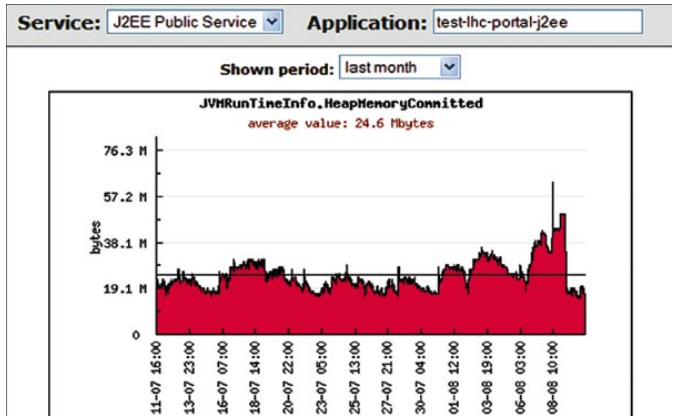
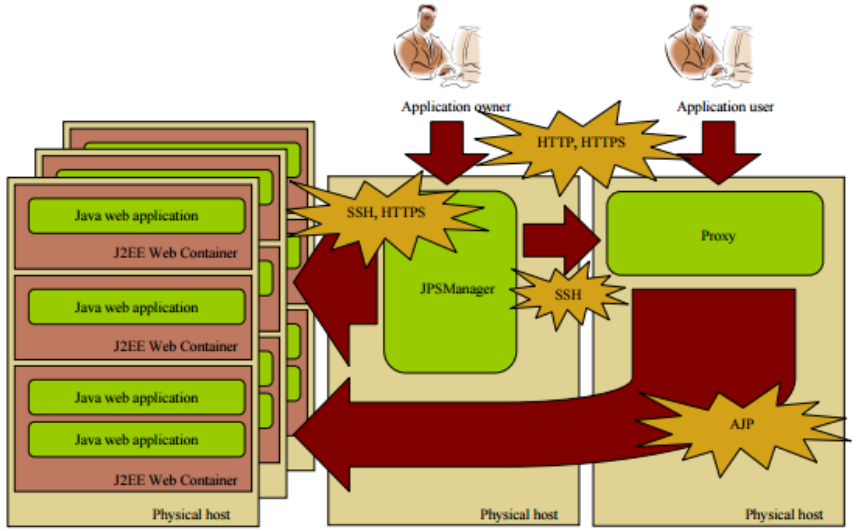
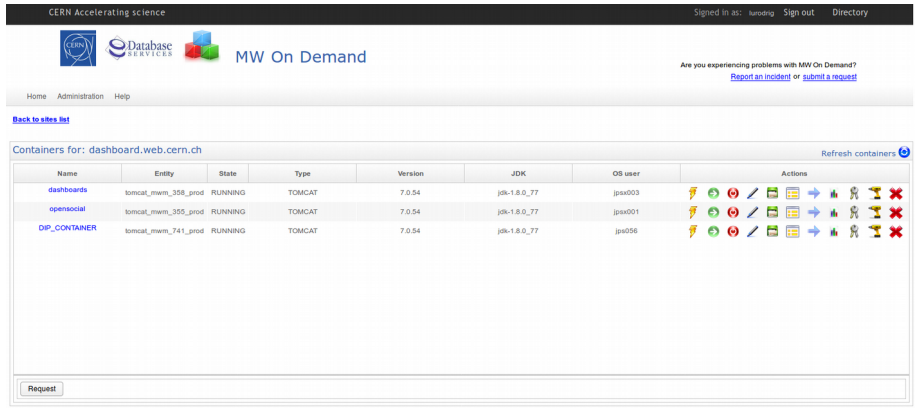

CERN

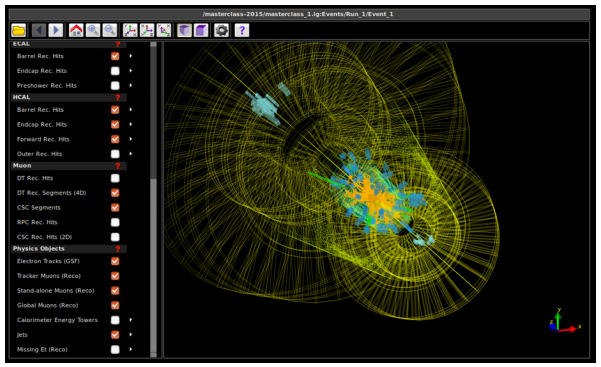
J2EEPS: long time ago in a galaxy...

