VOTIRO

Votiro Cloud

Quick Installation Guide

Introduction

To install Votiro Cloud quickly into your organization we will create a cluster of virtual machines. We will use static IPs, one for each node in the cluster + the LB VIP + an IP for the internal K8 LB (the control plane VIP address).

Each VM requires: 8 CPUs, 24 GB of memory and 500 GB SSD.

The installation has three steps:

- Deploy an OVF
- Configure the Network Environment
- Deploy Votiro Cloud

Installation

1. To begin the installation, deploy an OVF, three (or five) times.

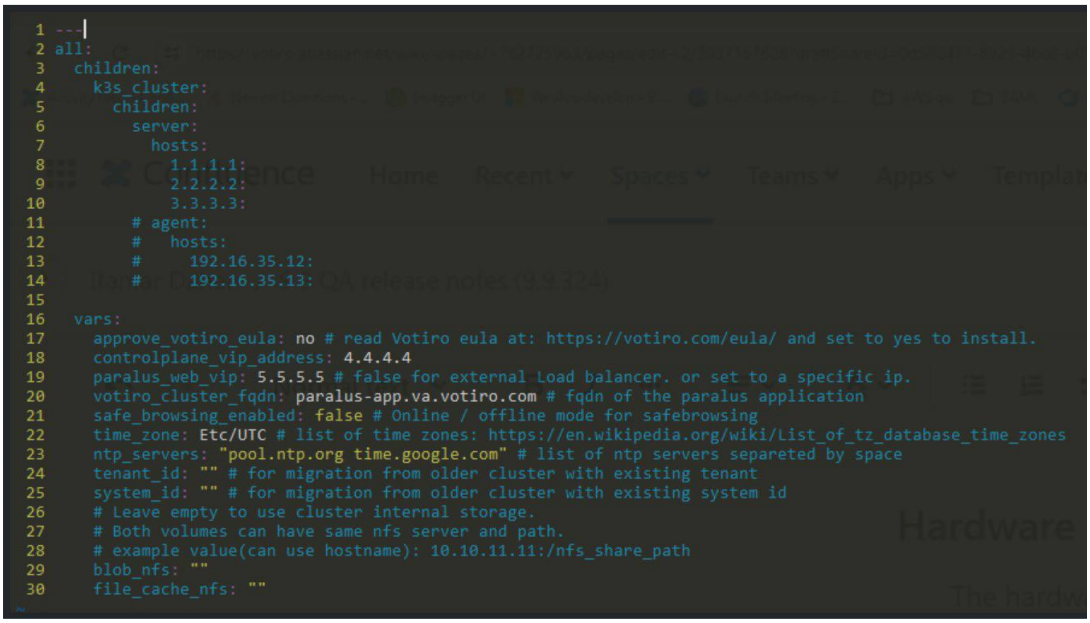
   There are now three (or five) servers.

2. Configure network settings for each VM. Log in to each VM, using **root** as login ID and password.

   Configure each VM with a static IP, Gateway and DNS server.

   There are now three (or five) machines configured and connected to your network.

3. To run a successful installation, you need to relate parameters in **inventory.yaml**. The file is located at **/root/ansible-initcluster/inventory.yaml**. That's the only file that needs to be updated prior to running the installation:



```
---
all:
  children:
    k3s_cluster:
      children:
        server:
          hosts:
            1.1.1.1:
            2.2.2.2:
            3.3.3.3:
        # agent:
        #   hosts:
        #     192.16.35.12:
        #     192.16.35.13:

  vars:
    approve_votiro_eula: no # read Votiro eula at: https://votiro.com/eula/ and set to yes to install.
    controlplane_vip_address: 4.4.4.4
    paralus_web_vip: 5.5.5.5 # false for external load balancer. or set to a specific ip.
    votiro_cluster_fqdn: paralus-app.va.votiro.com # fqdn of the paralus application
    safe_browsing_enabled: false # Online / offline mode for safebrowsing
    time_zone: Etc/UTC # list of time zones: https://en.wikipedia.org/wiki/List_of_tz_database_time_zones
    ntp_servers: "pool.ntp.org time.google.com" # list of ntp servers separeted by space
    tenant_id: "" # for migration from older cluster with existing tenant
    system_id: "" # for migration from older cluster with existing system id
    # Leave empty to use cluster internal storage.
    # Both volumes can have same nfs server and path.
    # example value(can use hostname): 10.10.11.11:/nfs_share_path
    blob_nfs: ""
    file_cache_nfs: ""
```

- **3 Key Configurations before running the script install-paralus-playbook.yaml**

  a. Define Hostname

  b. Network Configurations: Use the file named **00-installer-config.yaml** (located under **/etc/netplan**)

  c. Define Configuration Parameters: Use the file named **inventory.yaml** (located under **/root/ansible-initcluster**)

> **Note**: You must configure the NTP (Network Time Protocol) server to be valid and accessible at all times to avoid major issues in our product.

> **Recommendation for external storage:** We recommended working with an external NFS (Network File System) for handling larger volumes or to enhance performance (e.g., to achieve a high sanitization rate). External storage can provide greater flexibility and can accommodate larger file sizes beyond the temporary internal storage limit, ensuring that your operations continue smoothly without interruption. Working with internal storage can cause system errors if temporary internal storage exceeds the maximum. In that case, the system will return an error and sanitization will be enabled only after the temporary storage returns to normal operation.

- **Procedure**:

  a. Access the first virtual machine with VMRC.

  b. Use the credentials that were supplied separately.

  c. To switch to the root user, type **sudo -i** in the terminal.

