

“Expert Cloud Consulting” -

Server Migration

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Version 1.0

—
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Approved by (In review)

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“Expert Cloud Consulting”

Server Migration

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2.0 General Information:

2.1 Document / GitHub URL(s)

Ticket(s) Name	URL
Azure Migation	...

2.2 Document Purpose

This technical documentation outlines the complete process of migrating AWS instances to Azure Virtual Machines using Azure Migration Services, including the setup, execution, and best practices.

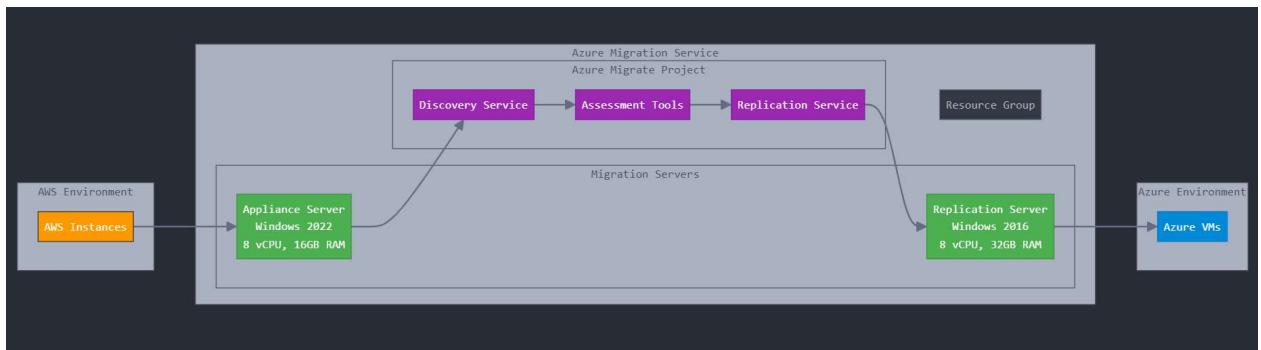
2.3 Document Revisions

Date	Version	Contributor(s)	Approver(s)	Section(s)	Change(s)
20/02/25	1.0	Prasad Bandagale	In Review	All Sections	New Document Created

2.4 Document References

Date	Document	Filename / URL
2024	Azure Migrate Documentation	https://docs.microsoft.com/en-us/azure/migrate/
2024	Azure Virtual Machines	https://docs.microsoft.com/en-us/azure/virtual-machines/

3.0 Infrastructure Overview



3.1 Source Environment (AWS)

Details of AWS instances being migrated:

- Instance specifications and configurations
- Operating systems
- Storage configurations
- Network settings

3.2 Target Environment (Azure)

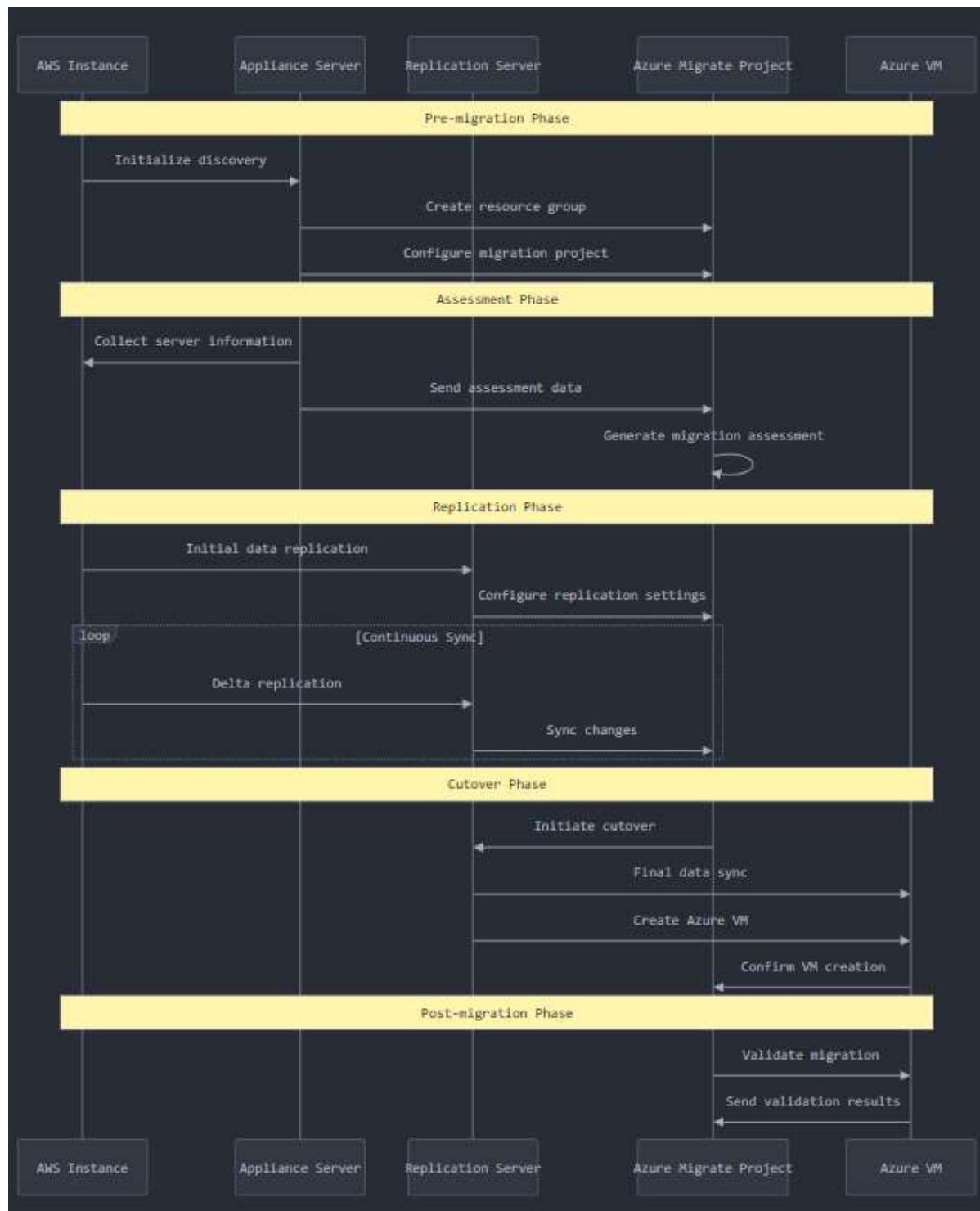
3.2.1 Appliance Server

- Operating System: Windows Server 2022
- Specifications:
 - CPU: 8 vCPU
 - RAM: 16 GB
 - Storage: 80 GB
- Role: Hosts migration tools and services

3.2.2 Replication Server

- Operating System: Windows Server 2016
- Specifications:
 - CPU: 8 vCPU
 - RAM: 32 GB
 - Storage: 300 GB
- Role: Manages data replication to Azure

3.2 Azure Migration full Process:



4.0 Migration Components

4.1 Azure Resources

1. Resource Group
 - o Created as primary container
 - o Houses all migration-related resources
 - o Enables centralized management

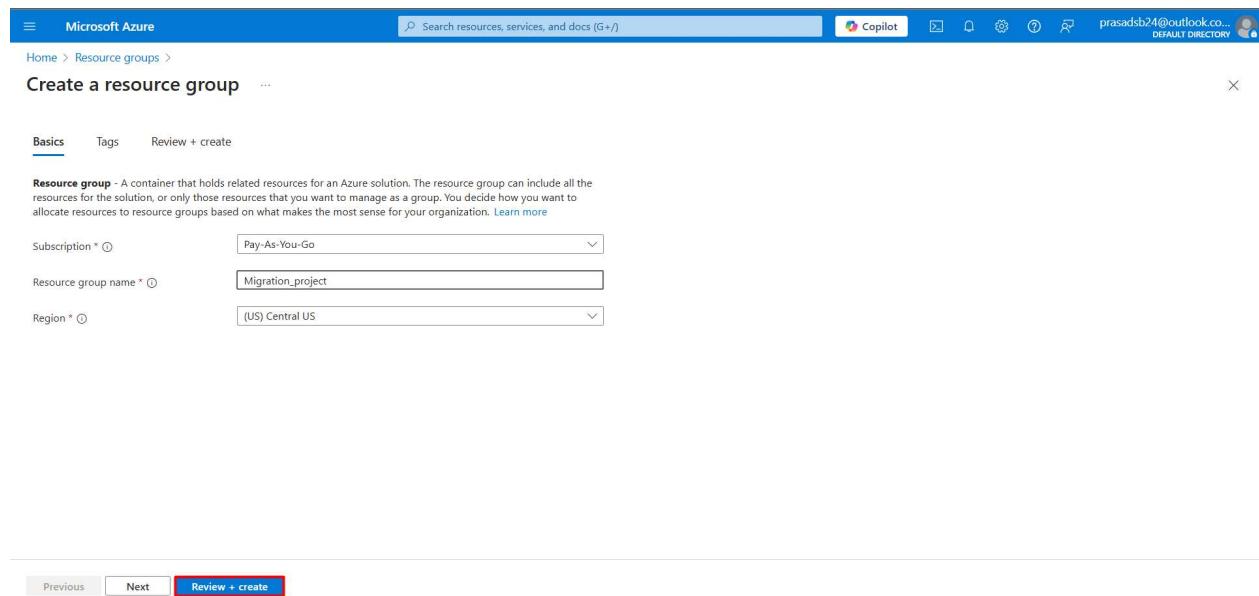
2. Azure Migrate Project
 - o Assessment capabilities
 - o Discovery features
 - o Migration tracking
 - o Performance monitoring

5.0 Migration Process

5.1 Pre-migration Phase

1. Resource Group Creation

- Name selection
- Region selection
- Tag configuration



The screenshot shows the Azure portal's 'Create a resource group' wizard. The 'Basics' tab is active. The 'Subscription' dropdown is set to 'Pay-As-You-Go'. The 'Resource group name' field contains 'Migration_project'. The 'Region' dropdown is set to '(US) Central US'. At the bottom, there are 'Previous' and 'Next' buttons, and a prominent 'Review + create' button.

