With Docker and k8s, this is not your grandparents' infra anymore!

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Meet the team

Mikaël Barbero, Build Team
- is at EclipseCon -

Christopher Guindon, Web Dev
- is not at EclipseCon -

Frederic Gurr, Build Team
- is at EclipseCon -

Me
- I am here -

Eric Poirier, Web Dev
- is at EclipseCon -

Matt Ward
- is not at EclipseCon -

IT Services Provided - 2018

User Community		Projects/Committers	
Websites: eclipse.org, help, Wiki, etc	**Bug reporting: Bugzilla, GitHub Issues**	**Build Services: CBI (Jenkins, Nexus, Sonar, Best Practices)**	**OpenID Connect authentication for Third Party apps** **Project API**
Code contributing: Git/Gerrit	**Discussion: Forums, Mailing Lists**	**Build Infra: Kubernetes Cluster (Red Hat OpenShift)**	**GitHub Integration**
Downloads **User Storage Service**	**Discovery: Eclipse Marketplace** **PMI: Project Management Interface**	**Code Signing, App Packaging**	**Web Design: Drupal, Hugo, PHP, JS, HTML**
Webmaster support!			

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Your grandparents had this - circa 2005

User Community		Projects/Committers
Websites: eclipse.org, help, etc	**Bug reporting: Bugzilla**	**Good Intentions?**
Code contributing: CVS	**Discussion: Newsgroups, Mailing Lists**	
Slow Downloads		

Webmaster support!

Code

Your grandparents did this   Today we have this
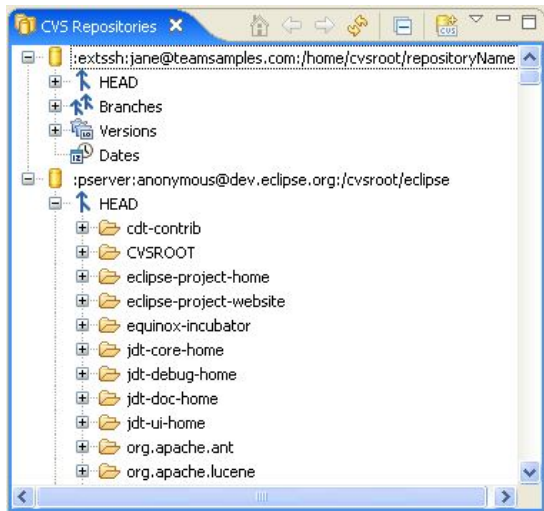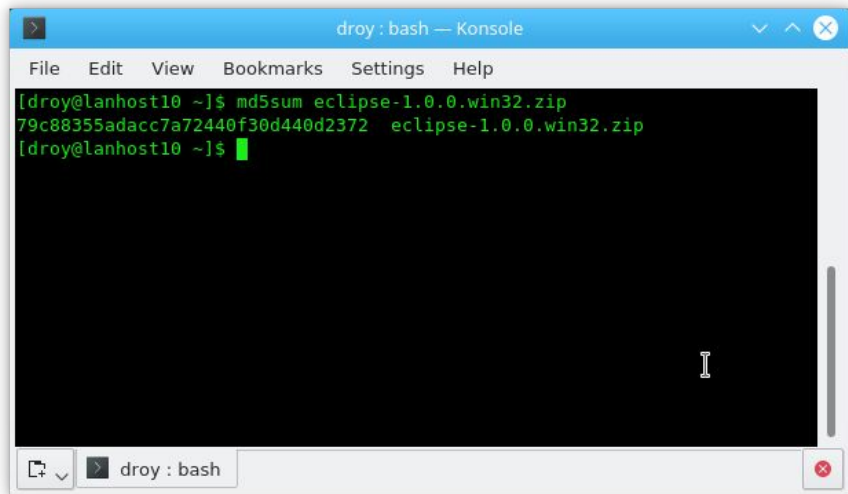
CVS
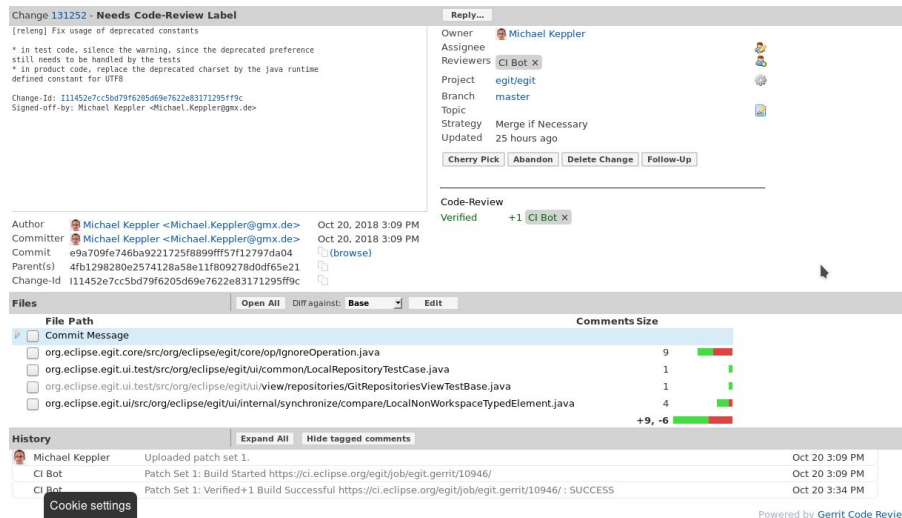
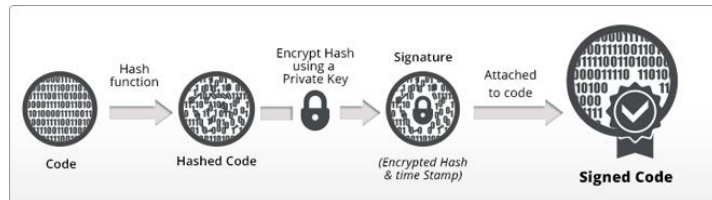Gerrit Code Review to improve collaboration

