

A close-up, high-contrast image of a human eye, looking slightly to the right. The eye is rendered in a dark, almost black color against a lighter background, with the eyelashes and iris clearly visible.

Automated functional testing with Jubula

Introduction, questions and answers

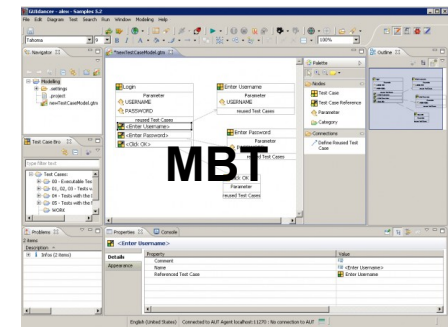
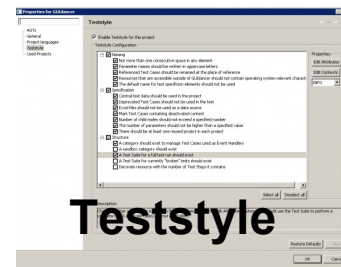
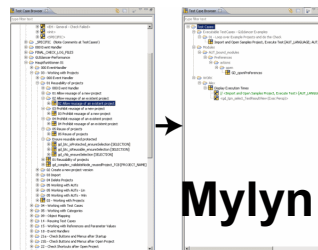
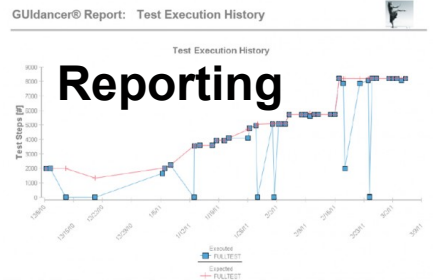
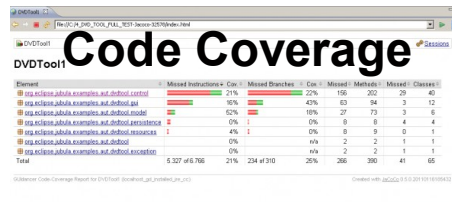
Oliver Goetz

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 +**



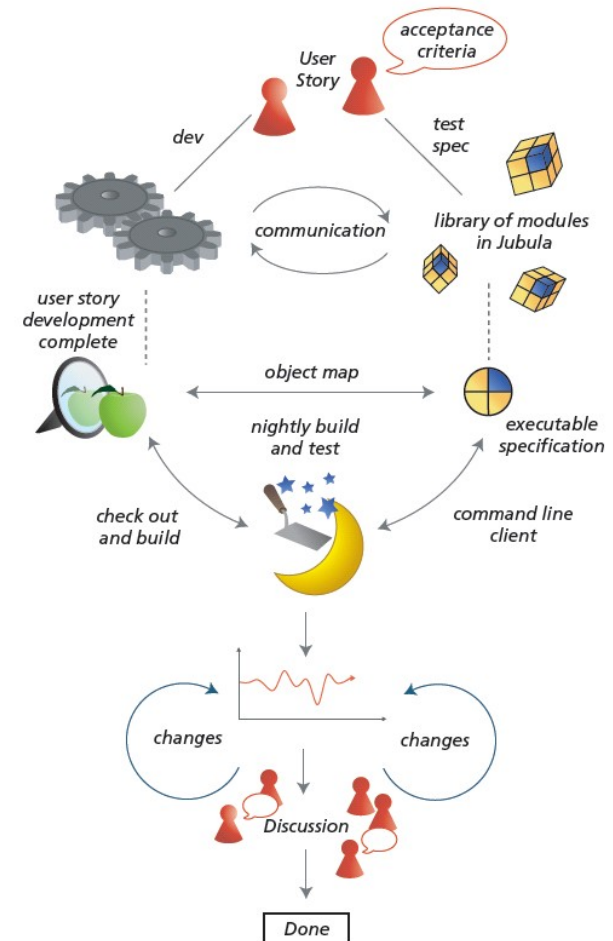
What makes Jubula different?

