



# Smart Azure Calculator User Manual

Nov 2020

***We Azure you; we'll make it simple.***

# Introduction

Congratulations on your subscription to the Smart Azure Calculator! This will allow you to develop much faster, more accurate and above all, more convincing price proposals for Azure Migrate projects. It's going to help you win more Azure Migrate deals!

The Smart Azure Calculator is a powerful tool, part of a method we developed over the years after winning hundreds of Azure Migrate projects in the past years. Based on these experiences we have developed a training to help you to be more successful in selling Azure Migrate project. See for yourself: <https://bit.ly/35WdJBd>

If you follow this guide, you will get the most out of the Smart Azure Calculator. If you prefer to watch demos instead, go to: <https://youtu.be/cf5pUmL8ilo>.

We also keep a blog explaining Azure pricing development, explaining new programs and sharing our experience on how to sell Azure Migrate projects. If you, as an Azure professional, want to stay informed about all the commercial aspects of Azure, follow our blog: [Blog - The CloudLab](#)

After subscribing via Azure Marketplace to the Smart Azure Calculator, you get access to the homepage of the Smart Azure Calculator.

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# Home page - My Cases

The Smart Azure Calculator begins at "My Cases" homepage where you have an overview of all your cases. You can start new cases, clone or delete them if they are no longer needed.

Search your cases.

All cases can be arranged by pressing the column names.

Start a new case.

ID	Name	Language	Started	Status Date	Status	Actions
S0326	Smart Azure Calculator	English	Sun 02 Aug 20	Sun 02 Aug 20	PROCESSING	
S0368	Template Purpose case	English	Wed 05 Aug 20	Mon 31 Aug 20	PROCESSING	

+ Add New

Every case has a unique number. Reference ID if Support is required.

Customer Smart Azure Calculator \$ USD 🇬🇧 Welcome Herb Prooy

Herb Prooy

Switch to End-Customer View

Back to Reseller Portal

Back to Smart Azure Calculator

You can return to My Cases homepage at any time by clicking on your name in the top right corner and selecting this button.

Cloning the selected case will create another case with same case data, useful as a second scenario, an alternative offer or as a template to start a quick specific calculation, for example, WVD.

Modify the case name.

Delete the case.

Drilldown to the case of the Smart Azure Calculator and start working on building your case to establish the Azure price estimate and offer.

# The Dashboard explained

The Dashboard has 8 TABS to work the whole case and is covering what is called the steps of “Customer Cloud Journey”. Go through every TAB even if you don’t change any variable. It is important to save any inputted fields as applicable. If you don’t, the graphs and tables in the Output files could have another outcome.

Before you start the case, double check if selected Azure Region is the correct one. Change as required and the price plan of selected Azure Region will be loaded automatically.

Microsoft Partners can choose to source software licenses via the CSP program. Select the CSP Country of your choice or select ‘Neutral’ for global pricing.

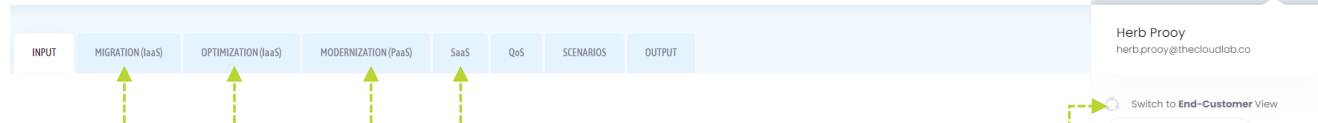
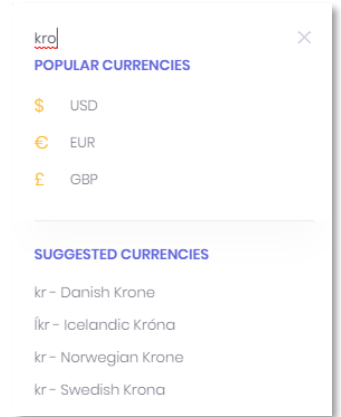
Region: West Europe CSP Country: Neutral

Name of the Reseller and Customer

Reseller: The Cloudlab Customer: Smart Azure Calculator \$ USD Welcome Herb Prooy

Available in English now. Other languages will be added soon.

Search for your currency of choice. The selected currency is also the currency used in the Output files.



Migration and Optimization are mandatory TABS to tune Azure infrastructure before extending your cost analysis.

Click these TABS if you want to analyze the total cost of ownership (TCO) of available Modernization (PaaS) options; Azure SQL / Windows Virtual Desktop or SaaS options; Business Central / Dynamics 365.

Go back to Reseller Portal to access other cases.

Switch to End-Customer views to hide margin related content when reviewing the App side-by-side with your end-customers.

CSP Margin or EA Discount	%	0
CSP Partner	A percentage of Azure bare VM cost to include 'other' Azure cost factors (such as network, bandwidth, transactions etc.). As default, we suggest to use 12%.	% 0
Reserved		% 0
Percentage of Azure variable costs		% 12

Within the Dashboard, some fields are in blue. Move your cursor over the blue-text fields to show relevant explanation accordingly.

Save

If you update any input field or section, always press “Save” before moving on.

# Input

Input tab is where you load your case data. There are two options for loading case data into the Smart Azure Calculator; manual or automated via imports. Watch these instructional demos: [https://youtu.be/ekYchf6\\_oRA](https://youtu.be/ekYchf6_oRA) and <https://youtu.be/Yw1nATcmF9o>.

Instant summary to assist data input.

Select the source of VM specification before adding.

Assign Purpose to VM(s) to estimate the best-matched Azure VM.

Delete row.

Automatically import Azure Migrate Excel output files.

For 'Configure' source, specify the VM size.

Select OS for the VM.

Save input for editing later.

Upon completing input, choose to insert or update all into VM grid.

Storage Input Summary; manually filled or Imported.

Click imported filename to re-open import screen (see next page).

When Import is initiated, an import Validation screen opens (see next page).

Overview of data input, grouped over KPIs, to quickly understand current infrastructure dynamics.

Purpose	Instance	# VM	Core/VM	GBRAM/VM	Operating System	Source
Dynamics AX	AX_Production	3	8	32	AHB-Windows	Configure
Remote Desktop	RDS	5	4	32	PAYG-Windows	Configure
SQL Enterprise	EI6ds v4	1	16	128	PAYG-Windows	Azure VM
Heavy ERP Apps	n1-standard-4	1	4	15	PAYG-RHEL	Google VM
Batch Processing	m6gd2xlarge	1	8	32	BYOL-Linux	Amazon EC2

Use this quick summary to guide your Compute input.

Windows: 9 VM / 60 vCore / 384 GB | Linux: 2 VM / 12 vCore / 47 GB  
 GBRAM per VM (Windows): 42.7 | GBRAM per VM (Linux): 23.5 | GBRAM/Core ratio: 6.0

Source dropdown: Azure VM, Amazon EC2, Azure VM, Configure, Google VM

Buttons: Import from file, Add, Save, Insert, Update All

Import

Azure Server Assessment

Choose file

Browse

1080VMs...All DCs (1).xls

Import

Number of reported VMs	1066
Number of vCores in use (VM)	1,796
Number of GBRAM in use (VM)	17,879
Number of GBRAM in use per VM (Windows)	16.1
Number of GBRAM in use per VM (Linux)	17.1
GBRAM/Core ratio - VM in use	10.0

Storage

	Primary	Backup	
Total Storage in use (TB)	TB 1082	TB 2000	3082 TB
Percentage on SSD	% 7.2		

# Import Validation

Once Import is initiated, the App opens the Import Validation screen. Here you can select the scope of business case based on the Azure VM readiness. The important step is to define as much as possible the Purpose of all VMs and VM groups.

**Select data import options**

**Azure VM readiness**

- Ready for Azure
- Ready for Azure with Conditions
- Unknown Readiness
- Not Ready For Azure

Select the set of VMs to include in business case.

Review the details of the original and recommended VM sizing.

Indication of the monthly Azure VM cost.

**Aggregate VMs**

Original sizing

Recommended sizing

	Total VM	Total Core	Total GBRAM	GBRAM/Core	Azure Consumption Estimate (VM only)
Original sizing	1,066	4,355	17,879	4.1	USD 203,931
Recommended sizing	1,066	3,085	9,791	3.2	USD 128,833
Relative differences		29%	45%		

Use the available filters to further verify and complete VM Purpose setup.

