

# TURBONOMIC CLOUD NATIVE EDITION

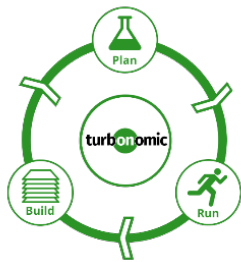
Assure Application Performance as You Scale Across Multiple Clouds

## More Choice, More Complexity

Today there are more choices than ever of where and how to run applications. Virtualization has made it easy to spin up workloads, containers make deployment even faster and public cloud providers remove the need to procure, rack and mount hardware. While increased choice has made it faster to build and scale applications, the complexity of trying to deliver the performance users demand has increased exponentially.

## A Different Approach to Scale

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



**Run** – real-time and automatable workload placement, scaling and provisioning decision guarantee performance of cloud native applications

**Build** – intelligent placement across private and public clouds, assures performance while minimizing costs

**Plan** – simulated change in the environment accelerates and cost effectively manages migrations to and across public clouds

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

## Multi-Cloud Management

The platform intelligently places workloads across public clouds and private data centers in real-time, accounting for performance and cost. It provides intelligent placement decisions to provisioning systems, avoiding resource contention and accelerating cloud initiatives.

## Exceed QoS Goals

Enables you to define and meet QoS goals, including response time and transaction throughput, driving decisions based on them. It auto-scales workloads, virtual machines or containers, to handle fluctuating transaction volume meeting user demand.

## Holistic Application Control

The platform understands application communication patterns based on sFlow or NetFlow optimizing the application as a whole, not individual tiers. It reduces latency by dynamically placing each application tier localizing traffic to the appropriate hosts.

## Real-time Application Configuration

Provides configuration based on real-time application demand and infrastructure resources (e.g. heap and container CPU based on available virtual and physical memory and CPU). It continuously characterizes each workload, virtual machine or container, to understand individual requirements and provides actionable placement, scaling and provisioning decisions.

## KEY BENEFITS

- Guarantee application QoS for any workload (e.g. application response time, transactions per second)
- Accelerate delivery of virtualized, cloud 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

## Intelligently Scale Cloud Native Applications

Extends decisions into PaaS and container orchestration tools (e.g. Docker, Kubernetes, Mesosphere, Cloud Foundry) to scale and place containers on appropriate virtual machines or public cloud instance based on the dynamic usage of resources.

## Lower Cloud Costs

Takes into account public cloud provider costs when deciding on workload placement and scaling. The platform continuously places workloads based on demand, preventing resource contention while making the most efficient use of the environment.

## Any Workload, Any Cloud

Operates across multiple clouds and hypervisors (e.g. AWS, Azure, VMware, Hyper-v, OpenStack).

## Effectively Manage Capacity

Enables you to simulate changes across the environment for new workloads, cloud migration and more. Understand the full impact of workload moves and potential adverse effects of inter-workload dependencies.

## Simple to Customize and Align

Accounts for data compliance (e.g. PCI, HIPAA, SOX) and licensing constraints when deciding what workloads to move and where. Easily define service priorities and cost policies. Dashboards and reports are simple to customize and share across your entire organization.

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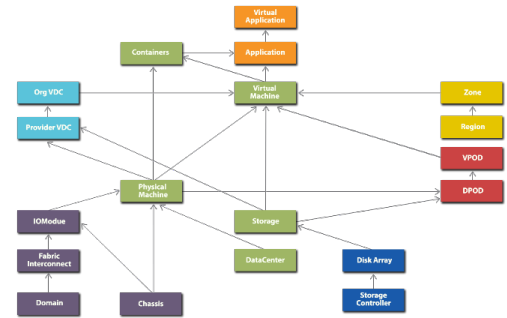
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Turbonomic enables effective scaling of cloud native applications. With the Turbonomic platform IT operators are freed from reactive firefighting; architects and planners are able to effectively plan for new applications, additional users and hardware 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, scaling and provisioning decisions.

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



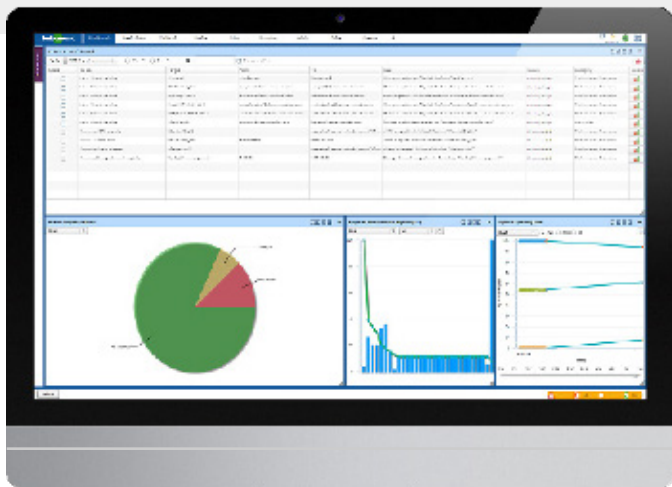
Supported virtualization and cloud environments: VMware® vCenter, Microsoft® Hyper-v, Citrix® XenServer, Red Hat® Enterprise Virtualization, IBM® PowerVM, OpenStack®, Amazon® Web Services, Microsoft® Azure and IBM® SoftLayer.

Seamless control for: Docker®, Mesosphere®, Kubernetes®, Cloud Foundry®, IBM® WebSphere, Oracle® Database, MySQL and WebLogic, Red Hat® JBoss, Apache® Tomcat, Microsoft® SQL and Exchange, Arista® EOS, Open vSwitch, VMware® NSX, VMware® vRealize Automation and vCloud Director, ServiceNow®, Microsoft® System Center Virtual Machine Manager, Apache® CloudStack, Red Hat Cloud Forms, EMC® VNX, EMC® VMAX, EMC® XtremIO, NetApp®, HPE® 3PAR OneView, Synergy and BladeSystem c7000, Pure Storage®, Dell Compellent®, Nutanix®, Cisco UCS®.



## 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



## 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)