

# Become our local **Community Organizer!**

We are looking for someone to help our local Elastic user group thrive.

Email us at [meetups@elastic.co](mailto:meetups@elastic.co), if you're interested.

Learn more:  
<https://ela.st/organize>



# Elastic Stack

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## Agenda:

- **Elastic Stack**
- **Beats**
- **Logstash**
- **ElasticSearch**
- **Demo**
- **Alops**

# Elastic Stack

FREE

## Open Source

Apache 2.0: Now and always.

### Feature highlights include:

- ✓ Clustering & high availability
- ✓ Powerful search and analysis
- ✓ Data visualization and dashboarding
- ✓ And more

Free download

## Basic

The forever-free plan.

### Everything in Open Source plus:

- ✓ Core security features
- ✓ Solutions such as APM, SIEM, Maps, and more
- ✓ Canvas
- ✓ And more

## Gold

More features.  
Dedicated support.

### Everything in Basic plus:

- ✓ Alerting
- ✓ Reporting
- ✓ Ingest management
- ✓ Business hours support
- ✓ And more

Contact us

## Platinum

The fully loaded experience.

### Everything in Gold plus:

- ✓ Advanced security features
- ✓ Machine learning
- ✓ Cross-cluster replication
- ✓ 24/7/365 support
- ✓ And more

Contact us

## Enterprise

Stack orchestration and endpoint security.

### Everything in Platinum plus:

- ✓ Endpoint protection
- ✓ Endpoint detection and response
- ✓ Endpoint event collection
- ✓ Access to ECE & ECK orchestration features

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# Elastic Stack

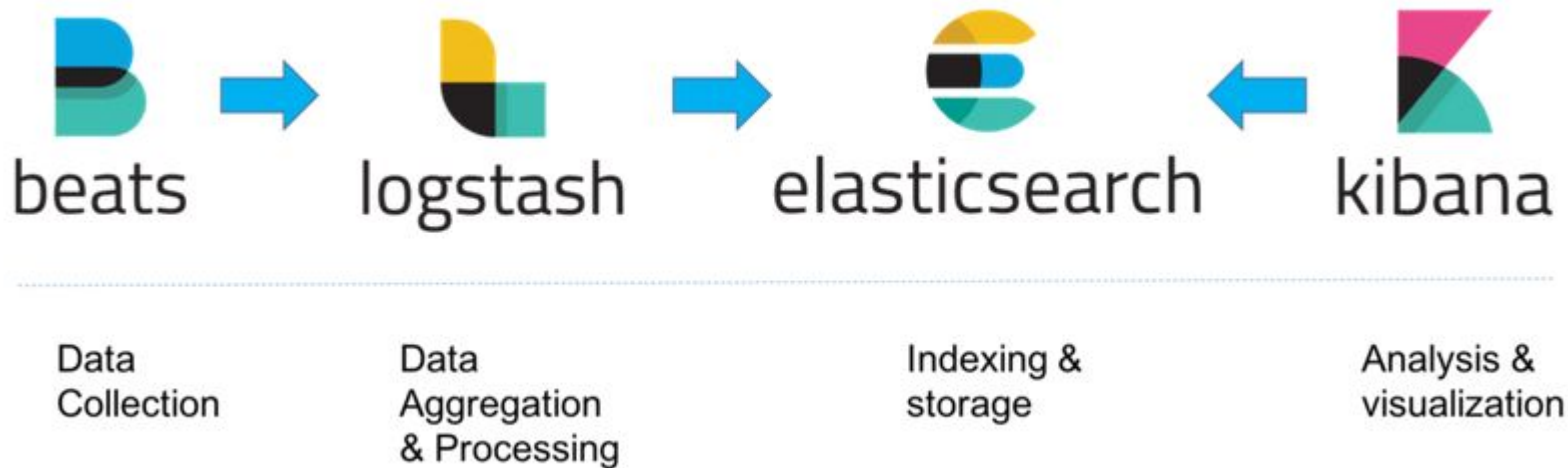
	OPEN SOURCE	BASIC	GOLD	PLATINUM	ENTERPRISE
ELASTIC STACK OPERATIONS & MANAGEMENT					
Data management					
Snapshot/restore	✓	✓	✓	✓	✓
Minimal snapshots	—	✓	✓	✓	✓
Snapshot lifecycle management	—	✓	✓	✓	✓
Data rollups	—	✓	✓	✓	✓
Data transforms	—	✓	✓	✓	✓
Index management	—	✓	✓	✓	✓
Index lifecycle management	—	✓	✓	✓	✓

