

Automated testing for RCP Eclipse based applications



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eclipse

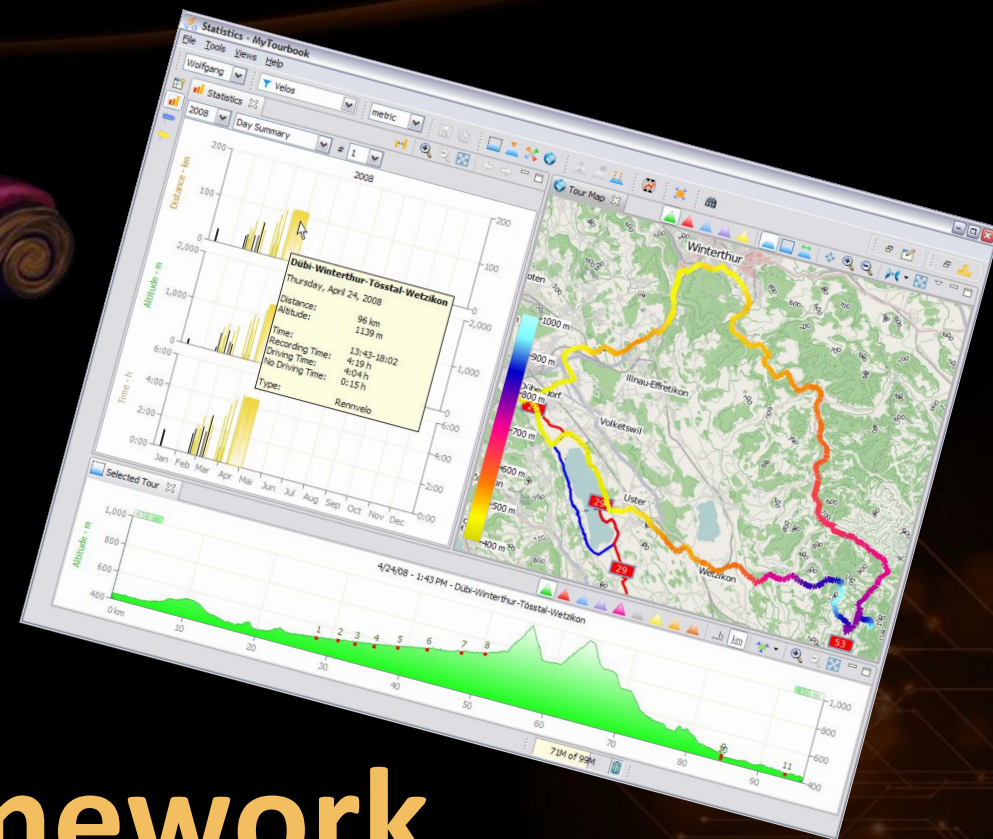
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#RCPTT

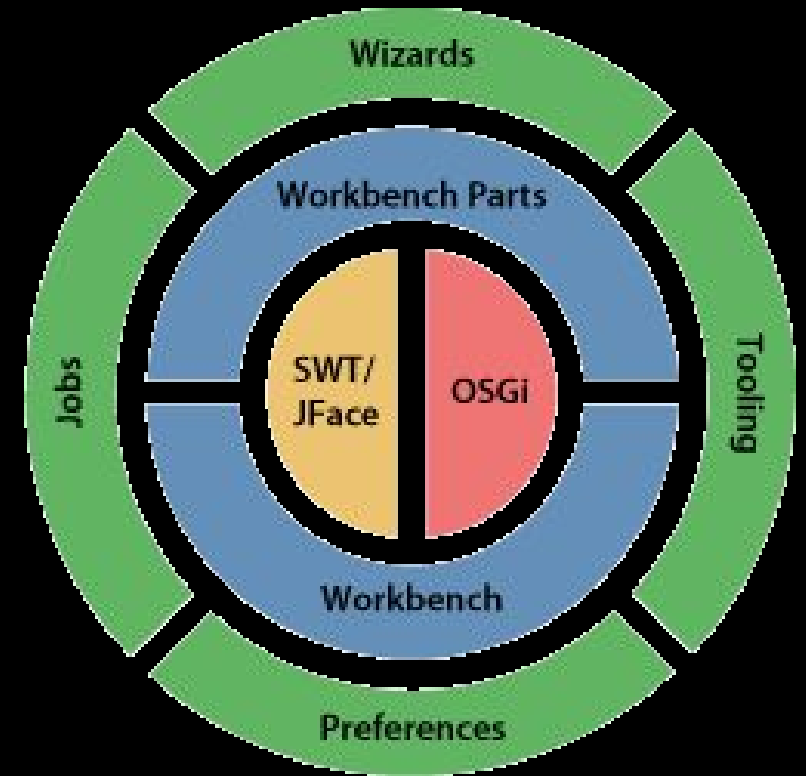


RCP Eclipse Framework

What is it good for?

