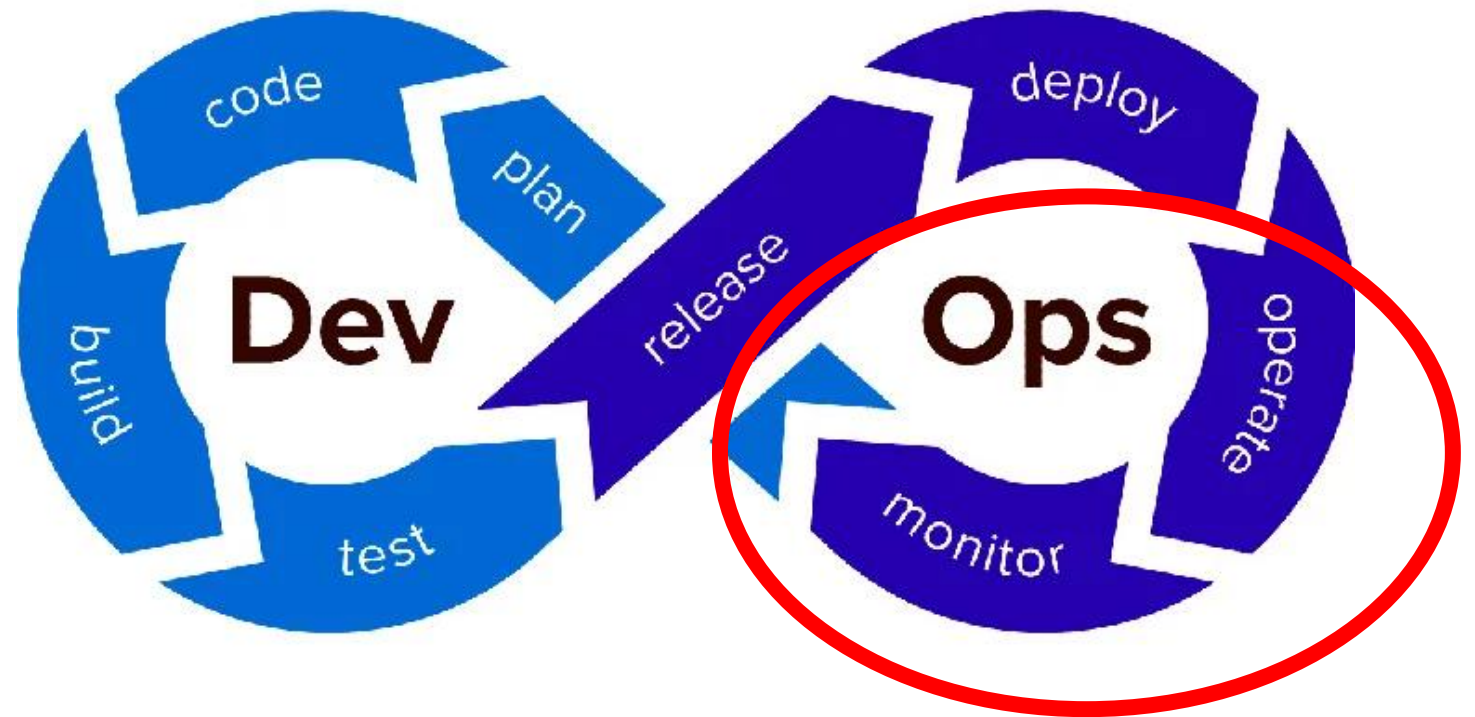


Stratégies de surveillance d'exécution

DevOps Part3/4

DevOps

Ops to Dev

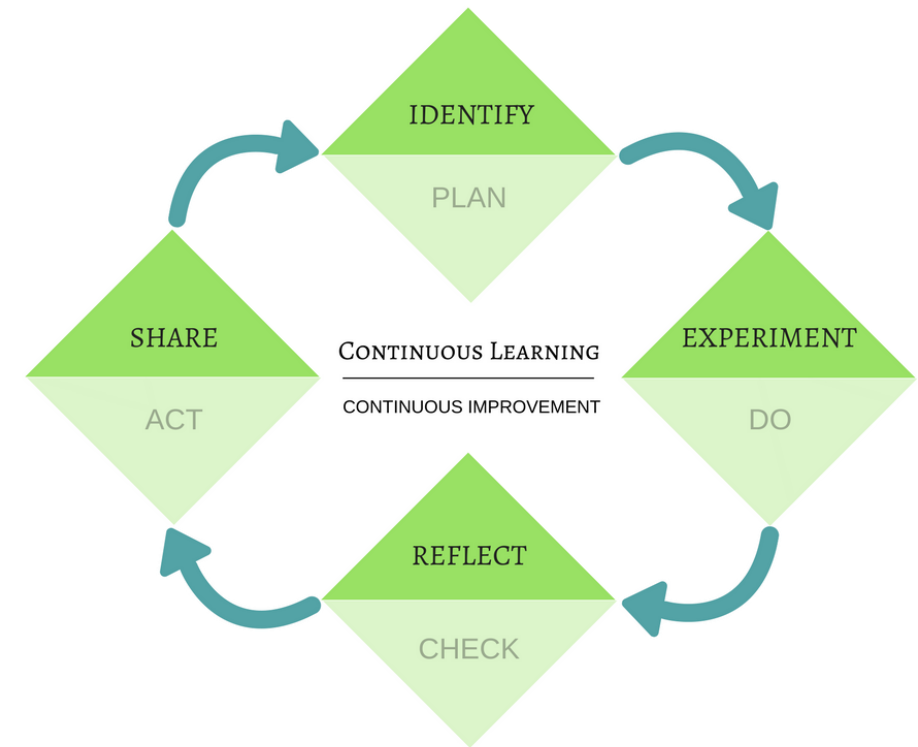


Outline (6 modules)

