

Avoiding regressions in an agile development environment

At Yottaa

Speaker Intro

- Studied Computer Science at Helsinki University
- Previously, Consulting Engineer at DEC
 - Developed middleware for OLTP systems
- Founder of Automature
 - built tools for making QA more transparent
- Currently a senior member of Quality Engineering team at Yottaa

Topics

- What does Yottaa do?
- The quality scene at Yottaa
- Tools used for automation at Yottaa
- The quality process in action...
- How tests are executed, metrics gathered, and reported
- A quick walk-through of the management portal UI test automation
- Questions

What Yottaa does...

eCommerce Acceleration platform

Enables online retailers significantly improve website performance

- Customers are well known eCommerce sites worldwide
- No code modifications required for customer sites!
- Sites are optimized by choosing a set of optimization policies/rules
- Traffic optimized **in-transit** through techniques including
 - Caching, Image optimizing, HTML rewriting, In-lining, Compression
- All traffic is routed through Yottaa's "data-centers"
- An average of 30% **reduction in page load times** is achieved
- Significant boosts in "conversion rates"

The software scene at Yottaa

- **Production is a SaaS environment**
- **Distributed Linux based architecture, consisting of**
 - **Management Portal (Ruby)**
 - **Load balancers (Java, C)**
 - **Traffic optimizers (Java)**
 - **Change broadcasters (Java, GoLang)**
 - **Traffic analytics (Java)**
- **Build & deployment uses Ant, Groovy & Jenkins CI**
- **SW repositories on private GitHub**
- **Puppet used for deployment**

QA Automation Tools

- **All tests are automated...**
- **Regression Tests are executed as Jenkins jobs, kicked off after components have been deployed in CI environment**
- **Automation has been developed using**
 - **Java for unit tests**
 - **Python for web-services testing**
 - **Automature's Test Generator for UI (Selenium) tests**
 - **Ruby for Analytics testing**
- **Automated Tests run as Jenkins jobs, using Python, Ruby, Spark runtime environments**
- **Test Results are uploaded to Zermatt using Jenkins plugins**

Some Terminology

- What is a Test Plan?
 - A Collection of Test Cases, bound by a common theme, serving a specified purpose, targeted at a specific Topology Set
- What is a Topology Set?
 - A collection of machines (physical or virtual) that mimic a deployment environment
- What is a Test Cycle?
 - An instance of execution of a Test Plan on target topology sets

Reporting using Jenkins Plugins

- Results of test cases/test suites executed, organized by
 - topology sets
 - date/time
 - release/sprint/build/plan
- Code coverage by test plan (or collection of plans)
- Build Quality Index Computation (scale 1-10, lowest is 1)
 - Function of tests passing & coverage achieved

Jenkins Plugin for Reporting Results

```
<testsuite errors="" failures="0" name="httpsrewrite" skips="" tests="4" time="645">  
  <testcase classname="case-plt-511" name="httpsrewrite check https rewrite support - enabled, https -&gt; http" time="196" />  
  <testcase classname="case-plt-513" name="httpsrewrite check https rewrite support - enabled, send over http, no rewrites expected" time="269" />  
  <testcase classname="case-plt-510" name="httpsrewrite check https rewrite support - enabled, http -&gt; https" time="53" />  
  <testcase classname="case-plt-512" name="httpsrewrite check https rewrite support - enabled, send over https, no rewrites expected" time="127" />  
</testsuite>
```

Invoke Automature Reporting

Test Plan

PLATFORM.L3_REGRESSION

Topologyset Description

Jenkins-Office3

Testcase Construction

@classname

Build Description

tpu-\$BUILDID

Testcycle Description

\$TCNAME

Test Report

autotest4/report/jenkins-report.xml

Jenkins Coverage Reporting Plugin

```
<package name="com/blah/common/ta/rc/dao">
  <class name="com/blah/common/ta/rc/dao/PageCategoryRow">
    <method name="getSiteId" desc="()V" line="20">
      <counter type="INSTRUCTION" missed="3" covered="0"/>
      <counter type="LINE" missed="1" covered="0"/>
      <counter type="COMPLEXITY" missed="1" covered="0"/>
      <counter type="METHOD" missed="1" covered="0"/>
    </method>
    <method name="toString" desc="()Ljava/lang/String;" line="27">
      <counter type="INSTRUCTION" missed="33" covered="0"/>
      <counter type="LINE" missed="6" covered="0"/>
      <counter type="COMPLEXITY" missed="1" covered="0"/>
      <counter type="METHOD" missed="1" covered="0"/>
    </method>
  </class>
</package>
```

