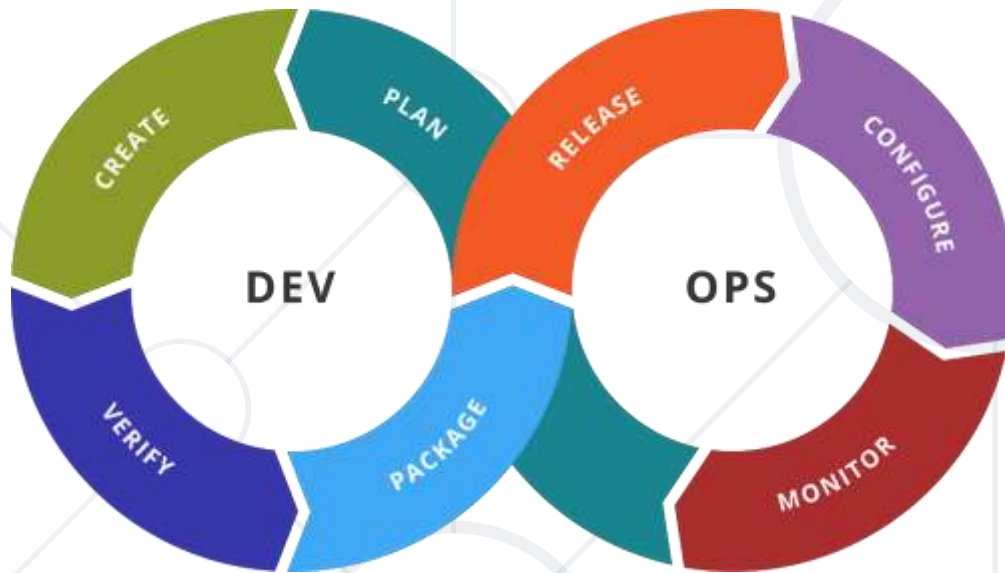


Elastic Stack



SoftUni Team
Technical Trainers



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You Have Questions?

