

Mesa Water AWS Case Study

Amazon EC2 for Windows Server Migration

Maintaining an on-site data center is costly and requires continuous upkeep. However, a transition to the cloud is not as easy as "lift and shift" for healthcare organizations.

In this case study, we document how our dedicated team at T2 Tech helped an organization complete a data center migration to the cloud using Amazon Web Services (AWS), providing insights you can apply to your health system or other large organization.

Our customer, [Mesa Water District](#) (Mesa Water®), chose us because of our long-standing reputation for expertise in data-center modernization. A key water provider in Southern California, their work is critical to the health and safety of more than 100,000 people. As they undertook their data-center refresh, our T2 consultants were there to walk them through the relative benefits of on-site versus remote (cloud) data centers, the selection of an appropriate cloud solution, and the planning and execution of the migration itself.

Decision to Migrate to a Cloud Data Center

We at T2 Tech know that traditional, on-site data centers have some distinct advantages. So, the key question is whether your existing data center can handle the demand for growth while containing costs for your organization. Traditional data centers allow for more control and the ability to customize your infrastructure, including hardware, applications, network connectivity, and databases. However, with ownership comes with substantial burdens, such as the need to provide backup power, cooling, repairs, upgrades, physical security, and replace equipment when end of life. This is on top of all the physical security requirements that can heavily impact resources.

In contrast, cloud data centers offer several compelling benefits. Most notably, cloud data centers offer lower capital expenditures (CapEx), improved scalability, and reduced operational needs. On-site data centers and their equipment can be costly to maintain and need to be replacement on average every five years. Cloud data allow you to only use what you need that can have a significant reduction in over costs. For Mesa Water®, these considerations made a cloud data center the obvious choice.



Selection of Amazon Web Services

The next challenge was to help our customer choose an appropriate cloud solution, capable of scalability and security while still minimizing cost. We discussed the advantages of [Amazon Web Services](#), which extend beyond being a well-known cloud service provider. Many large organizations, including those in the healthcare industry, have migrated to cloud data centers using AWS to ensure the security of their critical operations.



AWS boasts a superior track record of migrating traditional IT, especially when it comes to compliance and ease of use. Furthermore, AWS' cloud data center services make use of industry best practices for IT security and compliance. Importantly, we have found that AWS adopters gain a competitive edge through features that include a disaster recovery and easier long-term maintenance.

Importantly for Mesa Water®, AWS also costs less for more efficiency. We did an assessment to provide a cost estimate (total cost of ownership) for Mesa Water® and found that they would enjoy at least a **33% cost reduction in the first five years alone**. As Mesa Water® uses a Windows server, we recommend they adopt Amazon's Elastic Compute Cloud ([EC2](#)). This web service is reliable, scalable, and secure, making it perfect for their needs.

Planned, Purposeful Migration

Our experience with modernizing data centers enabled us to work with Mesa Water® to plan and execute this large-scale migration. We used our proprietary project management methodology to keep the project on time and on budget. The [steps in the process](#) we use are adapted from Amazon Web Services: assess, mobilize resources, and migrate.

Assess

- Identify security and compliance requirements.
- Survey the functional needs and technical specifications.
- Determine the available financial resources.

Mobilize

- Engage T2 Tech experts for specific needs.
- Decide on procedures to minimize risk (e.g., data loss).
- Determine the AWS' tools appropriate for migration.

Migrate

- Execute migration with full-service redundancy.
- Iterate tasks until the old system is modernized on the cloud.
- Ensure normal operations during migration.

Results

Our customer has been able to move beyond the expensive cycle of replacing new infrastructure every 3 to 5 years. Further, the Mesa Water® IT executives are pleased that at the increased efficiency of their new cloud management software and security.

Are you interested in learning more?

Reach out to T2 Tech for your own assessment for AWS Migration.



About T2 Tech

T2 Tech is a leader in the practical application of technology for healthcare and a range of other industries. Since 2006, T2 Tech has consistently delivered quality consulting and management advisory services to business executives and IT leaders. The T2 Tech team balances business and IT needs, uses a proven agile methodology, oversees projects from assessment to post-implementation and practices transparency in everything they do.