

## AWS Server Migration

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Move applications, data and other business elements from an on-premises infrastructure or a cloud platform to Amazon Web Services with the AWS Server Migration Service from Pax8 Professional Services. This service provides your clients with scalable, flexible and cost-effective cloud-computing environments.

### **This Service Offering Includes the Following Components:**

- **Deployment of:**
  - **AWS Virtual Private Cloud (VPC)** with subnet space for Virtual Machines, Gateway Subnet and AWS Virtual Private Gateway (VGW) as needed
    - Site-to-Site VPN is suggested to ensure a smooth migration from on-premises to AWS.
  - **Network Security Group** for AWS Virtual Private Cloud
  - **Replication Appliance:** The replication appliance is deployed when agent-based migration of VMware VMs or physical servers are set up. It is deployed as a single on-premises machine, either as a VMware VM or a physical server.
  - **AWS Migration Hub:** This central hub for migration provides tools for discovery, assessment and migration of on-premises apps, workloads, and private/public cloud VMs to AWS.
  - **Discovery and Assessment Tool:** This tool identifies workloads in use, dependencies between workloads and workload optimization.
  - **Server, Disk, and NIC Metadata:** Information about servers, disks, and NICs is collected during the migration process.
  - **Installed Applications, Roles and Features:** Information about installed applications, roles and features is also collected.
  - **Performance Data:** Data related to CPU and memory utilization, disk IOPS, and throughput is collected to optimize the migration process.
- **Test Migration:**
  - **Replication:** Ensure servers are in healthy status and protected
  - **Test Environment:** Test virtual machines in sandbox environment in AWS prior to actual migration
  - **Validation:** Discover and correct any potential issues before the full migration
  - **Performance and User Acceptance Testing:** Conduct performance and user acceptance testing for migrated servers and apps
  - **Post-Test Actions:** Clean up temporary VMs and related resources used in test migration

- **Cutover (Full) Migration:**

- **Replication:** Ensure servers are in healthy status and protected
- **Full Migration:** Shut down on-premises VMs and start up the migrated VMs in AWS
- **Post-Migration Actions:** Examples include updating database connection strings, configuring web servers, setting DNS servers, public and private IP addresses, etc.
- **Monitoring:** Confirm all resources are running properly in AWS environment

**This Service is for Partners who Need:**

This service is best suited for Partners with clients who need to decommission physical hardware and decentralize their workforce while maintaining a centralized infrastructure.

**Limitations and Requirements**

- **Requirements:**

- **Operating System:** The on-premises machines that are replicated to AWS must comply with AWS VM requirements for the operating system and architecture.
- **Disks:** The disks of the on-premises machines must meet AWS VM requirements.
- **Network Settings:** The network settings of the on-premises machines must meet AWS VM requirements.
- **VM Naming:** The on-premises machines must comply with AWS VM naming requirements.

- **Limitations:**

- **Discovery/Assessment:** A single AWS Migration Hub project can include discovery and assessment of up to 35,000 VMs.
- **Migration:** The number of VMs that can be migrated at once depends on the type of VMs. For example, a maximum of 500 VMs can be replicated simultaneously across multiple vCenter Servers using a scale-out appliance.
- **Data Disk Size Limit:** Up to 32 TB
- **Replication:** In the portal, up to 10 machines can be selected at once for replication. Additional machines can be replicated in batches of 10.

- **Funding Limitations:**

- Eligible projects can be funded up to six times the amount of the client's anticipated monthly AWS spend (your Infrastructure Solutions Consultant will help you estimate this).

**Prerequisites**

- **AWS Subscription:** Purchased via Pax8
- **Permissions:** Ensure that correct permissions are set up in AWS so virtual machine logs can be sent to the cloud, and then replicate VMs into AWS storage
- **Domain Administrator:** Ensure that Pax8 engineers are granted appropriate permissions to every source VM, VMware Center, or platform
- **Network Settings:** Set up the appropriate VPN tunnel to migrate the infrastructure to AWS



- **URL and Port Access:** Review URL and port access for machines that will be migrated
- **For Identity:** Active Directory domain and forest function level at least Server 2008 (Server 2016 preferred)
- **Healthy Active Directory** Forest documented by clean dcdiag output
- **SYSVOL** share synchronized using DFS-R documented by an output of Eliminated from the dfsrmig.exe /GetGlobalState command.
- **Operating System:** On-premises machines that are replicated to AWS must comply with AWS VM requirements for the operating system and architecture (Operating System Updates)

## Configuration Options

- **Server/Virtual Machine Migration Source**
  - **VMWare:** AWS Migration Hub provides a central hub to track discovery, assessment and migration of on-premises apps and workloads and private/public cloud VMs to AWS. It offers performance-based rightsizing, application dependency analysis, migration cost planning and readiness analysis for both VMware and Hyper-V.
  - **Hyper-V:** AWS Migration Hub provides a central hub to track discovery, assessment and migration of on-premises apps and workloads and private/public cloud VMs to AWS. It offers performance-based rightsizing, application dependency analysis, migration cost planning and readiness analysis for both VMware and Hyper-V.
  - **Physical Servers:** Migrating physical servers to AWS can help organizations secure their assets, optimize costs and achieve resilience. AWS-managed services can help reduce operational overhead and free up time for development and operations teams.

## Available Add-ons

- Additional migrated servers
- Additional test migrations

## Get Started

To get started, order the [Pax8 Professional Services Engagement SKU](#) in the Pax8 Marketplace. Please contact your Pax8 account team with questions.

## Eligibility

Open to active Pax8 partners in the US and Canada. AWS subscriptions must be purchased via Pax8. AWS subscriptions purchased elsewhere are not eligible for service. Customer must not fall within our regulatory limits. Customer must not be a federal contractor (or subcontractor) or any type of law enforcement agency/body subject to the CJIS security rule.