2. Azure Migrate Project Setup

- Project configuration
- Tool selection
- Discovery setup

Server Migration

The screenshot shows the Microsoft Azure Azure Migrate | Get started page. On the left, there's a sidebar with options like 'Get started', 'Explore more', 'Migration goals', 'Manage', and 'Support + troubleshooting'. The main content area is titled 'Migrate and modernize your datacenters' and features three scenarios: 'Servers, databases and web apps', 'Databases (only)', and 'Explore more scenarios'. Each scenario has a brief description and a button: 'Assess and migrate databases' for databases, and 'Explore more' for the third scenario. At the bottom of the main content area is a large blue button labeled 'Discover, assess and migrate'.

Step 1: Create project in Azure Migrate service.

The screenshot shows the Microsoft Azure Create project page for 'Servers, databases and web apps'. It starts with a brief description: 'A project is used to store the discovery, assessment and migration metadata reported by your on-premises environment. Select a subscription and resource group in your preferred geography to create the project.' Below this are fields for 'Subscription' (set to 'Pay-As-You-Go') and 'Resource group' (set to 'Migration_project'). Under 'PROJECT DETAILS', there are fields for 'Project' (set to 'AWS-ec2Migration') and 'Geography' (set to 'United States'). A section titled 'Advanced' is collapsed. At the bottom right is a 'Create' button, which is highlighted with a red box.

Step 2 : Click on discover using appliance

Azure Migrate: Discovery and assessment

Discover Build business case Dependency analysis Assess Overview Resolve issues

Using appliance (selected)

Using import

Discover your on-premises servers by using an appliance or importing in a CSV format. Click "Discover" to get started.

2: Build and review business case
Review the recommended migration strategy and financial analysis for migrating your datacenter to Azure.

3: Analyze dependencies
Analyze dependencies between servers. Click 'Dependency analysis' to get started.

4: Assess
Assess discovered servers for migration to Azure. Click 'Assess' to get started.

Add more assessment tools? [Click here](#).

Step 3: Select physical or other and Generate the key

Microsoft Azure

Home > Azure Migrate | Servers, databases and web apps >

Discover ...

Are your servers virtualized? Physical or other (AWS, GCP, Xen, etc.)

To discover your on-premises or cloud environment, you will need to deploy the Azure Migrate appliance. Follow the steps below to set up and configure the appliance. Once set up, this appliance remains connected to Azure Migrate, and performs continuous discovery of your environment.

The discovery requires access credentials to the servers you want to discover. You can scope the servers to be discovered by restricting access on the account you specify. Performance counters that can be used for performance-based assessments will also be collected.

1: Generate project key
Start by giving your appliance a name and generate the project key. The project key is needed during the configuration of the Azure Migrate appliance. Additionally, during this step some Azure resources will be created. Ensure that you have the required permissions. [Learn more](#)

Name your appliance aws-ec2 Manage existing appliances

2: Download Azure Migrate appliance
After you have generated the project key, download the zip file (.zip) with the PowerShell script to install the appliance on an existing physical or virtual machine.

zip file, 500MB

3: Set up the appliance
Before you start, ensure these [prerequisites](#) are met. To set up the appliance, execute the PowerShell script in the .zip file on an existing physical or virtual machine (running Windows Server 2022, with 16 GB of memory, 8 vCPUs, around 80 GB of disk storage).

4: Configure the appliance and initiate discovery
Access the appliance configuration manager from your browser and complete the configuration steps to initiate the discovery. [Learn more](#)

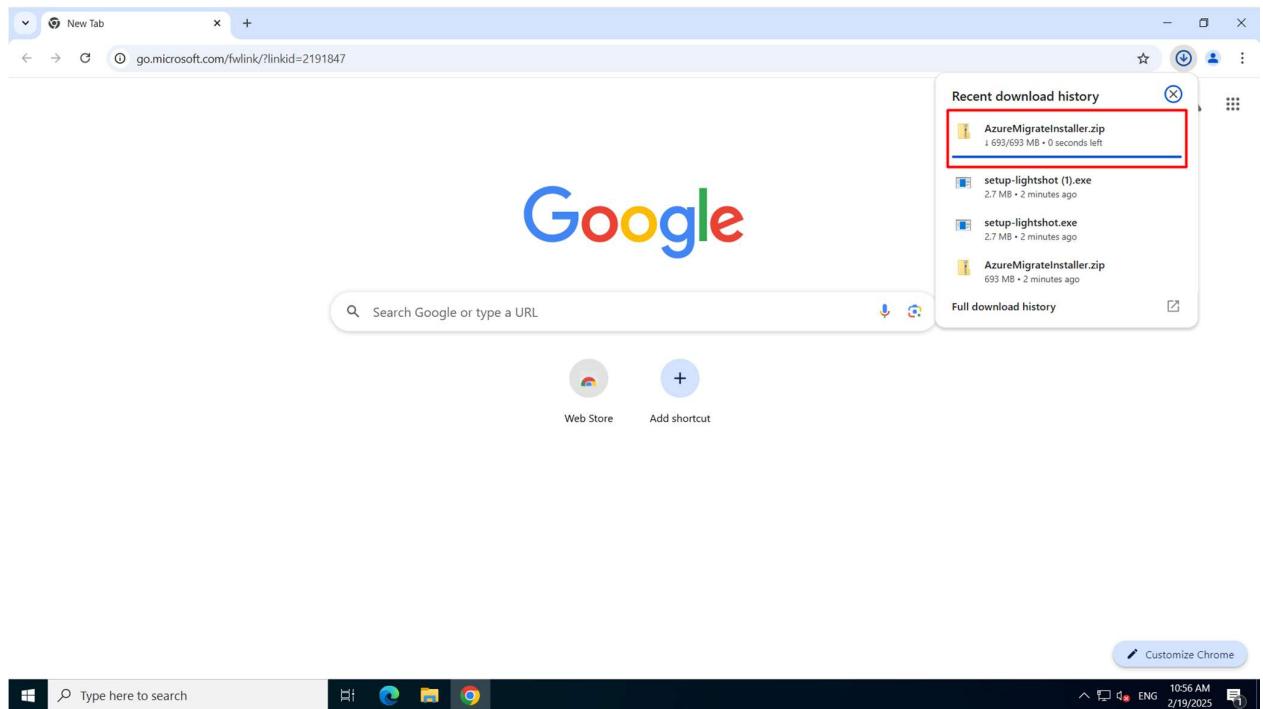
5.2 Setup Phase

1. Appliance Server Configuration

- Windows Server 2022 setup
- Azure tools installation
- Network configuration

Step 1: Connect the appliance server using RDP and Download AzureMigrateInstaller.zip. Then Unzip the AzureMigrateInstaller.

Server Migration



Step 2: Now open PowerShell using Administrator, then open the AzureMigrateInstaller script in PowerShell.

This will install azuremigrateinstaller.ps1.

```
#> # <copyright file="AzureMigrateInstaller.ps1" company="Microsoft">
#> </copyright>
#> #
#> # Description: This script prepares the host machine for various Azure Migrate Scenarios.
#> #
#> # Version: 10.3.0.0
#> #
#> # Requirements:
#> # Refer Readme.html for machine requirements
#> # Following files should be placed in the same folder as this script before execution:
#> # Scripts :> Add-AzureRmVMSelfSignedCertForTrustedSite.ps1
#> # MSIs :> Microsoft Azure Hyper-V\Server\VMware Assessment Service.msi
#> # Microsoft Azure Hyper-V\Server\VMware Discovery Service.msi
#> # Microsoft Azure SQL Discovery and Assessment Service.msi
#> # Microsoft Azure App Configuration Manager.msi
#> # Microsoft Azure Web App Discovery and Assessment Service.msi
#> # MicrosoftAzureUpdate.msi
#> # MicrosoftAzureRService.msi (VMware Migration only)
#> # MicrosoftAzureDraGatewayService.exe (VMware Migration only)
#> # Dara\Setup.Windows.msi (ASRV2 DRA)
#> #
#> Config : Scenario1.json
#> i

2. Azure US Government
3. Azure China
Please enter the option for desired cloud [1, 2 or 3]: 1
Selected cloud: Azure Public
[OK]
1. Set up an appliance for a Migrate project created with default (public endpoint) connectivity
2. Set up an appliance for a Migrate project created with private endpoint connectivity
Know more about the private endpoint connectivity: https://go.microsoft.com/fwlink/?linkid=2155739
Please enter the option for desired configuration [1 or 2]: 1
Selected connectivity: This appliance will be configured for the default (Public endpoint) connectivity
[OK]
Migration to Azure Stack HCI is set to false
You have chosen to set up an appliance to discover and assess the servers running as Physical or other (AWS, GCP, Xen, etc.) to an Azure Migrate project with default (public endpoint) connectivity on Azure Public cloud.
If this is not the desired configuration to set up the appliance, you can abort and execute the script again.
Enter [Y] to continue with the deployment or [N] to abort: y
Removing any previously installed agents in the next 5 seconds...

```

Step 3: Now open the Appliance Configuration Manager. That will automatically connect and sync with Azure.

