

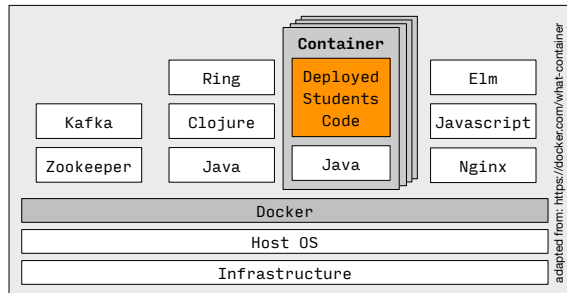
VIRTUALISIERTE ARBEITSUMGEBUNG FÜR DEN TEST VERTEILTER SYSTEME

Microservice-Architektur mit Docker, Kafka, Clojure & Elm

21. Juni 2017

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GLIEDERUNG

1. Kontext
2. Docker
3. Inspiration
4. „VAR-Tool“
5. Ausblick

KONTEXT

BISHERIGER ABLAUF

ANFORDERUNGEN

ERHOFFTE VORTEILE

DOCKER

DESCRIPTION

CONTAINER

DOCKER-COMPOSE

INSPIRATION

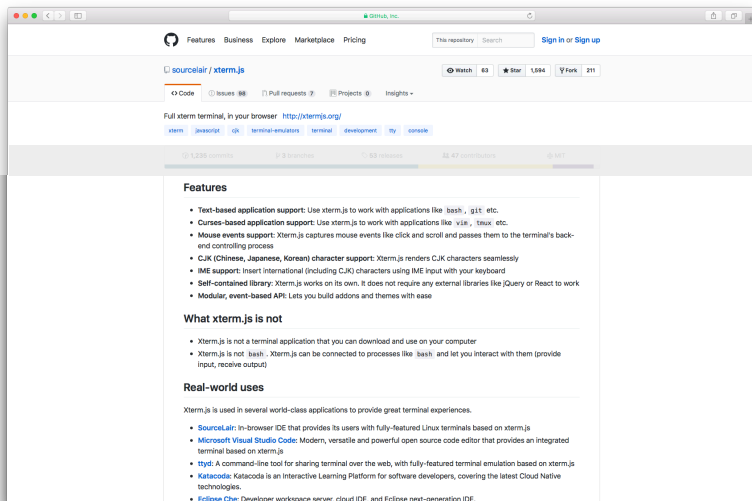
TMUX PANES

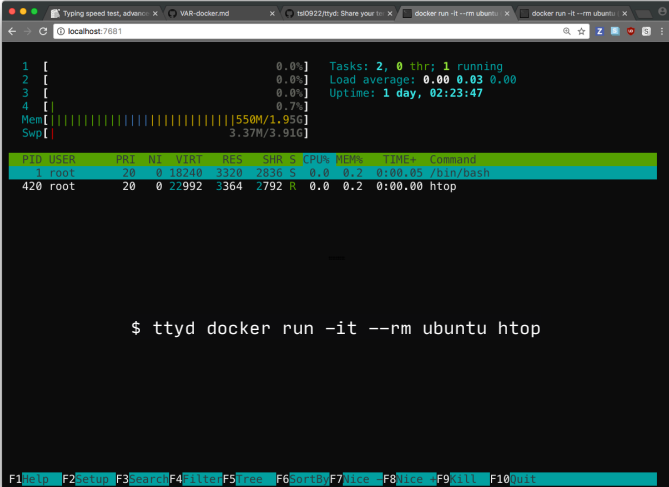
```

jen-mbp21docker-var jan$ ls -ls
total 64
drwxr-xr-x 13 jan staff 442 May 29 12:27 .
drwxr-xr-x 20 jan staff 688 Jun 5 21:53 ..
-rw-r--r-- 1 jan staff 8196 Jun 19 20:46 .DS_Store
drwxr-xr-x 17 jan staff 678 Jun 19 21:27 .git
-rw-r--r-- 1 jan staff 2076 Apr 10 16:47 .gitignore
-rw-r--r-- 1 jan staff 104 May 26 19:52 .gitmodules
-rw-r--r-- 1 jan staff 1075 Apr 10 16:46 LICENSE
-rw-r--r-- 1 jan staff 25 May 8 22:11 README.md
drwxr-xr-x 12 jan staff 408 Jun 19 21:27 client
-rw-r--r-- 1 jan staff 1271 May 26 19:53 docker-compose.yml
drwxr-xr-x 15 jan staff 518 May 26 19:53 docker-master
drwxr-xr-x 8 jan staff 272 Jun 19 10:41 docs
drwxr-xr-x 10 jan staff 340 May 26 19:33 kafka-websocket
jen-mbp21docker-var jan$
| | | tokenize-arg-string.js
| | |-- node_modules
| | | | camelcase
| | | | index.js
| | | | license
| | | | package.json
| | | | readme.md
| | | | package.json
|-- package.json
|-- public
|-- css
| | |-- app.css
| | |-- app.css.map
| |-- index.html
|-- js
| | |-- app.js
| | |-- app.js.map
|
1268 directories, 6762 files
jen-mbp21docker-var jan$

jen-mbp21docker-var jan$
| ./bootstrap.sh && \
| make install && \
| cd .. && rm -rf kafkacat
| # && AUTO_ADDED_PACKAGES="apt-mark showauto" && \
| # apt-get remove --purge -y $BUILD_PACKAGES $AUTO_ADDED_PACKAGES && \
| # rm -rf /var/lib/apt/lists/* /tmp/* /usr/tmp/*
|
RUN mkdir -p /usr/src/app
WORKDIR /usr/src/app
# closure app
# COPY project.clj /usr/src/app/
# run lein deps
# copy . /usr/src/app
# RUN mvn "%{lein uberjar} sed -n 's/%Created (.*/standalone.jar)/%{ip}'" app-standalone.jar
|
# ENTRYPOINT ["kafkacat"]
# CMD ["java", "-jar", "app-standalone.jar"]
CMD ls -ls | kafkacat -b kafka -t logSTOKEN
jen-mbp21docker-var jan$

