MICROLAND®

Making digital happen

CASE STUDY

Microland Empowers Leading Cloud Computing Company's Migration Success through Strategic Collaboration and Hyperautomation

Overview

Our customer is an American cloud computing and virtualization technology company headquartered in California, USA, with a global workforce of over 33,000 employees. Recently, they encountered legacy infrastructure complexities, migration challenges, and limited documentation. Microland's solutions enabled a 50%-60% reduction in data center footprint, ensured 99.99% infrastructure availability, and delivered projects fast.

Customer Challenges:

In the realm of cloud computing, the challenges faced by our customers' end clients have a profound impact on their businesses. Consequently, there arises a pressing need for a proficient cloud transformation and management partner capable of mitigating these challenges effectively.

Some of the prominent business hurdles are as mentioned below:

- **Legacy Infrastructure Complexity:** The client struggled with legacy architecture which consists of in-house developed systems and a mix of Commercial Off-The-Shelf (COTS) applications. The complexities of this architecture delay the seamless integration and efficient management required to meet modern business demands. The disparate nature of the systems makes it difficult to optimize operations and adapt swiftly to changing market needs.

- **Migration Challenges:** Migrating thousands of workloads from legacy hypervisors to the modern vSphere and VCF infrastructure without disrupting vital services is critical for system efficiency and competitiveness. Meticulous planning and flawless execution are essential for a smooth transition.

- **Limited Documentation:** The absence of comprehensive documentation detailing the current application stack that was hosted on the virtualized platform complicated the migration process. Lack of documentation around the technology landscape meant that the IT team lacked complete view of the dependencies and configurations which made any transformation a challenging effort.

- **Vendor Reliance and Support:** Over-dependence on vendors for support and management possessed significant risk. Lack of in-house expertise further added to delays in issue resolution and led to sub-optimal service delivery.

- **Disaster Recovery and Redundancy:** The absence of a robust Disaster Recovery (DR) setup exposed the company to single points of failure and potential business disruptions. Establishing resilient DR mechanisms was crucial to mitigate risks and safeguard business continuity.

Addressing these challenges demanded a strategic approach, robust planning, and collaboration across various stakeholders to ensure a seamless transition and to modernize the IT infrastructure that could support the company's evolving business needs.

Microland's Approach for Cloud & Datacenter Migration and IT Resilience

Given the complexity of the project, the client opted to partner with Microland and embraced a collaborative approach for the planning and execution of the migration process. Microland assembled a proficient team of certified Digital experts to address the challenges that arose during the migration process. This strategic collaboration ensured the prompt resolution of issues and facilitated a seamless migration experience for the end clients.

Test/POC Migrations and Pre-checks: Conducted comprehensive Test/Proof of Concept (POC) migrations for the service mesh under consideration. Pre-checked the in-scope Virtual Machines (VMs) to identify potential issues and ensure readiness for migration.

Risk Identification and Mitigation: Identified and mitigated potential risks and issues during migrations through proactive risk assessment and mitigation strategies. Eliminated sync failures and ensured smooth cutover by pre-replicating physical servers.

Data Center Consolidation and Upgrade: Leveraged Hyper-Converged Infrastructure (HCI) platform as the cornerstone for the client's internal private cloud. This involved virtualizing old physical servers and migrating workloads to ensure minimal downtime during the transition.

Migration Groups: Organized workloads into moving groups and executed migrations according to the scheduled migration windows to streamline the migration process and optimize resource allocation.

Hyperautomation: Enhanced VM migration is achieved through automated pre- and post-migration checks for both Windows and Linux systems using custom and automated provisioning of servers, and storage. This automation streamlined operations, improved efficiency, and reduced the risk of errors during migration, ensuring a smooth transition for the organization's IT infrastructure.

Improved Disaster Recovery: Prioritized security by employing Cloud Disaster Recovery (DR) best practices. Automated backup tasks to maintain DR databases timely and meet Recovery Point Objective (RPO) requirements effectively.

Outcomes:

The client achieved a 50%-60% reduction in data center footprint and ensured 99.99% infrastructure availability through a robust cloud-based Disaster Recovery (DR) solution. Hyperautomation enabled processes resulted in projects being delivered two times faster, with a 25% lower cost to migrate, and maintained 100% SLA compliance across all deliverables.