Select which data set you will use to continue to build the business case. We advise to take the Original sizing because the Right Sizing effort in later steps within the App will be better understood by the customer.

Search for VM(s) by keywords.

Select all or some records, choose the Purpose value to update to and click save.

Repeat as necessary for next groups.

Aggregated storage volumes for Primary Storage based on Import options.

After Submit, return to Input page to review Customer cost.

Machine:

Operating System:

Update:

VM Series:

Purpose:

Displaying 1 - 10 of 26 records

Machine	Purpose	Operating System	VM Series	GBRAM	Core	# VM
<input checked="" type="checkbox"/> PR-SQLD-003	SQL Standard	Microsoft Windows Server 2012 (64-bit)	Ev3	128	12	1
<input checked="" type="checkbox"/> PR-SQLD-007	SQL Standard	Microsoft Windows Server 2016 (64-bit)	Dv3	16	4	1
<input checked="" type="checkbox"/> DV-SQLD-001	Non-production	Microsoft Windows Server 2012 (64-bit)	Fsv2	8	4	1
<input checked="" type="checkbox"/> PR-SQLD-008	SQL Standard	Microsoft Windows Server 2016 (64-bit)	Dv3	64	16	1

**Storage**

Total Primary Storage: 1,082 TB

Percentage on SSD: 7%

# Input - Customer Benchmark Cost

Based on the Input variables, the App estimates the Benchmark cost for an infrastructure of the same size running in a legacy hosting environment. The benchmark calculation is built from data set of more than 800 Azure migrate viability studies. Going forward, the benchmark cost estimate will be referred to as "Customer Cost" and shall become your guide in building a competitive business case and prompting the customer to share his real cost levels to get an even more valuable Output.

Estimated Cost Structure	Currency	
Network	USD	17,342
DC/Co-location	USD	32,758
Total all-in FTE costs per month	USD	40,466
Primary Storage	USD	51,508
Auxiliary Storage	USD	26,400
Compute	USD	38,539
WinOS & HypVisor licenses	USD	32,758
Linux licenses	USD	0
Compliance audit	USD	0
Application Licenses	USD	0
<b>Total monthly estimated infra-cost</b>	<b>USD</b>	<b>239,771</b>

Reset all fields back to zero. Reset Save

Monthly benchmark cost is calculated for key cost types. All fields are editable in case the customer is willing to share his actual costs, to make the business case more relevant.

Add the monthly audit cost if applicable.

Application license costs are added here as soon they are entered in the Application TABs, such as Azure SQL, WVD, BC or D365.

Turn off if you are not interested in comparing Azure cost evaluations against Customer Cost.

Customer Benchmark cost

Estimated cost to run above sized infrastructure in a legacy hosting environment		
Total GBRAM to be replaced	multiplier 1.4	25,031 GB
Depreciation Period (months)	48	
Compute cost per month	USD 38,540	
Storage cost per month	USD 77,908	

If the Customer is still running v2008 or Win7 workloads, fill in the details and calculated ESU cost will be added to Customer Cost.

End-of-support programs (v2008 and Windows 7)			
<p>Input Extended Security Updates (ESU) information so that applicable ESU cost are added to Estimated Cost to compare against ACE comparably (ESU are free after migrated to Azure).</p>			
Windows Server v2008		SQL Server v2008	
Date to start with ESU	01-Jan-2021	Date to start with ESU	01-Jan-2021
# WinSvrSTD Licenses	0	SQL Enterprise Server v2008	SQL Standard Server v2008

# Migration (IaaS) - Pricing variables and adjustments

In this step, the cost comparison is built between the monthly estimated Customer Cost and Azure Cost, assuming the customer's workloads are already running on an Azure infrastructure today with the same size and utilization, in terms of CPU/Cores and RAMs, without any of Azure benefits: the so-called "lift and shift" scenario.

In this table, you can adjust the applicable costs, via the Input column.

Pricing Variables	Input	Adjusted
CSP Margin or EA Discount	% 15	8%
CSP Partner Incentive	% 10	10%
Reserved Instance Discount	% 5	5%
Percentage of Azure variable costs	% 15	
Percentage of current infrastructure with multi-tenancy		0%

If you are working an end-customer case and want to make a margin on your Azure offering, manage within this table. All the presented graphs in the App will include the margin set here. 'Sharing' discount or incentive means the percentage of your CSP/EA discount and/or incentive you leave for your customer. The end-customer margins appear in the 'Adjusted' column in the first table.

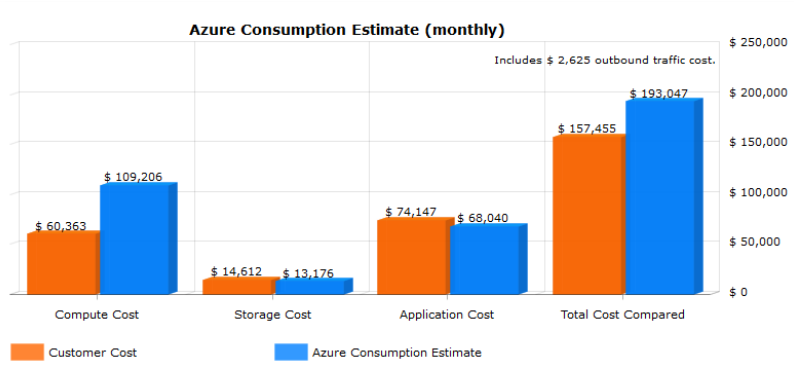
End-Customer Pricing Variables	
Managed Service Margin	% 10
CSP discount to share with customer	% 8
CSP incentive to share with customer	% 10

The total absolute and relative margin you have built into the Azure consumption estimate you present to the customer.

Current Indirect Cost Distribution	
Compute Cost	% 77 <input type="button" value="Save"/>
Storage cost	23%

You can influence the calculated Customer Indirect cost distribution over Compute and Storage cost.

Partner Margin for End-Customer	Currency	
Absolute margin per month	USD	27,592
Relative margin		12.3%



In the Azure Consumption Estimate (ACE) Comparison graph, the monthly ACE is presented compared with the monthly current Customer Cost. The Azure estimate displays the end-customer net price, including shared discount/incentives, along with your service margin, if added.



# Migration (IaaS) - The VM Grid

In this section you manage the mixture of VMs you want to build the comparison with. Azure VM series differs based on GBRAM/Core ratios and price. The VM Grid is filled with a mixture of VMs based on the Input. Building the right mix of VMs can bring big savings.

Total GBRAM from VM grid

VM Grid: Windows: 4,684 / 4,684 GB | Linux: 3,888 / 3,888 GB

Customer's Windows and Linux GBRAM

Add VM lines as applicable in respective VM Category.

VM grid contain records derived automatically from Input. Review and edit VM grid records as applicable.

Purpose	GBRAM	VM Series	VM Cost	Operating System	OS Cost	ACE
General Purpose	3,524 GB		USD 40,431	Windows	USD 30,997	USD 71,429
SQL Enterprise	2756	Dv3	USD 31,620	PAYG-Windows	USD 24,242	USD 55,862
Remote Desktop	256	Dv3	USD 2,937	PAYG-CentOS/Ubuntu	USD 0	USD 2,937

You can split and detail to every workload/purpose as needed. For example, SQL Enterprise workload can be split into 3 lines, total number of GBRAM remains the same (2,756 GBRAM) but by selecting better suited VM series and be smart in sourcing Operating System, the ACE for SQL Enterprise environments can drop by USD 17,666 or 32%.

