



Wiederverwendbarkeit von Migrationswissen durch Techniken der modellgetriebenen Softwareentwicklung

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Design for Future



UNIVERSITÄT PADERBORN
Die Universität der Informationsgesellschaft



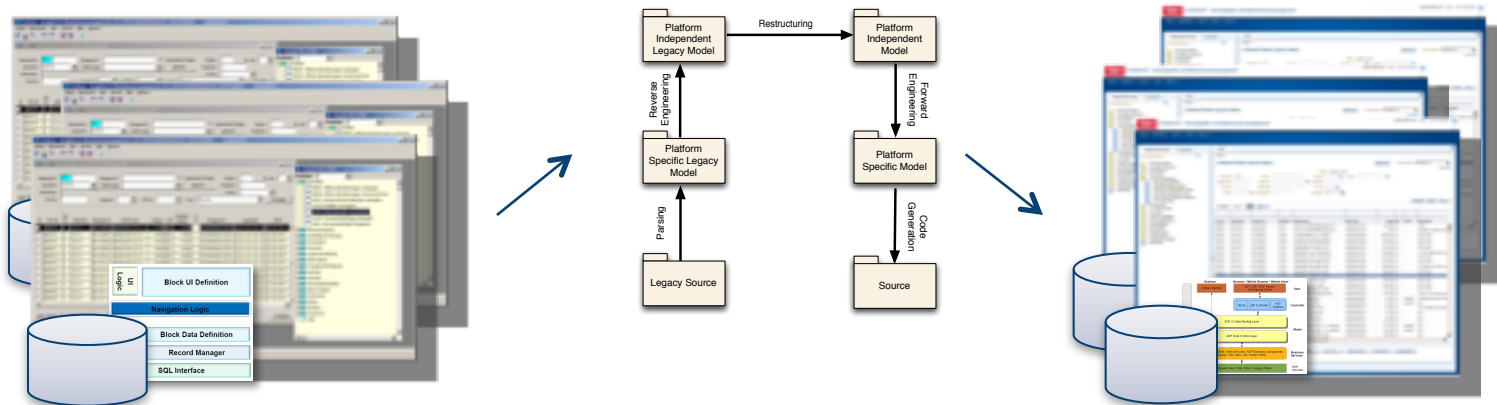
Bundesministerium
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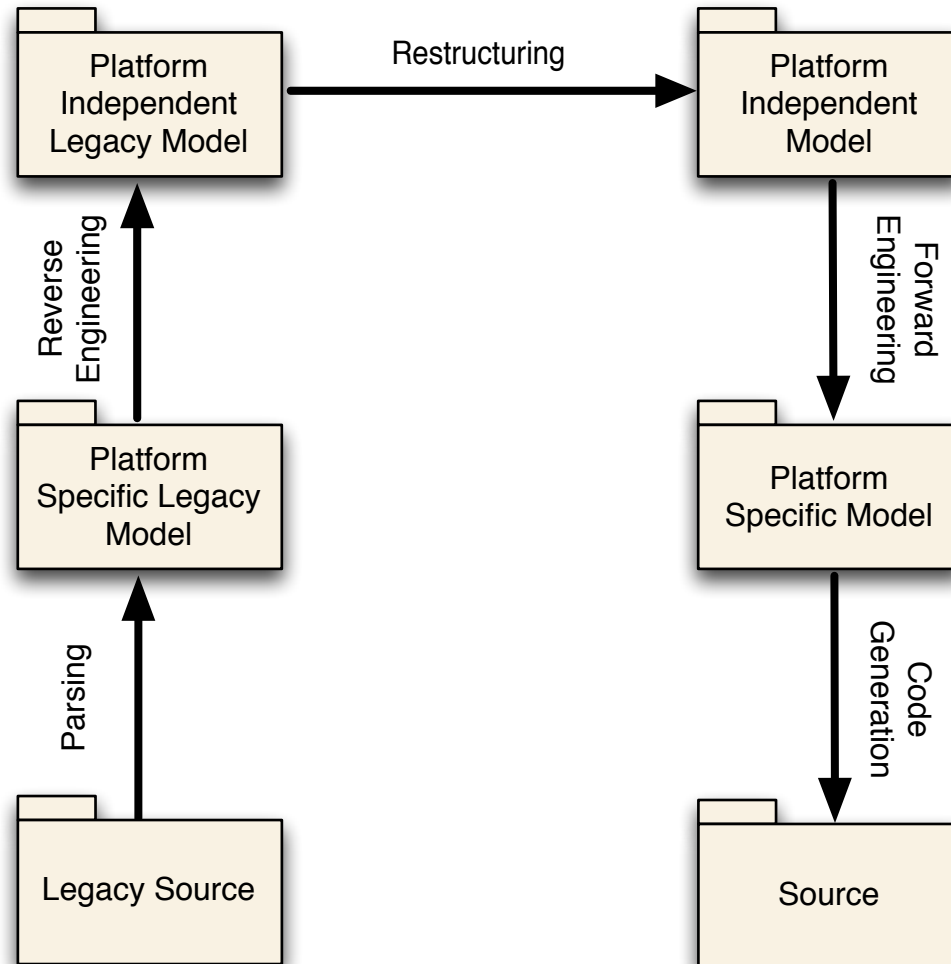
- Migration von Oracle Forms nach Oracle ADF
 - Umfangreiche Plattformunterschiede
 - Eingeschränkte Werkzeugunterstützung
- Migrationswissen entsteht während der Migration
 - Abbildungen, Entwurfsentscheidungen ...
 - Nur in den Köpfen der Mitarbeiter

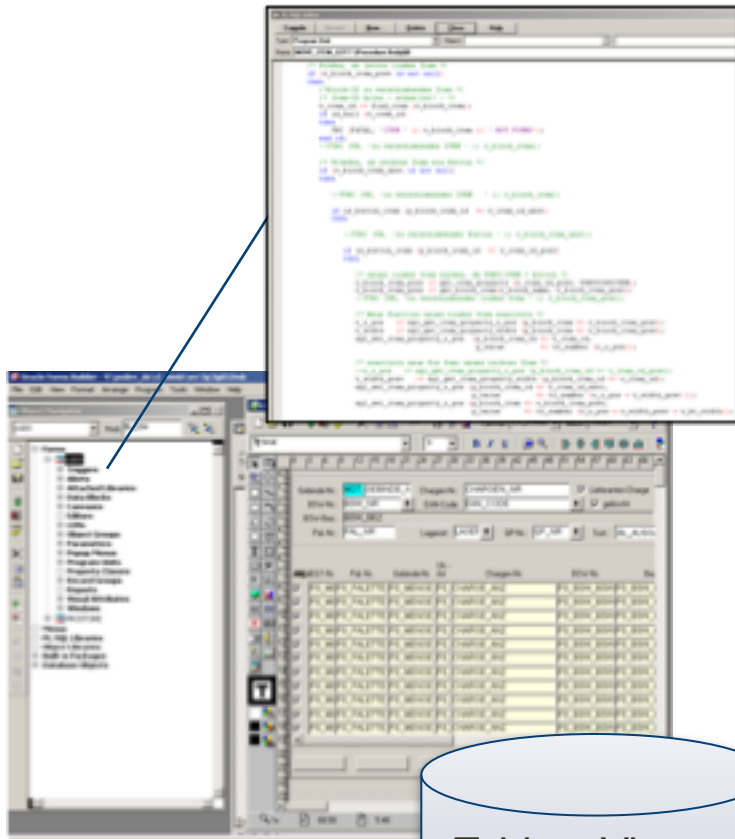


- Definition eines werkzeuggestützten Migrationsprozesses
 - Unter der Nutzung von Techniken der modellgetriebenen Softwareentwicklung [GG12]
- Anforderung: Erhaltung des Migrationswissens



[GG12] Grieger, M.; Güldali, B.; Sauer, S.: Sichern der Zukunftsfähigkeit bei der Migration von Legacy-Systemen durch modellgetriebene Softwareentwicklung. Proceedings of the 14th Workshop Software-Reengineering (WSR 2012)