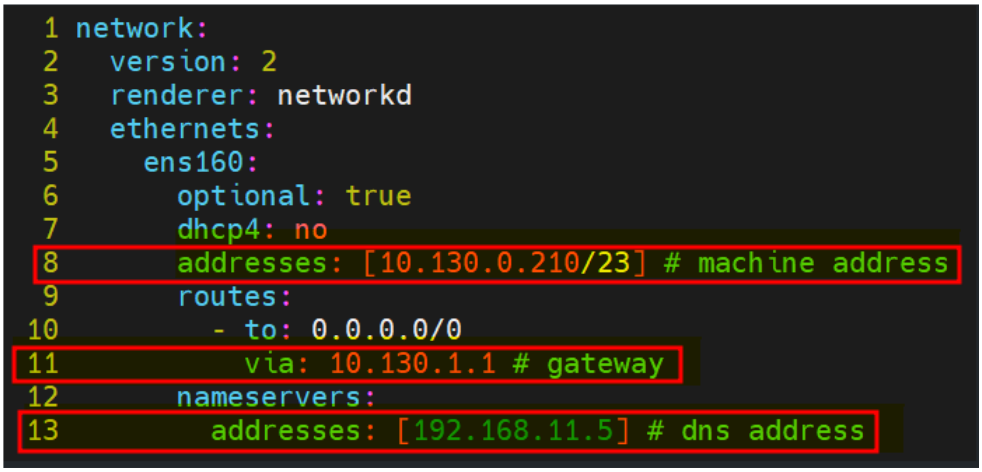
  d. Change hostname command:

  ```
  hostnamectl set-hostname NODE_NAME
  ```

  e. cd /etc/netplan

f. Edit (vi) the file named **00-installer-config.yaml** to edit VM network settings.

g. Edit lines 8, 11, and 13 (machine address, gateway, DNS address). You must use the prefix **/** to define the network size. See the example below:



h. Save the file.

i. Apply network configurations:

```
netplan apply
```

j. Repeat on the other VMs.

- **Mandatory configurations for fresh install**:

a. SSH to the first VM.

b. **sudo -i**

c. **cd ansible-initcluster**

d. **vi inventory.yaml**

- In the 3 nodes configuration, add the node IPs under the **hosts:** section of the file.
- In the 5 nodes configuration, add the first 3 node IPs under the **hosts:** section. This will make them the cluster's master nodes. Uncomment the **agent:** section and add the IPs of the rest of the nodes there. These nodes will be worker nodes.
- **approve_votiro_eula:** should be set to **yes**
- **controlplane_vip_address:** should receive an unused IP to be used for internal purposes.
- **paralus_web_vip:** should either receive an unused IP to be used by the system's load balancer, or leave empty for an external load balancer.
- **votiro_cluster_fqdn:** should contain the applicable FQDN for the system

- **Additional configurations**:

a. **safe_browsing_enabled**: set to true or false for Online / Offline mode for safe browsing.

b. In fresh install mode, the **tenant_id** and **system_id** should be left empty (they are generated automatically).

c. In upgrade mode, fill the **tenant_id** and **system_id** fields with the data from the previous environment.

d. **blob_nfs**: Is to be used if a customer wants to save the original and sanitized files in an external storage. Can be left empty for internal blob storage.
Example value (can use hostname):
`10.10.11.11:/nfs_share_path`

e. **file_cache_nfs**: is used to achieve better performance for the system. Can be left empty for an internal storage usage.
Example value (can use hostname):
`10.10.11.11:/nfs_share_path`

f. Save the file.

g. Take a Snapshot.

- **Run the script**

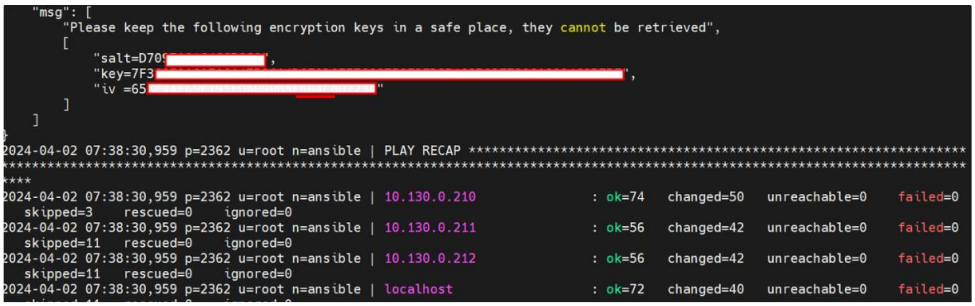
a. From the **ansible-initcluster** directory, run the next command:

```
ansible-playbook install-paralus-playbook.yaml
```

b. Follow the instructions on the screen.

c. When done, cat the **votiro-setup.log** file to verify successful installation.

d. Copy the encryption keys and save it in a safe place (see example below).



e. Run the health check to verify that the system is running properly.

- **For big file support, do the following**:
  - Apply ssh to one of the nodes, and run the **/root/extras/scale-for-largefile/ change-memory-limit.sh** script.
  - Edit the **cancellation-service-config** configmap

    ```
    Kubectl edit cm cancellation-service-config
    ```

    and increase the **CancellationTimeout**: field to **01:00:00** (1h)
  - In the management's policy page, set the large file case to **skip**

Your Votiro Cloud installation has completed successfully.

Start Using Votiro Cloud

To begin using the Management Dashboard type the Votiro cluster FQDN name in your web browser. You are now ready to enjoy the security of knowing your files are being processed for Positive Selection™ using Votiro Cloud.