## Analysiert: Wechselwirkungen zwischen Architektur & Organisation

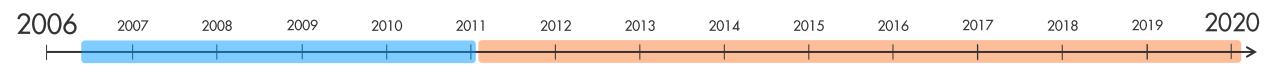










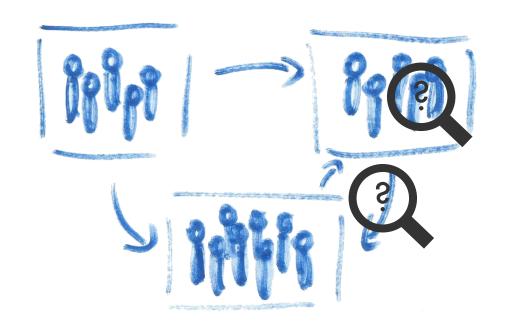


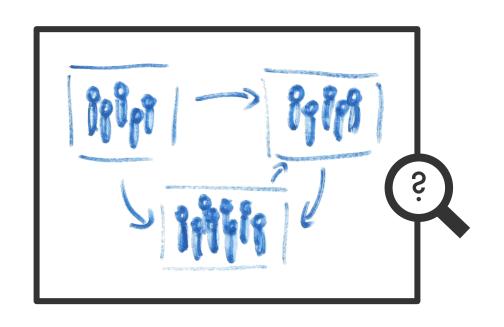
### Conway's "Law"

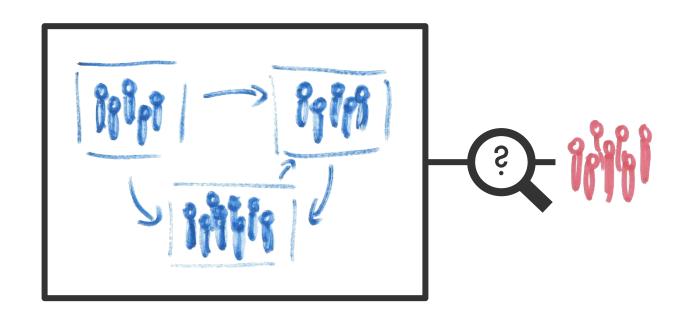
Organizations which design systems ... are constrained to produce designs which are copies of the communication structures of these organizations.

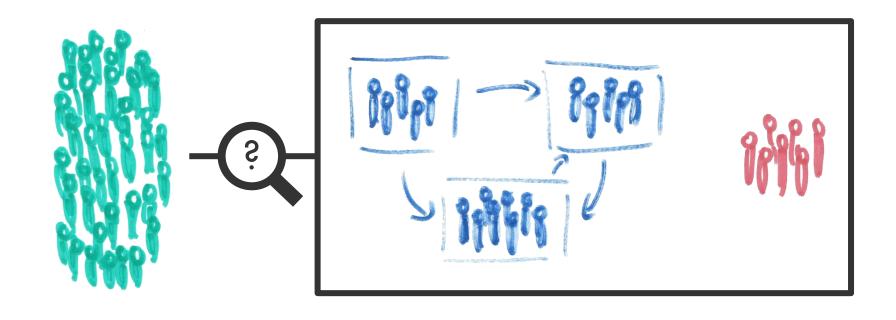
Melvin Conway, 1968

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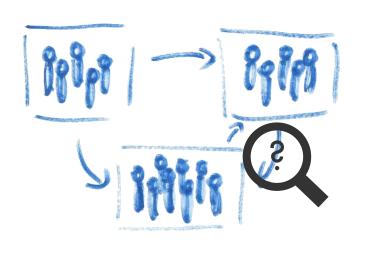




