

Haben wir alle wichtigen Features getestet?

Ticket-Coverage live am Beispiel

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CQSE GmbH

Forschung

- 13 Promotionen in Software Engineering
- Promotionsprogramm, Enger Universitätskontakt



Praxis

- Software Audits
- Quality Control und Test Control



Analysewerkzeug

www.teamscale.com



Änderungen



Test-Gap-Analyse

Ausführung



Ungetestete
Änderungen

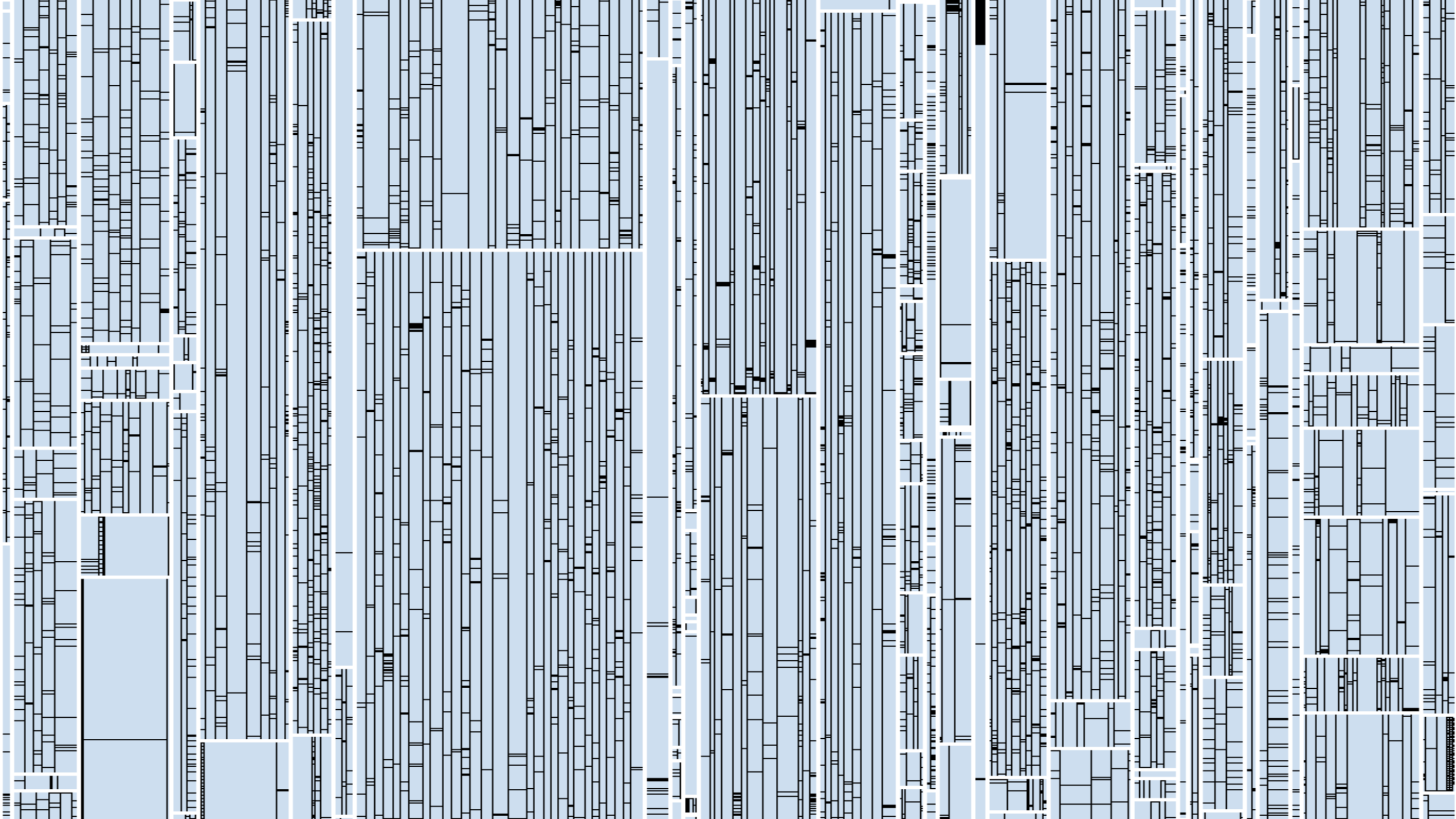
GUI.Dialogs

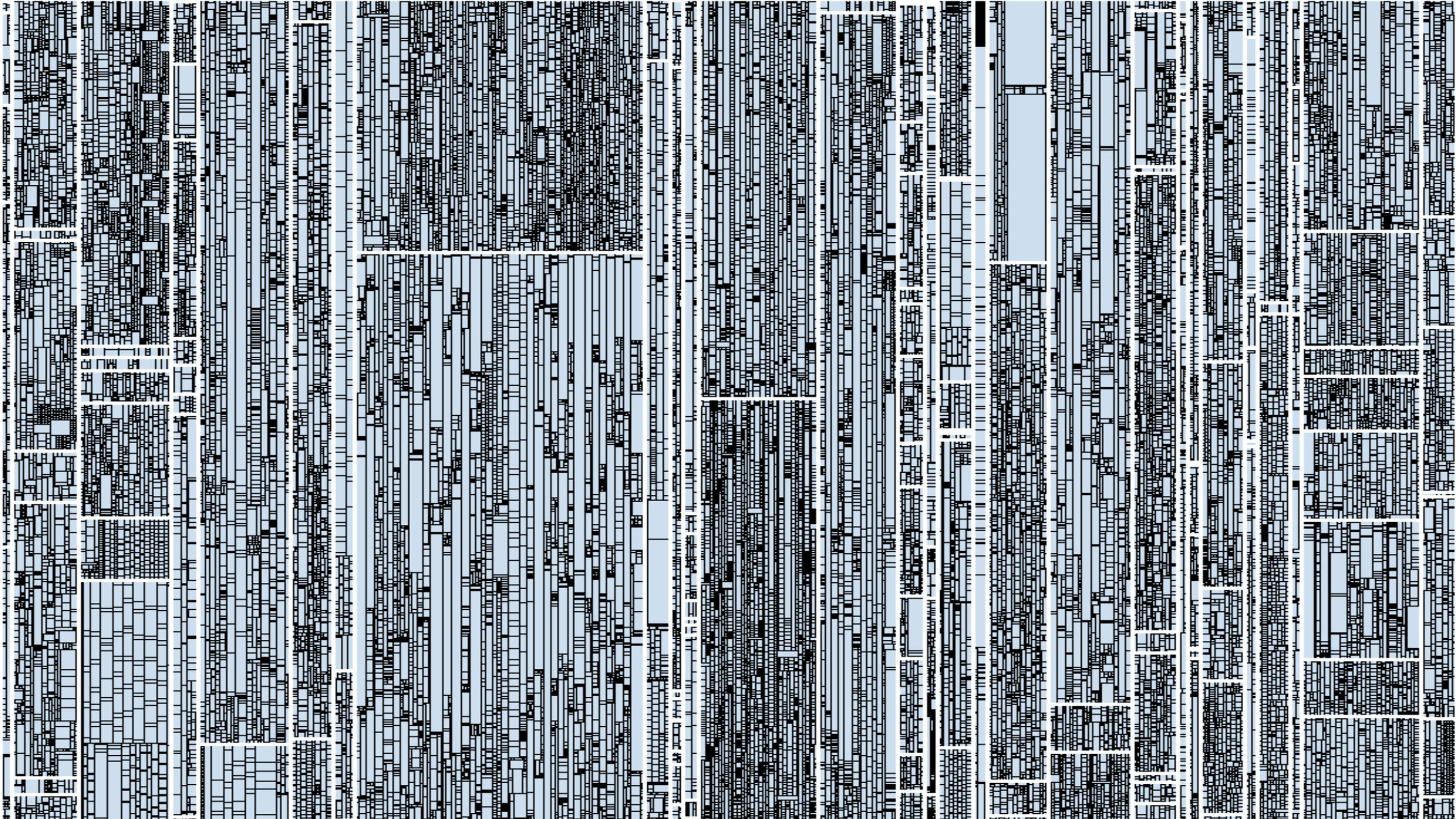
UI Controls

GUI.Base