Purpose	GBRAM	VM Series	VM Cost	Operating System	OS Cost	ACE
General Purpose	2,756 GB		USD 27,334	Windows	USD 10,862	USD 38,196
SQL Enterprise	1000	Dv3	USD 10,494	PAYG-Windows	USD 8,045	USD 20,148
SQL Enterprise	1000	Dv3	USD 10,494	Sub-1Y Windows	USD 767	USD 11,261
SQL Enterprise	756	Bms	USD 6,347	Sub-3Y Windows	USD 441	USD 6,788

SQL-Location B

Non-Specified

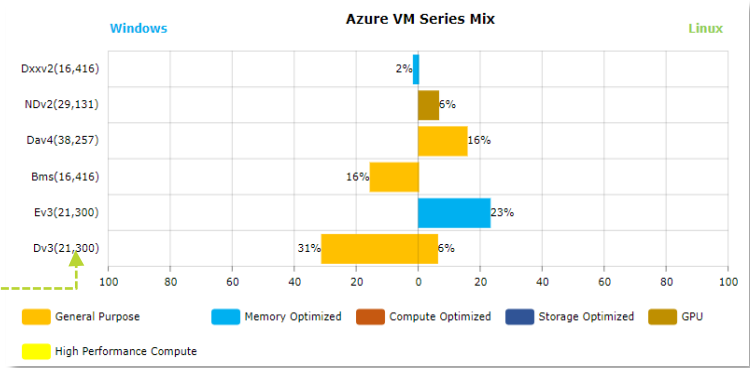
1000 Dv3

Enter Purpose

SQL-Location C

Create custom Purpose 'labels' to detail each VM infrastructure.

Understand CPU benchmark rating of each VM-series as a guide to configuring VMs.



PAYG-SUSE-Prio

USD 22,995

Core/VM: 3

# VM: 210

Estimate Windows Subscription and Other Linux (RH, SUSE, Ubuntu Advantage) OS Costs based on number of Core/VM and # VM.

# Migration (IaaS) - Storage, ASR and Network

In this part, you manage the setup of the comparable Azure Primary storage, the mixture of SAS and SSD as well as the configuration of the Backup storage. ASR or outbound traffic could come up as a significant cost if they are sizeable.

Weighted Primary Storage usage allocation		Total Primary Storage: 1082 TB	
HDD (SaaS/SATA)			93%
SSD			7%

Select your SSD Primary Storage mix	Price per GB	Percentage allocated
LRS Snapshots		<input type="button" value="Add SSD"/> <input type="button" value="Remove"/>
<input type="checkbox"/> Standard SSD 32 GiB - 4 TiB	USD 0.069798	% 30
<input type="checkbox"/> Premium SSD 4 - 16 GiB	USD 0.195000	% 30
<input type="checkbox"/> Premium SSD snapshots on Std SSD	USD 0.050000	% 20
<input type="checkbox"/> Ultra Disks	USD 0.156618	% 5
<input type="checkbox"/> LRS Snapshots	USD 0.145000	% 15

Weighted Backup storage		Total Backup Storage: 2000 TB	
Block Blob Premium	% 0	LRS	USD 0.000000
Block Blob Hot	% 30	LRS	USD 0.005880
Block Blob Cool	% 40	GRS	USD 0.008000
Block Blob Archive	% 30	GRS	USD 0.000837

The Storage section starts with the representation of the Primary Storage Mix. You can adjust the mix of Primary SSD using 'Price per GB' as a guide. 'Price per GB' includes applicable discounts/margins.

If backup storage size exceeds multiple times of primary storage total, it makes sense to mix storage over Cool and Archive.

Input current number of VMs under DR and the number of VMs that truly need to be protected under ASR, relevant ASR cost is added to ACE.

Azure Site Recovery	
Number of VMs currently under DR	50
Number of VMs covered with ASR	30

Specify the public outbound traffic in terms of TB/month. Do not include the traffic routed via private networks or for backup synchronization.

It is advisable to request a special price if Outbound Traffic is above 500TB. Alternatively, consider Azure ExpressRoute to optimize the Outbound Traffic cost. Fill in the custom price per GB/month to re-calculate total Outbound Traffic cost accordingly.

Azure Outbound Traffic Cost	
Outbound traffic in terms of TB/month	TB 50
Extra cost for outbound traffic	USD 2,625
Custom price per GB/month	USD 0.000

# Optimization (IaaS) - Right Sizing

In this section, the effects of the true consumption model of Azure are visualized. Pay for what you use is making the big difference in current hosting pricing models. (Pro)Active monitoring, analyzing workloads and better utilization of an Azure infrastructure should pay off. For more background on Optimization, watch this video <https://youtu.be/PhGQvOwEgWE>. For more details about Right Sizing, you can read in the Blog <https://bit.ly/2UU9iAs>.

The App is giving you two suggestions for Right Sizing. The first one is the difference between the processor performance of the current aged infrastructure compared with selected Azure VMs. If the Input comes from Azure Migrate, the Right Sizing suggestion between Original Sizing and Recommended sizing (see page 6) is listed here.

**Benefits on Right Sizing** Azure Migrate Right Sizing Recommendation: Core 29% | GBRAM 45% Right Sizing: 20% / 64%

Purpose	GBRAM	VM Series	Operating System	ACE	ACE (Rs)	GBRAM (Rs)	Right Sizing %
General Purpose	8,432 GB			USD 134,547	USD 106,330	1,316 GB	20%
Non-Specified	30	Bs	PAYG-CentOS/Ubuntu	USD 294	USD 233	GB 24	% 21
Non-Specified	48	D4v4	PAYG-SUSE+24x7	USD 783	USD 642	GB 39	% 18
Non-Specified	4	Bs	PAYG-RHEL	USD 127	USD 114	GB 4	% 10

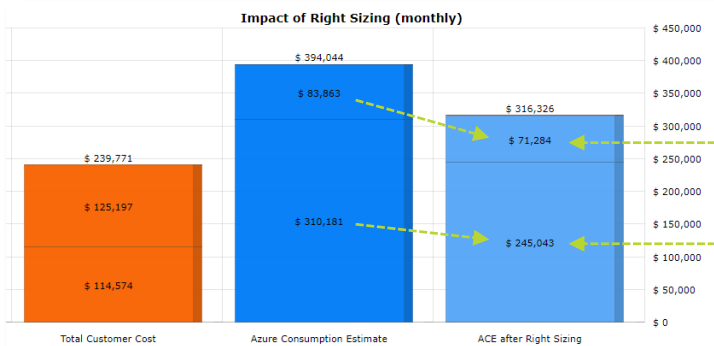
**Right Sizing storage usage when migrating to Azure**

Right Sizing Effect on Primary Storage during migration:  %

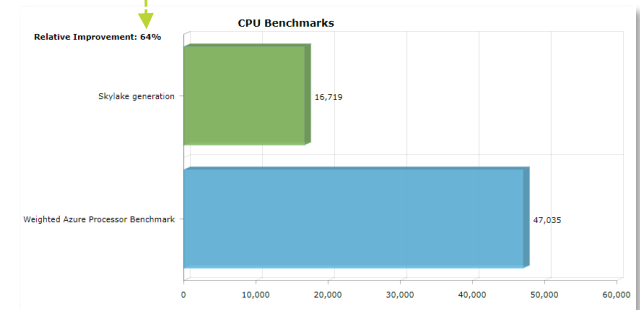
Compression ratio of Back-up Storage during migration:  %

Migrating storage always provide the opportunity to improve storage usage.

Based on the suggestions made, your own judgment or Customer's Input, you estimate the potential cost saving of Right Sizing.



The effect of Compute and Storage Right Sizing are visualized in terms of monthly cost savings.



Values from bottom to top represents Compute, Storage, Application and \*Miscellaneous costs  
 \* Miscellaneous consists of Compliance audit cost in Total Customer Cost and Networking cost in ACE

# Optimization (IaaS) - Snoozing

The next Optimization step is snoozing; achieving savings by switching off unused VMs for a given period. Typically, VMs qualifying for snoozing are all non-production environments for development, testing or internal systems etc. Furthermore, there is always the hidden potential of VM that a customer doesn't use during nighttime or weekends and load-balanced VMs etc. Snoozing is free of charge and can save a lot of money.

Based on purpose setup in VM Grid, the App is calculating the potential of snoozing VMs. You set the snoozing % or monthly hours for each VM-line to include this benefit in ACE calculations.

