

Share files or folders between two Azure VMs

OBJECTIVE :

To securely copy a directory named **STUDENTS_ATTENDENCE** from the source VM **MZCET-COLLEGE** to the destination VM **KKC-COLLEGE**, both hosted on Microsoft Azure, using a local Windows machine as an intermediate.

STEP 1 : CREATING THE VM MZCET-COLLEGE

The screenshot shows the Azure portal interface for the virtual machine 'MZCET-COLLEGE'. The left sidebar contains navigation options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Connect, Networking, Network settings, Load balancing, Application security groups, Network manager, Settings, Availability + scale, and Availability + scaling. The main pane displays the 'Essentials' section with the following details:

- Resource group: [\(move\)](#) Testing
- Status: Running
- Location: Central India (Zone 1)
- Subscription: [\(move\)](#) Azure for Students
- Subscription ID: 46f3e799-69dc-49e5-b125-667a9c1400e6
- Availability zone: 1
- Operating system: Linux (ubuntu 24.04)
- Size: Standard D2s v3 (2 vcpus, 8 GiB memory)
- Public IP address: 40.81.242.200
- Virtual network/subnet: [Noway_Tech/MZCET_COLLEGE](#)
- DNS name: Not configured
- Health state: -
- Time created: 7/23/2025, 4:39 AM UTC

Below the Essentials section, there are tabs for Properties, Monitoring, Capabilities (7), Recommendations, and Tutorials. The 'Properties' tab is active, showing a table with the following information:

Property	Value
Computer name	MZCET-COLLEGE
Operating system	Linux (ubuntu 24.04)
VM generation	V2
VM architecture	x64
Agent status	Ready
Agent version	2.140.1

The 'Networking' section on the right shows the public IP address 40.81.242.200 (Network interface mzcet-college390_x1) and the private IP address 27.0.0.4. It also lists the virtual network/subnet as Noway_Tech/MZCET_COLLEGE and provides a link to configure the DNS name.

STEP 2 : Connect the VM MZCET-COLLEGE through the SSH key

The screenshot shows the Azure portal interface for the virtual machine 'KKC-COLLEGE' in the 'Connect' section. The left sidebar is similar to the previous screenshot. The main pane displays the 'Connect' page with the following details:

- Connecting using: Public IP address | 74.225.213.243
- Admin username: azureuser
- Port: 22 (change) Check access
- Just-in-time policy: Unsupported by plan

Below the connection details, there are two sections: 'Recommended' and 'Most common'. The 'Recommended' section shows 'SSH using Azure CLI' with a 'Select' button. The 'Most common' section shows 'Native SSH' with a 'Select' button.

On the right side, a 'Native SSH' configuration window is open. It contains the following steps:

- Configure prerequisites for Native SSH**
Azure needs to configure some features in order to connect to the VM.
 - Validating prerequisites before configuration**
 - Port 22 access**: Validating access to port 22 on the virtual machine. [Learn more](#)
 - Public IP address: 74.225.213.243**: A public IP address is required to connect via this connection method.
- Open a local shell (on Windows)**
Open Terminal (Windows 11), PowerShell (Windows 10 or less), or a shell of your choice. Or switch the local machine OS above to view more instructions.
- Copy and execute SSH command**
Provide a path to your SSH private key file on your local machine.
Can't find your private key? [Reset your SSH private key](#)
SSH to VM with specified private key.

```
ssh -i ~/ssh/id_rsa.pem azureuser@74.225.213.243
```

At the bottom of the window, there is an 'Other information' section with the text: 'Using a Linux subsystem like WSL or Ubuntu on Terminal?'. There are 'Close' and 'Troubleshooting' buttons at the bottom.

STEP 3 :

Upon successful SSH login to the MZCET-COLLEGE virtual machine, the terminal displays the home directory of the azureuser. Within this directory, a subdirectory named STUDENT_ATTENDENCE is present, which contains the files intended for transfer.

```
azureuser@MZCET-COLLEGE: x Windows PowerShell x + v
PS C:\Users\ARAVIND> ssh -i C:\Users\ARAVIND\Downloads\MZCET-COLLEGE_key.pem azureuser@40.81.242.200
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.11.0-1018-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Wed Jul 23 06:03:14 UTC 2025

System load:  0.39          Processes:      137
Usage of /:   5.7% of 28.02GB Users logged in:  0
Memory usage: 3%           IPv4 address for eth0: 27.0.0.4
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Wed Jul 23 05:43:13 2025 from 27.5.126.155
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@MZCET-COLLEGE:~$ pwd
/home/azureuser
azureuser@MZCET-COLLEGE:~$ ls
STUDENTS_ATTENDENCE
azureuser@MZCET-COLLEGE:~$ |
```

STEP 4 :

Copy Directory from MZCET-COLLEGE VM to Local Machine. Directly copy from one remote VM (MZCET) directly **to another remote VM (KKC)** using scp is not possible.