- *Industrialisation du déploiement logiciel (Pipelines de Continuous Delivery)*
- *Industrialisation de la construction et de la validation du logiciel*
- *Gestion de configurations (construction et déploiement) pour différents environnements d'exécution*
- ***Stratégies de surveillance d'exécution***
- ***Automatisation de la surveillance d'exécution***
- *Gestion de l'évolution*

Outline (Methodology)

- Agile Learning
 - → Context
 - Me
 - Tooling (Introduction)
 - Roadmaps (DevOps/ Test Application)
 - → Trying out / Applying / Testing
 - You
 - → Retrospective
 - Us
 - → Improve/Share
 - Us



Outline

- Challenges/Challenges
- Infrastructure monitoring
- Execution monitoring
 - ELK - APM

Introduction

Introduction

- Monitoring ?

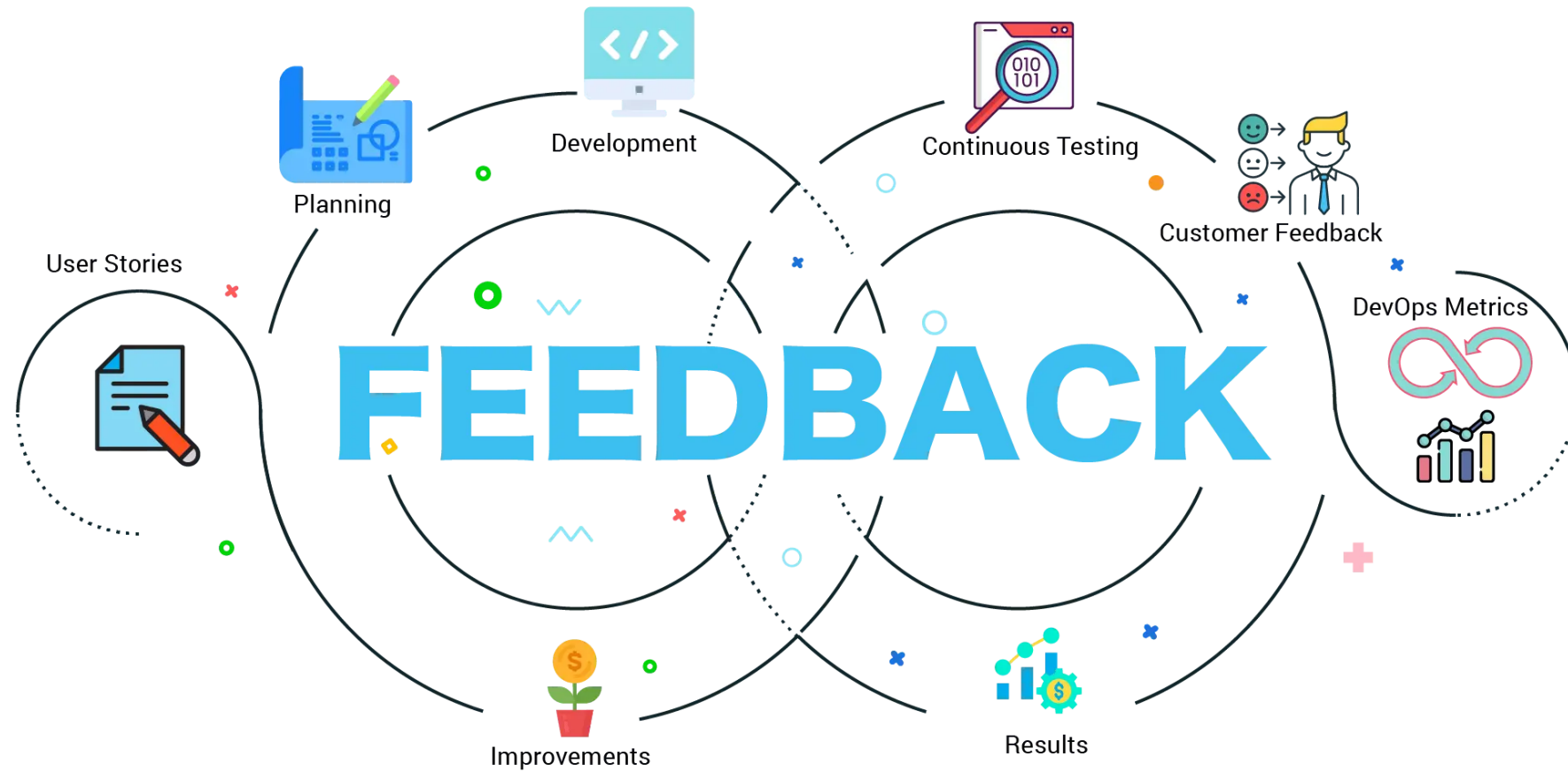


Introduction

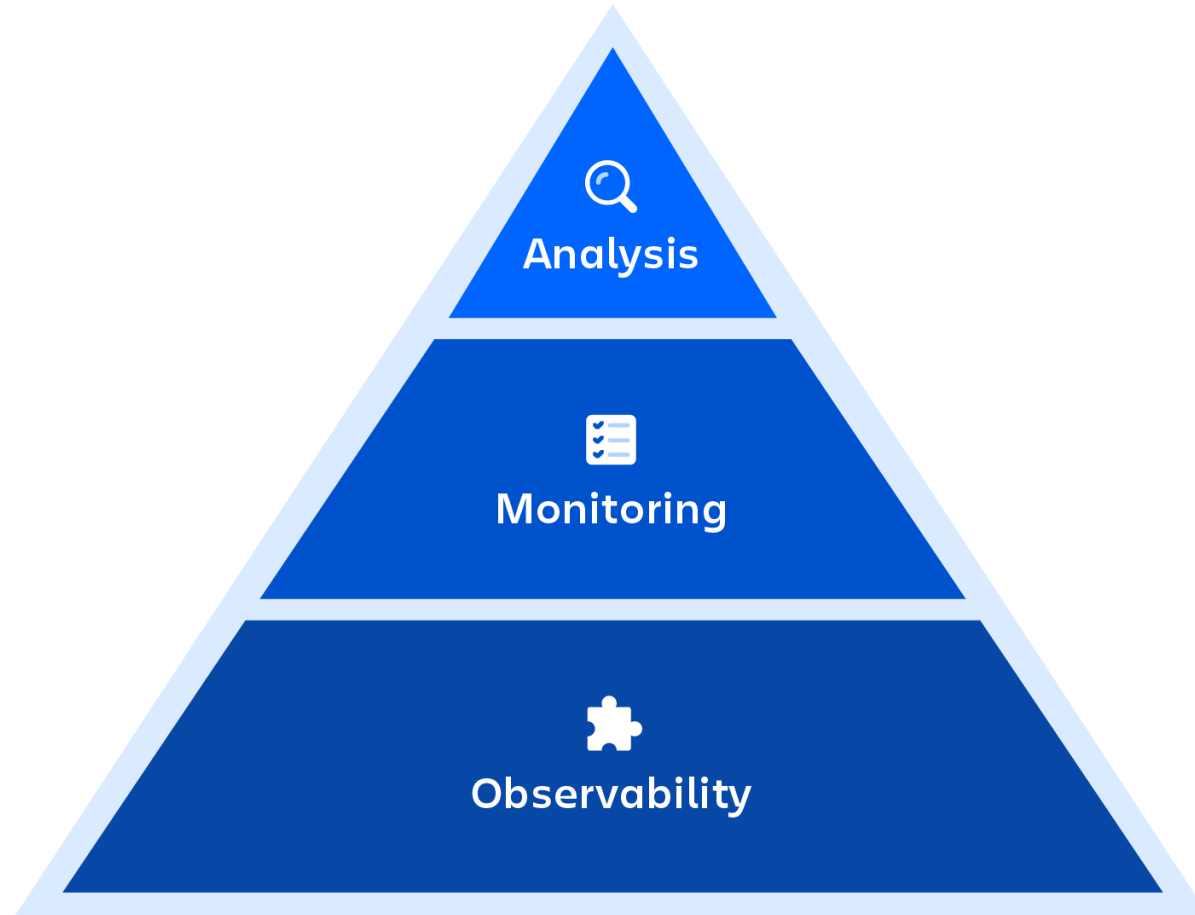
- Monitoring ?



Introduction



Introduction



Part 1

Infrastructure

Infrastructure Monitoring

Infrastructure Monitoring

- Why do we monitor ?
- What do we monitor ?

Infrastructure Monitoring

- Memory usage
- Network throughput
- CPU Usage
- Disk Usage
- ...

Infrastructure Monitoring (Problem)

- With Monitoring

- T0: Problem
- T+1: Client confused
- T+10: Client still tries
- T+20: Client writes mail
- T+30: Service Desk contacts client
- T+X: Problem confirmed
- T+X+Y: Problem taken care of

