

# Install Control Panel Server

This section is the part of the OnApp installation procedure.

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- Review the [Preparation Guide](#) to ensure that you have a suitable environment before starting the installation.
- Use corresponding option of the Control Panel installer in case MySQL is already installed and configured.
- Installer output is redirected to `./onapp-cp-install.log`
- All installer critical errors are in `/var/log/messages`
- If you're replacing an existing Control Panel with a new install, refer to [Control Panel Migration Guide](#) for instructions.
- If you need to install other components (OnApp Database Server, RabbitMQ Server, Redis Server) refer to the [OnApp Installation Components](#) for instructions. Also you can [migrate existing OnApp database from MySQL to MariaDB, Percona Servers or Percona Cluster](#).

**See also:**

[Technical Details](#)

[Preparation Guide](#)

To install Control Panel server, perform the following procedure:

1. Update your server:

```
bash# yum update
```

2. Download OnApp YUM repository file:

```
# rpm -Uvh http://rpm.repo.onapp.com/repo/onapp-repo-5.1.noarch.rpm
```

3. Install OnApp Control Panel installer package:

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

4. Set the custom Control Panel configuration. It is important to set the custom values before the installer script runs.

## Template server URL

```
TEMPLATE_SERVER_URL='http://templates-manager.onapp.com';
```

## # IPs (separated with coma) list for the snmp to trap

```
SNMP_TRAP_IPS=
```

## # OnApp Control Panel custom version

```
ONAPP_VERSION=""
```

## # OnApp MySQL/MariaDB connection data (database.yml)

```
ONAPP_CONN_WAIT_TIMEOUT=15
ONAPP_CONN_POOL=30
ONAPP_CONN_RECONNECT='true'
ONAPP_CONN_ENCODING='utf8'
ONAPP_CONN_SOCKET='/var/lib/mysql/mysql.sock'
```

**# MySQL/MariaDB server configuration data (in case of local server)**

```
MYSQL_WAIT_TIMEOUT=604800
MYSQL_MAX_CONNECTIONS=500
MYSQL_PORT=3306
```

**# [Use MariaDB instead of MySQL as OnApp database server](#) (Deprecated parameter. If you set any values for this parameter, they will not take effect)**

```
WITH_MARIADB=0
```

**# Configure the database server relative amount of available RAM (Deprecated parameter. If you set any values for this parameter, they will not take effect)**

```
TUNE_DB_SERVER=0
```

**# The number of C data structures that can be allocated before triggering the garbage collector. It defaults to 8 million**

```
RUBY_GC_MALLOC_LIMIT=16000000
```

**# sysctl.conf net.core.somaxconn value**

```
NET_CORE_SOMAXCONN=2048
```

**# The root of OnApp database dump directory (on the Control Panel box)**

```
ONAPP_DB_DUMP_ROOT=""
```

**# Remote server's (to store database dumps) IP, user, path, openssh connection options and number of dumps to keep**

```
DB_DUMP_SERVER=""
DB_DUMP_USER="root"
DB_DUMP_SERVER_ROOT="/onapp/backups"
DB_DUMP_SERVER_SSH_OPT="-o StrictHostKeyChecking=no -o UserKnownHostsFile=/dev/null -o PasswordAuthentication=no"
KEEP_DUMPS=168
DB_DUMP_CRON='40 * * * *'
```

**# [Enable monit - tool for managing and monitoring Unix systems](#)**

```
ENABLE_MONIT=1
```

**# If enabled (the 1 value is set) - install (if local box) and configures RabbitMQ Server (messaging system) for the vCloud support. (Deprecated parameter. If you set any values for this parameter, they will not take effect)**

```
ENABLE_RABBITMQ=1
```

**# Rotate transactions' log files created more than TRANS\_LOGS\_ROTATE\_TIME day(s) ago**

```
TRANS_LOGS_ROTATE_TIME=30
```

# Maximum allowed for uploading file size in bytes, from 0 (meaning unlimited) to [2147483647](#) (2GB). Default is 1GB

```
MAX_UPLOAD_SIZE=1073741824
```

