



国家应用软件产品质量监督检验中心
National Application Software Testing Labs

NAST

Increase the value of Open Standards: Ensure the Quality

Lin Ju

CTO

National Application Software Testing Labs

Open Standards in theory and practice

- A standard can be a specification, a practice, or a reference model
- To provide a way for those who are responsible for technology decisions to predict a certain level of functionality and interoperability from vendors they consider.
- To demand open standards from Web application development technology
- A vendor's support of open standards is an important element of consideration for choosing technology
- Standards have shifted into high gear as a mandate for competitive stature, cost effective IT and operational excellence.



Open Standards Complements

- Competitors hope to speed to market, efficiency, reduce their own complement cost
- The personal who implement the standard
HAD DAY JOBS

Quality?



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- Experience
 - Found in July 2002
- Funding Position
 - Total investment: US\$12million
 - Funding parties
 - Beijing Municipal Science & Technology Commission (BMSTC)
 - Beijing Products Quality Supervision and Inspection Institute (BPQSII)
- Accreditation
 - National Testing & Calibration Laboratory certification in Dec. 2003
 - National Application Software Testing Labs in Oct. 2004

National Application Software Testing Labs: Testing Criterion

- Testing criterion:
 - GB/T16260 (ISO/IEC 9126:2001) Information technology-Software Product Evaluation-Quality Characteristics and Guide lines for their use
 - GB/T 17544 (ISO/IEC 12119:1994) Information technology-Software Packages-Quality requirements and testing
 - Compliance to ISO/IEC 17025 General requirements for the competency of testing and calibration laboratories



National Application Software Testing Labs: Testing Projects

- What we can test
 - Enterprise Applications
 - Platforms
 - Database
 - Information System Product
 - Web applications
 - Open Source Software (OSS)

For: Localization, Functionality, Performance,
Load and Stress, Benchmark, Usability,
Comparison, Compatibility



OSS Case Studies

- Ubuntu: Linux Operating System
 - Testing Results

Version	Function Points	# of Defects
Ubuntu v. x. 1	2105	xx
Ubuntu v. x. 2	2210	xx
Ubuntu v. x. 3	1994	xx

- Ubuntu Linux Community’s testimony: “It is probably the most thorough and detailed report Ubuntu has ever been run through... Great work, incredibly useful. Thanks for the huge lot of testing work you did”.

Confidence on Open Standards

- Continued maintenance and assurance by the users of the specifications
- Assurances of stability, of interoperability and of longevity
- Build test suites which test implementation and application conformance to the standard
- It can be done by conformance laboratory certification, self-assessment or publication of “statements of conformance”.



Thank you!