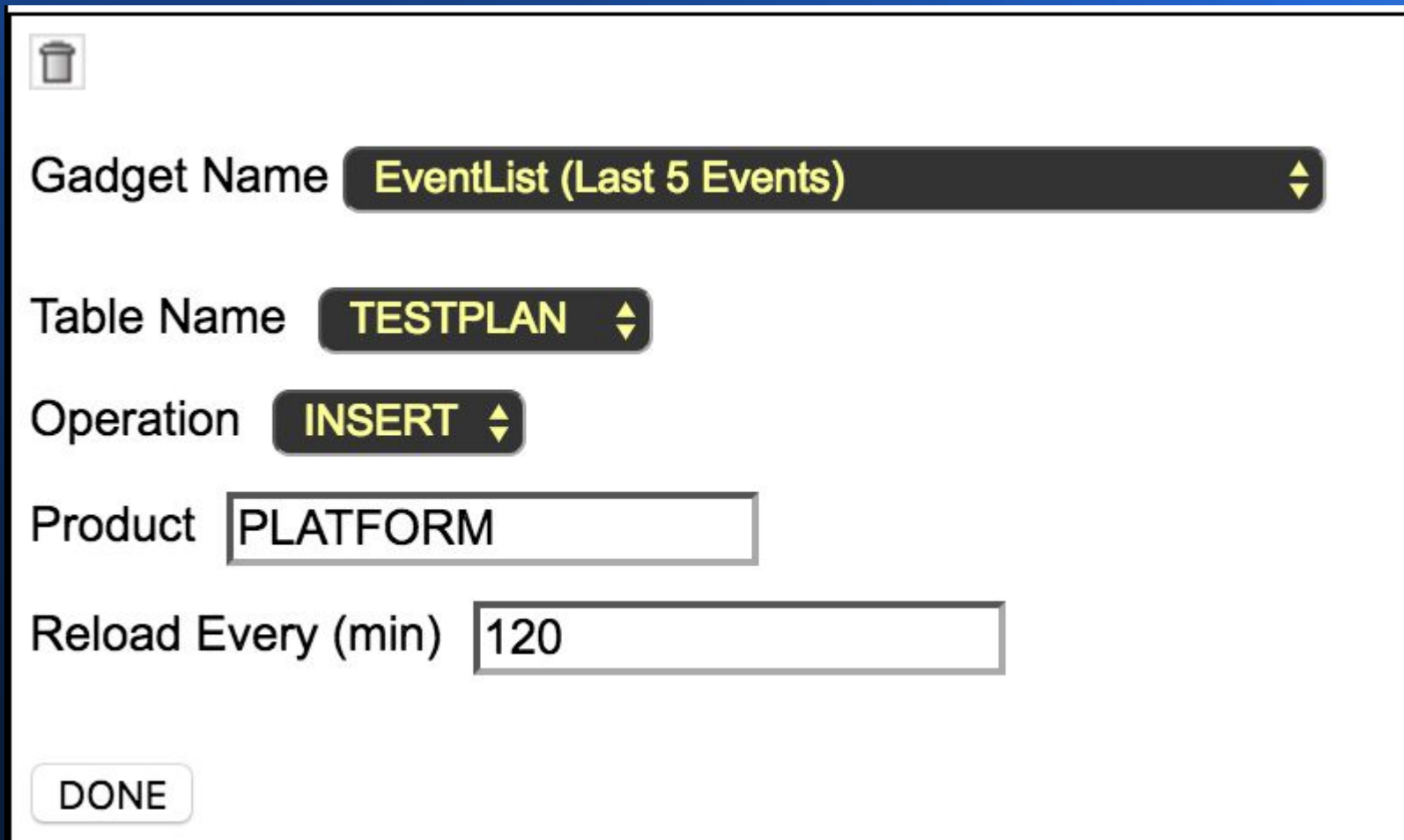
Invoke Automature Build Quality Reporting X

Coverage File Path


Displaying QA Results & Metrics

- Unit & Integration Tests are executed as Jenkins jobs
- Test results are written in XML (using Xunit schema)
- Automature's Jenkins Plugin uploads results to Zermatt, provides contextual information (which build, where & when executed)
- Zermatt provides many pre-built configurable custom charts, called **gadgets**, for displaying quality metrics
- Multiple Gadgets are combined into **Wallboards**
- Multiple wallboards are sequenced into a **movie show**

Creating a gadget



A configuration dialog box for creating a gadget. It features a trash icon in the top left corner. The form contains several fields: a dropdown menu for 'Gadget Name' with the value 'EventList (Last 5 Events)', a dropdown menu for 'Table Name' with the value 'TESTPLAN', a dropdown menu for 'Operation' with the value 'INSERT', a text input field for 'Product' containing 'PLATFORM', and a text input field for 'Reload Every (min)' containing '120'. A 'DONE' button is located at the bottom left.



Gadget Name **EventList (Last 5 Events)** ▾

Table Name **TESTPLAN** ▾

Operation **INSERT** ▾

Product

Reload Every (min)

The Events List Gadget



Event List (Last 5 Events):

