


<p>Nama: Widya WP</p> <p>NIM: 065xxxx</p> <p>Kelompok: XXX</p>		<p>MODUL 11</p> <p>Nama Dosen : Gatot Budi Santoso Adrian Sjamsul Qomar</p>
<p>Hari/Tanggal : 6 Desember 2021</p>	<p>Praktikum Jaringan Komputer</p>	<p>Nama Asisten Labratorium :</p> <ol style="list-style-type: none"> 1. Annur Hangga Prihadi 2. Harfansa Nasrullah 3. Faiz Kumara 4. Uray Asyifa

Firewall Rules GCP dan Testing Deploy

1. Alat dan Bahan

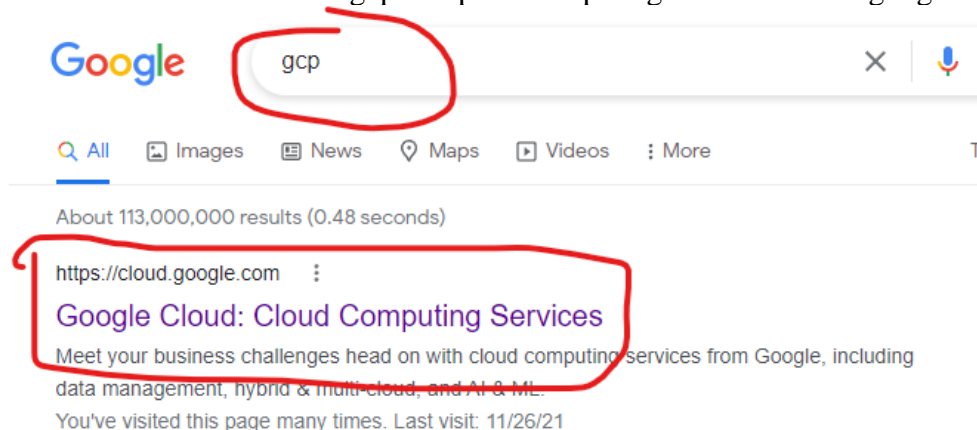
1.1. Hardware: Laptop atau PC

1.2. Services: Google Cloud Platform

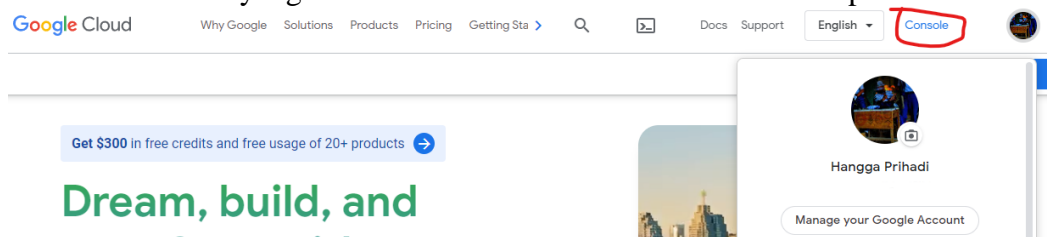
2. Elemen Kompetensi

2.1. Mengatur Firewall

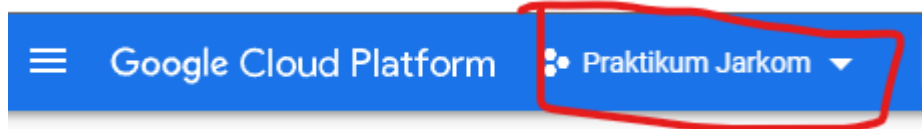
2.1.1. Buka browser lalu ketik gcp dan pilih link paling atas atau cloud.google.com



