

Monitoring mit Prometheus

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selbstständiger IT-Consultant

Organisatorisches

cruwe/devopsessentials19.git

- git
- docker
- maven
- ruby / Bundler

Warum Monitoring?

- Reaktion auf Fehlersituationen
- Verpflichtung
 - harte: Gesetze und Verordnungen
 - weiche: Due Diligence
- Vertrauen

Prinzip

- der Soll-Zustand ist bekannt
 - Antworten
 - Latenzen
 - Degradation bei Last?

Prinzip

- der Soll-Zustand wird abgeglichen
 - Antworten
 - Latenzen
 - Degradation bei Last?
- Bei Abweichungen Alerting

Systematik

- Verfügbarkeit
- Be- / Auslastung
- Ereignisse
- Compliance?

Verfügbarkeit

- ICMP Echo Request
- (UDP)/TCP port offen
- Application Layer - Antwort

Be-/Auslastung

- wieviele Requests per min
- System-Last (CPU/Memory)
- Bilden sich Queues? (mailQ, ...)
- Partitionen free/used

Ereignisse

- failed logins
- Applikations-Fehler (Traces)
- abgeschlossene und payable Transaktionen

Compliance?

- permissions? user?
- http-Header, Cookies
- Certificates
- Encryption ALGOS

Compliance?

- Applikationen? Versionen?
- am Wichtigsten: laufen Dienste nicht

„historische“ Systeme

Nagios®

- General
 - Home
- Extra Tools
 - MRTG stats
 - Nagios Graph
- Current Status
 - Tactical Overview
 - Map
 - Hosts
 - Services
 - Host Groups
 - Summary
 - Grid
 - Service Groups
 - Summary
 - Grid
 - Problems
 - Services (Unhandled)
 - Hosts (Unhandled)
 - Network Outages
 - Quick Search:

Current Network Status
 Last Updated: Sun Aug 17 07:55:18 CEST 2014
 Updated every 90 seconds.
 Nagios® Core™ 4.0.8 - www.nagios.org
 Logged in as nagiosadmin

[View History For all hosts](#)
[View Notifications For All Hosts](#)
[View Host Status Detail For All Hosts](#)



Service Status Details For All Hosts

Limit Results: **100** Results 0 - 100 of 121

Host	Service	Status	Last Check	Duration	Attempt	Status Information
localhost	CERTIFICATE cipherli.st	OK	08-17-2014 07:52:35	0d 14h 52m 38s	1/3	OK - Certificate 'cipherli.st' will expire on Tue Jun 2 00:59:00 2015.
	CERTIFICATE google.com	OK	08-17-2014 07:53:01	0d 14h 52m 12s	1/3	OK - Certificate '*.google.com' will expire on Tue Oct 28 00:00:00 2014.
	CERTIFICATE hosted-oswa.org	OK	08-17-2014 07:53:26	0d 14h 51m 46s	1/3	OK - Certificate 'hosted-oswa.org' will expire on Wed Jan 28 23:59:00 2015.
	CERTIFICATE mijn.ing.nl	OK	08-17-2014 07:53:51	0d 14h 51m 20s	1/3	OK - Certificate 'mijn.ing.nl' will expire on Thu Oct 30 23:59:00 2014.
	CERTIFICATE ponify.nl	OK	08-17-2014 07:54:20	0d 14h 50m 54s	1/3	OK - Certificate 'ponify.nl' will expire on Tue Jun 2 00:59:00 2015.
	CERTIFICATE raymii.org	OK	08-17-2014 07:54:43	0d 14h 50m 28s	1/3	OK - Certificate 'raymii.org' will expire on Sat Jun 25 00:59:00 2016.
	CERTIFICATE tweakers.net	OK	08-17-2014 07:51:57	0d 14h 50m 2s	1/3	OK - Certificate '*.tweakers.net' will expire on Thu Dec 8 12:29:00 2016.
	Current Load	OK	08-17-2014 07:51:58	0d 23h 52m 31s	1/4	OK - load average: 0.00, 0.00, 0.00
	Current Users	OK	08-17-2014 07:52:36	0d 23h 51m 53s	1/4	USERS OK - 1 users currently logged in
	HTTP	DOWN	08-17-2014 07:53:13	0d 23h 51m 16s	1/4	HTTP OK: HTTP/1.1 200 OK - 1334 bytes in 0.002 second response time
	HTTP cipherli.st	OK	08-17-2014 07:52:29	0d 14h 49m 36s	1/3	HTTP OK: HTTP/1.1 200 OK - 12901 bytes in 0.059 second response time



