

Merging Tests and Page Objects repo into one

Wednesday, October 18, 2017 8:44 PM

We (Deekshith, Tribhuvan and Me) had discussion on having one repository for maintaining our test script and page objects which will reduce the overhead of maintaining and releasing page objects as separate node modules. This type of format is already been followed for SPAR3 and Universal Screening projects (not sure if there are more products following the same) and looking at the success of these two projects we would like to implement it for all existing projects also.

Just wanted to let all of you know about this so that we are following the same practices across SBUs. Please let me know if anyone have any concerns to discuss.

Teams who would follow this format	Team Lead Name
Analytics QA Automation	Deekshith, Tribhuvan
Research QA Automation	Shiva Kumar Macharla, Priyanka Muddalapuram
Wealth QA Automation	Rashmi Bharti
Platform QA Automation	Vasu Nakka, Surendra Babu Parchuru

Migrating GitLab projects to GitHub

Friday, December 01, 2017 1:45 PM

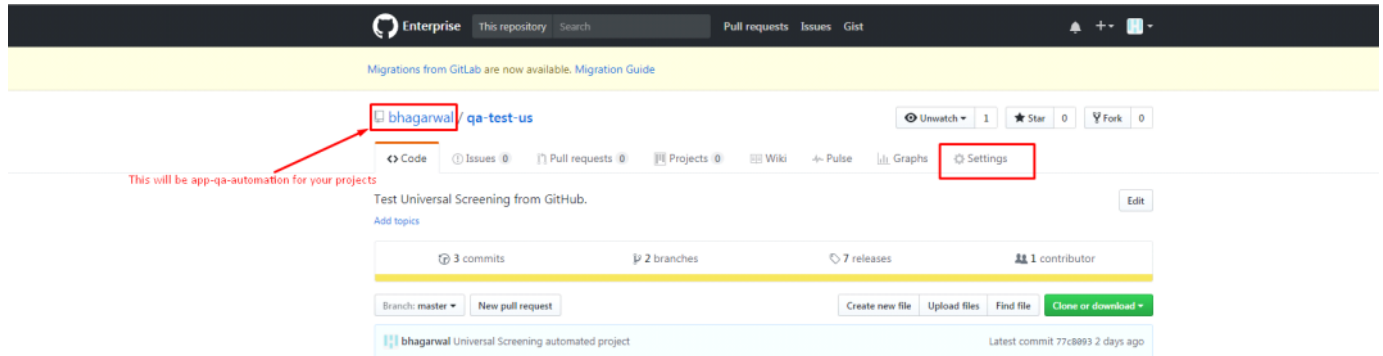
As part of migration to github when **app-qa-automation** group (called **organization** on github) is moved it is expected that all your projects from gitlab will be moved to github. However, the story does not ends here. You have to make the following changes post movement to GitHub:

1. Edit Package.json of your projects to remove gitlab links and replace it with github links to your project.
 - a. After editing push your new changes to github project and ensure you do this for all the branches of your project.
2. Locally you have to edit the remote url, which currently pointing to gitlab, and replace it with github url of project as remote url.

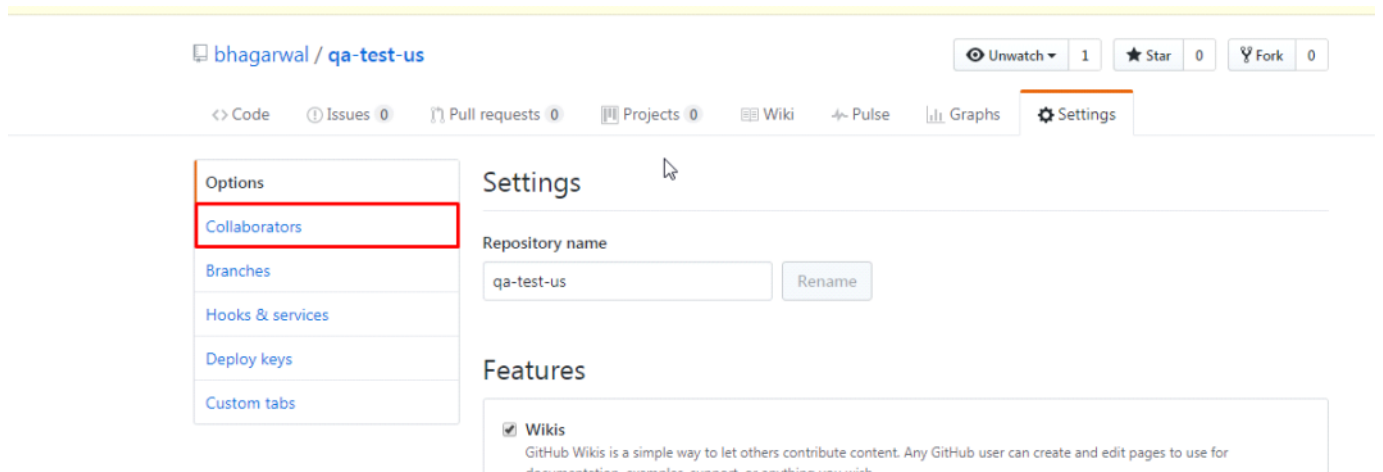
Resetting remote URL

git remote set-url <remote_name(origin/upstream)> <github_project_url_from_app_qa_automation_organization>

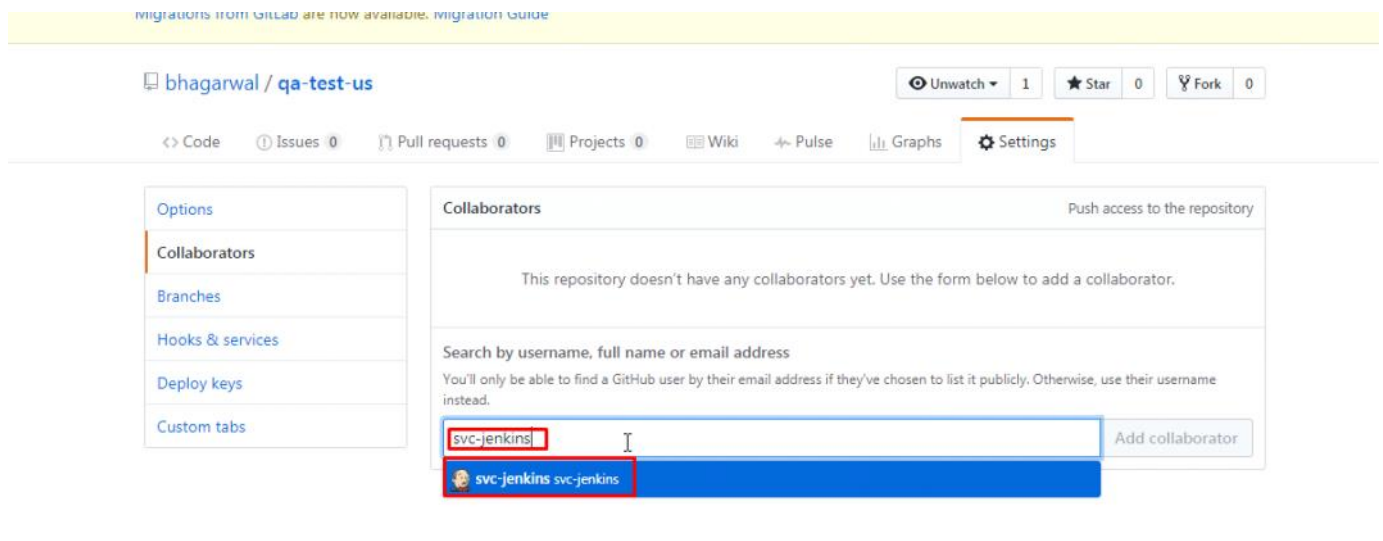
3. Add SSH public key to GitHub account. As all of us already had SSH key created for GitLab account you can add the same to GitHub account as well. Please follow the instructions mentioned here: <https://help.github.com/enterprise/2.11/user/articles/checking-for-existing-ssh-keys/>.
4. Go to Settings of your project



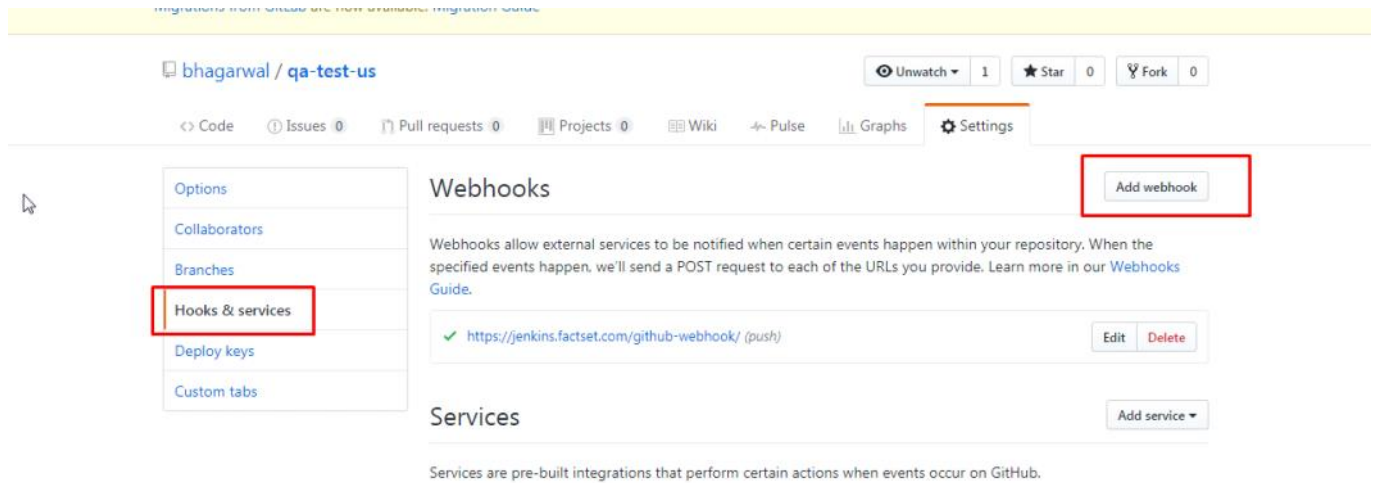
5. Once on Settings page, select **Collaborators** from LHP options:



6. After you select **Collaborators** option it'll ask you to enter username and password. Use your windows credentials to login.
7. Enter **svc-jenkins** into the **Add collaborator** field and select **svc-jenkins** as displayed in the typeahead. Now, click on **Add Collaborator** button to add **svc-jenkins** as collaborator.



