Create and Access Windows and Linux Virtual Machines on Google Cloud

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# Creating a Windows Virtual Machine on Google Cloud

## Step 1: Set Up Google Cloud Account

* Sign in to your Google Cloud account. If you don’t have one, create a new account at [URL].

## Step 2: Open the Google Cloud Console

* Navigate to the Google Cloud Console at [URL].

## Step 3: Create a New Project

* In the Google Cloud Console, click on the project drop-down at the top of the page and select "New Project".
* Give your project a name and click "Create".

## Step 4: Enable Billing

* Ensure that billing is enabled for your project. You can set up a billing account if you don’t have one.

## Step 5: Navigate to the VM Instances

* In the Google Cloud Console, go to the "Compute Engine" section and click on "VM instances".

## Step 6: Create a New VM Instance

* Click on "Create instance" to open the configuration page for a new virtual machine.
* Give your instance a name and select the region and zone where you want it to be hosted.
* Select "Windows Server" from the "Boot disk" section and choose the appropriate version.
* Configure the machine type, disk size, and other settings according to your requirements.
* Click on "Create" to start the VM instance.

## Step 7: Enable Remote Desktop Protocol (RDP)

* Once the VM is running, go to the "VM instances" page and click on the instance name.
* Click on the "Set Windows password" under the "Remote access" section to generate a password for the default user.
* Make a note of the external IP address of your instance.

## Step 8: Access the VM via RDP

* On your local machine, open the Remote Desktop Connection application (mstsc.exe).
* Enter the external IP address of your VM and click "Connect".
* Log in with the username and password you generated earlier.

# Creating a Linux Virtual Machine on Google Cloud

## Step 1: Open the Google Cloud Console

* Navigate to the Google Cloud Console at [URL] and ensure you’re in the correct project.

## Step 2: Navigate to the VM Instances

* In the Google Cloud Console, go to the "Compute Engine" section and click on "VM instances".

## Step 3: Create a New VM Instance

* Click on "Create instance" to open the configuration page for a new virtual machine.
* Give your instance a name and select the region and zone where you want it to be hosted.
* Select "Linux" from the "Boot disk" section and choose the appropriate distribution (e.g., Ubuntu, CentOS, Debian).
* Configure the machine type, disk size, and other settings according to your requirements.
* Click on "Create" to start the VM instance.

## Step 4: Connect to the Linux VM

* Once the VM is running, go to the "VM instances" page and click on the instance name.
* Copy the external IP address of your instance.
* For command-line access, use an SSH client (e.g., PuTTY or the built-in SSH tool in Google Cloud Console) to connect to the Linux VM by entering the external IP address and logging in with your user credentials.
* For GUI access, you can install and configure a remote desktop software like VNC or xrdp on your Linux VM.
* Follow the specific instructions for your Linux distribution to install and start the remote desktop software.
* Use an appropriate remote desktop client on your local machine to connect to the Linux VM, using the external IP address and your user credentials.