

Mit OpenShift vom Monolithen zu Microservices



SERVICE SOLUTION SYSTEMS

○ Wer wir sind



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Architecture &
Development



DevOps &
Cloud



Training &
Consulting



SERVICE SOLUTION SYSTEMS

3sIT - Timeline

1963



1994



2001



2013



3sIT - Kernkompetenzen

- Technischer Support
- RZ-Betrieb (mit Partner APA-IT)

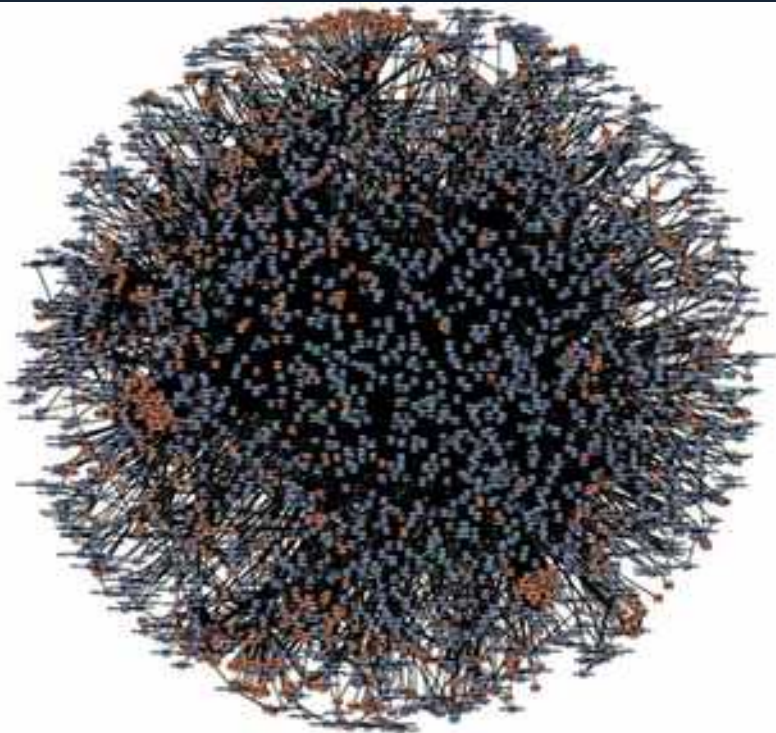
- **GO** – Gewerkschaften Online, die Homepagesammlung des ÖGB
- **ARN** – Evidenzsystem des ARBÖ
- **MVZV** – Evidenzsystem des ÖGB und seiner Fachgewerkschaften



Neuentwicklung!



