

Dimitri Gielis

Making your awesome APEX app available



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Dimitri Gielis

- ❖ Founder & CEO of APEX R&D
- ❖ 19+ years of Oracle Experience (OCP & APEX Certified)
- ❖ Oracle ACE Director
- ❖ “APEX Developer of the year 2009” by Oracle Magazine
- ❖ “Oracle Developer Choice award (ORDS)” in 2015
- ❖ Author Expert Oracle APEX
- ❖ Presenter at Conferences





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@dgielis

Dimitri Gielis Blog (Oracle Application Express - APEX)
I created this Blog to share my knowledge especially in Oracle Application Express (APEX) and my feelings ...

FRIDAY, SEPTEMBER 26, 2014

APEX 4.2.6 patch available

Oracle released [APEX 4.2.6](#) yesterday, it's also available from My Oracle Support as a patch set 19595896.

Here's the table of bug fixes.

Table 6 Bugs Fixed in the Oracle Application Express 4.2.6.00.03 Patch Set

Bug Number	Description
18393429	Importing pre-4.2 application with data loading results in runtime error
18609856	APEX_WEB_SERVICE.CLOBBASE642BLOB converts incorrectly
18658967	Corrupted HTML mail messages are created from APEX_MAIL.SEND
18719750	ORA-01858 during application import
18733989	Errors picking up session with cookie when TOP CALL is not F, SHOW, or ACCEPT
19021052	Oracle Application Express 4.2.4 throwing error while generating check boxes
19313700	Check box fails with ORA-06502 after upgrade from release 4.0 to 4.2.4
19482775	ORA-06502 when importing application containing translations

Applying the patch took less than 7 minutes.

```
Session altered.
...Validating Application Express
...Database user "SYS", database schema "APEX_040200", user# "106" 20:48:40
...Compiled 0 out of 3014 objects considered, 0 failed compilation 20:48:40
...271 packages
...263 package bodies
...452 tables
...11 functions
...16 procedures
...3 sequences
...457 triggers
...1320 indexes
...211 views
...0 libraries
...6 types
...0 type bodies
...0 operators
...0 index types
```

My next public appearances:

- [Oracle Open World: 27-SEP/2-OCT-2014](#)
- [ORCLAPEX-BE Meetup: 19-NOV-2014](#)
- [ODTUG KScope: 21/25-JUN-2015](#)

About Me

[Dimitri Gielis](#)

Passionate about Oracle and especially Oracle Application Express (APEX). Building applications with love @ APEX R&D.

[View my complete profile](#)

 **ORACLE**
ACE Director

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Twitter

 Follow @dgielis

A blue cartoon bird, resembling a Twitter bird, standing on a reflective surface. The bird is facing right, with its wings slightly spread and its beak open as if it's chirping. It has a yellow beak and yellow feet. The bird is standing on a light blue, reflective surface that shows a faint reflection of the bird below it.

Agenda

- ❖ Exporting and Importing an App
- ❖ (Automated) Testing
- ❖ Development Lifecycle Management

Exporting and Importing an App

Exporting an APEX app

- ❖ APEX Export (web)
- ❖ SQL Developer
- ❖ SQLcl
- ❖ APEX Export Java Exporter (command line)

Importing an APEX app

- ❖ APEX Import (web)
- ❖ SQL Developer
- ❖ SQLcl

Demo

(Automated) Testing

Which Tests?

Business-Facing

- **Automated & Manual**
- (support dev team @ business, customer level)

- **Manual**
- (Business level User/Customer)

Functional Tests

Story Tests

Prototypes,
Demos

Simulations

Q2

Exploratory Testing

Scenarios

Usability Testing

UAT

Q3

Supporting
the Team

Critique
Product

Q1

Q4

Unit Tests

Integration Tests

Component Tests

Performance &
Load Testing

Security Testing

Reliability Testing

Scalability Testing

- **Automated**
- (support dev team @ lower level, TDD)

- **Tools**
- (Technical level)

Technology Facing

How do most people test?



Acceptance Tests

Integration Tests

Unit Tests

When we ignore the unit tests results and release to production



**I SHOULD START WRITING UNIT
TESTS**



What is good code?

What is good code?

