adapt that to the new messaging

admin (today)



## AEM technical setup: The big picture



# AEM technical setup: How cache flushing works

Page activation

Cache Flush request

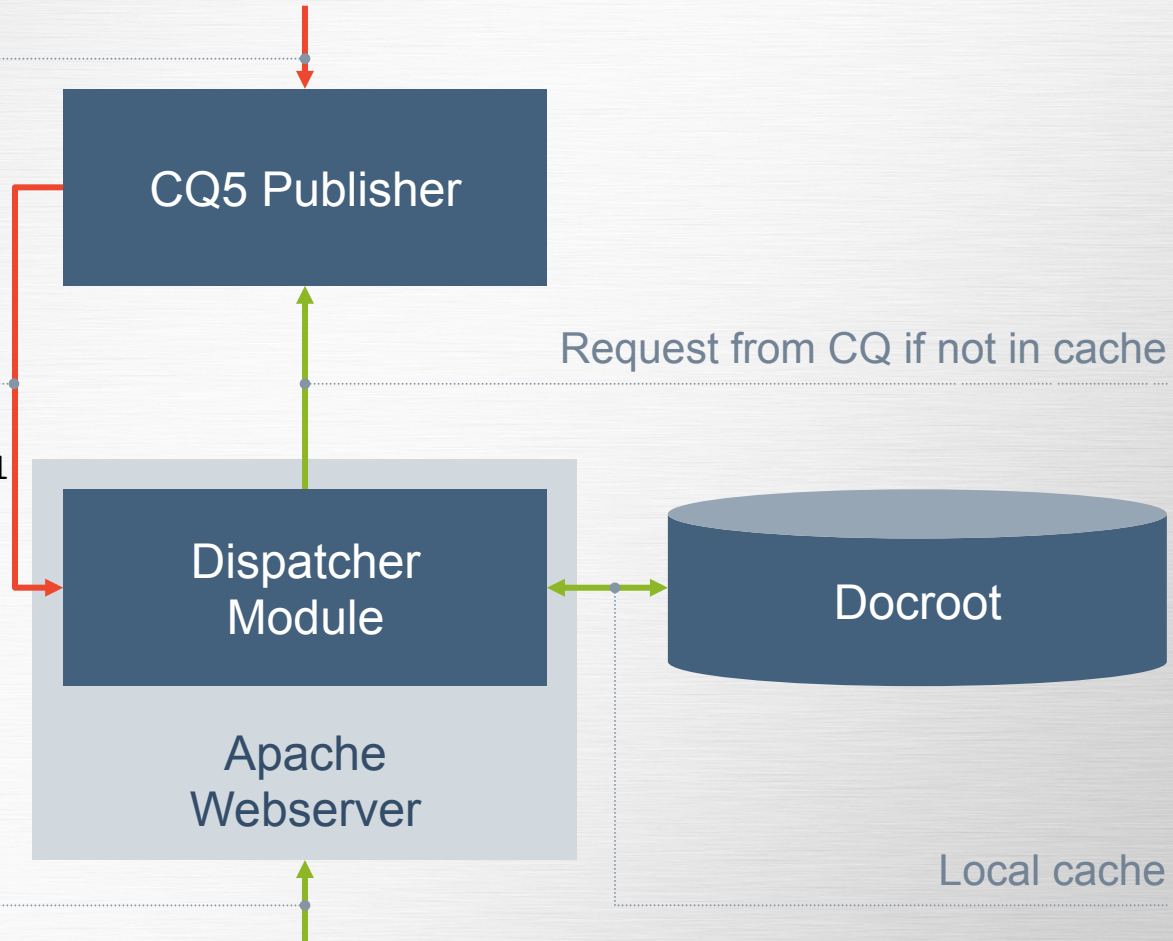
GET/dispatcher/  
invalidate.cache HTTP/1.1

