

1.4.2_7 Test completion

During test closure activities, we collect data from completed test activities to consolidate experience, including checking and filing testware, and analyzing facts and numbers. We may need to do this when software is delivered. We also might close testing for other reasons, such as when we have gathered the information needed from testing, when the project is cancelled, when a particular milestone is achieved, or when a maintenance release or update is done. Test closure activities include the following major tasks:

- Check which planned deliverables we actually delivered and ensure all incident reports have been resolved through defect repair or deferral. For deferred defects, in other words those that remain open, we may request a change in a future release. We document the acceptance or rejection of the software system.
- Finalize and archive testware, such as scripts, the test environment, and any other test infrastructure, for later reuse. It is important to reuse whatever we can of testware; we will inevitably carry out maintenance testing, and it saves time and effort if our testware can be pulled out from a library of existing tests. It also allows us to compare the results of testing between software versions.
- Hand over testware to the maintenance organization who will support the software and make any bug fixes or maintenance changes, for use in confirmation testing and regression testing. This group may be a separate group to the people who build and test the software; the maintenance testers are one of the customers of the development testers; they will use the library of tests.
- Evaluate how the testing went and analyze lessons learned for future releases and projects. This might include process improvements for the software development life cycle as a whole and also improvement of the test processes. If you reflect on Figure 1.3 again, we might use the test results to set targets for improving reviews and testing with a goal of reducing the number of defects in live use. We might look at the number of incidents which were test problems, with the goal of improving the way we design, execute and check our tests or the management of the test environments and data. This helps us make our testing more mature and cost-effective for the organization. This is documented in a test summary report or might be part of an overall project evaluation report.