



# Elastic Stack

Tomasz Gintowt  
**Team Data Services**

adform



# Agenda



- **LaaS**
- **AIOps**
- **Elastic Stack**
- **Beats**
- **Logstash**
- **Demo**



## Logging as a Service ( LaaS ) == Elastic Stack



**Linas Daneliukas**  
IT Systems Engineer (Kaunas)



**Giedrius Statkevičius**  
IT Systems Engineer (Kaunas)



**Tomas Dabašinskas**  
Lead IT Systems Engineer (Kaunas)



**Kęstutis Mizara**  
IT Systems Engineer (Vilnius)



**Ruslanas Sobolevas**  
*Senior IT systems engineer (Kaunas)*



**Robert Fabisiak**  
*Senior IT systems engineer (Warsaw)*

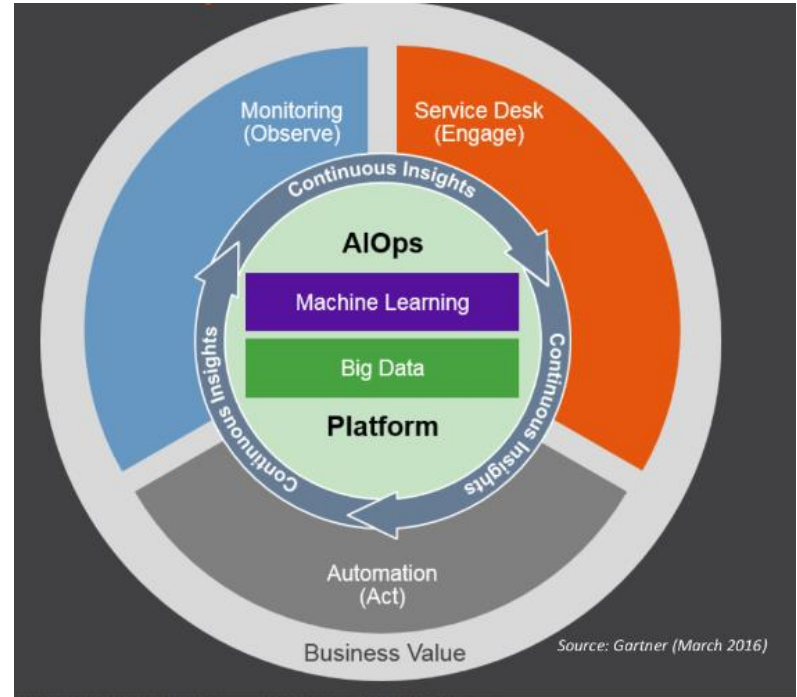


**Tomasz Gintowt**  
*IT systems engineer (Warsaw)*

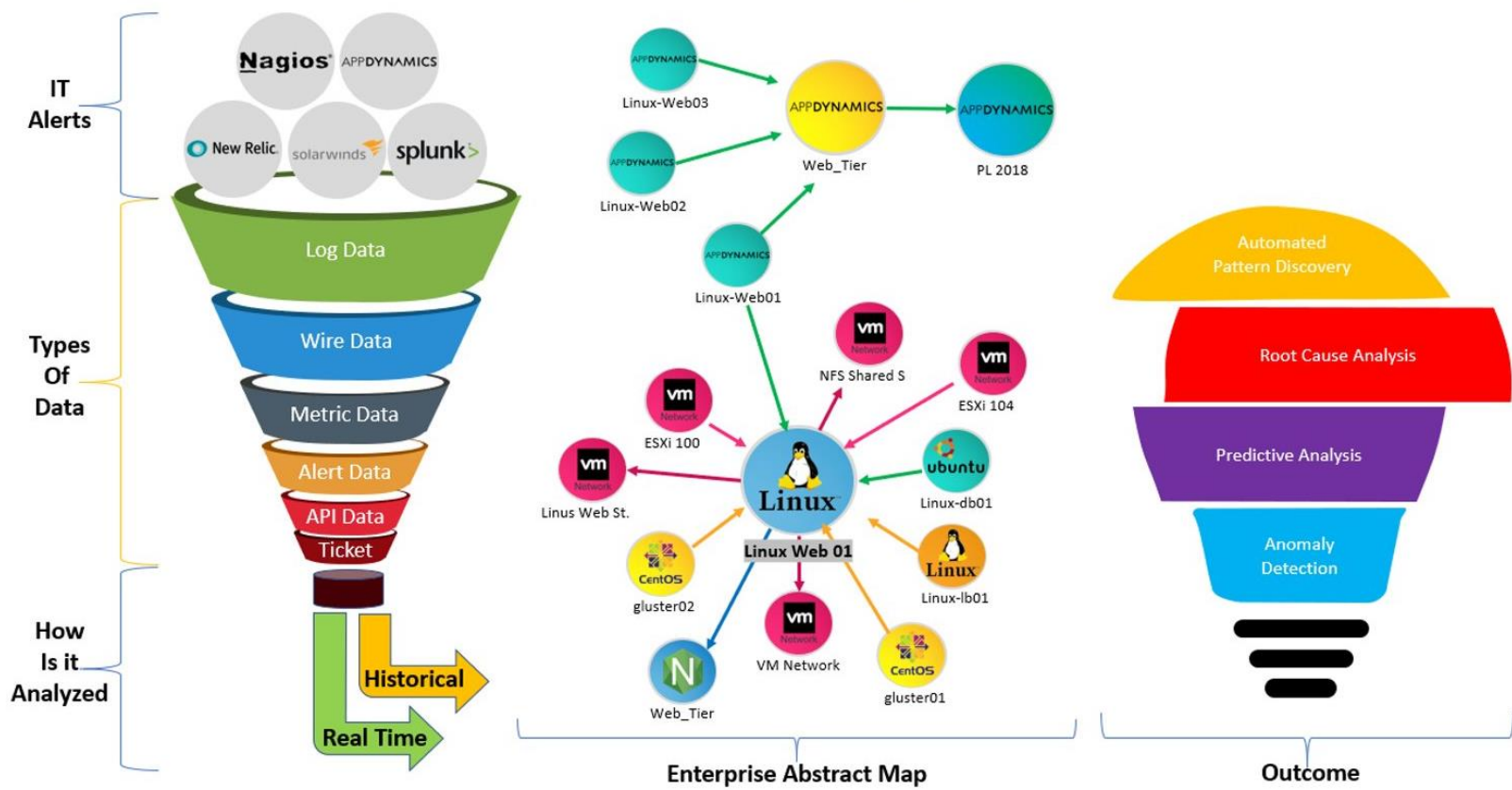
# AIOPS - Artificial Intelligence for IT Operations

AI Ops refers to multi-layered technology platforms that automate and enhance IT operations by

1. using analytics and machine learning to analyze big data collected from various IT operations tools and devices, in order to
2. automatically spot and react to issues in real time