CQ-Path:  
/content/mysite/mypage

Web request

Request from CQ if not in cache

Local cache







## CACHING WITH AEM



## AEM Caching module: Dispatcher

### A **Web server module**

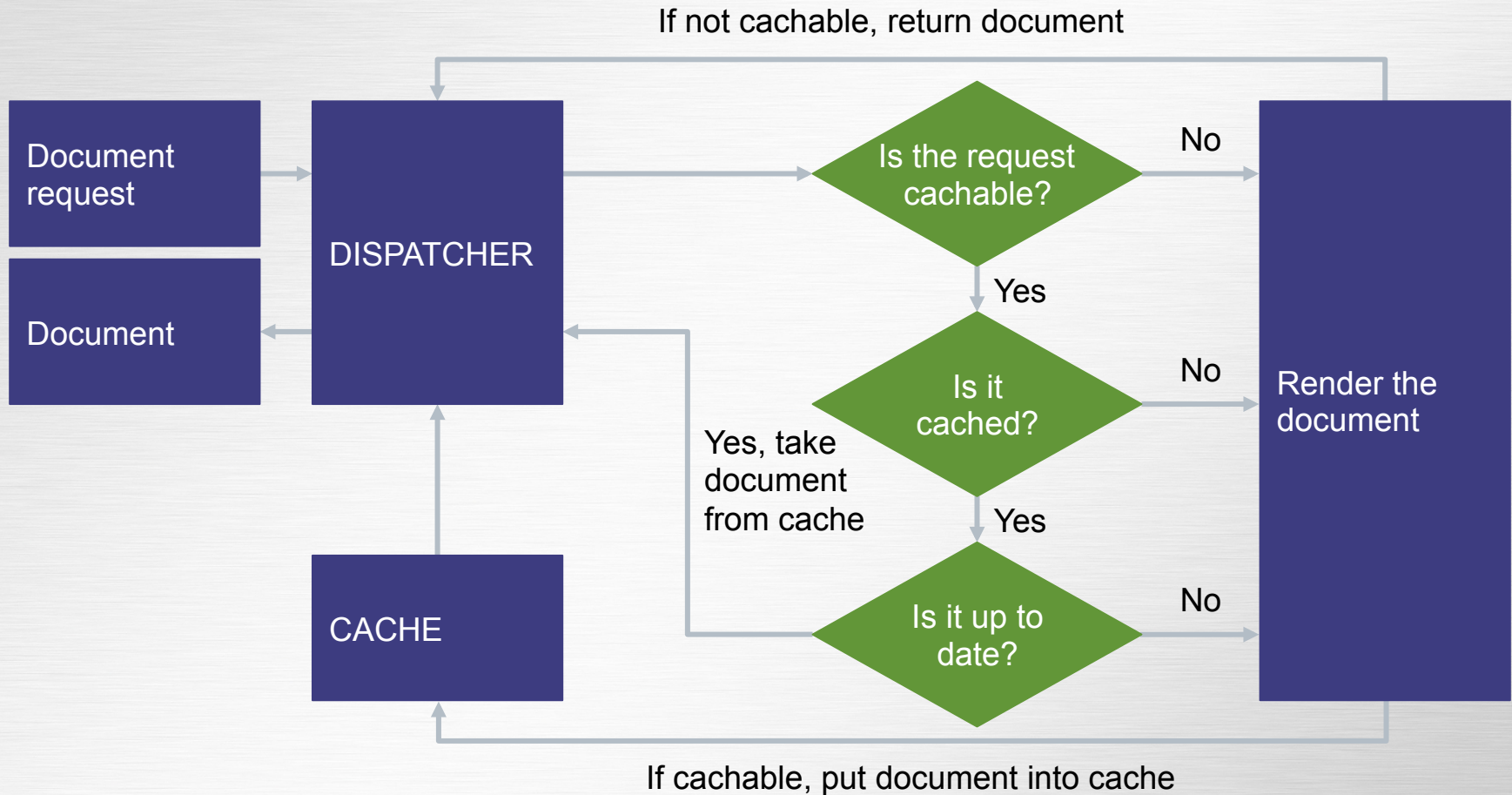
for Apache httpd, Microsoft IIS and others

Stores cachable objects in the docroot

Basic **flushing & invalidation** support

Support for multiple virtual hosts

## How the Dispatcher returns documents



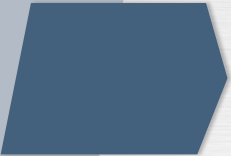
Source: <https://dev.day.com/docs/en/cq/current/deploying/dispatcher.html>

# Why change the Dispatcher?



Due to its nature **it can only cache the body** of a response

- No redirects



As the request handling is done by the underlying web server, **concurrency** is a big issue

- Multiple requests to the same complex pages



Rules for high-traffic or complex pages cannot easily be configured

- Workarounds using RewriteRules...