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[Host Groups](#)
• Summary
• Grid

[Service Groups](#)
• Summary
• Grid

[Problems](#)
• Services (Unhandled)
• Hosts (Unhandled)
• Network Outages

Quick Search:

Reports

[Availability](#)
[Trends](#)
[Alerts](#)
• History
• Summary
• Histogram
[Notifications](#)
[Event Log](#)

System

[Comments](#)
[Downtime](#)
[Process Info](#)
[Performance Info](#)
[Scheduling Queue](#)
[Configuration](#)

General

[Home](#)
[Documentation](#)

backup1 ✓

Probleme

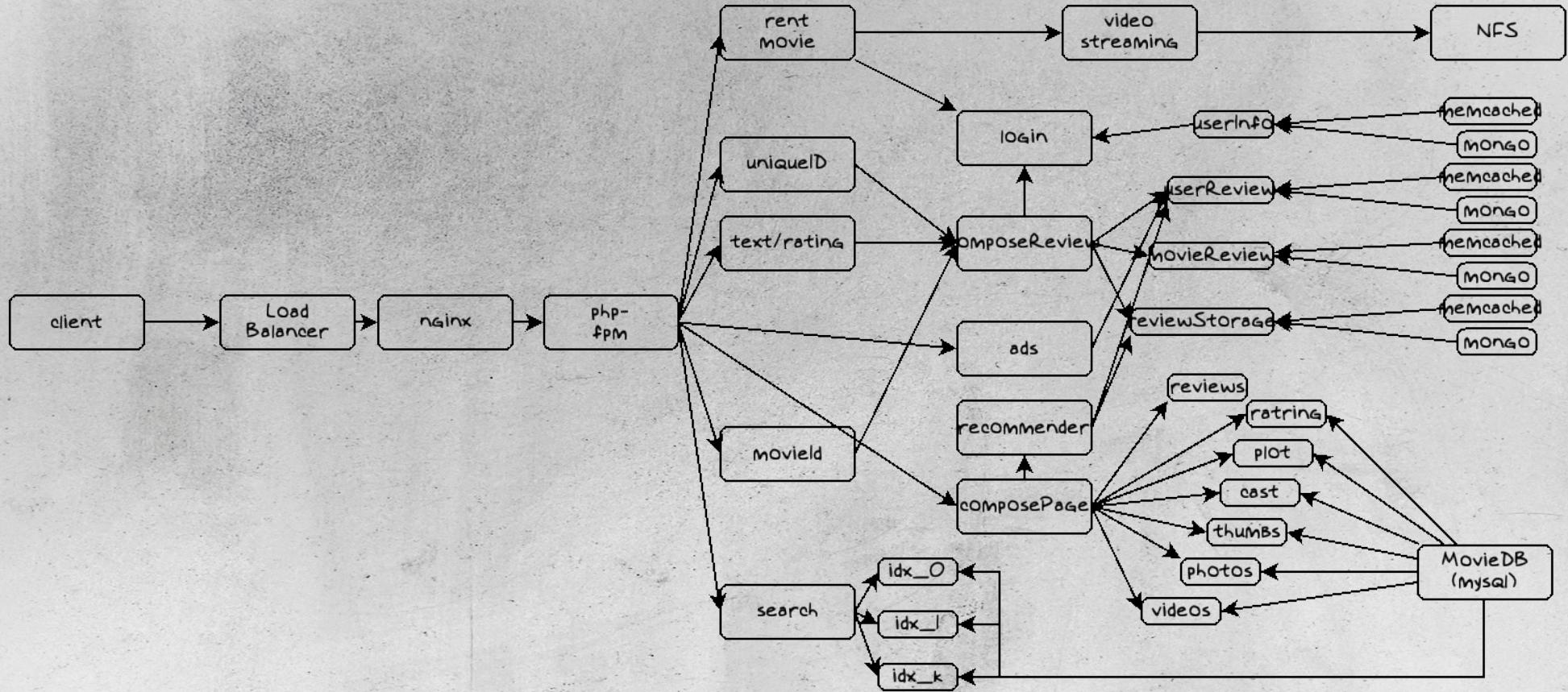
@DEVOPS_BORAT

In Startup, we have great capability for
churn out solution. Please send problem,
we are pay good money.

