Muss ich wirklich schon wieder alles testen?

Test-Impact-Analyse mit Teamscale live am Beispiel

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CQSE GmbH

CQSE

Praxis

Software-Audits

Kontinuierliche Qualitäts- und Testkontrolle

Teamscale

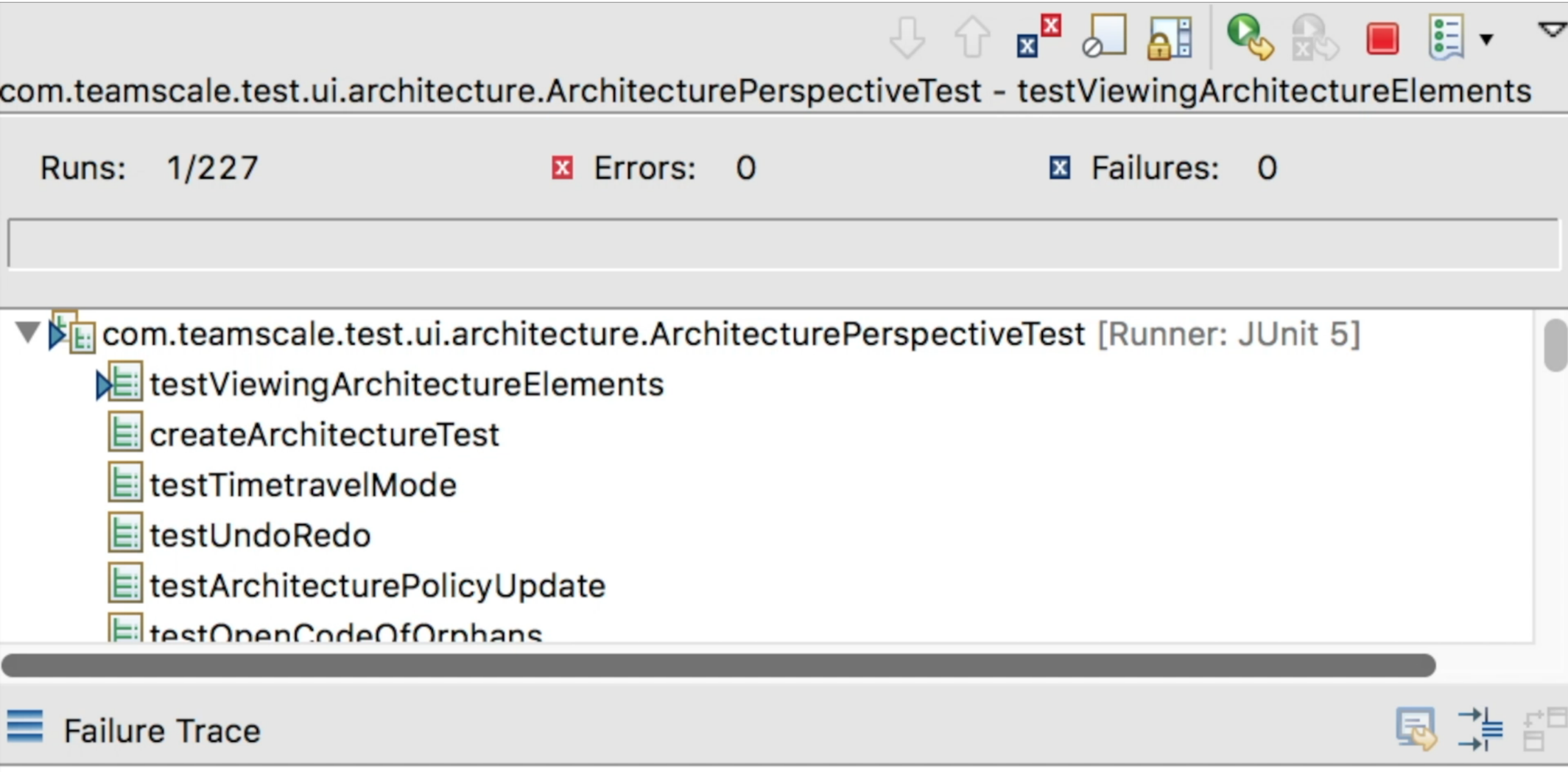
CQSE GmbH

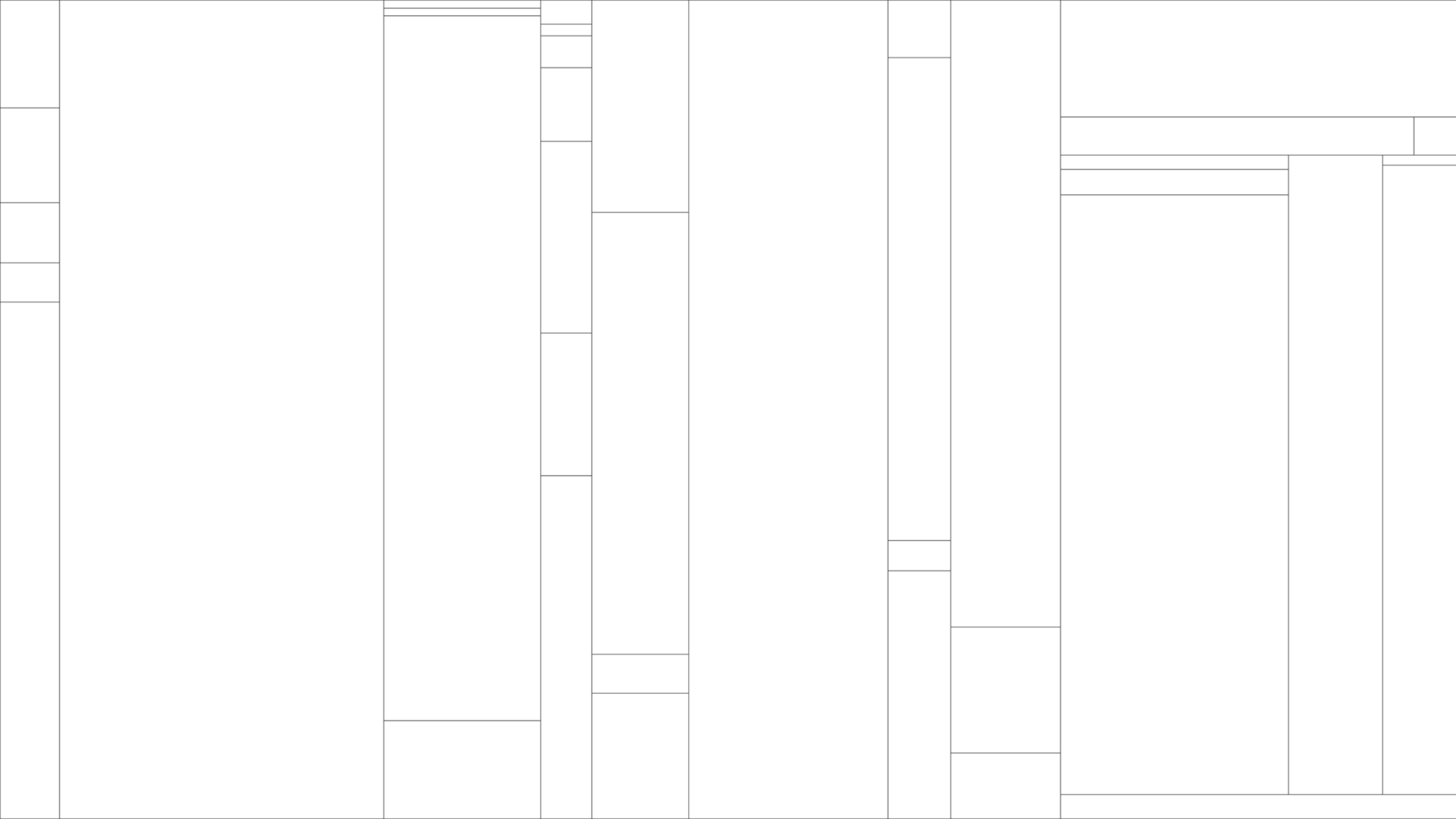