The screenshot shows the 'Appliance Configuration Manager' interface with 'Cloud: Public' selected. The main heading is 'Azure Migrate'. Below it, a sub-section titled '1. Set up prerequisites' lists three tasks: 'Check connectivity to Azure' (completed), 'Check time is in sync with Azure' (in progress), and 'Check latest updates and register appliance' (in progress). A 'Verification of Azure Migrate project key' section contains a text input field for pasting a key and a 'Verify' button. An 'Appliance auto-update status' section indicates that auto-update will run automatically after verification. The bottom of the screen shows a Windows taskbar with the date and time as 2/19/2025 11:10 AM.

Step 4: Verify Appliance Configuration Manager with project key. This will Auto-Update the Appliance and then login Azure account with copied code.

The screenshot shows the 'Appliance Configuration Manager' interface with 'Cloud: Public' selected. The main heading is 'Azure Migrate'. Below it, a sub-section titled 'Verification of Azure Migrate project key' shows a text input field containing a long project key and a 'Verifying' button. A message below the button says 'Azure Migrate project key has been verified.' An 'Appliance auto-update status' section shows the process is 'Initiating auto update service to install the latest updates of appliance services. This may take around 5 minutes.' An 'Azure user login and appliance registration status' section instructs to log in to the Azure account. At the bottom, there are 'Login' and 'Logout' buttons, and a message 'Running prerequisites'. The bottom of the screen shows a Windows taskbar with the date and time as 2/19/2025 11:13 AM.

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Step 5: Login will start initialising appliance registration and could take 10-15 mins to complete.

The screenshot shows a browser window titled 'ApplianceConfigurationManager' with the URL <https://ec2amaz-nb7jaet:44368>. The page displays a message: 'Check latest updates and register appliance'. It includes sections for 'Verification of Azure Migrate project key', 'Appliance auto-update status', and 'Azure user login and appliance registration status'. A progress bar at the bottom indicates 'Initiating appliance registration' and 'Registering'. Below the main content, a section titled '2. Manage credentials and discovery sources' is visible.

Step 6: Add the credentials of source server.

Friendly Name could be any. Then Add username and Password of source server.

The form is titled 'Add credentials'. It has fields for 'Source type:' (set to 'Windows Server'), 'Friendly name:', 'Username:', and 'Password:'. At the bottom are 'Save' and 'Add more' buttons.

Source type: [*]	Windows Server
Friendly name: [*]	
Username: [*]	
Password: [*]	
Save Add more	

Step 7: Then add source server for discovery with private IP of the server. (Note: Keep the 5985 port open of the instance to connect with appliance server.)

Add discovery source X

Add single item Add multiple items Import CSV

Discovery source:^{*} Windows Server

IP Address / FQDN:^{*} 172.31.17.163

Map credentials:^{*} Admin

Save

Step 8: Now click on start Discovery, which will discover the instance at azure portal. This will Initiate discovery and it could take 5-10 mins to complete.

The screenshot shows the 'ApplianceConfigurationManager' interface. At the top, there's a note about adding credentials for SQL Server DBs and web apps, mentioning prerequisites and a note about creating a least privilege account. Below this is a search bar and a table with columns: #, Credentials type, Friendly name, Username, Status, and Actions. A message says 'No credentials added'. Underneath the table, there's a button to 'Revalidate credentials'. Further down, a note says 'Click on the button below to initiate discovery. After the discovery is complete, you can check the discovery status of the physical or virtual servers in the table above.' A large blue button labeled 'Start discovery' is prominently displayed. A success message at the bottom states 'Discovery has been successfully initiated. Go to the [Azure portal](#) to review the discovered inventory.'

Step 9: Check the Azure Migrate and then refresh the service to check if any server is discovered or not.

Azure Migrate: Discovery and assessment

Discover Build business case Dependency analysis Assess Overview Resolve issues

Discovered servers	Discovered SAP® systems	Total migration business cases	Groups
1	0	0	0

Servers running databases	Dependency analysis progress	Assessments	Appliances
0	0 Servers 1 total	Total 0	Total 1
Servers running Web apps		Azure VM	- Registered 1
0		Databases	- Pending action 0
		Web apps on Azure	-
		SAP® Systems (Preview)	-
		Azure VMware Solution (AVS)	-

Next step: Start assessing your servers by clicking on 'Assess'

Step 10: Now Create the Assessment for the server. If required change the assessment setting.

Microsoft Azure

Home > Azure Migrate | Servers, databases and web apps > Discovered servers >

Create assessment ...

Basics Select servers to assess Review + create assessment

An assessment is created on a group of servers that you intend to migrate together. Assessment helps you determine the Azure readiness of your servers that are running on-premises or on any other cloud. You can assess the servers discovered by the Azure Migrate appliance as well as the servers imported into Azure Migrate. [Learn more.](#)

Assessment type * Azure VM Help me choose

Discovery source * Servers discovered from Azure Migrate appliance

Assessment settings (Showing 4 of 14) Edit

Sizing criteria	Performance-based
Target location	West US 2
Savings options (Compute)	3 years reserved
Azure Hybrid Benefit	Yes
Include security cost estimates	Yes, with Microsoft Defender for Cloud

< Previous Next: Select servers to assess > Feedback

Step 11 : Then name the assessment and group of the assessment, then select the server. Then refresh and check the group is created or not.

Assessment name * awsvm

Select or create a group Create new Use existing

Group name * awsvm

Add machines to the group

Appliance name * aws-ec2 (Physical or other)

Selected Items: 1

Name	Issues	IPv6/IPv4	Operating system	Operating system support ...	Support ends in	Source	Machine type
EC2AMAZ-Q10726C	-	172.31.17.163,fe80::1f56:318...	Microsoft Windows Server 2...	Extended	47 months		Physical or other

< Previous Page 1 of 1 Next >

Feedback

2. Replication Server Setup

- Windows Server 2016 setup
- Storage configuration
- Network settings

Steps 1: Click on Discover in Migration tools.

Migration and modernization

Discover **Replicate** **Migrate** **Overview**

Discovered servers	Replications	Test Migrations
1	Azure VM: 0	0
	Azure App Service code: 0	
	Azure Kubernetes Service (AKS): 0	
	Azure Local: 0	

Discovered apps

ASP.NET	0
Java	0

Next step: Start replicating your servers and web apps to Azure

Step 2: Create the migration tool resource

Home > Azure Migrate | Servers, databases and web apps >

Discover ...

Azure Migrate

X

Where do you want to migrate to? ⓘ
Azure VM

Are your machines virtualized? ⓘ
Physical or other (AWS, GCP, Xen, etc.)

Target region ⓘ
West US 2

Info ⓘ The target region for migration, once confirmed, cannot be changed for the project. After confirmation, the Server Migration tool (in this project) will allow replication and migration only to the selected target region.

Confirm that the target region for migration is "West US 2"

Create resources

Create resources

Close

Feedback

Step 3 : Then Follow this 2 steps and RDP the replication Server. Then download the MicrosoftAzureSiteRecoveryUnifiedSetup. Then run the setup.

Microsoft Azure

Search resources, services, and docs (G+/)

Copilot

prasadsb24@outlook.co...
DEFAULT DIRECTORY

Home > Azure Migrate | Servers, databases and web apps >

Discover ...

Azure Migrate

Install a replication appliance

Help me choose

The replication appliance (Configuration Server) is a virtual appliance that is deployed on-premises or on cloud, co-located with the machines you are looking to migrate. The replication appliance coordinates and manages replication for the servers that are being migrated. Follow the steps outlined below to set up and configure the replication appliance.

1. Download and install the replication appliance software.
Create a new Windows Server 2016 machine by following the Configuration Server sizing guidelines.
Download The replication appliance software installer and use it to complete installation of the replication appliance software on the newly created Windows Server 2016 machine.

2. Configure the replication appliance and register it to the project.
Download the registration key file and use it to register the replication appliance to this project. The replication appliance installer will ask for a registration key.
Download

3. Finalize registration
Prepare for replication by finalizing registration for the replication appliance (Configuration Server). Select the replication appliance from the drop down to finalize registration for it.

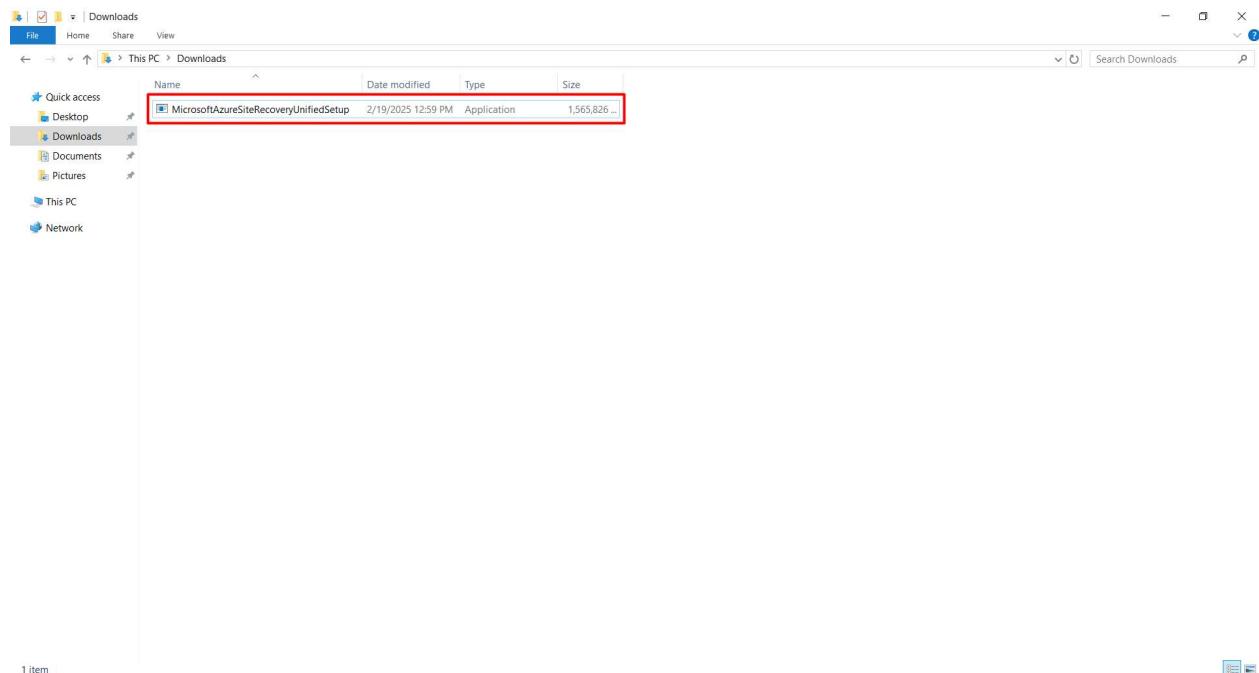
Info ⓘ The Configuration Server must be registered to the project to proceed with this step. Complete step 2 to proceed.