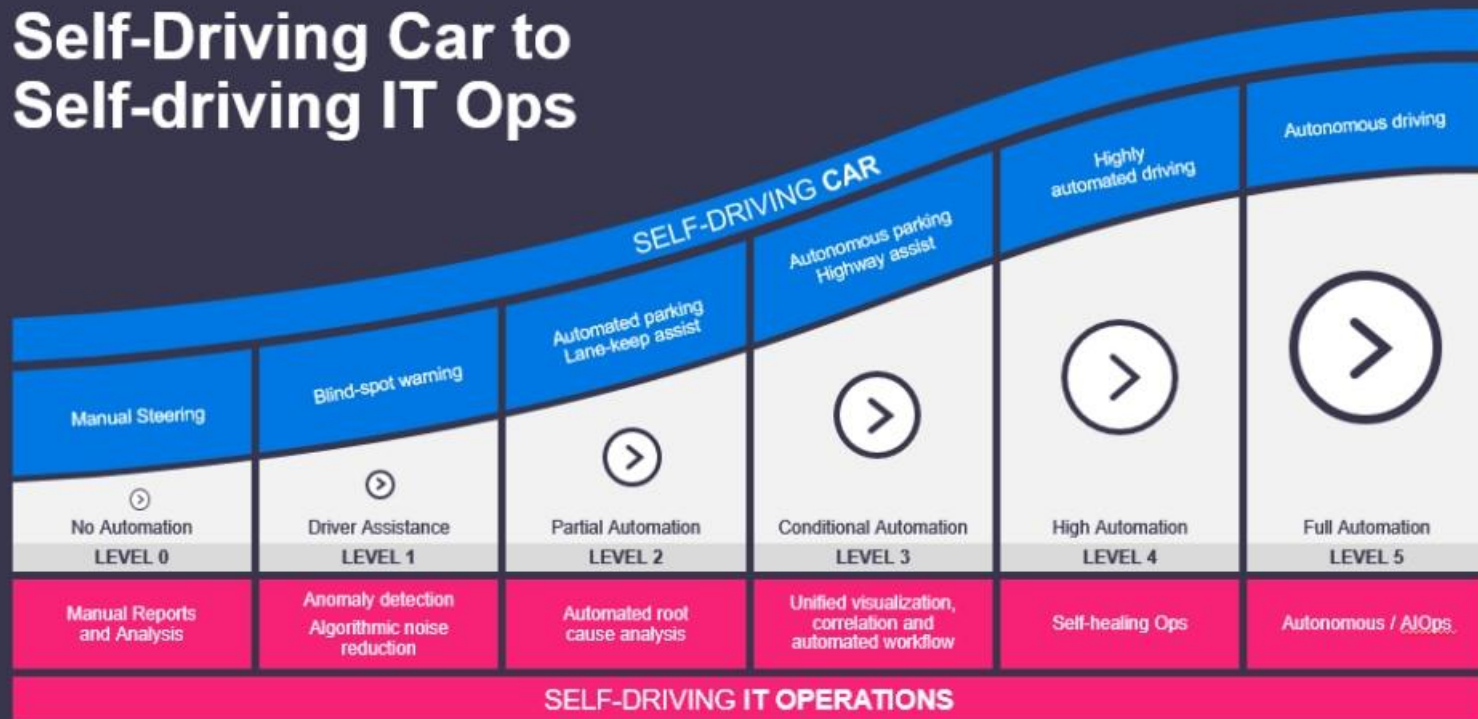


# AIOPS - Artificial Intelligence for IT Operations



# AIOPS - Artificial