Virtual Test Labs
The next frontier

Darshan Desai
Program Manager
Visual Studio - Test and Lab Management
Microsoft India, Hyderabad

darshand@microsoft.com  |  http://blogs.msdn.com/b/lab_management
Meet Ellen
“Thinking up new & creative ways of finding bugs keeps my job interesting”

Testers are focused on finding bugs, not running and reporting tests. Testers use their skills to search the space of potential bugs creatively and effectively. The thrill of the ‘hunt’ provides them with the motivation to keep going.

Ellen the vigilant tester
“Developers may take the happy path through a feature but I want to think about every other path that can be taken.”

Ellen the vigilant tester

Testers and developers approach their work very differently. Testers test the scenario while developers test the code. Testers love finding bugs whereas developers hate finding bugs. Testers think about how the users work, and developers think about how the code works.
“Automation for a few repetitive tasks... for everything else, manual testing”

The majority of testing done today is manual. This isn’t because great automated testing tools aren’t available to testers. Instead, the process of testing a product manually allows testers to identify other test cases or scenarios that they had not considered testing before. If the majority of their test cases were automated, testers fear that they would spend less time using the product they are testing, and more time maintaining and creating automated test cases. While automation is useful for repetitive tasks, testers feel that it should not replace manual testing.

Ellen the vigilant tester
Wants to help ship "great" software

Ellen the vigilant tester

**Background & Motivations**
- Typically does not have any formal CS training or background
- Quite often was once a user of the product being tested
- Sense of achievement comes from making users lives easier
- Feels like the customer advocate
- Likes tracking down hard-to-find bugs
- Competes with developers
- Has no desire to become a developer

**Focus & Approach**
- Driven by requirements
- Assessing quality
- Scope is user centered and scenario driven
- Often exploratory or ad-hoc
- Likes to be able to spend time with users
- Finding bugs, not running tests
- Tests defensively
- Provides detailed and accurate bug reports
- Dislikes ambiguity

**Authoring Tests**
- Automation for repetitive tasks
- Elucidate designs
- Hands-on approach to catch unforeseen bugs
- Doesn’t believe in 100% automation
- Wants tools that help find bugs
- Creates flexible, reusable tests
- May not always use formal test cases to find bugs
- Always looks for opportunities to find bugs
Ellen’s woes
Environment setup is painful
No-repro bugs
Cannot catch up with development
What if?
Environment setup is ‘quick and easy’
No more “no-repro” bugs
Development and testing work hand in hand
Enter Virtual Labs!!!
Demo

Virtual lab in action
Best practices/pitfalls
Integration
Cloning VMs without conflicts
Rewinding clock with snapshots
Virtual labs empower Ellen
Save time and increase productivity
Improve software quality
Enable better collaboration
Help ship "great" software
Questions??
Contacts

Darshan Desai

Email: darshand@microsoft.com
Blog: http://blogs.msdn.com/b/lab_management