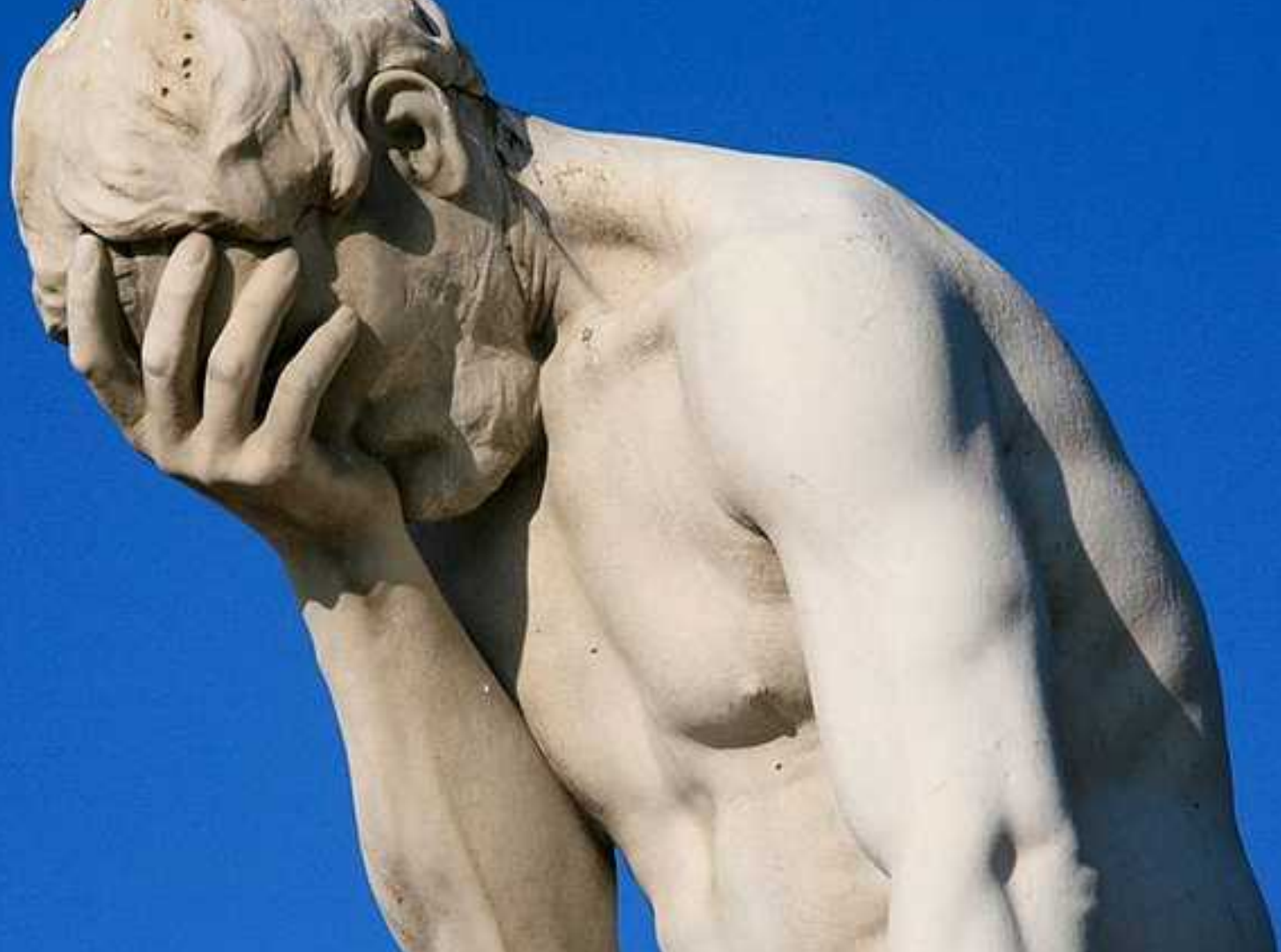
Monolith ade



amazon.com[®]



NETFLIX









Team Integration?

