IBM Turbonomic for Microsoft Azure

Cloud optimization you can continuously automate to prevent performance risk and cost overruns

Highlights

Automatically determine the correct Azure Virtual Machine type for cloud application workloads

Optimize while considering storage IOPS and throughput

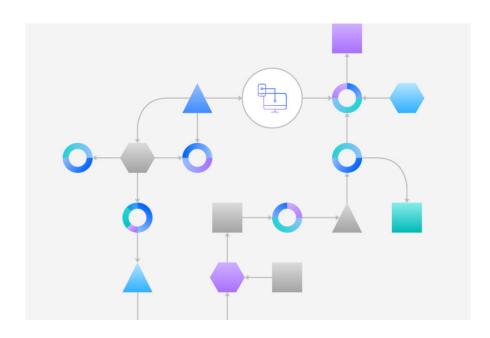
Optimize your Azure Kubernetes Service (AKS) platform for performance and cost

Perfectly scale Azure SQL Database as needed

Maximize Reserved Instance and Discount utilization

Determining the precise compute, storage and database configurations for Azure-hosted cloud applications to achieve optimal performance at the lowest cost is nearly impossible-even for human experts proficient in DevOps, SRE or cloud technologies. Organizations often resort to over-allocating cloud infrastructure resources to mitigate the risks of application performance degradation. But that can lead to unnecessarily high cloud bills.

With the AI-powered automation and cloud optimization solutions included in the IBM® Turbonomic® platform, continuous improvement in application performance and Azure cost optimization becomes achievable. Using the capabilities of IBM Turbonomic software, you can make smarter cloud investments which aligns with FinOps practices. The platform streamlines automation processes so your business can finally unlock the promised advantages of agility, elasticity and rapid speed to market.





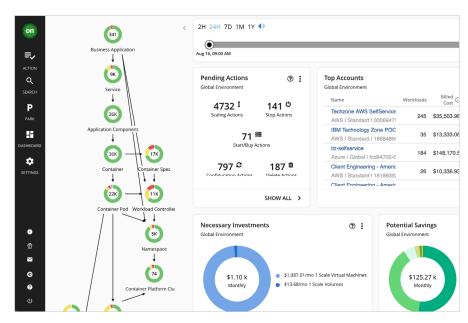


Figure 1. Turbo for Azure

Achieving real business outcomes requires continuous optimization to be automated at scale

App-first, demand-based analysis helps ensure actions can be safely automated across Kubernetes, Azure compute, storage, DbaaS and more. Turbonomic helps you run Azure Virtual Machines, Azure Storage, Azure SQL Database and Azure Kubernetes Services (AKS). Turbonomic helps you integrate with almost any pipeline, IaC, ITSM or communication tool in your organization. These include Red Hat® Ansible®, Azure DevOps, GitHub, GitLab, Jenkins, Puppet, Slack, Terraform and many others. Build trust with AppDev by showing exactly how automating application resourcing can impact on the customer experience, affecting response time or other business SLOs.

Automatically determine the correct Azure Virtual Machine for cloud application workloads

IBM Turbonomic can seamlessly and automatically determine the most appropriate Azure Virtual Machine for your cloud application workloads. This dynamic capability stems from a thorough consideration of various essential factors during each compute scaling decision. These factors include available capacity and utilization of vCPU, vMem, network and storage IO, throughput, reserved instance inventory, pricing and discounts, disk count, quota, available region capacity, and more. IBM Turbonomic software simultaneously takes into account both IOPs and discounts.

Optimize while considering storage IOPS and throughput

Expertly manage IOPS and throughput considerations with the power of IBM Turbonomic. This software helps you precisely identify when you need to scale between storage tiers to optimize performance in terms of IOPS and throughput while maintaining cost efficiency. IBM Turbonomic also determines exactly when you need to size up volumes to maximize performance for both IOPS and throughput. In addition, you can effortlessly modify the capacity of IOPS and throughput limits. With IBM Turbonomic, you can confidently use exactly what you need, helping ensure more efficient resource allocation and exceptional performance every step of the way.

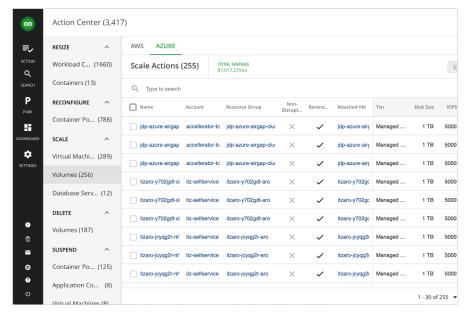


Figure 2. Turbo for Azure

Optimize your Azure Kubernetes Service (AKS) platform for performance and cost

Maximize the potential of your Azure Kubernetes Service (AKS) platform with IBM Turbonomic through the optimization of your platform for performance and cost. This is achieved through various actions, including container rightsizing, allowing seamless scaling of container limits up or down and requests in response to application demands. Continuous pod moves help avoid resource congestion, effectively defragmenting the cluster. Furthermore, the platform facilitates intelligent cluster scaling by provisioning or suspending nodes in real time to match fluctuating application demand. IBM Turbonomic also offers sophisticated container planning so users can simulate and explore how to best optimize their existing environment and effectively onboard additional applications.

Perfectly scale Azure SQL Database as needed

Effortlessly scale different Azure database tiers, helping ensure smooth transitions based on utilization levels (DTU*) with near-zero downtime. In addition, the software facilitates non-disruptive resizing of database volumes so users can increase or decrease disk size as needed for utilized space.

Maximize Reserved Instance and Discount utilization

You can unlock the advantages of Reserved Instances (RIs) and discounts with IBM Turbonomic. Through RI-aware compute scaling actions, existing RI inventory utilization can be increased, helping ensure optimal usage of resources. Additionally, the platform empowers demand-based RI purchasing actions to strategically maximize reservation-to-VM coverage.

Conclusion

By harnessing the AI-powered automation and cloud optimization provided by IBM Turbonomic, organizations can achieve continuous application performance and cost optimization. Your business can make intelligent Azure investments, yielding significant benefits thanks to IBM Turbonomic software. The platform streamlines automation, so organizations can achieve enhanced agility, elasticity and faster speed to market.

Why IBM?

IBM is one of the few companies with AI-powered automation capabilities that bridge business and IT. IBM clients use these technologies to continuously and automatically achieve better application performance and governance across hybrid and multicloud environments. IBM offerings are designed to help you fully automate actions so applications get what they need to perform while adhering to your specific business policies.

For more information

To learn more about IBM Turbonomic, contact your IBM representative or IBM Business Partner, or visit ibm.com/products/turbonomic.

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