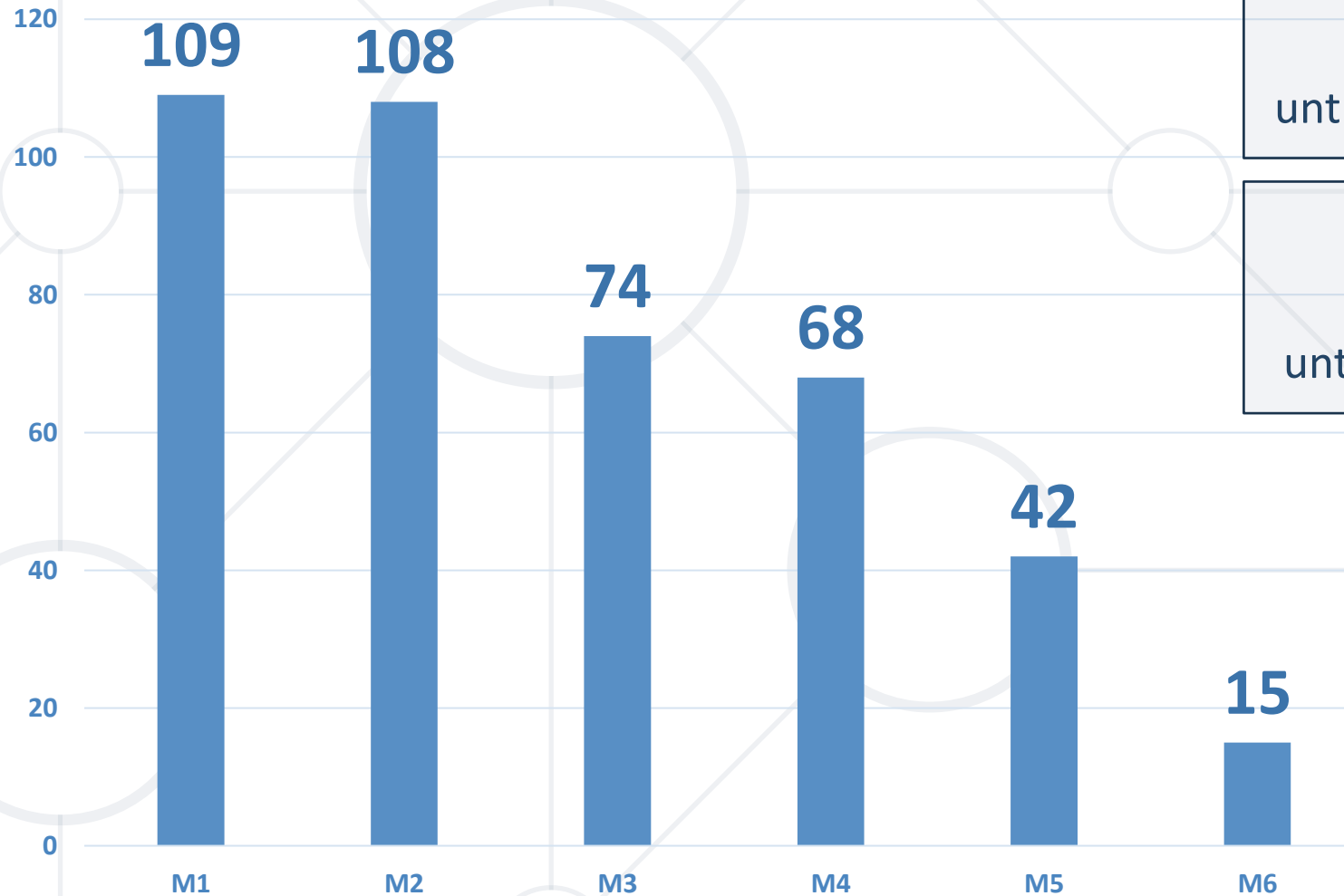
sli.do

#DevOps-23

facebook.com

/groups/DevOpsContainerizationCI/CDMonitoringJanuary2023

Homework Progress



Solutions for M6
can be submitted
until 23:59 on 15.03.2023

Solutions for M7
can be submitted
until 23:59 on 22.03.2023

THIS MODULE
AND ONE MORE TO GO

Test Your Knowledge

<https://zahariev.pro/q/do1>



Previous Module (M6)

Quick Overview

- Prometheus
 - Architecture
 - Installation and configuration
 - Information processing and PromQL
- Grafana
 - Installation and configuration
 - Dashboarding

