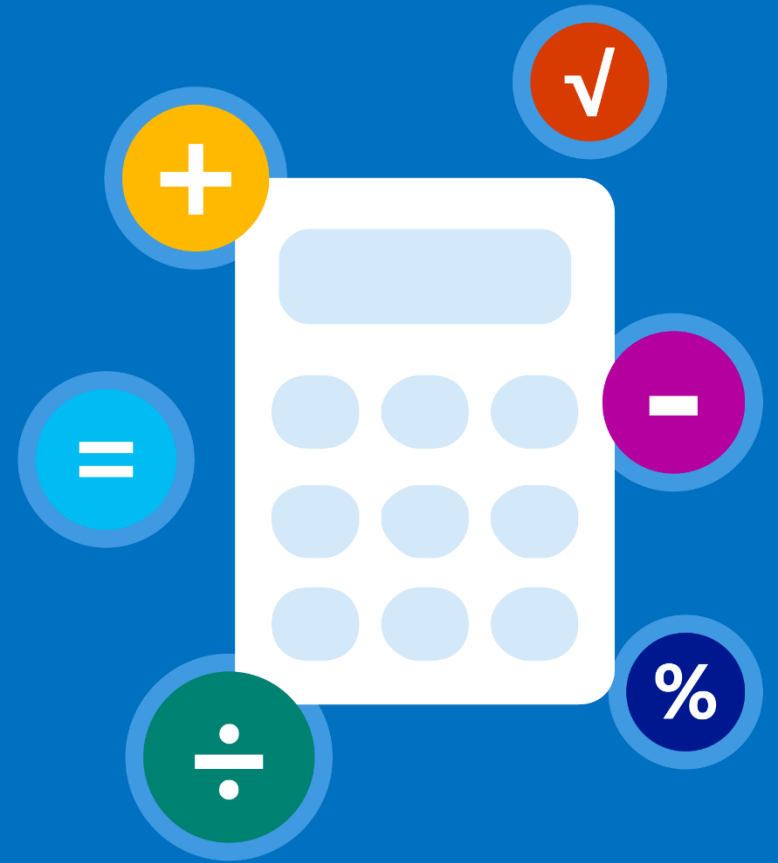


Azure Total Cost of Ownership (TCO) summary

Sample Report for Rehost Migration Scenario
using Microsoft Technologies
(Windows Server & SQL Server)



Assumptions and inputs

Compute

Physical servers

# Servers	OS	Proc(s) per server	Total cores	RAM (GB)	Optimize by	GPU
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Virtual machines

# VMs	OS	Virtualization	Core(s)	RAM (GB)	Optimize by
2	Windows	VMware	8	16	CPU
2	Windows	VMware	8	16	CPU

Storage

Storage type	Disk type	Capacity	Backup	Archive	Accessibility %
Local Disk/SAN	HDD	1 TB	0 TB	0 TB	100
Local Disk/SAN	SSD	1 TB	0 TB	0 TB	0

Networking

Outbound bandwidth (GB)/Month

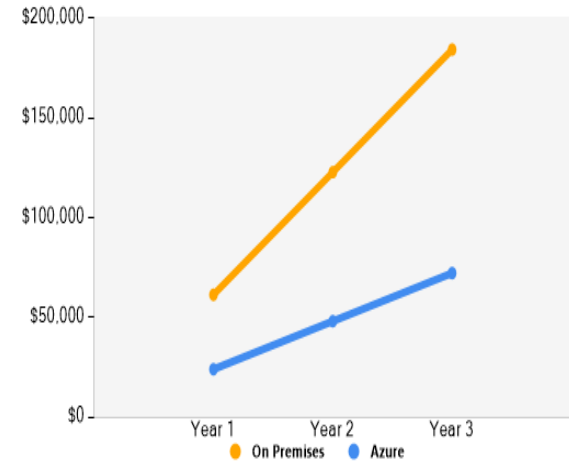
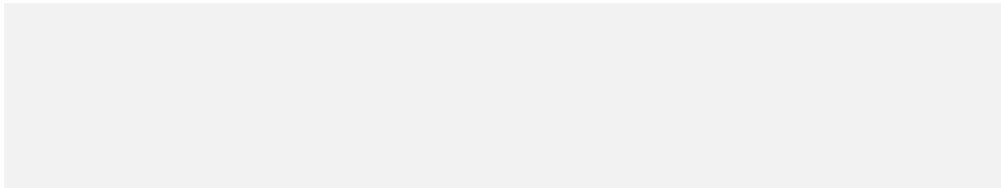
60 GB

Azure region

US East 2

DISCLAIMER: The TCO Calculator output is only an estimate of on-premises costs and equivalent Microsoft Azure services prices. Final Microsoft Azure costs will be based on your actual usage of Azure services, and may be different from the TCO estimates. This document is for informational purposes only. Microsoft makes no warranties, express or implied, in this summary.

