iManager Deployment Guide--OpenStack

Prerequisite: System Requirements

- vCPU: 8+
- Memory: 10G+
- Hard Disk: 200G+
- OpenStack tenant account and password

Prerequisite: Get Install Package from SuperMap

- supermap-imanager-*-*-*-*openstack-qcow2.qcow2 (* indicates version, any version is ok, iManager mirror)
- Ubuntu-16.04-docker.qcow2 (Docker mirror)

Deployment Process

Import Mirror

1. Import iManager Mirror In the Project >Compute>Mirror Management page, click Create Mirror button and set up the relevant information in the pop-up dialog box. Note that when you select a mirrored file, select the Qcow2 file, and select QCOW2QEMU emulator for mirror format
2. Import Docker Mirror Refer to the steps for importing iManager mirror to import Docker mirror

Create iManager virtual machine

1. Create cloud host type In OpenStack, the resource allocation for each virtual machine is set using the cloud host type. You can define your own specifications according to the requirements. On the Admin > Cloud Host Type Management page, click Create Cloud Host Type. Set the hardware specifications for the cloud host.

The reference map is as follows:
You can specify different cloud host types for different virtual machines according to actual requirements, and modifying the cloud host type does not affect the virtual machine hardware size once the virtual machine has been created based on the specified cloud host type.

Recommendation: iManager Cloud Host Type virtual kernel: 6+, memory 6000M+, root disk space 100G+ 

2. Create iManager virtual machine

On the Project->Compute->Instance page, click to start the cloud host. On the page for starting cloud host, fill in the appropriate information as follows:
启动云主机

详情 * 访问 & 安全 * 网络 * 创建 * 高级选项
可用域
nova
云主机名称 *
iManager
云主机类型 *
iManager-test
云主机数量 *
1
云主机启动源 *
从镜像启动
镜像名称
iManager (2.5 GB)

方案详情
名称: iManager-test
虚拟内核: 6
根磁盘: 100 GB
临时磁盘: 0 GB
所有磁盘: 100 GB
内存: 8.192 MB

项目限制
云主机数量: 15 中的 6 已使用
虚拟内核数量: 44 中的 21 已使用
内存总计: 81400 中的 35840 MB 已使用

启动云主机

详情 * 访问 & 安全 * 网络 * 创建 * 高级选项
已选择的网络
NIC1 内网 (bbed8a97-378f-47fb-98da-2b51f6e92200)

可用网络
外网 (0a618510-b2f8-413a-99da-5a3474d6a81b)

取消 执行
Create Docker virtual machine

Refer to Creating iManager Virtual Machine. The Docker cloud host type can be estimated based on subsequent use of Compose applications and data from big data labs. At least: Virtual kernel 2, memory 4096M, root disk space 100G Configure Docker and virtual platform

On the Project->Compute->Instance page, view Docker virtual machine IP and iManager virtual machine ip

2. Log into iManager virtual machine with the default user name supermap and password supermap as administrator to modify the value of `/opt/imanager/.env` of the Allin package to Docker virtual machine ip

3. Log into the virtual machine created by the Allin package, modify the expected warehouse of the address PRIVATE_REGISTRY_URL of the Docker warehouse in `/opt/imanager/.env` of the Allin package, and pull the required mirror required by the Compose application and GIS big data labs. You can directly download it from https://hub.docker.com.

4. Log into the virtual machine created by the Allin package, and execute the `sudo /opt/imanager/start.sh` command to update services

5. Access http://{ip}:8390/imanager in the browser, where {ip} is the ip of iManager virtual machine. The default account for iManager is admin/admin.

6. If you need to use the virtual platform, login iManger for virtual platform configuration in Advanced Options-System Configuration-Virtual Platform Management

If you use OpenStack with Identity API v2.0, the configuration items are as follows:

- "Tenant name": "Tenant Name" is also called "Project Name", refers to the project name you fill in when you apply for the computing resources in the OpenStack system for the GIS cloud management system.
- "Login user": Refers to the "User" account created in the OpenStack system. Please input the user name which can log on to the OpenStack. Please notice that the user needs to be assigned with a primary project.
- "Login Password": Fill in the user password that can login to OpenStack.
- "Whether to use floating IP": Whether to use floating IP, with false by default. When you set floating IP, you need to bind to floating IP if you want to access the GIS environment.
- "Network Name": The network where the IP resource resides.

If you use OpenStack with Identity API v3.0, the configuration items are as follows:

- "Domain Name": You can view your current domain name you specified via Identity Management->Domain of the OpenStack platform.
- "Login user": Refers to the "User" account created in the OpenStack system. Please input the user name which can log on to the OpenStack.
• "Login Password": Fill in the user password that can login to OpenStack.
• "Whether to use floating IP": Whether to use floating IP, with false by default. When you set floating IP, you need to bind to floating IP if you want to access the GIS environment.
• "Network Name": The network where the IP resource resides.

**Additional information:**

The basic configuration information of the ovf template of the Allin package:

<table>
<thead>
<tr>
<th>Environment</th>
<th>User name</th>
<th>Password</th>
<th>Adress ({ip} is Allin package ip)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RancherOS (system)</td>
<td>supermap</td>
<td>supermap</td>
<td>--</td>
</tr>
<tr>
<td>iManager</td>
<td>iManager</td>
<td>iManager</td>
<td>http://{ip}:8390/imanager</td>
</tr>
</tbody>
</table>

The basic configuration information of the ovf template of Docker:

<table>
<thead>
<tr>
<th>Environment</th>
<th>User name</th>
<th>Password</th>
<th>Adress ({ip} is Allin package ip)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>root</td>
<td>supermap</td>
<td>--</td>
</tr>
</tbody>
</table>