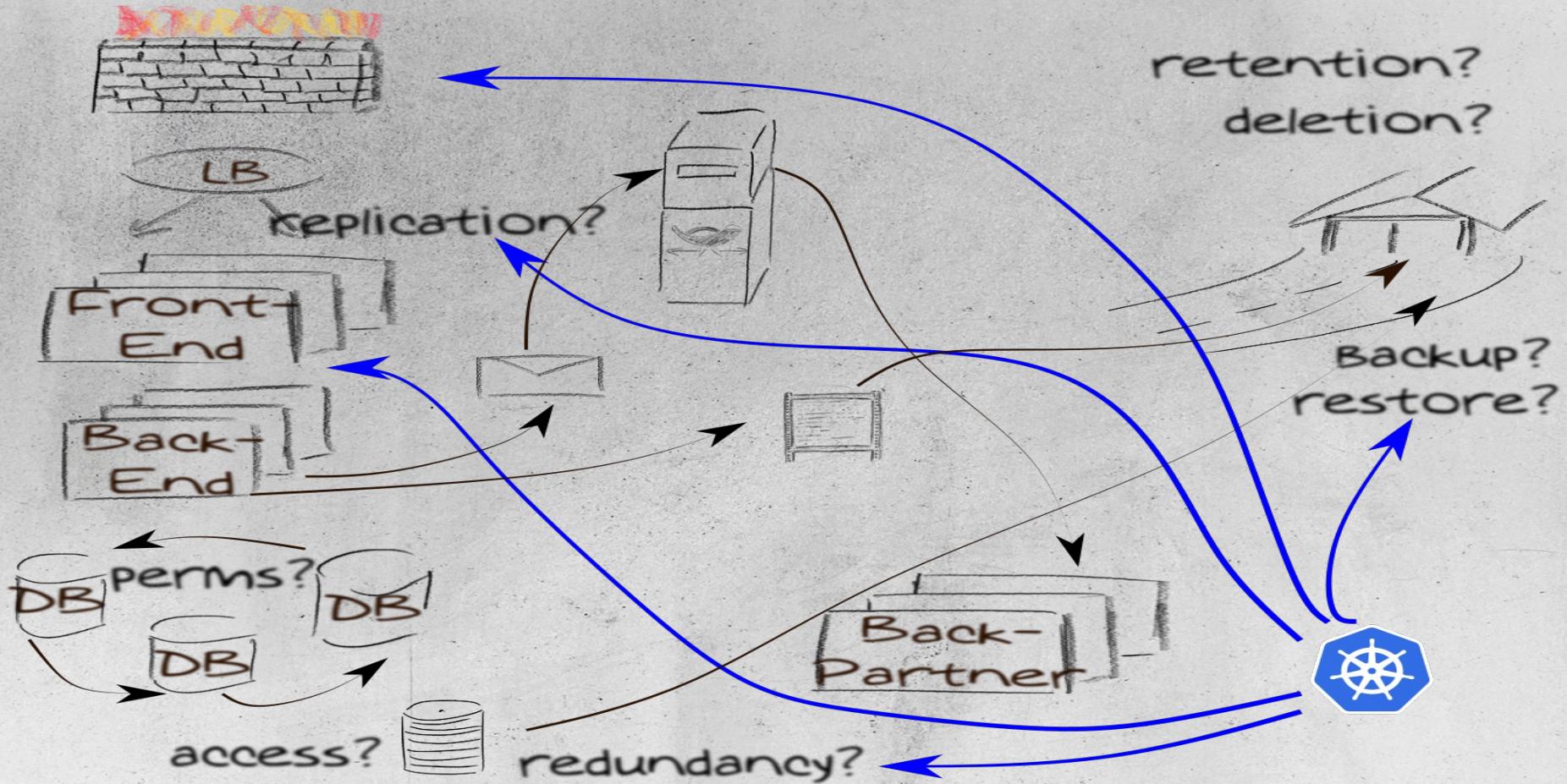
Probleme

- Monitoring-Systeme sind schwergewichtig
- Monitoring-Systeme skalieren schlecht
- RRDs sind nicht gut abfragbar
- Discovery / Config von Zielen oft PITA

