



Ein Entwickler sieht

oder:

Was tun bei fehlerhaften JUnit-Tests?

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<http://www.flickr.com/photos/herrolsen/4590360928/>

Übersicht

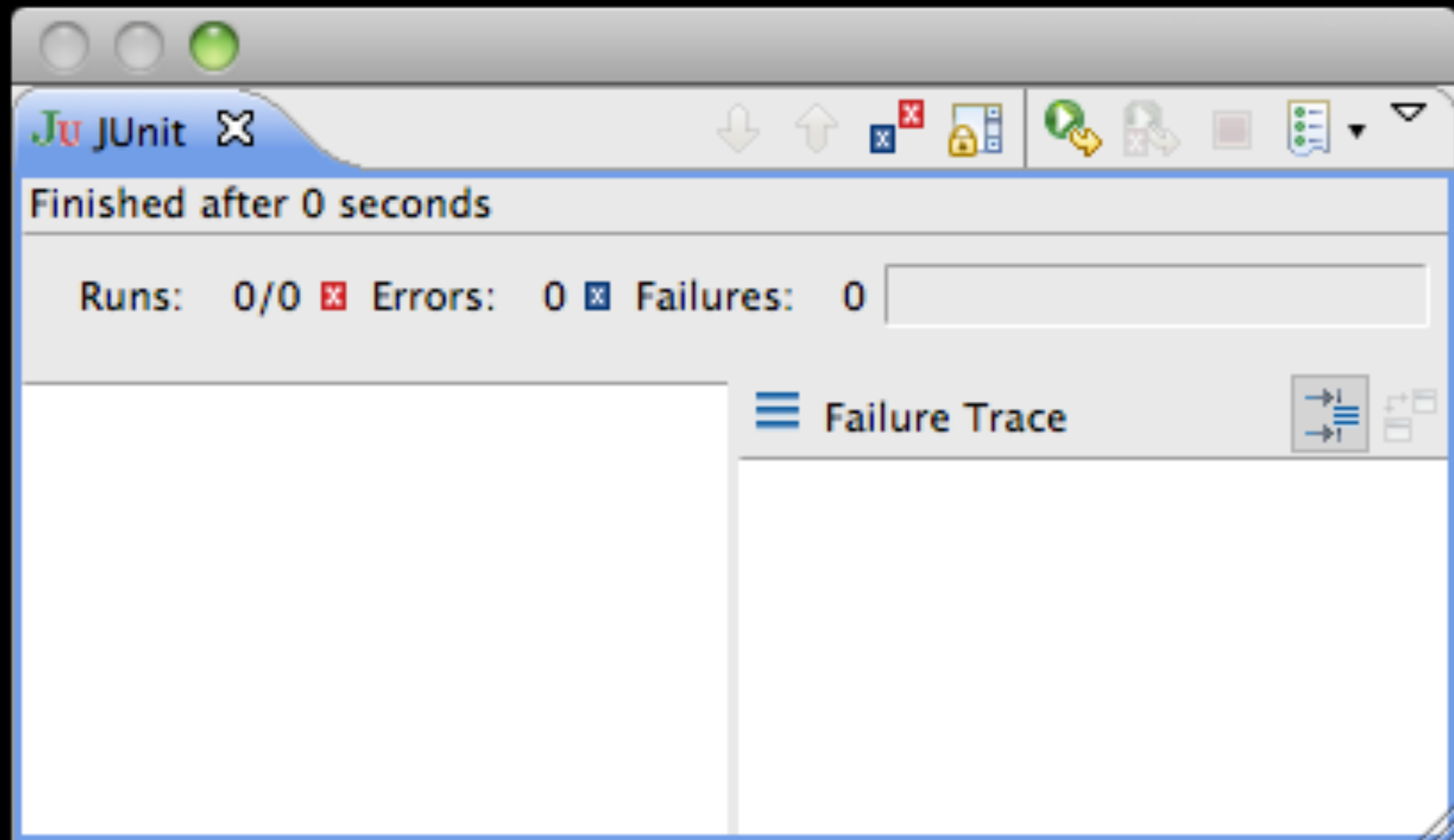


Übliche Probleme

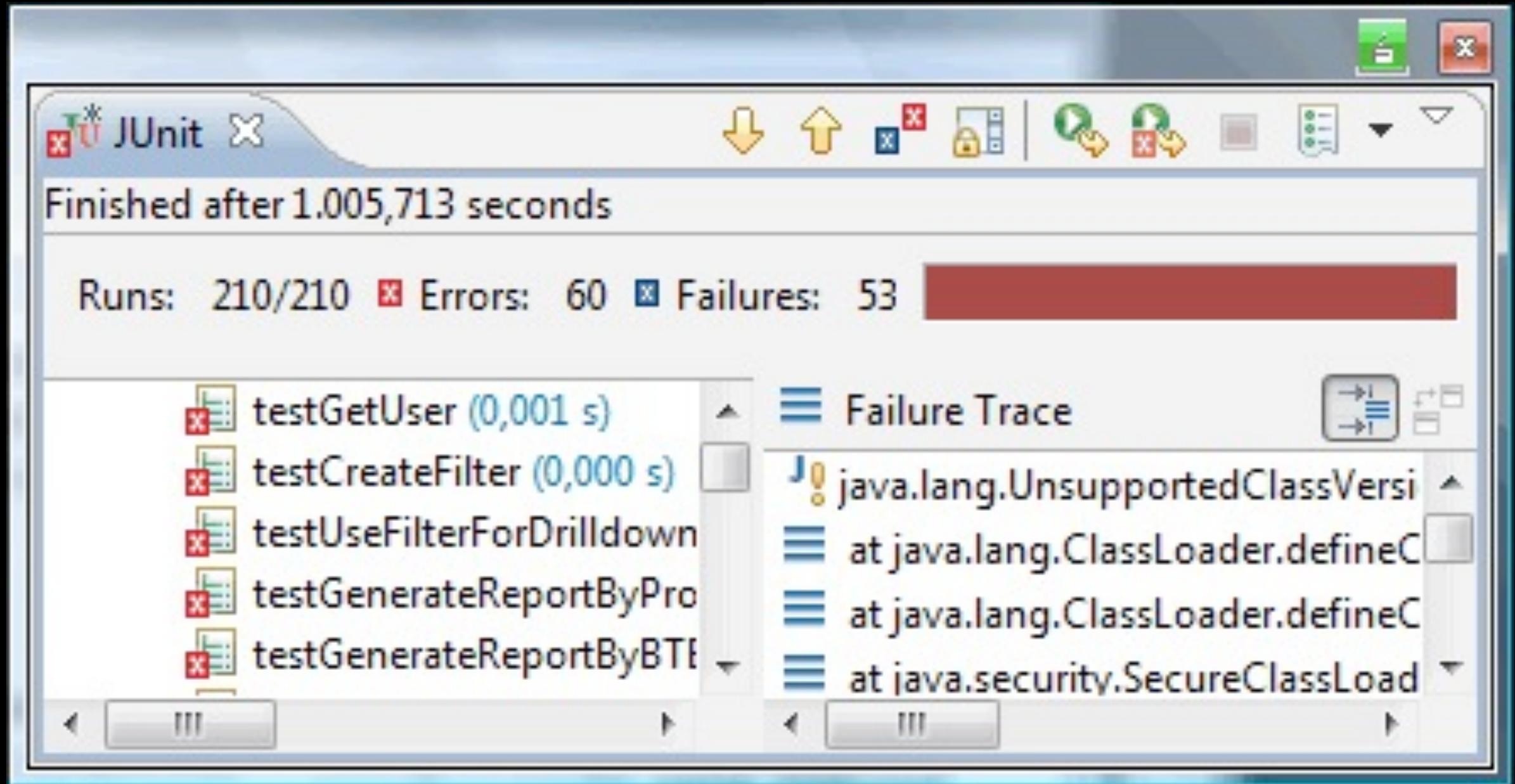