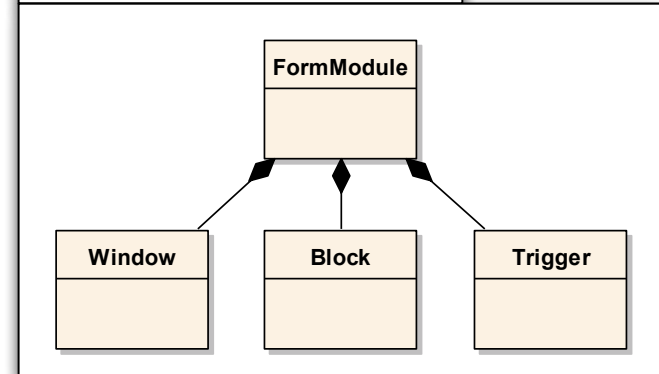




Tables, Views,
Procedures

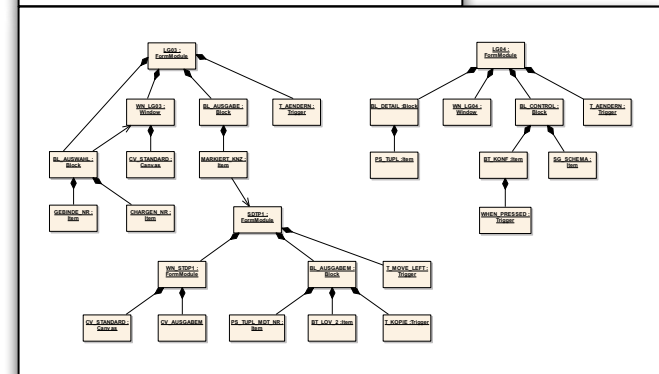
Erfassung →

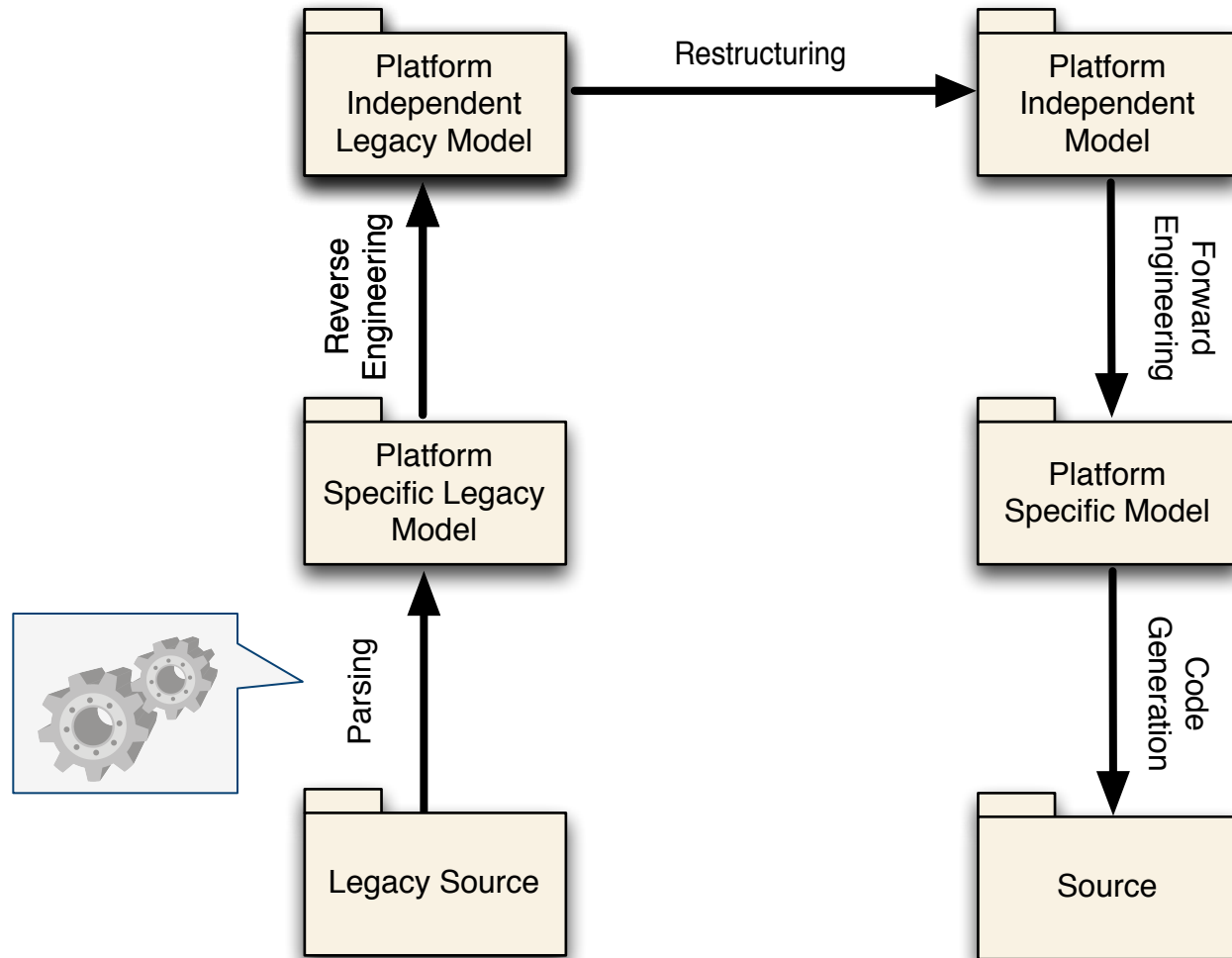
Oracle Forms PSMM



↑ Konform zu

