



*Cross Browser Testing
The Effectiveness Deal*

SG
VIRTUAL
CONFERENCE
7ma edición

Construyamos
mejor software
sin fronteras

22 de octubre 2014
Sede: Todo el mundo
EVENTO GRATUITO

CROSS BROWSER TESTING EL RETO DE LA EFICIENCIA

Delivering multi-browser applications



The defects introduction

WHAT IS IN THE BACKGROUND

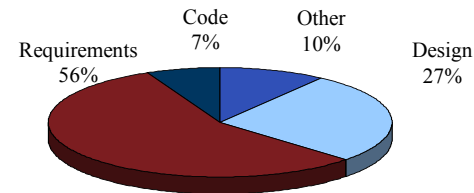
Poor Requirements Still Leading Cause of Failure

3 de 5 top reasons projects fail

1. Lack of user involvement
(inaccurate requirements)
2. Incomplete requirements
3. Changing requirements

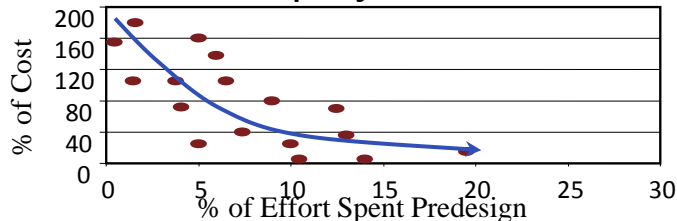
Source: Standish Group (2003)

