netcentric

ENTERPRISE WEB EXCELLENCE

# Enhancing Adobe Experience Manager (CQ5) with Varnish

Dan Beldiman, Senior System Engineer

28. November 2013

Authorized
Advanced
Integration
Partner

## About netcentric

Founded 2012 focused on

**Web Experience Projects**

80 Employees in

**München, Zürich, London und Barcelona**

Focus on

**Adobe CQ5**

AGENDA

1 Adobe Experience Manager (AEM)

2 Caching with AEM

3 Varnish with AEM

4 Q & A

# 1

# ADOBE EXPERIENCE MANAGER

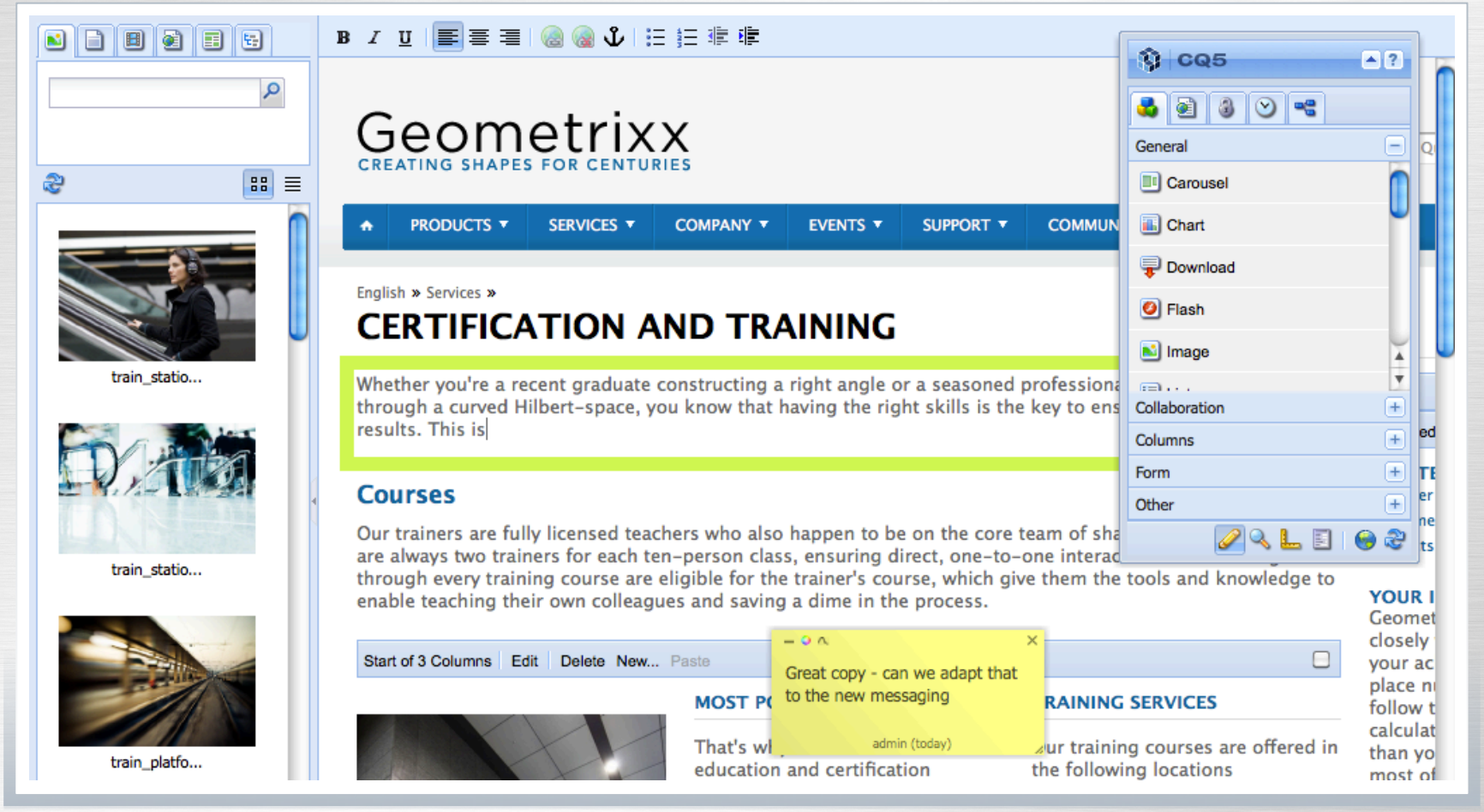
# What is Adobe Experience Manager (AEM)?

