This quick guide will help you get started migrating servers to Azure using Azure Migrate.
Get started with Azure Migrate:
Server migration

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Discover phase
1. Before you start—verify the list of prerequisites

Set up an Azure subscription
To use Azure, your customer will need an Azure subscription. If they don’t already have one, now’s the time to set one up.

Check Azure permissions
Once in the Azure tenant, check permissions to allow:

- VM logs to be sent to Azure
- Replication of VMs into Azure storage
- Creation and access to virtual networks
- Creation of new VMs
- Performing production migration

Test the environment
We recommend piloting the migration process using a single app and a small set of VMs for your first end-to-end migration. This allows you to apply learnings and resource dependency mappings to larger scale migrations.

<table>
<thead>
<tr>
<th>Purchase Azure directly from Microsoft</th>
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<tr>
<td>Get the same Azure pricing whether you create an account through the Azure website or your Microsoft representative.</td>
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<tr>
<td>Use Azure as part of a managed service from a Microsoft partner</td>
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<tr>
<td>Microsoft Cloud Solution Provider (CSP) partners offer a range of complete managed cloud solutions for Azure.</td>
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- Get your bill from and pay for Azure usage through your CSP.
- Get support for Azure through your CSP.
- Work with your CSP for Azure provisioning, deployment, and usage management.

Two ways to pay—same pricing:

- Purchase through the Azure website
  - The fastest and easiest way for organizations of all sizes to pay for using Azure.

- Purchase through your Microsoft representative
  - Intended for large organizations or customers who already have a Microsoft representative.

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Discover phase
2. Set up your project in Azure Migrate

First, let’s head over to Azure Migrate.
You can configure Azure Migrate directly from the Azure portal.
You can find Azure Migrate at the bottom of the page under the "Useful Links." You can also search for "migrate" in the search box.

Next, let’s select your assessment and migration tools

- Select Assess and migrate servers (which works for both Windows and Linux servers).
- If this is your first time going through the migration process, click Add Tools to start a wizard-based process to select the assessment and migration tools you want to use.
- Select the Azure Migrate: Server Assessment tool and click Next.

- Under the Select Migration Tool tab, you’ll see a list of Microsoft and Microsoft partner tools just like in the assessment tool step.
- Select the Azure Migrate: Server Migration tool, and click Next.
- You will be showing a summary of your selections at this point. Review to make sure everything looks good, then click on Add Tools to add your selected tool to your project.

Note: If you need to add more tools to your project, you can easily do so after your project is set up.
Discover phase

3. Discover your customer’s servers

We have to confirm a few choices as we get started.

1. Whether we want our agentless discovery to use an appliance, or if we will import using a CSV.

2. Whether we will be discovering virtualized VMware vSphere or Hyper-V virtual machines.

If you choose to use the appliance option, you are now ready to download the Azure Migrate appliance.

After downloading, you’ll want to deploy it into your customer’s environment (vSphere, for example).

Now we’re ready to set up our Assessment by downloading an appliance and deploying it to discover virtual machines and dependencies in your customer’s environment.

The first step is to head to the Azure Migrate home and selecting Discover under the Azure Migrate: Server Assessment box.

Note: The Azure Migrate appliance is a complete, platform-specific and pre-configured open virtual appliance (OVA).
Discover phase
3. Discover your customer’s servers

Once the appliance has been deployed, you can head back to Azure Migrate to set up the Discovery. You’ll be walked through a few steps to confirm your selections.

1. Set up the prerequisites, such as accepting licensing terms, ensuring your internet connection, syncing your time with the internet time server, etc.
2. Register with Azure Migrate.
3. Provide access to your client’s servers (such as vCenter) by providing admin credentials.
4. Enabling discovery of apps and dependencies (this step is optional, but highly recommended)

Once these selections are confirmed, you can click on **Start discovery**.

Once the Discovery process has begun, you’ll see basic assessment data in just a few minutes. To get deeper performance metrics, you’ll want the process to run for 24 hours.

You can also see any dependencies among your customer’s VMs.

To see this, head back to the Azure Migrate home and click on **Discovered servers**.

You will see a list of all servers, and can drill down into each by selecting **View dependencies**. You will be able to migrate those dependence resources so that your customers’ apps work as expected after the migration.

**Note:** The Azure Migrate Discovery is a read-only inspection of your customer’s VMs/servers and their metadata, including performance history. No agents are installed in this process.
Assess phase

4. Create and review your Assessment

Now we can take a look at the data gathered. Head back to the Azure Migrate home and select Assess.

In the Assess servers section, you’ll be asked to name your Assessment, and to confirm its properties, such as the source of your Discovery (i.e., that it’s using data from Azure Migrate).

You’ll also want to create a new group, select your appliance (you can have multiple selections, in the event you used more than one), and confirm which servers to include in the assessment.

Once your choices are verified, click on Create assessment.

Now you are ready to review the Assessment details. From the home screen, click on Assessment.

You’ll see your Assessment overview, including details on Azure readiness and monthly cost estimates for compute and storage.

You can click on each of these areas to see more detail (down to clicking on individual VMs to see cost breakdowns, CPU and memory utilization, and disk metrics like performance, size, and throughput, as well as cost.)

Finally, from the Assess servers section, you’ll be able to Export Assessment and download an even more detailed view of the findings.
Migrate phase
5. Replicate VMs

We can now move to the actual migration, which begins by replicating servers. Head over to the Azure Migrate home and select Replicate.

You’ll be asked to specify the parameters for the replication efforts by walking through a few tabs in this section.

1. You’ll start with Source settings, which will ask you to confirm how your customer’s machines are virtualized, and the appliance you used.
2. In Target settings, you’ll specify details such as your subscription, resource group, where your VMs will reside post-migration, and if you will take advantage of the Azure Hybrid benefit (if your customer has an eligible Windows license).
3. Next is Compute, where you’ll see a list of your target VMs and can customize details such as the Azure VM size, OS Disk details, and Availability Sets.
4. Under Disks, you’ll select which disks to replicate.
5. Last, you’ll Review + Start replication, which will start replicating VMs into Azure storage.
Migrate phase
6. Test the migration

Now we want to do testing using a test virtual network to make sure everything is working.

From the Azure Migrate home, select Replicating servers.

You will see a list of your customer’s servers. Pick one that you’d like to test and click on the ellipsis on the right so you can select Test migration.

This step will help you verify that everything is running as expected, without impacting on-premises machines, from network connections, to core app functionality across the data, middle, and front end tiers.

In the Test migration section, you’ll want to select the Azure Virtual Network to get things started. The process will then automatically run a prerequisite check, test preparation, creation of a new virtual machine, and the test itself – this will all take a few minutes.

Once your test is complete, head back to the Replicating servers page (you can find this on the home page). Click the ellipsis again and select Clean up test migration.
Migrate phase

6. Test the migration

Once you are satisfied with the results of your test, it is time to move the VMs into production.

Select the ellipsis once again, and this time click on Migrate.

As part of the process, you’ll be asked to confirm the shut down of your VM so the migration can be done without risk of data loss. For this reason, it is a good idea to do this step during off-peak business hours since the VM will be unavailable for a few minutes.