40% of effort in software projects is rework from requirements errors



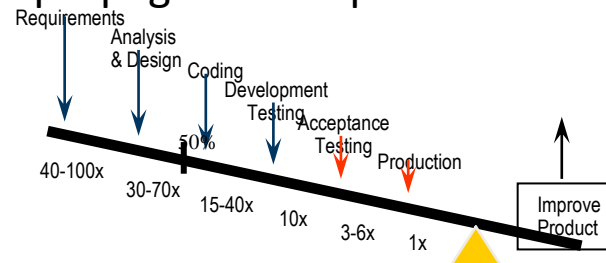
Source: James Martin

Investments in requirements reduces overall project costs

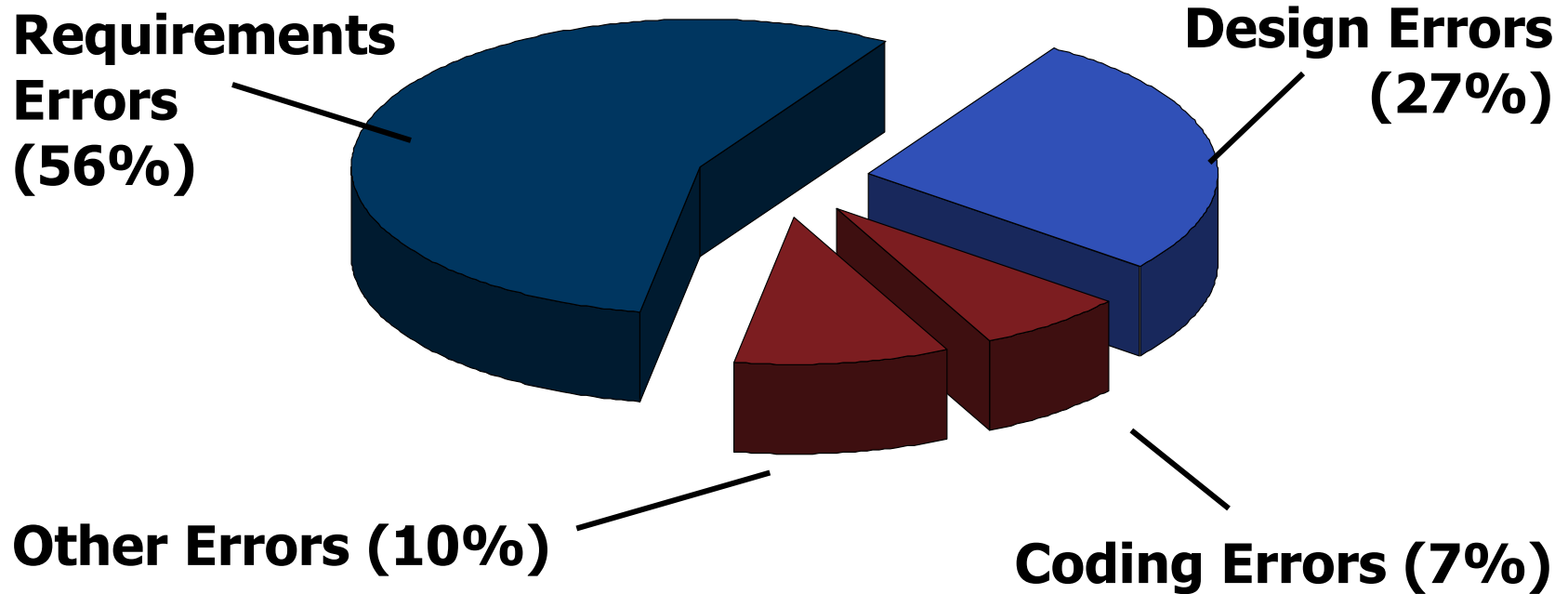


Source: Hooks and Farry, Customer-Centered Products, AMACOM, 2001)

The cost to fix a defect increases as it propagates into production

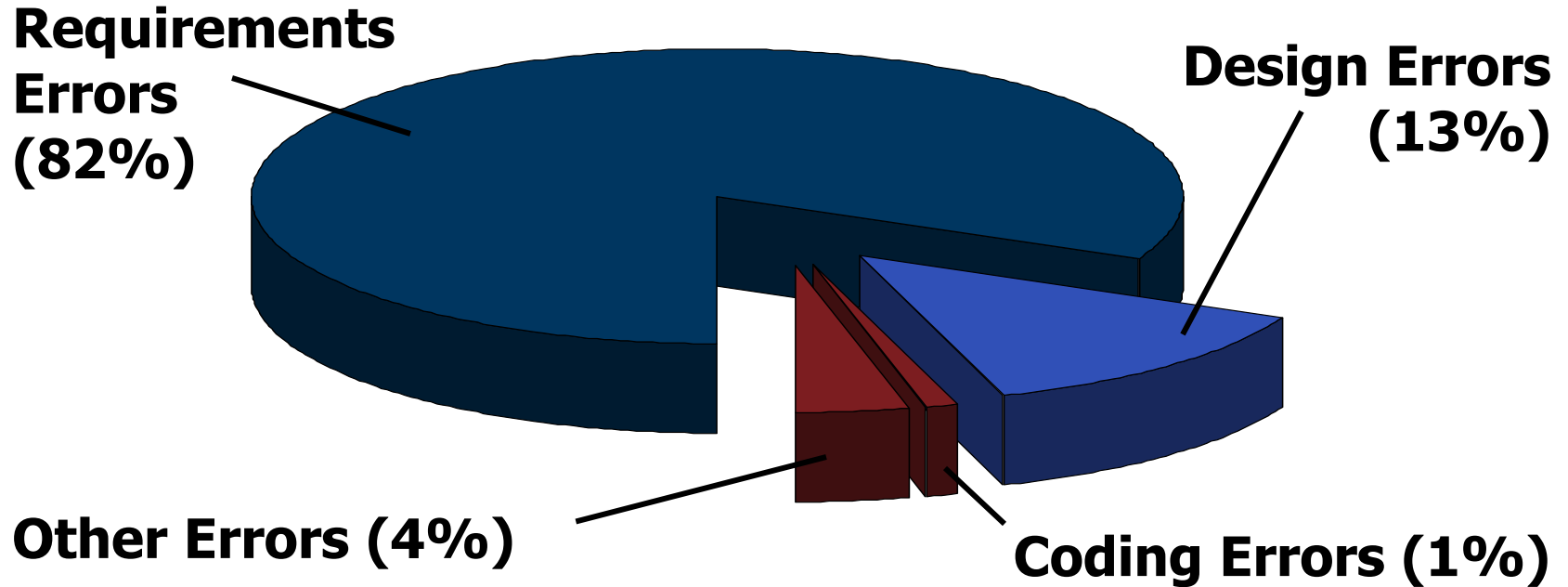


The Source of Software Defects



Source: James Martin, [An Information Systems Manifesto](#)