8. Now, in order to add web-hook select LHP. Click on **Add webhook** button from top right corner of the page t **Hooks & services** option from



9. Enter <https://jenkins.factset.com/github-webhook/> into Payload URL field

Content type: application/x-www-form-urlencoded

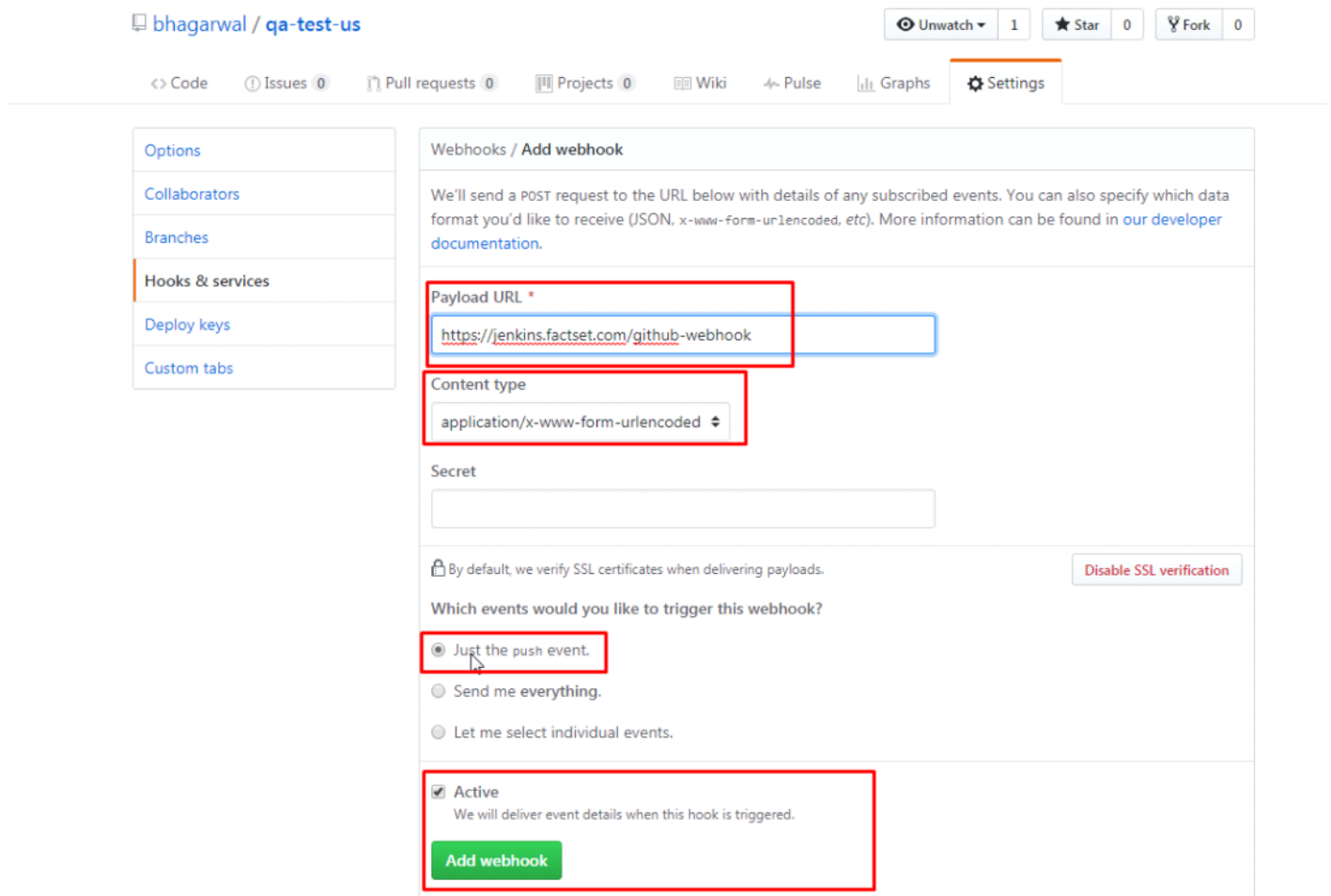
Secret: <leave_this_field_blank>

Which events would you like to trigger this webhook?

Select **Just the push event** (for now we are good with just push event, if you need jenkins to trigger the build apart from **push** events then select radio button **Let me select individual events** followed by selection of events which you would like to register for this webhook).

Make sure **Active** checkbox is selected too.

Click on **Add Webhook** button to save your webhook.



After you add the webhook successfully, it'll look something like this:

bhagarwal / qa-test-us

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Pulse Graphs Settings

Options
Collaborators
Branches
Hooks & services
Deploy keys
Custom tabs

Webhooks

Add webhook

Webhooks allow external services to be notified when certain events happen within your repository. When the specified events happen, we'll send a POST request to each of the URLs you provide. Learn more in our [Webhooks Guide](#).

✓ <https://jenkins.factset.com/github-webhook/> (push) Edit Delete

Services

Add service

Services are pre-built integrations that perform certain actions when events occur on GitHub.

Note that once you add the webhook it'll send a ping to check if webhook is working correctly. If you see any errors at this point follow this step after changing jenkins configuration as discussed below.

10. Jenkins Configuration for the project:

a. General

Project name: us-qa-test

Description: <h1>Universal Screening QA tests</h1>

[Safe HTML] Preview

☐ Assign Redmine project

☐ Enable project-based security

☒ Discard old builds

Strategy: Log Rotation

Days to keep builds:

If not empty, build records are only kept up to this number of days

Max # of builds to keep: 10

If not empty, only up to this number of build records are kept

☒ GitHub project

Project url: githubdev.factset.com/bhagarwal/qa-test-us/

GitLab connection: gitlab.factset.com

Mention the project url from app-qa-automation organization. It'll look something like this: github.factset.com/app-qa-automation/qa-test-us

You can leave this as it is

b. Source Code Management <No changes required from Office 365 Connector section>

Source Code Management

☐ None

☐ CVS

☐ CVS Projectset

☒ Git

Repositories

Repository URL: git@githubdev.factset.com:bhagarwal/qa-test-us.git

Credentials: git (SSH Key used for jenkins access on githubdev)

Here I have selected credentials for githubdev but you need to select credentials for github

Branches to build

Branch Specifier (blank for 'any'): *

Leave this field blank

Git executable: git-default

Repository browser: (Auto)

give your project repository SSH url here

Leave this field blank.

Git executable: git-default

Repository browser: (Auto) *Select {Auto} from drop-down*

Additional Behaviours: Add

☐ Perforce

☐ Subversion

c. Build Triggers

Build Triggers

☐ Trigger builds remotely (e.g., from scripts)

☐ Build after other projects are built

☐ Build periodically

☐ Build when a change is pushed to GitLab. GitLab CI Service URL: https://jenkins.factset.com/project/app-qa-automation/us-qa-test

☐ Build when another project is promoted

☒ GitHub Pull Request Builder

GitHub API credentials: https://githubdev.factset.com/api/v3 : svc-jenkins *Select https://github.factset.com/api/v3 : svc-jenkins from drop-down*

Admin list: Bhupender Agarwal

Use github hooks for build triggering ☒

☒ GitHub hook trigger for GITScm polling *Ignore this warning*

The webhook for repo bhagarwal/qa-test-us on githubdev.factset.com failed to be registered or was removed. More info can be found on the global configuration page. This message will be dismissed if Jenkins receives a PING event from repo webhook or if you add the repo to the ignore list in the global configuration.

☐ Poll SCM

Advanced...

Trigger Setup...

d. Remaining settings for **Build Environment, Build, and Post-build Actions** should remain the same.

e. Save the changes.

Post Migration TODOs

Saturday, December 23, 2017 11:39 PM

Post-build actions: <https://pages.github.factset.com/factset/gitlab-migration-docs/migration-guide.html#post-migration-user-actions>

Github Jenkins Plugin: <https://pages.github.factset.com/FactSet/gitlab-migration-docs/github-jenkins-plugin-guide.html>

Follow the Factset.io documentation [here](#)

Using YARN for releasing automated projects

Thursday, February 15, 2018 6:39 PM

Background:

We have seen that npm is little slow in terms of downloading the modules and thus consume more time to build projects and release the same to artifactory. A few months back Krishnateja evaluated YARN as package manager on tellus servers which significantly improved the speed of downloading the protractor projects.

Verdict:

Time has come to start using YARN as our mainstream for package manager which is also approved by FactSet's ARB and Engineering teams uses the same too.

There is not much changes required neither it need any additional efforts to learn YARN. One need to follow simple steps to start using YARN for their projects. Please see in instructions below:

1. Install YARN. Follow the instructions here: <https://yarnpkg.com/lang/en/docs/install/>
2. Read a little about YARN commands (mostly commands are same):
<https://shift.infinite.red/npm-vs-yarn-cheat-sheet-8755b092e5cc>
<https://yarnpkg.com/lang/en/docs/migrating-from-npm/>
3. Install dependencies of your project using YARN
Run **yarn** from your project's root directory where **package.json** is present instead of running **npm install** command. This will generate **yarn.lock** file which stores information about packages installed (Read more about **yarn.lock** file [here](#)).
4. Commit **yarn.lock** file into your source code repository [NOTE: THIS IS MUST IF YOU WANT TO USE YARN FOR ALL YOUR OTHER ACTIVITIES]

After this setup whenever you run **gulp release** it will internally use **yarn** to run further commands.

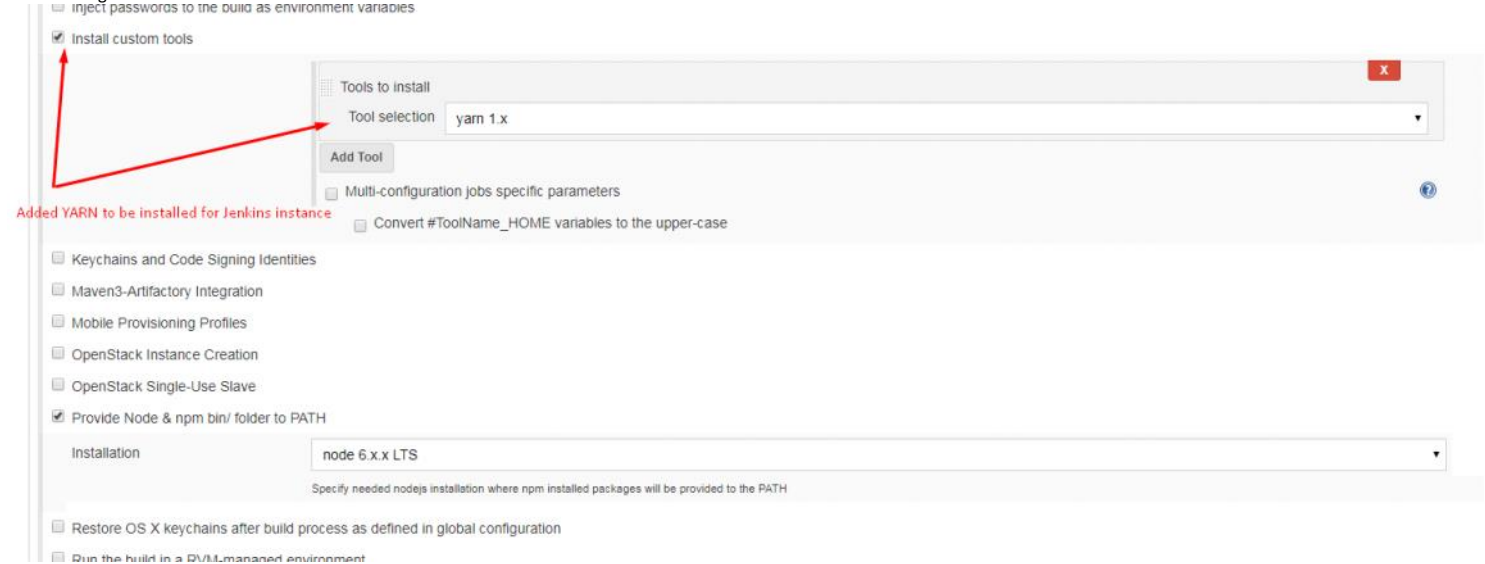
Changes to Jenkins configuration of your project

Along with the changes to your project you need make changes to your project's Jenkins configuration as well. This will speed up the process of releasing your packages to artifactory.

