SOLUTION SPECIFICATION





VSCALER CLOUD

Create a secure, scalable, cost effective, flexible IT infrastructure

Deploy your on premise private cloud in minutes, add cloudbased services or applications, and scale to public or hybrid cloud environments on-demand - all under a single management portal. vScaler allows you to provision full HPC-on-Demand clusters, Big Data analytics, accelerated GPU compute (for Machine Learning), tiered and accelerated storage platforms. In contrast with other IaaS only platforms, we work with our clients to optimise their infrastructure to allow their desired applications to run successfully in a private cloud environment.

MIXED WORKLOADS

We have invested as much effort in ensuring that our stack runs normal workloads in a fast and efficient manner offering you the choice of workload safe in the knowledge that it will perform.

HPC

Finely tuned software enables users to deploy HPC clusters of any scale. The HPC-on-Demand product provides a compelling solution for many challenges of delivering flexible infrastructure for research computing.

BIG DATA

vScaler's interface takes all the administrative burden out of configuring a complex analytical cluster. Select from your preferred distribution (Hadoop, Cloudera, Hortonworks, MapR) and begin running data-intensive applications or IOT analytics in minutes.

AI & DEEP LEARNING

Spin up a deep learning environments with all the appropriate frameworks installed and ready for use and accelerated using the world's fastest GPUs, purpose-built to reduce training time for DL algorithms and AI simulations

KEY FEATURES Application specific Cloud

Up to 70% cheaper then leading cloud providers

40% faster than native OpenStack in LinPack Performance tests - within 1% of bare metal

High performance vNICs passed through to instances



STORAGE

Unified Storage Auto Tiering Containerisation Erasure Coding Data Placement Composable Quotas

SECURITY

Resilient Volumes Disaster Recovery Validated Registry No SPOF Rolling Upgrades Zero Downtime Multi-Layer Authentication

MANAGEMENT PORTAL

Self Service Real Time Analytics

VIRTUALISATION

Up to 256 VMs Custom KVM Hypervisor Pre-emptive Log Analysis Rapid Deployment

ABOUT BIOS IT

BIOS IT is a global design house, systems builder and integrated solution provider for enterprise performance computing. We construct bespoke clusters and appliances by hand picking the best components and newest technologies based on specific customer goals. We support well-known organisations at the top of their research fields, across science, engineering, academia and finance disciplines. Our comprehensive range of products and services include: high-performance enterprise servers, storage and networking, on-premise or in the cloud, with associated services, support, hosting and software.

CFD

vScaler can offer CFD users an application specific, cloud environment with the performance benefits of a dedicated supercomputer but at the fraction of the cost. Supporting industry leading software such as ANSYS, OpenFOAM, Pam-Crash and STAR-CCM+ (among others), vScaler for CFD is specifically designed to improve access and development efficiency.

TECH SPECIFICATIONS

vScaler's 2U private cloud appliance includes everything you need to connect to your network. Designed using class leading technologies, the latest processor family, 2666Mhz DDR4 memory, 25GB interconnects and all SSD storage delivering superior performance with our optimised stack.

VSCALER MANAGED SERVICES

We take care of DC access. We take care of connectivity. We take care of storage, compute and the applications you require. Realise the benefits of the public cloud, with the greater levels of control and security of a fully hosted, single-tenant, dedicated environment. Let us manage your private cloud infrastructure under a single, easy to manage Service Level Agreement (SLA).



VSCALER FOR HPC WORKFLOW

	VSCALER APPLIANCE (PER NODE)
SERVER COMPUTE	Intel [®] Xeon [®] Scalable Processors or AMD EPYC [™] Series Processors
STORAGE CAPACITY	6x SSD [480 GB, 800 GB, 960 GB, 1.2 TB, 1.6 TB, or 1.9 TB]
MEMORY	384GB DDR 2666MHz
NETWORK CONNECTIONS	2x 1 GbE, 1x 1GbE RJ45 (IPMI) Dual-Port 25 GbE RDMA Mellanox

For more information visit www.bios-it.com.



www.bios-if.com AMERICAS: 1-800-654-BIOS | EMEA: +44 (0) 203 178 6467 | APAC: +61 (0)2 8866 3343

All products and companies referred to herein are trademarks or registered trademarks of their respective companies or mark holders.