Exercise: Running a Shell Script on a Remote System Using SSH

Consider two systems:

1. Local system [ initiate SSH connection ]
2. Remote system – identify IP address, where the shell script will be executed

Steps:

1. Open your terminal on the local system and generate an SSH key pair : ssh-keygen -t rsa -b 2048
2. Save the keys to the default location (~.ssh/id\_rsa)
3. Copy the public key to the remote system: ssh-copy-id username@remote\_ip\_address
4. Create a shell script on the remote system
5. Echo “hello SSH” and save it as a shell script
6. Run the shell script from your local system using SSH: ssh username@remote\_ip\_address 'bash ~/test\_script.sh'
7. Check the output

**Install the SSH Plugin in Jenkins**:

* Go to Manage Jenkins > Manage Plugins > Available.
* Search for and install the **SSH** plugin (if not already installed).

**Configure SSH in Jenkins**:

* Go to Manage Jenkins > Configure System.
* Scroll down to the **SSH remote hosts** section and click **Add**.
* Enter the following details:
  + **Name**: A name for this SSH configuration.
  + **Hostname**: The IP address of your remote system.
  + **Username**: The username to log into the remote system.
  + **Private Key**: Click **Add** and enter your private key (from ~/.ssh/id\_rsa on your local system).
* Click **Save** to save your SSH configuration.

**Create a Jenkins Job** to Run the Script via SSH:

* Create a new Freestyle project in Jenkins.
* Under **Build**, click **Add build step** > **Execute shell**.