# Elastic Stack

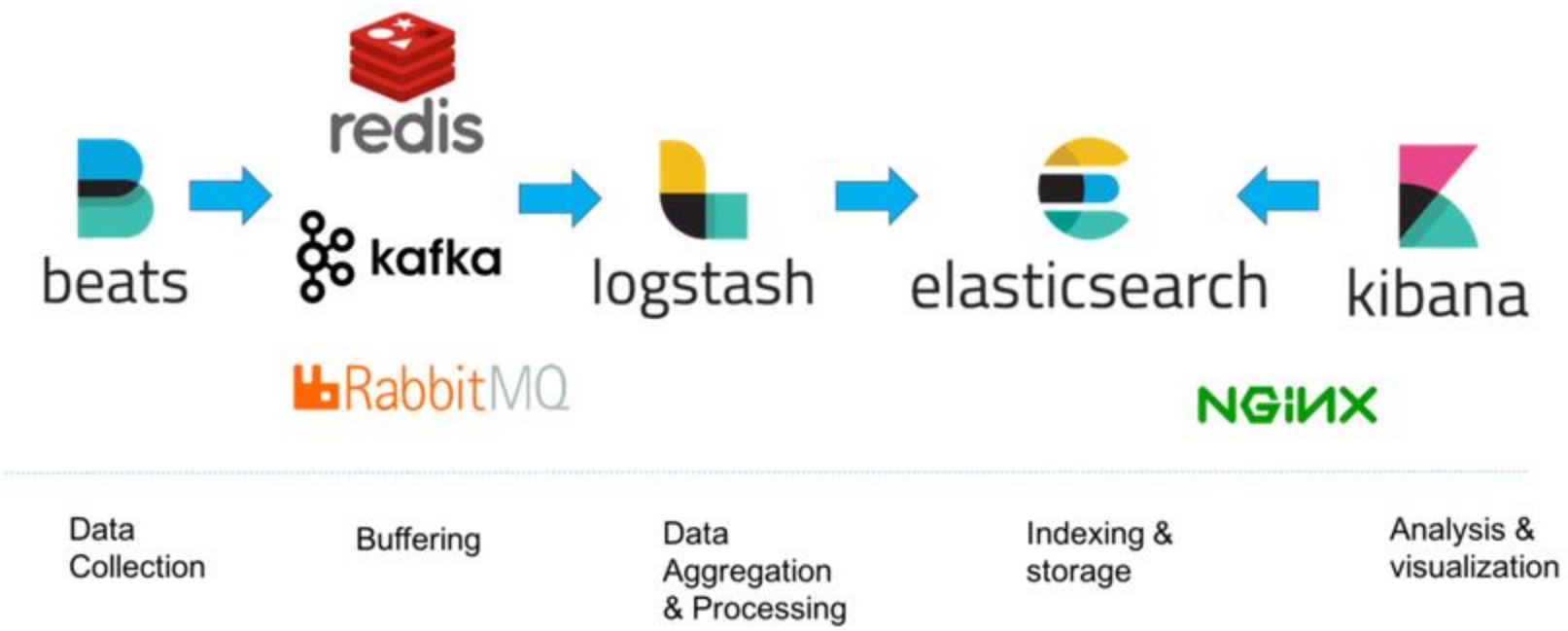




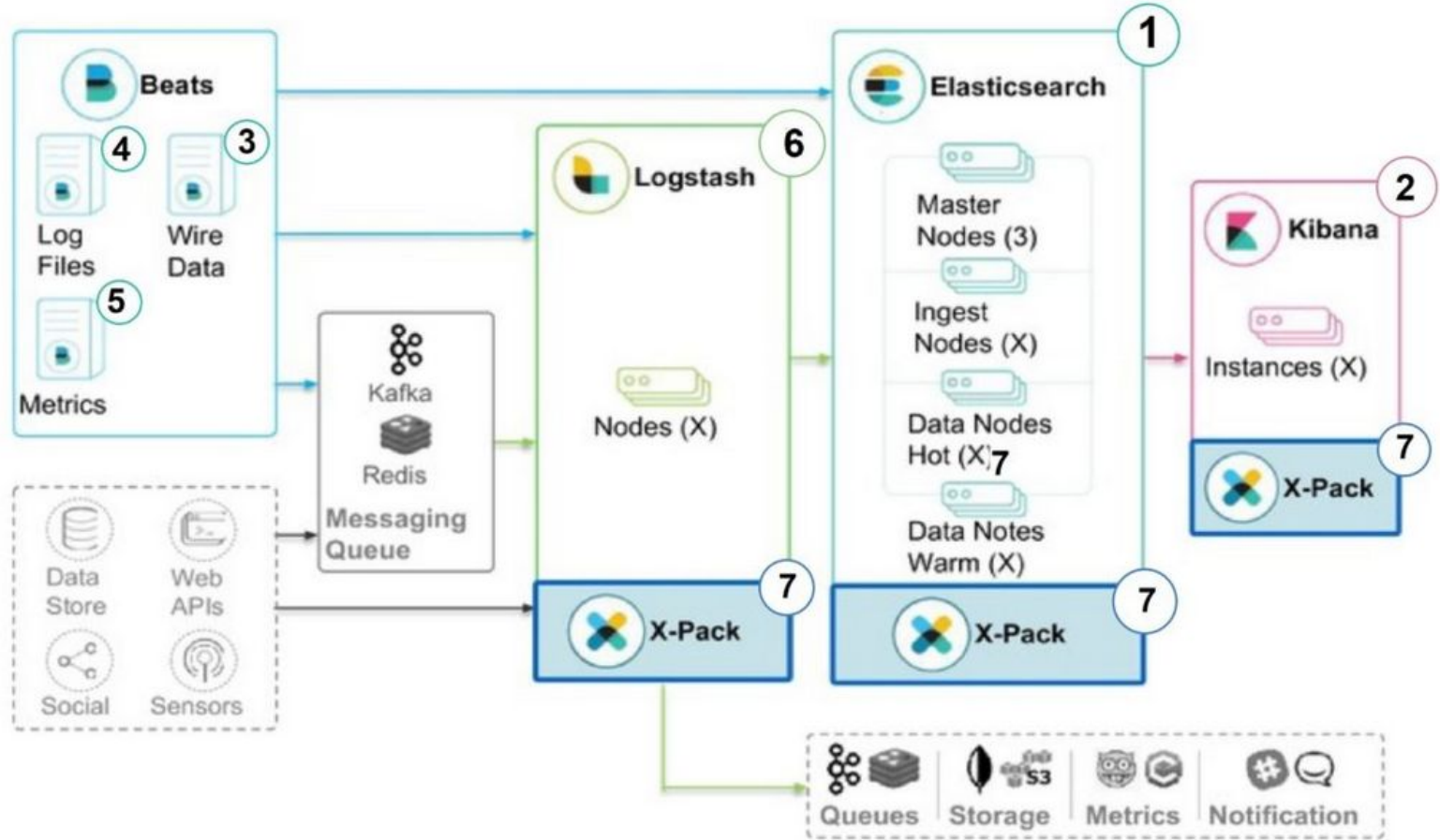
# Elastic Stack



# Elastic Stack



# Elastic Stack



# Beats



Filebeat



Metricbeat



Packetbeat



Winlogbeat



Auditbeat

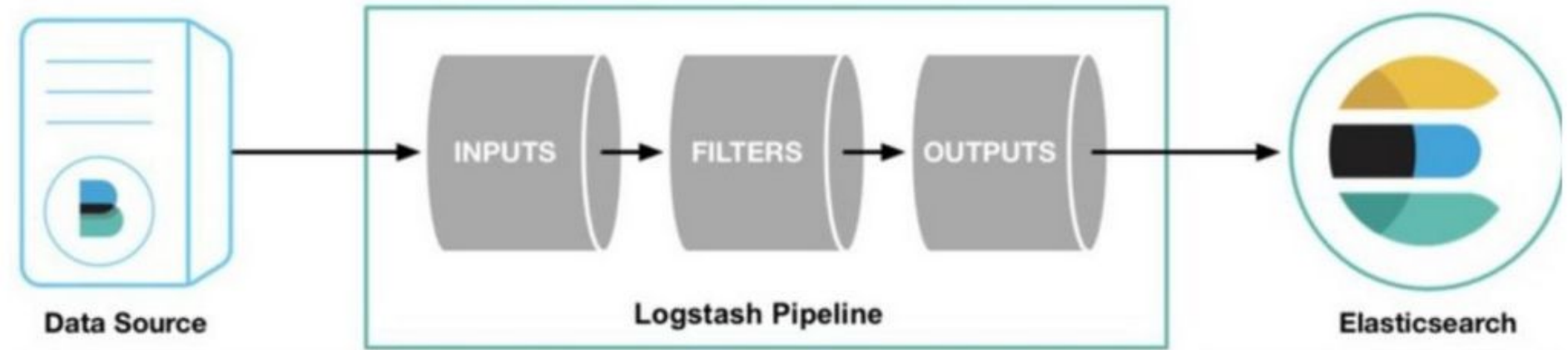


Heartbeat




Functionbeat

