

1.– 4. September 2014
in Nürnberg



Herbstcampus

Wissenstransfer
par excellence

Logs live und in Farbe

Statt nur schwarzweiß

Alexander Schwartz

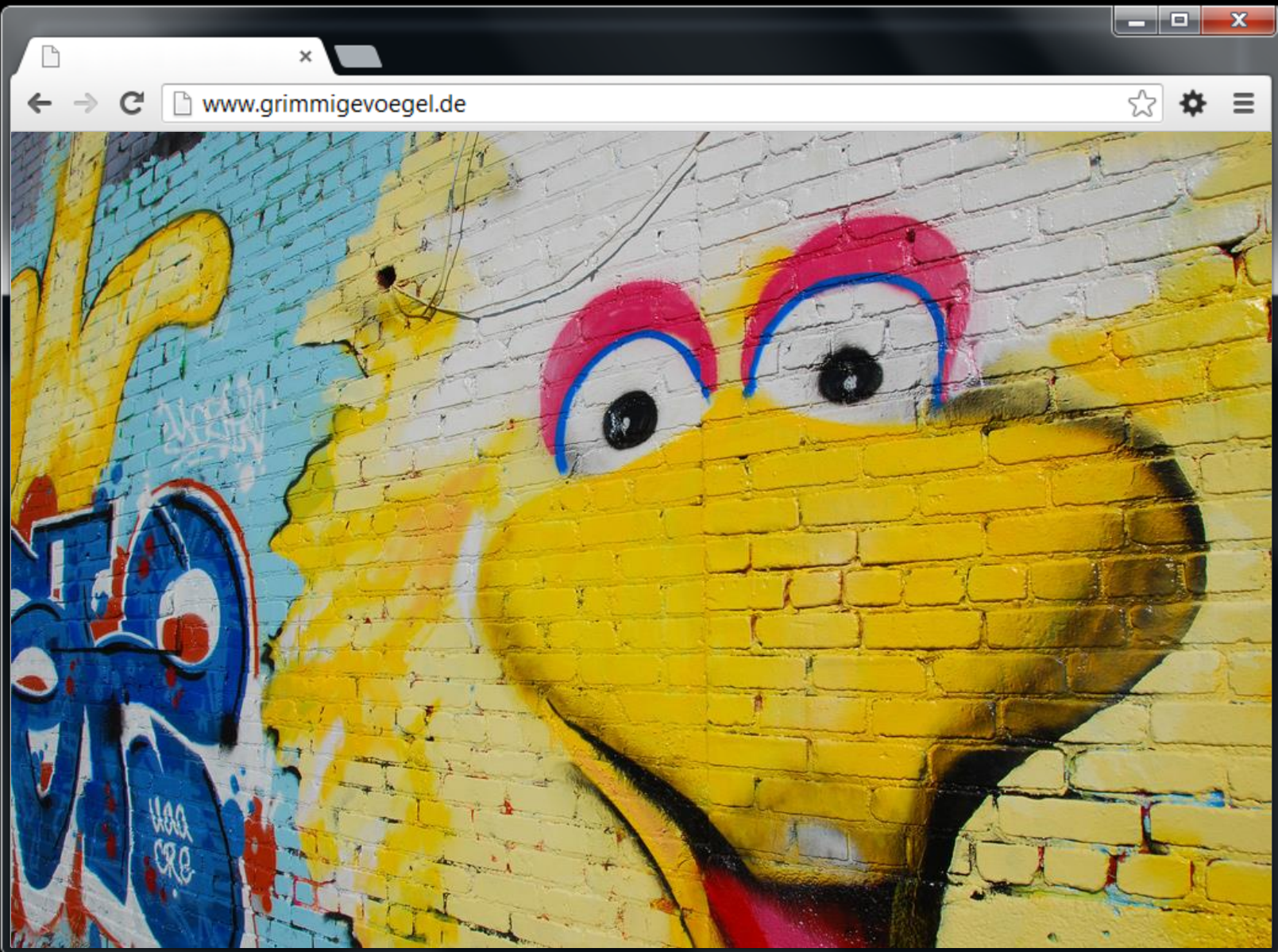
msg systems ag

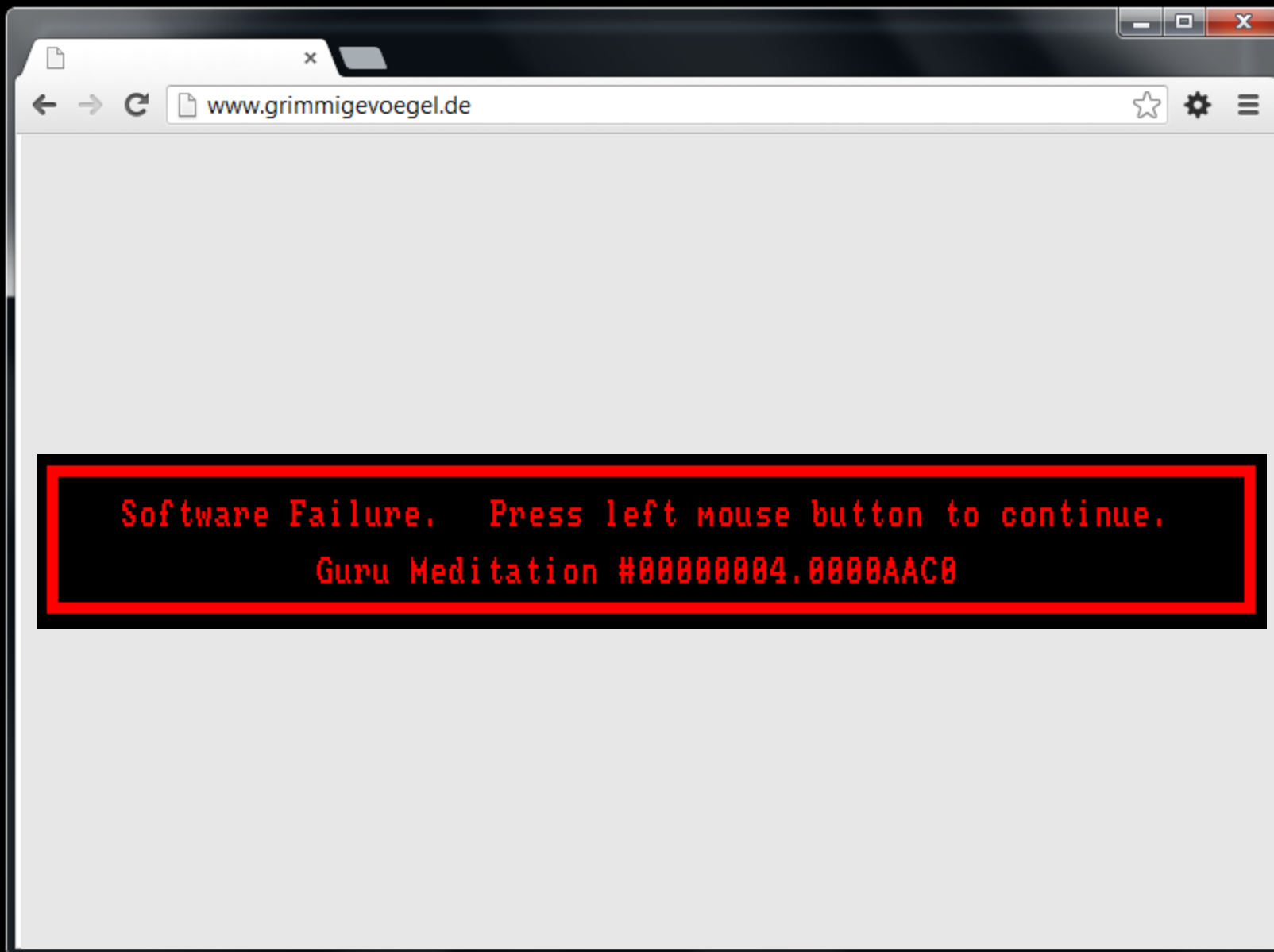
Logs live und in Farbe -
statt nur schwarzweiß

pecha kucha
[pe-chahk-cha]

