Overview of TestProject

An end-to-end Automation tool

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What is TestProject?

- **TestProject** is an end-to-end automation tool that provides capabilities to automate *Web*, *API*, and *Mobile* applications.

- It is an open-source friendly tool built on top of **Selenium** and **Appium**, which enables the **QA Engineers** to test Web applications along with Android and iOS effortlessly.

- TestProject's Agent comes pre-packaged with all vital Selenium and Appium dependencies. Therefore, reducing the installation effort.

- It also offers community Addons that can be installed quickly to make **automation scripts more robust** and reusable.

- It reduces and removes the extra effort QA engineers need to put on complex configuration and customized coding.

Architecture [1/2]

- TestProject mainly comprises of two different components:

  the **Test Recorder** and the **TestProject SDK**.

- The **Test Recorder** allows the user to directly record the tests from the UI (without writing code), whereas the **SDK** allows programmatic development of test cases.

- Additionally, the **TestProject SDK** offers a common syntax that allows users to write automation tests for both web and mobile applications.

- As it is built on top of Selenium and Appium, it shares the same commands as those frameworks and therefore reduces the requirement of learning new **APIs** to write tests.
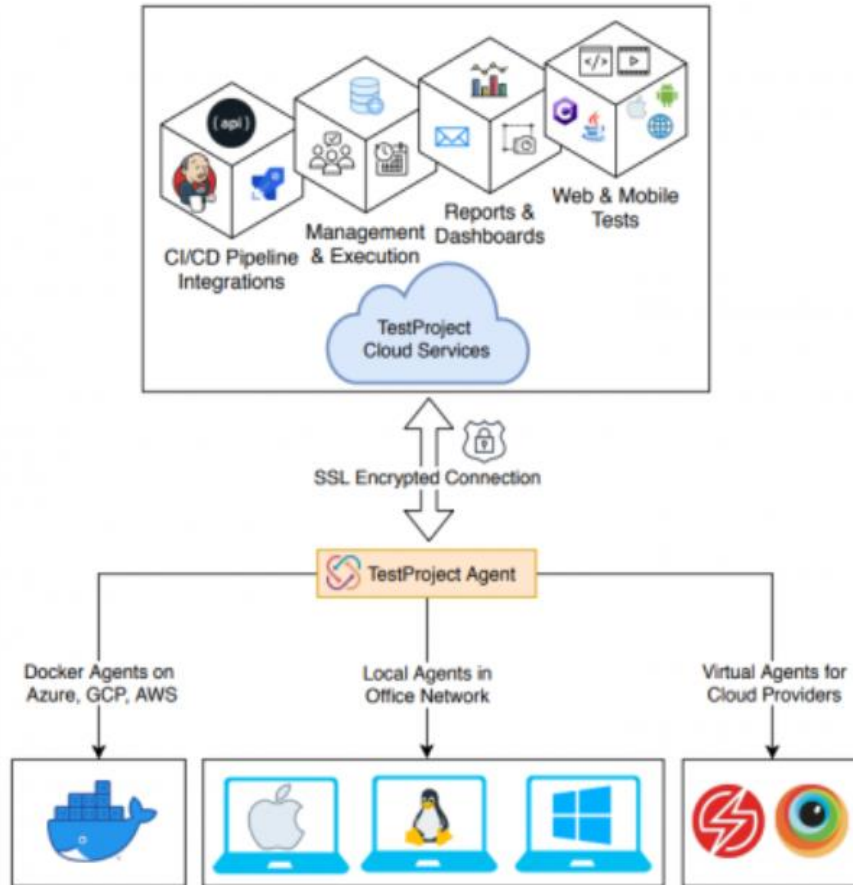
Architecture [2/2]

Fig 1: The basic architecture of the *TestProject* platform

TestProject consists of two components:

•*Cloud-based services (**app.testproject.io**), that carry storage, management, reporting, user authentication, and more.*

•*TestProject agents, which allow for the creation and execution of tests against the targeted applications.*

Why TestProject?

