



Workshop
Ergebnisse



Measuring & Ramp-Up

- Oliver Groht

based on
Atlassian's Five Secrets of JIRA Performance

catWorkX Midsummer Day 2015



Motivation

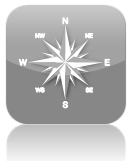
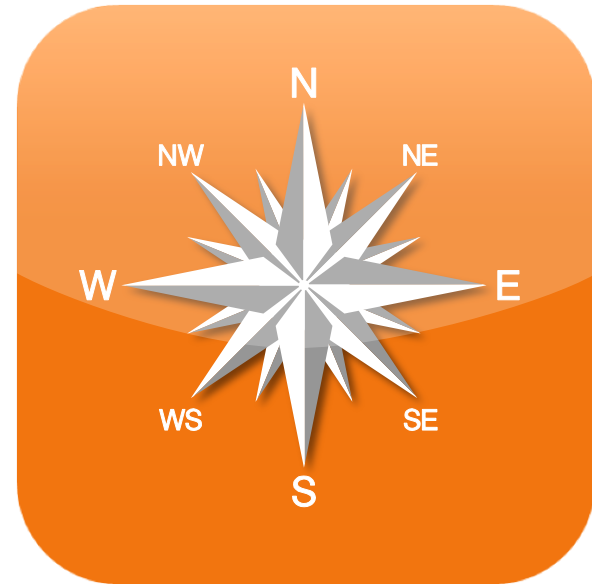
Ausgangslage:

- Wie kann ich Performance verbessern?
- Wie schnell ist mein JDC?
- Was bedeutet denn „schnell“?
- Was wäre die max. Ausbaustufe?
- Benötige ich KPI's?
- Wofür benötige ich KPI's?
- u.v.m.

Antwort:

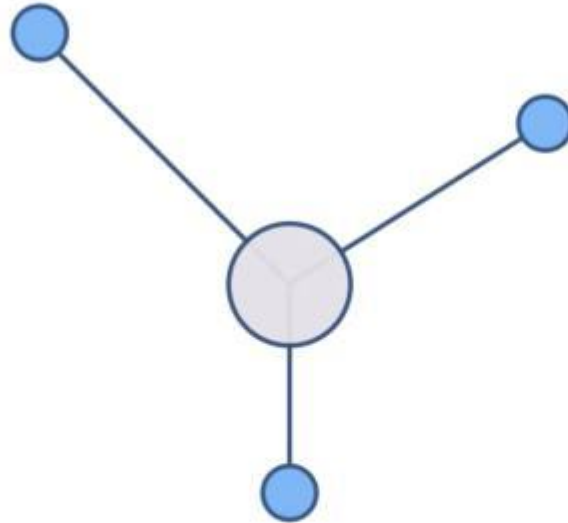
Ich kann glauben
oder besser:

Ich muss messen!