Alexander Schwartz
msg systems ag

Herbstcampus Nürnberg - 04.09.2014





```
$ tail -f app.log
```

```
$ mail admin@it-ops
```

```
3,433 INFO [stdout] (MSC service thread 1-6) 00:02:13,433 INFO [stdout] (MSC service thread 1-6) references
3,436 INFO [stdout] (MSC service thread 1-6) Hibe 00:02:13,436 INFO [stdout] (MSC service thread 1-6) Hibernate:
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HHH000230: S ationId)
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ing weld se ion rest-samples.war
3,764 INFO 00:02:13,436 INFO [stdout] (MSC service thread 1-6) Hibernate: fig.xml.bootstrap.XmlConfigExten
3,764 INFO 00:02:13,436 INFO [stdout] (MSC service thread 1-6) alter table Vessel iver starting...
3,768 INFO 00:02:13,437 INFO [stdout] (MSC service thread 1-6) add constraint FK fig.xml.bootstrap.XmlConfigExten
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3,786 INFO 00:02:13,437 INFO [stdout] (MSC service thread 1-6) foreign key (vess fig.xml.bootstrap.XmlConfigExten
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3,786 INFO 00:02:13,438 INFO [stdout] (MSC service thread 1-6) references Transl fig.xml.bootstrap.XmlConfigExten
3,796 INFO 00:02:13,444 INFO [org.hibernate.tool.hbm2ddl.SchemaExport] (MSC service thre sion] (MSC service thread 1-2)
1-6) HHH000230: Schema export complete
00:02:13,500 INFO [org.jboss.weld.deployer] (MSC service thread 1-2) JBAS0160 : service thread 1-2) Catch Inte
: Starting weld service for deployment rest-samples.war
00:02:13,764 INFO [org.jboss.solder.config.xml.bootstrap.XmlConfigExtension] (MSC service thread 1-2) Solder Config XML provider starting...
00:02:13,768 INFO [org.jboss.solder.config.xml.bootstrap.XmlConfigExtension] (MSC service thread 1-2) Loading XmlDocumentProvider: org.jboss.solder.config.xml
00:02:13,786 INFO [org.jboss.solder.config.xml.bootstrap.XmlConfigExtension] (MSC service thread 1-2) Reading XML file: vfs:/D:/workspace/rest-samples/conten
00:02:13,796 INFO [org.jboss.solder.Version] (MSC service thread 1-2) Solder service thread 1-6) Hibernate:
1.1.Final (build id: 3.1.1.Final) service thread 1-6) alter tab
00:02:16,919 INFO [solder-servlet] (MSC service thread 1-2) Catch Integration service thread 1-6) add c
or Servlets enabled service thread 1-6) forei
00:02:16,949 INFO [org.jboss.web] (MSC service thread 1-2) JBAS018210: Regist service thread 1-6) refer
ing web context: /rest-samples
00:02:17,128 INFO [org.jboss.as.server] (management-handler-thread - 4) JBAS0 tool.hbm2ddl.SchemaExport] (MSC
559: Deployed "rest-samples.war" plete
. starting weld service for deployment rest-samples.war
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ion SC service thread 1-2) Solder Config XML provider starting...
00:02:13,436 INFO [stdout] (MSC servic 00:02:13,768 INFO [org.jboss.solder.config.xml.bootstrap.XmlConf
00:02:13,436 INFO [stdout] (MSC servic 00:02:13,768 INFO [org.jboss.solder.config.xml.bootstrap.XmlConf
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ion 00:02:13,796 INFO [org.jboss.solder.Version] (MSC service thread
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00:02:16,919 INFO [solder-servlet] (MSC service thread 1-2) Catch
or Servlets enabled
00:02:16,949 INFO [org.jboss.web] (MSC service thread 1-2) JBAS01
ing web context: /rest-samples
00:02:17,128 INFO [org.jboss.as.server] (management-handler-threa
559: Deployed "rest-samples.war"
```

