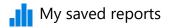
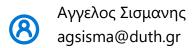
# Total Cost of Ownership (TCO) Calculator

Estimate the cost savings you can realize by migrating your workloads to Azure

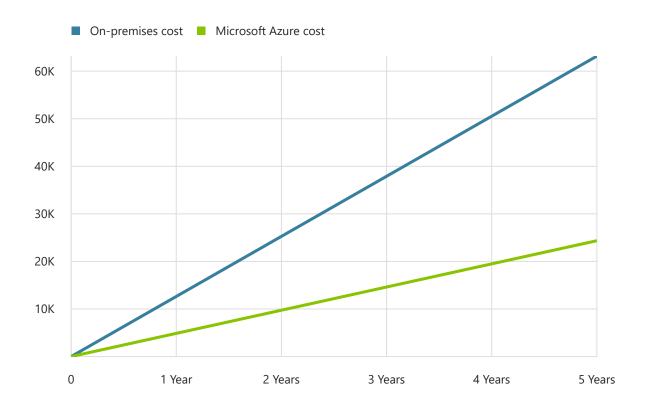




# Over 5 year(s) with Microsoft Azure, your estimated cost savings could be as much as $\$38,\!807$

### Total on-premises vs. Azure cost over time

Savings from running workloads in Azure accrue over time. The following shows how those savings add up over years.



## Total on-premises over 5 year(s)

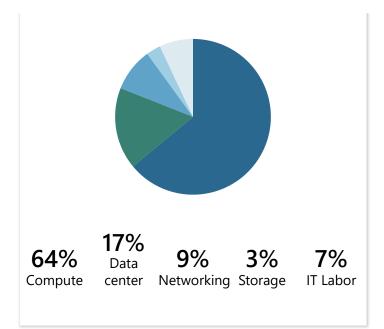
TCO of on-premises environments tends to be driven by compute and data center costs.

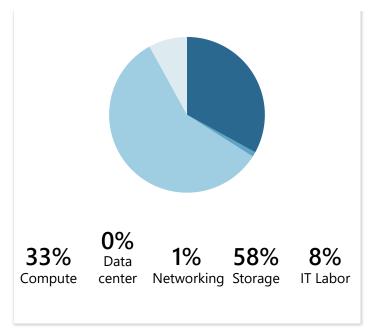
# Total Azure cost over 5 year(s)

In Azure, certain cost categories decrease or go away completely.

**\$63,165** Total cost

**\$24,358** Total cost



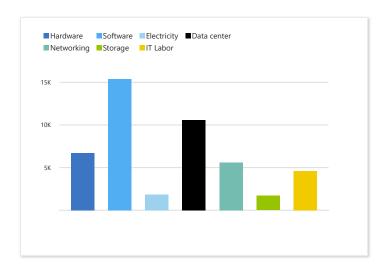


## Total on-premises cost breakdown

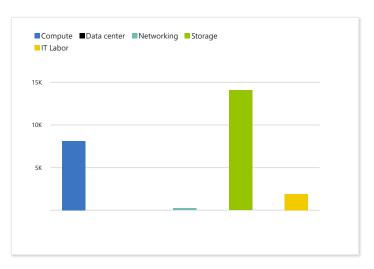
In Azure, several of the cost categories from the on-premises environment are consolidated and decrease with the efficiency that comes with the cloud.

### Total Azure cost breakdown

In Azure, several of the cost categories from the on-premises environment are consolidated and decrease with the efficiency that comes with the cloud.



\$63,165 Cost over 5 year(s)



**\$24,358**Cost over 5 year(s)

On-premises cost breakdown summary

Azure cost breakdown summary

Category	Cost
Compute Hardware Software Electricity Database	\$40,672.80 \$6,736.00 \$15,387.50 \$1,822.80 \$16,726.50
Data Center	\$10,579.45
Networking	\$5,616.30
Storage	\$1,696.00
IT Labor	\$4,600.00

Cost
\$8,132.04
\$0.00
\$234.00
\$14,074.57
\$1,917.05

Total \$63,1	65.00
--------------	-------

Total \$24,358.00

# Estimated on-premises cost (5 year(s))

# Estimated Azure cost (5 year(s))

### **Compute cost**

### Azure compute cost

Hardware cost	
Cost per 1 proc 2 core, 3.5 GB RAM physical server for Windows Number of servers required	\$1,684.00 1
Cost per 1 proc 2 core, 3.5 GB RAM physical server for Windows Number of servers required	\$1,684.00 1
Total cost for physical server(s)	\$3,368.00
Cost of maintaining physical server(s) - 20% of cost of physical server(s)	\$673.60
Total cost of maintaining server(s) over five year(s)	\$3,368.00
Total hardware cost over five year(s)	\$6,736.00
Software cost	
Cost of Windows datacenter license per 1 proc, 2 core, 3.5 GB RAM physical machine Number of licenses needed	\$6,155.00 1

### **Virtual Machines cost**

Number of hours per month	730
B2S Standard (2 core, 4 GB RAM) Windows (Azure Hybrid Benefit)	SKU# AAA- 88007
Number of virtual machines Total virtual machine cost per month	1 \$15.404

Total Azure Virtual Machines	\$924.24
cost	<b>\$324.24</b>

NOTE: For Azure compute costs, 3 year Reserved VM and two 1 year Reserved VM in use.