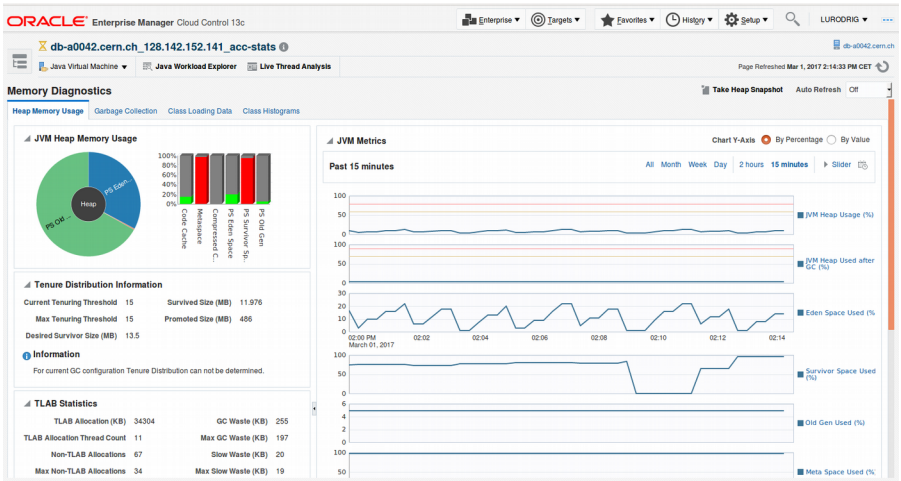


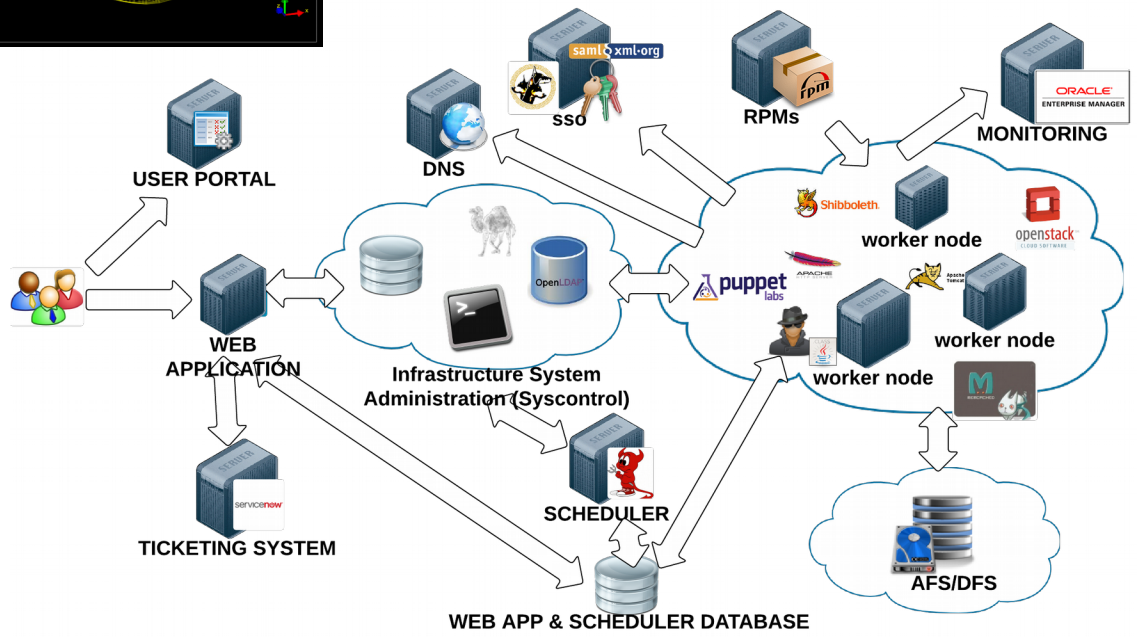


J2EEPS Evolution: MWOD

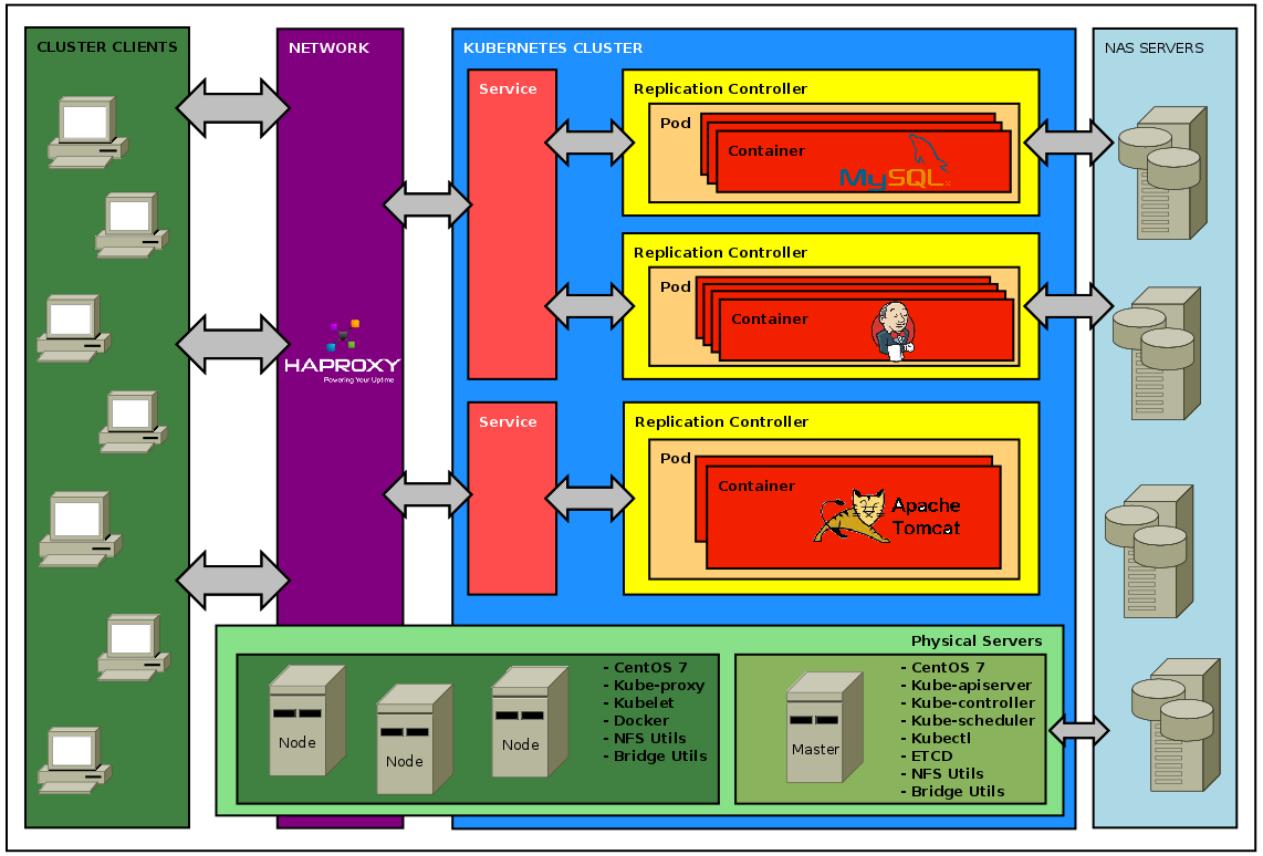