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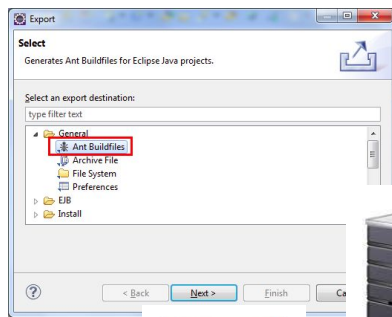
Builds

Your grandparents did this | Today we have this

MD5 checksums of binaries

SHA-512 checksums
Code Signing via CBI (Common Build Infra)

Builds - circa 2005

Your grandparents did this

Today we have this

Courtesy Gunnar Wagenknecht

Ant scripts on laptops, no public Visibility, difficult to reproduce
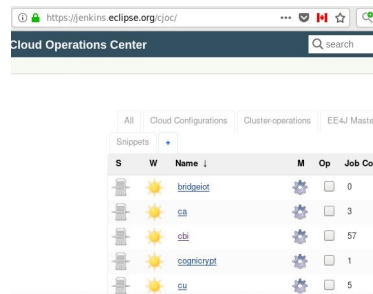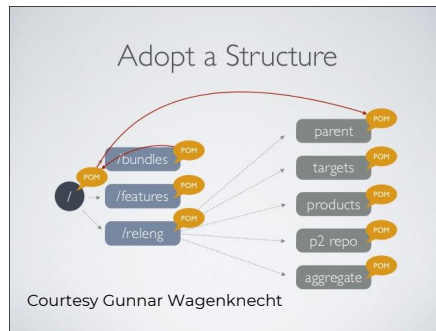
Maven/Tycho with Jenkins on Red Hat OpenShift visible to all (https://jenkins.eclipse.org)
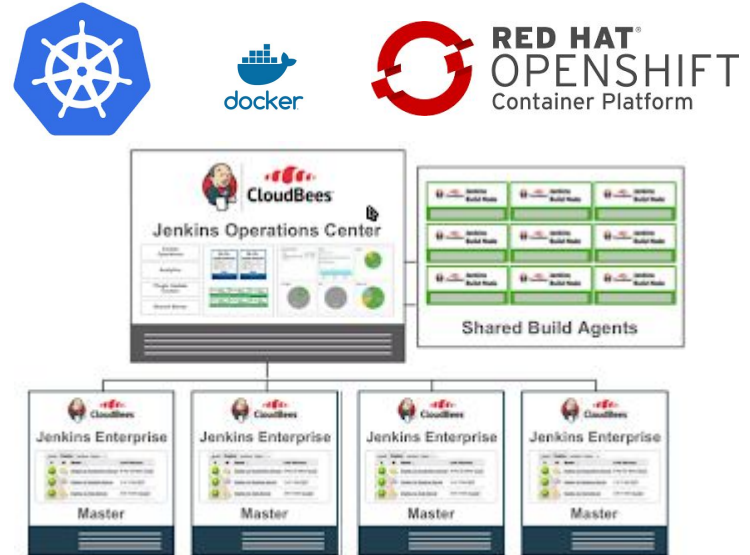
Builds - circa 2012

Your grandparents had this   Today we have this
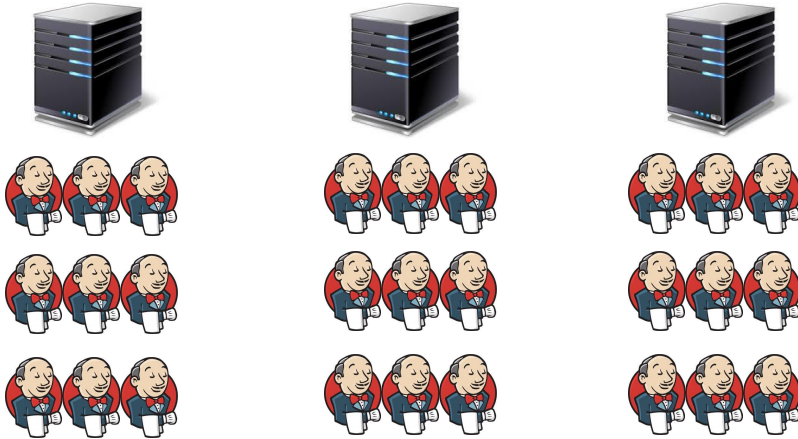
Standalone Jenkins Instance Per Project

