

# Getting Started Guide

## Overview

This getting started guide will explain how to launch a NetFoundry Zero Trust Networking into the GCP compute engine.

## Launching an instance in GCP

### Pre Deployment



#### Important

The BYOL (Bring Your Own License) licensing model is one that relies on your purchasing a software license separately from our website [here](#) and registering your appliance with generated one time key.



#### Important

Assumption is that the NF Fabric is already up.


### Deployment of Appliance

To get started, visit the GCP Marketplace site by clicking [here](#). If the marketplace doesn't come up, you can go to the search bar that appears, enter NetFoundry Zero Trust Networking and click the resulting solution that appears.

# To launch the instance Click on "Launch On Compute Engine"

Google Cloud Platform

netfoundry-marketplace-Public



**NetFoundry Cloud Gateway**  
[NetFoundry Inc.](#)  
Estimated costs: \$50.24/month + BYOL license fee

Spin up your network

LAUNCH ON COMPUTE ENGINE

**Runs on**  
Google Compute Engine

**Type**  
Single VM  
BYOL

**Last updated**  
2/5/20, 10:36 AM

**Category**  
[Networking](#)  
[Security](#)

**Version**  
default-version

**Operating system**  
Centos 7.7

**Overview**

Deploy secure, high performance, global networks as easily and effectively as you spin up your GCP instances:

- 1. Spin up your network in minutes via web console and APIs
- 2. Use our client software to connect user devices across our global network fabric from any Internet connection
- 3. Use our virtual and containerized gateways to connect applications and users from any site, data center or cloud from any Internet connection

NetFoundry extends any WAN without requiring WAN re-engineering, custom hardware, complex configuration or specific network providers. Simply connect your selected apps, user and IoT devices, and sites into zero-trust, high-performance private networks. Extend your PrivateLink or private WAN benefits globally, with software.

Like GPC, we provide the core infrastructure as a fully managed, on-demand service so that you control the networks without building or managing them. Use your existing Internet connections as short on-ramps to our managed global core network fabric, built over the Internet, leveraging multiple tier one providers.

Our platform enables you to do app-level micro-segmentation across any set of networks and clouds, spinning up app-specific networks called "AppWANs". Each AppWAN is "dark" and encrypted, protecting you from DDos and Man in the Middle attacks. Each device you attach to the network is authenticated via bi-directional certificate validation, included as part of our fully managed service, with the certificates embedded in our endpoint software.

[Learn more](#)

**About NetFoundry Inc.**

NetFoundry - Secure, high performance, cloud native networking across the Internet. Simple, Zero Trust, global networking for your applications and data.

[Learn more](#)

[About the provider](#)

**About BYOL**

BYOL (Bring Your Own License) solutions let you run software on Compute Engine while using licenses purchased directly from the provider. Google only charges you for the infrastructure costs, giving you the flexibility to purchase and manage your own licenses.

# Supply the information needed

Google Cloud Platform

netfoundry-marketplace-Public

←

New NetFoundry Cloud Gateway deployment

Your current project may have limited quota. If your deployment fails, change the 'project' query parameter in this page's URL to a project with a higher quota.

Deployment name

netfoundry-cloud-gateway-1

Zone

us-east4-c

Machine type

2 vCPUs7.5 GB memoryCustomize

Upgrade your account to create instances with up to 96 cores

Boot Disk

Boot disk type

SSD Persistent Disk

Boot disk size in GB

10

SSH Security

Instance level SSH Key

☐ Block project wide ssh keys

Networking

Network interfaces

default default (10.150.0.0/20)

+ Add network interface

You have reached the maximum number of one network interface

Firewall

Add tags and firewall rules to allow specific network traffic from the Internet

Creating certain firewall rules may expose your instance to the Internet. Please check if the rules you are creating are aligned with your security preferences. [Learn more](#)

☐ Allow TCP port 22 traffic from the Internet

Source IP ranges for TCP port 22 traffic

0.0.0.0/0, 192.169.0.2/24

[More](#)

NetFoundry

GatewayRegistrationKey

Deploy

NetFoundry Cloud Gateway overview

Solution provided by NetFoundry Inc.

\$56.54 per month estimated

Effective hourly rate \$0.077 (730 hours per month)

[Details](#)

Software

Operating System

Centos (7.7)

Launching a BYOL solution

NetFoundry Cloud Gateway is a BYOL (Bring Your Own License) solution. Marketplace will deploy this solution, but you are responsible for purchasing and managing the license directly from the provider.