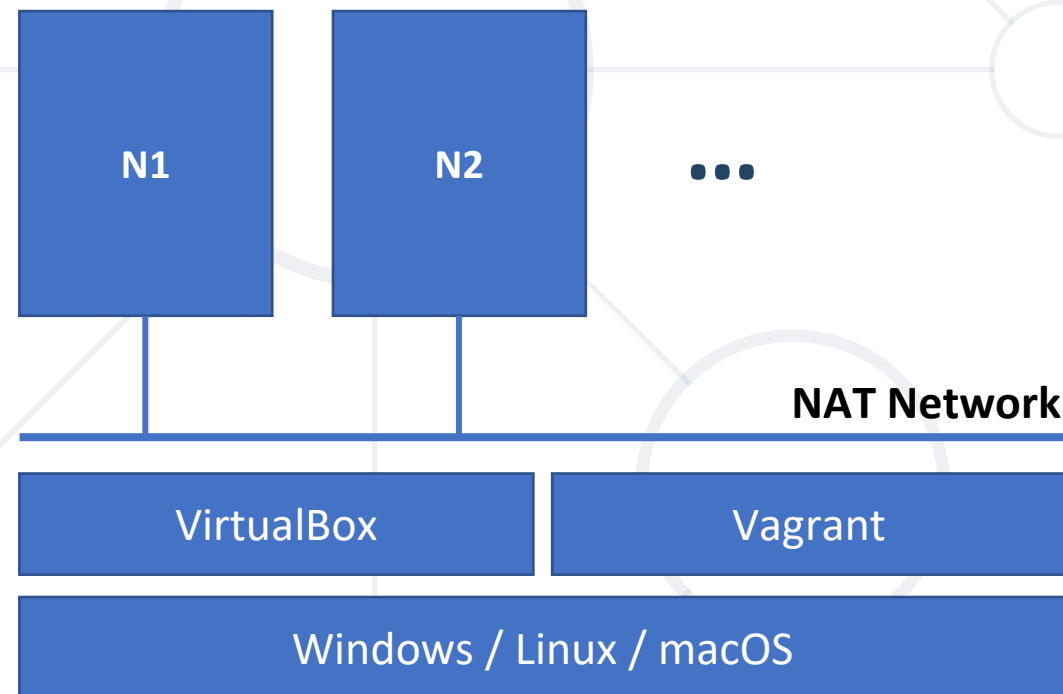


This Module (M7)
Topics and Lab Infrastructure

Table of Contents

- Elastic Stack
 - Elasticsearch
 - Logstash
 - Kibana
- Beats
- Elastic Stack and Docker







Elastic Stack
ex-ELK Stack

- Started as **ELK Stack**
 - **E**lasticsearch
 - **L**ogstash
 - **K**ibana
- Then became **Elastic Stack**
 - **B**eats were added
 - Then other components
 - ELK became obsolete as name

- Used for searching, analyzing, and storing of data
- The hearth of the Elastic Stack
- Distributed, RESTful search and analytics engine
- Designed for horizontal scalability, maximum reliability, and easy management
- Supported on multiple platforms
- Offered through packaging systems and as standalone package

- Open source, server-side data collection and processing pipeline
- Ingests data from a multitude of sources simultaneously, transforms it, and then sends it to your favorite “stash”
- Complemented by extensible plugin ecosystem
- Strong Elasticsearch synergy
- Processing in three stages – **input**, **filter**, and **output**

- Used for both data visualization and Elastic Stack navigation
- Supports multiple visualizations
- Visualizations can be used to create Dashboards
- Offers interactive experience



Practice: See It in Action
Live Demonstration in Class



Beats
Feed the data in

- Platform for single-purpose data shippers
- Can send data from hundreds or thousands of machines and systems to **Logstash** or **Elasticsearch**
- Lightweight - they just gather and send data without processing
- Plug & Play - use modules to simplify the process
- Extensible - we can build our own

- **Heartbeat**
 - Monitor services for their availability with active probing
- **Metricbeat**
 - Collect metrics from your systems and services
- **Filebeat**
 - Offers lightweight way to forward and centralize logs and files
- **Auditbeat**
 - Audits the activities of users and processes on the systems



Practice: See It in Action
Live Demonstration in Class



Docker and Elastic Stack

- Docker can be monitored as well as its containers
- We will explore both scenarios
- Furthermore, we will run the whole stack on Docker

