Azure Migrate

Simplify your journey to the cloud

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Overview

Migrating to the cloud isn’t just about improving scalability and security. It’s also about improving your financial resilience by shifting from a traditional upfront expenditure to a more flexible pay-as-you-go model. Azure Migrate is a service that provides a central hub of tooling for datacenter migration to Azure.

While migrating to the cloud offers your business greater scalability, cost-efficiency, and improved performance, it can require careful IT planning and strategy. Fortunately, there are resources and tools that can make your cloud migration less daunting and help simplify your path to the cloud—while minimizing risk and impact to your business.

Then, once you’ve migrated to the cloud, you need to make the most of your investment and keep it secure. If you are an IT manager running on-premises applications and servers, this guide can help you start your migration to the cloud.
Introducing Azure Migrate

Azure Migrate is designed to help you streamline cloud migration for your organization. Work with Microsoft experts and specialized partners to achieve value faster, with full access to curated guidance and best practices based on proven cloud adoption methodologies.

In many discussions with customers, Microsoft hears a level of uncertainty about how businesses can navigate their cloud migration journey. There is an urgency to act, but often a hesitation to start. There is, no doubt, a learning curve, but Microsoft has traversed it with many customers already. Businesses need best practices and prescriptive guidance on where to begin, process best practices, and how to avoid potential obstacles.

To begin an efficient journey to Azure, Microsoft offers three recommendations that are based on learnings from hundreds of scale migration engagements our team has helped our customers with.

The stages of your migration journey

Cloud migration involves significant organizational change management spanning people, process, and technology. Taking a holistic approach will not only help you navigate the journey successfully but also ensure that your organization realizes new benefits—including efficiency, agility, and scale—once your workloads are running in the cloud.
**First**, Azure Migrate offers the ability to perform a comprehensive discovery of your data centers so you can create an inventory of all on-premises infrastructure, databases, and applications. This allows your organization to generate right-sized and optimized cost projections for running applications in Azure. Between your existing configuration management database (CMDB), Active Directory, management tools, and our discovery tools, you have everything you need to make crucial migration decisions.

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**Assessment plan**

Technical and business planning for migration comes down to four straightforward steps.

- **Discover on-premises application and servers**
- **Identify dependencies**
- **Analyze configuration**
- **Plan costs**

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**Second**, complexities are often encountered; some will be related to the foundational architecture of cloud deployments, while others are tied to an organization’s readiness to change. In order to move quickly, it is necessary to establish clarity in ownership and requirements across stakeholders from security, networking, IT, and application teams.

**Third**, following an iterative, workload-based, wave-oriented approach to migration tends to work best. Customers can use Microsoft’s free first-party migration tools to achieve the scale that works best for their business—from a few hundred to thousands of servers and databases.
Why migrate to Azure?

Migrate to the cloud securely and efficiently—on your own terms.

Optimize costs and migrate data with confidence

Save money with the most cost-effective offers for Windows Server and SQL Server. AWS is 5 times more expensive than Azure for Windows Server and SQL Server. Become energy efficient and sustainable by moving on-premises datacenters to cloud.

Confidently migrate your data and workloads to Azure with best practices, expert guidance, and cost optimization tools.

Stay secure and resilient across hybrid environments

Protect workloads across your hybrid environments with intelligent security services backed by 3,500 cybersecurity professionals.

Use built-in resilience to avoid costly business interruptions.

Scale your applications and workloads on demand

Increase agility with best-in-class Azure infrastructure that scales to your business needs.

Reduce operational burden with fully managed application and database services in Azure.

With Azure Migrate, you have coverage for Windows Server and Linux, SQL Server and other databases, .NET and PHP-based web applications, and virtual desktop infrastructure (VDI). These capabilities give you options for migration to infrastructure as a service (IaaS) and platform as a service (PaaS) offerings like Azure App Service and Azure SQL.

Alongside first-party tools featured within the Azure Migrate platform, customers also have access to several third-party tools that will enable them to successfully make the journey to the cloud.
Built-in tools built for migration success

Since migrating servers and VMs is unique for each organization, multiple tools are available to support specific needs. These range from Microsoft first-party tools to various third-party tools. Here, we offer a summary of all the Azure migration tools and guidance you will need to plan and implement your cloud transition.

Integrated Tools

Microsoft features several robust first-party tools within a centralized hub to help you assess and migrate to Azure on-premises servers, infrastructure, applications, and data. Azure Migrate provides a unified migration platform, as well as a wide range of tools to assist with both the assessment and migration processes.

