arch platform technologies

USE-CASE ANALYSIS

TOTAL COST

Total cost of ownership of cloud-based workstation infrastructure

Arch Platform

- **Rapidly scale and manage cloud workstation resources** anywhere in the world to adjust to changing business needs.
- **Spin up networked cloud workstations with all your software and storage**, within your own AWS account - no IT/DevOps experience required.
- **Access the latest CPUs and GPUs** without capital expense.

Arch Platform Benefits

- **Save 30% to 50% on AWS** workstation infrastructure costs.
- **Increase user satisfaction** with computer performance matched to user workflows, working from anywhere.
- **Adjust to changing business conditions** by creating datacenter facilities and workstations in minutes.
- Remote brokering for on-prem and cloud workstations. Access workstation computers immediately with roaming user profiles.
- Comprehensive workstation image, team and group management **reduces IT/DevOps overhead by up to 90%.**
- Full integration and support for all leading cloud and hybrid-cloud storage providers.
- In depth user and IT analytics to fully optimize resources.

Enabling Agile, Scalable Infrastructure for Creative &Technical Workstation Compute

In today's environment of fast-changing project demands, hybrid workforces, and financial scrutiny, CIOs and department leaders in creative and technical sectors are being challenged to rethink legacy infrastructure strategies. Whether you're overseeing a DCC pipeline, product development team, energy exploration, or research/education labs, the ability to scale, control costs, and enable future-proof performance is no longer a luxury, it's a business imperative.

A **detailed TCO analysis** provides clear evidence that modern cloud-based workstation and storage infrastructure delivers measurable cost savings and operational agility over traditional on-premise deployments. Below, we explore the tangible and intangible benefits of transitioning from on-premise setups to cloud (or hybrid-cloud) workstations and storage, **based on the real-world use cases of Arch Platform customers**.

Please note: the Arch Platform supports cloud and hybrid-cloud access to workstations through a single-pane-of-glass portal.

📉 Tangible Cost Reductions at Every Scale

A detailed TCO analysis comparing a traditional on-premise type II data center setup to an AWS + Arch Platform cloud model for middling 3D workstations reveals a monthly savings per workstation as the scale increases:

Workstations	On-prem Cost/Month	Arch + AWS Cost/Month	Monthly Savings
50	$19,550 ($391 ea.)	$19,350 ($387 ea.)	$200+
100	$39,100 ($391 ea.)	$36,200 ($362 ea.)	$2,900+
1,000	$391,000 ($391 ea.)	$340,000 ($340 ea.)	$51,000+

These savings represent **2% to 13+% lower monthly operating expenses per workstation** when using cloud infrastructure. Savings accrue from avoiding real estate, power, cooling, data center, and software stack costs. There are other benefits such as mitigating upfront hardware investments, deployment complexities and time, and long depreciation cycles. Additionally, **Arch+AWS cloud customers save tens of thousands to hundreds of thousands of dollars from reduced team schedule delays related to end-user up-time.**

⚖️ TCO Assumptions

- Data center type II energy cost/workstation per month: $8
- Data center type II cooling cost/workstation per month: $8
- Data center type II real estate cost/workstation per month: $26
- Data center cost/workstation: $4,500, 36 month depreciation, monthly: $125
- Data center type II amortized infrastructure/workstation: $149/mo.
- Data center software stack cost/workstation per month: $10
- Data center type II burden rate: 20%
- AWS comparable workstation: G6.4XL Linux on-demand price (e.g. Oregon, USA)
- AWS customer discount: 10%
- AWS workstation usage: 8 hours per work day per workstation
- Arch Platform monthly plan, standard pricing