Terms of Service

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By using this product, you understand that certain account and usage information may be shared with NetFoundry Inc. for the purposes of sales attribution, performance analysis, and support.

Google is providing this software or service "as-is" and will not perform any ongoing maintenance. Ongoing upgrades and maintenance are your responsibility.

## LAUNCH OPTIONS

- **Deployment name:** Specify the name of the instance you would like to use.
- **Zone:** Specify the region you would like to launch your appliance.
- **Machine type:** The instance type and size for your appliance. For optimal performance, it is recommended that small (2 vCPU/8 GB RAM) is chosen, or better.
- **Boot disk type:** SSD Persistent Disk is appropriate for the appliance since there is minimal disk I/O for the instance.
- **Boot disk size in GB:** The instance by default comes with a 10 GB boot disk.
- **SSH instance level key:** (OPTIONAL) If you would like to apply an instance level ssh key.

- **Block project wide ssh keys:** (OPTIONAL) If you would like to prevent the project keys from being applied to this instance.
- **Network name / Subnet name:** The network you would like to place your appliance in.
- **Firewall:** (OPTIONAL) If you would like to allow ssh access to your instance, please check the box & fill out the restricted source ip/networks. **We do not recommend leaving this open to 0.0.0.0/0** if you choose this option.
- **IP forwarding:** Must be set to on, if you would like to reach applications within your networks.
- **GatewayRegistrationKey:** (OPTIONAL) This field allows you provide the gateway registration key that will be passed into the launching image. Automating the registration portion of the setup. You can access the gateway via ssh & register after this deployment is complete. Learn how to get a registration key [here](#).

Once the fields have been supplied, Click on "Deploy"

The screenshot shows the Google Cloud Platform console interface. The top navigation bar includes the Google Cloud Platform logo and the project name 'netfoundry-marketplace-public'. The left sidebar shows a project tree with 'netfoundry-cloud-gateway-1' selected. The main content area displays the gateway's status as 'deployed' and provides instructions for the next steps: registering the gateway, opening TCP port 22 traffic, and assigning a static external IP address. The right sidebar shows the gateway's configuration details, including instance name, zone, and machine type.

**netfoundry-cloud-gateway-1 has been deployed**

- Overview - netfoundry-cloud-gateway-1
- netfoundry-cloud-gateway netfoundry-cloud-gateway.jinja
  - netfoundry-cloud-gateway-vm-tmpl vm\_instance.py
    - netfoundry-cloud-gateway-1-vm vm\_instance

**NetFoundry Cloud Gateway**  
Solution provided by NetFoundry Inc.

Instance: [netfoundry-cloud-gateway-1-vm](#)  
Instance zone: us-east4-c  
Instance machine type: n1-standard-2

[MORE ABOUT THE SOFTWARE](#)

**Get started with NetFoundry Cloud Gateway**

[SSH](#)

**Suggested next steps**

- Register the Gateway**  
Register the Gateway in your NetFoundry Network

```
$ sudo nfnreg {registration key}
```

- Open TCP port 22 traffic**  
This firewall rule is not enabled. To allow specific network traffic from the Internet, create a firewall rule to open TCP port 22 traffic for target tag "netfoundry-cloud-gateway-1-deployment". [Learn more](#)  
If you are using Google Cloud SDK, type the following command in the terminal:

```
$ gcloud --project=netfoundry-marketplace-public compute
```

- Assign a static external IP address to your VM instance**  
An ephemeral external IP address has been assigned to the VM instance. If you require a static external IP address, you may promote the address to static. [Learn more](#)

**Documentation**

- [Learn More](#)

