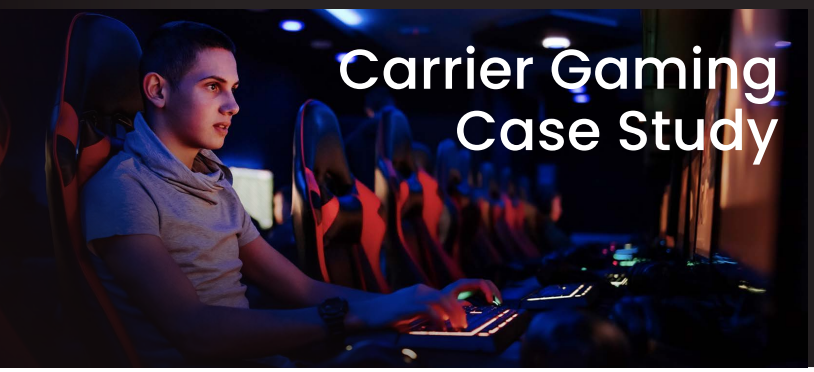
ActivePort



Carrier Gaming Case Study

The Radian Arc platform provides an infrastructure-as-a-service (IaaS) for cloud gaming, artificial intelligence, and machine learning applications to carriers worldwide.

In an exclusive arrangement, ActivePort developed the Radian Arc Cloud gaming platform and maintains the network stack globally. ActivePort partnered with AMD to build a hardware reference design and Orchestration system using v520 and v620 GPUs. This technology accelerates compute-intensive tasks such as interactive gaming.

RADIANARC AMD Blacknut oneplay

JUNIPER NETWORKS DELL Technologies SUPERMICRO

Per Carrier Deployment:

Scoping: 5 days	Development: 90 days	Implementation: 10 days

Orchestration and Virtualisation

Physical GPUs to run gaming VMs

Gamers are authenticated via API, then can access the gaming provider's catalogue (EG: Blacknut or OnePlay) on a Virtual Machine in a virtual GPU.

ActivePort orchestrates the physical AMD GPUs, splits them into vGPUs. Attaches the game image to the VM in the private cloud.

At the end of the gaming session, an API call is received delete the VM, returning the resources of the vGPU to the available pool.

Deployment of GPU private cloud

Radian Arc, ActivePort & the carrier work together to stand up the GPU private cloud solution.

Orchestration hardware stack includes:

- GPU Server - Supermicro 4124GS-TNR
- Networking - Juniper SRX380 & QFX5100
- Top of rack management & aggregation - DELL PowerEdge R6515 (AMD Based)

The carrier connectivity includes:

- Patching of all connections for PoP including networking, control and traffic.
- Connection of IP Transit

Activation of ActivePort platform:

- Config & commissioning of GPU server
- Activation & Testing of catalogue and GPU services