aws migration evaluator

Formerly TSO Logic

Business Case Summary

xxxxxxxxxxxxxxx

May 7th 2021

Table of contents

aws migration evaluator
Formerly TSO Logic

Overview

Scope

- 279 Servers instances observed
  - 279 virtualized servers
  - 0 bare metal servers
- 50.69 TB of attached storage

Method

- Agentless Collector

Collection Period

- 16th April to 2nd May

Business Data

- Environment Groupings
  - 0% servers classified by Environment
- Application Groupings
  - 0% servers classified by Application/Role

aws migration evaluator
Formerly TSO Logic

Executive Summary

The **31.6%** zombie server count offers a good opportunity for savings in this assessment. **180** servers had peak CPU utilization under **20%** over the **17** days we collected, these are great candidates for right sizing onto more efficient Amazon EC2 instances to help eliminate over-provisioning.

Parameter	On-Premises *(annual)*	AWS *(annual)*
Compute	$464,380.57	$240,339.66
Storage	$49,492.67	$37,070.4
Total	**$513,873.24**	**$277,410.10**
46.01% Savings via Migration Evaluator Right Sizing only		

Modeling

- 3 YR Standard RI/Instance Savings; All Upfront payment
- Storage modeled to EBS
- SQL Licensing costs excluded
- Costs in USD

Potential Refinement

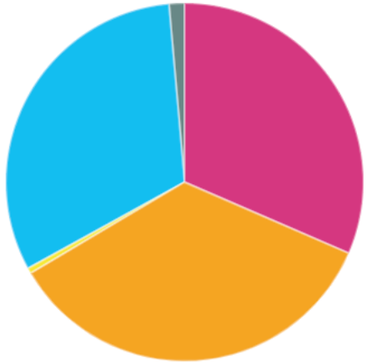
- Further confirmation on license mobility for Microsoft servers will allow for more accuracy in AWS modeling
- Using Environment tagging to target servers for On-Demand modeling (dev/test workloads)

aws migration evaluator
Formerly TSO Logic

Data Insights

Overview of the percentage of time servers were used, environment insights & licensing details.

OS INSTANCE CLASSIFICATION



In Use	31.5%
Idle	35.0%
Unclassified	0.5%
Zombie	31.6%
Expected Idle	1.4%

- **In Use** – Estimated percentage of time the servers delivered business value by being on and having their CPU utilization above 5% or above 300 MHz for VMware VMs.
- **Idle** – Estimated percentage of time the servers were on but did not deliver business value by having their CPU utilization below 5% or below 300 MHz for VMware VMs.
- **Unclassified** – Percentage of time servers were on but had no metrics available to determine if they were idle or in use.
- **Zombie** – Percentage of servers that were expected to deliver business value, but did not. These are candidates for retiring and not migrating to AWS.
- **Expected Idle** – Percentage of servers expected to not be in use but deliver business value in different ways. Examples include templates or disaster recovery.

Environment & Licensing	
Zombies	31.6% (88 servers removed from future state modeling)
SQL Servers	0
SQL Edition	Enterprise/Standard
Windows Servers	214
Linux Servers	55