► 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



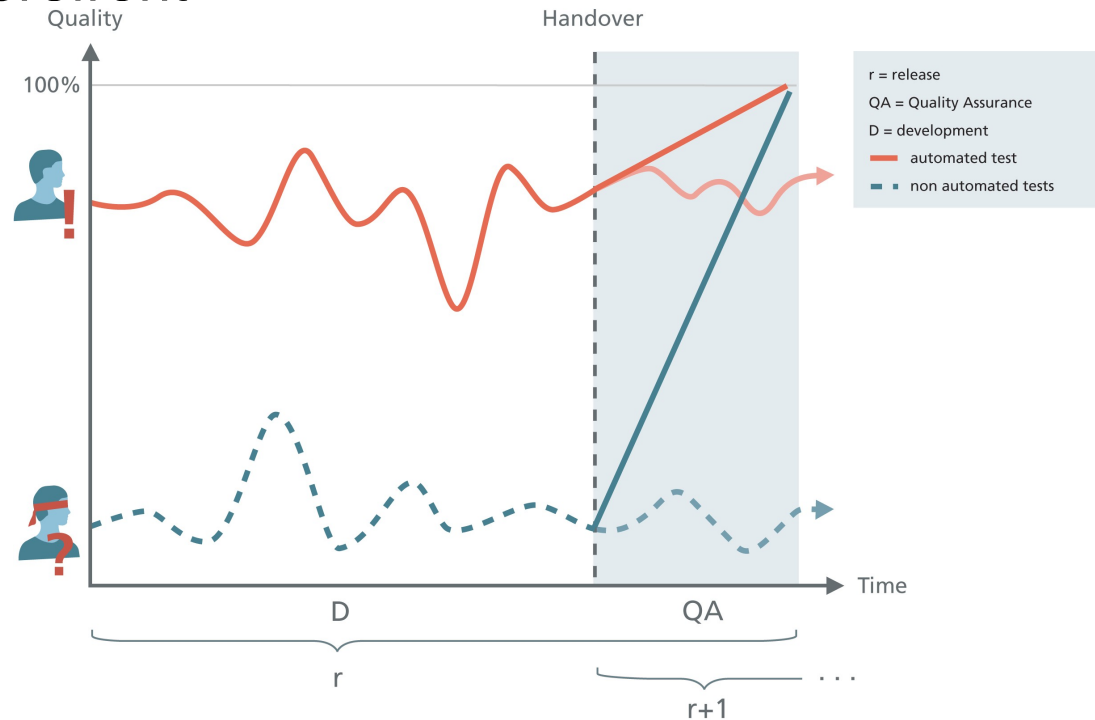
Photo Courtesy PDPhoto

Constant feedback about acceptance

▶ Quality info close to development

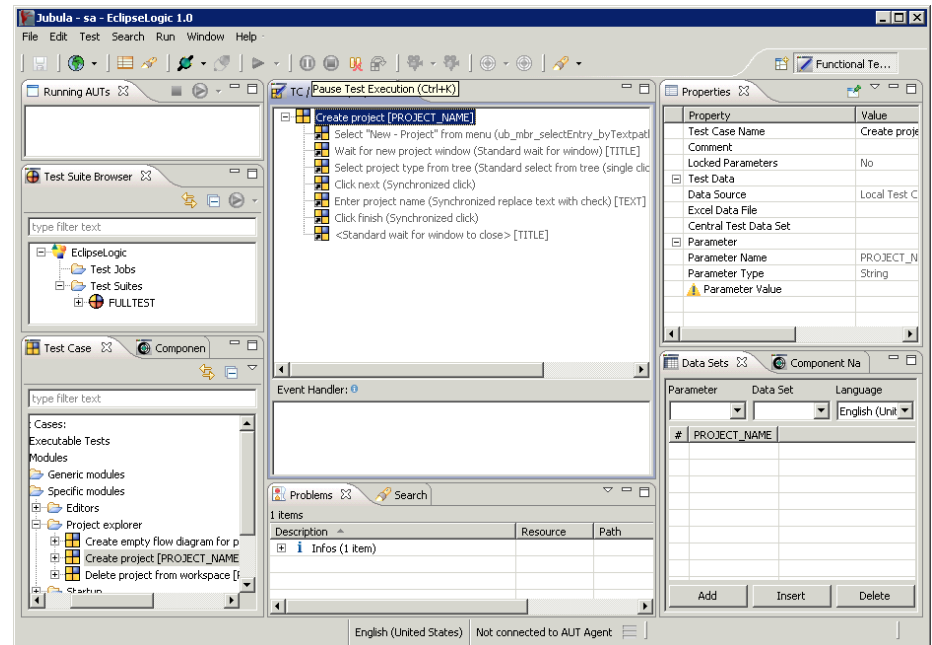
