

A close-up, high-contrast photograph of a human eye, looking slightly to the right. The eye is the central focus, with the iris and pupil clearly visible. The background is dark and out of focus.

# Automated functional testing with Jubula

*Introduction, questions and answers*

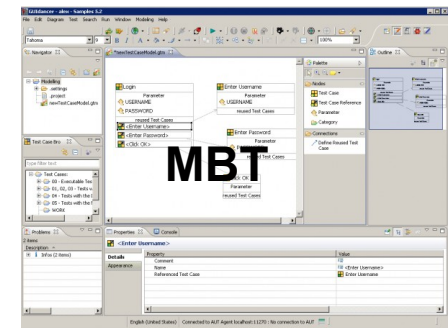
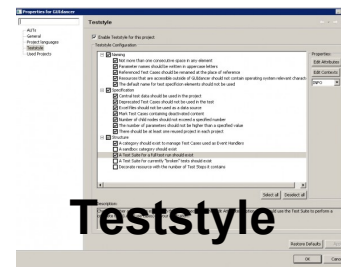
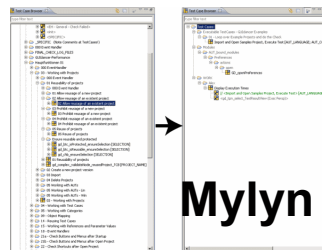
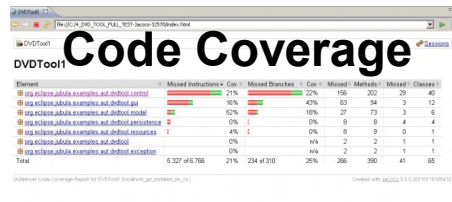
*Oliver Goetz*

# Agenda

- ▶ **Introduction to Jubula**
- ▶ **Demonstration**
- ▶ **Questions and answers**

# What is Jubula?

- ▶ Eclipse Project for automated functional testing
- ▶ Released from core parts of *GUIdancer* commercial test tool  
(Eclipse Award Winner 2010)
- ▶ ***GUIdancer* = Jubula +**



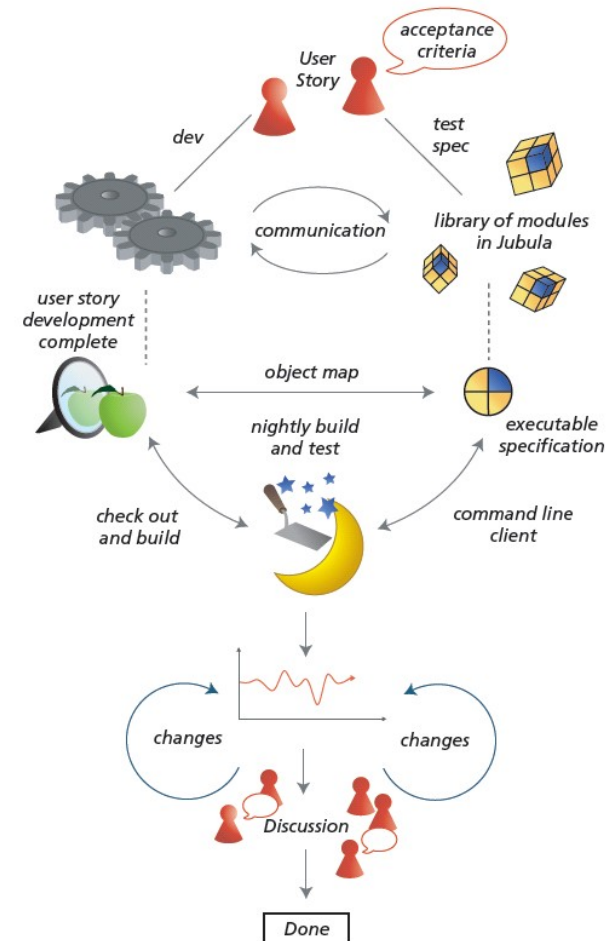
# What makes Jubula different?

