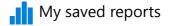
# Total Cost of Ownership (TCO) Calculator

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

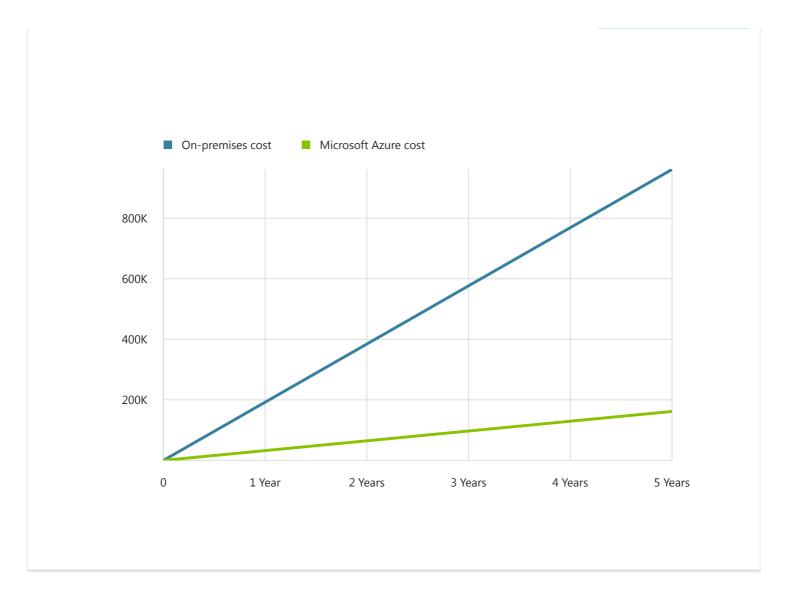




# Over 5 year(s) with Microsoft Azure, your estimated cost savings could be as much as $\$799,\!395$

#### 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.

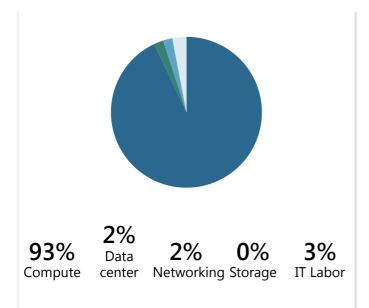
# Total Azure cost over 5 year(s)

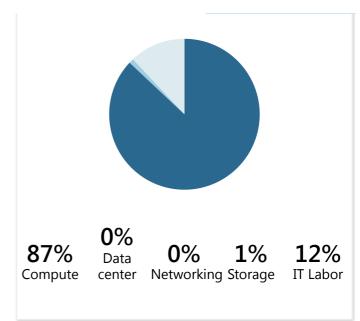
In Azure, certain cost categories decrease or go away completely.

**\$961,072** Total cost

\$161,677
Total cost

- Chat with Sales



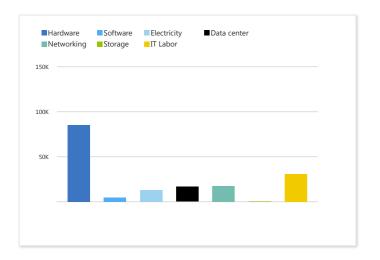


# Total on-premises cost breakdown

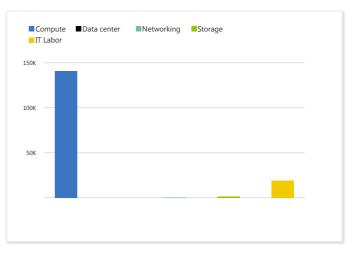
In Azure, several of the cost categories from the on-premises environment are consolidated and decrease with the efficiency that comes with the cloud.

#### 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.



\$961,072 Cost over 5 year(s)



\$161,677 Cost over 5 year(s)

On-premises cost breakdown summary

Azure cost breakdown summary

Category Cost
Compute \$896,128.20

Category = Cost Cost

Hardware Software Electricity	\$85,254.00 \$4,860.00 \$12,891.00	Compute  Data Center	\$140,962.80 \$0.00
Virtualization Database	\$25,459.20 \$767,664.00	Networking	\$120.00
Data Center	\$16,624.85	Storage	\$1,427.40
Networking	\$17,344.66	IT Labor	\$19,167.05
Storage	\$307.20		
IT Labor	\$30,667.05		