The cost to fix software defects

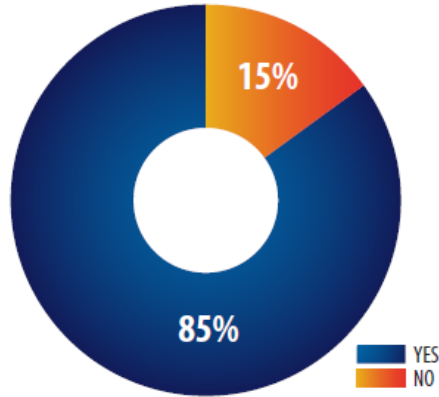


Source: James Martin, [An Information Systems Manifesto](#)

Connect your people for success software delivery

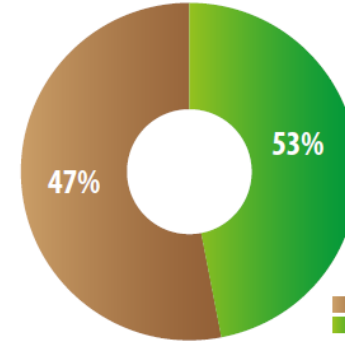


We need a better delivery process!



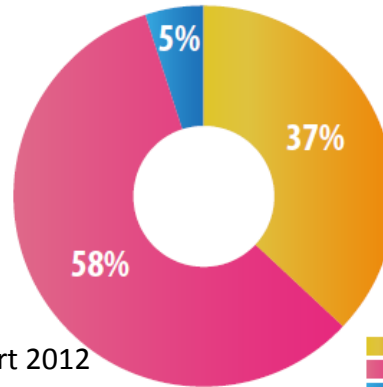
85%[†] of companies have to capture and share project requirements with other stakeholders

YES
NO



47%[†] of companies make change requests once every two weeks, or more frequently

ONCE EVERY TWO WEEKS OR MORE
LESS THAN ONCE EVERY TWO WEEKS



Only 37%[†] of companies are able to manage variability, variety and change very well

VERY WELL
ADEQUATELY
POORLY

*Source: Standish Group, Chaos Manifesto Report 2012

†Source: Vanson Bourne 2013

Key pains to solve

Customer Needs & Pains

- Customer Satisfaction
 - Ensuring the quality across a huge variety of browsers and platforms is time and cost intensive
- Finding problems early
 - Finding and fixing problems early in the product lifecycle is key to be cost effective
- Testing infrastructure
 - Setting up and maintaining a test infrastructure that fit the customers need is costly and time consuming



Silk Central Connect's Unique Solution

- Cross-browser configuration testing
 - Understand where web applications pass or fail
- Visual result comparison across browsers
 - Quickly find any problem of your application that is related to a specific browser
- Running tests in the cloud
 - Leverage the cloud to gain better test coverage and to avoid building a test environment on your own