User perspective at forefront

▶ 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

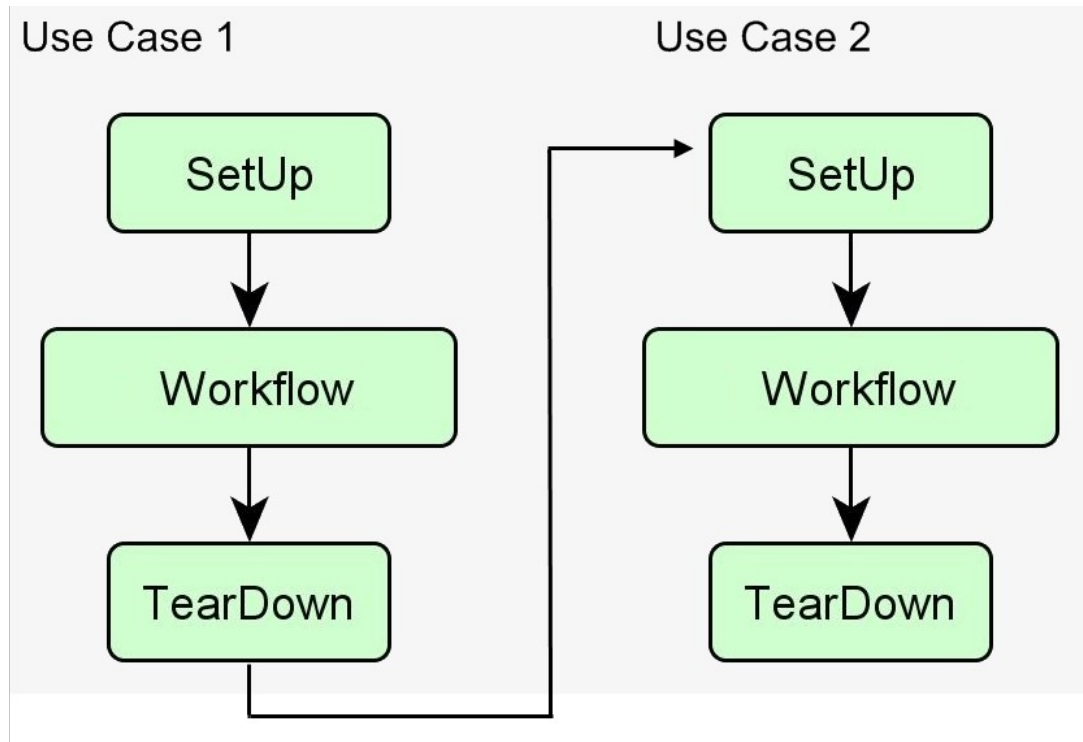
Retry

Break

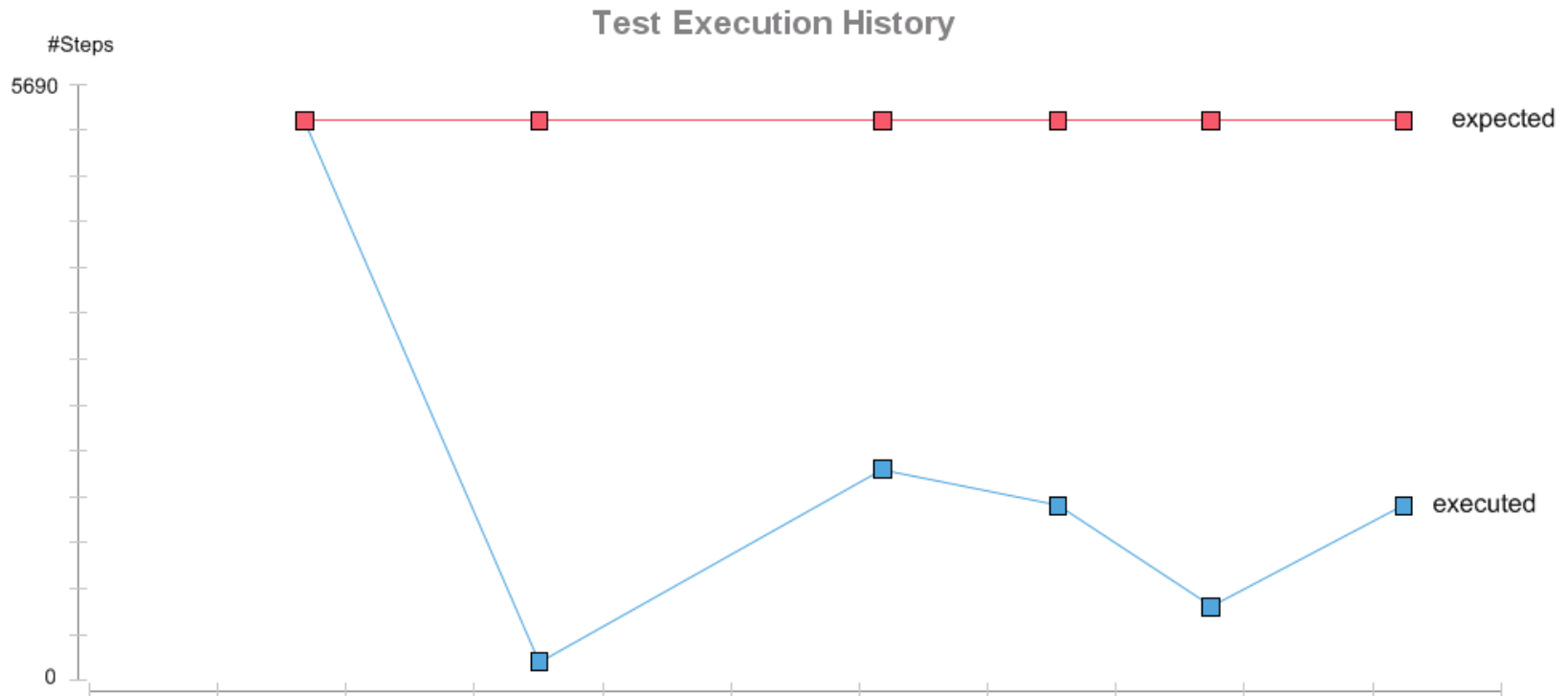
Pause

Why do we need Event Handlers?

