



## Using Linux Test Project for Kerrighed testing



Renaud Lottiaux





# Linux Test Project (LTP)

- <http://www.linuxtestproject.org/>
- A set of very simple tests
  - Test the entire kernel sys-calls
  - Currently, more than 1500 tests



# Testing Kerrighed with LTP

- The idea: using LTP as a non-regression test suite
- 3 test cases
  - Running the tests with no capabilities
    - In this case, Kerrighed is not involved
  - Running the tests with “DISTANT\_FORK”
    - Test the sys-calls with distant fork mechanism
  - Running the tests with migrations
    - Problem: how to migrate the tests at some “interesting” points ?
      - Modify each tests one by one to add a migration command
      - Add a mechanism to migrate during each sys-call
      - Another idea ?



# LTP as a Non Regression Test Suit

- We have created a script hosting running tests
  - trunk/tools/localTools/Script/krgltp.sh
  - Each time a new test is running ok, the test is added in the script
- The script is used in 2 cases
  - Manually, before a commit
    - The script must be run at least 4 times with no error before committing
  - Automatically and continuously on our validation cluster
    - Automatic validation mechanism
      - Check-out the latest SVN version
      - Compile it (check for compilation issues)
      - Boot-up a cluster with the resulting system
      - Run the tests several times (check for regressions)





# LTP is Great but not Enough

- All existing sys-call options are not tested
  - Work is in progress by the LTP team
- Some Kerrighed specific functionalities are not tested