Total	\$961,072.00		
		Total	\$161,677.00

Estimated on-premises cost (5 year(s))	Estimated Azure cost (5 year(s))
Compute cost	Azure compute cost
Hardware cost	= Chat with Sales

		Vistual Machines seet
Virtual machine density - Number of virtual cores that	3	Virtual Machines cost  Number of hours per month 730
can be created per physical core	3	·
Cost per 4 proc 8 core, 112 GB RAM virtualization server	\$21,558.00	B8MS Standard (8 core, 32 GB RAM) Windows (Azure Hybrid Benefit) SKU# AAA- 68668
for Windows	\$21,550.00	Number of virtual machines 10
Number of servers needed for 10 virtual machine(s) - 8 core, 256 GB RAM	1	Total virtual machine cost per \$1,117.160 month
Cost per 2 proc 4 core, 14 GB RAM virtualization server for Windows	\$6,964.00	Total Azure Virtual Machines \$67,029.60
Number of servers needed for 3 virtual machine(s) - 8 core, 64 GB RAM	1	NOTE: For Azure compute costs, 3 year Reserved VM and two 1 year Reserved VM in use.
Cost per 2 proc 8 core, 64 GB RAM virtualization server for Windows	\$14,105.00	App Service cost
Number of servers needed for 3 virtual machine(s) - 48 core, 64 GB RAM	1	B3 Basic App Service (4 core, 7 GB RAM) \$0.30 /hr
Total cost for virtualization	\$42,627.00	SKU# T2X- 00020
server(s)	4 1-10-1111	Full time App Service
Cost of maintaining virtualization server(s) - 20%	\$8,525.40	instances Average utilization 80 %
of cost of virtualization server(s)	¥0, <i>323.</i> 40	Auto scaling No Total App Service cost per
Total cost of maintaining server(s) over five year(s)	\$42,627.00	month \$525.60
		Total App Service cost over \$31,536.00
Total hardware cost over five year(s)	\$85,254.00	five year(s)
Software cost		SQL Database cost
		Business Critical Single Gen5 2 vCores (Azure Hybrid Benefit) \$0.27398 /hr
Cost of Windows standard license per 4 proc, 8 core, 112	\$1,944.00	SKU# AAD-
GB RAM virtualization server	Ψ1,5-100	Instance Count 17851
Number of servers needed for 10 virtual machine(s) - 8 core, 256 GB RAM	1	Cost Per Month \$235.54
Cost of Windows standard license per 2 proc, 4 core, 14 GB RAM virtualization server	\$972.00	Total SQL Database cost over five year(s) \$42,397.20
Number of servers needed for 3 virtual machine(s) - 8 core, 64 GB RAM	1	
Cost of Windows standard license per 2 proc, 8 core, 64 GB RAM virtualization server Number of servers needed	\$972.00	
for 3 virtual machine(s) - 48 core, 64 GB RAM	1	<b>-</b> 5:
		Chat with Sales

Total software license cost	\$3,888.00
Total Software Assurance cost	\$972.00
Total software cost over five year(s)	\$4,860.00
Electricity cost	
Price of electricity per kWh	\$0.1334
Power rating of 8 core, 112 GB RAM server	1,200 Watts
Total electricity cost for 1 server(s) - 8 core, 112 GB RAM server per month	\$116.86
Power rating of 4 core, 14 GB RAM server	324 Watts
Total electricity cost for 1 server(s) - 4 core, 14 GB RAM server per month	\$31.55
Power rating of 8 core, 64 GB RAM server	682.3 Watts
Total electricity cost for 1 server(s) - 8 core, 64 GB RAM server per month	\$66.44
Total electricity cost over five year(s)	\$12,891.00
	\$12,891.00
year(s)	\$12,891.00 \$0.00
Virtualization cost  Virtualization software license	
Virtualization cost  Virtualization software license cost  Per virtual machine, per month, cost to load balance, backup and patch virtual	\$0.00
Virtualization cost  Virtualization software license cost  Per virtual machine, per month, cost to load balance, backup and patch virtual machines	\$0.00 \$26.52
Virtualization cost  Virtualization software license cost  Per virtual machine, per month, cost to load balance, backup and patch virtual machines  Number of virtual machines  Virtual machine management	\$0.00 \$26.52 16
Virtualization cost  Virtualization software license cost  Per virtual machine, per month, cost to load balance, backup and patch virtual machines  Number of virtual machines  Virtual machine management cost per month  Virtual machine management	\$0.00 \$26.52 16 \$424.32
Virtualization cost  Virtualization software license cost  Per virtual machine, per month, cost to load balance, backup and patch virtual machines  Number of virtual machines  Virtual machine management cost per month  Virtual machine management cost per year  Total virtualization cost over	\$0.00 \$26.52 16 \$424.32 \$5,091.84

