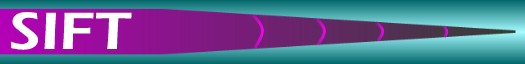
PRT – The Perl Regression Tester

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**Background/Motivation:** Many programs output text logs to indicate the functions they are performing. Some text in those logs can be used to confirm that the program is operating as expected, while other text may vary from run to run (e.g., timestamps, user names). PRT is a tool to fully automate the process of running sets of programs and checking important parts of their logs to make sure they are working correctly. It can also use parts of the logfiles, at runtime, to coordinate starting different programs only when others are ready, and to detect when programs encounter errors that should terminate testing early.

**Technology Overview:** PRT is a test-specification and execution tool with very broad applicability. To use PRT, you write a test specification file (a .prt file) that describes which applications/programs need to run, in what order, and what important parts of their logs should remain the same to indicate that the test is succeeding. PRT will then run the programs and compare the logs to previously “blessed” rubric logs.

**Role in SIFT projects:** PRT is used to specify how all of the software applications in a project are started, across different platforms, and what parts of their logfiles indicate that they are working (or failing). PRT enables fully automatic regression testing, as well as convenient one-command starting of demonstration scenarios. The programmers and operators benefit because running the complex system is easy, and it keeps working correctly because Jenkins (automated build system) and PRT watch it.