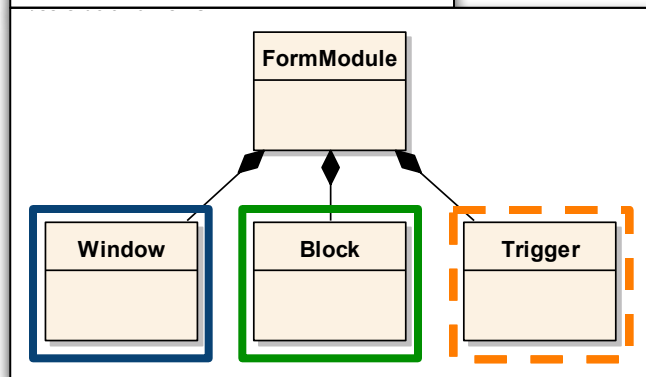
Oracle Forms PSM



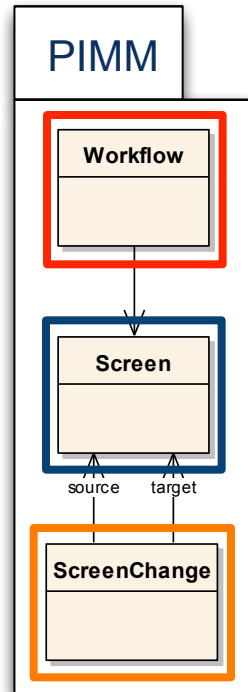




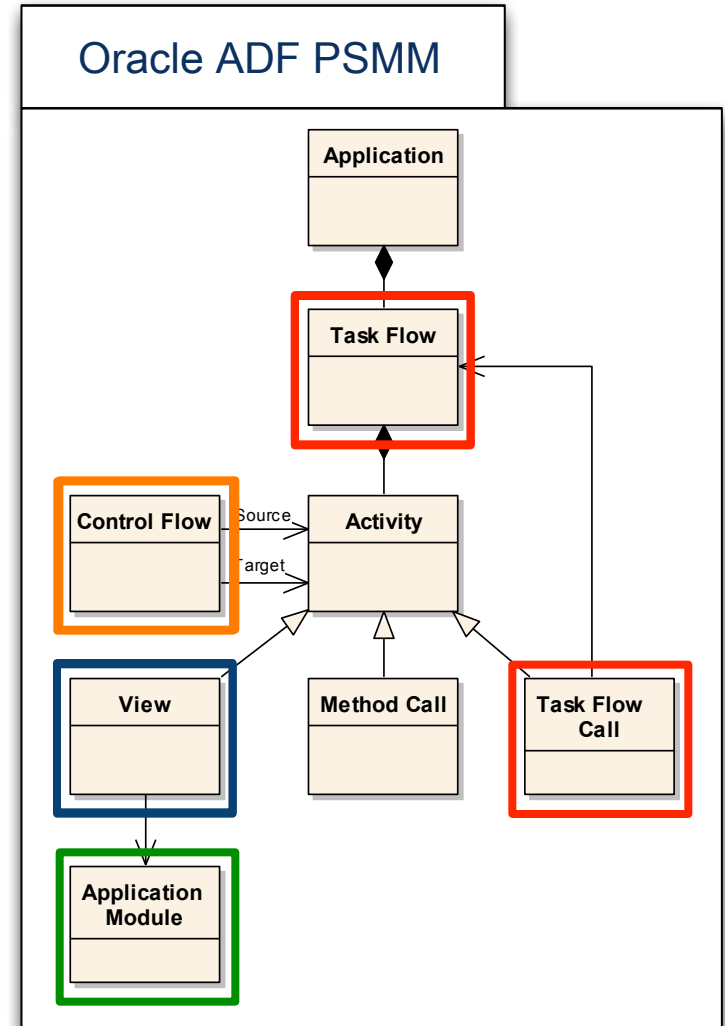
Oracle Forms PSMM

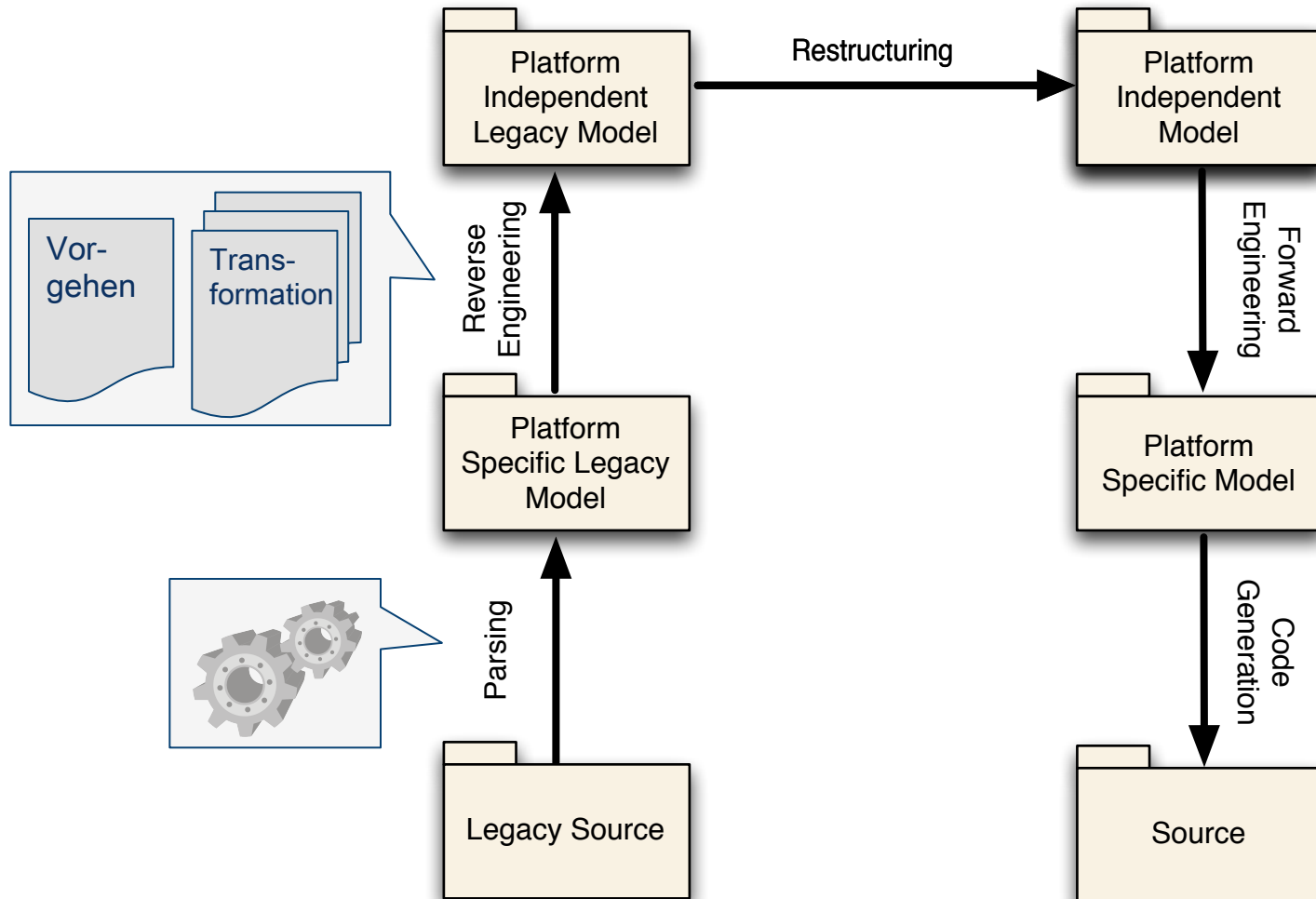


PIMM



Oracle ADF PSMM