SQL Server Enterprise License cost per 2 cores Enterprise cores	\$14,256.00 48
Total license cost	\$342,144.00
Enterprise Software Assurance cost per 2 cores Enterprise cores	\$3,546.00 48
Total Software Assurance cost	\$425,520.00

# Total SQL Database cost over \$767,664.00 five year(s)

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

Total cost over five year(s) \$896,128.20

Total Azure compute cost over five year(s)

\$140,962.80

#### Data center cost

#### Azure data center cost

### **Compute cost**

Number of rack units per rack	42
Rack units required per 8 core, 112 GB RAM server Number of 8 core, 112 GB RAM server Total number of rack units required	4 1 4
Rack units required per 4 core, 14 GB RAM server Number of 4 core, 14 GB RAM server Total number of rack units required	2 1 2
Rack units required per 8 core, 64 GB RAM server Number of 8 core, 64 GB RAM server Total number of rack units required	4 1 4
Total number of rack units required for all server(s)	10

Total Azure data center cost	\$0.00
over five year(s)	\$0.00

Chat with Sales

Data center construction cost per rack unit amortized over 20 years	\$302.27
Data center compute cost	\$3,022.70
Total Data center compute cost over five year(s)	\$15,113.50
Storage cost	
Total number of rack units required for all storage Number of rack units for DAS or SAN	1 1
Rack mounting/installation cost	\$302.27
Total Data center storage cost over five year(s)	\$1,511.35

Total Data center cost over five \$16,624.85 year(s)

Total Azure data center cost over five year(s)

\$0.00

# **Networking cost**

# Azure networking cost

Total hardware + software cost over five year(s)  Network hardware and software cost assumed to be 15% of hardware and software cost over five year(s)	\$90,114.00 \$13,517.10	Total outgoing bandwidth needed per month  Total outgoing bandwidth coper month	200 GB ost \$2.00
Network maintenance cost assumed to be 15% of network hardware and software cost over five year(s)	\$2,027.56		
Service provider cost/GB per month Amount of bandwidth needed (GB) per month	\$0.15 200		
Total service provider cost per month	\$30.00		■ Chat with Sales

Total networking co	st over five	¢17 2// 66
year(s)		\$17,5 <del>44</del> .00

Total Azure networking cost over five year(s)

\$120.00

# Storage cost

# Azure storage cost

Hardware	
Local Disk/SAN-HDD Cost per GB Storage (RAID 10 configuration) volume in GB	\$0.20 1,024
Total storage procurement cost	\$204.80
Storage Maintenance	
Storage maintenance cost (10% of storage procurement cost) over five year(s)	\$102.40
Total storage maintenance cost over five year(s)	\$102.40

Page Blob storage		
Usable storage volume in GB Storage cost per GB/month	512 \$0.045	
Annual storage cost per usable volume	\$276.48	
Total Page Blob LRS storage maintenance cost over five year(s)	\$1,382.40	
SQL Database Server storage		
Usable storage volume in GB Price per GB/Month Active DB Storage Cost/Month	3 \$0.083 \$0.25	
Annual storage cost per usable volume	\$9.00	
Total SQL Database Server Storage cost over five year(s)	\$45.00	
SQL Database Backup storage		
Billable backup storage volume in GB	0	
Price per GB/Month Backup Storage Cost/Month	\$0.00 \$0.20	
Annual storage cost per usable volume	\$0.00	

Total SQL Database Backup \$0.00 Storage Cost over five year(s = Chat with Sales

Total storage cost over five year(s)	\$307.20	Total Azure storage cost over five year(s)	\$1,427.40
IT labor cost		Azure IT labor cost	
Number of IT admin hour(s) needed per year Hourly rate for IT administrator	266.67 \$23.00	Number of IT admin hour(s) needed per year Hourly rate for IT administrator	166.67 \$23.00
Total IT labor cost over five year(s)	\$30,667.05	Total Azure IT labor cost over five year(s)	\$19,167.05

Total on-premises cost over five year(s) \$961,072.00 Total Azure cost over five year(s) \$161,677.00

A total savings of \$799,395.00 with Microsoft Azure