aws migration evaluator
Formerly TSO Logic

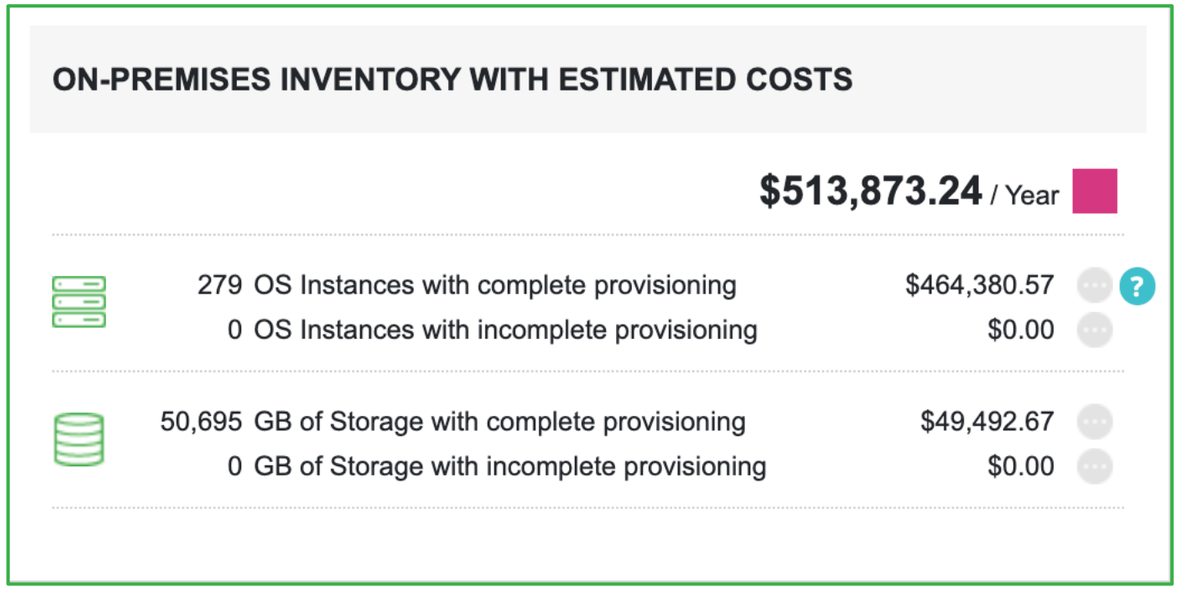
On-Premises Annual Cost Estimation

Included in On-Premises Cost Estimation

- Server based on AWS benchmarks
- Attached storage
- Power
- Software licensing: OS (if applicable)
- MS SQL Server licensing (if applicable)

Excluded in On-Premises Cost Estimation

- Employee costs
- Migration tools
- Professional services
- Shared storage
- Software outside of OS and SQL
- Networking



Currency is in USD, annually. Migration Evaluator benchmark costs were used for calculating on-premises estimations. OS and SQL licensing can be configured to customer actuals. On-premises licensed SQL cores are counted at the operating system level verses host @ $2,717 per core; operating system @ $500 per OS.

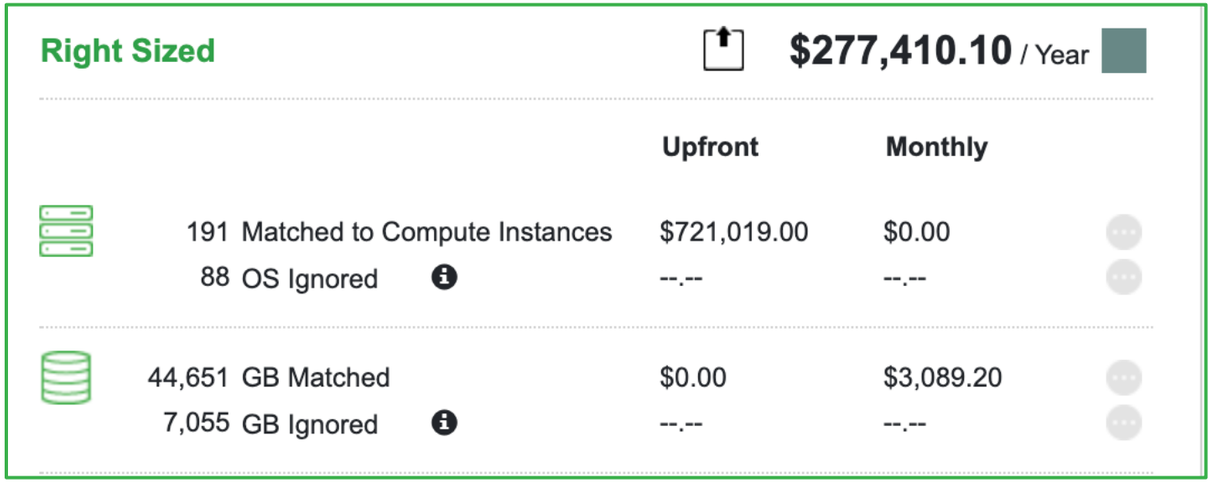
aws migration evaluator
Formerly TSO Logic

