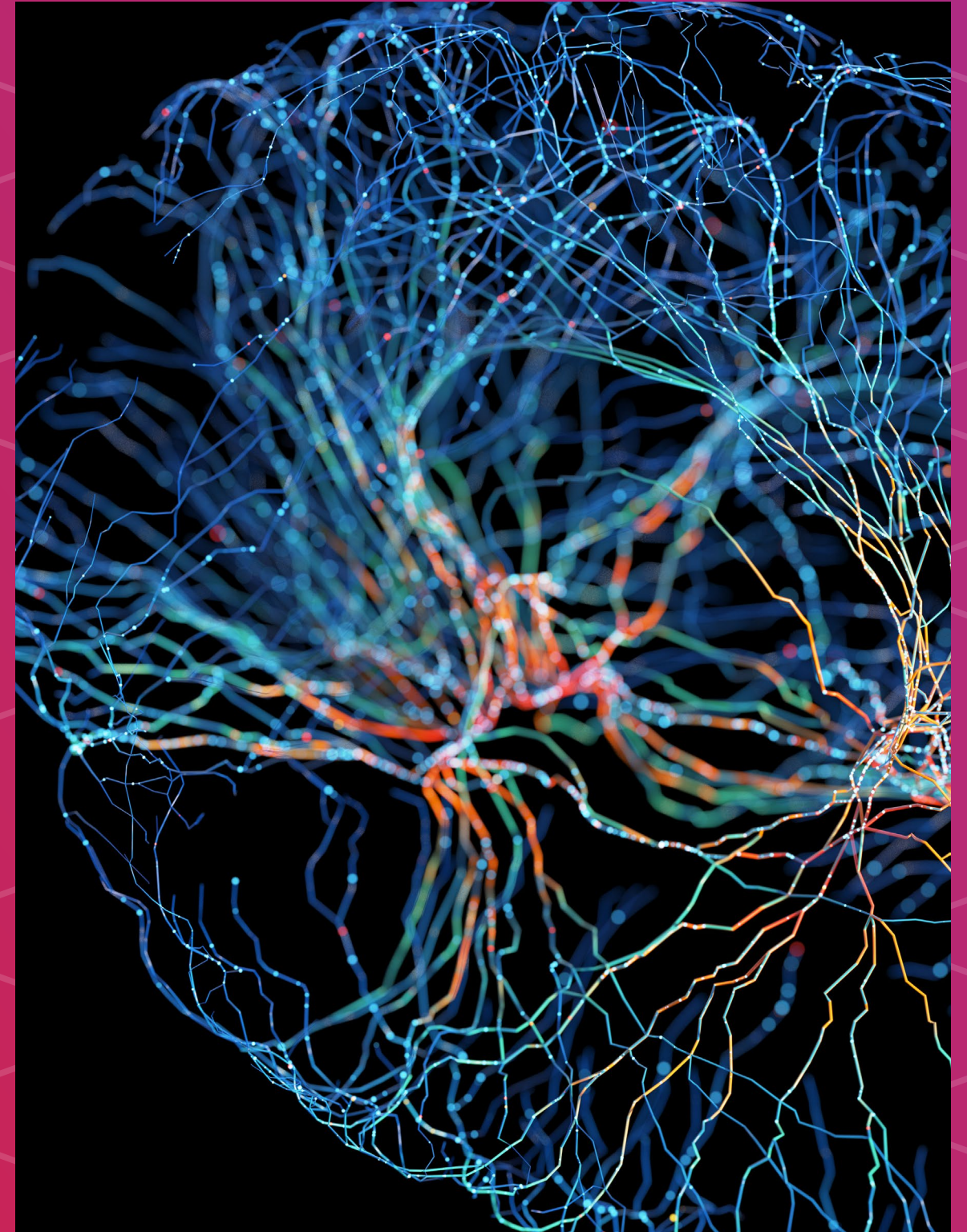# AiHPC's open AI healthcare platform sparks cross-innovation and collaboration

OrchAI connects global healthcare ecosystem 22x faster with Equinix high-performance computing and low-latency networks

Case Study

Hong Kong–based solutions provider AiHPC Innovation Limited develops AI systems that enhance diagnostics, streamline workflows and accelerate medical research through advanced analytics. The company's Orchestration AI (OrchAI) platform enables the regional medical community to collaborate, share AI data and models, and deliver R&D breakthroughs using high-performance computing (HPC) and low-latency networks.

