

Sustainable Operational Excellence: Optimizing Data Center Cost, Capacity and Energy

Reduce infrastructure waste while improving performance

On-prem and hybrid data centers



Business Challenges

Optimization before expansion is the new competitive advantage.



Increase in the cost of IT infrastructure due to continuous scaling



Freed-up capacity for resource reservation and improving reliability



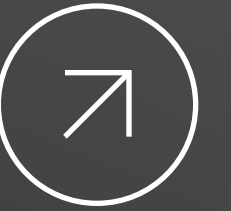
Avoiding the shutdown of services and mission critical systems



As IT infrastructure grows, electricity consumption increases



Maintaining reliability equals preserving reputation and caring for customers



WITH OCTOPUS (CONTINUOUS OPTIMIZATION)



You prevent performance issues before they start

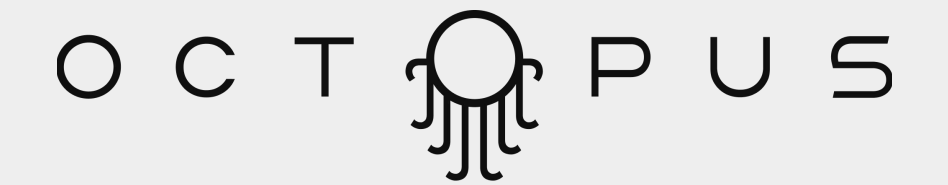


You use the hardware you already paid for



You shrink your carbon footprint and your OpEx

Large Government Infrastructure Organization



CHALLENGE

- ! Reduce performance spikes and infrastructure overload
- ! Ensure high availability and operational stability
- ! Improve overall data center service quality
- ! Increase efficiency without expanding hardware capacity

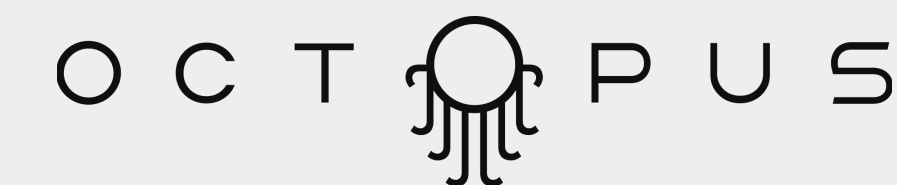
SOLUTION

Implementation and fine-tuning of the Octopus platform were completed within the customer's internal environment, covering 494 virtual machines, 38 physical servers, and 69 storage systems.

RESULT

- ✓ **40%** reduction in resource deficit through improved workload distribution
- ✓ **30%** increase in infrastructure efficiency
- ✓ More than **86%** of virtual machines removed from high-risk zones
- ✓ Delayed hardware expansion

International Energy Company



CHALLENGE

- ! Strict requirements for availability and fault tolerance
- ! Increasing demand for compute resources
- ! Manual balancing of workloads across systems
- ! Growing energy consumption and operational costs

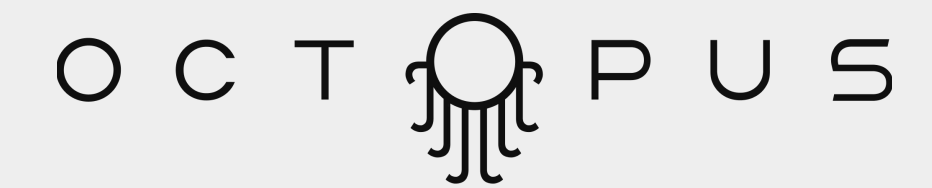
SOLUTION

Usetech deployed and fine-tuned the Octopus platform within the customer's internal environment, covering 5,500 virtual machines.

RESULT

- ✓ **100%** continuity of core systems
- ✓ **34%** projected reduction in infrastructure expansion costs
- ✓ **8%** reduction in system failures related to overload
- ✓ Additional available capacity without new hardware
- ✓ Reduced energy consumption

Regional Telecommunications Operator



CHALLENGE

- ! Rapid traffic growth driven by 5G services
- ! The need to scale IT resources quickly
- ! Manual management across data center and edge environments

SOLUTION

Usetech deployed and fine-tuned the Octopus platform within the customer's internal environment.

