iManager Deployment Guide--vSphere

Prerequisite: System Requirements

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

Prerequisite: Get Install Package from SuperMap

- supermap-imanager-***-vSphere-ovf.zip (* indicates version, any version is ok, iManager mirror)
- Ubuntu-16.04-docker-ovf.zip (Docker mirror)
- supermap-docker-image-all-*.tar.gz (Docker images package)

Production Environment Deployment

Log into vSphere via vSphere Client and deploy the ovf template: Refer to the following contents:
The above is part of the screenshot for deployment. Please fill in the appropriate name, and choose the host/cluster, resource pool, disk format, network, etc. If special settings not required, direct use of the default, and click Next.

Recommendation: Convert the imported virtual machine into a template, and if you want to continue to deploy iManager, you can omit the step for importing the ovf template.

Then you can deploy the new virtual machine according to the template.
According to the wizard, select the right data center, host/cluster, resource pool, memory. If special settings not required, direct use of the default, and click Next.

Adjust virtual machine specification size
It can be slightly adjusted according to the actual needs. Suggested: Memory 4G+, CPU 4+, hard drive 80G+

Enable virtual machine

Deploy the Docker ovf template by referring to the above process. It is suggested that you estimate how many Compose applications and GIS big data laboratories will be used, therefore, the virtual machine hardware can be adjust accordingly. Minimum settings: CPU 2, memory 4096M, root disk space 100G, and set IP for the Allin Package.

Import Docker images in your virtual machine
Put supermap-docker-image-all-*.tar.gz package in any directory on the machine and unzip:

```
 tar -zxvf supermap-docker-image-all-*.tar.gz
```

Switch to the directory

```
 cd supermap-docker-image-all
```

Under supermap-docker-image-all execute following command to install:

```
 sudo chmod +x ./images/pkg-out.sh && sudo ./images/pkg-out.sh
```

If the network is connected to a DHCP network, you can directly view the virtual machine network card eth0 IP; If the network is not connected to a DHCP network, you need to set static IP following the steps below:

- Log in to the virtual machine with the account supermap and password is supermap.
- Refer to the following command for setting the static IP, and then restart the machine:

```
$ sudo ros config set rancher.network.interfaces.eth0.address 192.168.17.133/24  
$ sudo ros config set rancher.network.interfaces.eth0.gateway 192.168.17.1  
$ sudo ros config set rancher.network.interfaces.eth0.mtu 1500  
$ sudo ros config set rancher.network.interfaces.eth0.dhcp false
```

- Set ip for the Docker virtual machine and restart the machine. The default account for the system where Docker resides is supermap/supermap. Ensure that the virtual machines created by the Allin package and the Docker virtual machine Network are mutually accessible to each other. Details can be found in the readme.txt of the ovf template of Docker. Log into the virtual machine created by the Allin package, modify the value of COMPOSEDOCKER_IP in /opt/imanager/.env of the Allin package with the ip of the host of Docker.
- 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.
- Log into the virtual machine created by the Allin package, and execute the sudo /opt/imanager/start.sh command to update services
- 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.
- Login iManger for virtual platform configuration in Advanced Options-System Configuration-Virtual Platform Management

"Server IP": IP address of VMware vCenter Server.

"Protocol Type": The default is "https" protocol. If you have modified it, you need to select the modified protocol type;

"Logon User": The name of the account to log on to VMware vCenter.
"Logon Password": The password of the account to log on to VMware vCenter.

"Data Center": Required. A virtual data center is a container that includes all the inventory objects that are required for the full functional environment that is used to manipulate the virtual machine. By default, the item is not selected and requires you to select a data center.

Whether to "Configure Resource Pool": The item is a non-mandatory option. Resource pool is a logical abstraction for VMware vCenter to flexibly manage resources. If you configure this item, iManager will calculate resources based on the resource pool specified by the user. Resource value for the Home page, administrator approval, and creating the GIS environment all come from the configured resource pool, and you need to select the resource pool to configure.

By default, the item is not selected, that is, not configuring the resource pool. The host where VMware vCenter Server resides will serve as statistical objects for resource related 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>Address ({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>admin</td>
<td>admin</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>Address ({ip} is Allin package ip)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>root</td>
<td>supermap</td>
<td>--</td>
</tr>
</tbody>
</table>