

Testing

There are currently three ways to test your component in CloudStack.

Unit Tests

Unit Tests can be written using Mockito and Spring for your plugin/component and will run as part of the build system. Tests that attempt to access a database or network resource belong to an integrated test. Documentation on writing UnitTests is [here](#)

Integration Tests

These are tests that will run on a working setup of CloudStack. In other words, the entire management server, hypervisor setup etc is assumed to exist and /or presetup before running these tests. One can think of these as system tests. They are written in python using marvin.

1. [How to](#) write integrated tests for CloudStack
2. [How to](#) include your integrated tests in the build phase

Smoke Tests

These are like the integration tests, but they use the *simulator* hypervisor, which just pretends to do the work its given. They require a working database and running management server. These tests should be run before pushing changes upstream or submitting to reviewboard.

See [how to run the smoke tests using the simulator](#).