

Component programming environments Using ProActive/fractal components

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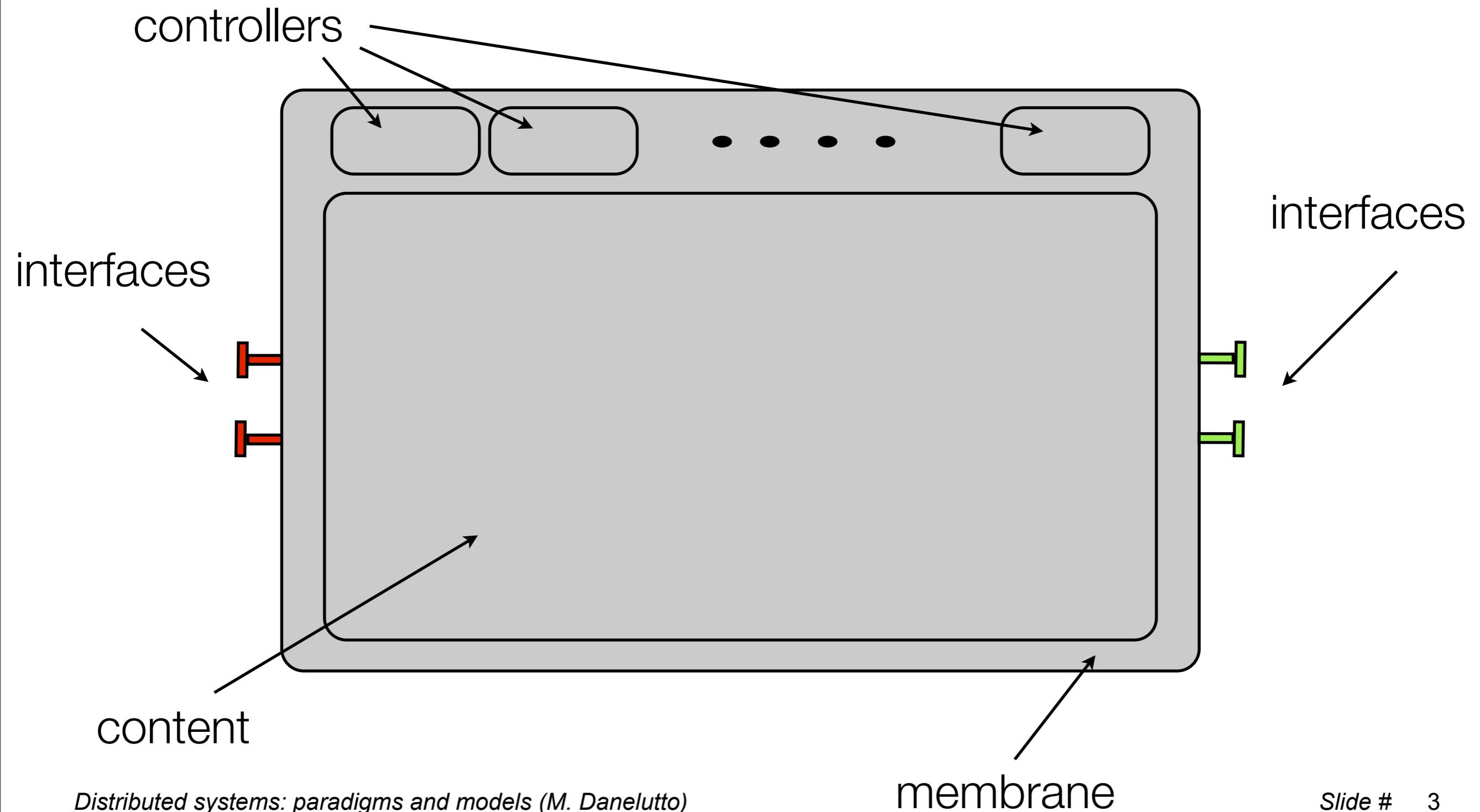