S

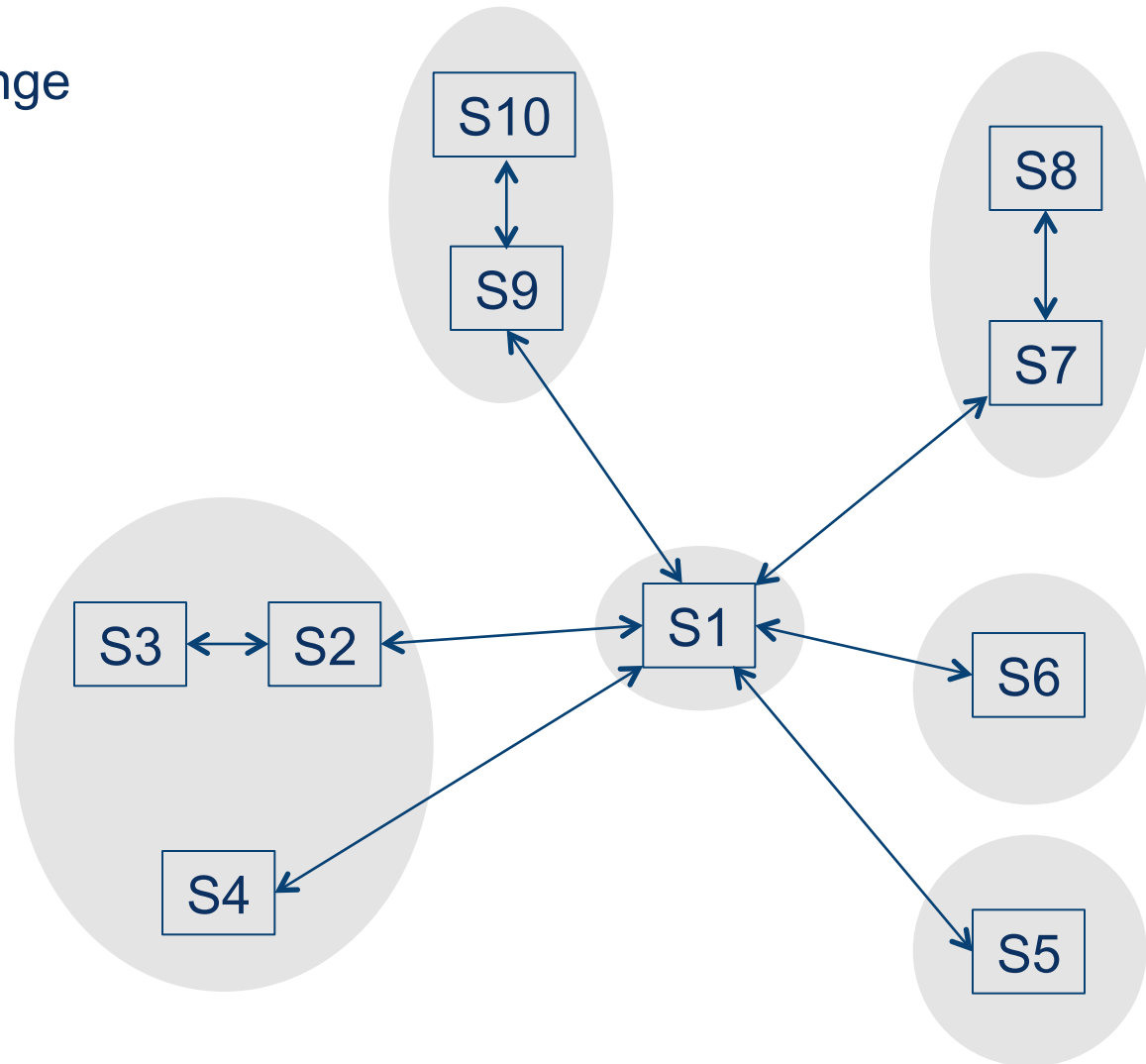
Screen



Screen Change



Module



S

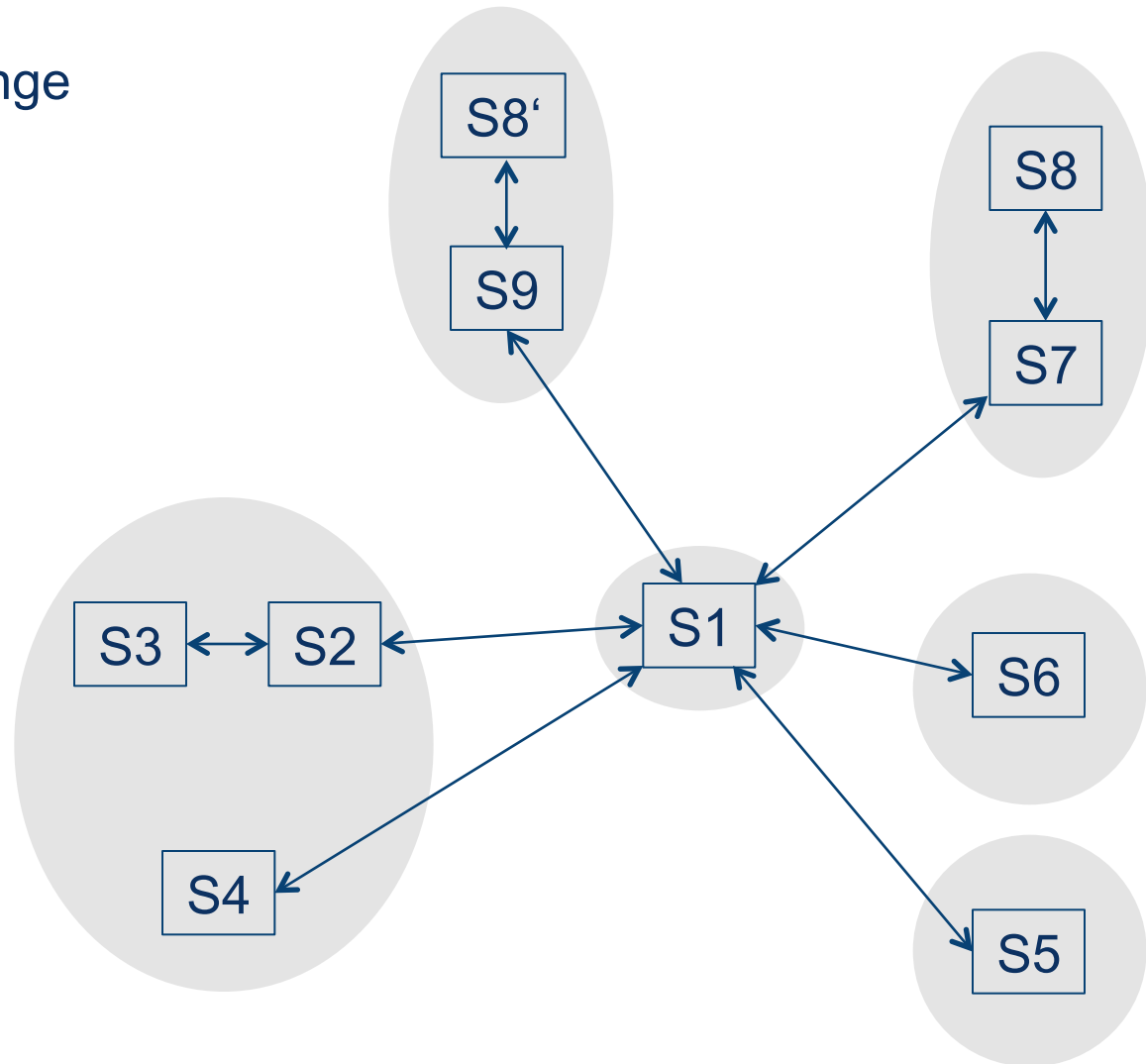
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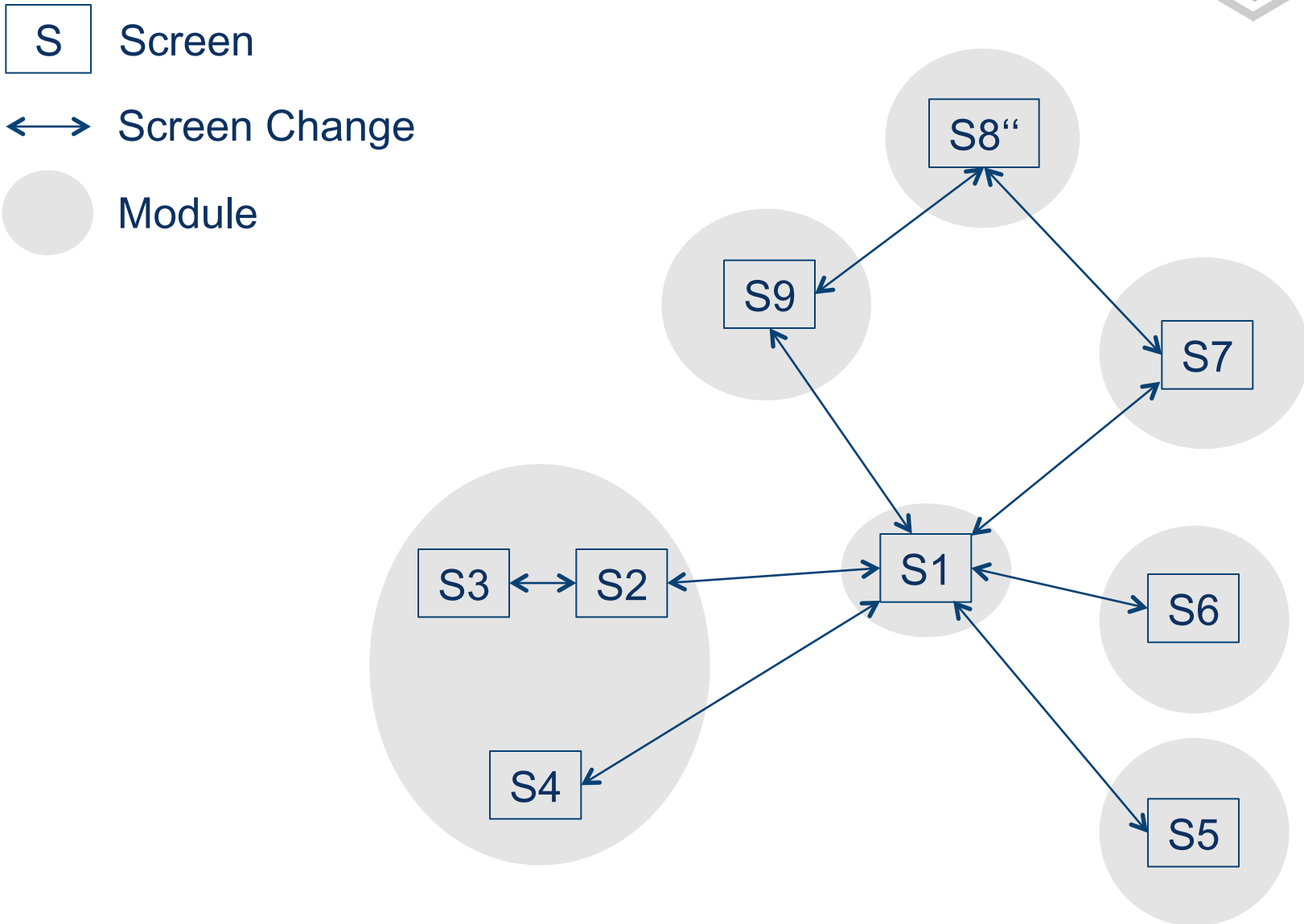