# Timeout before ping Redis Server to check if it is started. Default is 5 sec.

```
REDIS_PING_TIMEOUT=5
```

# OnApp Control Panel SSL certificates (please do not change if you aren't familiar with SSL certificates)  
# \* The data below to generate self-signed PEM-encoded X.509 certificate

```
SSL_CERT_COUNTRY_NAME=UK  
SSL_CERT_ORGANIZATION_NAME='OnApp Limited'  
SSL_CERT_ORGANIZATION_ALUNITNAME='OnApp Cloud'  
SSL_CERT_COMMON_NAME=`hostname --fqdn 2>/dev/null`
```

# SSLCertificateFile, SSLCertificateKeyFile Apache directives' values  
# ssl\_certificate, ssl\_certificate\_key Nginx directives' values

```
SSLCERTIFICATEFILE=/etc/pki/tls/certs/ca.crt  
SSLCERTIFICATECSRFILE=/etc/pki/tls/private/ca.csr  
SSLCERTIFICATEKEYFILE=/etc/pki/tls/private/ca.key
```

# \* PEM-encoded CA Certificate (if custom one exists)  
# SSLCACertificateFile, SSLCertificateChainFile Apache directives' values  
# ssl\_client\_certificate Nginx directives' values

```
SSLCACERTIFICATEFILE=  
SSLCERTIFICATECHAINFILE=
```

# SSLCipherSuite, SSLProtocol Apache directives' values  
# ssl\_ciphers, ssl\_protocols Nginx directives' values

```
SSLCIPHERSUITE=  
SSLPROTOCOL=
```

```
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
```



Set the `OPENSSL_ENABLE_MD5_VERIFY=1` environment variable if installing on CentOS 6.x with self-signed certificates. So the installer command should look like:

```
# export OPENSSL_ENABLE_MD5_VERIFY=1 && /onapp/onapp-cp-install/onapp-cp-install.sh -i  
SNMP_TRAP_IPS
```

#### Usage:


```
/onapp/onapp-cp-install/onapp-cp-install.sh -hUsage: /onapp/onapp-cp-install/onapp-cp-install.sh  
[-c CONFIG_FILE] [--mariadb | --percona | --percona-cluster] [-m MYSQL_HOST] [-p MYSQL_PASSWD] [-d  
MYSQL_DB] [-u MYSQL_USER] [-U ADMIN_LOGIN] [-P ADMIN_PASSWD] [-F ADMIN_FIRSTNAME] [-L  
ADMIN_LASTNAME] [-E ADMIN_EMAIL] [-v ONAPP_VERSION] [-i SNMP_TRAP_IPS] [--redis-host=REDIS_HOST]  
[--redis-passwd=REDIS_PASSWD] [--redis-port=REDIS_PORT] [--redis-sock=REDIS_PATH] [--rbthost  
RBT_HOST] [--vcdlogin VCD_LOGIN] [--vcdpasswd VCD_PASSWD] [--vcdvhost VCD_VHOST] [--rbtlogin  
RBT_LOGIN] [--rbtpasswd RBT_PASSWD] [-a] [-y] [-D] [-t] [--noservices] [-h]
```

#### Where:

<b>Database server options:</b>	Default database SQL server is MySQL Server. Please use one of the following option to install <b>LOCALLY</b> .
<code>--mariadb</code>	MariaDB Server
<code>--percona</code>	Percona Server
<code>--percona-cluster</code>	Percona Cluster
<b>MYSQL_*</b>	Options are useful if MySQL is already installed and configured.
<code>-m MYSQL_HOST</code>	MySQL host. Default is 'localhost'
<code>-p MYSQL_PASSWD</code>	MySQL password. Random is generated if is not set or specified.
<code>-d MYSQL_DB</code>	OnApp MySQL database name. Default is 'onapp'
<code>-u MYSQL_USER</code>	MySQL user
<b>REDIS_*</b>	Options are useful if Redis Server is already installed and configured.
<code>--redis-host=REDIS_HOST</code>	IP address/FQDN where Redis Server runs. The Redis Server will be installed and configured on the current box if localhost/127.0.0.1 or box's public IP address (listed in <code>SNMP_TRAP_IPS</code> ) is specified. If local Redis, it will serve as well on the unix socket '/tmp/redis.sock'. Default value is 127.0.0.1.
<code>--redis-port=REDIS_PORT</code>	Redis Server listen port. Defaults are: 0 - if local server 6379 - if remote server


