

# Spring Boot Microservices

Beginner to Guru

Consolidated Logging with ELK Stack



# Consolidated Logging with ELK Stack

- **E** Elasticsearch
- L Logstash
- K Kibana
- All products open source, supported company called elastic
- Elasticsearch JSON based search engine based on Lucine
  - Highly scalable 100s of nodes (cloud scale)





# Logstash

- Data processing pipeline for log data
- Allows to:
  - Collect from multiple sources
  - Transform
  - Send





#### Kibana

- Data visualization tool for Elasticsearch
- Can query data and act as a dashboard
- Can also create charts, graphs, and alerts
  - Many many more features





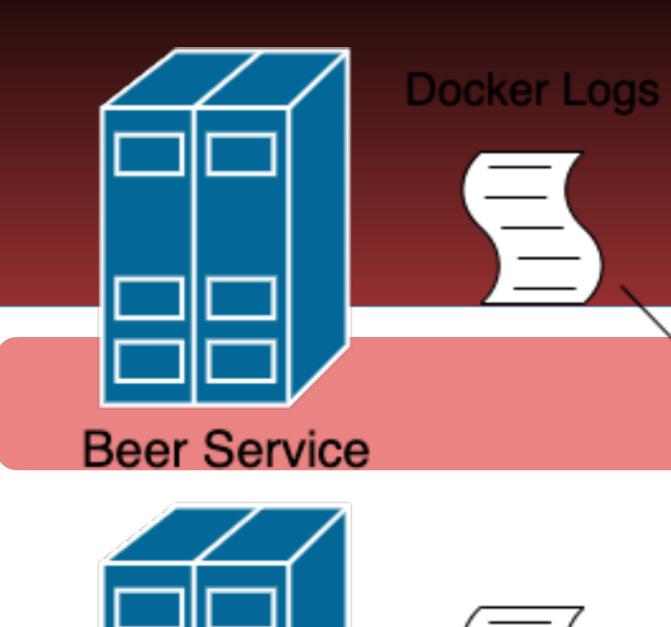
#### Filebeat

- Filebeat is a log shipper
- Moves log data to a destination
- Often destination is a logstash server
  - Logstash is used for further transformation before sending to Elasticseach



### **ELK without Logstash**

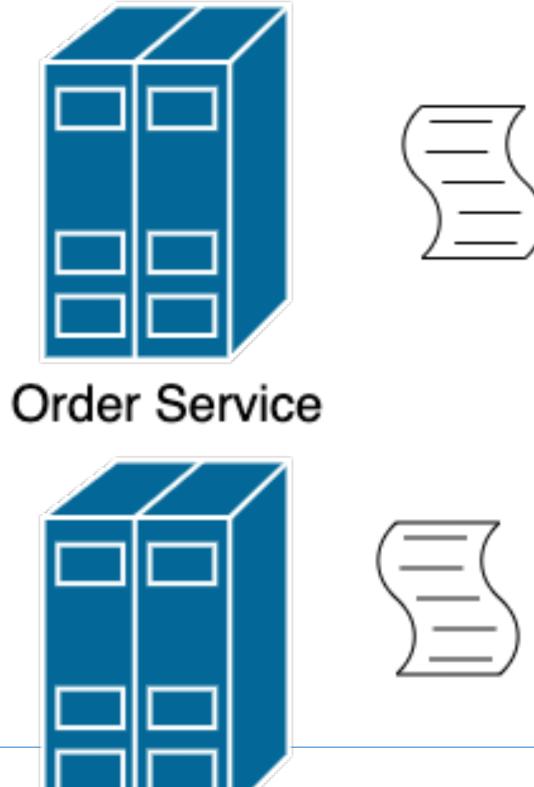
- Filebeat has ability to do some transformations
- Thus, possible to skip Logstash and write directly to Elasticsearch
- Previously we setup JSON logout put
- Filebeat can convert JSON logs to JSON objects for Elasticsearch





# Overview

Filebeat

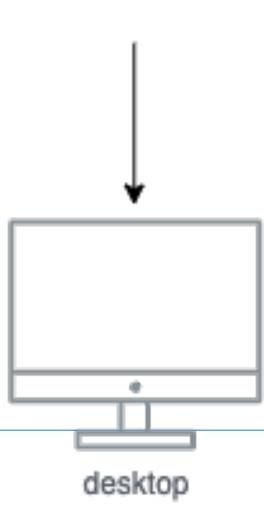


Inventory Service









Kibana



# SPRING FRAMEWORK

