

XINS


A brief introduction

Target audience:



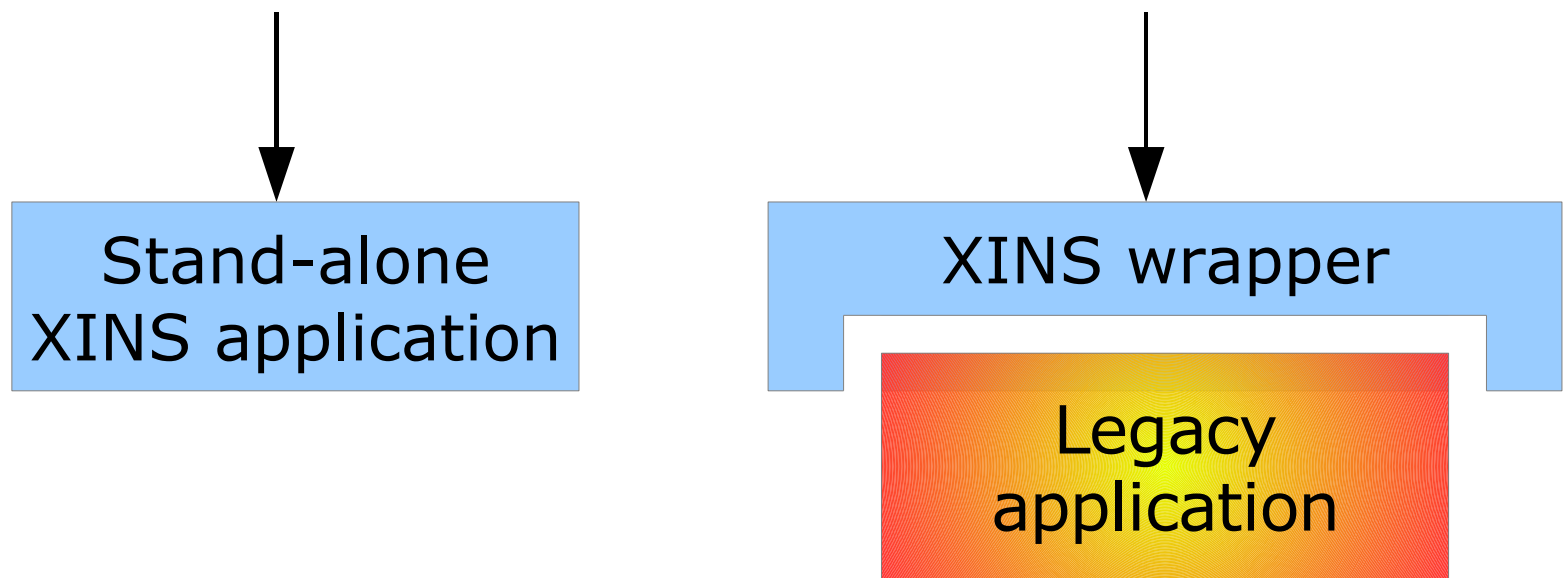
- management
- architects
- analysts

Scope

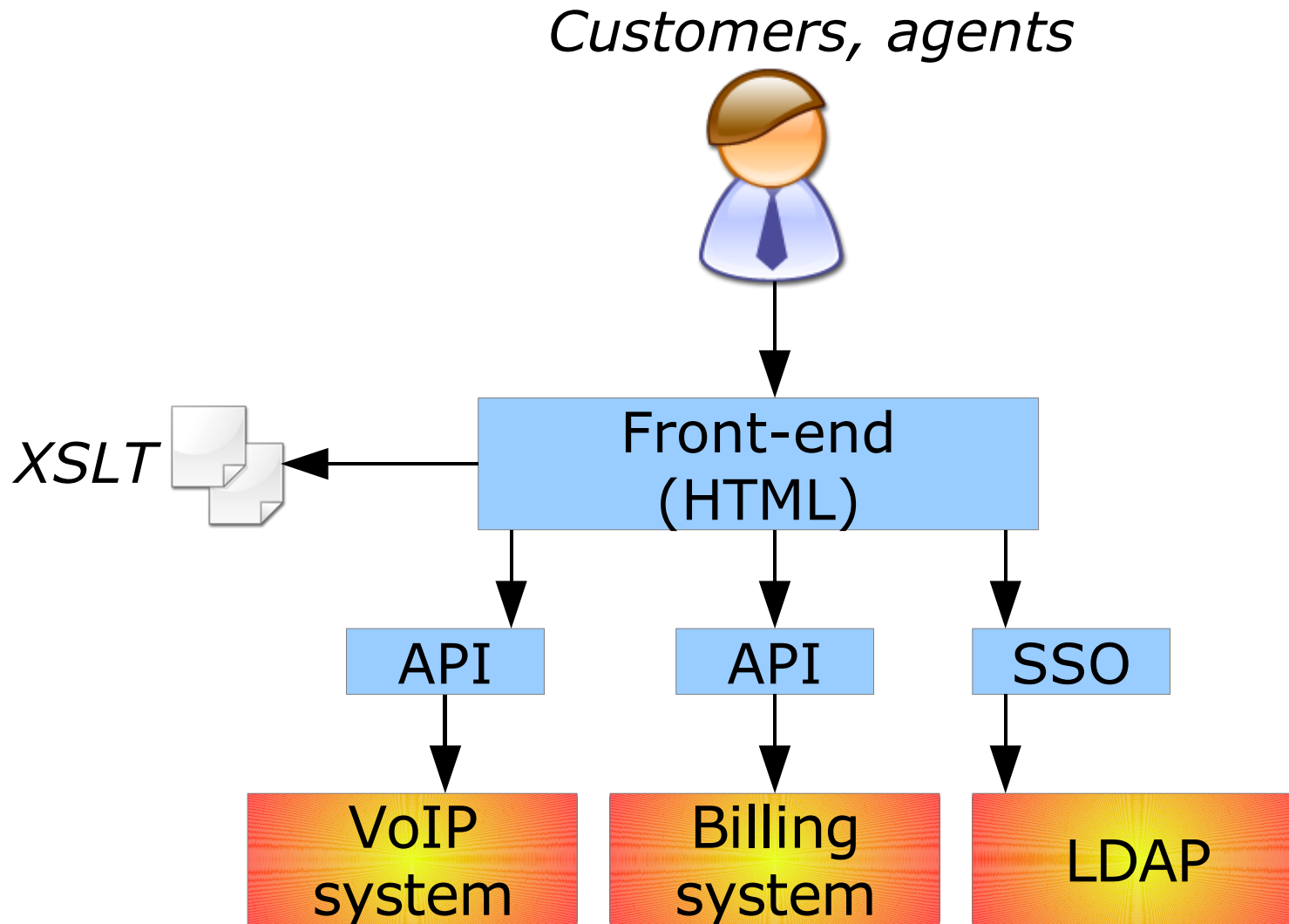
- Framework 
- Domain: Distributed applications