Refer sample project for changes: <https://jenkins.factset.com/job/app-qa-automation/job/qa-common-protractor/configure>

Changes are:

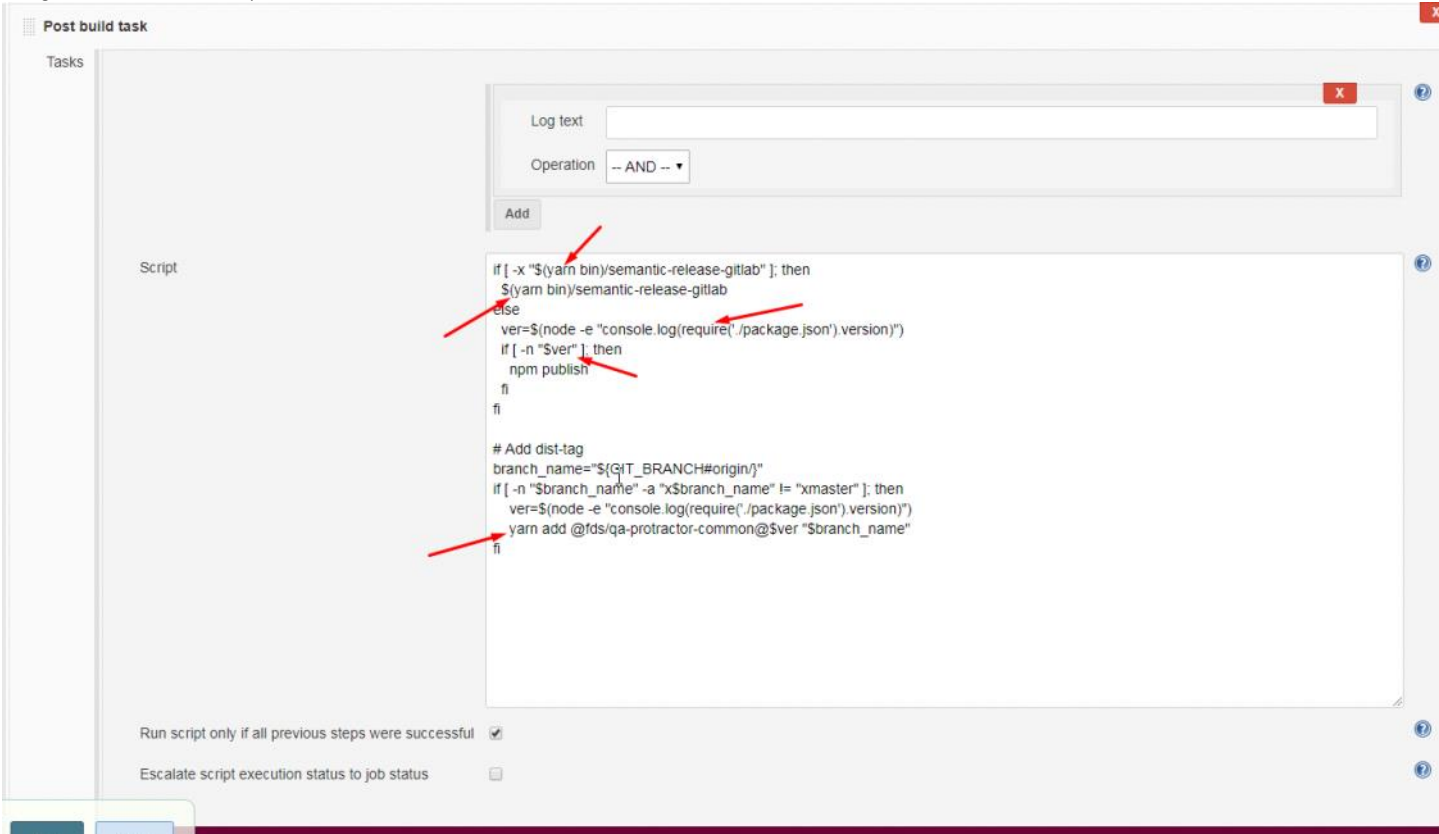
1. Adding YARN to be installed for Jenkins instance



2. Changes to Shell Script:



3. Changes to Post-build action script:



Here you see that all **npm** instances are replaced with **yarn**.

NOTE:

- Npm publish** still remain the same due to issue with **yarn publish**. This means final step to publish your package to artifactory would still be done through **npm**.
yarn publish issues: <https://github.com/yarnpkg/yarn/issues/2430>, <https://github.com/yarnpkg/yarn/issues/610>, <https://github.com/yarnpkg/yarn/issues/4497>
- Earlier **npm publish** conditional statement was relying on latest tag pushed to git repo which sometime caused build to succeed without actually publishing your package to artifactory. Now, I have changed the logic to use **version** from **package.json** as oppose to relying on tag pushed to git repo. I have taken this freedom considering we all would use **gulp release** command to release latest changes which internally bump the version anyway.

Collaboration with Engineering

Wednesday, October 18, 2017 8:49 PM

Analytics Product Presence in Hyderabad

Thursday, November 09, 2017 2:33 PM



Analytics Product Presence in Hyderabad

Product Name	Engineering Lead	QA/Automation Resources (Available/Not Available/Requested)	PD Contact	Engineering Presence (Completely in Hyd, Other Locations, Hyd+Other Locations)	PD Presence (Completely in Hyd, Other Locations, Hyd+Other Locations)	Application Status	Comments
Vector Editors	Eric G/Swaraj C	Requested to Rajeeta	Satyajit	Completely in Hyd	Completely in Hyd	* Product is almost ready.	* Combined product of LVE & PVE.
ALM renamed to ACFP (Asset Cash Flow Projection)	Eric G/TBD	Not Available	Gaurav from Mannan's Team	Completely in Hyd	Hyd + Other Locations (Chicago)	* Development will start next month.	* Specs and Wireframes are ready.
PLM (Portfolio List Manager)	Sushil Thampy	1 Automation resource available	Leslie Itty	Hyd + Other Locations (Austin)	Other Locations (Austin)	Live	* Currently PLM has only Accounts Dialog functionality converted to HTML.
PAT	Harsha	Not Available	Jay	Completely in Hyd	Other Location	Live	* QA not required for now
TRU (Tax Rate Utility)	Harsha	Available (Sean Kehoe used to work on this but not sure for now)	Andrew Manickas	Completely in Hyd	Other Locations(Norwalk)	Live	TRU integration with PA3 not covered in tests
PCA (Portfolio Composite Asset Builder)	Harsha	Not Available	Andrew Dienstag	Completely in Hyd	Other Locations(Norwalk)	Live	* Major updates are ready but due to lack of QA did not release the changes.
STU (Security Trading Utility)	Harsha	Available	Tracy Look	Hyderabad	Other Locations (Norwalk)	Live	* PD has already tested the new changes. * More development of this project will be seen in near future.
							* No active development done
Quick Returns	Kailean/Naga Bhaskara Rao Bandaru	Not Available	Steven Daly	Completely in Hyd	Other Locations (Austin)	Live	* Enhancements are being made * Already a production App
Data Central	Naga Bhaskara Rao Bandaru	Not Available	Steven Daly	Completely in Hyd	Other Locations (Austin)	* Development will be started soon	* Specs and wireframes will be ready in couple of weeks and then development will start soon.
Custodial Framework	Rob Duval	Not Available					
Portfolio Services Dashboard (PSD)	Rob Duval	Not Available					1 Engineer works on both application. Plan to hire one more here.
Portfolio Reporting Batcher(PRB)	Lakshmi Kiran	Not Available	Jennie Yuen	Completely in Hyd	Other Locations (NY, Norwalk)	Ready to go Live	* Plan to release first phase with v214/v215. * This will serve batcher for PA3, SPAR3, PUMA, Bi-Sam etc.
PDB2	Avinash is taking care now	Available	Jennie Yuen	Other Locations(NY)	Other Locations(NY)	Live	No active development done on this product
PA3	David Seah	Available	Brad	Hyd + Other Locations (Norwalk)	Other Locations (Norwalk)	Live	
OPC	Harsha	Not Available	Amir Akhundzadeh	Hyderabad		Live	
Formula Development Environment (FDE)	Aaron Fetterman	Not Available	Max Wheeler	Hyderabad	Other Locations (Norwalk)	Development in Progress	
PRU	Jay Gagnon	Available	Joe Hanko	Hyd + Other Locations (Norwalk)	Other Locations (Chicago)	Live	
Pint	Jay Gagnon	Not Available	Joe Hanko	Hyd + Other Locations (Norwalk)	Other Locations (Chicago)	Live	
PUB2	Lakshmi Kiran	Not Available	Aaron Elsworth, Ken M Witmyer	Hyderabad	Other Locations (Norwalk)	Live	

Sessions Planning for Engineering Team (Reporting to Pankaj N Parmar)

Wednesday, October 18, 2017 8:48 PM



Session Planning (Product QA Resources For Pankaj)

