

SSH Configuration with Custom RSA Key for Mac Users

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Steps to Configure SSH with a Custom RSA Key

1. Download and copy RSA key contents

First we will download an RSA key shared on moodle and copy it's contents.

- Download ds203-azure-vm-rsa file shared on moodle.
- Once downloaded, Open it in any editor and copy all the contents from the file. [This is the private key] (use **Ctrl + A** to select all, and **Ctrl + C** to copy it).

2. Open a Terminal

Now, you will need to open a terminal on your computer. Here's how:

- On macOS, press **Cmd + Space**, type **Terminal**, and press **Enter**.

3. Create a New RSA Key File

Once the terminal is open, create a new file to store your RSA private key by running the following command:

```
vim ~/.ssh/ds203-azure-vm-rsa
```

This will open the **vim** text editor and create the file **ds203-azure-vm-rsa** in the **/.ssh** directory.

4. Paste the RSA Key

After opening the file, you need to paste your RSA private key into it. Make sure the key includes the **BEGIN** and **END** statements at the top and bottom.

Here's how to paste the key:

- In the **vim** editor, press **i** to enter Insert mode.

- Press **Ctrl + V** to paste the RSA key into the file. [Contents we copied in 1st step]

To save the file and exit **vim**, press **Esc** and then type **:wq**, followed by **Enter**.

4. Create or Edit the config File

Now, to make the SSH connection easier, create or modify the **SSH config** file to specify which RSA key to use. In the terminal, run:

```
vim ~/.ssh/config
```

If this file doesn't already exist, it will be created.

Inside the **config** file, add the following lines:

```
Host X.Y.Z.W (Replace with your vm_ip_address)
  User hduser
  IdentityFile ~/.ssh/ds203-azure-vm-rsa
```

In this block:

- Replace **X.Y.Z.W** with the actual IP address of the virtual machine (VM) you're connecting to (Make sure your VM on azure is running, if not run the vm by selecting the vm and clicking start button).

Save and exit the file by pressing **Esc**, then type **:wq**, and press **Enter**.

5. Change Permissions for Security

After saving the key, it's important to restrict access to it for security reasons. Run the following commands to change the file permissions:

```
chmod 600 ~/.ssh/ds203-azure-vm-rsa
chmod 700 ~/.ssh
```

6. Test the SSH Connection

Once you've set up the key and the **config** file, test the connection by running this command in the terminal:

```
ssh hduser@X.Y.Z.W
```

Replace **X.Y.Z.W** with your actual VM's IP address. If everything is set up correctly, this should log you into the VM without needing to specify the RSA key each time.