- Environment: HTTP networks
- Programming language: Java
- Natural languages: English, French

Applicability

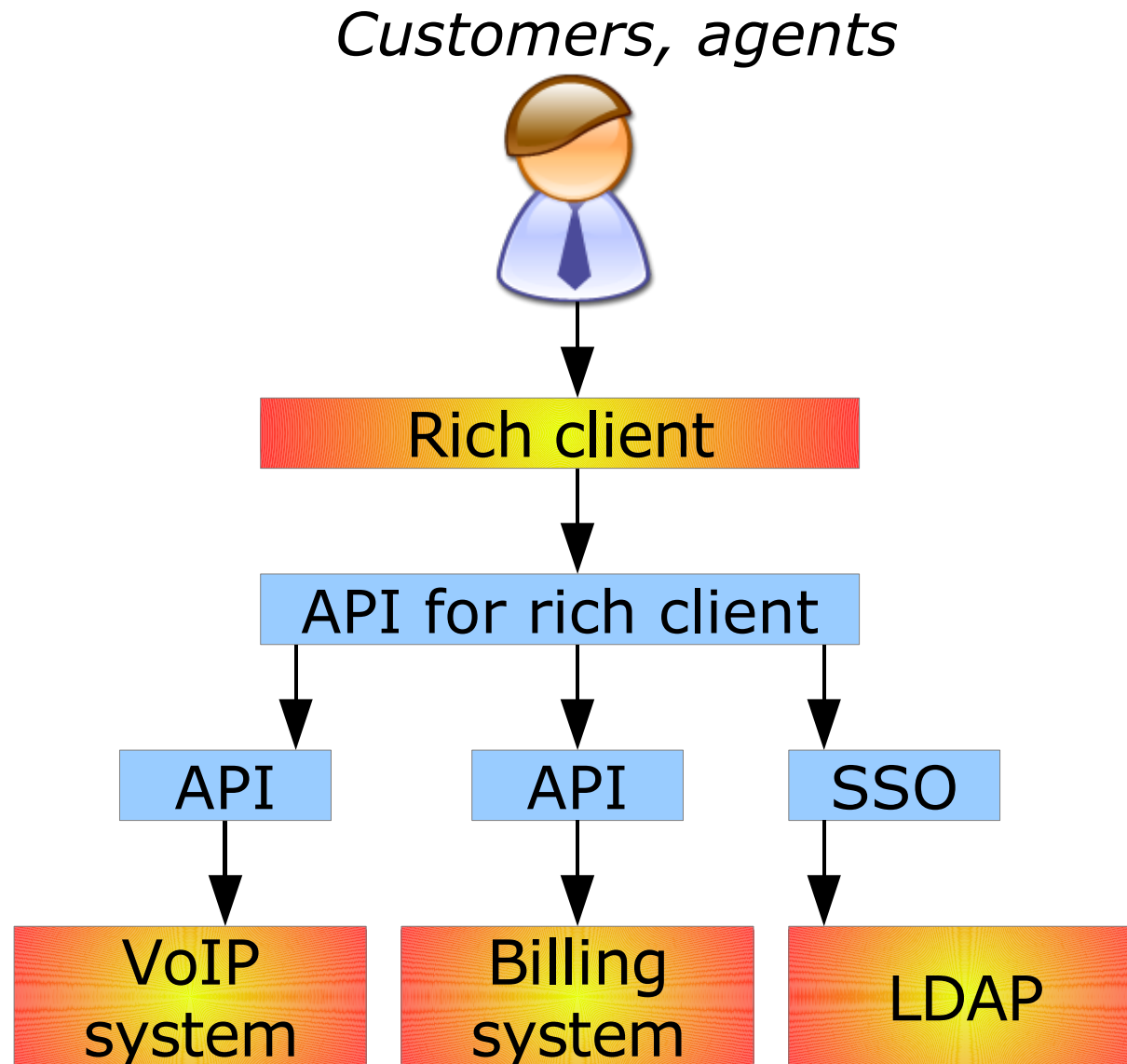
- Develop stand-alone applications
- Encapsulate existing ones