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

Create, and **deliver** personalized online experiences

Formerly known as **"CQ5"**

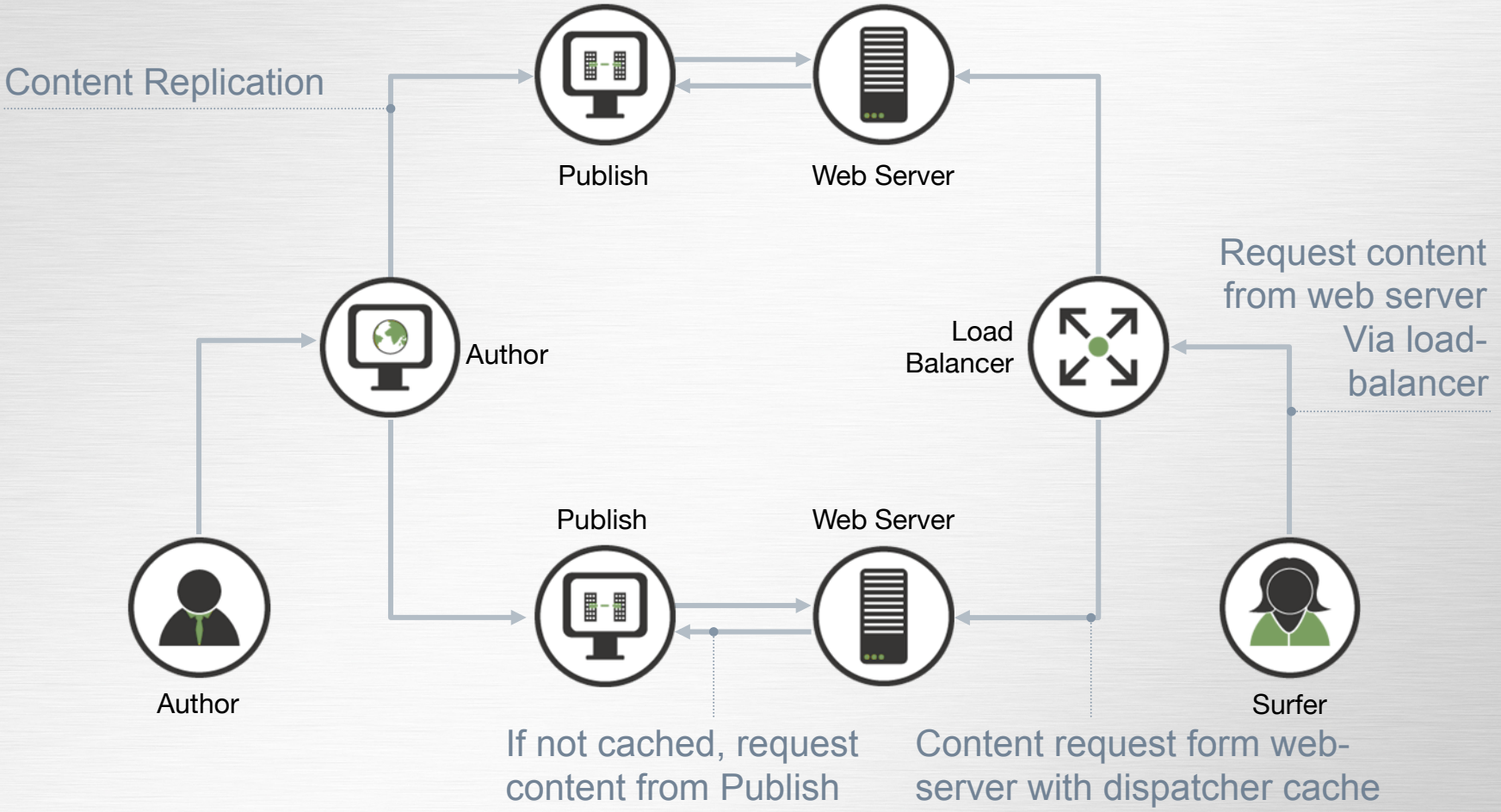
# Easy to use, great look and feel