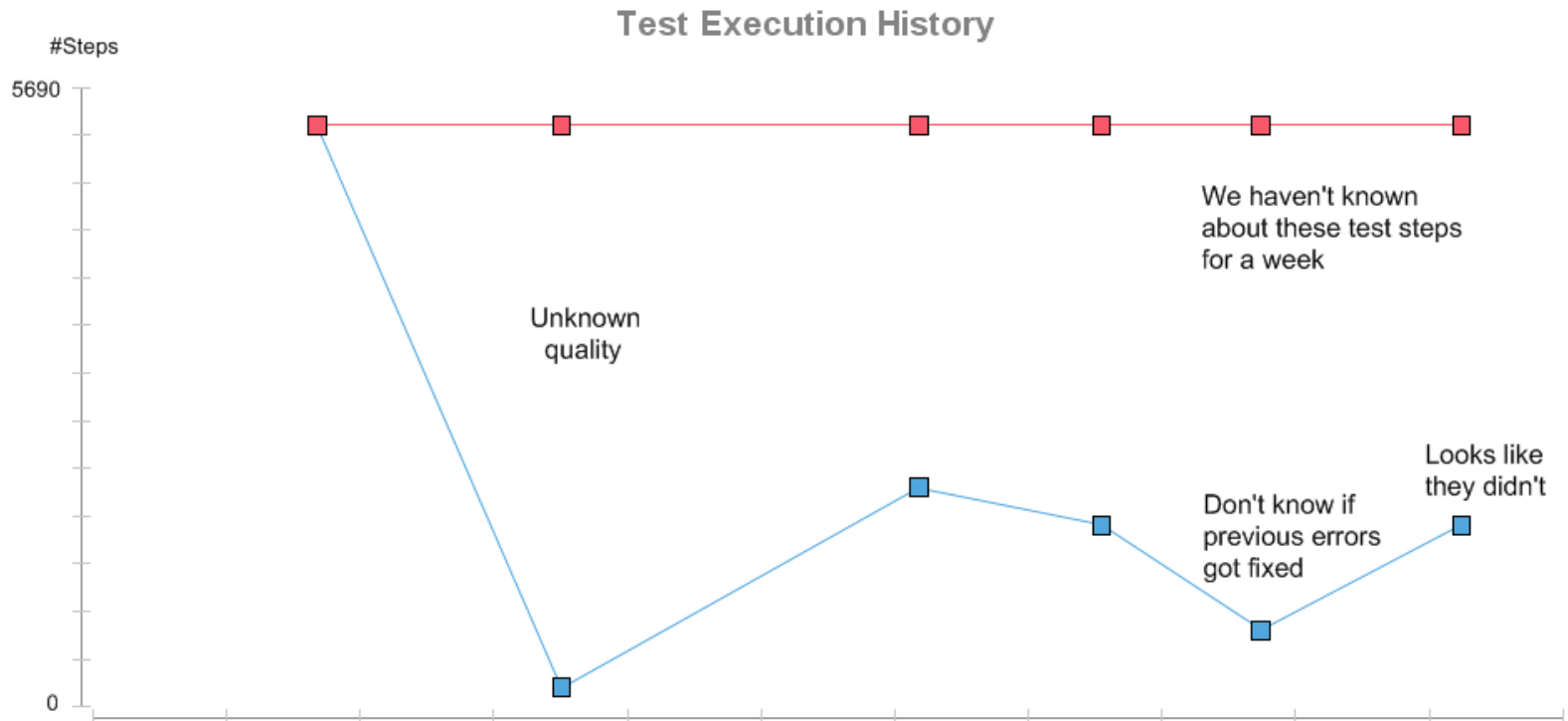
► What if an error occurs?