# Logstash



# Logstash, grok filters

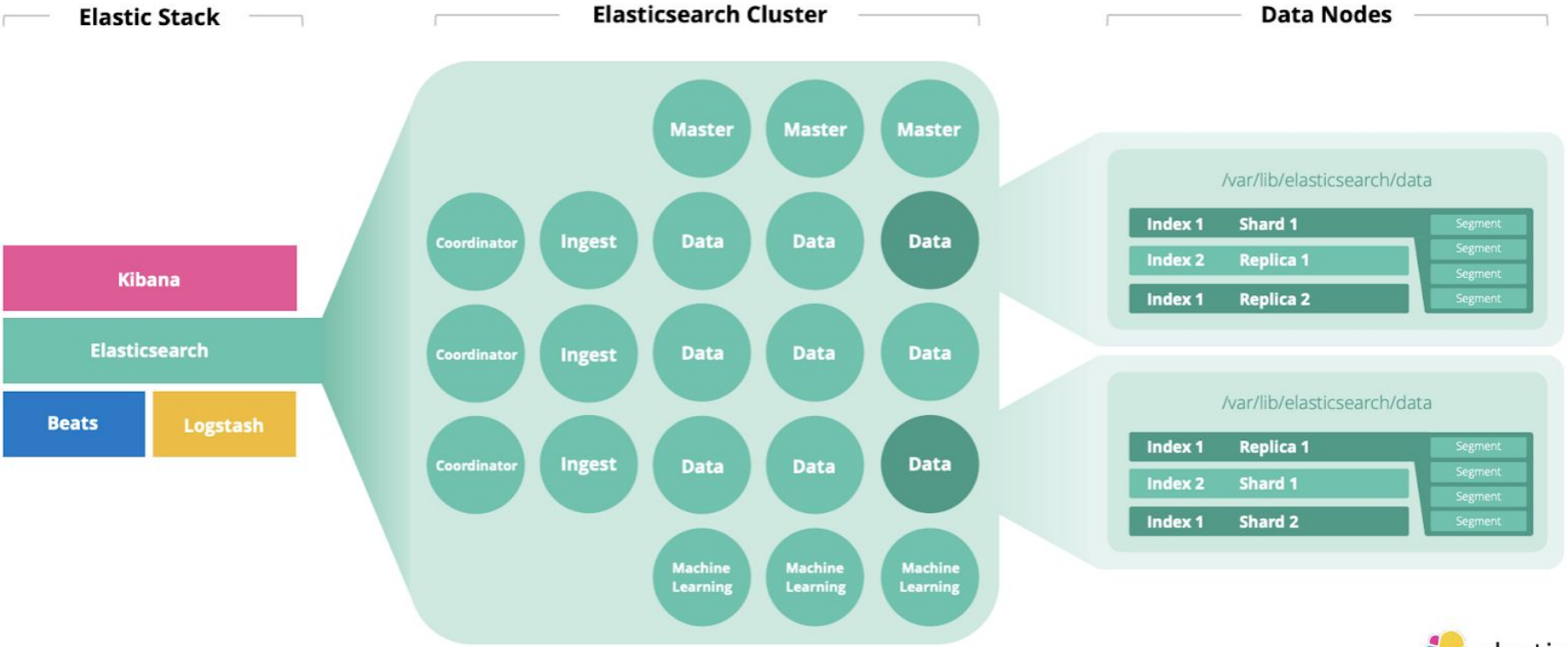


```
2016-09-19T18:19:00 [8.8.8.8:prd] DEBUG this is an example log message
```

```
%{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





## Kafka

- Zookeeper 3 nodes
- Kafka 3 nodes
- Disk size!
- Cluster close to producers, per DC/Location