Buzzword Bingo



{ Idap }



**Fehler-
sammler**



**Event
Analytics**



**Application
Log**



Fehlersammler

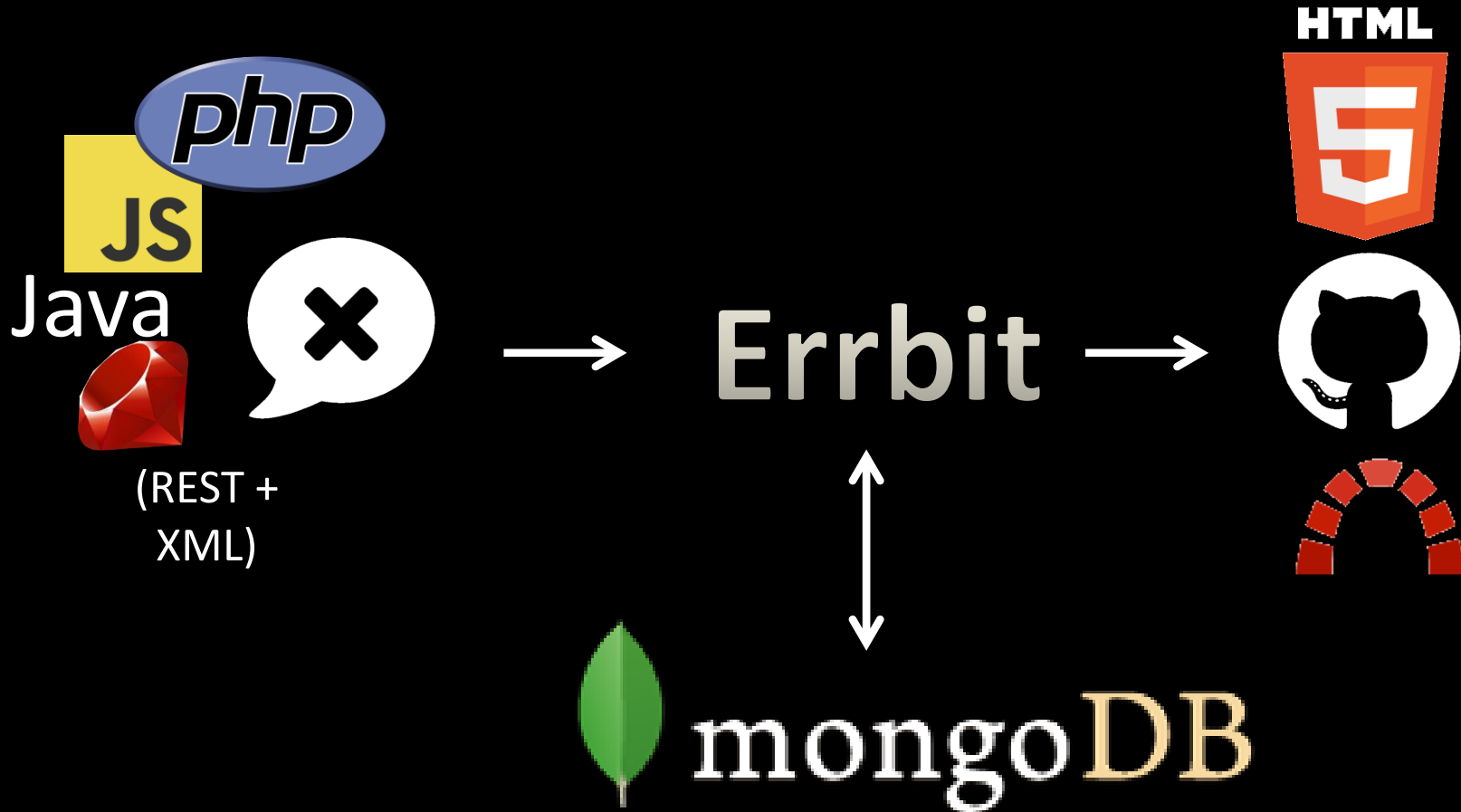
Errbit



open source

Clone von:  Airbrake.io

Big Picture



Errbit Workspace

Unresolved Errors

show resolved

Search for issues

<input type="checkbox"/>	APP	WHAT & WHERE	LATEST ↑	DEPLOY	COUNT	RESOLVE
<input type="checkbox"/>	Hello World production	My Exception xy <i>com.msgsystems.gbl.technology.errbit.LogExceptionTest</i>	8 minutes ago	n/a	1	
<input type="checkbox"/>	Hello World development	My Message <i>com.msgsystems.gbl.te</i>				
<input type="checkbox"/>	Hello World development	My Exception xy <i>com.msgsystems.gbl.te</i>				