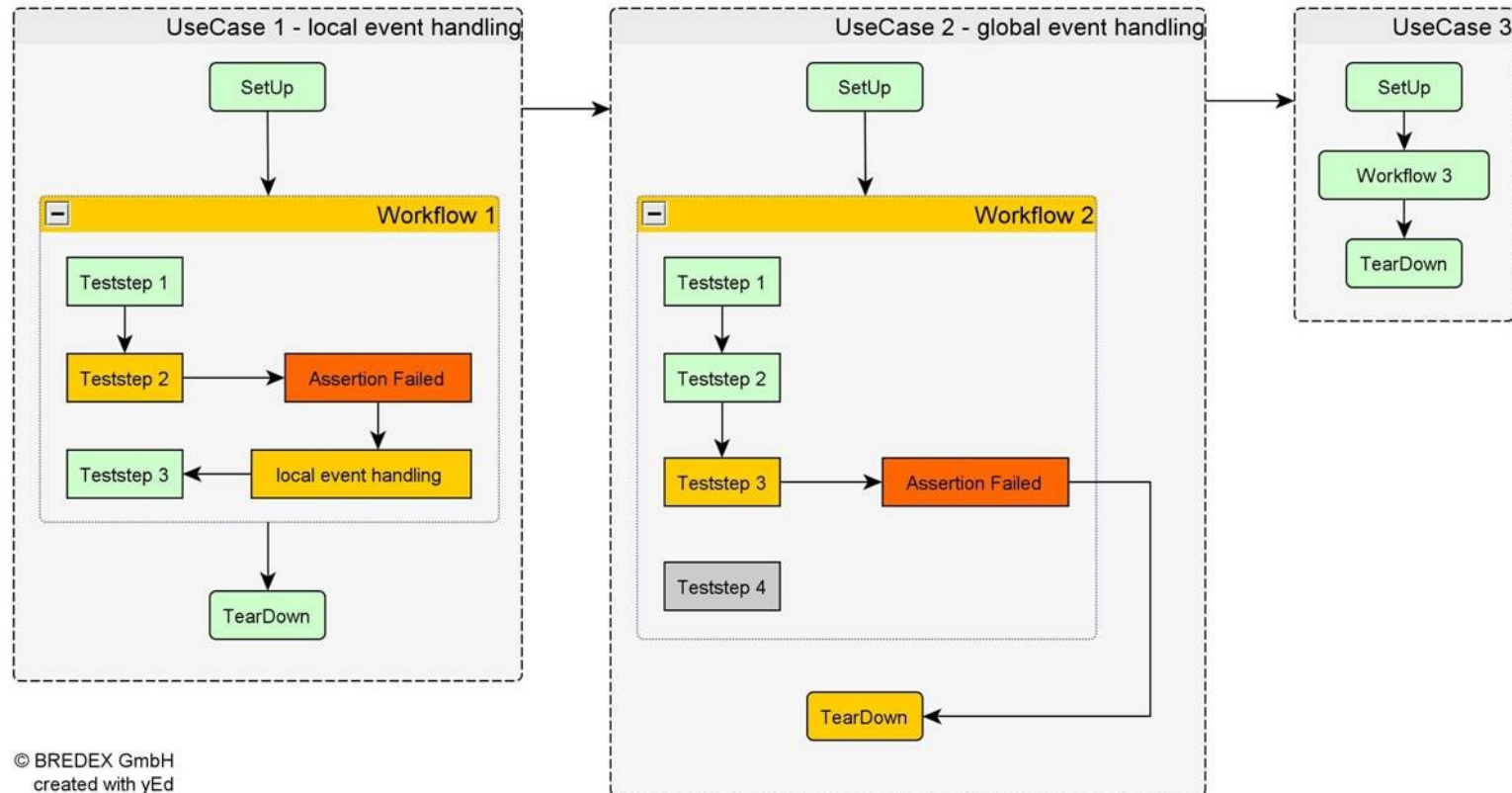
Why do we need Event Handlers?



