Drilling Deep with Machine Learning as an Enterprise Enabled Micro Service

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Hypothesis

Container clusters are *disruptive enablers* of enterprise-grade Machine Learning capabilities in oil/gas applications and workflows when delivered as a **fully converged platform**
Univa ML Survey: Key Findings

- Most organizations have been using Machine Learning for more than 2 years
- Available infrastructure for Machine Learning remains CPU-heavy
- There is interest in deploying new infrastructure to support Machine Learning over the next 6 months
- Machine Learning applications will make use of *all* capabilities - existing CPUs & GPUs plus new Big Data & containerized
- There is definitely interest in private/public/hybrid clouds – though on-premise deployments are expected to dominate
Machine Learning Use Case Examples

1000+ Applications (legacy, not containerized)

Kubernetes Container Orchestration

Univa Grid Engine

Containerized Apache Spark™ Service(s)

Containerized Apache Spark™ Application(s)
Container Clusters for Machine Learning

- Apache Spark is easily containerized as a service or an application
- Navops Command delivers sophisticated, enterprise-grade workload placement and advanced policy management capabilities for Kubernetes-based container clusters that addresses mixed workloads
- Microservices-based approaches can be systematically refactored into existing applications and/or workflows
- Univa offers unique solutions for fully converged infrastructures
THANK YOU
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