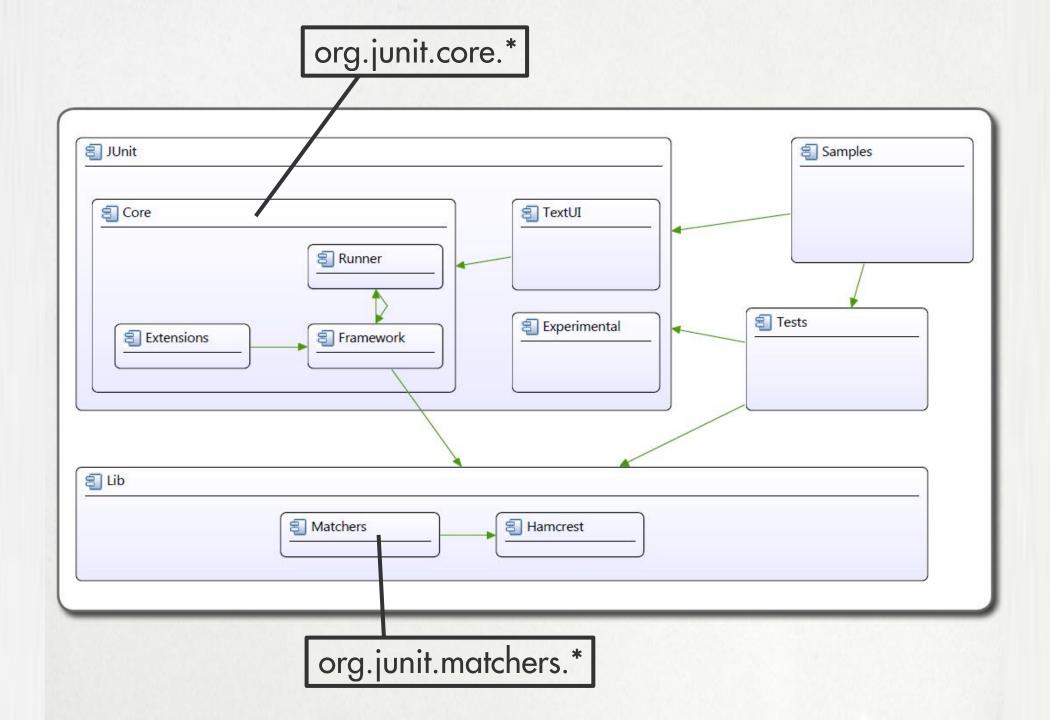


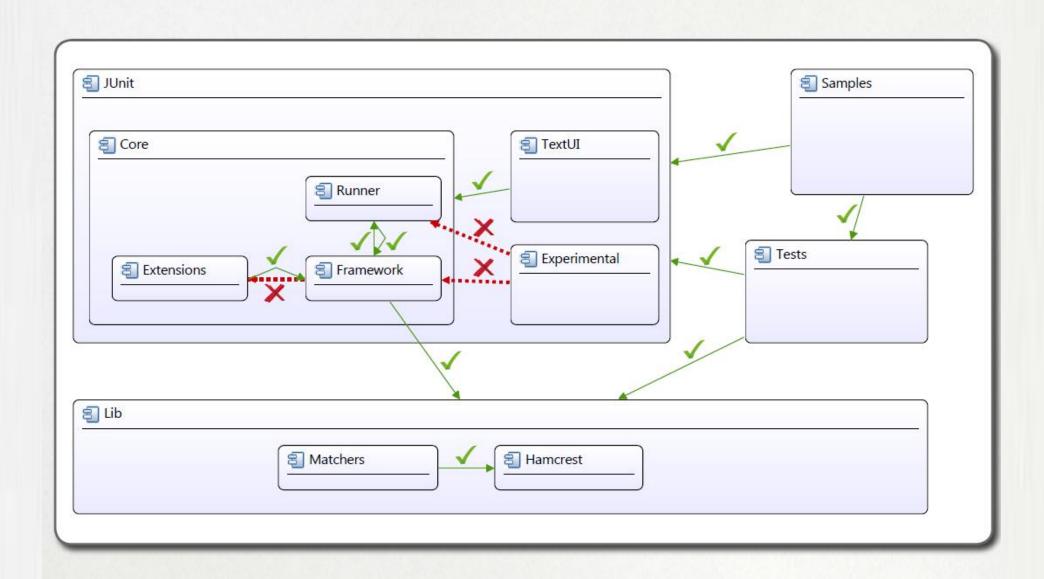


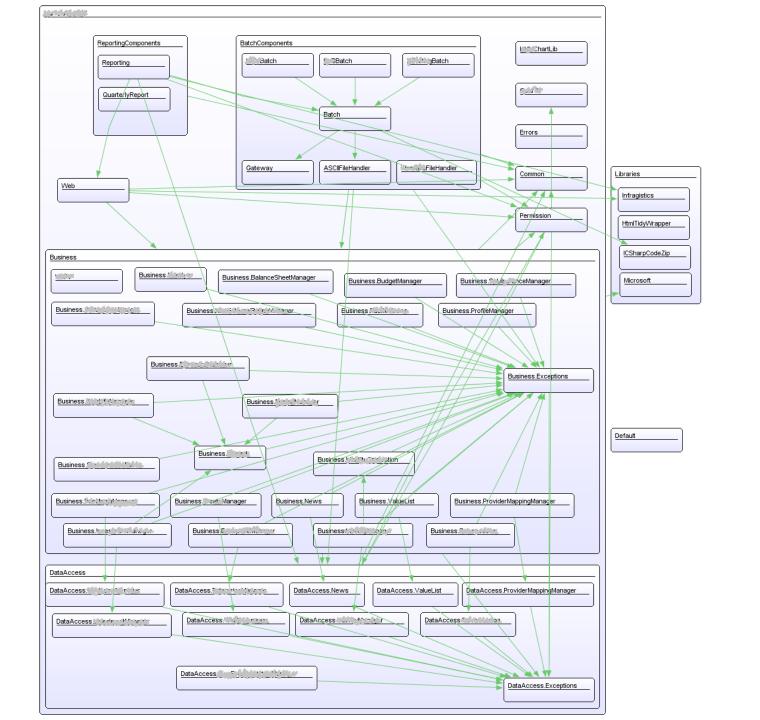


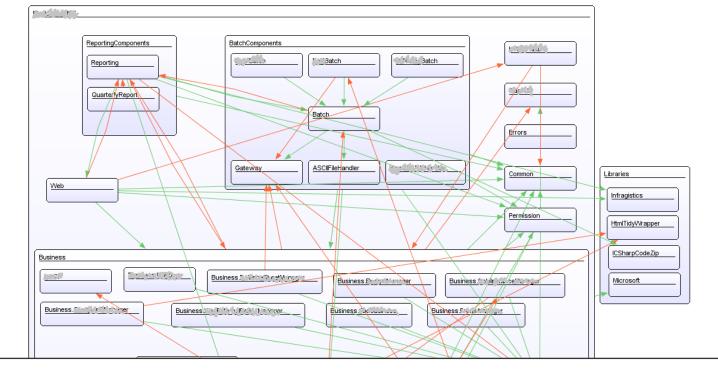










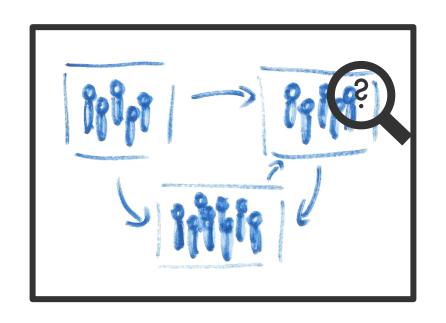


Studie Munich Re

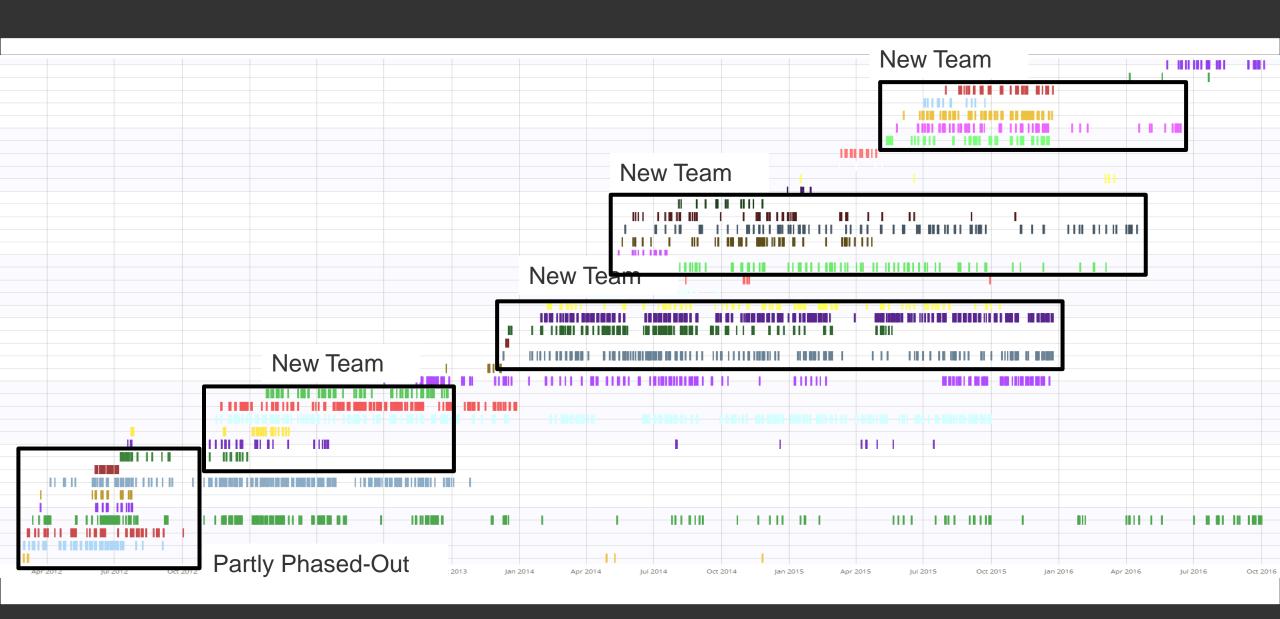
- Auslassungen in Dokumentation
- Aufdeckung von Fehlern
- Katalysator f
   ür Architekturdiskussionen

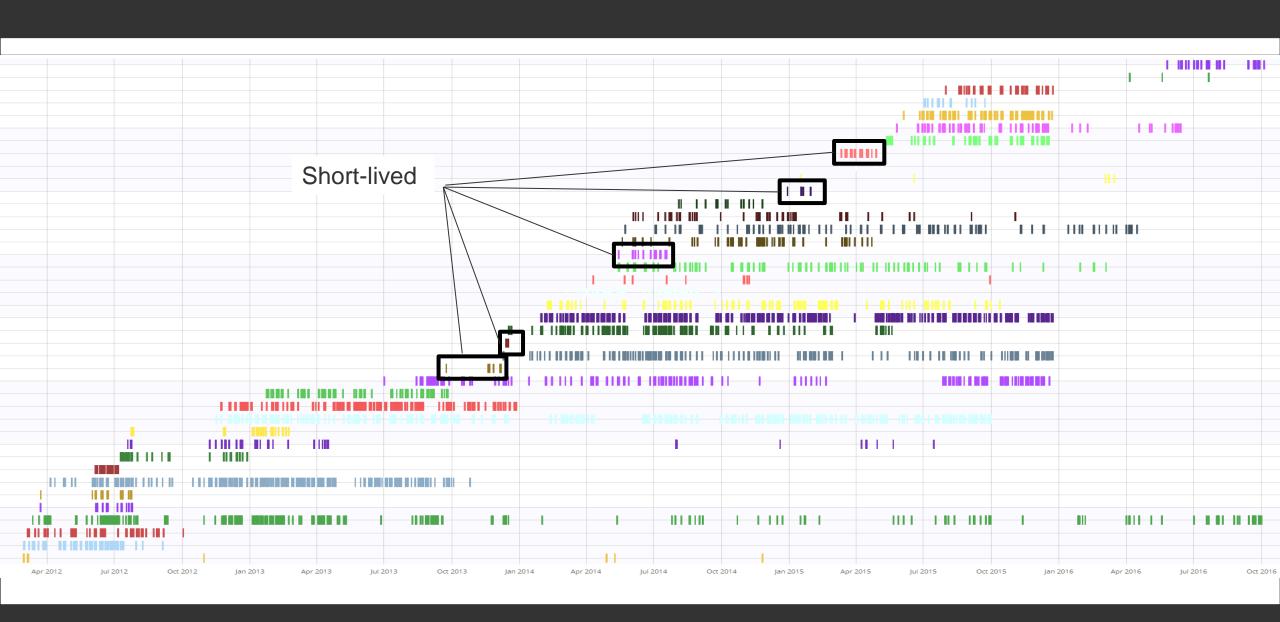
Feilkas, Juergens et al: Loss of Architectural Knowledge During Evolution ICPC 2009