Enterprise Anforderungen

Scalability



Stability



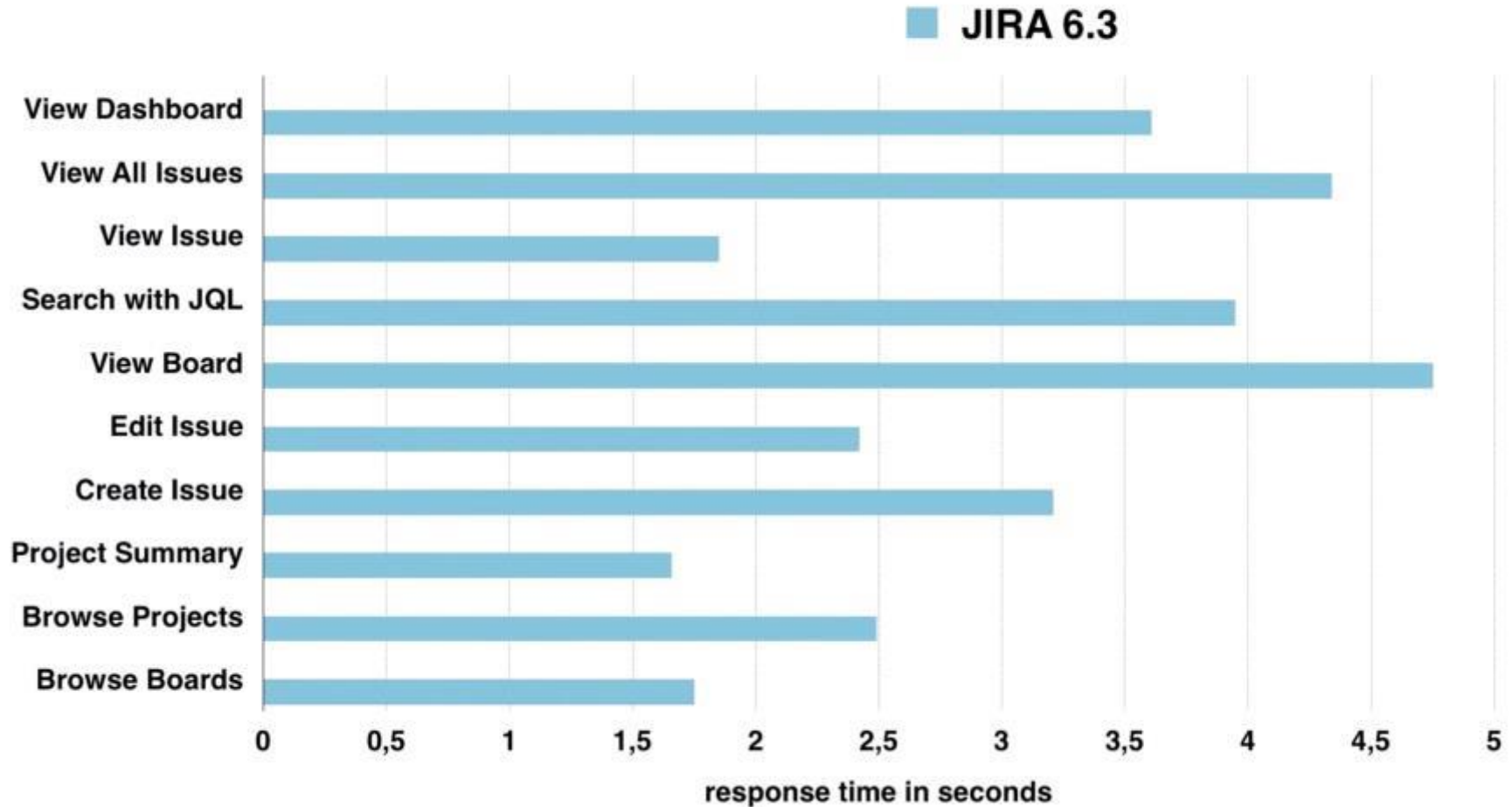
Speed



basierend auf: Five Secrets of JIRA Performance
http://www.youtube.com/watch?v=hZ_lfilQyhc

Erster Ansatz:

Response Times of JIRA Actions



Zweiter Ansatz: Jira's interne Statistiken

Administration

Projects Issues User management **System** Add-ons

General Configuration
Find More Admin Tools

TROUBLESHOOTING AND SUPPORT

System Info

Instrumentation

Integrity Checker

Logging & Profiling

Scheduler Details

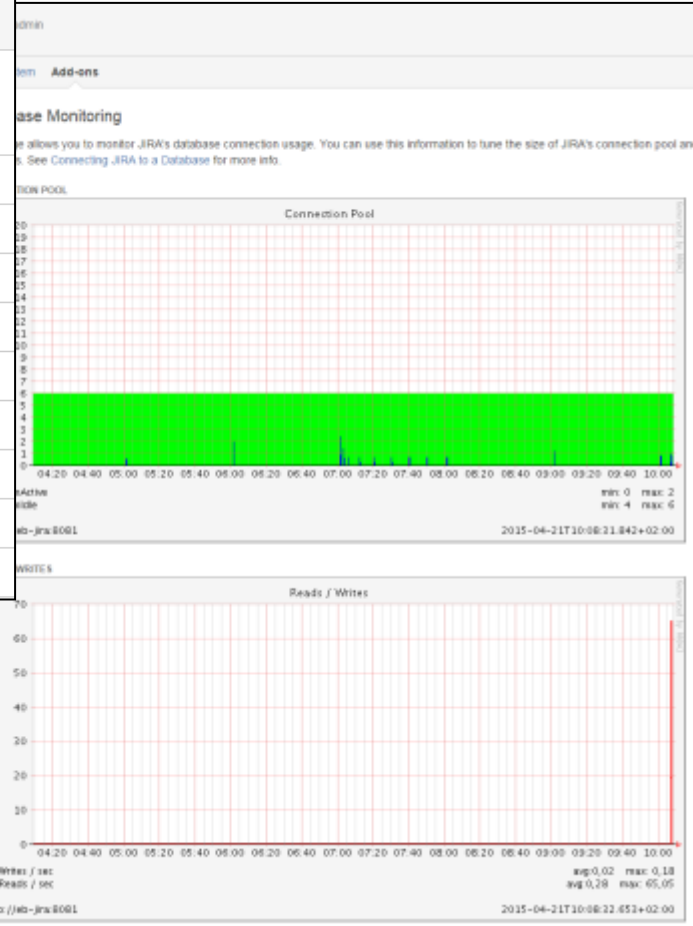
Audit Log

ATLASSIAN SUPPORT TOOLS

Atlassian Support Tools

Name	Type	Value
HostLicenseCache.evictionCount	Counter	0
HostLicenseCache.hitCount	Counter	181
HostLicenseCache.missCount	Counter	2
HostLicenseCache.putCount	Counter	1
HostLicenseCache.removeCount	Counter	0
HostLicenseCache.size	Gauge	1
IssueAutomaticTransitionLimit.evictionCount	Counter	0
IssueAutomaticTransitionLimit.hitCount	Counter	0
IssueAutomaticTransitionLimit.missCount	Counter	0

- ADMINISTRATION PLAN
- AGGREGATION SETTINGS
- Configure
- ADMIN HELPER
- Permission Helper
- Notification Helper
- MONITORING
- Database Monitoring**
- CATWORKX METRICS
- Metrics Settings



Dritter Ansatz: catWorkX Metrics Plugin- interne Statistiken im JIRA

catWorkX Metrics Plugin

Setup and Control the Metrics

Settings Job JMX

Settings for the Metrics Job and JMX

Alternative Hostname:

Enter an alternative for the currently configured hostname of the JIRA Base URL.

* Chosen Backend: **GRAPHITE** ▾

Chose a backend for the job. This can be chosen safely, even if the job is not supposed to run.

* Job interval:

Enter the interval for the job in seconds.

Graphite Settings

Graphite Hostname:

Enter the hostname of the Graphite Server/Service. Can also be the Graphite connector of the influxDB.

Graphite Portnumber:

Enter the portnumber, usually 2003, of the Graphite Server/Service. Can also be the Graphite connector of the influxDB.

InfluxDB Settings

InfluxDB Url:

Enter the URL of the InfluxDB including protocol and portnumber. Omit username and password this must be entered below.

InfluxDB User:

Enter the username required to connect to the InfluxDB.

InfluxDB Password:

Enter the password required to connect to the InfluxDB.

InfluxDB Database:

Enter the database of the InfluxDB to use, e.g. jira.

