OnApp with vCloud Director Installation Guide

If you wish to deploy only the vCD integration model, you only need to install the Control Panel server, configure Rabbit MQ, and import vCloud Director.

See also:

Full Cloud Installation

On this page:

If you already have RabbitMQ installed on another box or you already have vCD login and password, please run the inst aller with additional Rabbit MQ and vCD options.

- As initial import of vCloud Director into OnApp might take a considerable amount of time, you may consider increasing the *Idle session timeout* parameter in the vCloud Director at **Administration** > **General**, to avoid the possible import failure.
- It is recommended to have vCloud Director and OnApp Control Panel in one network.
- Currently OnApp supports only default vCD roles. These roles are mapped using the label, therefore, please do not change the labels of the default user roles in vCloud Director. Users with custom roles are not imported into OnApp.

Install/Update Control Panel Server

To install/update control panel server:

1. Update your server:

```
bash# yum update
```

2. Download OnApp YUM repository file:

```
# rpm -Uvh http://rpm.repo.onapp.com/repo/onapp-repo-5.4.noarch.rpm
```

3. Install OnApp Control Panel installer package:

```
bash#> yum install onapp-cp-install
```

4. Edit the `/onapp/onapp-cp.conf` file to set Control Panel custom values. Custom values must be set before the installer script runs.

```
bash# vi /onapp/onapp-cp.conf
```

5. Run the Control Panel installer:

```
bash#> /onapp/onapp-cp-install/onapp-cp-install.sh -i SNMP_TRAP_IPS
```

Ensure that the `SNMP_TRAPS_IP` should be the management IP of your CP server.

vCD and Rabbit MQ options
The installer will automatically install/upgrade RabbitMQ server on the CP's box and configure it if no options are specified.
Consider the options below for Rabbit MQ configuration if it is already installed on server separate from CP.

`--rbthost` RBT_HOST	IP address/FQDN where RabbitMQ Server runs. The RabbitMQ will be installed and configured on the current box if localhost/127.0.0.1 or box's public IP address (enlisted in SNMP_TRAP_IPS) Default values is 127.0.0.1.
VCD_*	These options are usefull if vCloud Director/RabbitMQ is already installed and configured.
--vcdlogin VCD_LOGIN	RabbitMQ/vCloud Director user. Default value is 'rbtvcd'.
--vcdpasswd VCD_PASSWD	RabbitMQ/vCloud Director user password. The random password is generated if isn't specified.
--vcdvhost VCD_VHOST	RabbitMQ/vCloud Director vhost. Default value is '/'
RBT_*	These options are used to configure RabbitMQ manager account. If local RabbitMQ server.
--rbtlogin RBT_LOGIN	RabbitMQ manager login. The default value is 'rbtmgr'.
--rbtpasswd RBT_PASSWD	RabbitMQ manager password. The random password is generated if isn't specified.

6. Install OnApp license to activate the Control Panel:

   Enter a valid license key via the Web UI (you'll be prompted to do so). Once you have entered a license it can take up to 15 minutes to activate.

7. Restart the OnApp service:

   ```
   bash#> service onapp restart
   ```

8. Once the installation of the Control Panel is complete, your default OnApp login will be **admin/changeme.** The password can be changed via the Control Panel's **Users** menu.
9. Proceed to RabbitMQ And OnApp Control Panel Connection.

- Installer output is redirected to ./onapp-cp-install.log
- All installer critical errors are in /var/log/messages

Configure RabbitMQ And OnApp Control Panel Connection

OnApp vCD integration requires the use of RabbitMQ to keep vCD and OnApp synchronised. If you plan using the RabbitMQ server installed by OnApp by default, there is no need for additional configuration in OnApp Control Panel. Though, it is required that you edit the AMQP settings in vCD.

To specify RabbitMQ settings in vCD:

1. Go to your OnApp Control Panel server.
2. Open the `/onapp/interface/config/on_app.yml` file.
3. Find the RabbitMQ parameters:
   - `rabbitmq_login`
   - `rabbitmq_password`
   - `rabbitmq_vhost`
   - `rabbitmq_host` - make sure it is reachable by vCloud Director
4. Edit your AMQP settings in vCD with the RabbitMQ details found at step 3:
   a. Navigate to the **Administration** tab of your System Organization, expand **System Settings** and select **Extensibility**.
   b. Click **Enable Notifications**.
   c. Add the details from OnApp.
   d. Set **Exchange** vcloud.

- You can use the Shovel plugin to reliably and continually move messages from your own RabbitMQ instance to the OnApp's RabbitMQ instance. For more information refer to Using the Shovel plugin with RabbitMQ for vCloud Director.
- Remember that `rabbitmq_host` must be reachable by vCloud Director.