Intelligence for IT Operations

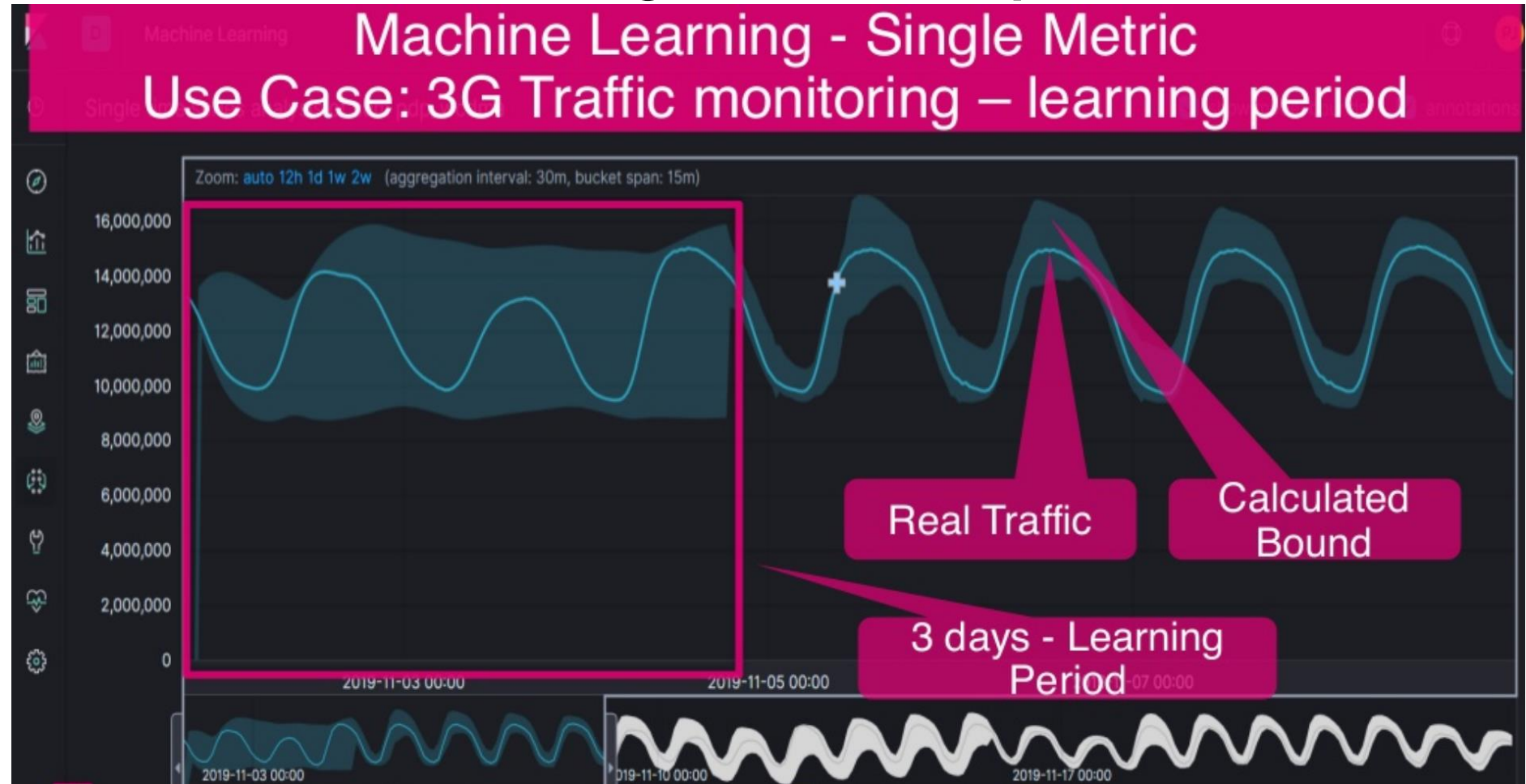
## Self-Driving Car to Self-driving IT Ops