Forschung

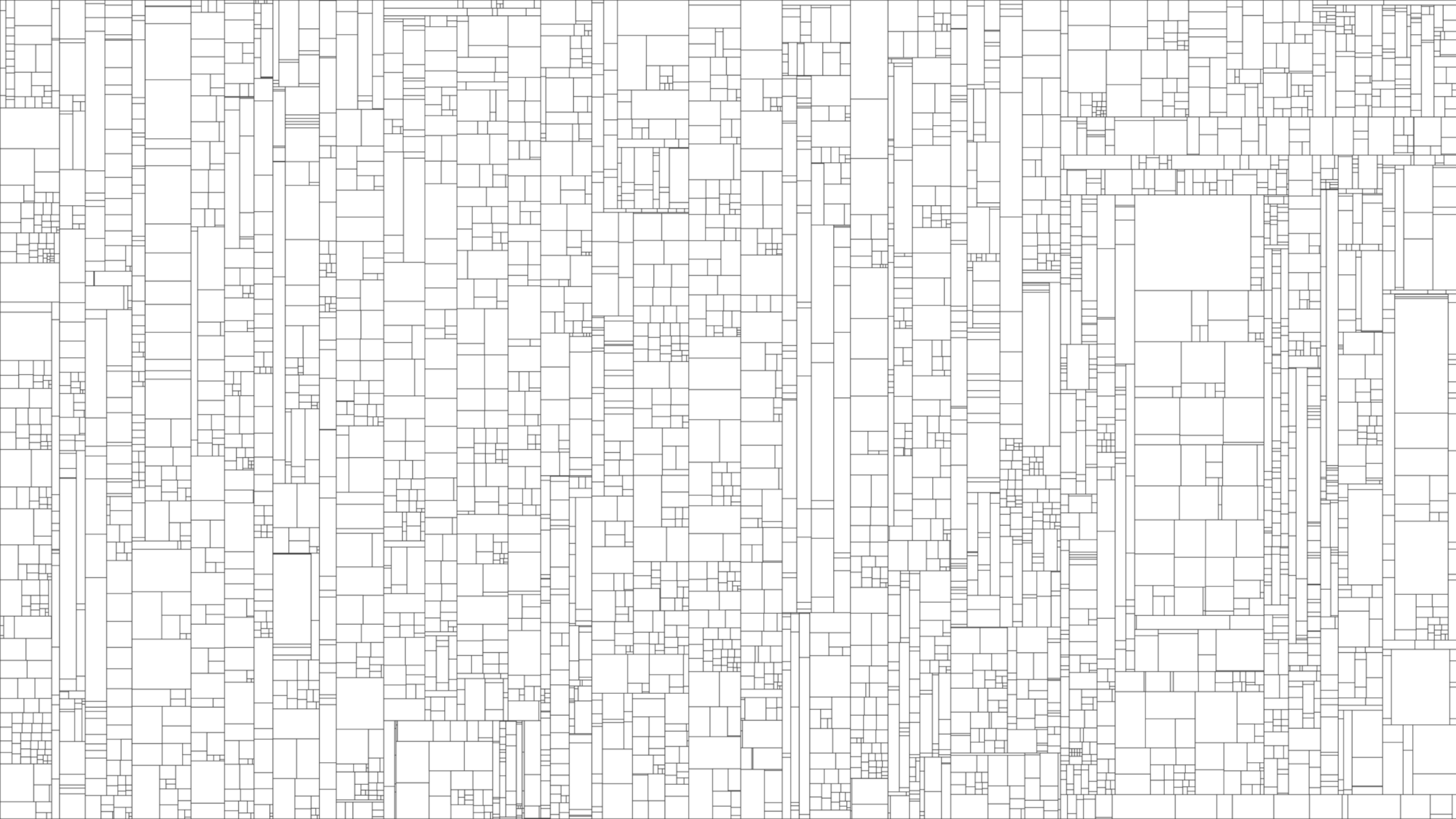
16+ Promotionen in Software Engineering

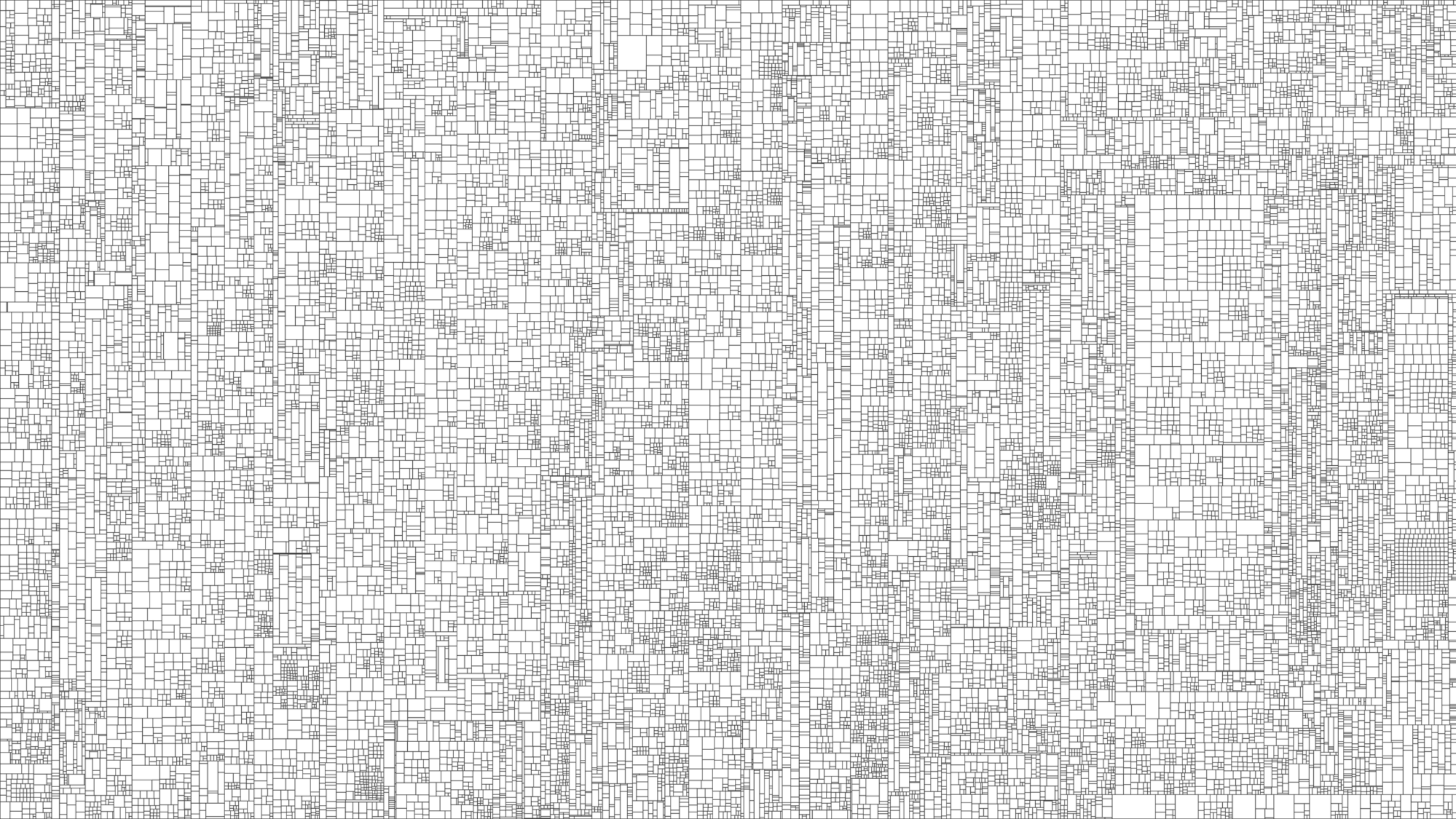
Eigene Forschung

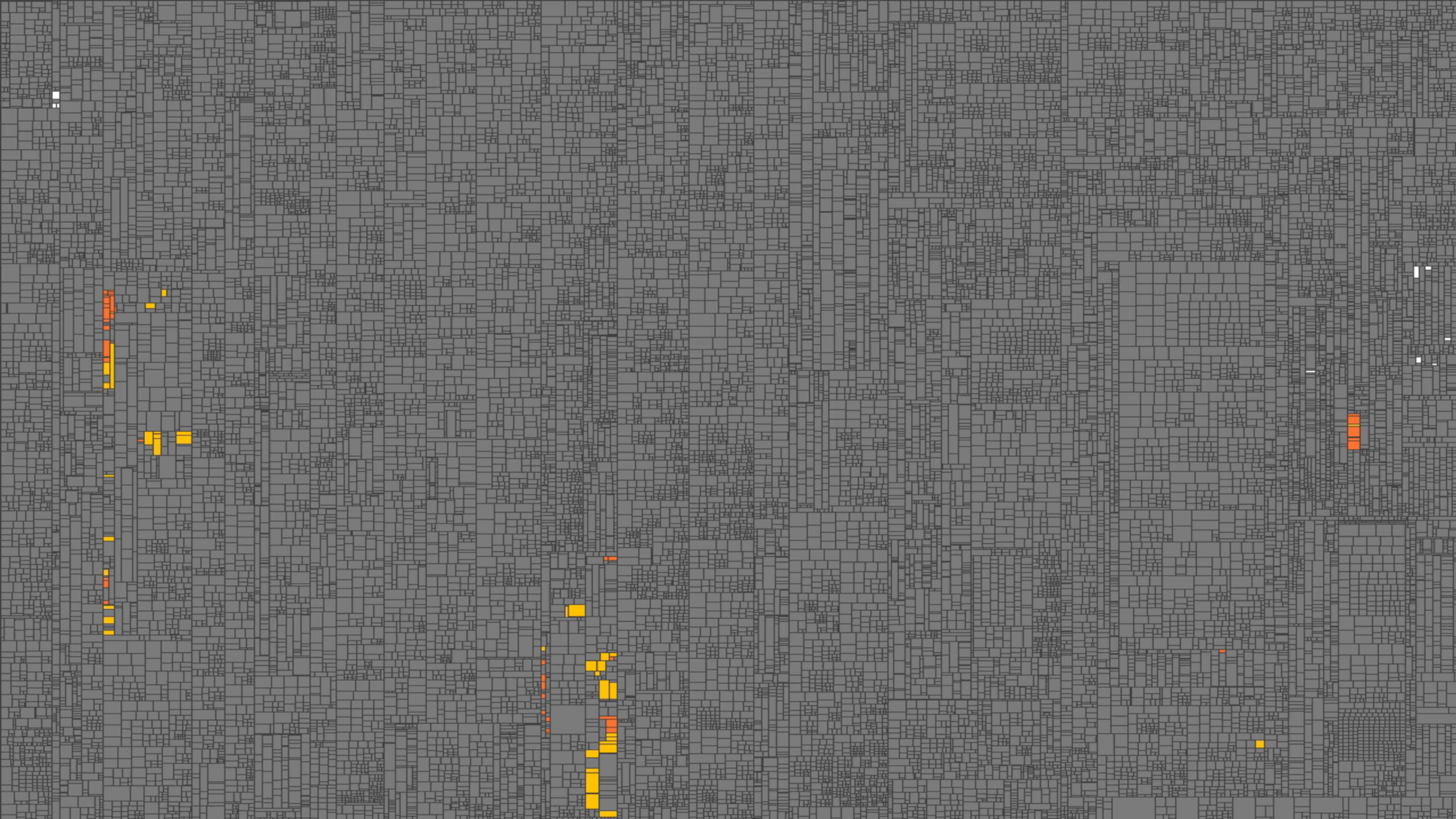
Enger Kontakt zu Universitäten

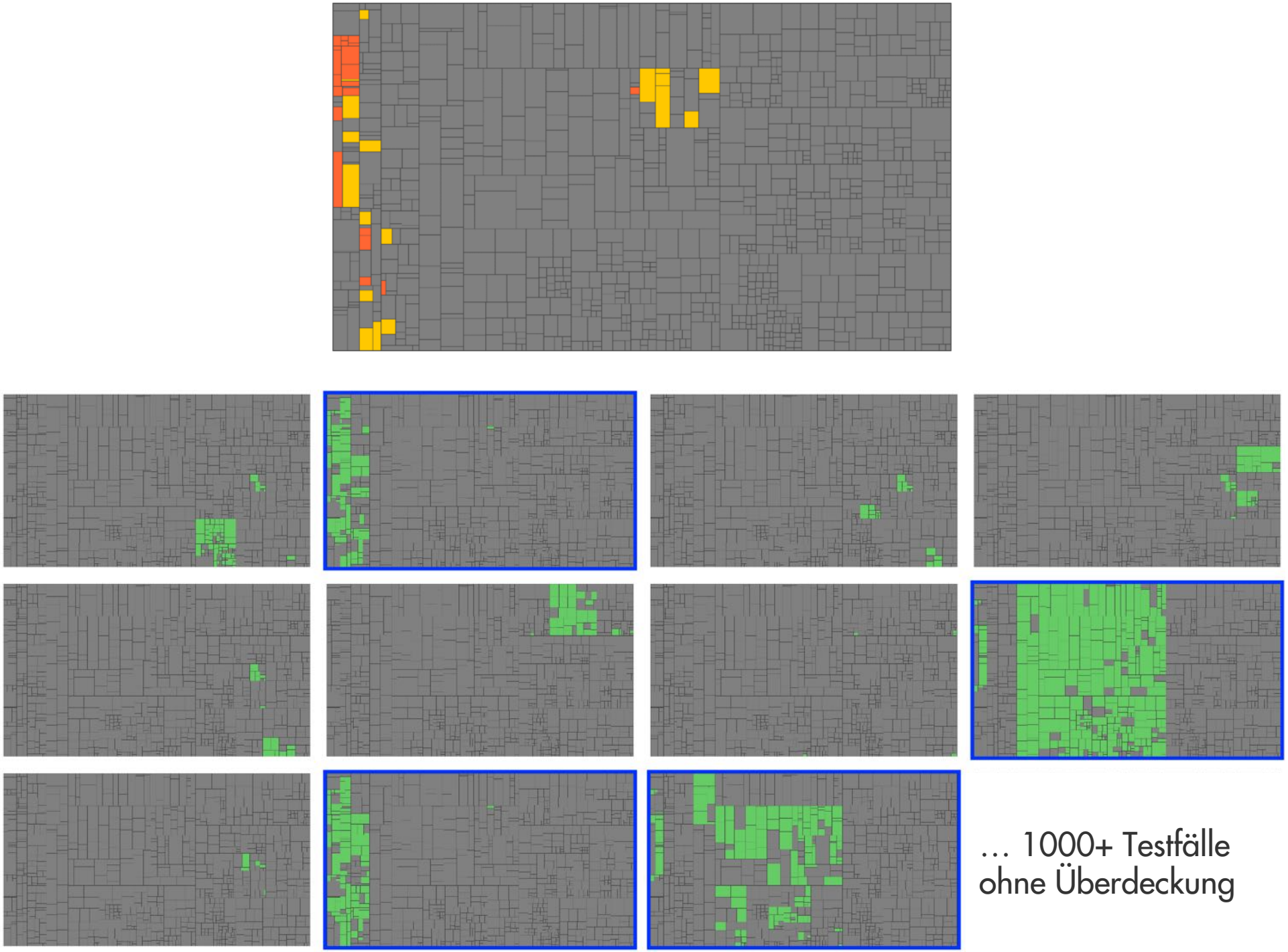

com.teamscale.test.ui.architecture.ArchitecturePerspectiveTest - testViewingArchitectureElements
Runs: 1/227
Errors: 0
Failures: 0
com.teamscale.test.ui.architecture.ArchitecturePerspectiveTest [Runner: JUnit 5]
testViewingArchitectureElements
createArchitectureTest
testTimetravelMode
testUndoRedo
testArchitecturePolicyUpdate
testOpenCodeOfOrphans
Failure Trace



