

# Migrating Azure VMs to Google Cloud

This document describes how to migrate VMs from Azure to Google Cloud using Migrate for Compute Engine.

**Note:** Migration from Azure is supported only for VM instances that use [Azure managed disks](https://docs.microsoft.com/en-us/azure/virtual-machines/windows/managed-disks-overview) (https://docs.microsoft.com/en-us/azure/virtual-machines/windows/managed-disks-overview).

Before proceeding, be sure to complete complete the [prerequisites](/migrate/compute-engine/docs/4.8/how-to/migrate-azure-to-gcp/azure-prerequisites) (/migrate/compute-engine/docs/4.8/how-to/migrate-azure-to-gcp/azure-prerequisites) and [configuration](/migrate/compute-engine/docs/4.8/how-to/migrate-azure-to-gcp/configure-azure-as-a-source) (/migrate/compute-engine/docs/4.8/how-to/migrate-azure-to-gcp/configure-azure-as-a-source) for Azure.

## Available migration operations for Azure

The following operations are supported when moving from Azure to Google Cloud:

- Run-in-Cloud
- Storage Migration
- Move back
- Prepare to detach
- Detach
- Cleanup

For more information on these operations, see [VM migration lifecycle](/migrate/compute-engine/docs/4.8/concepts/planning-a-migration/vm-migration-lifecycle) (/migrate/compute-engine/docs/4.8/concepts/planning-a-migration/vm-migration-lifecycle).

**Note:** For cloud-to-cloud migrations, only [write isolation](/migrate/compute-engine/docs/4.8/concepts/planning-a-migration/storage-policies) (/migrate/compute-engine/docs/4.8/concepts/planning-a-migration/storage-policies) mode is available; data written to migrated VMs is *not* written back to Azure.

During migration of an instance from Azure to Google Cloud, Migrate for Compute Engine does the following:

1. Stops the source VM in Azure.
2. Creates the Migrate for Compute Engine VM Importer at Azure.
3. Takes a snapshot from the source VM disk.
4. Creates a data disk from source VM snapshots and attaches it to the Migrate for Compute Engine importer.
5. Creates an instance in Google Cloud.
6. Streams data from the importer to the Google Cloud Cloud Extension.
7. When migration is complete, Migrate for Compute Engine terminates the importer and resources are cleaned up.

At the end of the process, the original Azure instance remains intact and powered off.

## Migrating with waves

You can migrate VMs from Azure to Google Cloud with [Wave Migrations](#)

([/migrate/compute-engine/docs/4.8/how-to/organizing-migrations/overview](#)).

To start a storage migration, [create a new Full Migration job](#)

([/migrate/compute-engine/docs/4.8/how-to/organizing-migrations/creating-aborting-jobs#starting\\_a\\_job\\_on\\_a\\_wave](#)) on your wave.

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