Coexistence through the SDLC

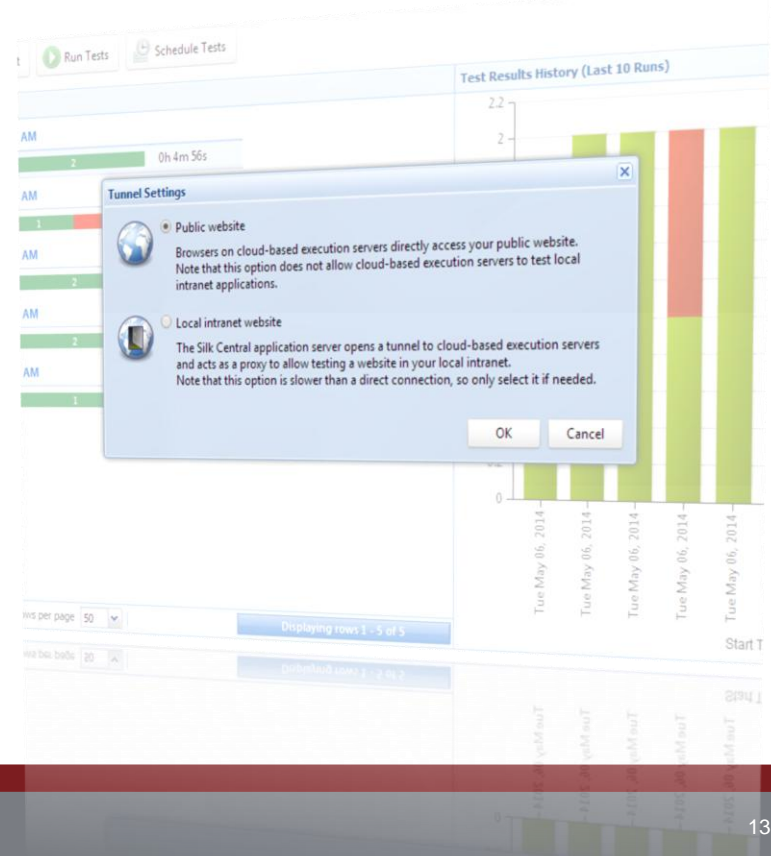


Cross browser configuration testing

- **Validate a Web Application with a single click** – understand where applications pass or fail
- **Cross Browser Configuration Testing** – how is cross browser configuration testing done
- **Side-by-Side Results** – at a glance result comparison
- **Running tests in the Cloud** – leverage to cloud to extend test coverage

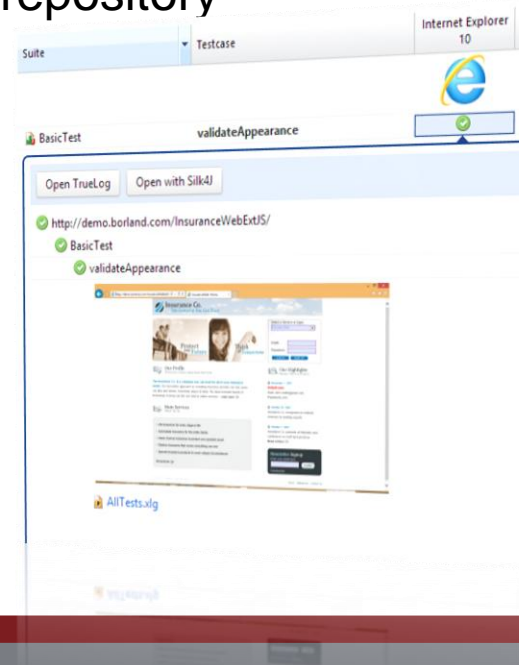
Your application is not public?

- Not all web applications are public available
- Enable customer to test local local web applications from the cloud
- Configurable for each project



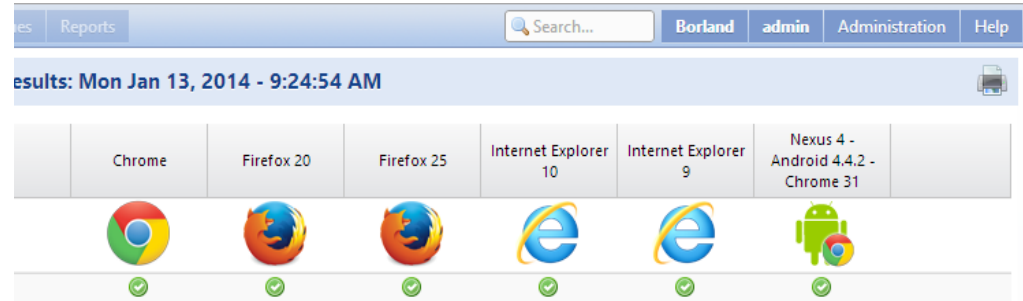
No limits for improvement

- File based repository for evaluation
 - No need for manually setting up a SVN repository
- Usability enhancements
 - Show URL within the results for better analysis



