Imagining Business-Efficient Solutions for Data Agile Enterprises

Smart, Simple and Scalable
The mind-boggling influx of data & computing requirements has posed a new challenge for organizations worldwide. With new technologies such as 5G and private 5G coming up, it will further play a pivotal role in accelerating all such requirements. The big question is how to make sense of such massive volumes of data & computing and plan the IT infrastructure around it. From its inception, Tyrone realized the industry’s pain points and optimized solutions using the available hardware and software without much proprietary constraints. We have many years of enviable and rich experience that has seen us solve a number of business problems.

Tyrone delivers powerful business solutions in HPC (High-Performance Computing), Servers & Workstations, Cloud Computing, Storage, AI/ML, Big Data, and Networking. In addition, over the years, we have developed remarkable capabilities to offer customized solutions for the three essential IT components, i.e., computing, storage, and networking. Tyrone teams combine a deep understanding of the technology with experience to deliver the finest solution that understands the complexities of modern businesses.

Our customers appreciate us for the end-to-end solutions that also cover post-sale services. The unparalleled customer support ensures that our customer’s problems are solved immediately.

**Tyrone Redefining Paradigm**

**Business Paradigm**

We simplify your work by providing out-of-the-box solutions customized to deliver superior performance. For us, the answer is not limited to what is in the box but how we can help to maximize ROI and derive an innovative solution by combining the right components. From the beginning, we emphasize understanding your pain points and framing a solution designed to suit your needs.

**Value Paradigm**

We ensure a low total cost of ownership (TCO) and full value for investments by suggesting only the right components/products at a fair price. We stand by our tenets of no hidden charges or unnecessary additions to the original cost.

**Technology Paradigm**

We help our customers keep abreast with the evolving technology by employing solutions developed in partnership with industry leaders. We are always at the forefront of adopting farm-fresh technologies that provide you the edge and option of being an early adopter. In addition, once on board, you can experience the entire technology lifecycle.

**Service Paradigm**

Our high-quality solutions require minimal intervention than the industry average. However, our customers vouch for our after-sales customer service, which is second to none in the industry. This is evidenced by our existing customers referring most of our new customers.
Our Products and Solutions

1. Storage

Unified Storage Solution

NAS and SAN are unified into a single box compatible with FC, Ethernet, SAS, and InfiniBand. High on flexibility, storage efficiency, and data protection; Low on space requirement, power consumption, and cooling needs, Tyrone presents Verta, a next-generation unified storage solution that can be used as a NAS, SAN, or both and virtual tape library (VTL). Other unified, flexible storage solutions include Opslag US and FS2.

Unified Block Storage

Tyrone Opslag UB block storage is used for structured data and commonly deployed in SAN (Storage Area Network) systems. Its unified block series of products are high-performance, simple, secure, scalable, and affordable SAN storage systems for enterprises and small and midsize businesses (SMBs). These are ideal solutions for large-scale surveillance, backup, and disaster recovery in enterprises or remote deployments.

Parallel File Storage

Tyrone presents ParallelStor, a high-performance PFS storage solution specially developed for massive enterprise requirements with high availability as one of its many highlights. The solution boasts of some brilliant performance metrics such as high throughput (10GB/s), high bandwidth (EDR-100GB/s, HDR-200GB/s), and high density (in various Configurations).

Archival and Surveillance

Collectivo from Tyrone has been custom-designed to handle immense workloads in a performance-critical environment, such as archival and storage requirements. In addition, its hardware and software can also be configured accordingly. Other highlights are multiple petabytes scalable, excellent performance, automated protection of data, easy data accessibility, simple management, and high-density storage.
2. **High-Performance Computing**

Accelerate transformational innovation with the wonders of high-performance computing (HPC) by utilizing Tyrone's solution for a brighter future.