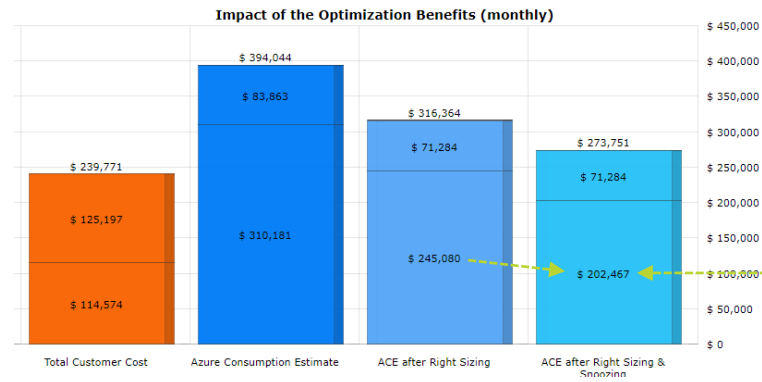
Benefits on Snoozing Snoozing: 5% / 43%

Purpose	GBRAM (RS)	VM Series	Operating System	ACE (RS)	ACE (RS+Snoz)	Monthly Hours	Snoozing %
General Purpose	6,663 GB			USD 106,330	USD 63,667	7,139 Hours	11%
Non-Specified	4	Bs	PAYG-RHEL	USD 114	USD 105	Hours: 672	%: 8
Non-Specified	39	Dav4	PAYG-SUSE+24x7	USD 642	USD 629	Hours: 715	%: 2
Non-Specified	24	Bs	PAYG-CentOS/Ubuntu	USD 233	USD 205	Hours: 642	%: 12

You set the snoozing % or monthly hours for each VM-line to include this benefit in ACE calculations.

Partner Margin after Right Sizing and Snoozing	
Absolute margin per month (Right Sizing & Snoozing)	USD 16,234
Relative margin (Right Sizing & Snoozing)	21%

The effect of these two benefits is that the Azure consumption will drop significantly. Relative partner margin will not drop, however, in absolute term, it will. In this table, the effect of that drop in absolute margin is visualized.



The benefits of snoozing on the monthly Compute cost visualized.

Values from bottom to top represents Compute, Storage, Application and \*Miscellaneous costs  
 \* Miscellaneous consists of Compliance audit cost in Total Customer Cost and Networking cost in ACE

# Optimization (IaaS) - Reserved Instances

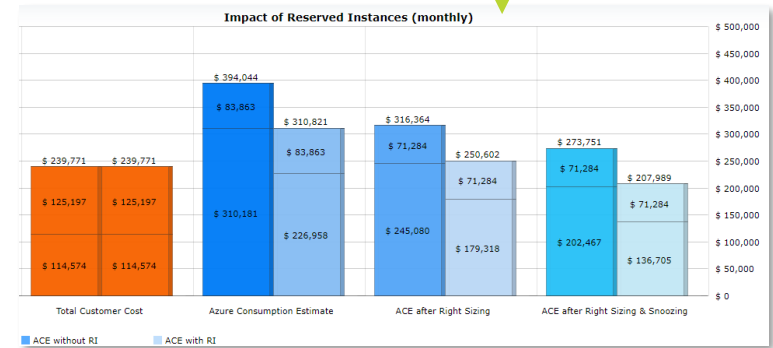
The last Optimization step is about Reserved Instances. Microsoft is giving the possibility to pay upfront for Azure consumption of selected VM types, giving substantial discounts if your customer is committing to consume VM-series volumes for one or three years.

In this table, with the VMs selected, you can allocate 1Y or 3Y Reserved Instances to commit for each VM and understand the commitment cost.

Allocation of Reserved Instances								
Purpose	GBRAM (RS)	VM Series	Operating System	ACE (RS+Snz)	RI Type	RI Prepay	ACE with RI (RS+Snz)	
Remote Desktop	218	Dv3	PAYG-CentOS/Ubuntu	USD 2,283	RI 1Y	USD 22,110	USD 1,843	
SQL Enterprise	2,205	Dv3	PAYG-Windows	USD 40,875	Choose Type	USD 0	USD 40,875	
Pre-payment per category		RI 1Y	USD 194,350	RI 3Y	USD 1,101,368	Total pre-payment for all RI		USD 1,295,718

Review the commitment for the Reserved Instances.

In the graph, you review the effect of Reserved Instance (RI) on the monthly Azure consumption for the selected VMs, mouse-over each cost breakdown to understand the cost component.



Values from bottom to top represents Compute, Storage, Application and \*Miscellaneous costs  
 \* Miscellaneous consists of Compliance audit cost in Total Customer Cost and Networking cost in ACE

End-Customer Pricing Variables		
Managed Service Margin		10%
Azure discount when buying Reserved Instances		5%
Reserved Instances discount to share with customer	% 2	Save

CSP discounts are not applicable for Reserved Instances. For this, Microsoft is offering CSPs a RI-discount. Here you can define how much of that discount you want to pass over to customer. The Managed Service margin previously set is also applicable on the ACE calculations.

Partner Margin after all Azure benefits	Currency	
Absolute margin per month (with all Azure benefits)	USD	2,497
Relative margin (with all Azure benefits)		13.6%
Upfront absolute margin for Reserved Instances	USD	16,516

If the Azure consumption is dropping due to the Reserved Instances, then margin is dropping as well and visualized in this table. At the bottom of the table, the upfront absolute margin on committed VMs is calculated, if applicable.

# Modernization (PaaS) and SaaS

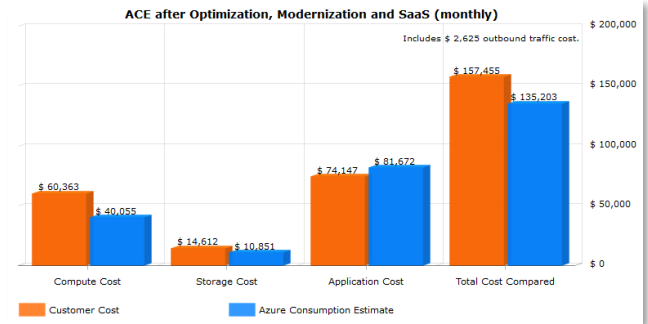
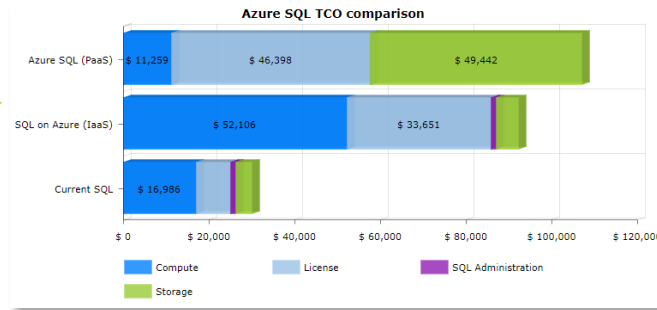
In these two TABs, you will get the chance of going beyond the advanced hosting capabilities of Azure by investigating the potential benefits of introducing the Modernization and SaaS offerings available on Azure. The structure of each Application TAB are consistent with key sections, we shall explain using the Azure SQL as an example.

You start by evaluating and adjusting the Azure IaaS solution, before building the PaaS and/or SaaS options.

After configuring all the options, you will review the impact not only in the total TCO impact, breakdown by cost category per option. This will allow a deeper understanding of the cost differences in price build-up, which, in turn, provide new insights to further fine-tune costs and/or margins.

At the last section of each TAB, add the missing information about the current environment with respect to SQL environments. This is essential to calculate the potential added value of Azure SQL.

Collected information about SQL		
	SQL Enterprise	SQL Standard
# SQL Servers	4	3
Total Primary storage in use	80	20
Total Backup storage in use	120	30
SQL monthly license cost	USD 7,200	USD 750
SQL Administration	USD 1,200	
# SQL Enterprise servers in high-availability mode	0	
# SQL Standard databases in use		200



	Current SQL	SQL on Azure (IaaS)	Azure SQL (PaaS)
Compute	USD 16,986	USD 52,106	USD 11,259
License	USD 7,950	USD 33,651	USD 46,398
SQL Administration	USD 1,200	USD 1,200	
Storage	USD 3,834	USD 5,155	USD 49,442
<b>Total</b>	<b>USD 29,969</b>	<b>USD 92,111</b>	<b>USD 107,099</b>
RI Commitment (SQL on Azure)	USD 229,698	RI Commitment (Azure SQL)	USD 405,328

After configuration of the PaaS or SaaS solution, you must select which option you want to carry forward with the overall TCO analysis.

