

The logo for EVIDEN, featuring the word in a white, outlined, sans-serif font. The background is a dark blue gradient with faint, glowing wireframe patterns of mechanical parts and gears.

EVIDEN

# Unleashing the Power of HPC in Manufacturing

HPC, AI, and Quantum in the Cloud and as-a-Service Webinar

# Spotlight on Expertise

Meet our Esteemed Speakers



---

Beth Torres  
SVP, Head of  
Manufacturing –  
Americas



---

Mike Schutz  
Sr. Sales Executive  
- HPC



---

Adil Noor  
PreSales Engineer  
HPC Cloud

# Eviden – The Most Advanced High-end HPC, AI & Quantum Portfolio

On-prem and in-the-cloud

as-a-Service  
Enablement



Nimbix Supercomputing Suite

Jarvice XE

HyperHUB

Any workload, any application, any way you want to run

Application &  
Optimization

Quantum Computing



Artificial Intelligence



Data



Simulation



AI-embedded HPC  
Software  
Environment

Smart Performance Management Suite

Smart Maintenance Management Suite

Fast Machine Learning Engine

Smart Energy Management Suite

Smart Data Management Suite

High-end Hybrid  
HPC, AI & QC  
Hardware

Quantum Simulator

Supercomputers

HPDA HPC

Interconnect

Storage

# High-Performance Computing (HPC)

## Who is using HPC?

### Engineers

- Simulation
- Fluids/mixing
- Modeling & Design
- Mechanical
- 3D - Digital twins

### Research & Development

- Data scientists
- Developers
- Anyone involved in AI or Analytics

### Other roles

- HPC cluster managers
- Infrastructure managers/directors
- Cloud Architects
- Systems engineers
- Supply Chain

## What Clients Experience

- ✓ Faster time to solve – Better Economics
- ✓ Greater flexibility with project fluctuation
- ✓ Increased efficiency and management of HPC across multiple, geographically dispersed business lines



# HPC tools in Manufacturing

## Use Cases

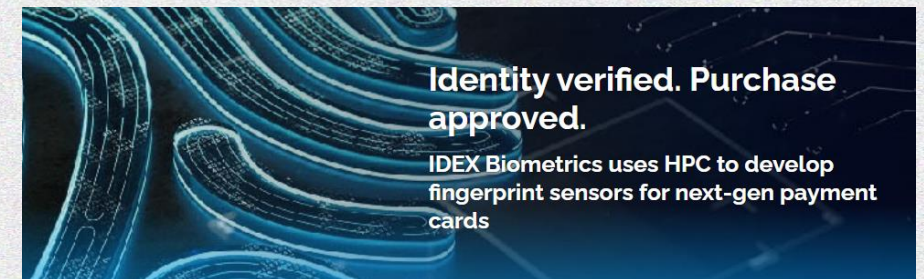
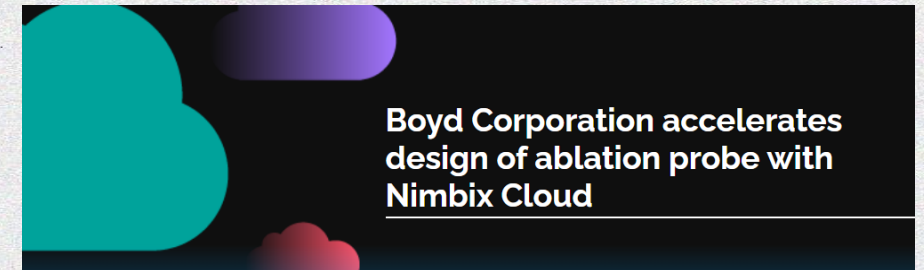
Finite Element Analysis (FEA)  
Equipment Analysis  
Aerodynamics  
3D Visualization  
Heat-Combustion Analysis  
Computational Fluid Dynamics (CFD)/Mixing  
Predictive Modeling  
R&D

EVIDEN

## Popular Applications



## Case Studies



# Nimbix Cloud

## Run Workloads in Minutes



2 endpoints each with multiple zones :

<https://cloud.nimbix.net>

<https://federated.nimbix.net>

Available at scale



# HyperHub™ Application Marketplace



Over 150 Independent Software Vendors



Distribute, deploy, and run applications and workflows globally, on any cloud, or on-premises datacenter



Built-in support for autoscaling apps for high-performance clusters



Native accelerator support for GPU, FPGA, or other silicon options



HPC and supercomputing applications as point-and-click workflows



Automatic synchronization of HyperHub Application Marketplace to any JARVICE XE deployment

