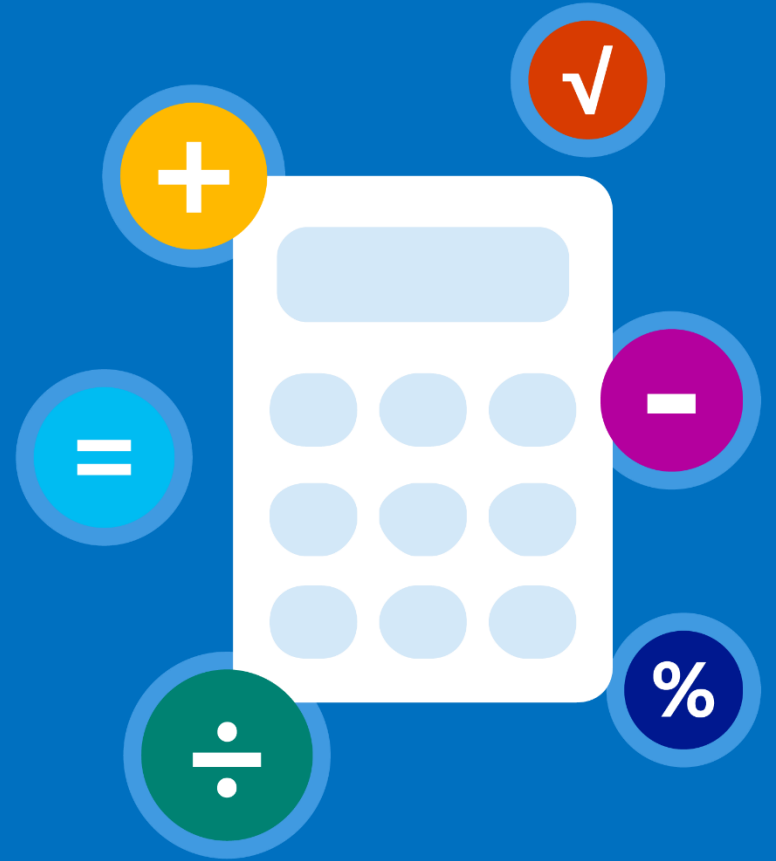


# Azure Total Cost of Ownership (TCO) summary

Sample Report for Rebuild Migration Scenario  
using Open Source Technologies  
(Linux & MySQL)



# 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	Linux	VMware	8	16	CPU
2	Linux	VMware	8	16	CPU

## Networking

### Outbound bandwidth (GB)/Month

60 GB

### Azure region

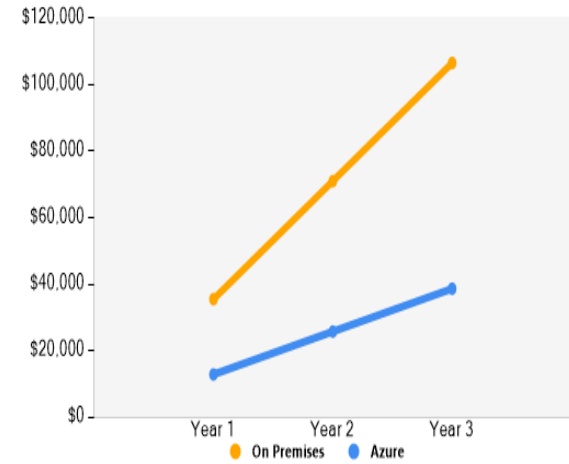
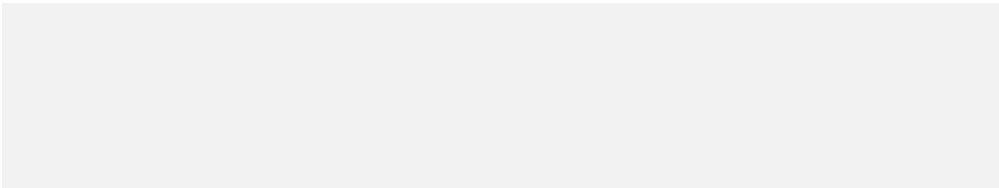
US East 2

## 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

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 **\$ 67,913 (64%)** over **3** year(s) with Microsoft Azure.



#### On-premises cost breakdown summary

Category	Costs
<b>Compute</b>	\$47,950
Hardware	\$22,896
Software	\$0
Electricity	\$3,586
Database	\$0
Virtualization	\$21,468
<b>Data Center</b>	\$37,500
<b>Networking</b>	\$7,301
<b>Storage</b>	\$10,650
<b>IT labor</b>	\$3,205
<b>Total</b>	<b>\$106,606</b>

#### Azure cost breakdown summary

Category	Web direct cost
Compute	\$36,004
Data center	\$0
Networking	\$164
Storage	\$921
IT labor	\$1,604
<b>Total</b>	<b>\$38,693</b>

# 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 4 virtual machine(s) - 8 vCPU, 16 GB RAM, Compute	2
Number of servers needed for 2 virtual machine(s) - 8 vCPU, 16 GB RAM, Compute	1
<b>Total cost for virtualization server(s)</b>	<b>\$17,612</b>
Cost of maintaining virtualization server(s) - 10% of cost of virtualization server(s)	\$1,761
<b>Total cost of maintaining server(s) over 3 year(s)</b>	<b>\$5,284</b>
<b>Total hardware costs over 3 year(s)</b>	<b>\$22,896</b>

### Software cost

Virtual Machine Costs	
<b>Total Windows licensing costs over 3 year(s)</b>	<b>\$0</b>

