

# AWS Migration Business Case

## Table of Contents

- [Executive Summary](#)
- [Insights](#)
- [Next Steps](#)
- [On-Premises Assessment](#)
- [Storage Assessment](#)
- [Disclaimer](#)

## Executive Summary

This assessment analyzed **9 storage volumes** for AWS migration. The analysis reveals an estimated **annual savings of \$408,180 (85.8%)** by migrating to AWS, with total recommended AWS cost of **\$67,640** annually compared to **\$475,820** for on-premises infrastructure.

### Assessment Scope

- **Storage**
  - **File Storage (FSx)**: 6 volumes, 30.00 TiB
  - **Object Storage (S3)**: 3 buckets, 50.00 TiB
- **On-Premises**
  - **On-Premises**: 9 Shared Storage, 178.47 TiB storage

*Please refer to the Assessment Issues sheet in the analysis workbook for additional details on issues found with inventory.*

### Strategic Benefits

| Strategic Benefit            | Business Impact                                                                     |
|------------------------------|-------------------------------------------------------------------------------------|
| Cost Optimization            | Estimated annual savings of \$408,180 (85.8%) with Reserved Instances vs on-demand  |
| Infrastructure Modernization | Migration from aging bare metal to cloud-native, right-sized EC2 instances          |
| Operational Efficiency       | Elimination of hardware maintenance, power, cooling, and data center overhead costs |
| Enhanced Scalability         | On-demand resource scaling to meet changing business requirements                   |
| Improved Reliability         | AWS 99.99% SLA with built-in redundancy and disaster recovery capabilities          |

## Insights

### Financial Summary

| Cost Component | AWS - On Demand | AWS - 1 Year No Upfront | AWS - 3 Year No Upfront |
|----------------|-----------------|-------------------------|-------------------------|
| Storage        | \$61,491        | \$61,491                | \$61,491                |

| Cost Component              | AWS - On Demand | AWS - 1 Year No Upfront | AWS - 3 Year No Upfront |
|-----------------------------|-----------------|-------------------------|-------------------------|
| Business Support            | \$6,149         | \$6,149                 | \$6,149                 |
| <b>Annual Total</b>         | <b>\$67,640</b> | <b>\$67,640</b>         | <b>\$67,640</b>         |
| <b>Savings vs On-Demand</b> | -               | <b>\$0 (0.0%)</b>       | <b>\$0 (0.0%)</b>       |

## Next Steps

1. **Engage Specialists:** [Engage a specialist](#) if you want further support and guidance on your migration journey.
2. **Perform wave planning and migration:** Utilize the AWS Transform VMware job capabilities to perform comprehensive application assessment through dependency mapping, create migration waves, and execute the VMware-to-EC2 migrations
3. **Engage AWS Migration Acceleration Program:** Apply for the [AWS MAP program](#) to potentially offset migration costs and accelerate your cloud journey through expertise from AWS Professional Services, a global partner ecosystem, and AWS investment.

## On-Premises Assessment

### Scope

| Metric        | Value            |
|---------------|------------------|
| Total Servers | 9 Shared Storage |

### Cost Breakdown

| Cost Category | Annual Cost      |
|---------------|------------------|
| Storage       | \$475,820        |
| <b>Total</b>  | <b>\$475,820</b> |

### Assumptions

- TCO Duration: 5 years
- AWS Region: ap-south-1
- Discounts applied: Hardware 40%, Software 25%, Storage 50%
- Storage costs include: shared storage

## Storage Assessment

### Scope

| Metric | Value |
|--------|-------|
|--------|-------|

| Metric       | Value     |
|--------------|-----------|
| FSx Storage  | 6 volumes |
| FSx Capacity | 30.00 TiB |
| S3 Storage   | 3 buckets |
| S3 Capacity  | 50.00 TiB |

### Cost Breakdown

| Storage Service | Annual Cost        |
|-----------------|--------------------|
| FSx             | \$53,529.84        |
| S3              | \$7,960.92         |
| <b>Total</b>    | <b>\$61,490.76</b> |

### S3 Cost by Storage Class

| Storage Class                | Annual Cost |
|------------------------------|-------------|
| S3 Standard                  | \$3,372.60  |
| S3 Standard IA               | \$2,792.52  |
| S3 Glacier Instant Retrieval | \$1,686.36  |
| Backup Landing Zone (EBS)    | \$109.44    |

### Key Findings

1. Analyzed 5 storage arrays (6 volumes) for FSx for NetApp ONTAP migration
2. Total capacity assessed: 30.00 TiB
3. Estimated annual AWS cost: \$53,529.84
4. Recommended deployment: Cost Optimized, Single-AZ, Gen2
5. NAS storage arrays sized to FSx for NetApp ONTAP (3 arrays)
6. SAN/block storage arrays sized to FSx for NetApp ONTAP iSCSI (2 arrays)
7. Recommended target: Amazon S3
8. 1 backup repository migrates to Amazon S3, keeping its backup landing zone (100 GiB) on Amazon EBS gp3. That EBS cost is included in this assessment's total because this repository is assessed here rather than in the EBS assessment.
9. Analyzed 3 object storage volume(s) with 50.00 TiB total capacity.
10. Estimated annual AWS S3 cost: \$7,960.92 using S3 Standard storage classes pricing model.

### Recommendations

1. **Validate inventory capacity and performance data:** FSx for NetApp ONTAP sizing is derived from

reported capacity, IOPS and throughput. Review error.csv for volumes flagged with missing or substituted data before treating the estimate as final.

2. **Migrate to FSx for NetApp ONTAP (Cost Optimized, Single-AZ, Gen2)** Deploy storage using Cost Optimized, Single-AZ, Gen2 for an estimated \$53,529.84/year.
3. **Validate inventory capacity and performance data:** Amazon S3 sizing is derived from reported capacity. Review error.csv for volumes flagged with missing or substituted data before treating the estimate as final.
4. **Migrate object storage to Amazon S3:** Migrate to Amazon S3 using S3 Standard storage classes for an estimated \$7,960.92/year.

## Assumptions

- Assessment performed for AWS region: ap-south-1
- Recommended deployment strategy: Cost Optimized, Single-AZ, Gen2
- 80% SSD usable considered (Best Practice), 20% space added to capacity pool
- 16% of SSD space is considered for system space - added to Capacity Pool
- 3% of capacity space is added as metadata to SSD pool
- 2% of used capacity added to SSD for backup snapshots
- 5% Snap Reserve
- 50% simultaneous peaks assumed
- 45% savings from compression + deduplication (when data is missing)
- Pricing: Cost Optimized, Single-AZ, Gen2
- Region: ap-south-1
- Storage type allocation: STANDARD 20%, STANDARD/IA 30%, GLACIER 50%
- Workload type: object
- API overheads: 10% of S3 pricing
- Backup landing zone: 100 GiB retained on Amazon EBS gp3 across 1 backup repository routed to Amazon S3

## Disclaimer

This report provides an estimate of fees in USD, and savings based on certain information you provide. Fee estimates do not include any taxes that might apply. Your actual fees and savings depend on a variety of factors, including your actual usage of AWS services, which may vary from the estimates provided in this report. Additional configurations are available on request by engaging a specialist.