

2019

## 2019年测试行业技术杂谈





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01

# 测试工具大盘点

## 2019年5款热门API自动化测试工具

Product	 POSTMAN	 APACHE JMeter™	 Katalon	 TRICENTIS	 apigee
Available since	2012	1988	2015	2007	2004
Application Under Test	API	API	Web (UI & API) Mobile apps	Web (UI & API) Mobile apps	API
Pricing	Paid + Free	Open Source	Free	Paid + Free	Paid + Free
Supported Platform	Windows Linux MacOS	Windows Linux MacOS	Windows Linux MacOS	Windows	Windows Linux MacOS
Ease of installing and use	Easy to setup & use	Advanced programming skills needed to setup & use	Easy to setup & use	Easy to setup. Need training to properly use the tool	Require end-points management knowledge to use

# Katalon

The screenshot displays the Katalon Studio IDE interface. The top toolbar includes icons for file operations (save, open), project management (add, delete), test execution (run, debug), and a 'Keyword' button. The left sidebar contains a search bar and a tree view with 'Test Cases' and 'Object Repository'. The 'Object Repository' is expanded, showing a list of actions: 'Delete an existing issue with', 'Search issues by Jql with', 'Get an issue with hard cod', 'Edit an existing issue havir', and 'Peatch a new comment int'. The main editor area shows a Java script snippet for 'Verify issue information'.

```
1 * import static com.kms.katalon.core. checkpoint.CheckpointF
21
22 // Verify response code
23 WS.verifyResponseStatusCode(response, 200)
24
25 // Verify response information
26 WS.verifyElementPropertyValue(response, 'fields.project.key
27 WS.verifyElementPropertyValue(response, 'issuetype.name, 'E
```

Below the script, the test structure is outlined:

- Feature: Verify issue infomation
  - Scenario: Verify issue infomation by Id
    - Given Jira System is available
    - When I send "GET" request to get information of an issue
    - Then I get response code "200"

# TRICENTS

Enter Vehicle Data 7

Enter Insurant Data

Enter Product Data

Make

-please select-

Engine Performance [kW]

Date of Manufacture

MM/DD/YYYY

Number of Seats

-please select-

Fuel

-please select-

List Price [\$]

License Plate Number

Annual Mileage

Next >>

Logical Name	Value	Action
Create Vehicle Insurance		
Enter Vehicle Data		
Make	Audi	Input
Engine Performance [kW]	200	Input
Year of Construction	{Year}	Input
Number of Seats	5	Input
Fuel	Petrol	Input
List Price [\$]	35.000	Input
License Plate Number	B-CD 123	Input
Usage	Private	Input
Annual Mileage	10.000	Input
Next	{CLICK}	Input
Enter Insurance Data		
Enter Product Data		
Start Date		
Insurance Sum [\$]		
Payment Option		
Next		
Verify Quote Details		

Details		Test configuration	
Name		Loginfo	
	ExecutionLists	115	35
	Automated	45	7
	Create Quote		
	ActualLog	45	7
	Open Sample Application		
	Create Automobile Quote	14	2
	Create Truck Quote	13	4
	Create Camper Quote	17	1

GZ

Gary Zhang  
cbcy-10110-eval

< PUBLISH

API Products

**Portals**

Developers

Apps

SWITCH TO CLASSIC


apigee

Portals > API120-Goods > Overview

Help Live Portal


Manage cbcy-10110-eval-api120goods

Have questions? [Learn more...](#)