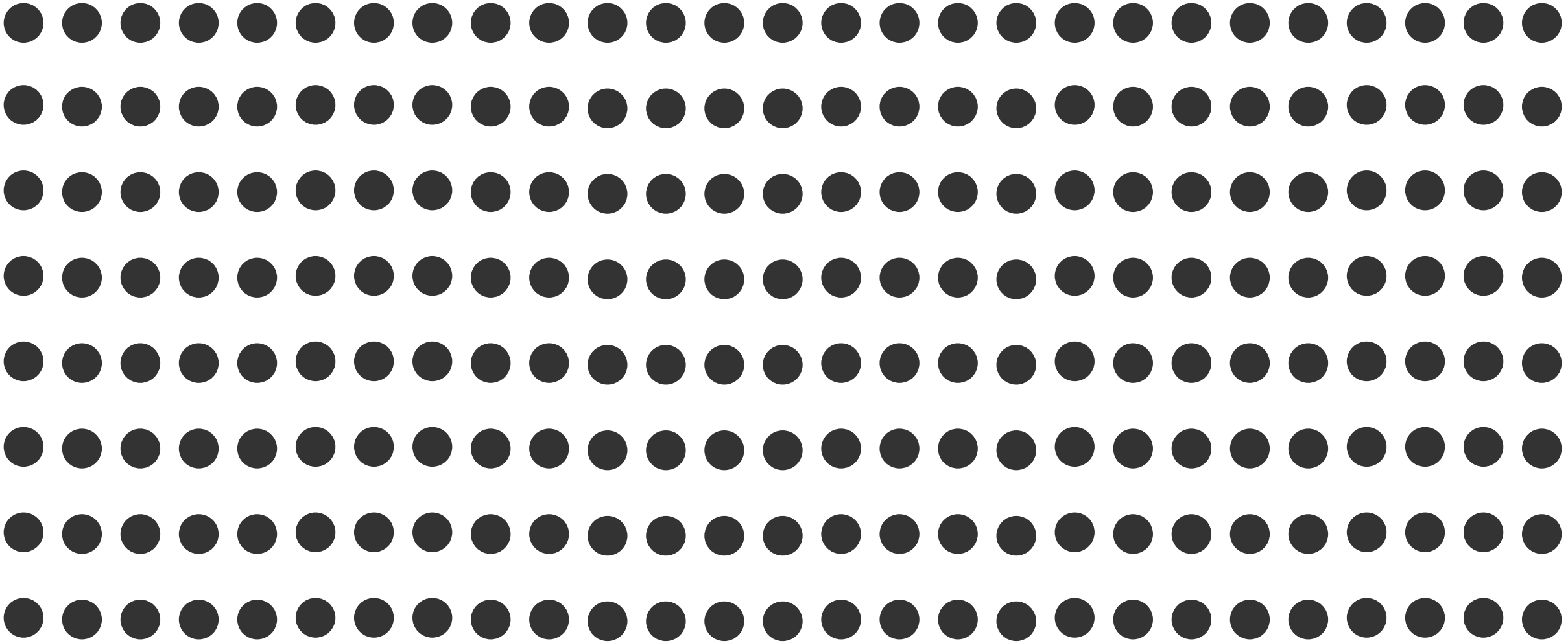




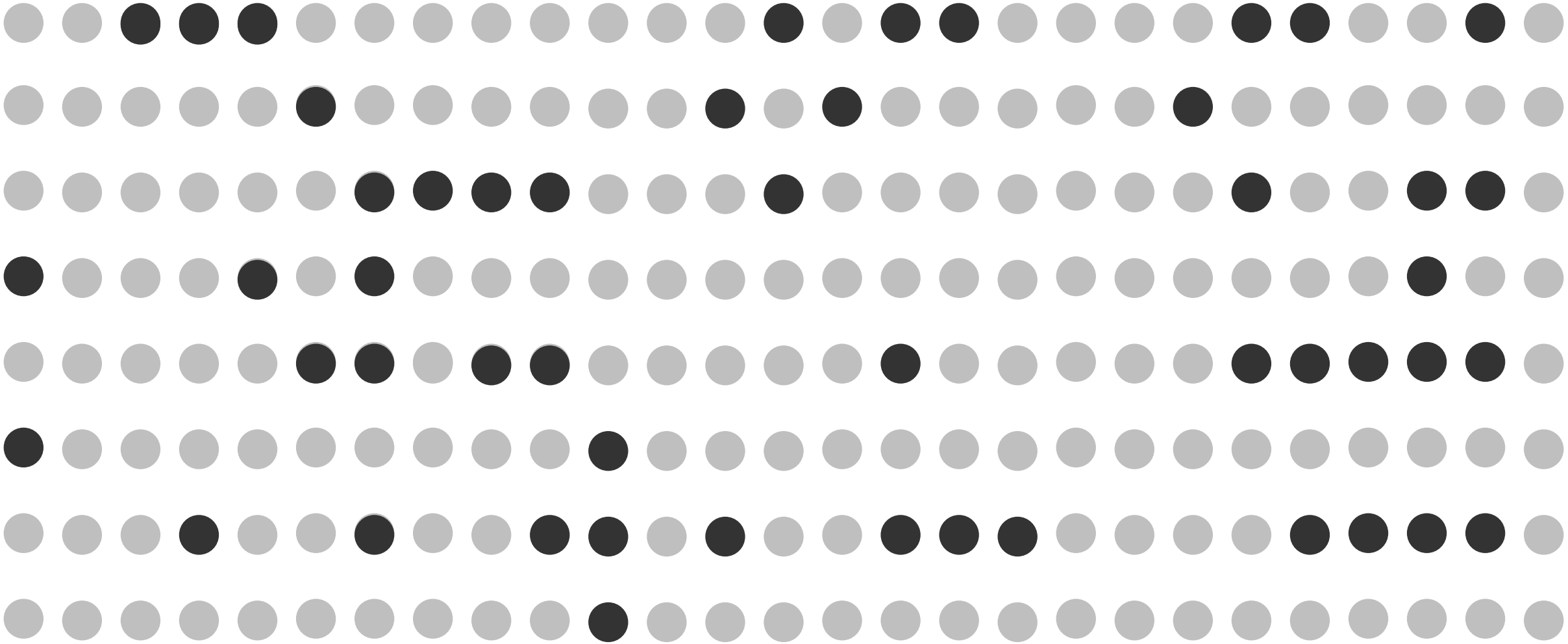




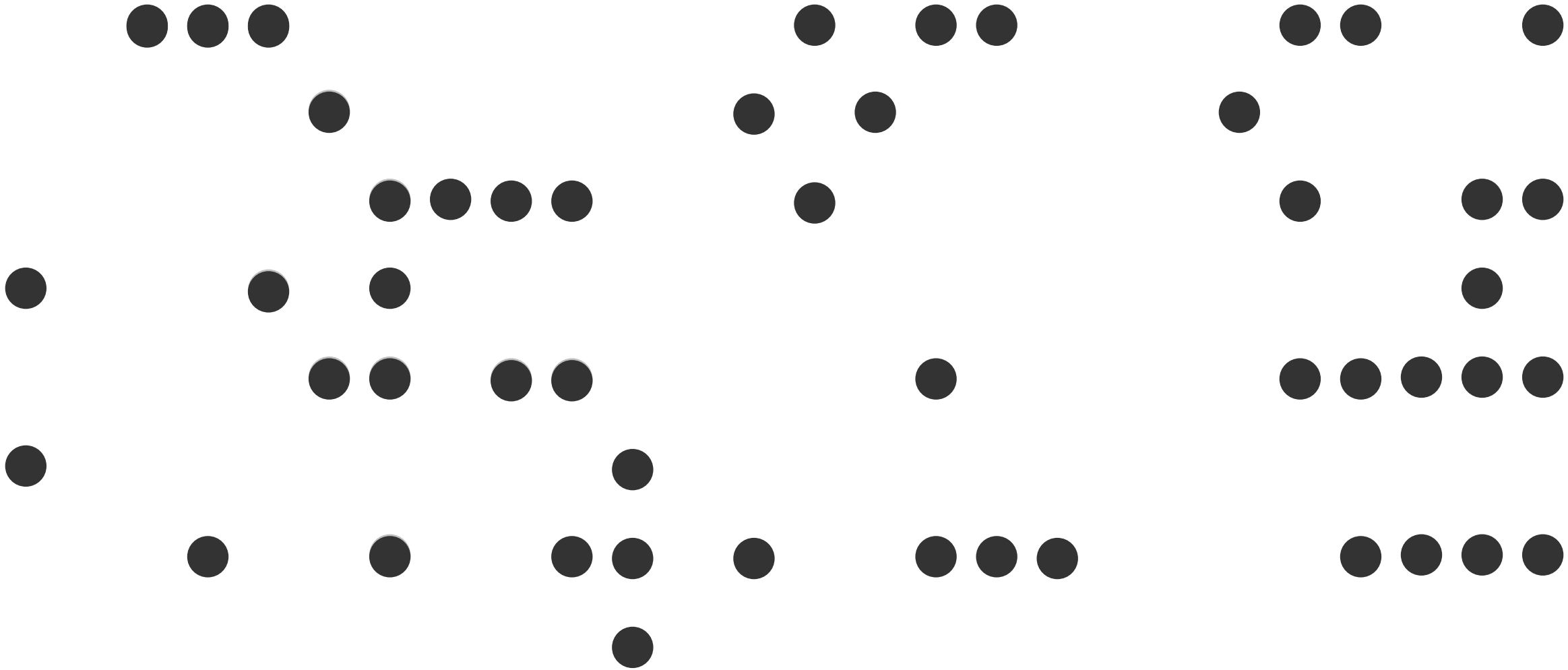
… 1000+ Testfälle
ohne Überdeckung



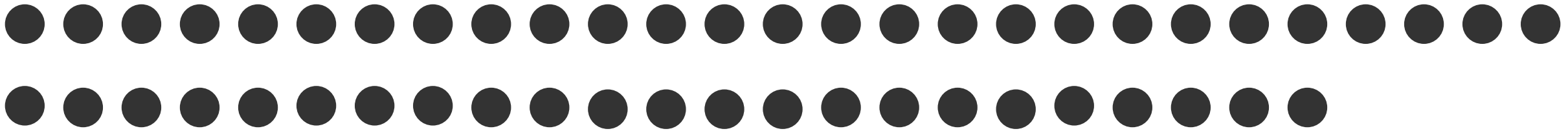
Schritt 1: Selektion betroffener Testfälle



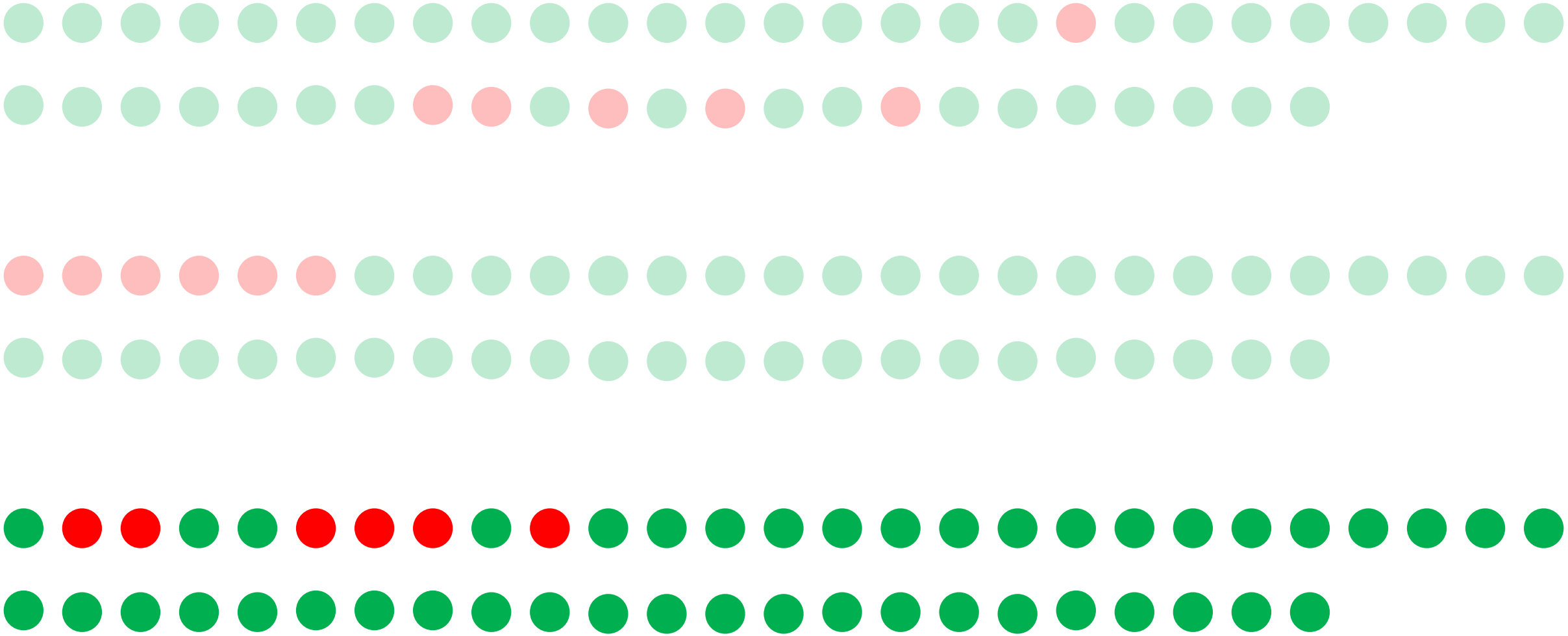
Schritt 1: Selektion betroffener Testfälle

