## Bhadale IT Hub

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This document offers a high level overview of our IT Hub that offers various modules allowing for clients to onboard faster and get the benefits of a large set of vendor products, tools, IDE related to AI, Quantum and Generative AI technologies.

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## **Bhadale IT HUB**

**Executive summary**: Considering the need and demand for high quality digital platforms that can help clients to get the most of the newer technology, we have proposed an IT Hub that allows for rapid on boarding of clients to various modules on a need basis, allowing them to subscribe to modules they need only. We have various modules and the key ones are described in following sections.

Bhadale IT Hub is based on these 5 key pillars.

**Hub Core**: This is the bare minimum set of tools, libraries and software needed to leverage our various platform offerings. The core can be deployed remotely, onsite, to mobiles or even an IoT.

**Multi Cloud Engg**: Offers IDE, tools for integration of various cloud vendor solutions for IaaS, PaaS, SaaS Models, related client requirements, domain requirements, project needs etc to the available vendor solutions using our best practices, inventory, assets and our expertise in middleware design. Designs like Mesh architecture, Service Bus, OSI layers, logical design tools, workflow design, various security features, off loaders, centralized or distributed admin etc that many clients need to administer

**Multi Quantum Tech**: For cross-technology and classical and hybrid modes of operations, we have the hub equipped with best practices from various vendors, tools and backend. Integration with multi-cloud Engg as explained above is possible allowing for faster on boarding of clients. Supported technologies include superconductors, semiconductors, trapped ions, topological qubits, and photons to name a few. We offer direct solutions that allow for clients making best use of the various features from various vendors.

**Multi AI Tech**: For cross-AI, ML technologies, platforms. This is integrated with the Multi Cloud Engg module, allowing for easier and portable movement of virtual assets across different vendors, using open source and open standards.

**Multi Cloud and Multi Quantum**: This allows for special clients and guests to take their innovations to greater heights by having a fully integrated set of multiple clouds, multiple AI, multi quantum tech to be available and an optional HPC center can be made available at a dedicated collocation.