

# 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 plan to deploy [Accelerator](#), refer to the [RabbitMQ Configuration for Accelerator](#) document for more details.
- 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-5.4.noarch.rpm
```

3. Install OnApp Control Panel installer package:

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

4. (Optional) 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. This is the list of Control Panel IP addresses on which the traps sent from the compute resources are processed.

```
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. Only change this value if you understand what it does.

```
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 [-c CONFIG_FILE] [--mariadb | --community | --percona  
| --percona-cluster] [-m MYSQL_HOST] [--mysql-port=MYSQL_PORT] [--mysql-sock[=MYSQL SOCK] [-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-bind[=REDIS_BIND] [--redis-passwd[=REDIS_PASSWD] [--redis-  
port=REDIS_PORT] [--redis-sock[=REDIS SOCK] [--rbthost RBT_HOST] [--vcdlogin VCD_LOGIN] [--  
vcdpasswd VCD_PASSWD] [--vcdvhost VCD_VHOST] [--rbtlogin RBT_LOGIN] [--rbtpasswd RBT_PASSWD] [-a]  
[-y] [-D] [-t] [--noservices] [--ha-install] [--rake=RAKE_TASKS] [-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> .
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<code>--mariadb</code>	MariaDB Server
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<code>--community</code>	MySQL Community Server
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<code>--percona</code>	Percona Server
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<code>--percona-cluster</code>	Percona Cluster
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<b>MYSQL_*</b>	Options are useful if MySQL is already installed and configured.
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<code>-m MYSQL_HOST</code>	MySQL host. Default is 'localhost'
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<code>--mysql-port=MYSQL_PORT</code>	TCP port where MySQL Server serves connections.
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<code>--mysql-sock [=MYSQL SOCK]</code>	Unix socket on which MySQL Server serves connections. Default values is <code>/var/lib/mysql/mysql.sock</code> . Used if local server only. The socket is unset if the option's argument isn't specified.
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<code>-p MYSQL_PASSWD</code>	MySQL password. Random is generated if is not set or specified.
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<code>-d MYSQL_DB</code>	OnApp MySQL database name. Default is 'onapp'
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<code>-u MYSQL_USER</code>	MySQL user
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<b>REDIS_*</b>	Options are useful if Redis Server is already installed and configured.
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<code>--redis-host=REDIS_HOST</code>	IP address/FQDN where Redis Server runs. It is used by Control Panel to connect to Redis Server. 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 SNMP_TRAP_IPS) is specified. Default value is 127.0.0.1. If local Redis, it will serve as well on the unix socket 'PORT' (if <code>--redis-sock</code> without argument isn't specified).
<code>--redis-bind [=REDIS_BIND]</code>	The IP address for Redis Server to serve connections (to listen). The option isn't mandatory.
<code>--redis-port=REDIS_PORT</code>	Redis Server listen port. Defaults are: 0 - if local server 6379 - if remote server
<code>--redis-passwd [=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 /var/run/redis/redis.sock. The socket is unset if the option's argument isn't specified.
<b>ADMIN_*</b>	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.
<b>VCD_*</b>	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 '/'
<b>RBT_*</b>	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>--ha-install</code>	Proceed with Control Panel and High Availability components installation.
<code>--rake RAKE_TASKS</code>	List of OnApp Control Panel rake tasks (separated with space) to run at the very end of install or upgrade.
<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.

<b>-y</b>	update OS packages (except of OnApp provided) on the box with 'yum update'.
<b>-a</b>	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.
<b>-t</b>	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.
<b>--noservices</b>	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.
<b>-D</b>	Do not make database dump, and make sure it is disabled in the cron and not running at the moment.
<b>-h</b>	print this info

6. Install Cloudboot dependencies:

Depending on the needed compute resource type, you should install `onapp-ramdisk-DISTRO-FLAVOR` package(s), where:

DISTRO - CentOS6 or CentOS7

FLAVOR - XEN, KVM



It is required to install `yum install onapp-ramdisk-centos7-default` together with onappstore packages.

It is recommended to install all packages. Below you can find an example:

```
bash#> # yum install onapp-ramdisk-centos6-kvm
bash#> # yum install onapp-ramdisk-centos6-xen
bash#> # yum install onapp-ramdisk-centos7-kvm
bash#> /onapp/onapp-store-install/onapp-store-install.sh
bash#> # yum install onapp-ramdisk-centos7-default
```



Make sure that you run `bash#> # yum install onapp-ramdisk-centos7-default` package after executing `bash#> /onapp/onapp-store-install/onapp-store-install.sh`.

After `onapp-ramdisk-centos7-default` installation the following packages will be installed automatically:

```
onapp-store-install
onapp-ramdisk-tools
```

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.

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