### Electricity cost

Price of electricity per kWh	\$0.1
Virtual Machine Costs	

### Azure WebApp Cost

WebApp name	App1
Azure WebApps Service Plan	Basic-B3
Matched Configuration in WebApp plan	4 core, 7 GB RAM
WebApp cost per hour	\$0.3
Full time WebApp instances	2
Average Utilization	100 %
<b>Total WebApp cost per month</b>	<b>\$438</b>
<b>Total WebApp cost for 3 year(s)</b>	<b>\$15,768</b>

### Azure Database for MySQL

Azure Database for MySQL cost per core for General Purpose instance	\$0.05/hr
Number of core(s) required per General Purpose instance	8
Number of instance(s) required	2
<b>Total General Purpose instance cost per month</b>	<b>\$562</b>
<b>Total Azure Database for MySQL cost over 3 years</b>	<b>\$20,236</b>

Power rating of 2 proc 6 core, 64 GB RAM server	682 Watts
Total electricity cost consumed by 2 server(s) - 2 proc, 6 core, 64 GB RAM server per month	\$99.57
<b>Total electricity costs over 3 year(s)</b>	<b>\$3,586</b>

#### Database cost

Total number of license(s) required	1
MySQL Community Edition License cost per instance	\$0
<b>Total license cost</b>	<b>\$0</b>
<b>Total MySQL Database licensing cost over 3 year(s)</b>	<b>\$0</b>

#### Virtualization cost

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	\$13,980
Virtual machine management cost per year	\$2,496
<b>Total virtual machine management costs over 3 year(s)</b>	<b>\$21,468</b>

<b>Total compute cost over 3 year(s)</b>	<b>\$47,950</b>
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<b>Total Azure compute cost over 3 year(s)</b>	<b>\$36,004</b>
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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	4
Total number of rack units required	8
Total number of rack units required for all server(s)	8.00
Number of racks required	1
Data Center construction cost per rack amortized over 20 years	\$6,250
<b>Total Data center compute costs over 3 year(s)</b>	<b>\$18,750</b>

### Datacenter storage cost

Rack mounting/installation cost	\$6,250
<b>Total Data center storage costs over 3 year(s)</b>	<b>\$18,750</b>

<b>Total Data Center cost over 3 year(s)</b>	<b>\$37,500</b>
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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)	\$22,896
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### Azure Networking cost

Total outgoing bandwidth needed/month	\$4.57
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Network hardware and software costs assumed to be 25% of hardware and software costs over 3 year(s)	\$5,724
Network maintenance cost assumed to be 20% of network hardware and software costs over 3 year(s)	\$1,145
Service provider cost/GB per month	\$0.20
Amount of bandwidth needed (GB) per month	60
<b>Total service provider cost per month</b>	<b>\$12</b>
<b>Total network hardware and software cost over 3 year(s)</b>	<b>\$7,301</b>

<b>Total estimated on-premises networking cost over 3 year(s)</b>	<b>\$7,301</b>
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Total outgoing bandwidth cost/month	\$4.57
<b>Total networking cost for 60 GB / Month over 3 year(s)</b>	<b>\$164.34</b>

<b>Total estimated Azure networking cost</b>	<b>\$164.34</b>
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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

<b>Total storage procurement cost over 3 year(s)</b>	<b>8,192</b>
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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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<b>Annual storage cost per usable volume</b>	<b>\$307</b>
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Number of storage transactions required per usable volume	5,000
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Storage maintenance	
<b>Storage maintenance cost (% of storage procurement cost) over 3 year(s)</b>	<b>\$2,458</b>
<b>Total storage maintenance over 3 year(s)</b>	<b>\$2,458</b>

Azure page blob transaction pricing per 10000 transactions	\$0.00036
	SKU# N9H-00439
<b>Total annual transactions cost</b>	<b>\$0</b>
<b>Total LRS storage maintenance cost over 3 year(s)</b>	<b>\$921</b>
<b>MySQL storage</b>	
Storage amount required by IOPs in GB	1.00
Usable storage volume (RAID 10 configuration) in GB	512.00
Number of Instances	2.00
Storage price per instance/hr	\$0.00
Storage cost/month	0.00
<b>Annual storage cost</b>	<b>\$0</b>
<b>Total Annual MySQL storage cost</b>	<b>\$0</b>
<b>Total MySQL Storage cost for over 3 year(s)</b>	<b>\$0</b>

<b>Total estimated on-premises storage cost</b>	<b>\$10,650</b>
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<b>Total estimated Azure storage cost</b>	<b>\$921</b>
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## IT labor cost

<b>On-premises IT labor cost</b>	
Number of IT admin hour(s) needed per year	21.36
Hourly rate for IT administrator	\$50

<b>Azure IT labor cost</b>	
Number of IT admin hour(s) needed per year	10.68
Hourly rate for IT administrator	\$50.00



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**Total estimated on-premises IT labor cost**

**\$3,205**

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**Total estimated Azure IT labor cost**

**\$1,604.00**

## Learn more about Azure

### What is Azure?

Learn how Microsoft Azure cloud services enable developers and IT professionals to build, deploy, and manage applications in the cloud, wherever they want, and with the freedom to use their preferred tools, applications, and frameworks. Find out more at:

<https://azure.microsoft.com/en-us/overview/what-is-azure>

### The Trusted Cloud

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<https://azure.microsoft.com/en-us/support/trust-center>

### Customer innovations

World-class organizations all over the world are driving innovation and getting results with Azure. Find out more at:

<https://azure.microsoft.com/en-us/case-studies>

### Azure solutions

With everything you need to get quickly started—from technical documentation to partner resources—Azure provides complete solutions for your needs. Learn more about Azure solutions areas:

<https://azure.microsoft.com/en-us/solutions>

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<https://azure.microsoft.com/en-us/get-started>