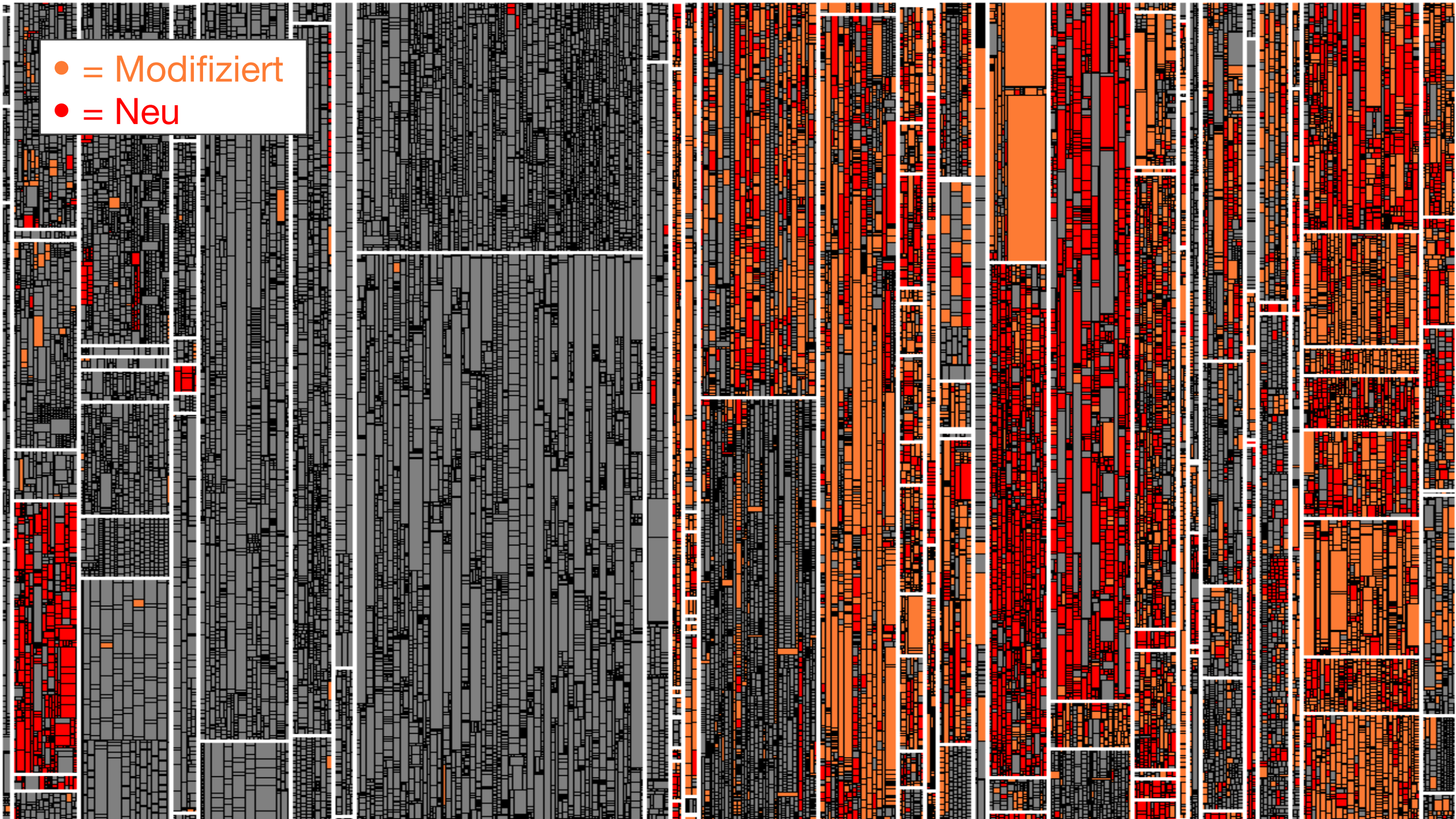
Authentication

Data
Validation

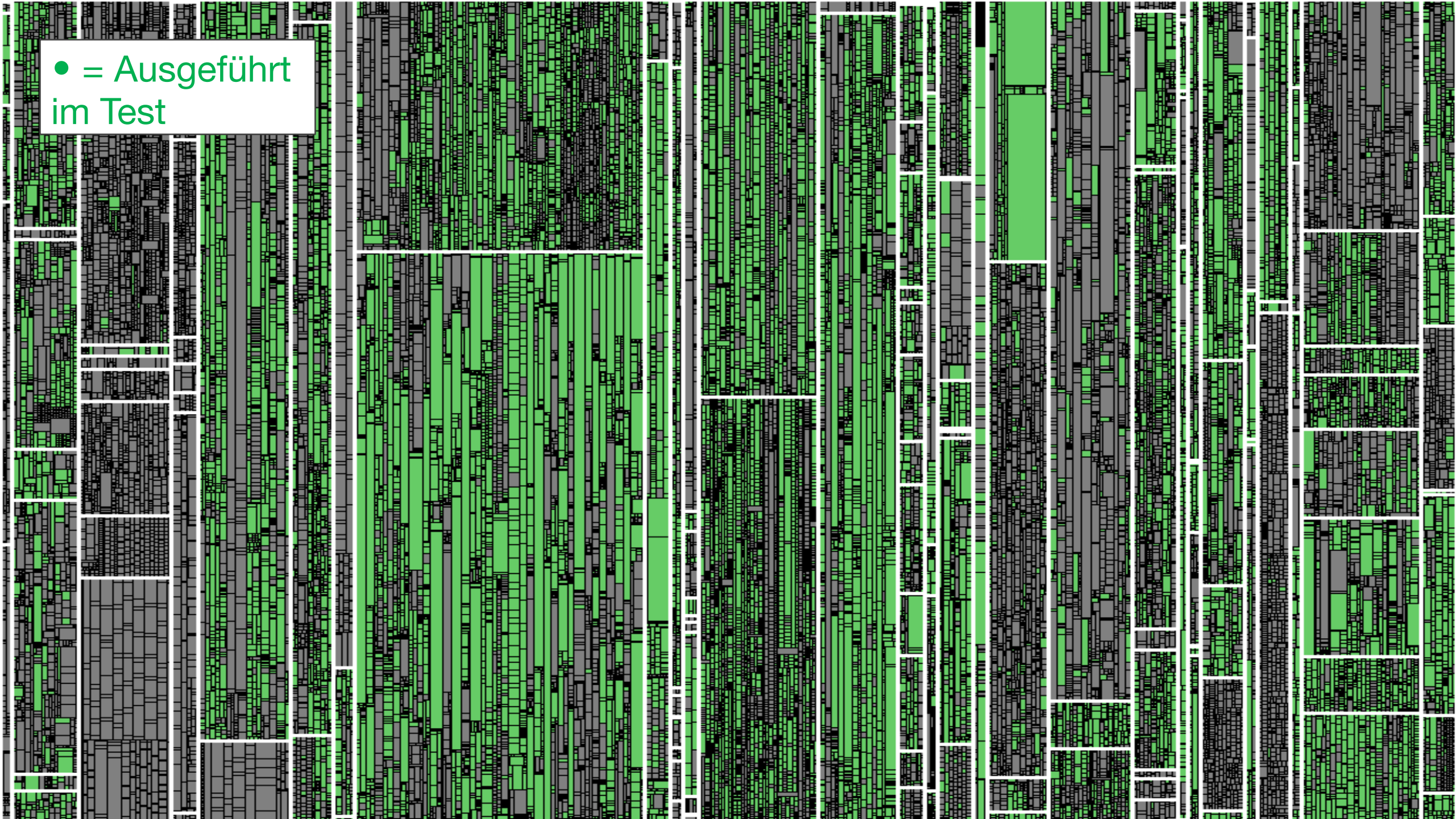




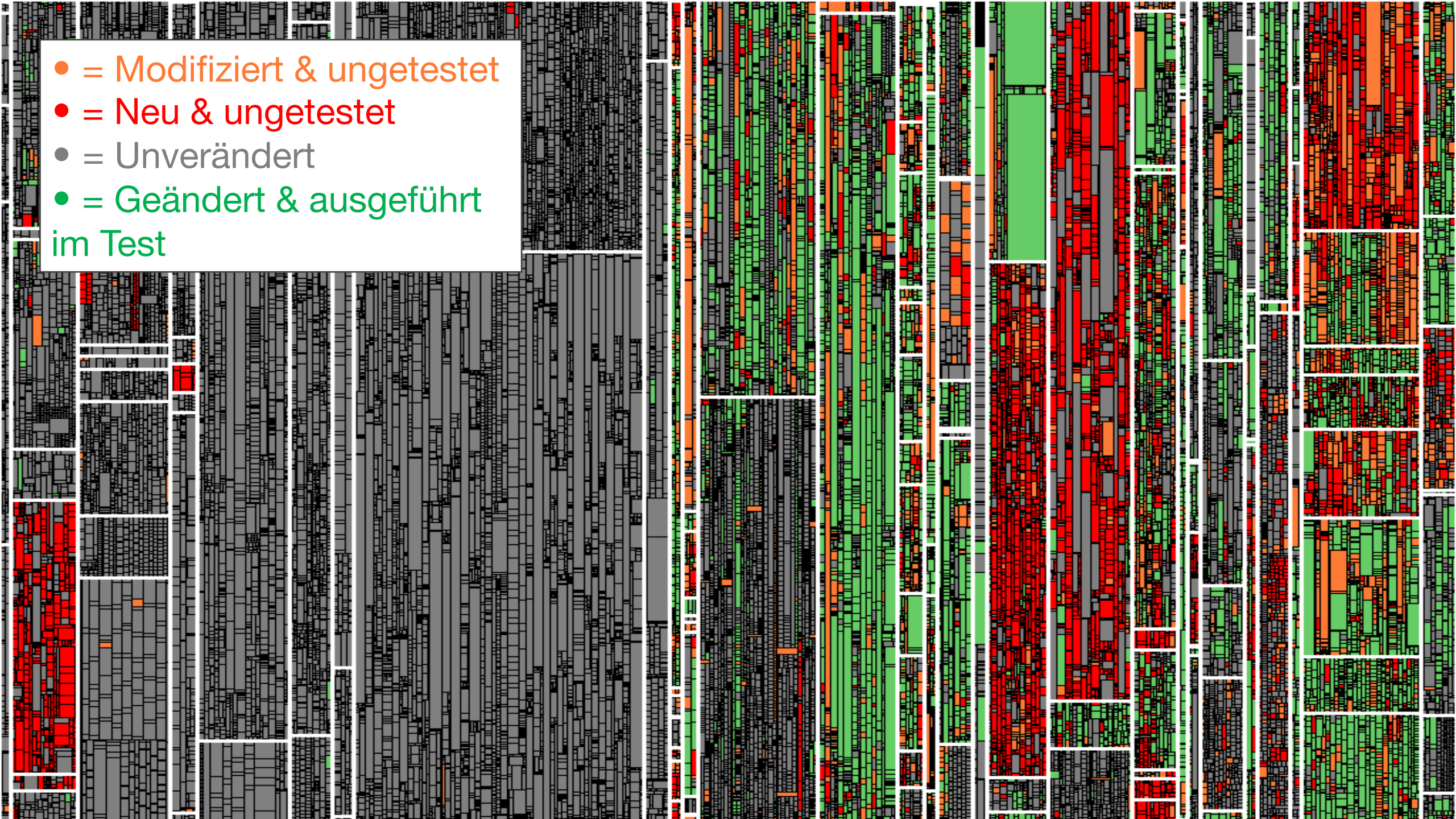
- = Modifiziert