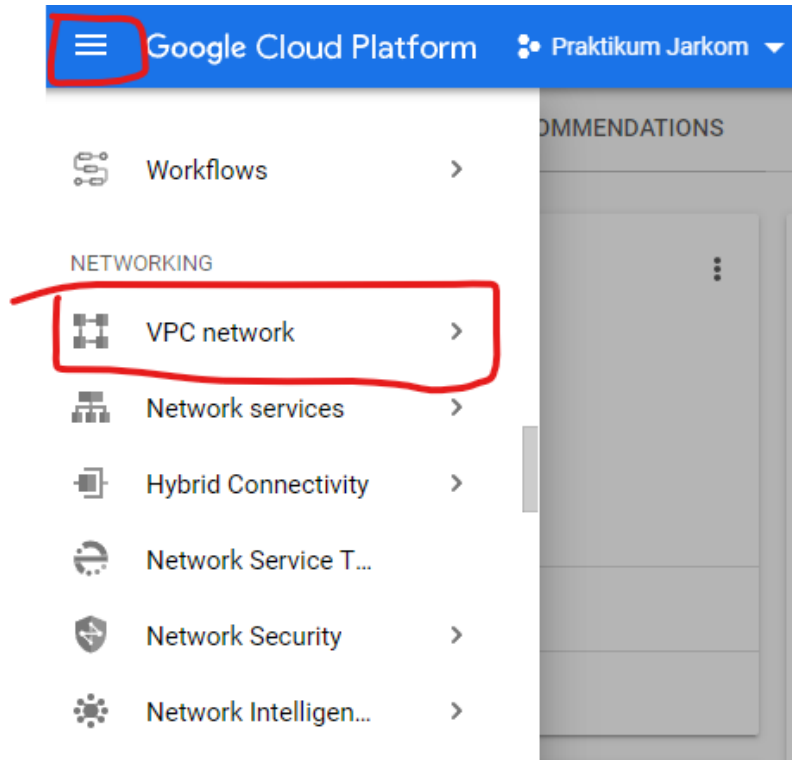
2.1.2. Gunakan email yang telah diberi hak akses masuk ke GCP dan pilih console



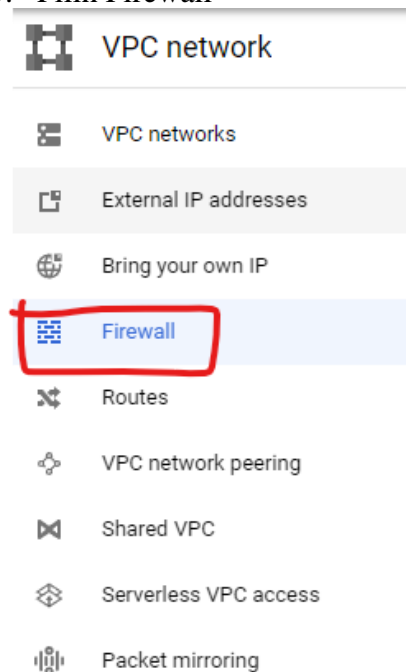
2.1.3. Pastikan project yang muncul adalah Praktikum Jarkom



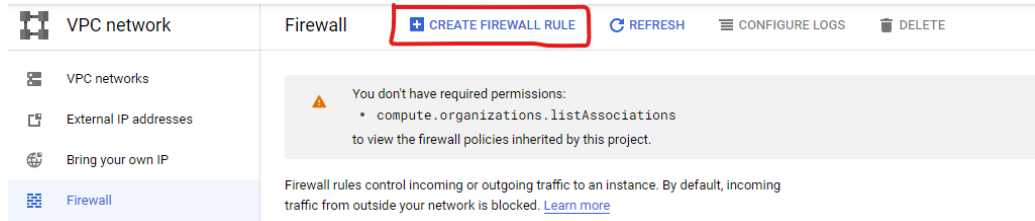
2.1.4. Pilih VPC network



2.1.5. Pilih Firewall



2.1.6. Pilih CREATE FIREWALL RULE



2.1.7. Atur Firewall dengan ketentuan berikut

Name	kelompok-xx (isi xx dengan nomor kelompok)
Targets	Specified target tags
Target tags	web-server-kelompok-xx (isi xx dengan nomor kelompok)
Source IPv4 ranges	0.0.0.0/0
Protocols and ports	Specified protocols and ports
Specified protocols and ports	<ol style="list-style-type: none"> 1. Centang tcp lalu isi dengan 11xx (xx isi dengan nomor kelompok) 2. Centang udp 3. Centang Other protocols isi dengan icmp,sctp lalu klik create

← Create a firewall rule

Firewall rules control incoming or outgoing traffic to an instance. By default, incoming traffic from outside your network is blocked. [Learn more](#)

Name *
kelompok-69
Lowercase letters, numbers, hyphens allowed

Description

Targets
Specified target tags

Target tags *
web-server-kelompok-69

Source filter
IPv4 ranges

Source IPv4 ranges *
0.0.0.0/0 for example, 0.0.0.0/0, 192.168.2.0/24

Second source filter
None

Protocols and ports ?

