

Sustainable Quality

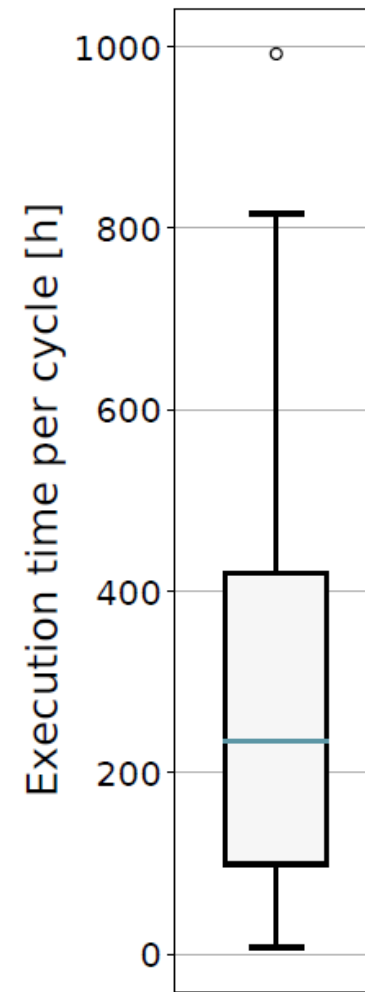
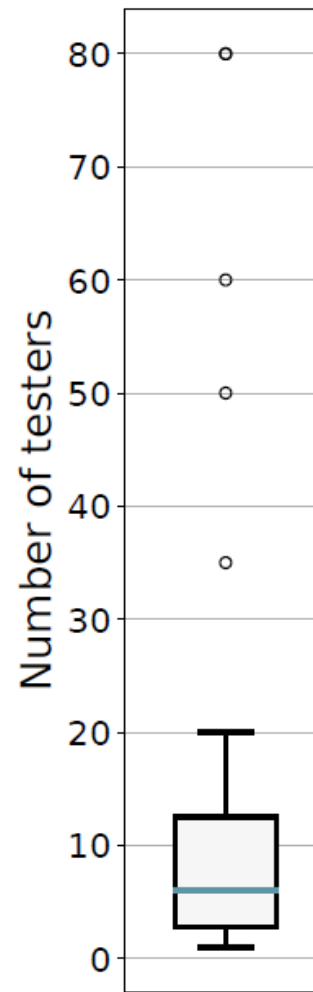
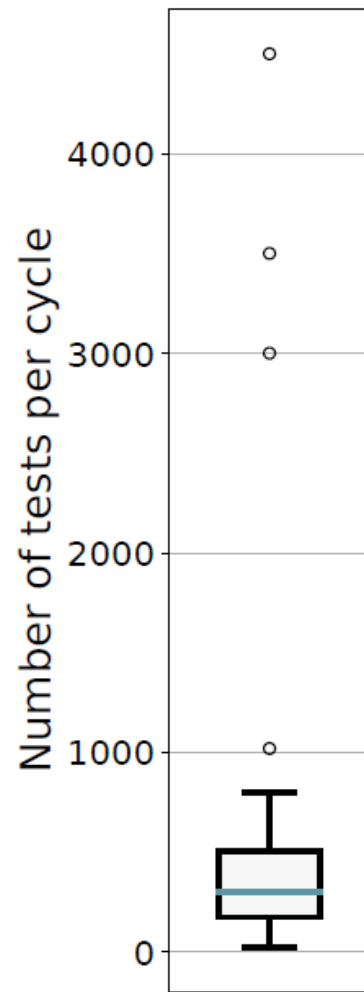
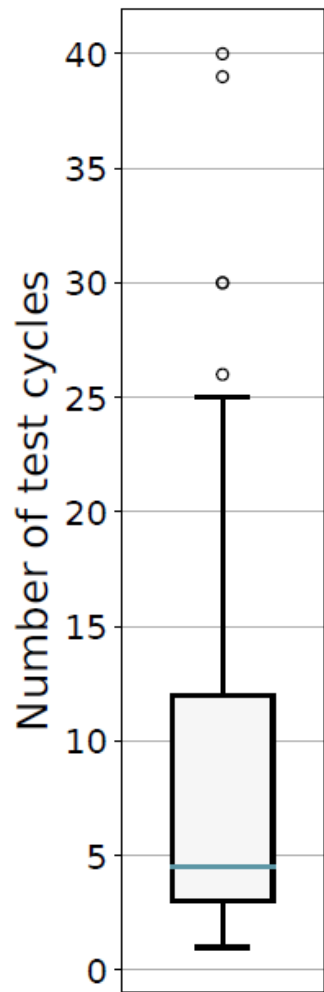
Software and Systems Quality all Stakeholders can depend on

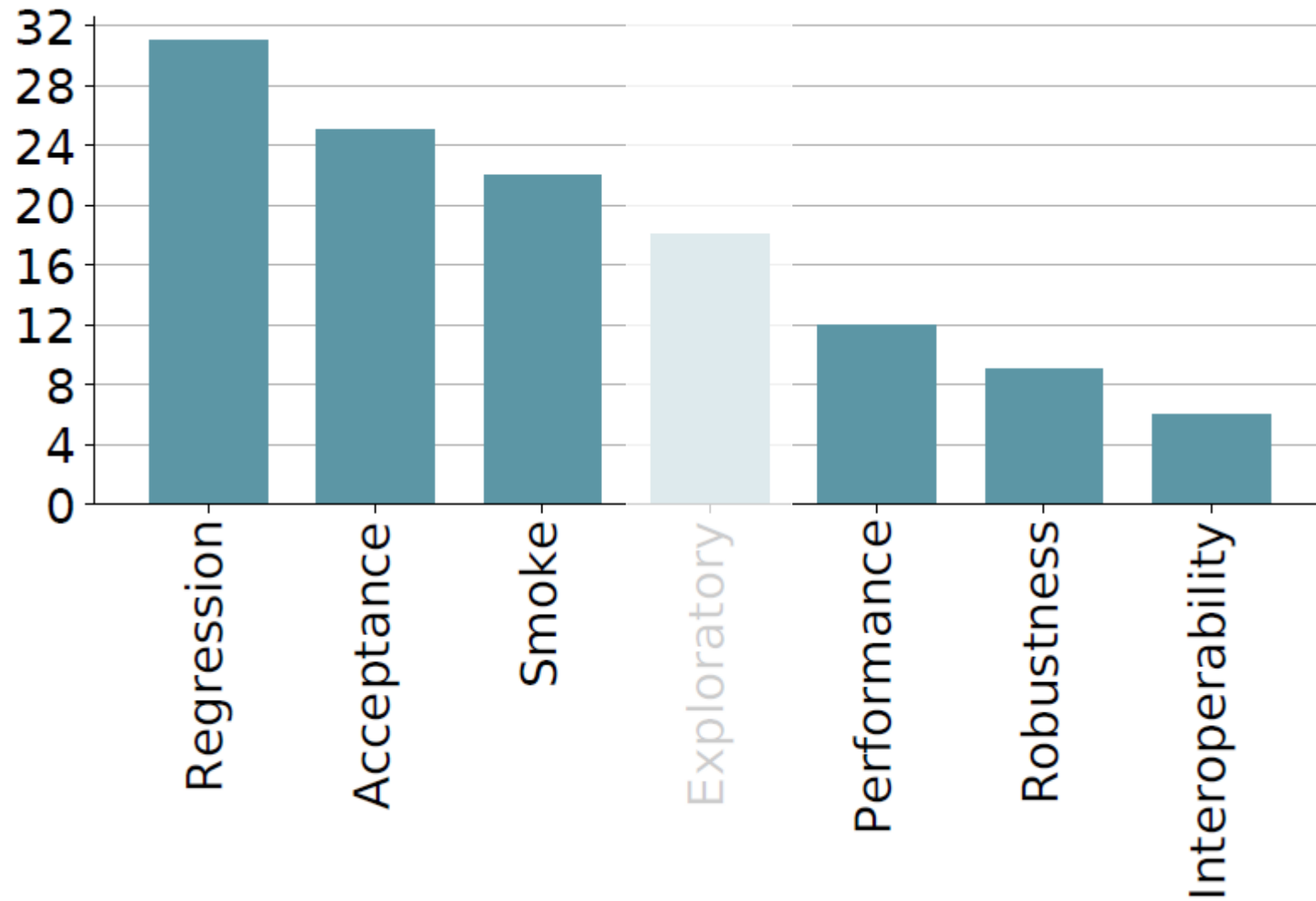
Test Intelligence für manuelle Tests

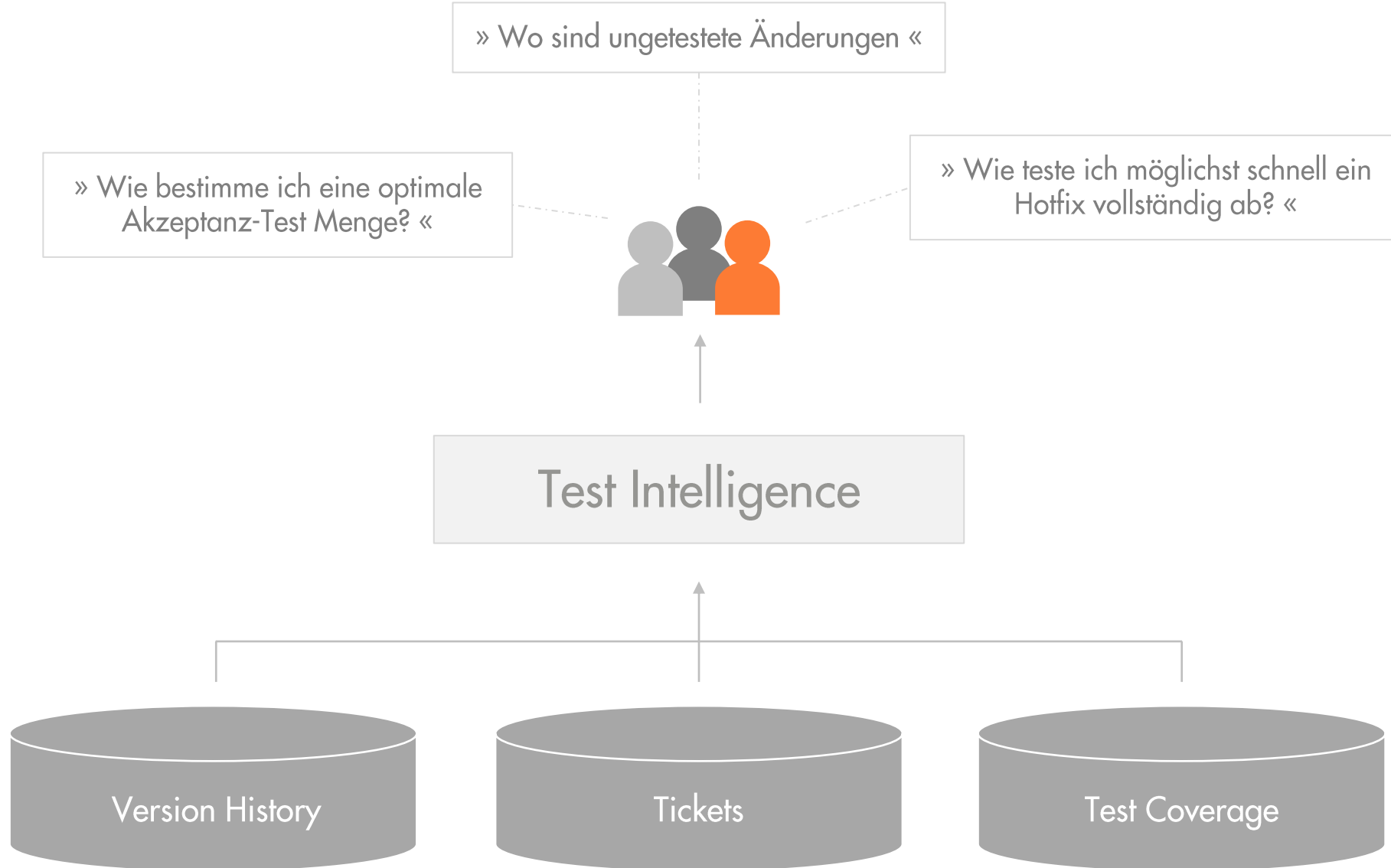
Dr. Elmar Juergens
CQSE GmbH



Manuelle Tests?