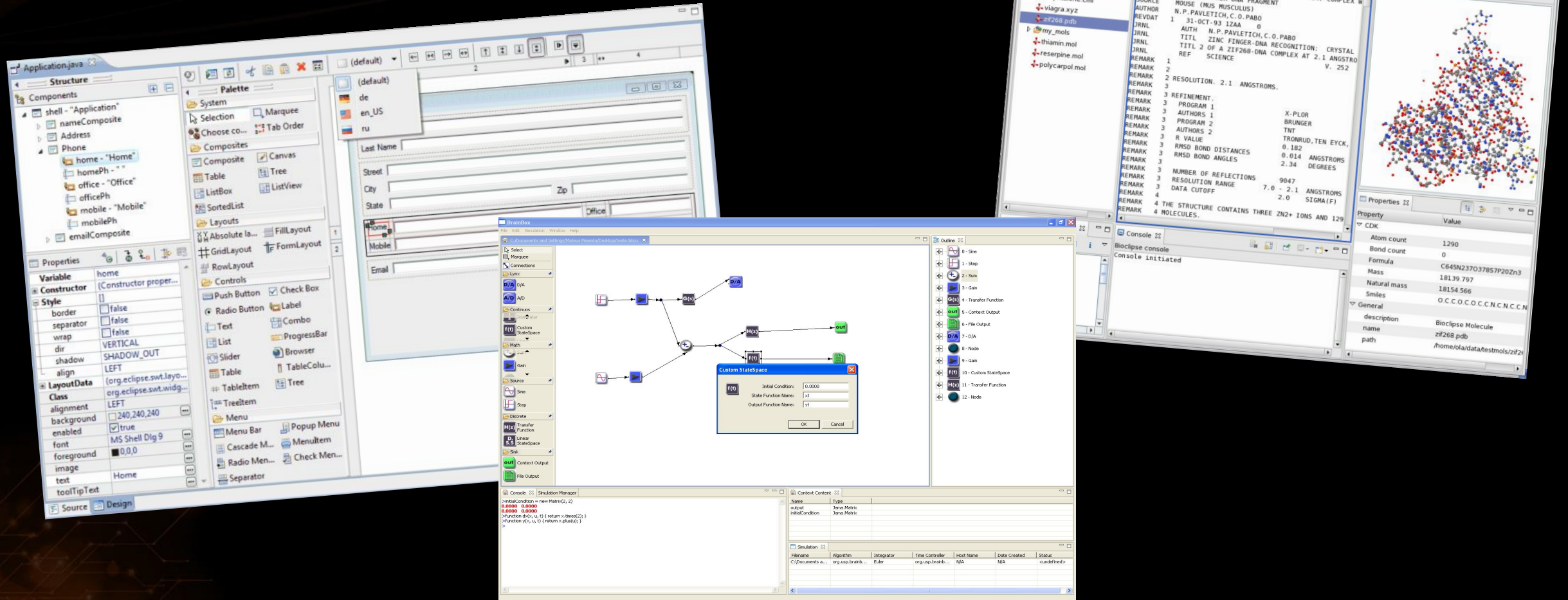
RCP Eclipse Framework

- RCP is a collection of **lower level** frameworks
 - **OSGi** – At the lowest level
 - **SWT** - Provides the primitive widgets (text controls, radio buttons, etc.)
 - **JFace** – Provides a variety of advanced UI functionality controls (wizards, data bindings, preference pages, etc.)
 - Other Eclipse APIs



RCP Eclipse Framework

- Easily built **GUI** for Java applications





RCP Testing Tool

continuous integration
hello novosibirsk
and line interface
IDE
awesome
agile
productivity
context
declarative
testing
behavior
runtime intelligence
functional
designed for
SWT
RC

What is RCPTT?

And why should I care?

RCP Testing Tool

- Open source project for **GUI testing** automation
 - Extendible functionality and Plugins available
 - Supported by Eclipse community
- Good for Continuous Integration and Delivery
- Multi platform
 - Linux, Windows and MacOS