## ► Drag and drop test creation

No recording

No program code

According to best practices known from software development



# What can Jubula do?

## ▶ **User perspective**

Complete workflows

All layers tested

Acceptance tests

Regression tests



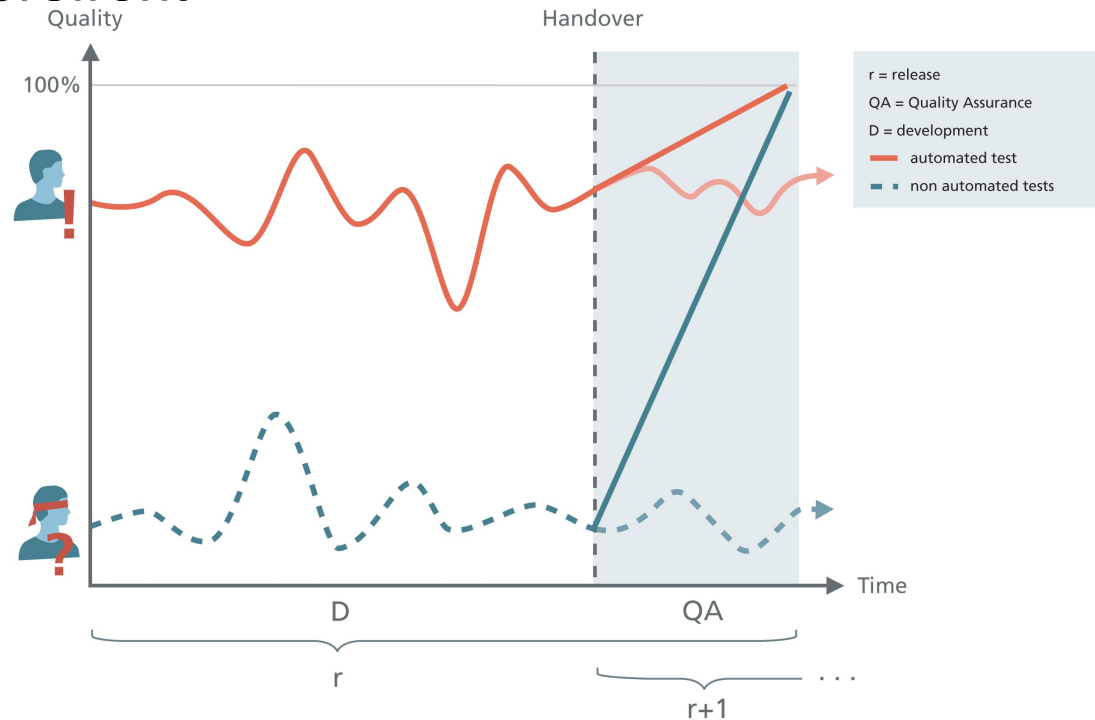
Photo Courtesy PDPhoto

# Constant feedback about acceptance

## ▶ Quality info close to development

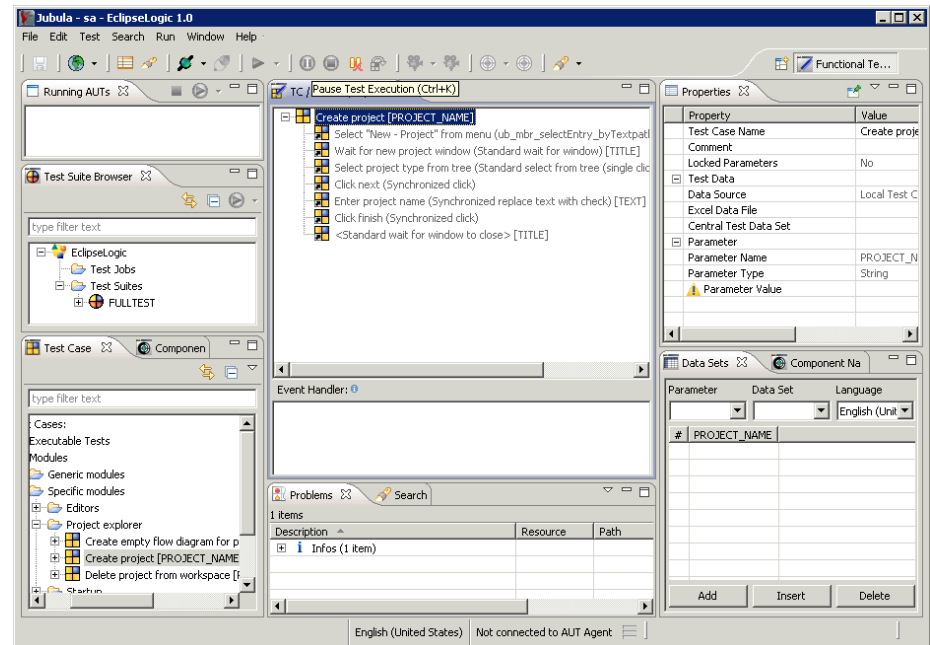
User perspective at forefront

