



Katalon Studio

自動化測試軟體工具

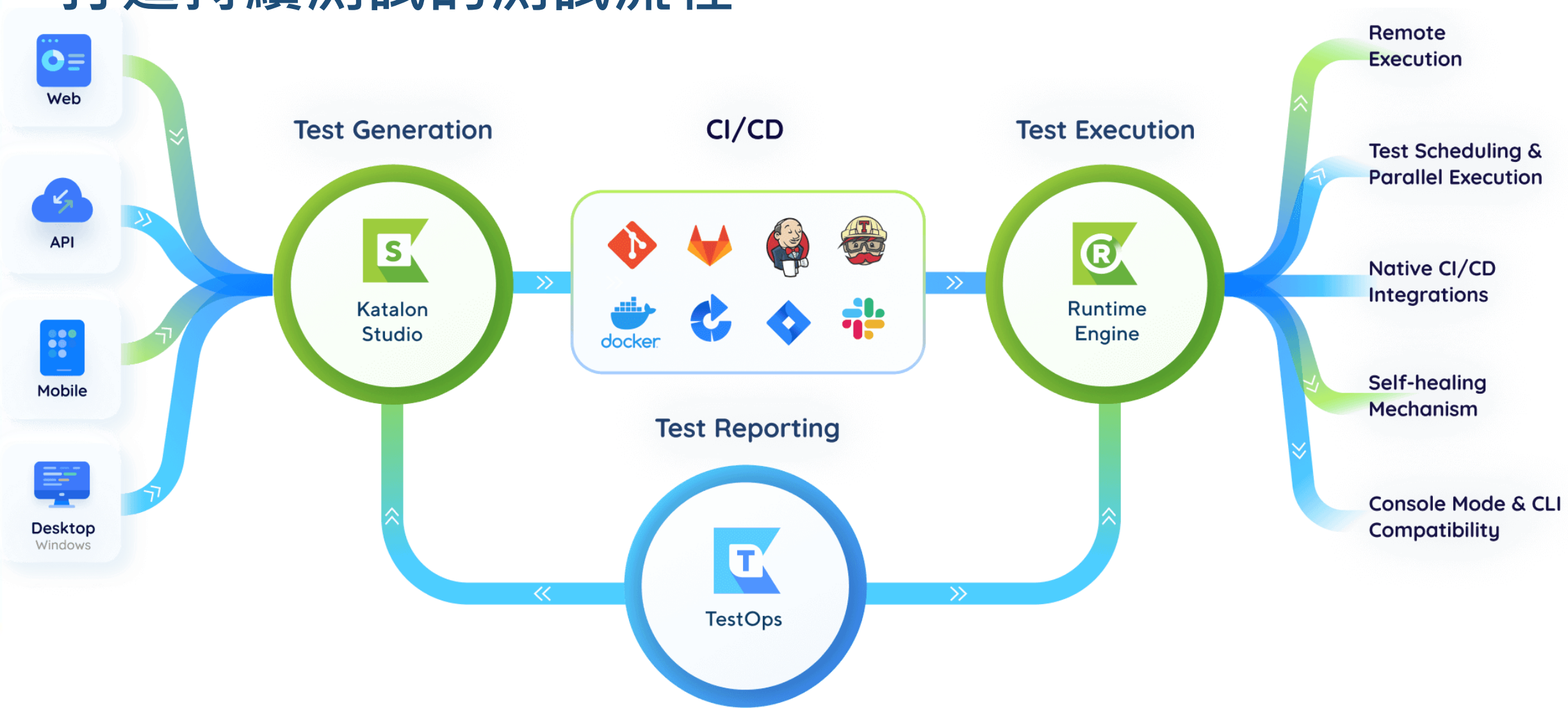


outline

- Overview
- No code (Codeless) testing.
- Test management.
- Test results.
- License Comparison.



打造持續測試的測試流程



Environments

Deployment OS



Windows 7+



macOS 10+



Linux (Ubuntu 14+)

Web Platform



Firefox 56+



Internet Explorer 9+



Google Chrome 58+



Microsoft Edge



Safari 12+



Headless Browsers

Mobile Platform



Android 6+



iOS 9+



Cloud Services



Industry Ratings

Gartner

★★★★☆ (4.4/5)



★★★★☆ (4.7/5)



★★★★☆ (4.5/5)



★★★★★ (5/5)



★★★★☆ (4.1/5)



★★★★☆ (4.4/5)



★★★★☆ (4.3/5)

Be a part of the 100,000+ companies using



Katalon Studio is a 2020 Customers' Choice in Software Test Automation



Katalon is ranked as a Top Automated Testing Software

No code (Codeless) testing.



測試案例 (Test case)

The screenshot displays the Selenium IDE interface with a test case titled "填入表單" (Fill form) for the "登入功能_玉山銀" (Login function -玉山銀) project. The test case consists of 9 steps:

Item	Object	Input	Output	Description
1 - Open Browser		""		
2 - Navigate To Url		"https://www.玉山銀行.com.tw/ba"		
3 - Click	button_			
4 - Switch To Window Title		"玉山銀行 E.SUN Internet E"		
5 - Click	input_loginformcustid			
6 - Set Text	input_loginformcustid	"F123456789"		
7 - Set Text	input_loginformname	"User123"		
8 - Set Encrypted Text	input_loginformpxsswd	"9KzOjDimb7xYNm4DpaGVEQ=="		
9 - Click	span_			

Below the test case table, the execution status is shown: Runs: 1/1, Passes: 1, Failures: 0, Errors: 0, Skips: 0. The console log shows the following details:

```
Test Cases/填入表單 (20.746s)
  (Default) Username =
  (Default) Password =
  1 - openBrowser("") (3.005s)
  2 - navigateToUrl("https://katalon-demo-cura.herokuapp.com/") (2.802s)
  3 - click(findTestObject("Object Repository/Page_CURA Healthcare Service/a_Make A...))
```

Test management.