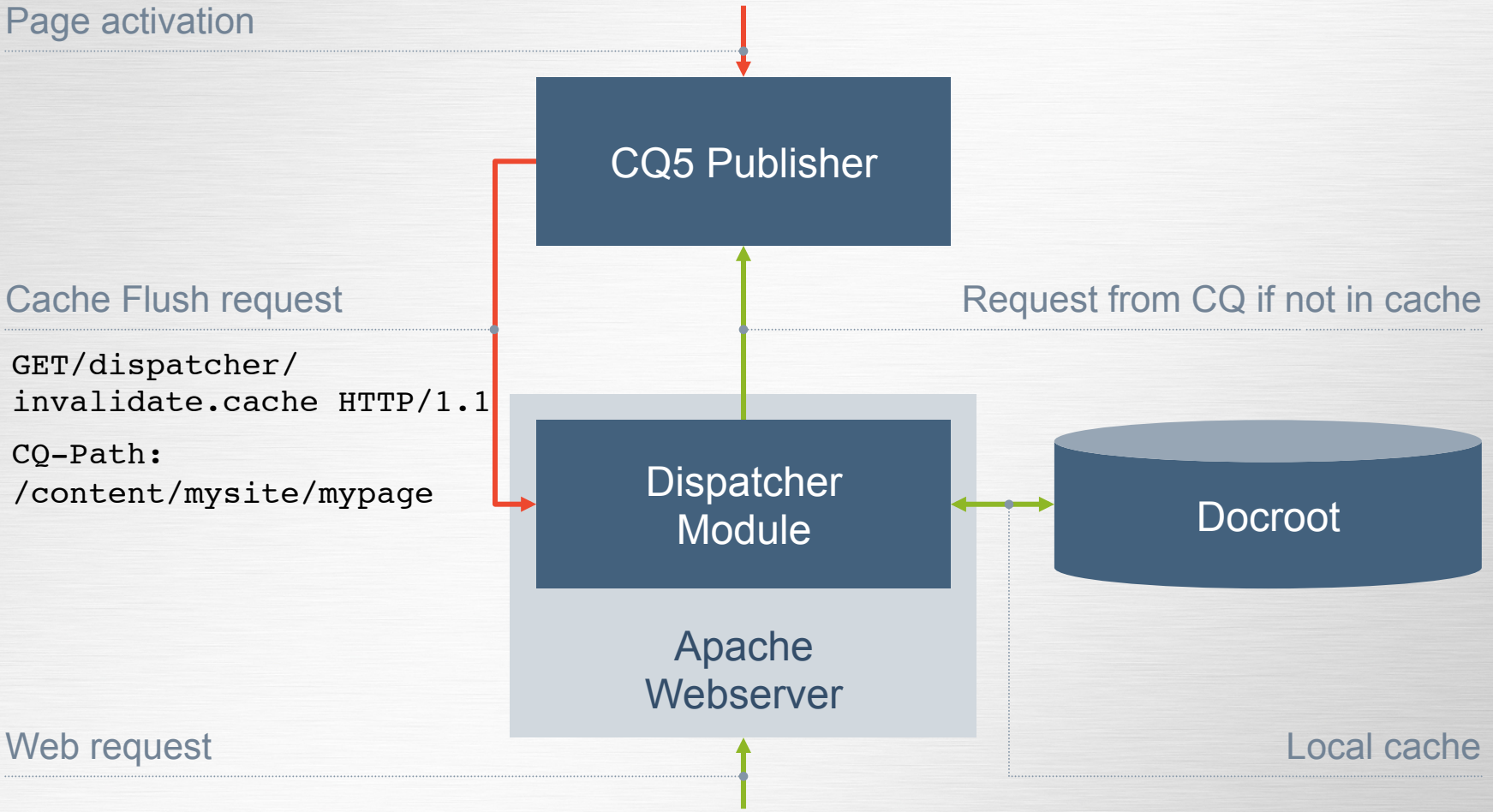



netcentric

# AEM technical setup:
# The big picture



# AEM technical setup: How cache flushing works






netcentric

2

# CACHING WITH AEM

# AEM Caching module: Dispatcher