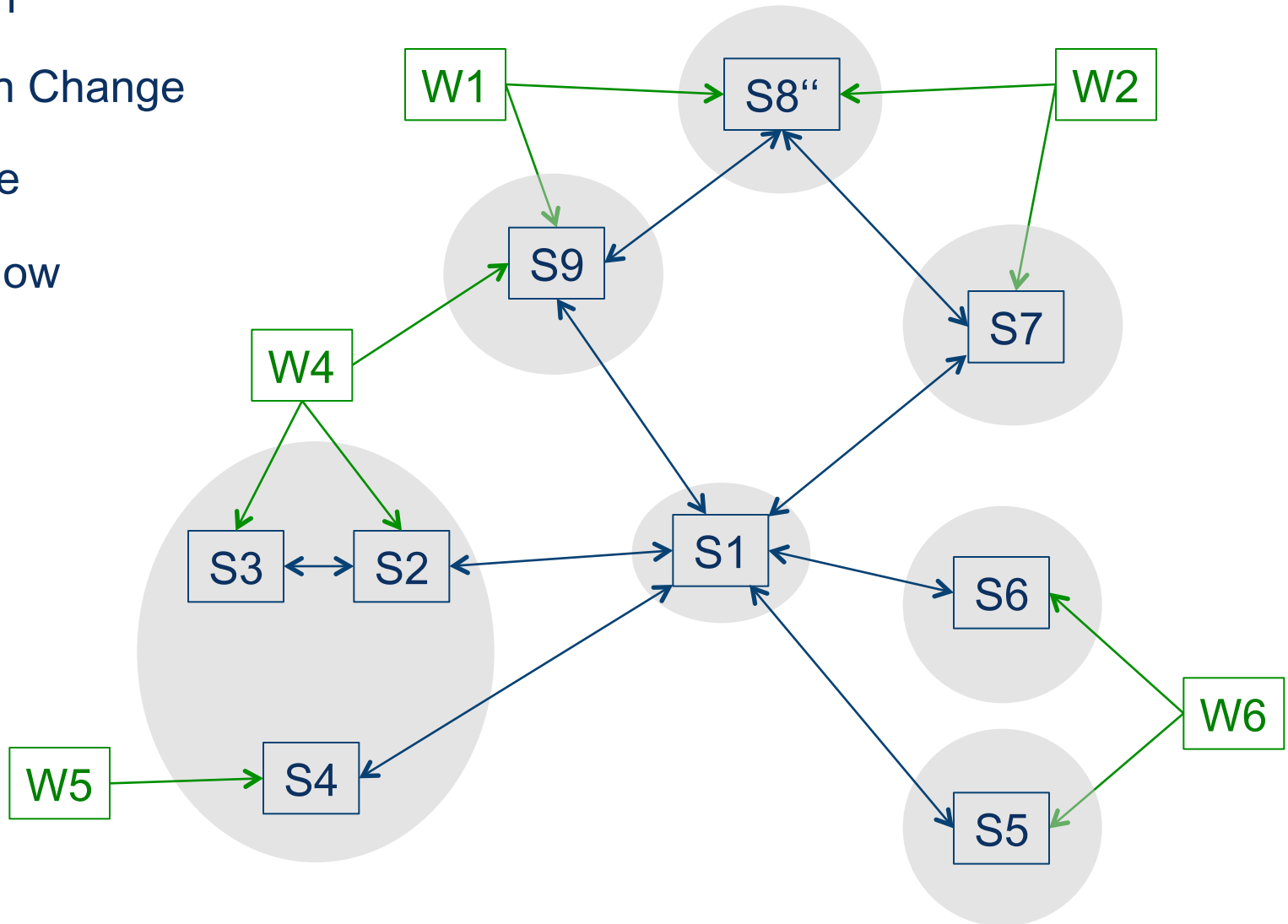
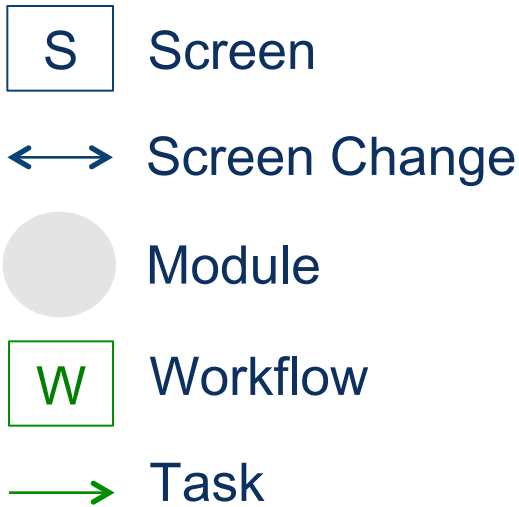
Screen Change

