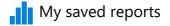
## Total Cost of Ownership (TCO) Calculator

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

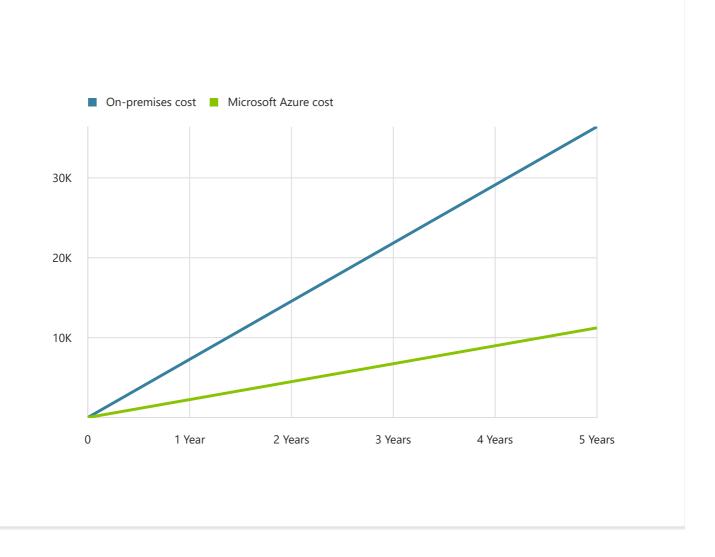




# Over 5 year(s) with Microsoft Azure, your estimated cost savings could be as much as $\$25,\!180$

#### 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)

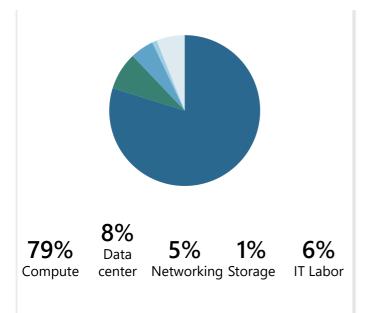
TCO of on-premises environments tends to be driven by compute and data center costs.

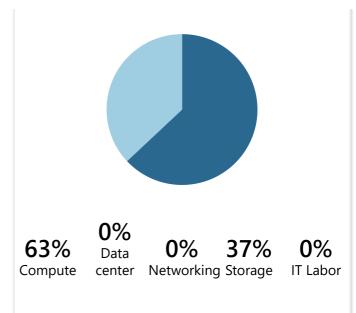
## Total Azure cost over 5 year(s)

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

**\$36,404** Total cost

**\$11,224** Total cost



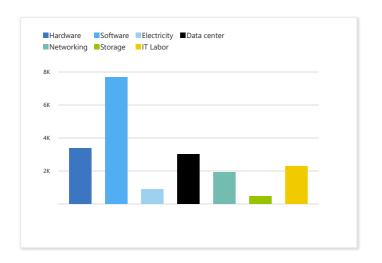


# Total on-premises cost breakdown

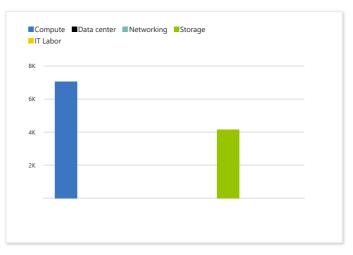
In Azure, several of the cost categories from the on-premises environment are consolidated and decrease with the efficiency that comes with the cloud.

#### **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.







**\$11,224** Cost over 5 year(s)

On-premises cost breakdown summary

Azure cost breakdown summary

| Category | Cost        |
|----------|-------------|
| Compute  | \$28,697.25 |

| Hardware<br>Software<br>Electricity<br>Database | \$3,368.00<br>\$7,693.75<br>\$909.00<br>\$16,726.50 | Compute  Data Center  Networking | \$7,068.00<br>\$0.00<br>\$0.00 |
|---|---|----------------------------------|--------------------------------|
| Data Center                                     | \$3,022.70  | Storage                          | \$4,155.61                     |
| Networking                                      | \$1,917.15  | IT Labor                         | \$0.00                         |
| Storage   | \$467.20  |                                  |                                |
| IT Labor  | \$2,300.00  |                                  |                                |

| Total | \$36,404.00 |
|-------|-------------|
| Total | \$36,404.00 |

Total \$11,224.00

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<br>RAM physical server for<br>Windows<br>Number of servers required           | \$1,684.00<br>1 |
|--|-----------------|
| Total cost for physical server(s)  | \$1,684.00      |
| Cost of maintaining physical server(s) - 20% of cost of physical server(s)                                   | \$336.80        |
| Total cost of maintaining server(s) over five year(s)  | \$1,684.00      |
| Total hardware cost over five year(s)  | \$3,368.00      |
| 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<br>1 |
| Total software license cost  | \$6,155.00      |
| Total Software Assurance cost  | \$1,538.75      |
| Total software cost over five year(s)  | \$7,693.75      |
| Electricity cost   |                 |
| Price of electricity per kWh   | \$0.133         |
| Power rating of 2 core, 3.5 GB<br>RAM server<br>Total electricity cost                                       | 156 Watts       |
| consumed by 1 server(s) - 2<br>core, 3.5 GB RAM server per<br>month  | \$15.15         |