If you are running your own RabbitMQ server, it is required that you add the RabbitMQ details through the OnApp Control Panel.

To specify RabbitMQ settings in OnApp Control Panel:

If you want to use a separate RabbitMQ instance for vCloud Director, specify the following vCloud Director RabbitMQ parameters in the `/onapp/configuration/rabbit_mq/vcloud/credentials.yml` file:

- :host: - RabbitMQ server IP address
- :port: - RabbitMQ port
- :vhost: - the name of the "virtual host" (or vhost) that specifies the namespace for entities (exchanges and queues) referred to by the protocol. Note that this is not virtual hosting in the HTTP sense.
- :user: - RabbitMQ login
- :password: - RabbitMQ password

If you want to use the same Rabbit MQ instance both for vCloud Director and OnApp engine:

1. Go to your Control Panel's **Settings** menu, and click the **Configuration** icon.
2. Click the **System** tab to change the following application settings:
   RabbitMQ

   - *Host* - RabbitMQ server IP address
   - *Virtual Host* - the name of the "virtual host" (or vhost) that specifies the namespace for entities (exchanges and queues) referred to by the protocol. Note that this is not virtual hosting in the HTTP sense.
   - *Login* - RabbitMQ login
   - *Password* - RabbitMQ password

You have to restart OnApp daemon after changing RabbitMQ credentials.

Remember that `rabbitmq_host` must be reachable by vCloud Director.

Import of vCloud Director resources into OnApp

Before you start

- Your vCD should be v8.0 or later
- vCD public addresses should be configured properly
- Make sure your OnApp cloud admin has *Read any vApps* and *Read own vApps* permissions before the import
- Ensure you have a user with vApp author role created on the vCloud Director with your valid email. (Go to vCD Console > OnApp tab > Administration and right click your user)
- All vCD users should have a valid email, or else they won't be imported
- Currently fast-provisioned virtual datacenters are not supported for vApp provisioning
- vCD users should be assigned one of the default vCloud Director roles. Users with custom roles are not imported into OnApp.
- vApps and vApp Templates that have "system" owner won't be imported
- VSs currently cannot be connected to network during provisioning
- VS passwords are not imported into OnApp
- vCloud Director system admins are not imported into OnApp and all management tasks are performed via the vCloud Director web interface.
- vCloud Director compute resource passwords are encrypted by default.

Import

To import your vCloud Director resources into OnApp:

1. Log in to OnApp CP as an administrator.
2. Set Rabbit MQ credentials for the OnApp CP and your vCloud Director.
3. Create a compute zone in which the vCloud Director compute resource will reside.

   To create a compute zone:

   a. Go to your Control Panel's **Settings** menu and click the **Compute Zones** icon.
   b. Press **"+"** or click the **Add New Compute Zone** button.
   c. On the screen that follows:

i. *Label* - give your compute zone a name
ii. *Server type* - select a type for your zone. For vCloud Director compute zones select the *Virtual Private Cloud* type.
iii. *Location group* - select the location group to which this Compute zone will be assigned
iv. *Failover timeout* - set the time period for which the iterations will run during the failover if the compute resource does not respond

d. Click the **Save** button.

4. Create a compute resource of a *vcloud* type and specify vCloud Director global system admin credentials and API URL of your vCloud Director.

   To create a compute resource:

   a. Go to your Control Panel **Settings** menu.
   b. Click the **Compute Resources** icon.
   c. Press **"+"** button or click the **Add New Compute Resource** button underneath the list of compute resources on the screen.
   d. On the screen that appears:

      - *Label* - enter a compute resource name.
      - *Compute resource type* - choose a compute resource type. Select vcloud.
      - *Compute zone* - select the compute zone you added on Step 3.
      - *Login* - specify the vCloud Director system admin login
      - *Password* - specify the vCloud Director system admin password
      - *API URL* - set the vCloud Director API URL - e.g. https://example.com
      - AMQP Exchange Name - specify your vCloud Director AMQP exchange name (this can be taken in your vCloud Director instance **Extensibility** > **Settings** > **Exchange**)

   e. Click the **Save** button. The compute resource will be added to the system and the import will start automatically.

5. The import will start automatically. After the transaction is successfully completed, all your vCloud Director resources will be shown in OnApp. You can view log output of transaction *Import vCloud to Control Panel* for more import details.

Please note

- At the moment, vCloud system admins are not imported into OnApp and all management tasks are performed via the vCloud Director web interface.
- VS passwords are not imported into OnApp.
- vCloud compute resource passwords are encrypted by default.