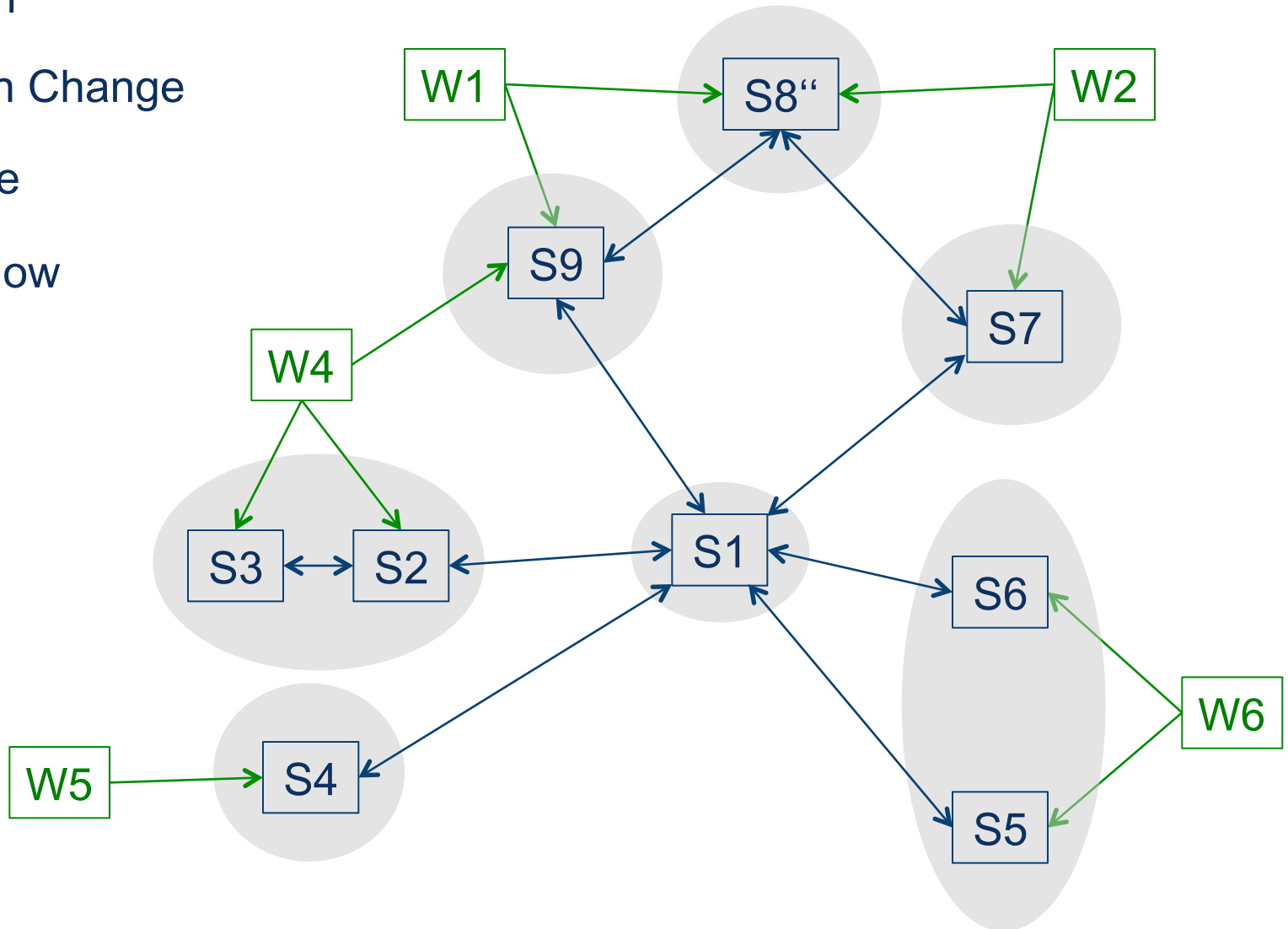
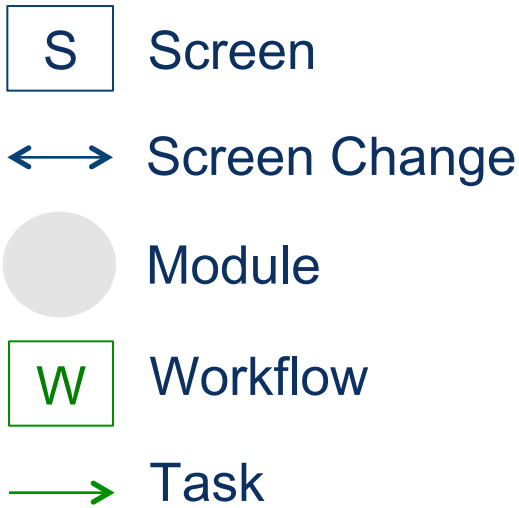