Once you save an option, the totals of the different cost categories are adjusted. The ACE graph gives a summary of TCO analysis per cost category. The absolute and relative margin estimates are also presented.

Partner Margin for SQL		Currency
Absolute margin per month (with SQL only)		USD 5,577
Absolute margin per month (with all Azure benefits and SQL)		USD 19,286
Relative margin		0.4%

Relevant RI Commitment for SQL VMs and Azure SQL is displayed.

# Azure SQL (PaaS) - SQL on Azure (IaaS)

Azure SQL Database is the intelligent, scalable, cloud database server managed by Microsoft. It is an alternative for managing your own SQL Servers and databases either on-premise or on Azure. Here you analyze the TCO effect of the different options to run your SQL databases. For a demo of this functionality, watch: <https://youtu.be/H9Mb7COtNXY>.

Check and tune the SQL on Azure configuration. If necessary, go back to the VM Grid to adjust. You can also select the sourcing of SQL licenses.

SQL on Azure (IaaS)						
SQL Compute						
Purpose	GBRAM (RS)	VM Series	VM Cost	Operating System	OS Cost	Compute Cost
SQL Enterprise	218	Dxxv2	USD 1,808	PAYG-Windows	USD 847	USD 2,655
SQL Standard_Dyn	1,537	Ev3	USD 9,454	PAYG-RHEL	USD 302	USD 9,757
Total SQL Compute Cost						USD 12,412
Current Customer SQL Compute Cost						USD 44,619
SQL License						
Purpose	VM Series	Constrain Factor	# of Core	SQL License	License Cost	
SQL Enterprise	Dxxv2	0	32	PAYG-SQL Ent	USD 6,570	
SQL Standard_Dyn	EXT_Ev3	4	50	PAYG-SQL Std	USD 2,738	
Total SQL License Cost						USD 9,308
Current Customer SQL License Cost						USD 7,950

In SQL Storage, the prices of SQL storage are specified based on inputted SQL sizing.

Estimated current Customer Costs are made available to facilitate evaluation of cost differences.

SQL Storage		Storage Cost
Primary Storage - SQL Enterprise/Standard		USD 3,364
Backup Storage - Enterprise/Standard		USD 1,791
Total SQL Storage Cost		USD 5,155
Current Customer SQL Storage Cost		USD 3,388
Total SQL on Azure monthly infrastructure cost		USD 68,150
Total Current Customer SQL monthly infrastructure cost		USD 27,908

Eligible Memory Optimized VMs can be setup as Extreme Memory Optimized VMs to constrain to lower active vCPU(s).

Optimize SQL License Cost according to available core constrain factor of 2 or 4.

Review current customer's SQL Administration cost and adjust as applicable for managing SQL servers on Azure.

SQL Administration			
SQL Administration Cost	USD	1,200	Save

# Azure SQL (PaaS) - Azure SQL (PaaS)

Azure SQL Database have two purchasing models. One is based on the underlying number of Cores of the compute tier, the other is based on Database Transaction Unit (DTU) with bundled compute and storage for common workloads. By default, the App lands SQL Enterprise capacity in vCore and SQL Standard in DTU. In this TAB, you find a comprehensive UI, including all Azure SQL configuration options and conditions, to fine tune the most optimal Azure on SQL configuration.

The number of cores is based Standard/Enterprise VMs found in the SQL License table above. Adjust to arrive at the ideal configuration as desired.

The number of Assigned GBRAM is related to the Cores via a fixed factor.

Choose SQL license option and input SQL License Cost in case of BYOL.

Add Azure SQL records for relevant purchasing model to detail the suitable mix for SQL.

Choose the vCore service tier.

SQL storage volumes as specified by customer, adjust as appropriate.

Managed Instance backup defaults to read-access geo-redundant storage (RA-GRS). Tune the Backup and Long Term Retention (LTR) options as required if you are not going with managed.

Select single database or elastic pool with its service level.

DTU can be estimated from total SQL cores. As a guide, multiply # of Core by 75 (Basic), 100 (Standard) or 125 (Premium) to arrive at DTU total. Adjust the number of DTUs if you work with other factors.

Different DTUs comes with their included storage and maximum available storage. If your DTU configurations involves high storage volume, be mindful of the included storage for your DTU sizing and maximum available storage and deduct included storage from your storage requirements to arrive at a more realistic Storage Cost.

The screenshot displays the Azure SQL (PaaS) configuration page, divided into two main sections: 'Purchase model based on vCore' and 'Purchase model based on DTU'.

**Purchase model based on vCore:**

- Summary: # of Core (SQL Enterprise): 34 | # of Core (SQL Standard): 39
- Table: vCore SQL Compute and License
 

vCore Option	Number of Cores	GBRAM Assigned	SQL License	RI Type	RI Prepay	Compute Cost	License Cost	
BC-Gen 5	34	173	BYOL	BC 3Y	USD 146,608	USD 5,704	USD 7,756	
Total SQL Compute and License - vCore						USD 146,608	USD 5,704	USD 7,756
- Table: vCore SQL Storage
 

vCore Option	Primary Storage	Backup Storage	Backup Zone	LTR %	Retention Zone	Storage Cost
BC-Gen 5	GB 80,000	GB 120,000	RA-GRS	% 20	RA-GRS	USD 44,823
Total SQL Storage - vCore						USD 44,823
Total Azure SQL monthly cost - vCore						USD 58,283

**Purchase model based on DTU:**

- Table: DTU SQL License and Storage
 

DTU Option	Number of DTUs	Storage Service	Storage	LTR %	Retention Zone	License Cost	Storage Cost
Single-Standard	39,100	Standard	GB 20,000	% 20	RA-GRS	USD 47,959	USD 4,916
Total Azure SQL (PaaS) - DTU						USD 47,959	USD 4,916
Total Azure SQL monthly cost - DTU						USD 52,875	
Total Azure SQL (PaaS) cost						USD 111,158	

If you want to better understand how Azure SQL Database works and configures, read <https://docs.microsoft.com/en-us/azure/sql-database/>.



# Windows Virtual Desktop

Windows Virtual Desktop is a comprehensive desktop and app virtualization service running on Azure. It is an alternative for managing your own Remote Desktop Servers and databases either on-premise or on Azure. In this TAB, you analyze the TCO effect of the different options to achieve your existing Remote Desktop requirements translated into a WVD solution. For a demo of this functionality, watch [https://youtu.be/CoDU\\_zkWSI4](https://youtu.be/CoDU_zkWSI4).

For Windows VM-series selected for the WVD infrastructure, its Windows OS license comes for free(select PAYG-Windows OS in VM grid). Snoozing benefits and Reserved instances are applicable for WVD infrastructure.

Verify the Remote App or Remote Desktop on Azure configuration. If necessary, go back to the VM Grid to adjust.

In the last section of TAB, enter information about current Remote Desktop environment for useful calculations.

Collected information about Remote Desktop	
	<b>Remote Desktop</b>
Number of Remote Desktop servers	22
Number of Remote Desktop users	600
Monthly RDS license cost	USD 3,000
Monthly Citrix/VMWare cost	USD 6,600

Remote Desktop on Azure (IaaS and PaaS)						
Purpose	GBRAM (RS)	VM Series	VM Cost	Operating System	OS Cost	Compute Cost
Remote App	2,343	Dv3	USD 14,090	PAYG-Windows	USD 18,847	USD 32,937
Remote Desktop	653	Dv3	USD 6,850	PAYG-Windows	USD 5,252	USD 53
Total Remote Desktop on Azure (PaaS) monthly compute cost			USD 20,941	Total Remote Desktop on Azure (IaaS) monthly compute cost		USD 32,937
Total Current Customer Remote Desktop monthly compute cost			USD 23,004			

Estimated current customer cost are made available to facilitate evaluation of cost differences. ESU Win7 cost are included in current cost if applicable.

Total Users for Office and Non-Office configuration

Customer's Remote Desktop and Office Users

By default, the App lands non-Office Remote Desktop users into Windows 10 Enterprise E3 and Office users into Microsoft 365 Business licenses. Citrix Products are defaulted as 0. Edit as applicable.