- = Neu



● = Ausgeführt
im Test



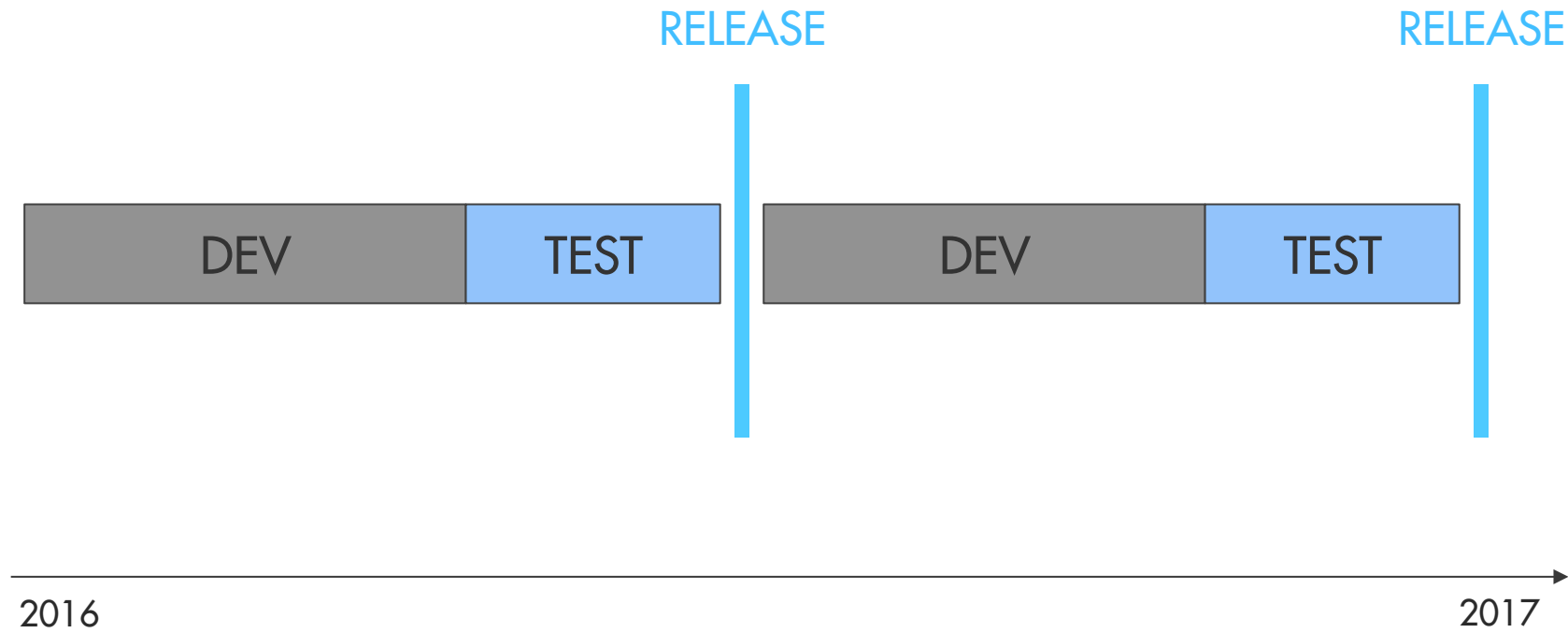
- = Modifiziert & ungetestet
- = Neu & ungetestet
- = Unverändert
- = Geändert & ausgeführt im Test