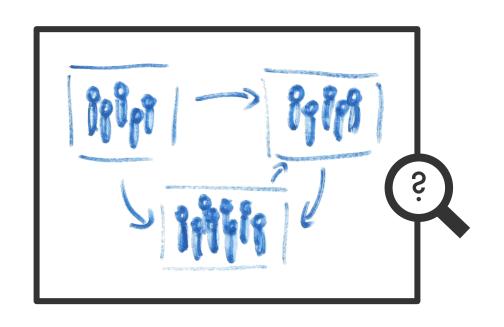




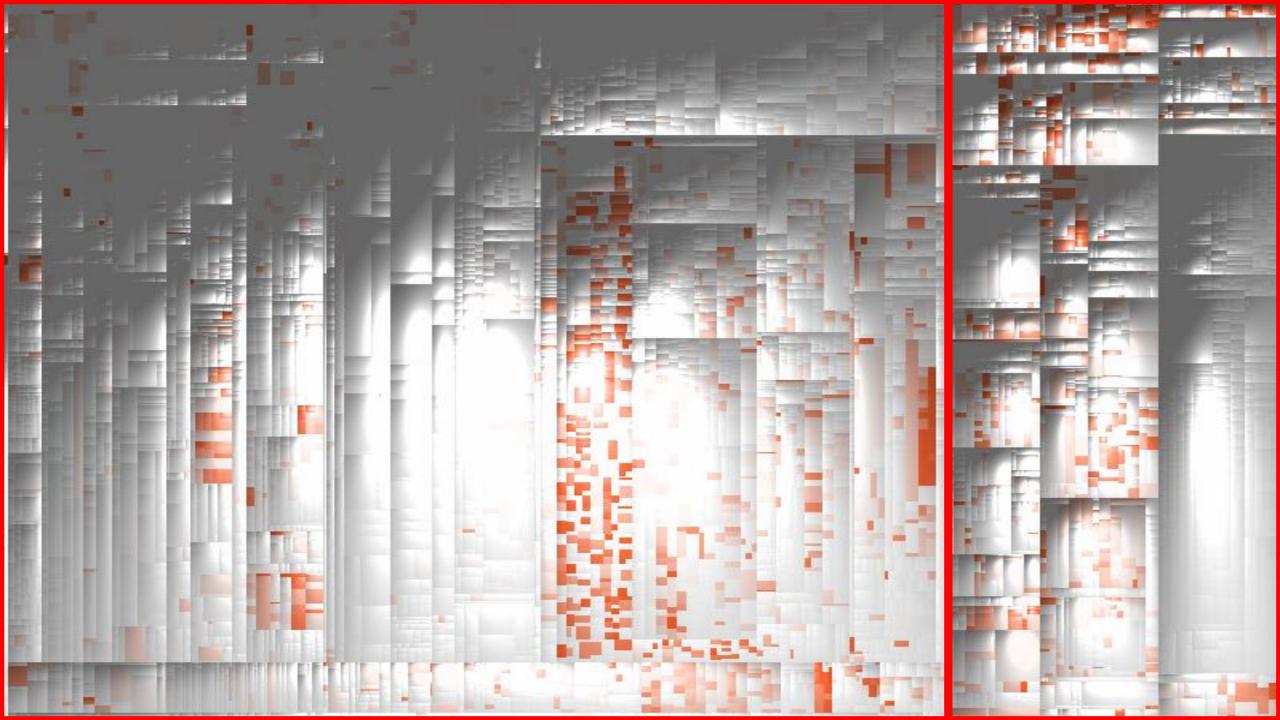


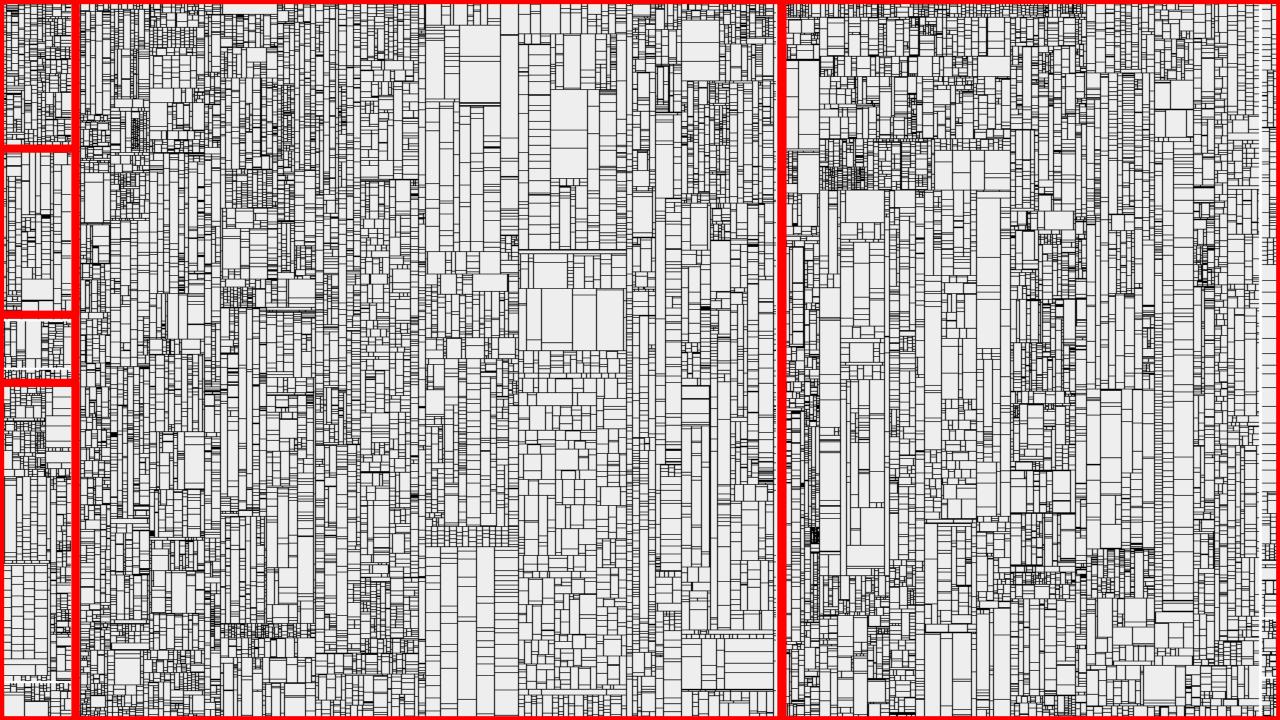


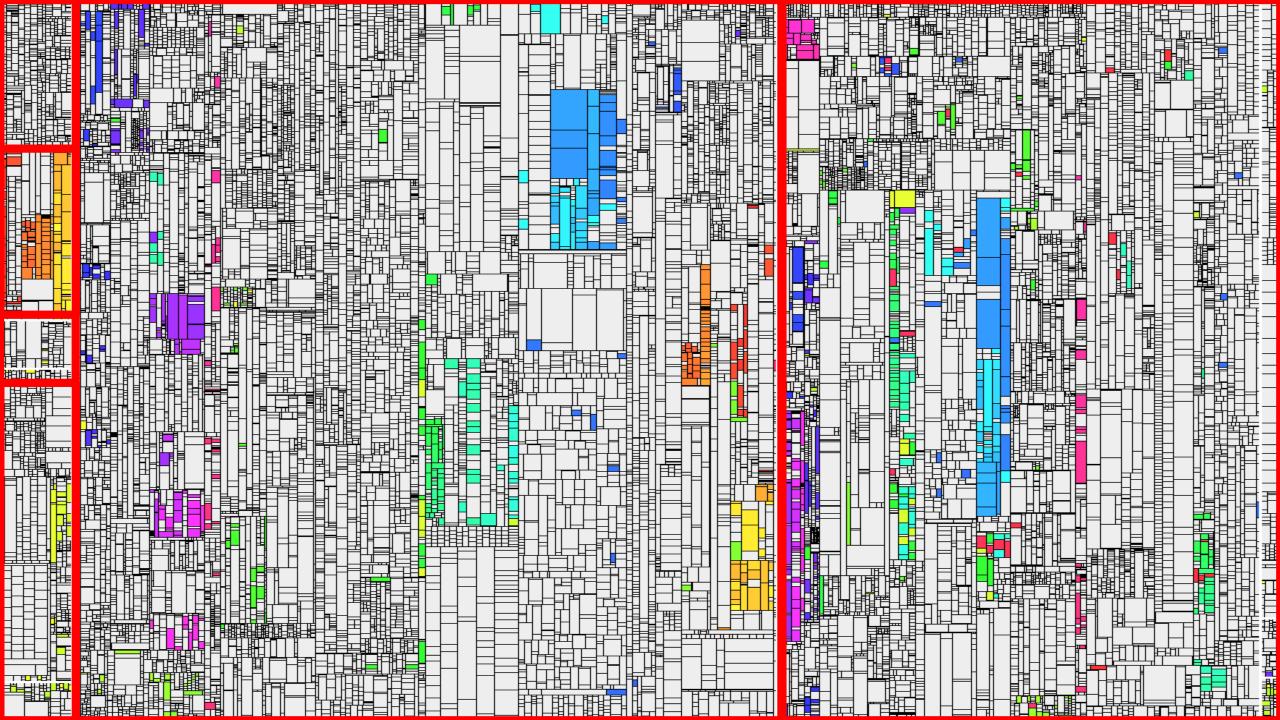




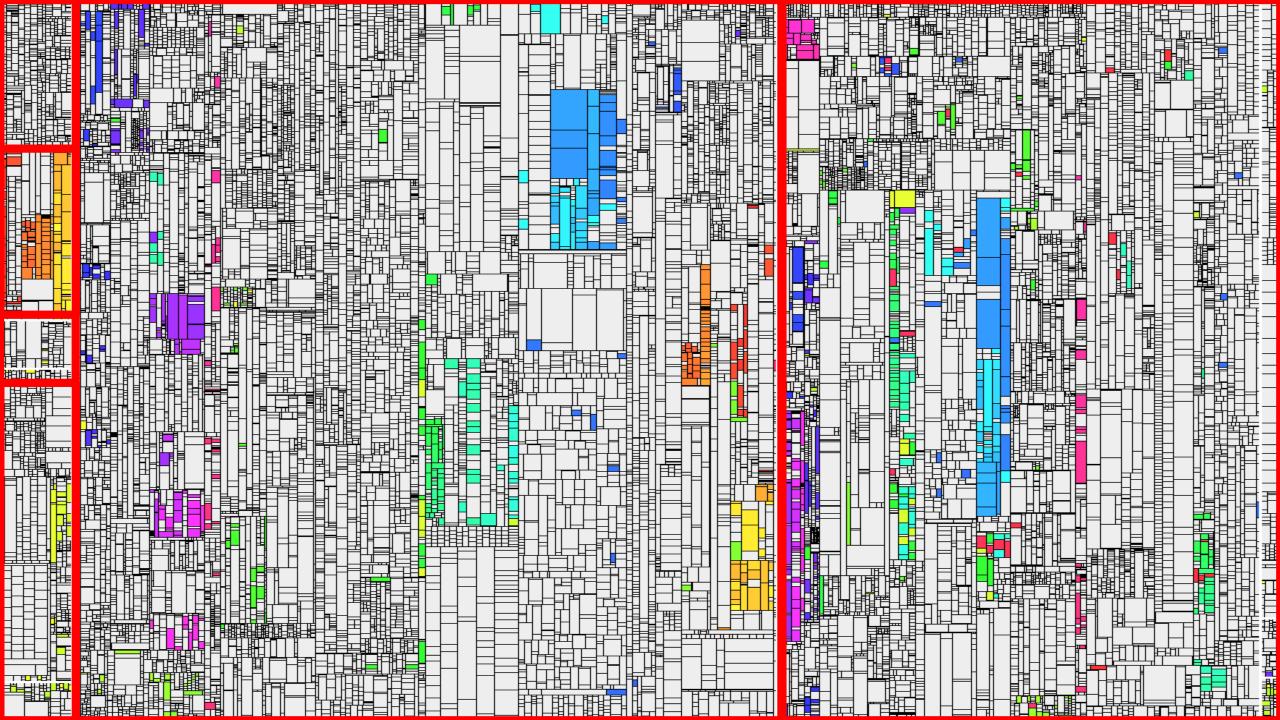
# Produkte Komponenten





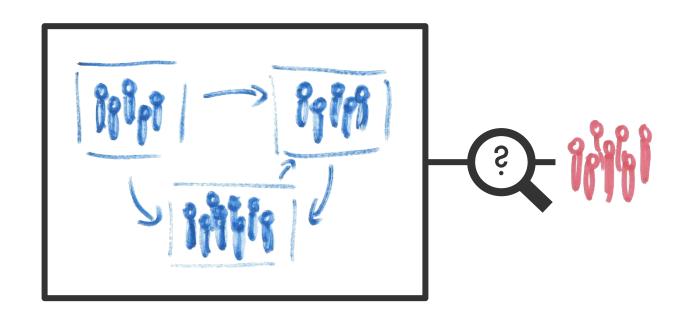


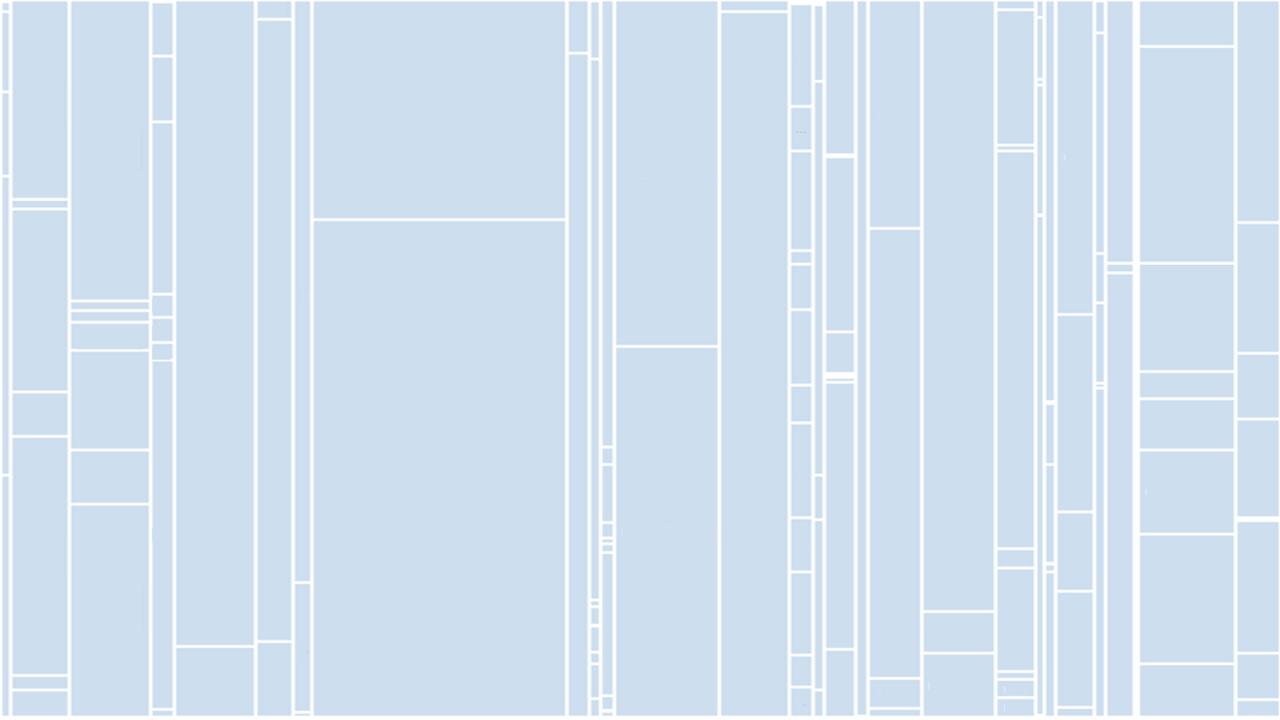
Alba PIP - infiff ight Piffe

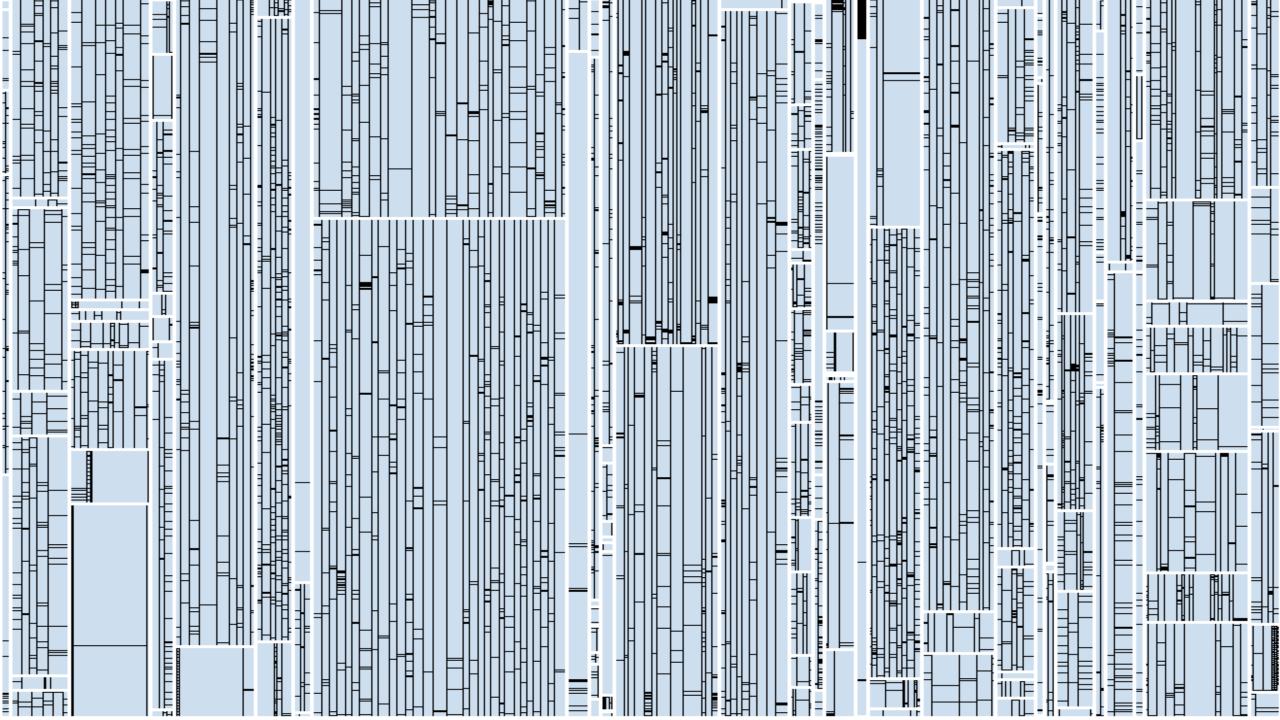


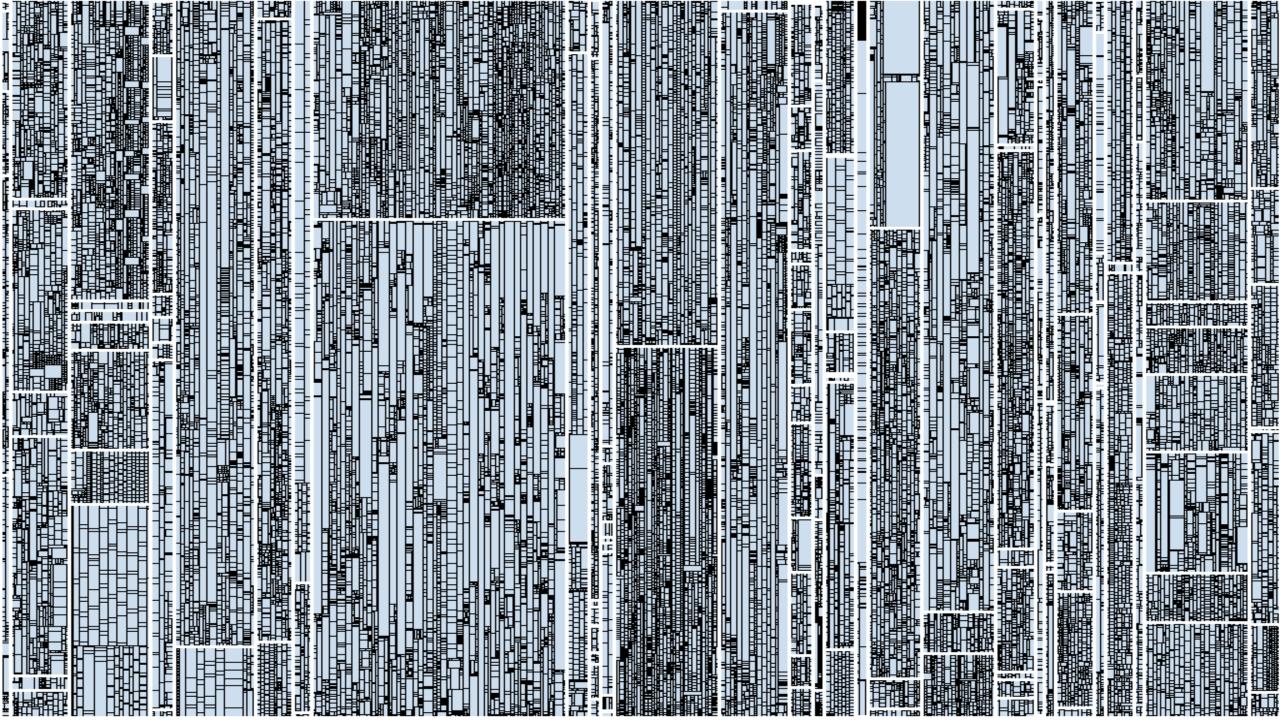
```
/// <param name="authority">Die Zuweisung die deaktiviert werden soll</param