Select Configuration Server
Select Configuration Server

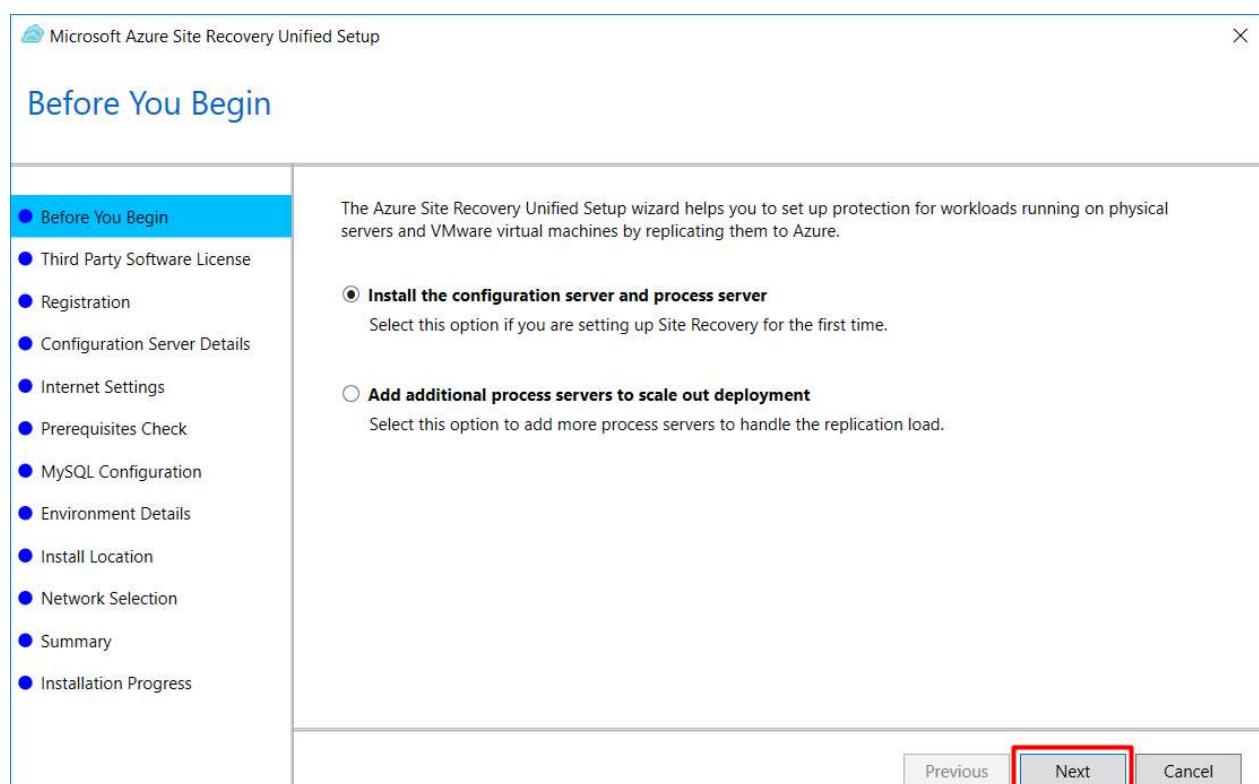
Finalize registration

Close

Feedback



Step 4: Select the option of “install the configuration server and process server” and follow up with next for third party software license.



Step 5: Now download registration key in your replication server.

Server Migration

The replication appliance (Configuration Server) is a virtual appliance that is deployed on-premises or on cloud, co-located with the machines you are looking to migrate. The replication appliance coordinates and manages replication for the servers that are being migrated. Follow the steps outlined below to set up and configure the replication appliance.

1. Download and install the replication appliance software.
Create a new Windows Server 2016 machine by following the [Configuration Server sizing guidelines](#).
[Download](#) the replication appliance software installer and use it to complete installation of the replication appliance software on the newly created Windows Server 2016 machine.
2. Configure the replication appliance and register it to the project.
Download the registration key file and use it to register the replication appliance to this project. The replication appliance installer will ask for a registration key.
[Download](#)
3. Finalize registration.
Prepare for replication by finalizing registration for the replication appliance (Configuration Server). Select the replication appliance from the drop down to finalize registration for it.

⚠️ The Configuration Server must be registered to the project to proceed with this step. Complete step 2 to proceed.

Select Configuration Server
Select Configuration Server
Finalize registration

[Close](#) [Feedback](#)

Step 6: Now browse that key in Registration and select next.

Microsoft Azure Site Recovery Unified Setup

Registration

Before You Begin

Third Party Software License

Registration

Internet Settings

Prerequisites Check

MySQL Configuration

Environment Details

Install Location

Network Selection

Summary

Installation Progress

Site Recovery Registration Key
C:\Users\Administrator\Desktop\AWS-ec2Migration-MigrationVault-1319517 [Browse](#)

Previous Next Cancel

Step 7: Keep Internet setting default if you are not using proxy server. Next, it will check the server configuration.

Prerequisites Check

Prerequisites Check : Passed: 6, Failed: 0, Warning: 3, Skipped: 0

[Re-Run](#)

Prerequisites check	Status
Min Memory and CPU checks	Warning
Restart pending	Passed
Min OS version and Domain Controller check	Passed
Checking for required IIS configurations	Passed
Checking for incompatible Group Policies	Passed
Global time sync check	Passed
Free space requirements	Warning
Checking for Static IP Addresses	Warning
Checking for Strawberry Perl(v5.8.8)	Passed

[Previous](#) [Next](#) [Cancel](#)

Step 8: Configuration the MySQL Database with password.

MySQL root password
••••••••••

MySQL database (svsystems user) password
••••••••••

Note: Passwords must

- Contain at least one letter
- Contain at least one number
- Contain at least one special character (_!@#\$%)
- Be between 8-16 characters
- Contain no spaces

[Previous](#) [Next](#) [Cancel](#)

Step 9: Keep this as NO if you don't want protect VMware virtual machines.

If you want to protect VMware virtual machines, Azure Site Recovery need to check for additional components.

Do you want to protect VMware virtual machines?

Yes
 No

Previous Next Cancel

Step 10: Select the network interface as Ethernet 3 for smooth connection.

1. Select a Network Interface Card(NIC) for connectivity with on-premises machines.
 Network Interface: Ethernet 3 [172.31.70.248]

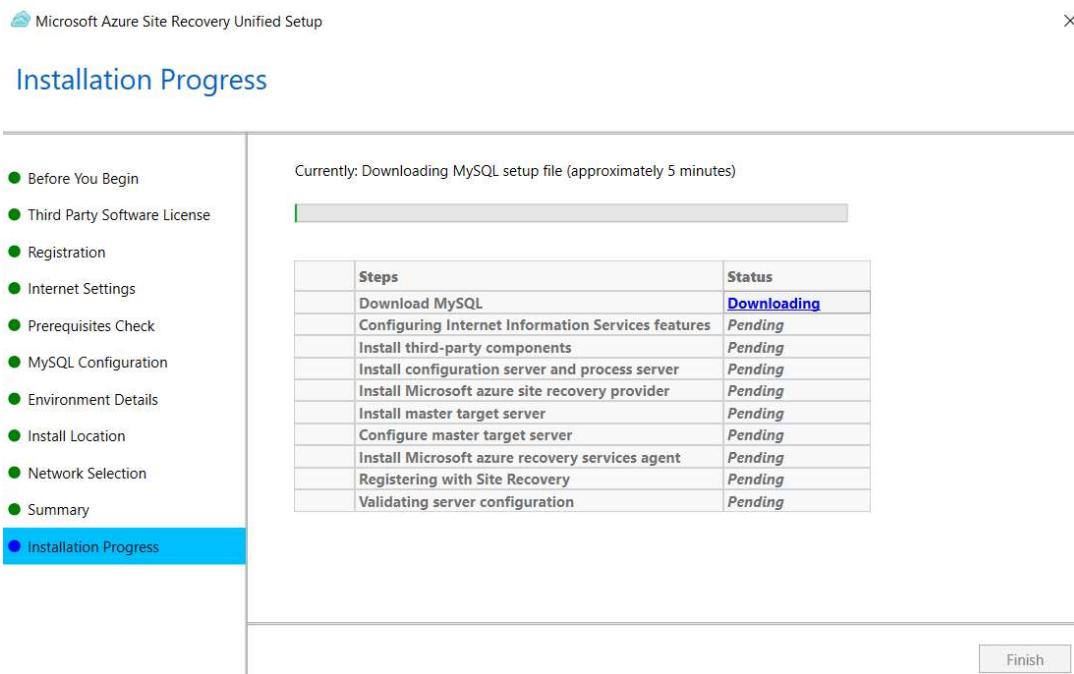
2. Select a Network Interface Card (NIC) for connectivity with Azure components for failback.
 Network Interface: Ethernet 3 [172.31.70.248]
 Port for receiving replication traffic: 9443

Note : Azure Site Recovery Unified Setup will open two ports for inbound connection on this server.