Theme

Add style with CSS rules




Pages

Create and publish pages using Markdown




Users

Manage portal user accounts




APIs

Manage visibility and entitlements of API products




Assets

Manage images and other assets



Menus

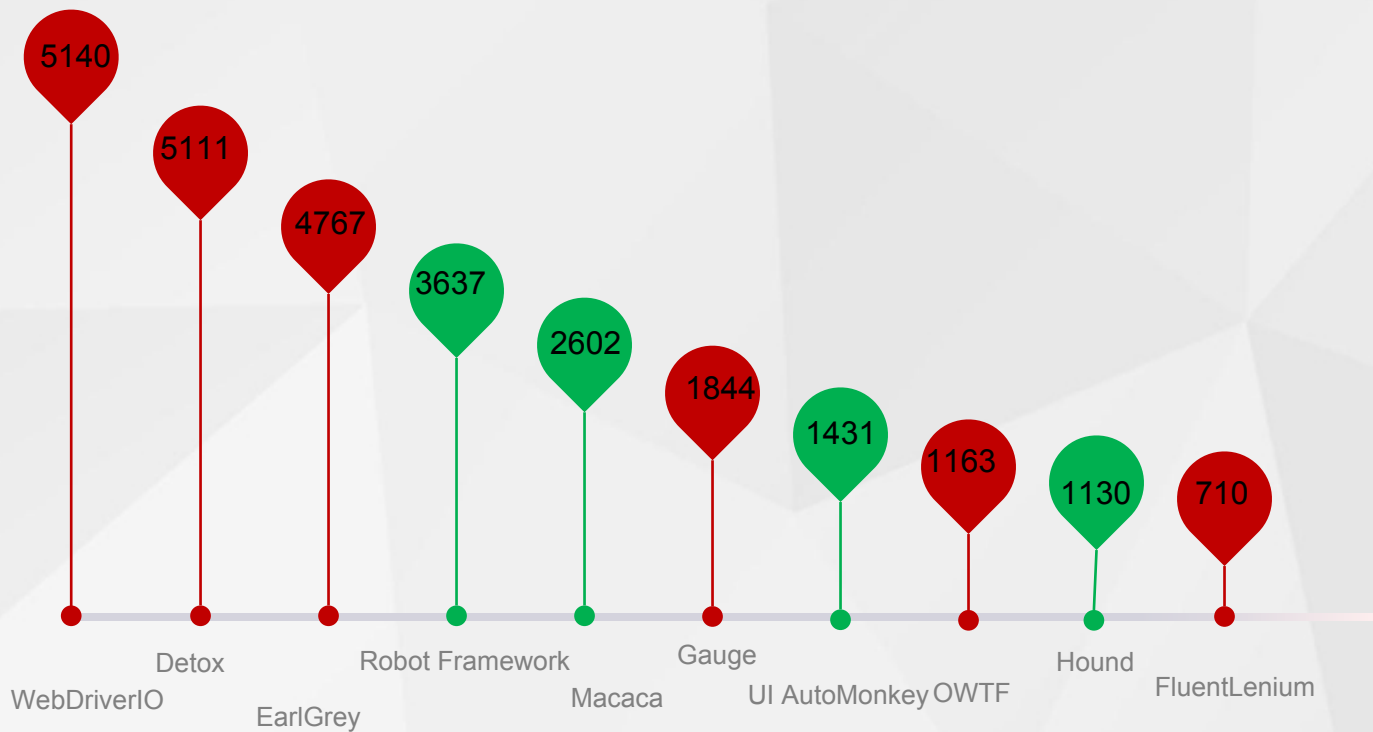
Change the information architecture



Settings

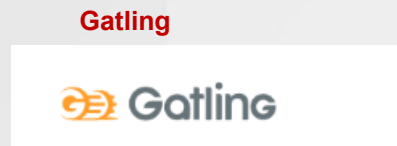
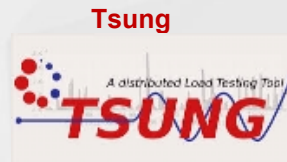
Custom scripts, domain, email settings...

## 2019年GitHub 10款最受欢迎自动化测试工具

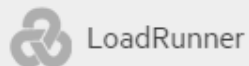




# 2019年常见性能测试工具



ApacheBench



Loadrunner

Jmeter

## 2019年常见缺陷管理工具

系统名称	功能侧重点
JIRA	集项目计划、任务分配、需求管理、错误跟踪于一体。
Quality Center	基于WEB测试管理工具，结合有BUG管理，需求管理及用例管理等功能
Mantis	基于Web的Php+Mysql的开源BUG管理系统
禅道	需求、用例、bug管理平台