jenkins created testcycle "OF3_327_10-23 " in
PLATFORM at 05:00:36

jenkins created testcycle "OF2_151_10-23 " in
PLATFORM at 04:10:31

jenkins created testcycle "OF3_163_10-23 " in
PLATFORM at 03:09:45

jenkins created testcycle "STG_312_10-23 " in
PLATFORM at 02:28:58

jenkins created testcycle "STG_380_10-23 " in
PLATFORM at 01:13:04

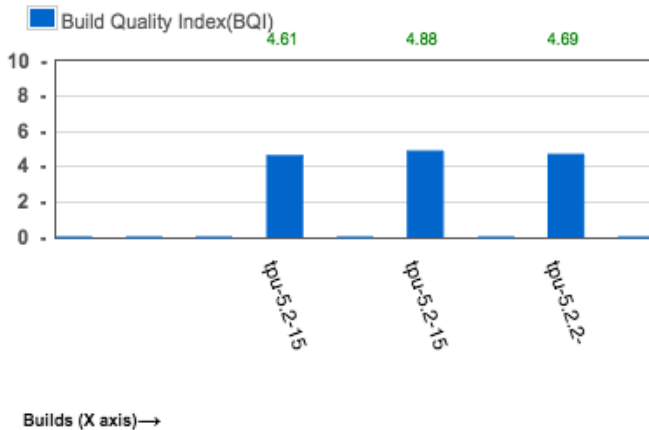
The Coverage Rankings Gadget

Alt Coverage Rankings for Platform TPU

PACKAGE	CLASS COVERED PCT ASC	METHOD MISSED DESC	LINE MISSED DESC
com/yottaa/platform/router/tpu/instanton	C : 0 , M : 13 , CP : 0.0%	C : 0 , M : 104 , CP : 0.0%	C : 0 , M : 440 , CP : 0.0%
com/yottaa/platform/router/store/zkcache	C : 0 , M : 7 , CP : 0.0%	C : 0 , M : 59 , CP : 0.0%	C : 0 , M : 308 , CP : 0.0%
com/yottaa/cloud/api/aws/network	C : 0 , M : 10 , CP : 0.0%	C : 0 , M : 47 , CP : 0.0%	C : 0 , M : 508 , CP : 0.0%
com/yottaa/cloud/api/aws/ec2/instances	C : 0 , M : 31 , CP : 0.0%	C : 0 , M : 41 , CP : 0.0%	C : 0 , M : 138 , CP : 0.0%
com/yottaa/cloud/api/core/object	C : 0 , M : 4 , CP : 0.0%	C : 0 , M : 38 , CP : 0.0%	C : 0 , M : 115 , CP : 0.0%
com/yottaa/platform/router/cache/local/diskbackendstore	C : 0 , M : 4 , CP : 0.0%	C : 0 , M : 32 , CP : 0.0%	C : 0 , M : 59 , CP : 0.0%
com/yottaa/cloud/api/aws/sqs	C : 0 , M : 27 , CP : 0.0%	C : 0 , M : 28 , CP : 0.0%	C : 0 , M : 68 , CP : 0.0%
com/yottaa/cloud/api/aws/s3/objects	C : 0 , M : 14 , CP : 0.0%	C : 0 , M : 26 , CP : 0.0%	C : 0 , M : 55 , CP : 0.0%
com/yottaa/platform/router/tpu/sprite/internal	C : 0 , M : 6 , CP : 0.0%	C : 0 , M : 23 , CP : 0.0%	C : 0 , M : 138 , CP : 0.0%
com/yottaa/platform/router/interfaces/timing/client	C : 0 , M : 5 , CP : 0.0%	C : 0 , M : 22 , CP : 0.0%	C : 0 , M : 140 , CP : 0.0%
com/yottaa/platform/router/interfaces/keepalive	C : 0 , M : 3 , CP : 0.0%	C : 0 , M : 21 , CP : 0.0%	C : 0 , M : 121 , CP : 0.0%
com/yottaa/platform/router/cache/local/disk	C : 0 , M : 1 , CP : 0.0%	C : 0 , M : 20 , CP : 0.0%	C : 0 , M : 21 , CP : 0.0%
com/yottaa/platform/router/backplane/services/logging	C : 0 , M : 5 , CP : 0.0%	C : 0 , M : 19 , CP : 0.0%	C : 0 , M : 100 , CP : 0.0%
com/yottaa/cloud/api/aws/elb	C : 0 , M : 15 , CP : 0.0%	C : 0 , M : 18 , CP : 0.0%	C : 0 , M : 54 , CP : 0.0%
com/yottaa/cloud/api/aws/s3	C : 0 , M : 5 , CP : 0.0%	C : 0 , M : 17 , CP : 0.0%	C : 0 , M : 124 , CP : 0.0%
com/yottaa/platform/mdp/exception	C : 0 , M : 10 , CP : 0.0%	C : 0 , M : 15 , CP : 0.0%	C : 0 , M : 40 , CP : 0.0%