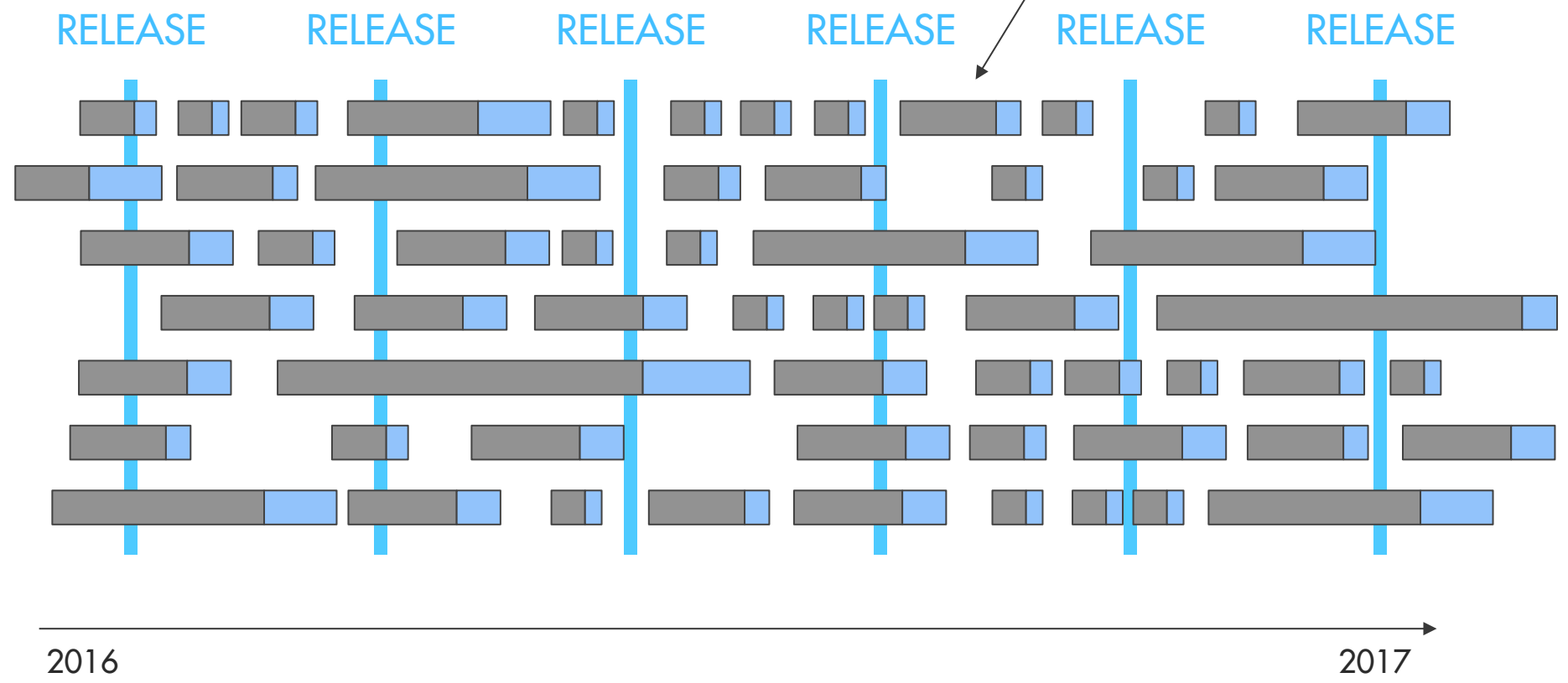
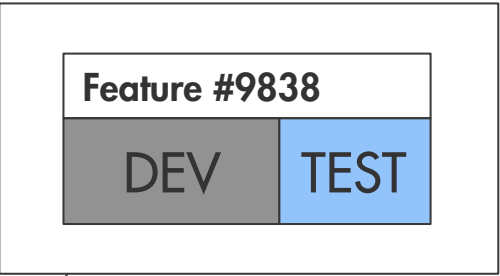