☐ Allow all

☒ Specified protocols and ports

☒ tcp : 1169

☒ udp : all

☒ Other protocols
 icmp,sctp

▼ DISABLE RULE

CREATE

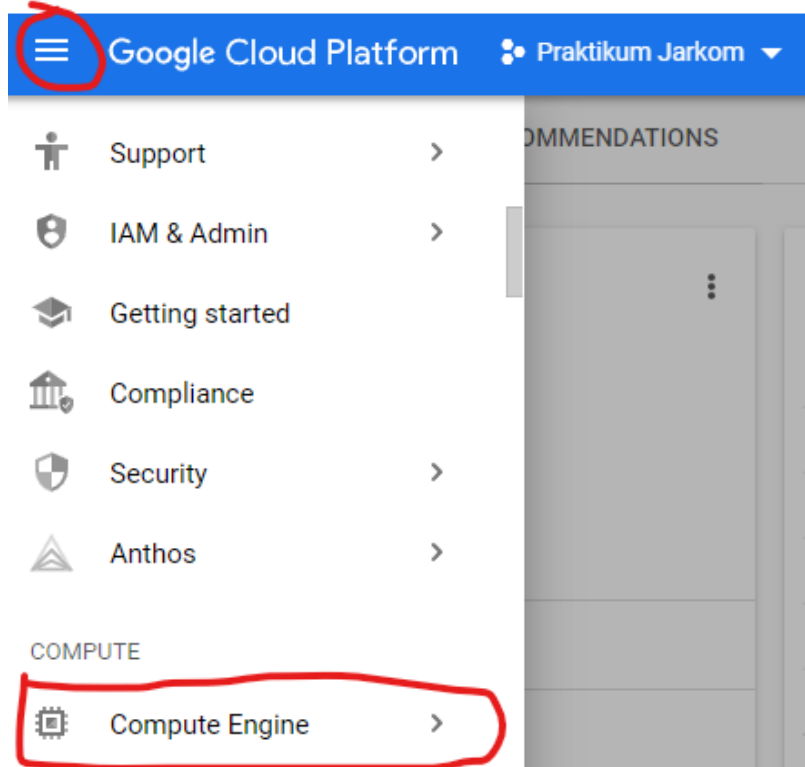
CANCEL

2.1.8. Pastikan Firewall kalian sukses terbuat seperti gambar berikut

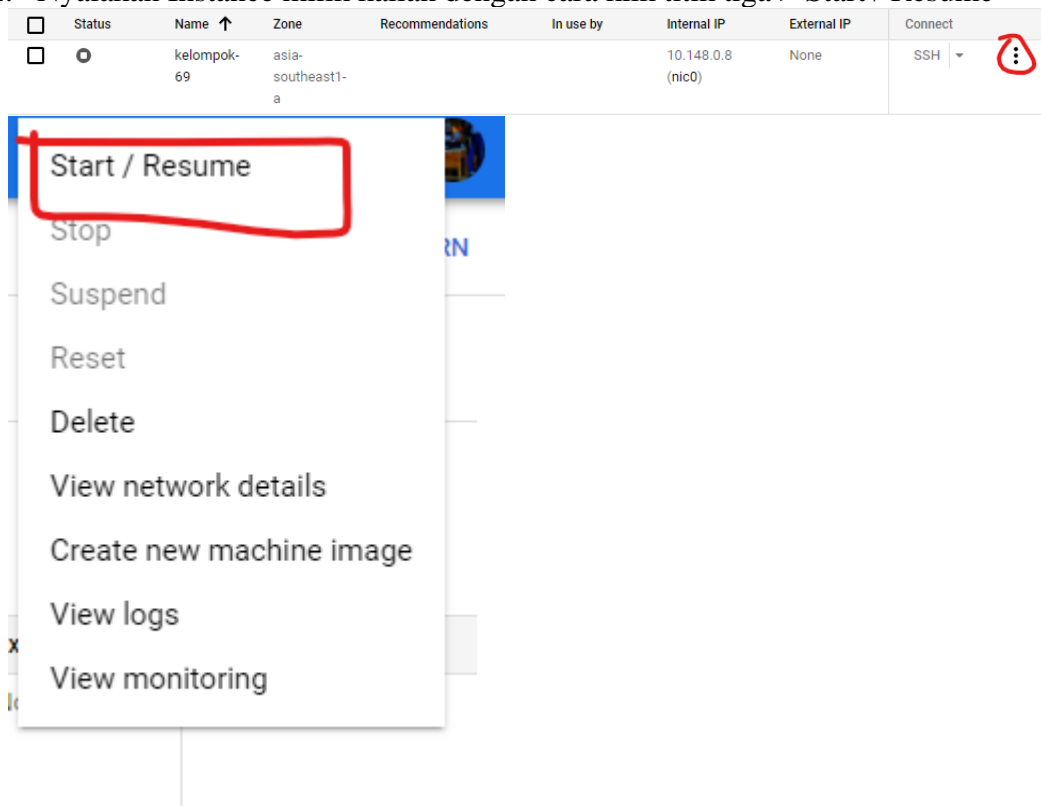
<input type="checkbox"/>	default-allow-http	Ingress	http-server	IP ranges: 0.0.0.0/0	tcp:80	Allow	1000	default	Off
<input type="checkbox"/>	kelompok-1169	Ingress	web-server-1169	IP ranges: 0.0.0.0/0	tcp:1169 udp icmp,sctp	Allow	1000	default	Off
<input type="checkbox"/>	default-allow-icmp	Ingress	Apply to all	IP ranges: 0.0.0.0/0	icmp	Allow	65534	default	Off
<input type="checkbox"/>	default-allow-internal	Ingress	Apply to all	IP ranges: 10.0.0.0/8	tcp:0-65535 udp:0-65535 icmp	Allow	65534	default	Off
<input type="checkbox"/>	default-allow-rdp	Ingress	Apply to all	IP ranges: 0.0.0.0/0	tcp:3389	Allow	65534	default	Off
<input type="checkbox"/>	default-allow-ssh	Ingress	Apply to all	IP ranges: 0.0.0.0/0	tcp:22	Allow	65534	default	Off

2.2. Setting GCP Instance

2.2.1. Masuk ke Compute Engine



2.2.2. Nyalakan Instance milik kalian dengan cara klik titik tiga > Start / Resume



2.2.3. Pastikan Instance sudah menyala lalu klik SSH



2.2.4. Pastikan Instance SSH yang muncul milik kalian

```
hanggapriyadi@kelompok-69: ~ - Google Chrome
ssh.cloud.google.com/projects/praktikum-jarkom/z