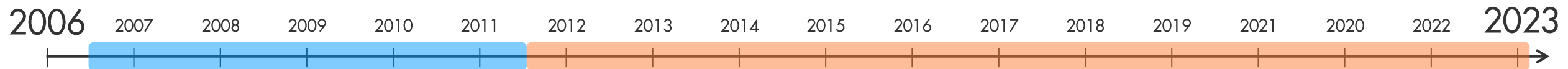


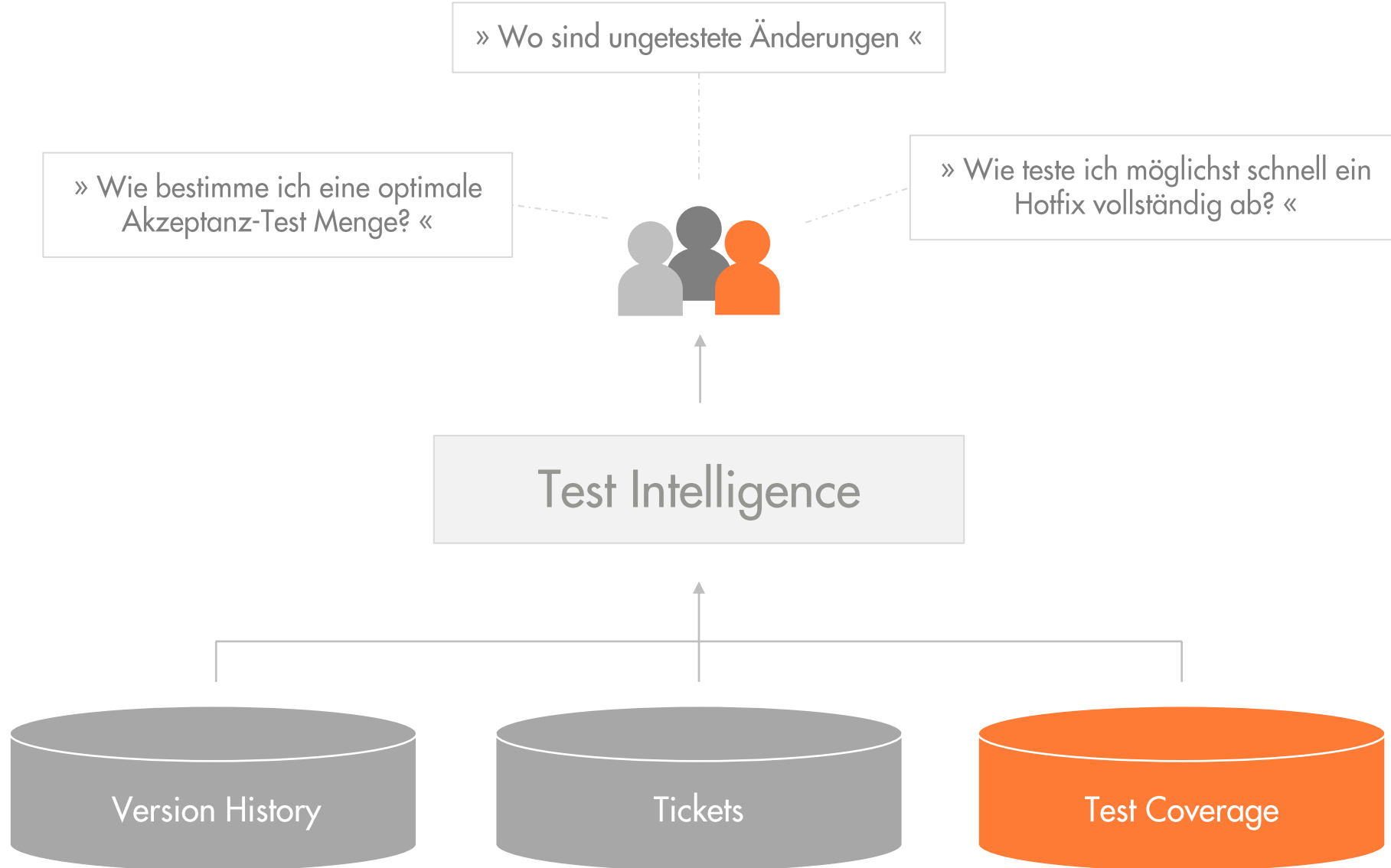


TUM



CQSE





Sample Only the Active Layer/Mask

Untitled1 x Picture1.png x



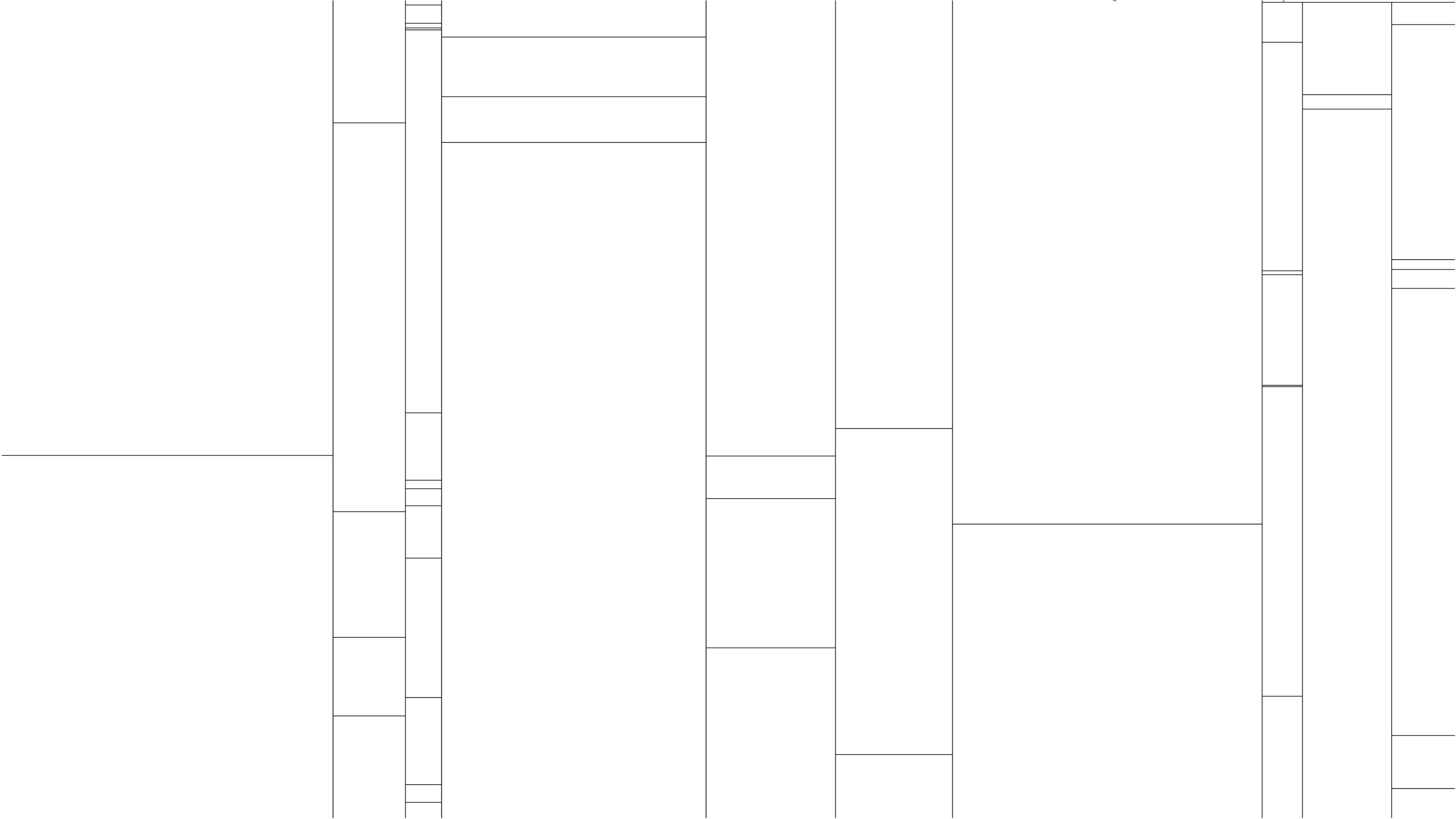
Layers

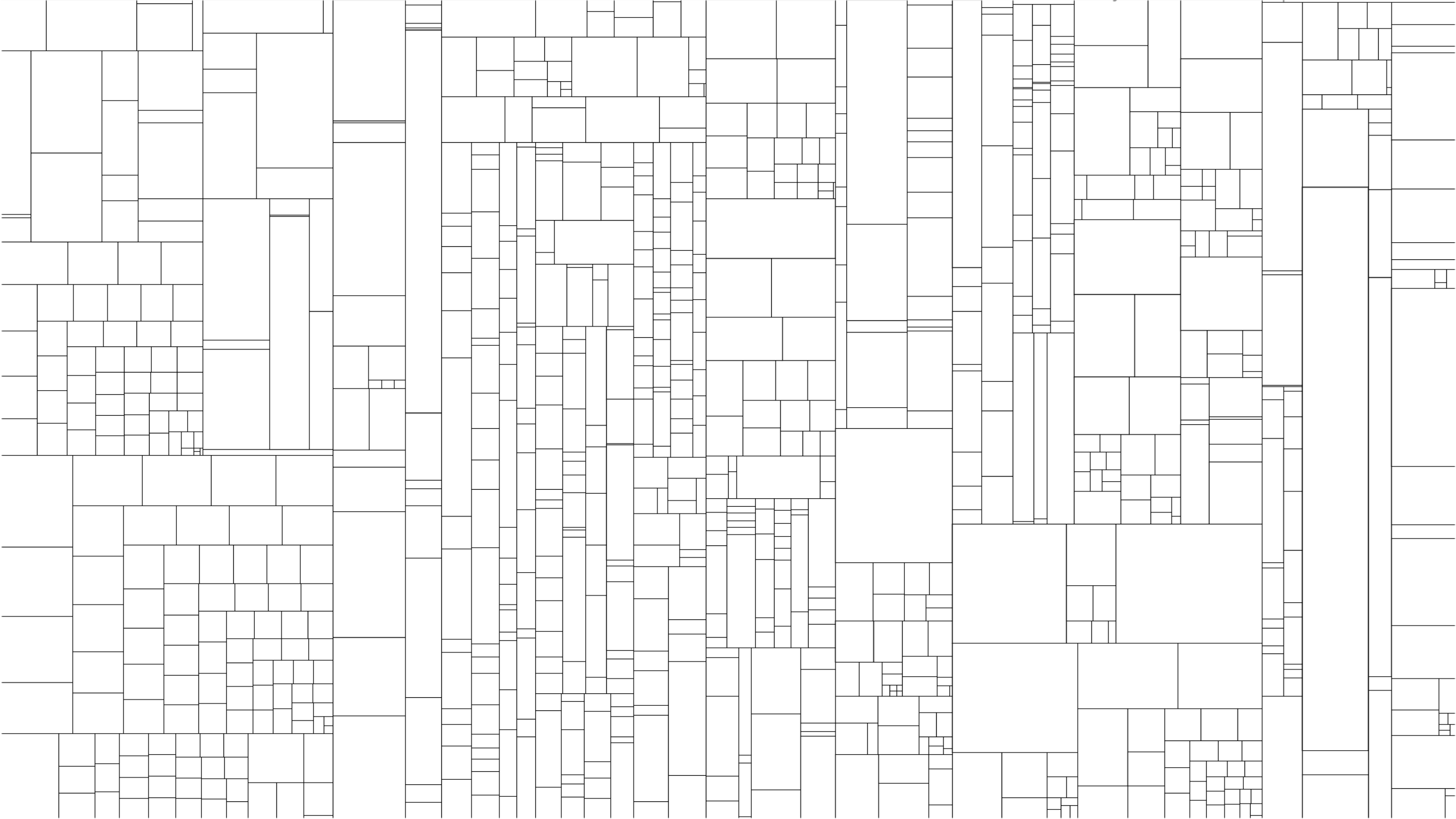
Opacity: 100 % Normal

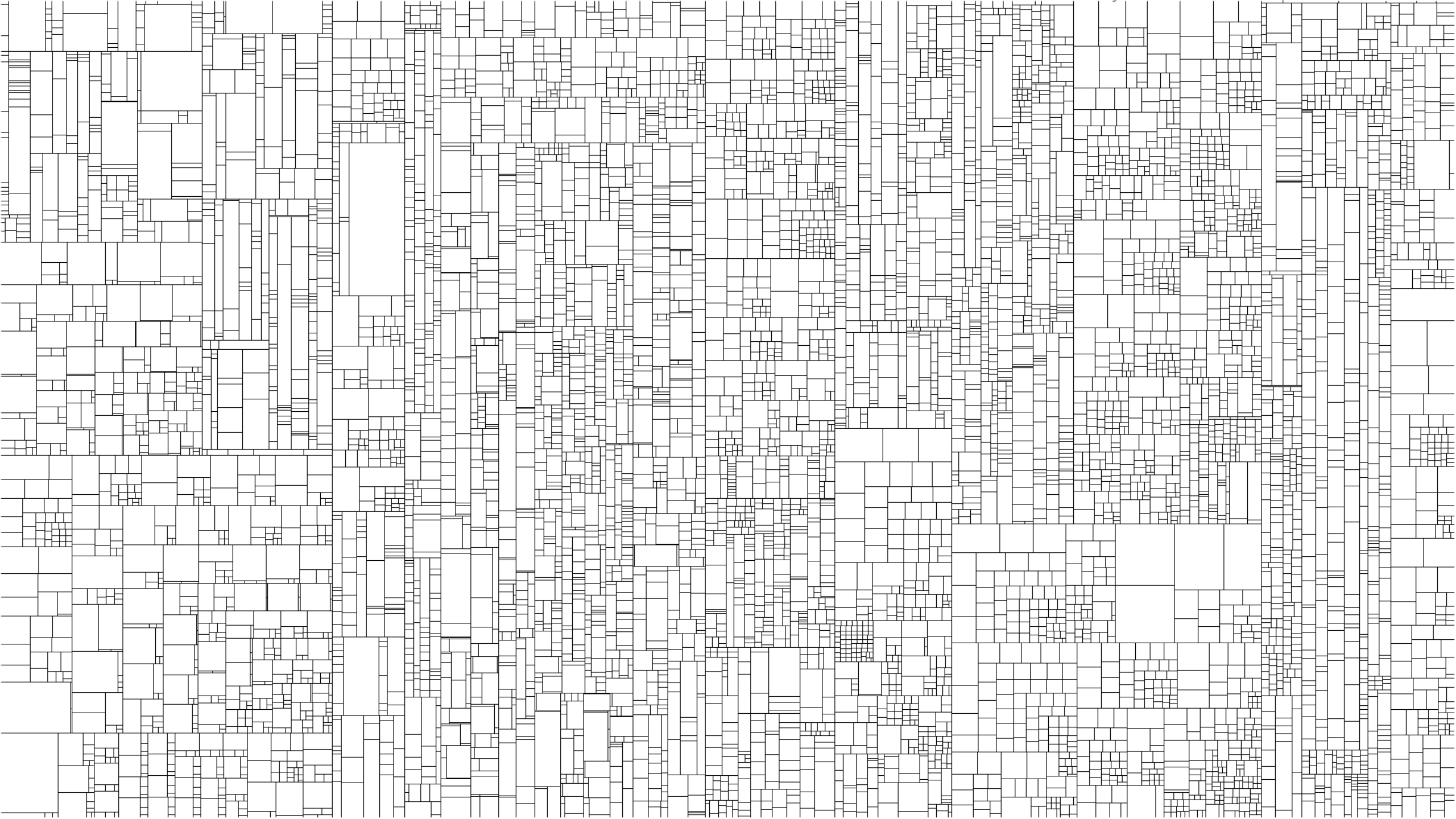
layer 1

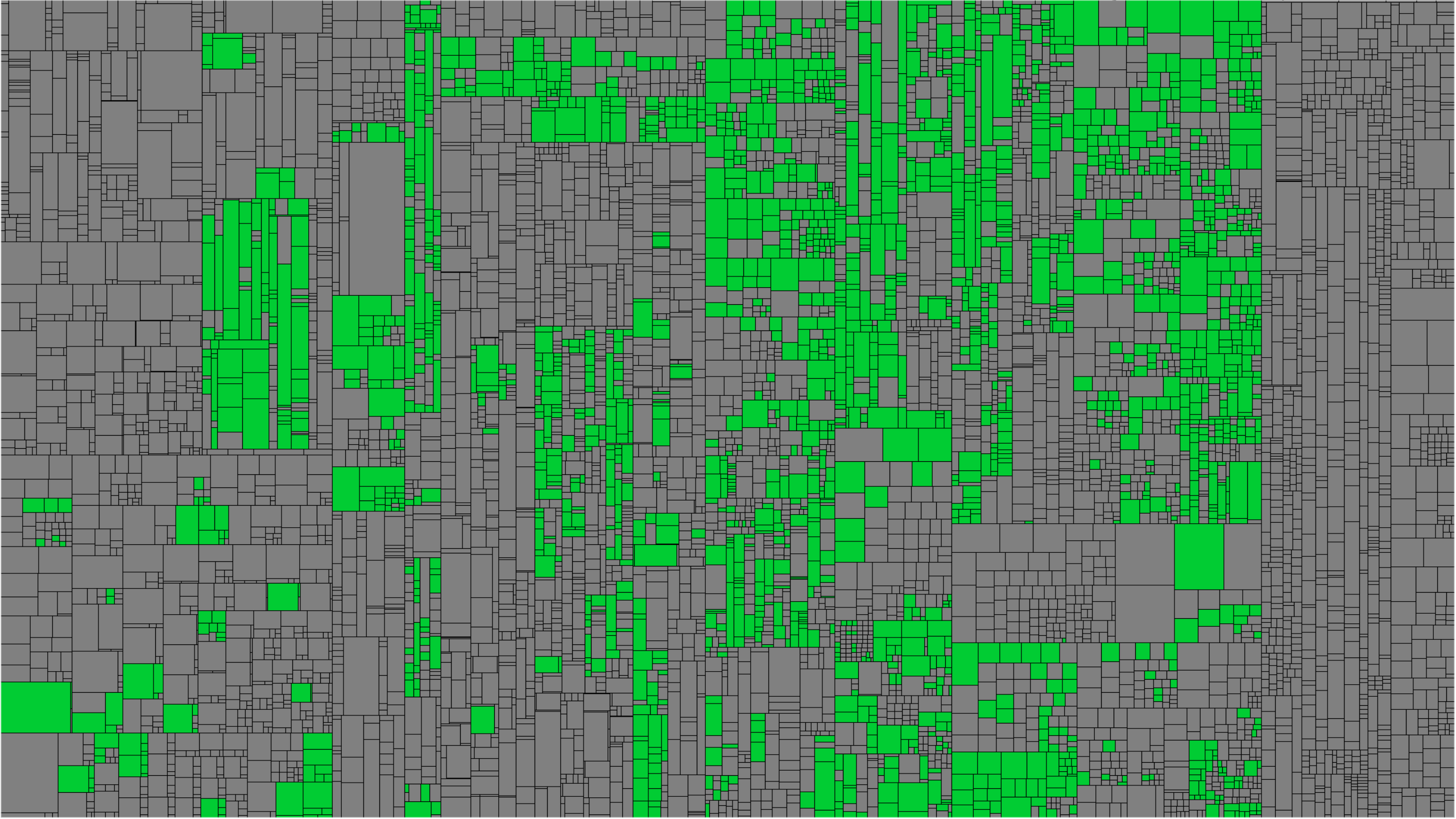


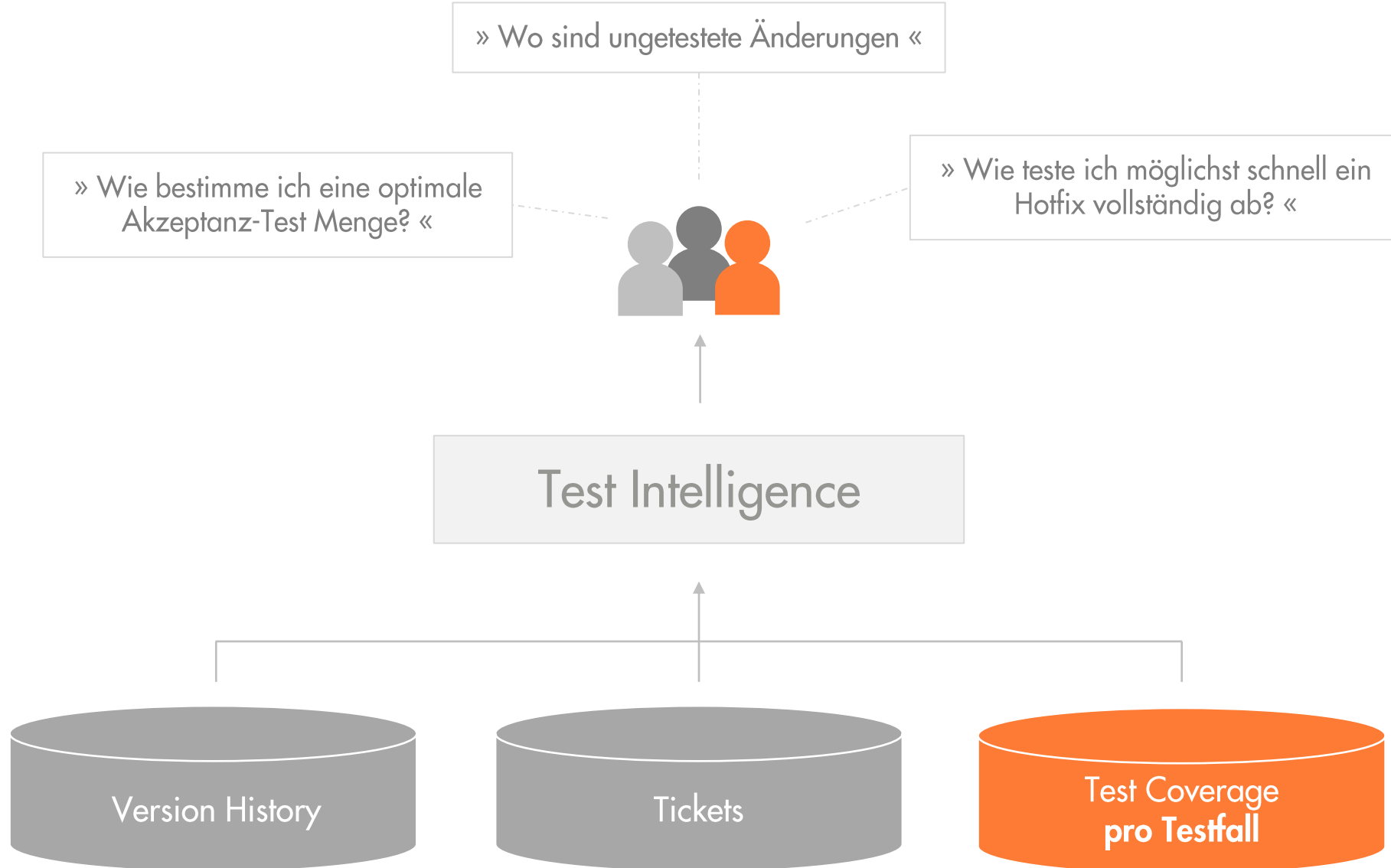

```
114
115i     private static void createAndShowGUI(String[] args) {
116         assert calledOnEDT() : threadInfo();
117
118         Messages.setMsgHandler(new GUIMessageHandler());
119
120         // GlobalKeyboardWatch.showEventsSlowerThan(100, TimeUnit.MILLISECONDS);
121
122         Theme theme = Themes.DEFAULT;
123         // if a LaF was set from the command line, then don't override it
124         if (System.getProperty("swing.defaultlaf") == null) {
125             theme = AppPreferences.loadTheme();
126             Themes.install(theme, false, true);
127         }
128
129         int uiFontSize = AppPreferences.loadUIFontSize();
130         String uiFontType = AppPreferences.loadUIFontType();
131
132         Font defaultFont = UIManager.getFont("defaultFont");
133         if (defaultFont != null) { // if null, we don't know how to set the font
134             if (uiFontSize != 0 || !uiFontType.isEmpty()) {
135                 Font newFont;
136                 if (!uiFontType.isEmpty()) {
137                     newFont = new Font(uiFontType, Font.PLAIN, uiFontSize);
138                 } else {
139                     newFont = defaultFont.deriveFont((float) uiFontSize);
140                 }
141
142                 FontUIResource fontUIResource = new FontUIResource(newFont);
143                 UIManager.put("defaultFont", fontUIResource);
144
145                 if (theme.isNimbus()) {
146                     UIManager.getLookAndFeel().getDefaults().put("defaultFont", fontUIResource);
147                 }
148             }
149         }
150
151         var pw = PixelitorWindow.get();
152         Dialogs.setMainWindowInitialized(true);
153
154         // Just to make 100% sure that at the end of GUI
155         // initialization the focus is not grabbed by
156         // a textfield and the keyboard shortcuts work properly
157         FgBgColors.getGUI().requestFocus();
158
159         TipsOfTheDay.showTips(pw, false);
160
161         MouseZoomMethod.load();
162         PanMethod.load();
163
164         // The IO-intensive preloading of fonts is scheduled
165         // to run after all the files have been opened,
166         // and on the same IO thread
167         openCLFilesAsync(args)
168             .exceptionally(throwable -> null) // recover
169             .thenAcceptAsync(v -> afterStartTestActions(), onEDT)
170             .thenRunAsync(Utils::preloadFontNames, onIOThread)
171             .exceptionally(Messages::showExceptionOnEDT);
172     }
173
```