Allgemeine Betrachtungen

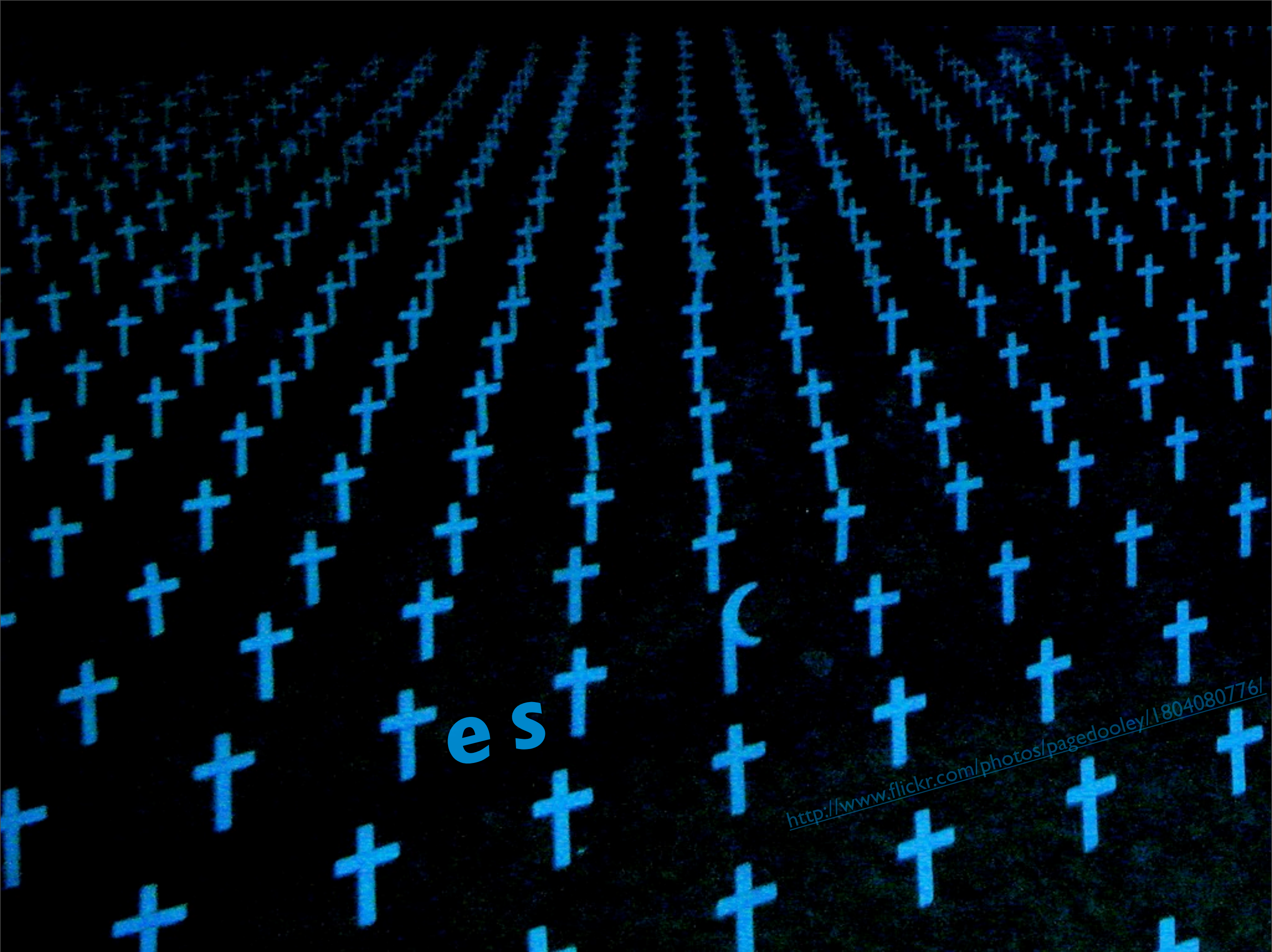
PatternTesting

Keine Tests vorhanden?



Tests kaputt?





<http://www.flickr.com/photos/pagedooley/1804080776/>

Ursachen

- Daten haben sich geändert
- Umgebung hat sich geändert