Connected, host fingerprint: ssh-rsa 0 E0:D0:
:E1:C1:A8:B1:9B:24:F6:16:25:FE:29:63:C3:0B:62
Linux kelompok-69 4.19.0-18-cloud-amd64 #1 SM
6_64

The programs included with the Debian GNU/Lin
the exact distribution terms for each program
individual files in /usr/share/doc/*/copyrigh

Debian GNU/Linux comes with ABSOLUTELY NO WAR
permitted by applicable law.
hanggapriyadi@kelompok-69:~$
```

2.2.5. Pastikan file dalam Instance tidak berubah dengan cara ketik `dir && R --version && git --version`

```
hanggapriyadi@kelompok-69:~$ dir && R --version && git --version
Prak-Jarkom
R version 3.5.2 (2018-12-20) -- "Eggshell Igloo"
Copyright (C) 2018 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under the terms of the
GNU General Public License versions 2 or 3.
For more information about these matters see
http://www.gnu.org/licenses/.

git version 2.20.1
```

2.2.6. Ketik `sudo apt update`

```
hanggapriyadi@kelompok-69:~$ sudo apt update
Hit:1 http://deb.debian.org/debian buster InRelease
Get:2 http://deb.debian.org/debian buster-updates InRelease [51.9 kB]
Get:3 http://deb.debian.org/debian buster-backports InRelease [46.7 kB]
Get:4 http://security.debian.org/debian-security buster/updates InRelease [65.4 kB]
Get:5 http://packages.cloud.google.com/apt cloud-sdk-buster InRelease [6774 B]
Get:6 http://packages.cloud.google.com/apt google-cloud-packages-archive-keyring InRelease [49.3 kB]
```

