

# 介绍

« (index.html) » (intro-basic-networking.html) 🐞 (https://bugs.launchpad.net/neutron/+filebug?field.title=Introduction%20in%20Neutron&field.comment=%0A%0A%0AThis bug tracker is for errors with the documentation, use the following as a template and remove or add fields as you see fit. Convert [ ] into [x] to check boxes:%0A%0A- [ ] This doc is inaccurate in this way: \_\_\_\_%0A- [ ] This is a doc addition request.%0A- [ ] I have a fix to the document that I can paste below including example: input and output. %0A%0AIf you have a troubleshooting or support issue, use the following resources:%0A%0A - Ask OpenStack: http://ask.openstack.org%0A - The mailing list: http://lists.openstack.org%0A - IRC: 'openstack' channel on Freenode%0A%0A-----%0ARelease:%2012.0.1.dev11%20on%202018-03-07%2021:05%0ASHA:%2043df2709acbdce86686a40b75fd34e96880427d0%0ASource:%20https://git.openstack.org/cgit/openstack/neutron/tree/doc/source/admin/intro.rst%0Ahttps://docs.openstack.org/neutron/queens/admin/intro.html&field.tags=doc)

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OpenStack网络服务（neutron）提供了一个API，允许用户设置和定义云中的网络连接和寻址。网络服务的项目代码名称是neutron。OpenStack Networking负责创建和管理虚拟网络基础架构，包括由OpenStack Compute服务（nova）管理的设备的网络，交换机，子网和路由器。高级服务，如防火墙或虚拟专用网络（VPN）也可以使用。

OpenStack Networking由neutron-server，用于永久存储的数据库和任意数量的插件代理组成，它们提供其他服务，例如与本机Linux网络机制，外部设备或SDN控制器的接口。

OpenStack Networking完全独立，可以部署到专用主机。如果您的部署使用控制器主机运行集中式Compute组件，则可以将网络服务器部署到该特定主机。

OpenStack Networking与各种OpenStack组件集成在一起：

- OpenStack身份认证服务（keystone）用于API请求的认证和授权。
- OpenStack计算服务（nova）用于将虚拟机上的每个虚拟网卡插入特定网络。
- 管理员和项目用户使用OpenStack Dashboard（horizon）通过基于Web的图形界面创建和管理网络服务。

## 注意

本指南中使用的网络地址范围根据RFC 5737 (<https://tools.ietf.org/rfc/rfc5737>)和 RFC 3849 (<https://tools.ietf.org/html/rfc3849>)进行选择，因此仅限于以下内容：

### IPv4的：

- 192.0.2.0/24
- 198.51.100.0/24
- 203.0.113.0/24

### IPv6的：

- 2001::DB8::/32

本指南示例中的网络地址范围不应用于除文档之外的任何用途。

## 注意

为了减少混乱，本指南删除与特定操作无关的命令输出。

- [基本网络 \(intro-basic-networking.html\)](#)
  - [以太网网络 \(intro-basic-networking.html#ethernet\)](#)
  - [VLAN的 \(intro-basic-networking.html#vlans\)](#)
  - [子网和ARP \(intro-basic-networking.html#subnets-and-arp\)](#)
  - [DHCP \(intro-basic-networking.html#dhcp\)](#)
  - [IP \(intro-basic-networking.html#ip\)](#)
  - [TCP / UDP / ICMP \(intro-basic-networking.html#tcp-udp-icmp\)](#)
- [网络组件 \(intro-network-components.html\)](#)
  - [开关 \(intro-network-components.html#switches\)](#)
  - [路由器 \(intro-network-components.html#routers\)](#)
  - [防火墙 \(intro-network-components.html#firewalls\)](#)
  - [负载均衡器 \(intro-network-components.html#load-balancers\)](#)
- [覆盖（隧道）协议 \(intro-overlay-protocols.html\)](#)
  - [通用路由封装（GRE） \(intro-overlay-protocols.html#generic-routing-encapsulation-gre\)](#)
  - [虚拟可扩展局域网（VXLAN） \(intro-overlay-protocols.html#virtual-extensible-local-area-network-vxlan\)](#)
- [网络命名空间 \(intro-network-namespaces.html\)](#)
  - [Linux网络命名空间 \(intro-network-namespaces.html#linux-network-namespaces\)](#)
  - [虚拟路由和转发（VRF） \(intro-network-namespaces.html#virtual-routing-and-forwarding-vrf\)](#)
- [网络地址解读 \(intro-nat.html\)](#)
  - [SNAT \(intro-nat.html#snat\)](#)
  - [DNAT \(intro-nat.html#dnat\)](#)
  - [一对一NAT \(intro-nat.html#one-to-one-nat\)](#)
- [OpenStack网络 \(intro-os-networking.html\)](#)
  - [概念 \(intro-os-networking.html#concepts\)](#)
  - [服务和组件层次结构 \(intro-os-networking.html#service-and-component-hierarchy\)](#)
- [防火墙即服务（FWaaS） \(fwaas.html\)](#)
  - [FWaaS v1 \(fwaas.html#fwaas-v1\)](#)
  - [FWaaS v2 \(fwaas.html#fwaas-v2\)](#)
  - [FWaaS v1与v2 \(fwaas.html#fwaas-v1-versus-v2\)](#)



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❓ 问题吗？ (http://ask.openstack.org)

⊕

OpenStack 文档 ▾

Neutron 12.0.1

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中子特征分类 (../feature\_classification/index.html)

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- OpenStack 的
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有助于 (http://docs.openstack.org/infra/manual/developers.html)

文档

OpenStack 手册 (http://docs.openstack.org)

入门 (http://openstack.org/software/start/)

API 文档 (http://developer.openstack.org)