Product Name	Product Area (Platform, Research, Analytics, Wealth etc.)	Team Lead Name	Engineering Tech Lead Name	Tentative Dates for the session	Type of Session Required	QA Resource Name(s)	Automation Resource Name (s)	Automation Tools Used (Webstorm, Aptana, Test Complete)	Languages Used (Ex. Ruby, Protractor, JavaScript etc)
Code Red	Research	Priyanka Muddalapuram				Pavan Alenji	Sruthi Cheekoti, Rajiv Krishna Kalla	TestComplete, SoapUI	Java Script
IRN	Research	Priyanka Muddalapuram				Daniel Enticknap	Swati Gupta	Selenium, SoapUI	Ruby, Groovy
Partners	Research	Priyanka Muddalapuram				Thierry Gauthey			
Market Intelligence	Platform	Surendra Babu Parchuru				Debojyoti Bhattacharya	Niharika Saidhugari	Webstorm	Protractor
FactSearch	Platform	Surendra Babu Parchuru				Debojyoti Bhattacharya	Vijendar Devanaveni	Webstorm	Protractor
News	Research	Priyanka Muddalapuram				Sampath Punna	Prashanth Kumar Mudarakola	Webstorm	Protractor
Market Watch	PMT	Sushree Samal				Aditya Sambaraju			
Time & Sales	PMT	Sushree Samal				Aditya Sambaraju			
News & Filings	Research	Priyanka Muddalapuram				Venkatalakshmi Swathi Nanduri	Rashmi Bharti	Webstorm	Protractor
Company & Markets	Research	Shiva Kumar Macharla				Sandhya Nadig, Jim Butler	Yagnya Kadkol, Lakshmi Praveena Adusumalli, Krishnakanth Sabnekar	Selenium, SoapUI	Ruby, Groovy
Doc Viewer	Research	Priyanka Muddalapuram				Venkatalakshmi Swathi Nanduri			
Interactive Charting	Platform	Surendra Babu Parchuru				Priya SuryaDevara , David V Caruso	Naresh Surya , Neeraj Kumar Singh	Webstorm	Protractor
Note: For Code Red, Priyanka has plan to conduct session sometime in this month.									
			Session 1 (Basic Details)	Session 2 (Detailed knowledge)	One session for each tool (Selenium, Protractor, TestComplete, SoapUI and Appium) (Execution and work flows)				
		Tool / Technology (Selenium / Protractor/ Test Complete / Soap UI, Appium)	* Basic introduction to tool / technology * When we choose it(ex PC, Web...) * Language support(ex: Ruby, JS...)	* Benefits compared with other existing tools * QA Specific locators , id's in identifying elements and it's benefits * How to write xpath or find element in Test complete.	* Introduction to IDE(specific to tool). * How to write simple script. * Execution * Automation work flows(to-do moved to production). * Project Structure				



Session Planning (Product QA Resources For Pankaj)

Product Name	Product Area (Platform, Research, Analytics, Wealth etc.)	Automation Team Lead	Engineering Tech Lead Name	Tentative Dates for the session	Type of Session Required	QA Resource Name(s)	Automation Resource Name (s)	Automation Tools Used (Webstorm, Aptana, Test Complete)	Languages Used (Ex. Ruby, Protractor, JavaScript etc)
Code Red	Research	Priyanka Muddalapuram	Swamy Kancheti	December 1st week	Team intros, overlap of Engineering & QA, tools	Pavan Alenji	Sruthi Cheekoti, Rajiv Krishna Kalla	TestComplete, SoapUI	Java Script
IRN	Research	Priyanka Muddalapuram	Krishna Nandula	December 1st week	Team intros, overlap of Engineering & QA, tools	Daniel Enticknap	Swati Gupta	Selenium, SoapUI	Ruby, Groovy
Partners	Research	Priyanka Muddalapuram	Raju Kuridi	December 2nd week	Team intros, overlap of Engineering & QA, tools	Thierry Gauthey			
Market Intelligence	Platform	Surendra Babu Parchuru	Mayank Sawhney	December 2nd week	Team intros, overlap of Engineering & QA, tools	Debojyoti Bhattacharya	Niharika Saidhugari	Webstorm	Protractor
FactSearch	Platform	Surendra Babu Parchuru	Shlabh Sharma	Done	Team intros, overlap of Engineering & QA, tools	Debojyoti Bhattacharya	Vijendar Devanaveni	Webstorm	Protractor
News	Research	Priyanka Muddalapuram	None	N/A	N/A	Sampath Punna	Prashanth Kumar Mudarakola	Webstorm	Protractor
Market Watch	PMT	Sushree Samal	None	N/A	N/A	Aditya Sambaraju			
Time & Sales	PMT	Sushree Samal	None	N/A	N/A	Aditya Sambaraju			
News & Filings	Research	Priyanka Muddalapuram	RajaniKanth Katukojwala	December 3rd week		Venkatalakshmi Swathi Nanduri	Rashmi Bharti	Webstorm	Protractor
Company & Markets	Research	Shiva Kumar Macharla	None	N/A		Sandhya Nadig, Jim Butler	Yagnya Kadkol, Lakshmi Praveena Adusumalli, Krishnakanth Sabnekar	Selenium, SoapUI	Ruby, Groovy
Doc Viewer	Research	Priyanka Muddalapuram	RajaniKanth Katukojwala	December 3rd week	Team intros, overlap of Engineering & QA, tools	Venkatalakshmi Swathi Nanduri			
Interactive Charting	Platform	Surendra Babu Parchuru	RajaniKanth Katukojwala	December last week	Team intros, overlap of Engineering & QA, tools	Priya SuryaDevara , David V Caruso	Naresh Surya , Neeraj Kumar Singh	Webstorm	Protractor
Note: For Code Red, Priyanka has plan to conduct session sometime in this month.									
			Session 1 (Basic Details)	Session 2 (Detailed knowledge)	One session for each tool (Selenium, Protractor, TestComplete, SoapUI and Appium) (Execution and work flows)				
		Tool / Technology (Selenium / Protractor/ Test Complete / Soap UI, Appium)	* Basic introduction to tool / technology * When we choose it(ex PC, Web...) * Language support(ex: Ruby, JS...)	* Benefits compared with other existing tools * QA Specific locators , id's in identifying elements and it's benefits * How to write xpath or find element in Test complete.	* Introduction to IDE(specific to tool). * How to write simple script. * Execution * Automation work flows(to-do moved to production). * Project Structure				

Alternative tools to AutoIT

Wednesday, November 01, 2017 8:22 PM

Please find the email thread below due to which the evaluation has been done.



AlternativeToAutoITEvaluation

Automation Tool	Features and Comments	Reference			
Kantu	<ul style="list-style-type: none">* Visual Automation using Screenshots (only for Web)* Can extract data from PDF or web pages and load that into the spreadsheets, CSV or text files.* No need to learn about DOM and any locator strategy to automate application as it relies on images.	https://a9r9.com/kantu/web-automation			
Automa	<ul style="list-style-type: none">* Very easy to learn* Need to give instructions to perform actions.* Code is written in Python.* Not a free tool.* Uses instructions like given to humans but also uses images at some places to automate.	https://www.getautoma.com/			
TestingWhiz	<ul style="list-style-type: none">* Mainly for data-driven, keyword driven and object-based architecture with Java scripting.* Visual recorder which can perform actions on windows based dialog box.* It has multiple browser support.* Not an open source tool.	https://www.testing-whiz.com/features			
pywinauto	<ul style="list-style-type: none">* A Python module to automate Microsoft Windows GUI.* You can create scripts to perform actions on windows button, text field etc.* Good documentation	https://pywinauto.readthedocs.io/en/latest/			
TestApi	<ul style="list-style-type: none">* This is a library provided by microsoft to deal with its UI Applications.* Extensive documentation is available but need more learning.* Need to use .NET for developing scripts.	https://blogs.msdn.microsoft.com/ivo_manolov/2008/12/15/introduction-to-testapi-part-1-input-injection-apis/ https://msdn.microsoft.com/en-us/library/ms726294(VS.85).aspx			
Winium	<ul style="list-style-type: none">* Can be used to Automate Windows Desktop(WPF, WinForms) Apps* Need an object spy to identify elements.* Winium bindings are available either in .NET or Java.	https://github.com/2gis/Winium http://www.suryarazmi.com/2015/11/automation-of-windows-apps-using-winium.html			

Tool	Open Source (Yes/No) Yes (only Community Edition, PRO and PRO Plus are paid version)	Language Need to Learn	Documentation Availability (High/Medium/Low)	Available as Library or Tool	Community Support			
Kantu	Yes (only Community Edition, PRO and PRO Plus are paid version)	Based on Images and need to rely on tool for running tests.	High	Tool	Need to contact Kantu's support team			
Automa	No	Python	High	Tool	Need to contact Automa's support team			
TestingWhiz	No	Need to use tool. You can assume it as SoapUI tool where you don't write actual script.	High	Tool	You can join their user forum to get your answers. Here is the link if you want to check (https://testingwhiz.zendesk.com/hc/en-us)			
pywinauto	Yes	Python	High	Library	https://stackoverflow.com/questions/tagged/pywinauto			
TestApi	Yes	.Net	High	Library	Microsoft documentation and Stackoverflow			
Winium	Yes	.Net or Java	Medium	Library	github documentation and some YouTube videos			

Subject	RE: Anything better than AutoIT?
From	Bhupender Agarwal
To	Ramya Parthasarathy; Shiva Kumar Macharla; QAAutomation Tls
Cc	Rajul Shrivastava
Sent	Wednesday, November 01, 2017 8:58 PM

Surely, I'll see if I can find some solution to the issues.

Thanks,
Bhupender Agarwal
Senior Team Leader, QA Automation
FactSet Systems India Pvt. Ltd.
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bhagarwal@factset.com
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From: Ramya Parthasarathy
Sent: Wednesday, November 01, 2017 8:32 PM

To: Bhupender Agarwal <bhagarwal@factset.com>; Shiva Kumar Macharla <smacharla@factset.com>; QAAutomation Tls <qaaautomation_tls@factset.com>
Cc: Rajul Shrivastava <rajul.shrivastava@factset.com>
Subject: RE: Anything better than AutoIT?

Brilliant. Thanks Bhupender.

The reason I have been looking for alternatives is due to the recent issues we have been facing with AutoIT for attachments (xref: [RPD:31592816](#))
We have moved 3 test cases into "Road Blocked" because of this issue. We have tried increasing the timeouts which worked for couple of runs and started failing again (<http://is.factset.com/rpd/summary.aspx?messageId=31592816&commentId=33516695>)

Not really sure how to move forward with these kind of issues with AutoIT. Any suggestions will be greatly appreciated ☺

Regards,
Ramya

From: Bhupender Agarwal
Sent: 01 November 2017 14:54
To: Shiva Kumar Macharla <smacharla@factset.com>; Ramya Parthasarathy <rparthasarat@factset.com>; QAAutomation Tls <qaaautomation_tls@factset.com>
Cc: Rajul Shrivastava <rajul.shrivastava@factset.com>
Subject: RE: Anything better than AutoIT?

Hi,

I have been reading about different tools which can be used but to be honest I didn't find any better tool than AutoIT. Please check my comments and evaluation in the spreadsheet attached.

Thanks,
Bhupender Agarwal
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From: Bhupender Agarwal
Sent: Wednesday, November 01, 2017 2:09 PM
To: Shiva Kumar Macharla <smacharla@factset.com>; Ramya Parthasarathy <rparthasarat@factset.com>; QAAutomation Tls <qaaautomation_tls@factset.com>
Cc: Rajul Shrivastava <rajul.shrivastava@factset.com>
Subject: RE: Anything better than AutoIT?

Hi Ramya,

I checked LeanFT (now known as UFT Pro) which is basically an HP product and comes with a cost with first 60 days being free. It's a full Functional Testing tool and if our purpose is just to perform few actions on native window dialogs I don't think we should be considering this tool.

Thanks,
Bhupender Agarwal
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From: Bhupender Agarwal
Sent: Wednesday, November 01, 2017 1:49 PM
To: Shiva Kumar Macharla <smacharla@factset.com>; Ramya Parthasarathy <rparthasarat@factset.com>; QAAutomation Tls <qaaautomation_tls@factset.com>
Cc: Rajul Shrivastava <rajul.shrivastava@factset.com>
Subject: RE: Anything better than AutoIT?