RESULT

- ✓ **40%** reduction in data transmission latency
- ✓ Reduced capital expenditure through optimized procurement
- ✓ More efficient use of engineering resources
- ✓ Automated load balancing across infrastructure
- ✓ Significant reduction in manual operational work

Octopus Platform Overview

Intelligent IT resource management system based on AI to optimize business operations and prevent downtime. Delivered as an on-premises solution, it enables continuous optimization of CPU, memory, and storage across virtualized environments

1

Analyzes real consumption and predicts future capacity pressure;

2

Safety reallocates resources to improve utilization and stability;

3

No agents inside workloads and no changes to applications or architecture;

4

Helps delay hardware expansion and control infrastructure and energy costs.

Up to

30%

lower infrastructure costs

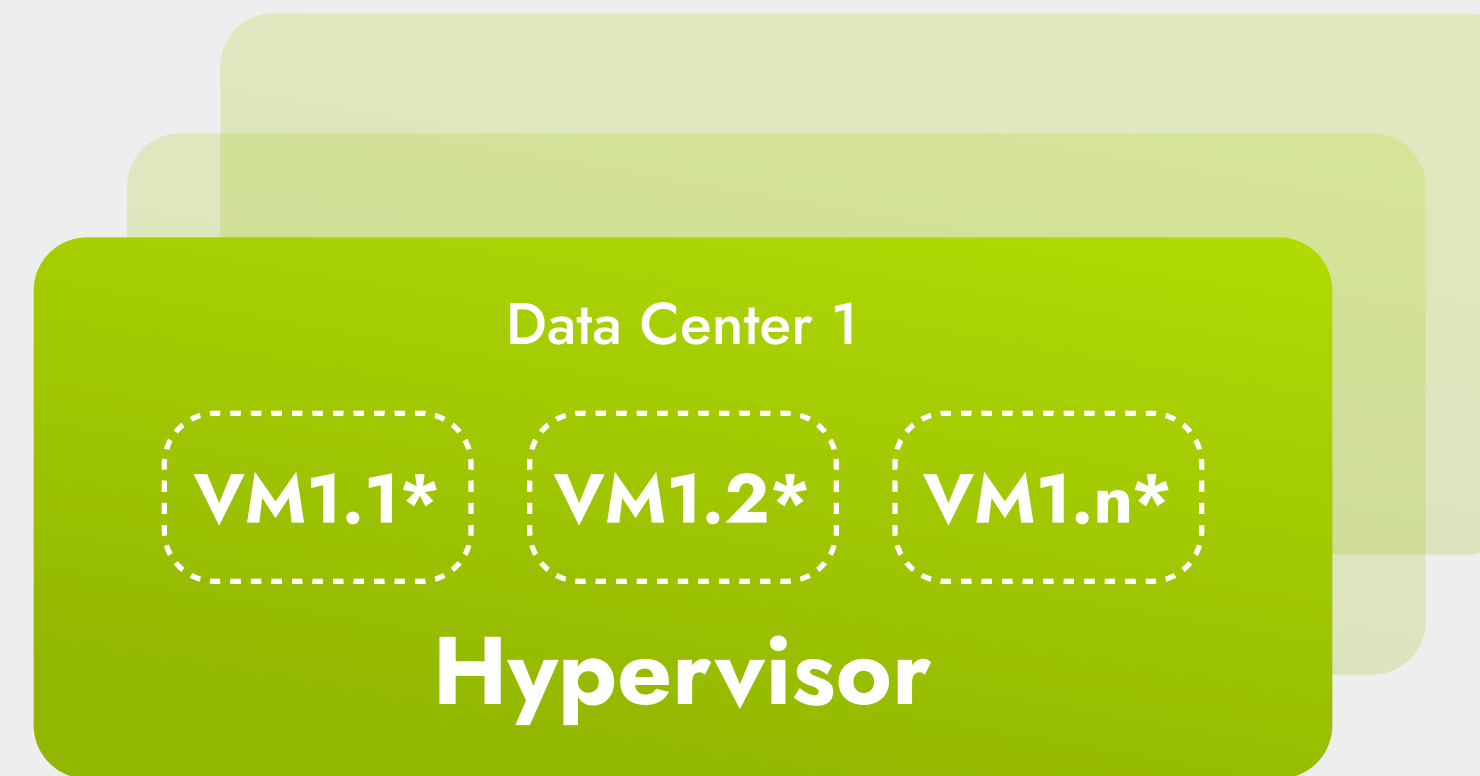


30%

increase in server performance & reduced downtime without new hardware



Conceptual Architecture



Collection

- ✓ CPU, memory (RAM), storage, network data
- ✓ Real-time infrastructure data
- ✓ Full infrastructure visibility