❖ Correct

Test functionality

❖ Fast enough

Test performance

❖ Maintainable

Test after changes

Good unit tests

Good unit tests

- ❖ Automatic, run fast
- ❖ Wide code coverage including edge cases
- ❖ Repeatable
- ❖ Independent from execution order
- ❖ Using real and understandable test data

Automation is key!

Automation is key!

- ❖ Reduce time to market
- ❖ Find defects early
- ❖ Find more defects (coverage)
- ❖ Less boring ... more fun !

When all my unit tests pass on first run

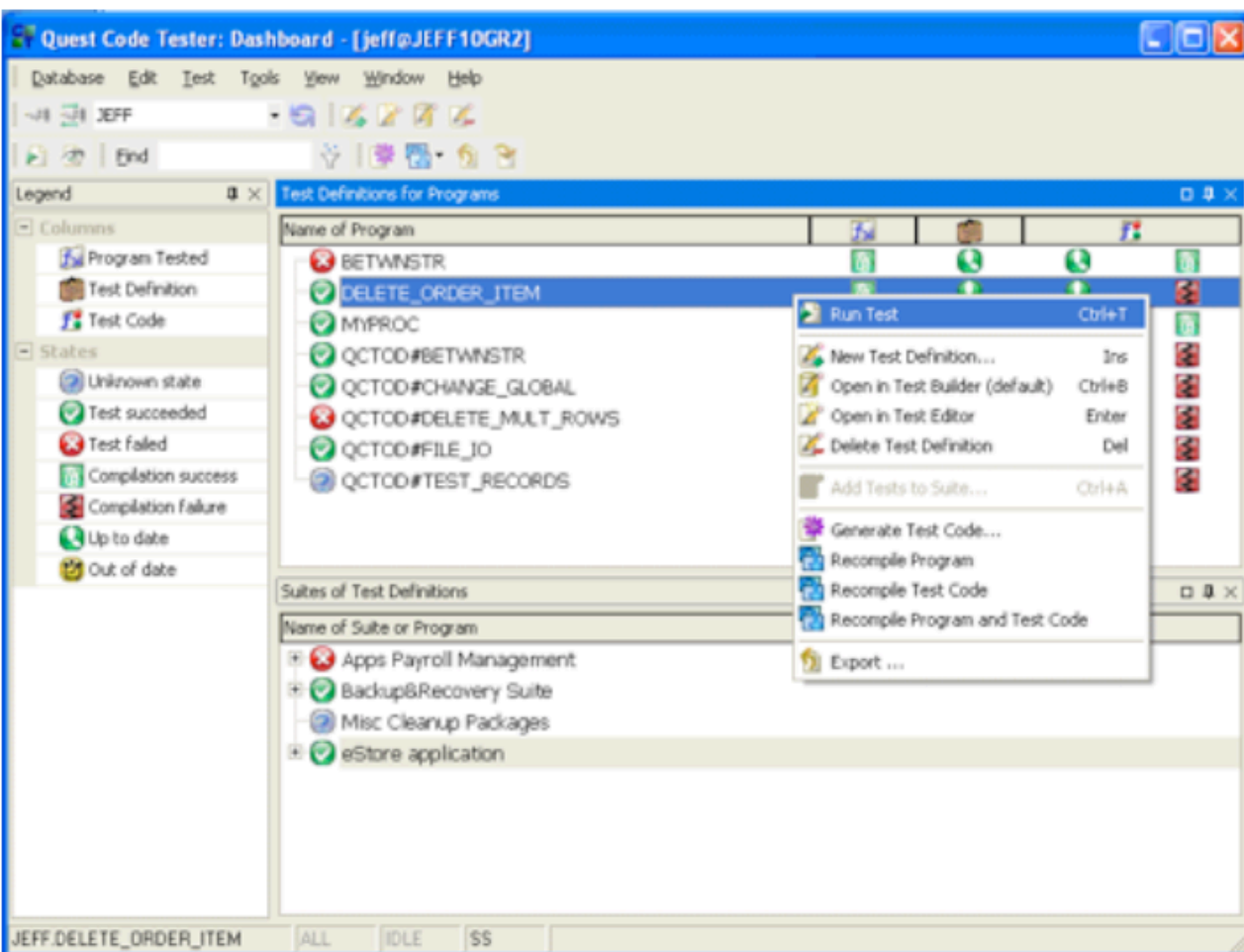


Oracle PL/SQL Unit Tests

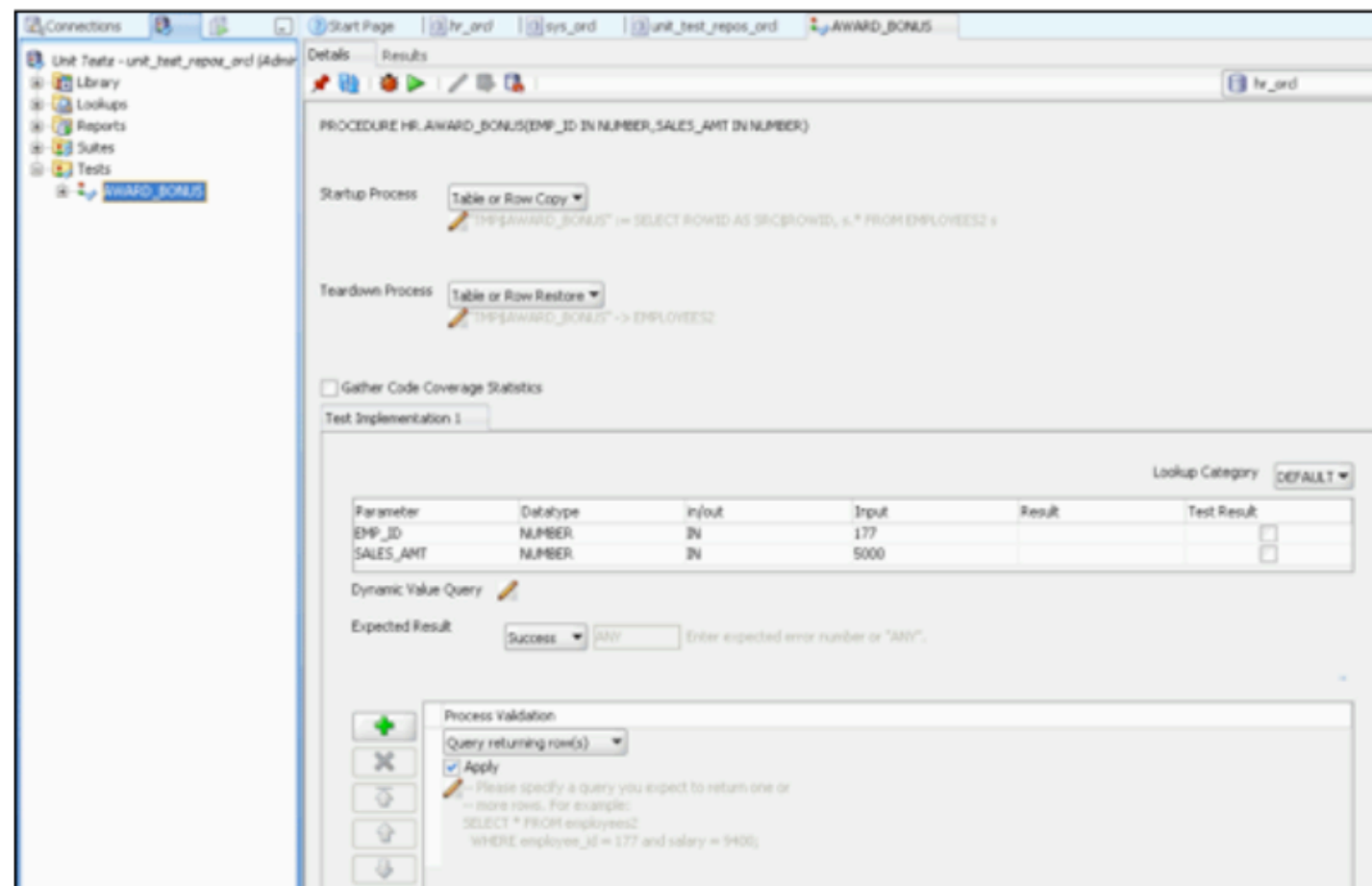
Visual testing tools



Quest Code Tester



SQL Developer 2.1



PL/SQL Unit Tests: utPLSQL

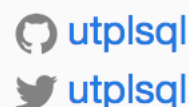
utPLSQL

Documentation

- Latest release: [v3.0.4 documentation](#) - Created 03 Nov 2017 - 11:36:29 AM
- [Latest development version](#) - Created 17 Nov 2017 - 04:38:44 AM

