



Auf dem Weg zu einem Softwareökosystem

Erfahrungen der HIS eG

Hildesheim, den 24. Juni 2016
Markus Keunecke

Agenda

- Einleitung
- Software Ökosysteme
- Feature Packs
- Datenbankanpassungen
- Zusammenfassung

Einleitung

- Markus Keunecke
- Architekt

- HIS eG
 - Genossenschaft
 - Campus-Management-System
„HISinOne“
 - seit 1969

HISinOne

UNIVERSITÄT
DUISBURG
ESSEN
Offen im Denken

Studienangebot



STUDIENPORTAL
DER HOCHSCHULE WISMAR

User name

Password



Lost login

- Startseite
- Bewerbung
- Studienangebot
- Alumni

My university portal

⚠ Session cookies are required for security reasons.

Startseite
Universität Duisburg-Essen
Herzlich willkommen beim HIS Online-Portal der Universität Duisburg-Essen - dem Hochschulportal für Studierende

My university portal

- Startseite
- Alumni
- Bewerber/Innen
- Studierende

Bewerbung für Ausländer

Bewerber der Hochschule Wismar

Foreign Applicants

Bitte beachten!

GEORG-AUGUST-UNIVERSITÄT
GÖTTINGEN

- Startseite
- Studium
- AStA
- Studentenwerk Göttingen

eCampus ist Ihr zentraler Zugang zu den relevanten Onlinediensten. Direkt nach der Anmeldung können Sie die Funktionen **SB/UniVZ**, **Stud.IP**, **FlexNow** und **E-Mail** nutzen.

Füllen Sie die persönliche Startseite mit Ihren Inhalten. Alles Weitere in der [Hilfe](#).

Fragen / Anregungen an: campussupport@uni-goettingen.de oder persönlich an die Chipkartenstelle/ZHG

