

# Application Instrumentation

(or some other terrible talk title)

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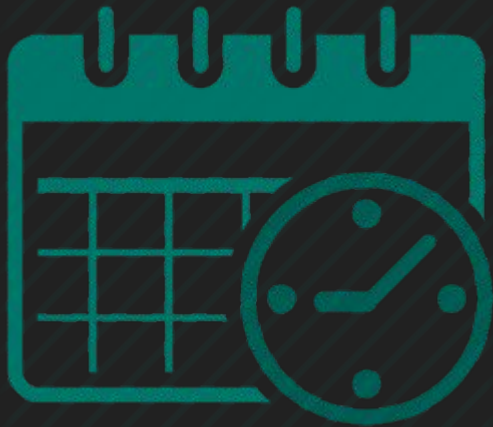
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delivering hire insights.

***Dice***



Overview of tools & terminology

Instrumenting our applications “the hard way” with examples

Instrumenting our applications “the easy way” with examples

A few more examples just for funsies

# Why Bother?

Observing vs. Alerting vs. Dashboards

Instrumenting from our applications

Build applications with instrumentation  
in mind from the beginning

AND develop all of your instrumentation  
“on your machine” as you build the  
application



# Tools & Terminology



JMX : Java Management Extensions

Jolokia : Expose JMX through endpoints

Hawtio : Explore the endpoints

Influxdb : Time Series Database

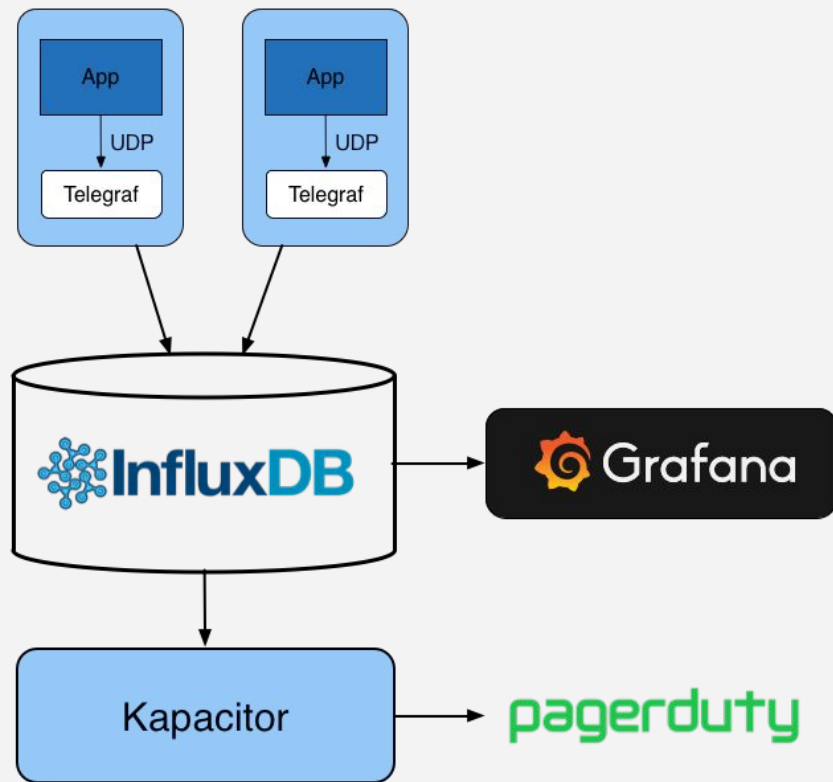
Telegraf : Collect & Process

Chronograf : Browse

Grafana : Create Dashboards

Kapacitor : Stream Processing & Alerting

# This is DevOps



# Let's connect some containers!



Network Config

Influx Docker Setup

Chronograf Docker Setup

Grafana Docker Setup



A large, dense pile of multi-colored polyhedral dice, including d4, d6, d8, d10, d12, and d20. The dice are in various colors like blue, green, red, yellow, and grey, and feature different numbers and symbols such as dots and mathematical signs. The text "Let's do it for real..." is overlaid in the center in a white, sans-serif font.

Let's do it for real...

# Custom Metrics

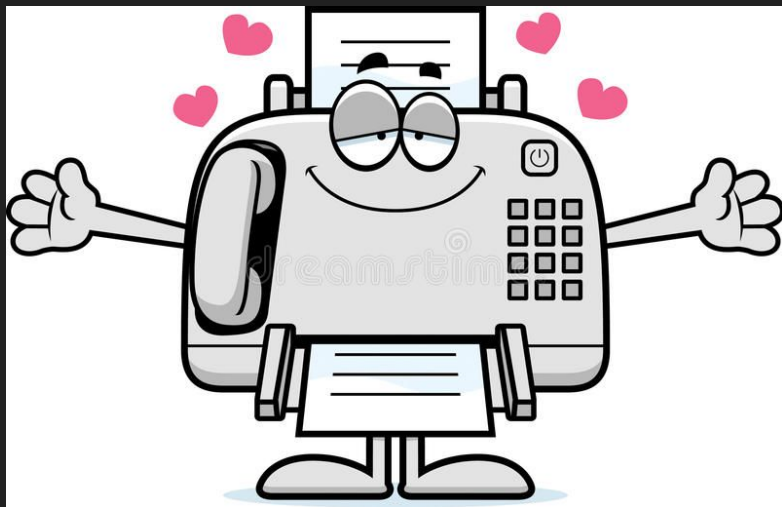


Output additional data by exposing it through JMX or custom application endpoints.

If you are using spring boot you can extend actuator functionality to report metrics. Otherwise configure Telegraf to forward them.



# Questions?



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Slides & Examples:

<https://github.com/jessiepuls/2018-09-cijug>