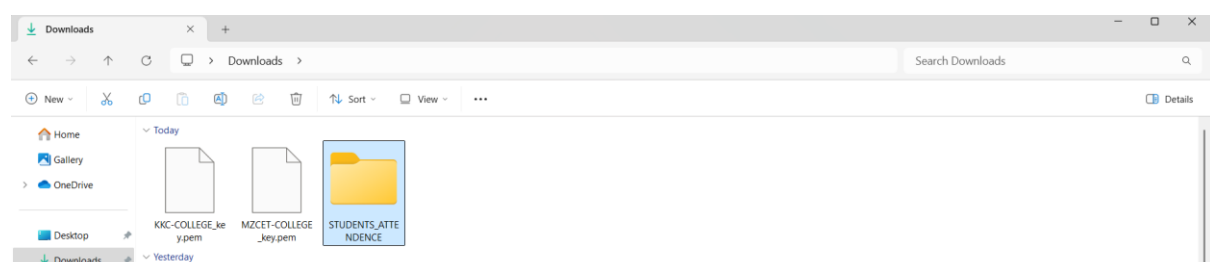
Use Local Machine as Middle Step

COMMANDS – `scp -i C:\Users\ARAVIND\Downloads\MZCET-COLLEGE_key.pem -r azureuser@40.81.242.200:/home/azureuser/STUDENTS_ATTENDENCE C:\Users\ARAVIND\Downloads\`

```
azureuser@MZCET-COLLEGE: x Windows PowerShell x azureuser@KKC-COLLEGE: x + v
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

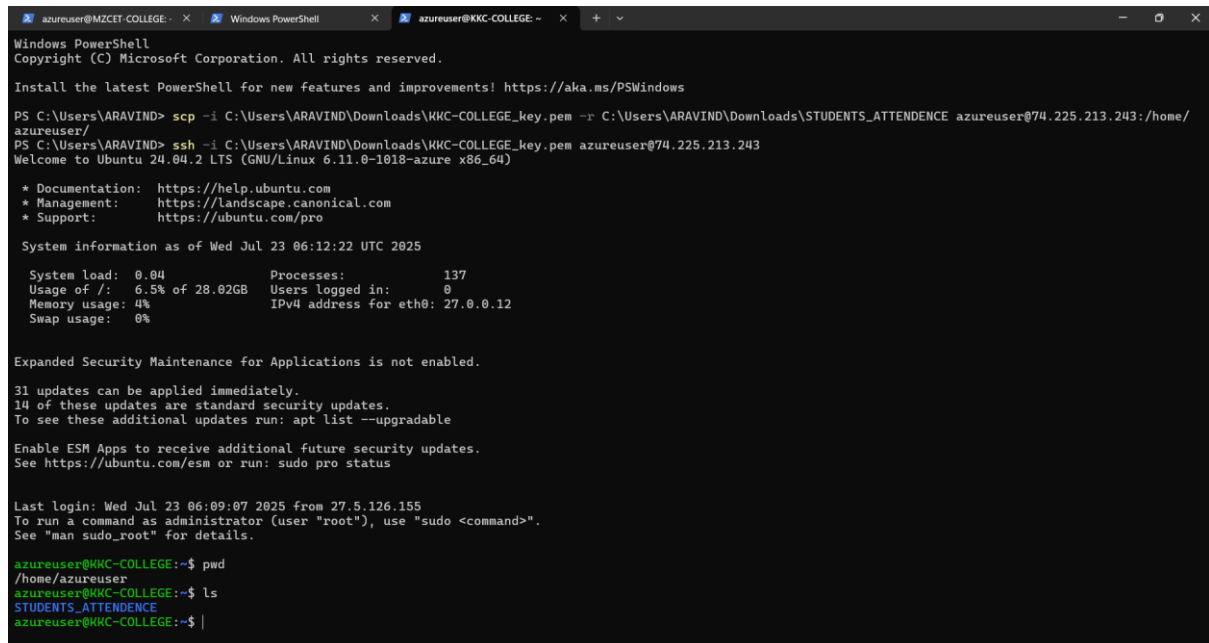
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\ARAVIND> scp -i C:\Users\ARAVIND\Downloads\MZCET-COLLEGE_key.pem -r azureuser@40.81.242.200:/home/azureuser/STUDENTS_ATTENDENCE C:\Users\ARAVIND\Downloads\
PS C:\Users\ARAVIND> |
```



STEP 5: Copy Folder from Local Machine to KKC-COLLEGE

COMMAND = `scp -i C:\Users\ARAVIND\Downloads\KKC-COLLEGE_key.pem -r C:\Users\ARAVIND\Downloads\STUDENTS_ATTENDENCE azureuser@74.225.213.243:/home/azureuser/`



```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\ARAVIND> scp -i C:\Users\ARAVIND\Downloads\KKC-COLLEGE_key.pem -r C:\Users\ARAVIND\Downloads\STUDENTS_ATTENDENCE azureuser@74.225.213.243:/home/
azureuser/
PS C:\Users\ARAVIND> ssh -i C:\Users\ARAVIND\Downloads\KKC-COLLEGE_key.pem azureuser@74.225.213.243
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.11.0-1018-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Wed Jul 23 06:12:22 UTC 2025

System load:  0.04          Processes:      137
Usage of /:   6.5% of 28.02GB Users logged in: 0
Memory usage: 4%          IPv4 address for eth0: 27.0.0.12
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

31 updates can be applied immediately.
14 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

Last login: Wed Jul 23 06:09:07 2025 from 27.5.126.155
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@KKC-COLLEGE:~$ pwd
/home/azureuser
azureuser@KKC-COLLEGE:~$ ls
STUDENTS_ATTENDENCE
azureuser@KKC-COLLEGE:~$ |
```