void IAuthorityListManager, DeactivateAuthority (DecMemoIdentifier decMemoId,
  this.delegateManager.DeactivateAuthority(decMemoId, authorityList as Autho
/// <summary>
/// Führt die Laufliste fort (geht zur nächsten Zuweisung über wenn die aktuelle 🛭
/// </summary>
/// <param name="decMemoId">Identifikator der Entscheidungsvorlage</param
/// <param name="authorityList">Die Laufliste die fortgeführt werden soll</para
/// <returns>Die nach dem Fortführen aktive Zuweisung der Laufliste</returns>
IAuthorityAssignment IAuthorityListManager,Proceed(DecMemoIdentifier decMer
  if (!this.CheckCurrentUserMayProceed(authorityList as AuthorityList))
    throw new AuthorityListException(Error_27.CurrentUserMayNotProceedAut
  if (authorityList,State == AuthorityListState,InProgress)
    DTOComplex decMemoData = this.GetDecMemo(decMemoId, Currency.Neu
    ((IDecMemoState)this).SubmitDecMemo(decMemoId, decMemoData);
    IAuthorityAssignment newActiveAssignment = this.delegateManager.Proced
    return newActiveAssignment;
  else
    return this.delegateManager.Proceed(decMemoId, authorityList as Authority
```