```



The screenshot shows a web browser window with the address bar at `localhost:7681`. The page content is a TTYD (Terminal) interface for monitoring a Docker container. It displays system statistics, a process list, and a command input field.

System Statistics:

```
1 [ 0.0%] Tasks: 2, 0 thr; 1 running
2 [ 0.0%] Load average: 0.00 0.03 0.00
3 [ 0.0%] Uptime: 1 day, 02:23:47
4 [ 0.7%]
Mem[|||||]550M/1.95G
Swp[ ]3.37M/3.91G
```

Process List:

PID	USER	PRI	NI	VIRT	RES	SHR	S	CPU%	MEM%	TIME+	Command
1	root	20	0	18240	3320	2836	S	0.0	0.2	0:00.05	/bin/bash
420	root	20	0	22992	3364	2792	R	0.0	0.2	0:00.00	htop

Command Input Field:

```
$ ttyd docker run -it --rm ubuntu htop
```

Footer:

```
F1 Help F2 Setup F3 Search F4 Filter F5 Tree F6 SortBy F7 Nice F8 Nice F9 Kill F10 Quit
```

„VAR-TOOL“

Experimente

Java RMI Chat

Excercise

Excercise

Excercise

Excercise

Excercise

Excercise

Excercise

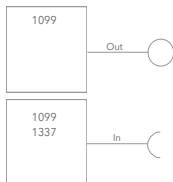
ChatServer



Container-Einstellungen

Dieser Container enthält bereits Dateien. 📁

Ports



Main Class

Argumente

ChatClient



```
Exception in thread "main" java.io.FileNotFoundException: Could
not locate var_server/core__init.class or var_server/core.clj on
classpath. Please check that namespaces with dashes use
underscores in the Clojure file name., compiling:(var_server/
core_test.clj:1:1)
```

```
at clojure.lang.Compiler.load(Compiler.java:7391)
at clojure.lang.RT.loadResourceScript(RT.java:372)
at clojure.lang.RT.loadResourceScript(RT.java:363)
at clojure.lang.RT.load(RT.java:453)
at clojure.lang.RT.load(RT.java:419)
at clojure.core$load$fn__5677.invoke(core.clj:5893)
at clojure.core$load.invokeStatic(core.clj:5892)
at clojure.core$load.doInvoke(core.clj:5876)
at clojure.lang.RestFn.invoke(RestFn.java:408)
at clojure.core$load_one.invokeStatic(core.clj:5697)
```