Presseinformationen

UNI
FREIBURG

Campus Management - HISinOne
Albert-Ludwigs-Universität Freiburg

- Startseite
- Bewerbung
- Studienangebot
- Hilfe

Hints Application

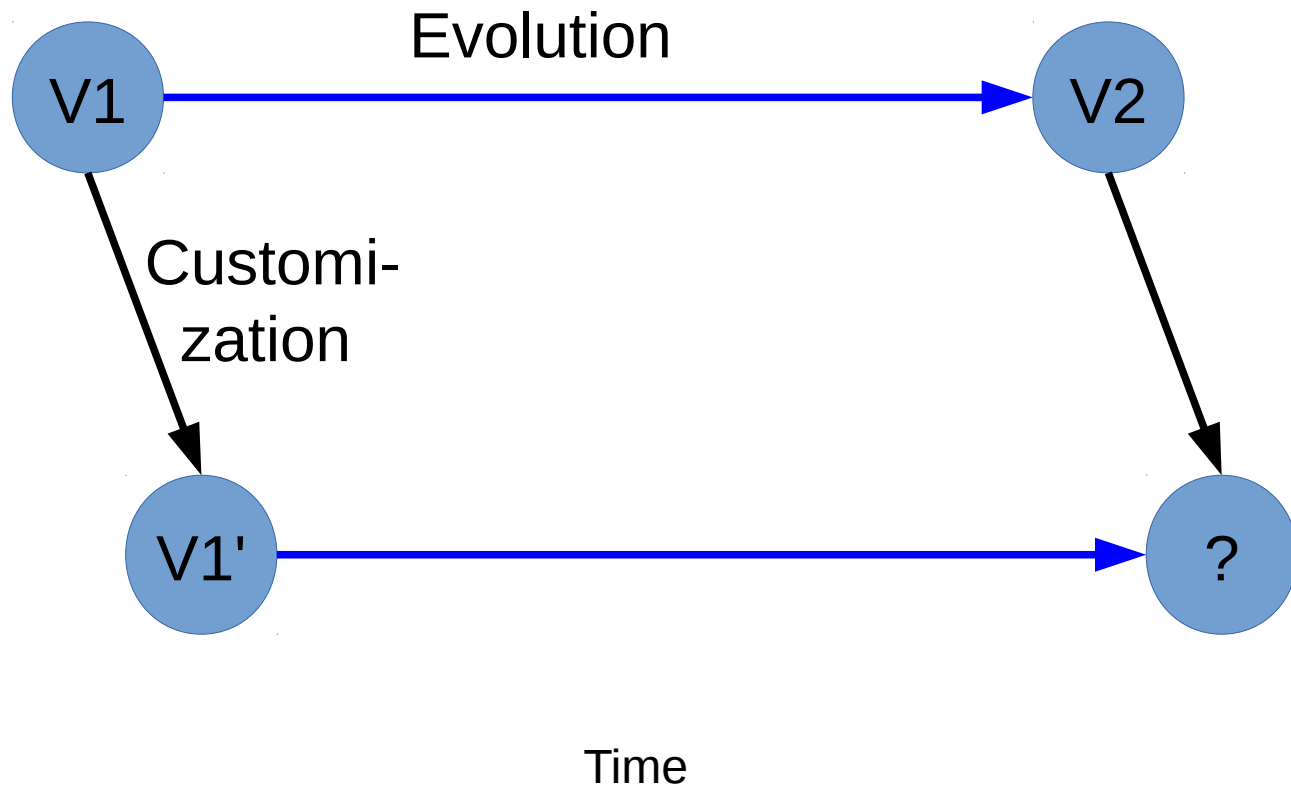