Documentation release history

- [v2.3.1 documentation](#) - Created 07 Jul 2016 - 04:22:00 PM
- [v3.0.0-beta documentation](#) - Created 30 Mar 2017 - 08:44:00 PM
- [v3.0.0 documentation](#) - Created 18 May 2017 - 06:52:00 PM
- [v3.0.1 documentation](#) - Created 14 Jun 2017 - 08:00:05 PM
- [v3.0.2 documentation](#) - Created 18 Jul 2017 - 07:42:35 PM
- [v3.0.3 documentation](#) - Created 30 Aug 2017 - 08:10:20 AM
- [v3.0.4 documentation](#) - Created 03 Nov 2017 - 11:36:29 AM



utPLSQL

Unit Testing Framework for Oracle PL/SQL.

Demo

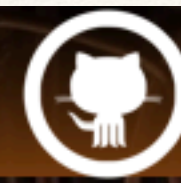
When I launch all the unit tests and
they all pass



Oracle APEX Unit Tests

APEX Testing

- ❖ Advisor
- ❖ Your own tests (developer portal)
- ❖ Selenium
- ❖ Apache JMeter
- ❖ CasperJS



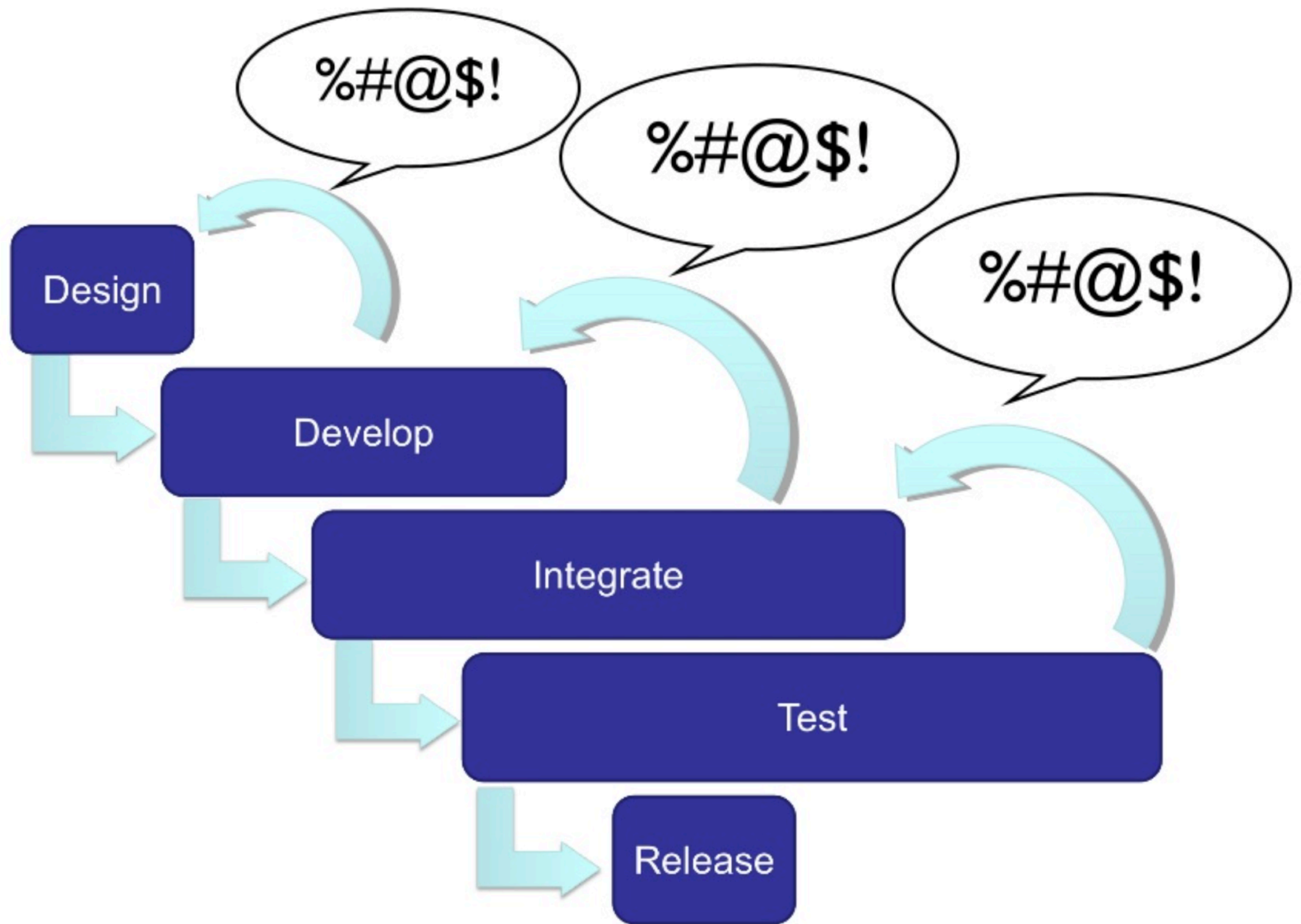
“Testing Made Easy”