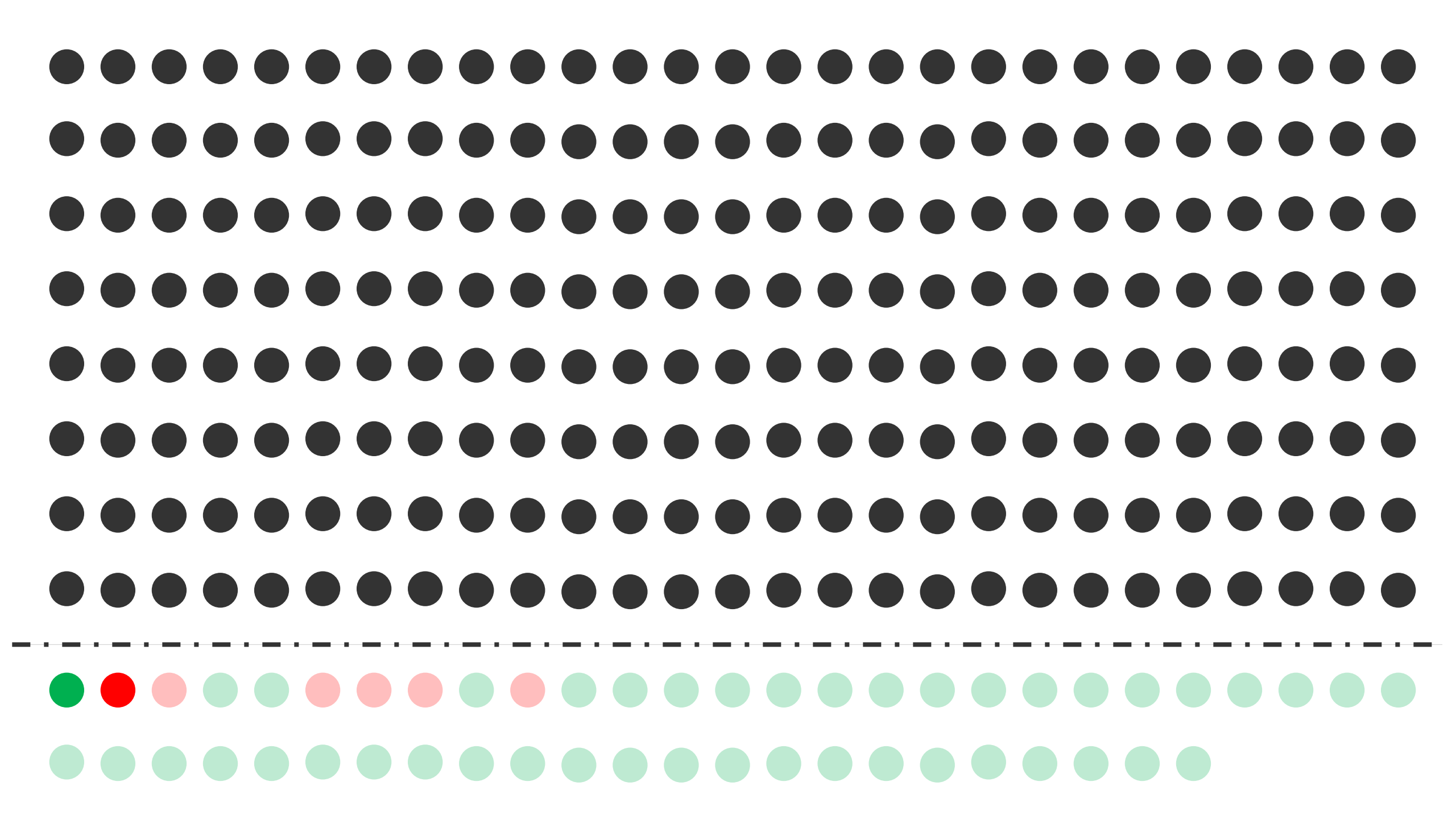


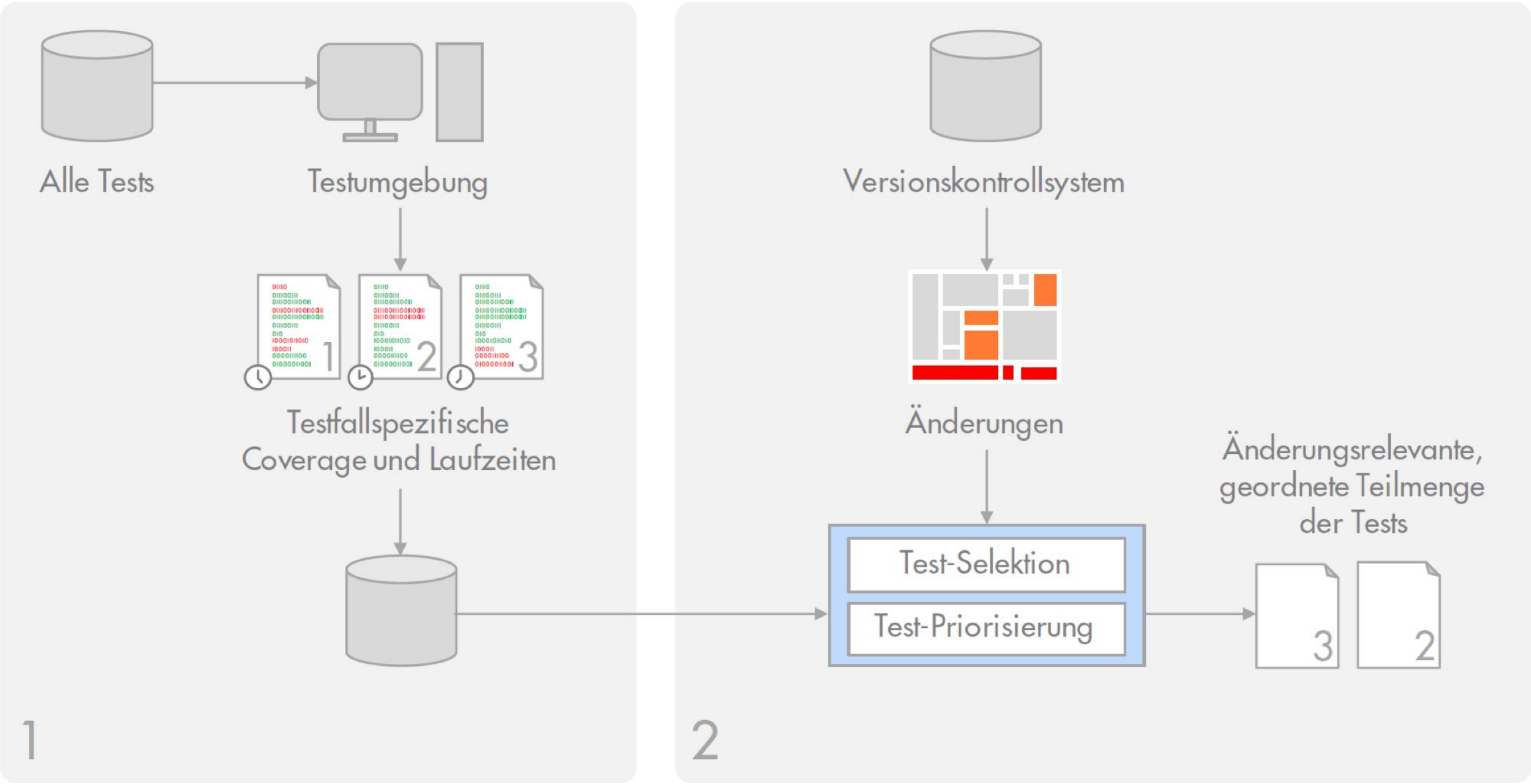
Schritt 1: Selektion betroffener Testfälle



Schritt 2: Priorisierung selektierter Testfälle






Alle Tests
Testumgebung
1
2
3
Testfallspezifische
Coverage und Laufzeiten
1
Versionskontrollsystem
Änderungen
Test-Selektion
Test-Priorisierung
Änderungsrelevante,
geordnete Teilmenge
der Tests
3
2
2

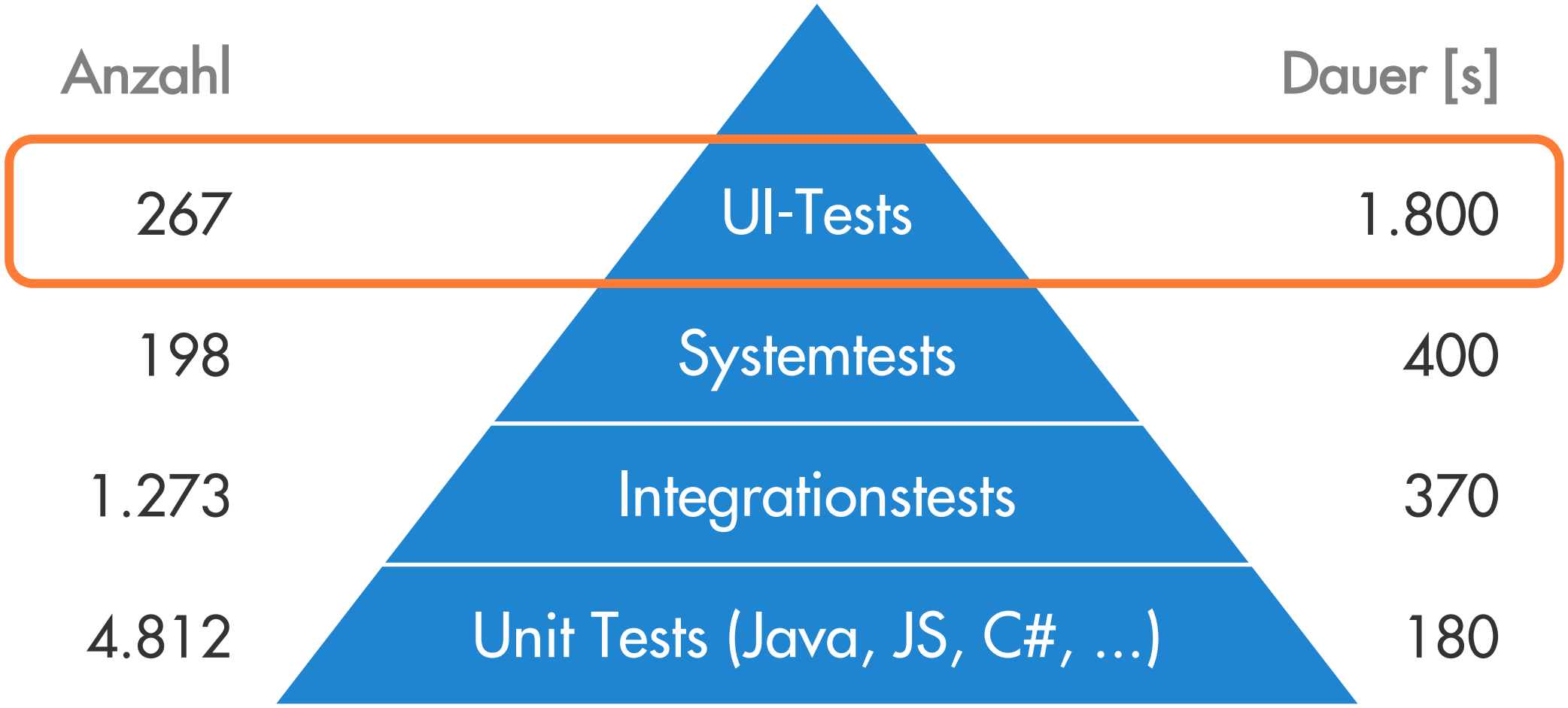
80% der fehlerhaften Builds in 1% der Zeit erkannt

