Abstract

Today, testing applications for Internet (web sites and other applications) is being verified using proprietary test solutions. An application is developed and another application is developed to test the first one. Test Competence Centre at Ericsson AB has expertise on testing telecom applications using TTCN-2 and TTCN-3 notations. These notations have lot of potential and are being used for testing in various areas. So far, not much work has been done on using TTCN notations for testing Internet application. This thesis was a step through which the capabilities/possibilities of the TTCN notation (in Web testing) could be determined.

This thesis presents investigation results of the 3 different test technologies/tools (TTCN-2, TTCN-3 and a proprietary free software, PureTest) to see which one is the best for testing Internet Applications and what are the drawbacks/benefits each technology has.

The background topics included are brief introduction of software testing and web testing, short introduction of TTCN language and its version 2 and 3, description of the tool set representing the chosen technologies, conceptual view of how the tools work, a short description of HTTP protocol and description of HTTP adapter (Test Port).

Several benefits and drawbacks were found from all the three technologies but it can be said that at the moment proprietary test solutions (PureTest in this case) is still the best tool to test Internet Application. It scores over other the two technologies (TTCN-2 and TTCN-3) due to reason like flexibility, cost effectiveness, user friendliness, small lead times for competence development etc. TTCN-3 is more of a programming language and is certainly more flexible when compared to TTCN-2. TTCN-3 is still evolving and it can be said that it holds promise. Some of the features are missing which are vital for testing Internet Applications but are better than TTCN-2.