1.4 FUNDAMENTAL TEST PROCESS

In this section, we will describe the fundamental test process and activities. These start with test planning and continue through to test closure. For each part of the test process, we'll discuss the main tasks of each test activity. In this section, you'll also encounter the glossary terms confirmation testing, exit criteria, incident, regression testing, test basis, test condition, test coverage, test data, test execution, test log, test plan, test strategy, test summary report and testware.

As we have seen, although executing tests is important, we also need a plan of action and a report on the outcome of testing. Project and test plans should include time to be spent on planning the tests, designing test cases, preparing for execution and evaluating status. The idea of a fundamental test process for all levels of test has developed over the years. Whatever the level of testing, we see the same type of main activities happening, although there may be a different amount of formality at the different levels, for example, component tests might be carried out less formally than system tests in most organizations with a less documented test process. The decision about the level of formality of the processes will depend on the system and software context and the level of risk associated with the software.

So we can divide the activities within the fundamental test process into the following basic steps:
• planning and control;
• analysis and design;
• implementation and execution;
• evaluating exit criteria and reporting;
• test closure activities.

These activities are logically sequential, but, in a particular project, may overlap, take place concurrently and even be repeated. This process is particularly used for dynamic testing, but the main headings of the process can be applied to reviews as well. For example, we need to plan and prepare for reviews, carry out the reviews, and evaluate the outcomes of the reviews. For some reviews, such as inspections, we will have exit criteria and will go through closure activities.