- Anforderungen haben sich geändert
- Software hat sich geändert
- ...



Ursachen

fehlende
Pflege!!!

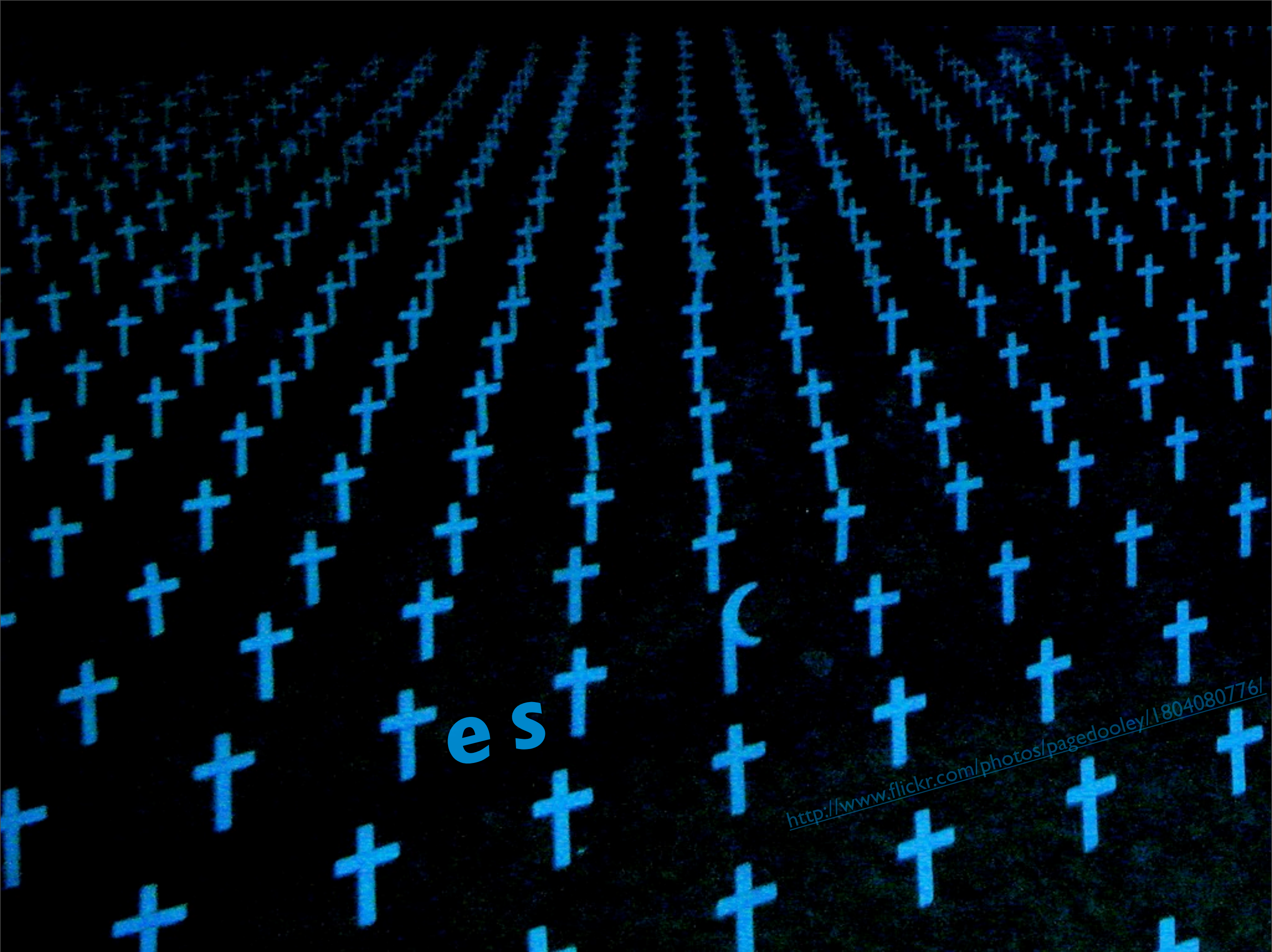
- Daten haben sich geändert
- Umgebung hat sich geändert
- Anforderungen haben sich geändert
- Software hat sich geändert
- ...