Challenge

OrchAI connects the local and Asia-Pacific medical R&D ecosystems, empowering the healthcare community with medical imaging analysis, genomic sequencing and healthcare data analytics. With traditional infrastructure, OrchAI struggled with data transfer bottlenecks, infrastructure scalability limitations and security consistency across different environments. It needed seamless, low-latency connectivity and robust infrastructure to enable high-performance computing, data orchestration and data manipulation.
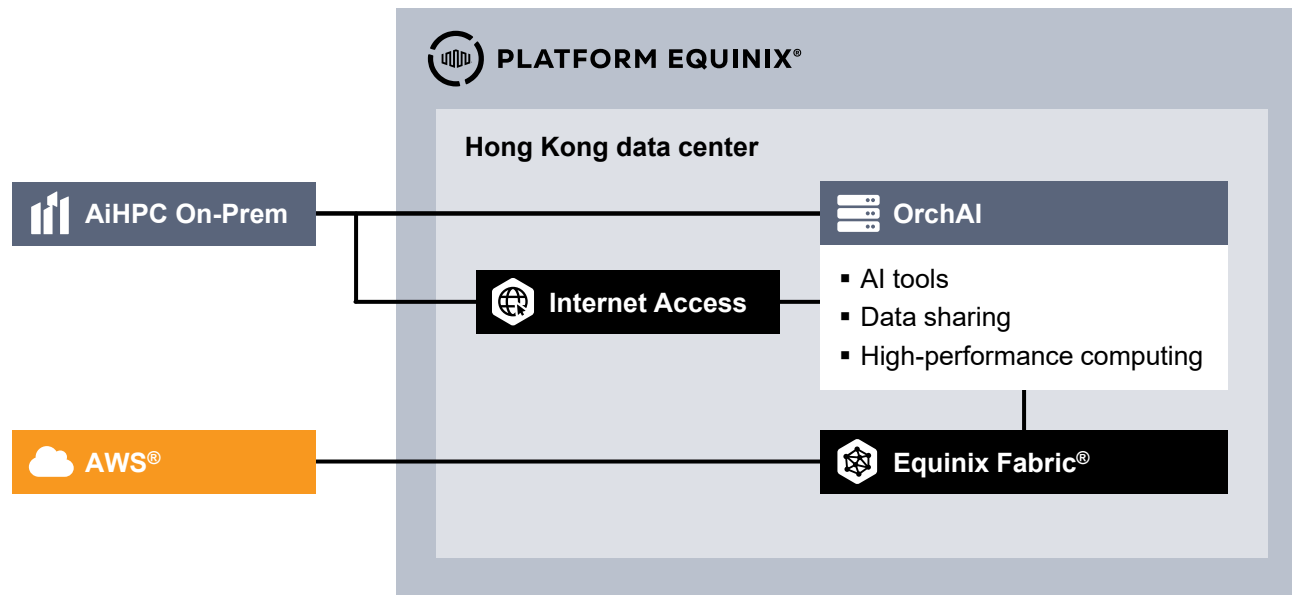
Solution

OrchAI demanded exceptional infrastructure for its cutting-edge technologies. To enable the platform to deliver AI workloads using NVIDIA GPU clusters and HPC processors, manage AI workloads on Kubernetes and enable fast storage with NVMe, AiHPC turned to Equinix AI-ready data centers and flexible networks.

Equinix global data centers now host OrchAI's mission-critical HPC resources and support its computing resource allocation system to optimize utilization and avoid bottlenecks. Each data center also acts as an interconnection hub, allowing AiHPC to build low-latency connections with Equinix Internet Access and Equinix Fabric® to accelerate network speed while maintaining flexibility to manage cost and performance. Additionally, these private connections facilitate the secure exchange of sensitive healthcare data.

