

Thales PunchPlatform



PunchPlatform team

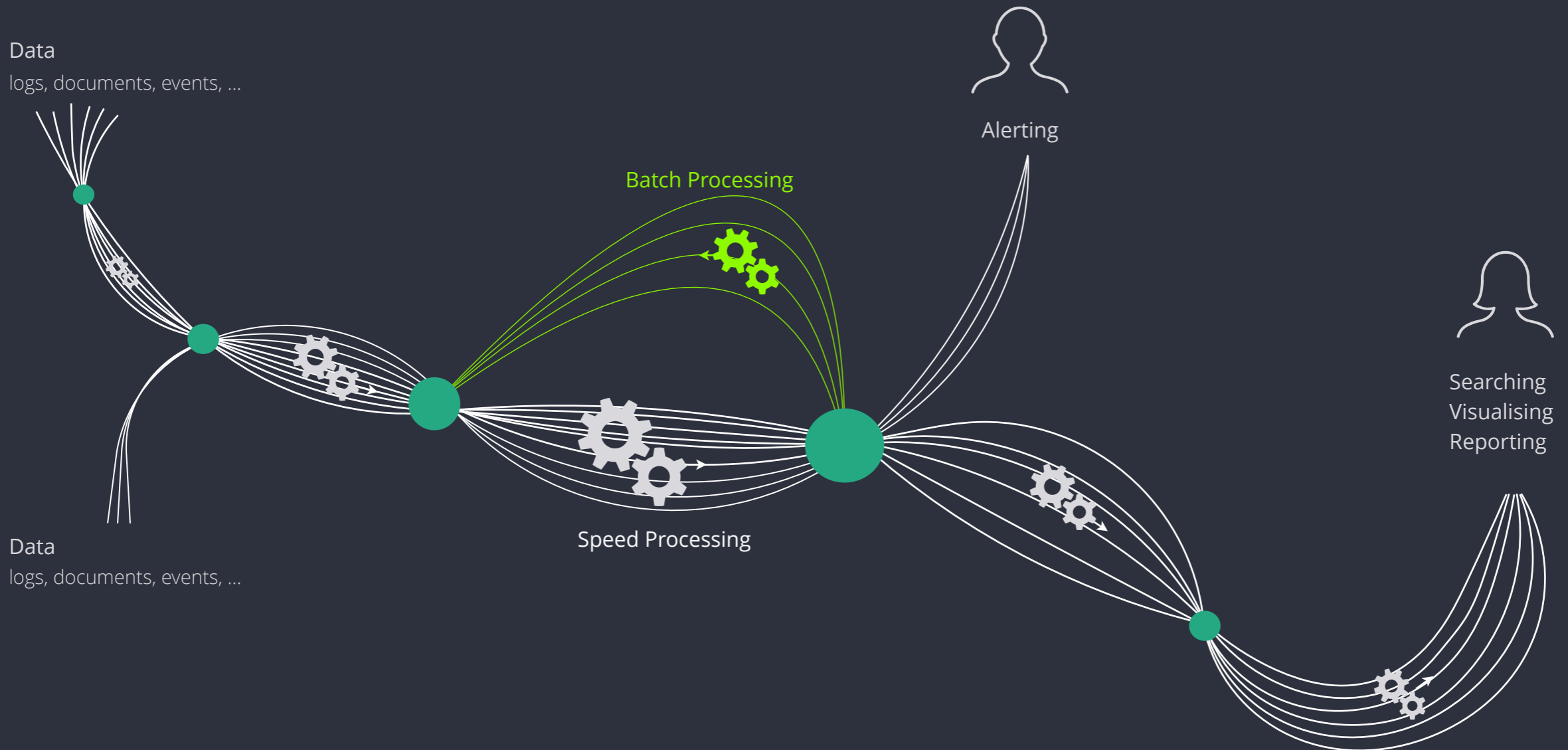
Agenda

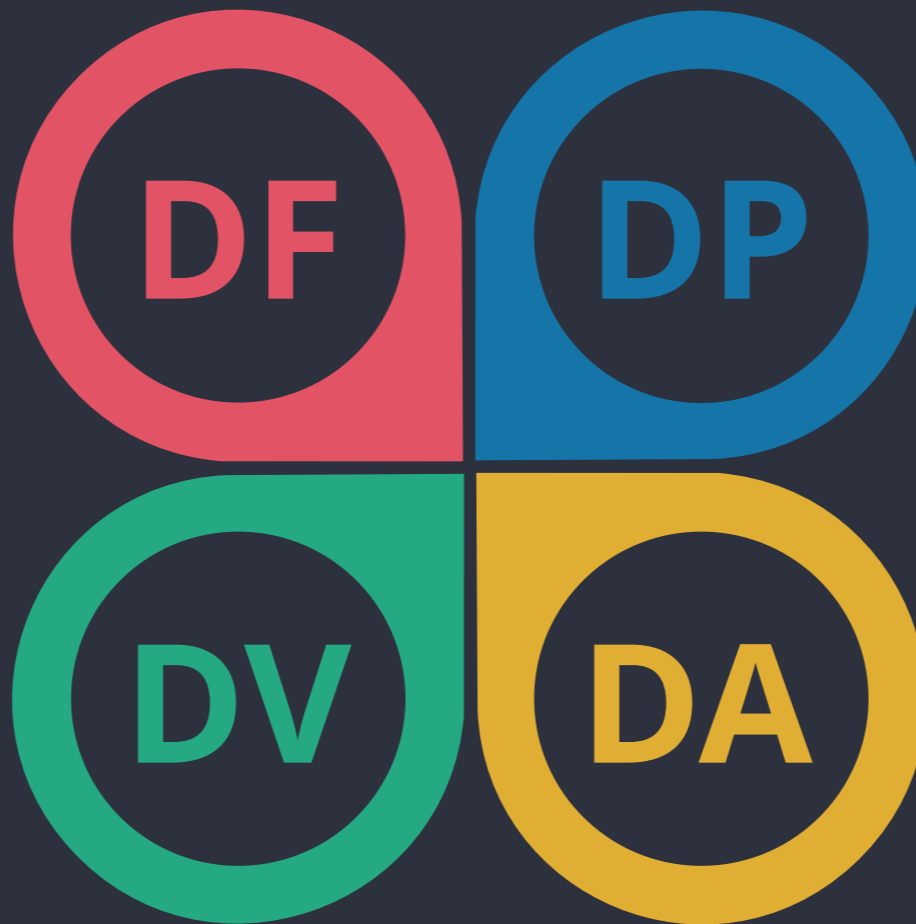
- What It Does
- Building Blocks
- Deployment & Operations
- Typical Setups
- Customers and Use Cases
- RoadMap