Apply Cancel

catWorkX Metrics Plugin

Setup and Control the Metrics

Settings Job JMX

Control the Metrics Job

Status

RUNNING **CLUSTERED: NODE1**

(Re-)Start Job Stop Job

catWorkX Metrics Plugin

Setup and Control the Metrics

Settings Job JMX

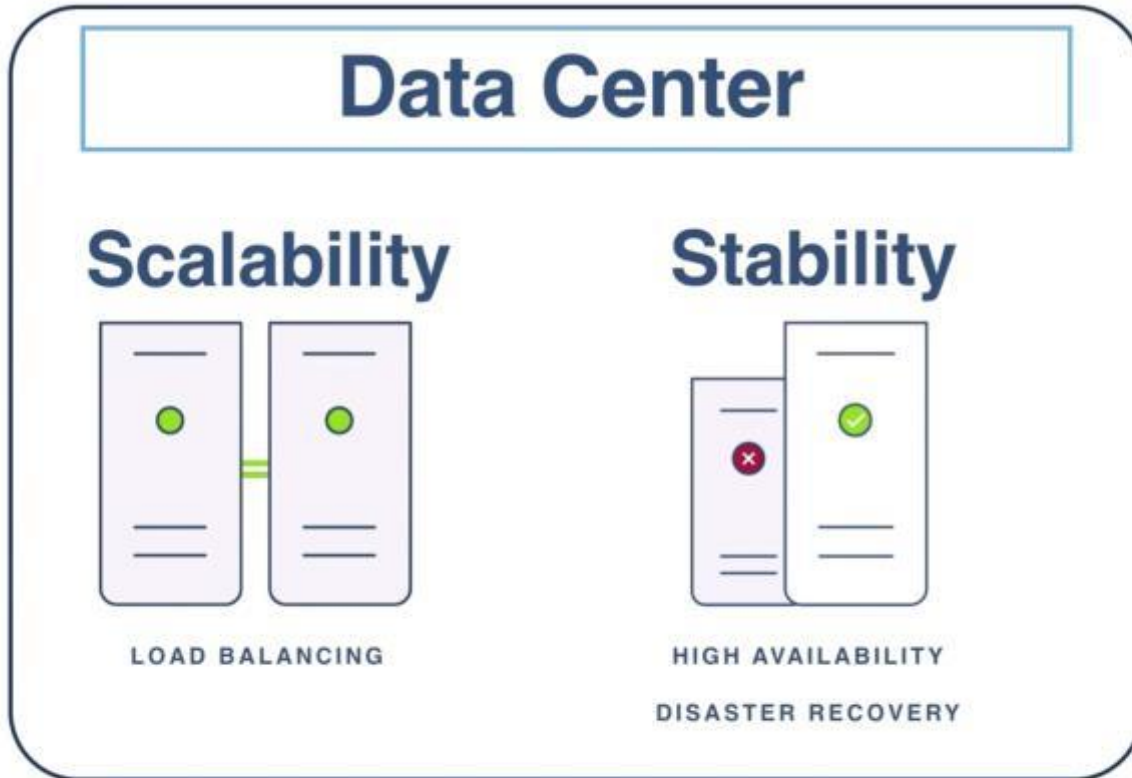
Control JMX

Status

INITIALIZED **STARTED**

Start JMX Stop JMX

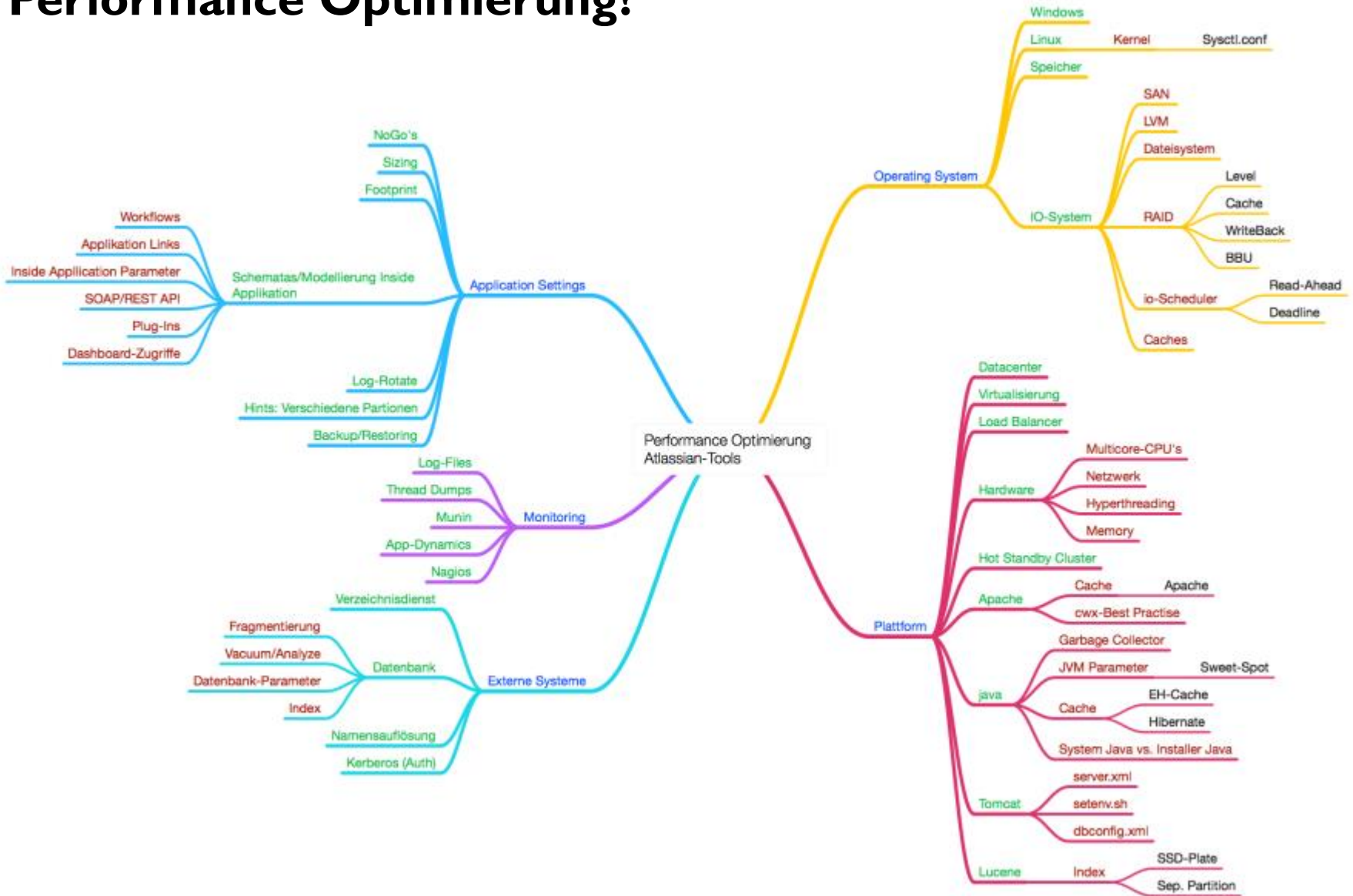
Exemplarische Enterprise Umsetzung



Speed



Performance Optimierung?



