



Software Testing or Software Quality Assurance?

Software Quality Assurance (SQA) encompasses the entire software development process, which includes processes such as:

- * Requirements definition
- * Software design
- * Coding, source code control, code reviews
- * Software configuration and release management
- * Testing and product integration

SQA is organized into goals, commitments, abilities, activities, measurements, and verifications.

Software Testing can be viewed as the process of validating and verifying that a computer program/application/product:

- * Meets the requirements that guided its design and development
- * Works as expected
- * Can be implemented with the same characteristics
- * Satisfies the needs of stakeholders

SQA Lifecycle Activities

Requirements/Specification

Architecture

Construction

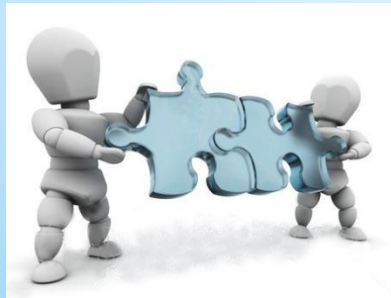
Design

Testing

Debugging

Deployment

Maintenance



Why QA?



We can't fix it if we don't know what's broken.

“You cannot go back and add quality. By the time you figure out you have a quality problem, it is probably too late to fix it.” -- John Reel, CIO Trident Data Systems *

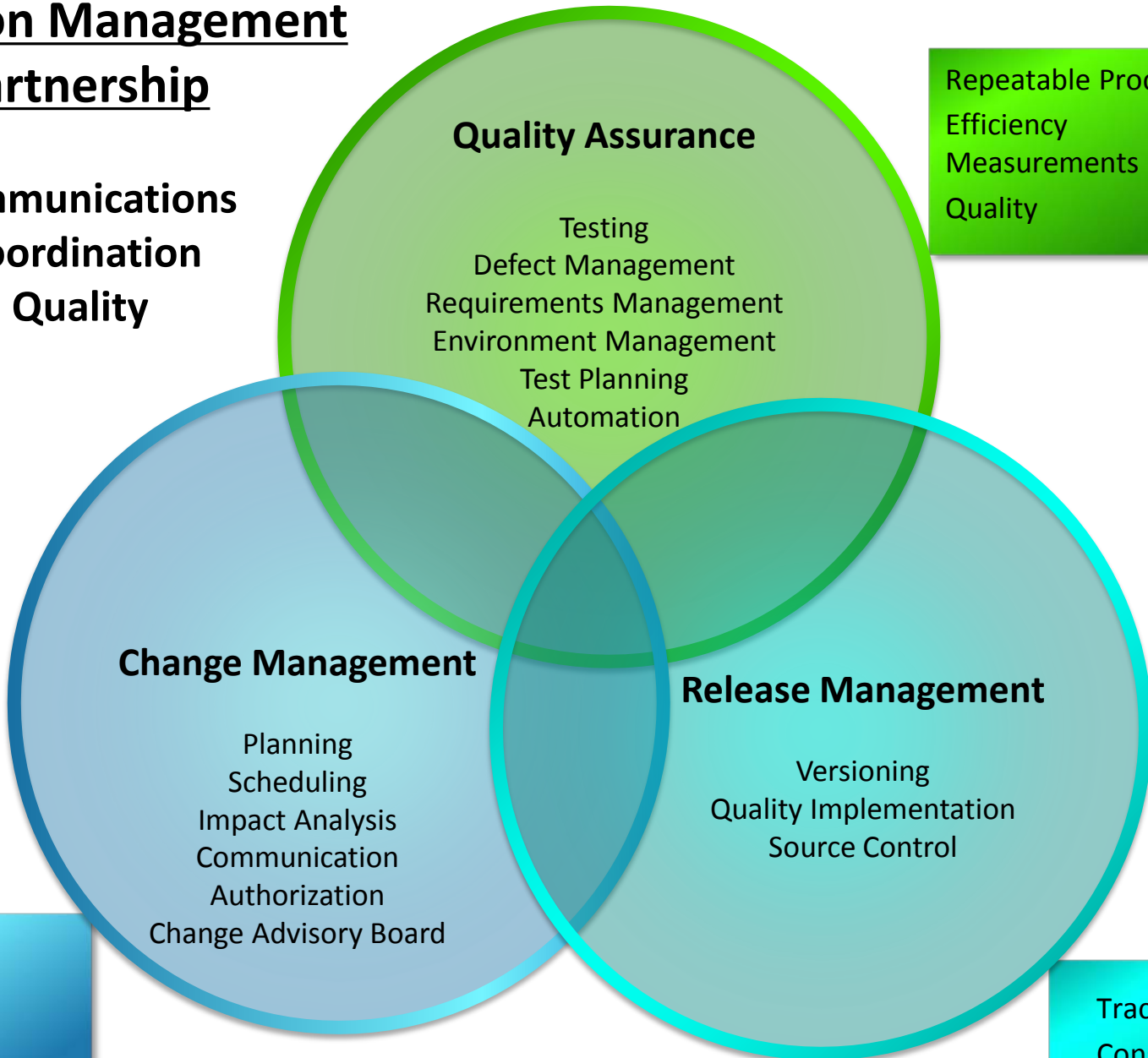
Our Mission:

We will test early, validate along the way, collaborate with business partners, and deliver a quality product!