Windows Virtual Desktop Software				
		Non-Office User: 825 / 725   Office User: 300 / 300		<input type="button" value="Add"/>
# Users	User Type	Windows Virtual Desktop License	License Cost	
725	Non-Office	Windows 10 Enterprise E3	USD 5,742	
300	Office	Microsoft 365 Business	USD 6,806	
0	Citrix Products	Citrix Managed Desktops Service	USD 0	
100	Non-Office	BYOL-Windows OS	USD 500	
Total 1,125 Users		Total Windows Virtual Desktop monthly license cost		USD 13,048
		Total Current Customer Remote Desktop monthly license cost		USD 20,823

Select the desired WVD license.

Add WVD records to detail the suitable mix for overall WVD needs.

Input the total BYOL cost in License Cost if you have BYOL Licenses.

Included in WVD pricing is RD Gateway, Broker Session, Host, Database. To level the cost comparison, it is recommended to reduce the WVD Compute Cost. Recommended default is 11% reduction on WVD Compute cost. If applicable, update your estimated percentage reduction on WVD Compute cost.

Windows Virtual Desktop parity	
Correction on WVD PaaS Compute cost	% 11

# Business Central - NAV/GP on Azure (IaaS)

Business Central is a business management solution for small and mid-sized organizations that automates and streamlines business processes and helps you manage your business. For a demo of this functionality, watch: <https://youtu.be/EOOmXOt6F1k>.

Check and tune the NAV/GP on Azure configuration. If necessary, go back to the VM Grid to adjust. You can also select the sourcing of SQL licenses for NAV/GP SQL VMs.

Review the Current NAV/GP monthly cost spread over the Depreciation period as provided by Customer's input.

NAV/GP Compute						
Purpose	GBRAM (Rs)	VM Series	VM Cost	Operating System	OS Cost	Compute Cost
Access & Identify_Dyn	256	Dv3	USD 2,686	PAYG-RH+Ent-SAP BizApp	USD 13	USD 2,700
Internal Systems_Dyn	512	ArmV2	USD 2,914	PAYG-SUSE-HPC Std	USD 8	USD 2,922
Non-production_Dyn	512	ArmV2	USD 2,914	PAYG-RH+Ent	USD 168	USD 3,072
SQL Standard_Dyn	1840	Ev3	USD 12,914	PAYG-SUSE-Prio	USD 40,880	USD 53,794
Total NAV/GP Compute Cost						USD 62,488
Current Customer NAV/GP Compute Cost						USD 20,320
SQL License						License Cost
Purpose	VM Series	Constrain Factor	# of Core	SQL License	License Cost	
SQL Standard_Dyn	EXT_Ev3	2	108	PAYG-SQL Std	USD 12,376	
Total NAV/GP SQL License cost						USD 12,376
Current Customer NAV/GP SQL License cost						USD 750
Total NAV/GP on Azure monthly infrastructure cost						USD 74,864
Total Current Customer NAV/GP monthly infrastructure cost						USD 21,070

Current NAV/GP Software	
NAV/GP software and licenses	USD 2,083
Third party software (including embedded ISV software)	USD 417
Maintenance cost on NAV/GP and Third party software	USD 4,167
Implementation and customisation	USD 1,417
Functional Support and Incident Management	USD 1,200
<b>Current NAV/GP software related monthly cost</b>	<b>USD 9,283</b>

Current Customer SQL license cost for NAV/GP is approximated based on Customer's input for SQL Standard. Adjust the SQL license cost for Current Customer's NAV/GP infrastructure as applicable.

Eligible Memory Optimized VMs can be setup as Extreme Memory Optimized VMs to constrain to lower active vCPU(s).

Optimize SQL License Cost according to available core constrain factor of 2 or 4.

If you are working an end-customer case and want to make a margin on your Business Central offering, manage within this End-Customer pricing variables table.

End-Customer Pricing variables	
CSP Margin on Business Central licenses	% 15
CSP Margin on Business Central licenses to share with customer	% 15
Managed Service Margin on Business Central licenses	% 0

# Business Central - on-premises vs cloud

Business Central offers on-premises and online solutions. Compare on-premises costing against cloud solution to determine which solution is financially viable for each case.

Based on customer input, Essentials or Premium price plan is defaulted. Adjust as required.

Input extra named users for Full User and Team Member as required.

Add records to detail the suitable mix for each solution for comparison.

Based on customer input, Essentials or Premium price plan is selected. Adjust as required.

Input extra named users for Full User and Team Member as required.

Converted users are calculated based on existing concurrent full users multiplied by 3. Microsoft is offering this migration benefit to convert 1 concurrent user to 3 named users.

Dynamics 365 Business Central on Azure (IaaS)

Dynamics 365 Business Central on-premises user subscriptions on Azure

Dynamics 365 Business Central Plan	Premium	Converted User	Extra User	Monthly Cost
Full user		48	5	USD 275
Team member		24	10	USD 568

Dynamics 365 Business Central on-premises add-ons on Azure

Dynamics 365 Business Central on-premises option	Type	Unit	Monthly Cost
Dyn365 Business Central Application Builder	User	5	USD 632
Dyn365 Business Central Solution Developer	User	2	USD 884

Non-embedded third party software cost: USD 417

Business Central maintenance cost: USD 4,167

Functional Support and Incident Management on-premises cost: USD 1,200

Migration cost from NAV/GP to Dynamics 365 Business Central on-premises: Total migration: USD 150,000

Total Dynamics 365 Business Central on Azure monthly license cost: USD 10,643

Upfront investment for Dynamics 365 Business Central on-premises licenses: USD 141,540

Dynamics 365 Business Central cloud

Dynamics 365 Business Central cloud user subscriptions

Dynamics 365 Business Central Plan	Premium	Converted User	Extra User	Monthly Cost
Full user		48	5	USD 1552
Team member		24	10	USD 1705

Dynamics 365 Business Central cloud add-ons

Dynamics 365 Business Central cloud option	Type	Unit	Monthly Cost
Microsoft PowerApps Plan 2	User	1	USD 38
Flow per business process plan	User	1	USD 95

Non-embedded third party software cost: USD 417

Change and Release management (One Version): USD 0

Functional Support and Incident Management on cloud: USD 1,200

Migration cost from NAV/GP to Business Central cloud: Total migration: USD 150,000

Total Dynamics 365 Business Central cloud monthly cost: USD 7,507

Planned date of migration to Business Central: 01-Mar-2020

Microsoft benefit on Dynamics 365 Business Central cloud licenses: USD 41,130

Monthly cost are calculated based customer inputs. Adjust the monthly cost as appropriate to arrive at a suitable configuration.

# Dynamics 365 - AX/CRM on Azure (IaaS)

Dynamics 365 revolutionizes CRM and ERP by applying intelligence to all forms of data. Dynamics 365 is the world's connected business cloud designed to help you better understand your business, develop and execute tactics/strategies to be successful. For a demo of this functionality, watch <https://youtu.be/EOOmXOt6F1k>.

Check and tune the AX/CRM on Azure configuration. If necessary, go back to the VM Grid to adjust. You can also select the sourcing of SQL licenses for AX/CRM SQL VMs.

AX/CRM Compute						
Purpose	GBRAM (Rs)	VM Series	VM Cost	Operating System	OS Cost	Compute Cost
Access & Identify_Dyn	256	Dv3	USD 2,686	PAYG-RH-Ent-SAP BizApp	USD 13	USD 2,700
Dynamics AX	256	Dv3	USD 2,686	PAYG-SUSE-HPC Prio	USD 40	USD 2,726
Internal Systems_Dyn	512	Amv2	USD 2,914	PAYG-SUSE-HPC Std	USD 8	USD 2,922
Non-production_Dyn	512	Amv2	USD 2,914	PAYG-RH-Ent	USD 158	USD 3,072
SQL Standard_Dyn	1840	Ev3	USD 12,914	PAYG-SUSE-Prio	USD 40,880	USD 53,794
Total AX/CRM Compute cost						USD 65,214
Current Customer AX/CRM Compute cost						USD 20,320

SQL License					
Purpose	VM Series	Constrain Factor	# of Core	SQL License	License Cost
SQL Standard_Dyn	EXT_Ev3	2	108	PAYG-SQL Std	USD 12,376
Total AX/CRM SQL License cost					USD 22,304
Current Customer AX/CRM SQL License cost					USD 0

Eligible Memory Optimized VMs can be setup as Extreme Memory Optimized VMs to constrain to lower active vCPU(s).