What It Does

Compose Arbitrary Industrial Data Processing Channels





DataFlow

Collect and Transport Your Data
 Multi-nodes, -racks, -rooms, -sites
 Scalable, Resilient, Reliable



DataVisualization

Create your Dashboards to dig
 months/years of data
 Pick what suits best your needs:
 Kibana, Grafana, Zeppelin
 Data Extraction and Reporting
 Multi-Tenant, Secure

DataProcessing

Parse, Normalize, Enrich
 Store, Archive, Index
 Detect, Raise Alarms
 Search
 Reprocess, Replay



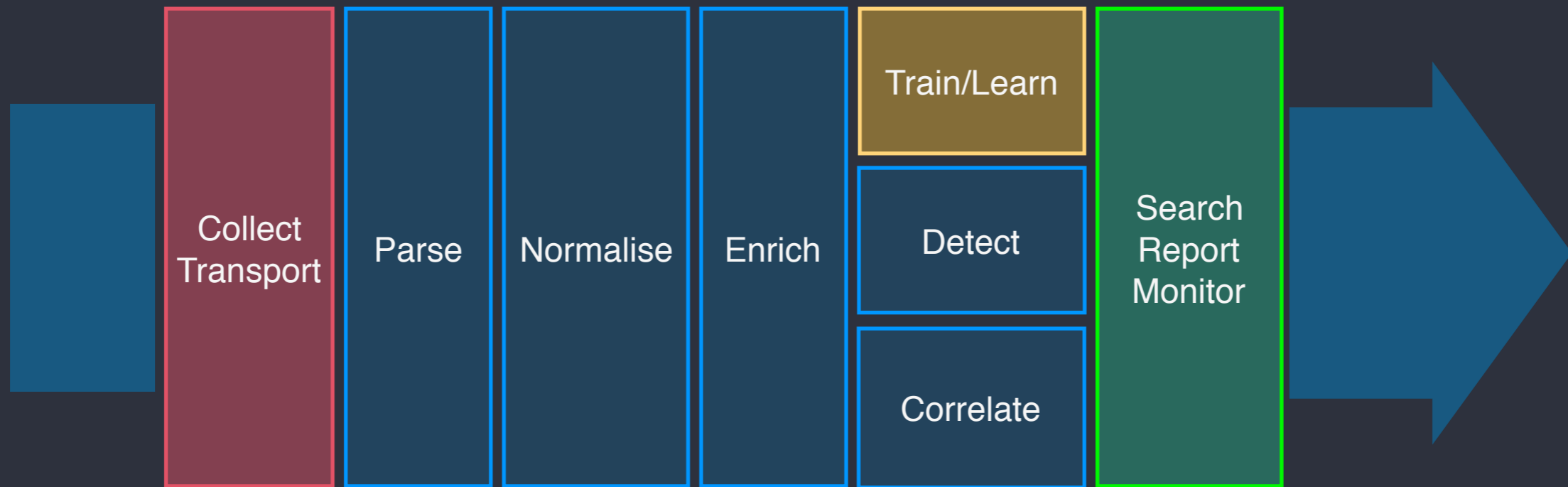
DataAnalytics

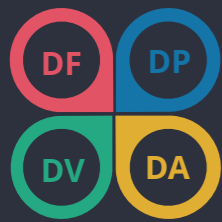
Plug in Arbitrary Processing
 Storm, Spark-Streaming, Flink
 Join the Thales Big Data and
 Analytics Community





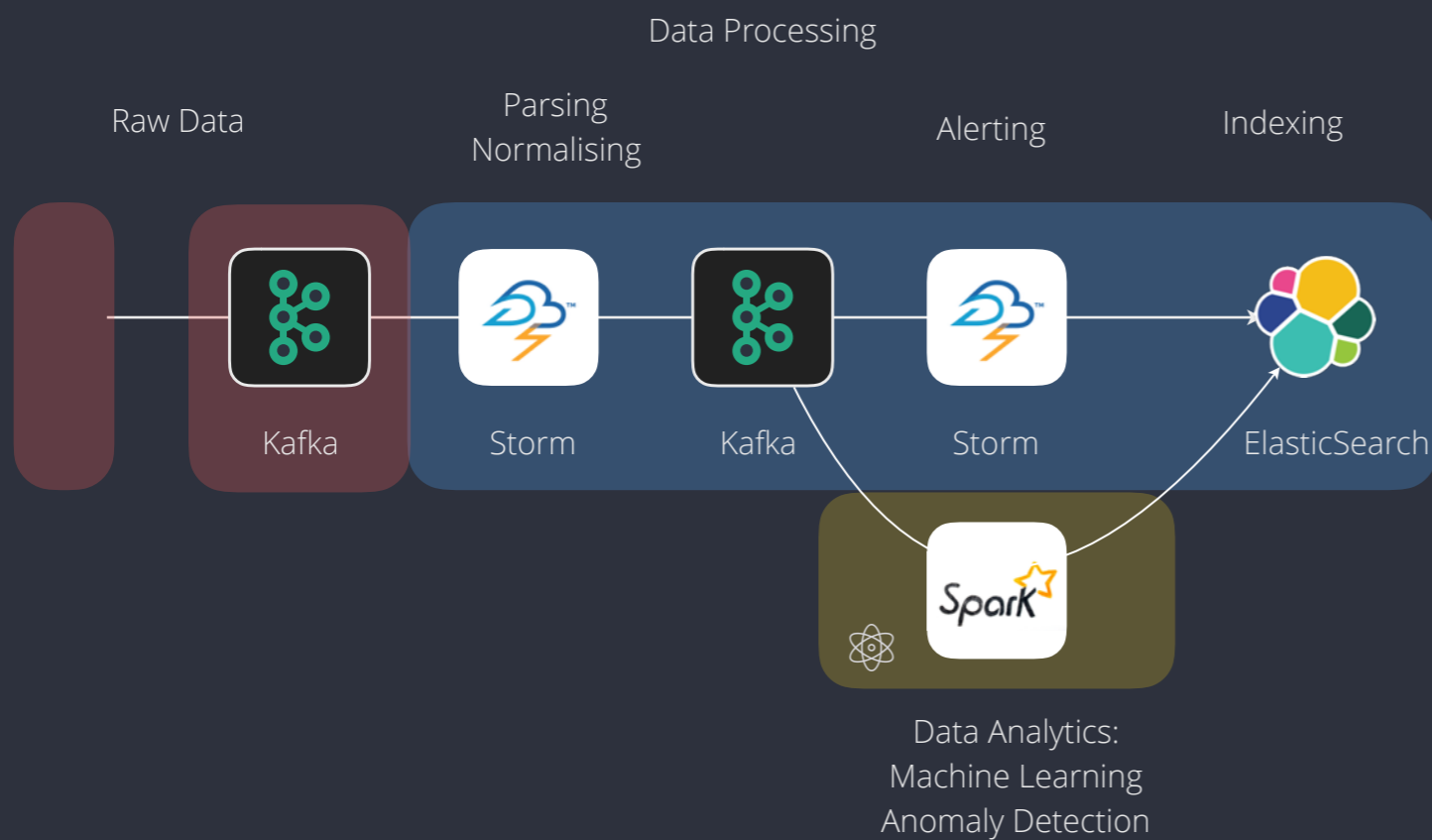
Understanding the (CyberSecurity) Data Pipeline





