How not having fun being the Junit prime and how making it better

March the 4th 2015
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Official duties

- Monitor the daily Junit reports (10) for the different streams

- Detect the new failures and report them

- Failures not claimed by someone (claims are rare or may be we get better) become a new Bugzilla ticket.

- Even if claimed they can last long so should be created immediately

- Add new entries in the Excel document

Unofficial duties

- Failures marked as "new" in the Excel document and forgotten to be created are to be added and you need to find the details after the fact

- Existing (not new) failures in the Junit report which are missing in the Excel document and/or in Bugzilla to create

- Some tickets are closed by the developers but they forget to remove them from the Excel spreadsheet

- Things that the previous Junit primes have missed and it's easy.

How it gets messy

- The Excel document is in a poor state
    - Missing entries (new not created, simply missing)
    - Extra entries (already closed)
    - Duplicate entries
    - Entries corresponding to multiple packages
    - Same issue in multiple streams but the ticket is created for one stream only. If you are lucky for the other stream it refers to the other ticket but if you remove the first one blindly the second is an orphan
    - List not sorted properly while the Junit report is
    - MAIN today is not MAIN tomorrow, if we branch then you have to rename
    - <u>CONFUSION</u>

- All the flavors for the text of the entries for the errors in Bugzilla
    - ClassTest has an error (no "Junit")
    - Junit – simple class name, FQN, multiple packages
    - Junit error - …
    - Error… (no "Junit")
    - Name of the ticket refer to a package while the class would be OK
    - Multiple packages in one ticket
    - Multiple classes in one ticket
    - Not sort/query friendly
    - Missing information in the tickets
    - <u>CONFUSION AGAIN</u>
- Even if motivated this is a tough job if you want to do it well

Example 1

- Started the job this week, similar to the last time.

- Removed 2 or 3 old entries, I had to check 60 tickets to not be closed to not keep the Excel list growing

- Added 8 missing entries (plus the missed ones still waiting to be added)

- The truth in Bugzilla A250/P300

Bugzilla – Bug List: Known JUnit A250P300

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Please log all new issues not associated with a pending release (e.g. Support Issues) under the classification "Other".

Wed Mar 4 2015 15:26:23 EST

Hide Search Description

Summary: Junit   **Classification:** Application Release 2.5.0, Platform Release 3.0.0   **Status:** UNCONFIRMED, NEW, ASSIGNED, REOPENED

ID ▼	Product	Comp	Assignee	Status	Resolution	Summary ▲
27991	3.0.0 So	Developm	.com	NEW	---	JUnit failure - com.oacis.platform.dkf.server.vigilance and com.oacis.platform.dkf.server.vigilance.db.integration.online (vig)
27008	3.0.0 Oa	Common P	.com	NEW	---	JUnit failure - dinmar.oacis.applet.core.cpd.CpdServletRemoteTest (vig)
28175	2.5.0 Or	General	lus.com	NEW	---	Junit failure - dinmar.oacis.applet.order.gui.DispensableDrugComboBoxModelTest (Modelnet)

3 bugs found.

Example 1

- The truth in Excel A250/P300

45	***					*************
46	com.oacis.applet.order.workspace.model	A250P300G300	MN	See main 25871		JUnit failure : com.oacis
47	dinmar.oacis.applet.order.gui	A250P300G300	MN	28175	28171/28175/28176 MAIN/A25/A20	Junit failure - dinmar.oa
48	dinmar.oacis.applet.order.icon	A250P300G300	MN	See main 26675		JUnit failure - dinmar.oa
49	dinmar.oacis.applet.ws.ccow	A250P300G300	MN	See main 23408		JUnit: Unit Test Failures
50	dinmar.oacis.common.order.workspace	A250P300G300	MN	new		dinmar.oacis.common.c
51	dinmar.oacis.core.config	A250P300G300	MN	to Stu	See main 24836	
52	dinmar.oacis.order.config	A250P300G300	MN	new		**dinmar.oacis.order.con**
53	***					*************
54		A250P300G300	FWK			
55	***					*************
56	com.oacis.platform.dkf.server.vigilance	A250P300G300	VIG	27645	Caused by CR-105	JUnit: Package com.oac
57	com.oacis.platform.dkf.server.vigilance.db.integration.online	A250P300G300	VIG	27645	Caused by CR-105	JUnit: Package com.oac
58	com.oacis.platformPV.server.vigilance	A250P300G300	VIG	See main 25266	PPV	Junit failure : com.oacis
59	dinmar.oacis.applet.core.cpd	A250P300G300	VIG	27008	intermittent	Junit error: dinmar.oaci
60	dinmar.oacis.applet.cpd	A250P300G300	VIG	See main 25385	PPV, intermittent	JUnit failure: dinmar.oa
61	dinmar.oacis.order.checking.dkf	A250P300G300	VIG/FWK	See main 26170		JUnit Failure : dinmar.oa
62	dinmar.oacis.order.workspace	A250P300G300	VIG/FWK	See main 23454		JUnit failure - dinmar.oa