Optimize SQL License Cost according to available core constrain factor of 2 or 4.

End-Customer Pricing variables	
CSP Margin on Dynamics 365 licenses	% 15
CSP Margin on Dynamics 365 licenses to share with customer	% 15
Managed Service Margin on Dynamics 365 licenses	% 0

Manage the margins on Dynamics 365 offering for end-customer case.

Review the Current CRM/AX monthly cost spread over the Depreciation period as provided by Customer's input.

Current AX/CRM Software			
	AX		CRM
AX software and licenses	USD 7,500	CRM software and licenses	USD 4,000
Third party software	USD 4,167	Third party software	USD 333
Maintenance cost on AX and Third party software	USD 4,167	Maintenance cost on CRM and Third party software	USD 4,167
Implementation and customisation	USD 1,333	Implementation and customisation	USD 2,000
Functional Support and Incident Management	USD 8,500	Functional Support and Incident Management	USD 1,200
<b>Current AX software related monthly cost</b>	<b>USD 25,667</b>	<b>Current CRM software related monthly cost</b>	<b>USD 11,700</b>

Estimated current customer costs are made available to enable evaluation of cost differences.

AX/CRM Storage		Storage Cost
Primary storage cost - AX/CRM		USD 2,018
Backup storage cost - AX/CRM		USD 2,383
Total AX/CRM Storage cost		USD 4,401
Current Customer AX/CRM Storage cost		USD 2,356
Total AX/CRM on Azure monthly infrastructure cost		USD 91,919
Total Current Customer AX/CRM monthly infrastructure cost		USD 22,676

Prices of AX/CRM Storage are specified based on inputted AX storage sizing.

Tick the applicable configuration(s) if they exists in current AX and/or CRM infrastructure to level with Dynamics 365 capabilities.

Business value parity	
Dynamics 365 has automatic fault tolerance configurations which represents high business value: "AlwaysOn" SQL cluster with an RPO of less than 5 seconds, GRS data storage, double infrastructure set-up and full disaster recovery. Base assumption is that current customer costs does not include below configurations. Tick the applicable configuration(s) if they exists in current AX and/or CRM infrastructure to level with Dynamics 365 capabilities.	
<input checked="" type="checkbox"/> AlwaysOn SQL cluster	<input type="checkbox"/> Geo-redundant data
<input type="checkbox"/> High-availability	<input type="checkbox"/> Full Disaster recovery

# Dynamics 365

Dynamics 365 combines enterprise resource planning (ERP) and customer relationship management (CRM) into one cloud-based solution for medium to large organizations.

The screenshot displays the Dynamics 365 configuration interface, showing a table of subscriptions and capacity costs. The table is organized into sections: Dynamics 365 Subscriptions, Dynamics 365 Capacity, Dynamics 365 Sandbox, and Dynamics 365 Add-ons. Each row includes a red 'X' icon, a dropdown menu for the subscription name, a 'Type' column, a 'Unit' column, and a 'Monthly Cost' column. A 'Save' button is located at the bottom right of the table. Below the table, there are several rows for additional costs, including 'Third party add-in software cost', 'Maintenance Cost', 'Functional Support and Incident management cost', 'Change and Release Management cost', 'Migration cost from AX/CRM to Dynamics 365', and 'Total Dynamics 365 monthly cost'. A 'Save' button is also present at the bottom right of this section.

Callout boxes provide additional information:

- User subscriptions are defaulted based on customer inputs. Edit as appropriate.
- Add record(s) for the Dynamics 365 areas and detail the desired mix as appropriate.
- Monthly costs are calculated based customer inputs. Adjust each cost as required to arrive at a suitable configuration.

Type	Unit	Monthly Cost
Dynamics 365 Subscriptions		
Dynamics 365 Plan	User	100 USD 15,517
Dynamics 365 Team Members	User	100 USD 633
Dynamics 365 for Sales Enterprise Device	Device	50 USD 5,740
Dynamics 365 Capacity		
Common Data Service File Capacity	GB	10 USD 21
Dynamics 365 Unified Operations - Database Capacity	GB	20 USD 844
Dynamics 365 Sandbox		
Dynamics 365 Plan - Unified Operations Sandbox Tier 1:Developer & Test Instance	instance	1 USD 314
Dev/Test instance - E4 v3 at 250 hours per month	instance	1 USD 84
Dynamics 365 Add-ons		
Dynamics 365 Unified Operations - Order Lines	User	10 USD 5,278
Dynamics 365 for Customer Service Chat	User	20 USD 1,267
Dynamics 365 for Field Service - Resource Scheduling Optimization	User	10 USD 238
Third party add-in software cost		USD 7800
Maintenance Cost		USD 8,333
Functional Support and Incident management cost		USD 9,700
Change and Release Management cost		USD 280
Migration cost from AX/CRM to Dynamics 365	Total Migration	USD 200,000 USD 3,333
Total Dynamics 365 monthly cost		USD 59,382

# Quality of Service

Making a choice for Azure is not only about money, the Quality of Services is important as well. In this section, a comparison is made between the Customer's SLA and the SLA of Azure. To understand how to sell better using Quality of Services, watch this: [https://youtu.be/curN2lg\\_Dbw](https://youtu.be/curN2lg_Dbw).

Fill in the Customer SLA details.

Quality of Services Aspects	CONTOSO	AZURE
<b>Availability guarantee</b>		
Uptime guarantees on the infrastructure	% 99.96	99.95% up to 99.99%
Max service credits pay out	% 0	20%
<b>Data Back-up</b>		
Back-up frequency to recovery vault per 24 hours	14	Up to 3
Back-up frequency to disk per 14 hours	1	15 minutes to one hour
Retention options	daily, weekly, monthly, yearly	daily, weekly, monthly, yearly
Guaranteed maximum retention period	1	Up to 99 years
Back-up data encrypted	Yes	Option, with AE256
<b>Disaster Recovery</b>		
Pricing policy for DR	USD 50	\$25 per VM protected
RPO and RTO guaranteed	RPO 1 hours, RTO 24 hours	Best RPO < 1 minute
<b>Data Security and Compliance</b>		
Two-factor authentication	No	Yes
Protection against identity fraud	Yes	Included
Current compliancy certifications	CSA, HIPAA	CDSA, GxP, ISO9001, 20000, 2301, 27001, 27018, MPAA, ISAE/SSAE, SOC1, SOC2, SOC3, WCAG plus many local ones
Audit Cost	USD 0	All Azure compliancy certificates included

Annual audit cost are updated to Customer Cost automatically for cost comparisons.

# Scenarios

Scenarios TAB offers the possibility to develop 3 financial migration scenarios to bring over your customer workloads to Azure. Scenarios provide insights on effects of migration speed on Cost developments overtime, additional cumulative cashflow and, if applicable, Microsoft Incentives (dependent on committed Azure consumption target). To understand the use and purpose of Scenarios, watch <https://youtu.be/XGlnlfzkPAU>.

In the first table of Scenarios, different variables for setting the scenarios are defined. We advise to base the first 2 scenarios on a migration effort by in-house staff, plus external expertise if needed, where rule of thumb is migrating maximum 100 VMs per month. Use Scenario 3 for a radical approach, by outsourcing migration to a specialized company, using tools in combination with a 'migration factory' in a low-cost setting with migration up to 1,000 VMs per month. For Scenario 3, the lead time before the migration project is longer than in Scenario 1 and 2.

Remaining bookvalues at the end of the DC contract	Scenario 1	Scenario 2	Scenario 3
Remaining network cost	50%	% 50	% 50
Remaining DC/Co-location cost	25%	% 25	% 25
Remaining staff costs after migration	50%	% 50	% 50
Remaining storage cost	25%	% 25	% 25
Remaining VM Server cost	25%	% 25	% 25

In the second table, adjust the variables that have to do with remaining liabilities and book values after the Datacenter contract ends, based on the depreciation period the customer is using and thinking smart about the remaining book-values.

