

1.4 Test Process

There is no one universal software test process, but there are common sets of test activities without which testing will be less likely to achieve its established objectives. These sets of test activities are a test process. The proper, specific software test process in any given situation depends on many factors. Which test activities are involved in this test process, how these activities are implemented, and when these activities occur may be discussed in an organization's test strategy.

A test process consists of the following main groups of activities:

- Test planning
- Test monitoring and control
- Test analysis
- Test design
- Test implementation
- Test execution
- Test completion

Each group of activities is composed of constituent activities, which will be described in the subsections below. Each activity within each group of activities in turn may consist of multiple individual tasks, which would vary from one project or release to another. Further, although many of these activity groups may appear logically sequential, they are often implemented iteratively.

For example, Agile development involves small iterations of software design, build, and test that happen on a continuous basis, supported by on-going planning. So test activities are also happening on an iterative, continuous basis within this development approach. Even in sequential development, the stepped logical sequence of activities will involve overlap, combination, concurrency, or omission, so tailoring these main activities within the context of the system and the project is usually required.