Transition Management

Partnership

Communications
Coordination
Quality



Quality Assurance

Testing
Defect Management
Requirements Management
Environment Management
Test Planning
Automation

Repeatable Processes
Efficiency
Measurements
Quality

Change Management

Planning
Scheduling
Impact Analysis
Communication
Authorization
Change Advisory Board

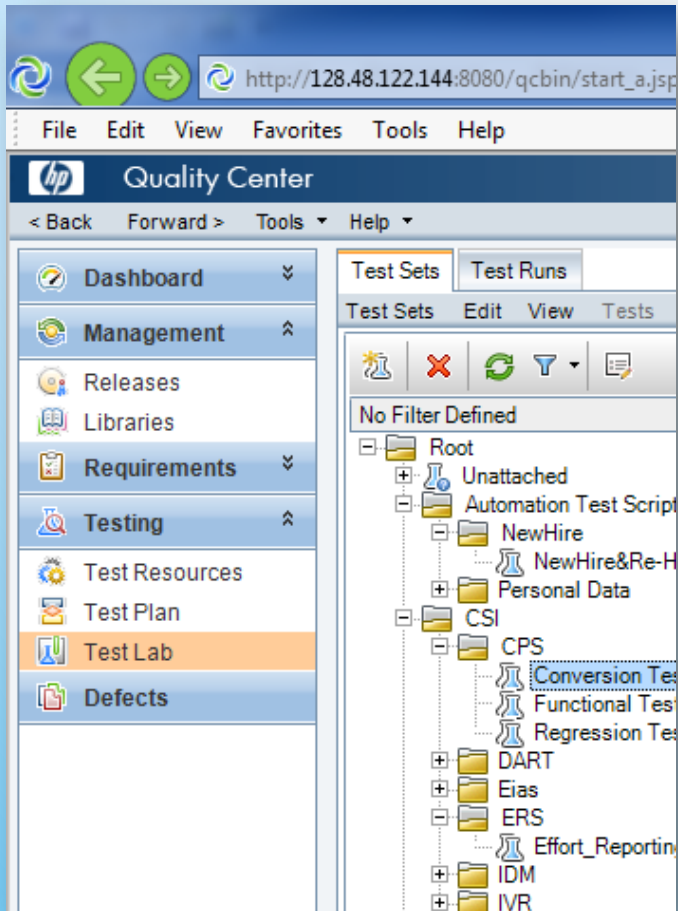
Continuous Improvement
Reporting
Managing

Release Management

Versioning
Quality Implementation
Source Control

Traceability
Consistent Experience
Tracking

Tools



HP Quality Center (QC)*

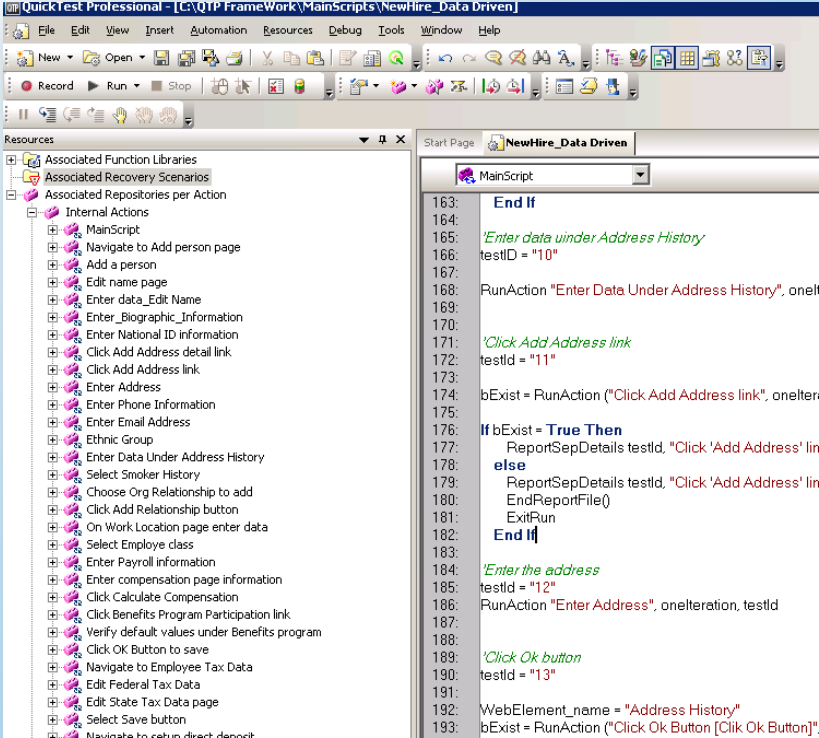
- Requirements
 - At FSPD level of detail
- Testing
 - Test Plan – Scripting
 - Test Lab – Execution
- Defect Tracking
- Reporting