# Why Varnish?



Caching and flushing can be defined fine grained

- Logic of content references can be built into flush rules



Is fast and reliable

- Used in Intranet where CDN is not an option for web acceleration



Caching of non-html responses is possible

- Caching of redirects



Because Varnish is awesome 😊

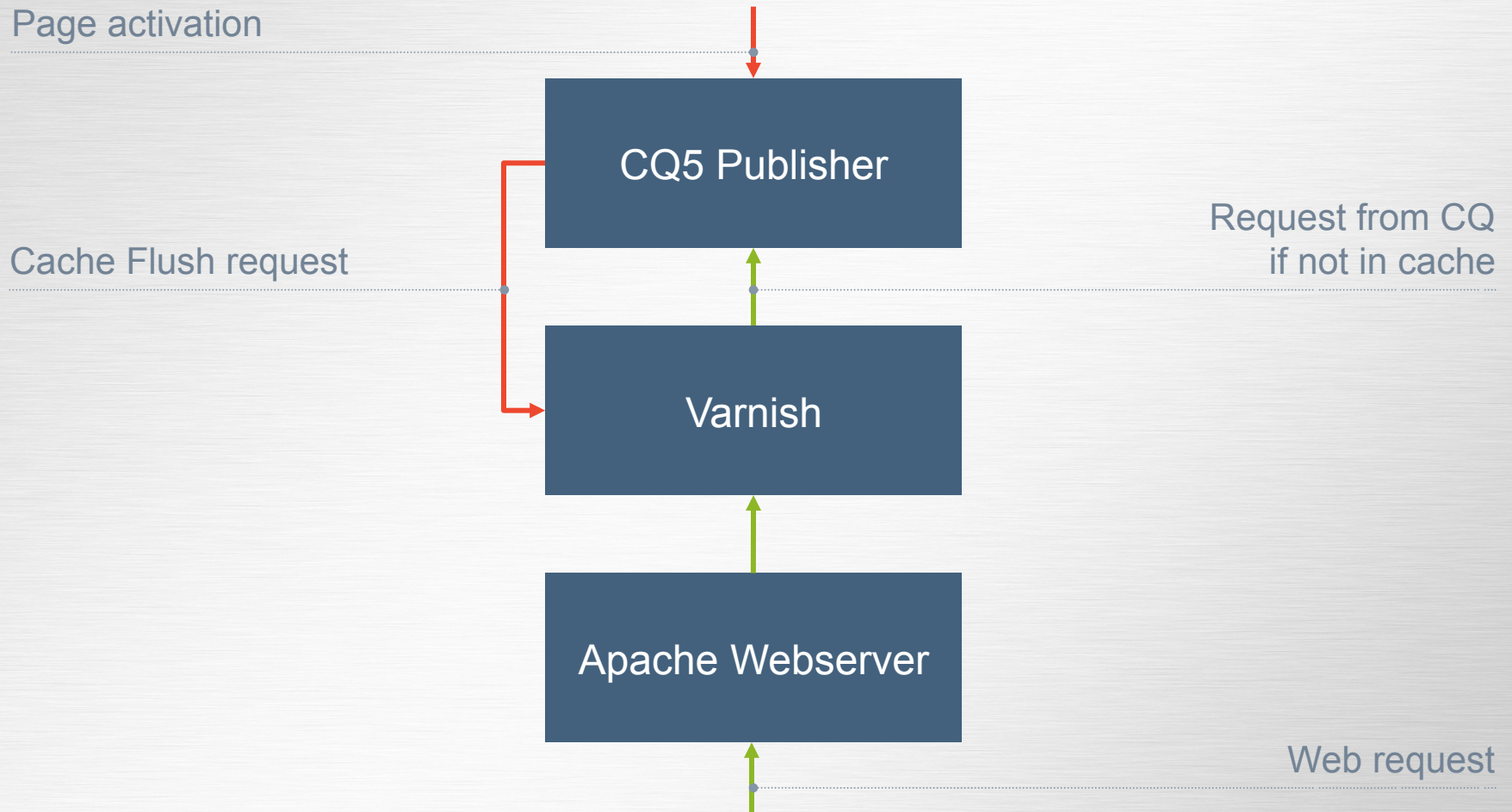




# VARNISH WITH AEM



## CQ5 Technical setup: publishing details using varnish



## What does it take for a basic integration?

Literally **one condition with a ban statement** ...

```
if (req.url == "/dispatcher/invalidate.cache"){  
    if(req.http.CQ-Handle){  
        ban("obj.http.x-url ~ ^"+req.http.CQ-Handle+"[/]*$");  
        std.log("Banning: "+req.http.CQ-Handle+"[/]*$");  
    }  
}
```

## What else can we achieve?

Improve flushing/  
invalidation through  
specific rules

Change flush  
behaviour dynamically

Control cache  
through the admin  
interface







## Contact



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