Quicklinks

- Veranstaltungen suchen
- Tagesaktuelle Veranstaltungen anzeigen

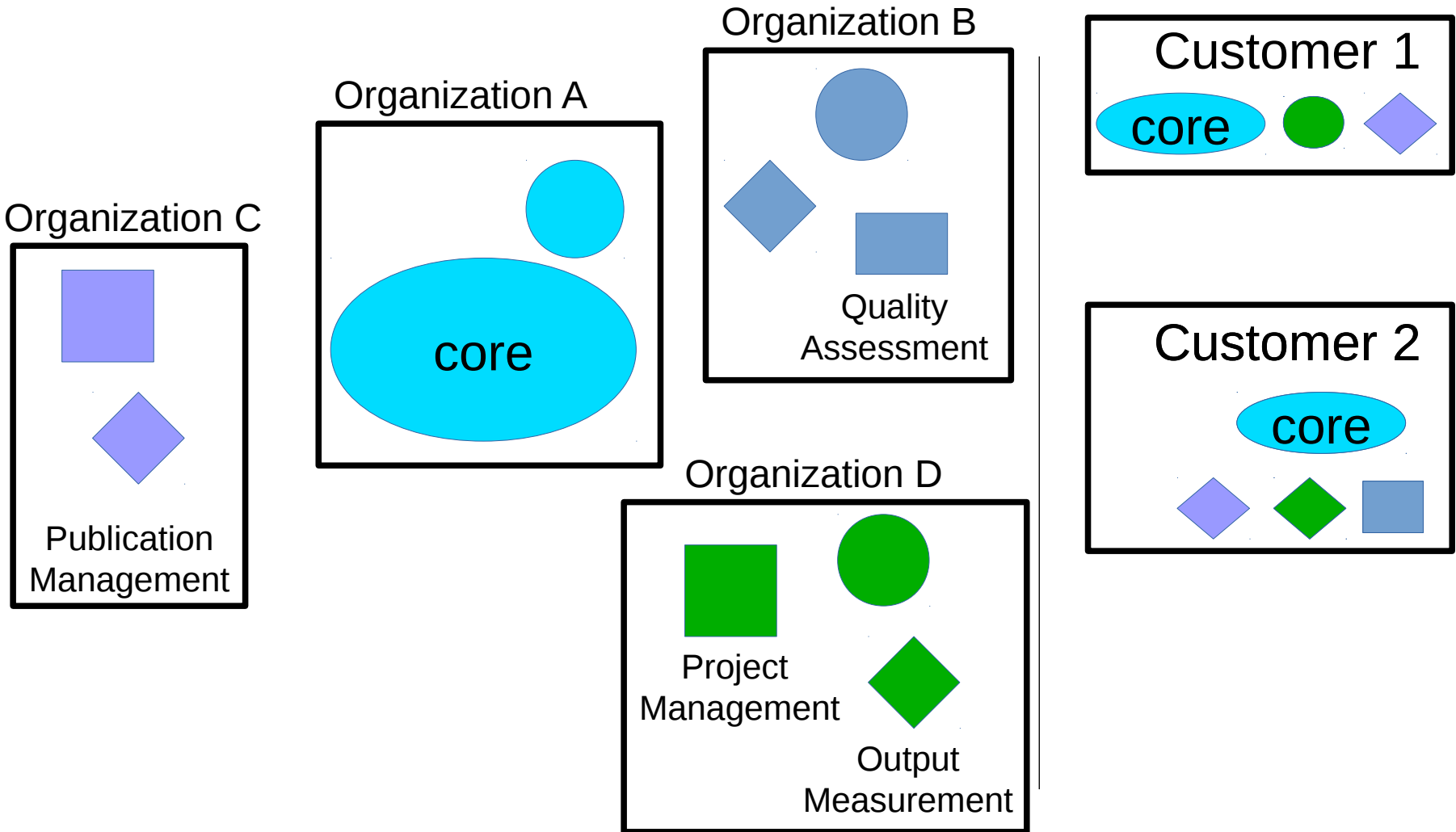
Use up

Please older website

Evolution vs. Customizing

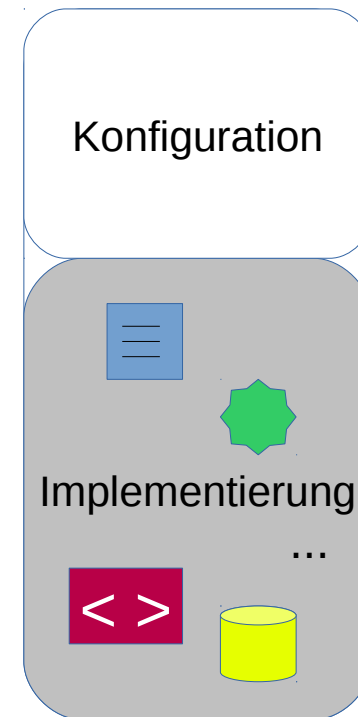