Beta Release

<https://www.apextestautomation.co.uk>

[Features](#)[Explore](#)[Services](#)[Contact](#)[Get Started](#)

Development Lifecycle Management



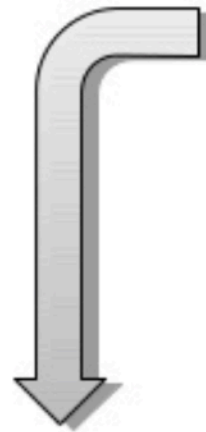
Continuous Integration

Does require

- Source control
- Automated builds
- Automated tests

Does not require

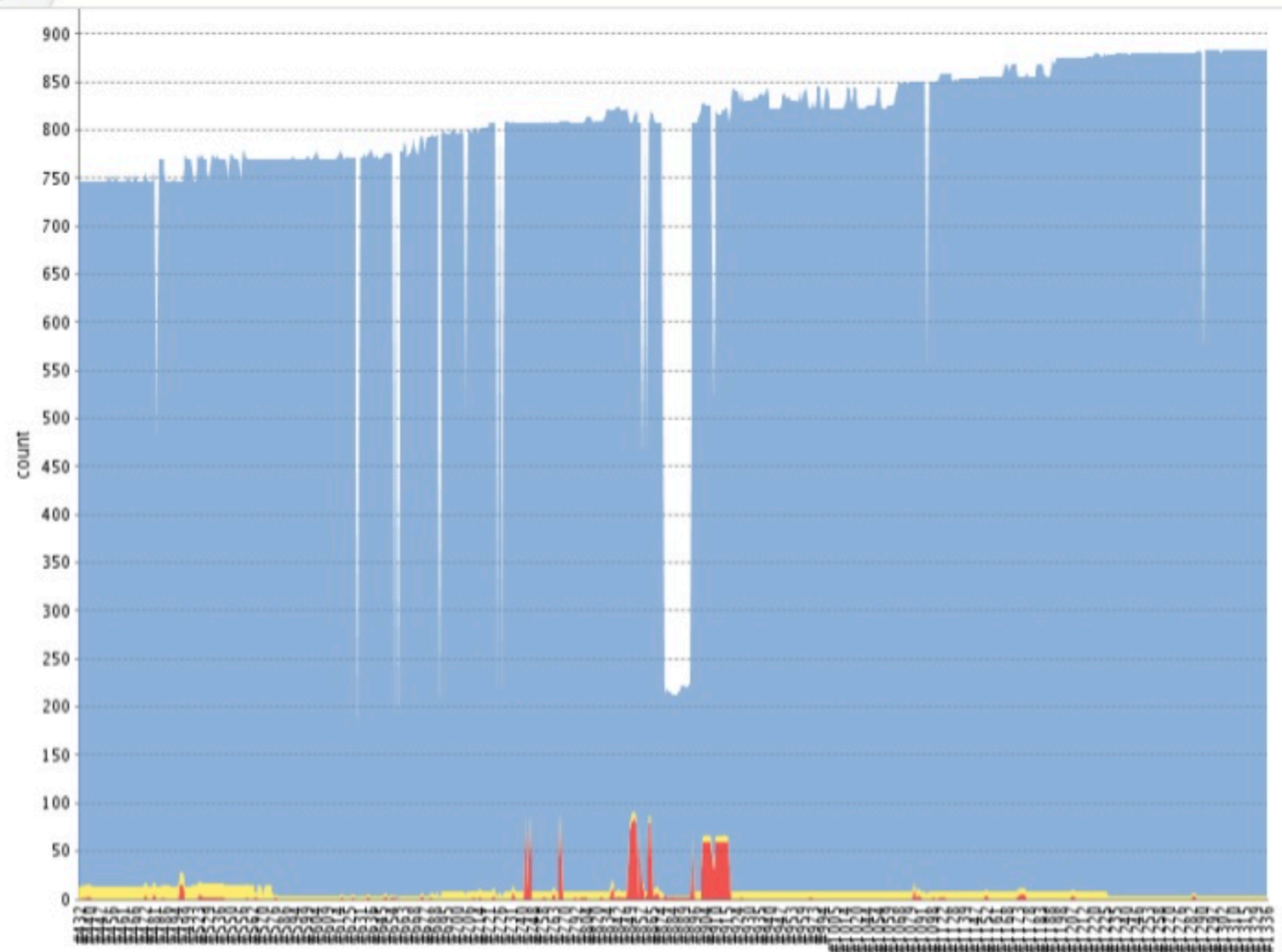
- Constant releases
 - (i.e. continuous delivery)
- No manual testing
- “Operations/Infrastructure as code”
- Agile, Scrum or Kanban



