Modeling Data

Cordys BOP 4.1 Fundamentals

CORDYS

Agenda

CORDYS

- Agility Improvement
- Generic Formats
- Business Object Abstraction
- Implementing BO Abstraction
- Transformation Modeling

Business Agility

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- Agility:
  - The ability to react fast on events
- Improvement of Business Agility:
  - Optimize Business Processes
  - Optimize ability to change Business Processes
  - Optimize ability to change in business context/systems
- Examples:
  - Incorporation of existing and new systems
  - Integration with external systems (supply chain: customers, suppliers)

Incorporation of existing and new systems

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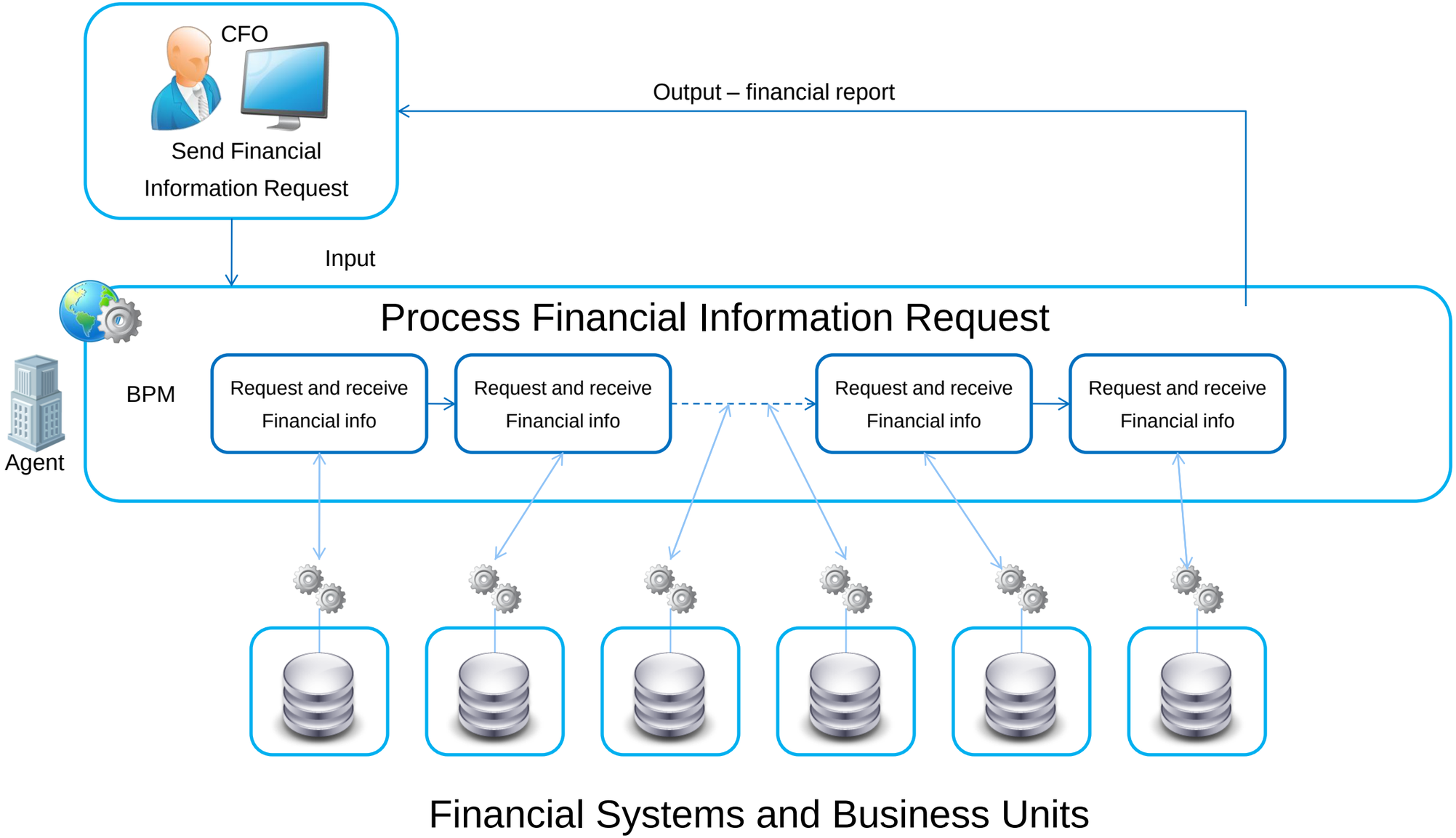

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Business Process using generic formats

