The Financial Services Industry (FSI) is under constant pressure to use bleeding edge technology that can give it the performance gains needed to meet consumer expectations and remain ahead of the curve in a highly competitive industry. Our expert team has designed low, medium and high spec FSI LMX cluster solutions, optimised for financial services workloads, including high-frequency trading (HFT), derivative pricing and risk analysis.

When developing a turnkey cluster solution, we adopt a layered approach. Starting with the end user requirements at an application level and working down the stack to the hardware that will ultimately deliver the resources. The goal of our software is to plug the gap between end user expectancy, and what's provided by the hardware.

**GPU ACCELERATION**

Our Turnkey Cluster solutions offer up to 8x NVIDIA A100 GPUs. In today’s fast-paced markets, the ability to test and simulate model hypotheses with speed and accuracy can create revenue opportunities for financial institutions. The NVIDIA A100 Tensor Core GPU delivers acceleration at every scale for AI, data analytics, and HPC to tackle the toughest computing challenges in finance.

**COMPUTE**

We offer the latest generation CPU options from industry veterans AMD. In an industry where every microsecond counts, AMD’s high-frequency EPYC series processors, deliver a proven platform with super-fast cores and plenty of cache to give FSI customers an imperative edge over the competition.

**NVME STORAGE**

Financial analytics requires a modern storage architecture that can handle the most...
demanding I/O intensive workloads and latency-sensitive applications at petascale. Weka has demonstrated record-breaking performance on STAC M3 benchmarks using kdb+ time-series database.

**INTERCONNECT**
High Performance clusters require flexible, high-speed connections. NVIDIA Mellanox interconnect accelerates and offloads data transfers to ensure compute resources never “go hungry” and simplify infrastructure automation so applications run faster.

**LMX SOFTWARE**
With Define Tech’s LMX Software you can manage your Cluster from a secure, on-premise, container-driven orchestration platform. LMX allows you to focus on mission critical workloads rather than the administration of the underlying IT systems, with a simple and cost-effective path-to-scale as your workloads and datasets grow.

**APPLICATION REPOSITORY**
Financial services organisations, large and small are migrating to cloud-based financial applications, which is having a profound impact on ability, scalability and TCO. Our built-in software application repository is a portfolio of thousands of containerised analytical applications, models and tools that come pre-integrated and ready to run.

**AI-OPTIMISED**
Financial institutions are adopting AI to deliver smarter, securer services. Our platform includes hpc-optimised capabilities such as secure dedicated clusters that can support collaborative research, virtualised GPU’s for accelerating analytical workloads, cloud-native workstations for remote workforces as well as the integration of AI technologies such as Kubernetes.

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**LOW SPEC**
- 1x NVIDIA SN2010 Switch
- 1x Deployment Node
- 1x AMD EPYC™ 7313p per node
- 1x NVIDIA GPU Node
- 1x Hyper-Converged Node
- 8x AMD EPYC™ 7543 per node
- LMX Cloud Software

**MEDIUM SPEC**
- 1x NVIDIA SN2410 Switch
- 1x Deployment Node
- 1x AMD EPYC™ 7313p per node
- 1x Compute Node
- 2x AMD EPYC™ 7543 per node
- 3x Controller Nodes
- 2x AMD EPYC™ 7413 per node
- 1x Weka Storage Node
- 1x NVIDIA GPU Node
- 6x Ceph Storage Nodes
- LMX Cloud Software

**HIGH SPEC CLOUD**
- 1x NVIDIA SN2700 Switch
- 1x Deployment Node
- 1x AMD EPYC™ 7313p per node
- 1x Compute Node
- 2x AMD EPYC™ 7543 per node
- 3x Controller Nodes
- 2x AMD EPYC™ 7413 per node
- 2x Weka Storage Node
- 2x NVIDIA GPU Node
- 12x Ceph Storage Nodes
- LMX Cloud Software

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**USE CASES**
- **HIGH FREQUENCY TRADING**
- **RISK MODELING**
- **QUANTATIVE ANALYSIS**

For pricing or to discuss your requirements:

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