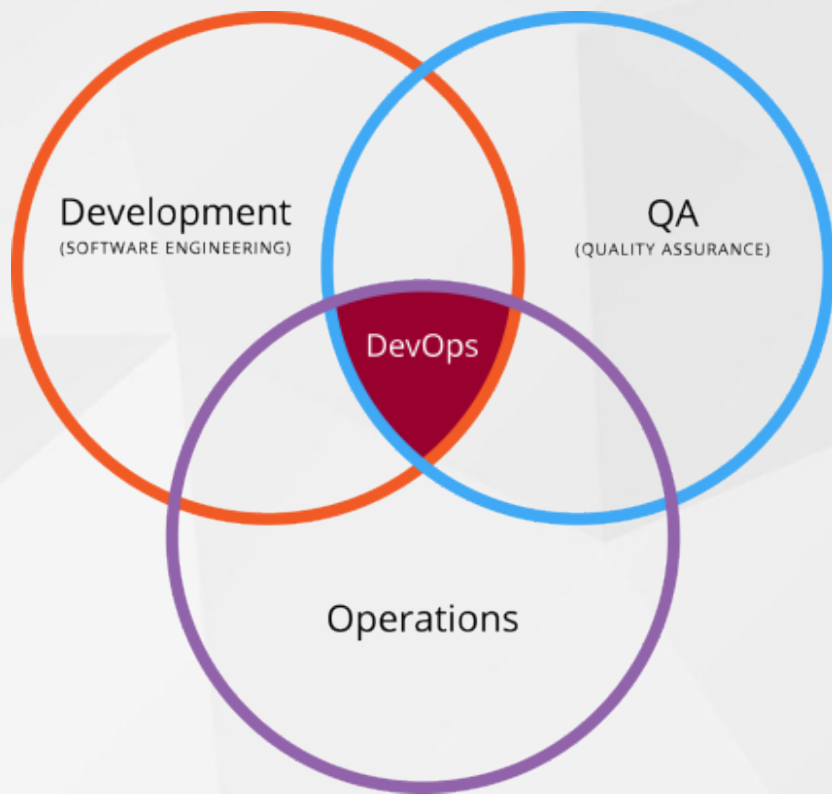
02

**DEVOPS**

## DevOps的定义

DevOps ( Development和Operations的组合词 ) 是一种重视「软件开发人员 ( Dev ) 」和「IT运维技术人员 ( Ops ) 」之间沟通合作的文化、运动或惯例。透过自动化「软件交付」和「架构变更」的流程，来使得构建、测试、发布软件能够更加地快捷、频繁和可靠

## DevOps的角色定位



## DevOps的重要实践



持续集成



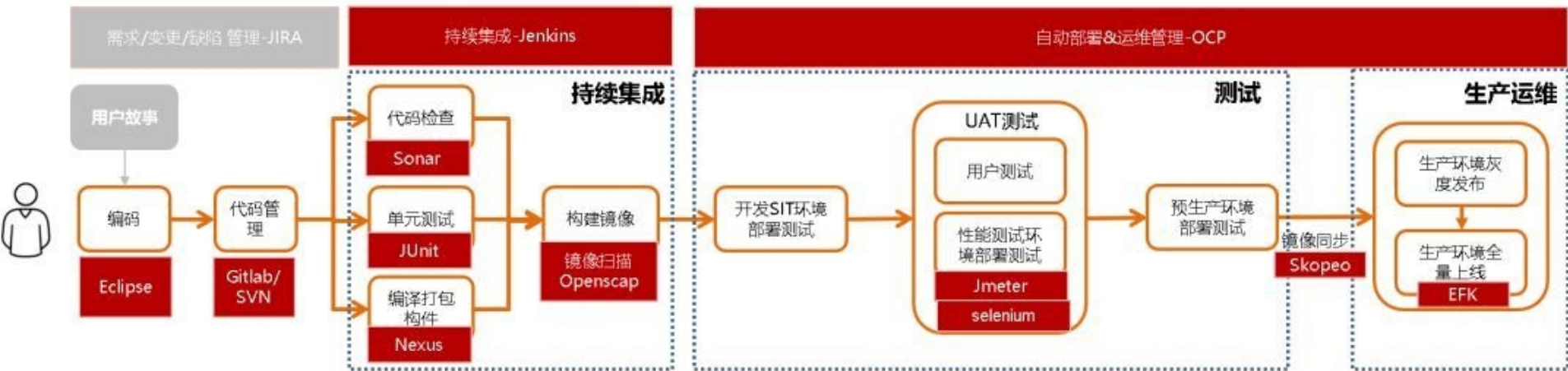
持续交付



微服务



基础设施即代码



## DevOps常用工具

1

### Jenkins

基于Java开发的一种持续集成工具，用于监控持续重复的工作，旨在提供一个开放易用的软件平台

2

### Ansible

基于Python开发，集合了众多运维工具的优点，实现了批量系统配置、批量程序部署、批量运行命令等功能。

3

### Docker

Docker 是一个开源的应用容器引擎，让开发者可以打包他们的应用以及依赖包到一个可移植的容器中，然后发布到任何流行的 Linux 机器上，也可以实现虚拟化。

4

### Kubernetes

Kubernetes是Google 团队发起并维护的基于 Docker 的开源容器集群管理系统，它不仅支持常见的云平台，而且支持内部数据中心。

5

### git

git是一个开源的分布式版本控制系统，可以有效、高速地处理从很小到非常大的项目版本管理





03

## 测试工作的变革与展望

# 面临的挑战



# 对测试的要求

Changes to the way we test

缩短迭代周期

测试角色的转变



弥补团队沟通的裂痕

对现有工具的定制化

承担更多的职责

# Q&A