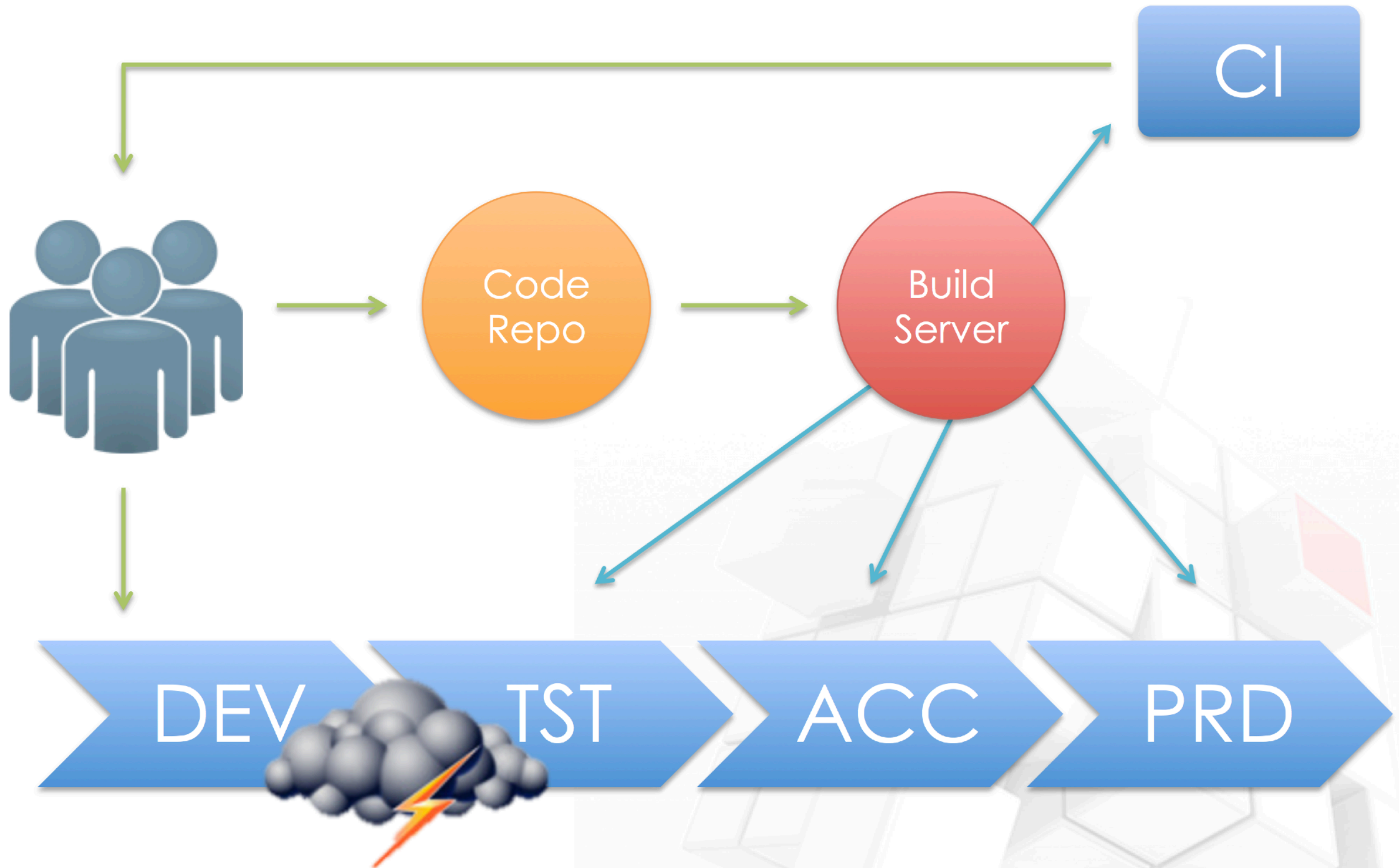
But... CI is an important part of many methodologies.