3 YR Standard RI/Instance Savings Plan

(Windows Server Included)

AWS Modeling Parameters

Location:	• **Frankfurt**
Instances:	• 3 Year • Standard Reserved • All Upfront payment
Modeling:	• Right Sizing
Licensing:	• Windows licenses included
Currency:	• USD annually
Savings Plan Rate Estimate:	• $27.43 Commit / Hour



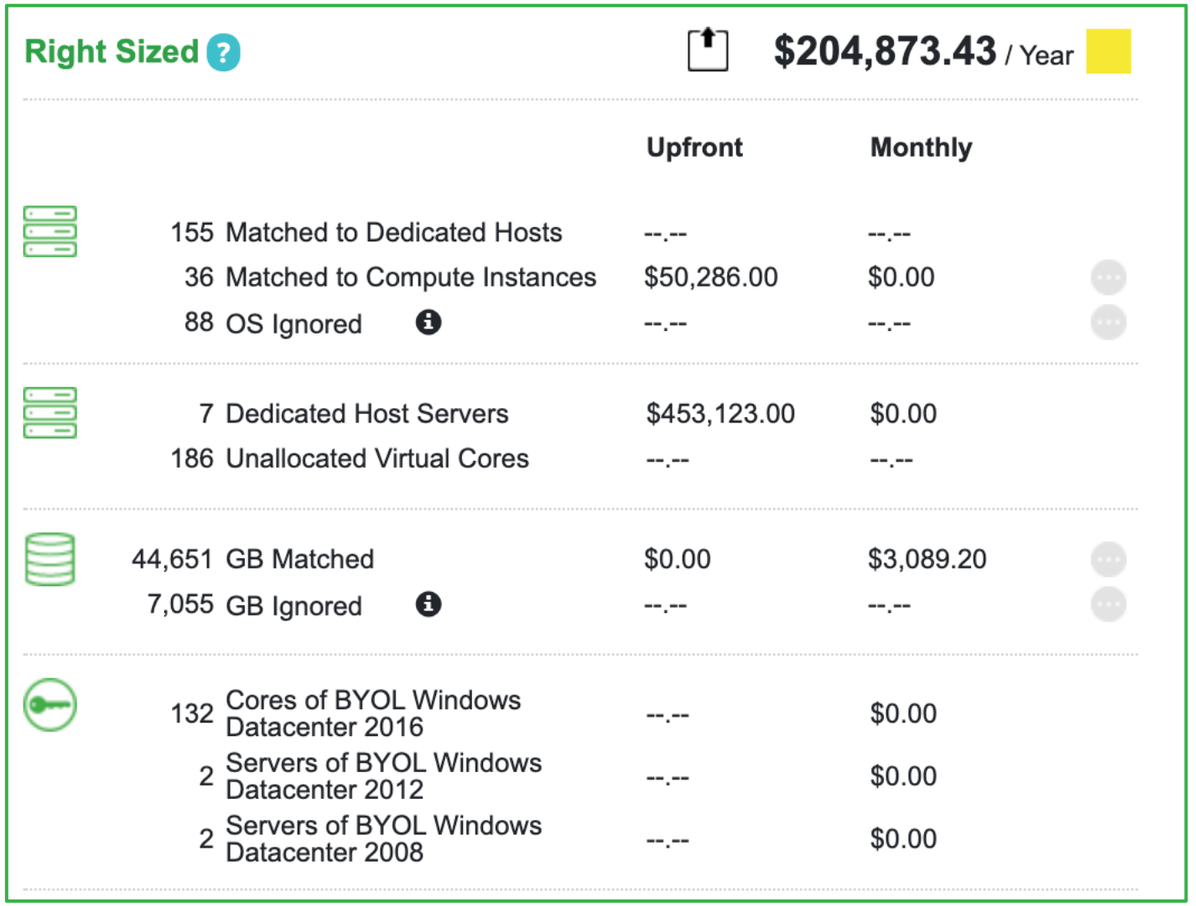
While this doesn't take into account the cost of change, migration tools, and services, the intent of our software is to provide a directional business case based on your actual data.