Jenkins Instance Per Project, running on scalable OpenShift
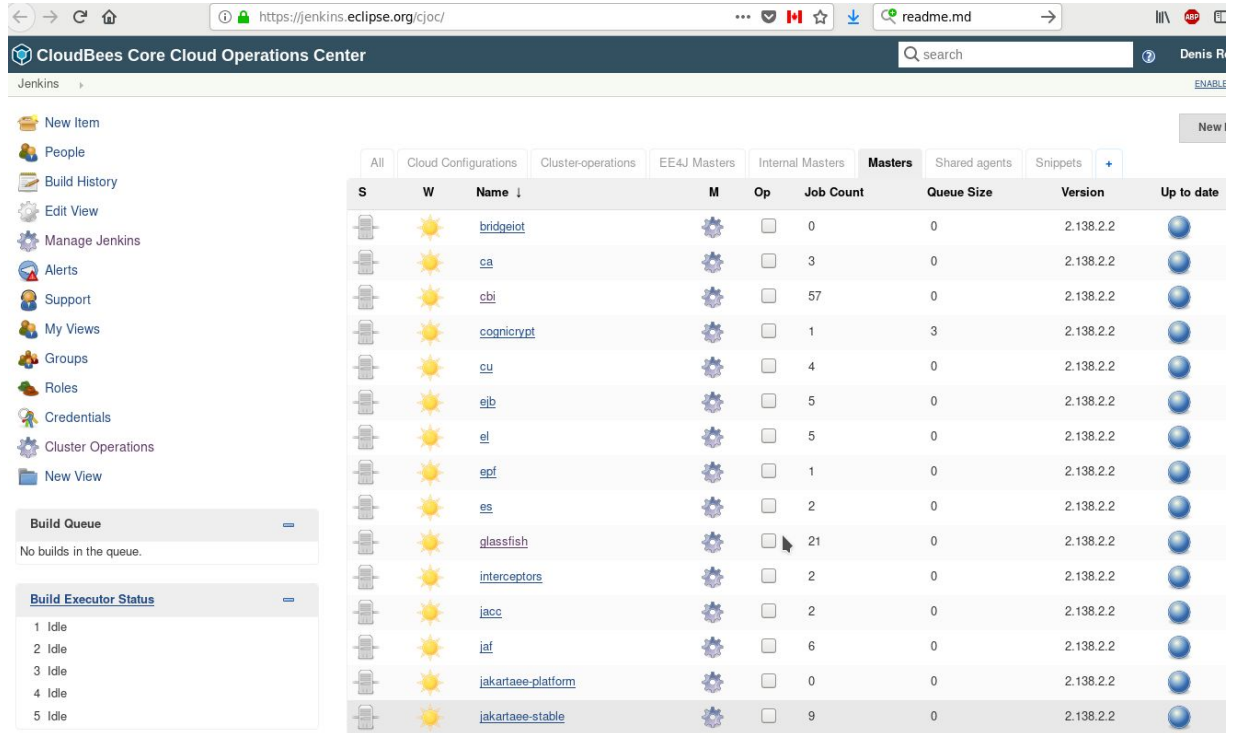
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CBI 3.0: Cloudbees Jenkins Enterprise

200+ Jenkins instances - ~40 instances on new CJE

35 new in the last month!

Standalone JIPP migrations start shortly

Powered by Docker/Kubernetes via Red Hat OpenShift
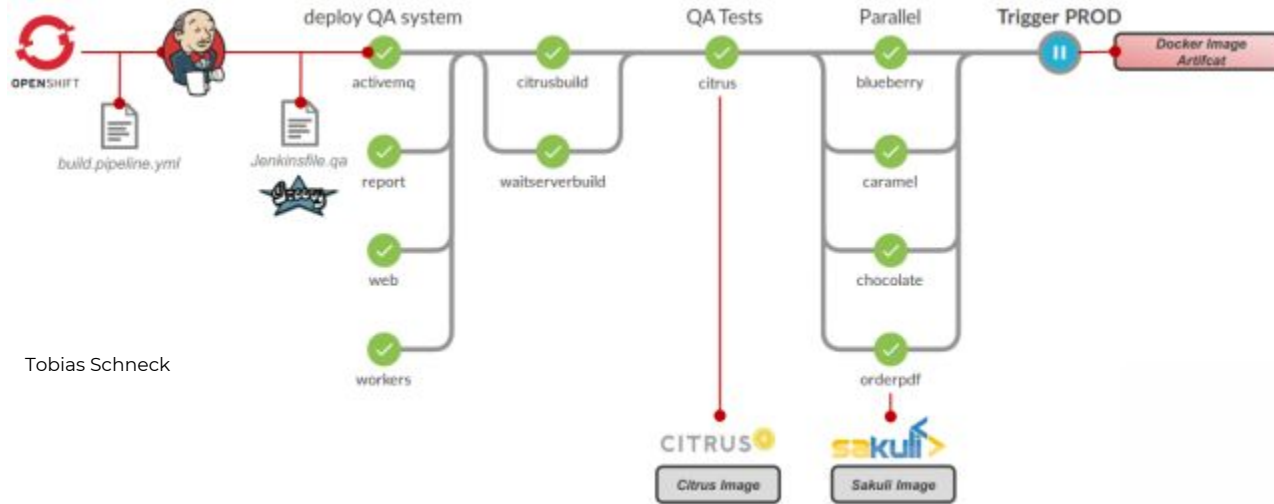
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CBI 3.0: What's included?