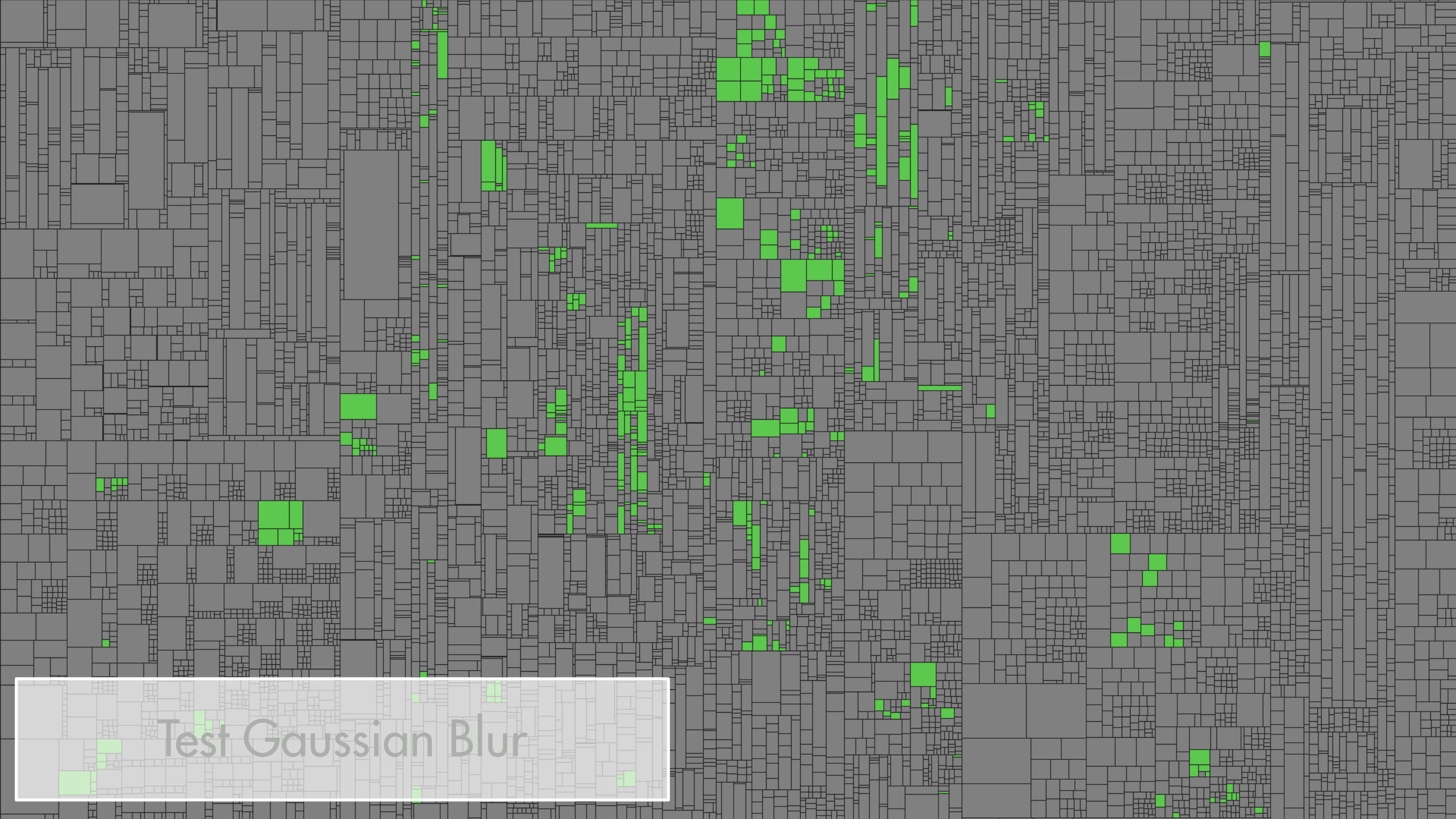








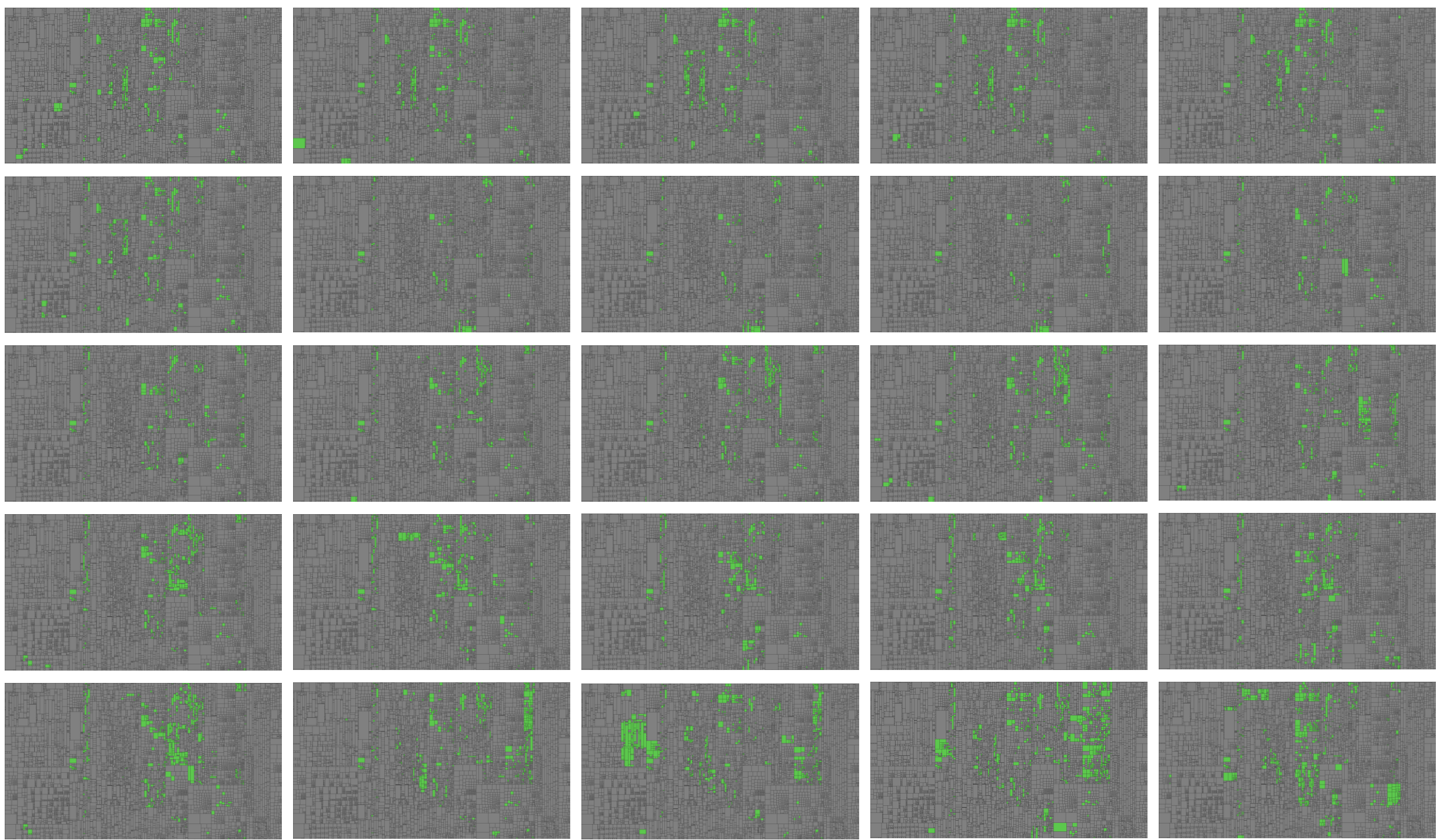


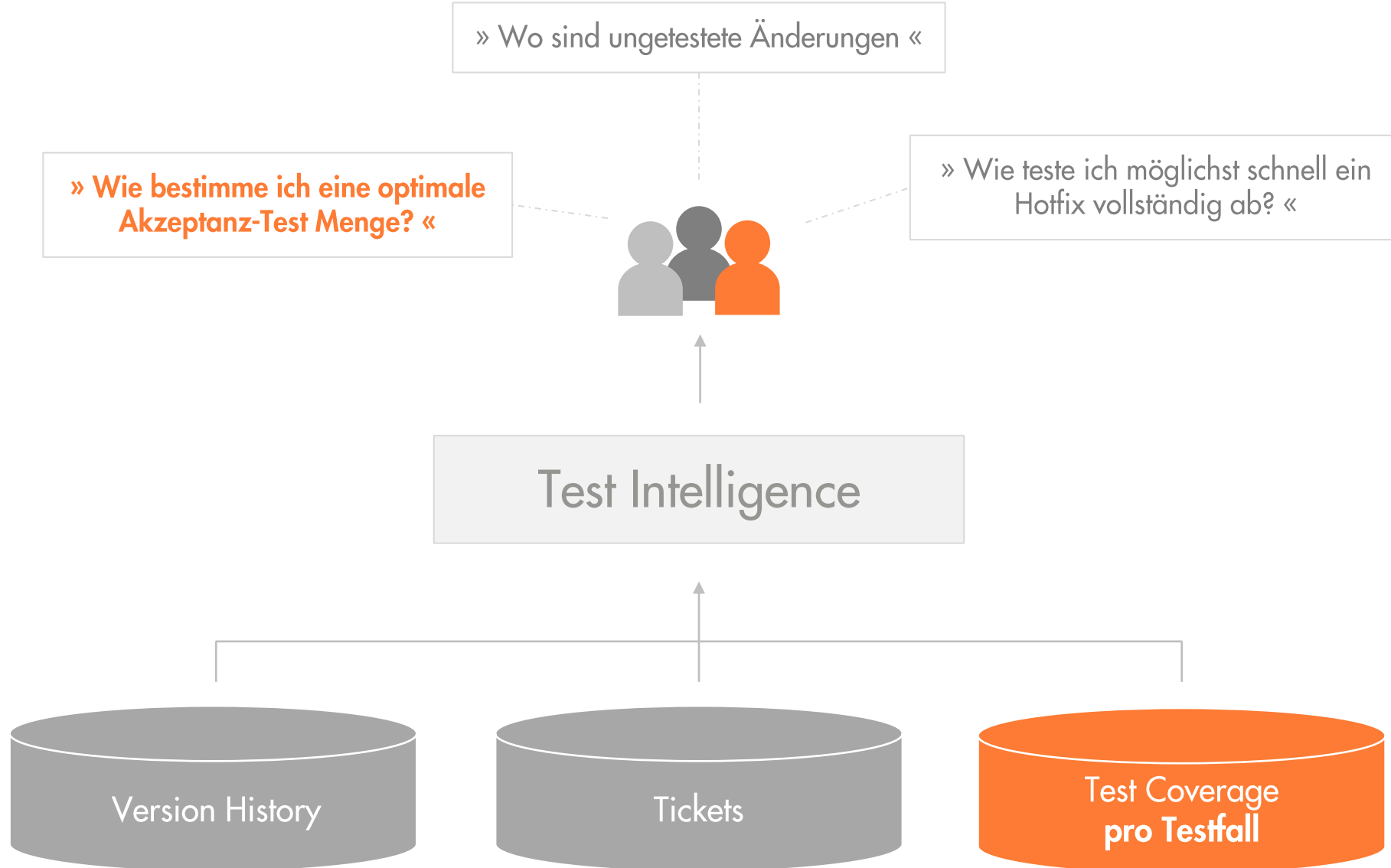


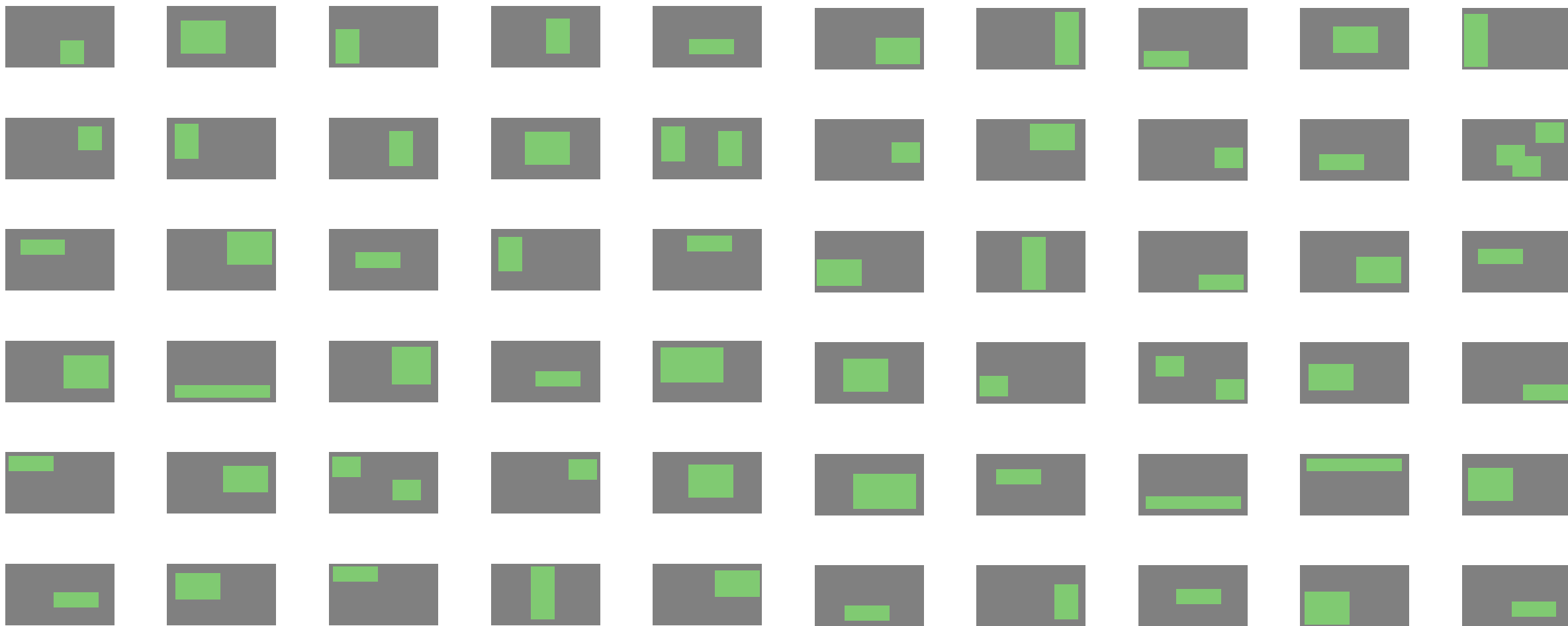
Test Gaussian Blur

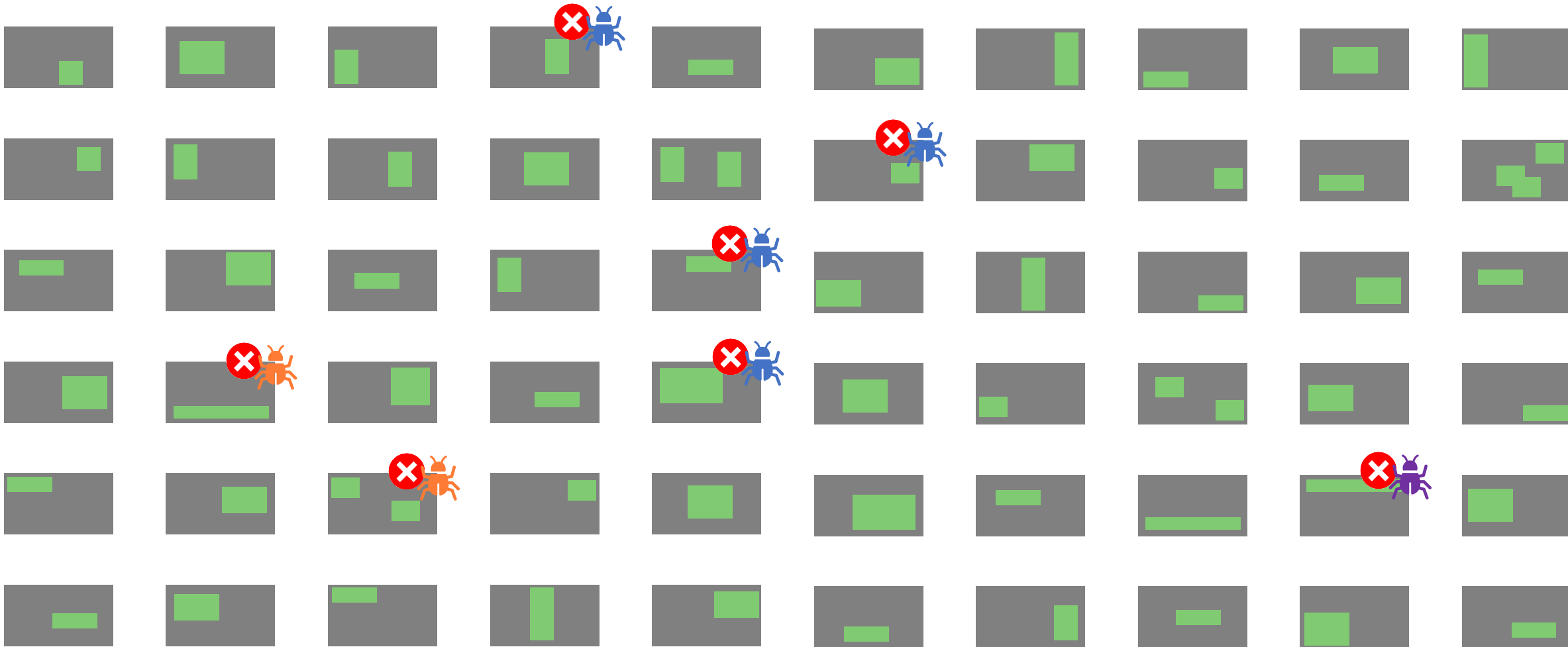


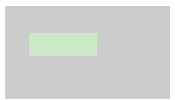
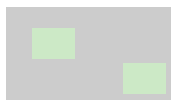
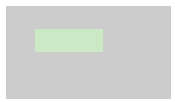
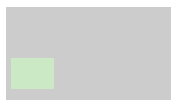
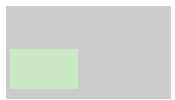
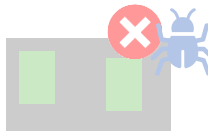
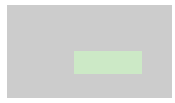
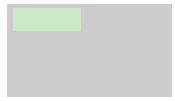
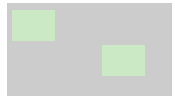
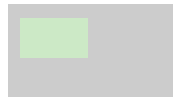
Test Create and Modify
Selection