3 YR Dedicated Host Model

(Windows BYOL)

AWS Modeling Parameters

Location:	• **Frankfurt**
Instances:	• 3 Year • Standard Reserved • All Upfront payment
Modeling:	• Right Sizing
Modeled to Dedicated Host:	• Windows Server 2008, 2012, 2016, 2019
Dedicated Host Licensing:	• BYOL Windows Server @ $0/core
Modeled to Compute Instances (EC2)	• Any non-Server Windows (Windows 7, 10, Vista) • Any non-Windows (Linux, RHEL)
EC2 Licensing:	• Windows licenses included
Currency:	• USD annually
Savings Plan Rate Estimate:	• $19.16 Commit / Hour



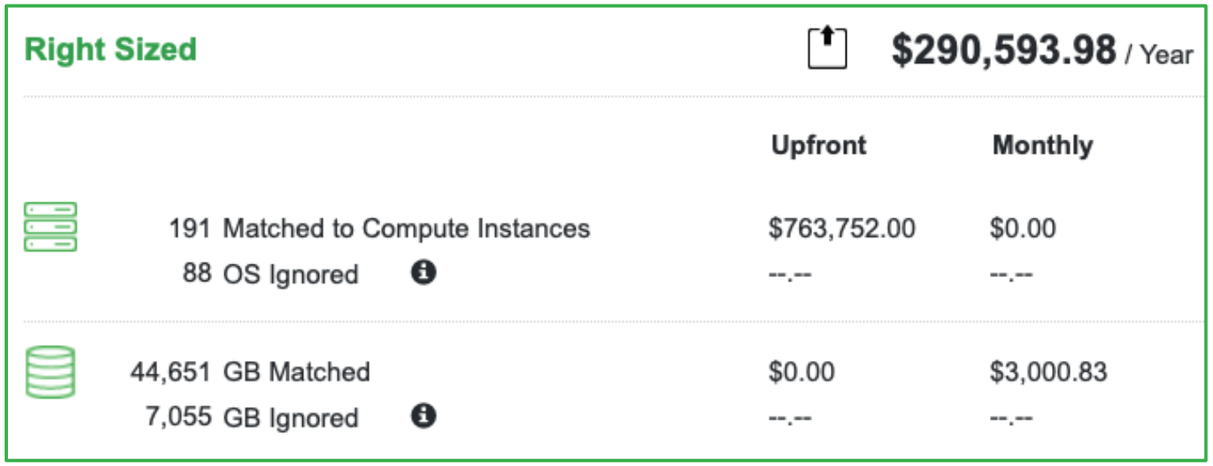
While this doesn't take into account the cost of change, migration tools, and services, the intent of our software is to provide a directional business case based on your actual data.

3 YR Standard RI/Instance Savings Plan

(Windows Server Included)

AWS Modeling Parameters

Location:	• **Milan**
Instances:	• 3 Year • Standard Reserved • All Upfront payment
Modeling:	• Right Sizing
Licensing:	• Windows licenses included
Currency:	• USD annually
Savings Plan Rate Estimate:	• $29.06 Commit / Hour



While this doesn't take into account the cost of change, migration tools, and services, the intent of our software is to provide a directional business case based on your actual data.

On Demand – Zombies Included

(Windows Server Included)

AWS Modeling Parameters

Location:	•	**Milan**
Instances:	•	On Demand 24x7
Modeling:	•	Right Sizing
Licensing:	•	Windows licenses included
Currency:	•	USD annually
Savings Plan Rate Estimate:	•	$N/A