To support AiHPC's hybrid and multicloud strategy, Equinix interconnects OrchAI with Amazon Web Services to enable flexible and simplified network management, empowering agile industry collaboration within the OrchAI ecosystem.

PLATFORM EQUINIX®

Hong Kong data center

AiHPC On-Prem

Internet Access

OrchAI
- AI tools
- Data sharing
- High-performance computing

AWS®

Equinix Fabric®

Equinix colocation and network services bring flexible connectivity with enhanced security, enabling the OrchAI community to efficiently access HPC and AI resources.

"Our objective is to streamline medical research, healthcare implementation and cross-border collaboration in Hong Kong and worldwide. Equinix's global footprint, cloud connectivity and a vast ecosystem of AI and healthcare stakeholders provide unparalleled infrastructure advantages, fostering industry collaboration securely."

Dr. Sam Chu, Founder, AiHPC

Solution components

Equinix Hong Kong data centers

Delivers the capacity and performance needed to support AI-driven applications and workloads with a scalable, high-performance computing environment.

Equinix Internet Access

Facilitates service-to-service connection between OrchAI and AWS, while providing secure and reliable connectivity to end users accessing OrchAI services.

Equinix Fabric

Interconnects digital infrastructure and the healthcare ecosystem to enable agile network management and offer secure, low-latency connections for the reliable exchange of sensitive healthcare data.

Benefits

Equinix global networks and AI-ready data centers enable AiHPC to speed up large dataset transfers, optimize AI operations, enhance security and simplify compliance. This allows AiHPC to connect the medical R&D community by delivering digital services more quickly, efficiently and securely.

22x faster connectivity

Low-latency networks significantly enhance data transfer speeds, accelerating OrchAI's performance 22 times. By enabling large datasets to move efficiently across hybrid cloud infrastructure, AiHPC improves AI inference operations, utilizing pretrained AI models to reduce training within the on-premises infrastructure.

Enhanced security, streamlined compliance

AiHPC builds multilayered security through physical security, private interconnections, comprehensive encryption and multifactor authentication with Equinix certified data centers and networks. These measures also help AiHPC reduce the compliance burden by documenting regulated data flow, addressing data sovereignty requirements and simplifying security management.

Rapid network deployment

Optimized, agile digital infrastructure allows AiHPC to deploy and configure network environments much faster to support its hybrid environment, multicloud strategy and future expansion.

Expanding global ecosystem

Leveraging secure connections through Equinix, AiHPC creates dedicated links with partner institutions, facilitating secure and robust healthcare data exchange. This enables AiHPC to promote global collaborative AI utilization while upholding stringent data governance and setting future standards for secure data exchange within the ecosystem.

About AiHPC

AiHPC (Artificial Intelligence High-Performance Computing) is a pioneering organization dedicated to advancing healthcare through the integration of artificial intelligence and high-performance computing. By providing a comprehensive platform that includes high-performance computing acceleration, data orchestration and edge solution deployment, AiHPC empowers medical institutions and researchers to overcome technological barriers and optimize resource utilization.

AiHPC.com

About Equinix

Equinix (Nasdaq: EQIX) is the world's digital infrastructure company. Digital leaders harness Equinix's trusted platform to bring together and interconnect foundational infrastructure at software speed. Equinix enables organizations to access all the right places, partners and possibilities to scale with agility, speed the launch of digital services, deliver world-class experiences and multiply their value, while supporting their sustainability goals.

Equinix.com

Ready to get started?

Learn how Equinix AI-ready data centers with high-performance computing and global interconnectivity can speed up AI for your organization.

Learn more

Drive your future forward on Platform Equinix®

Platform Equinix is where digital businesses bring together all the right places, partners and possibilities to create the digital infrastructure they need to succeed. It's the trusted foundation for digital infrastructure, enabling businesses to innovate and create value through our digital ecosystem of tools, technologies and capabilities from the most valuable partners and communities in the world.