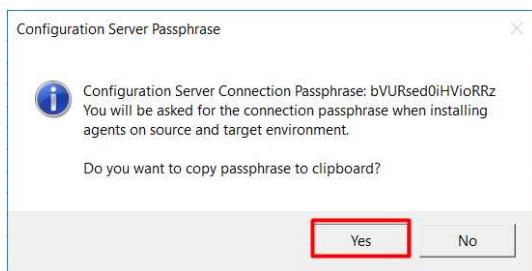
- Port 443 will be used by a web server which orchestrates replication operations. This port will be opened on all Network Interfaces assigned to this computer.
- The data transport port specified above will be used to send/receive replication data. This port will be opened only on the Network Interface selected above.

Previous Next Cancel

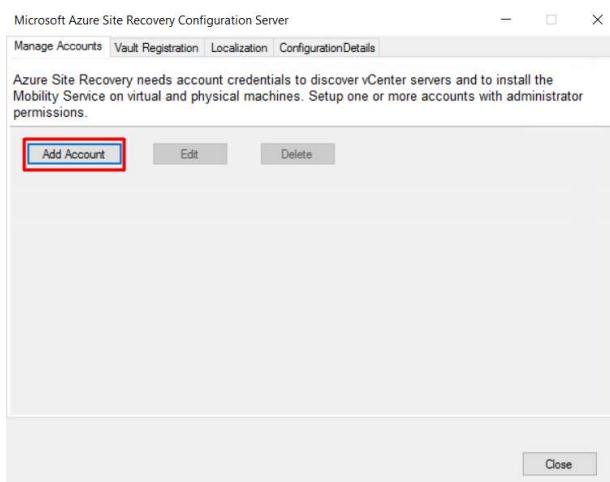
Step 11: Now install all the prerequisites. It could take 15-20 mins to install.



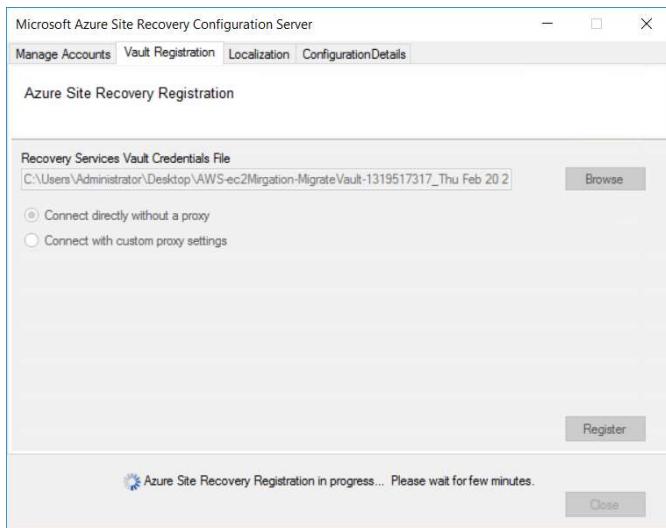
Step 12: After completion of the installation, it will prompt to copy the passphrase. Copy it and paste it in notepad. (Note: passphrase is required to register the agent to replication server.)



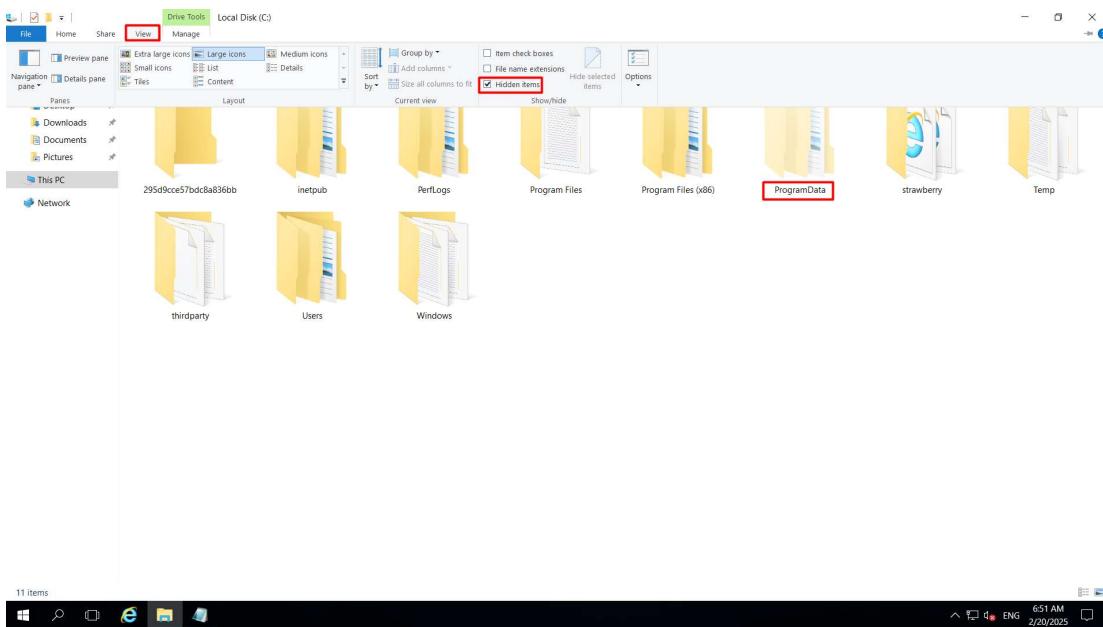
Step 13: Now Add the account on azure site recovery.



Step 14: Now add the vault Registration as same file as registration key. Registration could take 5-10 mins.



Step 15: Now navigate to Local drive C, then look for hidden folder ProgramData

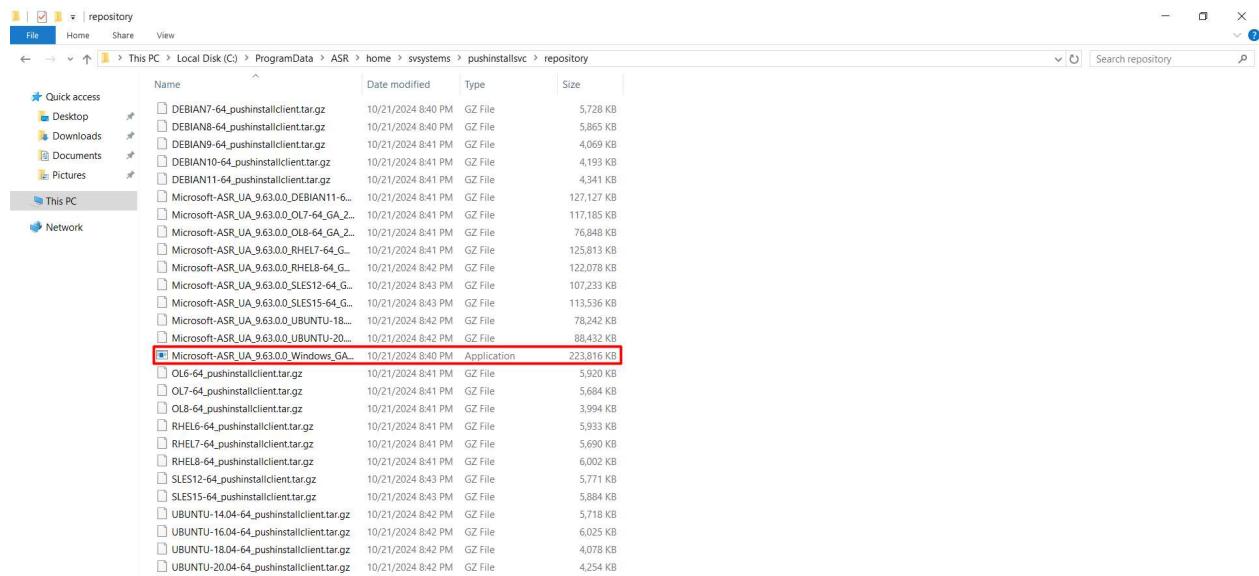


3. Source server Windows any

Step 1: Now Navigate to the location for replication agent
C:\ProgramData\ASR\home\svsystems\pushinstallsvc\repository

Copy that agent and paste it in the source server.
The best way is to use internet to transfer the agent.