## **SQL** Database cost

| Total SQL Database cost over five year(s)                      | \$7,068.00            |
|--|-----------------------|
| Instance Count<br>Cost Per Month                               | \$117.80              |
| General Purpose Single Gen5 2<br>vCores (Azure Hybrid Benefit) | \$0.13698 /hr<br>SKU# |

| Total electricity cost over five year(s)                                  | \$909.00        |
|---|-----------------|
| SQL Database cost   |                 |
| Total CPU cores   | 4               |
| SQL Server Standard License<br>cost per 2 cores<br>Standard cores         | \$3,717.00<br>4 |
| Total license cost  | \$7,434.00      |
| Standard Software Assurance<br>cost per 2 cores<br>Standard cores         | \$929.25<br>4   |
| Total Software Assurance cost   | \$9,292.50      |
| Total SQL Database cost over five year(s)                                 | \$16,726.50     |
| NOTE: A minimum of four core required for each physical proc server or VM |                 |

| Total cost over five year(s) | \$28,697.25 |  |            |
|------------------------------|-------------|--|------------|
|                              |             | <ul> <li>Total Azure compute cost<br/>over five year(s)</li> </ul> | \$7,068.00 |

#### Data center cost

#### Azure data center cost

| Compute cost  |          |  |        |
|---|----------|--|--------|
| Number of rack units per rack   | 42       | Total Azure data center cost over five year(s) | \$0.00 |
| Rack units required per 2 core, 3.5 GB RAM server                         | 1        | c c c c c c c c c c c c c c c c c c c          |        |
| Number of 2 core, 3.5 GB<br>RAM server                                    | 1        |  |        |
| Total number of rack units required                                       | \$1.00   |  |        |
| Total number of rack units required for all server(s)                     | \$1.00   |  |        |
| Data center construction cost<br>per rack unit amortized over<br>20 years | \$302.27 |  |        |

| Data center compute cost   | \$302.27   |
|--|------------|
| Total Data center compute cost over five year(s)   | \$1,511.35 |
| Storage cost   |            |
| Total number of rack units<br>required for all storage<br>Number of rack units for<br>DAS or SAN | 1          |
| Rack mounting/installation cost  | \$302.27   |
| Total Data center storage cost over five year(s)   | \$1,511.35 |
|  | \$1,51     |

Total Data center cost over five year(s) \$3,022.70

Total Azure data center cost over five year(s)

\$0.00

# **Networking cost**

## Azure networking cost

| Total hardware + software cost over five year(s)   | \$11,061.75 |  |        |
|--|-------------|--|--------|
| Network hardware and software cost assumed to be 15% of hardware and software cost over five year(s) | \$1,659.26  | Total outgoing bandwidth needed per month  Total outgoing bandwidth cost | 1 GB   |
| Network maintenance cost assumed to be 15% of network hardware and software cost over five year(s)   | \$248.89    | per month  | \$0.00 |
| Service provider cost/GB per month   | \$0.15      |  |        |
| Amount of bandwidth needed (GB) per month  | 1           |  |        |
| Total service provider cost per month  | \$0.15      |  |        |

## Storage cost

## Azure storage cost

| Hardware  |          |
|---|----------|
| Local Disk/SAN-HDD                                  |          |
| Cost per GB   | \$0.20   |
| Storage (RAID 10 configuration) volume in GB        | 1,024    |
| Total storage procurement cost                      | \$204.80 |
| Backup  |          |
| Total backup and archive volume in GB               | 2,048    |
| volume in GB  | HP LTO-7 |
| B 1   | BB873A   |
| Backup volume per tape in TB                        | 6        |
| Number of Tape drives required                      | 1        |
| Cost per Tape Drive                                 | \$160.00 |
| Backup and Archive cost over five year(s)           | \$160.00 |
| Storage Maintenance                                 |          |
| Storage maintenance cost                            | 4422.55  |
| (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<br>Storage cost per GB/month                             | 512<br>\$0.045          |
| Annual storage cost per usable volume  | \$276.48                |
| Total Page Blob LRS storage maintenance cost over five year(s)                       | \$1,382.40              |
| Backup   |                         |
| Total backup and archive volume in GB  | 2,048                   |
| Storage cost per GB  | \$0.0224                |
|  | SKU# AAL-<br>31949      |
| Backup and Archive maintenance cost over five year(s)                                | \$2,752.51              |
| SQL Database Server storage  |                         |
| Usable storage volume in GB<br>Price per GB/Month<br>Active DB Storage<br>Cost/Month | 3<br>\$0.038<br>\$0.115 |
| Annual storage cost per usable volume  | \$4.14                  |

|  |               | Total SQL Database Server<br>Storage cost over five year(s)                                      | \$20.70           |
|--|---------------|--|-------------------|
|  |               | SQL Database Backup<br>storage   |                   |
|  |               | Billable backup storage volume in GB Price per GB/Month  | \$0.00<br>\$0.200 |
|  |               | Backup Storage Cost/Month<br>Annual storage cost per usable<br>volume                            | \$0.200<br>\$0.00 |
|  |               | Total SQL Database Backup<br>Storage Cost over five year(s)                                      | \$0.00            |
| Total storage cost over five year(s)   | \$467.20      | Total Azure storage cost over five year(s)   | \$4,155.61        |
| IT labor cost  |               |  |                   |
|  |               | A 17 1 1   |                   |
|  |               | Azure IT labor cost  |                   |
| Number of IT admin hour(s)<br>needed per year<br>Hourly rate for IT<br>administrator | 20<br>\$23.00 | Azure IT labor cost  Number of IT admin hour(s) needed per year Hourly rate for IT administrator | 0<br>\$23.00      |

Total on-premises cost over five year(s)

\$36,404.00

A total savings of \$25,180.00 with Microsoft Azure