Run Test Case with an external data source

Excel spreadsheet showing test data:

	A	B	C	D	E	F
1	Name	Password				
2	user1@linktech.com.tw	1234				
3	user2@linktech.com.tw	5678				
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						

Test Case Configuration Window:

File Name: C:\Users\KHCho\Desktop\testdata.xlsx
Sheet Name: Team A

Use first row as header Use relative path Bind to test case as string

No.	Name	Password
1	user1@linktech.com.tw	1234
2	user2@linktech.com.tw	5678



Visual Testing On TestOps (Enterprise)

Sample Visual Testing

Mismatch Show diff

Baseline Sample Visual Testing 2400x3028

Checkpoint Sample Visual Testing 2400x3028

The image displays a side-by-side comparison of two screenshots of the Amazon website. The left screenshot is labeled 'Baseline' and the right is 'Checkpoint'. Both screenshots show the same page content, including the Amazon logo, navigation links, a search bar, and a main message: 'This deal is currently unavailable, but you can find more great deals on our Today's Deals page.' Below the message is a loading spinner. The footer contains several columns of links under categories like 'Get to Know Us', 'Make Money with Us', 'Amazon Payment Products', and 'Let Us Help You'. The interface includes a 'Mismatch' button, a 'Show diff' button, and a close button (X) in the top right corner. There are also checkmark and cross icons in the top right area.



Test results.



Test Results

Test Cases Table

Passed Failed Error Incomplete Skipped

Export report Katalon TestOps Show Test Case Details

Search here...



No.	Name	Resolution	Video	
1	填入表單 (20.269s)			
2	登入帳號密碼開單_Jira (25.286s)	Click here to fix the broken Test Object		
3	登入帳號密碼開單_Jira (6.987s)			

Summary | Execution Settings | Execution Environment

Test Suite ID [Test Suites/填入表單以及Jira登入開單](#)
Host name KHCho - DESKTOP-9CPR34F
Katalon version 8.2.0.208
Start 2021-12-07 10:23:11
Elapsed 53.001s
Total TC 2
Passed 1
Error 0
Incomplete 1

OS Windows 10 64bit
Platform Chrome 96.0.4664.45
End 2021-12-07 10:24:04
Failed 0
Skip 0



Test results sent by email



Test Suite Execution Report

Dear Sir/Madam,

Your test suite has just finished its execution. Here is the summary report.

Host Name	KHCho - DESKTOP-9CPR34F		
Operating System	Windows 10 64bit		
Browser	Chrome 96.0.4664.45		
Test Suite	New Test Suite 1202		
Profile	default		
Result	Passed: 1	Failed: 0	Error: 0

You can now go to your test project to view the execution report.

This email was sent automatically by Katalon System. Please do not reply.

Thanks,
Katalon Studio

Test Suite

Formats ▾ **B** *I* [List Icons] [Link Icon] [Image Icon] [Table Icon] [Text Icon] [Text Icon] [Text Icon]

Test Suite Execution Report

Dear Sir/Madam,

Your test suite has just finished its execution. Here is the summary report.

Host Name	\${hostName}		
Operating System	\${os}		
Browser	\${browser}		
Test Suite	\${suiteName}		
Profile	\${executionProfile}		
Result	Passed: \${totalPassed}	Failed: \${totalFailed}	Error: \${totalError}

You can now go to your test project to view the execution report.

This email was sent automatically by Katalon System. Please do not reply.]

Thanks,
Katalon Studio


[Table Icon] [Close Icon] [Table Icon] [Table Icon] [Close Icon] [Table Icon] [Table Icon] [Close Icon]

Restore Defaults Apply



Katalon TestOps





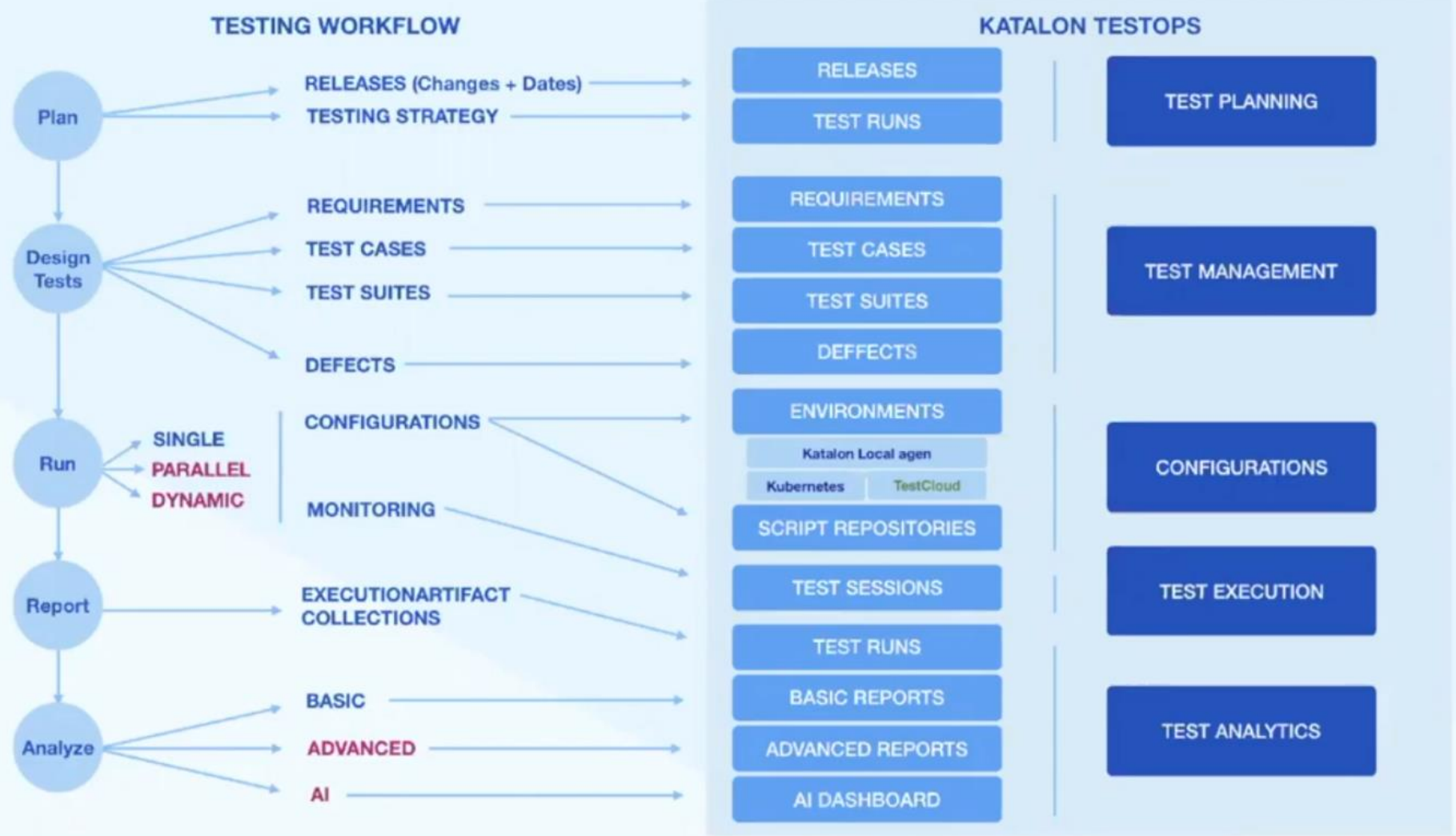
Test Planning - 可以進行持續整合，在本地的測試環境或是其他的CI/CD測試環境上來安排遠端執行。