Your estimated savings are **\$ 112,056 (61%)** over **3** year(s) with Microsoft Azure.



On-premises cost breakdown summary

Category	Costs
Compute	\$102,573
Hardware	\$30,583
Software	\$6,945
Electricity	\$3,107
Database	\$29,736
Virtualization	\$32,202
Data Center	\$56,250
Networking	\$11,690
Storage	\$10,650
IT labor	\$3,205
Total	\$184,368

Azure cost breakdown summary

Category	Web direct cost	1 Year Reserved VM	3 Years Reserved VM
Compute	\$77,236	\$71,836	\$66,128
Data center	\$0	\$0	\$0
Networking	\$164	\$164	\$164
Storage	\$3,253	\$3,253	\$3,253
IT labor	\$2,767	\$2,767	\$2,767
Total	\$83,420	\$78,020	\$72,312

Estimated on-premises cost (three years) vs. estimated Azure cost (three years)

Compute cost

Hardware cost

Virtual Machine Costs	
Virtual machine density - Number of virtual cores that can be created per physical core	2
Cost Per 2 Proc 6 Core 64 GB RAM virtualization server	\$8,806
Number of servers needed for 2 virtual machine(s) - 8 vCPU, 16 GB RAM, Compute	1
Cost Per 4 Proc 2 Core 56 GB RAM virtualization server	\$14,719
Number of servers needed for 2 virtual machine(s) - 8 vCPU, 16 GB RAM, Compute	1
Total cost for virtualization server(s)	\$23,525
Cost of maintaining virtualization server(s) - 10% of cost of virtualization server(s)	\$2,352
Total cost of maintaining server(s) over 3 year(s)	\$7,058
Total hardware costs over 3 year(s)	\$30,583

Software cost

Virtual Machine Costs	
Cost of Windows Data Center license per 2 Proc, 6 core, 64 RAM virtualization server	\$4,630.32

Web direct cost

Number of hours per month	730
Average utilization	100%
Virtual Machines Costs	
A8v2 Standard (8 vCPU, 16 GB RAM) Windows(Azure Hybrid Benefit)	\$0.4/ hr
	SKU# AAA-21427
Number of virtual machine(s) needed	2
Total virtual machine costs per month	\$584
Total web direct virtual machine costs over 3 year(s)	\$21,024
1 Year Reserved VM	
Number of hours per month	730
Average utilization	100%
Virtual Machines Costs	
F8 Standard (8 vCPU, 16 GB RAM) Windows(Azure Hybrid Benefit)	\$0.297/ hr
Number of virtual machine(s) needed	2
Total 1-Year Reserved Cost over 3 year(s)	\$15,624
3 Years Reserved VM	
Number of hours per month	730

Number of servers needed for 2 virtual machine(s) - 8 vCPU, 16 GB RAM, Compute	1
Cost of Windows Data Center license per 4 Proc, 2 core, 56 GB RAM virtualization server	\$2,315.16
Number of servers needed for 2 virtual machine(s) - 8 vCPU, 16 GB RAM, Compute	1
Total Windows licensing costs over 3 year(s)	\$6,945

Electricity cost

Price of electricity per kWh	\$0.1
Virtual Machine Costs	
Power rating of 2 proc 6 core, 64 GB RAM server	682 Watts
Total electricity cost consumed by 1 server(s) - 2 proc, 6 core, 64 GB RAM server per month	\$49.79
Power rating of 4 proc 2 core, 56 GB RAM server	500 Watts
Total electricity cost consumed by 1 server(s) - 4 proc, 2 core, 56 GB RAM server per month	\$36.50
Total electricity costs over 3 year(s)	\$3,107

Database cost

Total core licenses required	16
Total license packs required (2 cores/ea)	8
SQL Server Enterprise License cost per core	\$14,256
SQL Server Standard License cost per core	\$3,717
Total license cost	\$29,736
Total Database cost over 3 year(s)	\$29,736

Virtualization cost

Average utilization	100%
Virtual Machines Costs	
F8 Standard (8 vCPU, 16 GB RAM) Windows(Azure Hybrid Benefit)	\$0.189/ hr
Number of virtual machine(s) needed	2
Total 3-Year Reserved Cost over 3 years	\$9,916

