

This document aims to provide you with adequate information which can help you get started with running existing tests using avocado.

What is avocado?

Avocado is an improved version of autotest.

If you are familiar with autotest framework, below is mapping to replacement/equivalent in avocado:

- > autotest test runner is equivalent to avocado test runner
- > virttest is included in avocado-VT. We generally would be using this one to write tests until the avocado-virt is more mature.
- > avocado-virt is Avocado Virtualization Plugin and Library
- > Tests can also be written under avocado-virt-tests using the libraries supported by avocado-virt

More info: <http://avocado-framework.readthedocs.org/en/latest/>

How to install avocado?

Below link gives information on installing avocado [which is as simple as rpm install]:

<http://avocado-framework.readthedocs.org/en/latest/GetStartedGuide.html#installing-avocado>

Below are the minimum packages required , which enables running existing qemu,libvirt testcases as well:

- PyYAML
- aexpect
- autotest-framework
- avocado
- avocado-plugins-vt
- avocado-virt
- fabric
- gdb-gdbserver
- libtomcrypt
- libtommath
- p7zip
- pystache
- python-crypto
- python-ecdsa
- python-paramiko
- python3-simplejson

Quickstart to useful avocado commands and key config/data file locations:

1. List all avocado plugins:

```
avocado plugins
```

2. Run sample test

```
avocado run /bin/true
```

3. This command is used to download the latest JeOS image, necessary to run libvirt,QEMU[and any other which you need] related tests.

```
avocado virt-bootstrap
```

```
avocado vt-bootstrap --vt-type qemu
```

```
avocado vt-bootstrap --vt-type libvirt
```

4. Once you bootstrap, try to list all testcases:

```
sudo avocado list --vt-type libvirt
```

```
sudo avocado list --verbose
```

This should list a large amount of tests (over 1900 virt related tests)

```
ACCESS_DENIED: 0
```

```
BROKEN_SYMLINK: 0
```

```
EXTERNAL: 0
```

```
FILTERED: 0
```

```
INSTRUMENTED: 0
```

```
MISSING: 0
```

```
NOT_A_TEST: 0
```

```
SIMPLE: 0
```

```
VT: 1922
```

5. virttest location:

```
/usr/lib/python2.7/site-packages/virttest/
```

6. To get the configuration of avocado and default directories:

```
avocado config
```

Avocado config files:

```
/etc/avocado/avocado.conf
```

```
/etc/avocado/conf.d/virt.conf
```

```
/etc/avocado/conf.d/vt.conf
```

```
/etc/avocado/conf.d/gdb.conf
```

```
/home/srikanth/.config/avocado/avocado.conf
```

Avocado data files:

<code>datadir.paths.base_dir</code>	<code>/usr/share/avocado</code>
<code>datadir.paths.test_dir</code>	<code>/usr/share/avocado/tests</code>
<code>datadir.paths.data_dir</code>	<code>/usr/share/avocado/data</code>
<code>datadir.paths.logs_dir</code>	<code>~/avocado/job-results</code>

7. Legacy QEMU tests location:

`/usr/share/avocado/data/avocado-vt/test-providers.d/downloads/io-github-autotest-qemu/qemu/tests`

8. Legacy libvirt tests location:

`/usr/share/avocado/data/avocado-vt/test-providers.d/downloads/io-github-autotest-libvirt/libvirt/tests/src`

9. Running one virt-test to make sure your setup is good enough:

`avocado run type_specific.io-github-autotest-qemu.migrate.default.tcp`