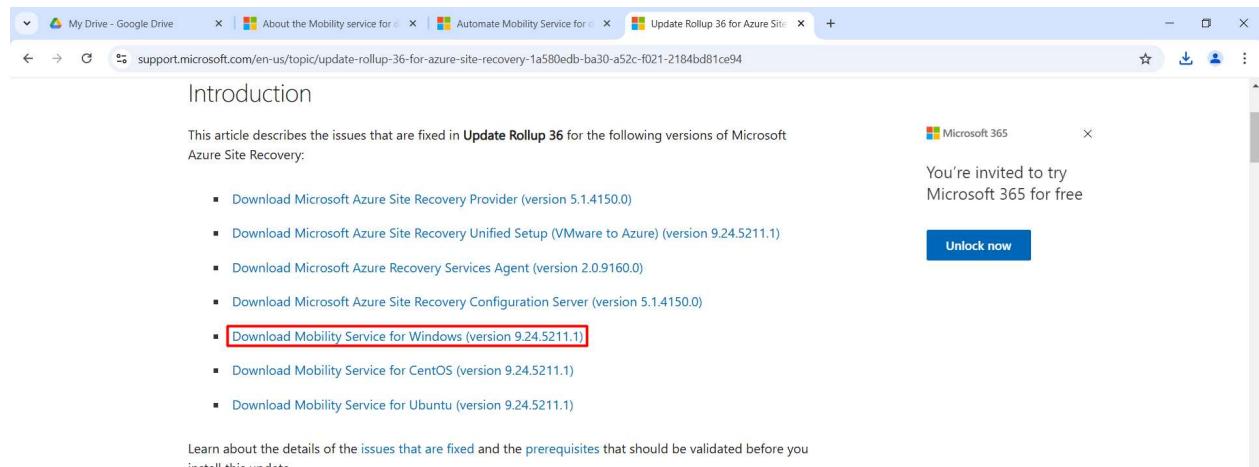
Server Migration



Name	Date modified	Type	Size
DEBIAN7-64_pushinstallclient.tar.gz	10/21/2024 8:40 PM	GZ File	5,728 KB
DEBIAN8-64_pushinstallclient.tar.gz	10/21/2024 8:40 PM	GZ File	5,865 KB
DEBIAN9-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	4,069 KB
DEBIAN10-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	4,193 KB
DEBIAN11-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	4,341 KB
Microsoft-ASR_UA_9.63.0.0_DEBIAN11-6...	10/21/2024 8:41 PM	GZ File	127,127 KB
Microsoft-ASR_UA_9.63.0.0_OL7-64_GA_2...	10/21/2024 8:41 PM	GZ File	117,185 KB
Microsoft-ASR_UA_9.63.0.0_OL8-64_GA_2...	10/21/2024 8:41 PM	GZ File	76,648 KB
Microsoft-ASR_UA_9.63.0.0_RHEL7-64_G...	10/21/2024 8:41 PM	GZ File	125,813 KB
Microsoft-ASR_UA_9.63.0.0_RHEL8-64_G...	10/21/2024 8:42 PM	GZ File	122,078 KB
Microsoft-ASR_UA_9.63.0.0_SLES12-64_G...	10/21/2024 8:43 PM	GZ File	107,233 KB
Microsoft-ASR_UA_9.63.0.0_SLES15-64_G...	10/21/2024 8:43 PM	GZ File	113,536 KB
Microsoft-ASR_UA_9.63.0.0_UBUNTU18-64...	10/21/2024 8:42 PM	GZ File	78,242 KB
Microsoft-ASR_UA_9.63.0.0_UBUNTU20-64...	10/21/2024 8:42 PM	GZ File	88,432 KB
Microsoft-ASR_UA_9.63.0.0_Windows_GA_...	10/21/2024 8:40 PM	Application	223,816 KB
OL6-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	5,920 KB
OL7-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	5,684 KB
OL8-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	3,994 KB
RHEL6-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	5,933 KB
RHEL7-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	5,690 KB
RHEL8-64_pushinstallclient.tar.gz	10/21/2024 8:41 PM	GZ File	6,002 KB
SLES12-64_pushinstallclient.tar.gz	10/21/2024 8:43 PM	GZ File	5,771 KB
SLES15-64_pushinstallclient.tar.gz	10/21/2024 8:43 PM	GZ File	5,884 KB
UBUNTU-14-04-64_pushinstallclient.tar.gz	10/21/2024 8:42 PM	GZ File	5,718 KB
UBUNTU-16-04-64_pushinstallclient.tar.gz	10/21/2024 8:42 PM	GZ File	6,025 KB
UBUNTU-18-04-64_pushinstallclient.tar.gz	10/21/2024 8:42 PM	GZ File	4,078 KB
UBUNTU-20-04-64_pushinstallclient.tar.gz	10/21/2024 8:42 PM	GZ File	4,254 KB



Step 2: After the installation of the Azure Site Recovery Unified Agent. We have to configure the mobility agent. I highly recommend to use older version for mobility agent as the newer version got some issue.



This article describes the issues that are fixed in **Update Rollup 36** for the following versions of Microsoft Azure Site Recovery:

- Download Microsoft Azure Site Recovery Provider (version 5.1.4150.0)
- Download Microsoft Azure Site Recovery Unified Setup (VMware to Azure) (version 9.24.5211.1)
- Download Microsoft Azure Recovery Services Agent (version 2.0.9160.0)
- Download Microsoft Azure Site Recovery Configuration Server (version 5.1.4150.0)
- **Download Mobility Service for Windows (version 9.24.5211.1)**
- Download Mobility Service for CentOS (version 9.24.5211.1)
- Download Mobility Service for Ubuntu (version 9.24.5211.1)

Learn about the details of the issues [that are fixed](#) and the [prerequisites](#) that should be validated before you install this update.

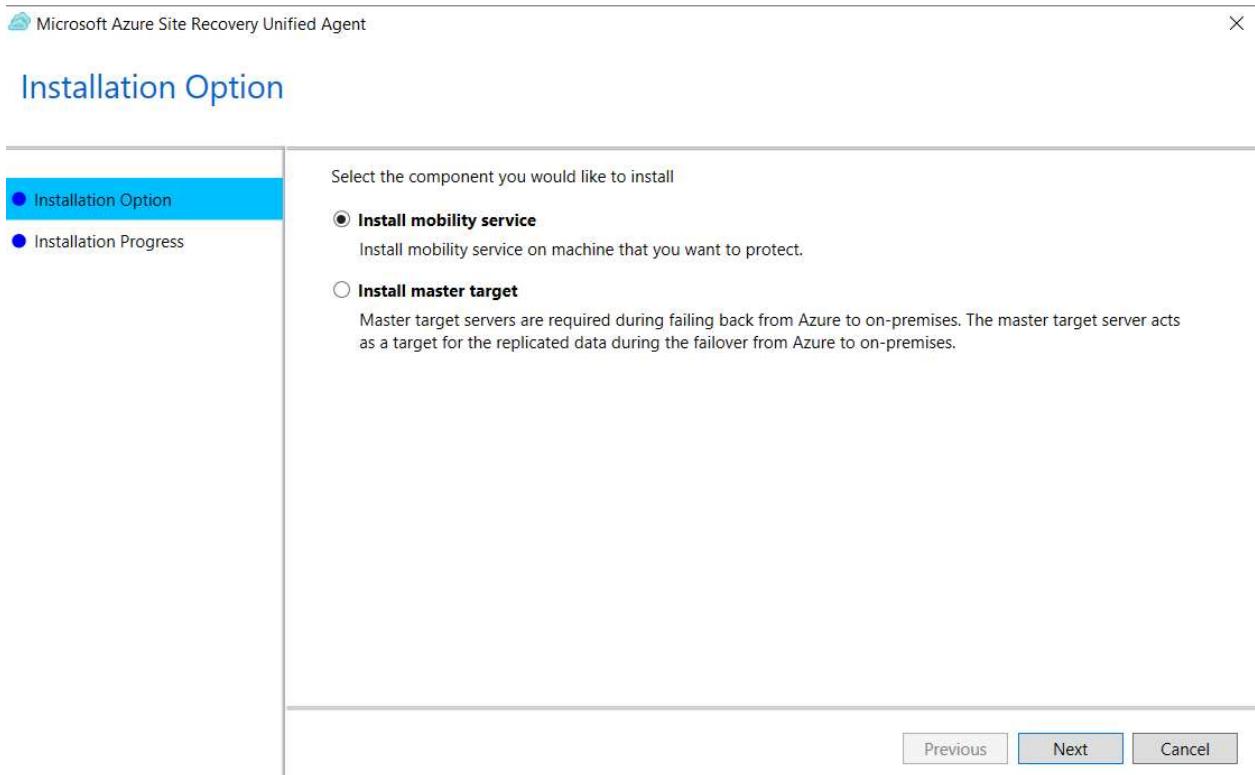
Update information

Prerequisites

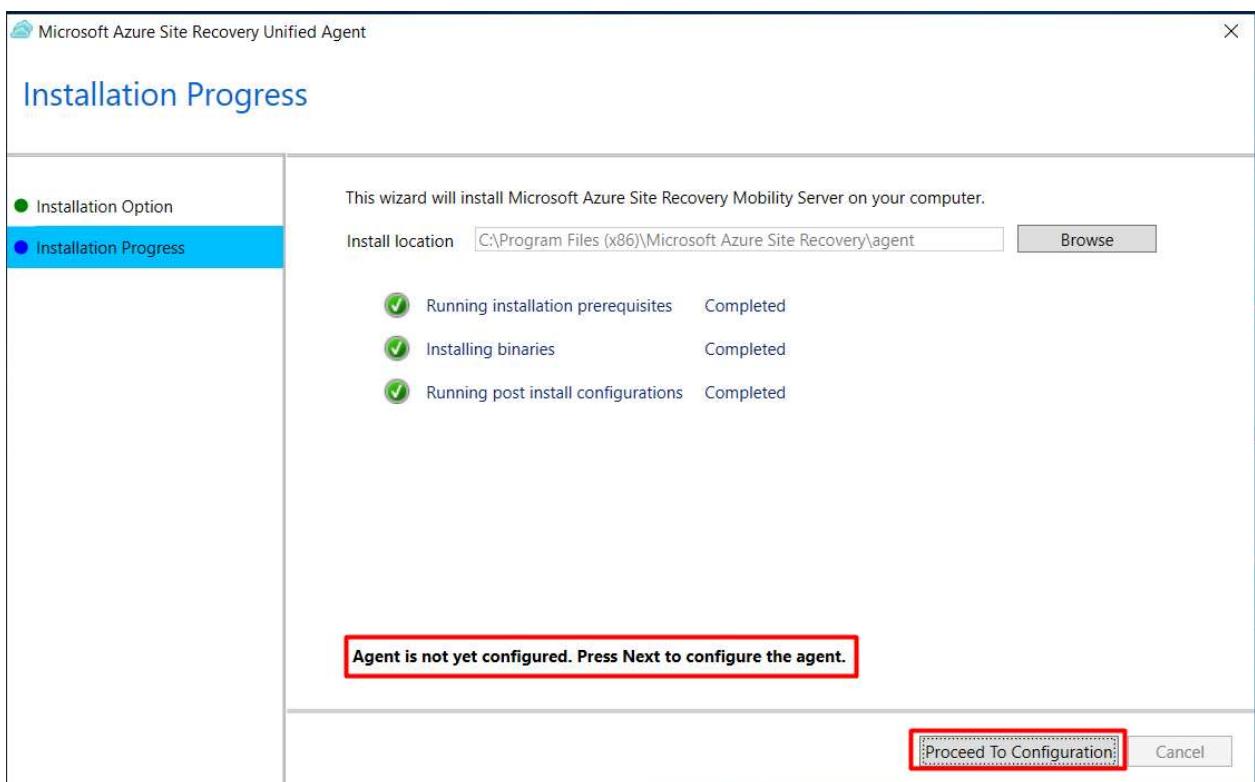
To install Microsoft Azure Site Recovery Provider Update Rollup 36 (version 5.1.4150.0), you must have one of the following installed:



Step 3: Install the mobility Agent on the source server.