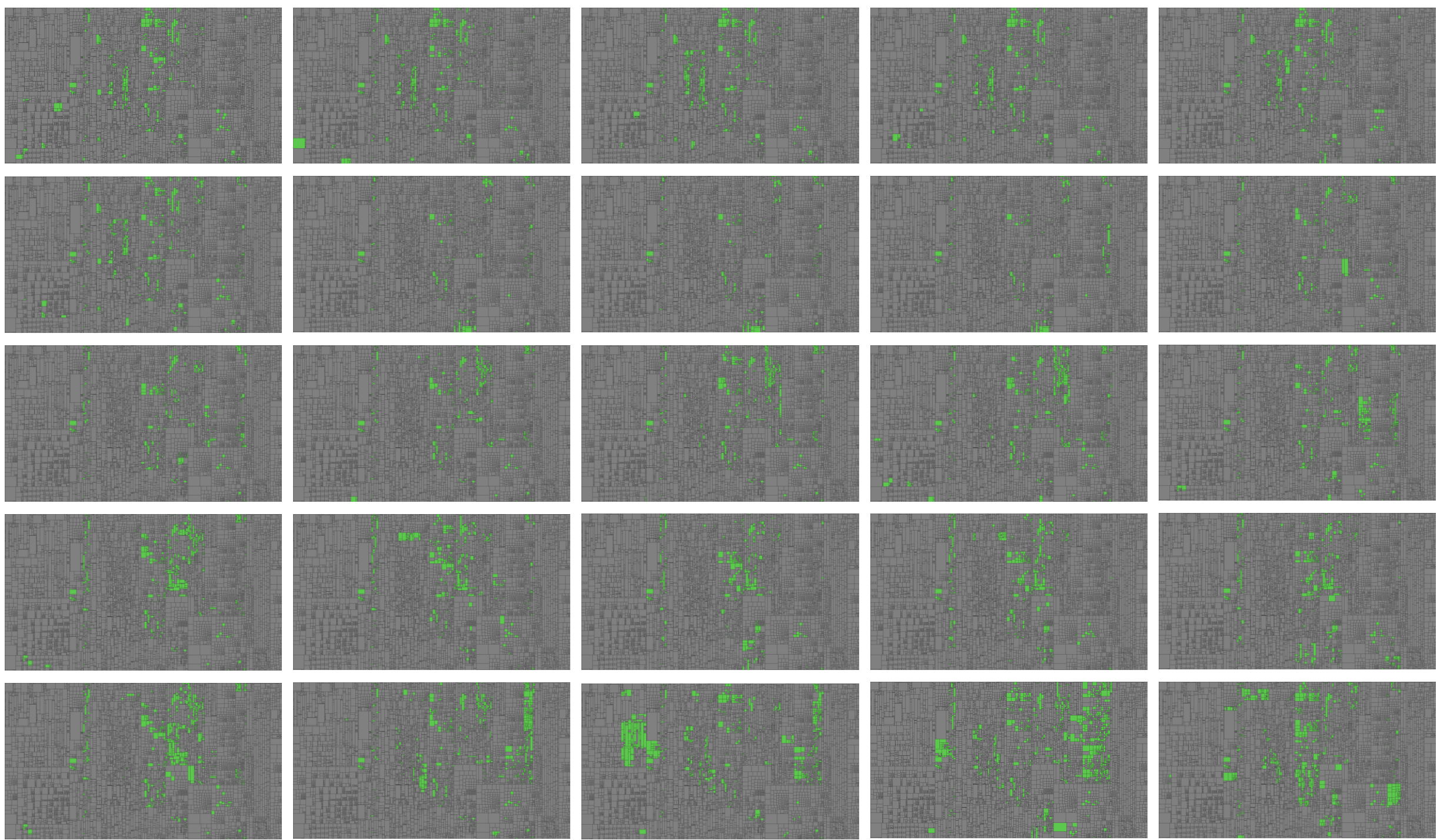


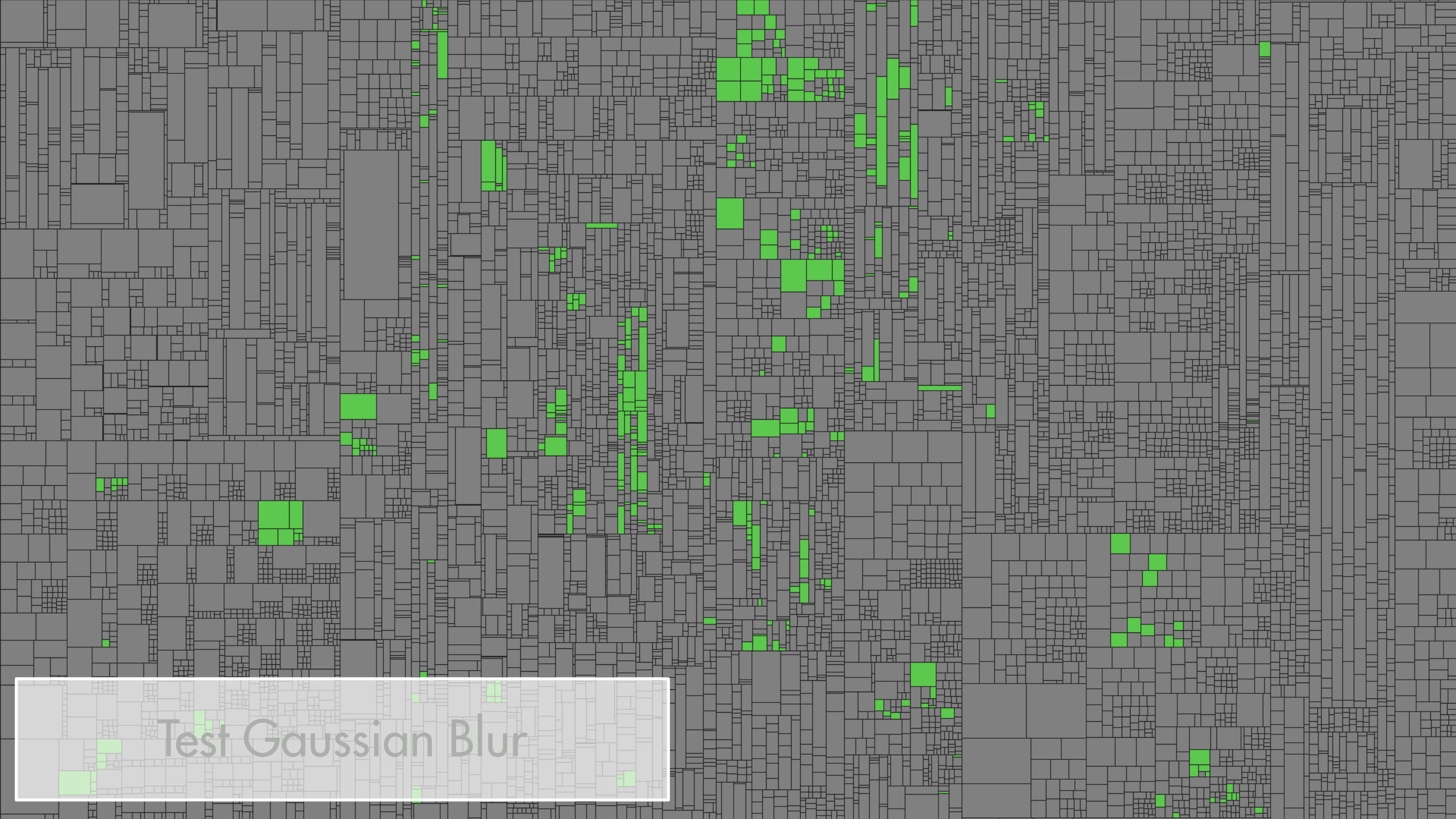








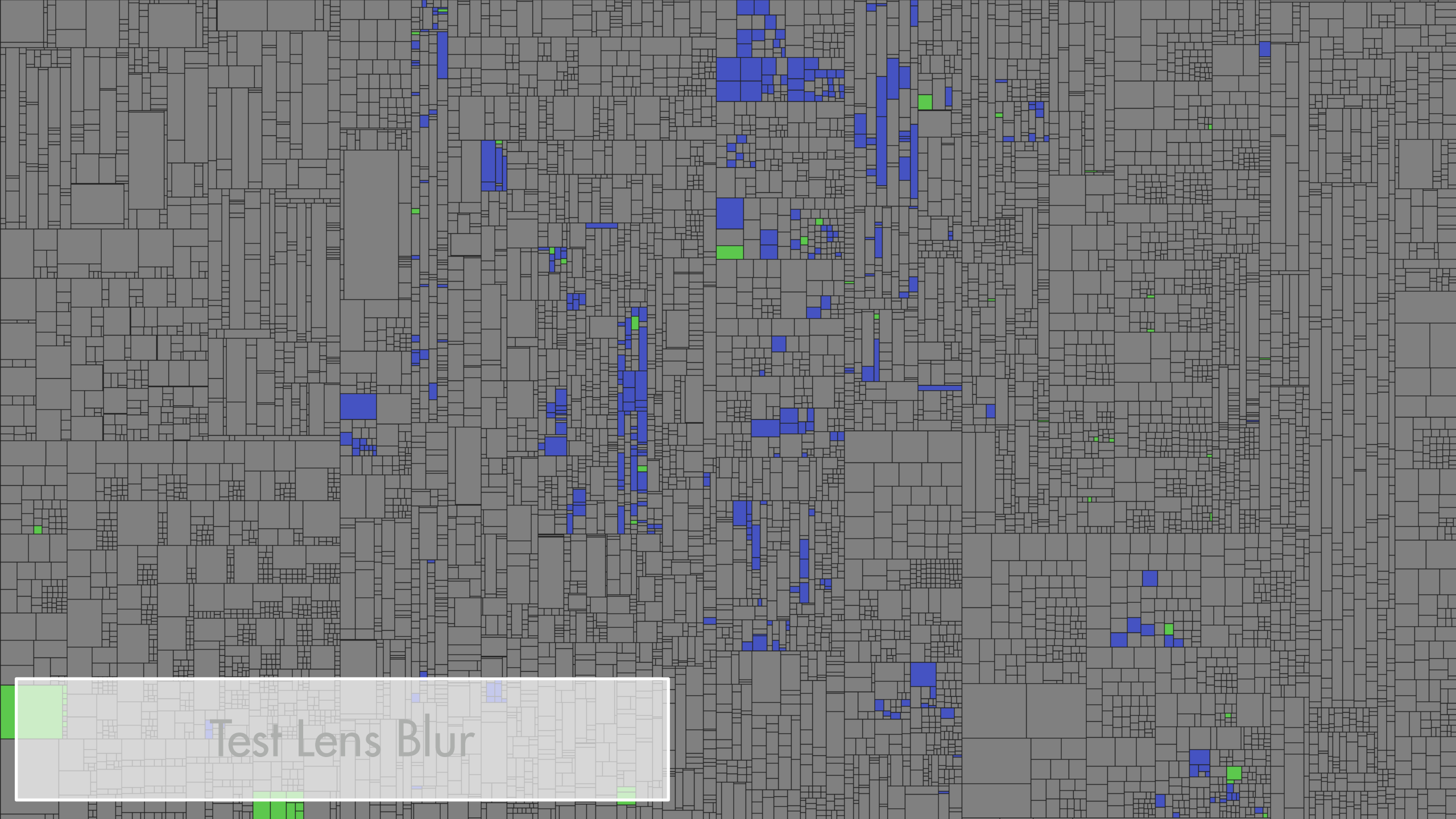




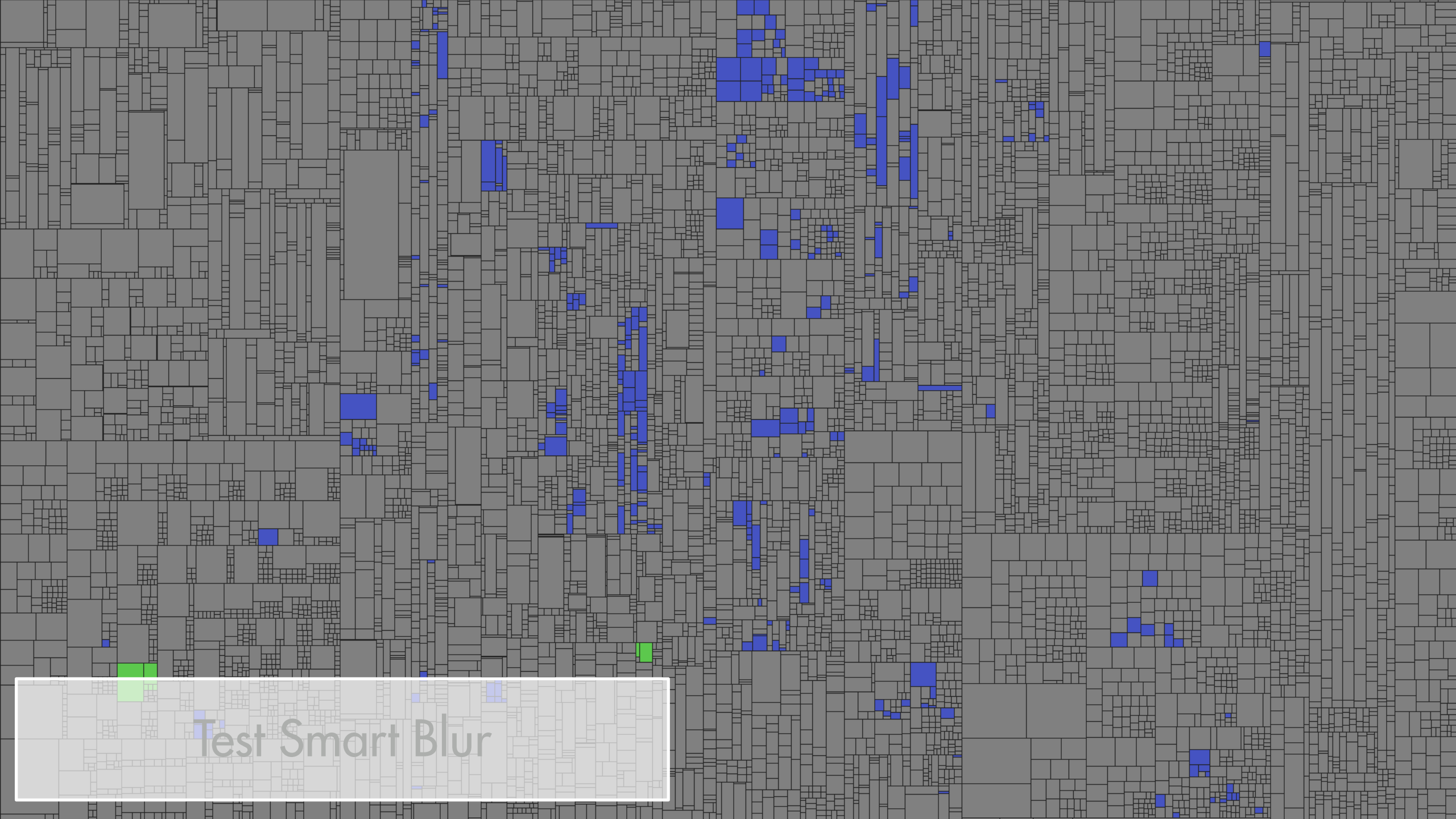
Test Gaussian Blur



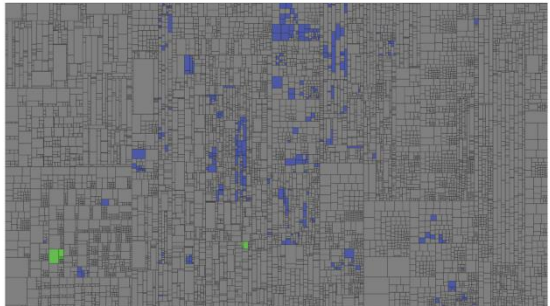
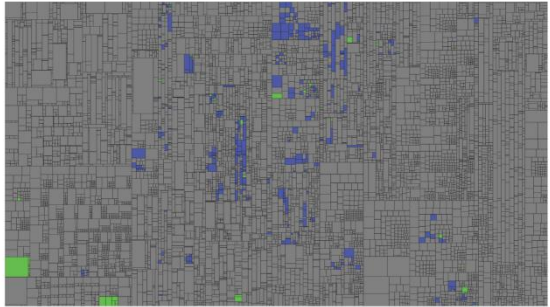
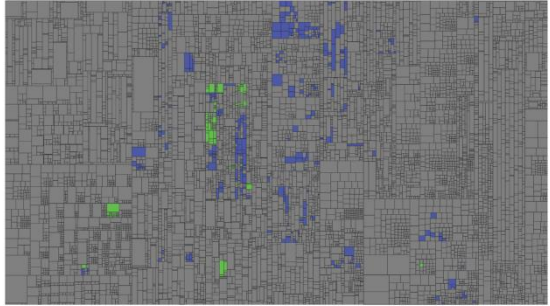
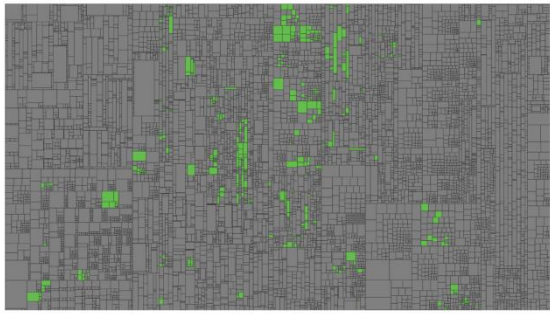
Test Motion Blur




Test Lens Blur



Test Smart Blur

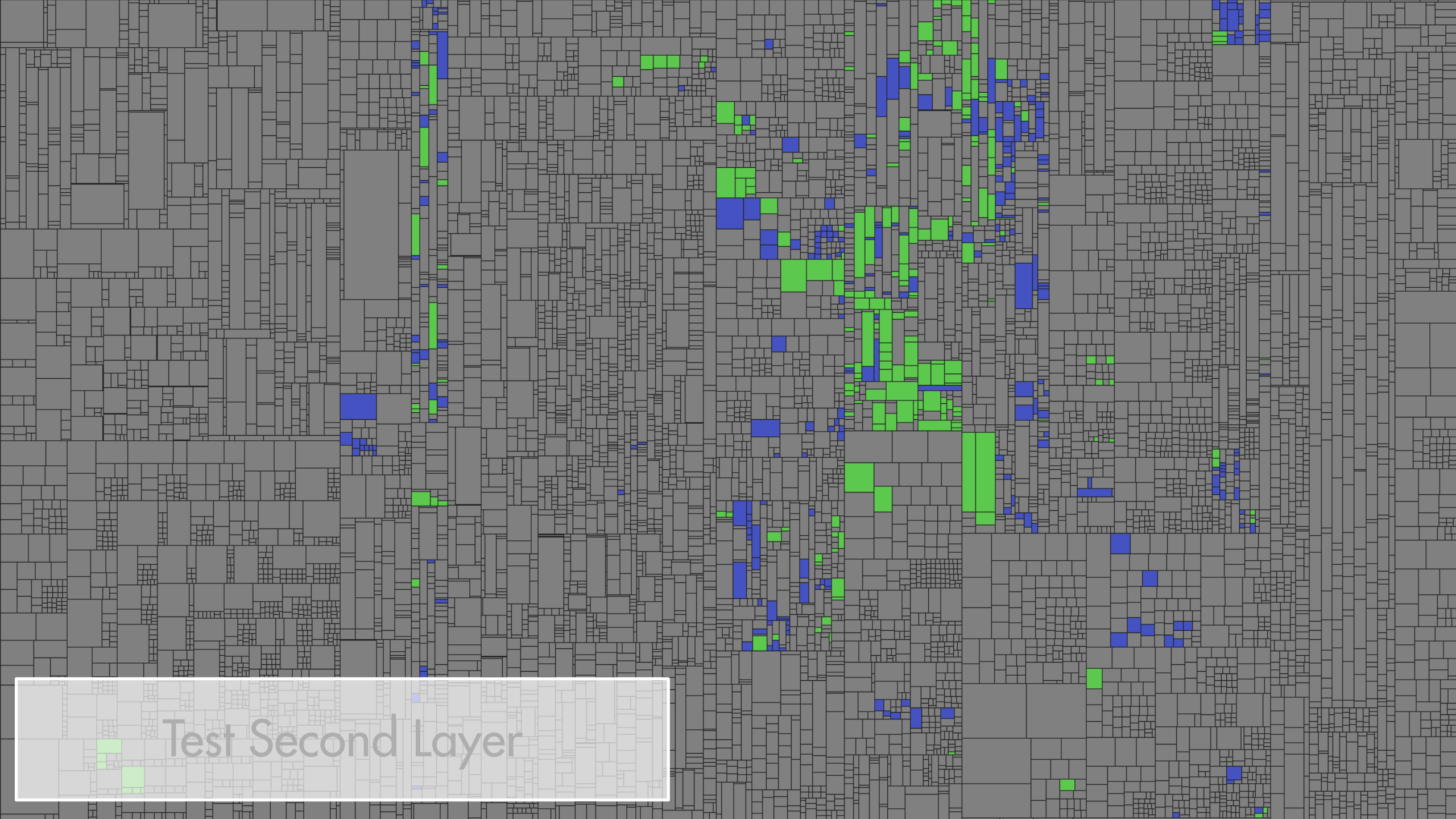




Test Create and Modify
Selection



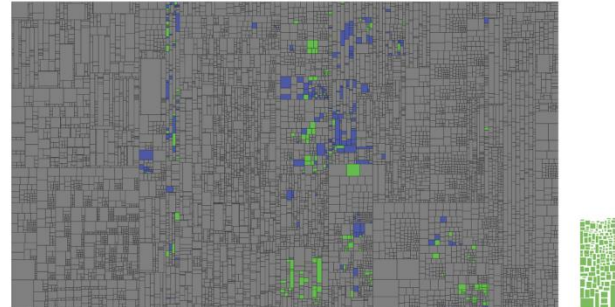
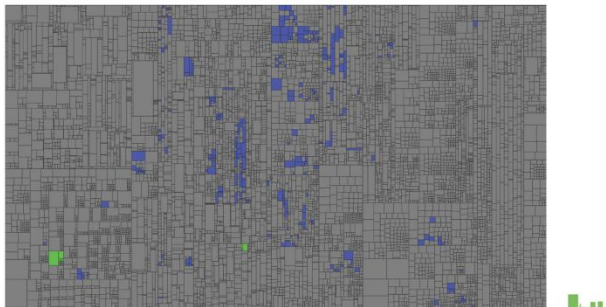
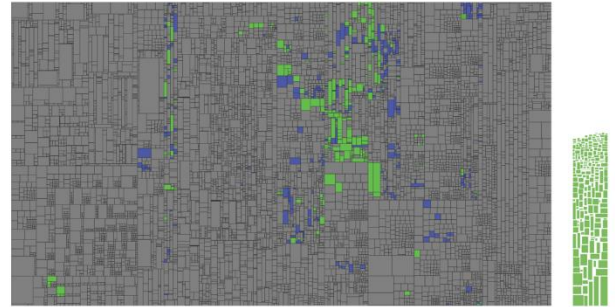
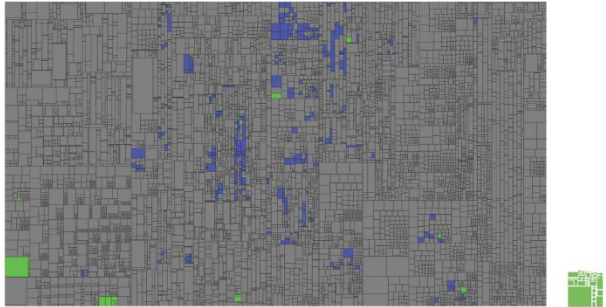
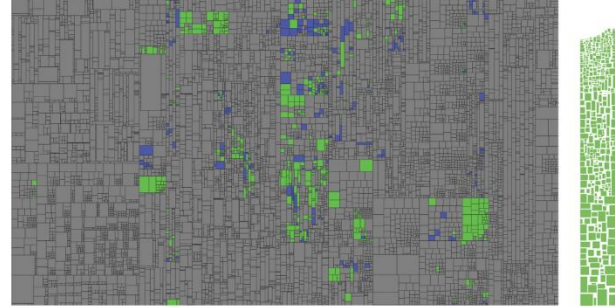
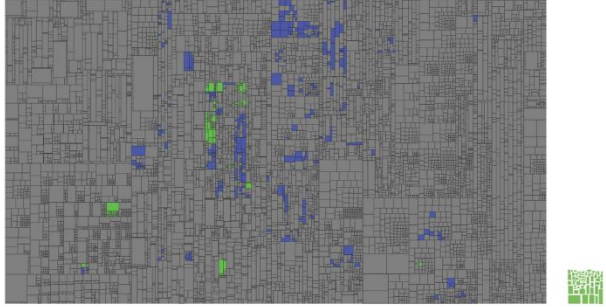
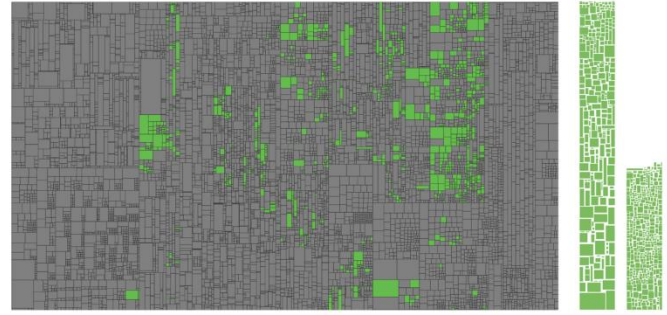
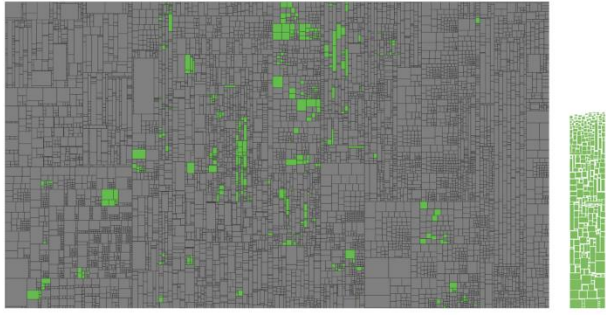
Test Change View Settings



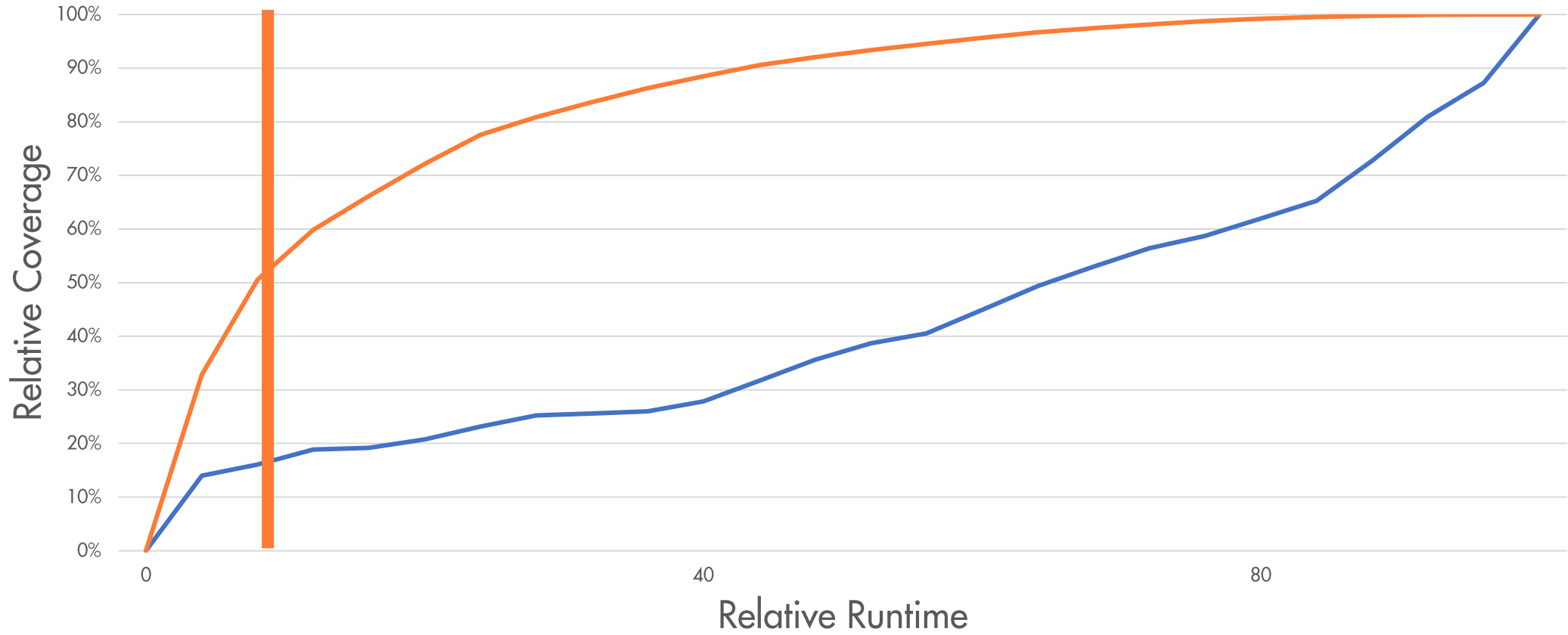
Test Second Layer

The image consists of a dense, overlapping grid of gray rectangles of various sizes. Scattered throughout this grid are several smaller rectangles in blue and green. The blue rectangles are more numerous and appear in various orientations and sizes. The green rectangles are fewer in number and often appear in small clusters or as single blocks. The overall effect is a complex, textured pattern of gray with occasional color accents.