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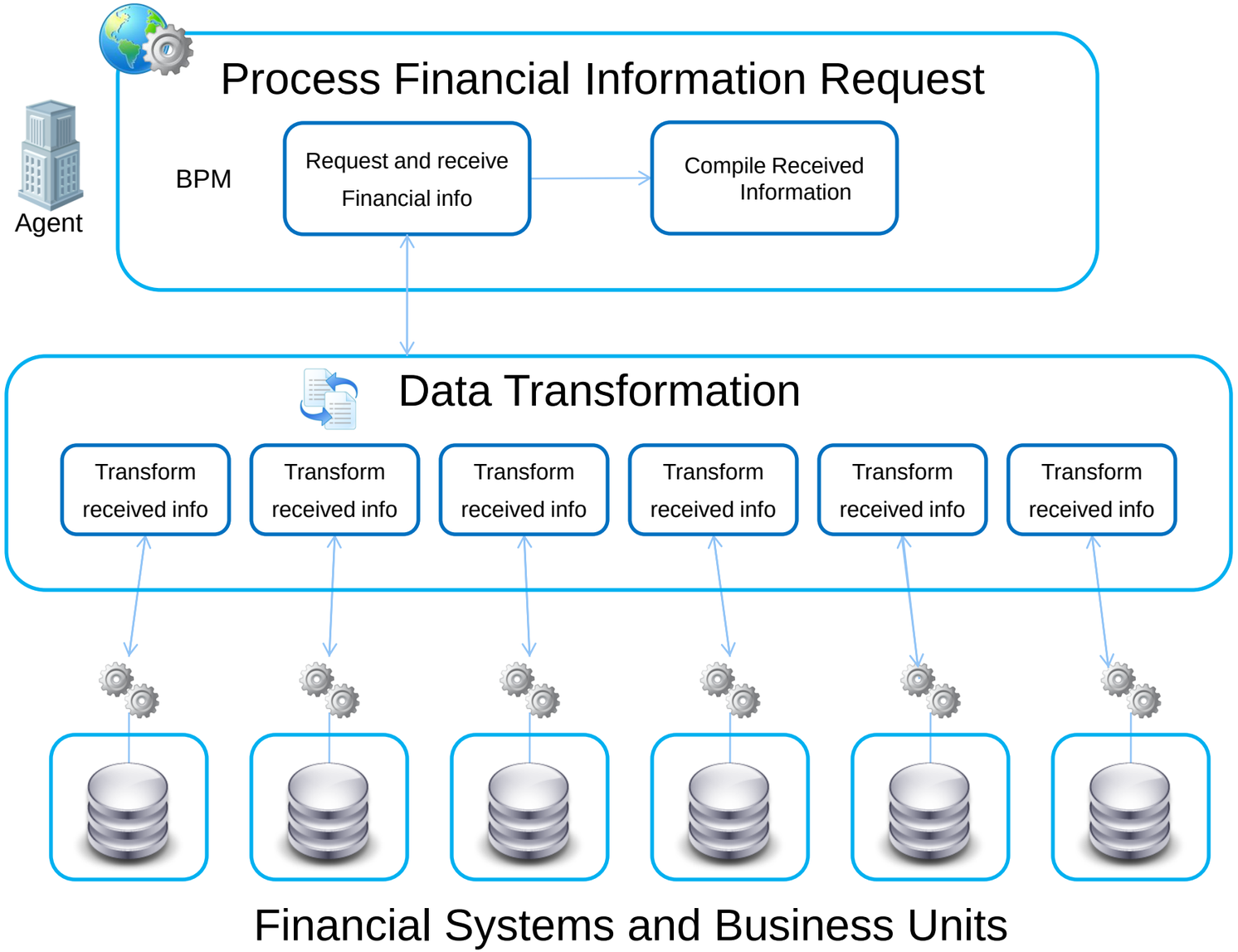

Integration with external systems (supply chain)

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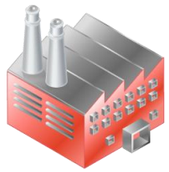
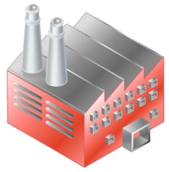
Customers



Send order



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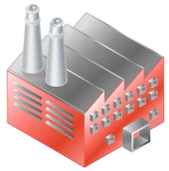

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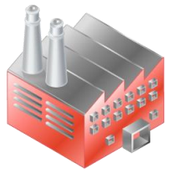


Send order

Input

Output

Transport Company

Check resources

Quote pricing based on ratings

Ok?

Personnel and equipment planning system

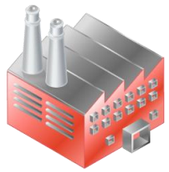
Tariff system

Manager Approval

Integration with external systems (supply chain)

CORDYS

Customers



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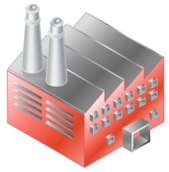

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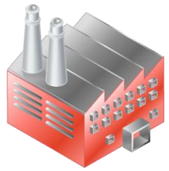

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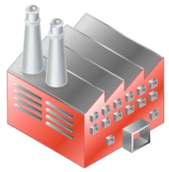

Send order

Input

Output

Transformation

Transform to generic Order

Transform to generic Order

Input

Output

Transport Company

Check resources

Quote pricing based on ratings

Ok?

