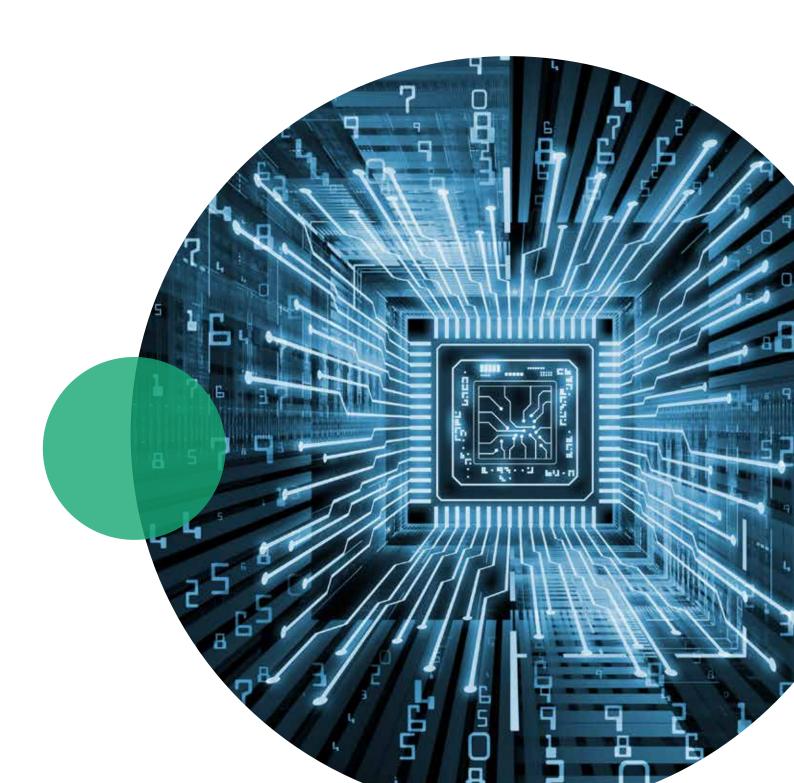


Wipro Nuage: Accelerating and Optimizing Silicon Design Workloads on the Cloud



Semiconductor development requires a high-performance computing (HPC) infrastructure that can seamlessly scale up and down to accommodate peaks in design and simulation cycles. Although migrating to the cloud helps with on-demand access to resources, costs can escalate quickly if not managed properly. Hence, enterprises need an intelligent resource manager and predictor to handle high compute and storage requirements for spiky workloads and to optimize the license costs of electronic design automation (EDA) tools.

Our Wipro Nuage solution puts all this in reach by enabling businesses to minimize the HPC costs of EDA workloads, shift spending from capex to opex, and improve asset utilization. Wipro Nuage is a smart orchestrator powered by AI/ML that enables enterprises to accelerate silicon design workloads through the prediction and optimization of resources using cloud-native services.

Key takeaways

Optimized HPC Costs

- Provisions compute Resources only when EDA licenses are available.
- Delivers lower HPC costs than any other solution in the market.
- Eliminates idle compute times using an auto-provisioning feature thet tracks incomplete job requests.
- Enables true elasticity with zero waste.

Frictionaless

 Ensures a seamless integration and enables quick tools adoption



Predictable Outcome/TTM

AI/ML Enabled

- Ensure rightsized compute cores and memory with our AI/ML predection engine.
- Optimizes short-running jobs through runtime ML predictions with low-cost preemptive capabilities.



Wipro Nuage



Extensible Architecure

- Offers a cloud provider and HPC scheduler-agnostic solution.
- Facilitates business-specific cutomizations and configuration.



Self-service

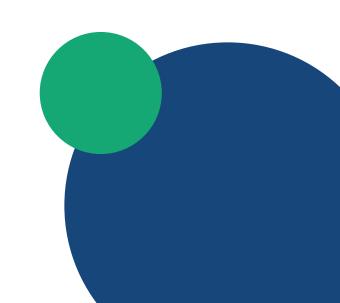
- Equips engineers with self-service capabilities for managing and governing jobs.
- Provides a dashboard for monitoring hosts, for monitoring hosts, projects, and license info.

ctable Optmized ne/TTM License Cost

Automated and Seamless

In addition to the benefits illustrated above, certain aspects make Wipro Nuage unique and enable IT teams to:

- Ensure the rightsizing of compute core and memory through AI/ML-based prediction engines.
- Improve predictability and forecast management so enterprises can use their infrastructure more efficiently.
- Reduce total cost of ownership by optimizing operations and monitoring hosts, projects, and license information.



Key features

Wipro Nuage is an automated orchestrator that significantly optimizes HPC costs for EDA workloads. It leverages AI/ML prediction engines to ensure the rightsizing of compute cores and memory in a public, hybrid, or private cloud scenario. In cloud-based environments, it can auto-scale infrastructure resources to meet the dynamically changing needs of current and foreseen workloads.

With our solution, semiconductor companies can move away from fractured processes, experiences, and data sets to gain the following benefits:



A cost-optimized infrastructure with a potential 100% increase in resource utilization



A 20 to 40% reduction in IT costs (40–50% IP/front-end design and 20–25% physical/back-end design)



A doubled improvement in asset utilization

Wipro Nuage is the only solution on the market that addresses the business, financial, and technical challenges the semiconductor industry faces when migrating EDA workloads to the cloud.

To know more about Wipro Nuage, please visit:

https://www.wipro.com/ engineeringNXT/wipro-nuage/





Wipro Limited

Doddakannelli, Sarjapur Road, Bangalore-560 035, India Tel: +91 (80) 2844 0011

Fax: +91 (80) 2844 0256

wipro.com

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services,

strong commitment to sustainability and good corporate citizenship, we have over 200,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information, please write to us at info@wipro.com