100% Change Coverage → 0 Fehler

Test Focus: Release



Test Focus: Ticket





Ticket Coverage

Ticket

Im Issue Tracker verwaltete Unit of Work.
Bug, Issue, Change Request, User Story, ...

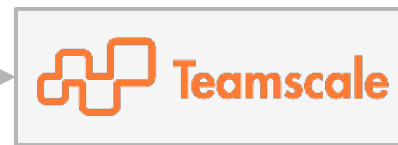
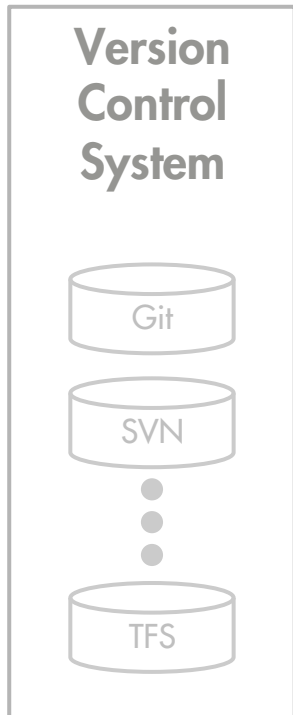
Ticket Code

Code, der bei der Implementierung eines Tickets angefasst (geändert oder neu geschrieben) wurde.

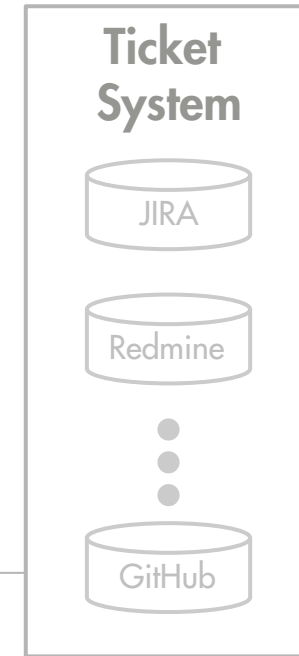
Ticket Coverage

Anteil des Ticket Codes, der im Test zur Ausführung kam.

CR#9838: Added TODO	26.07.16 16:38
CR#9838: Adjust naming	26.07.16 15:33
CR#9533: RED	26.07.16 15:13
CR#9533: GREEN	26.07.16 15:12
CR#10181: Added new finding for deprecated classes, methods and fields	26.07.16 14:43
CR#10037: Moved ReviewMetricsSynchronizer to Crucible package and made some improvements to its internal structure	26.07.16 14:31
CR#10037: Updated aggregation strategy of open reviews so each review is only counted once, even over multiple files	26.07.16 13:04
CR#10203: Fixed "field could be made final" for Java interfaces	26.07.16 12:16
CR#10200: Rename pathRestriction -> subPath (1)	26.07.16 11:35
CR#10200: Rename pathRestriction -> subPath (1)	26.07.16 11:35
CR#10172: Removed unwanted colons from headers in the commit view of the activity perspective	26.07.16 11:20
CR#9838: Fix: only one color of a threshold is specified in a corridor	26.07.16 11:14
CR#0: Fix findings	26.07.16 11:01
CR#9838: minor improvement	26.07.16 10:56
CR#10199: Mail notifications do now support starTLS	26.07.16 10:52
CR#9533: working on developer feedback	26.07.16 09:50
CR#9838: Amend last commit	26.07.16 09:38
CR#9838: minor refactoring	26.07.16 09:05
CR#9838: Fix NPE	26.07.16 09:01



Ticket Coverage



```

public static synchronized void log(String methodIdentifier) {
    if (s_mode == LoggingMode.TESTING) {
        s_testingLog.add(methodIdentifier);
    } else if (s_mode == LoggingMode.FRAMING) {
        s_framingLog.add(methodIdentifier);
    } else {
        throw new IllegalStateException();
    }
}

public static synchronized Set<String> getFramingLog() {
    return s_framingLog;
}

public static synchronized Set<String> getTestingLog() {
    return s_testingLog;
}

public static synchronized void reset() {
    s_testingLog.clear();
    s_framingLog.clear();

    setMode(LoggingMode.FRAMING);
}

public static synchronized void setMode(LoggingMode newMode) {
    s_mode = newMode;
}