Personnel and equipment planning system

Tariff system

Manager Approval

Extensions and Improvements

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- Possible extensions:
  - Add order formats
  - Add web interface
  - Add email interface
  - Add Batch Processing
  - Order state tracking
  - Response formats

- improvements:
  - Transform native order to generic Order (Business Object)
  - Use only generic orders in order processing

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SOA layers: Implementation dependent Processes and UIs

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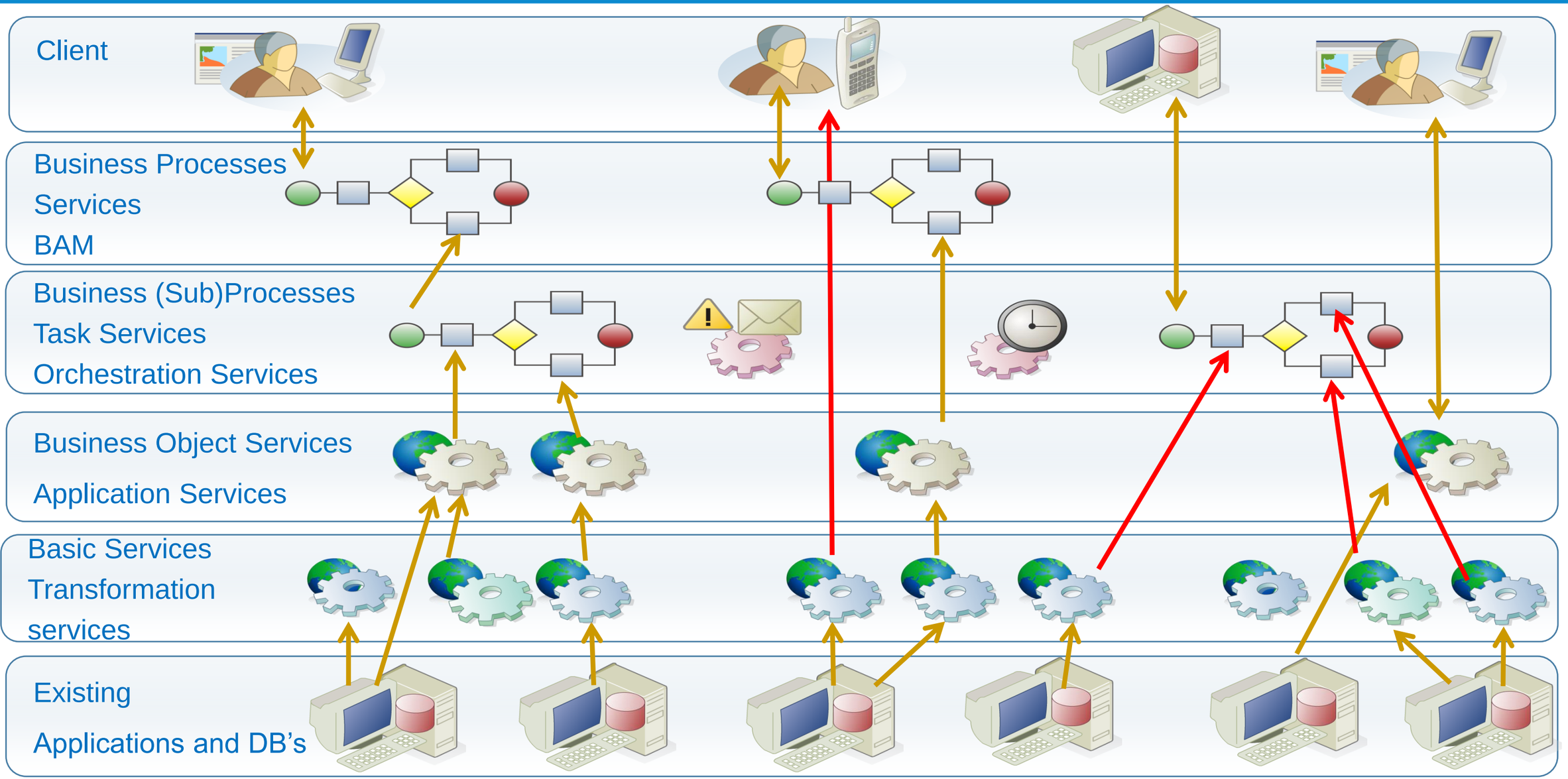
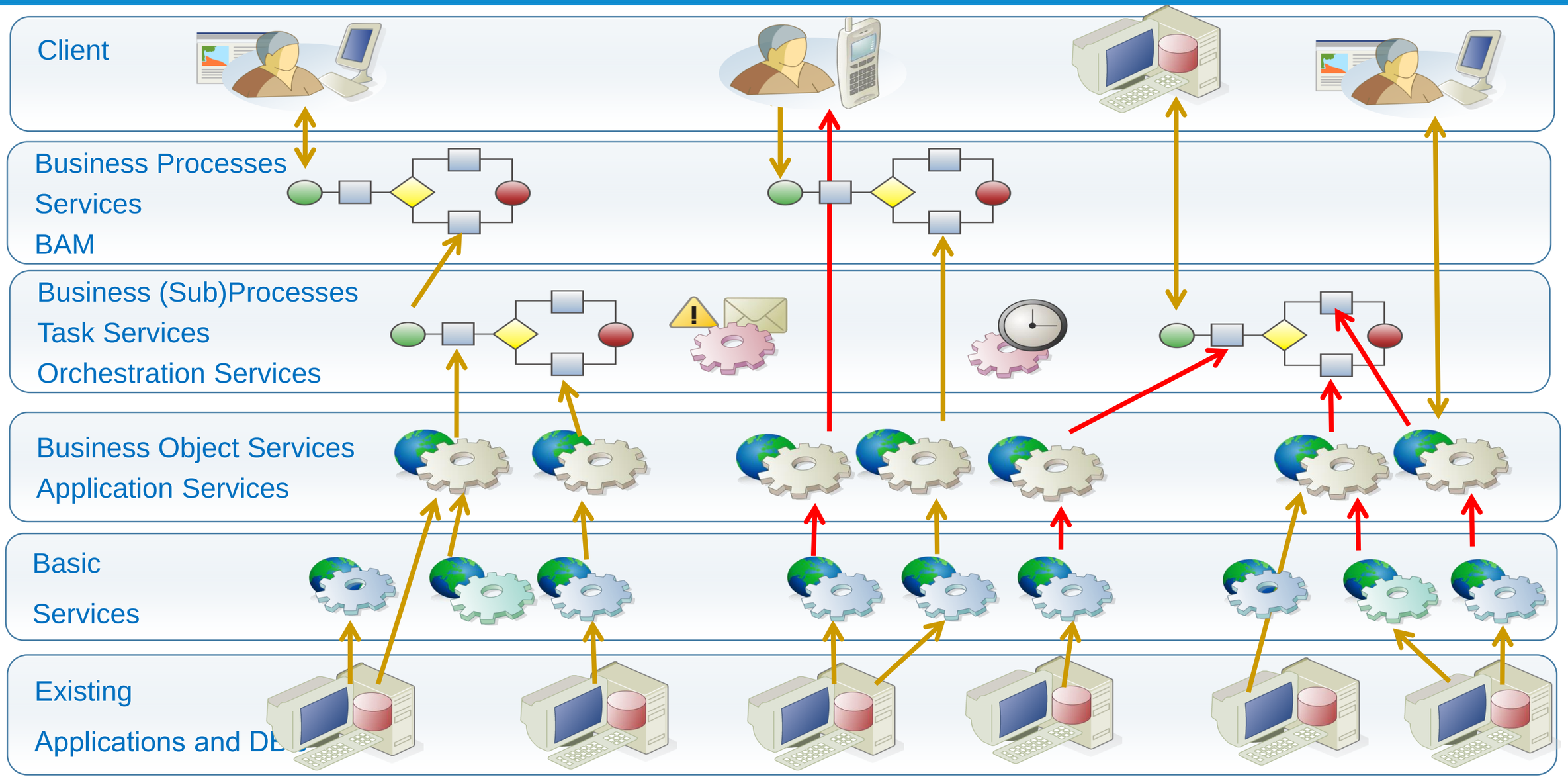