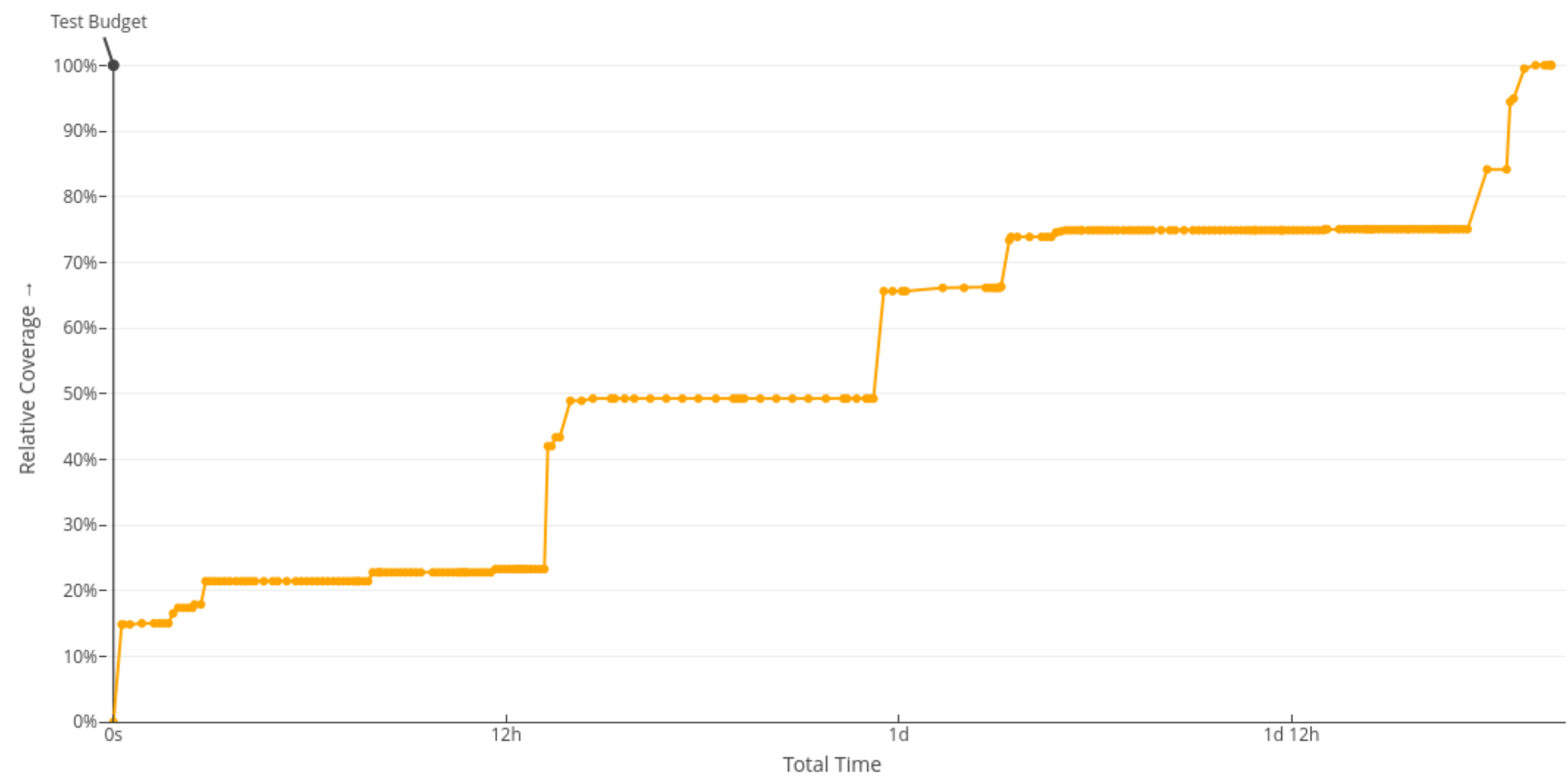
Test Save Image



Time vs Code Coverage



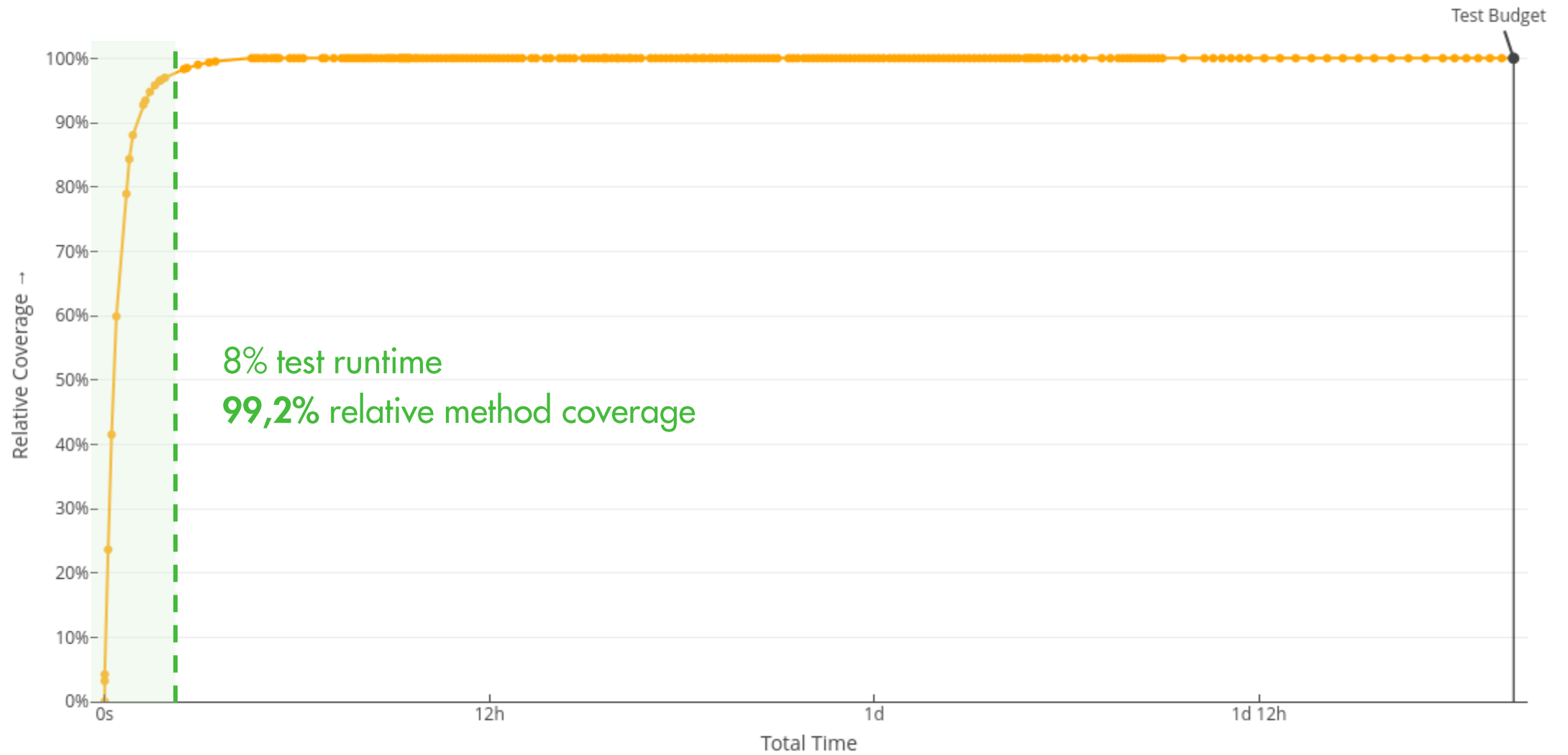
Coverage over Time ?



Results for Test Query & Budget Restriction

Relative Coverage: 0%, Selected Tests: 0 out of 236 (0%)

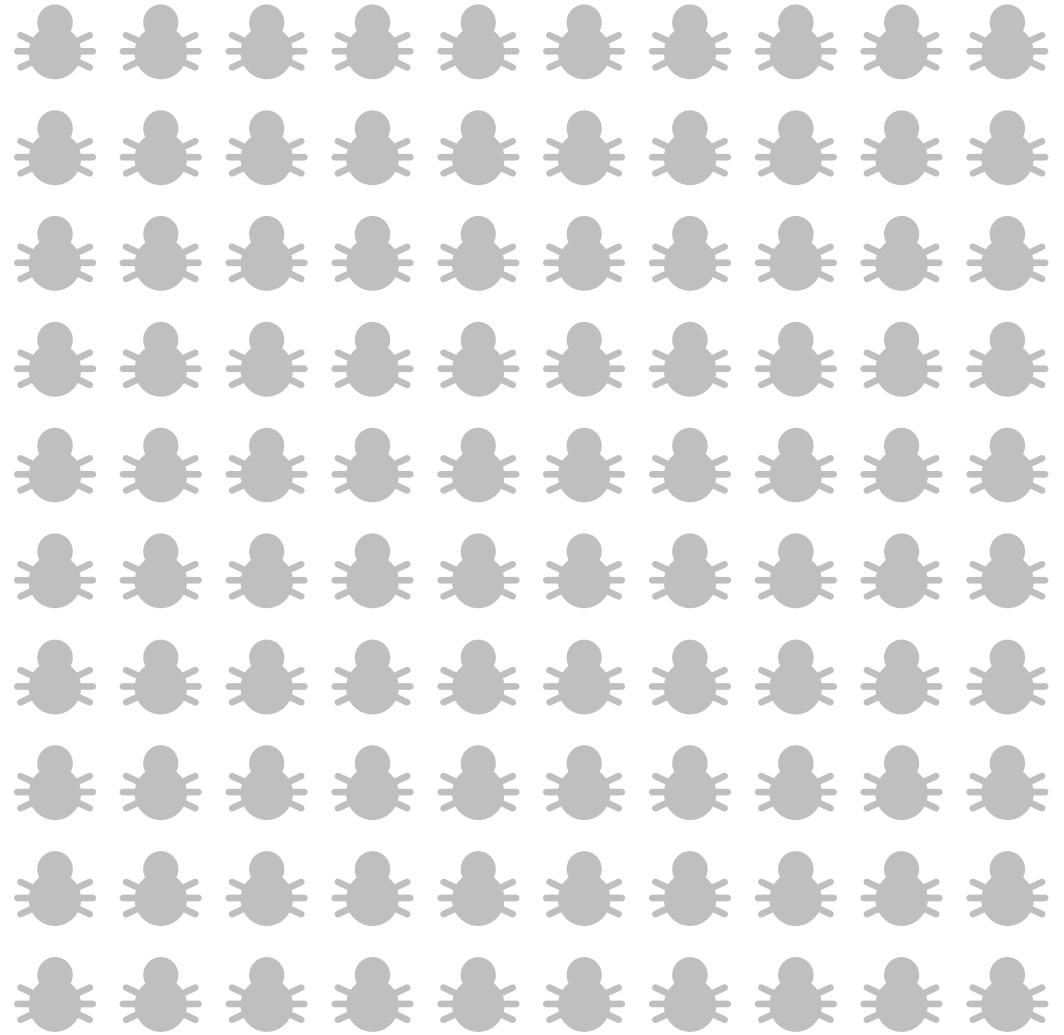
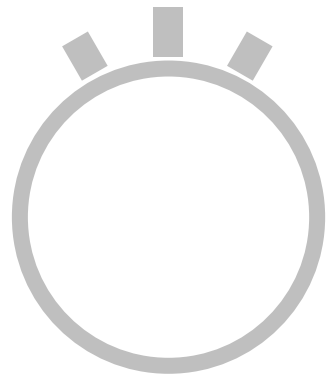
Coverage over Time ?

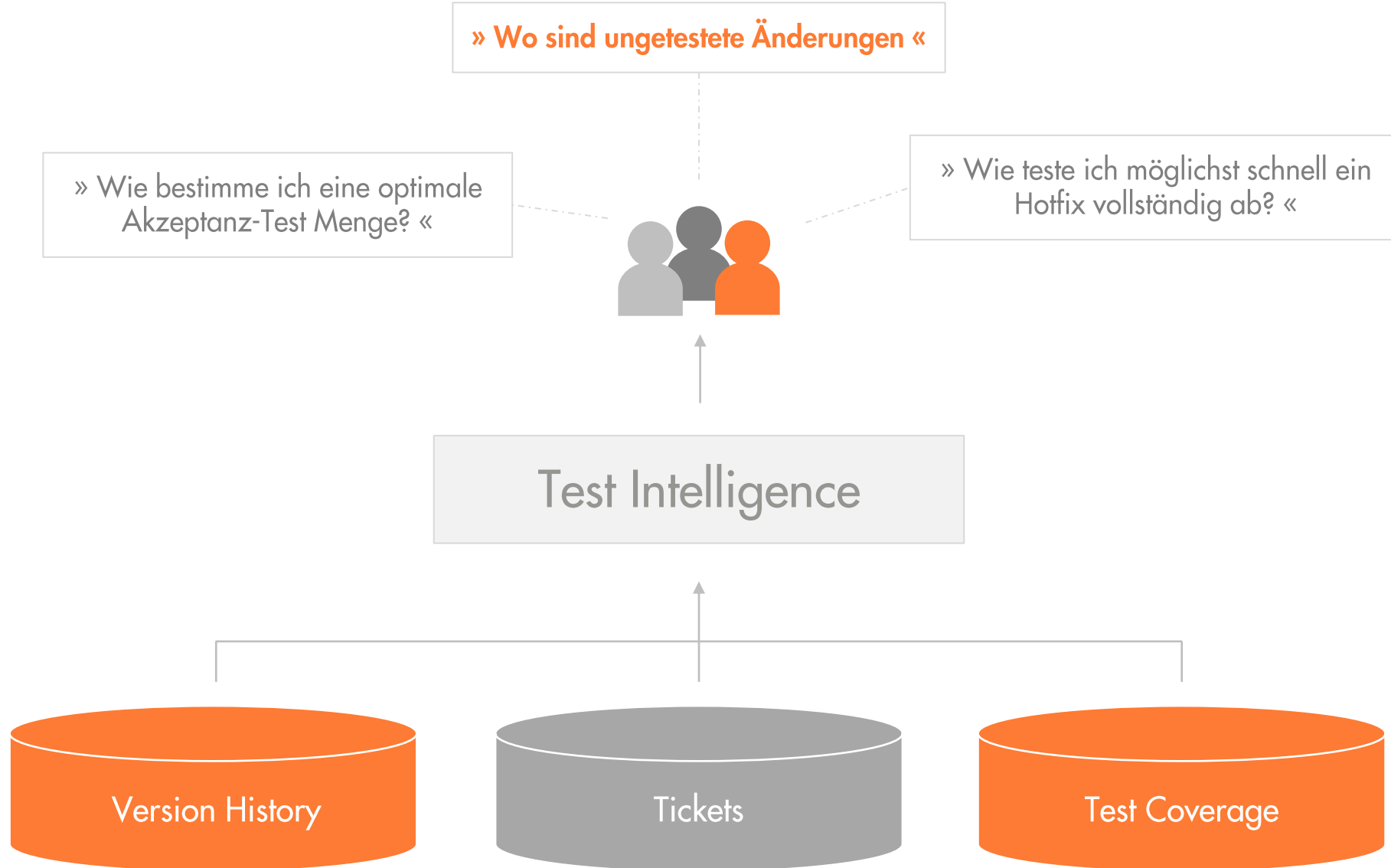


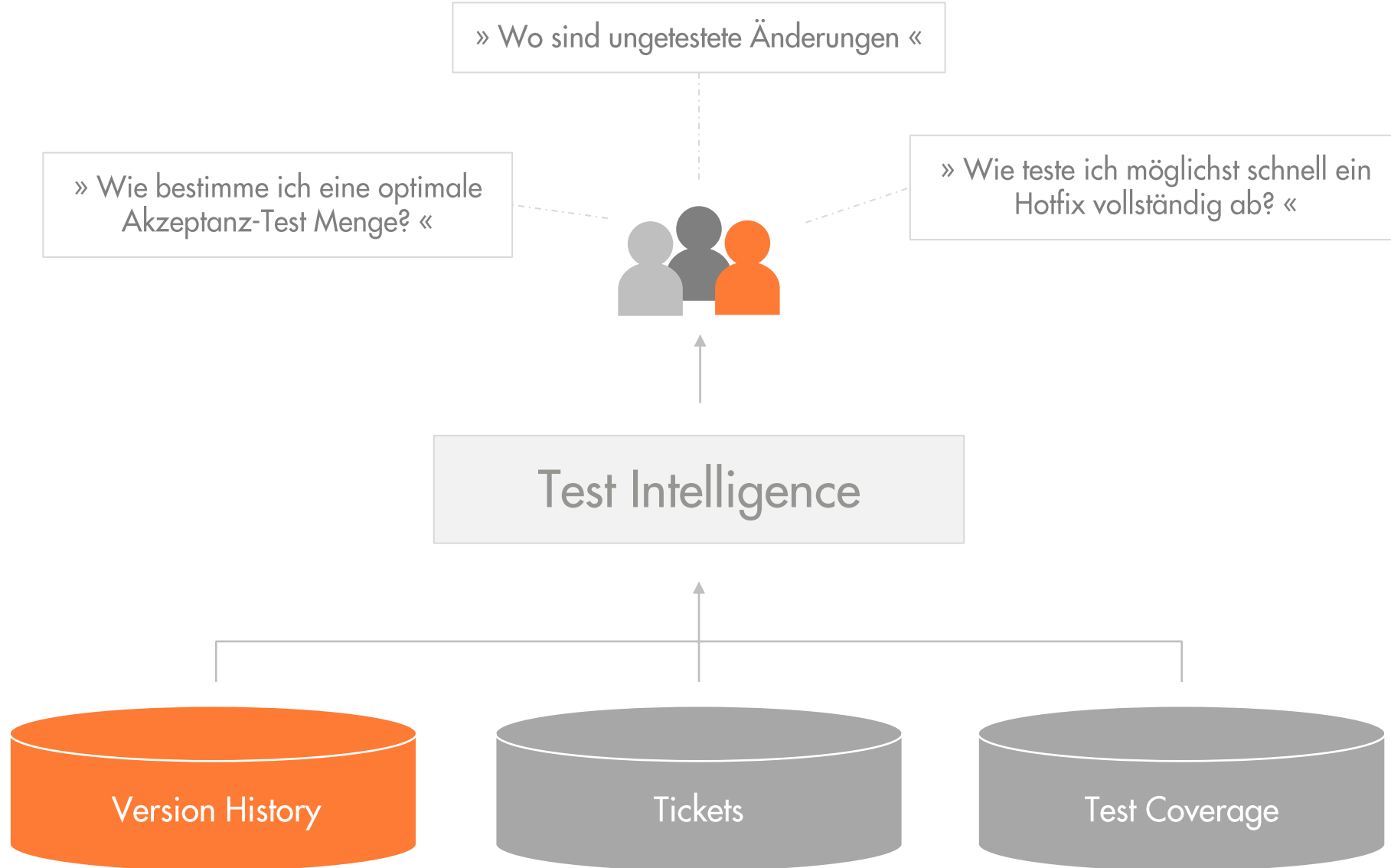
8% test runtime
99,2% relative method coverage