90% der fehlerhaften Builds in 2% der Zeit erkannt

Demo

www.teamscale.com

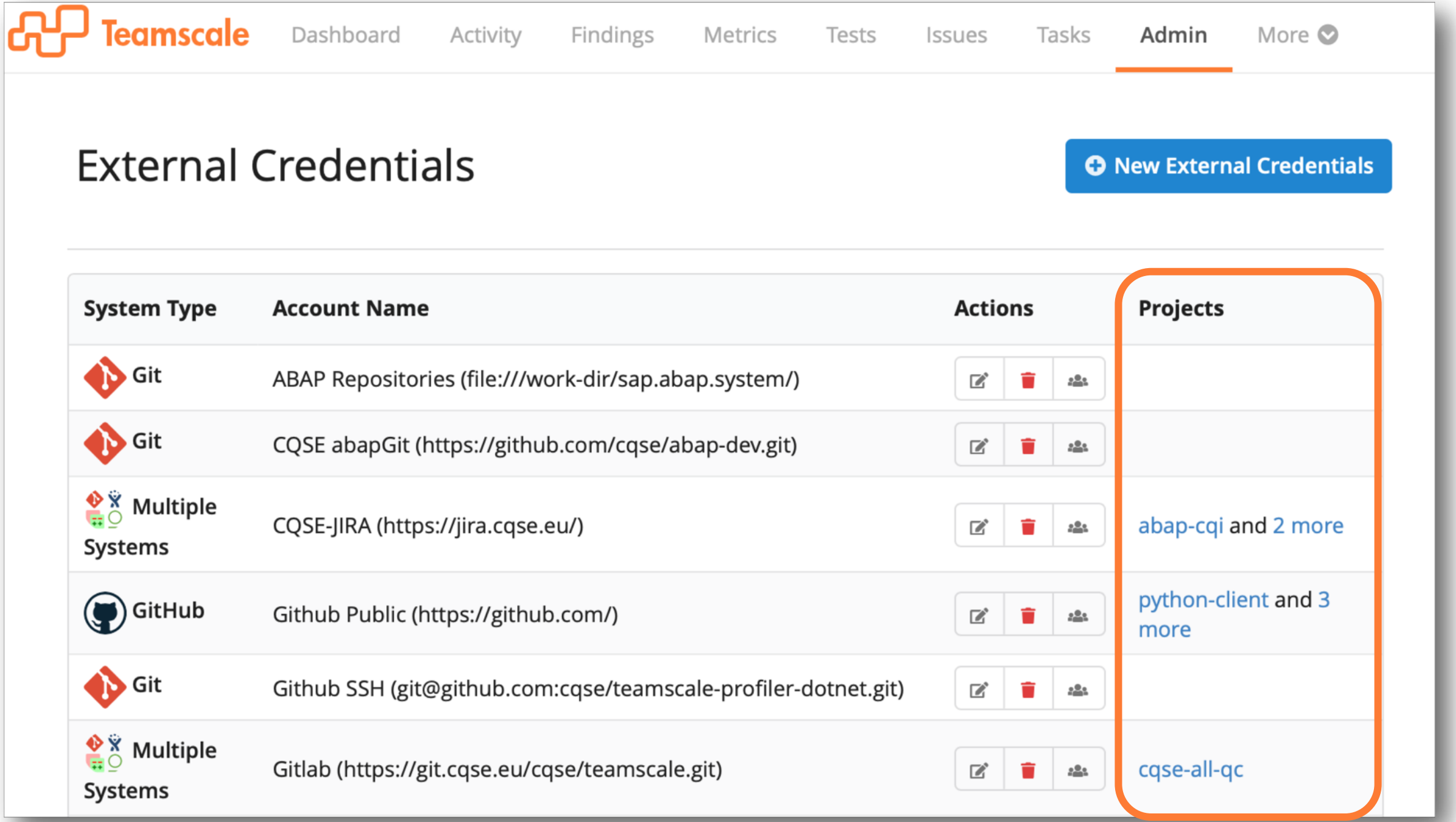
Wie wir Teamscale testen



External Credentials

New External Credentials

System Type	Account Name	Actions
Git	ABAP Repositories (file:///work-dir/sap.abap.system/)	
Git	CQSE abapGit (https://github.com/cqse/abap-dev.git)	
Multiple Systems	CQSE-JIRA (https://jira.cqse.eu/)	
GitHub	Github Public (https://github.com/)	
Git	Github SSH (git@github.com:cqse/teamscale-profiler-dotnet.git)	
Multiple Systems	Gitlab (https://git.cqse.eu/cqse/teamscale.git)	


Teamscale
Dashboard
Activity
Findings
Metrics
Tests
Issues
Tasks
Admin
More
External Credentials
New External Credentials
System Type
Account Name
Actions
Projects
Git
ABAP Repositories (file:///work-dir/sap.abap.system/)
Git
CQSE abapGit (https://github.com/cqse/abap-dev.git)
Multiple Systems
CQSE-JIRA (https://jira.cqse.eu/)
abap-cqi and 2 more
GitHub
Github Public (https://github.com/)
python-client and 3 more
Git
Github SSH (git@github.com:cqse/teamscale-profiler-dotnet.git)
Multiple Systems
Gitlab (https://git.cqse.eu/cqse/teamscale.git)
cqse-all-qc

Teamscale / TS-15717

Account credentials: show list of projects that use the credential

Edit | Comment | Assign | More | Back to New

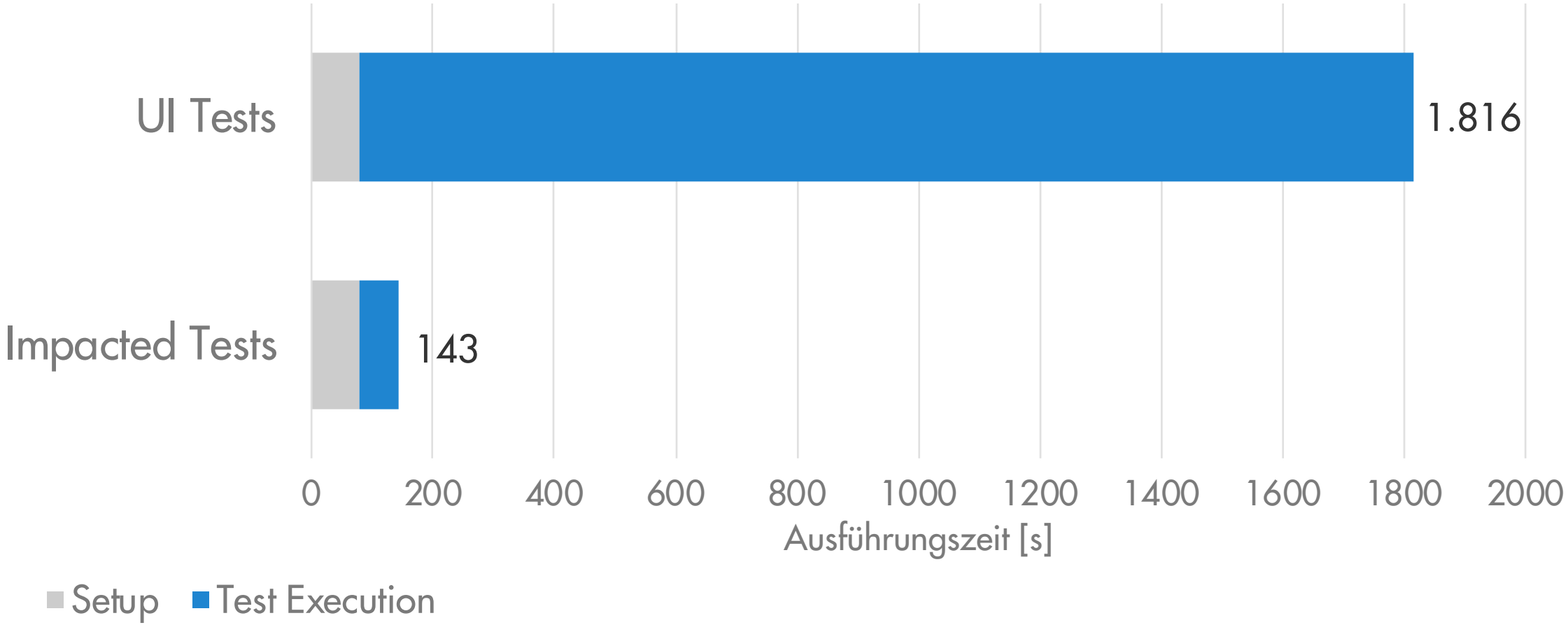
Details

Type:	Feature	Status:	DONE (View Workflow)
Priority:	Normal	Resolution:	Green
Component/s:	Web Interface	Fix Version/s:	Teamscale 4.6
Labels:	accounts, administration, easy, students		
Merge Request:	https://git.cqse.eu/cqse/teamscale/merge_requests/3679		
Customer:	[redacted]		
PDash Task:	#4887		
Change Log:	Account credentials show a list of their assigned projects		