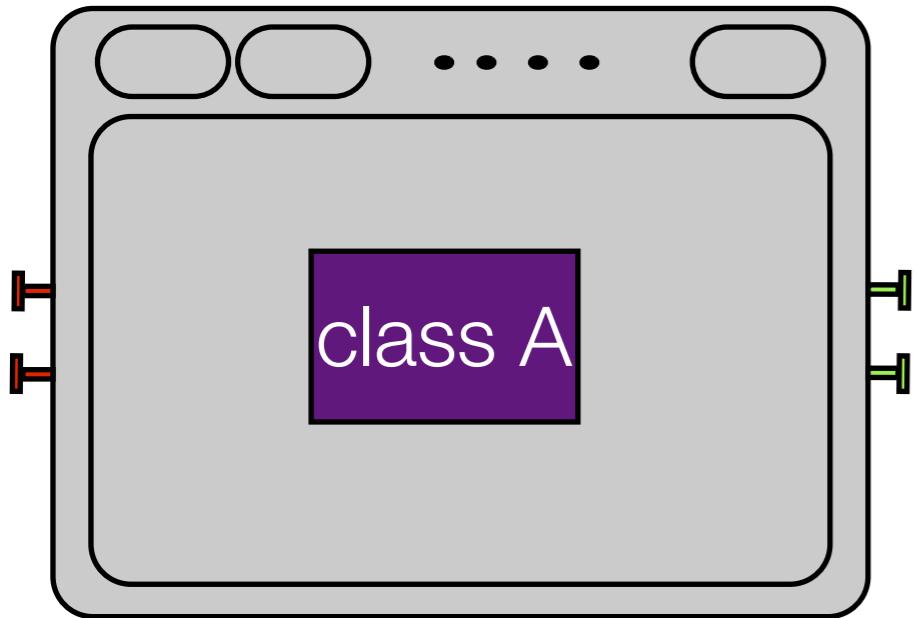
Outline

- **ProActive/fractal components**
 - *Structure*
 - *Main Elements*
- **Helloworld App**
- **Helloworlddual App**
- **Pipeline App**
- **PipelineWithMulticast App**

