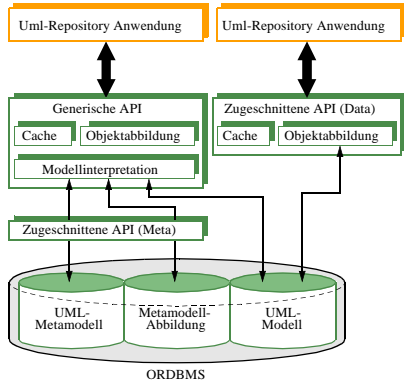


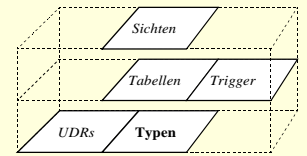
SERUM-Infrastruktur

Generating Software Engineering Repositories using UML

Spezifikation

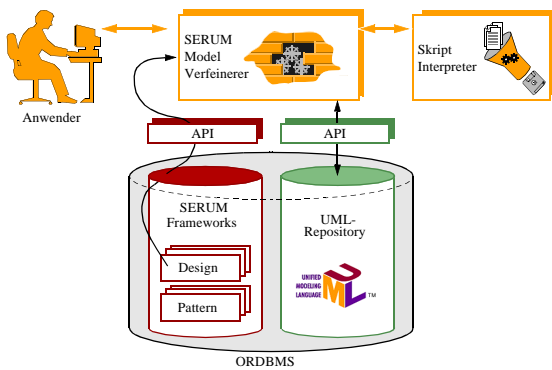


```
CREATE ROW TYPE data_association_class_ty
UNDER data_class_ty;
CREATE TABLE data_association_class_ta
OF TYPE data_association_class_ty
(PRIARY KEY (element_id) ) UNDER data_class_ta;
CREATE VIEW datadata_association_class_vi_u
( element_id, name, stereotype, is_root,
is_leaf, is_abstract, is_active, as_row )
AS SELECT T.*, T AS as_row
FROM data_association_class_ta T;
CREATE TRIGGER data_association_class_update_tr
UPDATE ON data_association_class_ta
REFERENCING NEW AS neu
FOR EACH ROW
(EXECUTE PROCEDURE data_association_class_update_pr
(neu.element_id, neu.name, neu.stereotype, neu.is_root, neu.is_leaf, neu.is_abstract) );
CREATE FUNCTION data_all_connection(a_asso_class association_class_ty )
RETURNING SET( data_association_end_ty NOT NULL );
```



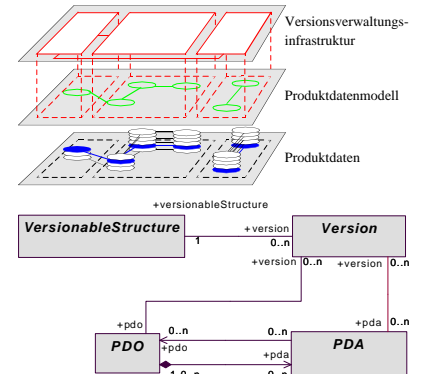
OR-DB-Schema
'UML-Modell'

Verfeinerung

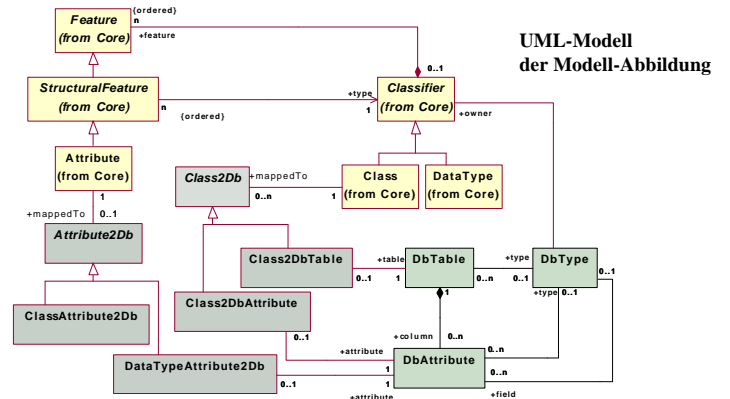
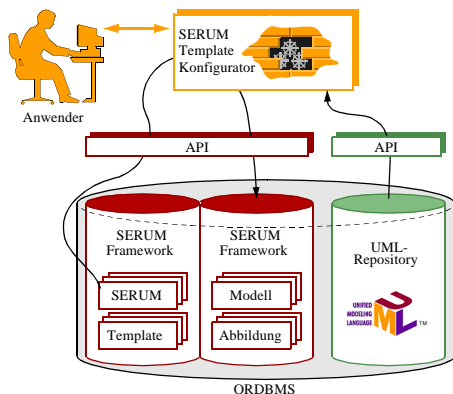


```
begin define pattern CreateVersion
begin parameters
// Parameterliste(Java-Syntax)
end parameters
begin preconditions
// Vorbedingungen
// (OCL-Constraints)
end preconditions
begin constraints
// künftig einzuhaltende Zusicherungen
// (OCL-Constraints)
end constraints
begin alter model
// Modelmanipulation
// (Java-Code)
end alter model
end define pattern.
```

Framework: 'Versionierung'

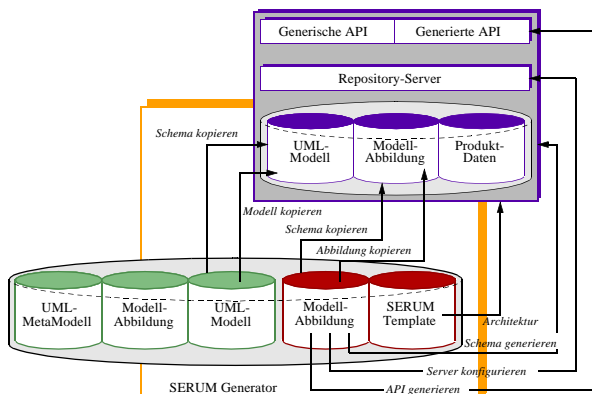


Konfiguration



UML-Modell
der Modell-Abbildung

Generierung



```
public interface GapiClass
extends GapiClassifier {
Collection
GapiAttribute
GapiAssociationEnd
Collection
Instance
GapiOperation
getAllAttributes();
getAttributeForName(GapiName name);
getAllOppositeAssociationEnds();
getOppositeAssociationEndForName(GapiName name);
getAllInstances();
getObjectForOid(GapiObjectIdentifier oid);
getOperationForName(GapiName name);
}
public interface GapiObject
extends GapiInstance {
Collection
Collection
Collection
getAttributeValues(GapiAttribute attribute)
getAssociatedInstances(GapiAssociationEnd role)
callOperation(GapiOperation operation, Collection parameters);
}
```

Schnittstellen der generischen API
(Auszug)