- Why this difference?

- By the way some entries are likely missing in both.

Example 2

- The truth in Bugzilla A200/P250

Summary: Junit **Classification:** Application Release 2.0.0, Platform Release 2.5.0 **Status:** UNCONFIRMED, NEW, ASSIGNED, REOPENED

17 bugs found.

ID ▼	Product	Comp	Assignee	Status	Resolution	Summary ▼
25888	2.5.0 So	Design A	.com	ASSI	---	Require new JUnit flags for app server started that runs against the FDB or VIG sample data.
24744	2.5.0 PP	Junit		ASSI	---	P250 Feature 18939 Decimal Order Duration: PPV Junit test suite development
23635	2.5.0 PP	Junit		ASSI	---	P250 Feature 17714 CPD UI: PPV Junit test suite development
27757	2.5.0 So	Developm		NEW	---	JUnit: Package com.oacis.platform.dkf.server.vigilance and com.oacis.platform.dkf.server.vigilance.db.integration.onli
22199	2.5.0 PP	Junit		ASSI	---	JUnit Tests for Feature 17714 Common Patient Data UI
24431	2.5.0 PP	Junit	.com	NEW	---	JUnit failure: dinmar.oacis.platform.pendingOrders.PendingOrdersGeneralTest....
23981	2.5.0 PP	Junit	.com	NEW	---	JUnit failure: com.oacis.platform.options.server.UserPrefsPublisherPPVTest
23654	2.0.0 Or	Workspac	.com	NEW	---	JUnit failure in dinmar.oacis.applet.order.workspace.WorkspaceChangeControlTest
23810	2.5.0 PP	Junit	.com	NEW	---	Junit Failure - dinmar.oacis.platform.userSettings.server.ServerUserSettingsResolverPPVTest
23809	2.5.0 PP	Junit		ASSI	---	Junit failure - dinmar.oacis.common.test.OacisMultiUserSimpleTestCasePPVTest
28176	2.0.0 Or	General	.com	NEW	---	Junit failure - dinmar.oacis.applet.order.gui.DispensableDrugComboBoxModelTest (Modelnet)
26367	2.5.0 So	Design A		ASSI	---	JUnit failure - dinmar.oacis.applet.core.communication.clientPush.ClientPush_2_Test
23808	2.5.0 PP	Junit	m	ASSI	---	Junit Failure - dinmar.oacis.applet.core.ClientPushSubscribeTest (intermittent)
26765	2.5.0 PP	Junit	.com	NEW	---	Junit failure - com.oacis.platformPV.server.vigilance (vig)
23589	2.5.0 PP	Junit		ASSI	---	JUnit failure - com.oacis.platformPV.server.vigilance (intermittent)
25806	2.5.0 PP	Junit		NEW	---	Junit errors in com.oacis.platformPV.server.vigilance
26146	2.5.0 PP	Junit		NEW	---	Investigate the lazy relationship invalidation in final step of Vigilance JUnit PV_bugRegression_Test.Bug_24783_APIReturnsAListWithDuplicateObjects

17 bugs found.

