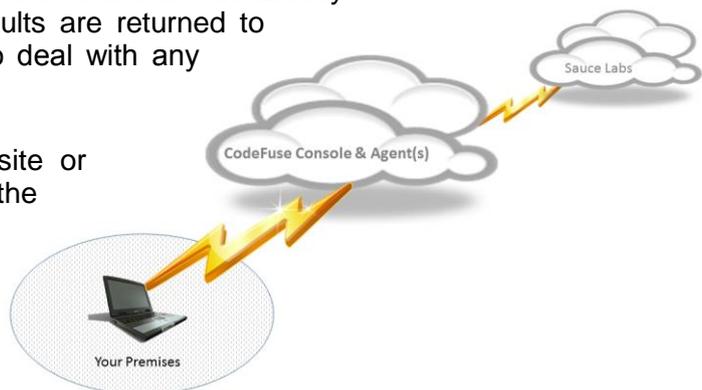# CodeFuse's Flexible Testing Solution Architectures

CodeFuse can be deployed in multiple ways to support your website, desktop application and API testing needs. You can run your tests entirely in the cloud if the website or application under test is available over the internet. Alternatively, if the website / application resides behind a firewall then you can use a local agent to execute tests in the cloud. The third scenario allows you to execute tests entirely in-house with no cloud infrastructure.

All of these scenarios enjoy the benefits of CodeFuse including easy configuration (no scripting knowledge is needed), behaviour and test driven development modelling and encouraging collaboration between tester and analyst.

Cloud Agent running Cloud Tests

This configuration involves zero infrastructure installation on the client side. Tests are run by CodeFuseAgents which exist in the CodeFuseCloud which talk directly to the Sauce Lab cloud-based virtual machines. Results are returned to CodeFuseConsole, and the user hasn't had to deal with any additional infrastructure.

This architecture is deployed where the website or application under test is available over the Internet. It is not suitable for executing tests against Windows Desktop applications or where you need to use your own custom Test Actions.
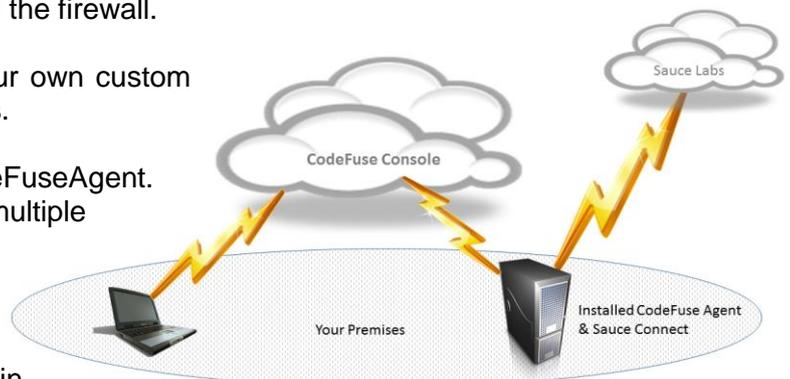
Local Agent running Cloud Tests

This configuration is most commonly used where you want to run tests in the cloud, but your application-under-test is behind a firewall. In this instance, you can install your own CodeFuseAgent behind your firewall, start Sauce Connect on the same machine as the agent and you will be able to run tests on Sauce Lab's platform from behind the firewall.

This configuration also allows you to add your own custom Test Actions to your agent for use in your tests.

In this instance, you need to install a CodeFuseAgent. However, you will not need multiple CodeFuseAgents to cover each of the different OS and browser combinations that you want to test against, as they are available on the Sauce Labs platform. You may want to install multiple CodeFuseAgents in order to run simultaneous tests though.
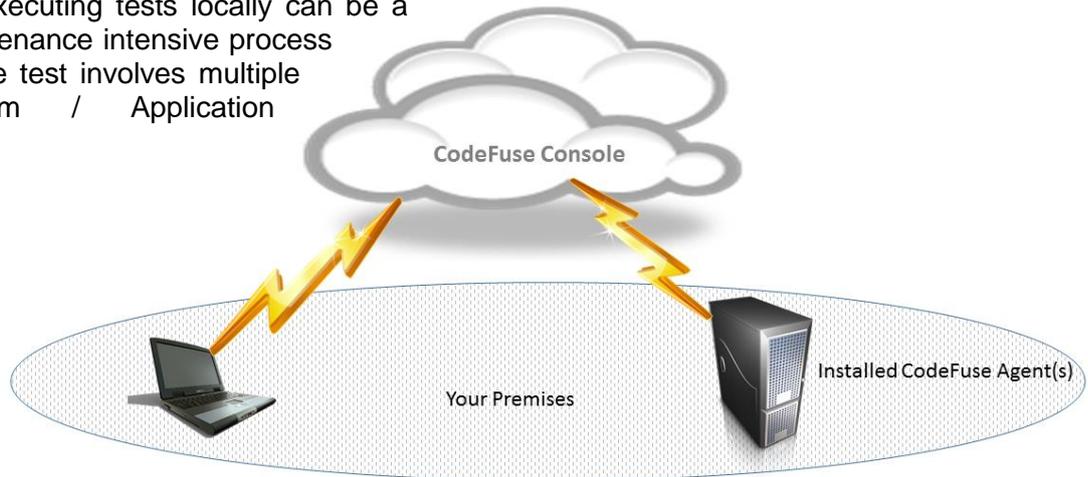
Please note, this scenario is not suitable for executing tests against Windows Desktop applications.

Local Agent running Local Tests

This configuration is used when you want to use CodeFuseConsole to manage and orchestrate your tests, but you want to keep all of the test execution itself in-house. In this scenario you will need to install CodeFuse Agents locally in order to execute your test, one agent per browser and operating system combination. This option is ideally suited when you want to test Windows desktop applications.

Please note that executing tests locally can be a resource and maintenance intensive process especially when the test involves multiple Operating System / Application combinations.

About CodeFuse Technology Limited

CodeFuse Technology produces tools for the software development industry. We are focussed on improving the quality of your software by enhancing your collaboration, simplifying your processes and streamlining your QA efforts through automation. We provide cloud based Software-as-a-Service (SaaS) solutions which are designed to minimise your efforts in set-up and maintenance so that you can concentrate on getting the job done. We were established in 2013 as CodeFuse Technology Limited.

Software Quality. Simplified.

Contacting CodeFuse

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