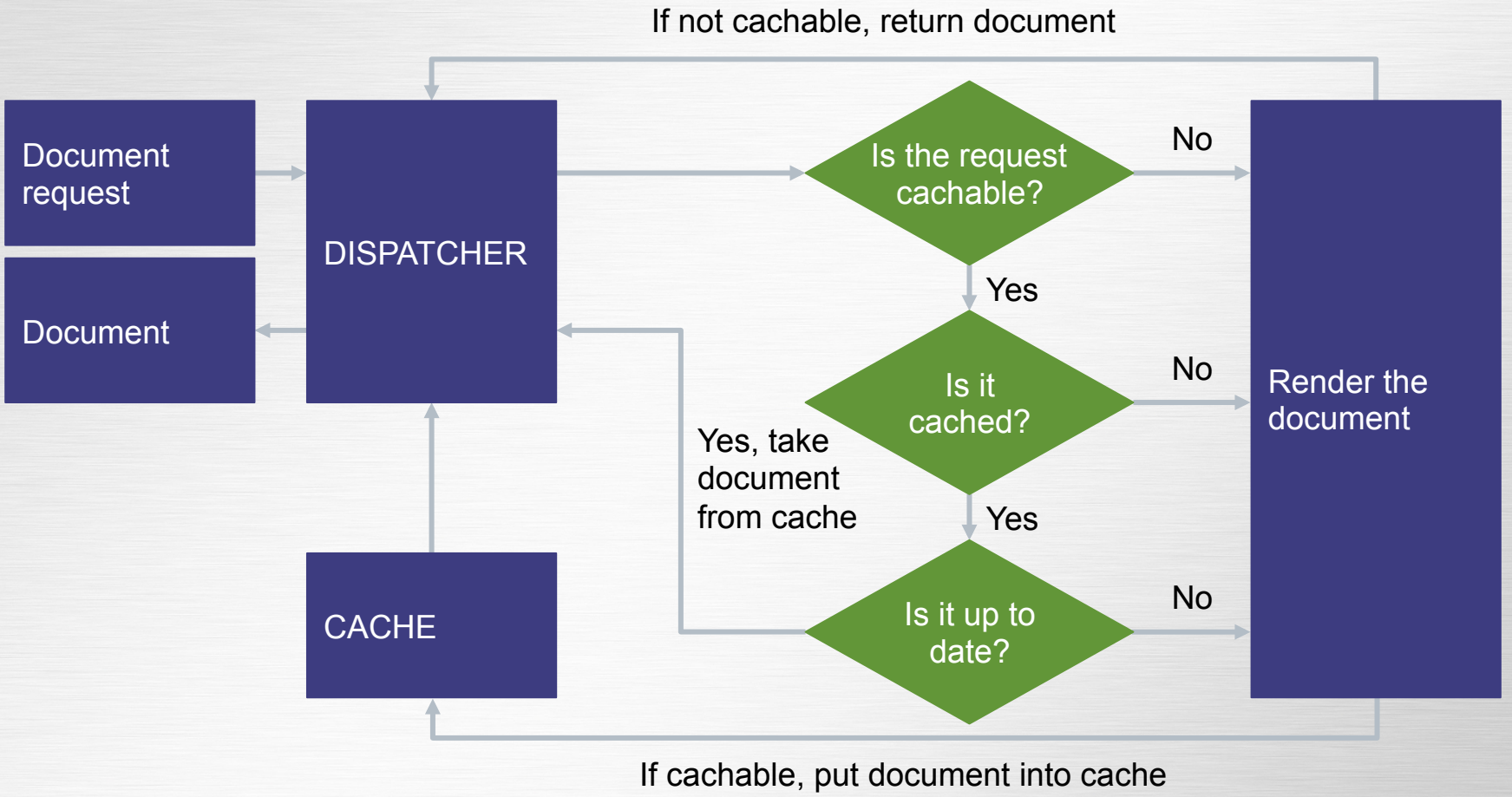
A **Web server module**
for Apache httpd, Microsoft IIS and others

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 it's 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