Container 3



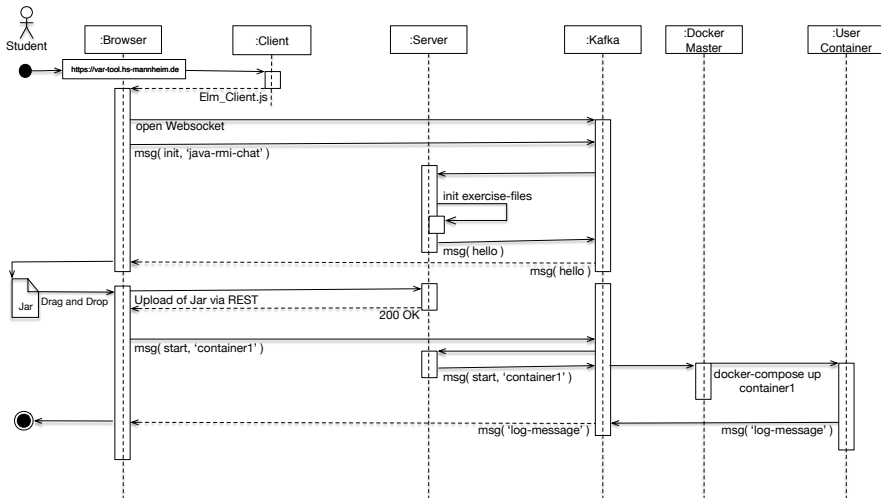
Datei hochladen.

Container 4

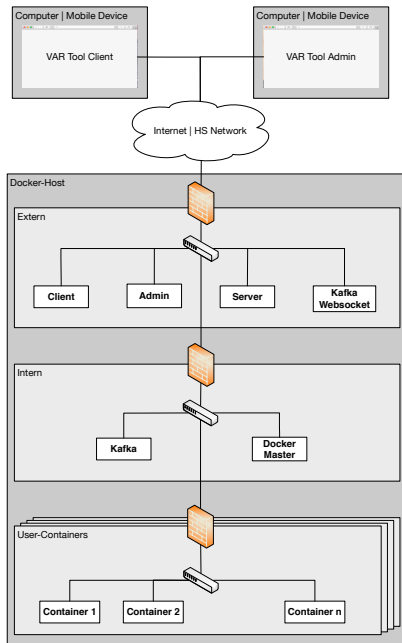


Datei wird hochgeladen.

SEQUENCE



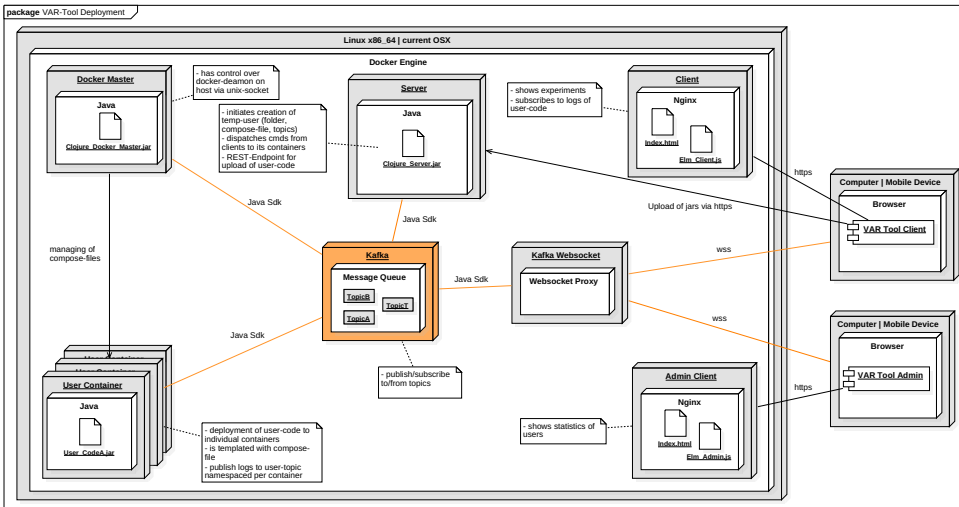
NETWORK



DEPLOYMENT

package VAR-Tool Deployment

Linux x86_64 | current OSX



COMPOSE-FILE

AUSBLICK

FIN

Danke für die Aufmerksamkeit. – Fragen?