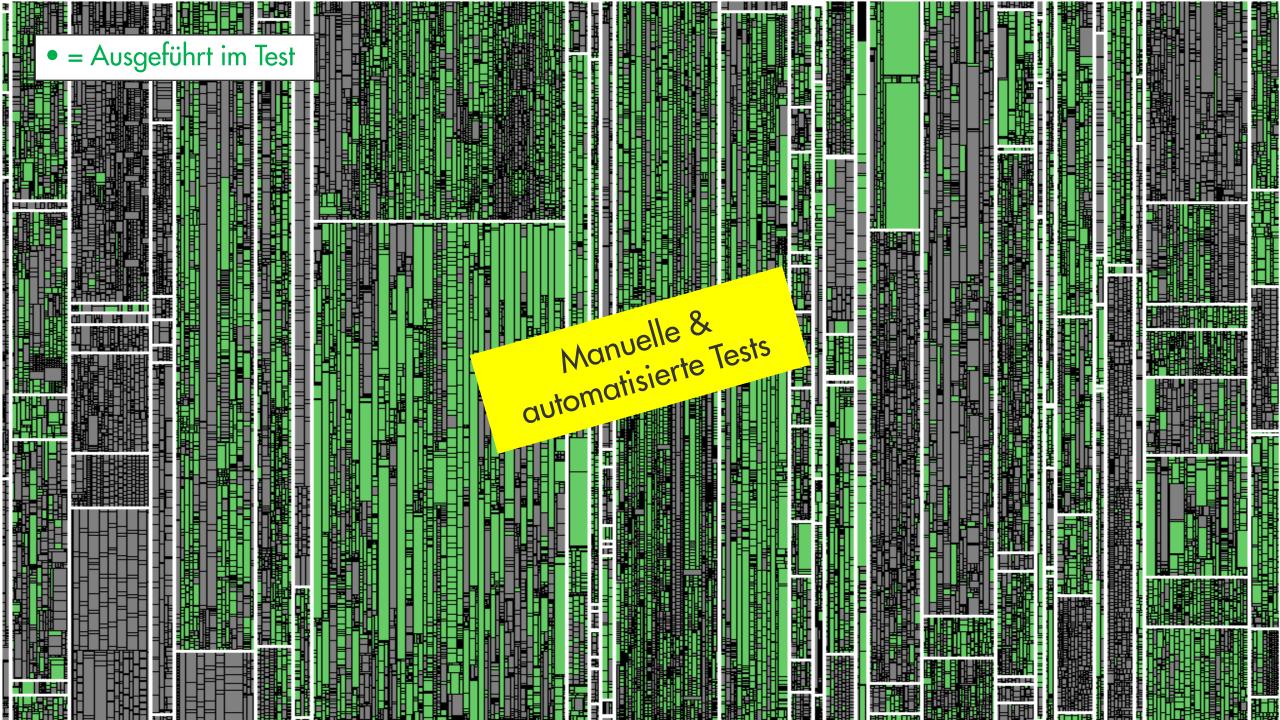
```
void IAuthorityListManager.DeactivateAuthority(DecMemoIdentifier decMe
  this.delegateManager.DeactivateAuthority(decMemoId, authorityList as
/// <summarv>
/// Führt die Laufliste fort (geht zur nächsten Zuweisung über wenn die ak-
/// </summary>
   <param name="decMemoId">Identifikator der Entscheidungsvorlage<</pre>
  <param name="authorityList">Die Laufliste die fortgeführt werden soll
/// <returns>Die nach dem Fortführen aktive Zuweisung der Laufliste</re
IAuthorityAssignment IAuthorityListManager.Proceed(DecMemoIdentifier /
  if (!this.CheckCurrentUserMayProceed(authorityList as AuthorityList))
    throw new AuthorityListException(Error 27, CurrentUserMayNotProce
  if (authorityList.State == AuthorityListState.InProgress)
    DTOComplex decMemoData = ((ICedentDecMemoStore)this).GetCed
    ((IDecMemoState)this).SubmitDecMemo(decMemoId, decMemoData);
    IAuthorityAssignment newActiveAssignment = this. delegateManager
    base.CommitTransaction():
    return newActiveAssignment;
  else
    return this.delegateManager.Proceed(decMemoId, authorityList as A
```