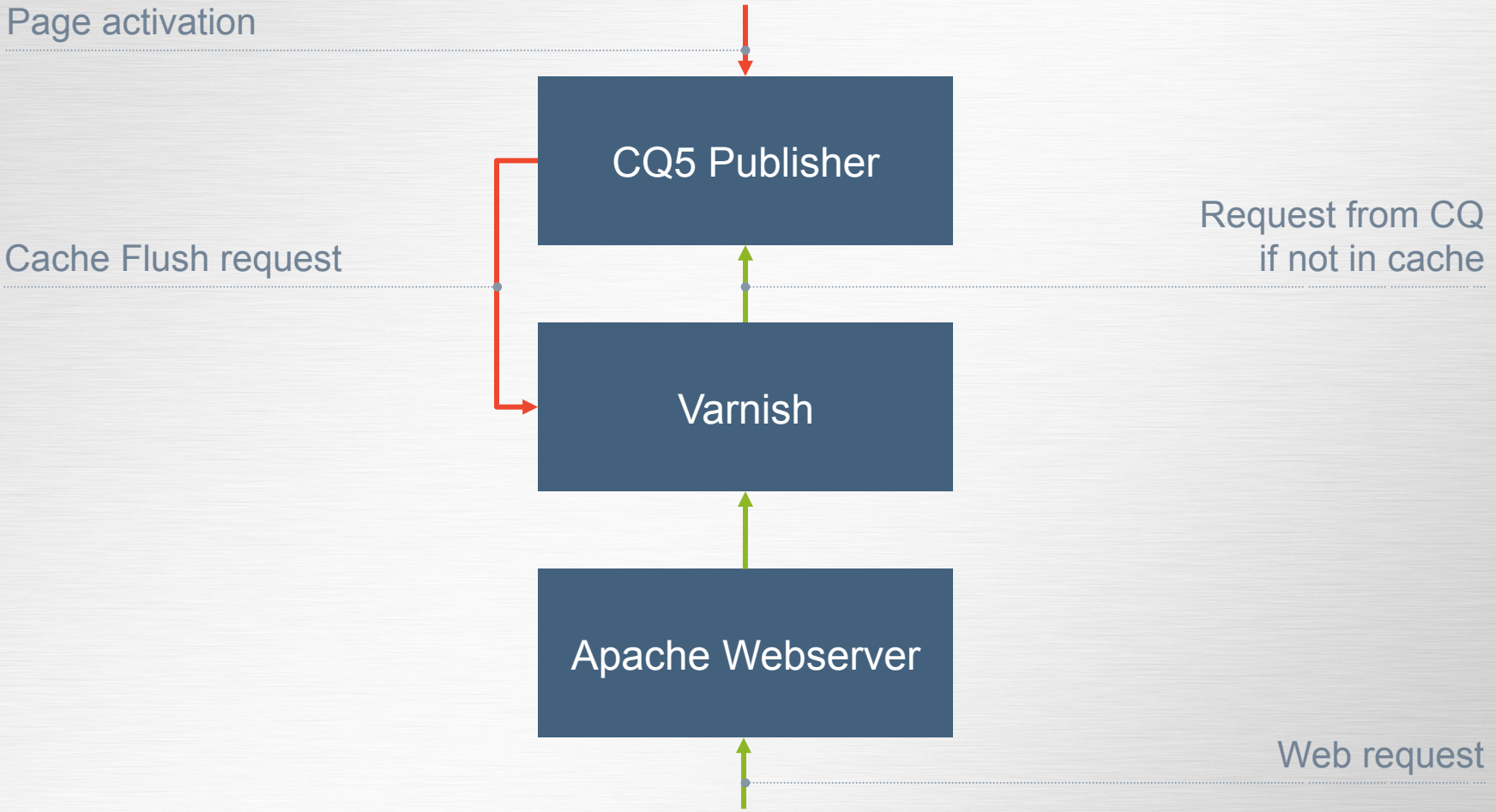
Caching of non-html responses is possible
- Caching of redirects

Because Varnish is awesome ☺

3

# 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+"[^/]*$");
                std.log("Banning: "+"obj.http.x-url ~ ^"+req.http.CQ-Handle+"[^/]*$");
        }
}
```

# What else can we achieve?

Improve flushing/ invalidation through specific rules

Change flush behaviour dynamically

Control cache through the admin interface

## Contact

Dan Beldiman

dan.beldiman@netcentric.biz

Tel: +49 170 5844847

**Netcentric Deutschland GmbH**

Landsberger Strasse 110
Central Tower
80339 Munich

**Netcentric AG**

Poststrasse 5
8805 Pfäffikon

Nordstrasse 9
8006 Zurich

**Netcentric Iberia S.L.**

Avenida Diagonal 123
8ª Planta
08005 Barcelona

**Netcentric UK Limited**

Holland House
Gherkin Piazza, 1 – 4 Bury Street
London
EC3A 5AW



netcentric