Test Management - 我們可以用來整合其他的測試來源，像是Katalon Studio 或是 Jira。

Reports and analytics - 報告與分析結果



TestOps as a QA Orchestration solution



遠端執行 Remote Execution



Test Planning

測試計畫 Test Planning





Test Planning – Schedule

- 查看執行測試狀態 View the status of Test Runs



Test Run Calendar

Schedule Test Run

Schedule Sample Test Run

08	09	10	11	12	13		
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	

- 進到 Test Execution > Test Run Calendar
- 點選 Calendar 上的測試執行以查看摘要

Test Run: #2591 Reproduce docker image issue

Passed Nov 07, 23:44 0ms Details

0	0	0	0	0
Test Results (-13)	Passed (-6)	Failed (-7)	Error (+0)	Incomplete (+0)

Failed Test Results

Status	ID	Name	Time	Assc
--------	----	------	------	------

There is no data to display.

Test Suites

Status	Name	Profile	Platform	Duration	Total	P	F	E	I
--------	------	---------	----------	----------	-------	---	---	---	---

There is no data to display.



Test Planning – Release

將 Test Run 連結到 Release 上

1 Dashboard Planning Test Management Test Execution 2 Reports Configurations

3 Test Runs Visual Testing Requirements Test Cases Defects

Test Run: #56 4 Demo release 5

Summary Test Results Files Defects Passed Mar 15 15s default

1 Test Results (-1) 1 Passed (-1) 0 Failed (+0) 0 Error (+0) 0 Incomplete (+0)

Passed Failed Error Incomplete

將 Test Run 連結到 Release 上

進入 Project > Report > Test Runs > Test Run # 編號 > 右上角 Release 按鈕

顯示下拉選單可以連接到Release

Started Duration

Sort: ID (Ascending)



Test Planning – Builds

- Manage a Build

查看/編輯 Build

進入 Project > Planning > Release > 選擇對應的 Release > 查看底部的 Builds 區塊 > 選擇一個 Build

進入 Build 頁面，可以查看關聯的 Test Run 列表

Summary

Description

Jira Project

Katalon

Jira Release

7.3.7

Test Cases

Status: All ▾

Builds

Name	Test Runs	Test Cases	
build 3	5	<div style="width: 100%;"><div style="width: 50%; background-color: green;"></div><div style="width: 50%; background-color: red;"></div></div>	<div style="display: flex; align-items: center;">8<div style="border: 1px solid red; padding: 5px;"> Edit Delete</div></div>

Test Management



Test Management – Defects

Data Collection Production | Dashboard | Planning | Test Management | Test Execution | **Reports** | Configurations

Test Runs | Visual Testing | Requirements | Test Cases | Defects

Test Run: #2590

Summary | Test Results | Files | **Defects**

Link to a release | Failed | Oct 28 | 12s

查看 TestOps 中的 Defects

點擊 ID 選擇一個 Test Run，在 Test Run 頁面選擇 Defects

Data Collection Production | Dashboard | Planning | Test Management | Test Execution | **Reports** | Configurations

Test Runs | Visual Testing | Requirements | Test Cases | **Defects**

Defects

Type	Key	Name
Failed	KAT-105	pm test
Passed	KAT-104	Test Jira PM
Passed	KAT-103	Verify Successful Login
Failed	KAT-102	KAT-102

查看 TestOps 中的 所有的 Defects

如果要查看其他所有的Defects，點擊 Report > Defects



Test Management – JIRA Defects

Link Test Results to JIRA

The screenshot shows the TestOps interface for Test Run #2590. The 'Test Results' tab is active, displaying a table of test results. A blue callout box highlights the 'Links' column for a failed test result (ID 100868137).