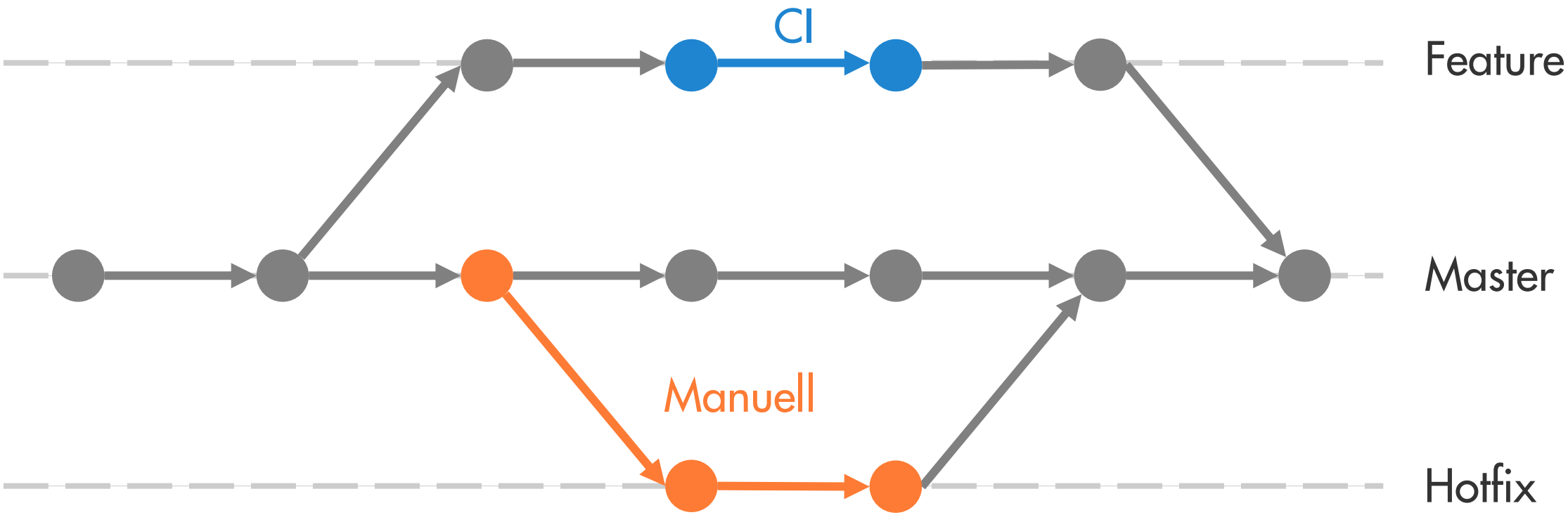
Description

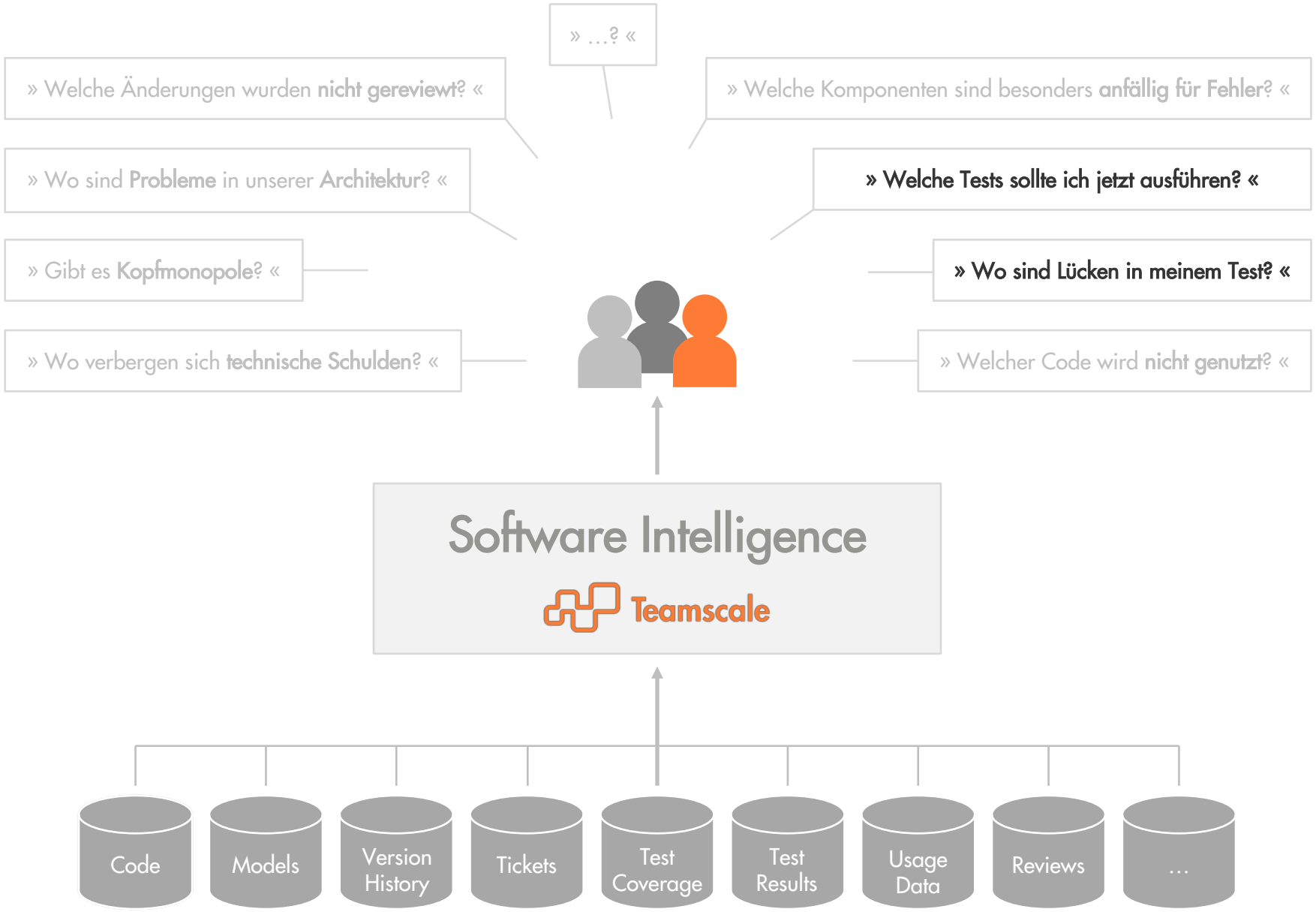
It would be useful for an admin to know which TS projects are configured to use a particular credential. Especially to locate unused credentials that can be deleted. This could be shown as a short list next to the credential name, similar to how we do this for the analysis profiles.