## ▶ Safety net



# Demo

- ▶ Run test
- ▶ Add new tests
- ▶ Error analysis
- ▶ Unattended test runs



# About Event Handlers

## ▶ **React to errors**

Action error

Component not found

Check failed

Configuration error

## ▶ **Continue test**

Continue

Exit

Return

Retry

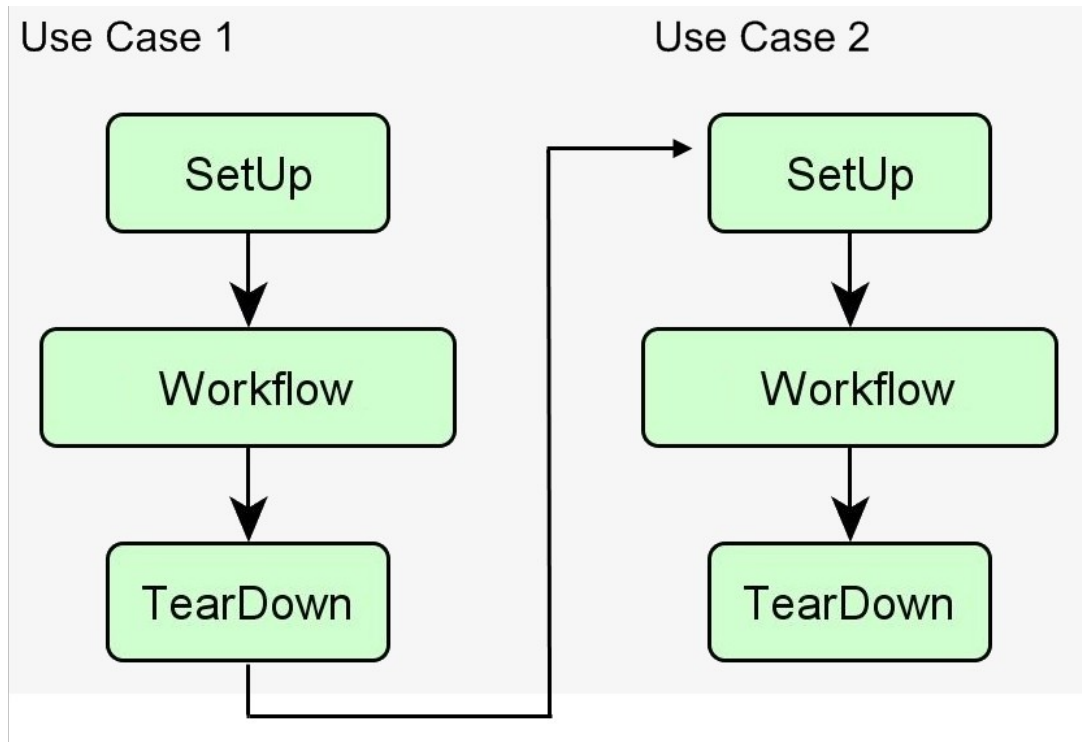
Break

Pause

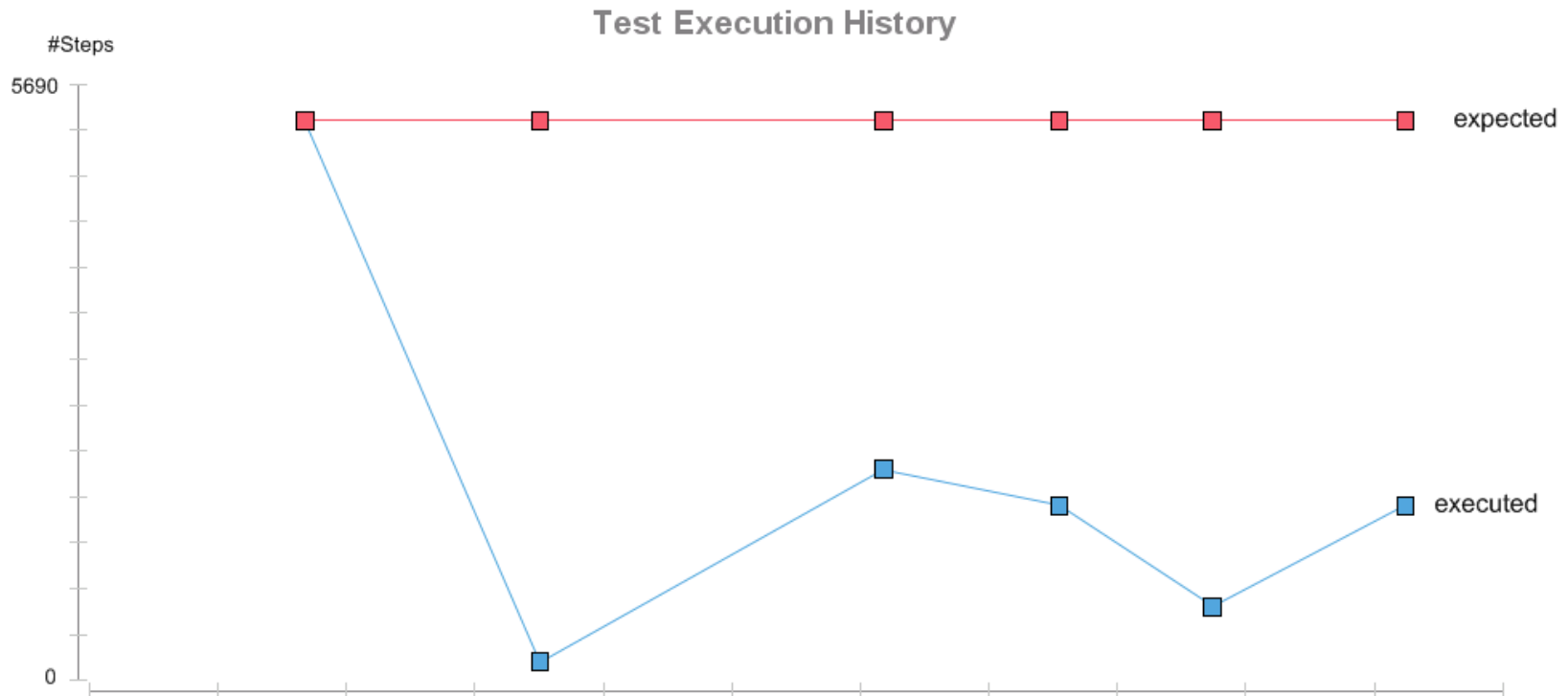


# Why do we need Event Handlers?

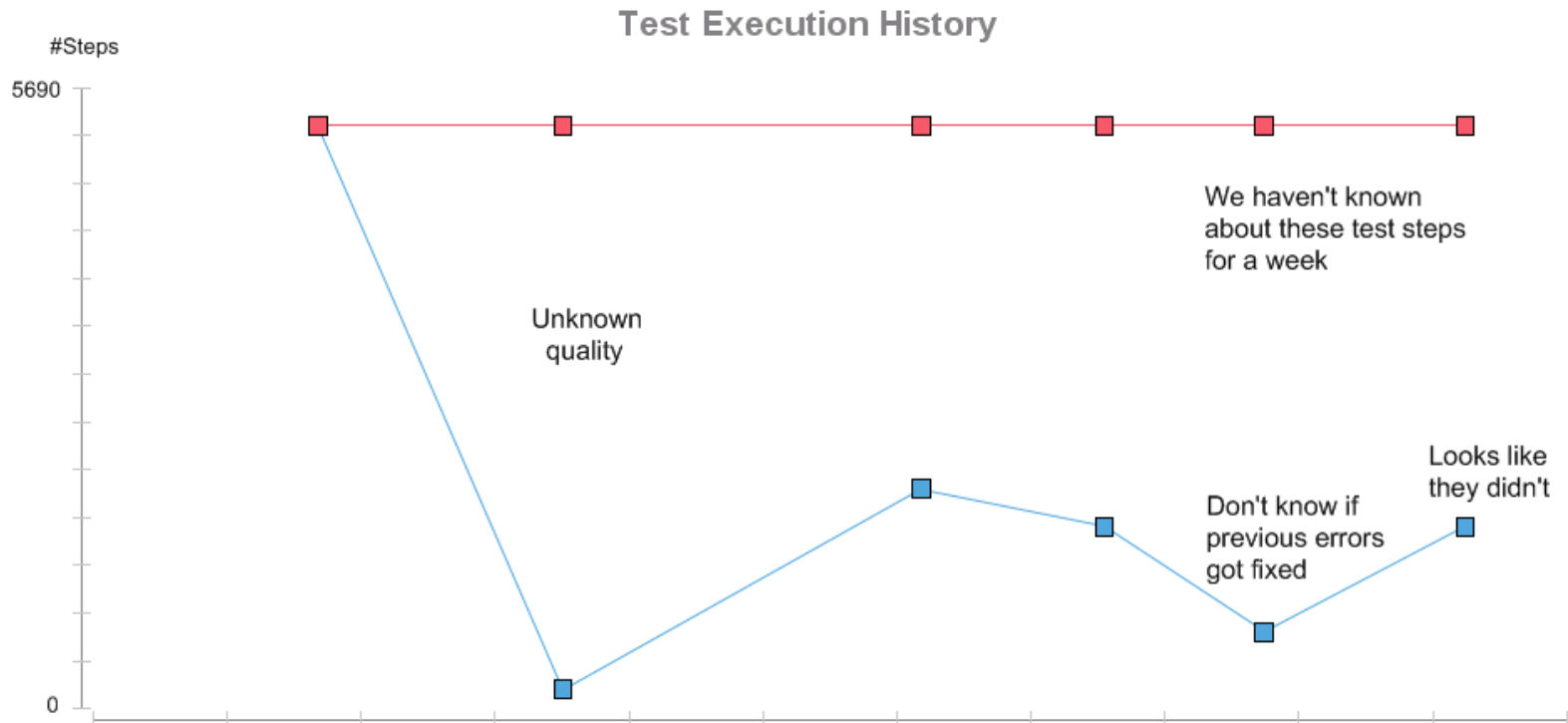
## ► What if an error occurs?



