

Week 4: Service-to-Service Communication

Unit 2: Analyzing Logs in Kibana





Analyze your logs @CF – ELK stack

- Logs are only useful if they can be analyzed
- Collect logs in single location → common format required
- ELK stack: Elastic search + Logstash + Kibana
 a popular combination to store, search, and view log entries
 - → provided at SAP Cloud Platform: Cloud Foundry



Logstash (Data Processor)

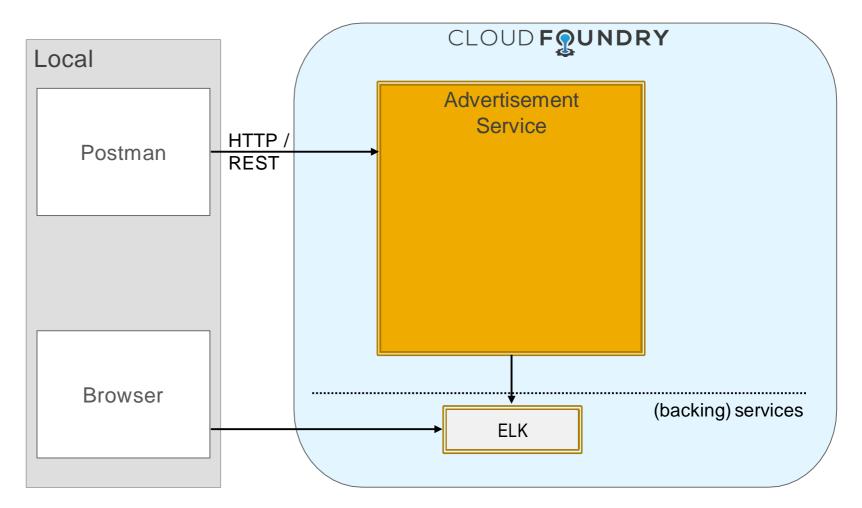
Elastic Search (Storage & Search) **K**ibana (Web Interface)

© 2018 SAP SE or an SAP affiliate company. All rights reserved. | PUBLIC

Exercise



Exercise 14:
Getting Started with
Elastic Stack



© 2018 SAP SE or an SAP affiliate company. All rights reserved. I PUBLIC

Review of sample solution





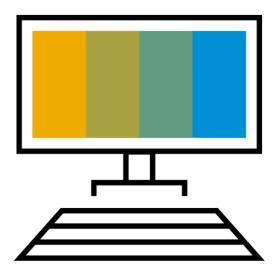
Food for thought

Trace methods with aspect-oriented programming

With Java aspects (e.g. AspectJ) * you can easily introduce trace logs

- for every method execution,
- seeing what arguments it receives,
- what it returns,
- and how much time every execution takes,

without changing code!



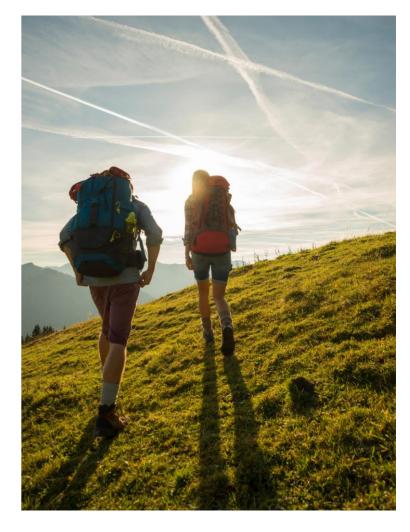
© 2018 SAP SE or an SAP affiliate company. All rights reserved. | PUBLIC

^{*}Aspects modularize cross-cutting concerns, applying logic that spans multiple objects

Further reading

- SAP Help: Application Logging
- Kibana
- CF Docs: Application Logging in Cloud Foundry





© 2018 SAP SE or an SAP affiliate company. All rights reserved. | PUBLIC

What you've learned in this unit

- Why it makes sense to do tracing with aspect-oriented programming (AOP)
- The ELK stack: **E**lastic search + **L**ogstash + **K**ibana
 - What it is
 - Why we use it
 - How to use it



© 2018 SAP SE or an SAP affiliate company. All rights reserved. I PUBLIC

Thank you.

Contact information:

open@sap.com





© 2018 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

See http://global.sap.com/corporate-en/legal/copyright/index.epx for additional trademark information and notices.