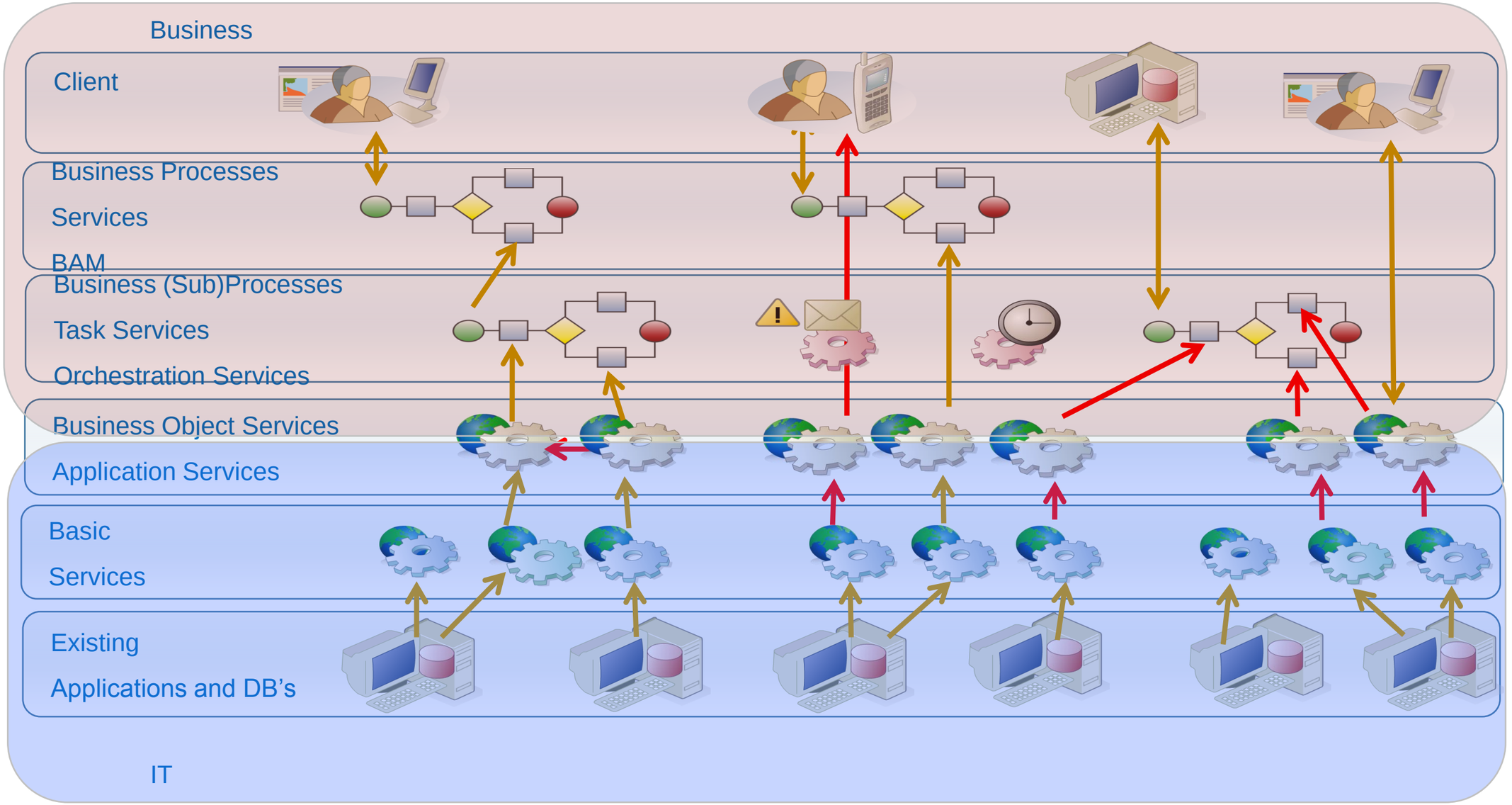
SOA layers: Business Object Services

CORDYS



Decoupling Business and IT

CORDYS



Business Object Abstraction

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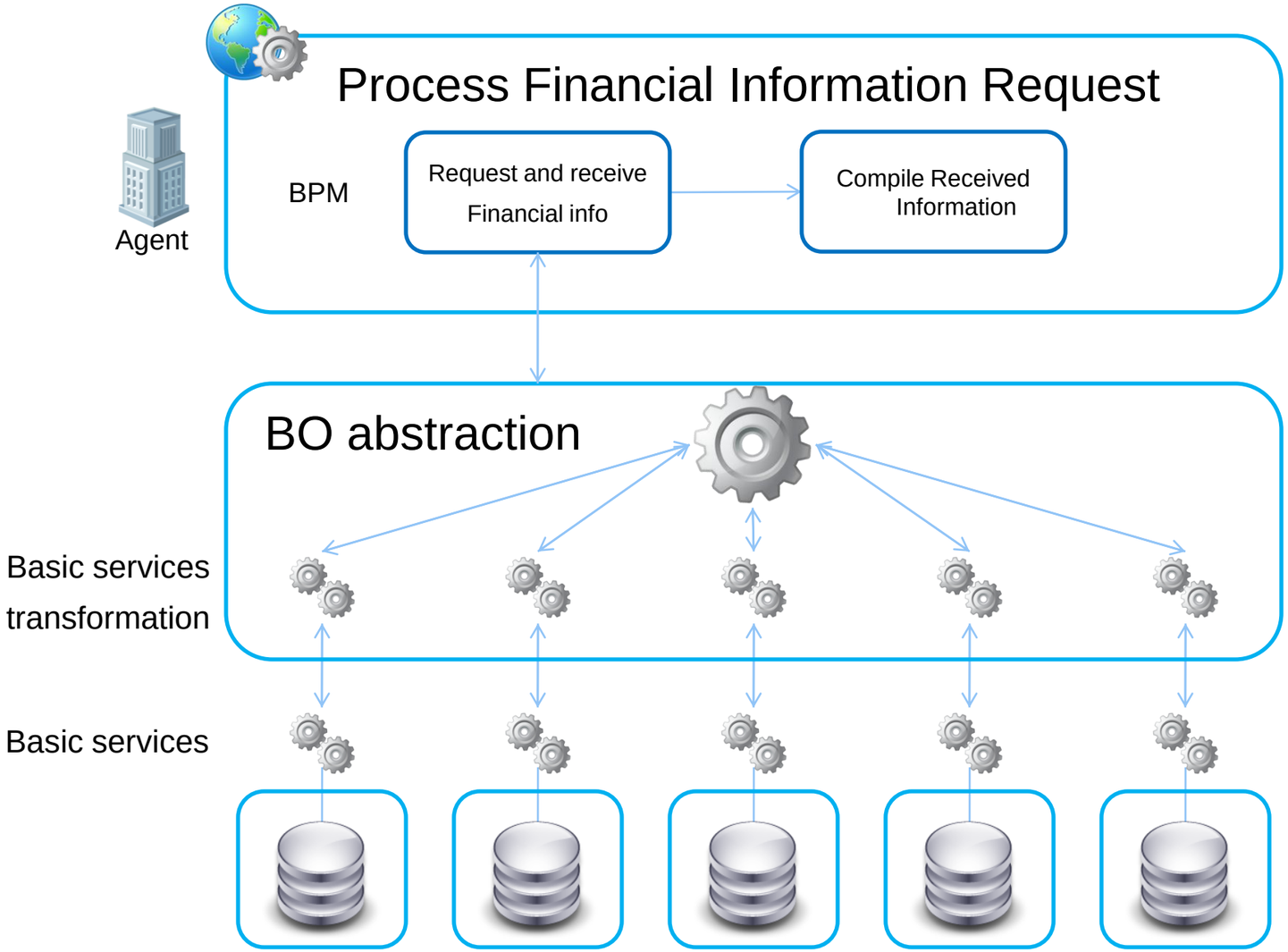
- Decoupling of services and implementation => Agility Improvement
- Reducing roundtrips => Performance Improvement
  - Composite Objects
  - Related Data
- Implementation hiding => Security Improvement