* Soon to upgrade to Application Lifecycle Management (ALM)

Tools

Unified Functional Test (UFT)

- Used for test automation
- Focus on designing tests, not execution
- Will be leveraged for SIT and ongoing regression testing
- Benefits
 - Faster than human testers
 - Reliable--tests perform the same steps each time
 - Use same test for different sets of data
 - Reuse tests in different environments
 - Can program more sophisticated tests



The screenshot displays the Quick Test Professional (QTP) interface. The title bar reads "Quick Test Professional - [C:\QTP Framework\MainScripts\NewHire_Data Driven]". The menu bar includes File, Edit, View, Insert, Automation, Resources, Debug, Tools, Window, and Help. The toolbar contains icons for New, Open, Save, Run, Stop, and other test-related functions. The Resources pane on the left shows a tree view with "Associated Function Libraries", "Associated Recovery Scenarios", and "Associated Repositories per Action". The MainScript repository is expanded, listing various actions such as "Navigate to Add person page", "Add a person", "Enter data_Edit Name", "Enter Biographic Information", "Enter National ID information", "Click Add Address detail link", "Click Add Address link", "Enter Address", "Enter Phone Information", "Enter Email Address", "Ethnic Group", "Enter Data Under Address History", "Select Smoker History", "Choose Org Relationship to add", "Click Add Relationship button", "On Work Location page enter data", "Select Employee class", "Enter Payroll information", "Enter compensation page information", "Click Calculate Compensation", "Click Benefits Program Participation link", "Verify default values under Benefits program", "Click OK Button to save", "Navigate to Employee Tax Data", "Edit Federal Tax Data", "Edit State Tax Data page", "Select Save button", and "Navigate to return direct deposit". The Script Editor pane on the right shows the following code:

```
163: End If
164:
165: 'Enter data under Address History
166: testID = "10"
167:
168: RunAction "Enter Data Under Address History", onel
169:
170:
171: 'Click Add Address link
172: testID = "11"
173:
174: bExist = RunAction ("Click Add Address link", onel
175:
176:
177: If bExist = True Then
178:     ReportSepDetails testID, "Click 'Add Address' lin
179: Else
180:     ReportSepDetails testID, "Click 'Add Address' lin
181: EndReportFile()
182: ExitRun
183: End If
184:
185: 'Enter the address
186: testID = "12"
187: RunAction "Enter Address", oneliteration, testID
188:
189:
190: 'Click Ok button
191: testID = "13"
192:
193: WebElement_name = "Address History"
194: bExist = RunAction ("Click Ok Button [Clik Ok Button]"
```

Roadmap



Centralized Testing began by testing payroll and enterprise reporting applications:

- * PPS (Payroll: Mainframe System)
- * ERS (Enterprise Reporting System: Web Application)

Roadmap

Today, we've added the Research Enterprise Management System and Decision Support Systems:

REMs (Research Enterprise Management Web Application)
Decision Support Systems:

- * Under-graduate
- * Contracts and Grants
- * Degree



Roadmap

Our Future

UCPath: The test team is being trained and mentored on Payroll, Human Resources, Benefits, Absence Management, Commitment Accounting, and Time and Attendance modules as well as the interfaces.

