

Client:

Our client is a global leader in digital marketing and media solutions. They develop software that is supported in more than 25 locales. Their digital tools have revolutionized the media world. With their expertise in this space, they empower their customers to create and publish their media in the market and also allow them to showcase their content across every avenue available.

Challenges:

Following the agile technology has become paramount in developing a majority of the software products and our client follows this approach too for their software development which is then further made available in several languages. Herein, the developers are mandated with fixing issues found in the current Sprint itself. While this is great from an end user standpoint, giving the limited time on hand, a thorough regression test effort herein becomes a challenge.

Some specific issues, we were tasked with include:

- Availability of machines on all languages and platforms supported by the product
- Regressing “n” number of bugs on varied operating systems on the same language
- Tracking the task of each tester involved in regressing the bugs on “x” different languages
- Completing the regression test effort in the provided (limited) time frame

Solution:

As a company that specializes in Localization testing, QA InfoTech had a good handle of the requirements and challenges involved with this client. We put together a solution that alleviated the client’s pain areas, helping them ship on time with the desired levels of quality.

Approach:

We had to complete regression testing of “n” issues on “x” different languages. Also, within that particular time frame we were able to perform a sanity check around specific features for which the issue had been fixed.

Steps:

1. We followed the approach of building of test machines first. We made images of all the native OSs (French, German, Spanish etc...) and all we were required to do was, restore the image every time we had to switch to a different language. This helped us save a lot of time, as seen below:

Time Saving Approach:

Installation of new OS every time	Time Taken – 1 hr
Restoration of an image	Time Taken – 15 minutes
TIME SAVED	45 minutes

2. A linguistic issue was to be verified on a locale and was reported on different platforms say: Win XP, Win 7 and Win 8 and Win 8.1
 Approach that we followed here was - “A linguistic issue need not to be regressed on different platforms. If once, verified on for e.g. (Win 7) and the bug was found to be fixed, that means it is no more reproducible on the other platforms as well.

Efforts saved:

Linguistic Issue	Locale	Platform	Status
A	B	Win 7	Verified and found it to be fixed

That means, the linguistic issue is now fixed on other platforms as well – Win XP, Win 8 and Win8.1

Time Saved:

Restoration of Image+ Installation of product+ Regression of Linguistic Issue (1 Platform)	Time Taken: 45 min
Restoration of Image+ Installation of product+ Regression of Linguistic Issue (4 Platforms)	Time Taken: 45*4 = 180 min
Time Saved	180-45 = 135 min

3. Since, we followed the approach of restoration of images, automatically the number of testers involved in regression were reduced. Had it been, installation of a new OS every time and then performing regression, it would have consumed a lot of time and manpower. The prime advantage here was:

- One person can regress “y” number of bugs out of “n” bugs in one go, on the same language and same machine and perform the sanity check as well.

4. For functional issues, along with the image restoration approach, we followed the concept of VMs aka Virtual Machines. This physical machine was of great help as every time restoration wasn’t required. Here, multiple OS environments could co-exist on the same computer. We could easily create the real time testing environment and could perform the regressions in an efficient way.

5. A lot of times, we were supposed to regress the new/changed translation of strings on various languages. Herein before the availability of the new fixed builds on which the strings were hard coded, we could easily check that by replacing the “dct” file provided to us. Installation of the new build was not required here, as we could easily replace the “dct” file on the last available build and could check if the issue was fixed or not. This helped us in saving ample time, as restoration and installation of new build wasn’t required.

6. All of these practices together helped us shipped regressed and final builds in 25 languages with the defined timelines.

Client Benefits:

We have been following this effective regression testing strategy from the project inception with this client, which resulted in the following benefits:

1. Huge cost reduction, as with this approach resource ramp reduced significantly
2. Deadlines were always met in a timely manner
3. Quality of the shipped build met and exceeded customer expectations
4. Additional efforts were not required and tracking of the tasks performed by the limited resources was easy

About QA InfoTech:

January: 2014

At QA InfoTech (an ISO 9001:2008, 20000-1:2005, 27001:2005 and CMMI Level III certified company), we specialize in providing independent offshore software testing and, unbiased software quality assurance services to product companies, ranging from the Fortune 500s to start-up companies.

Established in 2003, with less than five testing experts, QA InfoTech has grown leaps and bounds with its QA Centers of Excellence globally; three of which are located in the hub of IT activity in India, Noida, India and the other, our affiliate [QA InfoTech Inc.](#) Michigan USA. In 2010 and 2011, QA InfoTech has been ranked in the top 100 places to work for in India. For more details, please refer to our [blog on this event](#).

"We assure the highest degree of Excellence and Accuracy in our engagements. Once you have placed your trust with us, rest assured we guarantee an elated peace of mind"

- Mukesh Sharma, Founder & Chief Executive Officer

For More details:

•Contact us at info@gainfotech.com

•Visit us at www.gainfotech.com



USA Office: Farmington Hills

Michigan, U.S.A.-
Phone: +1-248-719-3409



India Headquarter: A-8 Sector-68, Noida

Uttar Pradesh, India
Phone: 08010180180

