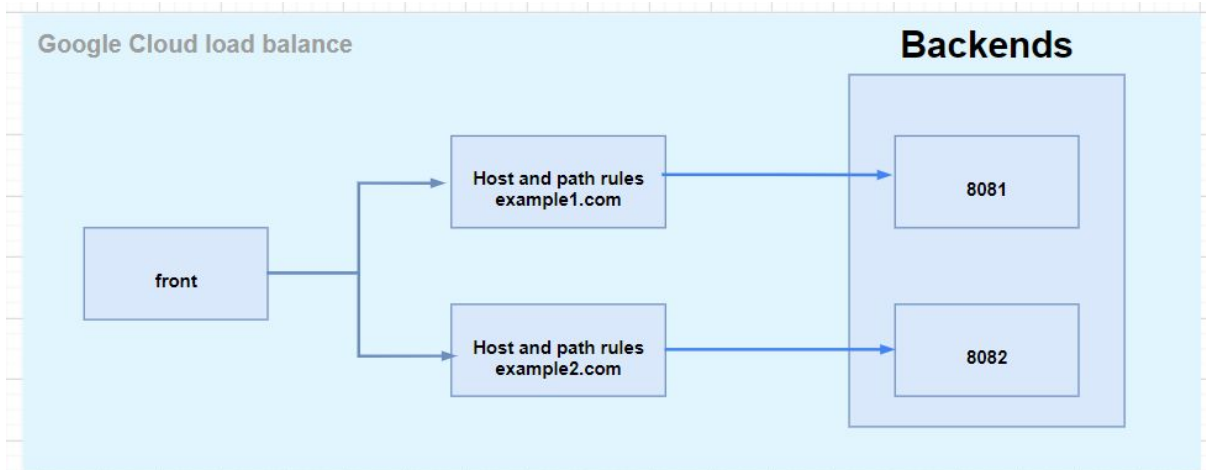


## Google Cloud Load Balancing 配置实例组单实例多应用

部署架构图：



具体实现过程：

1、创建后端MIG，配置实例组定义 port name，如下  
在创建实例模板时，设置network tags

← Instance templates [+ CREATE VM](#)

mc-tmpl

**Machine type**  
f1-micro (1 vCPU, 0.6 GB memory)

**Reservation**  
Automatically choose

**Display device**  
Turn on a display device if you want to use screen capturing and recor  
☐ Turn on display device

**Node Affinities**

**Labels**  
None

**Creation time**  
Jan 13, 2021, 2:14:34 PM

**Firewalls**  
☐ Allow HTTP traffic  
☐ Allow HTTPS traffic

**External IP**  
None

**IP forwarding**  
off

**Network**  
[all-region](#)

**Network tags**  
backend-server

**Placement policy**  
No policy ?

**Confidential VM service** ?  
Disabled

配置实例组定义 port name，如下

← Instance groups

PRESERVE STATE

ROLLING U

### Edit mc-01

Zone  
us-central1-a

Port name mapping

Optional)

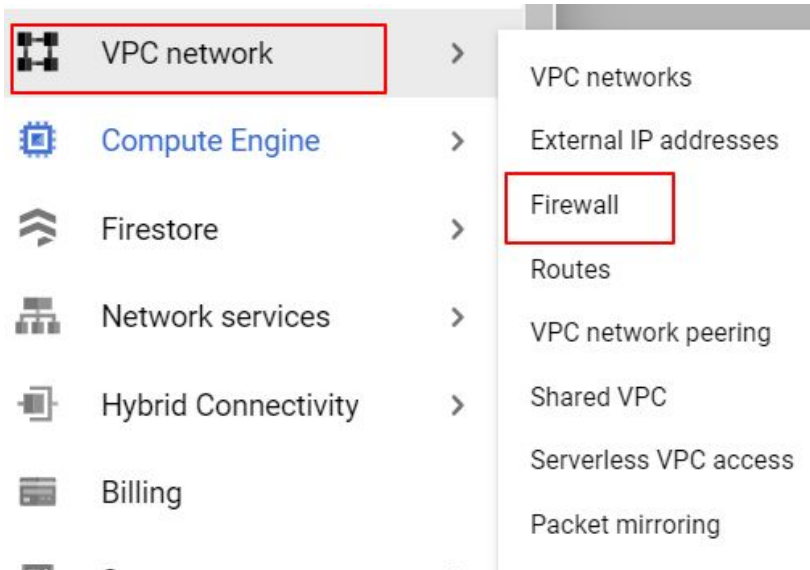
设置自定义 port name

A load balancer sends traffic to an instance group through a named port. Create a named port to map the incoming traffic to a specific port number, then go to "HTTP load balancing" to create a load balancer using this instance group.