Log Management

Typical Setup



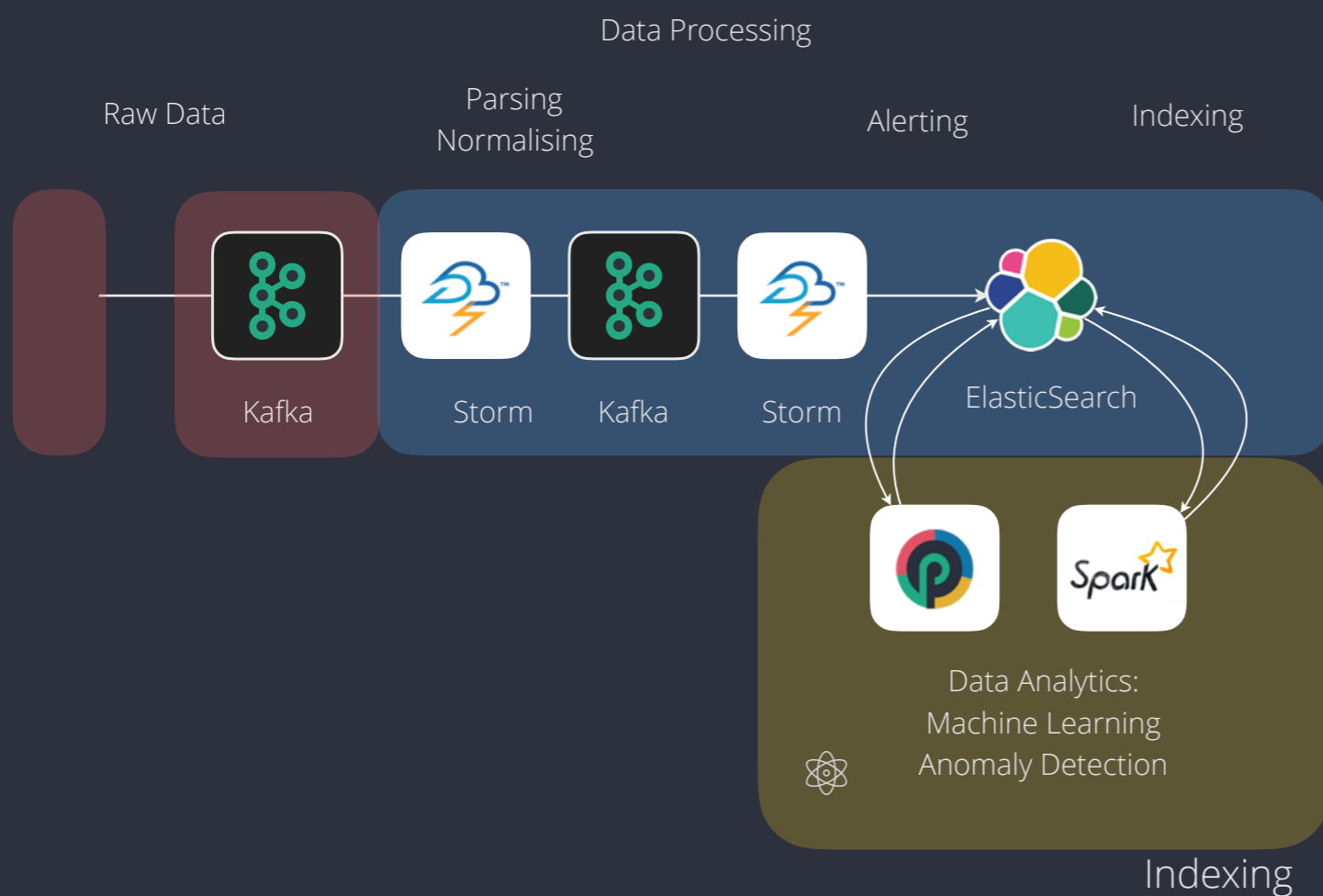
Searching
Visualising
Reporting
Alerting

Indexing




Log Management

Typical Setup



Searching
Visualising
Reporting
Alerting



 Deployment & Operations



PunchPlatform Benefits : Start from empty servers



What you need are plain linux servers, with local disks only.

Use dedicated hardware, VMs, Clouds. Whatever.

If you build your own infrastructure use the PunchPlatform infrastructure ansible libraries. Otherwise use Amazon, OpenStack, or any IaaS tool you have.