- **Easy to get started with** - The TestProject recorder is a powerful and easy to use record and playback tool that helps you get started with making tests with a minimal learning curve.
- **Full team collaboration -** Test automation works best when the whole team is able to work together on the same platform. TestProject makes sharing tests between team members straightforward and simple.
- **Extensibility / Reusability** - TestProject has a unique feature called Addons. Addons are shared **reusable functions** created by your team or the community. You can either use an existing addon to extend the default capabilities of TestProject or can create one yourself to simplify your test process.
- **Integration into existing workflows** - TestProject has an API that you can use to run it within existing continuous integration workflows. It also has a developer SDK that allows you to create tests or to import existing tests that you might have into the platform.
- **Cross Browser and Cross Platform**. TestProject allows users to create and run both web and mobile tests. We can also use it on any platform ranging from **Mac, Windows, Android**, and **iOS**. It is also compatible with most standard browsers, which means any **cross-browser** testing can perform effortlessly.
- **Reliable Technology-** TestProject uses reliable and proven technology like Selenium and Appium for a robust and well understood way of interacting with web pages.
- **Free** - The TestProject offers the Free Forever plan. TestProject is a powerful and fully featured product that anyone can use for free.

Unique Features

Features	Description
Free Automation Development Framework	The most significant advantage of *TestProject* is its cost. The Free-forever plan to allow the user to use complete features without paying a single penny. Users get to use the full potential of *TestProject* for a lifetime without worrying about licensing fees.
Collaborative Testing Repository	*TestProject* allows the addition of unlimited team members to your project. You can collaborate on a single project by just inviting your teammates and by giving them the permissions. You can provide access to anyone, even a person sitting on the other side of the globe. It allows easy sharing of tests, elements, reports, addons, and any component team may want.
Addons	One of the most exciting features of the *TestProject* is the concept of addons. Addons are a reusable collection of coded steps or actions that we can leverage across multiple tests. Addons can either be developed by the team or by the community.
Easy to Deploy and execute	*TestProject* removes complex setup, configurations, and installations. Deploying with *TestProject* is as easy as installing TestProject's Agent. Once Agent is installed on any local system, tests can develop or execute directly on that system without worrying about any dependencies, libraries, or configurations.

Features	Description
Easy Integration with DevOps tools	*TestProject* offers seamless integration with popular CI/CD tools like Jenkins and Slack. With just a few clicks, even someone completely new to **DevOps** can easily integrate automated tests with these tools. It uses RESTful APIs to execute tests and send notifications.
Multiple Platform Compatibility	As we discussed earlier, *TestProject* is compatible with multiple platforms like Windows, Mac, Android, and iOS. It also supports all major browsers. The SDK can also provide support for various programming languages like Java, C#, and Python.
Ease of Use	It is probably one of the most user-friendly automation tools in the market. Simple tooltips, easy, quick tutorials, and intelligent feature placement ensure that even a first time user can quickly get accustomed to the UI and can start developing tests in no time.
Elaborate Test Analytics	Extensive test analytics provide greater insight into the test results. It let you compare your tests across multiple environments, analyze step-by-step execution, and share execution reports with your team.

- Source: https://www.toolsqa.com/testproject/what-is-testproject/

Pros

- FREE end-to-end test automation platform
- Highly collaborative environment
- Ultimate user-friendliness
- Great community support
- Compatibly with various Platforms
- Saves time and effort

Cons

There are no cons as such in this tool. But there are certain limitations that can be addressed:

- Currently, it supports code generation only in the Java programming language.

- If your agent gets stopped, it does not show any warning sign or notification. It would be better if it pops up a message informing the user so the user can look into it and restart the agent.

References

- https://www.toolsqa.com/testproject/what-is-testproject/
- https://docs.testproject.io/
- https://www.softwaretestinghelp.com/testproject-review-tutorial/