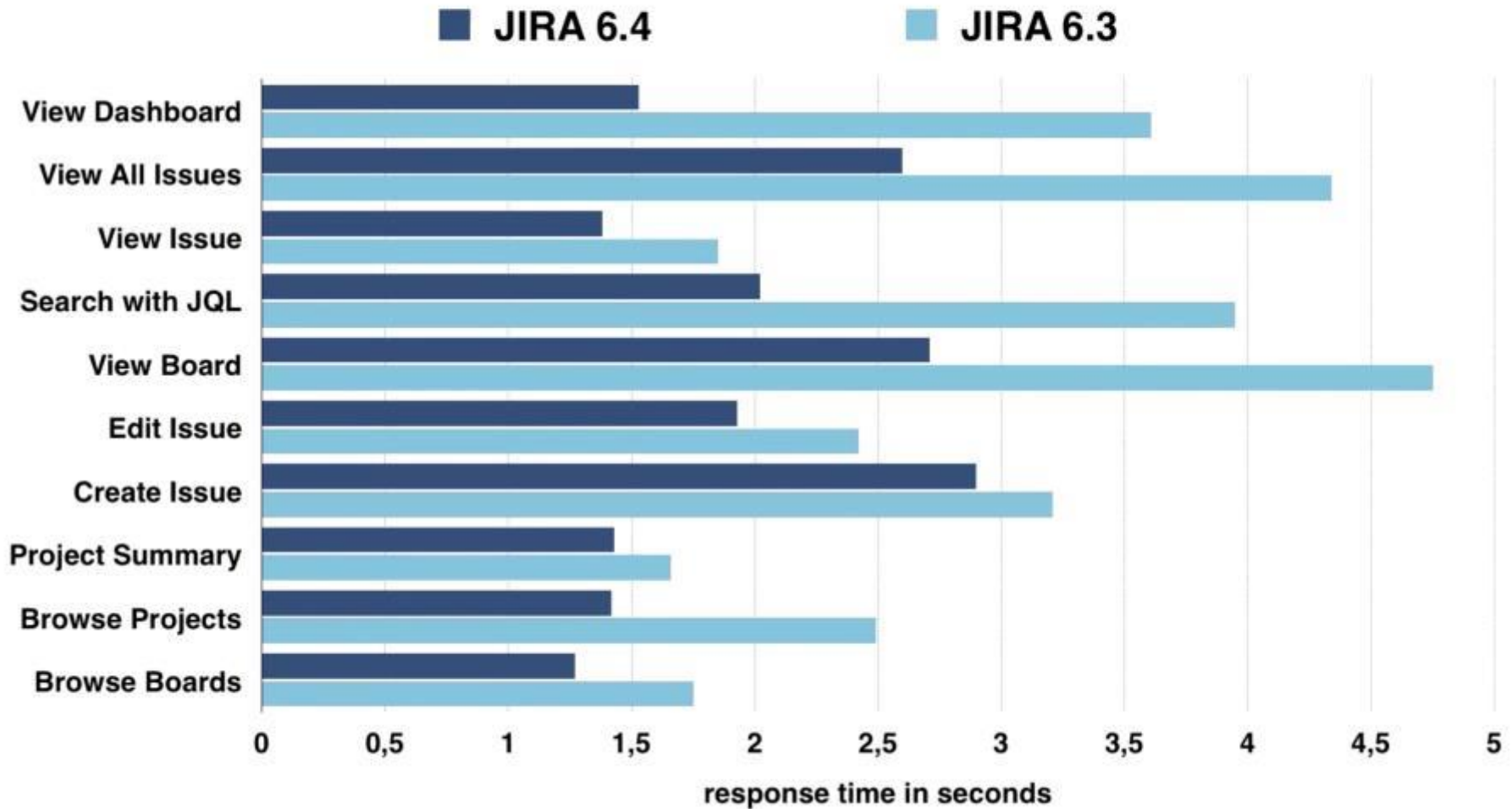
Welche Tools kann ich nutzen?