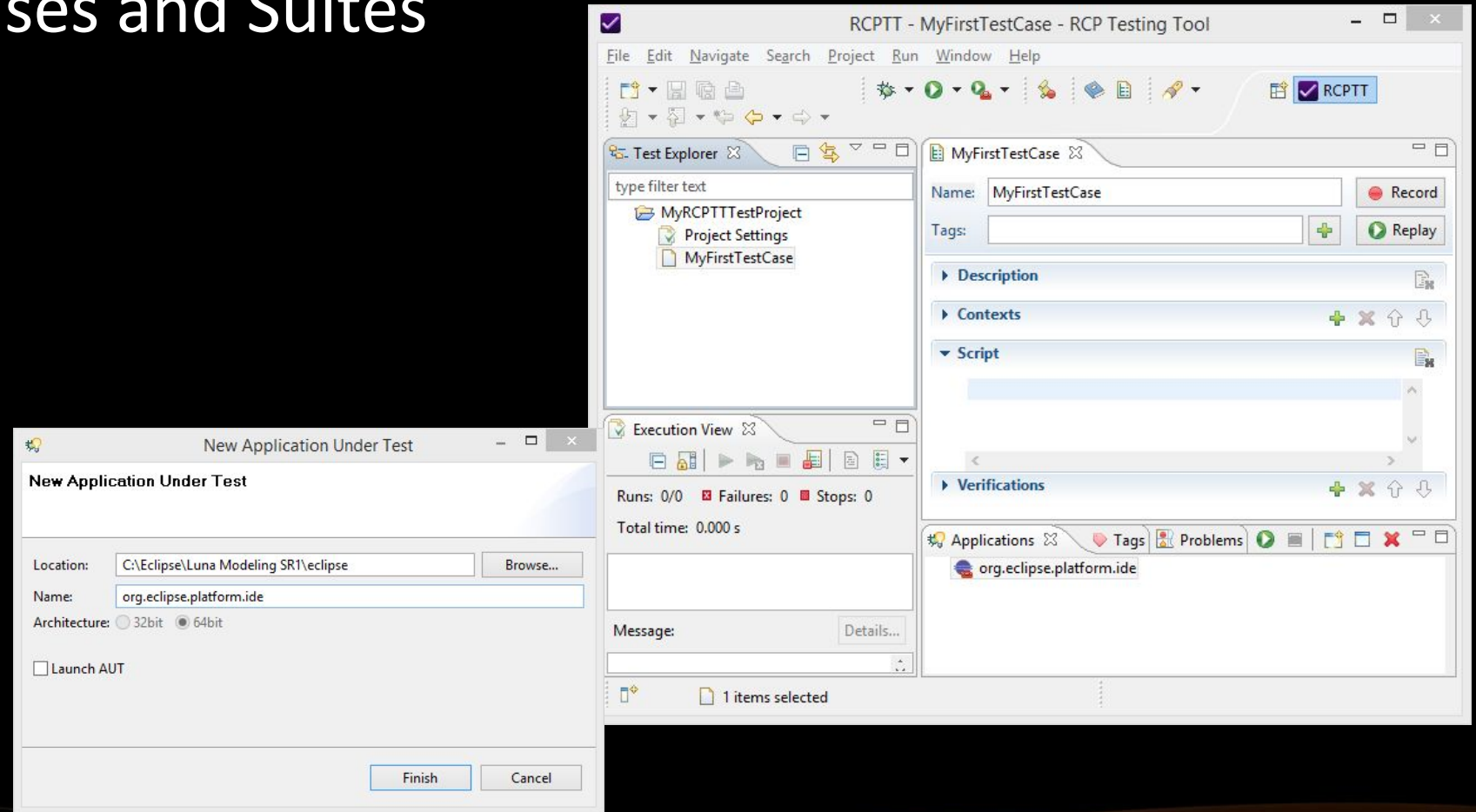
RCP Testing Tool

- Fully aware of the RCP Eclipse internals
 - Hides application's inner complexity
 - No need to deal with wait operations!
 - Always knows when operation is complete
- Easy to setup test Preconditions



RCP Testing Tool

- Powerful IDE
 - Manage Test Cases and Suites
 - Record / Replay
 - Debug
- Code reusability
 - Contexts
 - Workspaces
 - ECL Scripts



Demo!



ECL Scripting

Native language of Eclipse

ECL Scripting

- ECL stands for **Eclipse Command Language**
 - Able to do virtually anything with Eclipse

```
get-view "Package Explorer" | get-tree |  
select testJavaProject | get-menu Delete | click  
with [get-window "Delete Resources"] {  
    get-button "Delete project contents on disk (cannot be  
    undone)" | check  
    get-button OK | click  
}
```

ECL Test Script

- Tests are meaningless without **any assertions**
 - Verify your expected result either positive or negative

```
get-view "Package Explorer" | get-tree |  
get-property itemCount | equals 0 | verify-true
```


Summary

- RCP Eclipse Framework
- ECL Scripting Language
- RCPTT
 - Contexts, Workspaces, Workbenches, etc.
 - Test Cases, Test Suites, Data Sets , etc.



Useful Links

- RCP Testing Tool website:
 - www.eclipse.org/rcptt/
- Sample test cases:
 - github.com/QualityAssuranceTeam/RCPTT
- ECL Documentation:
 - www.eclipse.org/rcptt/documentation/userguide/ecl
- Contribute to community:
 - wiki.eclipse.org/RCPTT/Contribution_Guide





Questions?

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