Thanks for the suggestion Shiva ☺

Bhupender Agarwal
Senior Team Leader, QA Automation
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From: Shiva Kumar Macharla
Sent: Wednesday, November 01, 2017 1:17 PM
To: Bhupender Agarwal <bhagarwal@factset.com>; Ramya Parthasarathy <rparthasarat@factset.com>; QAAutomation Tls <qaaautomation_tls@factset.com>
Cc: Rajul Shrivastava <rajul.shrivastava@factset.com>
Subject: RE: Anything better than AutoIT?

Hi Bhupender,
Please take a look at [Winnium](#) as well. It can be integrated with Selenium easily and supports multiple languages.

Ref: <https://github.com/2gis/Winium>

Thanks,
Shiva

From: Bhupender Agarwal
Sent: Wednesday, November 01, 2017 12:21 PM
To: Ramya Parthasarathy <rparthasarat@factset.com>; QAAutomation Tls <qaaautomation_tls@factset.com>
Cc: Rajul Shrivastava <rajul.shrivastava@factset.com>

Subject: RE: Anything better than AutoIT?

Hi Ramya,

I have did some research in the past but couldn't find any tool. I have checked on Sikuli but as it is image based automation it'll be heavy to integrate with our infrastructure. However, if there is any pressing requirement I think we can evaluate it to see if it is acceptable to use Sikuli.

In addition, I haven't heard about **LeanFT** (thanks for bringing it to my notice). I'll do little research on this and will also check if there are any other tools to serve our purpose ☺

Thanks,
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From: Ramya Parthasarathy

Sent: Tuesday, October 31, 2017 9:41 PM

To: QAAutomation TLS <qaautomation_tls@factset.com>

Cc: Rajul Shrivastava <rajul.shrivastava@factset.com>

Subject: Anything better than AutoIT?

Hello All,

We have been using AutoIT along with Selenium to automate non-browser based functionalities (handling windows dialog etc.)

This is a bit flakey sometimes. I just wanted to know if anyone has tried Sikuli or LeanFT or any other approach.

Regards,
Ramya

Information on Different Project Testing Combinations

Monday, February 05, 2018 9:16 PM

Application which do not uses **Stage** information:

1. Code Red
2. Mobile Projects
3. IRN

Meetings

Thursday, November 09, 2017 6:53 PM

Bugs Found per Month - Internal QA

Monday, January 29, 2018 3:14 PM

Subject	RE: Bug Caught using Soap UI
From	Krishna Srikanth Darna
To	Bhupender Agarwal
Cc	Padmini Rajanala
Sent	Thursday, January 25, 2018 2:37 PM

Hi Bhupender,

Sorry for the delay response, please refer to the below grid for bugs found month over a month using the SOAP UI tool in Orders project.

July,17	Sep,17	Oct,17	Nov,17	Jan,18	Total Bugs
3	3	1	2	5	14

Thanks, Srikanth.

From: Krishna Srikanth Darna
Sent: Friday, January 19, 2018 9:03 AM
To: Bhupender Agarwal <bhagarwal@factset.com>
Cc: Padmini Rajanala <PRajanala@factset.com>
Subject: RE: Bug Caught using Soap UI

Hi Bhupender,

Sure, will share the below details on 1/22.

Thanks, Srikanth.

From: Bhupender Agarwal
Sent: Wednesday, January 17, 2018 6:29 PM
To: Krishna Srikanth Darna <kdarna@factset.com>
Cc: Padmini Rajanala <PRajanala@factset.com>
Subject: Bug Caught using Soap UI

Hi Krishna,

Can you please send me a number of bugs found month over month using the Soap UI script?

Thanks,
Bhupender Agarwal
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Ruby Utilities Usage in Protractor Scripts

Thursday, November 09, 2017 6:53 PM










Meeting Date: 11/9/2017 6:00 PM

Location: Hyderabad Divyashree 1109 VideoConference

Link to Outlook Item: [click here](#)

Invitation Message

Participants

-  [Priyanka Muddalapuram](#) (Meeting Organizer)
-  [Avanthi Rentala](#)
-  [Bhupender Agarwal](#)
-  [Deekshith kumar Lingoju](#)
-  [Krishnateja Surapaneni](#)
-  [Mahendra Tribhuvan Sura](#)
-  [Shiva Kumar Macharla](#)
-  [Surendra Babu Parchuru](#)
-  [Vasu Nakka](#)

Notes

Subject	Ruby Utilities Usage in Protractor Scripts
From	Bhupender Agarwal
To	Shiva Kumar Macharla; Priyanka Muddalapuram; Surendra Babu Parchuru; Krishnateja Surapaneni; Mahendra Tribhuvan Sura; Deekshith kumar Lingoju; Avanthi Rentala; Vasu Nakka; Bhupender Agarwal
Cc	Rajul Shrivastava
Sent	Thursday, November 09, 2017 6:53 PM

Hi All,

Context of the meeting: Remove the dependency of Protractor Projects on Ruby utilities so that we can reduce the efforts needed to integrate two different types of projects.

Here are the meeting highlights:

1. We'll not be using ruby utilities inside protractor projects.
2. Launching of the workstation (both in Ruby and Protractor projects) can be taken care by .exe file developed by Priyanka.
3. Surendra, Priyanka, Shiva, and Vasu to provide a list of ruby utilities currently being used in protractor projects.
4. Ruby utilities currently being used into protractor projects will either be converted into protractor utilities using available node modules or the same will be converted to .exe format if any supporting node module is not found.
5. In case, if ruby utilities are converted into exe format and one has to call any specific utility from the same they have to ensure that the exe file accepts command line parameter.

Please add your points if I missed any.

Thanks,
[Bhupender Agarwal](#)
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Automation - Minimize intermittent element not found errors (Selenium)

Thursday, November 16, 2017 10:17 PM

Meeting Date: 11/16/2017 9:30 PM

Location: 444/0098003

Link to Outlook Item: [click here](#)

Invitation Message

Hello All,

I have been thinking about ways to minimize “Script Errors” that happens due to “Application Glitches”. Most annoying ones are errors due to “Element not found” intermittent issues. This takes a toll on our framework too as scripters, analysts and regression team are re-scheduling runs due to these failures.

All of us understand that there might be temporary glitches in applications due to load, network issues, one of the services being slow, etc. We experience these when we are testing manually too.

Also, let’s bear in mind that our automation scripts are for functional testing and not for performance testing. With this, I have been thinking that we should have some kind of standard for polling times that we use in our Selenium scripts –

So we know that the wait times that we use in the following calls are just polling times and if the element is found before the specified time, we come out of the call and proceed further.

- `UtilsCommon.GetElementWithXpath(driver = nil, xpath = nil, wait_time = 20, flagError = true, elementName = nil, onlyIfVisible = true)`
- `UtilsCommon.GetVisibleElementWithXpath(driver = nil, xpath = nil, wait_time = 10, flagError = true, elementName = nil)`
- `UtilsCommon.GetVisibleElementsWithXpath(driver = nil, xpath = nil, wait_time = 20, flagError = true)`
- `UtilsCommon.GetElementsWithXpath(driver = nil, xpath = nil, wait_time = 20, flagError = true, onlyIfVisible = true)`
- `UtilsCommon.WaitUntilElementDisappear(driver = nil, xpath = nil, wait_time = 20, elementName = nil)`

I have been thinking to increase this poll time to maximum (optimum let’s say ☺) that we can do. We shall talk to engineers and decide too. This way, we can get a buy-in from the engineering that in spite of all these if the scripts fail with “Element not found” issues, then it is definitely problem with application slowness and they cannot ignore those RPDs.

Shiva was suggesting that we can have some global variables for wait times and we can classify them based on wait times in loop, wait times for page load, wait times for element on pop up etc. We can decide on what should be the optimum values of these. This way our scripts will be consistent in terms of using wait times. Currently we all are using random values.

Can we all discuss this and brainstorm this please? If we all agree, we can next take this up with engineering?

Please add anybody who can help us in this ‘brainstorm’ session ☺

Regards,
Ramya

Participants

-  [Ramya Parthasarathy](#) (Meeting Organizer)
-  [Rajul Shrivastava](#)
-  [Shiva Kumar Macharla](#)
-  [Priyanka Muddalapuram](#)
-  [Bhupender Agarwal](#)
-  [Sheikh Khalid](#)

Notes

- At application level find the timeouts used currently. And then reach out to application engineers to get agreement on using maximum timeouts for different web components.
- Shiva and Ramya to collect this information either for IRN or Estimates application.
- Using JSON object as parameter to utility function calls to get rid of overhead of parameter ordering.

GITHUB Migration Planning Dec 21st

Friday, December 08, 2017 1:33 PM

In Scope Apps

Portfolio	S.no	Name of Application	# of Total Test cases	# of Total Files to be moved to GIT
Analytics	1	PA3	266	346
Analytics	2	AT4	258	305
Analytics	3	PDB2	25	49
Analytics	4	QS	64	87
Analytics	5	PLM	31	68
Analytics	6	AXP2	26	46
Analytics	7	BPM2	88	111
Analytics	8	PS3	13	29
Analytics	9	PRU	4	13
Core	10	Universal Screening	46	64
Core	11	News	3	7
Core	12	Full Quote	2	5
Platform	27	Formatter	57	72
Platform	28	Chart JS	84	84
Platform	29	Style Set	8	25
Platform	30	OA3(Online Assistant)	19	26
Platform	31	Data Check	3	7
Platform	32	Fact Search	4	10
Platform	33	File Dialogs	9	15
Platform	34	IL4	4	16
Platform	35	Formula lookup	11	14

GITHUB Migration - Day 1 - Dec 22nd

Friday, December 08, 2017 1:35 PM

In Scope Apps

Portfolio	S.no	Name of Application
Analytics	1	PA3
Analytics	2	AT4
Analytics	3	PDB2
Analytics	4	QS
Analytics	5	PLM
Analytics	6	AXP2
Analytics	7	BPM2
Analytics	8	PS3
Analytics	9	PRU
Core	10	Universal Screening
Core	11	News
Core	12	Full Quote
Platform	27	Formatter
Platform	28	Chart JS
Platform	29	Style Set
Platform	30	OA3(Online Assistant)
Platform	31	Data Check
Platform	32	Fact Search
Platform	33	File Dialogs
Platform	34	IL4
Platform	35	Formula lookup