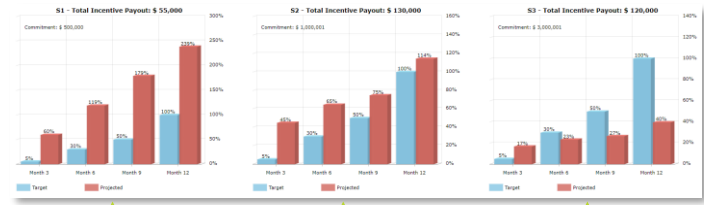
If the Azure cost are substantial lower than the Customer Cost, it could be more beneficial to close the current DC, pay a penalty and end with higher book values.

The migration cost variables are adjusted in the third table. In the first two lines, you can add external cost (per month) for training and/or support. Estimated migration cost is the cost of a migration engineer to move a VM with workload to Azure. USD 200 cost per VM is a market standard for in-house migration. Specialized migration companies offer prices for migrating VMs at USD 50 per VM or even lower.

In the fourth table, the Microsoft Incentive program variables can be managed, if applicable for your case. If unsure, check with your Microsoft rep. Azure Consumption Target is set on a trial-and-error basis.

Microsoft Migration Incentive program	Currency	Scenario 1	Scenario 2	Scenario 3
<b>Azure Migration Program (AMP)</b>				
Azure Consumption Target	USD	500,000	500,000	500,000
ECIF % of commitment		% 0	% 0	% 0
ECIF in USD based on Azure consumption	USD	0	0	0
<b>Datacenter Migration Program</b>				
Azure Consumption Target	USD	500,000	500,000	500,000
Percentage cash incentive if reaching 100% of the committed Azure amount	12%	12%	12%	12%
Cash incentive if reaching 100% of the committed amount	USD	60,000	60,000	60,000
Select the applicable Migration Incentive Program to apply for all scenarios				
<input type="checkbox"/> No Incentive Program <input type="checkbox"/> No Incentive Program <input checked="" type="checkbox"/> Azure Migration Program (AMP) <input type="checkbox"/> Datacenter Migration Program				

Adjust the values to understand incentive payout potential for available Azure Migration Program.



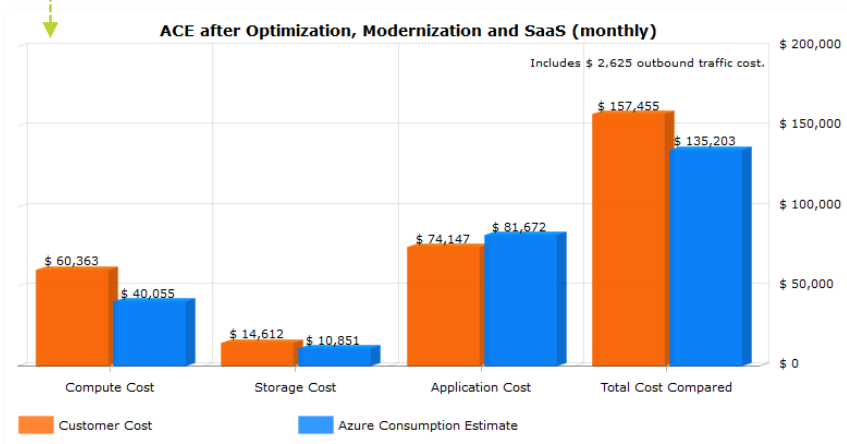
Select Datacenter Migration Program to generate Incentive Payout charts to visualize potential payout against targets.

In the last table, the results of 3 scenarios are summarized in terms of major KPIs. There can be up to 3 graphs per scenario to assist with visualizing your Scenario building - cost development, cumulative cash flow and lastly, incentive payout (as applicable).

# Output

In the Output section, you create the Customer Presentation, including graphs and tables supporting the price offer. The second Output file is a Word document with all the case details, settings, all graphs and all tables. The last document is an Internal Memo summarizing the case and defining the margins you will make in the case. To understand what you can do to improve your margin, watch this video: <https://youtu.be/ObkoCEowWx0>.

Review the final Azure Consumption Estimate Comparison graph after Optimization, Modernization and SaaS (as applicable). The latest margin information is also presented for overall review before you select your preferred output files.



Partner Margin after Optimization, Modernization and SaaS	Currency	
Absolute margin per month (with all Azure benefits and Applications)	USD	13,337
Relative margin (with all Azure benefits and Applications)		12.8%

Outputs of TCO Analysis

- Create TCO Presentation
- Create Word Document with all case details
- Create Internal Memo for deal approval

Download the Output files with the actual case data, graphs and tables, to build your presentation, quote or an internal memo for deal approval purposes.

The output files are generated in native format to make it easy to customize it to your specific needs.

## Customer Benchmark cost

If Customer Cost is not required, switch off the Customer Benchmark cost in the presentation to the Customer. The Customer Cost values will not be displayed.

Selling Azure Migrate requires another approach than legacy hosting offers. In this video we share our experiences and insights on how to be successful: <https://youtu.be/RtvRBgMrjc8>.





# Output - Competing with AWS

In many Azure Migrate cases, you must compete against AWS. We have run many compete cases and developed a couple of slides in the Customer Presentation which can help you in winning the deal.

**Volume of Windows GBRAM in use by Contoso complete case**

	Windows		
	#Server	#CPUs	#GBRAM
Virtual Machines	401	1,732	6,475
Physical Machines	0	0	0
	401	1,732	6,475

Average Windows PAYG license price per GBRAM: USD 6.50  
 Buying your Windows license via an EA or CSP can save you up to 90%: USD 0.65  
 \* Structural monthly saving on Windows PAYG licensing compared to AWS: USD 37,879

**Annual structural cost savings on Windows licensing compared to AWS: USD 454,545**  
**Structural cost saving on Windows licensing compared to AWS over 5 years: USD 2,272,725**

The App calculates the difference between Azure and AWS Windows server license costs based on all case data sets. For this, you must utilize Azure AHB benefits for Windows OS licenses. You can select 'AHB-Windows' for VM OS within the VM Grid (see page 9).

Azure Site Recovery is an enormous added value for many customers. It guarantees much higher availability at a low cost. AWS' disaster recovery solution is much more expensive than that of Azure. The App calculates the cost difference based on case data.

**AWS CloudEndure Disaster Recovery Pricing**

Volume Discount Tier (Per Machine Pricing)	1 Month	12 Months	36 Months
1-99 Machines	\$99	\$1,068	\$2,556
100-499 Machines	\$74	\$804	\$1,908
500-999 Machines	\$64	\$696	\$1,656
1,000-4,999 Machines	\$54	\$588	\$1,404
5000+ Machines	\$45	\$480	\$1,152

The AWS cost per month for protecting 1078 servers is USD 58,212  
 The comparable Azure ASR cost per month is USD 26,950

**A full protected environment on Azure compare to AWS will save you structurally annually USD 375,144**  
**Over the 5 years TCO horizon this saves USD 1,875,720**

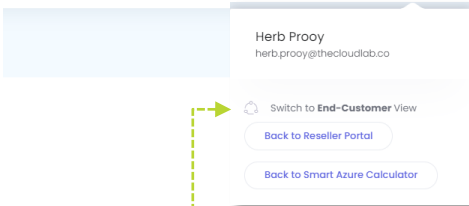
We have made a video to share our experiences on how to compete successfully against AWS, watch <https://youtu.be/o813JONPyiM>.



# Getting the Customer buy-in

After going through this manual or working with the Smart Azure Calculator, you have learnt that in order to make a successful price proposal, the involvement of the customer is important. Smart Azure Calculator offers different possibilities to get the customers' buy-in.

Reseller The Cloudlab Customer Smart Azure Calculator USD Welcome Herb Prooy



Switch to End-Customer views to hide margin related content when reviewing the App side-by-side with your end-customers.

All cost estimates are presented as Customer net pricing, inclusive of your Customer-shared margins and/or service margin.



In the Output TAB, you can send an email invite to your Customer Expert(s) with an active link to review your case.

If Send Invite is triggered again, latest URL is the latest and previous URL will not work.



If desired, delete the active CE URL to ensure there is no unauthorized access to your case.

Giving the customer access to their own case will not only increase their involvement but also their understanding of how the dynamics of Azure pricing work and what opportunities there are for them to reduce Azure costs.



# Success in winning new Azure Migrate business!

***We Azure you; we'll make it simple.***

At least we try

Have any question or suggestion for further improvements?  
Send us an email: [info@thecloudlab.com](mailto:info@thecloudlab.com)

