

# Conception using Components and Contracts

## The ACCORD project

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# ACCORD's goal

To propose an **analysis and design framework** to system architect. This framework will use **semantics contracts** to **describe and compose business components**.

# Approach and structure of ACCORD

## Architectural framework

Defining an abstract model to formalize components, assembly and contracts using UML profiles

## Assembling tools

Development of design and assembling tools ; tools for transformation to standard infrastructure model (EJB and CCM)

Use the architectural framework and the assembling tools on study cases ; FT : information systems ; EDF : scientific calculus

## Study cases

# Project members

## Architectural framework



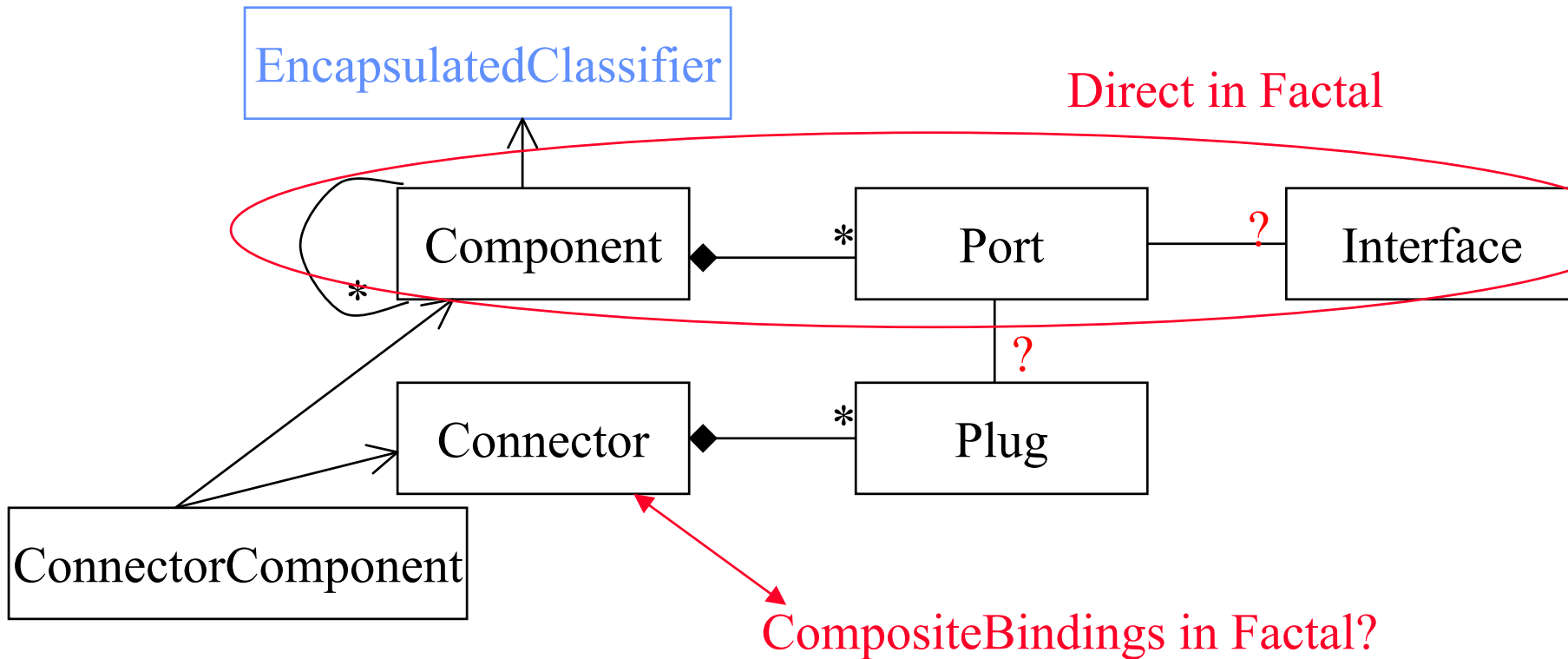
## Assembling tools



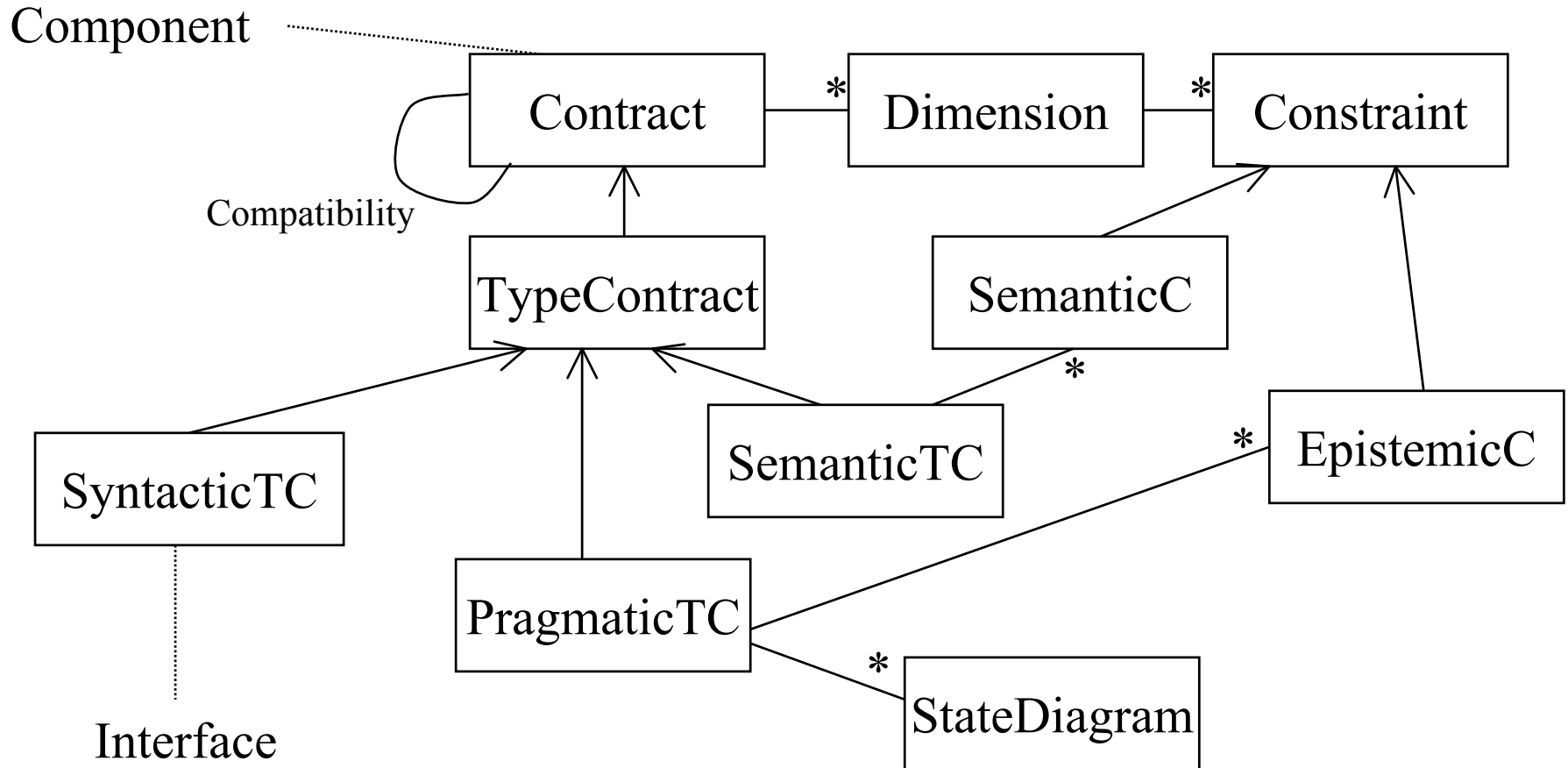