Results for Test Query & Budget Restriction

Relative Coverage: 100%, Selected Tests: 236 out of 236 (100%)








```

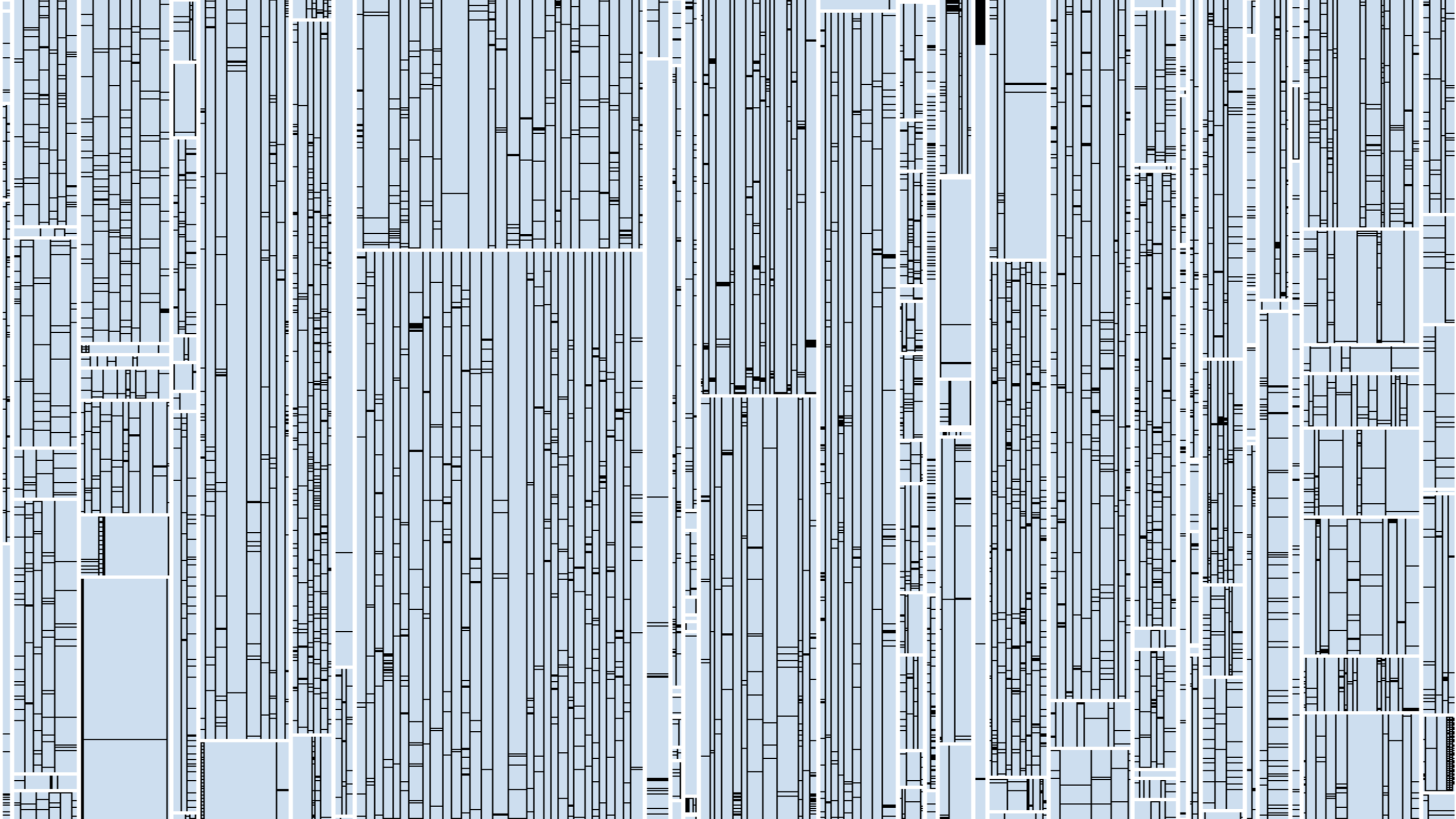
760     int canvasHeight = canvas.getHeight();
761
762     if ((imageWidth > canvasWidth) || (imageHeight > canvasHeight)) {
763         BufferedImage newImage = ImageUtils.crop(image, -getTX(), -getTY(), canvasWidth, canvasHeight);
764
765         BufferedImage tmp = image;
766         setImage(newImage);
767         tmp.flush();
768
769         setTranslation(0, 0);
770         return true;
771     }
772     return false;
773 }
774
775 @Override
776 public void enlargeCanvas(int north, int east, int south, int west) {
777     // all coordinates in this method are
778     // relative to the previous state of the canvas
779     Rectangle imageBounds = getImageBounds();
780     Rectangle canvasBounds = comp.getCanvasBounds();
781
782     Rectangle transformedCanvasBounds = new Rectangle(
783         canvasBounds.x - west,
784         canvasBounds.y - north,
785         canvasBounds.width + west + east,
786         canvasBounds.height + north + south);
787
788     if (imageBounds.contains(transformedCanvasBounds)) {
789         // even after the canvas enlargement, the image does not need to be enlarged
790         translationX += west;
791         translationY += north;
792     } else {
793         enlargeImage(transformedCanvasBounds);
794     }
795 }
796
797 @Override
798 ContentLayerMoveEdit createMovementEdit(int oldTX, int oldTY) {
799     ContentLayerMoveEdit edit;
800     boolean needsEnlarging = checkImageDoesNotCoverCanvas();
801     if (needsEnlarging) {
802         BufferedImage backupImage = getImage();
803         enlargeImage(comp.getCanvasBounds());
804         edit = new ContentLayerMoveEdit(this, backupImage, oldTX, oldTY);
805     } else {
806         edit = new ContentLayerMoveEdit(this, null, oldTX, oldTY);
807     }
808
809     return edit;
810 }
811

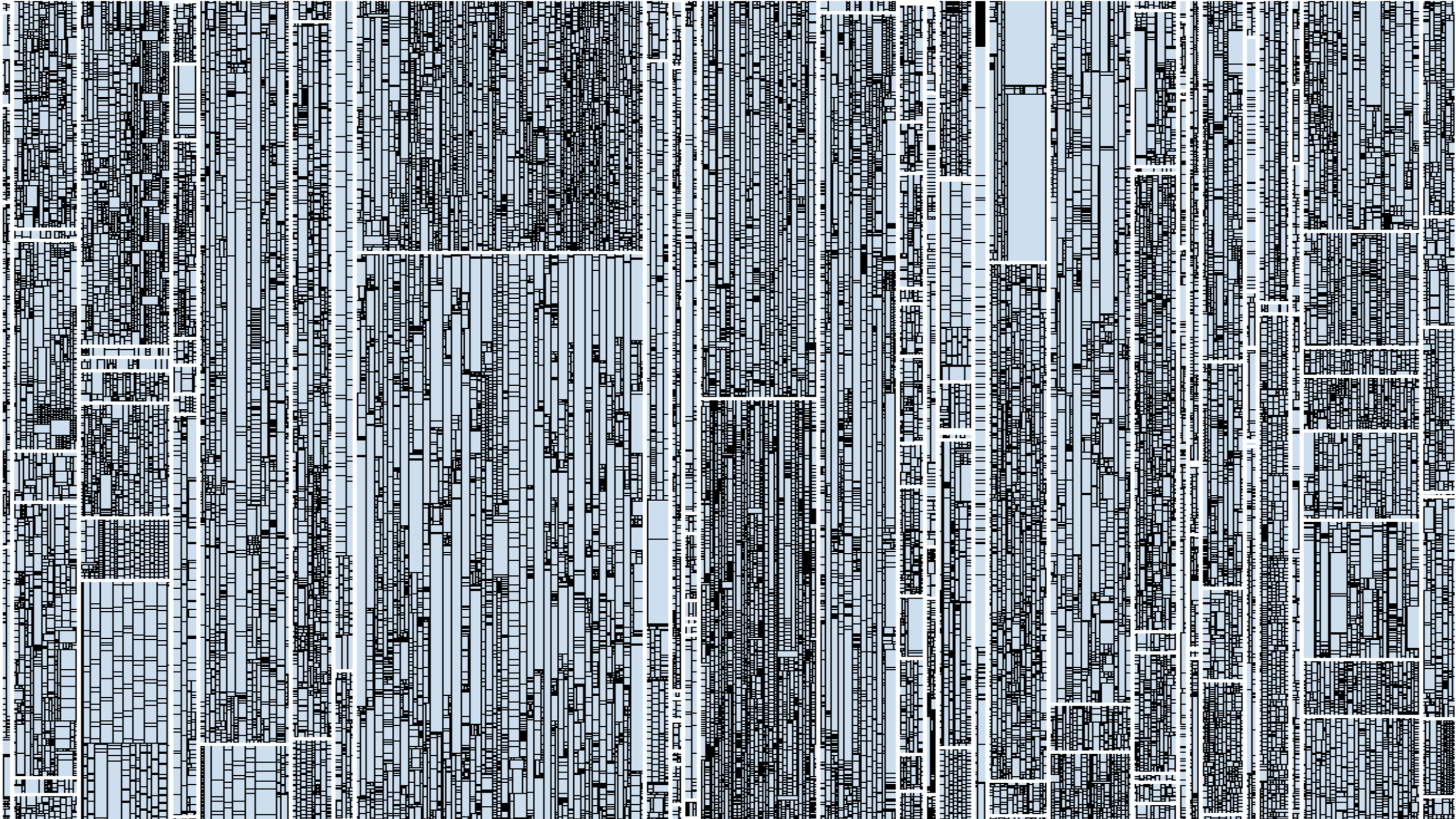
```

```

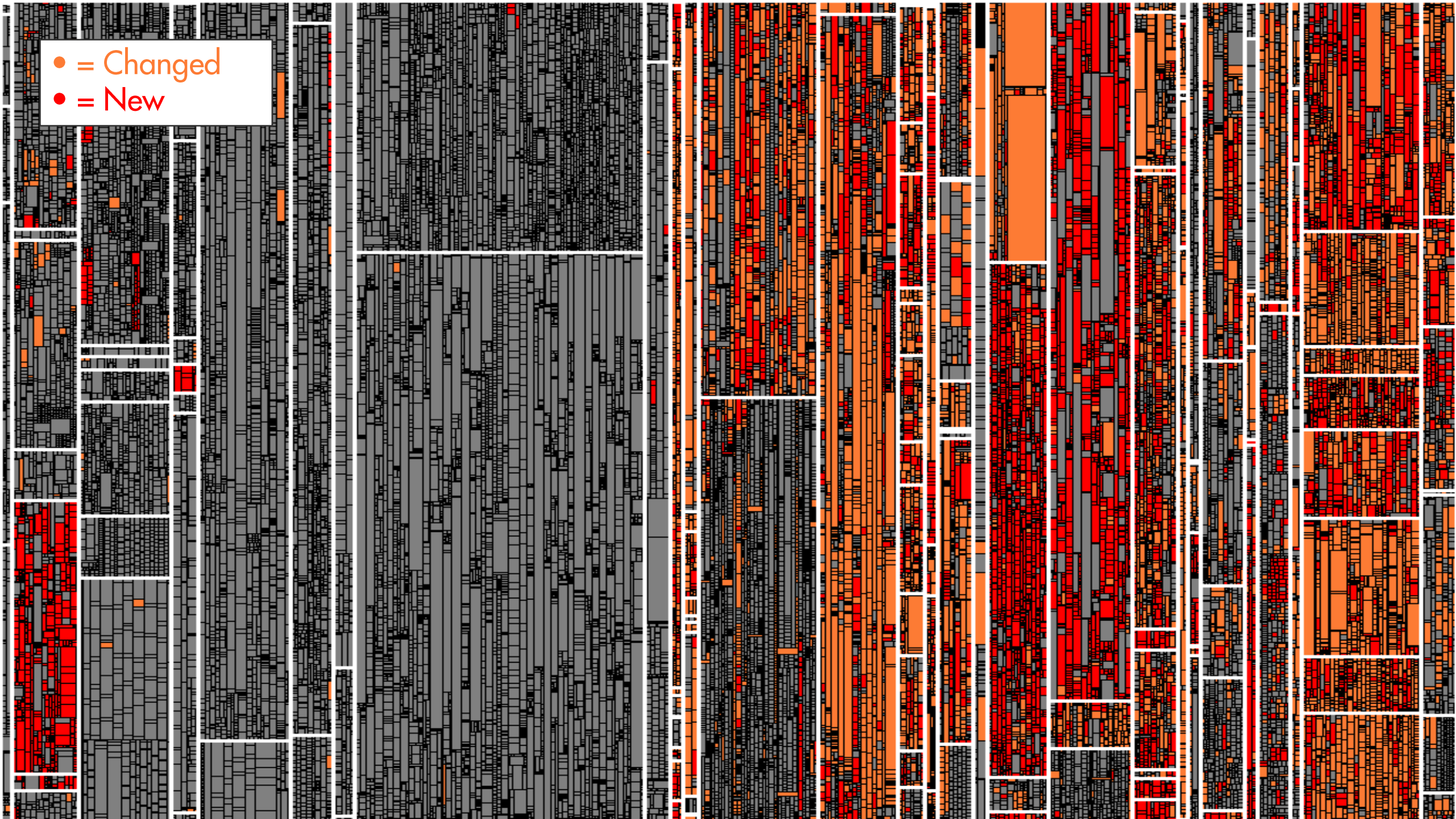
777     int canvasHeight = canvas.getHeight();
778
779     if ((imageWidth > canvasWidth) || (imageHeight > canvasHeight)) {
780         BufferedImage newImage = ImageUtils.crop(image, -getTX(), -getTY(), canvasWidth, canvasHeight);
781
782         BufferedImage tmp = image;
783         setImage(newImage);
784         tmp.flush();
785
786         setTranslation(0, 0);
787         return true;
788     }
789     return false;
790 }
791
792 @Override
793 public void enlargeCanvas(int north, int east, int south, int west) {
794     // all coordinates in this method are
795     // relative to the previous state of the canvas
796     Rectangle imageBounds = getImageBounds();
797     Rectangle canvasBounds = comp.getCanvasBounds();