#### **SQL** Database cost

General Purpose Single Gen5 2 vCores (Azure Hybrid Benefit)	\$0.13972 /hr
	SKU#
Instance Count	1
Cost Per Month	\$120.13

Total SQL Database cost over five year(s)	\$16,726.50
Total Software Assurance cost	\$9,292.50
Standard Software Assurance cost per 2 cores Standard cores	\$929.25 4
Total license cost	\$7,434.00
SQL Server Standard License cost per 2 cores Standard cores	\$3,717.00 4
Total CPU cores	4
SQL Database cost	
Total electricity cost over five year(s)	\$1,822.80
Total electricity cost consumed by 1 server(s) - 2 core, 3.5 GB RAM server per month	\$15.19
Power rating of 2 core, 3.5 GB RAM server	156 Watts
Total electricity cost consumed by 1 server(s) - 2 core, 3.5 GB RAM server per month	\$15.19
Power rating of 2 core, 3.5 GB RAM server	156 Watts
Price of electricity per kWh	\$0.1334
Electricity cost	
Total software cost over five year(s)	\$15,387.50
Total Software Assurance cost	\$3,077.50
Total software license cost	\$12,310.00
Cost of Windows datacenter license per 1 proc, 2 core, 3.5 GB RAM physical machine Number of licenses needed	\$6,155.00 1

NOTE: A minimum of four core licenses are required for each physical processor on the

Total SQL Database cost over five year(s)	\$7,207.80
iive year(3)	

		_	
Total cost over five year(s)	\$40,672.80		
		Total Azure compute cost over five year(s)	\$8,132.04 
Data center cost		Azure data center cost	
Compute cost			
Number of rack units per rack Rack units required per 2 core, 3.5 GB RAM server Number of 2 core, 3.5 GB RAM server Total number of rack units required Rack units required per 2 core, 3.5 GB RAM server Number of 2 core, 3.5 GB RAM server Total number of rack units required Total number of rack units required Total number of rack units required for all server(s) Data center construction cost per rack unit amortized over 20 years Data center compute cost	42 1 1 \$1.00 1 1 \$1.00 \$2.00 \$302.27 \$604.54	Total Azure data center cost over five year(s)	\$0.00
Total Data center compute cost over five year(s)	\$3,022.70		
Storage cost			
Total number of rack units required for all storage Number of rack units for Blob	5 5		

\$1,511.35		
\$7,556.75		
\$10,579.45	Total Azure data center cost over five year(s)	\$0.00
	Azure networking cost	
\$22,123.50		
\$3,318.52	Total outgoing bandwidth needed per month	200 GB
\$497.78	per month	\$3.90
\$0.15		
200		
\$30.00		
\$5,616.30	<u> </u>	
	<ul><li>Total Azure networking cost over five year(s)</li></ul>	\$234.00
	\$7,556.75 \$10,579.45 \$22,123.50 \$3,318.52 \$497.78 \$0.15 200 \$30.00	\$10,579.45  Total Azure data center cost over five year(s)  Azure networking cost  \$22,123.50  \$3,318.52  Total outgoing bandwidth needed per month Total outgoing bandwidth cost per month  \$497.78  \$0.15 200  \$30.00  Total Azure networking cost

# Azure storage cost

Hardware			
Blob Cost per GB Storage (RAID 10	\$0.20	Block Blob storage Hot tier	
configuration) volume in GB (GRS enabled Storage volume doubled to provide geo-redundant capability)	5,120	Usable storage volume in GB Average storage cost per GB/month % of data being accessed frequently	2,534 \$0.04 99
Total storage procurement cost	\$1,024.00		SKU# N9H- 01011
		Annual storage cost per usable volume	\$1,359.00
Backup			
Total backup and archive volume in GB	2,048 HP LTO-7	Total Blob storage - Hot Tier - GRS maintenance cost over five year(s)	\$6,795.00
Backup volume per tape in TB	BB873A 6	Block Blob storage Cool tier	
Number of Tape drives required	1	Usable storage volume in GB	26
Cost per Tape Drive	\$160.00	Average storage cost per GB/month % of data being accessed	\$0.79
Backup and Archive cost over five year(s)	\$160.00	infrequently	1 SKU# N9H- 00991
Storage Maintenance		Annual storage cost per usable volume	\$246.24
Storage maintenance cost (10% of storage procurement cost) over five year(s)	\$512.00	Total Blob storage - Cool Tier - GRS maintenance cost over five year(s)	\$1,231.20
Total storage maintenance cost over five year(s)	\$512.00	Backup	
		Total backup and archive volume in GB	2,048
		Storage cost per GB	\$0.0448

		Backup and Archive maintenance cost over five year(s)	\$5,505.02
		Usable storage volume in GB Price per GB/Month Active DB Storage Cost/Month Annual storage cost per usable volume  Total SQL Database Server Storage cost over five year(s)  SQL Database Backup storage Billable backup storage volume in GB Price per GB/Month Backup Storage Cost/Month	16 \$0.008 \$0.126 \$24.19 \$120.95 32 \$0.007 \$0.220 \$84.48
		Annual storage cost per usable volume	
		Total SQL Database Backup Storage Cost over five year(s)	
Total storage cost over five year(s)	\$1,696.00	Total Azuro storago cost over	
		_ Total Azure storage cost over five year(s)	\$14,074.57

**Azure IT labor cost** 

IT labor cost

year(s)  Total on-premises cost over five	\$4,600.00	Total Azure IT labor cost over five year(s)	\$1,917.05
Number of IT admin hour(s) needed per year Hourly rate for IT administrator  Total IT labor cost over five	40 \$23.00	Number of IT admin hour(s) needed per year Hourly rate for IT administrator	16.67 \$23.00

A total savings of \$38,807.00 with Microsoft Azure