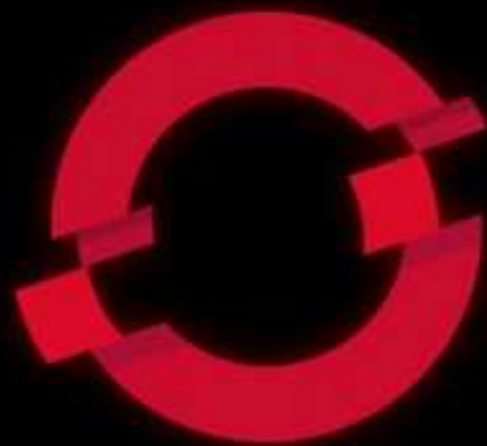


Mehrere 2-Pizza-Teams
Verschiedene Lieferanten





Container-basierte Infrastruktur



OPENSIFT



DevOps

Platform Team

MIND THE GAP



Overview



Applications



Builds



Resources



Storage



Monitoring

Name List by

APPLICATION

nodejs-mongodb-example

<http://nodejs-mongodb-example-demo.apps.intern.3sit.at/>DEPLOYMENT
mongodb, #1

CONTAINER: MONGODB

Image: rhsci/mongodb-32-rhel7
Ports: 27017/TCP

Networking

SERVICE Internal Traffic

mongodb

27017/TCP (mongodb) → 27017

ROUTES External Traffic

[Create Route](#)DEPLOYMENT
nodejs-mongodb-example

Builds: 1

No deployments for nodejs-mongodb-example





Releases

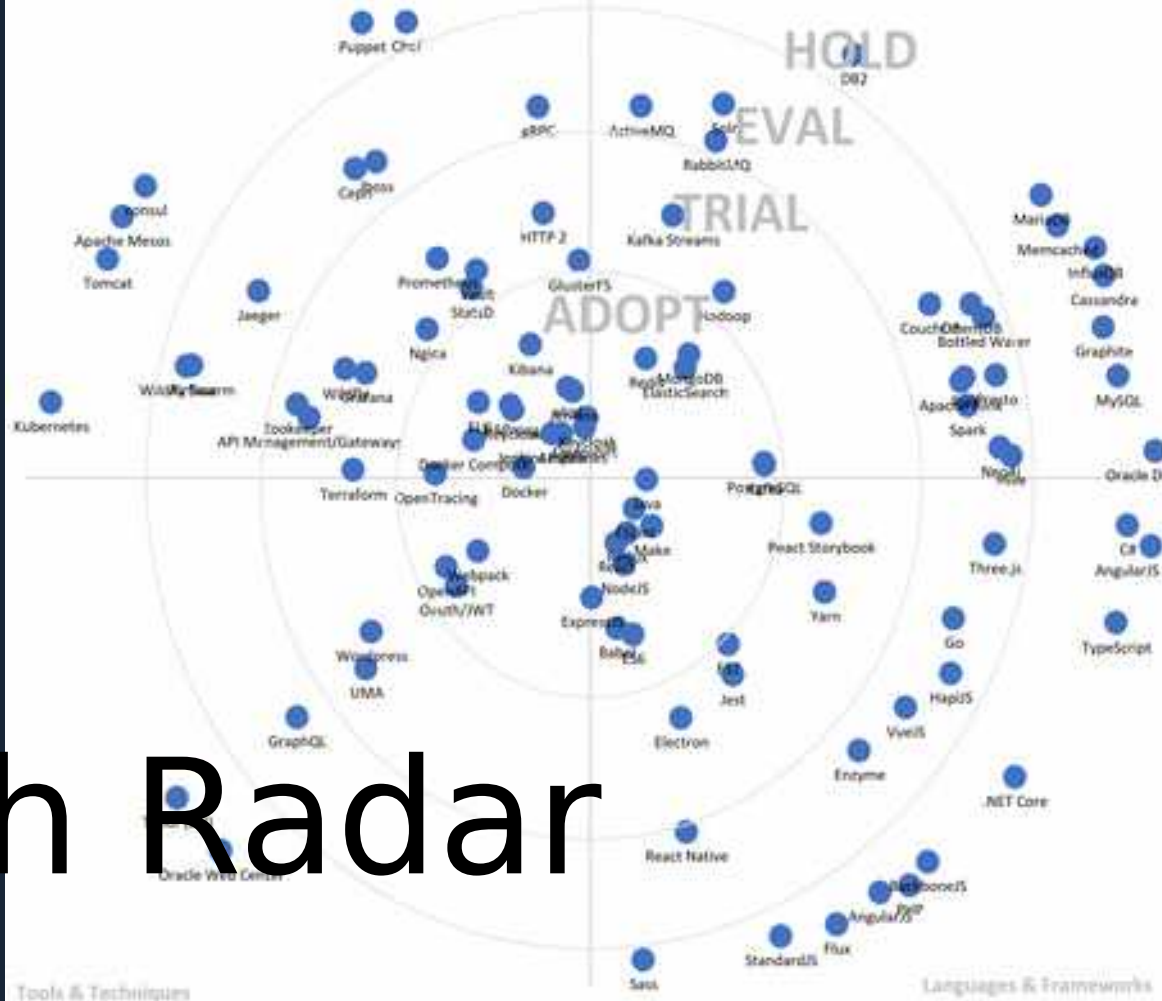
Routing

A high-angle, long-exposure photograph of a complex multi-level highway interchange at night. The image is filled with curved ramps and overpasses, creating a dense network of light trails. The light trails are primarily in shades of purple, blue, and yellow, representing the movement of vehicles. The overall scene is illuminated by the ambient light of the highway and the surrounding area, with some darker patches of vegetation visible between the levels of the interchange.