Business Process with Business Object Layer

CORDYS



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Implementing Composite Services

CORDYS

- Process Modeler
  - Graphical model
  - Contract First
  - Short lived Processes
  - Transaction management (with WS-AppServer Services)

- WS-AppServer
  - Within Java code SOAP calls can be done

Contract First

CORDYS

- Enables parallel development
  - Forms
  - Processes
  - ….
- Implementation independency
  - Improvement of implementation
  - Replacement of implementation

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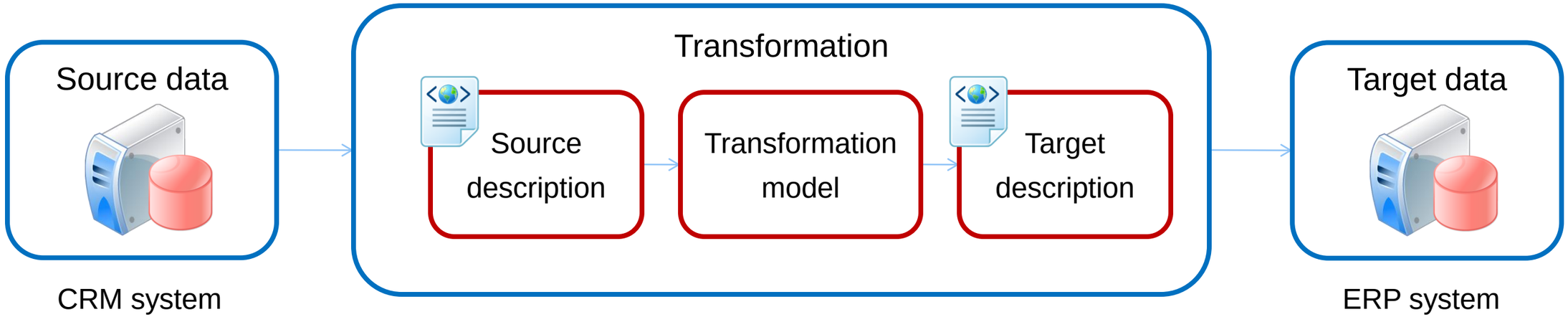
XML Schemas

CORDYS



XML Data

CORDYS

- Food product with lab analysis results

```
<lot number="B12001" fdlRef="32518-13" dateTime="2006/04/02T14:12:45+01:00">
   <productDescription>NONA FRZ  - PINEAPPLE BL CONC.  PRIMA</productDescription>
   <clientName>PRIMA</clientName>
   <blendDate>2006/03/31</blendDate>
   <articleNumber>101 PI 115 0</articleNumber>
   <warehouseName>Cold Stores</warehouseName>
   <concentrate>
      <actual acidity="2.68" ratio="22.44" temperatureAtFilling="-3,3" tonnageKg="20170"/>
      <theoretical uncorrectedBrix="" correctedBrix="60.24" acidity="2.67" ratio="22.56"/>
      <specification uncorrectedBrix="" correctedBrix="59,0 - 61,0" acidity="2,47 - 3,36" ratio="18 - 24"/>
   </concentrate>
   <finishedProduct bx="12.8 Bx" pulp="11.2" coarsePulp="" ph="2.84" formol="" essentialOils=""/>
   <visual colour="Green / yellow" aromaAndFlavour="OK" foreignMatter="NONE" labelsSeals="OK" crystals="" cellsFloatOnWater=""/>
</lot>
```