Understand where the application pass or fails

- Auto scan an URL
 - Silk Central Connect checks if the URL is accessible
 - Silk Central Connect provides a screenshot of the web application on all the different browsers
- Complete Test Project created
 - Open Project in Silk4J to extend the test-set
 - Share Project across the team
 - Run tests locally or in the cloud



How is cross browser configuration testing done

- Cross Browser Testing

- Use one powerful script for testing in various browsers (including mobile browsers), browser versions and locales
- Built-in synchronization removes the need for a tester to manually synchronize against asynchronous events typical for highly dynamic web applications, e.g. based on AJAX.

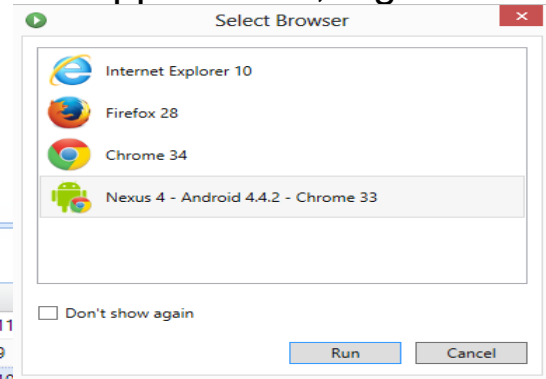
- Cross Browser Configuration Testing

- Run test across a huge variety of browsers

Execution Servers | Cloud Providers

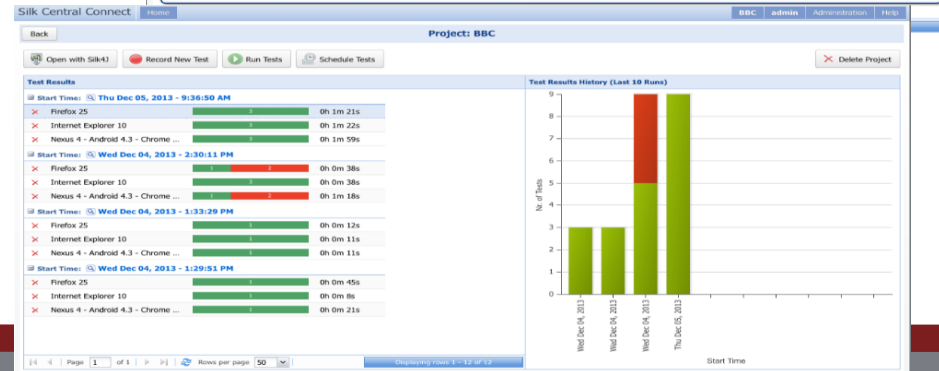
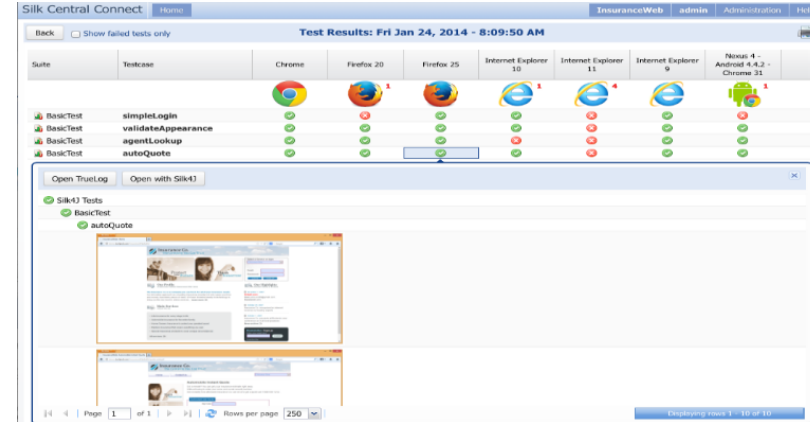
All Locations ×