Analytics

Friday, December 08, 2017 1:36 PM

Platform

Friday, December 08, 2017 1:37 PM

Research

Friday, December 08, 2017 1:37 PM

GITHUB Migration Testing - Dec 23rd - Dec 26th

Friday, December 08, 2017 1:37 PM

In Scope Apps

Portfolio	S.no	Name of Application	Test Plan Name for Testing	Project Level Set up Status	Jenkin Set up for Project Status
Analytics	1	PA3		<input type="checkbox"/>	<input type="checkbox"/>
Analytics	2	AT4		<input type="checkbox"/>	<input type="checkbox"/>
Analytics	3	PDB2		<input type="checkbox"/>	<input type="checkbox"/>
Analytics	4	QS		<input type="checkbox"/>	<input type="checkbox"/>
Analytics	5	PLM		<input type="checkbox"/>	<input type="checkbox"/>
Analytics	6	AXP2		<input type="checkbox"/>	<input type="checkbox"/>
Analytics	7	BPM2		<input type="checkbox"/>	<input type="checkbox"/>
Analytics	8	PS3		<input type="checkbox"/>	<input type="checkbox"/>
Analytics	9	PRU		<input type="checkbox"/>	<input type="checkbox"/>
Core	10	Universal Screening		<input type="checkbox"/>	<input type="checkbox"/>
Core	11	News		<input type="checkbox"/>	<input type="checkbox"/>
Core	12	Full Quote		<input type="checkbox"/>	<input type="checkbox"/>
Platform	13	Formatter		<input type="checkbox"/>	<input type="checkbox"/>
Platform	14	Chart JS		<input type="checkbox"/>	<input type="checkbox"/>
Platform	15	Style Set		<input type="checkbox"/>	<input type="checkbox"/>
Platform	16	OA3(Online Assistant)		<input type="checkbox"/>	<input type="checkbox"/>
Platform	17	Data Check		<input type="checkbox"/>	<input type="checkbox"/>
Platform	18	Fact Search		<input type="checkbox"/>	<input type="checkbox"/>
Platform	19	File Dialogs		<input type="checkbox"/>	<input type="checkbox"/>
Platform	20	IL4		<input type="checkbox"/>	<input type="checkbox"/>
Platform	21	Formula lookup		<input type="checkbox"/>	<input type="checkbox"/>

Analytics

Friday, December 08, 2017 1:38 PM

Platform

Friday, December 08, 2017 1:38 PM

Research

Friday, December 08, 2017 1:38 PM

Soap UI

Thursday, February 01, 2018 8:35 PM

Soap UI Pro Demo to Is Engineering - Meeting with Krishna Srikanth Darna

Monday, January 08, 2018 8:12 PM

Subject	Meeting with Krishna Srikanth Darna
From	Bhupender Agarwal
To	James Cherrone
Sent	Monday, January 08, 2018 8:11 PM

Hi Jim,

I met with Krishna Srikanth Darna today to know more about the demo he has taken for Engineering team. Please find my discussion notes with him below:

What he's automating using Soap UI pro which cannot be done through the free version of the tool?

Ans.: As part of testing the Orders API, he has to connect to IS SQL database using JDBC drivers which is available with Pro version in a simplified manner. With pro version, one can set the database source and credentials at project level which can then be utilized for multiple test cases under a project whereas with free version there is no such option available to make this setup at the project level; For each test case, we have to repeat the setup process.

Also, we have 2-3 different environments such as Dev, QA, Stage etc., which can be set only in Pro version. We don't have such option with the free version and thus in order to execute the same test case against the different environment, we will end up maintaining 2-3 different copies of the same test case.

Is it possible to run test scripts developed with Pro version to be able to run with the free version?

Ans.: No, as mentioned above, as free version neither support making database setup at project level nor support different environments we cannot execute the script with the free version.

Why engineer need Pro version license? Are they going to develop Soap UI scripts?

Ans.: No, Engineers do not want to develop scripts but want to run the scripts developed by QA before pushing their code to production.

Buying a license just for executing scripts wouldn't make sense. Probably, they should use tellus to execute scripts where shared licenses from the pool get used?

Did we find any bugs with existing automated scripts?

Ans.: Yes, but the count is not available. Issues are tracked on JIRA.

How many test cases we are able to automate now?

Ans.: Currently, 2 analysts are working on Soap UI Pro and able to automate 10 test cases together after dedicating 2.5 hours per person per day.

If they continue with this pace we can see 50 test case automated per week and 200 test cases per month (Total Test Cases we have ~ 3000).

NOTE: Here, one test step is one test case.

Do we have any metrics on how many manual test cases we are able to retire per month?

Ans.: As the project is in its initial phase, we don't have such metrics available yet. Maybe in a couple of months, we can get a count of an average number of manual test cases that can be retired per month.

Please let me know if I missed any point during the discussion so that I can check with him again.

Thanks,

Bhupender Agarwal

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Soap UI License Policy and Distribution List

Friday, January 12, 2018 9:34 PM

Subject	RE: SoapUI License Policy
From	Eric Forsander
To	Sheikh Khalid; Asha Veerapaneni; Alisa C. Berry; Evan Wolbach; Eyme Ann Mathew; Karina Palterman; Kate M.
Cc	Avanthi Rentala; Bhupender Agarwal; James Cherrone; Ramya Parthasarathy
Sent	Friday, January 12, 2018 9:33 PM

Thanks Ramya for providing this. Smart Bear had indicated we must uninstall, but it appears that may not be the case. We'll confirm with them and get back with firm guidance on this.

Regarding existing licenses, they can remain on VM's, however please do not install any additional.

Thanks,

Eric Forsander

Director of Quality Assurance – CTS
203.810.2260

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From: Sheikh Khalid

Sent: Friday, January 12, 2018 10:32 AM

To: Asha Veerapaneni <aveerapaneni@factset.com>; Eric Forsander <eforsander@factset.com>; Alisa C. Berry <aberry@factset.com>; Evan Wolbach <ewolbach@factset.com>; Eyme Ann Mathew <emathew@factset.com>; Karina Palterman <kpalterman@portware.com>; Kate M. Kuzin <KKuzin@factset.com>; Sushree Samal <ssamal@portware.com>

Cc: Avanthi Rentala <arentala@factset.com>; Bhupender Agarwal <bhagarwal@factset.com>; James Cherrone <james.cherrone@factset.com>; Ramya Parthasarathy <rparthasarat@factset.com>

Subject: RE: SoapUI License Policy

Hi Eric,

Please see below feedback/questions from Ramya. Adding Ramya to cc as well.

1. When transferring a license or some with a license leaves the firm, we must uninstall SoapUI from their machine. Turning the machine into CSS where it well be imagined will result in the license being unusable.

[Ramya Parthasarathy]

Just uninstalling Ready! API from a machine does not uninstall the license. We need to uninstall the License (choosing Online option) first and then uninstall the Ready! API software

When transferring license, we always only Uninstall the License and not uninstall the Ready! API. Is this OK?

Here are the steps we follow uninstall/Install the SoapUI Licenses

Uninstall

1. Open Ready API!
2. Navigate to Help -> License Manager
3. Click on 'Uninstall License' button

4. Select 'Save a backup'
5. Click Next
6. On 'Deactivate SoapUI License' screen, select 'Online'
7. Click Finish
8. Send the saved License file to anybody who wants to use this

Install

-
- 1. Get the License file and Extract to Local folder
- 2. Open Ready API!
- 3. Navigate to Help > License Manager > Install license
- 4. After uploading the license file, select **Online** in Activation Options section and complete the installation.

3. Going forward, do not install licenses on VM's. This is a violation of our licensing agreement.

[Ramya Parthasarathy]

What would happen to the already existing licenses on the VMs? Do we uninstall them?

Thanks,
Sheikh

From: Asha Veerapaneni

Sent: Friday, January 12, 2018 10:12 AM

To: Eric Forsander <eforsander@factset.com>; Alisa C. Berry <aberry@factset.com>; Evan Wolbach <ewolbach@factset.com>; Eyme Ann Mathew <emathew@factset.com>; Karina Palterman <kpalterman@portware.com>; Kate M. Kuzin <KKuzin@factset.com>; Sheikh Khalid <skhalid@factset.com>; Sushree Samal <ssamal@portware.com>

Cc: Avanthi Rentala <arentala@factset.com>; Bhupender Agarwal <bhagarwal@factset.com>; James Cherrone <james.cherrone@factset.com>

Subject: RE: SoapUI License Policy

Eric,

Looks like there is some confusion in the license key assigned to Wealth. Currently we are using SO00054540-1-1 on an VM

In your list below it is listed as TBD

4	TBD	TBD	TBD	Unassigned	Kate confirm not being used 1/4/18	soapUI-license-SO00054540-1-1.key	0%
---	-----	-----	-----	------------	------------------------------------	-----------------------------------	----

I am attaching the screenshot of the email that Rajul sent me with the license key
Can you please confirm?

Thanks
Asha

From: Eric Forsander

Sent: Friday, January 12, 2018 9:19 AM

To: Alisa C. Berry <aberry@factset.com>; Asha Veerapaneni <aveerapaneni@factset.com>; Evan Wolbach <ewolbach@factset.com>; Eyme Ann Mathew <emathew@factset.com>; Karina Palterman <kpalterman@portware.com>; Kate M. Kuzin <KKuzin@factset.com>; Sheikh Khalid <skhalid@factset.com>; Sushree Samal <ssamal@portware.com>

Cc: Avanthi Rentala <arentala@factset.com>; Bhupender Agarwal <bhagarwal@factset.com>; James Cherrone <james.cherrone@factset.com>

Subject: SoapUI License Policy

Hi Team,

Below is the complied list of all SoapUI licenses we currently have. Thanks to all for polling your teams and getting an accurate assessment. If you still see any inaccuracies in this, please let me know.

So we can maintain parity, there are a few policies we need to follow going forward.

1. When transferring a license or some with a license leaves the firm, we **must uninstall SoapUI from their machine**. Turning the machine into CSS where it will be imagined will result in the license being unusable.
2. Anytime you reallocate a license, provide me with updated information. It's your responsibility to have accountability for licenses assigned to your team.
3. Going forward, do not install licenses on VM's. This is a violation of our licensing agreement.

As a side note, a common theme I heard from those asking for licenses was training. For training purposes, there are 2 free options available that don't require a full paid license.

1. SoapUI Pro Trial – gives you 14 days of full access to the tool.
2. SoapUI Open Source – indefinite usage of tool, but limited in feature set (see link below for details on limits).

<https://www.soapui.org/downloads/soapui.html>

If you have any questions or concerns on the above, let me know.