Step 4: After the installation of mobility service, configure the agent.



Step 5: before Installation of agent, you should open the HTTPS port for the agent to connection with replication server or you might see this error.

Microsoft Azure Site Recovery Unified Agent

Registration

Please enter configuration server details below

Configuration server IP address: 172.31.70.248 ✓

Configuration server passphrase: XXXXXXXXXX

<input checked="" type="checkbox"/> Running registration prerequisites	Failed	Details
<input checked="" type="checkbox"/> Performing registration	Skipped	
<input checked="" type="checkbox"/> Validating configuration	Skipped	

Registration logs can be found at C:\ProgramData\ASRSetupLogs\ASRUncifiedAgentConfigurator.log

[Register](#) [Finish](#)

Check the Inbound rules in EC2 security Groups

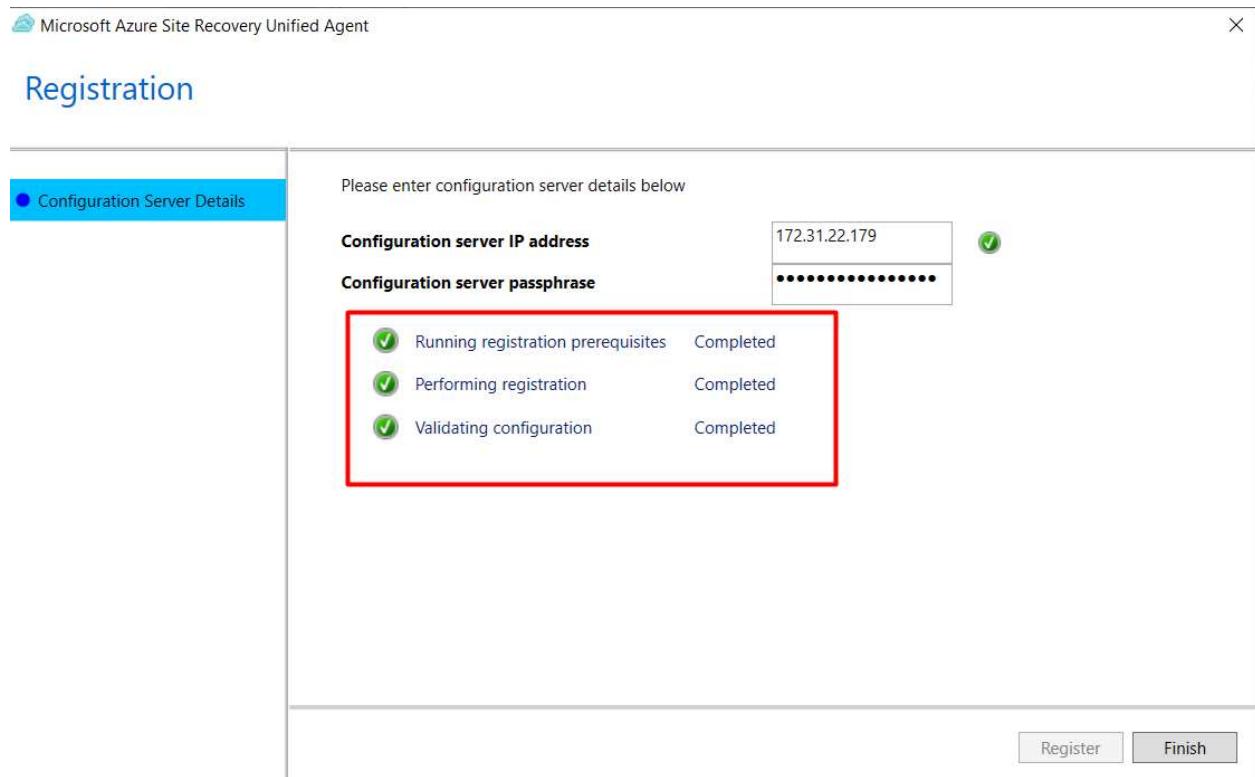
Open the 443/HTTPS port or connection between agent and configuration server.

Inbound rules [Info](#)

Security group rule ID	Type Info	Protocol Info	Port range Info	Source Info	Description - optional Info
sgr-05ca255d01a126534	RDP	TCP	3389	Custom ▼	<input type="text"/> 0.0.0.0/0 X
-	HTTPS	TCP	443	Anywh... ▼	<input type="text"/> 0.0.0.0/0 X

[Add rule](#)

This is how it looks after completing the installation. Then restart the server to complete perfect agent installation.



Step 6: Now check the azure portal, that configuration server is available for finalize registration.

Microsoft Azure

Discover ...

Do you want to install a new replication appliance or scale-out existing setup?

Install a replication appliance Help me choose

The replication appliance (Configuration Server) is a virtual appliance that is deployed on-premises or on cloud, co-located with the machines you are looking to migrate. The replication appliance coordinates and manages replication for the servers that are being migrated. Follow the steps outlined below to set up and configure the replication appliance.

1. Download and install the replication appliance software.
Create a new Windows Server 2016 machine by following the Configuration Server sizing guidelines.
Download the replication appliance software installer and use it to complete installation of the replication appliance software on the newly created Windows Server 2016 machine.
2. Configure the replication appliance and register it to the project.
Download the registration key file and use it to register the replication appliance to this project. The replication appliance installer will ask for a registration key.
Download
3. Finalize registration
Prepare for replication by finalizing registration for the replication appliance (Configuration Server). Select the replication appliance from the drop down to finalize registration for it.

Select Configuration Server *

EC2AMAZ-1QUMOFC

Finalize registration

Close

Step 7: Now click on replicate icon to move to the next step.

Server Migration

The screenshot shows the 'Specify intent' step in the Azure Migrate interface. It asks for basic migration details:

- What do you want to migrate? (radio button selected for) Servers or virtual machines (VM)
- Where do you want to migrate to? (radio button selected for) Azure VM
- Are your machines virtualized? (radio button selected for) Physical or other (AWS, GCP, Xen, etc.)
- On-premises appliance (radio button selected for) EC2AMAZ-1QUMOFC (Replication Appliance)

At the bottom are 'Continue' and 'Cancel' buttons.

Step 8: Select the basics.

The screenshot shows the 'Replicate' step under 'Specify intent'. It focuses on basic settings:

- Basics** tab is selected.
- Process Server * (radio button selected for) EC2AMAZ-1QUMOFC
- Guest credentials * (radio button selected for) admin

At the bottom are 'Previous' and 'Next' buttons.

Step 9: select the target server.

Home > Azure Migrate | Servers, databases and web apps > Specify intent >

Replicate ...

X

① Basics ② **Virtual machines** ③ Target settings ④ Compute ⑤ Disks ⑥ Tags ⑦ Review + Start replication

Select machines to replicate (Learn how to [discover non-virtualized/other machines](#) for server migration.)

Import migration settings from an assessment? *

No, I'll specify the migration settings manually

* Virtual machines

Search to filter machines

< Previous

Page 1 of 1

Next >

Name

IP Address

Boot Type

EC2AMAZ-Q10726C

172.31.17.163

Selected items : 1

Previous Next

Feedback

Step 10: Select own target setting (note: Create Vnet and subnet first to attach to replication)

Microsoft Azure

Home > Azure Migrate | Servers, databases and web apps > Specify intent >

Replicate ...

① Basics ② Virtual machines ③ **Target settings** ④ Compute ⑤ Disks ⑥ Tags ⑦ Review + Start replication

Select target properties for migration. Migrated machines will be created with the specified properties.

Region: West US

Subscription: Pay-As-You-Go

Resource group: project3

Cache storage account: Auto-create (default)

Virtual network: aws_vnet

Subnet: default

Availability options: No infrastructure redundancy required

Automatically repair replication:

Target VM security type: Standard

Disk encryption type: Encryption at-rest with a platform-managed key

Previous Next

Feedback

Step 11: Select the Compute VM size or keep it default.

Server Migration

The screenshot shows the Microsoft Azure portal with the URL https://portal.azure.com/#view/Microsoft_Azure_Migrate/SmsInitiateMigrateBlade/migrateProjectId/%2Fsubscriptions%2F4841e18f-8f01-49fc-b0b5-a829c6e6d07a%2FresourceGroups.... The page is titled "Replicate" and shows the "Compute" tab selected. It displays a table for selecting the Azure VM size for the migrated machine. The table has columns for "Name" (EC2AMAZ-Q10726C), "Azure VM Name" (EC2AMAZ-Q10726C), and "Azure VM Size". A dropdown menu under "Azure VM Size" lists various options, including "Standard_A1_v2 (1 Core, 2 GB RAM)" through "Standard_B16s_v2 (16 Cores, 64 GB RAM)". At the bottom, there are "Previous" and "Next" buttons, and a "Feedback" link.