*Don't let your aspirations get affected by the constraints of obsolete technology!*

The revenue from HPC is expected to reach a massive USD 39.87 billion by 2025. The outcome of high-performance computing is affecting different industry verticals by aiding swift decision-making to save lives, mitigate financial risks and anticipate customer sentiments. HPC solutions are designed to unlock the maximum potential of your data. *(Source: Statista)*

A typical HPC system can perform up to $10^{17}$ floating point operations per second. Earlier, HPC was only a domain of specialists using only supercomputers. However, the recent advances in computing, storage, and networking technology have made the technology available even to a joint enterprise, thus democratizing the benefits of technology for all. *(Source: Statista)*
What Tyrone Offer?

Tyrone offers a range of High-Performance Computing (HPC) solutions, developed using leading industry-standard building blocks and best-in-class partner products, which can deliver exceptional performance and manageability at a fraction of the cost of competing solutions. We also provide a wide choice of systems and interconnects so you can choose the solution that best suits your requirements and scales as your computing needs grow. The broad categories of supercomputing solutions that Tyrone brings to you is shown on the right hand side:

- **HPC Clusters**
- **GPU Optimized Computing**
- **Parallel File System**
- **Management Tools**

Our 'Supercomputing-on-Demand' service pushes the envelope of supercomputing further by extending massive number crunching abilities on a pay-for-use basis. This service benefits customers with only intermittent need for supercomputers or those who do not wish to invest capital to purchase and maintain these mighty beasts.

Tyrone's strength lies in understanding your HPC needs, identifying partner products best suited for you, and customizing them to integrate into your environment. Our dedicated and experienced team provides excellent implementation and long-term support services.

**Tyrone Cluster Manager**

HPC clusters are maximizing the speed and efficiency of delivering enterprise-grade solutions for different industry verticals. But managing the clusters and maintaining their fluidity is also a foreseeable challenge for enterprises lagging on the technology curve. To solve the problem, Tyrone has introduced Tyrone Cluster Manager (TCM) for simplified cluster deployment and management.

TCM is a comprehensive management suite that facilitates the deployment of complete clusters and their management. Its capabilities make your clusters reliable, agile, and responsive. To the utter delight of our HPC customers, the platform empowers them by minimizing the complexity of cluster deployment and management on bare metal and the private cloud. Moreover, there is added satisfaction of augmented time to delivery while reducing the overall cost.

Some of its benefits are quick setup, deployment, provisioning/reprovisioning of clusters, easy-to-use GUI web-based interface, customized node scaling with distributed architecture, more installation options, automatic discovery, and yearly support & maintenance.
3. Servers & Workstations

Our next-generation servers respond to customers’ needs in areas such as memory capacity and scalability, virtualization, system management, energy efficiency and infrastructure flexibility. Some of our server solutions consist of All-Flash NVMe, high-density servers such as Blade Server, Twin Server solutions in 2U and 4U, Storage Servers, GPU Servers, and other software-defined solutions.

Apart from servers, Tyrone also offers mobile, rack, and tower workstations in its latest portfolio of products. Our workstations are well-equipped to handle some of the most testing applications across multiple industries.

Virtualization Products

Virtualization has widely opened the floodgates of opportunity in the storage, servers, and networking domains. It creates one or several virtual component versions to enable you to enjoy bigger, faster, and more secure applications. Tyrone offers high-end virtualization solutions in partnership with industry leaders. Our virtualization solutions are extensively used in datacentres to:

- Increase space utilization efficiency by consolidating workloads of multiple under-utilized servers.
- Ensure high availability and disaster recovery to safeguard crucial data.
- Reduce the cost of hardware and software by replicating servers/workstations.
- Reduce software maintenance cost; any migration, troubleshooting, or version upgrade needs to be done only on the parent machine.
- Improve speed while reducing environmental impact.
4. Networking

*Network switches are an integral part of high-performing modern data centers.*

Tyrone has decades of successful experience deploying complex networking products and brings accumulated expertise to their switches. We have introduced the NXT range of switches to meet the business requirement. These switches are ideal for top-of-the-rack deployment with the Open Network Install Environment (ONIE) that supports the installation of compatible Network Operating System (NOS) Software, including the open-source options Open Network Linux plus commercial NOS offerings. In addition, these switches provide excellent freedom of choice, with a high degree of control, rapid innovation, and reduced capital expenditure (CapEx) and operational expenditure (OpEx).