Why do we need Event Handlers?



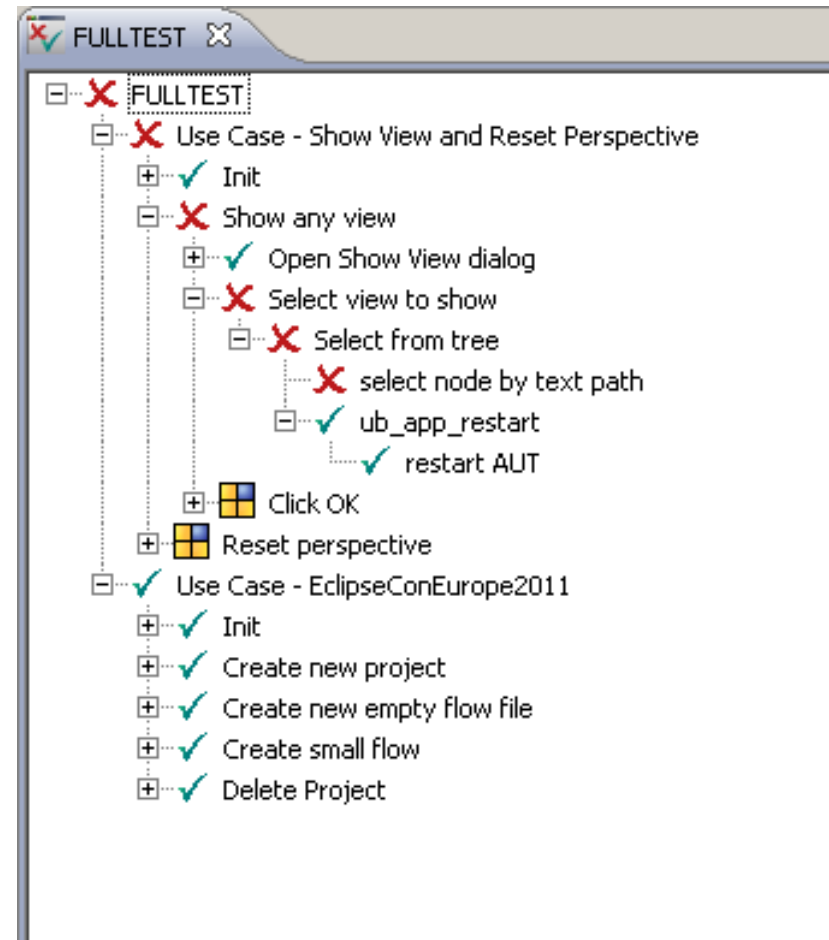
Using Event Handlers



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