<code>--redis-passwd</code> <code>[=REDIS_PASSWD]</code>	Redis Server password to authenticate. Random password is generated if the option's argument isn't specified. By default no password is used for local Redis.
<code>--redis-sock=REDIS_PATH :</code>	Path to the Redis Server's socket. Used if local server only. Default is /tmp/redis.sock
<code>ADMIN_*</code>	Options are used to configure OnApp Control Panel administrator data. Please note, that these options are for NEW INSTALL only and not for upgrade
<code>-P ADMIN_PASSWD</code>	CP administrator password
<code>-F ADMIN_FIRSTNAME</code>	CP administrator first name
<code>-L ADMIN_LASTNAME</code>	CP administrator last name
<code>-E ADMIN_EMAIL</code>	CP administrator e-mail
<code>--rbthost RBT_HOST</code>	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 are 127.0.0.1.
<code>VCD_*</code>	Options are usefull if vCloud/RabbitMQ are already installed and configured.
<code>--vcdlogin VCD_LOGIN</code>	RabbitMQ/vCloud user. Default value is 'rbtvcd'.
<code>--vcdpasswd VCD_PASSWD</code>	RabbitMQ/vCloud user password. The random password is generated if isn't specified.
<code>--vcdvhost VCD_VHOST</code>	RabbitMQ/vCloud vhost. Default value is '/'
<code>RBT_*</code>	Options are used to configure RabbitMQ manager account. If local RabbitMQ server.
<code>--rbtlogin RBT_LOGIN</code>	RabbitMQ manager login. The default value is 'rbtmgr'.
<code>--rbtpasswd RBT_PASSWD</code>	RabbitMQ manager password. The random password is generated if isn't specified.
<code>-v ONAPP_VERSION</code>	Install custom OnApp CP version
<code>-i SNMP_TRAP_IPS</code>	IP addresses separated with coma for snmp to trap
<code>-c CONFIG_FILE</code>	Custom installer configuration file. Otherwise, preinstalled one is used.
<code>-y</code>	update OS packages (except of OnApp provided) on the box with 'yum update'.
<code>-a</code>	Do not be interactive. Process with automatic installation. Please note, this will continue OnApp Control Panel install/upgrade even if there is transaction currently running.
<code>-t</code>	Add to the database and download Base Templates. For new installs only. If this option is not used, then only the following mandatory System Templates will be added by default during fresh install: OnApp CDN Appliance; Load Balancer Virtual Appliance; Application Server Appliance.
<code>--noservices</code>	Do not start OnApp services: monit, onapp and httpd Please note, crond and all OnApp's cron tasks remain running. They could be disabled by stopping crond service manually for your own risk.
<code>-D</code>	do not make database dump, and make sure it is disabled in the cron and not running at the moment
<code>-h</code>	print this info

6. Install Cloudboot dependencies:

 This step is optional: if you have Integrated Storage, take this step, otherwise skip it.

```
bash#> yum install onapp-store-install
bash#> /onapp/onapp-store-install/onapp-store-install.sh
```

7. Install OnApp license to activate the Control Panel. Enter a valid license key via the Web UI (you'll be prompted to do so). Your default OnApp login is **admin/changeme**. The password can be changed via the Control Panel's **Users** menu in the Control Panel.

 Once you have entered a license it can take up to 15 minutes to activate.

8. Restart the OnApp service:

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

9. After you have installed the Control Panel server, configure your Cloud Settings. See [Configure Cloud](#) for details.

**Perform the following steps if you plan to deploy Accelerator. Otherwise skip.**

10. If you plan to configure an Accelerator, run the following command:


- For all compute resources:

```
rake hypervisor:messaging:configure
```

- For certain compute resources only:


```
rake hypervisor:messaging:configure['11.0.50.111 11.0.50.112']
```

To perform the configuration for a number of compute resources, separate their IPs with a space.

 The command above runs on compute resources that are online. If some compute resources are offline, you should run the command again when they are online.

The *rabbitmq\_host* parameter in the *on\_app.yml* file should contain the real IP address of the server with RabbitMQ installed. The *rabbitmq\_host* parameter should not be set to 'localhost' or '127.0.0.1'.

The server with RabbitMQ installed should be available from the compute resources.

 For information on manual configuration for Accelerator, refer to [RabbitMQ Configuration for Accelerator](#).

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