

# Using SSH over SSM

## Pre-Requisites

1. Install [AWS CLI](#)
2. Install [Session Manager Plugin for AWS CLI](#)
3. Have personal AWS Key
4. SSH key-pair uploaded to the server
5. Make sure following IAM policy is applied and allowed for the user

```
1 {
2     "Version": "2012-10-17",
3     "Statement": [
4         {
5             "Effect": "Allow",
6             "Action": "ssm:StartSession",
7             "Resource": [
8                 "arn:aws:ec2:region:987654321098:instance/i-02573cafcfEXAMPLE",
9                 "arn:aws:ssm:*:*:document/AWS-StartSSHSession"
10            ]
11        }
12    ]
13 }
```

## Instructions

1. Make sure all the pre-requisites are installed, and the CLI is configured.
2. Update SSH configurations

### a. On Windows

- i. The SSH configuration file is typically located at `C:\Users\<username>\.ssh\config`.

ii. 

```
1 # SSH over Session Manager
2 host i-* mi-*
3     ProxyCommand C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe "aws ssm start-session --target
```

### b. On Mac/Linux

- i. The SSH configuration file is typically located at `~/.ssh/config`.

ii. 

```
1 # SSH over Session Manager
2 host i-* mi-*
3     ProxyCommand sh -c "aws ssm start-session --target %h --document-name AWS-StartSSHSession --parameter
```

3. Go to Powershell (for Windows) / Terminal (on Mac/Linux)
4. Configure AWS CLI to use your Access Key. Save it as profile by appending (`--profile "ProfileName"`)

```
PS C:\Users\obero> aws configure
AWS Access Key ID [*****MRGX]:
AWS Secret Access Key [*****D6d]:
Default region name [ap-northeast-1]:
Default output format [json]:
```

5. Use following command to connect to the Servers using SSH

```
1 ssh -i /path/my-key-pair.pem username@instance-id
```

6. Use following command to connect using only SSM. You can also append (--profile "ProfileName")

```
1 aws ssm start-session --target "InstanceID"
```

## Related articles

[Step 8: \(Optional\) Allow and controlling permissions for SSH connections through Session Manager - AWS Systems Manager \(amazon.com\)](#)

[Start a session - AWS Systems Manager \(amazon.com\)](#)