Status	ID	Name	Actions	Links
Failed	100868137	test_basic.py::test_add_pass test_basic.py Profile:		✖

將Test Result 連結到JIRA

TestOps > 進入Project > Report > Test Runs >
點擊ID選擇失敗的 Test Run，點擊測試結果選項

可以點選進去連結到Jira開單



Test Management – JIRA Defects

Data Collection Production | Dashboard | Planning | Test Management | Test Execution | Reports | Configurations

Test Runs | Visual Testing | Requirements | Test Cases | Defects

Test Run: #2590

Summary | **Test Results** | Files | Defects

Failed Oct 28 12s

Link to a release

Filter by Name

Status: All | Test Suite: All | Started: All | Profile: All | Sort: ID (Ascending)

Status	ID	Name	Time	Assertions	Links
✓	100868137	test_basic.py::test_add_pass test_basic.py Profile:	2s Oct 28		
✗	100868138	test_basic.py::test_add_fail test_basic.py Profile: > ??? E assert 4 == 3 E + where 3 = a test\test\test_basic.py:7: AssertionError	2s Oct 28		
✓	100868139	test_basic.py::test_sub_pass test_basic.py Profile:			
✗	100868140	test_basic.py::test_sub_fail test_basic.py Profile: > ??? E assert -1 == 0 E + where 0 = sub(1, 1) C:\Users\...Downloads \test\test\test_basic.py:12: AssertionError %	Oct 28		
✓	100868141	test_basic.py::test_mul_pass test_basic.py	1ms Oct 28		

test_basic.py::test_add_fail

Jira Defects (E.g. DEMO-1)

Please install the Jira Integration add-on in your browser to use this feature. [Learn more](#)

ID/Feature	Summary	Status
There is no data to display.		

Summary

```
> ??? E assert 4 == 3 E + where 3 = add(1, 2) C:\Users\...h\Downloads\test\test\test_basic.py:7: AssertionError
```

將 Test Result 連結到 JIRA

在 JIRA Defects 欄位中，搜索關聯的 JIRA Issues。

將測試結果連結到 Jira bug。

Errors

```
> ???  
E assert 4 == 3  
E + where 3 = add(1, 2)  
C:\Users\...h\Downloads\test\test\test_basic.py:7: AssertionError
```



Test Management – JIRA Requirements

Link Test Cases to JIRA Requirements

Test Case: CuraHealth

Edit

將Test Result 連結到JIRA

TestOps > 進入Project > Test Management > Test Cases
進入Test Case 頁面，可搜尋到 Jira Requirements 欄位

Jira Issue 可以添加到 linked Issue 欄位

Linked Issue

Requirement

Defect

Jira Requirements (E.G. DEMO-1)

KAT-104



ID/Fe

KAT-104

Test Jira PM

Status

There is no data to display.



Test Management – JIRA Requirements

- Katalon Software project
- KAT board Board
- Backlog
- Active sprints
- Reports
- Issues**
- Components
- Releases
- Project pages
- Add item
- Project settings

Projects / Katalon / KAT-104

Test Jira PM

- Attach
- Create subtask
- Link issue
- ...

在 Jira 中查看已連結的 Issue

在 TestCase 連結到 Jira 需求後，可以點擊 Katalon TestOps 的 Jira Issue，會連結到 Jira Issue。

Show. All Comments History work log Newest first

W Add a comment...

Pro tip: press M to comment

To Do

Priority = Medium

Linked Test Runs	Open Linked Test Runs
Linked Test Cases	Open Linked Test Cases

More fields Story Points, Original estimate, ...

Created 21 hours ago Updated 21 hours ago [Configure](#)



Test Management – 查看 Requirements

在 TestOps 中查看 Requirement



Releases Requirements

Requirements

Requirements

Key: All Feature: All

Type Key Name

KAT-106 PM Story 1

KAT-104 Test Jira PM

KAT-101 BUG 4

KAT-103 Verify Successful Login

KAT-102 KAT-102

KAT-12 Test contains text of issue

1

1

2

1

將 Test Result 連結到 JIRA

TestOps > 進入 Project > Planning > Requirements
顯示 Requirements 頁面

查看所有與 Jira Issue 已連結的 Test Cases

Visual Testing On TestOps

Visual Testing

Katalon TestOps – 可以在測試執行期間擷取到的影像與可視覺化測試進行比較。

配置 Visual Testing

- 啟用截圖擷取在Katalon Studio裡面。
- 進入 Reports > Visual Testing > 查看 Visual Test Runs 頁面
- 點擊 Test Run 的 ID 出現 Test run 的 Result 頁面 > 選擇 Checkpoints 分頁。

Results **Checkpoints** Comments Passed 22 mins ago 6m 36s [Test Results](#)