ProActive/fractal Components

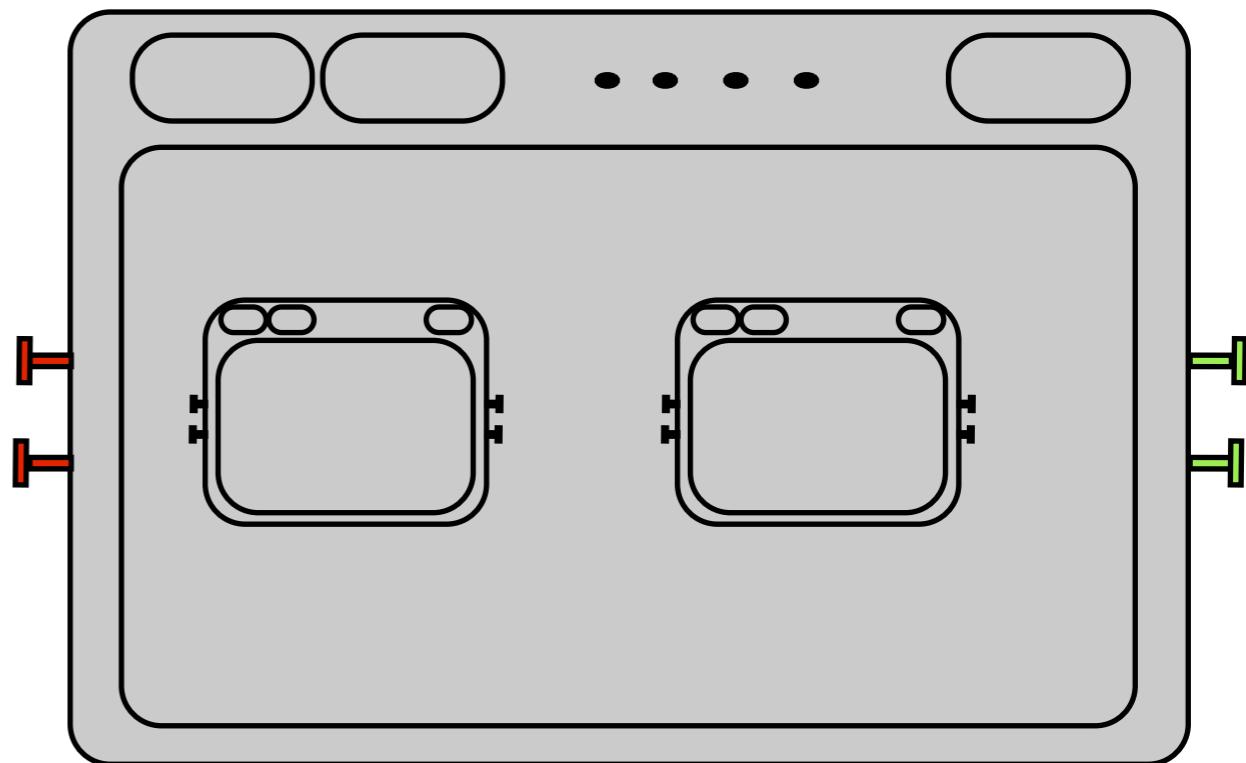


Component content



primitive component

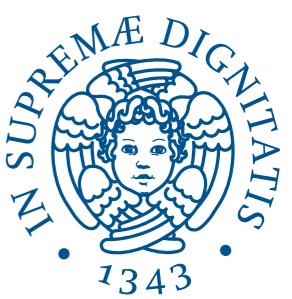
composite component





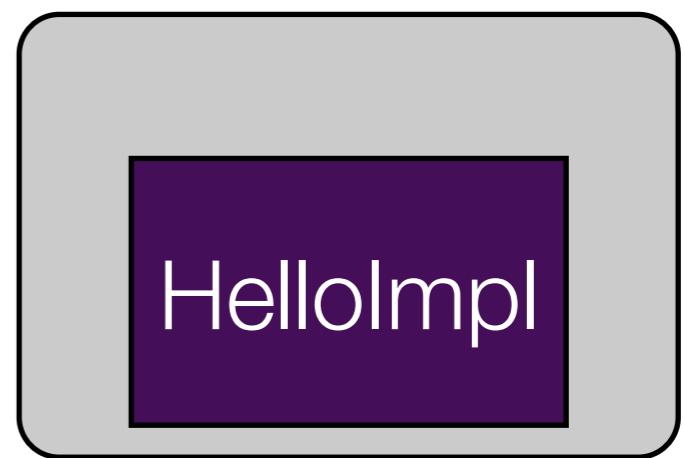
Main Elements from a developer POV

- **Interfaces have to be defined**
 - *when a component exposes a server interface T_1 it provides the functions defined in T_1*
 - *when a component exposes a client interface T_2 it makes use of (a subset of) functions defined in T_2*
- **Application Structure has to be designed**
- **Primitive Components code has to be developed**
 - *taking care of component interfaces types*
 - *taking care of controllers*