- With Monitoring

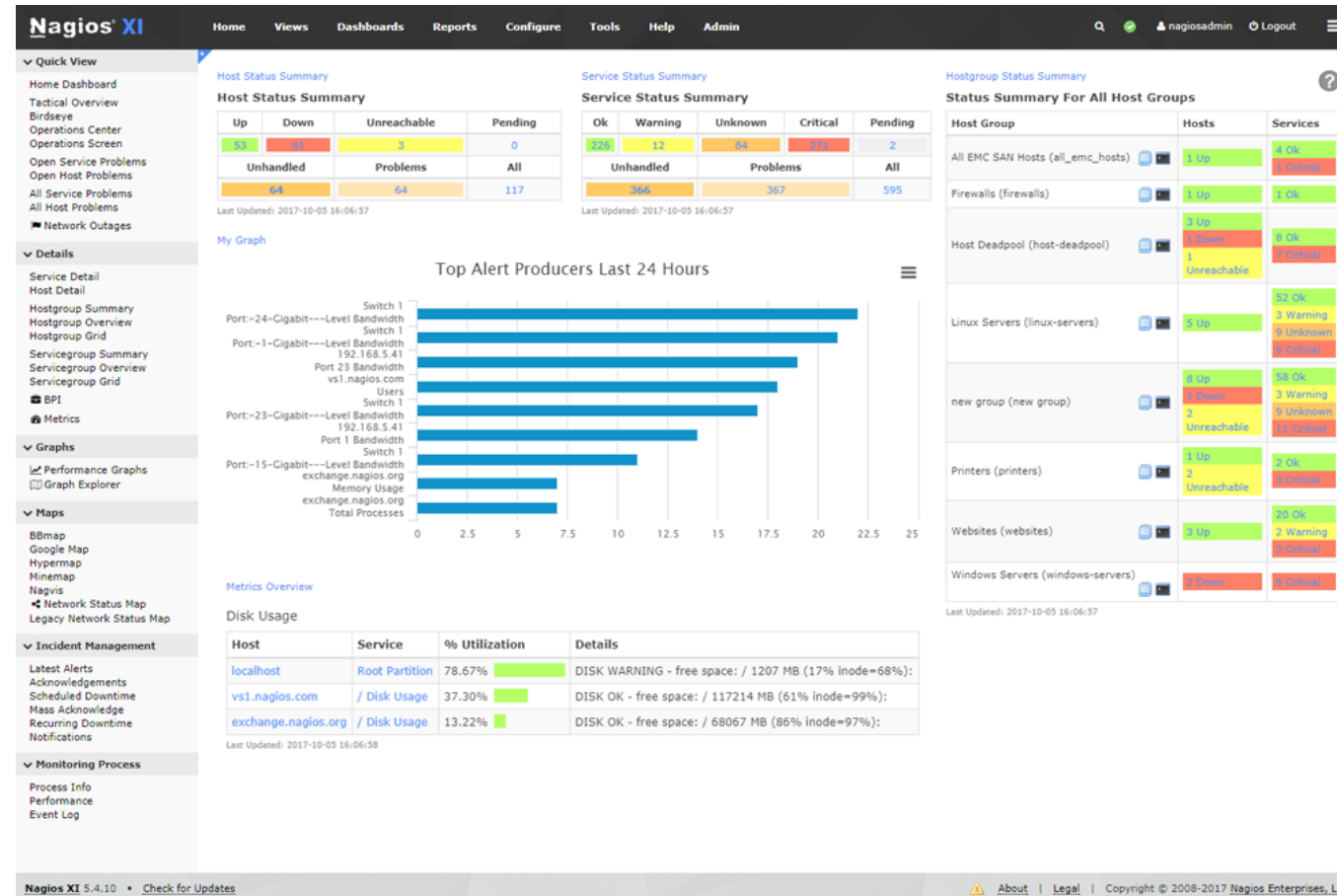
- T0: Problem
- T0: Mail/Slack to Devs
- T+1: Bug taken care of