Software-Ökosystem

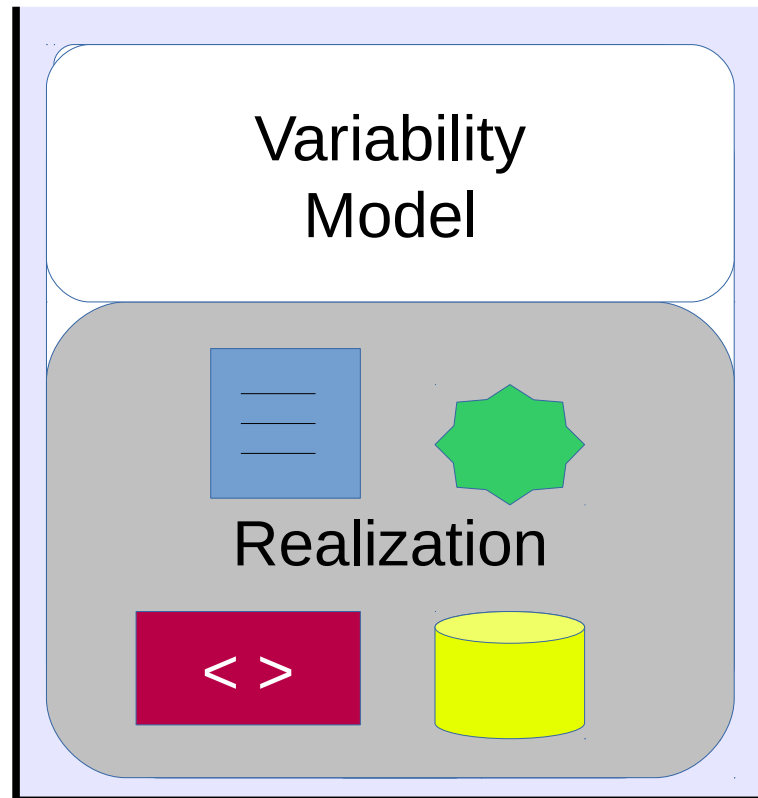


Feature Packs

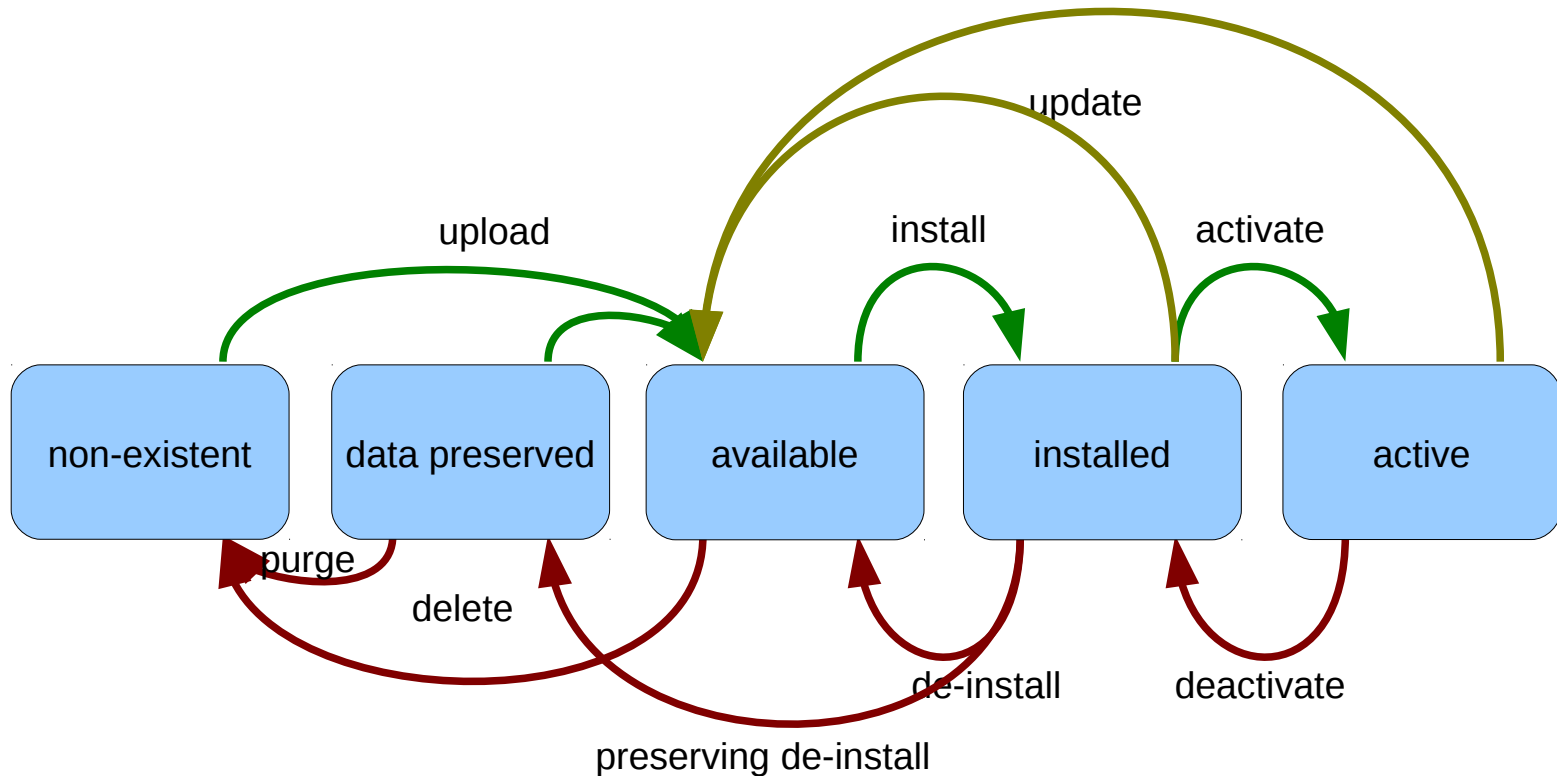
- Zerlegung eines Systems
- heterogene Technologien
- Kombination Konfiguration + Implementierung