erste Schritte

- Ursache finden
- reparieren *oder*
- wegschmeißen





<http://www.flickr.com/photos/pagedooley/1804080776/>

@Ignore @Test

public void testSomething()...

public void **broken**testSomething()...

Pattern Testing

AntiPattern Testing



Pattern

Testing

Library

Anti-Pattern
Detector

ausgereifte
AspectJ-Lib

Test-Unter-
stützung



Your Code

Tools

Check.CT

Check.RT

Exception

Concurrent

Samples

R u n t i m e


```
@RunWith(SmokeRunner.class)
```




@Broken

```
@Broken(till = "01-Jan-2012")
@Test
public final void testCryptBobsFile() throws IOException {
    File file = new File("C:/Temp/bobsfile.txt");
    File unencryptedFile = Rot13.crypt(file);
    String content = FileUtils.readFileToString(unencryptedFile);
    assertEquals("Hello World!", content);
}
```




@RunTestOn(osName="Mac OS X")

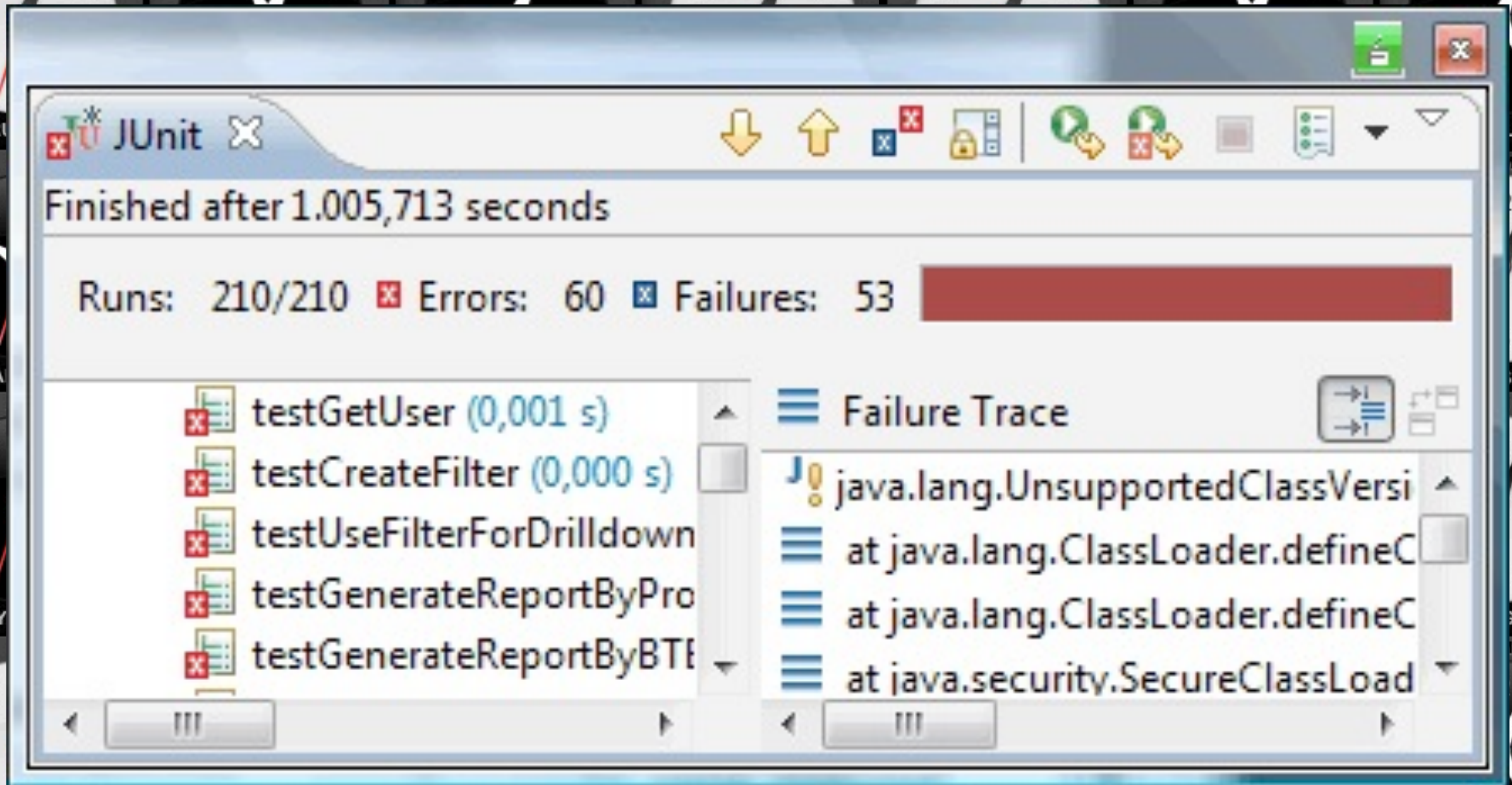
@SkipTestOn(osName="Linux")