Each Eclipse Project has access to one Jenkins instance (JIPP), including the following:

- (1) Jenkins instance, with (1) Resources Pack
  - Membership-sponsored projects may allocate more resources (see below)
- Digital signing Service: Java JAR, Java Cryptography Extensions, Windows Portable Executable with Microsoft Authenticode, macOS application bundles.
- Packaging service: Apple Disk Image (.dmg), Linux Flatpak
- Disk space: Ephemeral for builds, permanent for release builds.
- (1) 3.75G/30G Linux Virtual Server (if needed) (courtesy of Microsoft Azure)
- Access to worldwide download mirrors

CBI is an optional offering. Projects are not required to use this!

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Jenkins Pipeline Builds

Tobias Schneck

Next generation CI/CD - building Eclipse projects on the new CBI build farm

Frederic Gurr - Tomorrow 2pm Theater Stage

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Bug Tracker

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Bug Tracker

Your grandparents had this

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Bug Tracker

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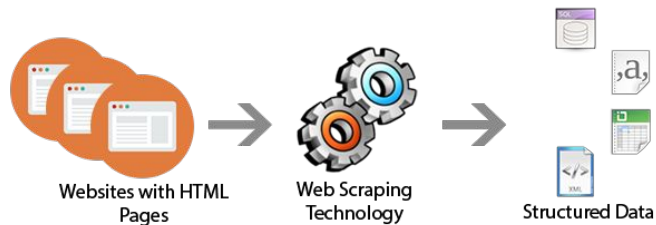
Interfacing

Today we have this

Third-party apps and sites that needed Eclipse web data had to use complex and error-prone screen scraping

https://api.eclipse.org for RESTful access to Eclipse data

OAuth2 for authentication

Data Privacy

Your grandparents were OK with this   Today we have this

"Privacy is important and we will do the right thing"

GDPR

Cookie Policy

Eclipse Hosted Services Privacy and Acceptable Usage Policy

GDPR: Policies At A Glance

- Privacy and Transparency a must
- If your service stores Personally Identifiable Information (PII) data you must subscribe to eclipse.org-gdpr@eclipse.org
- If you need PII, collect only as much information as required and to securely dispose of it when it isn't
- To take reasonable security precautions to prevent unauthorized access
- To obtain explicit consent by the user before you start using cookies. This requirement also includes cookies used by 3rd party services such as, but not limited to: Google Tag Manager, and social media widgets.
- Google Analytics is the only approved tool for collecting user data.
    a. All committers on a project must have access to the data collected for that project upon request
    b. Eclipse Webmaster (webmaster@eclipse-foundation.org) must be an administrator on all Google Analytics properties
    c. Google Analytics IP Anonymization feature must be turned on
    d. Projects must ensure that they are not transmitting PII to Google Analytics
    e. Projects must accept and follow Google Analytics Terms of Service

- ensure all web pages related to operation of the server use either the standard Eclipse.org footer template, or a footer that prominently contains notices.

THIS IS NOT THE COMPLETE POLICY!