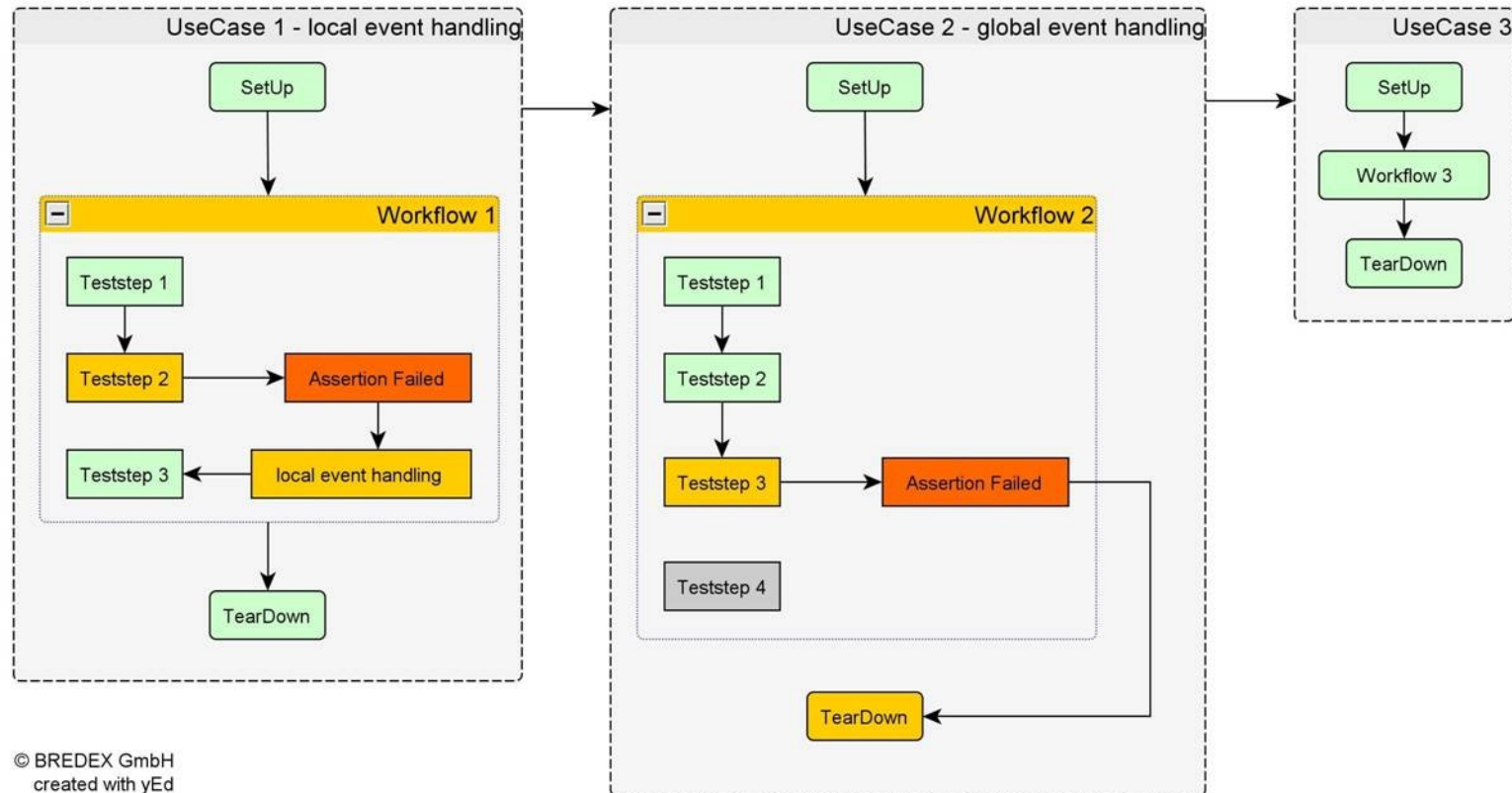
# Why do we need Event Handlers?



