Model driven architecture in action
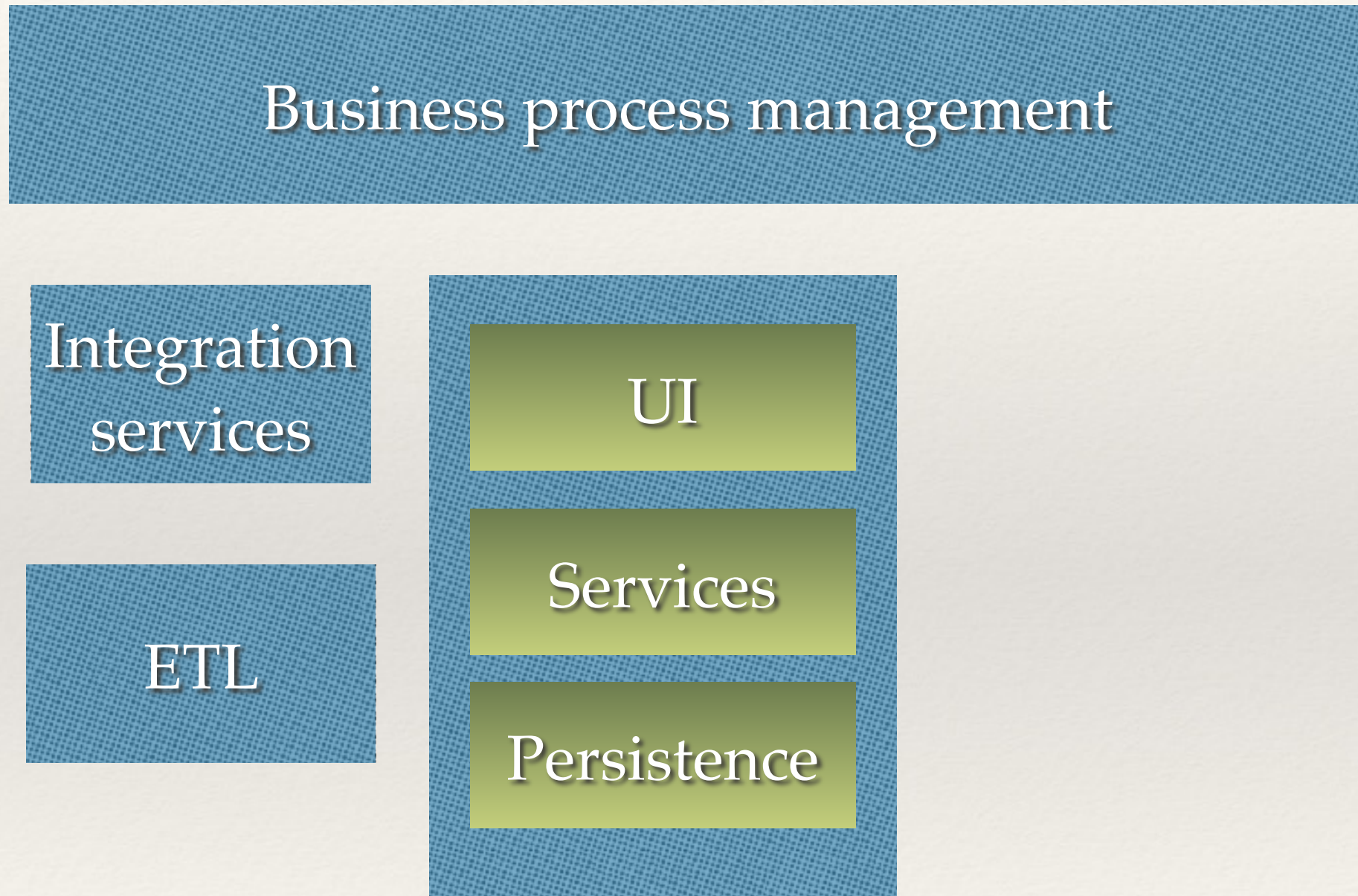
Tura – application generation solution
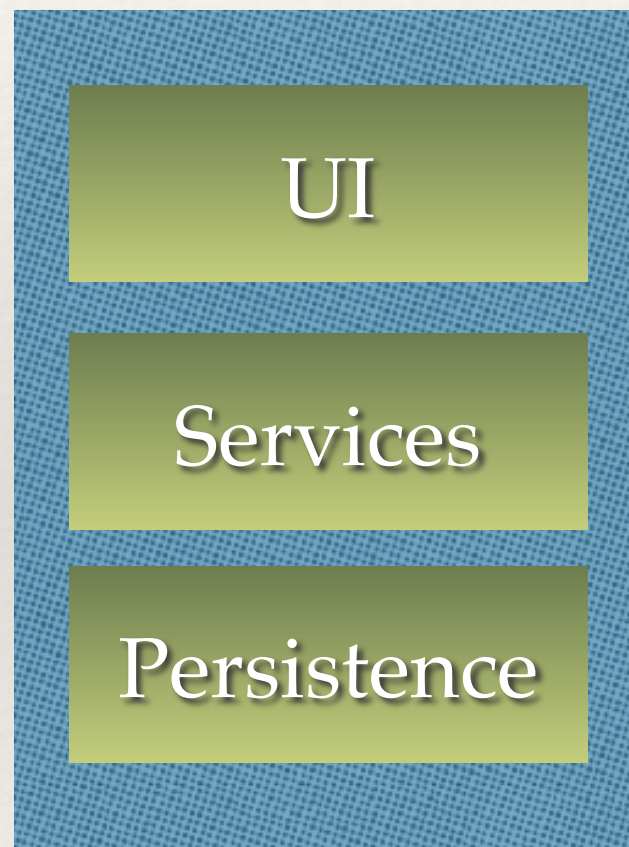
- Generate
- Build
- Deploy