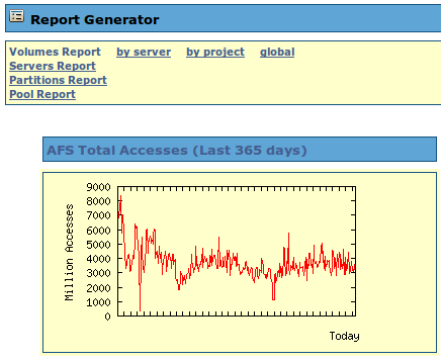


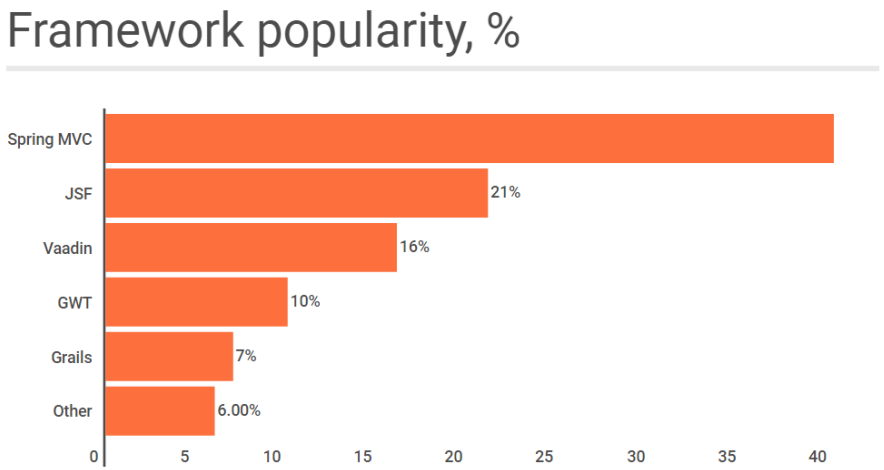
MWOD Evolution: Containers

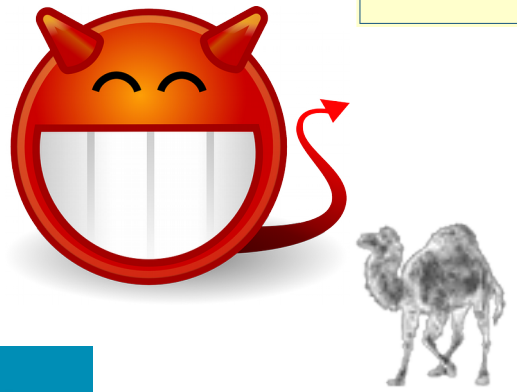