Data Description

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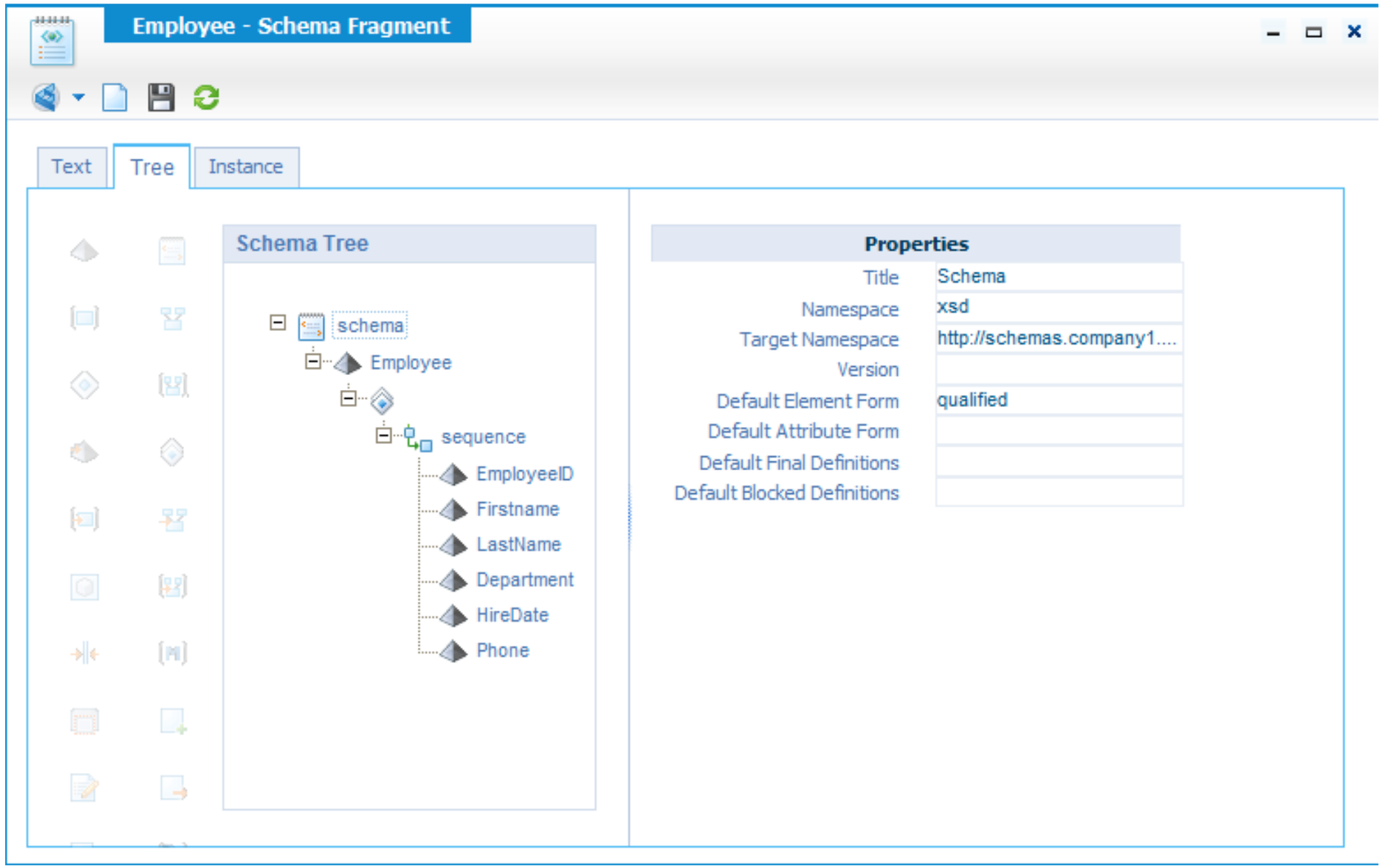
- XML Schema Definition (XSD)
- XML Schemas in Cordys
  - Data Source Related
    - Metadata
    - WS-AppServer models
  - Custom XML Schemas