**Nimbix Cloud**



**JARVICE XE:  
Enterprise HPC & AI  
Platform**



# JARVICE XE

Enterprise HPC and AI Platform



Give cloud capabilities to your HPC clusters

## Single pane of glass

Web Portal for user Interface and management

REST API Endpoint

Kubernetes Compatible

## On-demand self-service

PaaS and SaaS

Applications at scale

## Multi-cloud management

Multi-cloud HPC scheduler

License-based queuing

## Application management

100+ ISV provided with HyperHub

Bring your own code

Build your own marketplace

## Performance and portability

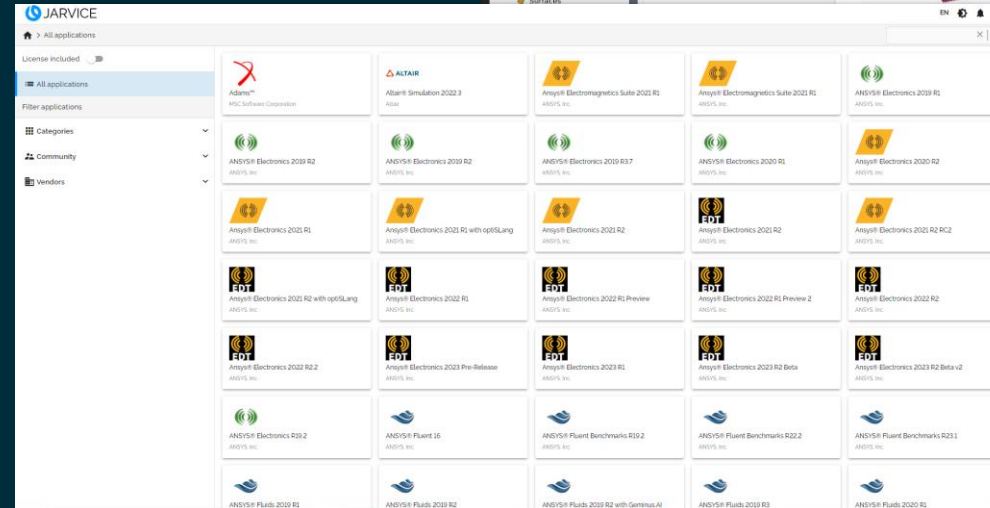
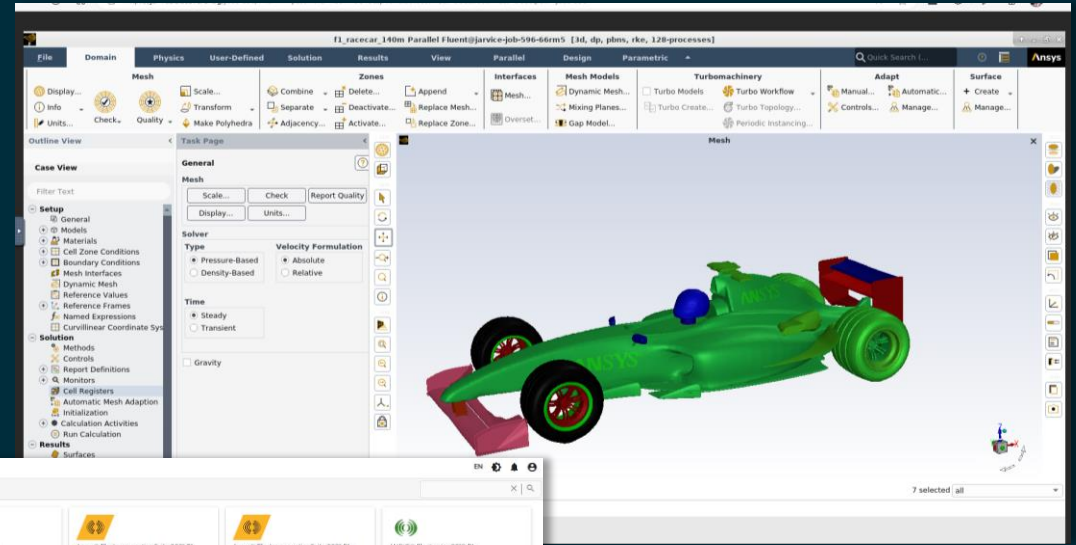
Containerized applications

Accelerator support (GPU, Infiniband, FPGA)



# Nimbix Cloud Demo

- Presentation of the portal
- Submission of HPC jobs
- Job scaling
- Remote visualization
- User/Team management
- Billing reports



# Our portfolio: End-to-End Services across Manufacturing Value Chain

Leading the shift to digital, sustainable and smart manufacturing

Automotive, Discrete Manufacturing, Chemicals & Process, Consumer Packaged Goods and Aerospace Industries



### Product Innovation

Quickly launch new products and services to meet customer demand.

- Advanced engineering
- HPC & digital simulation
- **PLM and Digital Twin**
- IOT, Telematics
- **Connected Vehicles**
- Data Monetization & Platform Services
- ...



### Intelligent Supply Chain

Manage Intelligent Supply Chain to connect siloes and close logistics loops


- Connected Supply Chain
- Precise Time of arrival (PTA)
- ERP for Inbound & Outbound Supply Chain
- Procurement-To-Pay (P2P) Automation
- Warehouse & Inventory Management
- ...



### Digital Manufacturing

Employ real-time data insights to optimize asset and plants.

- **Scaling Smart Factory**
- **PLM & SLM Management**
- **IIOT**
- **Manufacturing Operations, MES & MOM**
- Industrial Data Analytics
- Connected Machines
- Additive Manufacturing
- ...



### Service Innovation

Develop human-centric services to build a stronger connection with customers.

- Sales & Marketing/E-Commerce
- Predictive Sales Analytics
- **Connected Products**
- Warranty & Service Contract Management
- AR/VR/Metaverse
- Telematics
- Predictive Maintenance
- ...

**Transformation Acceleration:** Orchestrate data & technologies to develop prosumer-centric services

**Smart Platforms:** Deploy next-generation, agile, and reliable E&U applications

**OneCloud:** Leverage the hybrid cloud to develop digital native, agile infrastructures

**Advanced Computing:** Boost performance and maximize value across the digital continuum

**Digital Security:** Deliver end-to-end trust, business continuity & resilience

**Net Zero Transformation:** Drive success in E&U environmental programs

# EVIDEN

## Thank you!

We hope that you will join us for the next webinar, where we will dive deeper into the platform and check out our additional offerings from our [Cloud portfolio](#).

### Contact Us:

Beth Torres  
Head of Manufacturing - Americas  
[Bethany.Torres@eviden.com](mailto:Bethany.Torres@eviden.com)

Mike Schutz  
Director HPC Sales  
[mike.schutz@eviden.com](mailto:mike.schutz@eviden.com)

Adil Noor  
PreSales Engineer  
[adil.noor@eviden.com](mailto:adil.noor@eviden.com)