Wallboard for Build Quality Index

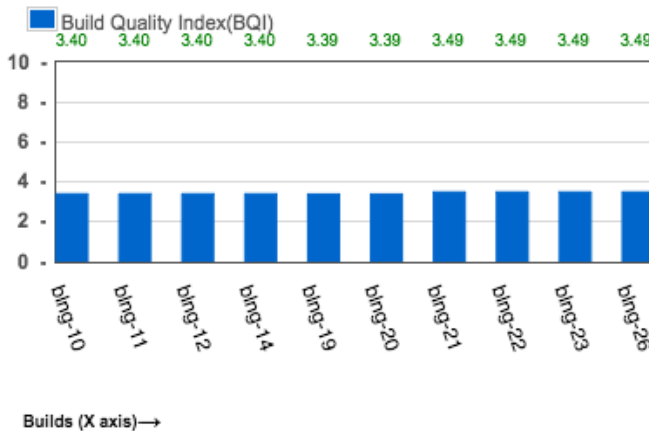
TPU Build Quality Index



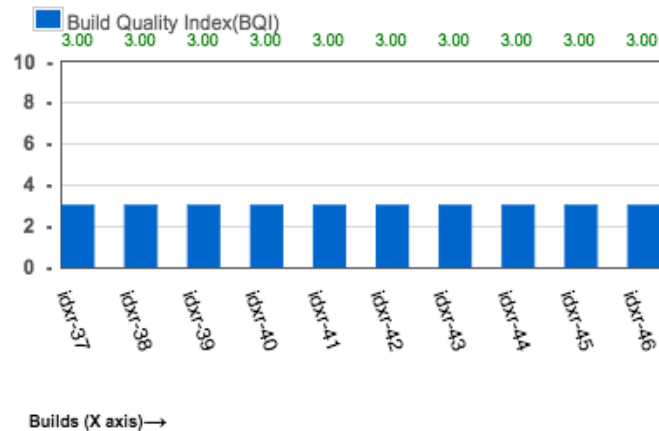
TA-Services Build Quality Index



TA-Billing Build Quality Index

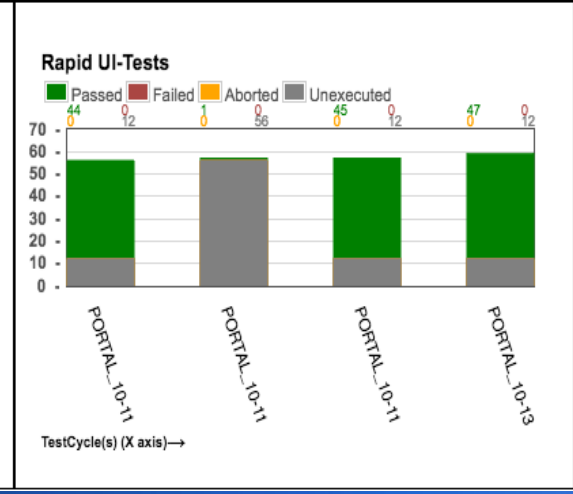
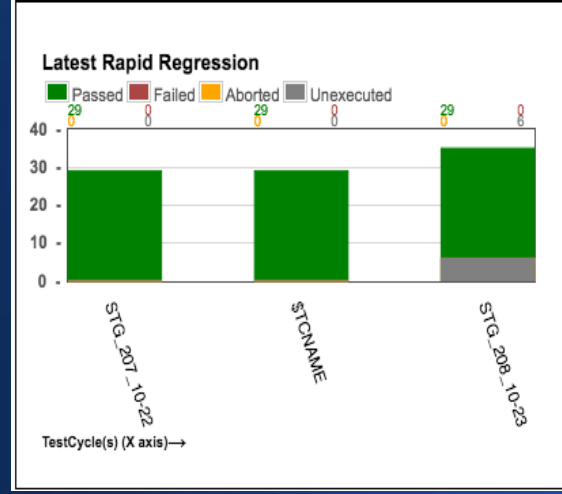
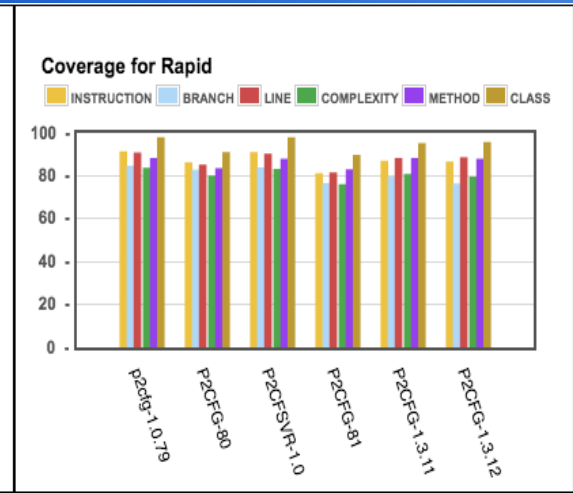
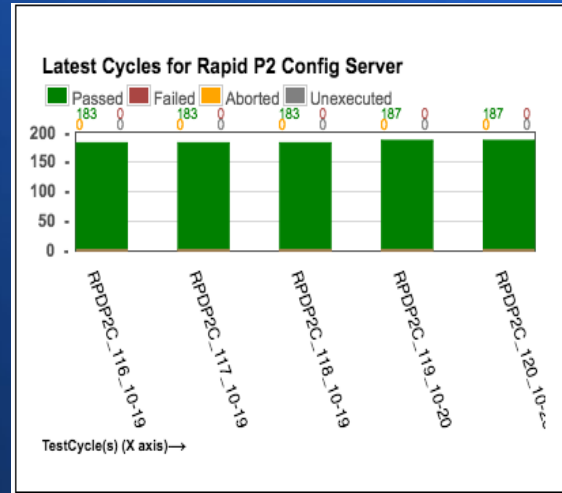
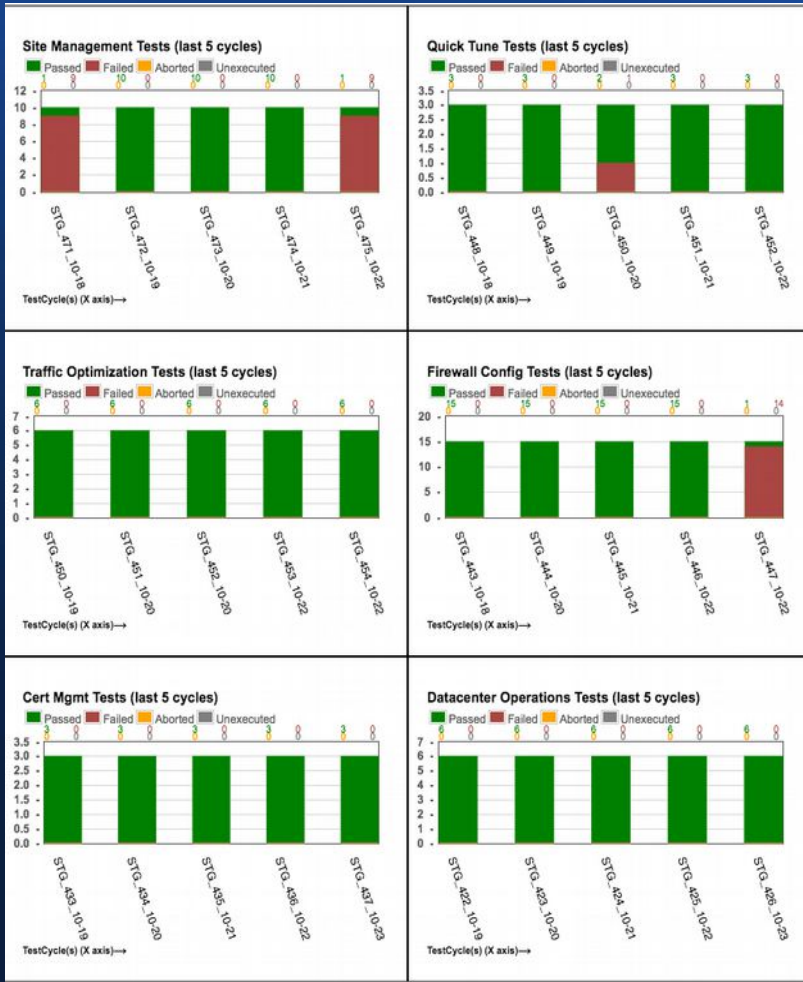


ES-Indexer Build Quality Index



Wallboards for Regression Results, Code Coverage

(by Testplan)



A quick walk-through of the management portal UI test automation

- Web UI to manage the Yottaa Universe
- Provision & manage Yottaa's network SaaS infrastructure
 - 5 worldwide data centers (Asia, Europe & Americas)
 - multi-layer routing for load balancing & optimization
- Configure client sites
 - fine-tune content optimization strategies & rules
 - manage cache
- Monitor performance
- Developed using Ruby-on-Rails

How are test cases created?

- Automature's **Basel** Web Testing Framework
- **Interactive test generator for Automature's Spark**
 - Two phase approach
 - Phase 1: Generate Page Objects for web elements
 - Phase 2: Create Test Cases
 - sequence of steps to manipulate web elements
- What are Page Codes?
 - JSON objects, that uniquely identify web elements by name
 - May also describe a meta-element, e.g.
 - A grid structure, or
 - A sequence dependency,
 - e.g. grid remains hidden, until check-box is selected, making the frame interactable

What do test cases look like?