Transformation Model

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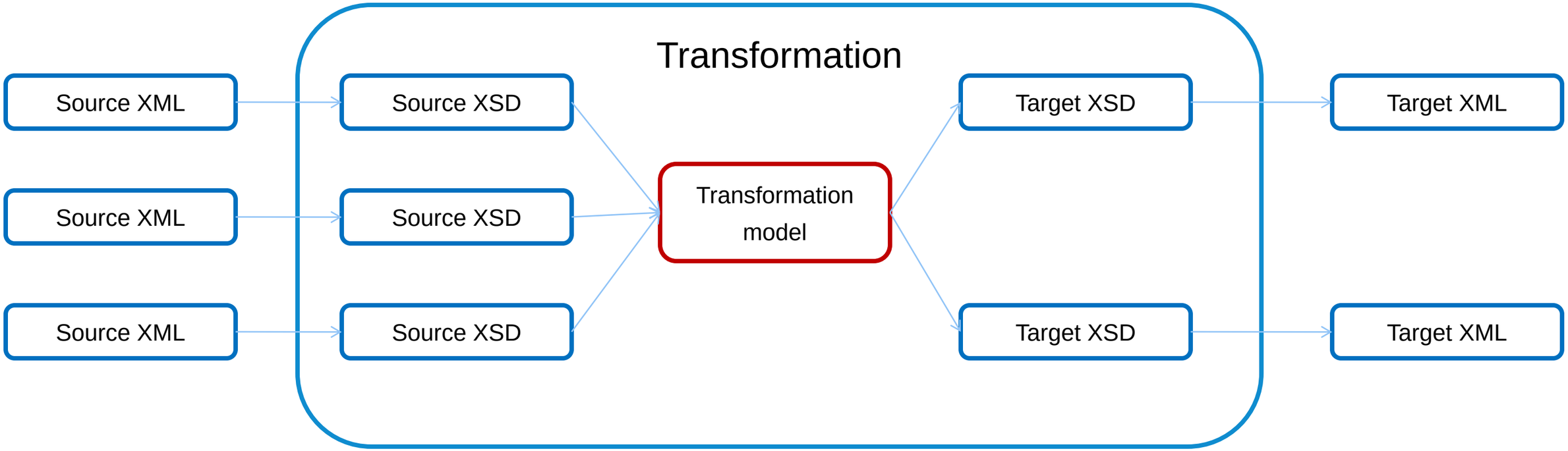
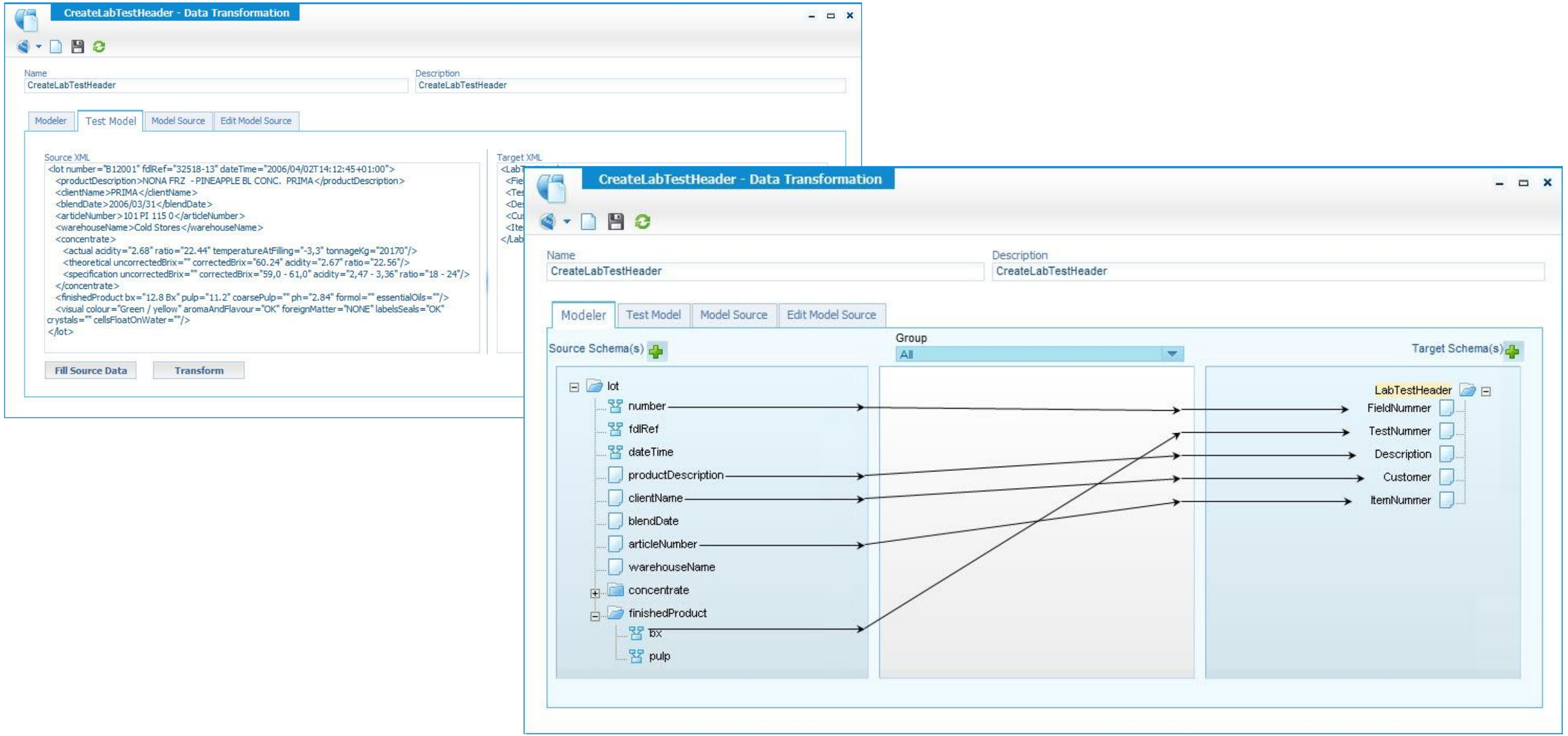
- Graphical Modeler
- Based on XSLT (Extensible Stylesheet Language Transformation)



Transformation modeler

CORDYS



Transformation functions

CORDYS

- Built-in (XSLT) functions
  - String
  - Mathematical
  - Logical
  - Date
  - ….
- Advanced Functions
  - Trigger Web Service
  - Value Mapping
  - Local Lookup
  - Java call

Thank You

Questions?