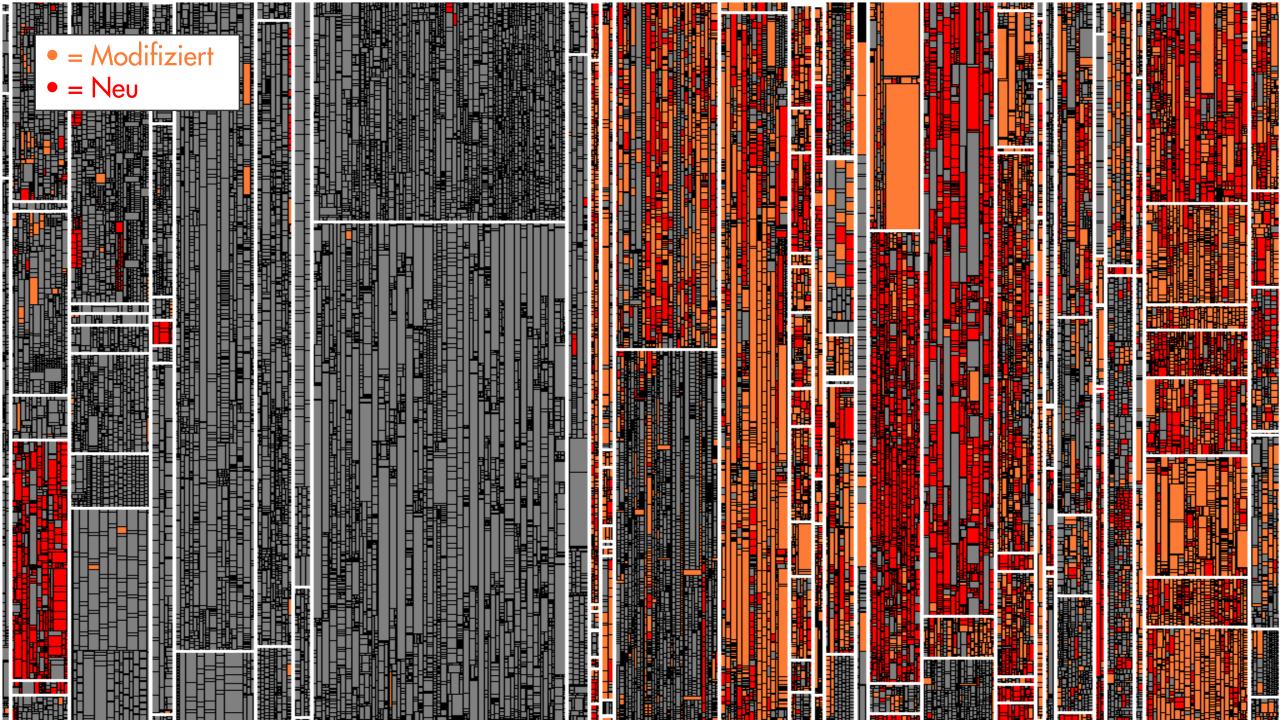


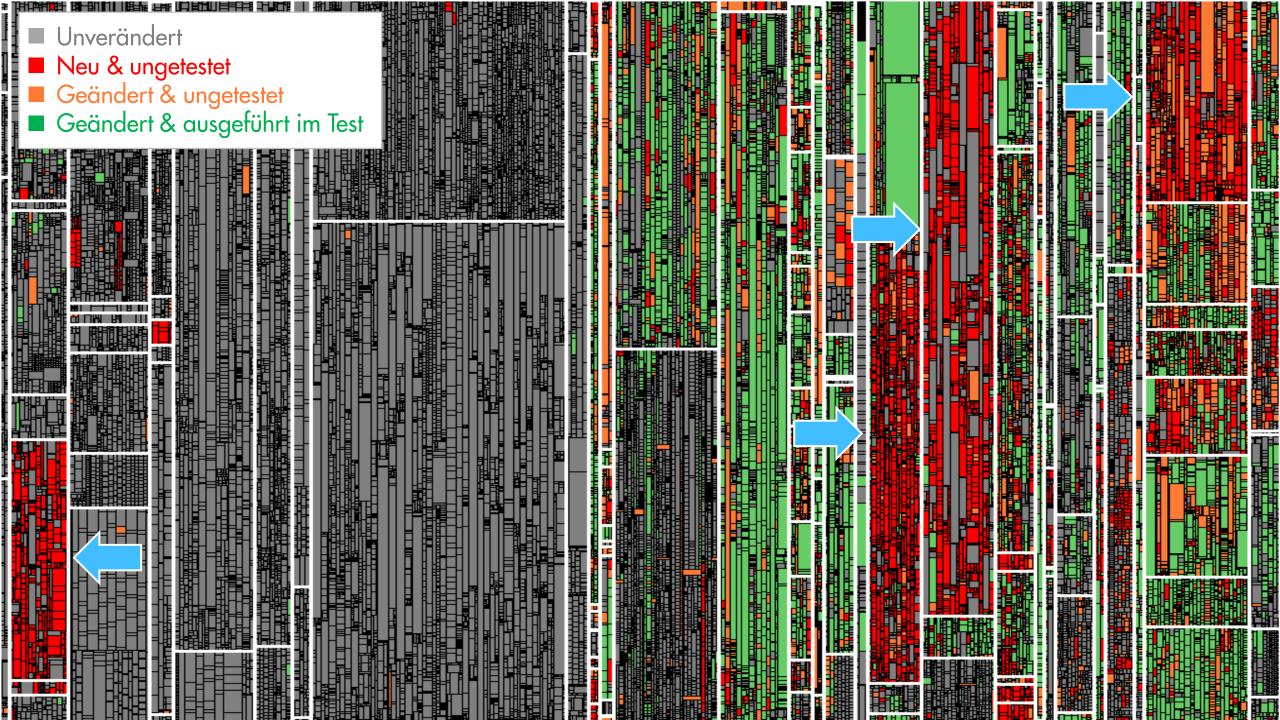








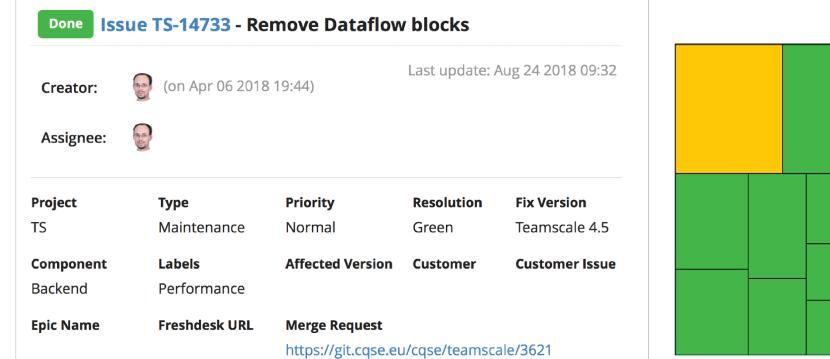


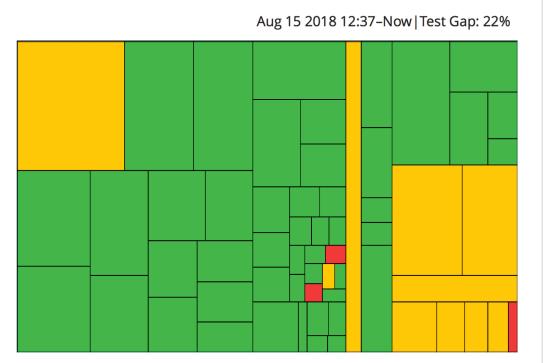


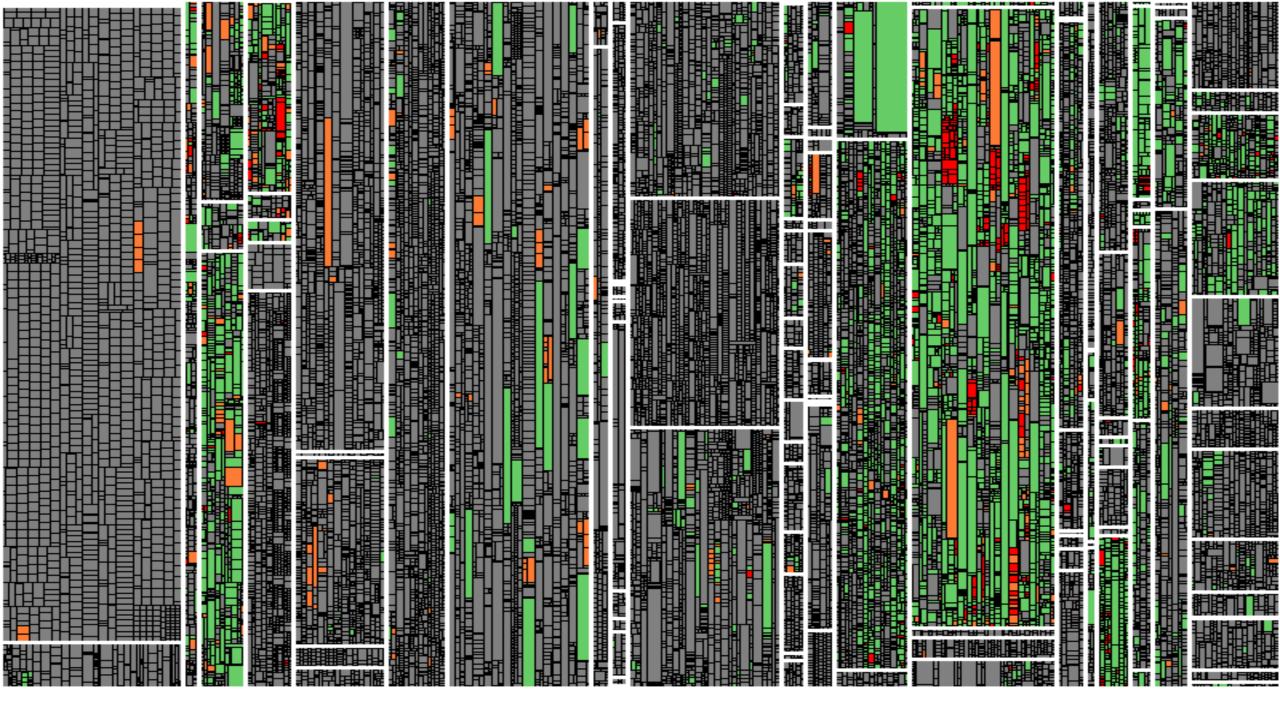
100% Change Coverage → 0 Fehler

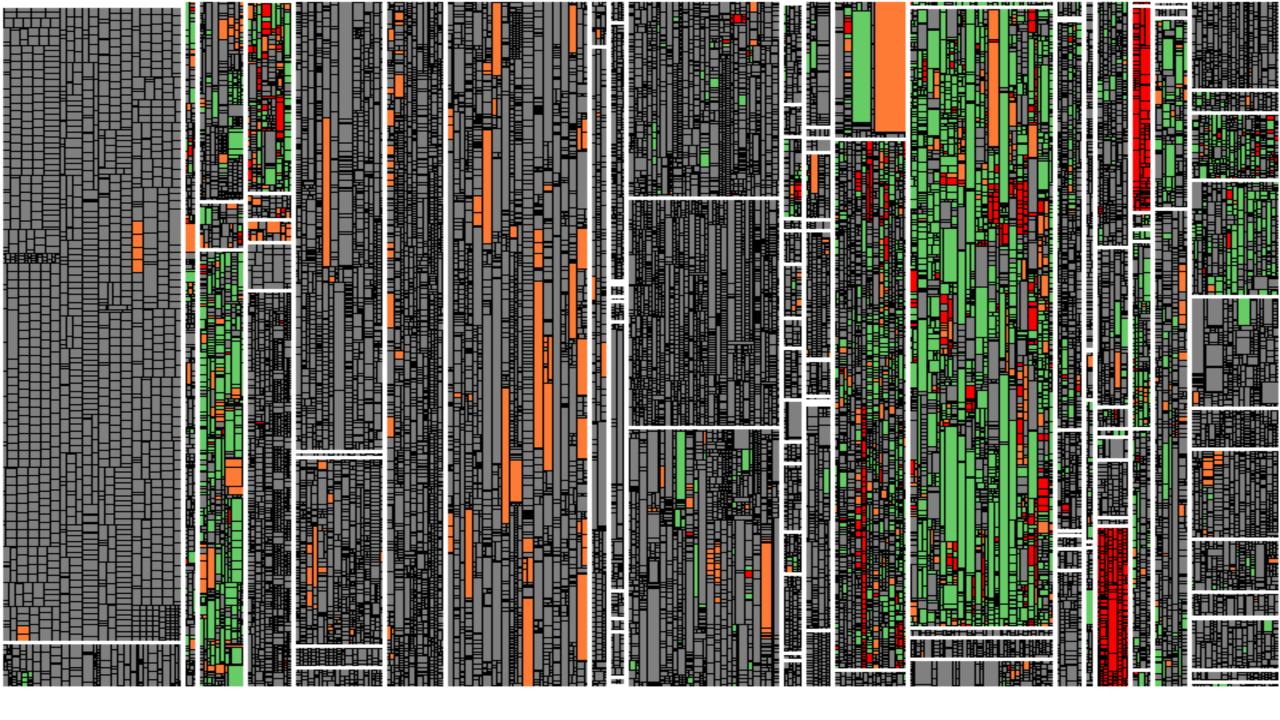
Issue # 🕶	Subject	Test Gap
☑ TS-10549	Undo/Redo for web-based architecture editor  Done	0%
☑ TS-10784	Fix long method finding in TaintAnalysisRunner  Done	0%
☑ TS-10923	Implement metric 'Nesting Depth' for Simulink  Done	29%
☑ TS-11364	External findings are not registered during first upload  Done	14%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