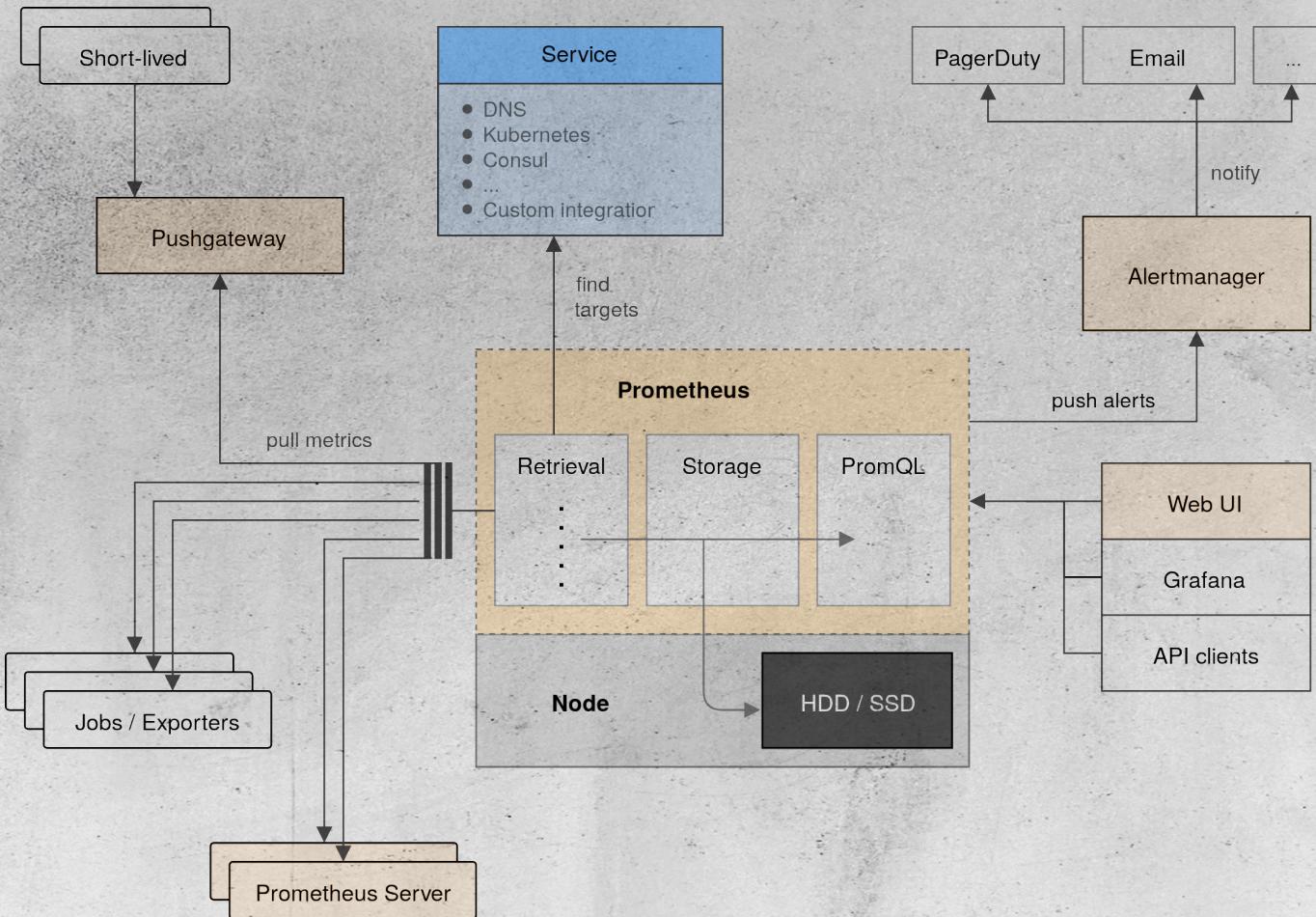
Distribution



Deployment



Lösung?



Interaktive Session