

Chapter - 02 Background Material

2.1 Existing Systems

Existing way of doing regression testing is manual handling of test cases. There are separate well documented test cases for each and every product/project. With each release of the project/product QA team should follow the test case documents and proceed the regression testing. When it comes to a load testing, trial version of a commercial tool is used. Amount of load that can be applied on the test case is limited in this scenario.

2.1.1 Advantages of existing system

There is no complete substitute for manual testing. Manual testing is crucial for the thorough testing of software applications.

Automation can only be justified where repeatable consistent tests can be run over a stable environment. When this isn't the case (for example during the early stages of the test cycle or when the application is complicated and the business risk is large) then testing teams almost always revert back to manual testing.

Here are some examples of when manual testing is needed:

If your application is business critical or on heavily tested software.

If you are new to testing.

If you do not believe in full automation.

Or if full automation has not been appropriate to the project.

2.1.2 Disadvantages of existing system

For regression testing, a large resource pool is required to handle parallel releases of different projects/products and it is really time consuming.

From load testing point of view using trial software with limited loading functionality is not enough for large scale software testing.

2.1.3 Advantages of purchasing a system

Purchasing a system will remove the total development time and cost of the new system.

2.1.4 Disadvantages of purchasing a system

Purchasing a test automation framework is costly and almost not affordable. So it is a huge disadvantage to purchasing a system when comparing to an open source solution.

Since most of the requirements are not always generic, developed system is ideal with that flexibility. Adding new features and change existing features time to time is not possible with purchased system. Also lots of automated tools are supported only one script at a time and cannot run several scripts sequentially. But planned system is providing above feature as well.

It is really hard to purchase a system which is compatible with internal technologies used by the organization.

For an example basing an automated testing effort on using only a capture tool such as IBM Rational Robot to record and play back test cases has its drawbacks. Running complex and powerful tests is time consuming and expensive when using only a capture tool. Because these tests are created ad hoc, their functionality can be difficult to track and reproduce, and they can be costly to maintain.

2.2 Summery

This chapter will discuss about advantages and disadvantages of the manual testing and purchasing a system.