Infrastructure Monitoring

- Nagios
- Zabbix
- SolarWinds
- Icinga
- Splunk
- Datadog

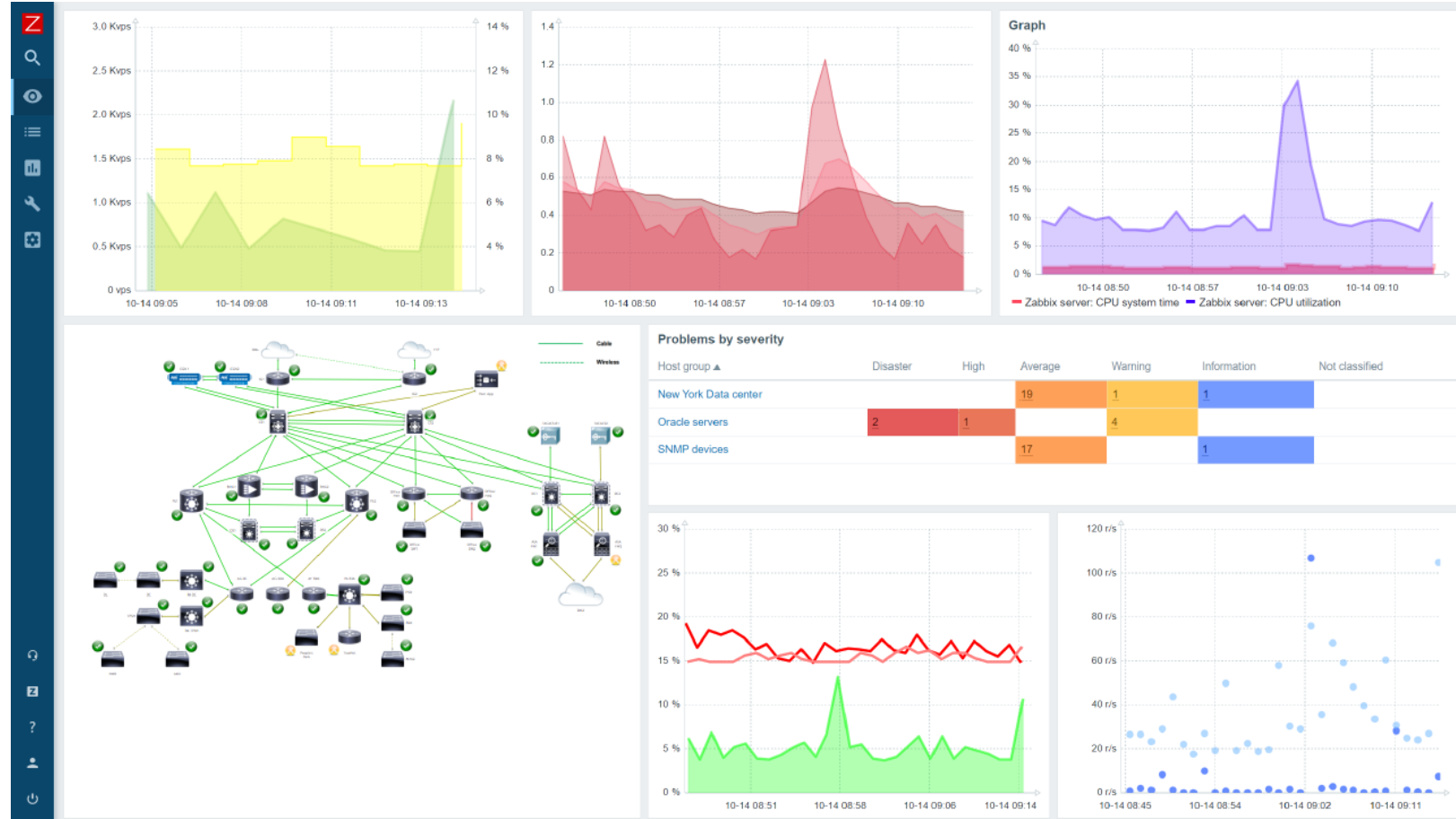
Infrastructure Monitoring

- Nagios



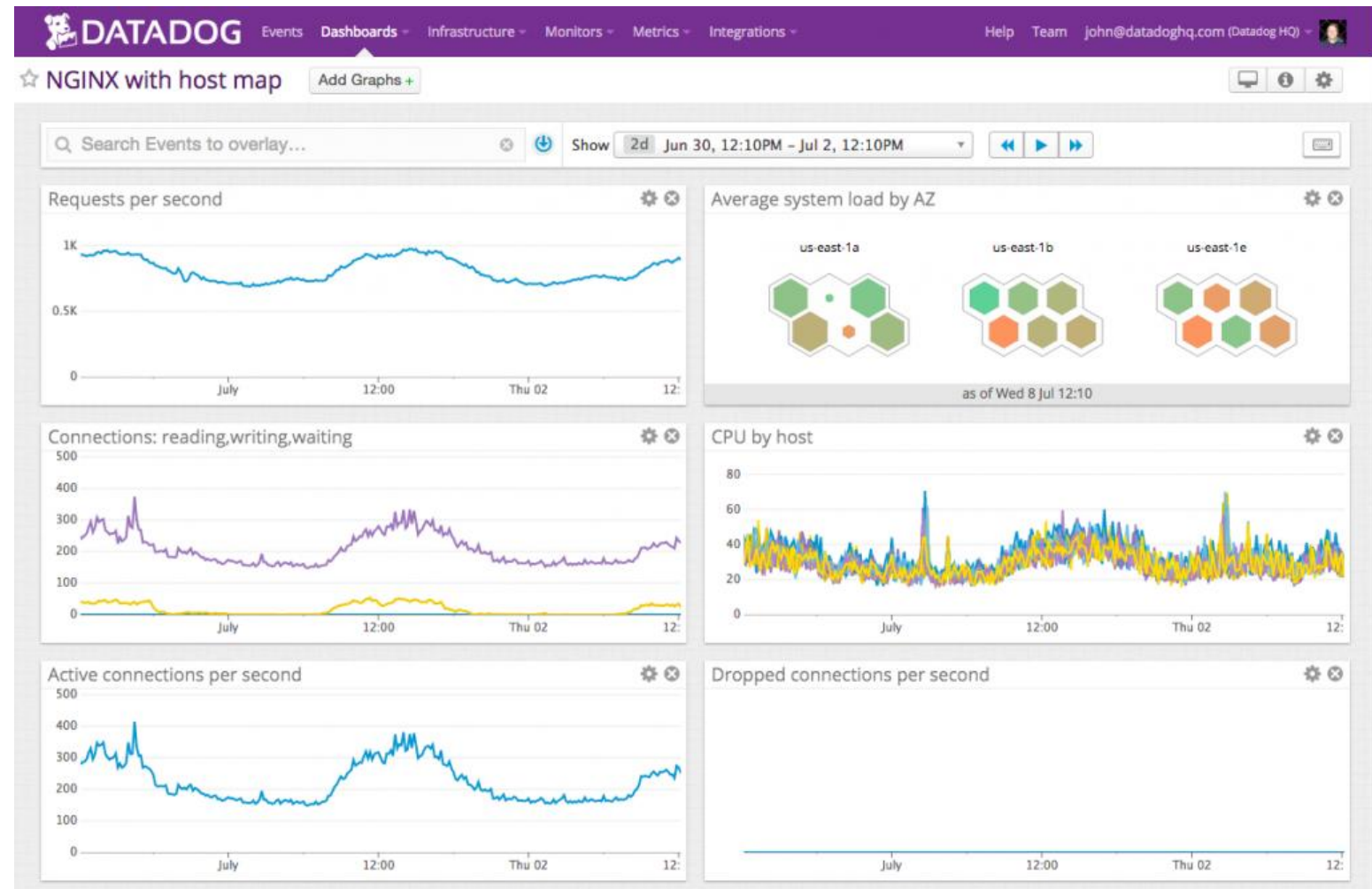
Infrastructure Monitoring

- Zabbix



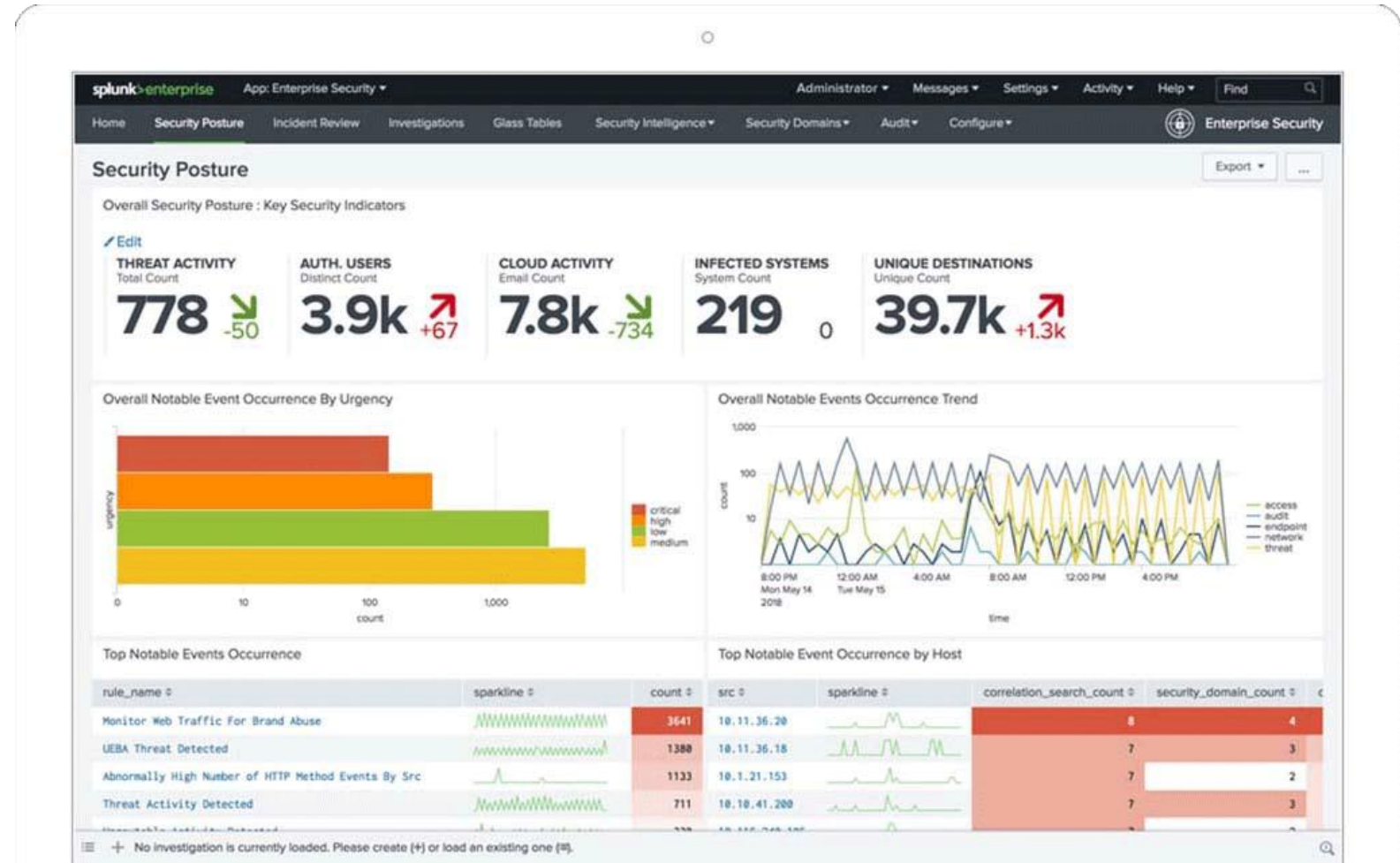
Infrastructure Monitoring

- Datadog



Infrastructure Monitoring

- Splunk



Part 2

Application

Execution Monitoring

Execution Monitoring

- Why do we monitor ?
- What do we monitor ?

Execution Monitoring

- Facts
- KPI
- Bugs
- Performances

Execution Monitoring (Bug)

- Without Monitoring

- T0: Bug
- T+1: Client confused
- T+10: Client still tries
- T+20: Client writes mail
- T+30: Service Desk contacts client
- T+X: Bug confirmed
- T+X+Y: Bug taken care of

- With Monitoring

- T0: Bug
- T0: Mail/Slack to Devs
- T+1: Bug taken care of

APM Tooling

Tooling

- Splunk
- Elastic APM
- Datadog
- Dynatrace
- AppDynamics
- ...