Merge Unmerge Resolve Unres

java.lang.Exception

App: Hello World Where: com.msgsystems.gbl.technology.errbit.LogExceptionTest
Environment: development Last Notice: May 11 20:53:01

resolve

iCal

up

create issue

My Exception xy

← Older | Newer → viewing occurrence 4 of 4

Summary

Backtrace

Environment

Parameters

Session

```
[unknown source] → Exception java.lang.Exception
/LogExceptionTest.java:13 → com.msgsystems.gbl.technology.errbit.LogExceptionTest.logException
/NativeMethodAccessorImpl.java:-2 → sun.reflect.NativeMethodAccessorImpl.invoke0
/NativeMethodAccessorImpl.java:57 → sun.reflect.NativeMethodAccessorImpl.invoke
...
/RemoteTestRunner.java:467 → org.eclipse.jdt.internal.junit.runner.RemoteTestRunner.runTests
/RemoteTestRunner.java:683 → org.eclipse.jdt.internal.junit.runner.RemoteTestRunner.runTests
/RemoteTestRunner.java:390 → org.eclipse.jdt.internal.junit.runner.RemoteTestRunner.run
/RemoteTestRunner.java:197 → org.eclipse.jdt.internal.junit.runner.RemoteTestRunner.main
```

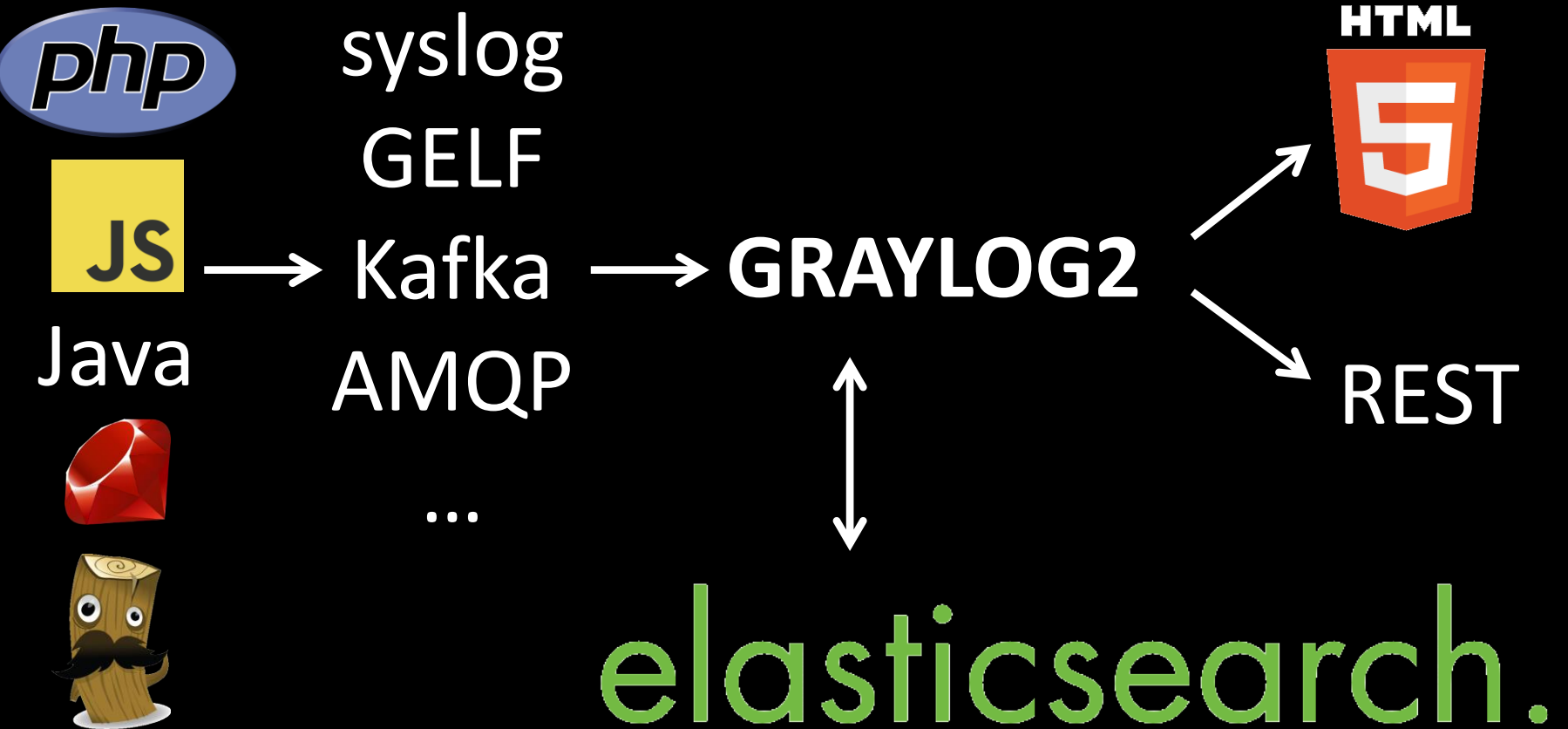


Event Analytics

GRAYLOG2



Big Picture



GRAYLOG2 Workspace

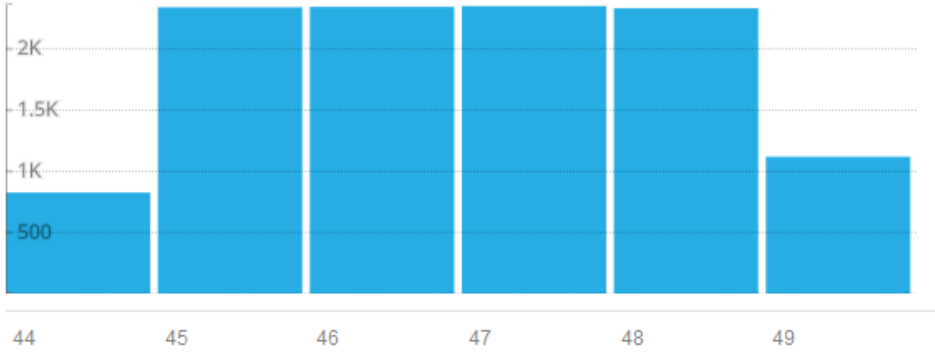
Search in the last 5 minutes ▼ Choose a saved search ▼

Q action:show 🔗

Q Search results 🌟 Export Clear pinned charts Save search

Found 11,315 messages. 🔗

Total result histogram 🔗



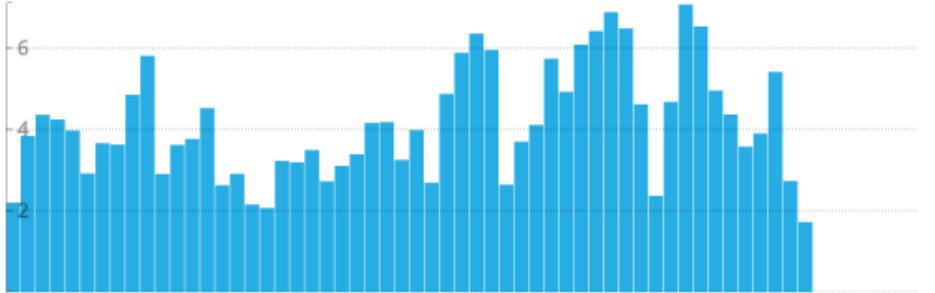
Minute	Count
44	~800
45	~2200
46	~2200
47	~2200
48	~2200
49	~1100

44 45 46 47 48 49

Resolution: Year, Quarter, Month, Week, Day, Hour, **Minute**

Field: speed ⚙️ 🚩

■ [mean] speed, Query: *



Time	Mean Speed
00:00	~3.5
00:05	~4.5
00:10	~3.5
00:15	~4.5
00:20	~5.5
00:25	~3.5
00:30	~4.5
00:35	~3.5
00:40	~4.5
00:45	~5.5
00:50	~6.5
00:55	~5.5
01:00	~4.5
01:05	~5.5
01:10	~6.5
01:15	~5.5
01:20	~6.5
01:25	~7.5
01:30	~6.5
01:35	~5.5
01:40	~4.5
01:45	~3.5
01:50	~2.5

Q Search results ▶

Found 11,315 messages in 185ms, searched in 1 index.