Step 12: Select the disk type.

The screenshot shows the Microsoft Azure portal with the URL https://portal.azure.com/#view/Microsoft_Azure_Migrate/SmsInitiateMigrateBlade/migrateProjectId/%2Fsubscriptions%2F4841e18f-8f01-49fc-b0b5-a829c6e6d07a%2FresourceGroups.... The page is titled "Replicate" and shows the "Disks" tab selected. It displays a table for selecting the managed disk type. The table has columns for "Name" (EC2AMAZ-Q10726C), "Disks To Replicate" (All selected), and "Disk Type" (Standard SSD). A dropdown menu under "Disk Type" lists "Standard SSD" and "Standard HDD". At the bottom, there are "Previous" and "Next" buttons, and a "Feedback" link.

And start the replication.

Server Migration

Creating required resources. Please do not close this page.

Virtual machines selected : 1

Target settings

Target Azure region: West US 2
Subscription: Pay-As-You-Go
Resource group: project3
Virtual network: aws_vnet

>>> Next steps: After initial replication completes, you can perform test migrations and migrate servers.

[Replicate](#) [Previous](#)

Here is the status of replication

Name	Status	Type	Item	Start time	Duration
Associate replication policy	Successful	Replication policy	defaultEC2AMAZ-1QUMOFC-policy	2/20/2025, 3:40:28 PM	00:00:26
Create replication policy	Successful	Replication policy	defaultEC2AMAZ-1QUMOFC-policy	2/20/2025, 3:39:54 PM	00:00:00
Register the Azure Site Recovery Provider	Successful	Server	EC2AMAZ-1QUMOFC	2/20/2025, 3:28:40 PM	00:00:00
Create a site	Successful	Server	EC2AMAZ-1QUMOFC	2/20/2025, 3:27:37 PM	00:00:00
Register the Azure Site Recovery Provider	Successful	Server	EC2AMAZ-1QUMOFC	2/20/2025, 3:23:41 PM	00:00:00
Create a site	Successful	Server	EC2AMAZ-1QUMOFC	2/20/2025, 3:22:38 PM	00:00:00
Register the Azure Site Recovery Provider	Successful	Server	EC2AMAZ-0P4Q0E9	2/20/2025, 12:19:14 PM	00:00:00
Create a site	Successful	Server	EC2AMAZ-0P4Q0E9	2/20/2025, 12:18:11 PM	00:00:00
Register the Azure Site Recovery Provider	Successful	Server	EC2AMAZ-0P4Q0E9	2/20/2025, 11:19:47 AM	00:00:00
Create a site	Successful	Server	EC2AMAZ-0P4Q0E9	2/20/2025, 11:18:43 AM	00:00:00
Create a site	Successful	Server	AWS-ec2Migration-HyperVSite	2/19/2025, 6:21:09 PM	00:00:00

<https://portal.azure.com/#>

Step 13: look for the Replication in migration Dashboard.

Migration and modernization

Discover Replicate Migrate Overview

Discovered servers
1
Azure VM

Discovered apps
ASP.NET 0 Azure Local 0
Java 0

Replications
Azure VM 1 (replication icon)
Azure App Service code 0 (cloud icon)
Azure Kubernetes Service (AKS) 0 (kubernetes icon)

Test Migrations
0

Migrations
0

Next step: You can start migrating the replicating servers and web apps to Azure

Here is one error regarding older version agent.

Microsoft Azure

Home > Azure Migrate | Servers, databases and web apps > Azure Migrate: Migration and modernization | Replications > EC2AMAZ-Q10726C

Replicating machines

Overview General

Migration status

Status	0% synchronized
Health	Healthy
Test migration status	Never performed
Configuration issues	No issues
Last synchronized	-

Server details

Appliance	EC2AMAZ-1QUMOFC (VMware)
VM ID	cb918430-ef71-11ef-9606-0afffe4cffc3
Operating System	Windows

Replication settings and target configuration

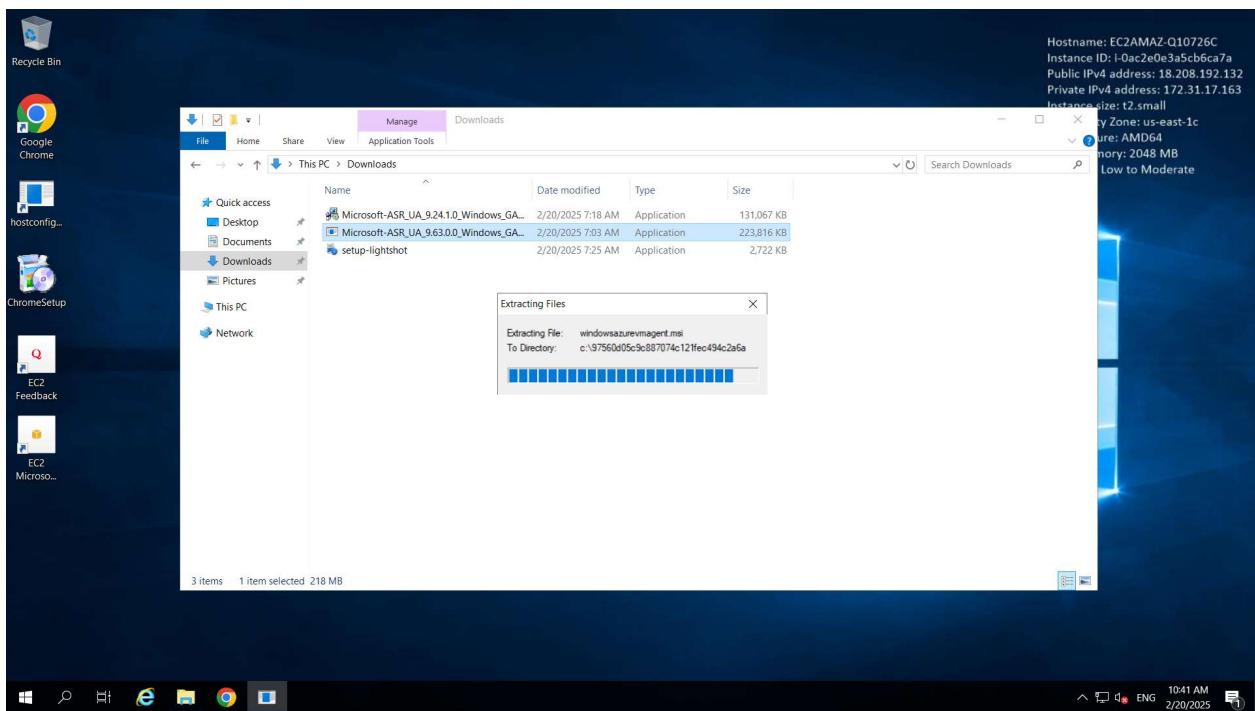
Cache storage account(s)	migrate4841elsa729729
Target subscription	Pay-As-You-Go
Target location	West US 2
Target Resource Group	project3
Target VM size	Standard_A1_v2
Target Virtual Network	

Events (last 72 hours) Open in new page

2/20/2025, 4:06:50 PM	Replication health changed ...	Critical
2/20/2025, 4:06:49 PM	Out-of-date version of Mobi...	Critical

To fix this error just upgrade the agent in your server.

Server Migration



It will show that agent is updated!!!

A screenshot of the Microsoft Azure portal. The top navigation bar shows 'Microsoft Azure' and the user's email 'prasadsb24@outlook.co...'. The main page displays a summary for a migration job named 'EC2AMAZ-Q10726C'. The 'Overview' section includes tabs for 'Test migration', 'Clean up test migration', 'Migrate', 'Resynchronize', 'Health error details', 'Stop replication', and 'Feedback'. The 'Migration status' table shows the following details:

Status	0% synchronized
Health	Healthy
Test migration status	Never performed
Configuration issues	No issues
Last synchronized	-

The 'Replication settings and target configuration' section lists the following parameters:

Cache storage account(s)	migrate4841elsa29729
Target subscription	Pay-As-You-Go
Target location	West US 2
Target Resource Group	project3
Target VM size	Standard_A1_v2
Target Virtual Network	

The 'Events (last 72 hours)' section shows the following log entries:

2/20/2025, 4:16:47 PM	Replication health changed ...	Information
2/20/2025, 4:12:35 PM	Agent upgrade	Information
2/20/2025, 4:06:50 PM	Replication health changed ...	Critical
2/20/2025, 4:06:49 PM	Out-of-date version of Mobi...	Critical

6.0 Best Practices

6.1 Performance Optimization

1. Network Configuration
 - o Bandwidth allocation
 - o Traffic routing
 - o Latency monitoring
2. Resource Management
 - o CPU utilization
 - o Memory allocation
 - o Storage performance

6.2 Security Measures

1. Network Security
 - o Firewall rules
 - o Security groups
 - o Access control
2. Data Protection
 - o Encryption settings
 - o Backup configuration
 - o Recovery options

7.0 Troubleshooting Guide

7.1 Common Issues

1. Replication Delays
 - o Bandwidth verification
 - o Network connectivity check
 - o Resource monitoring
2. Appliance Issues
 - o Configuration validation
 - o Service status check
 - o Log analysis

8.0 Project Deliverables

8.1 Documentation

1. Configuration Details
 - o Server specifications
 - o Network settings
 - o Security configurations
2. Migration Reports
 - o Assessment results
 - o Performance metrics
 - o Issue logs