A Test Case

Test Case ID	Description	Property	Step	Action	ActionArg_1	ActionArg_2	ActionArg_3
Comment							
CDNandCacheControl				&YottaaYourSiteOptimization.ClickOnCDNandCacheControl	handle=%BrowserHandle%		
				Zbrowser.findLatestWindowHandle	BrowserHandle		
				&YottaaCDNandCacheControl.ClickOnGeneral	handle=%BrowserHandle%		
				&YottaaCDNandCacheControl.ClickOnAddException	handle=%BrowserHandle%		
				&YottaaCDNandCacheControl.PopulateAll	handle=%BrowserHandle%	csvfilename=\$CSV_YottaaCDNandCacheControl	rowno=\$RowInYottaaCDNandCacheControl_2
				&YottaaCDNandCacheControl.ClickOnAssetCachingDone	handle=%BrowserHandle%		
				&YottaaCDNandCacheControl.ClickOnMobile	handle=%BrowserHandle%		
				&YottaaCDNandCacheControl.ClickOnAddException	handle=%BrowserHandle%		
				&YottaaCDNandCacheControl.PopulateAll	handle=%BrowserHandle%	csvfilename=\$CSV_YottaaCDNandCacheControl	rowno=\$RowInYottaaCDNandCacheControl_3
				&YottaaCDNandCacheControl.ClickOnAssetCachingDone	handle=%BrowserHandle%		
				&YottaaCDNandCacheControl.ClickOnTablet	handle=%BrowserHandle%		
				&YottaaCDNandCacheControl.ClickOnAddException	handle=%BrowserHandle%		
				&YottaaCDNandCacheControl.PopulateAll	handle=%BrowserHandle%	csvfilename=\$CSV_YottaaCDNandCacheControl	rowno=\$RowInYottaaCDNandCacheControl_4
				&YottaaCDNandCacheControl.ClickOnAssetCachingDone	handle=%BrowserHandle%		

A Molecule

Molecule ID	Description	Property	Step	Action	ActionArg_1	ActionArg_2	ActionArg_3	ActionArg_4
Comment								
VerifyElementsAreReadOnly				#define args	handle	elements		
				setvar	lookup			
				ZFileOps.ReadFileContent	\$lookupjson	lookup		
				Zbrowser.VerifyElementsAreReadOnly	#handle	#elements	lookup	
Comment								
ClickOnForwardButton				#define args	handle			
				Zbrowser.forward	#handle			
Comment								
ClickOnBackButton				#define args	handle			
				Zbrowser.back	#handle			
Comment								
TakeSnapshot				#define args	handle			
				Zbrowser.TakeSnapshot	#handle			
Comment								
ReadGeneratedElements				#define args	handle	jsonpath		
				Zbrowser.readGeneratedElement	#handle	#jsonpath		
Comment								
ClickOnUsage				#define args	handle			
				setvar	CV_ElementValue			
		silent		&GetPageCodeOfElement	Name	Usage	YottaaCDNandCacheControl.lookup	CV_ElementValue
				Zbrowser.clickPageCodeElement	#handle	Usage	CV_ElementValue	

How are test cases executed?

- Through the command line
- Through Jenkins shell executor (Mac, Linux or Windows)
- Through Spark's Graphical Execution Environment/Debugger

How are test cases debugged?



File Edit Run/Debug View Help

Config Macros Test Cases Molecules

Testcase Id	Descrip...	Property	Step	Action	Actionarg_1	Actionarg_2
19	AddSite			Zbrowser.findLatestWindowHandle	BrowserHandle	
24	Comment					
25	CDNAndCacheControl			&YottaaYourSiteOptimization.ClickOnCDNAndCa...	handle=%BrowserHandle%	
26				Zbrowser.findLatestWindowHandle	BrowserHandle	
27				&YottaaCDNandCacheControl.ClickOnGeneral	handle=%BrowserHandle%	
28				&YottaaCDNandCacheControl.ClickOnAddExcep...	handle=%BrowserHandle%	
30				&YottaaCDNandCacheControl.PopulateAll	handle=%BrowserHandle%	csvfilename=\$...
31				&YottaaCDNandCacheControl.ClickOnAssetCac...	handle=%BrowserHandle%	
32				&YottaaCDNandCacheControl.ClickOnAddExcep...	handle=%BrowserHandle%	
33				&YottaaCDNandCacheControl.PopulateAll	handle=%BrowserHandle%	csvfilename=\$...
34				&YottaaCDNandCacheControl.ClickOnAssetCac...	handle=%BrowserHandle%	
35				&YottaaCDNandCacheControl.ClickOnTablet	handle=%BrowserHandle%	
36				&YottaaCDNandCacheControl.ClickOnAddExcep...	handle=%BrowserHandle%	
37				&YottaaCDNandCacheControl.PopulateAll	handle=%BrowserHandle%	csvfilename=\$...
38				&YottaaCDNandCacheControl.ClickOnAssetCac...	handle=%BrowserHandle%	
39	Comment					
40	ContentOptimizationM...			&YottaaCDNandCacheControl.ClickOnContent-O...	handle=%BrowserHandle%	
46	Comment					
47	ContentOptimizationTa...			&YottaaCDNandCacheControl.ClickOnTablet	handle=%BrowserHandle%	
52	Comment					
53	TransformerGeneral			&YottaaTransformers.ClickOnTransformers	handle=%BrowserHandle%	

Run/Debug controls: Play, Stop, Pause, Refresh, Close

- Verbose
- No Autorecover
- No Verify
- Reporting
- Ignore
- Atom Exec Time
- Repeat

Times: days

Duration: days

Reporting

Execution Summary

Environment

Linked files

Variable

Search:

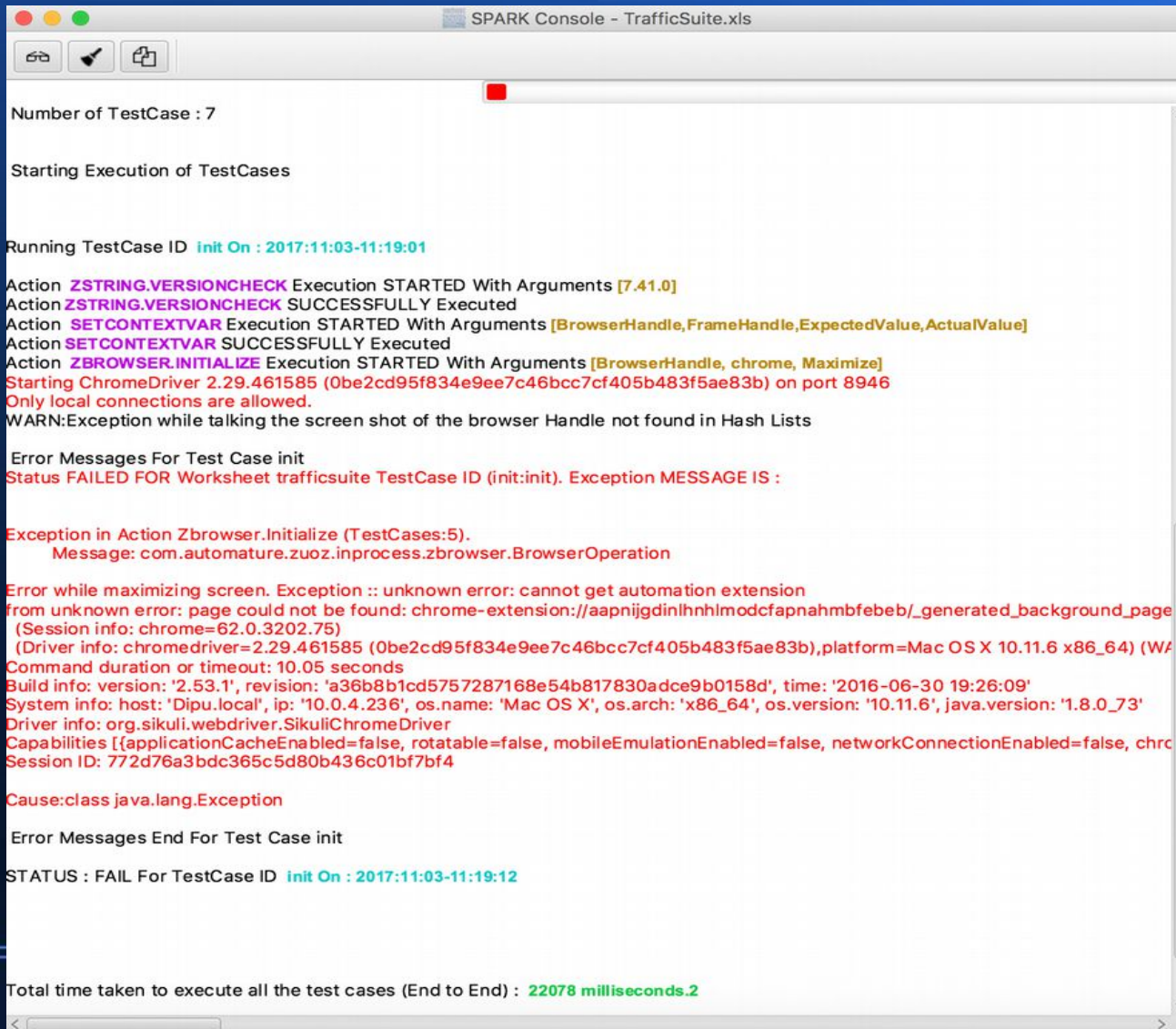
ID	Value
No content is table	

Testcase name

Breakpoint

Teststep expander

How do test case execution logs look like?



```
Number of TestCase : 7

Starting Execution of TestCases

Running TestCase ID init On : 2017:11:03-11:19:01

Action ZSTRING.VERSIONCHECK Execution STARTED With Arguments [7.41.0]
Action ZSTRING.VERSIONCHECK SUCCESSFULLY Executed
Action SETCONTEXTVAR Execution STARTED With Arguments [BrowserHandle,FrameHandle,ExpectedValue,ActualValue]
Action SETCONTEXTVAR SUCCESSFULLY Executed
Action ZBROWSER.INITIALIZE Execution STARTED With Arguments [BrowserHandle, chrome, Maximize]
Starting ChromeDriver 2.29.461585 (0be2cd95f834e9ee7c46bcc7cf405b483f5ae83b) on port 8946
Only local connections are allowed.
WARN:Exception while talking the screen shot of the browser Handle not found in Hash Lists

Error Messages For Test Case init
Status FAILED FOR Worksheet trafficsuite TestCase ID (init:init). Exception MESSAGE IS :

Exception in Action Zbrowser.Initialize (TestCases:5).
  Message: com.automature.zuoz.inprocess.zbrowser.BrowserOperation

Error while maximizing screen. Exception :: unknown error: cannot get automation extension
from unknown error: page could not be found: chrome-extension://aapnijgdinlhnhimodcfapnahmbfebeb/_generated_background_page
(Session info: chrome=62.0.3202.75)
(Driver info: chromedriver=2.29.461585 (0be2cd95f834e9ee7c46bcc7cf405b483f5ae83b),platform=Mac OS X 10.11.6 x86_64) (W/
Command duration or timeout: 10.05 seconds
Build info: version: '2.53.1', revision: 'a36b8b1cd5757287168e54b817830adce9b0158d', time: '2016-06-30 19:26:09'
System info: host: 'Dipu.local', ip: '10.0.4.236', os.name: 'Mac OS X', os.arch: 'x86_64', os.version: '10.11.6', java.version: '1.8.0_73'
Driver info: org.sikuli.webdriver.SikulichromeDriver
Capabilities [{applicationCacheEnabled=false, rotatable=false, mobileEmulationEnabled=false, networkConnectionEnabled=false, chr
Session ID: 772d76a3bdc365c5d80b436c01bf7bf4

Cause:class java.lang.Exception

Error Messages End For Test Case init

STATUS : FAIL For TestCase ID init On : 2017:11:03-11:19:12

Total time taken to execute all the test cases (End to End) : 22078 milliseconds.2
```

What a test execution report looks like?