Module

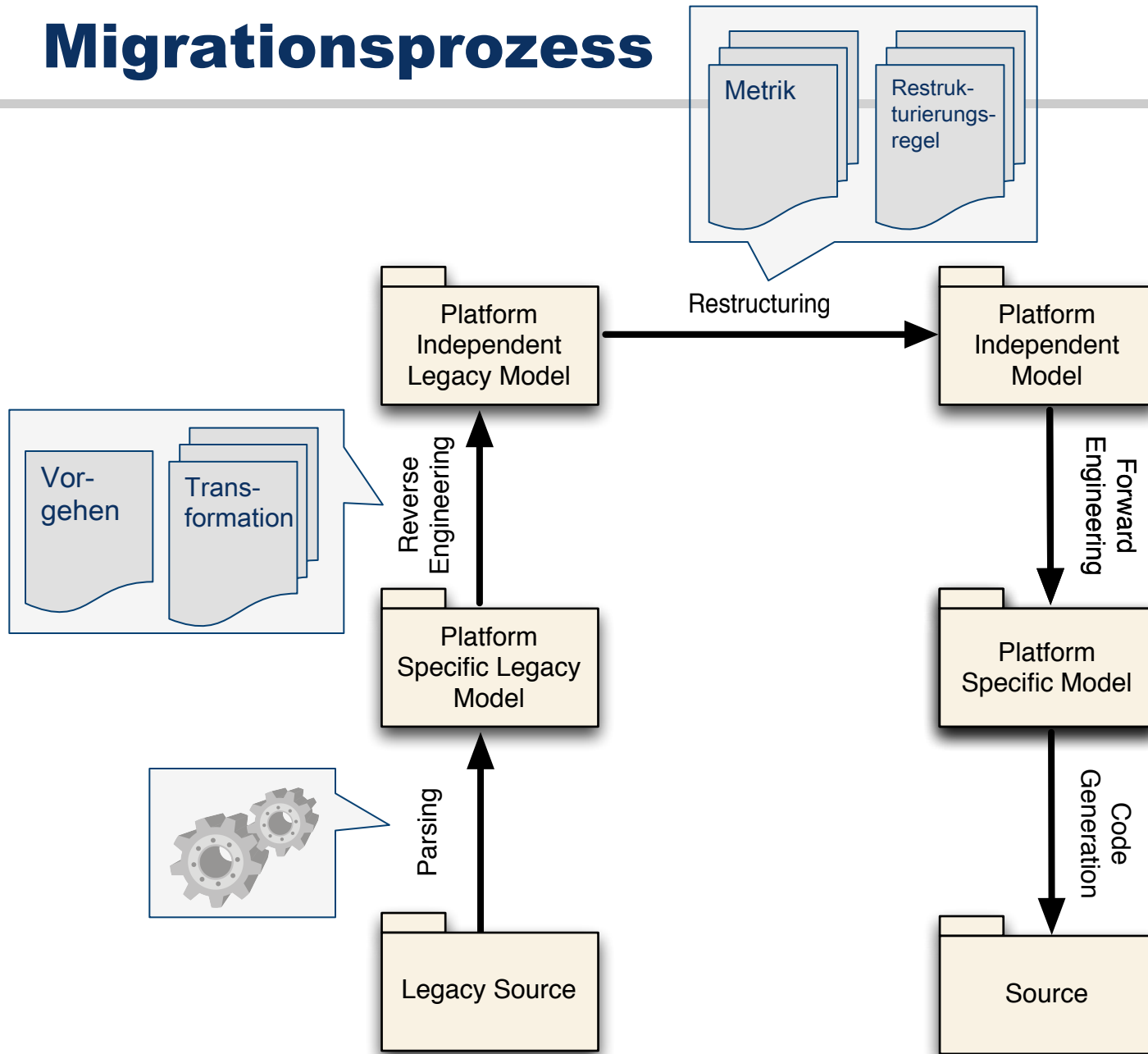




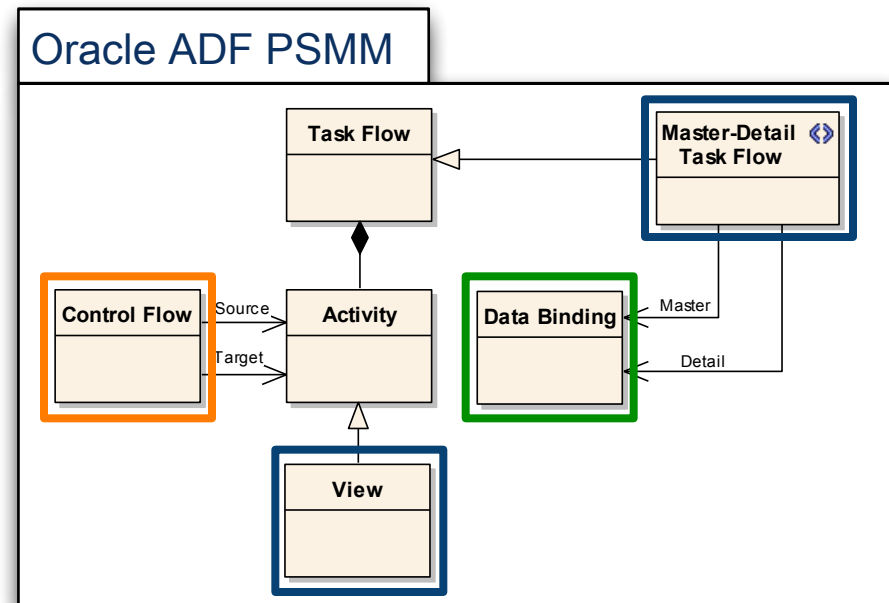
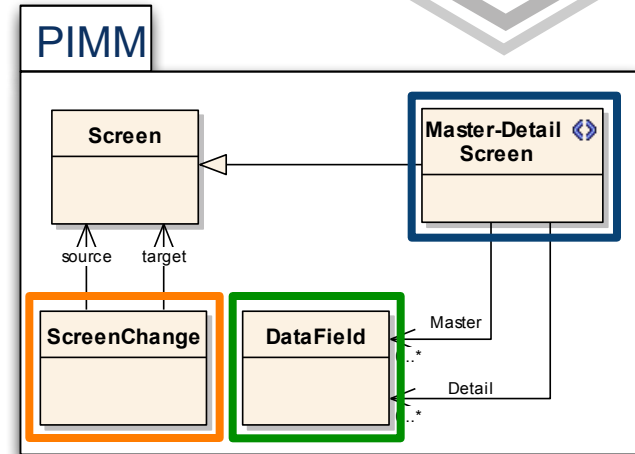
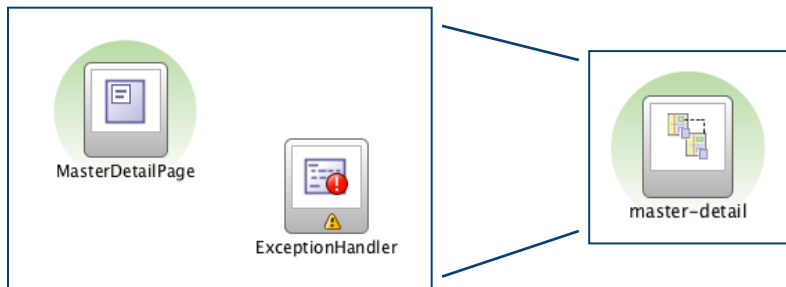
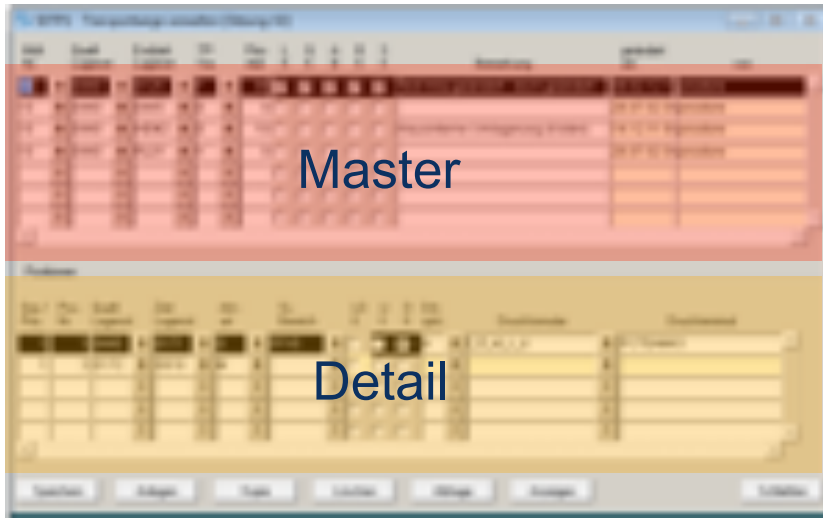




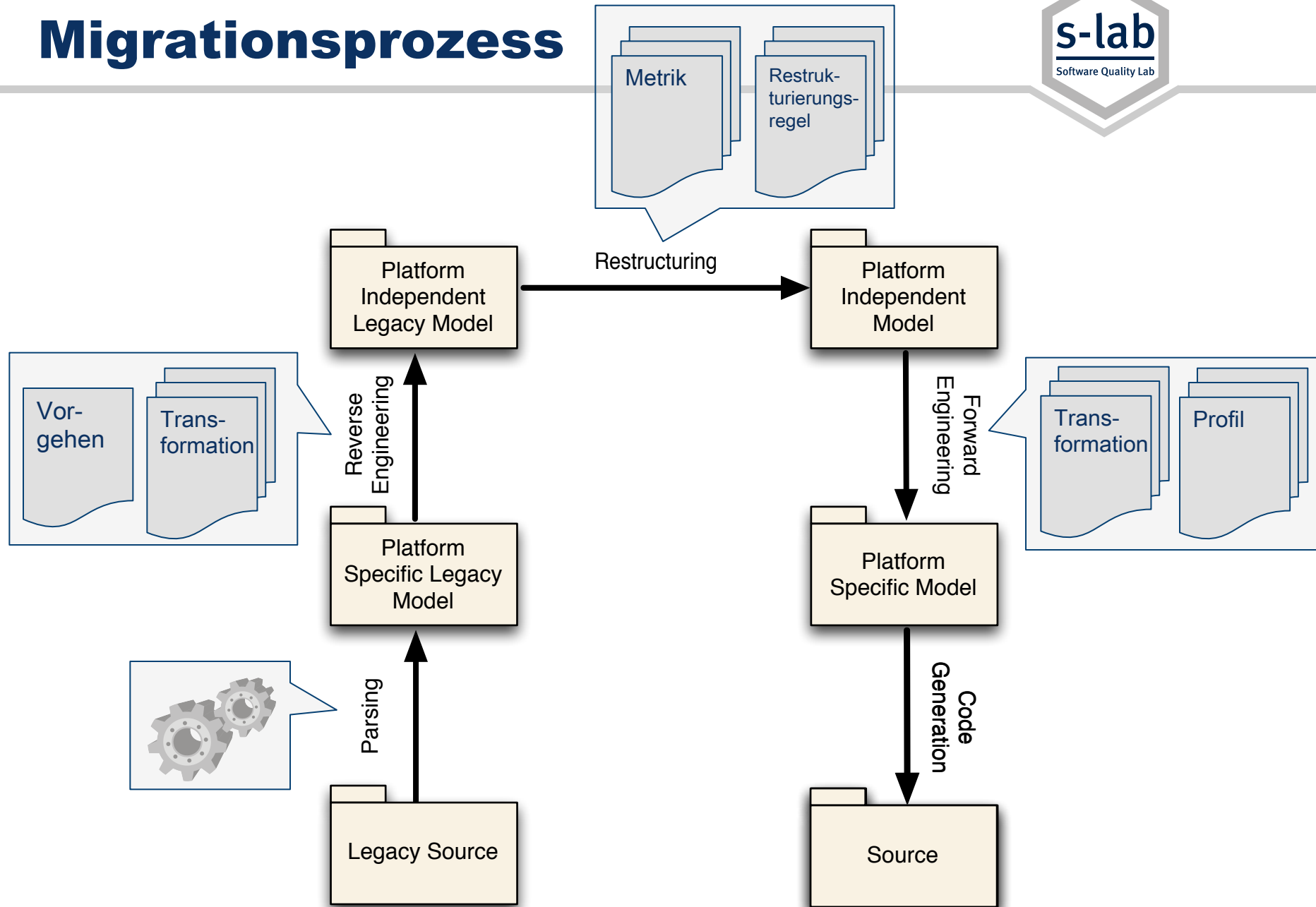
Migrationsprozess



Konkretisierung



Migrationsprozess



Oracle ADF PSMM

```
graph TD
    CF[Control Flow] -- Source --> A[Activity]
    CF -- Target --> A
    V[View] --> A
    MC[Method Call] --> A
    TFC[Task Flow Call] --> A
    TFC --> TF[Task Flow]
    A --> TF
```