S.No	First Name	Last Name	Office	Department/SBU	Comments	License Key	Usage (% based)
1	Kirti	Shukla	Norwalk	Analytics	Moving to Vimil	soapUI-license-SO00050656-	0%
2	Vasavi	Tallada	Hyderabad	Analytics		soapUI-license-SO00050656-	1%
3	Priyanka	Kudikala	Hyderabad	Analytics		soapUI-license-SO00050656-	1%
4	TBD	TBD	TBD	Unassigned	Kate confirm not being used 1/4/18	soapUI-license-SO00054540-	0%
5	Ramya	Parthasarathy	London	Research	Dedicated to her	soapUI-license-SO00050656-	200%
6	Remya	Viswanath	London	Research		soapUI-license-SO00050656-	50-60%
7	Sandhya	Nadig	Norwalk	Research		soapUI-license-SO00050656-	50-60%
8	Joe	Valiante	Norwalk	Research	On VM (Eng currently)	soapUI-license-SO00050656-	100%
9	Sruthi	Cheekoti	Hyderabad	Research	Being shared with	soapUI-	75%

			ad		Yagnya (as of	license-SO00050656-	
15	Isha	Sood	Hyderab ad	Research	formerly Alamjit	soapUI- license- SO00054540-	60%
16	Ramya	Parthasara thy	London	Research	Shared on Core VM by others	soapUI- license- SO00054540-	60-70%
17	Shiva	Kumar Macharla	Hyderab ad	Research	taken back from	soapUI- license- SO00054540-	50%
18	Laxmi	Prasanna	Hyderab ad	Research	Will be allocated to someone on Sandhya team	soapUI- license- SO00054540-	0%
12	Gouse	Feroz Syed	Hyderab ad	CTS	Received when was on Platform	soapUI- license- SO00050656-	60%
13	Madhuri	Polam	Hyderab ad	Platform	Allocation for Bookbuilder	soapUI- license- SO00050656-	30%
14	Madhavi	Peddi	Hyderab ad	Platform	She is on maternity leave, not sure who has	soapUI- license- SO00050656-	40%
19	Ganesh	Kumar Macharla	Hyderab ad	Platform	For Dexter	soapUI- license- SO00054540-	60%
20	New Hire		TBD	Platform	TBD	soapUI- license- SO00054540-	0%
21	Vikranth	Sanka	Hyderab ad	Platform	Planning for usage	soapUI- license- SO00054540-	0%
22	New Hire		TBD	Platform	TBD	soapUI- license- SO00054540-	0%
23	Krishna	Srikanth Darna	Hyderab ad	IS		soapUI- license- SO00054540-	25%
10	Venkata	Chaitanay Kanneganti	Hyderab ad	IS	On VM	soapUI- license- SO00050656-	1-2%
11	Gireesh	Danduboin	Hyderab ad	IS		soapUI- license- SO00050656-	65%
24	TBD	TBD	TBD	Unassigne	Previously used by Aditya	soapUI- license- SO00054540-	0%

25	TBD	TBD	TBD	Research	Attempted to use but received error	soapUI-license-SO00054540-	0%
26	telluscfgdevb06		NA	Automation	Execution Server -	soapUI-license-SO00050656-	NA
27	telluscfgb06		NA	Automation	Execution Server -	soapUI-license-SO00050656-	NA

Thanks,

Eric Forsander

Director of Quality Assurance – CTS
203.810.2260

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SoapUI Pro vs SoapUI Open Source

Tuesday, January 30, 2018 3:04 PM

FactSet's need to use SoapUI PRO against SoapUI Open Source

Please fill in the table below describing your use case to go with SoapUI PRO version. Intention here is to identify all the scenarios for automating FactSet Applications which is not possible to do with Free version of SoapUI. Please add link to example use case.

Soap UI PRO	Soap UI Open Source	Example
		File Comparisons using Groovy Scripts
		Exporting Responses to the External Files
		Looping the similar steps by importing the tickerlist files using Datasource
		Adding external jar files in bin location and imported classes into the Groovy Script in order to verify the Excel and PDF files Downloaded.
		Usage of Data Source Loops.
		Getting responses using Get Data Option.
		Downloading files received as response into Location provided in the Dump File row of custom properties.
		Using TestComplete step to read Excel charts.
Yes	No	Multi Environments setup
Yes	No	Datasource and Datasource loop steps
Yes	No	Assertion Step - To Add Multiple Assertions outside the Step
Yes	No	Support from SmartBear Dev Team
Yes	No	"Get Data" in Groovy Scripts - To get the xpath of the responses.

SoapUI Licenses

Tuesday, February 27, 2018 12:18 PM

Subject	SoapUI Licenses
From	Eric Forsander
To	Quality Assurance Managers
Sent	Tuesday, February 27, 2018 3:04 AM

Team,

We have purchased additional SoapUI licenses and they are now available for use upon approval. If your team has a need, reach out to me directly and I will provide you a license if the below criteria is met. Please be aware, these are fixed licenses and per the EULA cannot be installed on VM's or transferred between users for the duration of the license period (expires 6/28/19). This can be misleading since there is a tool built-in to SoapUI to transfer a license, however requires approval by Smart Bear to function and will not be granted for extenuating circumstances (i.e. someone leaves firm).

To request a license, I'll need the following (per key):

1. Name of individual activating/using the license
2. Brief justification listing project(s)/product(s) it will be used for of course of a 1 year period
3. Projected usage (avg # of hours per week)
4. SBU/horizontal QA head approval. Note: all request will be reviewed by Jim for final authorization

The goal of this process is to ensure we are getting maximum benefit from the license that we've purchased.

On a related note, Smart Bear is also offering ~1 hour of introductory training (via WebEx) to overview the tool. Attendance is not limited so if you or anyone from your teams are interested, get back to me with a list of names and I'll provide date options to them once available. Note, this will be during US business hours.

Thanks,

Eric Forsander

Director of Quality Assurance – CTS
203.810.2260

FactSet's Need for Soap UI PRO

Thursday, February 01, 2018 1:49 PM

Differences between Soap UI PRO and Soap UI Open Source

There is nice comparison done by feature wise on SmartBear website: <https://www.soapui.org/professional/soapui-pro/soapui-vs-soapui-pro.html>. However, to highlight a few please refer below:

S.NO.	Feature	Comments
1	Multi-Environment Support	This feature allow us to make settings at project level for testing against different environments. At FactSet, we do testing against various stages such as Devel, QA, Live where each stage has different end points to hit. Thus, this is a very vital feature for us.
2	Floating Licenses	This feature comes handy when we want to effectively utilize our licenses amongst scripters such that we have 100% consumption of the license.
3	WSDL Coverage	We have some applications such as Code Red, which depends on WSDL services and thus this is nice to have feature.
4	Request/Response Coverage	PRO version gives us JSON view of response data which is easy to read and retrieve data from but the same is not available with free version. Free version provides response in XML format.
5	Test History: Baseline and Comparison	This feature is very vital to recover mistakenly deleted files and compare the existing file with previous version.
6	Coding Free Test Assertion	It allow one to assert based on the response from previous step without having to know any programming knowledge.
7	Data Source Driven	It allows to read data from various sources such as text file, excel, database, etc., which helps us iterate over test data with ease which is not possible with free version.
8	Scripting Library	PRO version comes with large number of libraries which allow us to write groovy scripts that can interact with UI elements too. With this, if one has requirement to deal with some web component in between web-services call that can achieved.

Type of FactSet applications that need Soap UI PRO version

Testing against multiple Environment: If you got an application which needs testing against different environments such as staging, dev, qa, live etc then you need PRO version as it reduces efforts to maintain different scripts for each version. You can do the same stuff with free version but then you'll have to maintain one script each for different stage.

Drivers for Database: If you need connection to different database for retrieving data and then passing it along the web -service call then PRO is the perfect choice as it has support for almost all major database drivers to connect to. One such requirement I see with IS team where they have to connect to JDBC driver which is not available with Open Source version.

Data Source Driven Testing: If we want to read test data from different sources such as XML, spreadsheets, databases etc., then PRO is best choice for us as it can read data from various sources which helps us to test application against different data sets in each iteration. Open source version doesn't have this feature and thus for each data set one has to write same steps again which creates lot of redundant work.

Scripting Libraries: When you need to run some external script to initiate some action which is part of your web -service testing then you need external libraries to achieve it. Though groovy scripting is available in free version of Soap UI, it comes with very limited libraries with which it is not possible to achieve complex functionalities. For example, we had one of the use case where only after performing a click on UI component the web -service request would proceed further and we used Selenium -WebDriver + PhantomJS to implement this functionality.

Use of Test Complete Utilities: If you got a use case wherein you want to call the utility functions written in Test Complete, you can do so with PRO version of Soap UI. This will reduce your efforts to rewrite utilities specifically in groovy script again. Platform team has used this feature earlier to use excel charts utilities.

Additional Features which increases our speed of automation are:

- Point and Click:** This enable us to simply right-click and assertions on the response data. It also allows us to get data from previous steps without having to write any code and thus enables non-programmer to easily automate API testing. This is one of the heavily used feature by teams. Not to mention, this feature works in groovy script editor too !!
 - Huge Assertion Library:** Assertions are key to verify the outcome of request and it is not possible to just rely on basic message assertions. PRO version provides option to write Regular Expressions, Wild Cards etc., while writing assertions. This is also one of the heavily used feature by teams.
 - Plugin Manager:** PRO version comes with an option to install many plugins which can be used to integrate with various other tools such as JIRA, Jenkins, GitHub etc., which will help us achieve CI/CD for Soap UI projects.
 - Security Testing (Limited version)
 - Load Testing (Limited version)
 - Service Virtualization (Limited version)
- Read articles to know workarounds for Soap UI PRO features in free version.**
 - Data Source Loops:** I couldn't find any workaround of data source loops in free version.
 - Environments:** Found an article which describe about using Environment setup in free version but need to try how well that fits our requirements. However, this hack need a person to be technically sound.
<http://blog.danwin-it.nl/2015/07/set-environment-properties-in-soapui.html>
 - Scripting Library:** We can write groovy scripts and convert the same into JAR files to be able to access in our test cases. However, this need a person to be good at OOPs concept and should know groovy scripting. Also, one has to place this custom JAR file at global JAR file location so as to access functions with in test cases.
<http://www.doan.me/script-library-in-soapui-free.aspx>

FactSet's Products' using Soap UI PRO features

Initial Draft



SoapUIPROFeatureUtilizationByProduct

SBU/Groups	Products	Soap UI PRO Features						Comments			
		Environments	Data Source Loops	Specific Assertions	JDBC Database connectivity	Test Complete Access	Scripting Libraries				
Internal	fdscrm										
	Marketing	Yes	Yes	Yes	No	No	No				
	QA Inventory	Yes									
	Salesforce	Yes	Yes	Yes	No	No	No				
	Orders	Yes	Yes	Yes	Yes	No	No				
CTS	DataFetch	Yes	Yes	Yes	No	No	No				
	Enterprise	Yes	Yes	Yes	No	No	No				
Platform	Downloading	Yes	Yes	Yes	No	Yes	Yes				
	Email Data Downloading	Yes	No	No	No	No	No				
	RECS Entitlement Services API	No	No	No	No	No	No	We can try this product with free version as no specific PRO feature has been used here.			
Research	Aggregate-Summary										
	All Estimates										
	Constituents	Yes	Yes	Yes	No	No	Yes				
	Contribution										
	Country Comparison	Yes	Yes	Yes	No	No	Yes				
	Economic Analysis Reports	Yes	Yes	Yes	No	No	Yes				
	Economic Reports	Yes	Yes	Yes	No	No	Yes				
	Estimate History	Yes	No	No	No	No	No				
	Estimate Summary										
	Estimate Table										
	Global Quotes										
	Guidance History	Yes	No	No	No	No	No				
	Index Breakdown	Yes	Yes	Yes	No	No	Yes				
	Industry	Yes	Yes	Yes	No	No	Yes				
	Internal Research Notes										
	Investment Research 2.0										
	Partners Website										
Wealth	Shares	Yes	No	No	No	No	No				
	Targets & Ratings	Yes	No	No	No	No	No				
		No	No	No	No	No	No	We can try this product with free version as no specific PRO feature has been used here.			
	Windows App										
	Workspace App										
	Workspace Manager										
	Workstation										
Wealth	Security Overview										

Soap UI projects on GitHub

Friday, March 02, 2018 12:14 PM

Objective: As all our projects are getting moved to GitHub in order to integrate it in CID process we want to move Soap UI projects too on GitHub. This is also to achieve our vision of maintaining single source code repository for all type of projects.