Actions	Name ▲	Location	Assigned Keywords
× <input type="button" value="Refresh"/>	<input checked="" type="checkbox"/> ami-30ec1b47	AWS	Silk_Chrome 32, Silk_Firefox 24, Silk_Internet Explorer 11
× <input type="button" value="Refresh"/>	<input checked="" type="checkbox"/> ami-32ec1b45	AWS	Silk_Chrome 32, Silk_Firefox 24, Silk_Internet Explorer 9
× <input type="button" value="Refresh"/>	<input checked="" type="checkbox"/> ami-3eec1b49	AWS	Silk_Chrome 32, Silk_Firefox 24, Silk_Internet Explorer 10
× <input type="button" value="Refresh"/> <input type="button" value="Refresh"/>	localhost	Local	Silk_Firefox 25, Silk_Internet Explorer 10, Silk_Nexus 4 - Android 4.4.2 - Chrome 31
× <input type="button" value="Refresh"/> <input type="button" value="Refresh"/>	sccexecserver.cloudapp.net	Azure	Silk_Chrome 32, Silk_Firefox 25, Silk_Internet Explorer 11



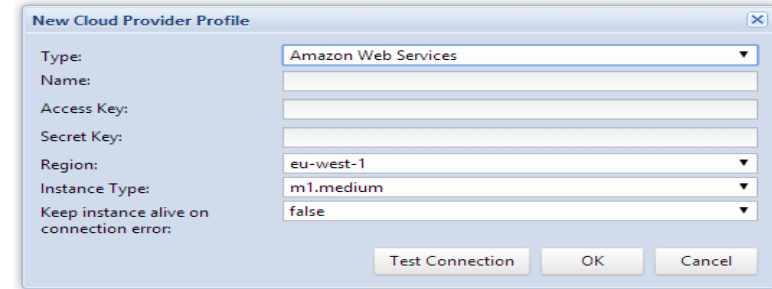
Side by side results

- Results across all Configuration
 - See where the application passes or fails
- Historical Results
 - See how the tests evolve
 - See on which configuration you have problems
- Deep result analysis
 - See with one click what the problem is
 - Jump right into the line of code which causes the issue



Leverage the cloud to extend test coverage

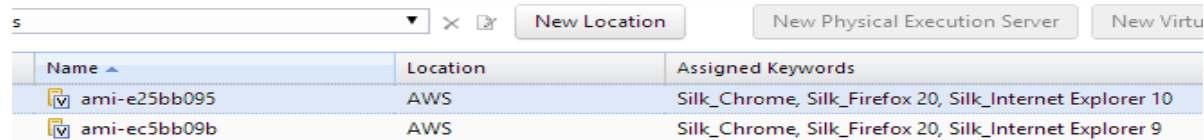
- **Test execution in the cloud**
 - Use own Amazon account
 - Cost effective test-execution
 - No longer buy expensive hardware
- **Test execution in your own private cloud**
 - Stay in your own DMZ
 - Use local environment for test execution
 - Leverage all existing hardware



The dialog box 'New Cloud Provider Profile' contains the following fields:

- Type: Amazon Web Services
- Name: (empty)
- Access Key: (empty)
- Secret Key: (empty)
- Region: eu-west-1
- Instance Type: m1.medium
- Keep instance alive on connection error: false

Buttons: Test Connection, OK, Cancel



Name	Location	Assigned Keywords
ami-e25bb095	AWS	Silk_Chrome, Silk_Firefox 20, Silk_Internet Explorer 10
ami-ec5bb09b	AWS	Silk_Chrome, Silk_Firefox 20, Silk_Internet Explorer 9

Better Software, Faster!



EFFECTIVENESS