Analysis

- ✓ AI-based load prediction
- ✓ Peak forecasting
- ✓ Bottleneck detection

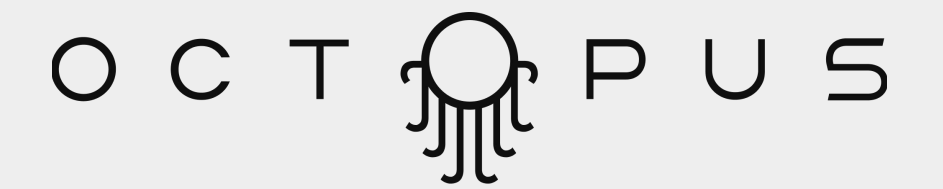


Redistribution Resources

- ✓ Frees up overloaded hosts
- ✓ Consolidates workloads to release underutilized servers
- ✓ Eliminates resource bottlenecks (CPU, RAM, storage)
- ✓ Dynamically redistributes VMs

*Virtual Machine

Octopus Main Features



Deep infrastructure observability across CPU, Memory, Storage, and Network (on-prem & cloud)



Cost and capacity optimization insights (monetary impact and resource savings)



Real-time infrastructure health assessment with VM-level criticality scoring



"AS-IS / TO-BE" and "What-If" simulation for clusters, hosts, and workloads



Intelligent resource optimization across VMs to maximize utilization and free capacity



Predictive capacity forecasting with exhaustion timelines and actionable recommendations

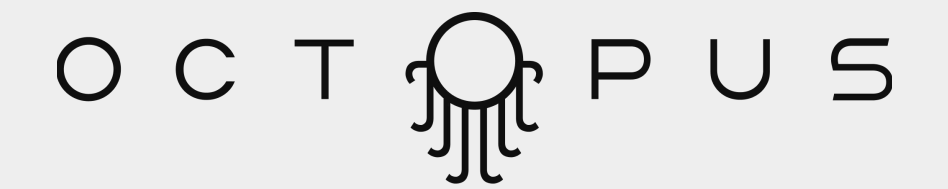


Policy-driven automation with flexible customization



Rich ecosystem integration with virtualization platforms, cloud, and external metrics sources

Benefits of Octopus



up to 30%

raised operational excellence



up to 30%

less budget for hardware



up to 70%

less manual work for highly
qualified specialists



up to 30%

raised efficiency in
energy consumption



30 minutes

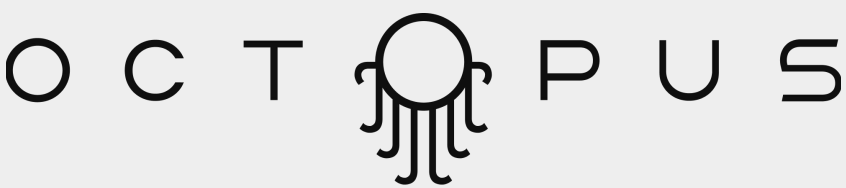
for installation



99.9%

stability work

Competitive Analysis



	OCTOPUS	 Turbonomic	 DRS (by VMWare)
Balancing	✓	✓	Only at the cluster level. No rightsizing support.
Prediction due to AI/ML	✓	✓	✗
Flexibility in customization	✓	✗	✗
Scalability	✓	✗	✓
Resources consumption	⚡	⚡ X2	⚡ X2
Cost	\$	\$ X2	\$ X2

Start with POC (Proof of Concept)

OCTOPUS

1 Capacity assessment to establish baseline utilization

2 Controlled pilot in a limited production scope

3 Success metrics agreed in advance



Start your Octopus journey — contact me today.



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