- [Back to Dashboard](#)
- [Status](#)
- [Changes](#)
- [Workspace](#)
- [Set Next Build Number](#)
- [Violations](#)

Build History (trend)		
#1336	Jan 23, 2013 6:37:33 PM	
#1335	Jan 23, 2013 6:30:55 PM	
#1333	Jan 23, 2013 6:11:57 PM	
#1332	Jan 23, 2013 5:14:32 PM	
#1330	Jan 23, 2013 4:28:09 PM	
#1329	Jan 23, 2013 4:21:28 PM	
#1328	Jan 23, 2013 4:14:43 PM	
#1327	Jan 23, 2013 4:08:03 PM	
#1325	Jan 23, 2013 3:54:27 PM	
#1322	Jan 23, 2013 3:16:30 PM	
#1315	Jan 22, 2013 7:45:33 PM	
#1314	Jan 22, 2013 7:38:56 PM	
#1313	Jan 22, 2013 7:32:22 PM	
#1312	Jan 22, 2013 7:25:41 PM	
#1311	Jan 22, 2013 7:18:59 PM	
#1310	Jan 22, 2013 7:12:12 PM	
#1309	Jan 22, 2013 7:05:16 PM	



A high-level overview



DevOps



DevOps is a software engineering practice that aims at unifying software development and software operation. source: [Wikipedia](#)

An all-in-one solution

Oracle Developer Cloud Service

 Project

 Code

 Maven

 Releases

 Snippets

 Merge Requests

 Issues

 Agile

 Build

 Deploy

 Docker Registry

 Wiki

 Administration

ORACLE[®] Developer Cloud Service

dgielis@apexrnd.be

APEX Office Print

Search Activities

RECENT ACTIVITIES - MAY 2017

 System created hosted repository **apex-office-print.git**

May 12, 2017 12:33 AM +0200

 Project created by **Dimitri Gielis**

May 12, 2017 12:33 AM +0200

REPOSITORIES

+ New Repository

Filter Git Repositories

All Favorites Favorites First

apex-office-print.git [Empty]