Demo?



<http://www.flickr.com/photos/dhaun/4926434047>



(J)Unit-Tests

- begrenzte Reichweite
- schnell

IntegrationsTest

- Zusammenspiel
- können länger dauern



**Tipp:
eigenes
Projekt**

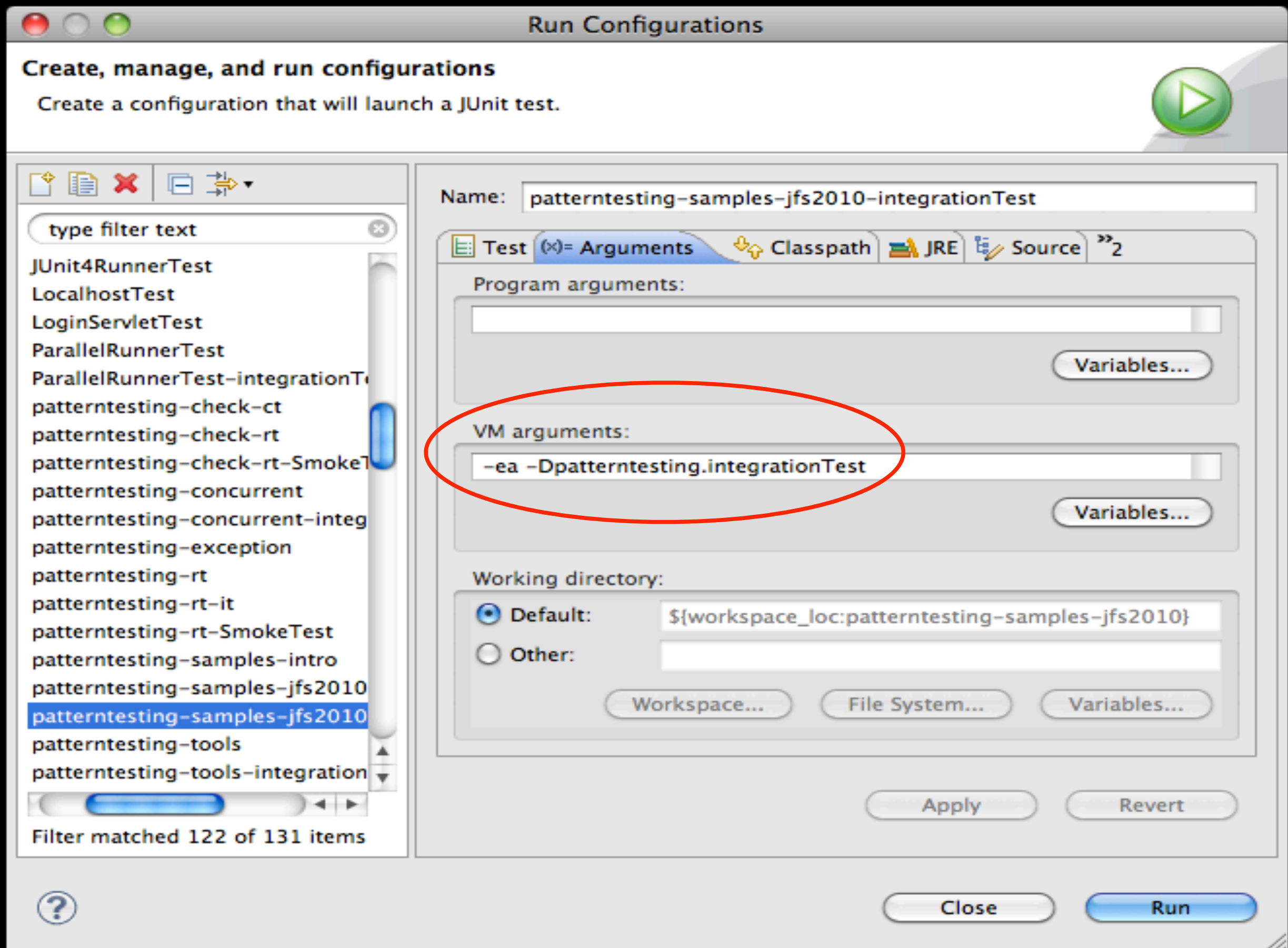

```
@RunWith(SmokeRunner.class)
public final class LoginServletTest {

    ...

    @IntegrationTest("needs LoginService")
    @Test
    public void testDoPost() throws IOException {

        ...

    }
}
```