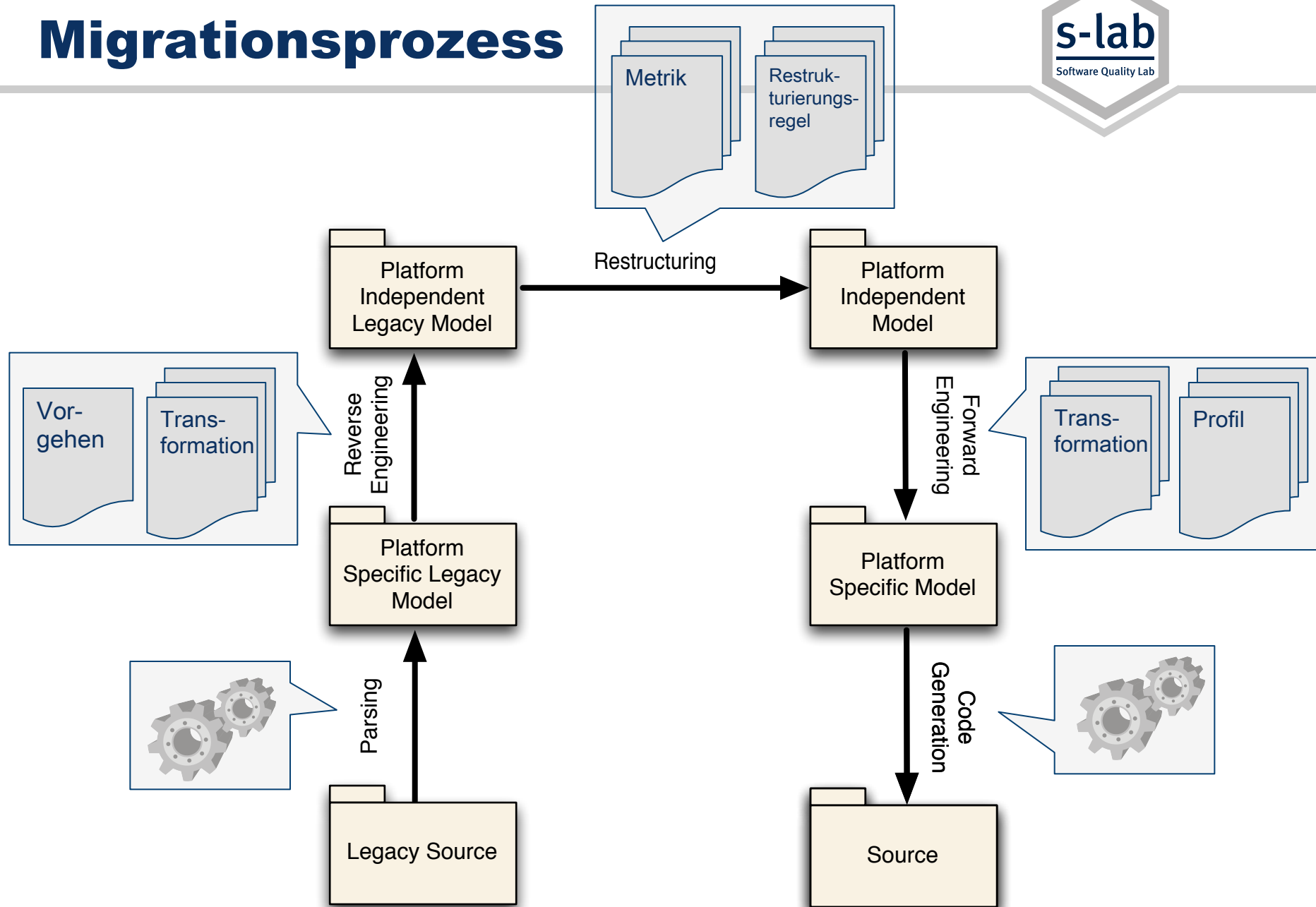
The diagram illustrates the Oracle ADF PSMM architecture. It features a central **Activity** component, which is a specialized type of **Task Flow** (indicated by a solid diamond arrow). The **Activity** is composed of several elements: a **Control Flow** (which has **Source** and **Target** connections to the **Activity**), a **View**, a **Method Call**, and a **Task Flow Call**. The **Task Flow Call** also has a direct connection to the **Task Flow** component.

Oracle ADF PSM

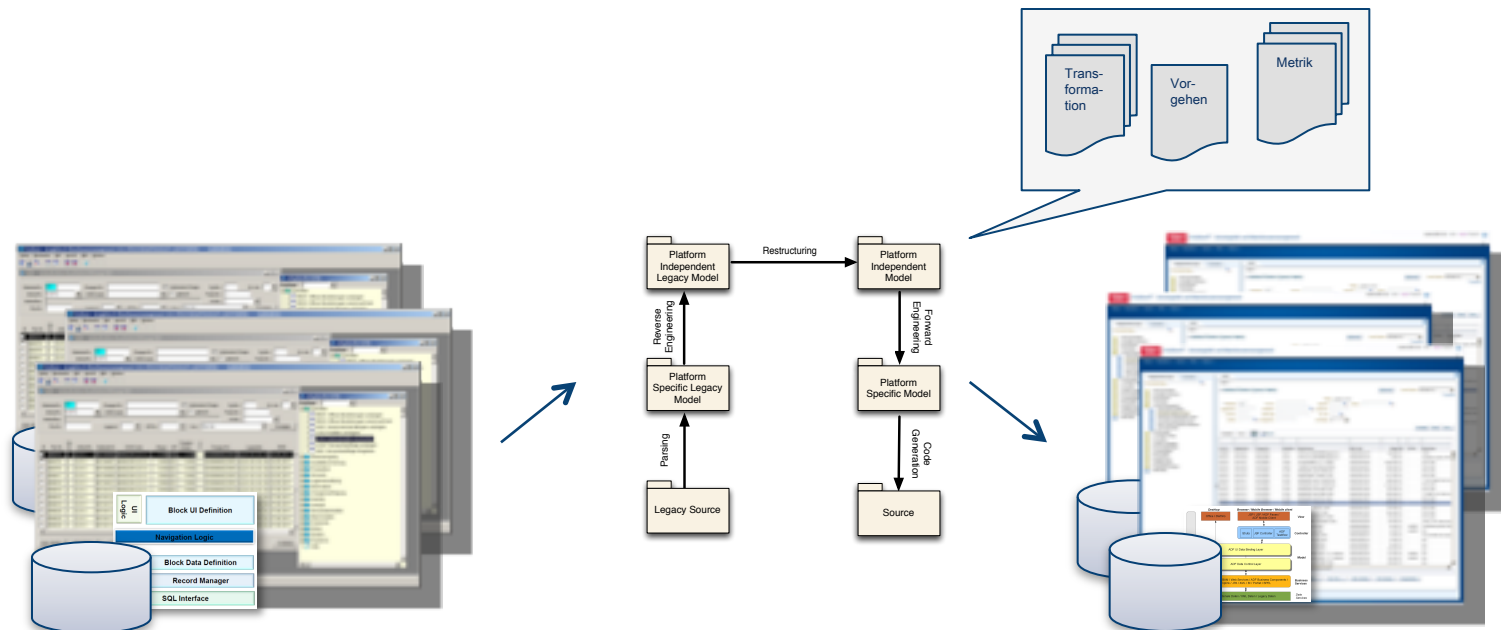
The screenshot displays the Microsoft SQL Server Enterprise Manager interface. The central pane shows a database diagram with four tables: 'table' (highlighted with a green circle), 'table1', 'table2', and 'table3'. 'table' is connected to 'table1' by a line, and 'table1' is connected to both 'table2' and 'table3' by lines. The left pane shows the 'Server Enterprise' tree structure, and the right pane shows the 'Properties' window for the selected table.

Tables

Migrationsprozess



- Definition eines werkzeuggestützten Migrationsprozesses
 - Unterstützung für eine komplexe Plattform-Migration
- Anforderung: Erhaltung des Migrationswissen
 - Explizite Repräsentation durch Artefakte



- Evaluierung des Ansatzes
 - Durchgängige Implementierung
 - Anwendung auf unterschiedliche Applikationen
- Inkrementelle Erweiterung des Migrationswissens
 - Entwurfsentscheidungen können variieren
 - Auswirkungen auf den Migrationsprozess

Vielen Dank für Ihre Aufmerksamkeit.

s-lab – Software Quality Lab

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