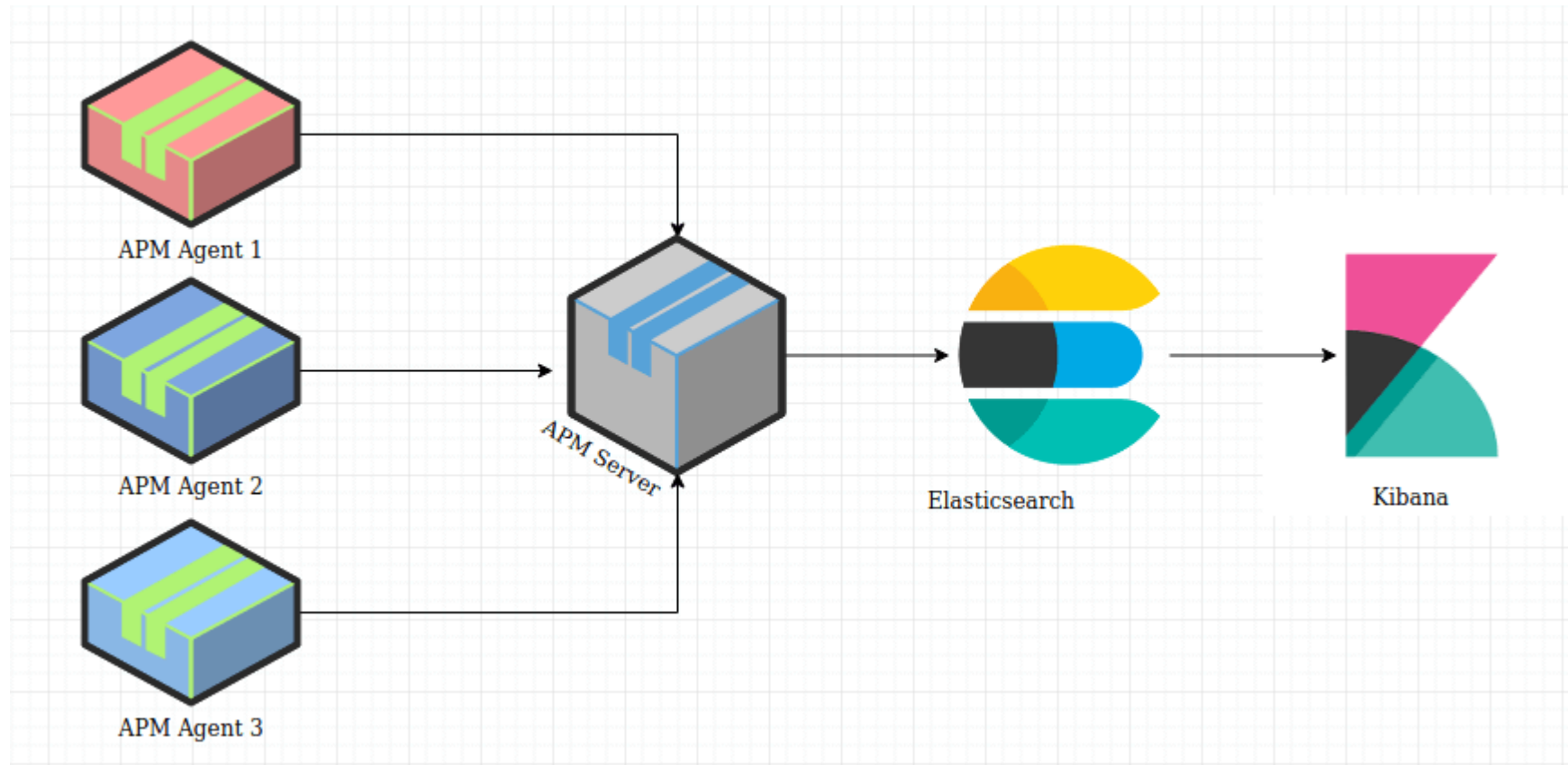
Tooling

- Splunk
- **Elastic APM**
- Datadog
- Dynatrace
- AppDynamics
- ...