Execution Details

[PORTAL](#)  > [Q3 \(V1.5\)](#)  > [Sprint-71](#)  > [STG_449_10-19](#)  > [TrafficOptimization](#)  > [\(jenkins01.node.office-1.dev\)](#)  > [Test Execution Details](#) 
























Test Cycle Topology Set   : [Jenkins-Staging](#) 

[Create Manual Test Execution Result](#) 
[Create Automated Test Execution Script](#) 

Execution Summary for Topology Set (jenkins01.node.office-1.dev)

Total Execution Details 6
Total Test Cases Passed 1
Total Test Cases Failed 5

Filters:- Passed Failed Aborted Running Show All










Test Case 	Action 	Description 	Test Suite 	Execution Date 	Test Engineer 	Status 	Comment 	Build Tag 	Duration 	Bug Details 
TransformerGeneral	  		TrafficSuite	2017-10-19 17:01:46	root	fail	 Exception in Action Zbrowser.clickPageCodeElement (Molecules:118). Message: com.automature.zuoz.inprocess.zbrowser.BrowserOperation Unable to click PageCode element Transformers. Exception :: -Timeout has expired. Page element type not found with value. Element Type = xpath And Value = //a[contains(., 'Transformers')] 	Portal_104	129.2460	0 
ContentOptimizationTablet	  		TrafficSuite	2017-10-19 16:59:36	root	fail	 Exception in Action Zbrowser.clickPageCodeElement (Molecules:145). Message: com.automature.zuoz.inprocess.zbrowser.BrowserOperation Unable to click PageCode element Tablet. Exception :: -Timeout has expired. Page element type not found with value. Element Type = xpath And Value = (/strong[contains(., 'Tablet')])[1] 	Portal_104	129.3440	0 
ContentOptimizationMobile	  		TrafficSuite	2017-10-19 16:57:27	root	fail	 Exception in Action Zbrowser.clickPageCodeElement (Molecules:100). Message: com.automature.zuoz.inprocess.zbrowser.BrowserOperation Unable to click PageCode element Content-Optimization. Exception :: Error while clicking element. Element = Content-Optimization. Exception :: unknown error: Element is not clickable at point (110, 222). Other element would receive the click: <div class="modal-backdrop-custom" style="display: block;"></div> (Session info: chrome=31.0.1650.63) (Driver info: chromedriver=2.3.238485,platform=Linux 2.6.32-696.3.2.el6.x86_64 x86_64) (WARNING: The server did not provide any stacktrace information) Command duration or timeout: 262 milliseconds Build info: version: '2.53.1',	Portal_104	5.4880	0 

What a test plan looks like?

CONTAINER : Smoke

[Create New Testplan](#)   

Select All/None [Move Selected Plans](#) [Delete Selected Plans](#)

	Plan Name 	Actions 	Purpose 	Execution Option 	Status 	Acceptance Criteria 	Milestones 	Last Execution Date 	Schedule 	Test Cycles 	Tags 	Test Suites 	Topology Sets 	Resources 	Email List 
<input type="checkbox"/>	DatcenterOperations	     	Smoke Testing on commonly used workflows in Datacenter Operations		Active	Sprint Default	Sprint Default	2017-11-02		324 	0 	1 	3 	0 	
<input type="checkbox"/>	CertificateManagement	     	Smoke Testing on commonly used workflows in managing certificates		Active	Sprint Default	Sprint Default	2017-11-02		429 	0 	1 	3 	0 	
<input type="checkbox"/>	FirewallConfiguration	     	Smoke Testing on commonly used workflows in configuring firewall and proxy		Active	Sprint Default	Sprint Default	2017-11-02		419 	0 	1 	3 	0 	
<input type="checkbox"/>	TrafficOptimization	     	Smoke Testing on commonly used workflows in optimizing traffic		Active	Sprint Default	Sprint Default	2017-11-02		416 	0 	1 	3 	0 	NULL
<input type="checkbox"/>	QuickTuneRules	     	Smoke Testing on commonly used workflows in Tuning Sites		Active	Sprint Default	Sprint Default	2017-11-02		414 	0 	1 	3 	0 	
<input type="checkbox"/>	SiteManagement	     	Smoke Testing on commonly used workflows in managing Sites		Active	Sprint Default	Sprint Default	2017-11-02		427 	0 	1 	3 	0 	

What a test cycle report looks like?

TestCycles for TRAFFICOPTIMIZATION ⓘ

[PORTAL](#) ⓘ > [TRAFFICOPTIMIZATION](#) ⓘ > [TEST CYCLES](#) ⓘ

Test Plans [↔](#) : [TrafficOptimization](#) [⌵](#)

Test Plan Summary

Total Test Cycles	416
Total Test Cases Executed	2492
Total Test Cases Passed	2264
Total Test Cases Failed	228

Displaying [1 to 20] /416 Cycles

« 1 2 3 4 5 »

[Create New Test Cycle](#)

Select All/None [Delete Selected Cycles](#)

ID ⓘ	Cycle Description ⓘ	Actions ⓘ	Modification Date ⓘ	Release ⓘ	Sprint ⓘ	Build ⓘ	Topologysets ⓘ	Failure Percentage ⓘ	Execution Details ⓘ	Code Coverage ⓘ
<input type="checkbox"/> 5519	STG_466_11-03		2017-11-02 19:59:49	Q3	SPRINT-71	Portal_104	1		Total : 7 Jenkins-Staging (Actual: 6 Failed: 0 Passed: 6 Aborted: 0)	
<input type="checkbox"/> 5502	STG_465_11-02		2017-11-01 19:59:41	Q3	SPRINT-71	Portal_104	1		Total : 7 Jenkins-Staging (Actual: 6 Failed: 0 Passed: 6 Aborted: 0)	
<input type="checkbox"/> 5493	STG_464_11-01		2017-11-01 15:01:13	Q3	SPRINT-71	Portal_104	1		Total : 7 Jenkins-Staging (Actual: 6 Failed: 0 Passed: 6 Aborted: 0)	
<input type="checkbox"/> 5476	STG_463_11-01		2017-10-31 19:59:53	Q3	SPRINT-71	Portal_104	1		Total : 7 Jenkins-Staging (Actual: 6 Failed: 0 Passed: 6 Aborted: 0)	









How gadget instances are created?