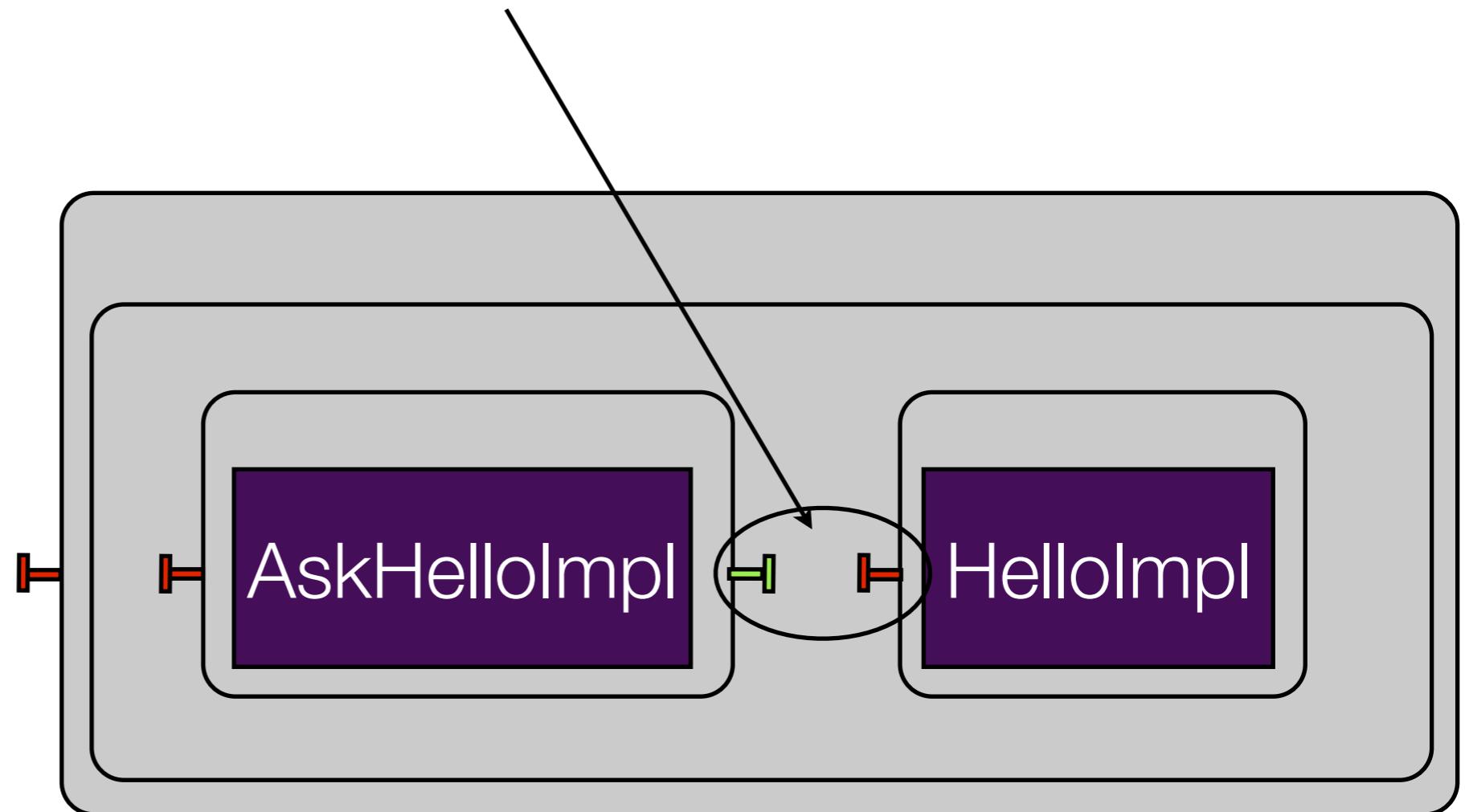
Let's start with helloworld app

- Just one server interface
- Very simple application: takes a string and returns the same string in an uppercase fashion
- Let me show it to you live!



Now we move to helloworlddual app

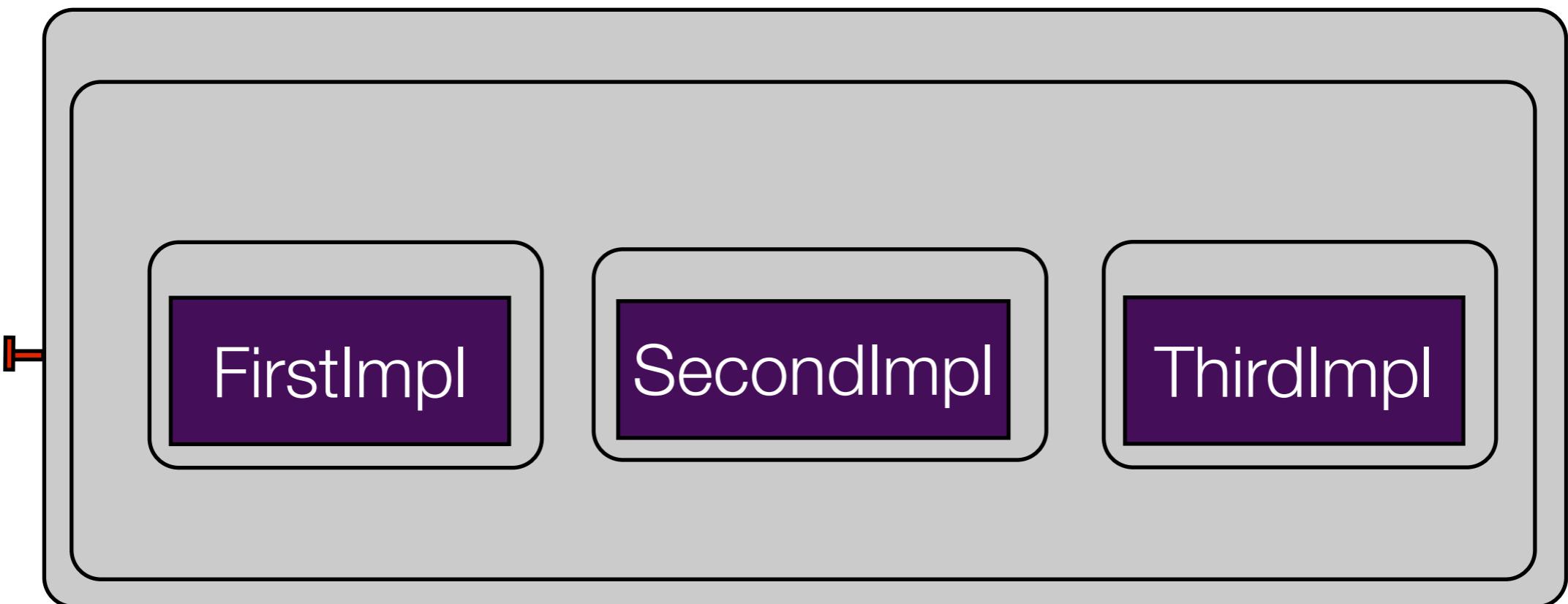
- Two components
 - now we have to manage their bindings