Message fields [of current page](#) / [all](#)

Quick select fields

Default None All

Q

- action
- controller
- http_method
- http_response_code
- message
- resource
- source
- took_ms
- user_id

Statistics Quick values Generate chart


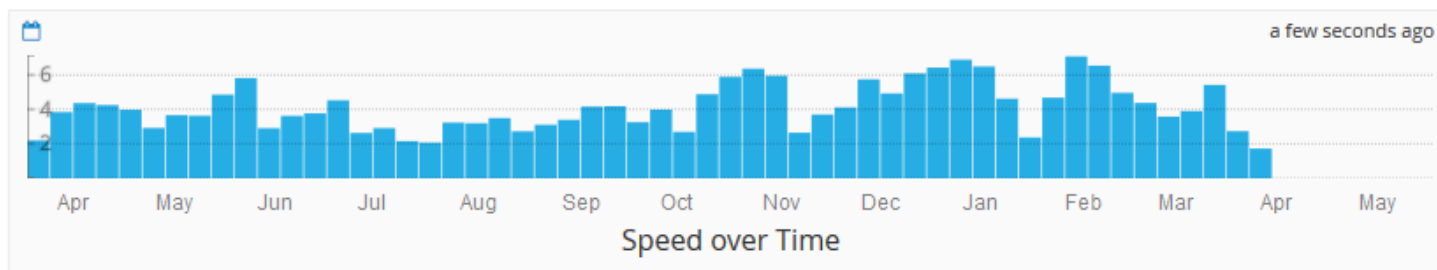
GRAYLOG2 Dashboard

[Dashboards](#) / [My Dashboard](#)



My Dashboard

My description (Unlock widget positions by clicking on the lock symbol on the top right. Then drag them to any position you like.)



a few seconds ago

Value	%	Count
3.4	1.82	320
4.3	1.80	316
3.8	1.78	312
3.9	1.77	311
4.0	1.76	309
3.7	1.75	308
3.3	1.74	306
4.2	1.73	304

Values



a few seconds ago

11,711

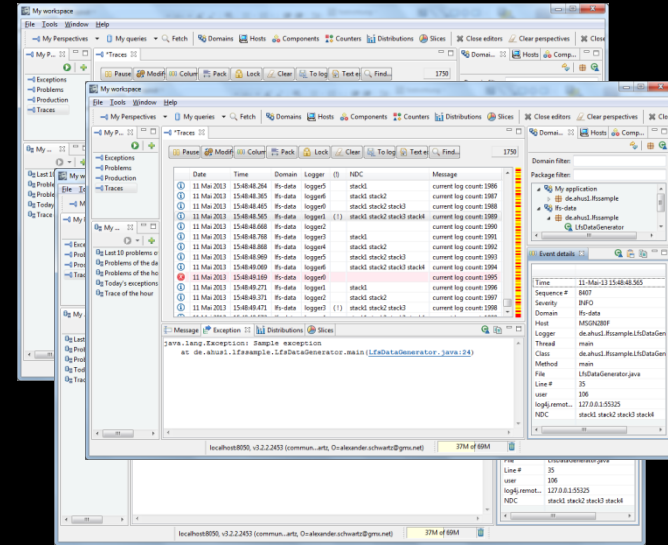
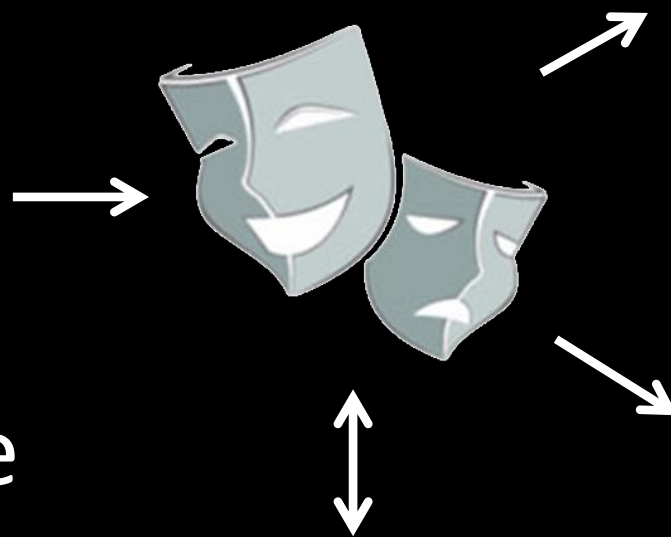
Number of Messages

Application Log



Big Picture

log4j
logback
log4xxx
Nlog
syslog
dropzone



Java API

SQL/NoSQL

logFaces Workspace

The screenshot displays the logFaces Workspace application. The main window is titled "My workspace" and contains several panels:

- Left Panel:** A sidebar with navigation options: "Exceptions", "Problems", "Production", "Traces", "My ...", "Last 10 problems or", "Problems of the da", "Problems of the ho", "Today's exceptions", and "Trace of the hour".
- Top Panel:** A menu bar with "File", "Tools", "Window", and "Help". Below it is a toolbar with icons for "My Perspectives", "My queries", "Fetch", "Domains", "Hosts", "Components", "Counters", "Distributions", "Slices", "Close editors", "Clear perspectives", and "Close".
- Center Panel:** A table of log entries. The table has columns for "Date", "Time", "Domain", "Logger", "NDC", and "Message". The selected row (row 10) is highlighted in red and shows an error message: "current log count: 1995".
- Bottom Panel:** A message viewer showing the details of the selected log entry: "java.lang.Exception: Sample exception at de.ahus1.lfssample.LfsDataGenerator.main (LfsDataGenerator.java:24)".
- Right Panel:** A tree view showing the application structure: "My application" containing "de.ahus1.lfssample" and "LfsDataGenerator". Below it is an "Event details" panel showing the following information:

Time	11-Mai-13 15:48:48.565
Sequence #	8407
Severity	INFO
Domain	lfs-data
Host	MSGN280F
Logger	de.ahus1.lfssample.LfsDataGen
Thread	main
Class	de.ahus1.lfssample.LfsDataGen
Method	main
File	LfsDataGenerator.java
Line #	35
user	106
log4j.remot...	127.0.0.1:55325
NDC	stack1 stack2 stack3 stack4

The status bar at the bottom shows "localhost:8050, v3.2.2.2453 (commun...artz, O=alexander.schwartz@gmx.net)" and "37M of 69M".

logFaces Trace & Focus

The screenshot displays the logFaces application interface. At the top, there is a toolbar with buttons for Pause, Modify, Column, Pack, Lock, Clear, To log, Text editor, and Find... A status bar on the right shows the number 1750. Below the toolbar is a table with columns: Date, Time, Domain, Logger, (!), NDC, and Message. The table contains multiple rows of log entries. A context menu is open over the row with time 15:48:47.964. The menu items are: Show details, Show source code, Copy to clipboard..., Create tag, Add bookmark, Clear all bookmarks, Focus on events..., Hide events..., Permanently ignore..., Fetch identical events in range of..., What happened before.., What happened after.., What happened in range of.., and Follow in real time... The 'Focus on events...' submenu is also open, showing options: from this domain (lfs-data), from this host (MSGN280F), from this component (), from this logger (logger0), from this thread (main), containing this text..., and where user is '102'. The table data is as follows:

Date	Time	Domain	Logger	(!)	NDC	Message
11 Mai 2013	15:48:46.959	lfs-data	logger6		stack1 stack2 stack3	current log count: 1973
11 M	15:48:47.064	lfs-data	logger6		stack1 stack2 stack3 stack4	current log count: 1974
11 M						current log count: 1975
11 M					stack1	current log count: 1976
11 M					stack1 stack2	current log count: 1977
11 M					stack1 stack2 stack3	current log count: 1978
11 M					stack1 stack2 stack3 stack4	current log count: 1979
11 M						current log count: 1980
11 M					stack1	current log count: 1981
11 M					stack1 stack2	current log count: 1982
11 M						current log count: 1983
11 M						current log count: 1984
11 M						current log count: 1985
11 M						current log count: 1986
11 M						current log count: 1987
11 M						current log count: 1988
11 M						current log count: 1989
11 M						current log count: 1990
11 M					stack1	current log count: 1991
11 M					stack1 stack2	current log count: 1992
11 M					stack1 stack2 stack3	current log count: 1993
11 M					stack1 stack2 stack3 stack4	current log count: 1994

logFaces Query

Query

Specify a friendly name for this query:
My new Query

Specify time range, size limitation and sorting order:
custom range no more than 10K records display in ascending order [Europe/Berlin](#)
[11 Mai 2013, 15:27 -- 11 Mai 2013, 16:27](#) Fetch stack traces

Use this criteria to fetch log data:

Capture log events when:

loggerLevel higher or equals WARN

and hostName is MSGN280F

OR

user is 104

Nie mehr...



@ahus1de

Errbit: <http://errbit.github.io/errbit>

Graylog2: <http://graylog2.org>

logFaces: <http://www.moonlitsoftware.com>