

# Navops Command

## Multi-tenancy and Advanced Policy Management for Kubernetes



### RUN CONTAINERS AT SCALE, SHARE KUBERNETES CLUSTERS AND BE CLOUD-NATIVE

Navops Command allows an organization to run containerized microservices applications more efficiently on Kubernetes. The scheduler and policy management system provides virtual multi-tenancy and resource sharing to increase cluster utilization and lower operation costs.

Now, it is easy to optimize compute resources with advanced scheduling and intelligent policy controls in your on-premise Kubernetes cluster or hybrid cloud environment. Leveraging Univa's proven Grid Engine technology, Navops Command is an automated workload placement and policy management solution that plugs into any Kubernetes distribution. With Navops Command, enterprise users can automate prioritization of microservices applications, improve server utilization, run cloud-native HPC applications, and efficiently respond to end user demand.

Customers can work with their choice of Kubernetes distribution like Red Hat's OpenShift, Tectonic, Rancher still gain the benefit of Navops Command's advanced policy management and virtual multi-tenancy across projects, teams and applications.

Navops Command also includes support for mixed workloads allowing organizations to run containerized and non-containerized enterprise HPC workloads within a Kubernetes cluster. Applications such as batch jobs, Spark, or Hadoop can be run side by side with microservices-based applications sharing the same server infrastructure, networking and storage. This shared capability greatly improves the utilization of enterprise infrastructure.

### TECHNOLOGY PARTNERS

Univa has established partnerships with many of the leading players in the cloud-native ecosystem – founding member of the Cloud Native Computing Foundation and contributor to the Open Container Initiative and The Linux Foundation. Platform partners include Red Hat, Rancher, VMware and leading cloud service providers such as AWS, Google, Microsoft Azure and Oracle Cloud.

### OTHER NAVOPS PRODUCTS



Open source Launch migrates HPC workloads to Cloud to meet increasing workload demands.



Open source Universal Resource Broker runs Mesos compatible frameworks on top of Kubernetes or Univa Grid Engine.

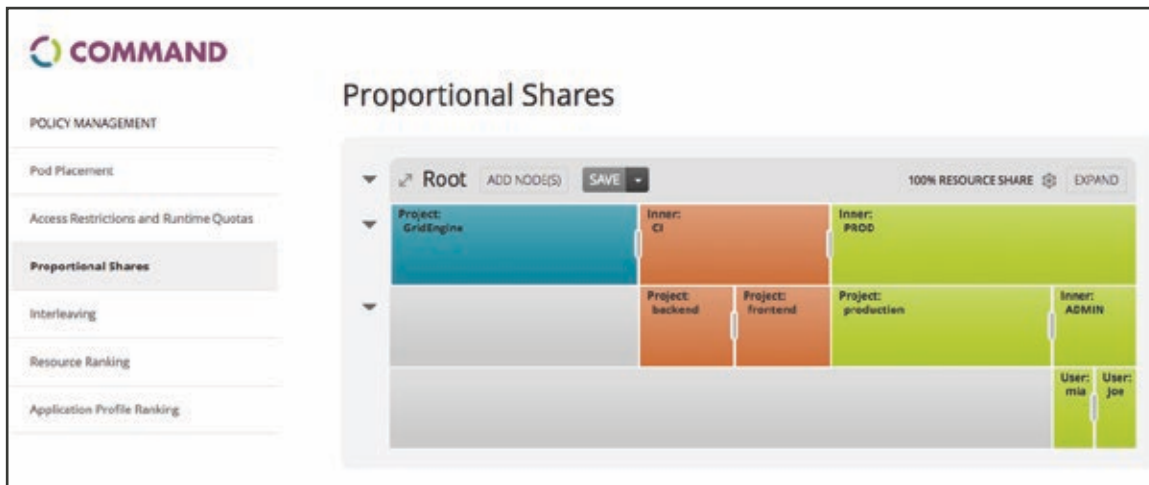
### Navops Command Highlights

- Advanced scheduling algorithms
- Sophisticated policies for managing SLAs
- Automated prioritization when resources become scarce
- Virtual multi-tenancy
- Run containerized and non-containerized workloads
- Cloud-native HPC

“Software such as Univa's Navops Command can enable organizations to consolidate and pool container clusters with traditional compute clusters for efficiency, performance and cost savings in enterprise workloads.”  
– Jay Lyman, Analyst, 451 Research

“Univa's extensive expertise in scheduling and policy management for enterprise workloads will greatly benefit customers adopting Kubernetes and containers.”  
– David Aronchick, Product Manager, Google

“Red Hat's OpenShift customers can benefit from the advanced policy management and resource efficiency improvements that Navops Command brings to Kubernetes.”  
– Chris Morgan, Product Management Director, Red Hat



Navops Command unleashes the power of containerization for enterprises on any architecture, any application and in any environment, providing increased efficiency and lower costs.



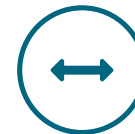
### Advanced Scheduling

- ✓ Superior scheduling algorithms
- ✓ Enterprise-proven policy management
- ✓ Set independent quotas by user or group



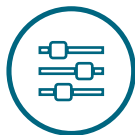
### Access

- ✓ Robust ACL support
- ✓ Automatically reserve resources
- ✓ Fairly segment access



### Best Fit

- ✓ Rarest resource preferential placement
- ✓ Balance IO usage, memory, and CPU
- ✓ Spread workload to least loaded machines



### Contention

- ✓ Set independent quotas per user or organizational unit
- ✓ Scale up or down interdependent services



### Cloud-native HPC

- ✓ Run HPC workloads on Kubernetes
- ✓ Share clusters between microservices and HPC applications
- ✓ Containerized and non-containerized workloads



### Workload Preemption

- ✓ Automatically reclaim resources for prioritized work
- ✓ Ensure business priorities

## About Univa

Univa is the leading independent provider of software-defined computing infrastructure and workload orchestration solutions. Univa's intelligent cluster management software increases efficiency while accelerating enterprise migration to hybrid clouds. Millions of compute cores are currently managed by Univa products in industries such as life sciences, manufacturing, oil and gas, transportation and financial services. We help hundreds of companies to manage thousands of applications and run billions of tasks every day. Univa is headquartered in Chicago, with offices in Toronto and Munich. For more information, please visit [www.univa.com](http://www.univa.com).



**Univa Corporation** 2300 North Barrington Road, Suite 400, Hoffman Estates, IL, 60195 USA  
Tel: +1.647.478.5901 [www.univa.com](http://www.univa.com)