NOTE: Levels of driving automation are defined in SAE International Standard J0316



# AIOPS - Artificial Intelligence for IT Operations



# Elastic Stack

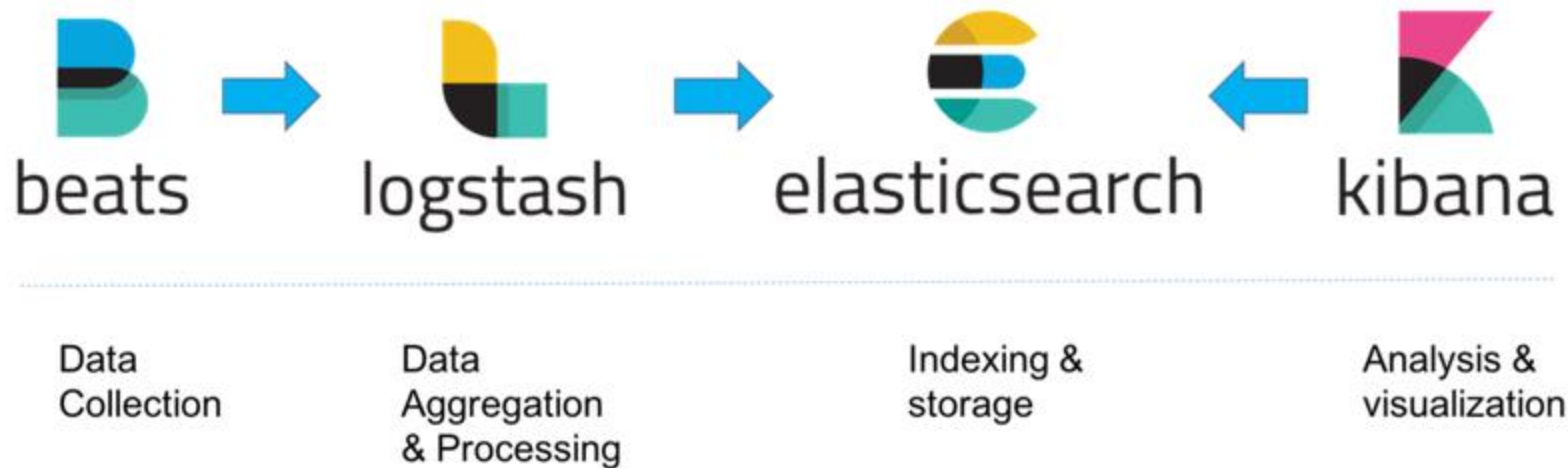




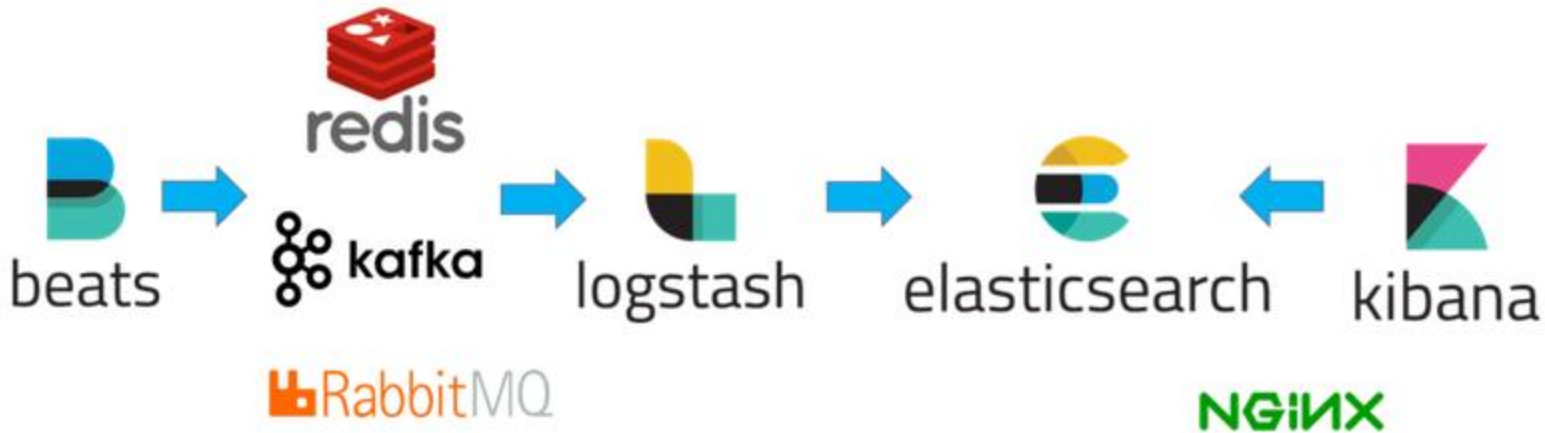
# Elastic Stack



# Elastic Stack



# Elastic Stack



Data  
Collection

Buffering

Data  
Aggregation  
& Processing

Indexing &  
storage

Analysis &  
visualization