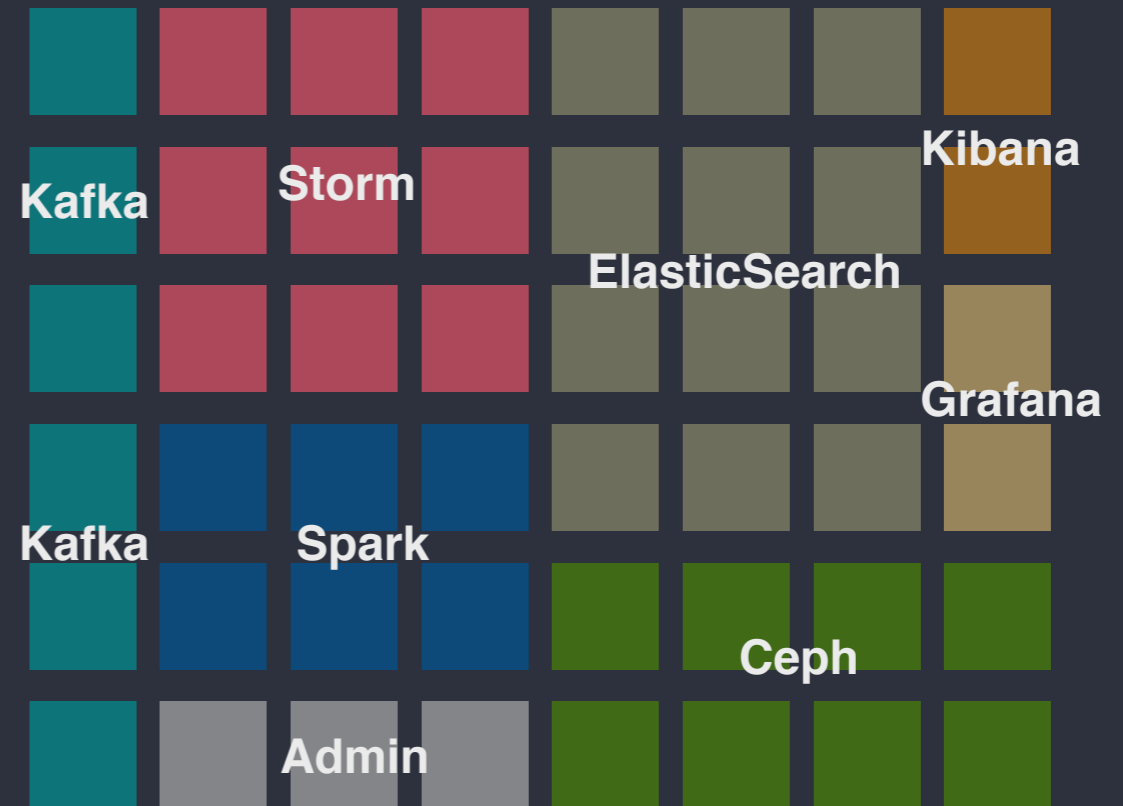




Deploy your services in minutes



Describe your setup in a configuration file. Use the PunchPlatform deployer to set it all.



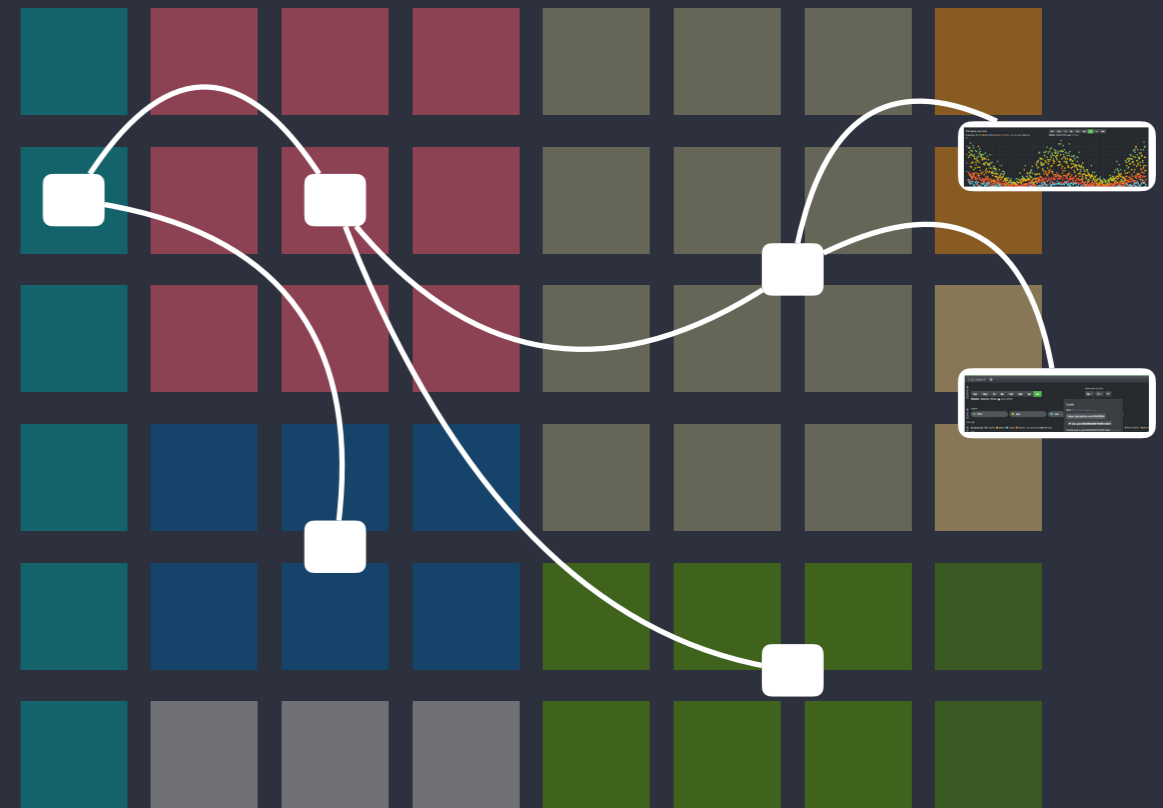
Platform configuration file



Deploy your business logic in minutes



Describe your data channel in a configuration file.
Use the PunchPlatform channel command to set it all.
It can be a log parsing pipeline, a scada metric pipeline, whatever.