Tech Stack



Tech Radar





OPENSIFT

Templates

Datenbanken





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Service Catalog

Lieferanten
Know-How?

A photograph of a classroom. In the background, a man in a striped shirt stands with his back to the camera, pointing at a green chalkboard. In the foreground, a person's hand is visible holding a smartphone, looking at the screen. The text 'Lieferanten Know-How?' is overlaid in white, bold, sans-serif font across the center of the image.



Troubleshooting



Monitoring



Server Access für alle Lieferanten?

Project demo ▼ Add to Project ▼ 🔔 admin ▼

Pods ▶ mongodb-1-nlzf0

mongodb-1-nlzf0 created 20 minutes ago Actions

[Deployment](#) [mongodb-1](#) [DeploymentConfig](#) [mongodb](#) [Name](#) [mongodb](#)

[Details](#) [Environment](#) [Logs](#) [Terminal](#) [Events](#)

🔒 When you navigate away from this pod, any open terminal connections will be closed. This will kill any foreground processes you started from the terminal. [Open Fullscreen Terminal](#)

Container: mongodb

```

sh-4.25 ps -aux
USER      PID   CPU   MEM   VSZ   RSS   TTY      STAT   START   TIME   COMMAND
1000000+  1     0.0  0.2 340720 78628 ?        SsL   08:50   0:12  mongod -f /etc/mongod.conf --auth
1000000+ 3727  0.0  0.0 11776  2708 ?        Ss    09:26   0:00 /bin/sh
1000000+ 3756  0.0  0.0 47452 1672 ?        R+    09:26   0:00 ps -aux
sh-4.25

```


Project
demo

Add to Project



admin



Overview



Applications



Builds



Resources



Storage



Monitoring

Roots > mongodb-1-nlzf0

mongodb-1-nlzf0 created 38 minutes ago

Actions

[deployment](#) [mongodb-1](#) [deploymentsconfig](#) [mongodb](#) [name](#) [mongodb](#)[Details](#) [Environment](#) [Logs](#) [Terminal](#) [Events](#)

Container: mongodb — Running Log from Oct 20, 2017 12:30:55 AM

[Save](#) | [Expand](#)

```
1 => sourcing 18-check-env-vars.sh ...
2 => sourcing 20-setup-wiredtiger-cache.sh ...
3 => [Fri Oct 20 00:50:55] wiredtiger: cacheSizeGB set to 1
4 => sourcing 30-set-config-file.sh ...
5 => sourcing 35-setup-default-datadir.sh ...
6 => sourcing 40-setup-keyfile.sh ...
7 => Waiting for MongoDB daemon up
8 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten] MongoDB starting : pid=28 port=27017
  dbpath=/var/lib/mongodb/data 64-bit host=mongodb-1-nlzf0
9 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten] db version v3.2.10
10 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten] git version: 79d93ab5ce20f51c272b4411202710a05200117
11 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten] OpenSSL version: OpenSSL 1.0.1e-fips 11 Feb 2013
12 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten] allocator: tcmalloc
13 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten] modules: none
14 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten] build environment:
15 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten]   distarch: x86_64
16 2017-10-20T00:50:56.129+0000 I CONTROL [initandlisten]   target_arch: x86_64
17 2017-10-20T00:50:56.130+0000 I CONTROL [initandlisten] options: { config: "/etc/mongod.conf", net: { bindip:
  "127.0.0.1", port: 27017 }, replication: { oplogSizeMB: 64 }, security: { authorization: "disabled" }, storage: {
  dbPath: "/var/lib/mongodb/data", wiredTiger: { engineConfig: { cacheSizeGB: 1 } } }, systemLog: { quiet: true } }
18 2017-10-20T00:50:56.136+0000 I STORAGE [initandlisten] wiredtiger_open config:
```

Go to End



Access Control



redhat. SS
O



Quotas,
Node



Logging



Danke für die Aufmerksamkeit!

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