



# LSB Infrastructure Project

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# About the Project

- Started in September 2006
- Contractor: Institute for System Programming of the Russian Academy of Sciences (ISP RAS), Moscow, Russia
- People from the Linux Verification Center, which is a part of ISP RAS

**ISP RAS**



**LinuxTesting  
.org**



# Long Term Goals

- Involve various parties in LSB community (ISVs, distribution vendors, upstream developers).
- Make LSB certification more inviting.
- Provide uniform infrastructure for contributing to LSB.
- Ensure LSB delivers real value in solving compatibility problems.



# Project Targets

- Renewed integrated LSB Database.
- New integrated software infrastructure systems:
  - LSB DB Navigator
  - LSB Test Execution Framework
  - LSB Certification System
- Linkage between all the key artifacts.
- Improved test coverage.
- Improved quality of the specifications.



## The First Phase (2006)

- Clean-up LSB DB Schema & Scripts.
- Alpha version of LSB DB Navigator.
- Alpha version of LSB Test Execution Framework.



# Clean-up LSB DB & Scripts

- Make all references to be of the same type as referenced fields.
- Ensure unified types and names for fields with the same semantics.
- Remove superfluous keys & indexes.
- Add missing keys & indexes.
- Remove obsolete fields and tables.
- Correct invalid data in some tables.
- Correct all the scripts that use the DB.
- Create up-to-date documentation.



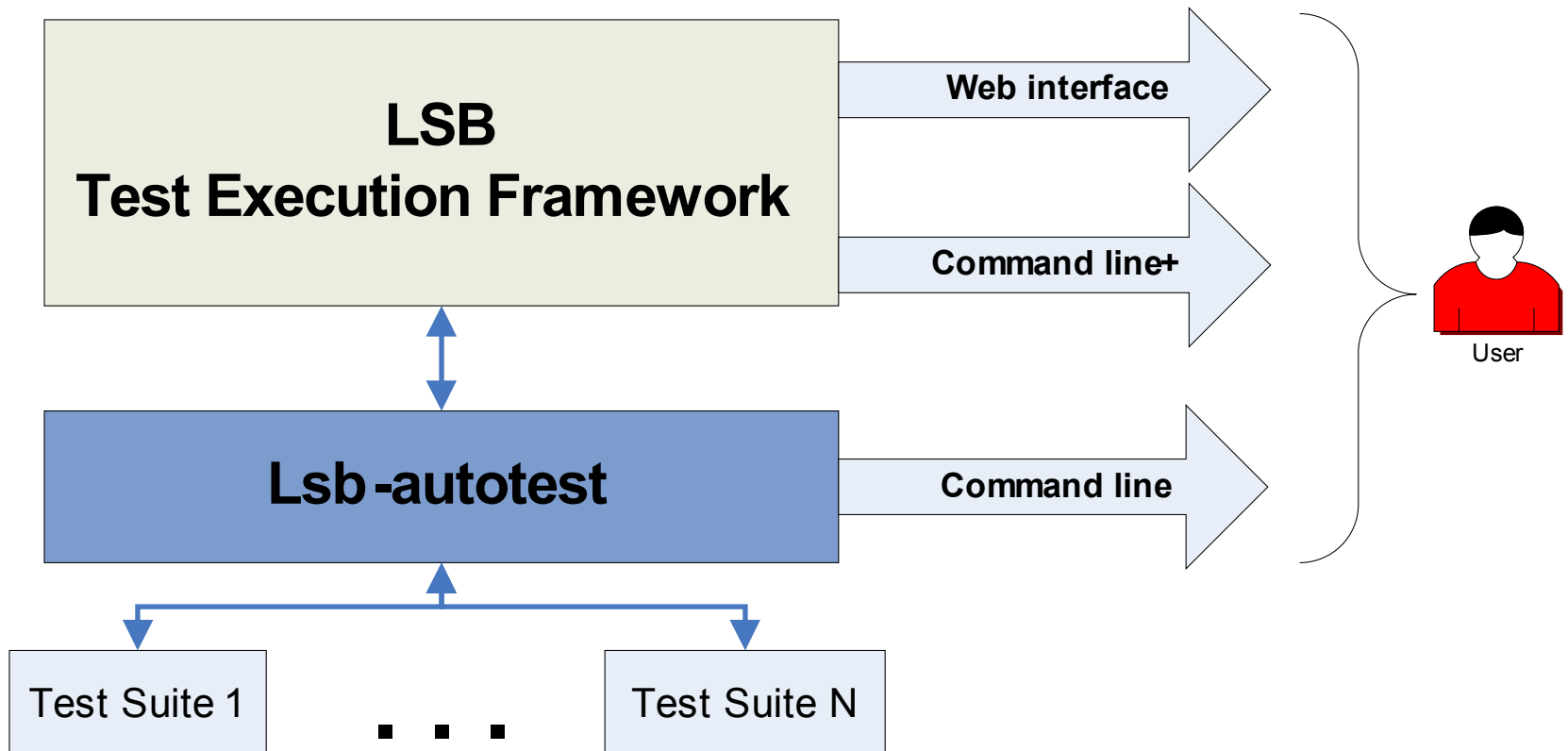
# LSB DB Navigator

- Browsing LSB Artifacts (Modules, ABI elements, ELF).
- Status queries.
- Test coverage browsing.
- DB consistency queries.
- Administrative interface.

=> Live Demo...

# LSB Test Execution Framework

- Provide user-friendly interface to configure & execute LSB tests and analyze the results.





# The Nearest Plans (1)

- Ensure consistency and completeness of the existing LSB DB data.
- Add new tables – applications, distributions, upstream components, test results, “interfaces-test cases” linkage, LSB versioning.
- Software Infrastructure Systems - Beta:
  - LSB DB Navigator
  - LSB TEF
  - Integration with the Certification System

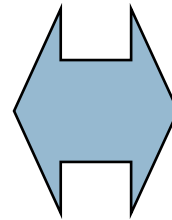


## The Nearest Plans (2)

- Investigate broad testing technology.
- Research projects:
  - How to prioritize interfaces?
  - Classify specifications by quality.
- Fill in “interfaces <-> test cases” linkage and develop corresponding features in TEF and DB Navigator.

# Interface <-> Test Case Linkage

Test Suite	Test Name	Test Case Source
math	C1	trig_c1.c
math	C2	trig_c2.c
math	C3	trig_c3.c
math	F1	t_float.c
math	D1	t_double.c



Interface	Spec Page
cos	cosine.html
cosf	cosine.html
cosl	cosine.html
cosh	cosineh.html
coshf	cosineh.html
coshl	cosineh.html



# Join Us

- Mailing list:

**lsb-infrastructure  
@lists.freestandards.org**

- Project Wiki:

**<http://ispras.freestandards.org>**