Feature Packs

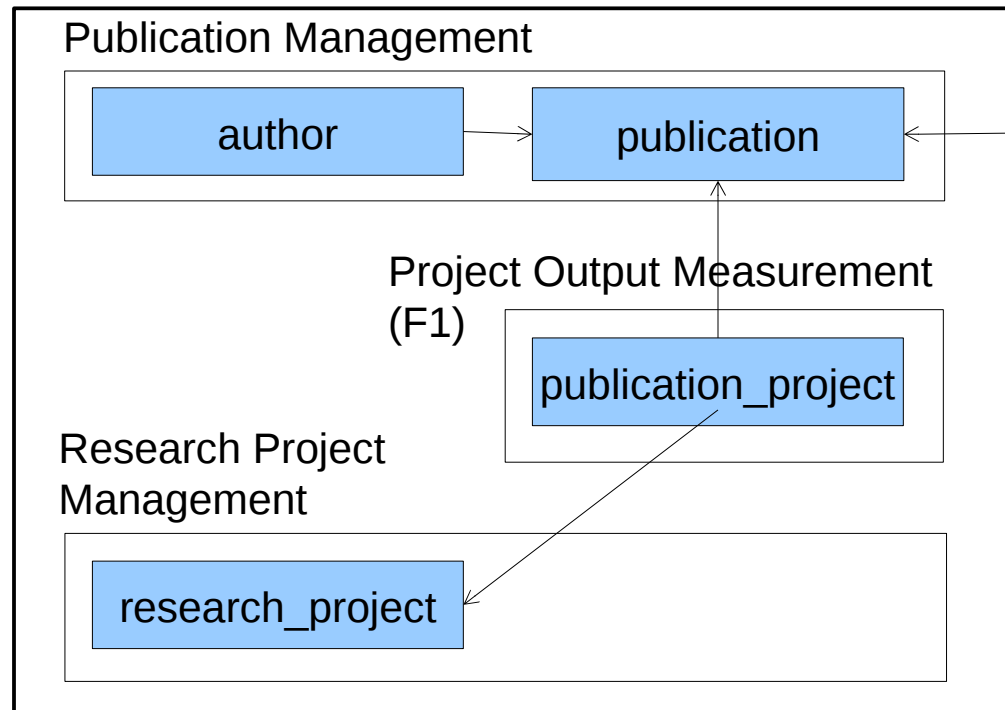


Feature Pack Lebenszyklus

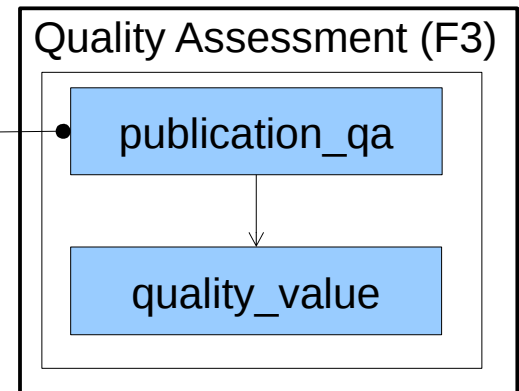



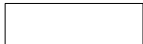


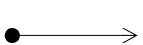
Datenbankanpassungen

Development organization



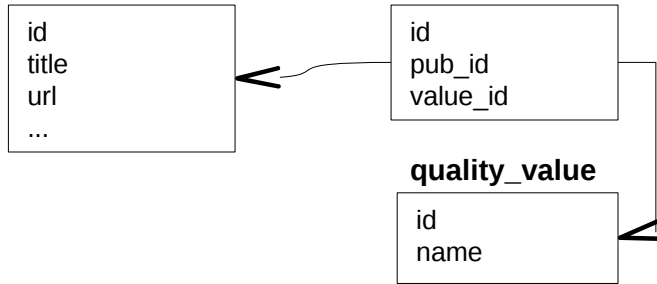
Third party vendor



-  Data model
-  Feature Pack
-  Table
-  Foreign key constraint
-  FK pair for exactly 1:1

Datenbankanpassungen

Before
publication



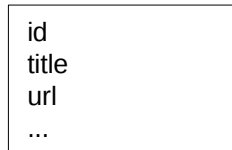
Original Database State

Old Publication Management
Quality Assessment installed

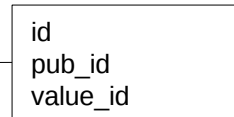
Datenbankanpassungen

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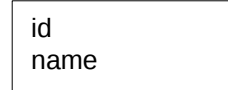
publication



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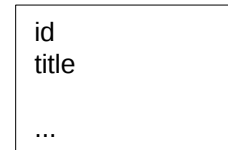


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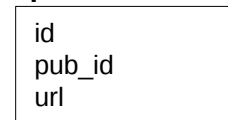


Desired

publication



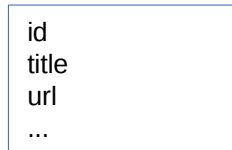
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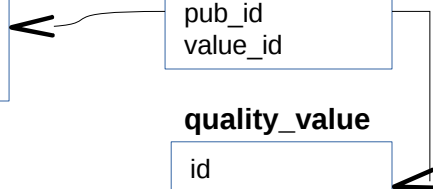
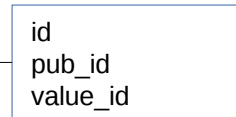
Datenbankanpassungen

Before

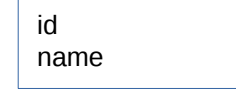
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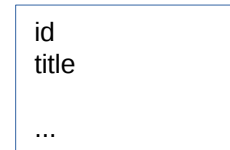


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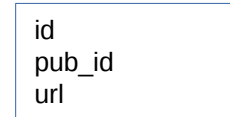