Find out more here: bit.ly/JIRA-PT

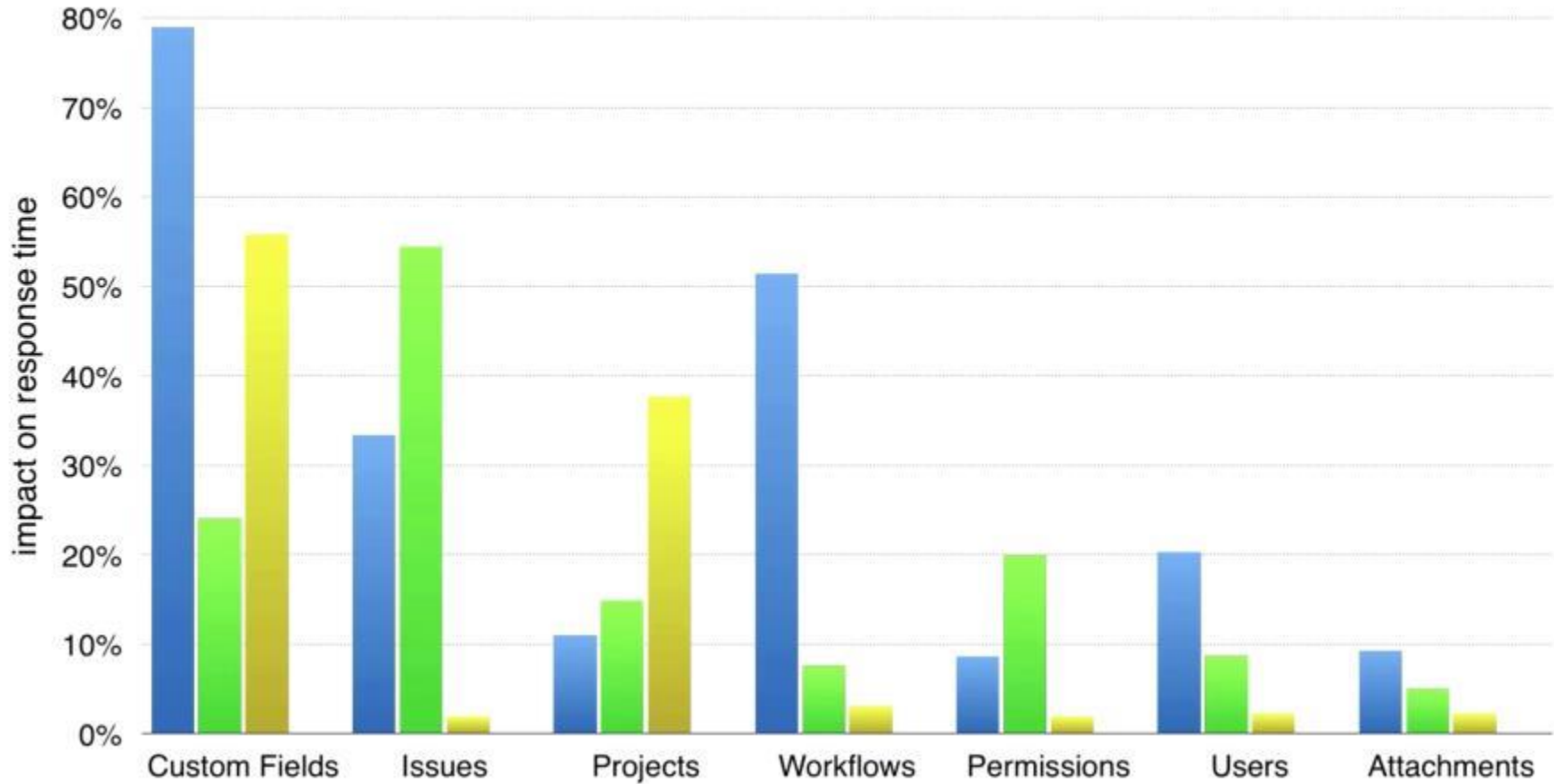


Response Times of JIRA Actions



Influence of scaling data attributes on speed

■ Create Issue ■ Search with JQL ■ View All Issues ■ Edit Issue



Ergebnisse

1. Jira Data Center skaliert linear bis zu vier Nodes
2. Jira 6.4 ist 30% schneller als Jira 6.3
3. Die Anzahl der Custom Felder reduzieren
4. Freie Textfelder haben die schlechteste Performance. Multi Select CF haben den geringsten Impact
5. Der nächste Performancefresser ist die Anzahl der (aktiven) Issues
6. Die Lucene Index Files müssen schnell über IO erreichbar sein
7. Die Anzahl der Benutzer haben seit Jira 5.1 keinen wirklichen Einfluß mehr auf die Performance. Nur die Anzahl der gleichzeitigen eingeloggten (aktiven) Benutzer
8. Java 8 ist 13% schneller als Java 6