Why phaseout MWOD?

Minimize in-house development
“End Of Support”

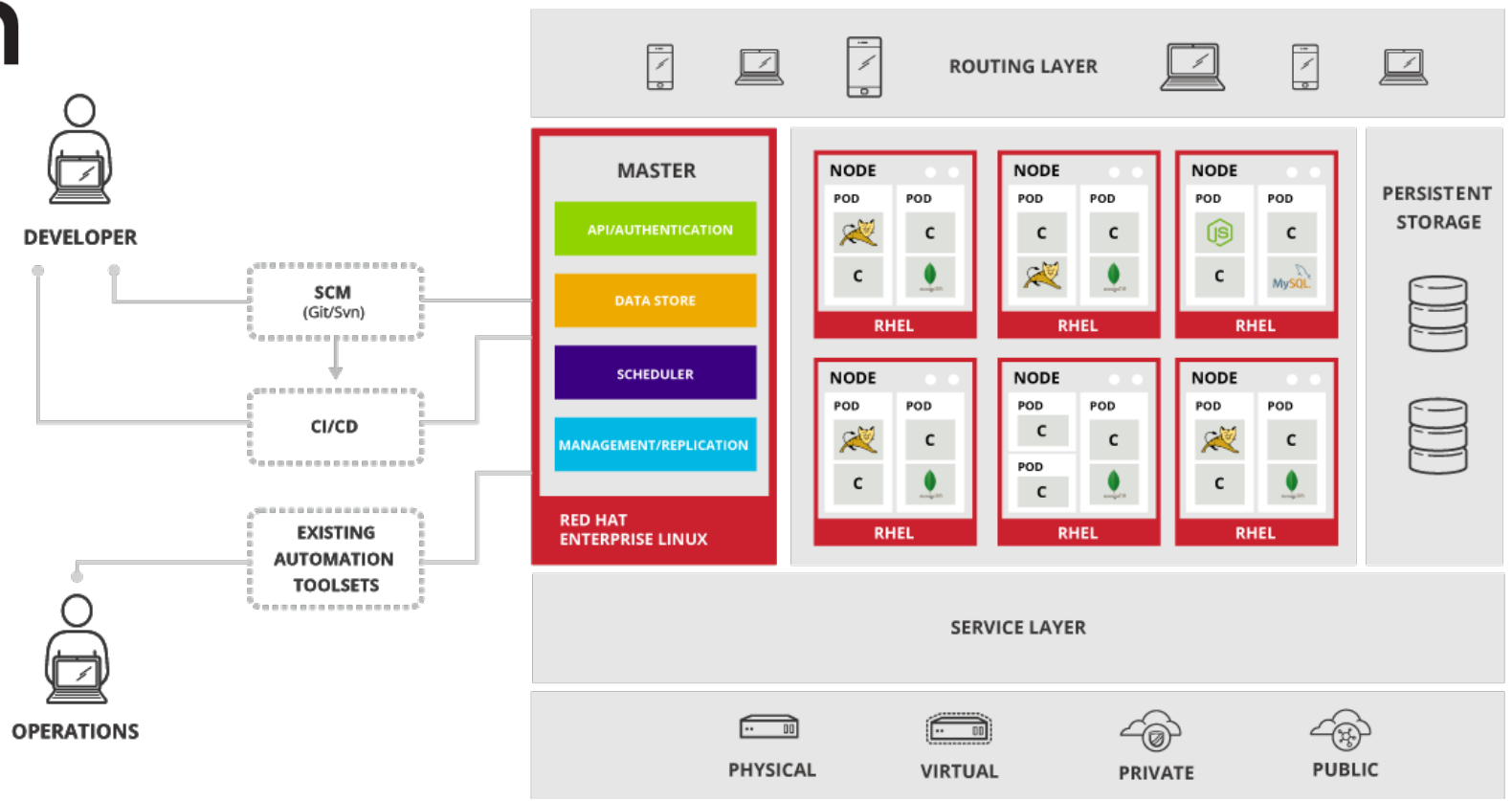






New Kids On the Block!