Pipeline App

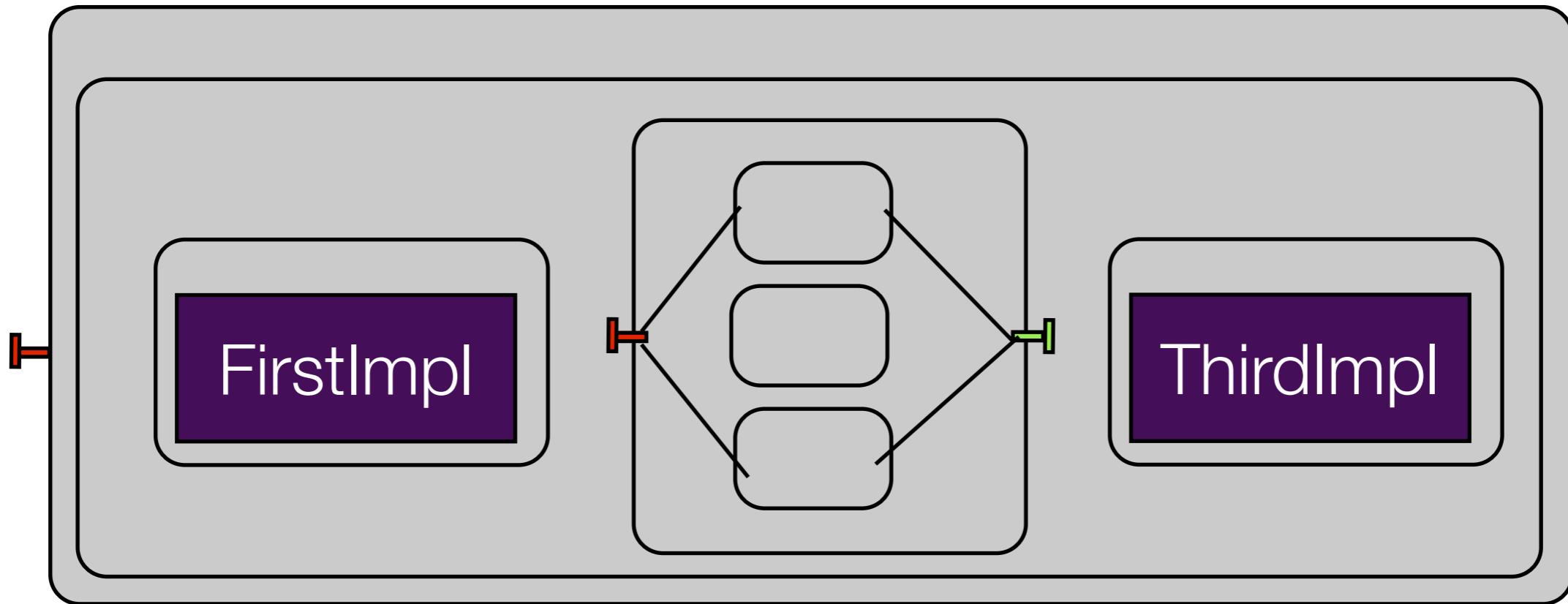
- Three components

- *three interfaces*
- *two bindings*



PipelineWithMulticast App

Now we have a component in the middle for handling multicast communications





Questions ?