Azure SQL Database Managed Instance

License Entitlements	
Eligible number of Instances	0
Not Covered by Azure Hybrid Benefit	
Azure SQL Database Managed Instance (General Purpose) price	\$1.069 / hr
Number of cores per Instance	8
General Purpose Instances	2
General Purpose Instances price per month	\$1,561
Total General Purpose Instances price over 3 year(s)	\$56,212

Per virtual machine, per month, cost to load balance, backup and patch virtual machines	\$52
Number of virtual machine(s)	4
Virtual machine management cost per month	\$208
Virtualization software license cost	\$20,970
Virtual machine management cost per year	\$3,744
Total virtual machine management costs over 3 year(s)	\$32,202

Total compute cost over 3 year(s)	\$102,573
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Total Azure compute cost over 3 year(s)	\$66,128
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Datacenter cost

Datacenter Compute cost

Number of rack units per rack	42
Virtual Machines Costs	
Rack units required per 2 proc 6 core, 64 GB RAM server	4
Number of 2 proc 6 core, 64 GB RAM server	2
Total number of rack units required	4
Rack units required per 4 proc 2 core, 56 GB RAM server	2
Number of 4 proc 2 core, 56 GB RAM server	2
Total number of rack units required	2

Total Azure Data center costs over 3 year(s)	\$0
----------------------------------------------	-----

Total number of rack units required for all server(s)	6.00
Number of racks required	1
Data Center construction cost per rack amortized over 20 years	\$6,250
Total Data center compute costs over 3 year(s)	\$18,750

Datacenter storage cost

Rack mounting/installation cost	\$12,500
Total Data center storage costs over 3 year(s)	\$37,500

Total Data Center cost over 3 year(s)	\$56,250
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Total Azure Data center costs over 3 year(s)	\$0
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Networking cost

Networking cost

Total hardware + software costs over 3 year(s)	\$37,528
Network hardware and software costs assumed to be 25% of hardware and software costs over 3 year(s)	\$9,382
Network maintenance cost assumed to be 20% of network hardware and software costs over 3 year(s)	\$1,876
Service provider cost/GB per month	\$0.20
Amount of bandwidth needed (GB) per month	60
Total service provider cost per month	\$12

Azure Networking cost

Total outgoing bandwidth needed/month	\$4.57
Total outgoing bandwidth cost/month	\$4.57
Total networking cost for 60 GB / Month over 3 year(s)	\$164.34

Total network hardware and software cost over 3 year(s)	\$11,690
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Total estimated on-premises networking cost over 3 year(s)	\$11,690
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Total estimated Azure networking cost	\$164.34
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Storage cost

Storage cost

Hardware infrastructure

Local Disk/SAN-HDD

Cost per GB	\$2
Amount of HDD (RAID 10) storage needed (TB)	1,024.00

Local Disk/SAN-SSD

Cost per GB	\$3
Amount of SSD (RAID 10) storage needed (TB)	2,048

Total storage procurement cost over 3 year(s)	8,192
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Storage maintenance

Storage maintenance cost (% of storage procurement cost) over 3 year(s)	\$2,458
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Total storage maintenance over 3 year(s)	\$2,458
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Azure storage cost

Storage maintenance

Page Blob storage - LRS

Usable storage volume (RAID 10 configuration) in GB	512.00
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Storage cost per GB	\$0.05
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Annual storage cost per usable volume	\$307
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Number of storage transactions required per usable volume	5,000
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Azure page blob transaction pricing per 10000 transactions	\$0.00036
------------------------------------------------------------	-----------

SKU# N9H-00439

Total annual transactions cost	\$0
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Total LRS storage maintenance cost over 3 year(s)	\$921
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Managed Instance Storage

Price per GB/Month	\$0.06325
Usable storage volume (RAID 10 configuration) in GB	1,024.00
Active DB Storage Cost/Month	\$65.00
Annual storage cost per usable volume	\$777
Annual Managed Instance Storage cost	\$777
Total Managed Instance Storage cost for over3 year(s)	\$2,332
Total MySQL Storage cost for over3 year(s)	\$0

Total estimated on-premises storage cost	\$10,650
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Total estimated Azure storage cost	\$3,253
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IT labor cost

On-premises IT labor cost

Number of IT admin hour(s) needed per year	21.36
Hourly rate for IT administrator	\$50

Total estimated on-premises IT labor cost	\$3,205
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Azure IT labor cost

Number of IT admin hour(s) needed per year	18.43
Hourly rate for IT administrator	\$50.00

Total estimated Azure IT labor cost	\$2,767.00
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