# Why do we need Event Handlers?



# Using Event Handlers

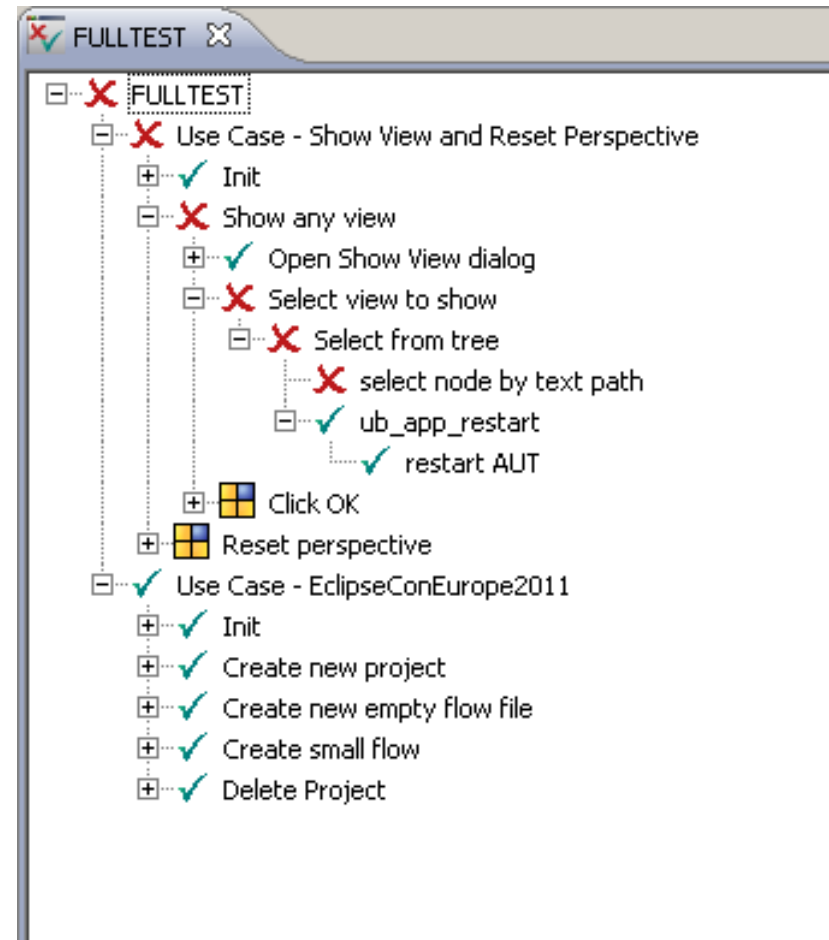


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# Global Event Handlers

- ▶ **Add Restart action as EH**
- ▶ **Reentry type: Return**

*..if an action error occurs in this Test Case, then restart the AUT and continue with the next Test Case in the hierarchy – it will be ready for you!*



# Local Event Handlers

- ▶ **Check for a specific state**

  - Rectify if not the case

  - Check again

# Running from the command line

## ▶ Continuous integration

Check out sources

Build software

Prepare test environment

Install software (AUT) on test systems

Run tests – **Test Executor**

Check results

HTML / XML

In ITE

```
<configuration>
  <project>EclipseConTest</project>
  <version>1.0</version>
  <autconfig>GEF_win</autconfig>
  <dbscheme>Default Embedded (H2)</dbscheme>
  <dbuser>sa</dbuser>
  <dbpw></dbpw>
  <server>localhost</server>
  <port>60000</port>
  <language>EN_US</language>
  <testsuite><entry>FULLTEST</entry></testsuite>
  <datadir>C:/Users/gduser/</datadir>
  <resultdir>C:/Users/gduser/</resultdir>
</configuration>
```

## Summary

- ▶ **Test workflows based on acceptance criteria**

  - Even before application available

  - Automated regression testing

- ▶ **Manual intelligence incorporated**

  - Synchronization

  - Reacting to clues in the application

  - Error handling

- ▶ **Reuse instead of copy**

  - Tests made up of similar units

  - Reusing ensures structure & maintainability

  - Central place for any changes



# Jubula project status

- ▶ **Current release: 1.1 / GUIDancer 5.2**
- ▶ **Next release: Indigo SR2 / GUIDancer 6.0**
- ▶ **On release train for Juno**
  
- ▶ **Keep updated:**



## Further information

### Community

- ▶ <http://www.eclipse.org/jubula>
- ▶ **Forum**
- ▶ **Webinar**
- ▶ **FAQs**
- ▶ **Videos**
- ▶ **Documentation**
- ▶ **Mailing lists**

### Professional services

- ▶ <http://www.bredexsw.com>
- ▶ **Proof of Concept**
- ▶ **Appetizer packages**
- ▶ **Training / Workshops**
- ▶ **Support**
- ▶ **Test reviews**
- ▶ **Best practices**
- ▶ **GUldancer Demo Licenses**
- ▶ **Customized extensions**

And finally...

▶ **Eclipse Testing Days 2012**

Call for Sponsors has started

Call for Papers early next year

[http://wiki.eclipse.org/Eclipse\\_Testing\\_Day\\_2012](http://wiki.eclipse.org/Eclipse_Testing_Day_2012)