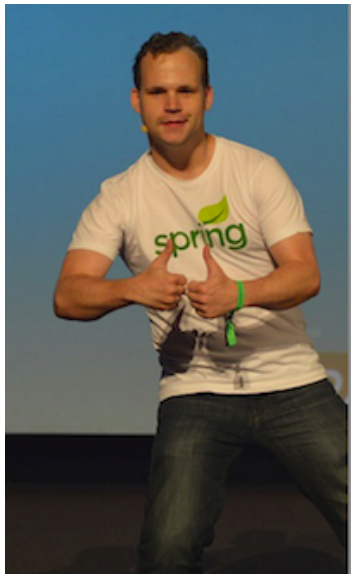
OPENSHIFT origin



Why openshift?

Covers standard war deployment

“Make jar no war”: Josh Long
“Make war no jar”: Antonio Goncalves

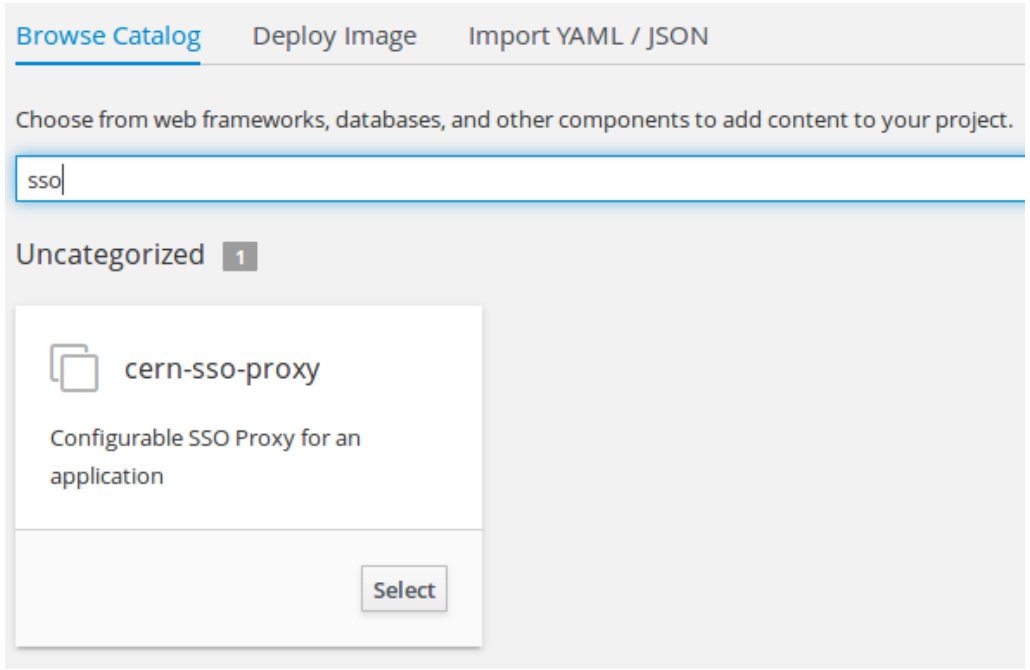


Why openshift?