**Azure Migrate: Server Assessment**

Discover and assess on-premises VMware VMs, Hyper-V VMs, and physical servers in preparation for migration to Azure.

**Azure Migrate: Server Migration**

Migrate VMware VMs, Hyper-V VMs, physical servers, other virtualized machines, and public cloud VMs to Azure.

**Data Migration Assistant**

Data Migration Assistant helps pinpoint potential problems blocking migration. It identifies unsupported features, new features that can benefit you after migration, and the right path for database migration.

**Azure Database Migration Service**

The Data Migration Assistant generates assessment reports that provide recommendations to guide you through the changes required prior to performing a migration. It's up to you to perform any remediation required. When you're ready to begin the migration process, Azure Database Migration Service performs all of the required steps. You can initiate your migration projects with peace of mind, knowing that the process takes advantage of best practices as determined by Microsoft.

**Web app migration assistant**

Use Azure App Service Migration Assistant to assess on-premises websites for migration to Azure App Service; use Migration Assistant to migrate .NET and PHP web apps to Azure.

**Azure Data Box**

Use Azure Data Box products to move large amounts of offline data to Azure. Use the Azure Data Box devices for offline data transfer when you are limited by time, network, or cost. Depending on your data size, choose from Data Box Disk, Data Box, or Data Box Heavy.
Migration Partners from A to Z

Get help with your cloud migration by finding the right Microsoft migration experts, partners, and tools for your project. Third-party tools are valuable alternatives when you have needs that are not covered by Microsoft first-party tools. For example, while there are some OS types that Azure Migrate cannot accommodate, other partner tools can support these efforts.

Carbonite

Carbonite Migrate is the right tool for performing challenging Azure migrations. It allows you to migrate physical, virtual, and cloud workloads from any environment to Microsoft Azure. Carbonite Migrate simplifies both lift-and-shift and optimization migrations without disrupting the production environment or taxing IT departments. Carbonite is a Gold Cloud Platform partner with an established track record of reliably moving workloads to Azure that can be challenging for native or free tools.

Cloudamize

Cloudamize is a platform that provides peace of mind, governance, efficiency, and control of multi-cloud environments. Cloudamize helps you assess what you have today, decide where you want to go, and then find the best patterns to adopt.

Cloudamize offers total flexibility in assessment and planning: experience zero limitations to how you plan your migration, including native support for assessment of virtualized and non-virtualized assets to discover and map your full on-prem estate and application inventory. Cloudamize is purpose-built for migration planning and analysis, allowing you to build highly customized TCOs and Migration plans across cloud providers, license scenarios, and specific application targets. Unlike other tools, Cloudamize provides both business and technical insight into your environment to ensure successful cloud migrations.

Corent Technology

Azure Migrate is integrated with Corent's SurPaaS®, which allows auto-provisioning of SurPaaS® account from Azure Console. SurPaaS® expands the migration capabilities beyond Lift and Shift from on-premises, by offering migration from other clouds, optimized migration, PaaS integration, and containerization. The robust cost modeling and analysis capabilities allow optimization and modernization decisions to be made before migration.

Corent Technology allows you to project not only the cost of your Cloud resources, but also additional services using SurPaaS®’s most versatile cost-modeling engine. Create your own custom cost patterns for a personalized analysis. Understand how your cloud resources are utilized by comparing your current cloud cost against cost projections for each of the optimization recommendations provided by SurPaaS®. With SurPaaS®, you can efficiently manage your Cloud resources and cost.
Device42

Device42 is a comprehensive IT infrastructure management software suite with powerful agent-less auto-discovery and application-dependency mapping tools, a configuration management database (CMDB), a complete datacenter infrastructure management (DCIM) suite, full IT asset and inventory management (ITAM) functionality, plus IP address management (IPAM), password management, and lots more — all in a single tool.

Device42 allows for continuous discovery of inventory, application dependencies, and resource utilization when migrating to the cloud via Azure. All migrations – big or small – can carry significant business risk. Botched cutovers can result in runaway costs and embarrassing downtime. Whether your goal is to migrate to a new facility, to the cloud, or even to a new platform or OS, Device42 has your back.

Lakeside

Microsoft's Windows Virtual Desktop offering is a desktop and app virtualization service that runs on Azure. While WVD offers numerous benefits like multi-session deployments, unified management of Windows desktop and apps, and more, the question remains—is it really the right fit for your environment?