Status: All ▾

Sample Visual Testing New

Sample Visual Testing 2 New

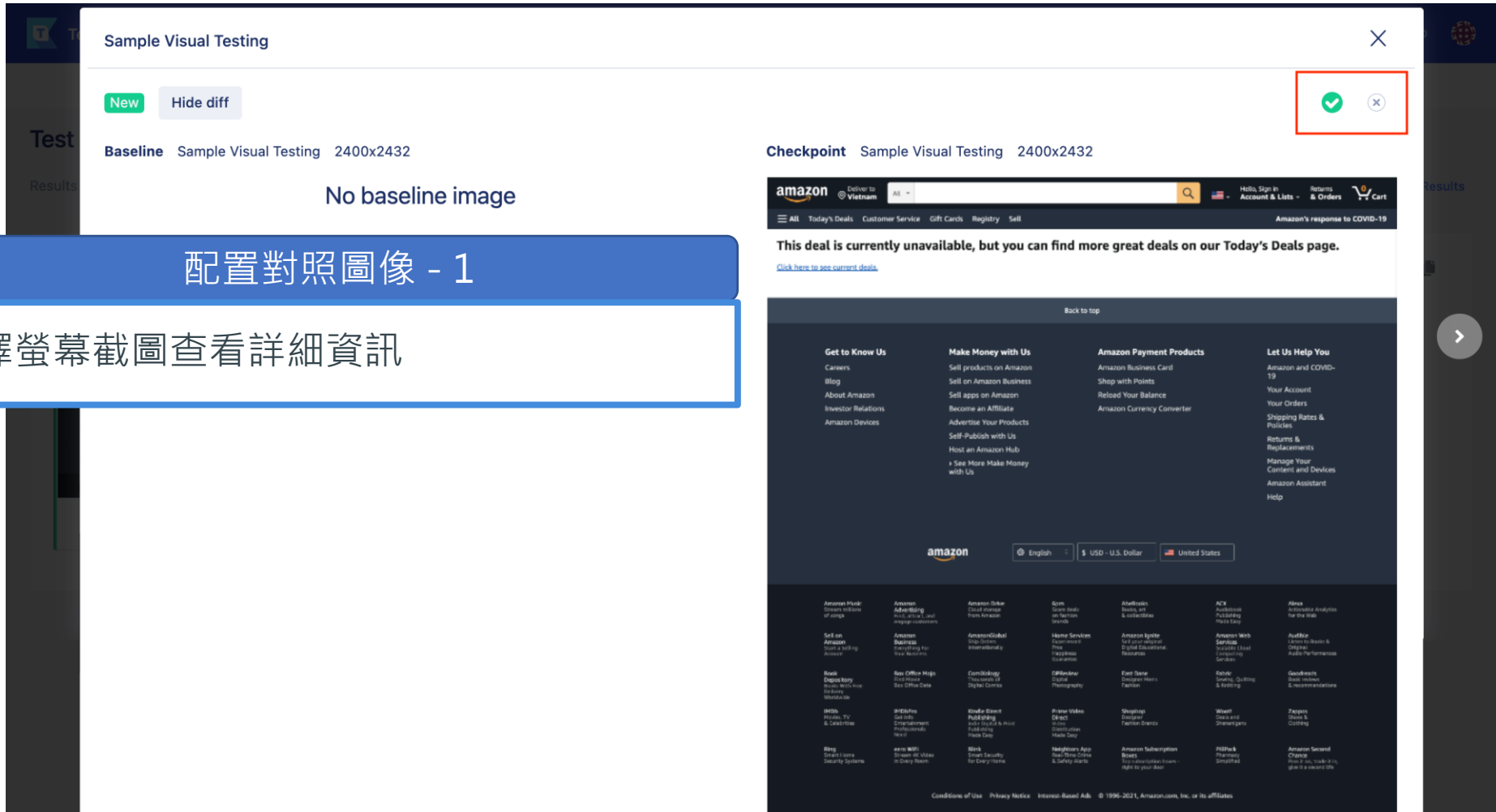
查看Checkpoints

可以查看在測試執行期間擷取到的螢幕截圖。



Visual Testing

配置對照圖像 – 設置對照圖用來與下一次測試運行的螢幕截圖進行比較。



配置對照圖像 - 1

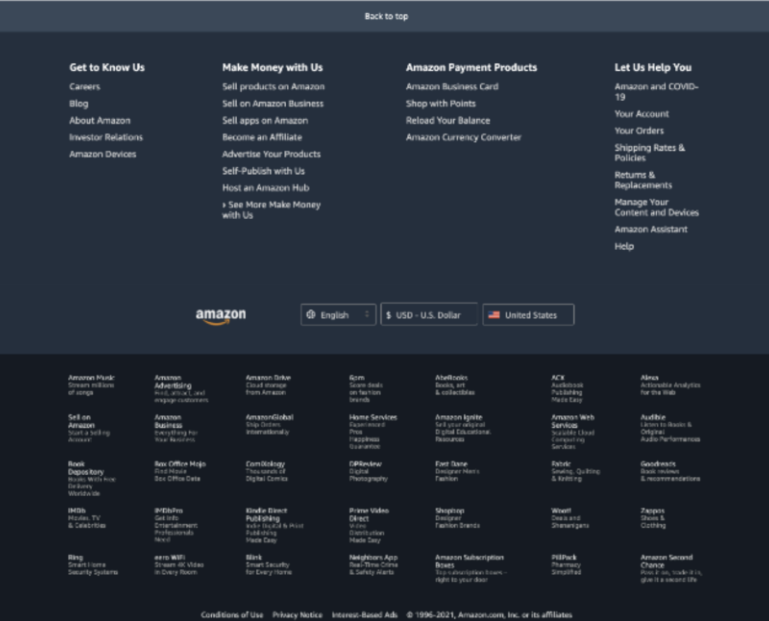
選擇螢幕截圖查看詳細資訊

Checkpoint Sample Visual Testing 2400x2432



This deal is currently unavailable, but you can find more great deals on our Today's Deals page.

[Click here to see current deals.](#)



Visual Testing

配置對照圖像 – 設置對照圖用來與下一次測試運行的螢幕截圖進行比較。

Test Run: #1

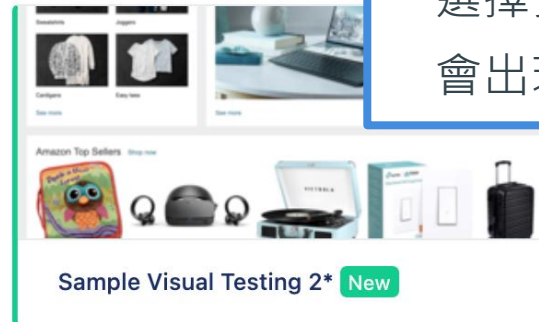
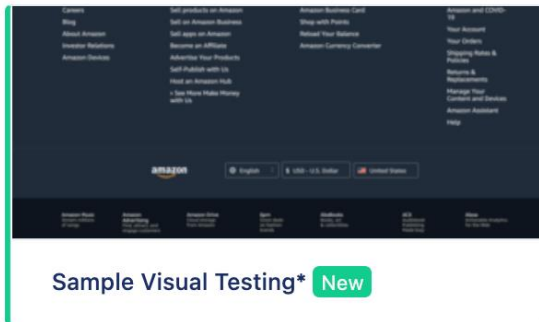
Results Checkpoints Comments

Unsaved

Passed

🕒 2 hours ago ⌚ 9m 54s 🔄 Test Results

Status: All ▾



配置對照圖像 - 2

選擇螢幕截圖右上角的通過或失敗圖示，然後關閉螢幕截圖。
會出現一個Unsaved的圖示在Checkpoints頁面上



Visual Testing

配置對照圖像 – 查看對照圖像訊息

Test Run: #1

Save to baseline

Results Checkpoints Comments

Unsaved

Passed

🕒 2 hours ago

🕒 9m 54s

🔗 Test Results

2

Visual Checkpoints

2

Passed

0

Failed

0

Unresolved

🟢 Passed 🟡 Failed 🟠 Unresolved

Failed Checkpoints

Status: All ▾

There is no data to display.