798
799     int newX = canvasBounds.x - west;
800     int newY = canvasBounds.y - north;
801     int newWidth = canvasBounds.width + west + east;
802     int newHeight = canvasBounds.height + north + south;
803     Rectangle newCanvasBounds = new Rectangle(newX, newY, newWidth, newHeight);
804
805     if (imageBounds.contains(newCanvasBounds)) {
806         // even after the canvas enlargement, the image does not need to be enlarged
807         translationX += west;
808         translationY += north;
809     } else {
810         enlargeImage(newCanvasBounds);
811     }
812 }
813
814 @Override
815 ContentLayerMoveEdit createMovementEdit(int oldTX, int oldTY) {
816     ContentLayerMoveEdit edit;
817     boolean needsEnlarging = checkImageDoesNotCoverCanvas();
818     if (needsEnlarging) {
819         BufferedImage backupImage = getImage();
820         enlargeImage(comp.getCanvasBounds());
821         edit = new ContentLayerMoveEdit(this, backupImage, oldTX, oldTY);
822     } else {
823         edit = new ContentLayerMoveEdit(this, null, oldTX, oldTY);
824     }
825
826     return edit;
827 }
828

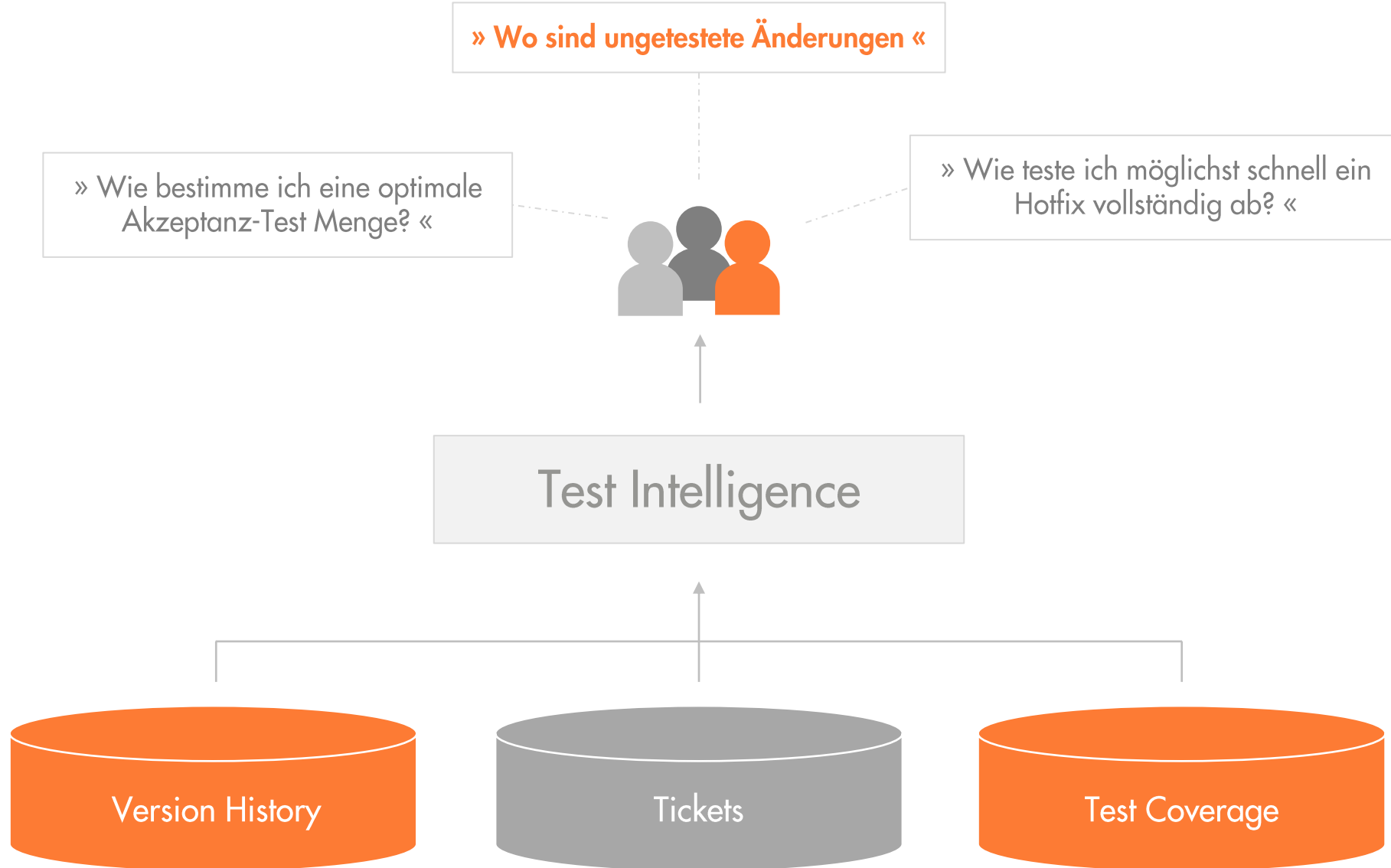
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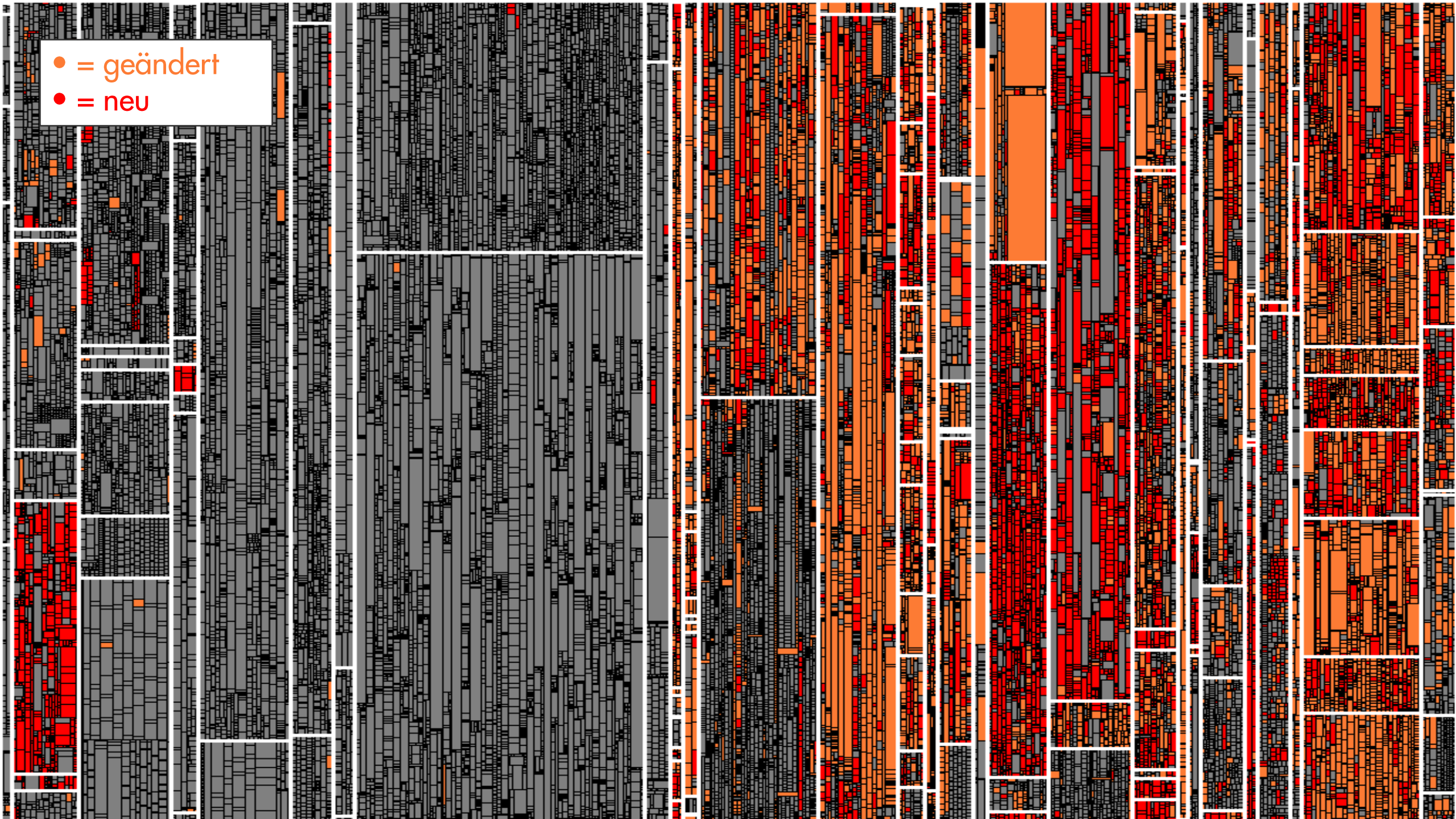


- = Changed
- = New



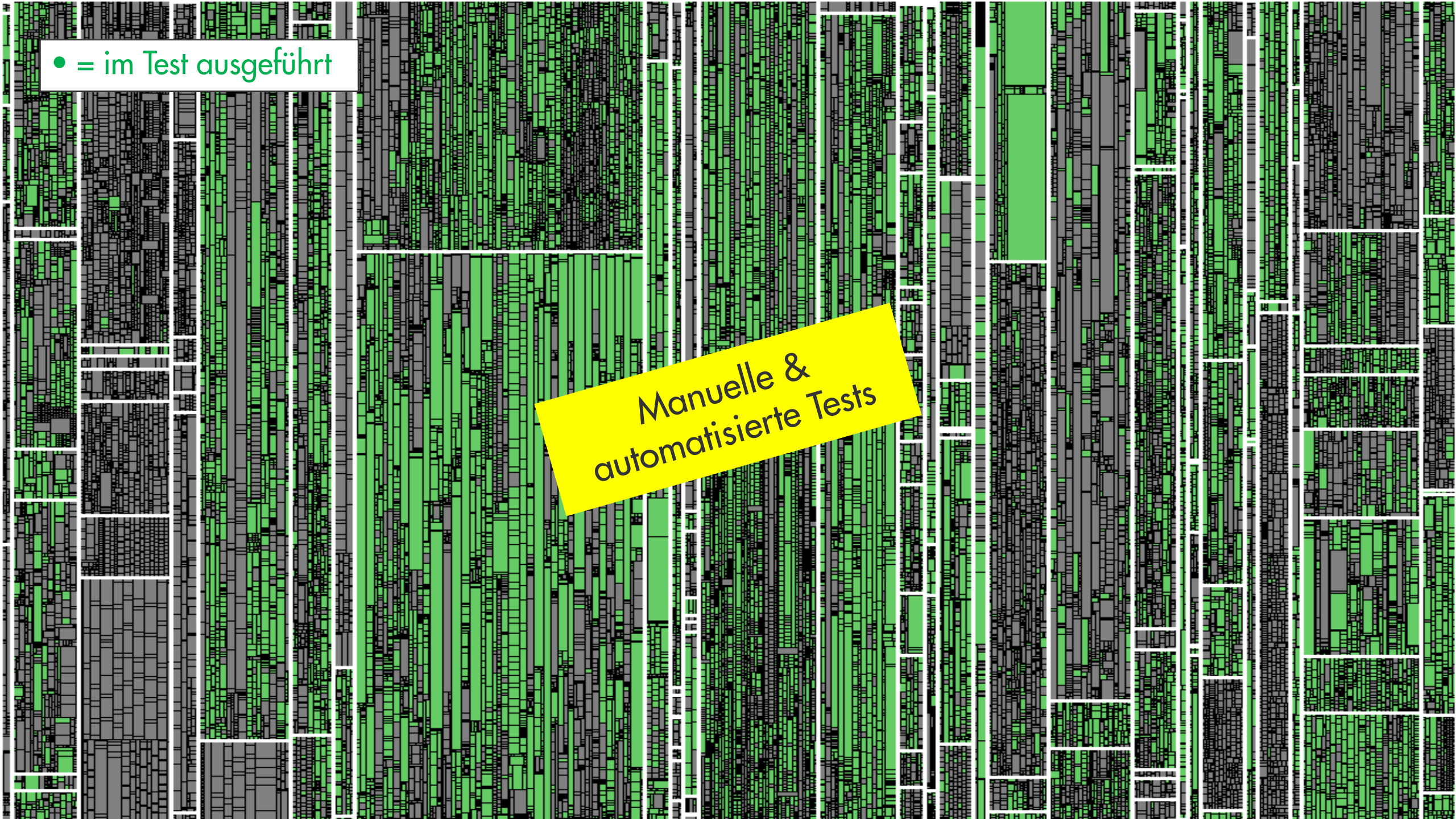


- = geändert
- = neu

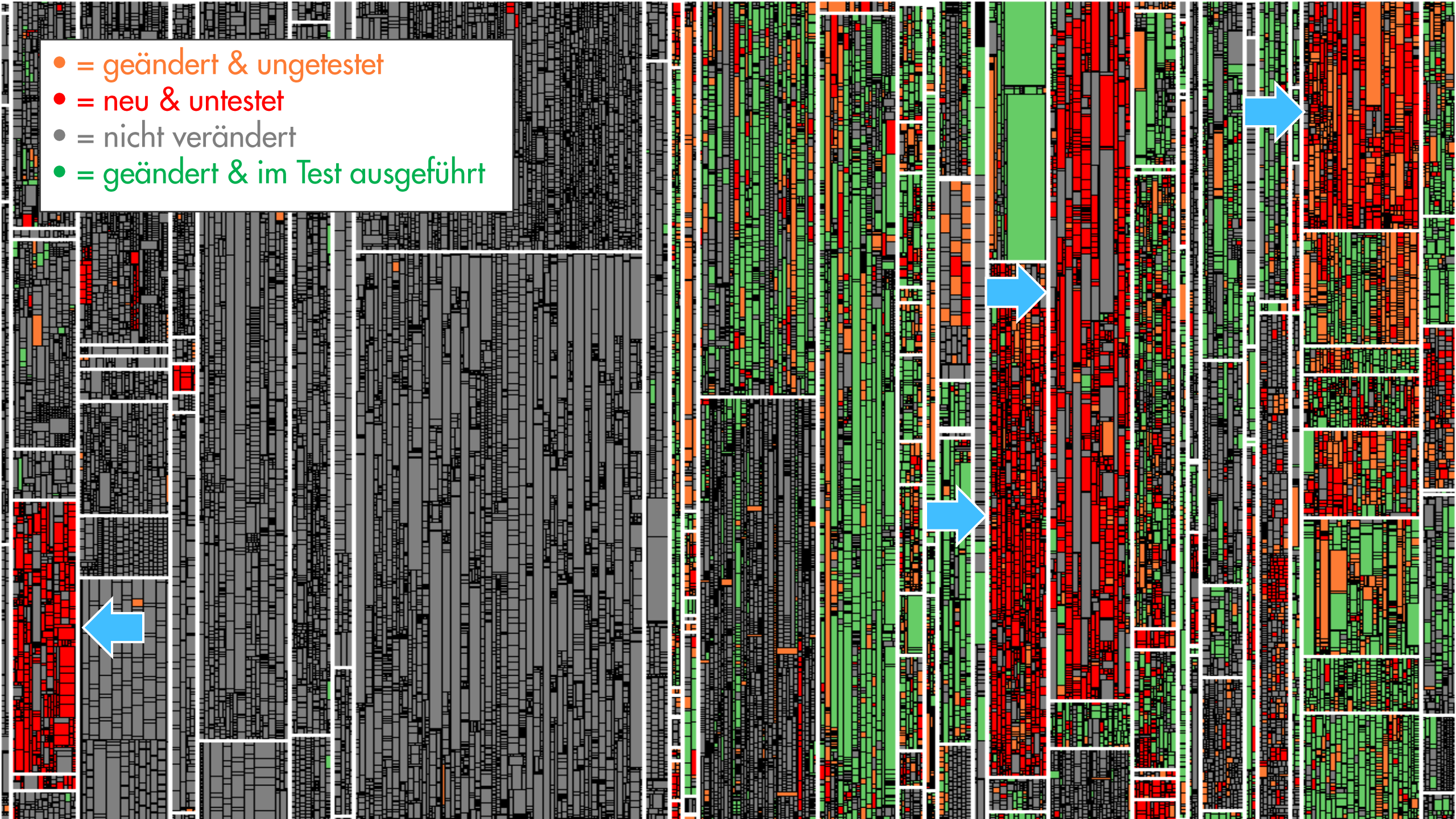


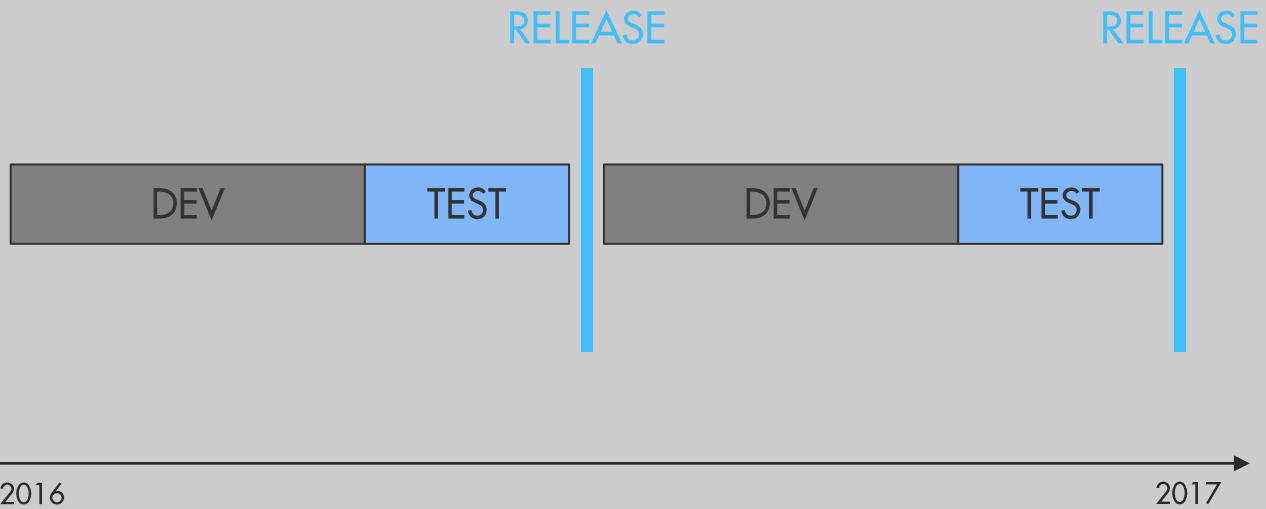
● = im Test ausgeführt


















Manuelle &
automatisierte Tests







- = geändert & ungetestet
- = neu & untestet
- = nicht verändert
- = geändert & im Test ausgeführt







Issue # ▼	Subject	Done		Test Gap
↗ TS-10549	Undo/Redo for web-based architecture editor	Done		0% 
↗ TS-10784	Fix long method finding in TaintAnalysisRunner	Done		0% 
↗ TS-10923	Implement metric 'Nesting Depth' for Simulink	Done		29% 
↗ TS-11364	External findings are not registered during first upload	Done		14% 
↗ TS-11942	Manual test coverage upload during development	Done		43% 
↗ TS-12050	Tool for transferring findings blacklists and tasks	Done		50% 
↗ TS-12262	Cannot set or alter alias without reanalysis	Done		0% 
↗ TS-13151	Fetch parent relationship of TFS work items	Done		0% 

Issue # ▾	Subject		Test Gap
TS-14421	Get rid of TestGapSynchronizer block	Done 	0% 
TS-14733	Remove Dataflow blocks	Done 	22% 

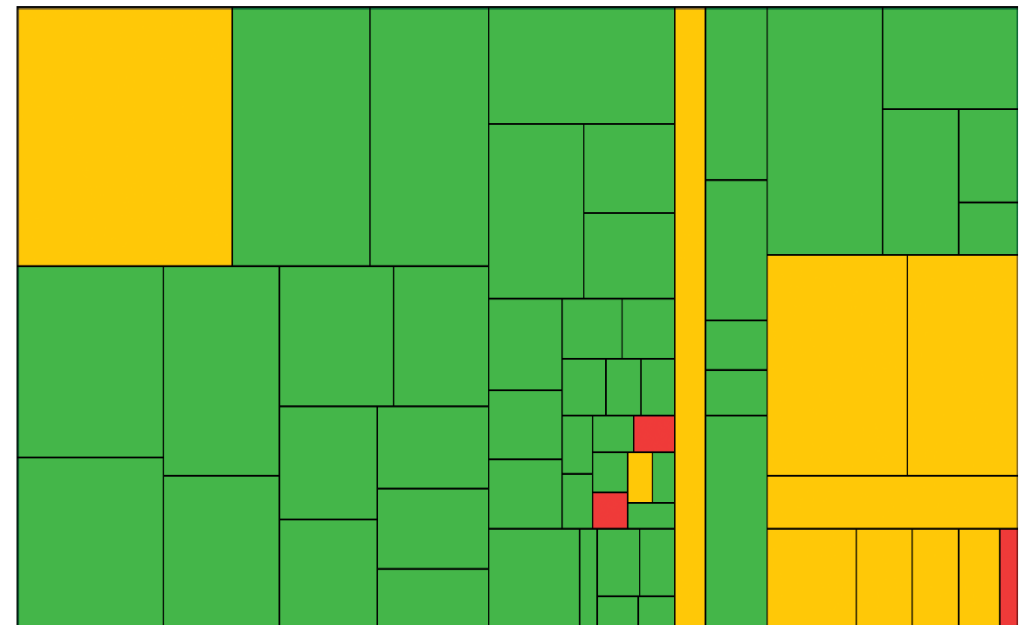
Done Issue TS-14733 - Remove Dataflow blocks

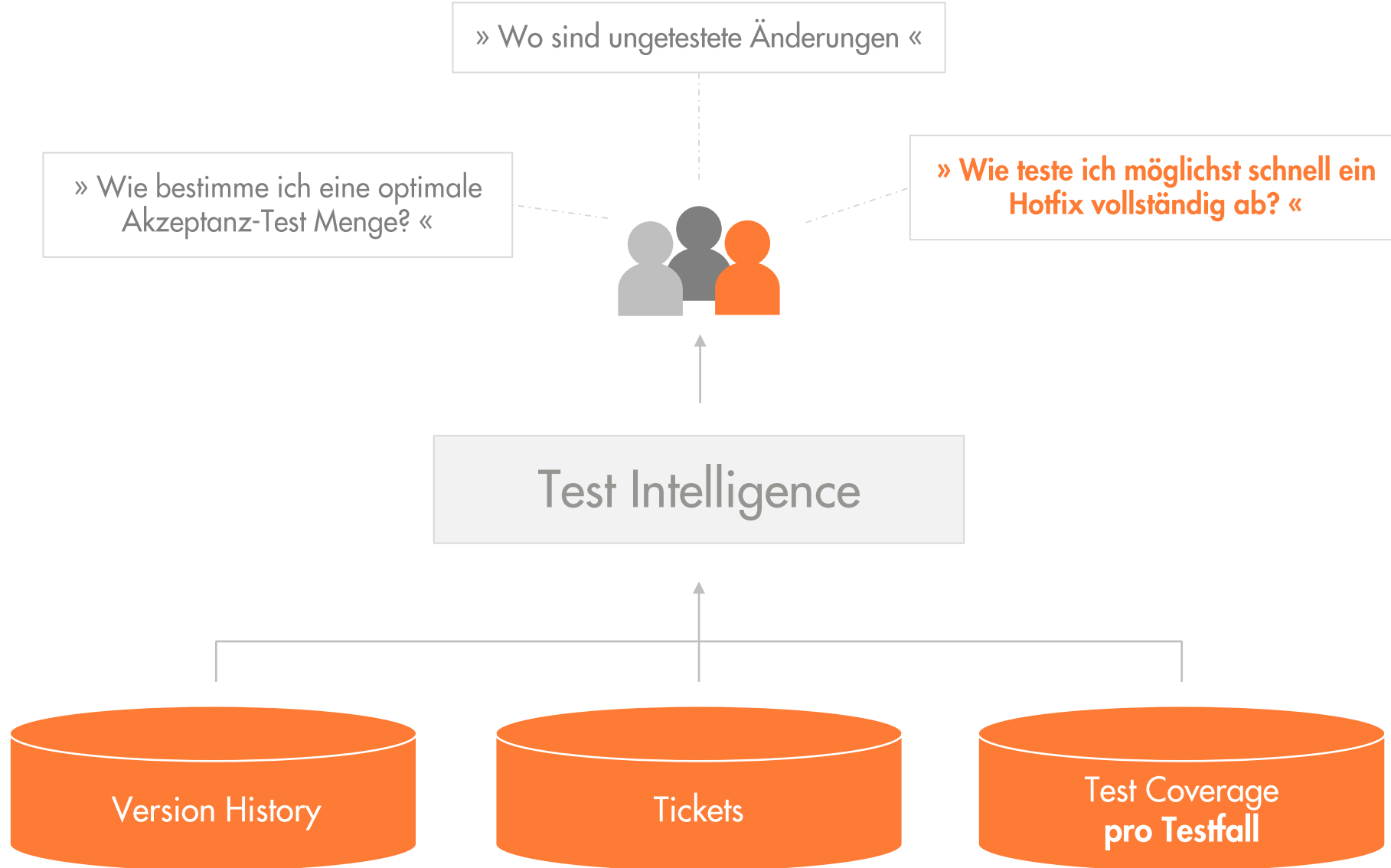
Creator:  (on Apr 06 2018 19:44) Last update: Aug 24 2018 09:32

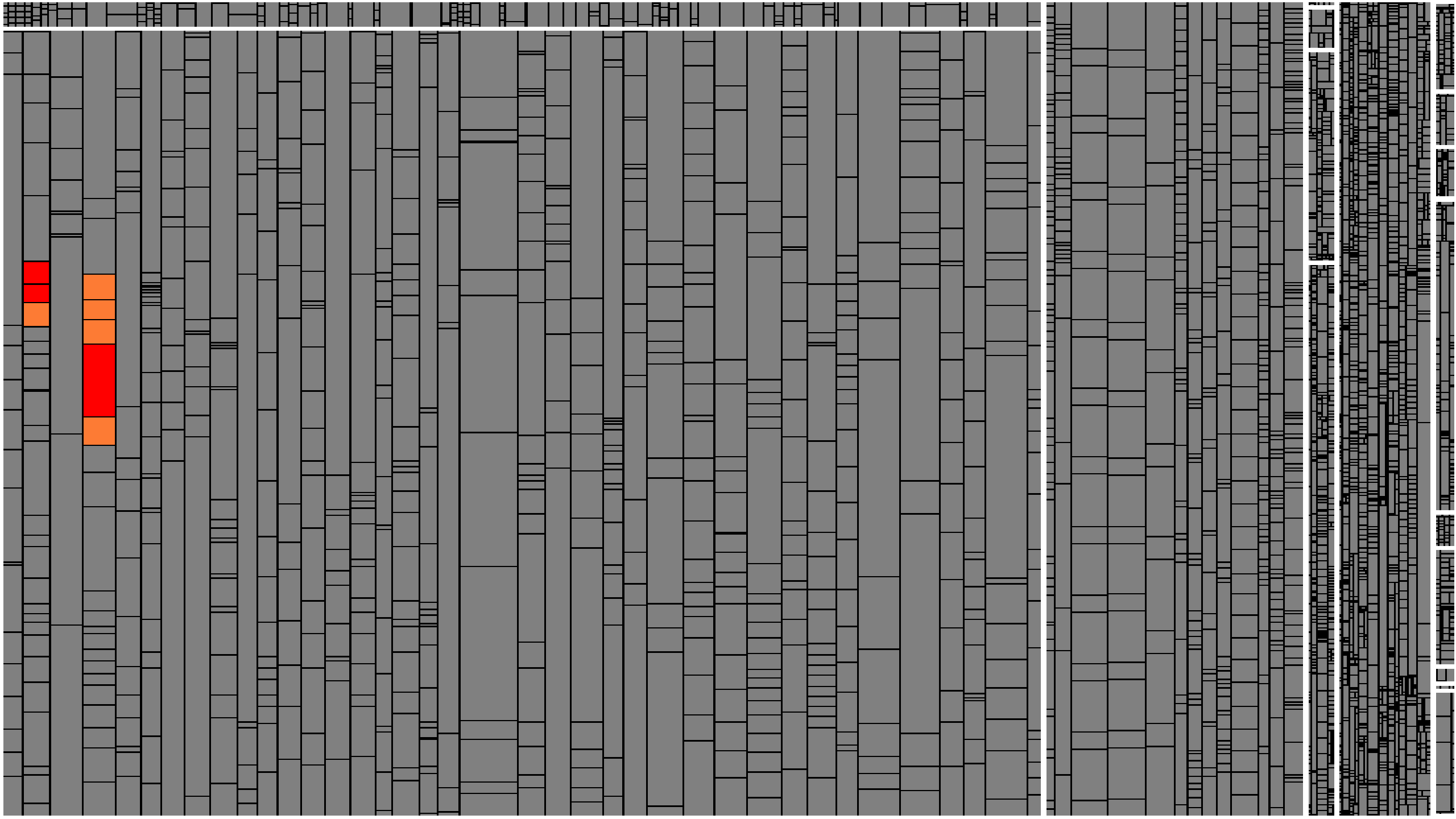
Assignee: 

Project	Type	Priority	Resolution	Fix Version
TS	Maintenance	Normal	Green	Teamscale 4.5
Component	Labels	Affected Version	Customer	Customer Issue
Backend	Performance			
Epic Name	Freshdesk URL	Merge Request		