As part of the WVD partner ecosystem, Lakeside and Microsoft have developed a free tool to help you answer that question and, along the way, to capture some helpful insights on the performance and usage of End User Computing (EUC) resources in your environment.

The SysTrack WVD Assessment is a free, cloud-based tool powered by Lakeside Software's SysTrack. The tool provides automated reporting on any environment as well as a readiness assessment for deploying Azure-based Windows Virtual Desktops. Specifically, the tool reports on:

- Current OS composition
- Application landscape
- Resource consumption considerations
RackWare

RackWare allows businesses to move existing data and applications between every major physical, virtual, and cloud environment. You can accelerate and automate data migrations across all major physical, virtual, and cloud environments.

Migration projects are often associated with downtime, data loss, and the diversion of internal resources from strategic initiatives. With over 350 enterprise clients, RackWare knows that for the cloud to be effective and economical, existing applications must have easy and flexible mobility into existing private and public cloud environments.

RackWare helps companies accelerate and automate data migrations across all major physical, virtual, and cloud environments. Our file-level replication technology, industry-leading cloud and hypervisor support matrix, and flexible architecture have made us a partner of choice for some of the world’s largest enterprises, migrating complex workloads with just a few clicks.

- Get your data and applications where you want them and when you want them, with the industry’s largest list of supported environments.
- Whether 10 workloads or 10,000, migration of complex, multi-tier applications can be completed in just a few clicks. The entire process is non-disruptive to the production environment.
- Save millions on labor and hardware costs. Get to the cloud faster and eliminate the need to purchase expensive on-premise hardware and software licenses.

Turbonomic

Turbonomic AI-powered Application Resource Management (ARM) simultaneously optimizes application performance, compliance, and cost in real time. Our software platform automatically discovers and assesses every layer of the application stack (including physical machines), and determines the exact cloud compute, storage, and discounting mechanism resources needed for applications to perform at the optimal cost in Azure.

- Full Stack Understanding Turbonomic’s agentless platform deploys in minutes, assessing and understanding the consumption of resources at each layer of the application and infrastructure stack.
- Seamless Integration Orchestrate your migration via API through Azure Site Recovery or other third-party solutions via the Azure Migrate Portal, to seamlessly support high-scale, complex migrations.
- Real-Time Migration Planning Turbonomic automatically understands real-time application needs, enabling customers to streamline your environment prior to migration, as well as mapping on-premises workloads to the precise service types and configurations needed to perform in Azure.
- Application Resource Management (ARM) After migration, Turbonomic simultaneously optimizes application performance, compliance, and cost in real time. Applications are continuously resourced automatically, to perform while satisfying business constraints.
UnifyCloud

UnifyCloud’s CloudAtlas platform makes the journey from on-premises to the cloud fast, easy, and efficient. Supporting all aspects of the entire cloud migration journey, CloudAtlas provides insight into legacy systems in conjunction with tools like Azure Migrate and automates key cloud migration steps that manual processes and on-premises tools just can’t support. CloudAtlas has been tested and proven to accelerate even the largest and most complex migration scenarios helping you get to the cloud quickly, securely and in compliance.

- Fast and detailed assessment of your on-premises environment. Use CloudAtlas in conjunction with Azure Migrate to assess your on-premises infrastructure and workloads to develop a comprehensive, data-driven cloud strategy.
- Easy app and data modernization to PaaS, Containers & Serverless. Get almost instant insight into the readiness of applications, databases, and services to move to PaaS or IaaS. Static code analysis provides remediation guidance at the code-block level; highlighting line of code, required changes, recommended code and level of effort. CloudAtlas integration with Azure Migrate further simplifies this effort.
- Manage cybersecurity, compliance, and cost in Azure. CloudAtlas provides daily reporting for cost, security, and GRC controls across Azure subscriptions, allowing you to easily minimize risk and cost while maximizing the benefits of the cloud.

These expert partners have met Microsoft’s highest standards. They are ready to help you plan and migrate to the cloud with fully managed services to aid in optimizing and securing your environment.
Getting Started

Get the help you need to simplify your journey to the cloud

The Azure Migration Program can help accelerate your progress with proactive guidance and the right mix of expert help at every stage of your migration journey.

Sign up for an Azure account and save money with unique cost-saving offers

Learn how to use Azure Migrate and optimize your migration with documentation and additional resources

Launch Azure Migrate and start your migration project