配置對照圖像 - 3

轉到 Result 頁面，點擊 Save to baseline

如果第一次的運行Test Suite且通過測試。則螢幕截圖會自動標記為通過，且沒有Save to baseline按鈕。

可以打開螢幕截圖點擊“失敗”圖示，然後切換為通過，以便出現“Save to baseline”按鈕。

Reports and analytics



Reports

Test Cases

Active

Stale

Slowest

Flaky

Platform Coverage

Filter by Name

Path: All ▾ Status: All ▾ Type: All ▾ Last Run: All ▾ Maintainer: All ▾

Sort: Last Test Run (Descending) ▾

Status	Name	Maintainer	Assertions	Last Test Run	Average Duration	Flakiness (%)	Requirements
--------	------	------------	------------	---------------	------------------	---------------	--------------



TestOps reports should failed

2 mins ago

8ms

0.00

4ms



TestOps reports should throw exception

2 mins ago

1ms

0.00

1ms



TestOps reports add(1, 1)



TestOps reports add(1, 2)



TestOps reports add(2, 1)



TestOps reports Nested describe it should run

2 mins ago

0ms

0.00

0ms



TestOps result should failed

2 mins ago

1ms

0.00

0ms

Active Test Cases

查看所有的 Test Cases 以及最近執行的 Test Run
可以點擊當前執行的 Test Case 查看運行摘要



Reports

Test Cases

Active **Stale** Slowest Flaky Platform Coverage

Filter by Name

Path: All ▾ Status: All ▾ Type: All ▾ Last Run: All ▾ Maintainer: All ▾

Sort: Last Test Run (Ascending) ▾

Status	Name	Maintainer	Assertions	Last Test Run	Average Duration	Flakiness (%)	Requirements
✓	Devide by zero			Jul 24, 2020 1m 49s	34s	25.00	Devide
✓	Plus			Jul 24, 2020 1m 22s	14s	0.00	Plus
✗	clickApprove Test Cases/admin published plugins/component						
✗	clickReject Test Cases/admin published plugins/component						
✗	rejectPlugin Test Cases/admin published plugins/component						
✗	searchPlugin Test Cases/admin published plugins/component	Huỳnh Thị Liễu		Sep 01, 2020 177ms		0.00	
✗	submitRejectReason Test Cases/admin published plugins/component	qa		Sep 01, 2020 518ms		0.00	

Stale Test Cases

列表顯示不再經常使用的 Test Cases

可以點擊瀏覽當中的 Test Cases 來決定是否更新



Reports

Test Cases

Active Stale **Slowest** Flaky Platform Coverage

Filter by Name



Path: All ▾ Status: All ▾ Type: All ▾ Last Run: All ▾ Maintainer: All ▾

Sort: Average Duration (Descending) ▾

Status	Name	Maintainer	Assertions	Last Test Run	Average Duration	Flakiness (%)	Requirements
✖	Assertion(FAILED) with Custom Keyword Test Cases	Huỳnh Thị Liễu		📅 Feb 25 🕒 40s	1m 39s	0.00	
✖	TC1 Test Cases		0	📅 Jan 27 🕒 4s	1m 1s	22.22	KAT-16
✔	Order and check out a single product using coupon Test Cases/Custom-keyword samples	Huỳnh Thị Liễu	4	📅 Feb 03 🕒 1m 5s	1m 1s	0.00	
✖	Order and check out multiple products Test Cases/Data-driven samples						
✔	Order and check out a single product Test Cases/Custom-keyword samples						
✔	Assertion(PASSED) with Custom Keyword Test Cases						
✔	TC3_Visual Testing Example	Huỳnh Thị Liễu	7	📅 Feb 01	40s	40.00	

Slowest Test Cases

列表顯示擁有最長的平均運行時間 Test Cases
可依據此報告來決策調整



Reports

Test Cases

Active Stale Slowest **Flaky** Platform Coverage

The most unreliable test cases.

Flaky



Name	History (Old → New)	Flakiness (%)
Async test.should be timeout		70.00
pasteboard		50.00
Take Full Page Screenshot As Checkpoint		50.00
Takescreenshot		
screenshot		
imgbox		
MapTestResidential		
Copy		40.00

Flaky Test Cases

顯示目前測試歷史中不穩定的 Test Cases

可以點擊瀏覽Detail以及深入研究調查不穩定的因素



Reports

Test Cases

Active Stale Slowest Flaky **Platform Coverage**

Test case quality by OS and browser-basis.