Channel configuration file



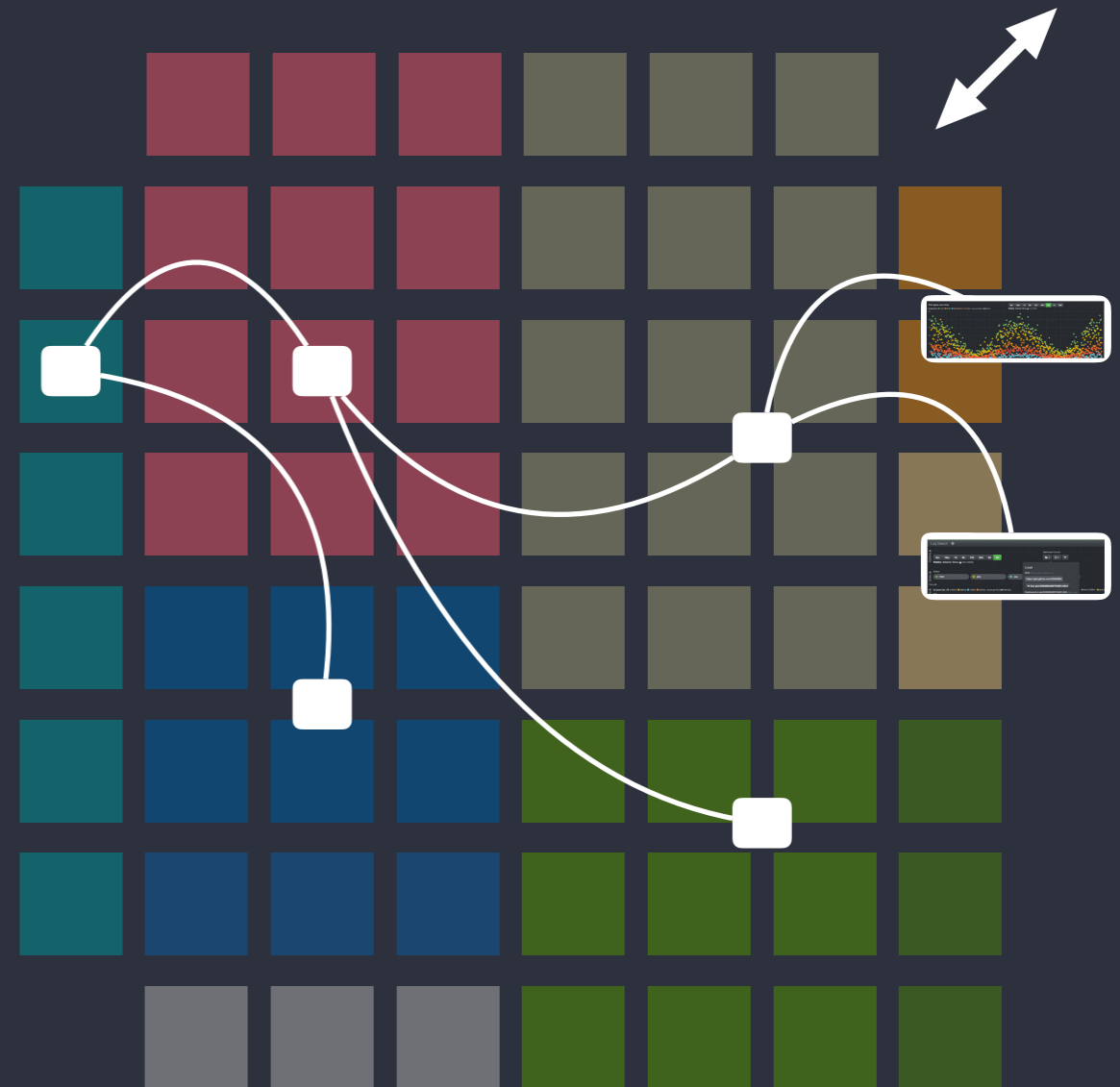
Resize Your Platform in minutes



Give more power to you platform, to scale up to you needs. Do that without service interruption.



Platform configuration file





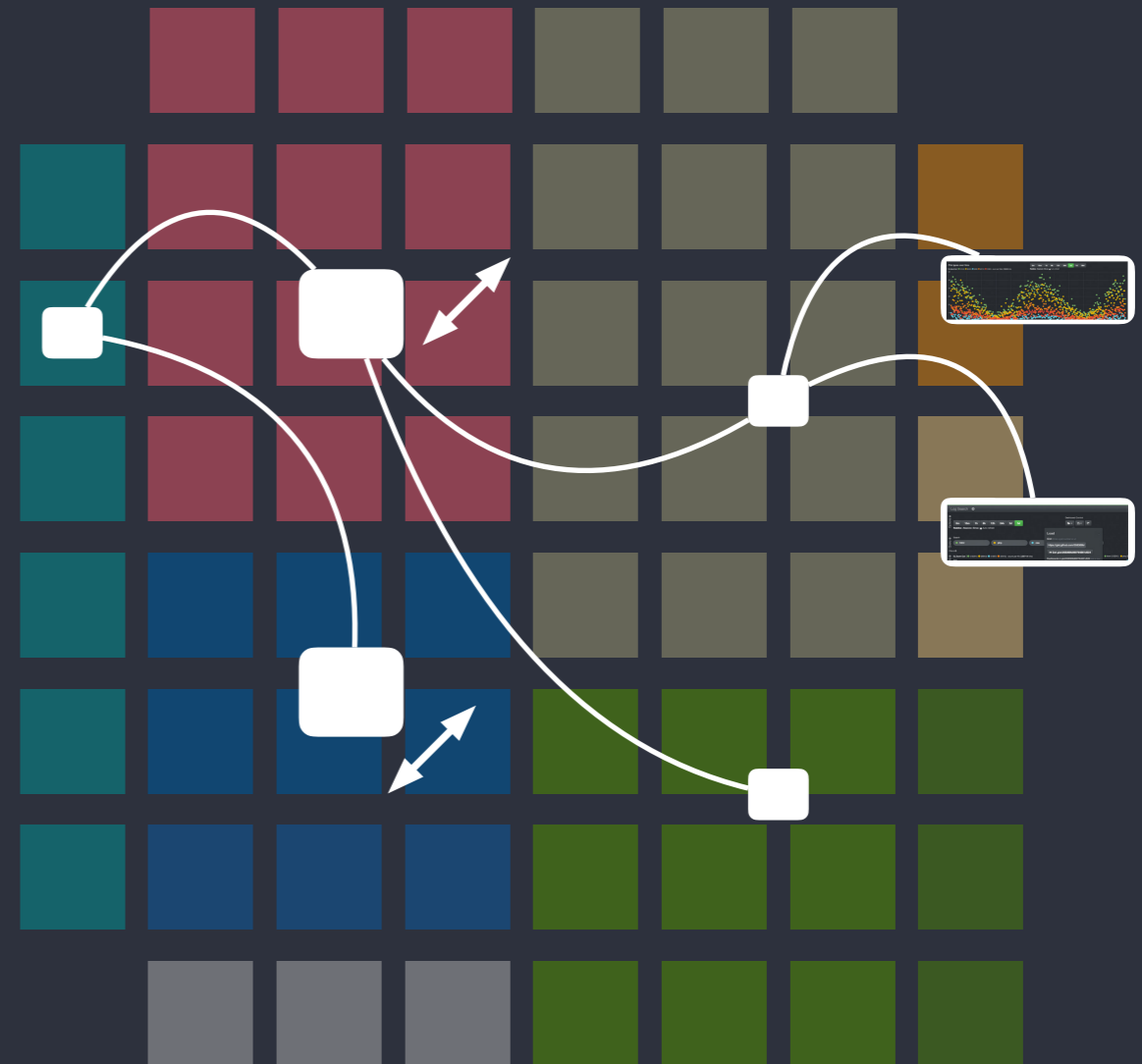
Resize you Processing in seconds



Give more power to you data channel, to scale up to you needs. Do that without service interruption.