```

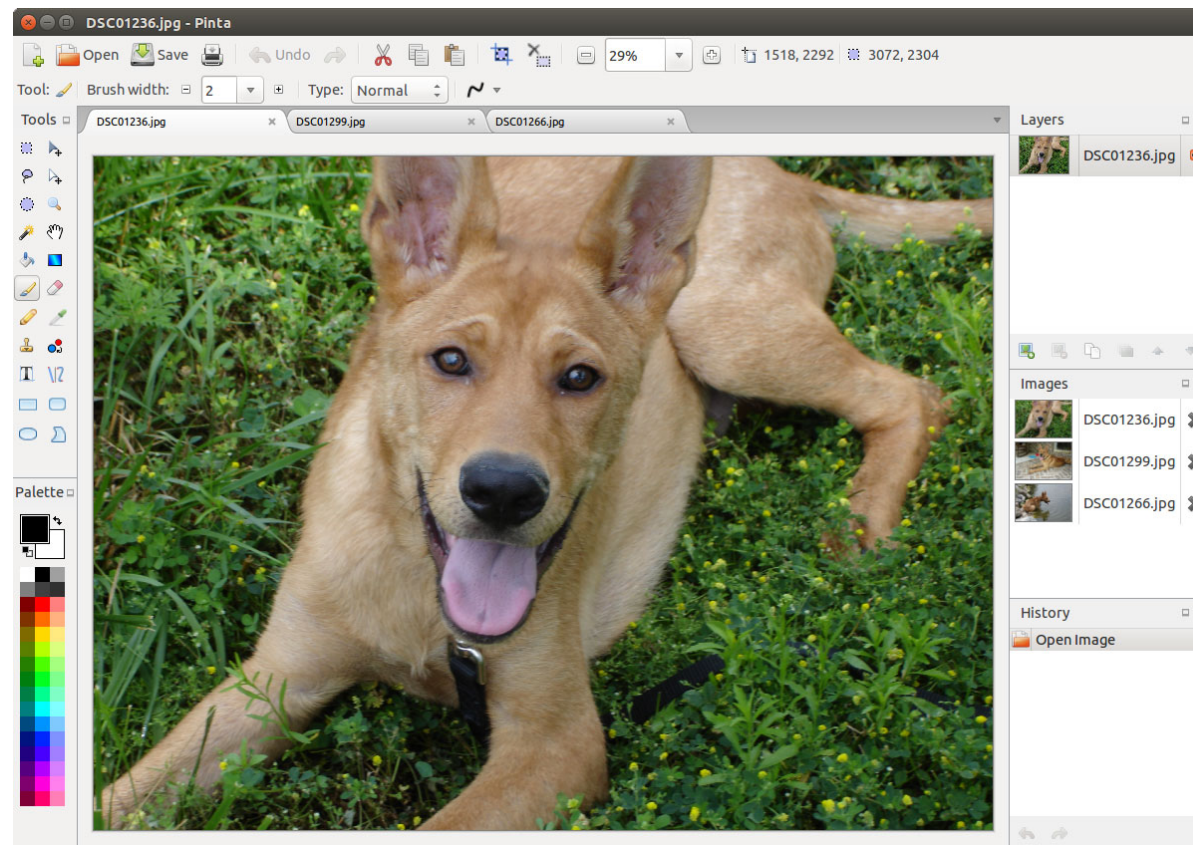

Demo



www.teamscale.com

Pinta: Open Source Zeichenprogramm (C# .NET)

 PintaProject/Pinta



ABAP

Ada

C#

C/C++

Cobol

Delphi

Fortran

Groovy

Gosu

HANA SQLScript

HANA Views

IEC 61131-3 ST

Java

JavaScript

Magik

Matlab

Open CL

OScript

PHP

PL/SQL

Python

Rust

SQLScript

Simulink/StateFlow

Swift

TypeScript

Visual Basic .NET

Xtend

Fazit

Kürzere Release-Zyklen führen zu Parallelisierung in Entwicklung und Test. Dadurch steigt das Risiko ungetesteter Änderungen.

Ticket Coverage hilft, wichtige Änderungen zuverlässig zu testen.

Wir unterstützen gerne bei der Evaluierung und Einführung.

Kontakt



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