2.2.7. Ketik `sudo -i R`

```
hanggapriyadi@kelompok-69:~$ sudo -i R
R version 3.5.2 (2018-12-20) -- "Eggshell Igloo"
Copyright (C) 2018 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
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Type 'license()' or 'licence()' for distribution details.

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

>
```

2.2.8. Ketik `install.packages('shiny')` (Ditunggu saja memang lama \pm 40 menit)

```
Type 'demo()' for some demos, 'help()' for on-line help, or  
'help.start()' for an HTML browser interface to help.  
Type 'q()' to quit R.  
  
> install.packages('shiny')  
[1]
```

2.2.9. Pastikan sukses menginstall packages shiny lalu ketik `q()` selanjutnya ketik `y`

```
** help  
*** installing help indices  
*** copying figures  
** building package indices  
** testing if installed package can be loaded  
* DONE (shiny)  
  
The downloaded source packages are in  
  '/tmp/RtmpsnU202/downloaded_packages'  
  
> q()  
Save workspace image? [y/n/c]: y  
[1]
```

2.2.10. Ketik `sudo apt install libcurl4-openssl-dev`

```
hanggaprihadi@kelompok-69:~$ sudo apt install libcurl4-openssl-dev  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
Suggested packages:  
  libcurl4-doc libidn11-dev libkrb5-dev libldap2-dev librtmp-dev libssh2-1-dev  
The following NEW packages will be installed:  
  libcurl4-openssl-dev
```

2.2.11. Ketik `sudo apt install libssl-dev`

```
hanggaprihadi@kelompok-69:~$ sudo apt install libssl-dev  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
Suggested packages:  
  libssl-doc  
The following NEW packages will be installed:  
  libssl-dev
```

2.2.12. Masuk ke directory prak jarkom

```
hanggaprihadi@kelompok-69:~$ cd Prak-Jarkom/  
hanggaprihadi@kelompok-69:~/Prak-Jarkom$  
[1]
```

2.2.13. Ketik `sudo R -e "shiny::runApp(host='0.0.0.0', port=11xx)"` isi xx dengan nomor kelompok

```
hanggaprihadi@kelompok-69:~/Prak-Jarkom$ sudo R -e "shiny::runApp(host='0.0.0.0', port=1169)"

R version 3.5.2 (2018-12-20) -- "Eggshell Igloo"
Copyright (C) 2018 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
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'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

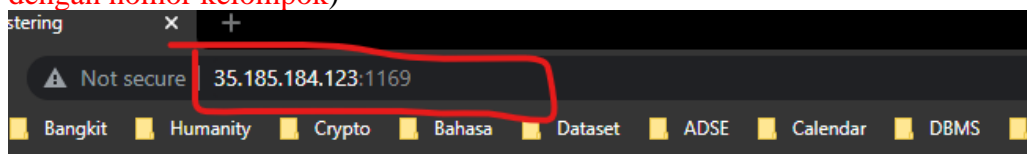
> shiny::runApp(host='0.0.0.0', port=1169)
Loading required package: shiny
Listening on http://0.0.0.0:1169
```

2.3. Testing

2.3.1. Copy External IP kalian

Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP
✓	kelompok-69	asia-southeast1-a			10.148.0.8 (nic0)	35.185.184.123

2.3.2. Paste External IP di address bar kalian lalu tambahkan dengan 11xx (isi xx dengan nomor kelompok)



2.3.3. Jika sukses maka akan muncul seperti ini
Iris k-means clustering

X Variable

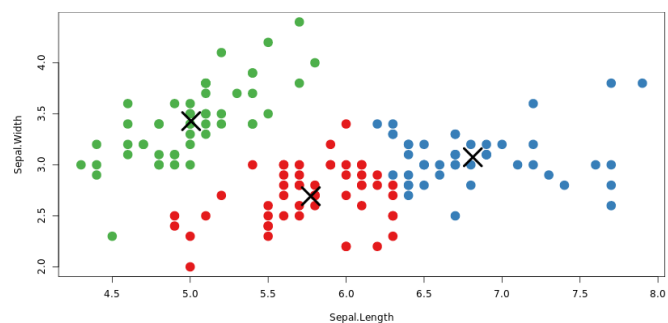
Sepal.Length

Y Variable

Sepal.Width

Cluster count

3



3. Simpulan

Isi simpulan sendiri ya (Minimal 4 baris)