Example 2

- The truth in Excel A200/P250

63	**					
64	com.oacis.applet.order.workspace.model	A200P250G250	MN	See main 235871		JUnit failure : com.oaci
65	com.oacis.order.common.form.qad	A200P250G250	MN	new		Error: com.oacis.order.
66	dinmar.oacis.applet.core.communication.clientPush	A200P250G250	MN	26367	intermittent	Junit failure : dinmar.oa
67	dinmar.oacis.applet.order.gui	A200P250G250	MN	28176	28171/28175/28176 MAIN/A25/A20	Junit failure - dinmar.oa
68	dinmar.oacis.applet.ws.ccow	A200P250G250	MN	See main 23408		JUnit: Unit Test Failures
69	dinmar.oacis.common.test	A200P250G250	MN	23809	PPV, intermittent	Junit failure : OacisMult
70	dinmar.oacis.core.db.odr	A200P250G250	MN	Intermittent	Failed testing: SdfGetOrderServiceStatusTest	
71	dinmar.oacis.core.config	A200P250G250	MN	New		dinmar.oacis.core.conf
72	**					
73		A200P250G250	FWK			
74	**					
75	com.oacis.platformPV.server.vigilance	A200P250G250	VIG	23589	PPV, intermittent	JUnit failure - com.oaci
76	com.oacis.platformPV.server.vigilance	A200P250G250	VIG	25806	PPV	Junit errors in com.oaci
77	com.oacis.platformPV.server.vigilance	A200P250G250	VIG	26765	PPV	Junit errors in com.oaci
78	dinmar.oacis.applet.core	A200P250G250	VIG	23808	intermittent, PPV	Junit Failure - dinmar.oa
79	dinmar.oacis.common.test	A200P250G250	VIG	23696	intermittent, PPV, see also main 24430	JUnit Failure in PPV clas
80	dinmar.oacis.common.test	A200P250G250	VIG	23809	intermittent, PPV	Junit failure - dinmar.oa
81	dinmar.oacis.order.checking.dkf	A200P250G250	VIG/FWK	See main 26170		JUnit Failure : dinmar.oa
82	dinmar.oacis.order.workspace	A200P250G250	VIG/FWK	23654		JUnit: Unit Test Failures

- Why this difference?

- By the way some entries are likely missing in both

State

- Complex process, multiple persons (primes + developers)

- Multiple teams involved

- Different ways to do

- Different

- Incomplete and non accurate view of the issues for both management, developers and testers

- We chase after the Excel report to have it containing what should be in Bugzilla

- Stated simply, it does not work and it's a pain for the JUnit prime. Time is wasted. The Excel is not accurate.

Proposal

- Ditch the Excel document as a list of errors

- Create tickets right away as discovered, no grace time

- Normalize the way to report the failures in Bugzilla

- One ticket per package, use FQN

- One ticket per class, use FQN

- Normalize the syntax, sort and filter friendly

- Specify the environment vig/modelnet/fwk as the tests are reported by the same environment

- Specify if the test is intermittent saving investigations

- Create the ports in other streams for the failures right away

- Custom Bugzilla queries for a stream or for stream+environment for both opened tickets and for all of them

- Create a reference ticket as an example

In Junit vs. Bugzilla fixed (MAIN)

Summary

Tests	Failures	Errors	Success rate	Time
40271	13	16	99.93%	5490.134

Packages

Name	Tests	Errors	Failures	Time(s)
com.oacis.applet.order.workspace.model	17	11	0	8.823
com.oacis.order.common.workspace.model.collection	31	0	1	0.560
dinmar.oacis.applet.order.gui	8	1	5	0.297
dinmar.oacis.applet.order.icon	16	0	4	27.285
dinmar.oacis.applet.ws.ccow	4	1	0	7.529
dinmar.oacis.common.order	59	0	1	30.304
dinmar.oacis.common.order.workspace	11	1	1	1.147
dinmar.oacis.core.config	50	0	1	226.510
dinmar.oacis.order.config	16	1	0	18.048
dinmar.oacis.order.workspace	2	1	0	1.014

What you see

Summary: JUnit failure modelnet   **Classification:** Main   **Status:** UNCONFIRMED, NEW, ASSIGNED, REOPENED

13 bugs found.