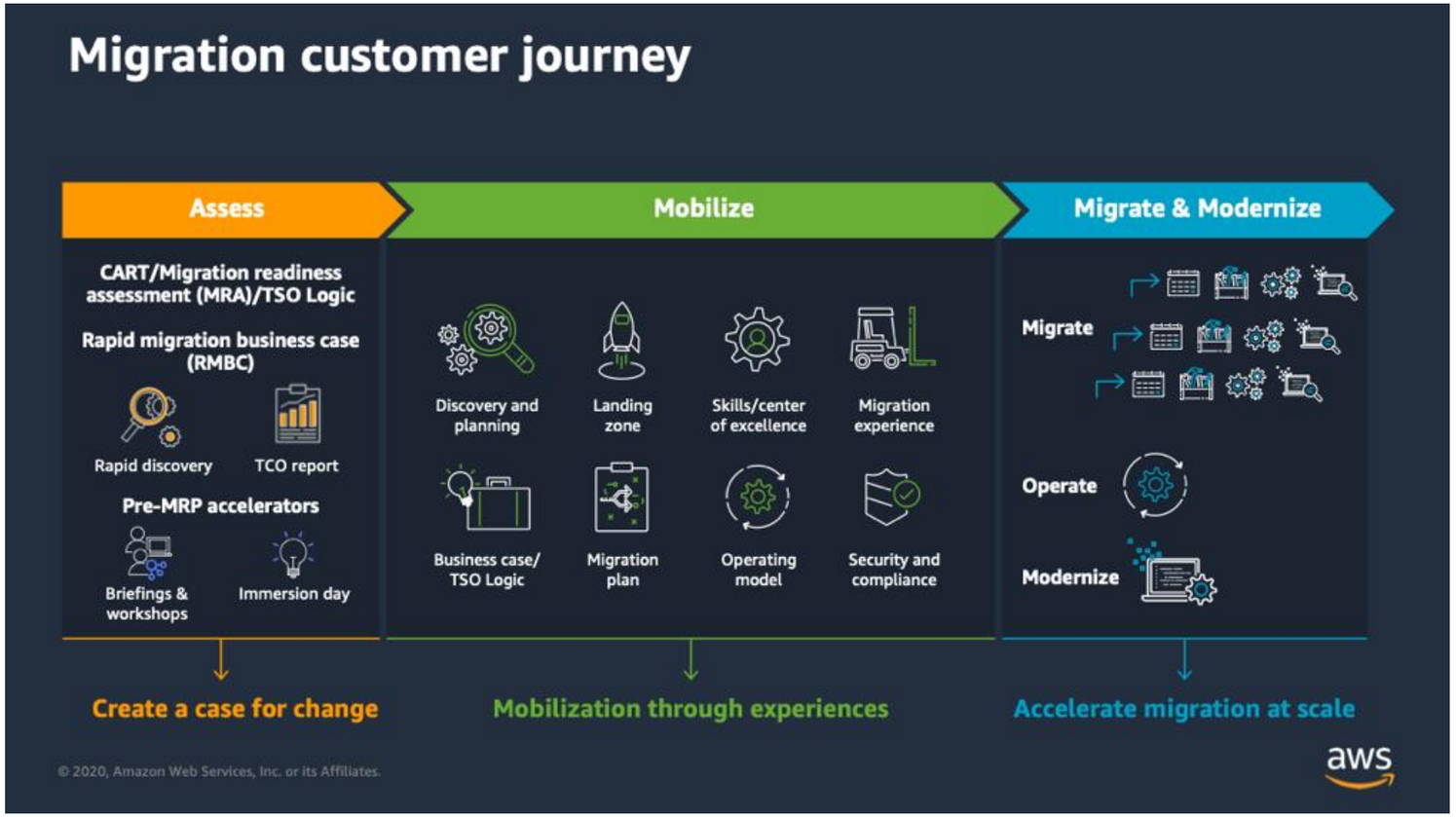
Right Sized **$618,503.44** / Year

	Upfront	Monthly
279 Matched to Compute Instances	$0.00	$47,946.44
51,786 GB Matched	$0.00	$3,595.52

While this doesn't take into account the cost of change, migration tools, and services, the intent of our software is to provide a directional business case based on your actual data.

Next Steps

- Work with your AWS Account team to determine your next best step
- Learn about the other services AWS provides to accelerate your migration to the cloud: aws.amazon.com/products/migration-and-transfer/



aws migration evaluator

Formerly TSO Logic

Thank You!