Sample Project considered for this POC: Estimates

GitHub Projects Link: <https://github.com/factset.com/bhagarwal/fds-qa-test-estimates-soapui>

Naming convention for projects: fds-qa-test-<project_name>-soapui

Project Structure:

git	3/2/2018 11:53 AM	File folder	
lib	3/2/2018 9:02 AM	File folder	
Results	3/2/2018 2:20 PM	File folder	
.gemrc	2/28/2018 5:00 PM	GEMRC File	1 KB
.gitignore	3/2/2018 5:00 PM	Text Document	2 KB
ChangeLog.md	3/2/2018 11:44 AM	MD File	1 KB
execute-soapui.rb	3/2/2018 11:32 AM	Ruby File	8 KB
fds-qa-test-estimates-soapui.gemspec	3/2/2018 11:45 AM	GEMSPEC File	2 KB
Gemfile	3/2/2018 8:44 AM	File	1 KB
LICENSE.txt	2/28/2018 5:57 PM	Text Document	1 KB
Rakefile	2/28/2018 5:57 PM	File	1 KB
README.md	2/28/2018 5:57 PM	MD File	1 KB
serialNumber.txt	2/28/2018 6:44 PM	Text Document	1 KB
test-config.json	3/2/2018 12:41 PM	JSON File	2 KB

Please update this file before committing any changes. Updating this file need some reading on "markdown" languages as ".md" files understand it. Also, abide to commit standards while submitting your changes.

This is newly created file which will be used to drive soapui test cases. You don't have to change anything in this file

Please update this file with the links to your project repo

File to which Serial Number will be written by Tellus Team

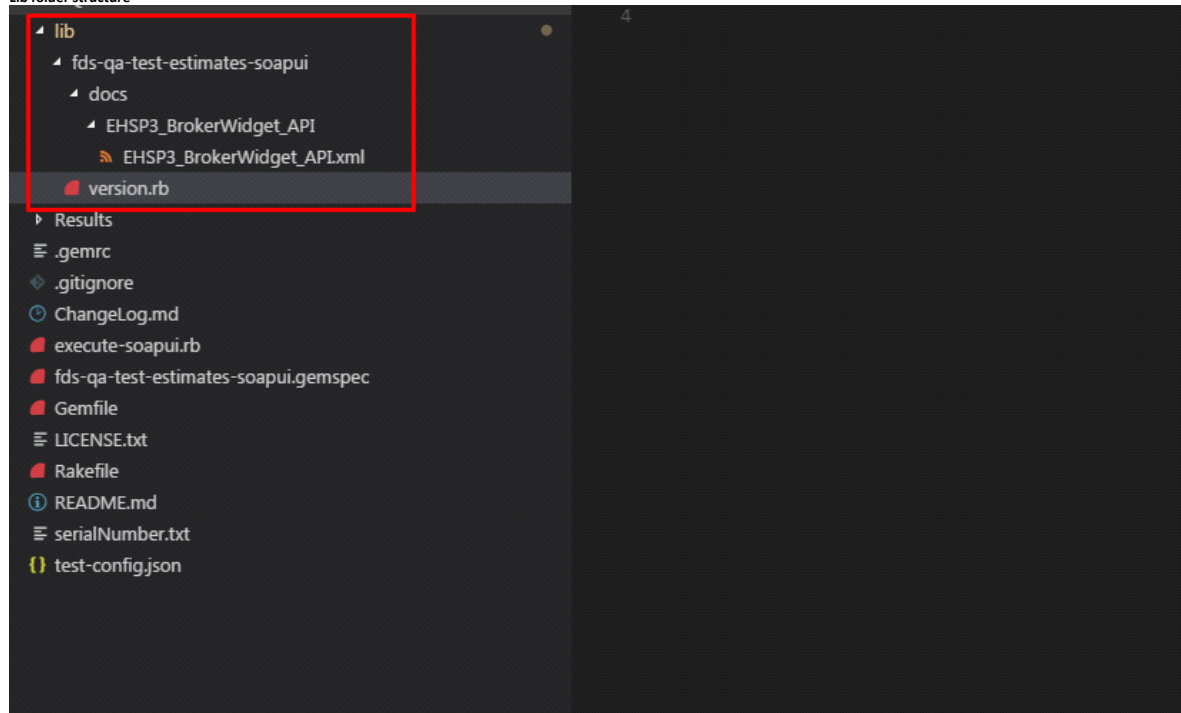
Sample test-config.json file which holds default configuration data. Going forward, Tellus team has to place "test-config.json" file under "gems/project_root_dir" (example: gems/fds-qa-test-estimates-soapui-version_number)

Default folder which should exist in your project archive. This is the place where execution logs will be saved and ".xml" file used by tellus to parse logs will be created.

Explanation of each file and folder (except lib folder) is explained in the image above. Please go through the image.

NOTE: Results folder content will not be pushed to GIT as we have added it into .gitignore list.

Lib folder structure



What you need to do?

1. Create folder of same name as project within lib folder. In this case it is **fds-qa-test-estimates-soapui**.
2. Create docs folder inside folder created in step 1.
3. Create a file named **version.rb** parallel to folder created in Step 1.
4. Under docs folder, place Soap UI XML file along with its test case folder structure similar to the image shown above

Changes needed

1. **Version.rb**

```
module FDSQATestEstimatesSoapUI
  VERSION = "0.0.0"
end
```

```

module FDSQATestEstimatesSoapUI
  VERSION = "0.0.8"
end

```

- You need to change **module** name. It should be same as your project name but in the format shown above. For example, project name here is **fds-qa-test-estimates-soapui** and thus module name is **FDSQATestEstimatesSoapUI**
- Update **VERSION** number before pushing to repo.
NOTE: If you don't change the version number Jenkins will fail the build as it cannot push the gem again with same version.

2. <project_name>.gemspec

```

end
end
end

spec.executables = spec.files.grep(%r{^bin/}).map{ |f| File.basename(f) }
spec.test_files = spec.files.grep(%r{^(test|spec|features)/})
spec.require_paths = ['lib']
spec.add_runtime_dependency 'fds-qa-soapui-common', '0.0.7'

```

- Only dependency for your project for now is **fds-qa-soapui-common** which is a newly created gem. This gem will hold all the common utilities which will be used by Soap UI projects.
NOTE: Please update version number as required for your project. Most likely it'll be latest version of **fds-qa-soapui-common** but that may change based on your project requirement.

3. serialNumber.txt

Currently, my serial number is hardcoded in this file. For local testing please update it with your own serial number.

NOTE: By default code will try to get **SerialNumber** from environment variable. If not found, it'll look for the same in **serialNumber.txt** file.

How to execute project?

Please follow the below steps to execute your project:

- Run the following command on **Command Prompt**

Say you have opened command prompt at C:\Tellus\1234 location

```
set GEM_HOME=C:\Tellus\1234
```

```
set GEM_PATH=C:\Tellus\1234
```

```
gem install fds-qa-test-estimates-soapui
```

```
// To execute project - [ruby <path/to/execute-soapui.rb>]
```

Example: C:\Tellus\1234> ruby gems\fds-qa-test-estimates-soapui-0.0.8\execute-soapui.rb

Project Settings required on GitHub repo:

- Go to **Settings**
- Select **Collaborators** from the left side menu (it'll ask you to enter your windows credentials)
- Add **svc-jenkins** as collaborator (type **svc-jenkins** into search field and select the same from typeahead menu. Select **Add collaborator** button to finish the process)
- Go to **Hooks** section displayed in left menu and click on **Add webhook** button.
- Add the following for creating new web-hook
Payload URL: <https://jenkins.factset.com/github-webhook/>
Content type: application/x-www-form-urlencoded <default_value>
Secret: <Leave this field blank>
Make sure **Just the push event** radio button is selected
Ensure **Active** box is checked

This will finish the web-hook settings on github

Jenkins Settings:

- Click on **New Item** from left hand menu list on <https://jenkins.factset.com/job/app-qa-automation/> page.
NOTE: This option will be visible only who got full write access to **app-qa-automation** group
- Enter project name in **Enter an item name** field. Please use the same github repo name for which you are creating this configuration.
For example, for github repo **fds-qa-test-estimates-soapui** I created jenkins job with name **fds-qa-test-estimates-soapui**.
- Select **Freestyle project** from the list
- In order to simplify configuring your project, go to bottom of the page and enter sample project name (**fds-qa-test-estimates-soapui**) into **Copy from** field
- Click on **OK** button to go to configuration page

Changes needed on configuration Page

Refer <https://jenkins.factset.com/job/app-qa-automation/job/fds-qa-test-estimates-soapui/configure> for sample configuration

- Description:** Provide description of your project.
- Change **Project url** with link to your own project

GitHub project

Project url:

GitLab connection:

- Under **Source Code Management** section change **Repository URL** field from **Repositories** sub-section (refer the image below)

Source Code Management

Repositories

Repository URL:

Credentials:

- Under **Build Triggers** section, change **Admin list** to have contact names of person responsible for this project
- Under **Build** section make sure to make the change in the script as highlighted below:

```
eval "$($rbenv init -)" || true
```

```
rbenv install -s 2.3.3
rbenv shell 2.3.3

export GEM_HOME=$(pwd)/.gem
export PATH="$GEM_HOME/bin:$PATH"

gem install bundler
bundle install
bundle exec rake build
ls pkg/

export RUBYGEMS_HOST=http://artifactory.factset.com/artifactory/api/gems/rubygems-fds/
version='ruby -I./lib -r 'fds-qa-test-estimates-soapui'/version' -e 'puts FDSQATestEstimatesSoapUI::VERSION'

if [ ! -z $version ]; then
  #version=$(git tag -l --points-at HEAD)
  gempath=pkg/fds-qa-test-estimates-soapui-$version.gem
  gem push $gempath --host http://artifactory.factset.com/artifactory/api/gems/rubygems-fds
fi
```

6. Click on **Save** to save the configuration

Changes Required from Tellus Framework team

1. Install gem in location they wish
Example: C:\Tellus\<group_id>>gem install <gem_name> [-v <version_number>]
2. To execute project use the following command
ruby path/to/execute-soapui.rb
Example: C:\Tellus\<group_id>>ruby gems\fds-qa-test-estimates-soapui-0.0.8\execute-soapui.rb
3. Log files will be found at **gems\<gem_name>-<version_number>\Results**

NOTE: Existing parser will work for parsing logs.

Tellus Framework Team: Please let me know if more changes are required so that I can document the same here.