SAME BUGS (IF NO DUPLICATES), SAME ORDER

ID ▼	Product	Comp	Assignee	Status	Resolution	Summary ▲
25871	Main Ord	General		NEW	---	JUnit failure - com.oacis.applet.order.workspace.model.OrderBeanInitControlTest (modelnet)
28168	Main Ord	Workspac		NEW	---	JUnit failure - com.oacis.order.common.workspace.model.collection.BasicOrderCollectionTest (modelnet)
28178	Main Oac	Client P		NEW	---	JUnit failure - d...r.oacis.applet.core.communication.clientPush (modelnet) intermittent
28171	Main Ord	General		NEW	---	JUnit failure - ...cis.applet.order.gui.DispensableDrugComboBoxModelTest (Modelnet)
26675	Main Ord	General		NEW	---	JUnit failure - ...oacis.applet.order.icon.ApprovalTypeIconsTest (modelnet)
26741	Main Ord	Workspac		NEW	---	JUnit failure - dinmar.oacis.applet.order.workspace.WorkspaceProxyTest (modelnet)
23408	Main Oac	CCOW		NEW	---	JUnit failure - dinmar.oacis.applet.ws.ccow.CCOWWebServiceTest (modelnet)
28179	Main Ord	General		NEW	---	JUnit failure - dinmar.oacis.common.order.CompositeOrderTranslatorTest (Modelnet)
28180	Main Ord	General		NEW	---	JUnit failure - dinmar.oacis.common.order.workspace.WorkspaceOrderTest (modelnet)
26703	Main Oac	Common U		NEW	---	JUnit failure - dinmar.oacis.core.config.oacfg_CodeTest (modelnet)
28190	Main Oac	Common U		NEW	---	JUnit failure - dinmar.oacis.core.db.odr.ChangePasswordTest (modelnet) intermittent
26961	Main Ord	General		NEW	---	JUnit failure - dinmar.oacis.order.config.ServerCatalogResolverTest (modelnet)
28181	Main Ord	General		NEW	---	JUnit failure - dinmar.oacis.order.workspace.OrderInfoPopulatorTest (modelnet)

13 bugs found.

is what you get

Impact

- Who creates a ticket (prime or other) just checks for the proper syntax, details, lack of duplicate and verifies his ticket to be properly listed in the query

- The developer just closes his ticket. It is removed from the query results automatically.

- Much simpler work for the Junit prime, just compare side to side the Junit report and the Bugzilla query instead of a 3 way comparison of unsorted/un-normalized things

Excel document (link see Proposal tab)

- Becomes recommendations and links

	A	B	C	D	E	F	G	H
1	To make the Bugzilla reports working, create the new entries in Bugzilla exactly as is:							
2	(case/space/dash matters) "JUnit failure - " followed by							
3	single class: FQN name of the class e.g. com.oacis.somepackage.SomeClassNameTest							
4	multiple classes: package name e.g. com.oacis.sompackage							
5	followed by in brackets the name of the environment it applies e.g. (modelnet) (vig) (fwk) or for multiple environments if any (fwk/vig)							
6	If the bug is intermittent add "intermittent" at the end of the bug							
7	Do not put more than one package per ticket							
8	e.g. JUnit failure - com.oacis.somepackage.SomeClassNameTest (vig) intermittent						Reference ticket example	
9								
10	If the created Bugzilla entry does not appear listed properly when sorted by name in the Bugzilla report then something is wrong.							
11	The display order should also match the mailed report order.							
12								
13	Put in the ticket:							
14	An attachment with the copy of the JUnit report results page for the whole class							
15	a link to the JUnit history page for this test/package							
16	Write down if/when the same error happened							
17	Add your other comments if any at the end of the ticket							
18								
19	**7.4.1**		**Stream**	Opened	**All**	**modelnet**	**fwk**	**vig**
20	Bugzilla report		**MAIN**	**Bugzilla report**	report	report	report	report
21	JUnit Test history			**JUnit test history**	N/A	history	history	history
22			A250-P300	**Bugzilla report**	report	report	report	report
23				**JUnit test history**	N/A	history	history	history
24			A200-P250	**Bugzilla report**	report	report	report	report
25				**JUnit test history**	N/A	history	history	history
26								
27			**Stream**	All	**All**	**modelnet**	**fwk**	**vig**
28			**MAIN**	**Bugzilla report**	report	report	report	report
29			A250-P300	**Bugzilla report**	report	report	report	report
30			A200-P250	**Bugzilla report**	report	report	report	report
31								

Done and left to do

- Main is already normalized

- Bugzilla queries are already created for all the streams

- 751, 750, 740 Bugzilla tickets are still to normalize (name + environment + intermittent)

- Then adjust the Bugzilla queries for these streams

- Then compare the Junit reports with Bugzilla to see what is missing

- Then create Bugzilla queries returning all the Junit entries, opened or closed for each stream (less effective as closed tickets are not normalized)

Now the future is friendly!