Desired

publication

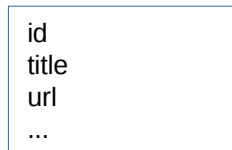


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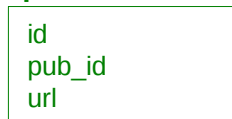


Initial Structure Adjustment

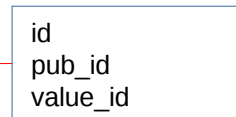
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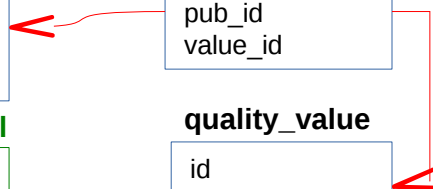
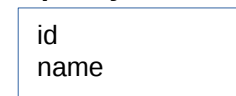
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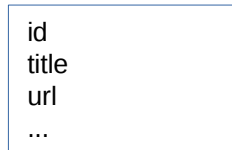


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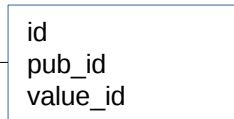


Datenbankanpassungen

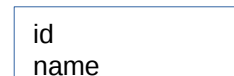
Before
publication



quality_assessment

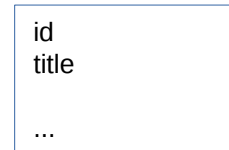


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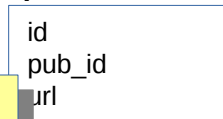


Desired

publication



publication_url

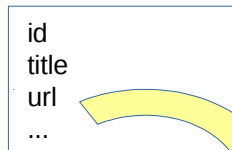


Data Modification

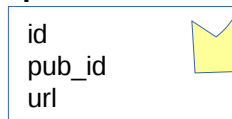
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Initial Struct

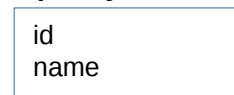
publication



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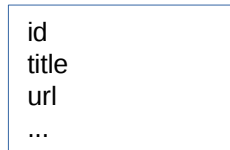
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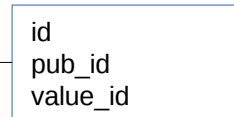
Datenbankanpassungen

Before

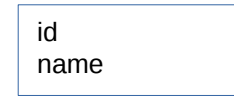
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quality_assessment

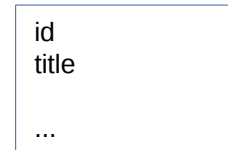


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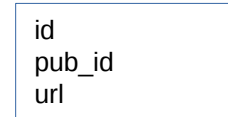


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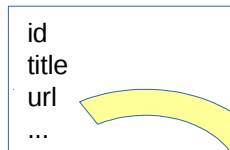


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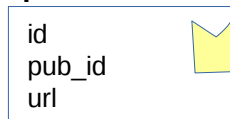


Initial Structure Adjustment

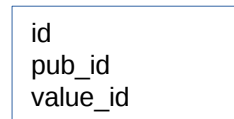
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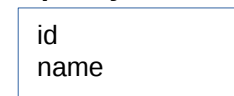
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quality_assessment

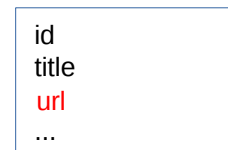


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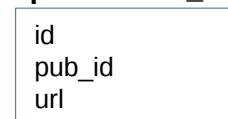


Final Structure Adjustment

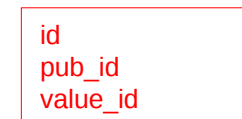
publication



publication_url



quality_assessment



quality_value



Zusammenfassung

- Verfolgte Ziele:
 - Updates in Teilen ermöglichen
 - Update-Risiko reduzieren
 - Third-Parties einbinden

Zusammenfassung

- Status
 - teilweise Verwendung des Ansatzes
 - neue Features werden häufig hiermit realisiert
 - teils Auslagerung bereits existierender Funktionalitäten
 - 3rd Parties und auch Kunden nutzen teilweise den Mechanismus

Zusammenfassung

- Was haben wir gelernt?
 - Monolithisches System hin zu dekomponierten System ist schwierig
 - Transformation ist nicht direkt sichtbar und steht in Konkurrenz zu neuen Features
 - Hürden für die einzelnen Entwickler niedrig halten

Vielen Dank für Ihre Aufmerksamkeit!