Architecture of business application

Business process management

Integration services

ETL

UI

Services

Persistence

Target to redesign

High level diagram

UI framework

UI framework integration

Data control

Object repository

Object repository

- Repository design pattern
- Object assembling
- Object serialization and delivery to remote client
- Object modification tracking
- Apply modification to persistence layer

Object repository

Object repository proxy

Transport layer

Object repository

Persistence layer

DB

SalesForce

Services

Object repository

Object repository proxy
- Tracking object update
- Save point , rollback changes

Transport layer
- Serialization and deserialization of object
- Serialization and deserialization of command
- Transmitting information through network

Object repository
- Object assembling
- Applying changes

Persistence layer
- Storage

Data control

Data control	• Cursor interface • Establish relationship between objects
Pagenator	• Paging against object repository • Keep order between created and existing object • Apply changes on updated object
Object pool	• Propagate updates between different data controls

UI framework integration

UI framework integration

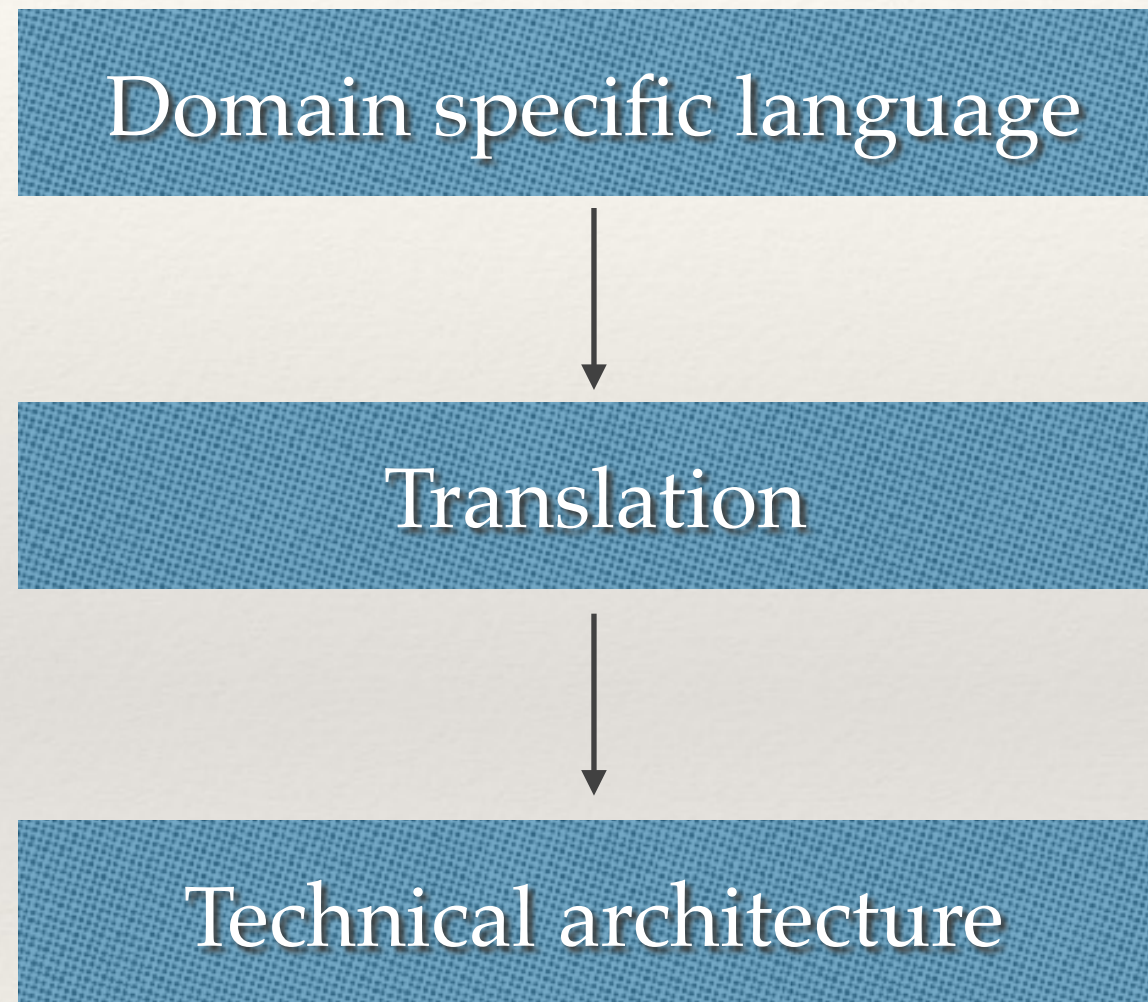- Building model for specific UI element using data control API

Mode driven architecture

Wrong

UML TOGAF, etc

Mode driven architecture

Nothing to do with business !

Mode driven architecture

Domain specific language

↓

Translation

↓

Technical architecture

Mode driven architecture

Domain specific language
- Identified structure of meta model

Translation
- Generation templates
- Technical architecture

Technical architecture
- Engine

Mode driven architecture

Demo of meta model editor
and code generation

Mode driven architecture

Main rule of code generation

Do not touch generated code

Do not modify generated code

Use plugin to modify behaviour

Mode driven architecture

UI framework

UI framework integration

Data control ← Plugins

Object repository ← Plugins

Tura solution

- Virtual appliance with Tura 4.2.0
- Brief doc

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