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Project Websites

Your grandparents did this
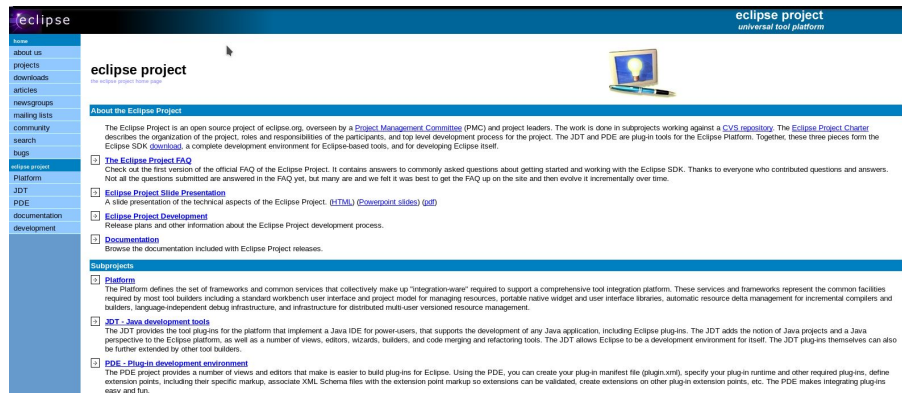
Text-based websites with frames

Today we have this

QuickSilver Theme:
https://github.com/eclipsefdn/hugo-solstice-theme
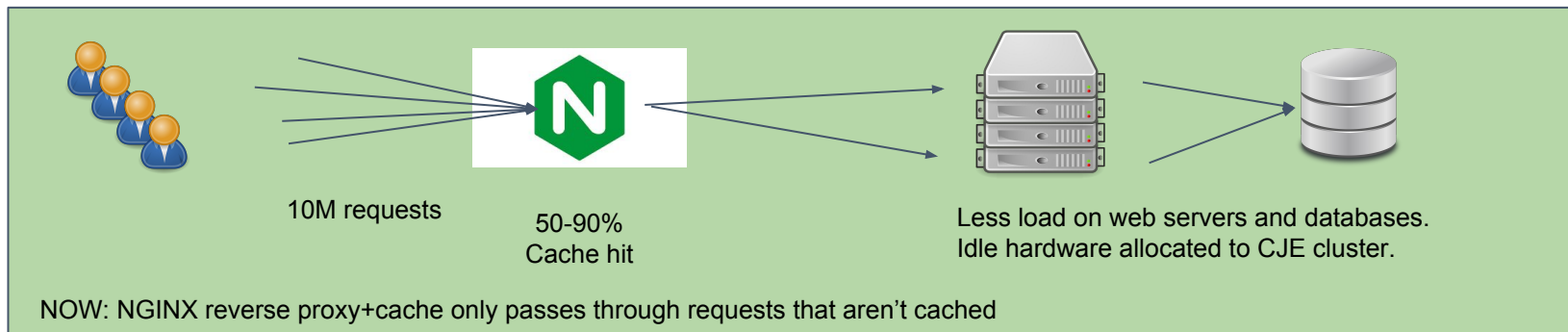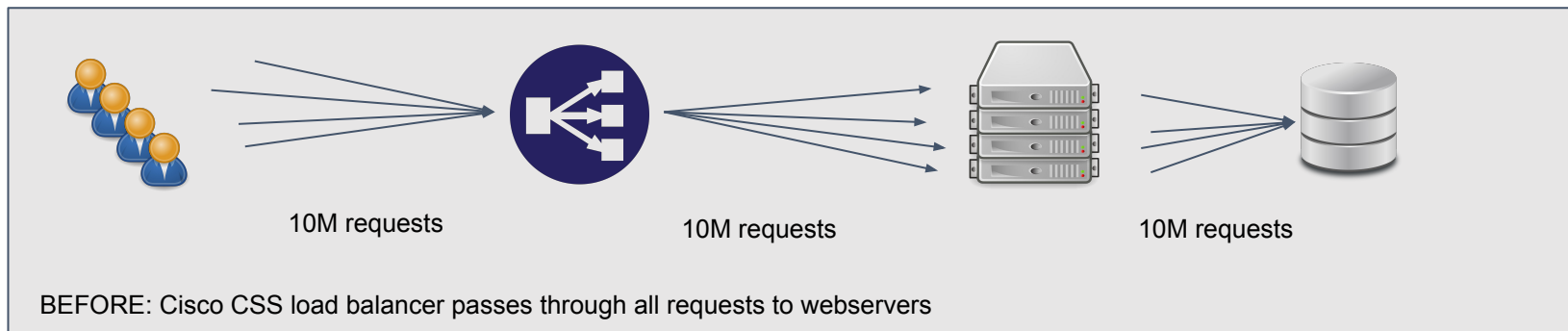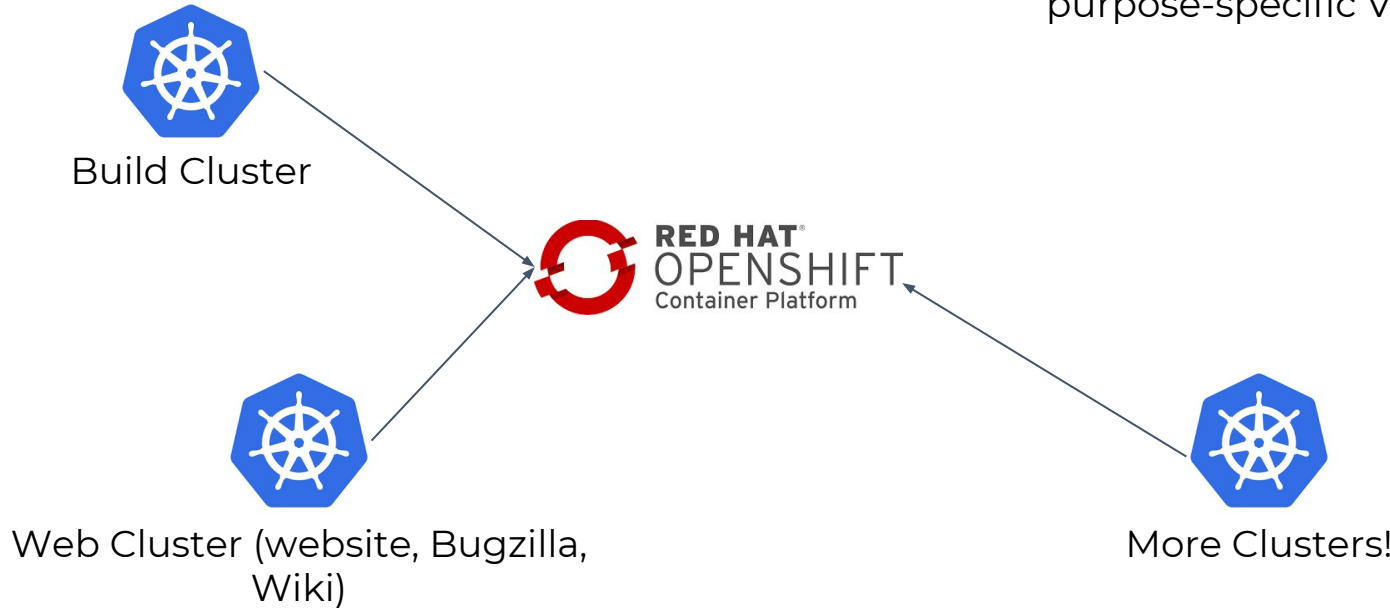

Dynamic, visually appealing and responsive sites using modern frameworks

Nginx: efficient load balancing

10M requests   10M requests   10M requests

BEFORE: Cisco CSS load balancer passes through all requests to webservers

10M requests

50-90%
Cache hit

Less load on web servers and databases.
Idle hardware allocated to CJE cluster.

NOW: NGINX reverse proxy+cache only passes through requests that aren't cached

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Looking forward

Build Cluster

Web Cluster (website, Bugzilla, Wiki)

RED HAT® OPENSHIFT Container Platform

Moving away from purpose-specific VMs

More Clusters!

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Your grandparents would be proud
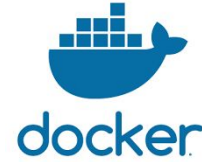
Questions?

Please login and rate this talk

https://eclipsecon.org/