# Beats



Filebeat



Metricbeat



Packetbeat



Winlogbeat



Auditbeat

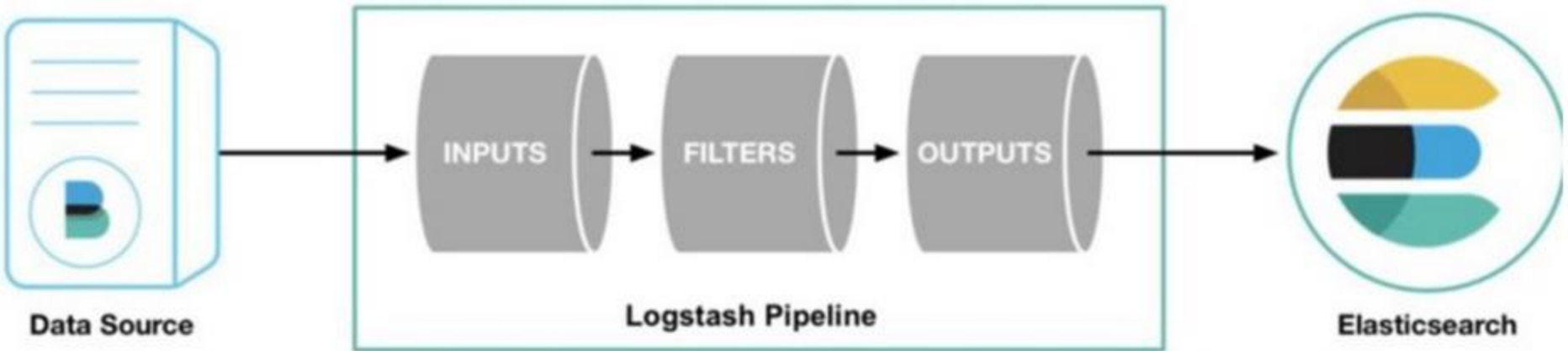


Heartbeat



Functionbeat

# Logstash



# Logstash, grok filters

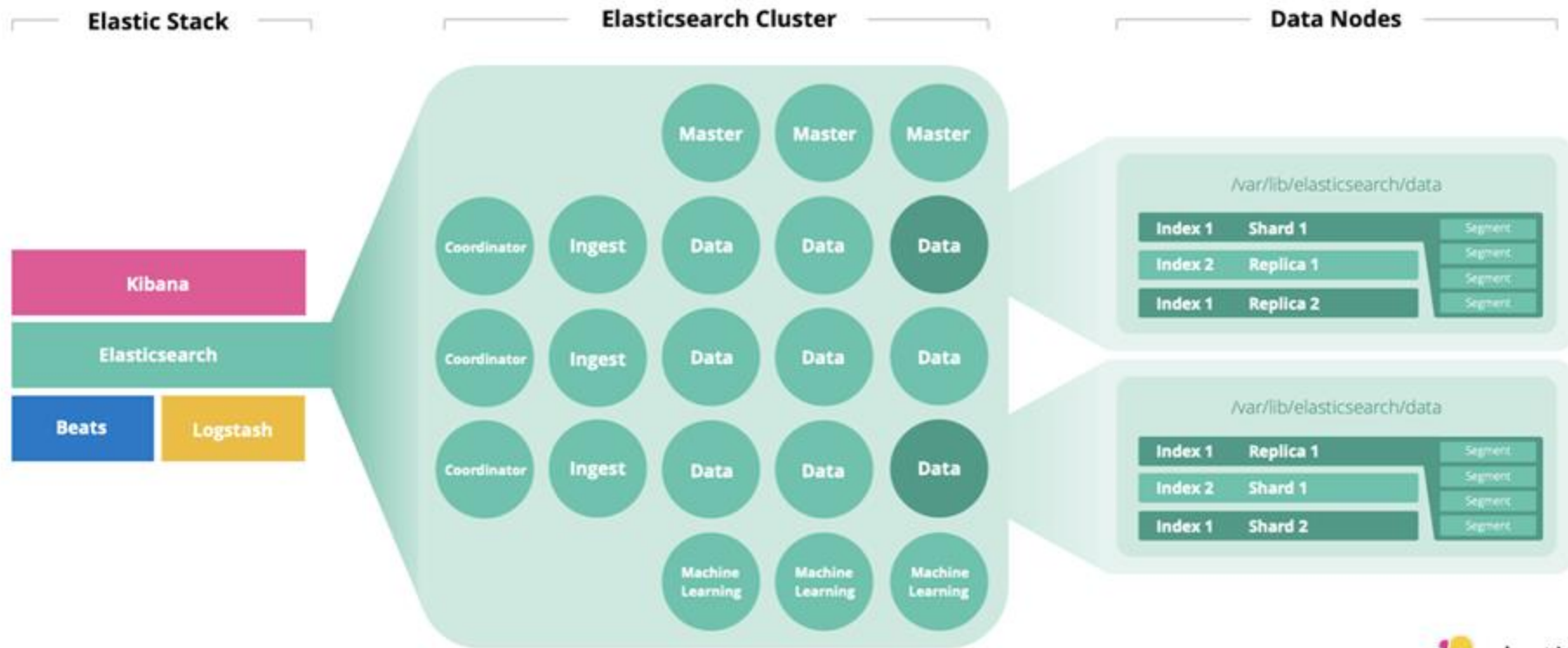


```
2016-09-19T18:19:00 [8.8.8.8:prd] DEBUG this is an example log message
```

```
%{TIMESTAMP_ISO8601:timestamp} \[%{IPV4:ip};%{WORD:environment}\] %{LOGLEVEL:log_level}  
%{GREEDYDATA:message}
```

```
{  
  "timestamp": "2016-09-19T18:19:00",  
  "ip": "8.8.8.8",  
  "environment": "prd",  
  "log_level": "DEBUG",  
  "message": "this is an example log message"  
}
```

# ElasticSearch



# Demo



Logs



Infrastructure



APM



Uptime



Maps



SIEM



Site Search



App Search



Enterprise Search





## Links:

- <https://demo.elastic.co>
- <https://www.elastic.co/subscriptions>



# Questions ?