**Support**

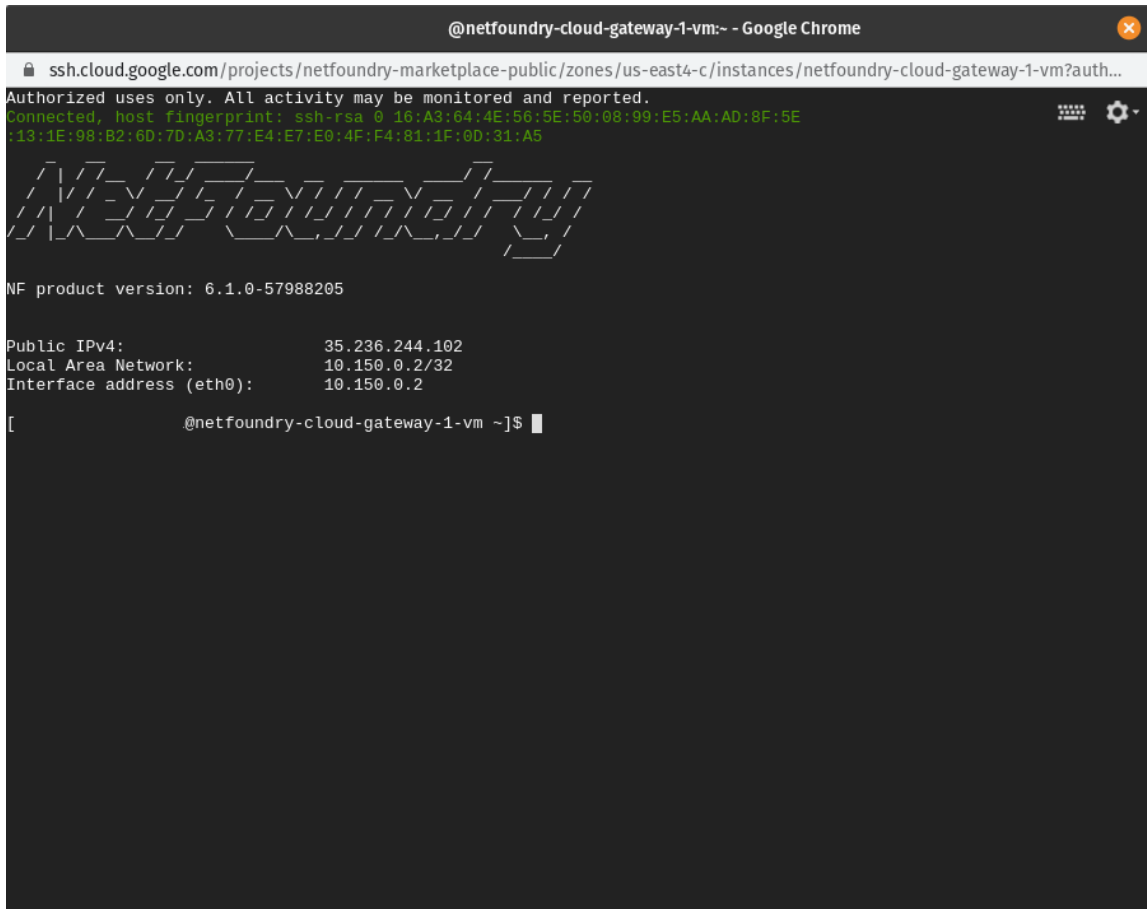
Tier Support available [Go to NetFoundry Inc. support](#)

**Template properties**

[SHOW MORE](#)

## Post Deployment

If you did not supply the **GatewayRegistrationKey** field during the deployment, you can access the machine via ssh by Clicking on the "SSH" button. OR You can optionally access this from other ssh point if you enabled the firewall rules to do so.

A screenshot of a terminal window titled "@netfoundry-cloud-gateway-1-vm:~ - Google Chrome". The terminal shows the SSH connection process, including the host fingerprint and a confirmation message. Below the confirmation, there is a large ASCII art logo for NetFoundry. The terminal also displays the product version "NF product version: 6.1.0-57988205" and network information: "Public IPv4: 35.236.244.102", "Local Area Network: 10.150.0.2/32", and "Interface address (eth0): 10.150.0.2". The prompt is "[ @netfoundry-cloud-gateway-1-vm ~]\$".

```
@netfoundry-cloud-gateway-1-vm:~ - Google Chrome
ssh.cloud.google.com/projects/netfoundry-marketplace-public/zones/us-east4-c/instances/netfoundry-cloud-gateway-1-vm?auth...
Authorized uses only. All activity may be monitored and reported.
Connected, host fingerprint: ssh-rsa 0 16:A3:64:4E:56:5E:50:08:99:E5:AA:AD:8F:5E
:13:1E:98:B2:6D:7D:A3:77:E4:E7:E0:4F:F4:81:1F:0D:31:A5

NF product version: 6.1.0-57988205

Public IPv4:          35.236.244.102
Local Area Network:   10.150.0.2/32
Interface address (eth0): 10.150.0.2

[ @netfoundry-cloud-gateway-1-vm ~]$
```

Use the following command to register the gateway with your network:

```
sudo nfnreg {registration key}
```

Setup is complete.