Channel configuration file

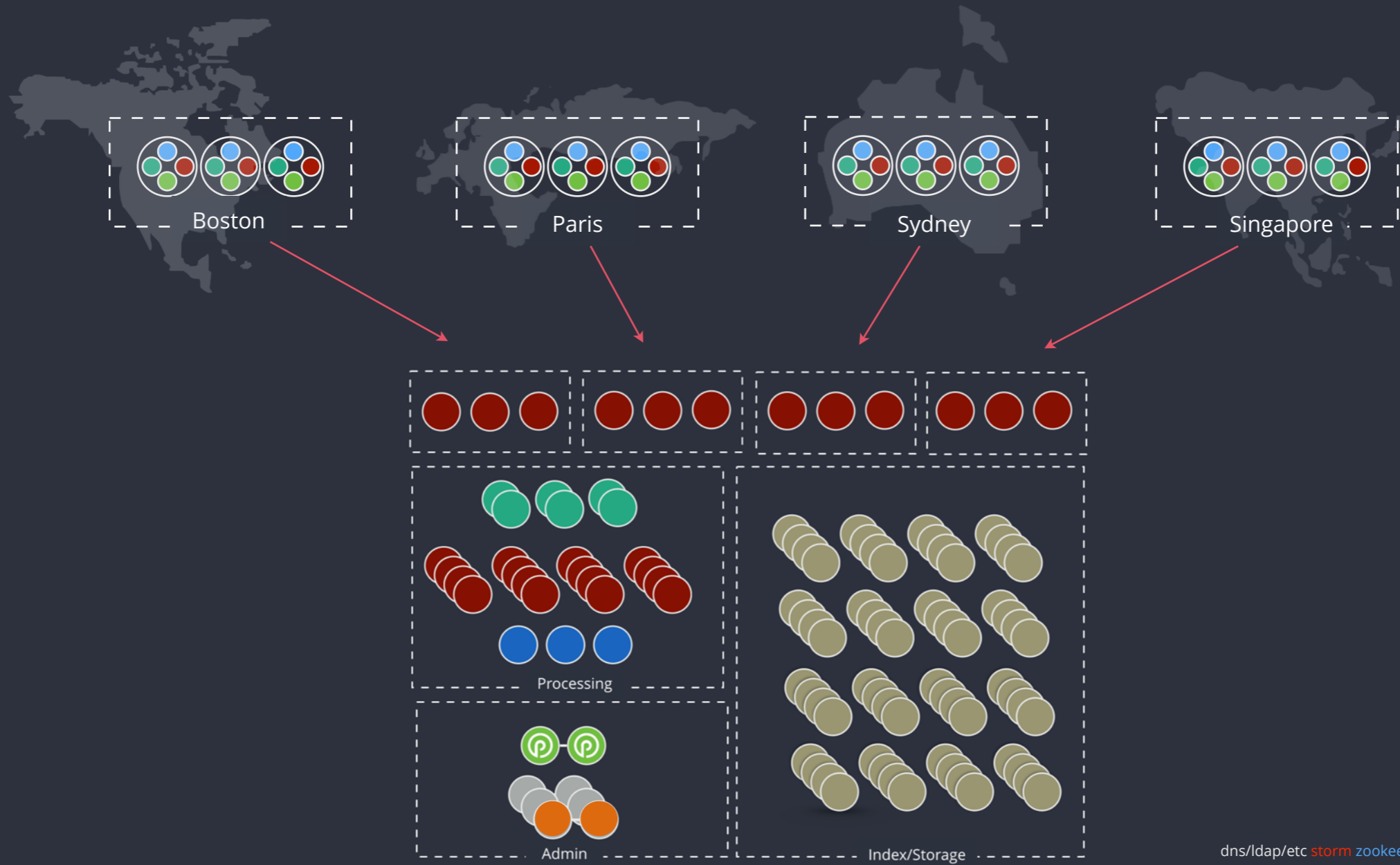




Real Example Setups

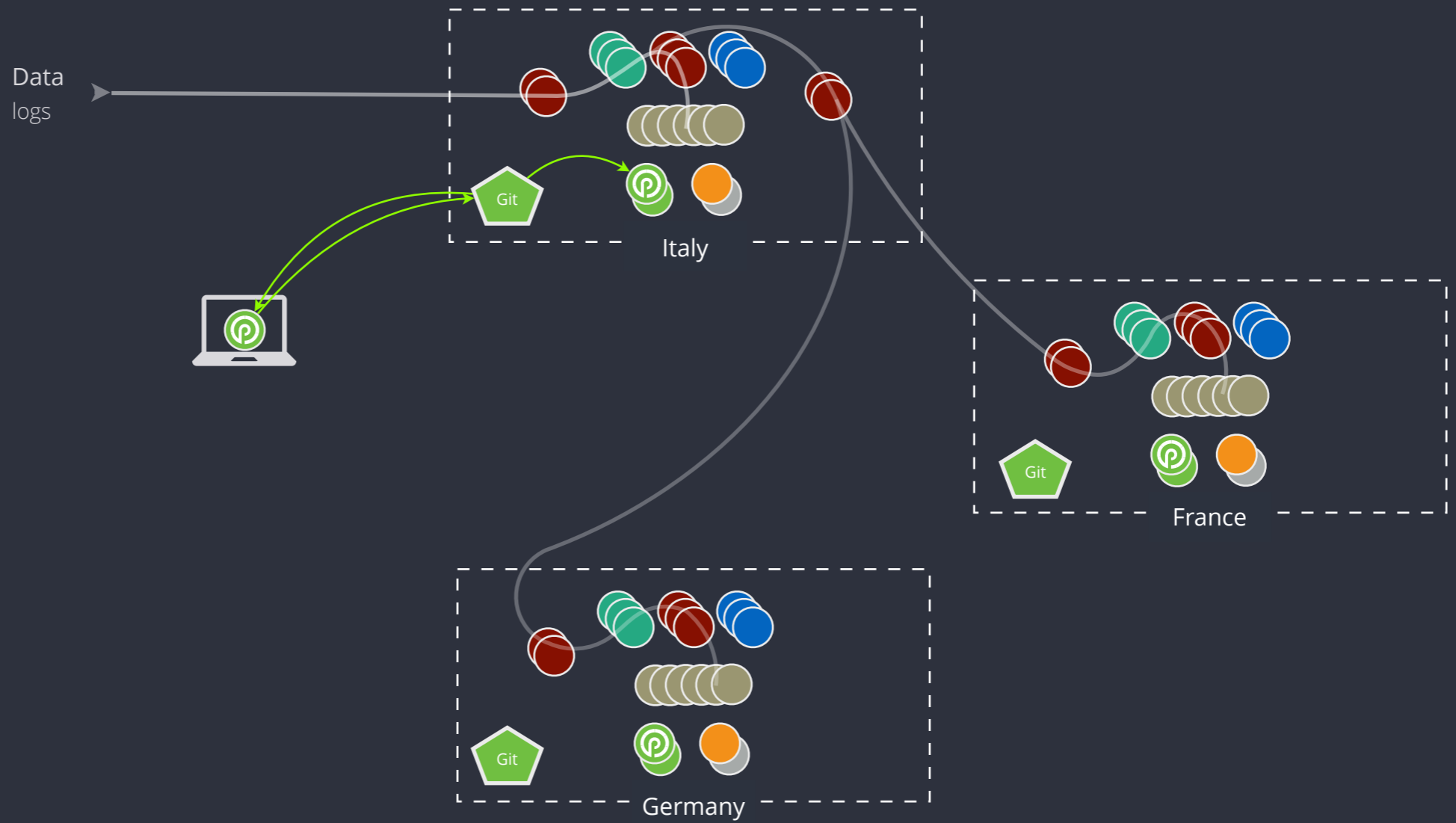


Connecting Your Sites





Multi Sites Replication

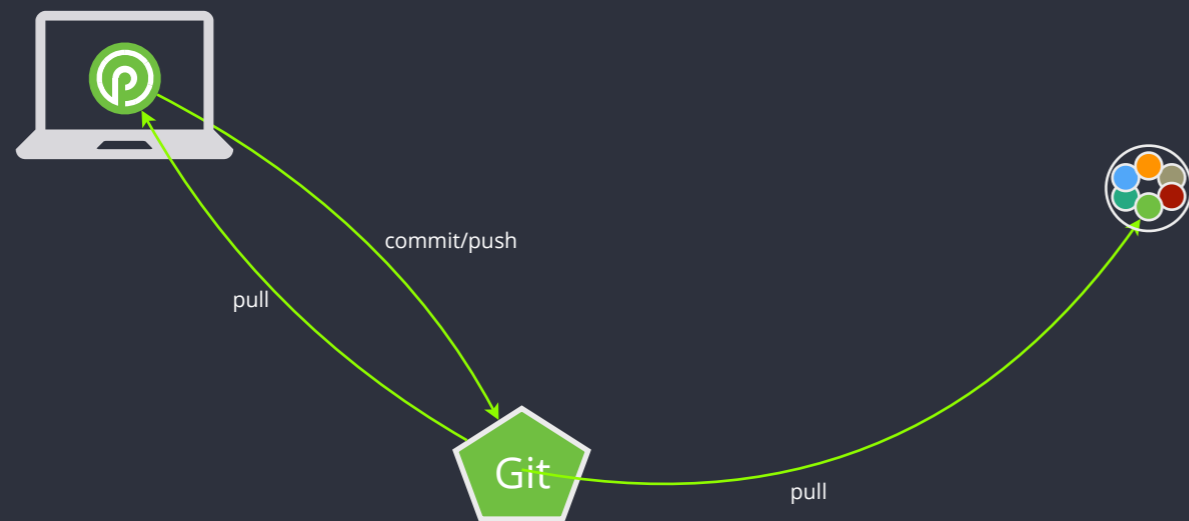


dns/ldap/etc storm zookeeper kafka elasticsearch ceph



