

# Platform Intelligence

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DIGITALIZATION FOR SUSTAINABLE PRODUCT DEVELOPMENT AND MANUFACTURE

- What are the benefits?
- Platform Intelligence: definition
- Platform: complex and dynamic system
- Foundation: information availability
- Intelligence: information gathering
- Manageable









#### The benefits

#### Keep learning - Learn along the way

#### Know your users

- Understand your users and how they use the system
- Follow patterns and improve efficiency: application/processes
- Be proactive and spend efforts where it brings most value
- → Enhanced End User Experience

#### Know your system

- Performance: Perform analysis, investigations and identify anomalies
- Availability: Monitor usage and ensure minimized down-time in case of issues
- Manageability (the quality of being easy or possible to deal with) increased.
- → Well performing system







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#### **Definition**

#### Continuous Information flow in the right context

#### Intelligence: Conscious Information gathering

- Availability of Information
- Selected, filtered then Centralized
- Continuous feedback loops

#### About a platform: 3DExperience

- Complex
- Dynamic System

#### Presented in a maneagable way

- Easy to assess / Understand
- In the right context







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#### The Platform

is Complex & Dynamic

#### **Complex** Platform

Multi servers, components, applications (services)

#### **Dynamic** System (key factors)

- Database
- Network WAN/LAN
- Infrastructure Design
- Application design
- Data
- User actions and behaviours
- •









**Database Server Metadata Repository** 



**Webtop Clients** 

Ex.: ENOVIA Apps, 3DDashboard, 3DSwym



**Native Clients** 

Ex.: CATIA/DELMIA/SIMULIA Apps CATIA V5, SolidWorks















3DPassport

3DDashboard

3DSwym

3DComments

3DNotification

3DSearch

3DSpace (MCS)

License Server (DSLS)









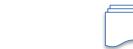
**FTS Server** 











File Server(s) (FCS) Long Fields Repository







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```
Time September 20th 2019, 17:13:58.738 type_main: srvmon nonHeapMemoryUsed: 310,516,688 input.type: log gcCount_PS Scavenge: 21 nonDaemonThreadCount: 26 serverInstance: products17x-demo.technia.c om_3dspace gcTimePerTime_PS MarkSweep: 0 committedVirtualMemorySize: 2,351,181,82 4 gcCountPerTime_PS Scavenge: 0 gcCountPerTime_PS MarkSweep: 0 heapMemoryInit: 1, 610.612.736 gcTime PS MarkSweep: 61 threadCount: 472 type: srvmon ivm metric
```

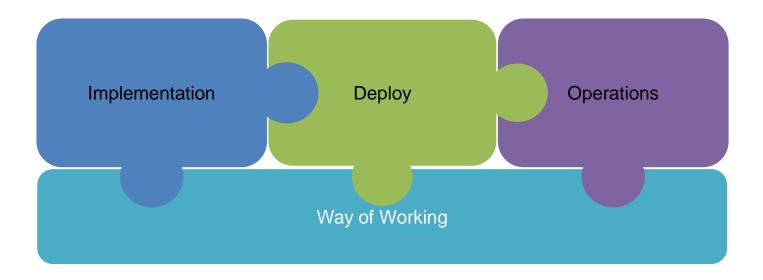






#### **Foundation**

# Information Availability



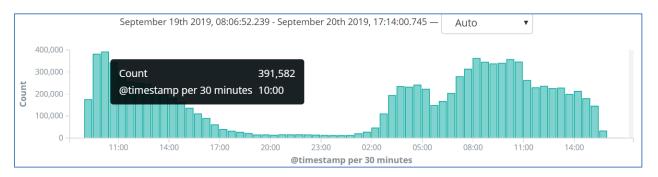
→ A strong foundation provides a sea of information







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# Intelligence



**Server Monitor:** sampling tool provided by TECHNIA that retrieve then presents key selected 3DExperience metrics

"Elastic Stack" is (formerly the "ELK stack") the combination of Elasticsearch, Logstash, and Kibana with Server Monitor

- Logstash is an open source, server-side data processing pipeline that ingests data from a
  multitude of sources simultaneously, transforms it, and then sends it to Elasticsearch
- **Elasticsearch** is a search engine based on Lucene. *It provides a distributed, multitenant-capable full-text search engine with an HTTP web interface and schema-free JSON documents*
- **Kibana** is an open source data visualization plugin for Elasticsearch. *It provides* visualization capabilities on top of the content indexed on an Elasticsearch cluster

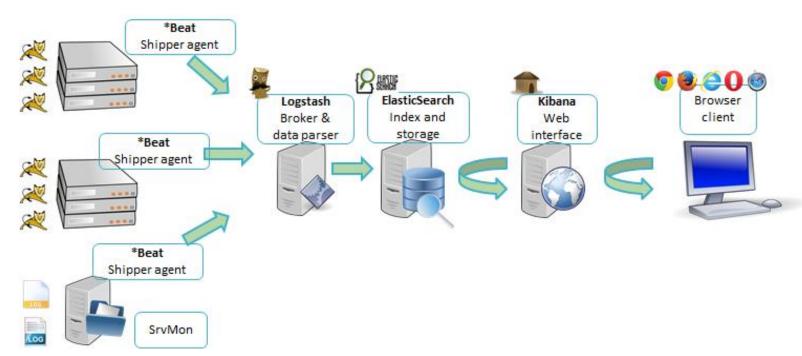






# **Monitoring**

Flow: Server Monitor with Elastik Stack









- What are the benefits?
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- ✓ The Foundation: information availability
- Intelligence: information gathering
- Made accessible

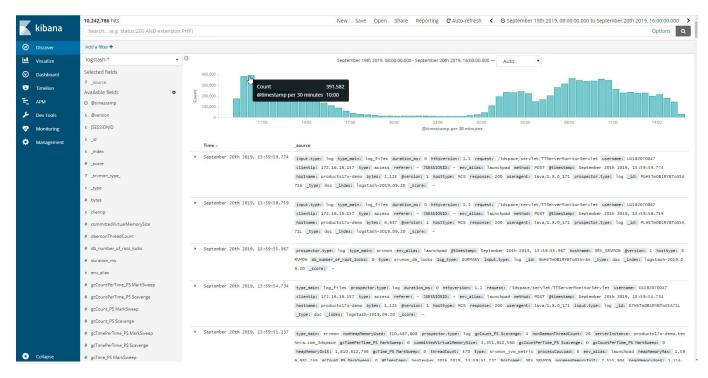






# Intelligence made accessible

#### Kibana













Platform Intelligence
Improving quality and performance
through continuous monitoring



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