## Study cases



# Meta-model — Components

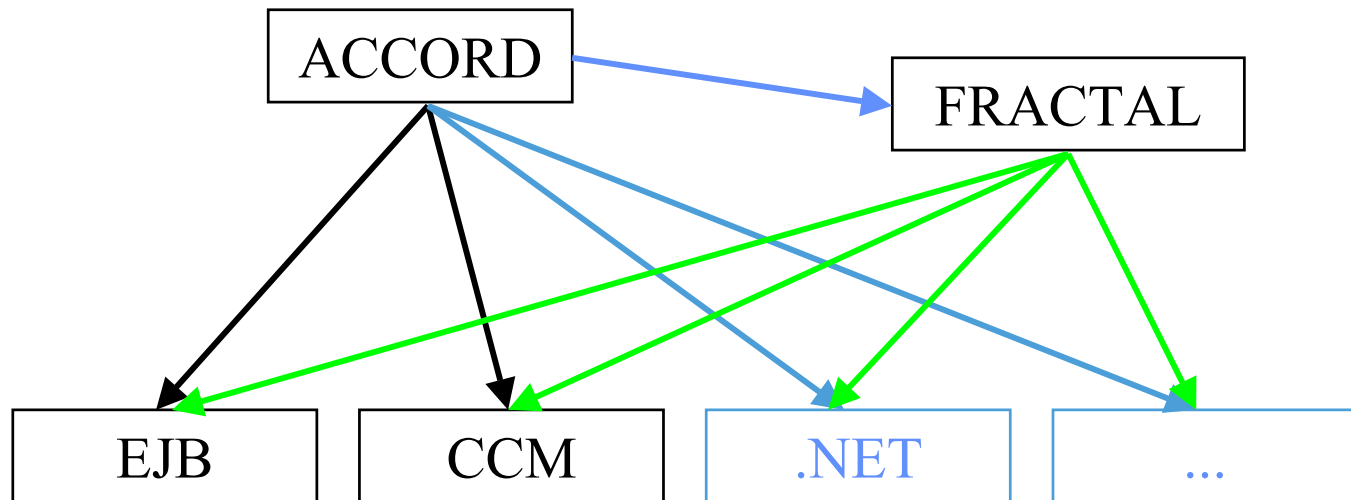


# Meta-model — Contracts



# ACCORD and Fractal

- ACCORD is design and architecture oriented
- Fractal is perhaps more realization oriented?



# Membrane and sharing

- A good abstraction of encapsulation (structure) and the control
- But is it good (aimed) at interaction control?
- We advocate connectors allowing more reusability
- Is the membrane a real frontier? What about the sharing of subcomponents?
- With sharing the membrane is a black box not really black (there is some implicit interaction). For example, what about suppression?



# Connectors

- Some connectors are components some are not (a CORBA connector)
- Useful to build entity that works on "untyped channel" (only describing some abstract general properties)
- To use such connectors (when reaching implementation level), we need proxies
- So they are good at conception level, but what about implementation?