Small Scale Deployment

Small monitoring systems



dns/ldap/etc storm zookeeper kafka elasticsearch



Use Cases



Data Agnostic :

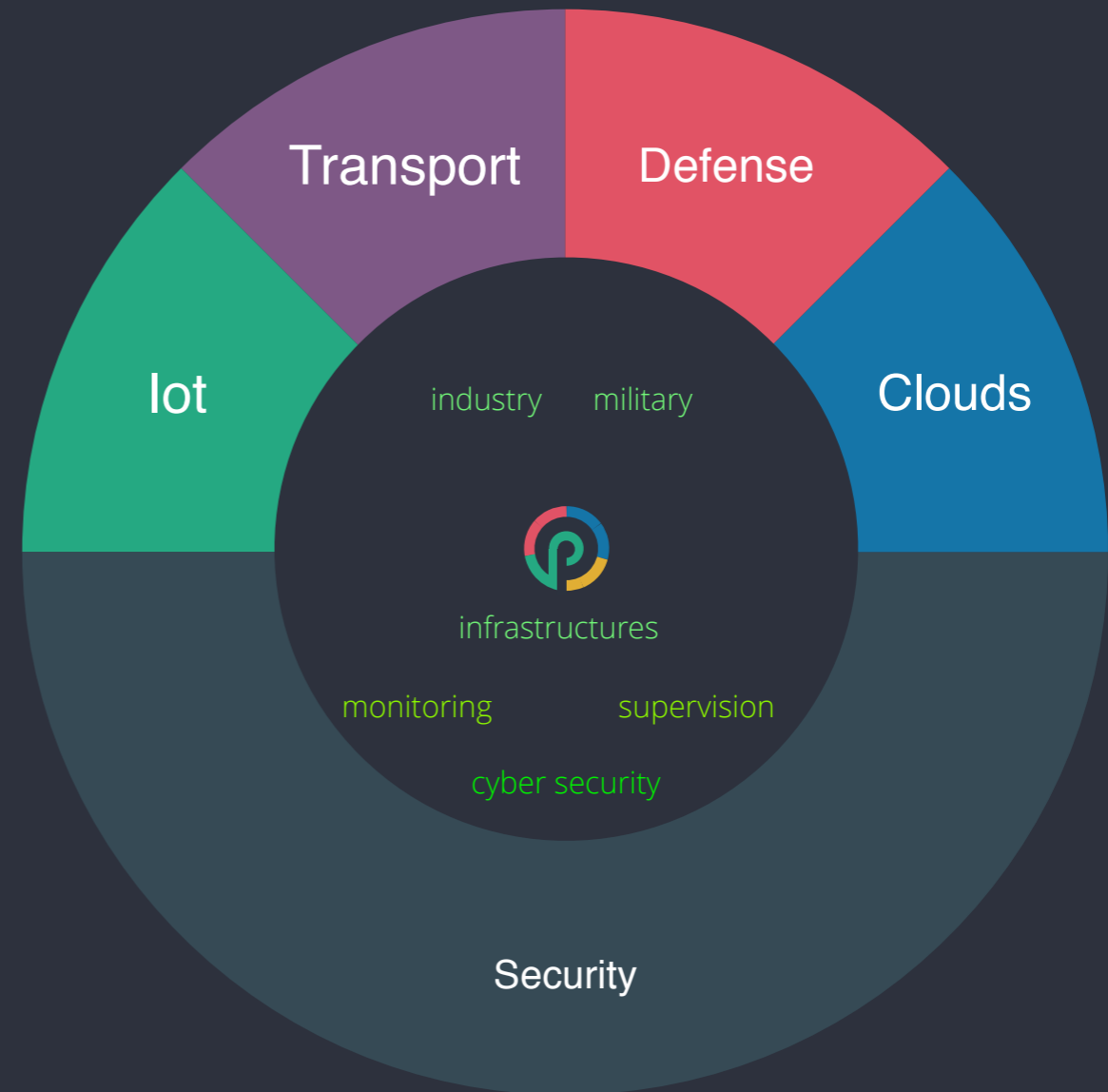
- . Logs, XML, json, text
- . Snmp traps, Netflow
- . metrics, time series