**Prominent Highlights**

- High Availability and Reliability
- Open Networking
- Flexibility and Versatility
- Smart Features
- Layer 2/3 Functionality
- Cost-Efficient with Dedicated Support

5. Container

Containers are software packages that include all essential elements to run in any environment. They also consist of dependencies, libraries, applications, and configuration files needed. Essentially, containers are a type of operating system virtualization and can handle small microservices, complete software processes, and extensive applications. No wonder, in 2022, 16% of the respondents from a global survey accepted that containerization is already playing a strategic role in their businesses. *(Source: Statista)*

**Tyrone Kubyts - Making an Impact**

Containers are expected to be the gold standard for running cloud-native applications in the coming years. They are lightweight and have a relaxed isolation property concerning operating system portability. Identifying the potential of containers to run HPC, AI/ML, and DL workloads, Tyrone has come up with its very own platform known as Kubyts™.

Setting up modern HPC, AI/ML, and Big Data applications can consume weeks/months of time. However, with Kubyts the same can be accomplished in a matter of few seconds. In addition, the option of running multiple applications on a single infrastructure makes it a must-have solution in its domain.
Kubyts is a curated catalog of GPU and CPU-accelerated container applications and images for deep learning (DL) software, HPC applications, and visualization tools. Kubyts™ containerizes applications along with all their dependencies, bundled into one package making it highly agile in moving them across platforms. There is more than 100+ containers and over 50+ applications to meet the challenges of a modern enterprise.

**Tyrone Container Platform**

Although containers bring their own set of benefits, managing them can be a challenging task. To address the challenge of container orchestration, Tyrone designed and developed Tyrone container platform, a multi-cloud, bare metal, upstream Kubernetes with best-in-class service and support.

It helps automate the time-consuming tasks involved in managing containers and microservices, from deployment and management to scheduling and scaling. Kubernetes saves you money and frees your application developers to spend more time doing what they do best. Moreover, the platform offers maximum compatibility with public containers, full automation for initial deployments, agile architecture, and regular security updates.

Its remarkable benefits are portability between clouds, ultimate scalability, bare metal performance, reduced licensing cost, low latency, and high density.

**6. Cloud Solutions**

Tyrone’s Cloud solutions have been designed keeping in mind the pain point of the industry in running modern workloads and ensuring continuity, speed, agility, low latency, high throughput, security, and failover mechanism for the IT infrastructure.

**What Tyrone Cloud Solutions Brings to the Table?**

- Private Cloud
- Hybrid Cloud
- Multi-cloud Control
- Cloud Migration
- Holistic Cloud Infrastructure
- Mixed Workload
Skylus – Private Cloud in Appliance

IT infrastructure has been undergoing a transformational change in the last few years. The desire for integrated IT solutions that combines the best of hardware and software is more evident than before.

Building up a private cloud is a complicated task. However, with Skylus you can set up a private cloud within days and introduce it within an organization to run modern workloads with maximum efficiency.

Skylus, deliver the best of private cloud in an appliance with hyper-converged capabilities, i.e., combining compute, storage, and network. It makes the customer’s journey simple and fast, from desegregated to BareMetal, Hyperconverged cloud deployment, seamless and easy. Other significant highlights include customized scalability, multitenancy, migration/failover between nodes, a single management dashboard, etc.

**Its significant benefits are agility, speed, ease of use, and quick deployment.**
Contact Us

facebook.com/tyronesystems
twitter.com/tyronesystems
linkedin.com/company/tyrone-systems

Support Inquiries
Email: tyronecare@tyronesystems.com