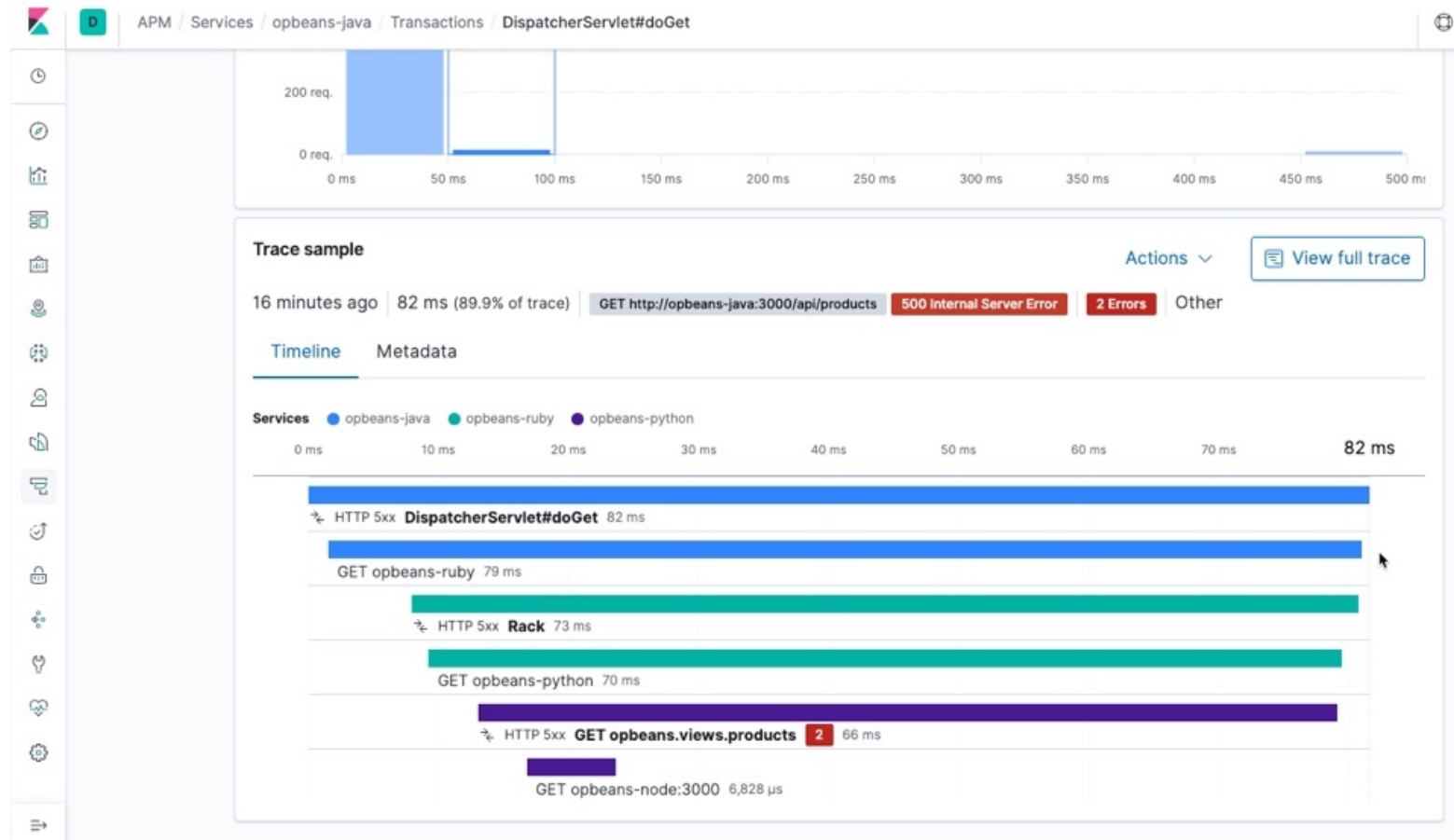
Elastic APM

- APM platform for client/server
 - Optimized for Web Apps
 - Server on top of Elastic Search
 - Integrated in Kibana
-
- Client libraries for almost all languages
-
- Standard integrations for all major frameworks

Elastic APM

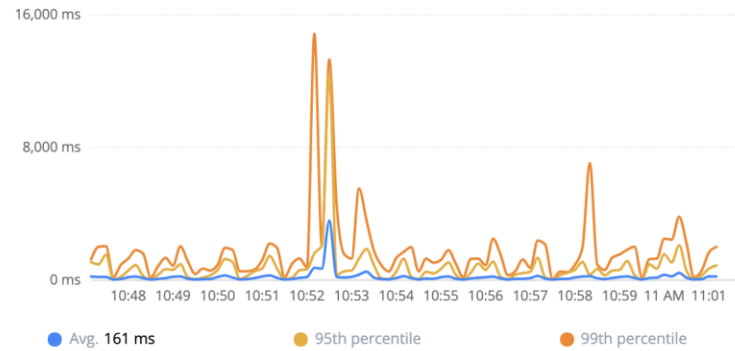


Elastic APM

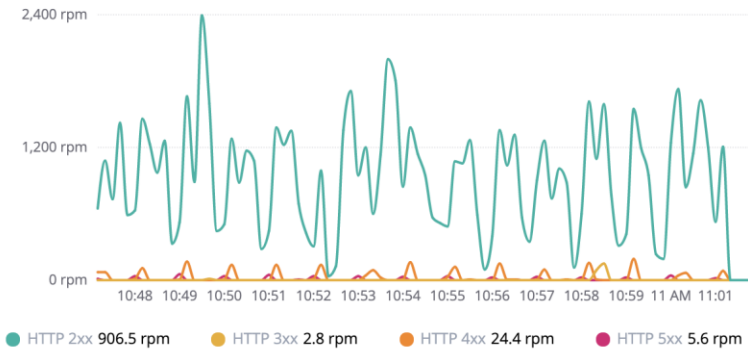


Elastic APM

Transaction duration



Requests per minute



Name	Avg. duration	95th percentile	Trans. per minute	Impact ↓
Api::V2::HostsController#facts	1,631 ms	3,031 ms	33.5 tpm	
Katello::Api::Rhsm::CandlepinProxiesController#facts	790 ms	1,288 ms	30.7 tpm	
Katello::Api::Rhsm::CandlepinProxiesController#get	51 ms	100 ms	291.1 tpm	
HostsController#externalNodes	253 ms	418 ms	53.9 tpm	
Api::V2::ConfigReportsController#create	435 ms	1,277 ms	25.7 tpm	
Katello::Api::Rhsm::CandlepinProxiesController#consumer_show	116 ms	171 ms	72.3 tpm	
Katello::Api::Rhsm::CandlepinProxiesController#serials	64 ms	139 ms	101.5 tpm	
Katello::Api::Rhsm::CandlepinProxiesController#server_status	36 ms	69 ms	128.1 tpm	
Api::V2::ExternalUsergroupsController#index	116 ms	174 ms	25.5 tpm	

Elastic APM