Platform Coverage

Last 2 months

Test Cases

Unknown



add



Android -
Test Cases/real devices



Android - exsiting apps ID



Platform Coverage

可以依據作業系統、瀏覽器來查看 Test Cases 的質量
另外可以切換時間週期來檢索目前的平台覆蓋率

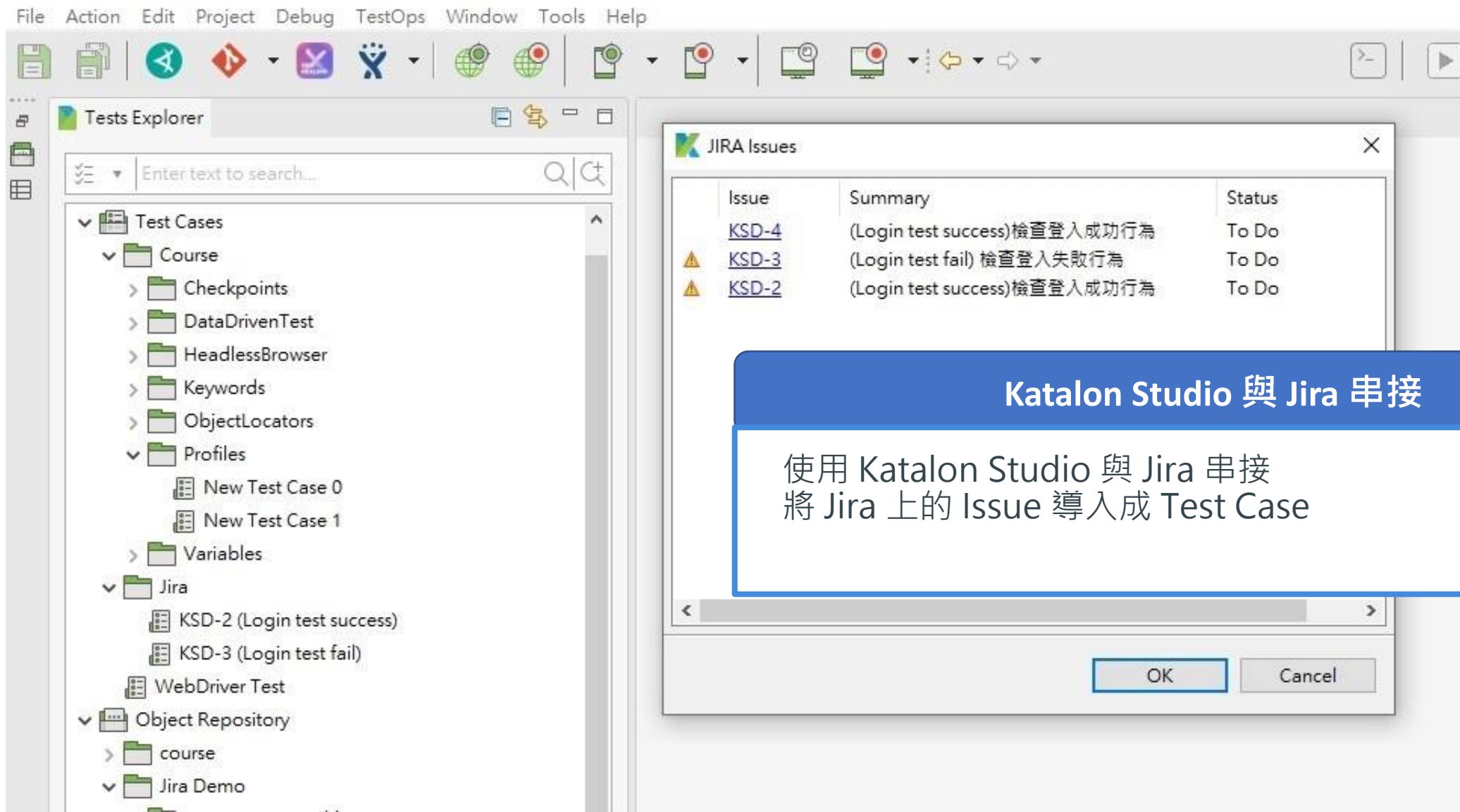


Async test should be timeout





Katalon DevOps Solution

Katalon DevOps Solution



The screenshot displays the Katalon Studio application window. The menu bar includes File, Action, Edit, Project, Debug, TestOps, Window, Tools, and Help. The toolbar contains various icons for file operations and testing. The Test Explorer panel on the left shows a tree view of test cases, including folders for Course, Profiles, Jira, and Object Repository. The JIRA Issues dialog box is open, showing a table of issues.

Issue	Summary	Status
KSD-4	(Login test success)檢查登入成功行為	To Do
 KSD-3	(Login test fail) 檢查登入失敗行為	To Do
 KSD-2	(Login test success)檢查登入成功行為	To Do

Katalon Studio 與 Jira 串接

使用 Katalon Studio 與 Jira 串接
將 Jira 上的 Issue 導入成 Test Case

OK Cancel



Katalon DevOps Solution

objects Filters Dashboards People Plans Insight Apps **Create**

Search [?] [Settings] [Profile]

Projects / Katalon Studio Demo / KSD-4

(Login test success) 檢查登入成功行為

Attach Create subtask Link issue ...

Katalon Studio 與 Jira 串接

Katalon Studio 執行測試完成

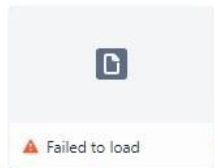
會自動回傳測試狀態以及上傳測試結果報告

1-Test Status

2-上傳檔案壓縮檔

3-可下載壓縮檔

Attachments (1)



Add a comment...