Security

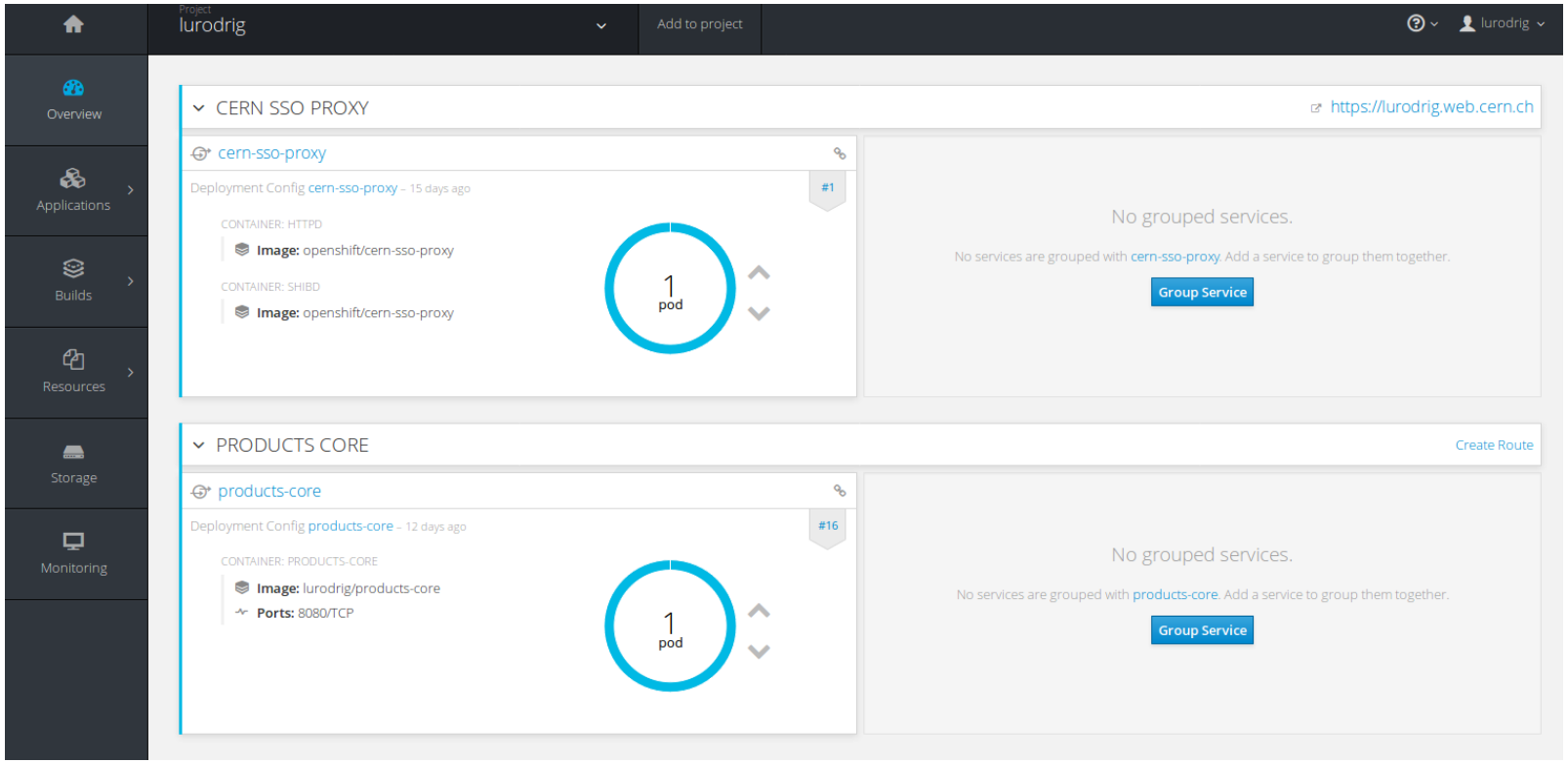
Application isolation

SSO



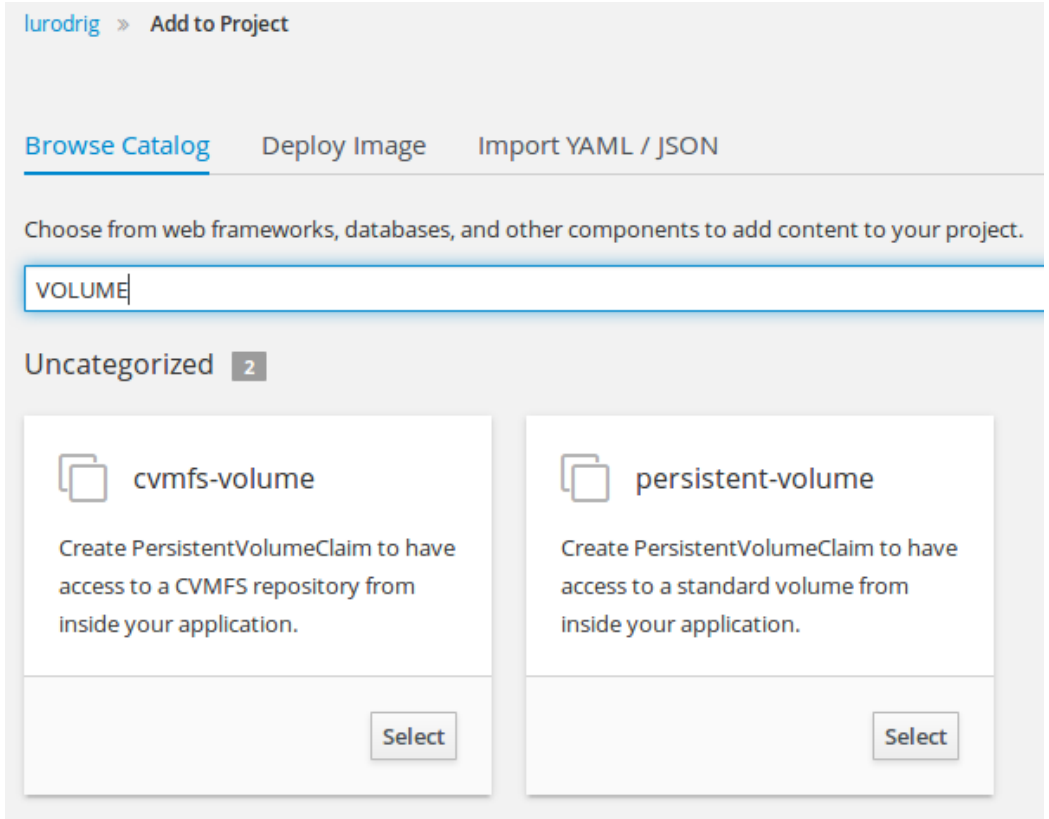
Why openshift?

