REGALE

## OPEN ARCHITECTURE FOR EFFECTIVE EXASCALE SUPERCOMPUTING

OBJECTIVES

- Effective utilization of resources
  - > Improved application performance
  - > Increased system throughput
  - > Minimization of performance degradation under the operation with power constraints
  - > Decreased energy to solution
- Broad applicability
- Easy and flexible use of supercomputing services

MILESTONES

- 1st version of REGALE pilots
  - > Industrial Scale Shape Optimization of Hydraulic Turbines
  - > In-Transit Workflow for Ubiquitous Sensitivity Analysis and MetaModel Training
  - > Enterprise Risk Assessment with HPDA
  - > Groundwater estimation and management
  - > Design of car bumper with advanced materials
- Release of the 1st REGALE prototype
- REGALE final architecture
- Release and demonstration of the final REGALE prototype

REGALE Architecture
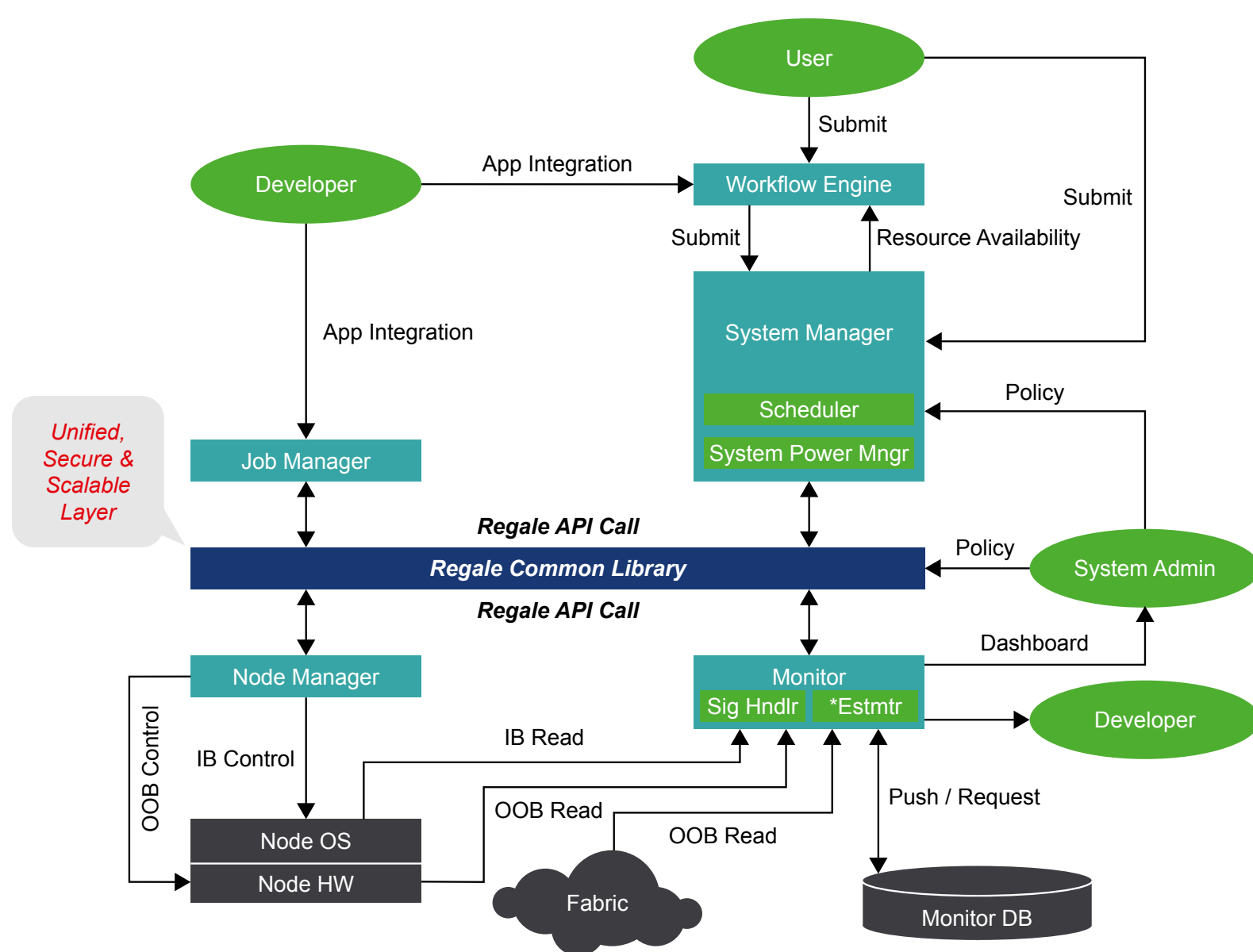
ACHIEVEMENTS TO DATE OF THE PROJECT

- Definition of an open, modular architecture for energy-efficient supercomputing
- Instantiation of the REGALE architecture across various toolchains
- Implementation of REGALE framework to support modularity and interoperability
- Integration of REGALE pilots with workflow frameworks

Contact Us!

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