

# Getting Started Guide

## Overview

This getting started guide will explain how to launch a NetFoundry application gateway in the Alibaba Cloud.

## Launching an instance in Alibaba Cloud

### 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.

### Deployment of Appliance

To get started, go to **Elastic Compute Service**, click on **Create Instance**. The following screen will appear.

1 Basic Configurations
2 Networking
3 System Configurations (Optional)
4 Grouping (Optional)
5 Preview

Billing Method
Subscription
Pay-As-You-Go
Preemptible Instance

Region
Malaysia (Kuala Lumpur)
Random
Zone A (6)
Zone B

Instances in different regions cannot communicate with each other through the internal network. Select the region nearest to your customers to reduce the latency.

Instance Type
Current Generation
All Generations

Filter
Select a
Select a
Search by instance type
I/O Optimized
Indicate

Architecture
x86-Architecture
Heterogeneous Computing
ECS Bare Metal Instance

Category
General Purpose
Compute Optimized
Memory Optimized
Big Data
Local SSD
High Clock Speed
Entry-Level (Shared)

Family	Instance Type	vCPUs	Memory	Physical Processor	Clock Speed	Internal Network Bandwidth	Packet Forwarding Rate	IPv6 Support
General Purpose Type g6	ecs.g6.large	2 vCPUs	8 GiB	Intel Xeon(Cascade Lake) Platinum 8269CY	2.5 GHz/3.2 GHz	1 Gbps	300,000 pps	Yes
General Purpose Type g6	ecs.g6.xlarge	4 vCPUs	16 GiB	Intel Xeon(Cascade Lake) Platinum 8269CY	2.5 GHz/3.2 GHz	1.5 Gbps	500,000 pps	Yes
General Purpose Type g6	ecs.g6.2xlarge	8 vCPUs	32 GiB	Intel Xeon(Cascade Lake) Platinum 8269CY	2.5 GHz/3.2 GHz	2.5 Gbps	800,000 pps	Yes

Selected Instance Type Purchased Instances

ecs.g6.large (2 vCPU 8 GiB, General Purpose Type g6)

1 Units

Image
Public Image
Custom Image
Shared Image
Marketplace Image

Select from image market (including operating system)

ECS instances created in this region do not allow the switch of OS between Linux and Windows.

Storage
System Disk

Disk specifications and performance

Ultra Disk 40 GiB 2120 IOPS Release with Instance

Click [here](#) for guidelines on how to select an appropriate disk for your scenario.

☐ Disk Backup (Recommended)

You can periodically backup disks with an automatic snapshot policy to prevent risks such as virus attacks and accidental data deletion. [Snapshot pricing \(pay-as-you-go billing and hourly payment collection\)](#) >

Data Disk You have selected 0 disks and can select 16 more.

+ Add Disk

- Choose the Billing Method fit your need
- Choose the region and zone you want your VM to deploy in
- Choose the instance type. We recommend at least 2 vCPUs + 4GiB Memory
- Choose number of Instances you want
- Find the Marketplace Image for **NetFoundry Application Gateway**
- Choose the size of Disk. The default size is okay.

click on **Next: Networking** to open the next screen

Basic Configurations **Networking** System Configurations (Optional) Grouping (Optional) Preview

**Network Type** VPC Learn more  
 VPC: vpc-8ps2xj83dv0rsved8txh2 VSwitch: VSWITCH0001 / vsw-8psceju2y7e6p00qwjasp Private IP Addresses Available: 252,  
 To create a new VPC, [go to the VPC console](#). VSwitch Zone: **Kuala Lumpur Zone A** VSwitch CIDR Block: **192.168.0.0/24**

**Public IP Address** ☒ **Assign Public IP Address**  
 The system will automatically allocate an IP address. In addition, you can use a more flexible EIP solution. Click here to learn more about [how to attach an EIP](#) >  
Pay-By-Bandwidth Pay-By-Traffic Learn more  
 The bandwidth fee is subscription-based and included in the ECS instance fee.

**Bandwidth**  
 1M 50M 100M 150M 200M 1 Mbps  
 Alibaba Cloud provides up to 5 Gbit/s protection against DDoS attacks for free. [Learn More](#) | [Reinforce Protection](#)  
 The data transfer plan is a great deal for reducing the traffic cost generated by your ECS/EIP/SLB instances. [Buy a data transfer plan](#)>.