User Interface



Why openshift?

AFS phaseout

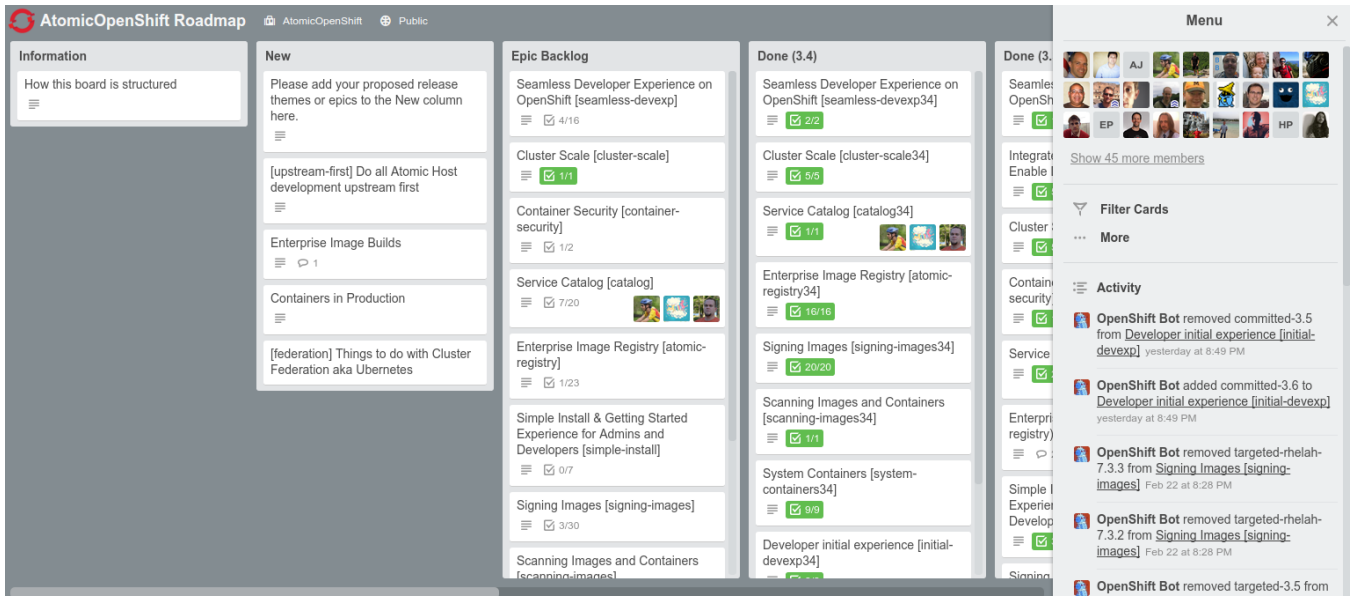


Why openshift?

Consolidation

Why openshift?