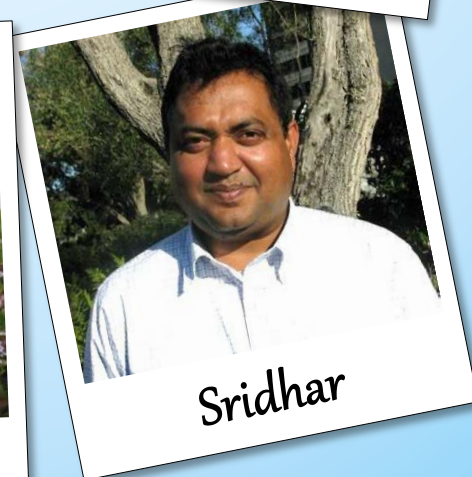
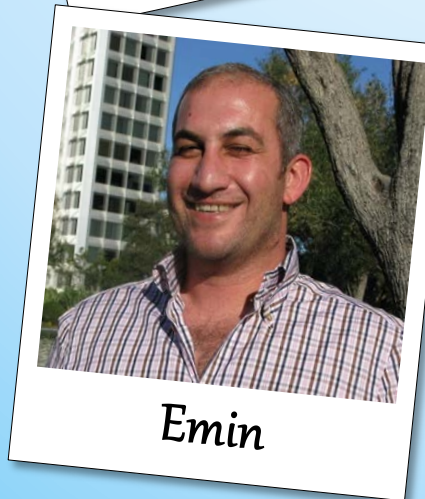
The UCOP roadmap supporting the strategy of “Deliver quality services through continuous assessment and improvement” is to move all UCOP applications into the centralized testing



Benefits of Independence

- * Cost effective through implementation of key learnings
- * Cross-trained staff for coverage
- * Standard processes and practices
- * Continuous improvement practices
- * Predictability with test case inventory
- * Integrated tool suite providing reporting and metrics
- * Separation of functions
- * Professionalism with peer reviews
- * End-to-end mapping of requirements, test cases, defects

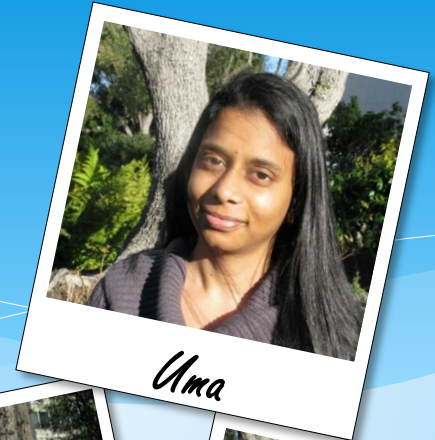
QA Leadership



QA Test Team



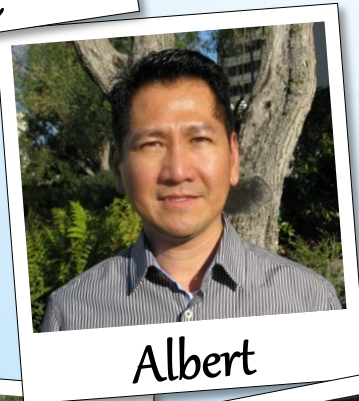
Rose



Uma



Joanne



Albert



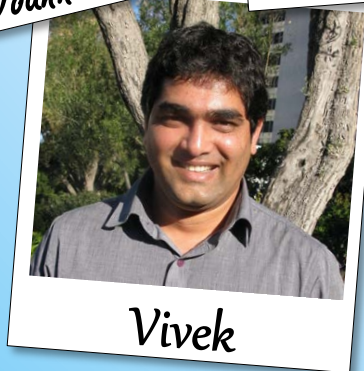
Rani



Ed



Giri



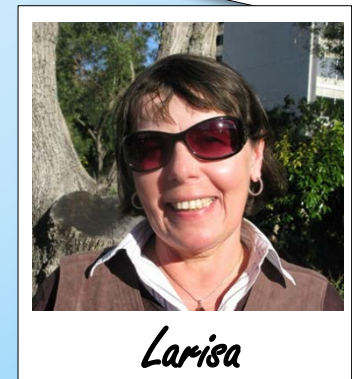
Vivek



Leigh



Su-Lan



Larisa

Get to Know Us

Where we came from...

- * Andhrapradesh, India
- * Baku, Azerbaijan
- * Hyderabad, India
- * Moscow, Russia
- * Mumbai, India
- * Quezon City, Philippines
- * Rangoon, Burma
- * San Diego, CA, USA

What comes in the package...

- * **166** years of testing experience
- * **59** years of PeopleSoft testing experience
- * **42** years of management experience

Where we are now...

- * Concord
- * Dublin
- * Fremont
- * Garden Grove
- * Pleasanton
- * Richmond
- * San Francisco
- * San Ramon
- * So. San Francisco
- * Union City
- * Walnut Creek

We are ...

Fashion Designers
Photographers
Travelers
School Volunteers
Awesome Parents/Grandparents
News Junkies
Cricket Players
Dancers
Animal Lovers
Cooks
Singers
Hikers/Nature Lovers
Readers
Beach Lovers
Museums & Historical Sites

Questions?

Now It's Your Turn.....