Pro tip: press M to comment

Test Result

Status: **PASSED** 1

Attachments: 20220318_164647.zip 2

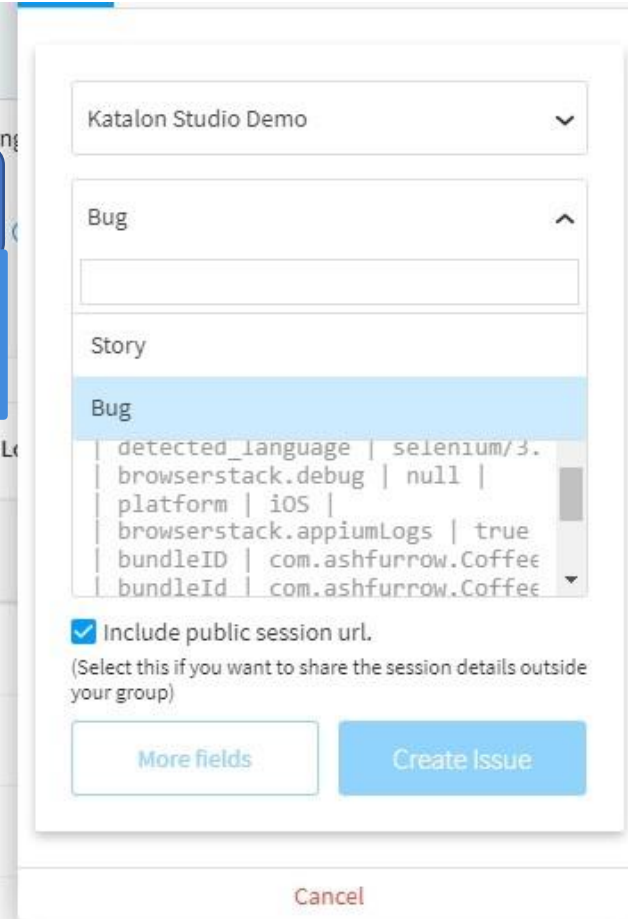
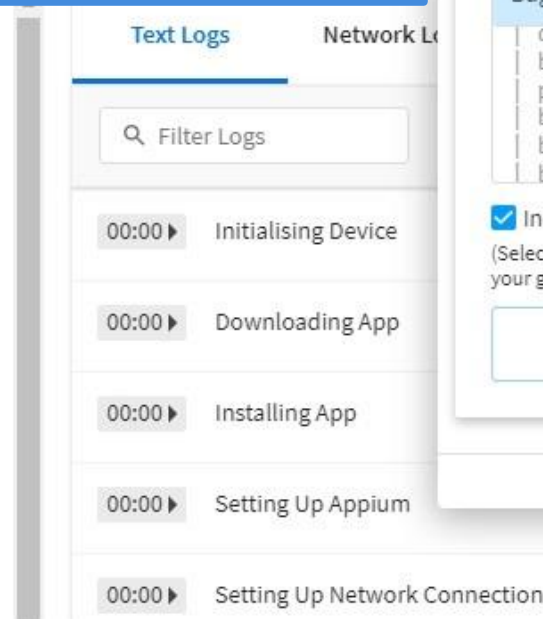
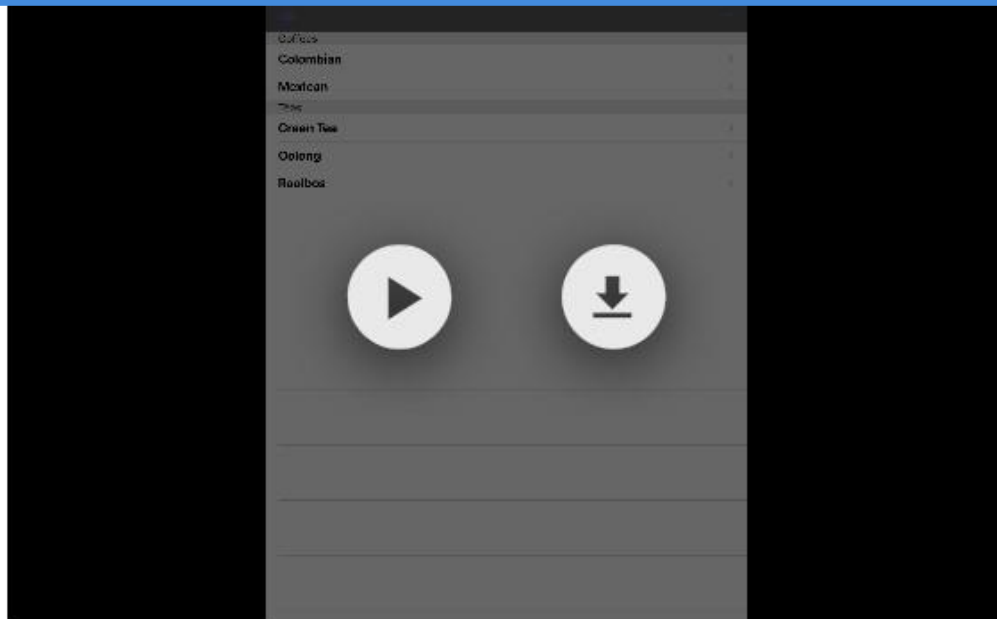
名稱	類型	壓縮大小
20220318_164647.csv	Microsoft Excel 逗點分隔...	
20220318_164647.html	Chrome HTML Document	
execution.properties	PROPERTIES 檔案	
execution.uuid	UUID 檔案	
execution0.log	文字文件	
JUnit_Report.xml	Microsoft Edge HTML D...	
testCaseBinding	檔案	
tsc_id.txt	文字文件	

Quickstart

Katalon DevOps Solution

Katalon Studio 遠端執行 Mobile 測試 (BrowserStack)

經由 Studio 執行 Mobile 測試，在 BrowserStack 上面顯示執行結果。
也可以回報問題追蹤，創建 Issue 在 Jira 上。



License Comparison

許可證類型 – Katalon Studio & Katalon Runtime Engine

Per-User license



- 一個許可證對應到一位個人用戶
- 許可無法在多位使用者間共享，但可以被轉移(如員工離職或離開專案)

Floating license



- 一個許可證可以共享無限制的帳戶及機器
- 適用於所有類型的執行環境

彈性的許可證模型以符合您的需求





Katalon TestOps

測試編排，關聯DevOps，無縫集成測試生態系。

\$Free 2K /executions/month

\$Number / executions /month

Test executions

- ✓ 改進的工作流程
- ✓ 簡化的DevOps
- ✓ 第三方串接的整合平台
- ✓ 開箱及用的報表分析



Katalon Studio Enterprise

無代碼快速創建，跨平台執行和維護測試。在所有平台上生成強大的測試。

\$170 /license/month

\$1,899 /license/Annual

per-User license

- ✓ 輕鬆為所有平台和操作系統生成自動化測試
- ✓ 可輕鬆儲存所有UI元素，以提高可重用性
- ✓ 提供初階使用者良好的無代碼體驗
- ✓ 針對專業開發者也提供無限的測試擴展



Runtime Engine

提高自動化效率，在 CI/CD Pipelines 或是透過命令列介面執行測試。

\$135 /license/month

\$1,499 /license/Annual

Floating license

- ✓ 利用 console 模式或命令列介面執行測試
- ✓ 創建處理操作以控制多個執行
- ✓ 在虛擬環境上測試執行