Port name	Port numbers	
http8081	8081	×
http8082	8082	×
<div>+ Add item</div>		

Instance template ?

## 2、配置防火墙规则，允许自定义 port name 可以正常访问



Google Cloud Platform chenman-test

**Network**  
default

**Priority \***  
1000 [CHECK PRIORITY OF OTHER FIREWALL RULES](#) ?  
Priority can be 0 - 65535

**Direction**  
Ingress

**Action on match**  
Allow

**Targets**  
Specified target tags

**Target tags** **Network tags**  
backend-server

**Source filter**  
IP ranges

**Source IP ranges \*** **load balancing /health check IP**  
130.211.0.0/22 35.191.0.0/16 for example, 0.0.0.0/0, 192.168.2.0 ?

**Second source filter**  
None

**Protocols and ports** ?  
☐ Allow all  
☒ Specified protocols and ports

**backend server port,支持范围: 80-100**  
☒ tcp : 8081,8082

参见：

[https://cloud.google.com/load-balancing/docs/https#firewall\\_rules](https://cloud.google.com/load-balancing/docs/https#firewall_rules)

### 3、配置Load Balance

#### 3.1配置后端服务为同一个实例组：

mc-01

☒ **Backend configuration**  
You have configured 2 backend(s) →

☒ **Host and path rules**  
You have created host and path rules

☒ **Frontend configuration**  
Your frontend is configured

☐ **Review and finalize**  
Optional

Create or select a backend service for incoming traffic. You can add multiple backend services and backend buckets to serve different types of content.

**Backend services & backend buckets**  
Create or select backend services & backend buckets

**Backend services**

	Name	Region	Backend type	Instance groups/Network endpoint groups		
1.	mc-back-01	us-central1	Instance group	1 instance group	🗑️	✎️
2.	mc-back-02	us-central1	Instance group	1 instance group	🗑️	✎️

## Create backend service

### Name

Name is permanent

lowercase, no spaces

### Description

### Backend type

Instance group

### Protocol, named port & timeout

Protocol

HTTP

Named port

http

Timeout

30

seconds

### Backends

Regions: us-central1

New backend

Instance group mc-01 (us-central1-a)

Port numbers comma-separated list of values

Balancing mode Utilization

Maximum backend utilization 80 %

## Instance group has named ports

Do you want to use an existing named port for this backend service?

http8081 (port 8081)

CANCEL USE SELECTED PORT NAME

## 配置host and path rules:

Edit HTTP(S) load balancer

mc-01

Backend configuration You have configured 2 backend(s)

Host and path rules You have created host and path rules →

Frontend configuration Your frontend is configured

Review and finalize Optional

### Host and path rules

Host and path rules determine how your traffic will be directed. You can direct traffic to a backend service or a storage bucket. Using advanced mode, you can also rewrite user request URLs before directing the traffic or respond to the client with URL redirects.

### Mode

Simple host and path rule

Advanced host and path rule (URL redirect, URL rewrite)

Hosts	Paths	Backends
Any unmatched (default)	Any unmatched (default)	mc-back-01
example.com	/*	mc-back-01
example1.com	/test/*	mc-back-02

+ Add host and path rule

Show configuration tests

## 配置GFE :

Edit HTTP(S) load balancer

mc-01

Backend configuration You have configured 2 backend(s)

Host and path rules You have created host and path rules

Frontend configuration Your frontend is configured →

Review and finalize Optional →

### Frontend configuration

Specify an IP address, port and protocol. This IP address is the frontend IP for your clients requests. For SSL, a certificate must also be assigned.

Protocol:HTTP, IP: 34.120.86.10:80, Port:80

+ Add Frontend IP and port

## 临时验证 :

在backend server 下创建不同的目录(作为http server home), 通过简单的python 验证 :

```
# Python版本是3.X
python -m http.server port
# Python版本是2.X
python -m SimpleHTTPServer port
```