		https://git.cqse.eu/cqse/teamscale/3621		

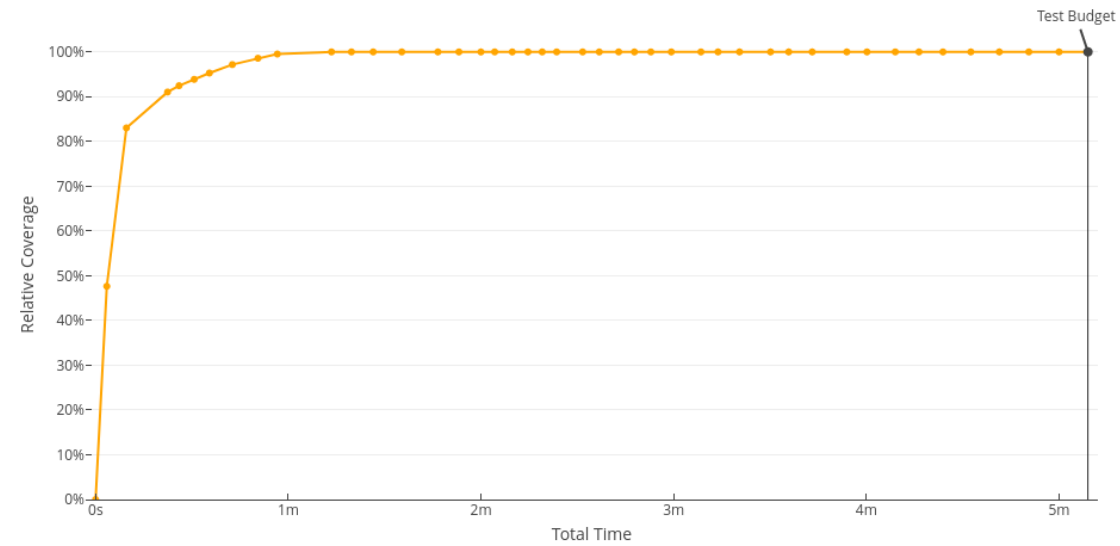
Aug 15 2018 12:37–Now | Test Gap: 22%







Pareto Chart

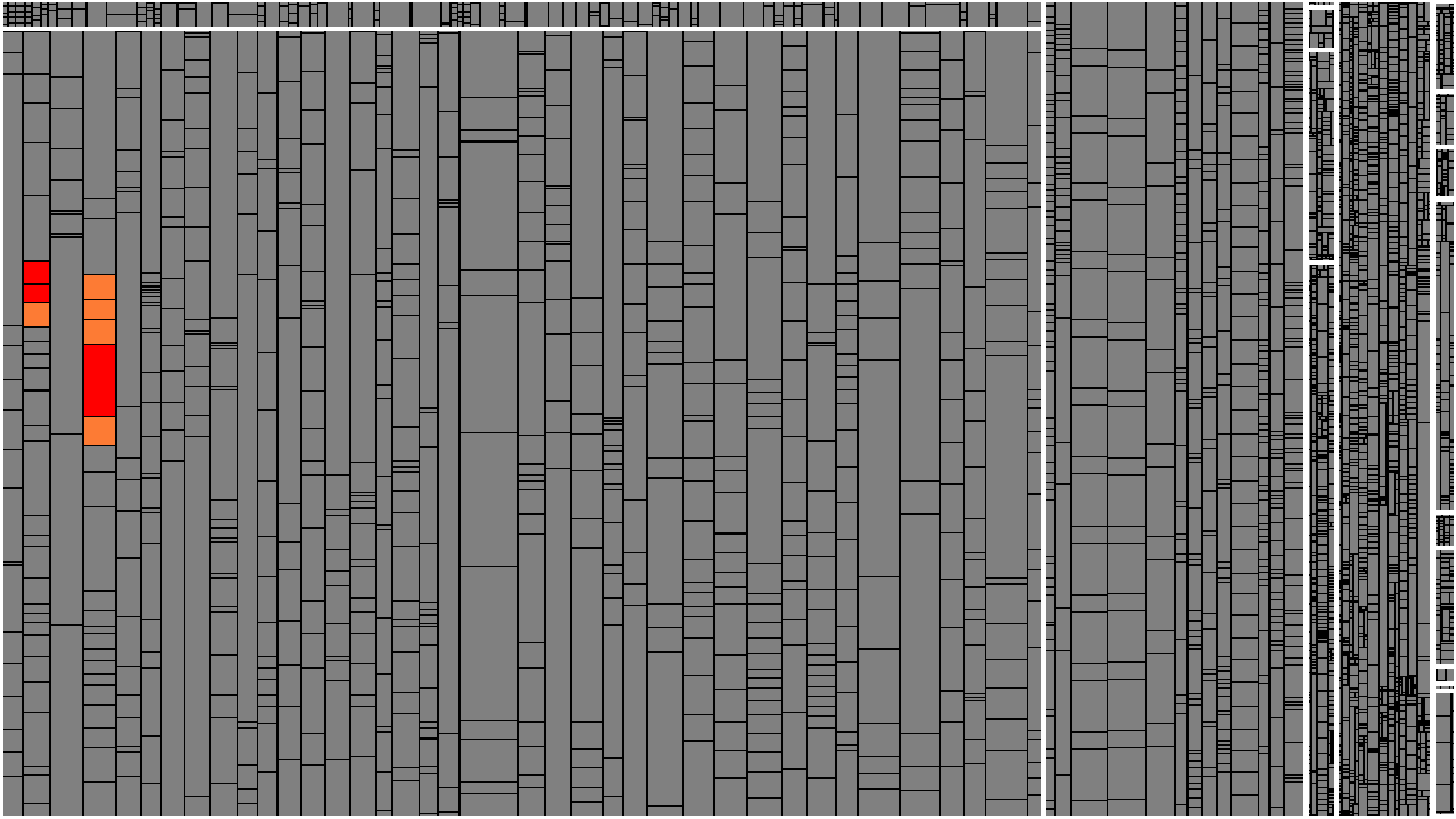


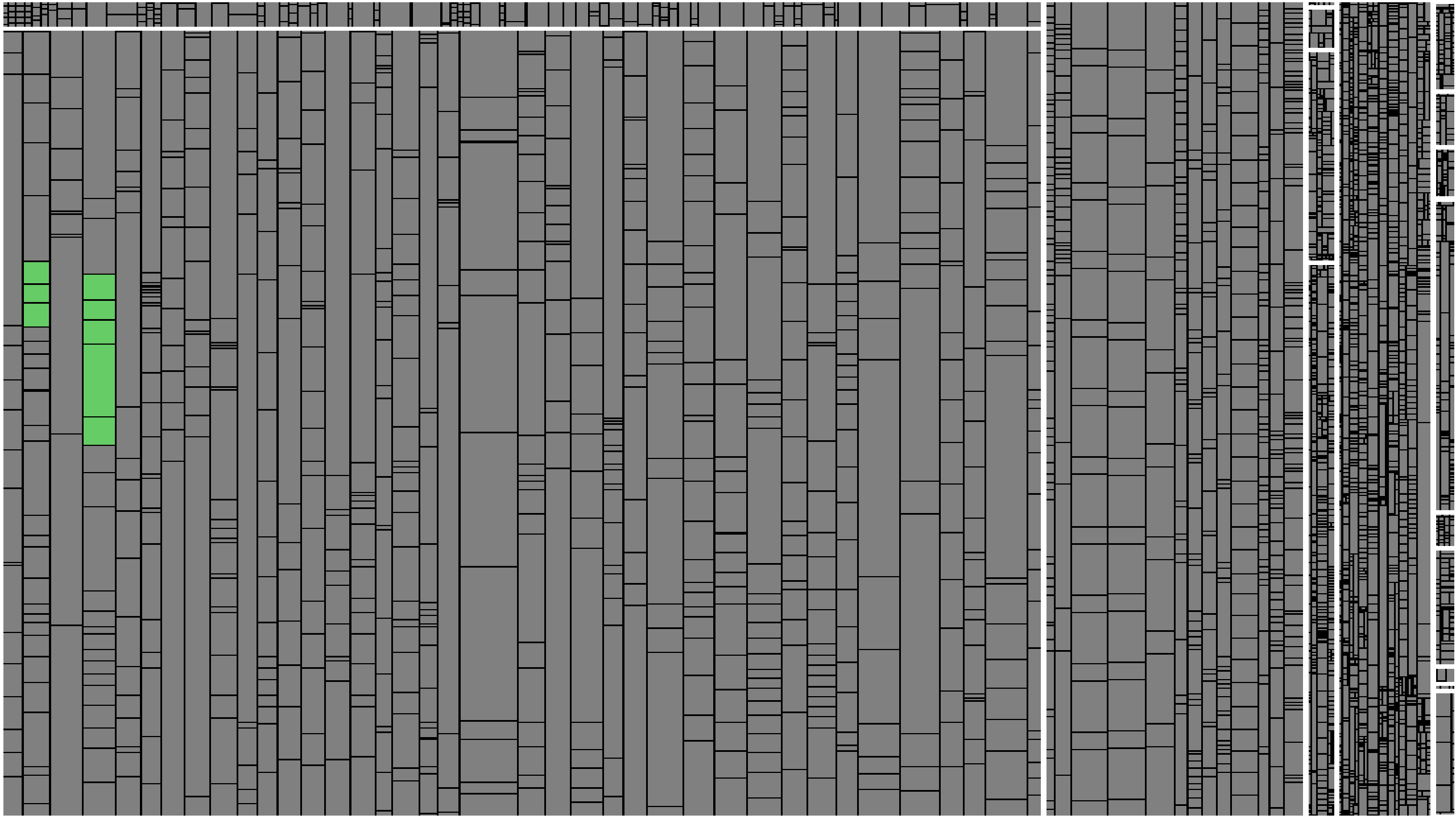
Results for Test Query & Budget Restriction
 Relative Coverage: 100%, Selected Tests: 43 out of 43 (100%)

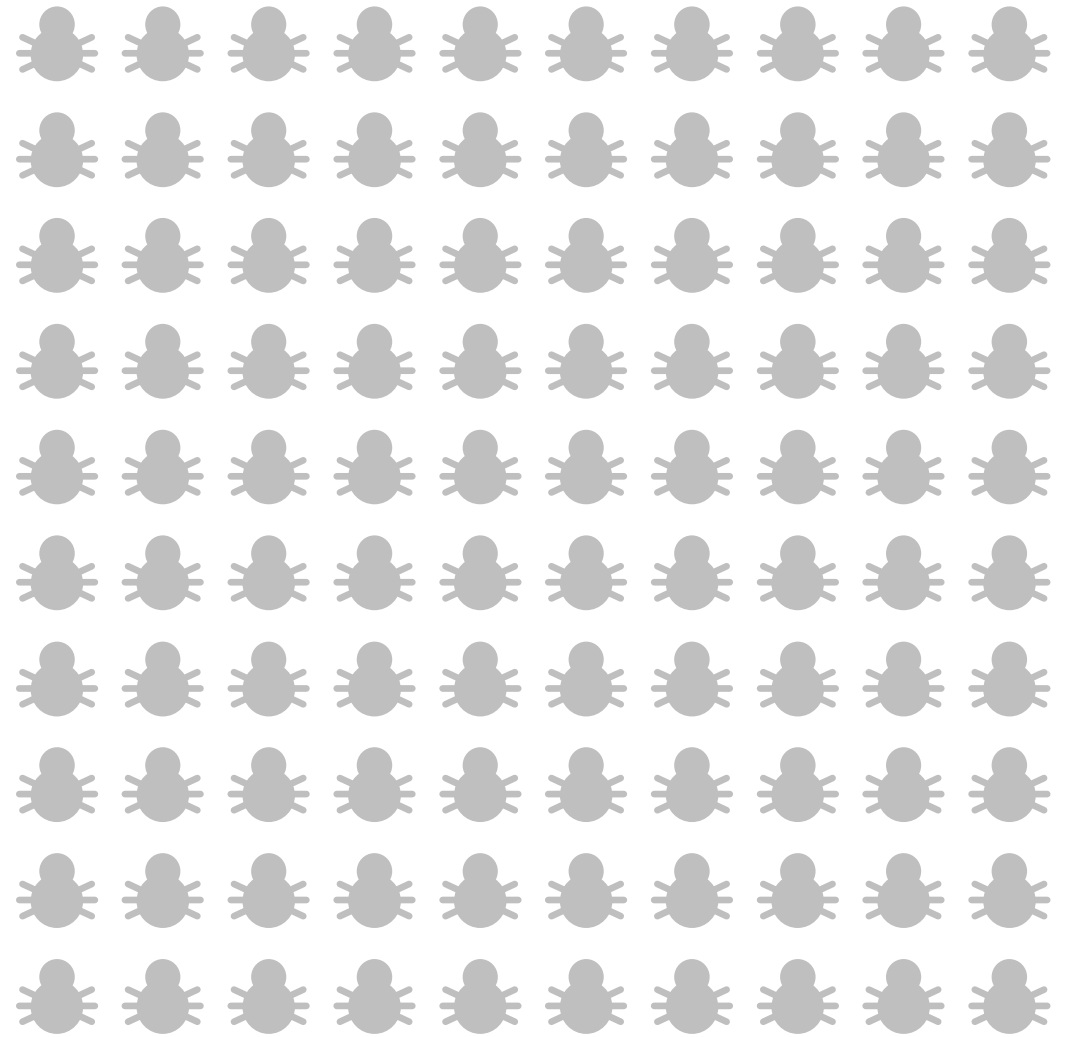
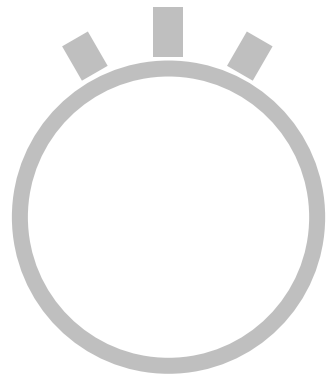
Test Budget 5m 9s of 5m 9s (100%)

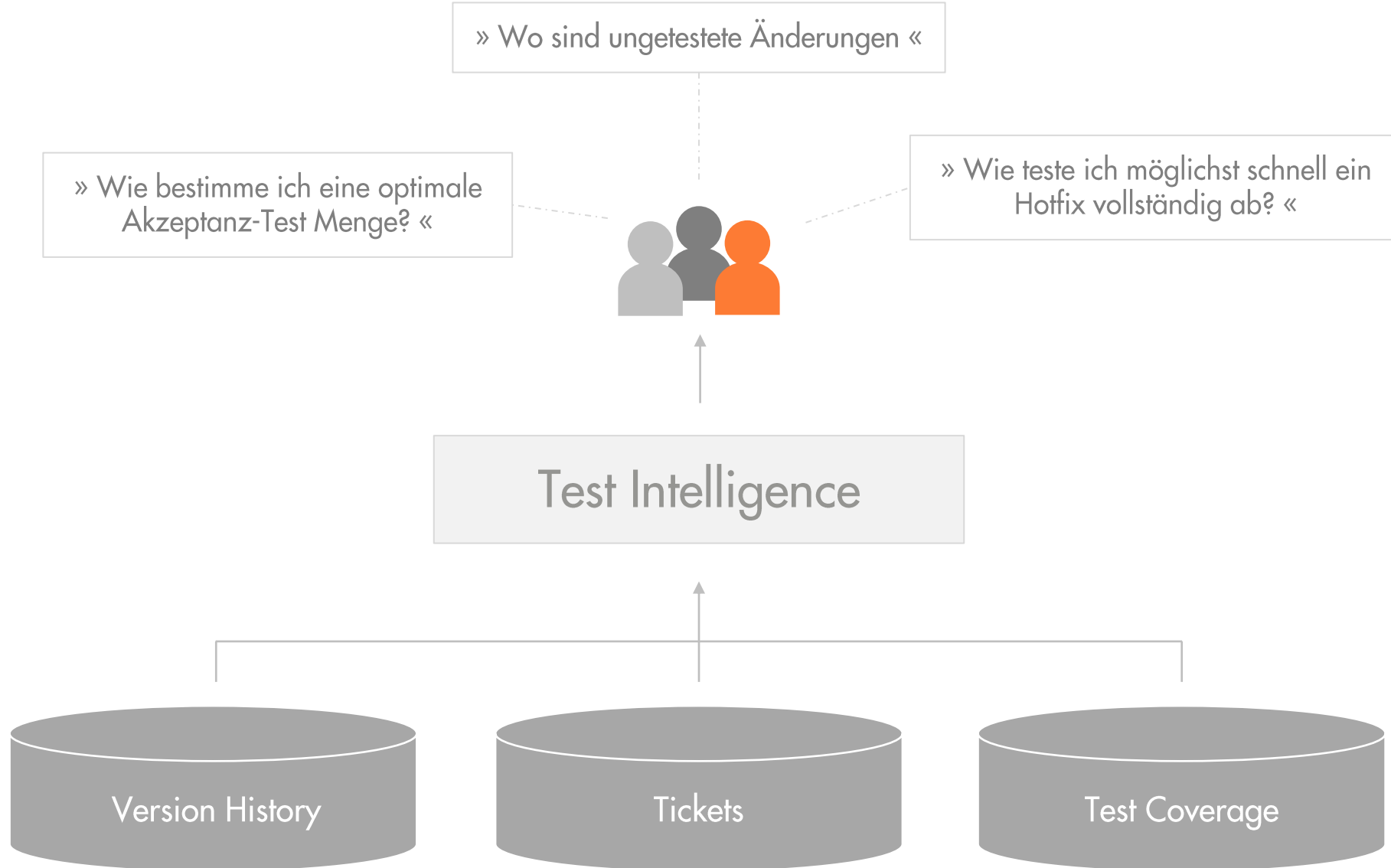
[Download Ranking as CSV](#)

<input type="checkbox"/> Name	Duration	Additional Coverage
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/Login user with valid username, valid password, account is disabled(Login User)	3s 490ms	101
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/New Savings Account with 'Valid' Name with Ownership 'Individual' and Type 'Money Market' and Deposit '2500' with result 'Money Market Account Created'(Create Savings Account)	6s 102ms	75
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/Transfer between the same account is not possible(Transfer Money)	12s 809ms	17
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/Login user with valid username, valid password, account is locked(Login User)	3s 593ms	3
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/Login user with valid username, valid password, credentials expired(Login User)	4s 716ms	3
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/Login user with valid username, valid password, account is expired(Login User)	4s 723ms	3
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/Change Password with conditions of valid Current Password, New Password meets requirements, and Confirm Password matches New Password(Change Password)	7s 151ms	4
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/Register New User with 'Mr.' Title, 'F' Gender, empty Mobile Phone expecting a Successful registration(Register New User)	7s 971ms	3
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/New Savings Account with 'Valid' Name with Ownership 'Joint' and Type 'Money Market' and Deposit '0-2499' with result 'Account Not Created'(Create Savings Account)	6s 28ms	2
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/New Savings Account with 'Valid' Name with Ownership 'Individual' and Type 'Money Market' and Deposit '0-2499' with result 'Account Not Created'(Create Savings Account)	16s 867ms	1
<input type="checkbox"/> io/digisic/bank/test/serenity/UIAcceptanceTests/New Savings Account with 'Valid' Name with Ownership 'Joint' and Type 'Money Market' and Deposit '2500' with result 'Money Market Account Created'(Create Savings Account)	6s 211ms	0











Kontakt – Ich freue mich auf Fragen 😊



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