ZERMATT Config Dashboards Gadgets Releases Testplans Agile Features Account

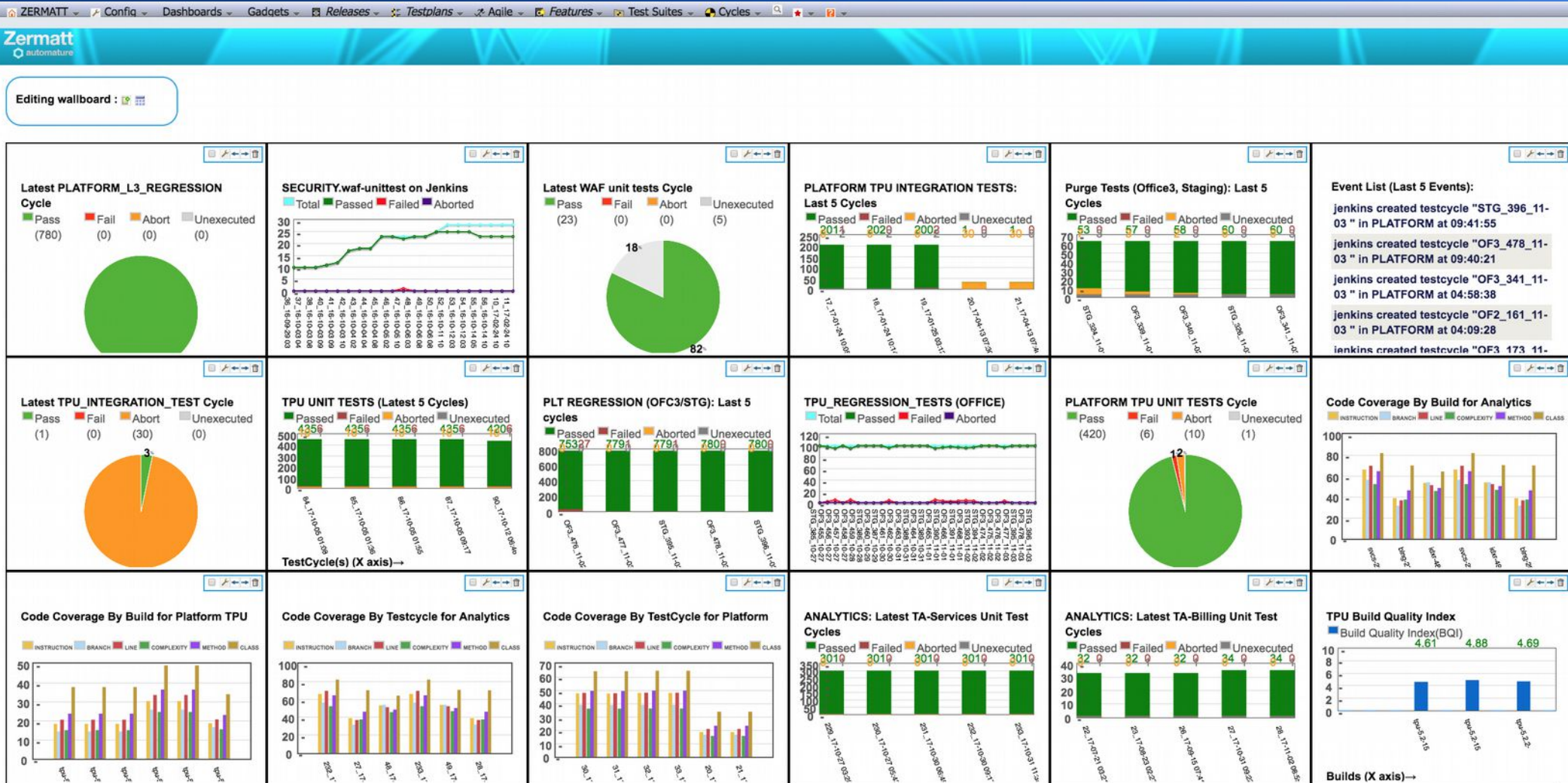
Zermatt automature Search

Gadget Instances ?

[Create Gadget Instance](#)

Gadget Name ?	Action ?	Gadget Configuration ?	Created By ?	Created On ?
EventList (Last 5 Events)	 	skin=plain table_name=TESTCYCLE operation_type=INSERT product_name=PLATFORM	Dipu Deshmukh	2017-10-23 15:32:24
TestCycleSummaryBarChart (Latest 5 Cycles)	 	skin=plain product_name=ANALYTICS testplan_name=TA-QA-Automation chart_type=bar latest=5 label=TA Regression Automation	Dipu Deshmukh	2017-08-03 09:13:06
TestCycleSummaryBarChart (Latest 5 Cycles)	 	skin=plain product_name=RAPID testplan_name=RAPID-UI chart_type=bar latest=5 label=Rapid UI-Tests	Dipu Deshmukh	2017-07-31 09:06:31
TestCycleSummaryBarChart (Latest 5 Cycles)	 	skin=plain product_name=PLATFORM testplan_name=YBIND chart_type=bar latest=5 label=YBIND Regression Tests	Dipu Deshmukh	2017-06-02 16:37:45

Wallboards are created by choosing gadgets



Thank You!

Questions?