Performance Challenge

Today’s enterprises have virtualized 80 to 99 percent of applications including mission-critical, I/O-intensive and latency-sensitive distributed workloads. With increased virtualization comes dynamic and unpredictable demand on the compute, storage and network layers. To address performance challenges and simplify management, operations teams are adopting converged or hyper-converged infrastructure, flash storage and public cloud services. Still, application growth and an increasingly rapid development cycle exponentially amplify the complexity of delivering the performance users demand.

A Different Approach to IT Management

Guaranteeing application performance requires a real-time approach across the plan, build and run operational phases of IT. The Turbonomic platform changes the way virtual and cloud environments are operated. It is the only autonomic performance platform that provides real-time placement, sizing and provisioning decisions that guarantee application quality of service while utilizing any infrastructure as efficiently as possible. The software continuously analyzes real-time workload demand and matches it to compute, storage and network resources in a virtualized, private or public cloud environment.

Run – real-time and automatable workload placement, sizing and provisioning decision, improve application performance by 30% or more

Build – intelligent placement and workload reservations for private clouds and self-service provisioning

Plan – simulated change in the environment based on real-time compute, storage and network resource demand

Turbonomic seamlessly works with any application, hypervisor, cloud architecture and infrastructure across the run, build and plan operational phases.

Guarantee Application Performance

The platform provides actionable workload placement, sizing and provisioning decisions. It continuously characterizes each workload, understanding individual requirements for compute, storage and network resources and auto-scales workloads horizontally or vertically based on real-time demand. Decisions are extended into compute and storage layers to minimize latency and I/O bottlenecks via resource provisioning and sizing of storage volumes and pools.

Effectively Manage Capacity

Determines when allocation of resources is not aligned with workload demand, driving decisions to provision more or suspend capacity. Enables you to simulate changes across the environment for new workloads, hardware refresh, data center consolidation, right-sizing virtual machines and more.

Scale With Confidence

Provides intelligent initial placement decisions based on the demand characteristics of existing and new workloads to provisioning systems (e.g. VMware vRealize Automation, OpenStack). New workloads are matched to existing shared resources and future workloads are held as reservation avoiding resource contention and accelerating private cloud initiatives.

Lower Infrastructure Costs

The platform continuously places workloads based on demand, preventing resource contention while making the most efficient use of compute, storage and network. It extends cluster or data center scope to exploit underutilized pools of resources, when network and storage configurations permit.

Any Workload, Any Infrastructure

Operates across multiple hypervisors (e.g. VMware, Hyper-V, KVM). Maps and visualizes end-to-end relationships and resource consumption from application to virtual machines, compute, storage, storage controller, network, fabric interconnects and more.

Simple to Customize and Align

Works in harmony with existing operational policies (e.g. disaster recovery, high availability, affinity, anti-affinity) while providing the ability to define service priorities and cost policies. Dashboards and reports are simple to customize and share across your entire organization. Easily integrates with service orchestrations and process management (e.g. Microsoft System Center, ServiceNow) facilitating automation and scheduling change where approval is required.

KEY BENEFITS

- Guarantee application QoS for any workload (e.g. application response time, transactions per second)
- Accelerate delivery of virtualized and distributed applications
- Improve management of larger, more complex environments
- Optimize resource allocation reducing HW/SW spend and public cloud bills
- No downtime for mission-critical applications
- One platform for deployment, planning and real-time management of the environment

TIME TO VALUE

91% of Turbonomic customers see a return on their investment within 90 days
Turbonomic operates outside the cycle of generating alerts and attempting to fix issues. With the Turbonomic platform IT operators are freed from reactive firefighting; architects and planners are able to effectively plan for new applications, additional users and hardware upgrades; and application owners and users experience improved performance.

**Common Data Model**

Turbonomic's Common Data Model relates every entity in the data center as a provider or consumer of resources enabling autonomic, real-time placement, sizing and provisioning decisions.

**Turbonomic Workload Edition**

Turbonomic Workload Edition supports multiple hypervisors and extends decisions into cloud orchestration and change management systems as well as storage, compute fabric, converged and hyper converged infrastructure, through APIs, no agents required.

Supported virtualization environments: VMware® vCenter, Microsoft® Hyper-v, Citrix® XenServer, Red Hat® Enterprise Virtualization, IBM® PowerVM, OpenStack®.

Seamless control for: VMware® vRealize Automation, ServiceNow®, Microsoft® System Center Virtual Machine Manager, Apache® CloudStack, Red Hat Cloud Forms, EMC® VNX, EMC® VMAX, EMC® XtremIO, NetApp®, HPE® 3PAR OneView and BladeSystem c7000, Pure Storage®, Dell Compellent®, Nutanix®, Cisco UCS®.

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**Immediate time to value**

- Deploys as a single virtual machine in any environment
- Delivers value in minutes – no new databases to configure, no thresholds to set, no time to learn what is “normal” in the environment – and provides actionable improvements in 30 minutes or less

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**Try Turbonomic**

- Download a free trial of Turbonomic for 30 days, at [turbonomic.com/download](http://turbonomic.com/download)
- For more information, visit [turbonomic.com](http://turbonomic.com)