@SmokeTest

java -Dpatterntesting.runSmokeTests ...



<http://www.flickr.com/photos/30529636@N06/3098628722/>

Fallstricke



<http://www.flickr.com/photos/donsolo/2855854548/>

`boolean equals (Object obj)`

Note that it is generally necessary to override the **hashCode** method whenever this method is overridden, so as to maintain the general contract for the **hashCode** method, which states that equal objects must have equal hash codes.

```
Sheep sh1 = new Sheep("Dolly");  
Sheep sh2 = new Sheep("Dolly");  
ObjectTester.assertEquals(sh1,  
                           sh2);
```



```
ObjectTester  
    .assertEquals(Sheep.class);
```

```
Package pkg = ...  
ObjectTester.assertEquals(pkg);
```



```
SerializableTester  
.assertSerialization(pkg);
```

```
CloneableTester  
.assertCloning(pkg);
```



```
Package pkg = ...  
ObjectTester.assertAll(pkg);
```

```
import static patterntesting.runtime.junit.FileTester;  
...  
assertEquals(f1, f2);  
assertContentEquals(f1, f2);
```


Pattern Testing - Browse /pa x

+

← → ↻

sourceforge.net/projects/patterntesting/files/patterntesting-libs/1.1.0/

☆

TAG



Pattern Testing

Planning

by oboehm, ojojo, vmassol

Summary

Files

Reviews

Support

Develop

Hosted Apps

Tracker

Mailing Lists

Code

Looking for the latest version? [Download patterntesting-tools-1.1.0-javadoc.jar \(146.8 KB\)](#)

[Home](#) / [patterntesting-libs](#) / 1.1.0

Name	Modified	Size	
↑ Parent folder			
patterntesting-libs-1.1.0-bin.zip	2011-04-25	1.7 MB	☐
patterntesting-libs-1.1.0-bin.tar.gz	2011-04-25	1.7 MB	☐
Totals: 2 Items		3.5 MB	

JAR

aspectjrt-1.6.9.RELEASE.jar

JAR

commons-io-1.4.jar

JAR

commons-lang-2.5.jar

JAR

commons-logging-1.1.1.jar

JAR

junit-4.8.1.jar

JAR

patterntesting-rt-1.1.0.jar

Support

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About

Einbindung



- patterntesting-rt.jar
- commons-lang.jar
- commons-logging.jar
- aspectjrt.jar
- junit.jar

```
<dependency>  
  <groupId>org.patterntesting</groupId>  
  <artifactId>patterntesting-rt</artifactId>  
  <version>1.1.0</version>  
</dependency>
```


The background of the entire slide is a photograph of a library. It shows several rows of dark wooden bookshelves filled with books. The books have various colored spines, including red, orange, yellow, and green. The lighting is warm, creating a cozy atmosphere. The text is overlaid on this image.