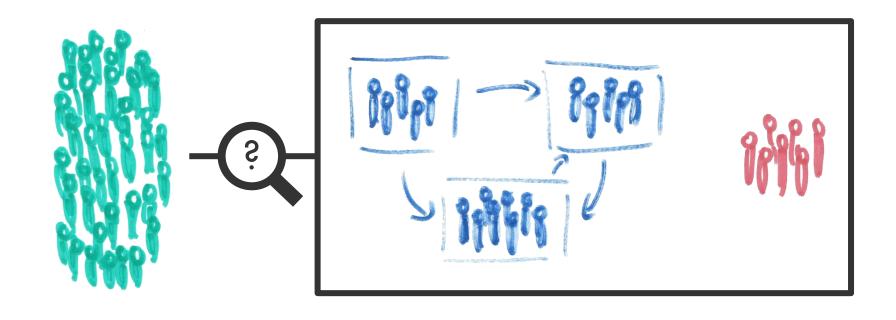
Issue # ➤	Subject		Test Gap
<b>☑</b> TS-14421	Get rid of TestGapSynchronizer block	Done	0%
<b>☑</b> TS-14733	Remove Dataflow blocks	Done	22%



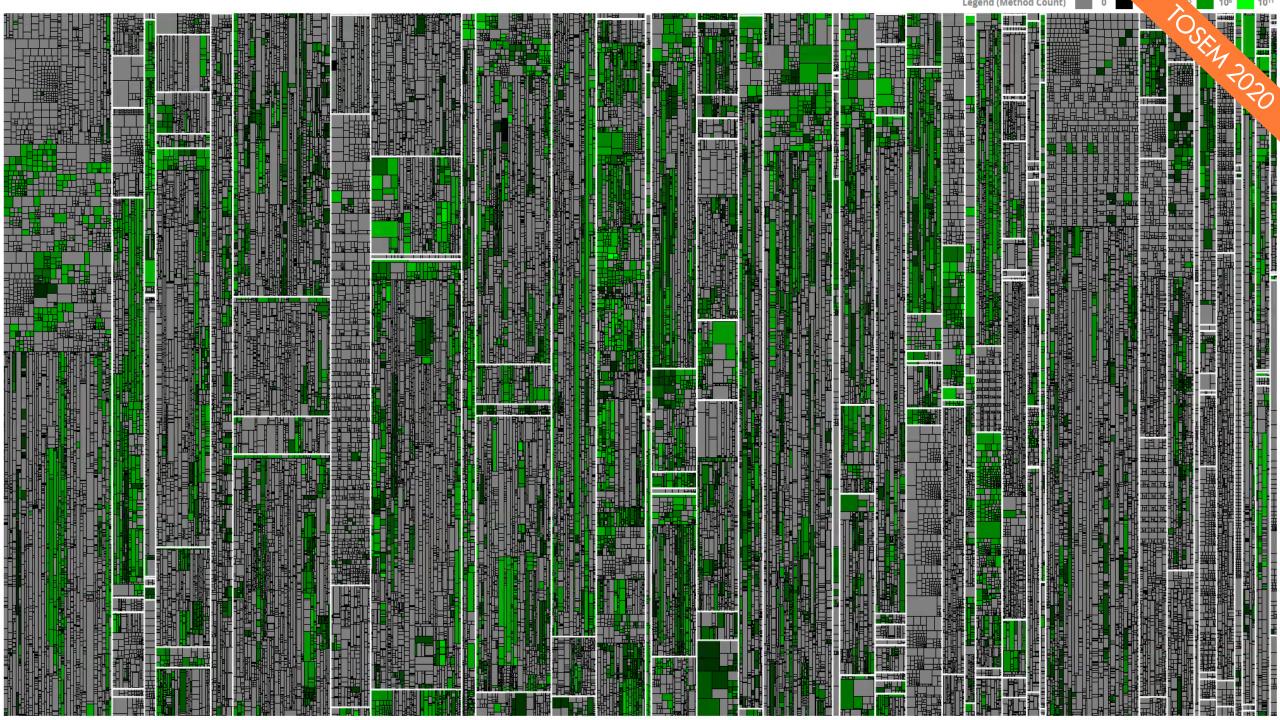




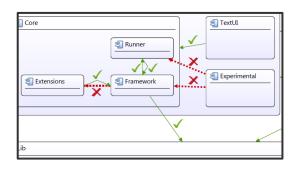


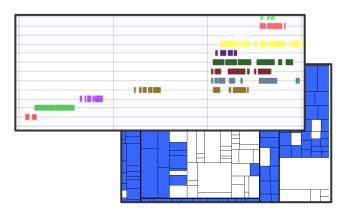


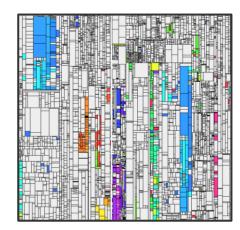




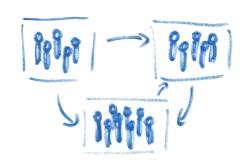




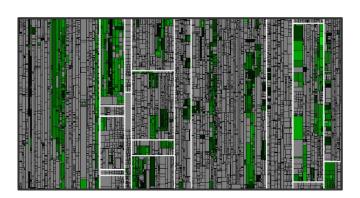


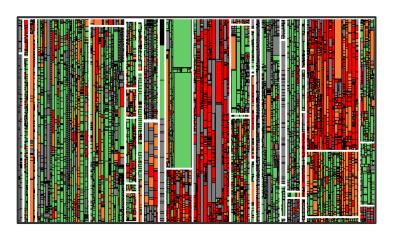






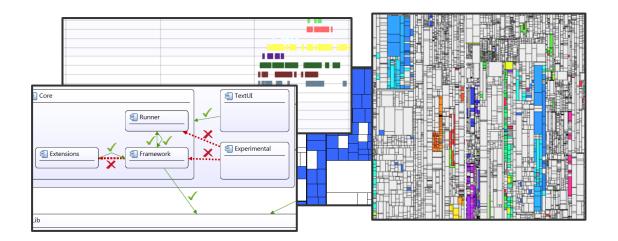


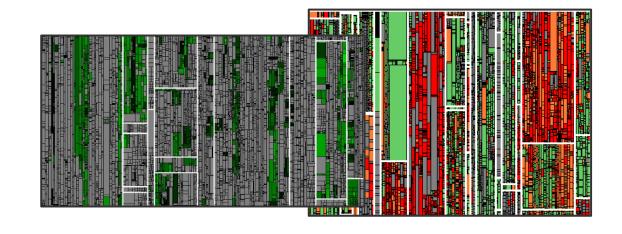




#### Statische Analysen

Dynamische Analysen





#### **Fazit**

Es treten oft Probleme auf, wenn Architektur und Organisation nicht gut zusammenpassen.

Es gibt nützliche dynamische und statische Analysen, die Symptome ermitteln können, damit Ursachen abgestellt werden können.

Sie sind zu einem großen Grad automatisiert, erfordern aber Erfahrung in Konfiguration und Interpretation. Ich stehe gerne zum Erfahrungsaustausch zur Verfügung ©

#### Kontakt - Ich freue mich auf Diskussionen ©



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