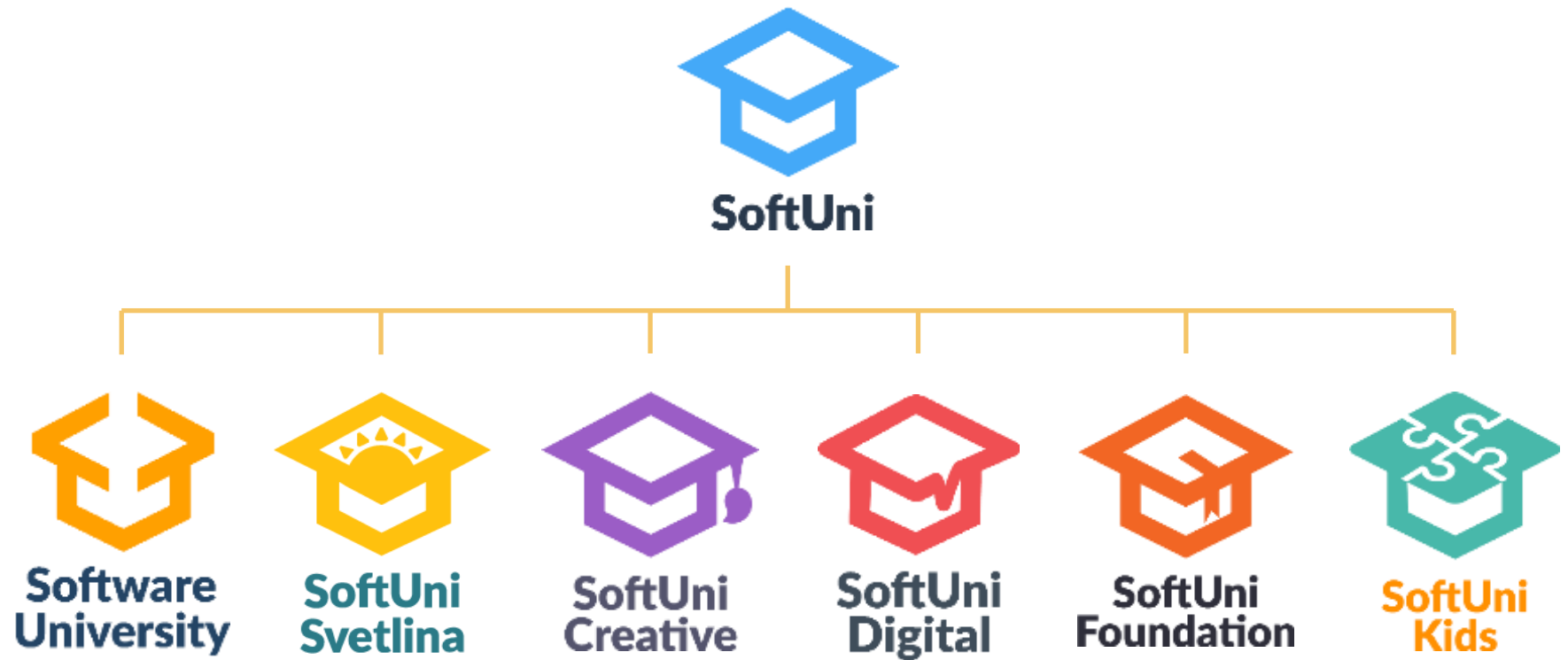


Practice: See It in Action
Live Demonstration in Class

- Get Started with Elastic Stack
 - <https://www.elastic.co/start>
- Get Started with Beats
 - <https://www.elastic.co/guide/en/beats/heartbeat/current/heartbeat-getting-started.html>
 - <https://www.elastic.co/guide/en/beats/metricbeat/current/metricbeat-getting-started.html>
 - <https://www.elastic.co/guide/en/beats/auditbeat/current/auditbeat-installation-configuration.html>
 - <https://www.elastic.co/guide/en/beats/filebeat/current/filebeat-getting-started.html>



Questions?



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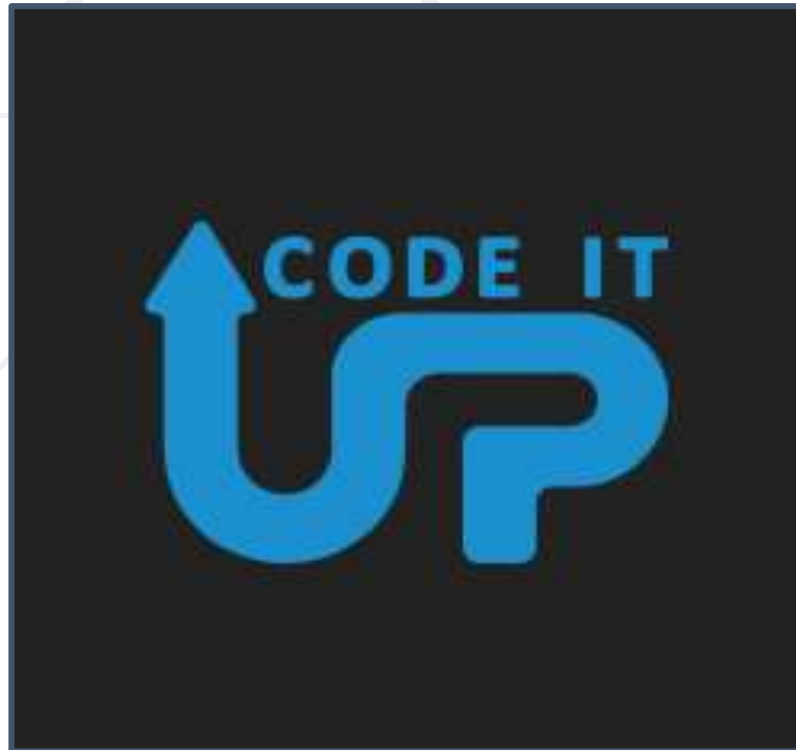
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