- First line defence ( log flood )



## Logstash Indexer

- perfect for K8S: stateless, scaling
- More CPU, less RAM
- Close to Elasticsearch, in the same DC



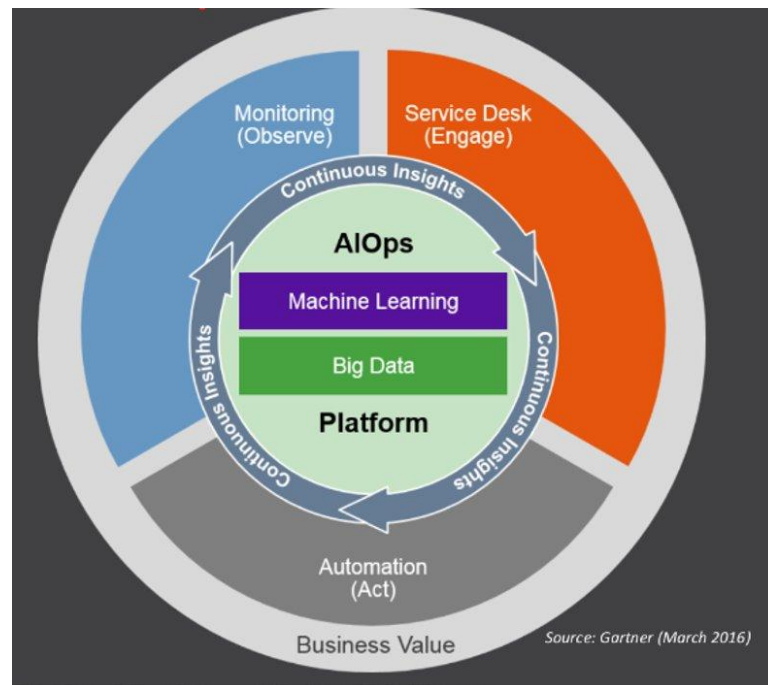
## ElasticSearch

- max 32G heap memory
- between 800 to 1000 shards per data node
- shard size 20-100G
- Roles: master, data hot/warm/cold, ingest, coordinator

# AIOps - Artificial Intelligence for IT Operations

AIOps 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





## Links:

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



# Questions ?

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