**Security Group** Reselect Security Group Learn more  
 A security group functions similarly to firewalls and is used to set network access controls for one or more ECS instances. You can go to the Security Groups page in the ECS console to [create a security group](#). [Learn more](#).  
**Security Group: 1). Default Security Group (Custom Port)**  
 Ensure that your security group has port 22 (Linux) or 3389 (Windows) configured in its allow rules. Otherwise, you will not be able to remotely connect to the ECS instance. You can add security group rules to your security group in the ECS console.  
 Select the protocols and ports you want to enable for IPv4: ☐ Port 80 (HTTP) ☐ Port 443 (HTTPS) ☒ Port 22 ☒ Port 3389 ☒ ICMP Learn more

**Elastic Network Interface** **Default ENI**  
 VSwitch: VSWITCH0001 ☒ Auto-assign IP Addresses ☒ Release with Instance  
 + Add ENI You can add up to 1 ENI.

**IPv6** IPv6 is not available. (Click here to view details.) >

Make your required selection then proceed to the next page (System Configurations).

Basic Configurations **Networking** **System Configurations (Optional)** Grouping (Optional) Preview

**Login Credentials** ☒ Key Pair ☐ Password ☐ Set Later  
**Key Pair** Learn more Select a key pair [Learn More](#) | [Create Key Pair](#)  
 If you do not specify a key pair or password, Set Later is selected by default.

**Instance Name** **launch-advisor-20200213** Learn how to customize sequential instance names.  
 The name must be 2 to 128 characters in length, and can contain letters, digits, periods (.), underscores (\_), colons (:), and hyphens (-). It must start with a letter.

**Description**  
 Description  
 The description must be 2 to 256 characters in length and cannot start with http:// or https://.

**Host** Learn how to customize sequential hostnames.  
 Enter a hostname  
**For Linux systems and other operating systems:** The name must be 2 to 64 characters in length. It can contain several segments delimited by periods (.). Each segment can contain letters, digits, and hyphens (-), but consecutive periods (.) or consecutive hyphens (-) are not allowed. The name cannot start or end with a period (.) or hyphen (-).

**Sequential Suffix** ☐ Add Sequential Suffix to Instance Name and Hostname Learn more

**Advanced (based on instance RAM roles or cloud-init)** Show >

- Select your key pair. **You must use key pair to login**
- Change the Instance Name to your desired name
- Optionally enter a host name

Continue to the next page to make more optional changes or hit "Preview" to the final page before creating the VM.

## Post Deployment

Go to the virtual machine you created, and locate the public IP address of the virtual machine.

Using an SSH client, log in to the machine using its public IP address as the user "nfadmin", using the SSH key or password specified earlier.

```
> ssh -i [path/to/private/key] nfadmin@[public_ip_address]
```

Once you are logged in to the gateway, run these commands to register it to your NetFoundry Network. Look for errors in the registration process output, or "Success" if registration completes successfully. **[registration key]** is the key you captured earlier.

```
> sudo nfnreg [registration key]
> sudo systemctl status dvn.service
```

```
root@HOSTNAME-UNSET ~# systemctl status dvn.service
● dvn.service - Dispersive Virtualized Networking Service
   Loaded: loaded (/etc/systemd/system/dvn.service; enabled; vendor preset: disabled)
   Active: active (running) since Wed 2018-01-03 10:22:37 MST; 2h 34min ago
     Process: 14478 ExecStart=/usr/bin/screen -d -m -S dvn ./monitor/monitor.bash (code=exited, status=0/SUCCESS)
     Process: 14476 ExecStartPre=/bin/test -f /opt/dispersive/dvn/cfg/vtc_config.jsec (code=exited, status=0/SUCCESS)
    Main PID: 14481 (screen)
      CGroup: /system.slice/dvn.service
              └─14481 /usr/bin/SCREEN -d -m -S dvn ./monitor/monitor.bash
                  └─14482 /bin/bash ./monitor/monitor.bash
                      └─28124 sleep 10

Jan 03 10:22:37 HOSTNAME-UNSET systemd[1]: Starting Dispersive Virtualized Networking Service...
Jan 03 10:22:37 HOSTNAME-UNSET systemd[1]: Started Dispersive Virtualized Networking Service.
```

The output should report **ACTIVE**.

It may take up to 5 minutes to register and come online. Once the Gateway Instance has started up, switch back to the NetFoundry Console and locate the Gateway Endpoint.

Confirm that the status indicator is green, which means that it has successfully registered and is online. If the status indicator remains grey, then the gateway has failed to register. If it is red, the gateway has registered, but is offline.

Setup is complete.