Richer functionality (e.g. oc client)
Big community
Fits in the CI model




```
lurodrig@lurodrig-laptop:/tmp$ oc describe dc cern-sso-proxy
Name:           cern-sso-proxy
Namespace:      lurodrig
Created:        2 weeks ago
Labels:         app=cern-sso-proxy
                template=cern-sso-proxy
Annotations:    <none>
Latest Version: 1
Selector:       name=cern-sso-proxy
Replicas:       1
Triggers:       Config, Image(cern-sso-proxy@stable, auto=true), Image(cern-sso-proxy@stable, auto=true)
Strategy:       Rolling
Template:
  Labels:       name=cern-sso-proxy
  Containers:
   httpd:
    Image:      172.30.78.46:5000/openshift/cern-sso-proxy@sha256:c1790650d2467bdbe04843c0bbc723f3b5670dc2d4fefc96805544a5cea177a1
    Port:
    Volume Mounts:
      /etc/httpd/conf.d/configurable from apache (rw)
      /tmp/configmap from shib (rw)
      /var/run/shibboleth from shared (rw)
    Environment Variables:
      NAMESPACE:          (v1:metadata.namespace)
      SERVICE_NAME:       products-core
      HOSTNAME_FQDN:
   shibd:
    Image:      172.30.78.46:5000/openshift/cern-sso-proxy@sha256:c1790650d2467bdbe04843c0bbc723f3b5670dc2d4fefc96805544a5cea177a1
    Port:
    Command:
      /shib.sh
    Volume Mounts:
      /tmp/configmap from shib (rw)
      /var/run/shibboleth from shared (rw)
    Environment Variables:
      NAMESPACE:          (v1:metadata.namespace)
      HOSTNAME_FQDN:
  Volumes:
   shared:
    Type:       EmptyDir (a temporary directory that shares a pod's lifetime)
    Medium:
   apache:
    Type:       ConfigMap (a volume populated by a ConfigMap)
    Name:       cern-sso-proxy
   shib:
    Type:       ConfigMap (a volume populated by a ConfigMap)
    Name:       cern-sso-shib
```

Why openshift?

Meets MWOD applications requirements

Caveats

Caveats

App server: apache tomcat → wildfly

JSR-000315 Java Servlet 3.0 Final Release

Caveats

JDK: HotSpot → OpenJDK

OpenJDK

Java

Caveats

Front end: apache httpd + mod_jk → HAProxy

`String`	**`getRealPath(String path)`** **Deprecated.** As of Version 2.1 of the Java Servlet API, use **`ServletContext.getRealPath(java.lang.String)`** instead.
`String`	**`getRemoteAddr()`** Returns the Internet Protocol (IP) address of the client or last proxy that sent the request.
`String`	**`getRemoteHost()`** Returns the fully qualified name of the client or the last proxy that sent the request.
`int`	**`getRemotePort()`** Returns the Internet Protocol (IP) source port of the client or last proxy that sent the request.
`RequestDispatcher`	**`getRequestDispatcher(String path)`** Returns a **`RequestDispatcher`** object that acts as a wrapper for the resource located at the given path.

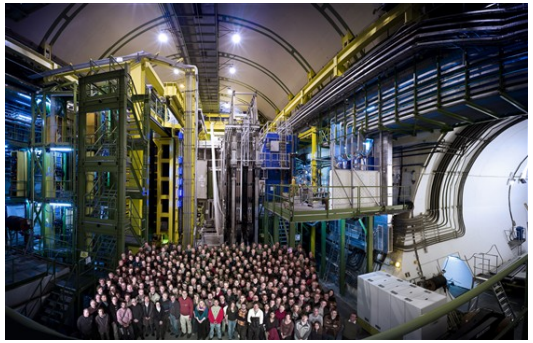
Support & Maintenance

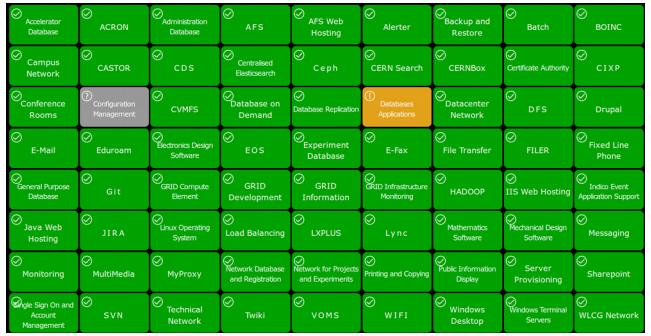
Platform: Red Hat

Application Server (Wildfly): Red Hat

IT integrations: IT-CDA

Custom images: user community





Migration Roadmap

February 2017

- **KB articles**

March 2017

- **User community meeting**
- No new MWOD sites

April 2017

- TEST instance stopped
- Sites content archived

October 2017

- PROD instance stopped
- Sites content archived

Resources

CERN Web Services:
https://webservices.web.cern.ch/webservices/

Getting started with openshift:
https://cern.service-now.com/service-portal/article.do?n=KB0004358

Migration OTG:
https://cern.service-now.com/service-portal/view-outage.do?n=OTG0035296

How to migrate:
https://cern.service-now.com/service-portal/article.do?n=KB0004488

luis.rodriguez.fernandez@cern.ch

https://mattermost.web.cern.ch @lurodrig

https://mattermost.web.cern.ch/it-dep/channels/developerscern

Tip of the week