Pattern

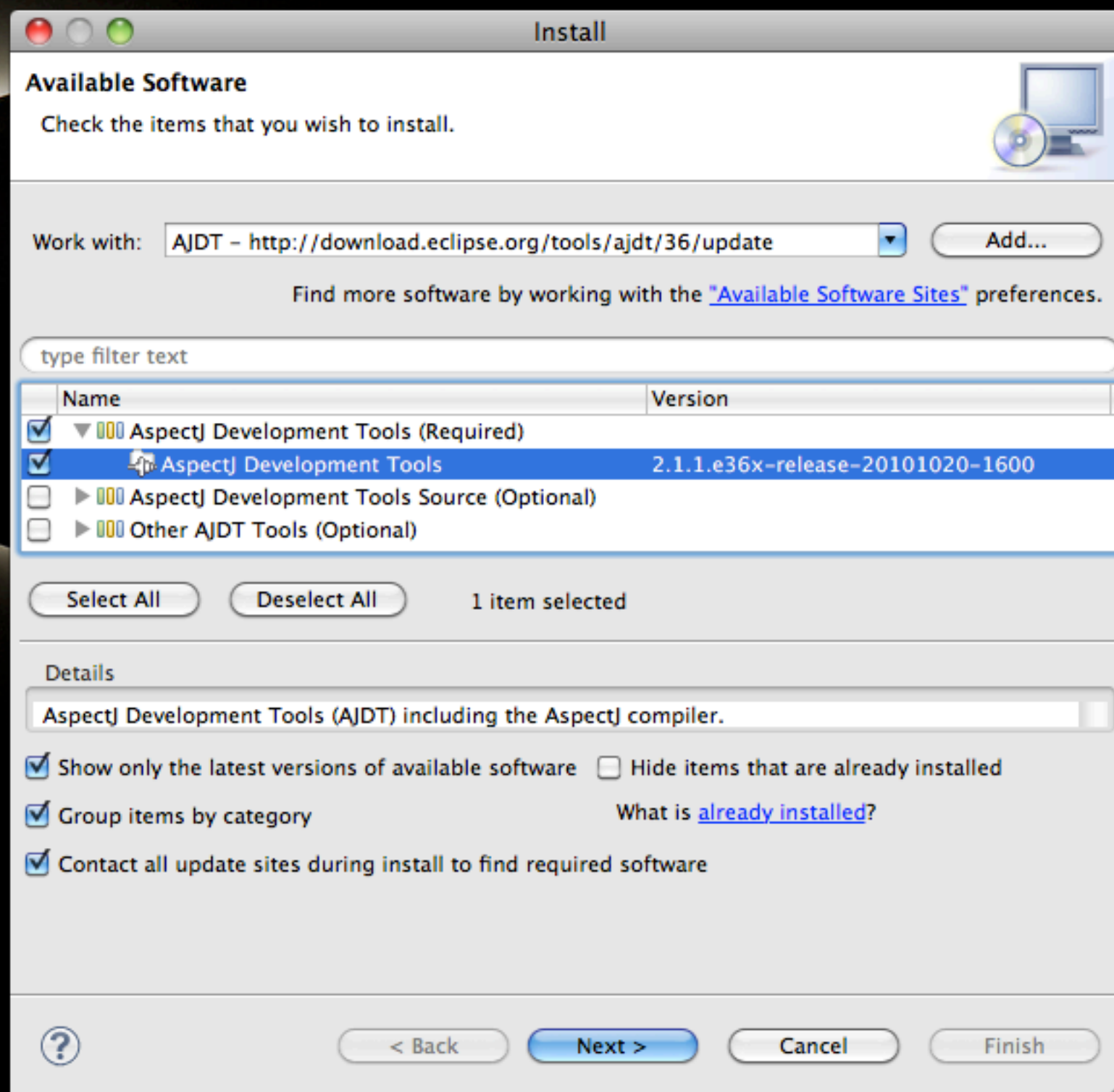
Testing

Library

Anti-Pattern
Detector

ausgereifte
AspectJ-Lib

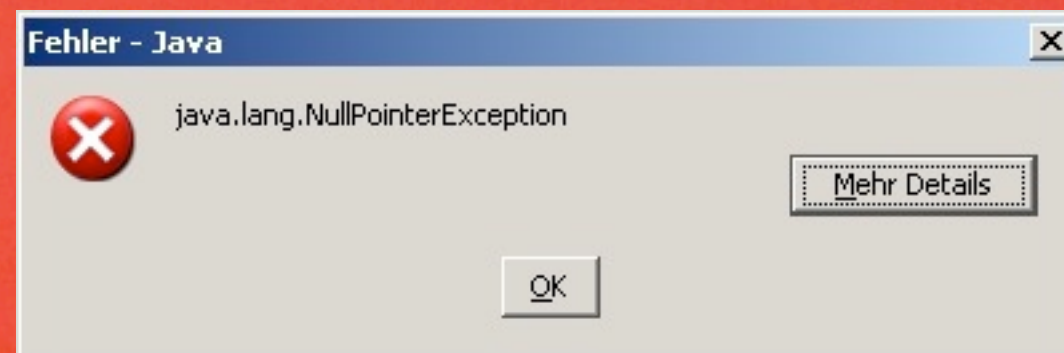
Test-Unter-
stützung



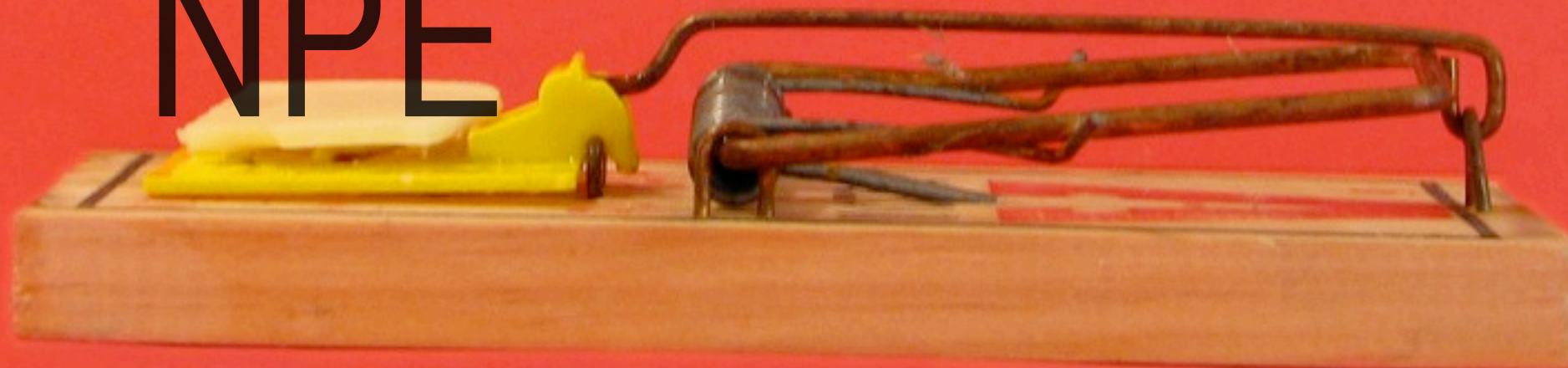
Einbindung



- patterntesting-rt.jar (Aspect Path)
- patterntesting-exception.jar (Aspect Path)
- u. a.



NPE

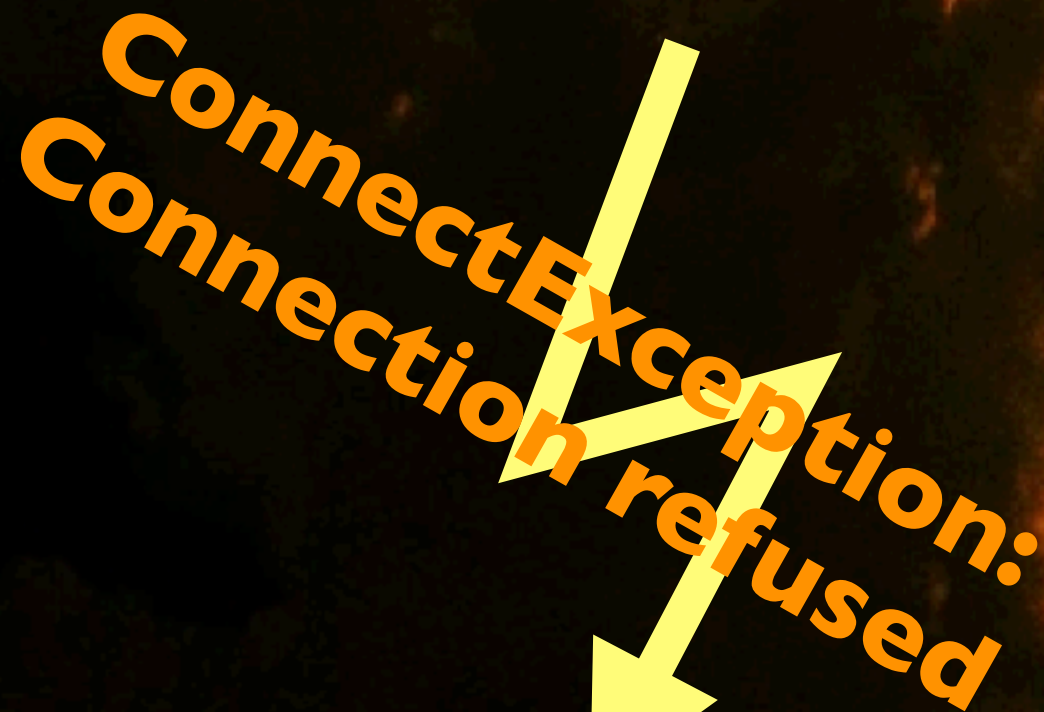


A large, bright, orange and yellow explosion or fireball against a dark background. The fireball is irregular in shape, with many smaller, glowing fragments visible within the main mass. The background is a deep, dark blue or black, suggesting a night sky or a dark environment. The overall effect is one of intense energy and power.

```
socket = new Socket("bnd", 815);
```

```
socket = new Socket("bnd", 815);
```

**ConnectException:
Connection refused**




```
socket = new Socket("bnd", 815);
```

**ConnectException:
Connection to bnd:815 refused**

@ Test Exception

Exception

Factory

<http://www.flickr.com/photos/extranoise/278465198/>

@Nullable

@Broken

@MayReturnNull

@LogRuntimeException

@NotYetImplemented

@PublicForTesting

@TestException

@TestThread

@ProfileMe

@Deprecated



Your Code

Tools

Check.CT

Check.RT

Exception

Concurrent

Samples

R u n t i m e

The Vision





To be the Minesweeper
for Your Java Code!

<http://www.flickr.com/photos/neodelphi/1707209395/>



Fragen?

ELADEN i

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<http://oli.blogger.de>

<http://PatternTesting.org>