HTTP SSH https://dgielis%40apexrnd.be@developer.em2

Maven

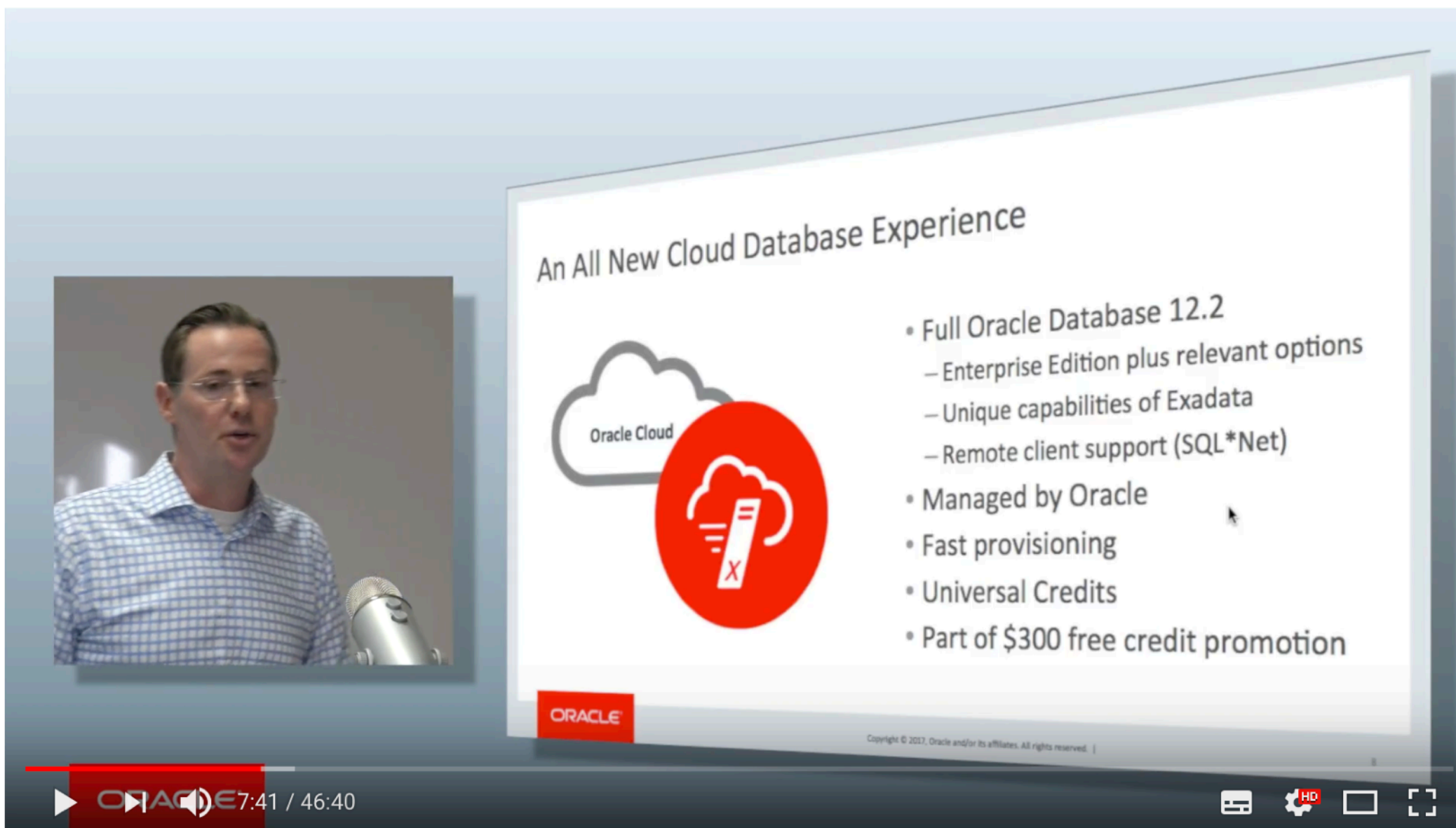
HTTP DAV https://developer.em2.oraclecloud.com/profile

Docker

No external docker registries linked to this project.



Demo



APEX Day Frankfurt - Oracle Database Cloud Services for the APEX Developer

553 weergaven

9 0 DELEN



Oracle Application Express

Gepubliceerd op 5 okt. 2017

ABONNEREN 4,5K

Oracle Database Cloud Services for the APEX Developer, Jason Straub, Principal Member of Technical Staff

Categorie

Wetenschap en technologie

Licentie

Standaard YouTube-licentie

<https://www.youtube.com/watch?v=lTVJQvnhyfA>

Recap

- ❖ Exporting and Importing an App
- ❖ (Automated) Testing
- ❖ Development Lifecycle Management

Q&A

APEX RD
research & development



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Consulting, Development, Training

- ❖ Looking for consulting, training and development in Oracle Application Express (APEX)?
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