Open Platform : powered by

- . ElasticSearch
- . Siddhi
- . CEPH
- . Storm
- . Spark
- . Kibana/Grafana/Zeppelin

Wide Range of Business Cases :

- . CyberSecurity
- . Industry 4.0 : manufacturing, transportation, energy
- . Monitoring : IT infrastructures







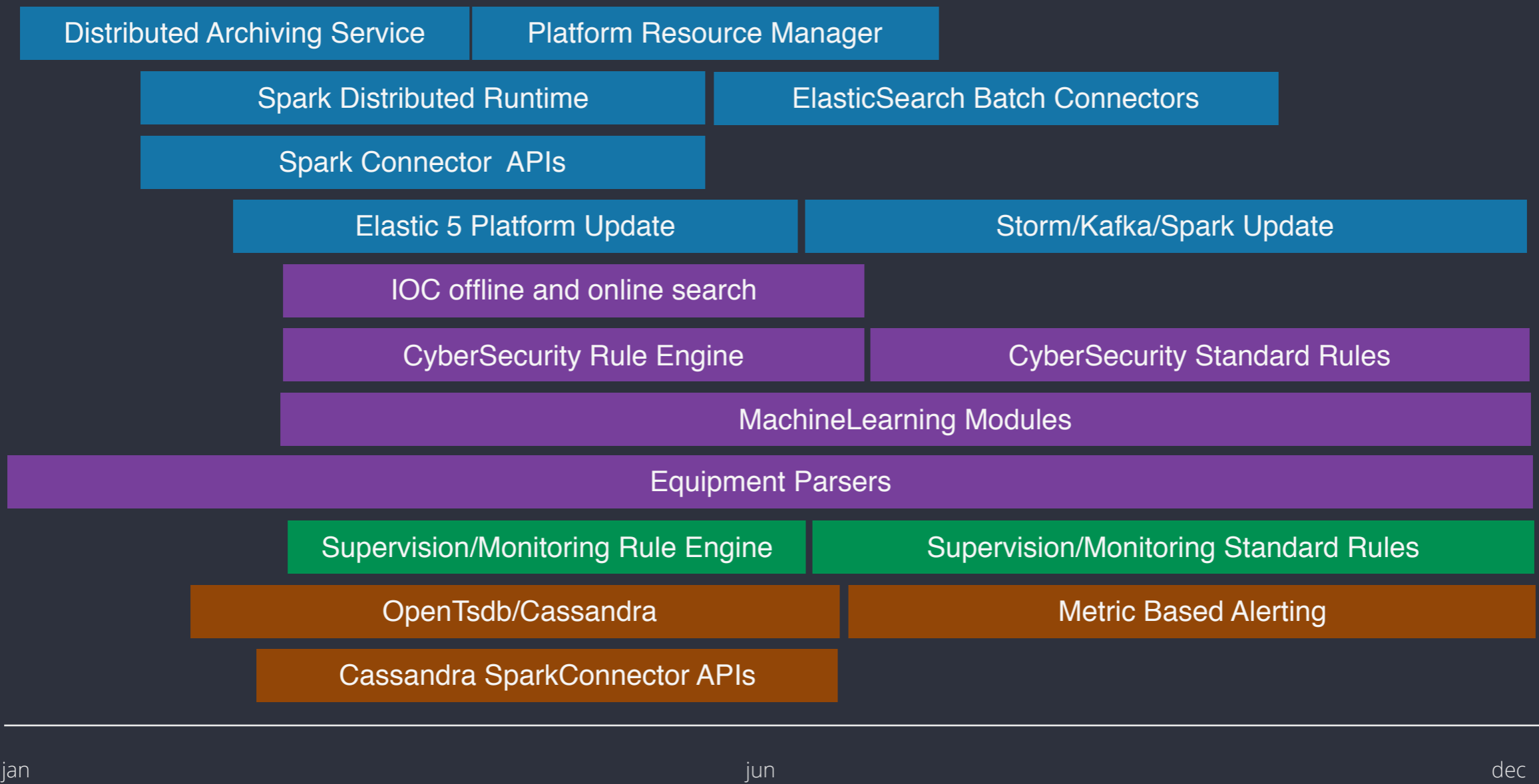
2017 RoadMap

Platform

CyberSecurity

Supervision

Industry



jan

jun

dec



PunchPlatform Stack



Parsers and Channels
Simple, straight, industrial

Stream Processing
Takes care of simple but key stream processing

Deployer/Updater
Install, Update. Fully documented.



Elastic Stack
all of it

Monitoring
end to end

Machine Learning
By configuration

Archiving
Long term storage. Secured



Thanks !