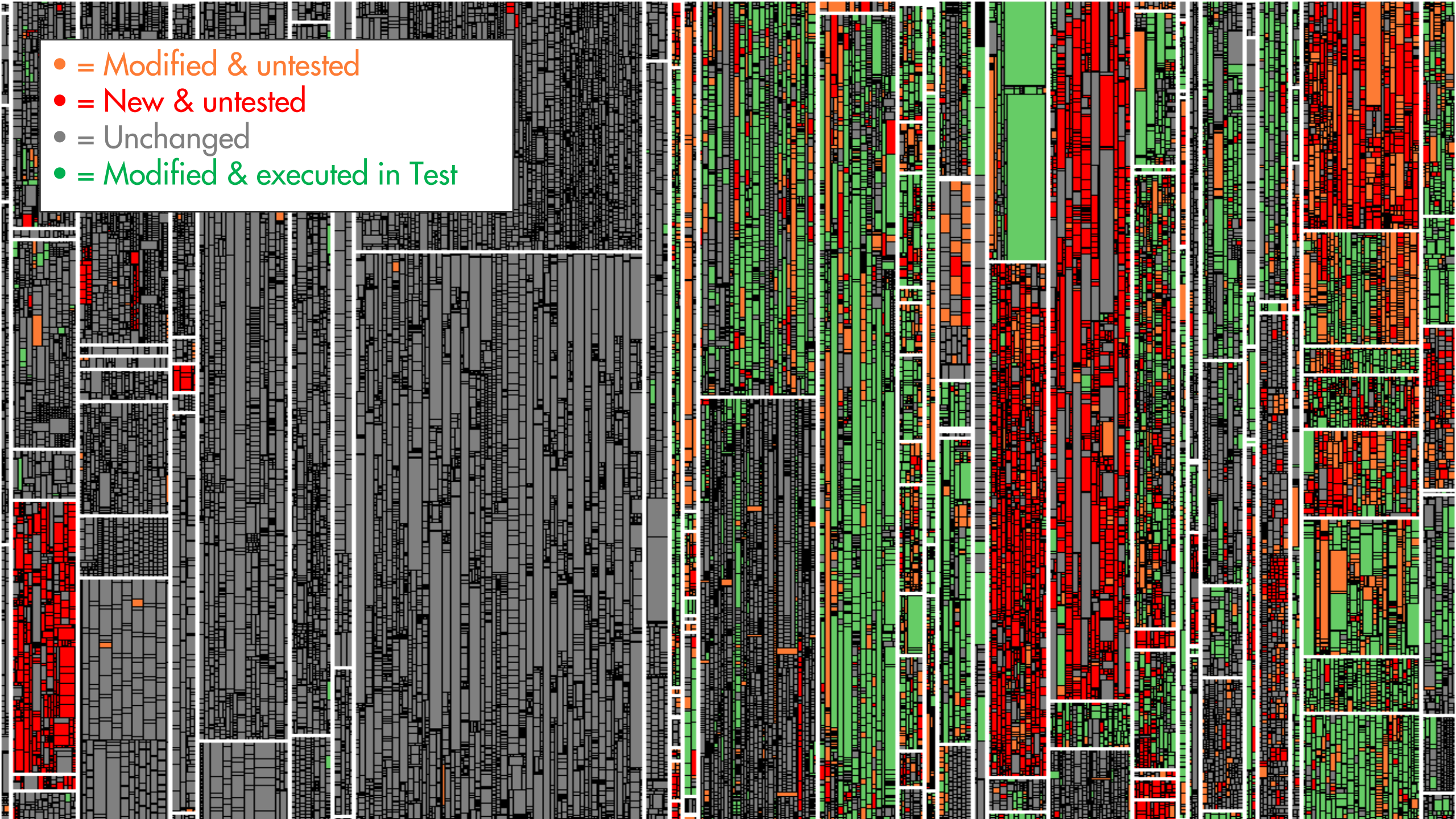
Zusammenfassung Beispiel



Beliebige Zeiträume und Branches




» …? «
» Welche Änderungen wurden nicht gereviewt? «
» Welche Komponenten sind besonders anfällig für Fehler? «
» Wo sind Probleme in unserer Architektur? «
» Welche Tests sollte ich jetzt ausführen? «
» Gibt es Kopfmonopole? «
» Wo sind Lücken in meinem Test? «
» Wo verbergen sich technische Schulden? «
» Welcher Code wird nicht genutzt? «
Software Intelligence
Teamscale
Code
Models
Version History
Tickets
Test Coverage
Test Results
Usage Data
Reviews
…


• = Modified & untested
• = New & untested
• = Unchanged
• = Modified & executed in Test

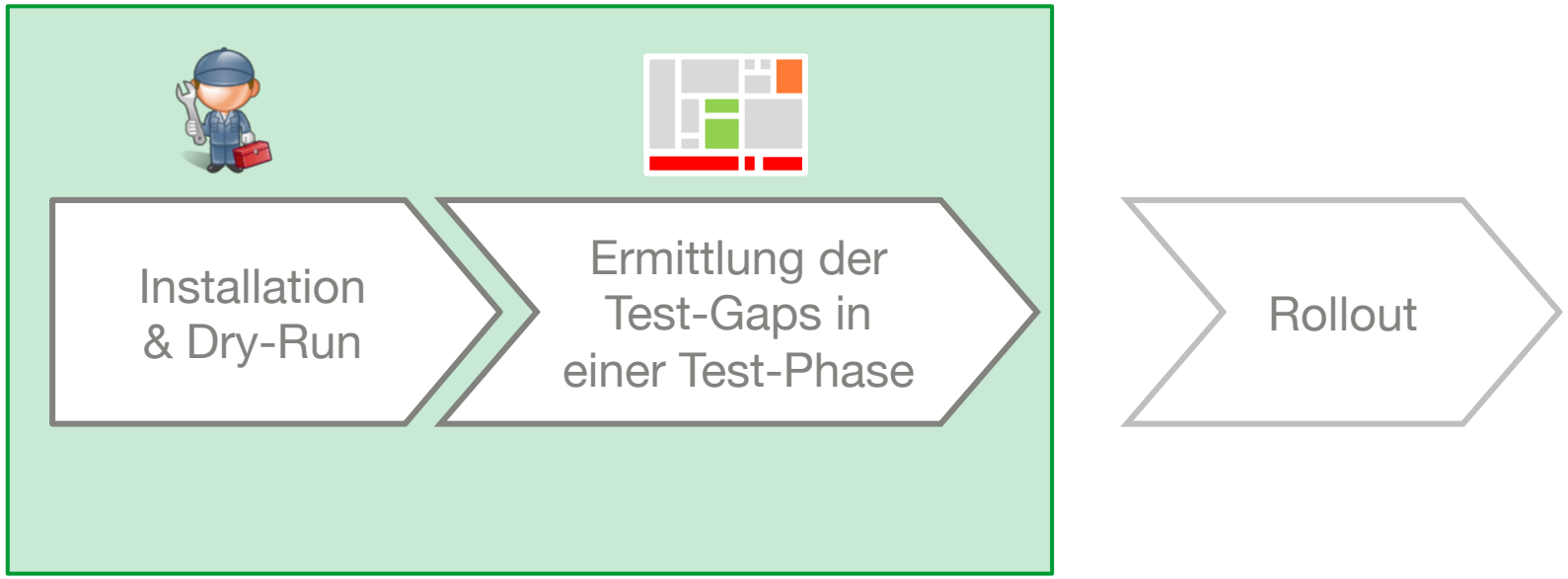
Code Structure | **Issues**

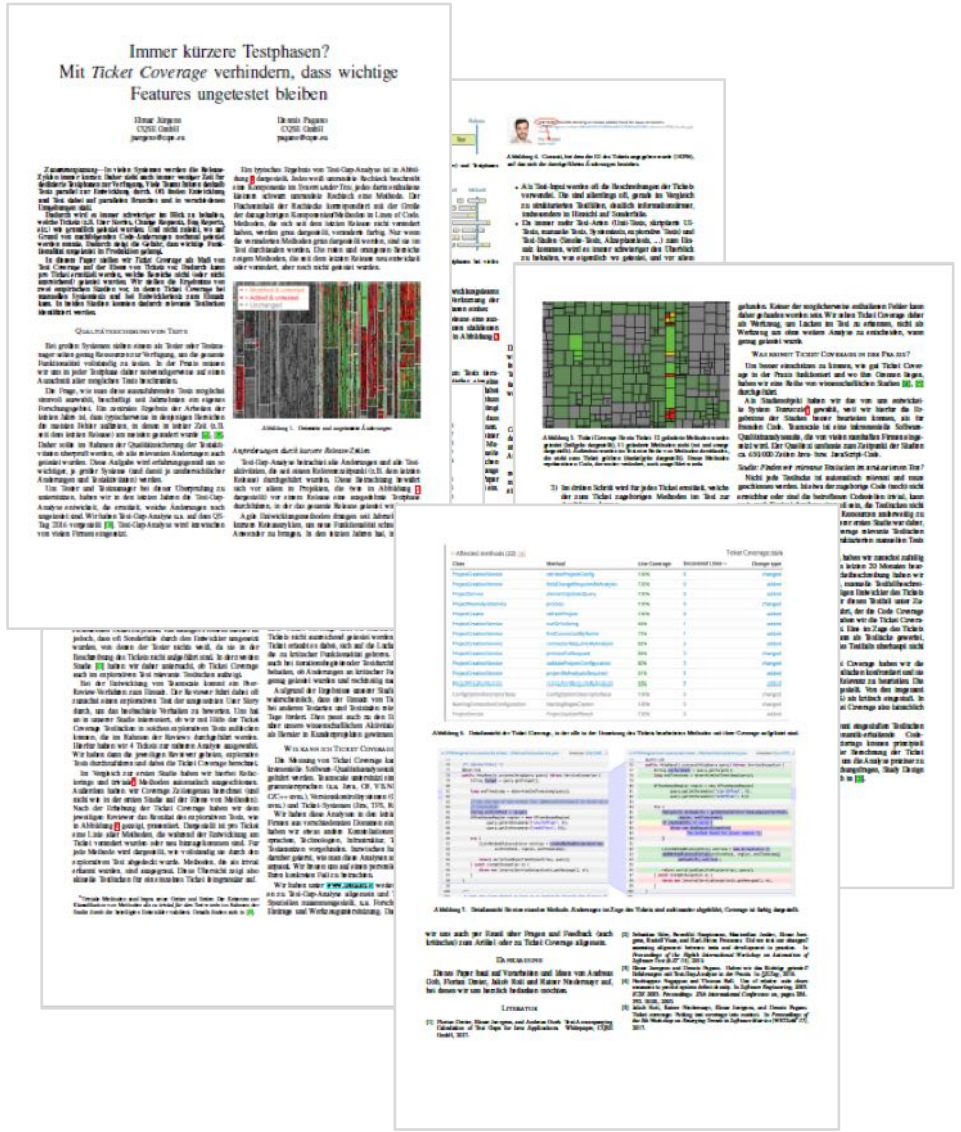
Issue Metric: Issues I have to test

Coverage sources: All

Issue #	Subject	Ticket Coverage
TS-13689	Undo/Redo for web-based architecture editor	70%
TS-13701	Implement metric 'Nesting Depth' for Simulink	35%
TS-13704	Fix long method finding in TaintAnalysisRunner	100%
TS-13714	External findings are not registered during first upload	100%
TS-13727	Manual test coverage upload during development	100%
TS-13731	Tool for transferring Finding Blacklists and Tasks (w/ Findings) between instances	100%
TS-13734	Cannot set/alter alias without reanalysis	100%
TS-13735	Fetch parent relationship of TFS Work Items	100%
TS-13742	Show data timestamp in project analysis warning	100%
TS-13766	Get rid of ESLintFindingsSynchronizer and TSLintFindingsSynchronizer blocks	76%

Pilotierung





cqse.eu/ticket-coverage-paper


Software Intelligence
Welche Überraschungen lauern in Ihrer Software?
Teamscale
Welche Änderungen am Code sind ungetestet?
Welche Tests sind diesmal am
OBJEKTspektrum
CIO
Besser messen

Kontakt – Wir freuen uns auf Diskussionen ☺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