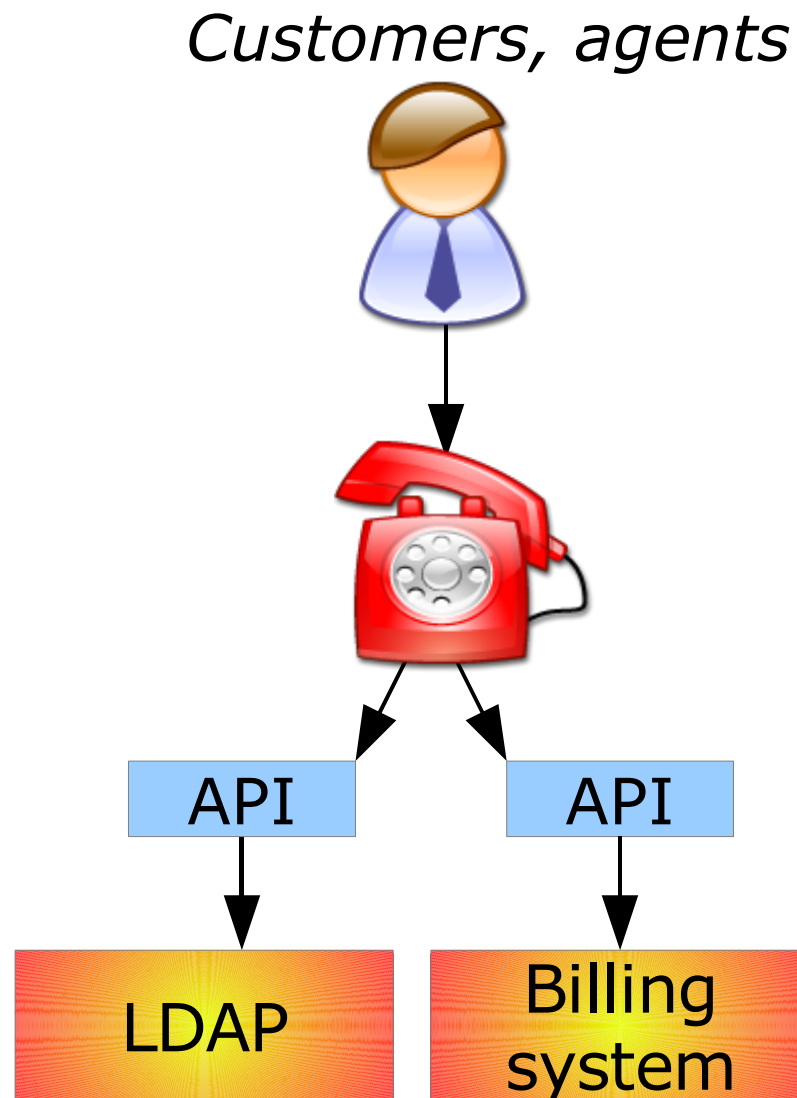
How is XINS applied? (1)



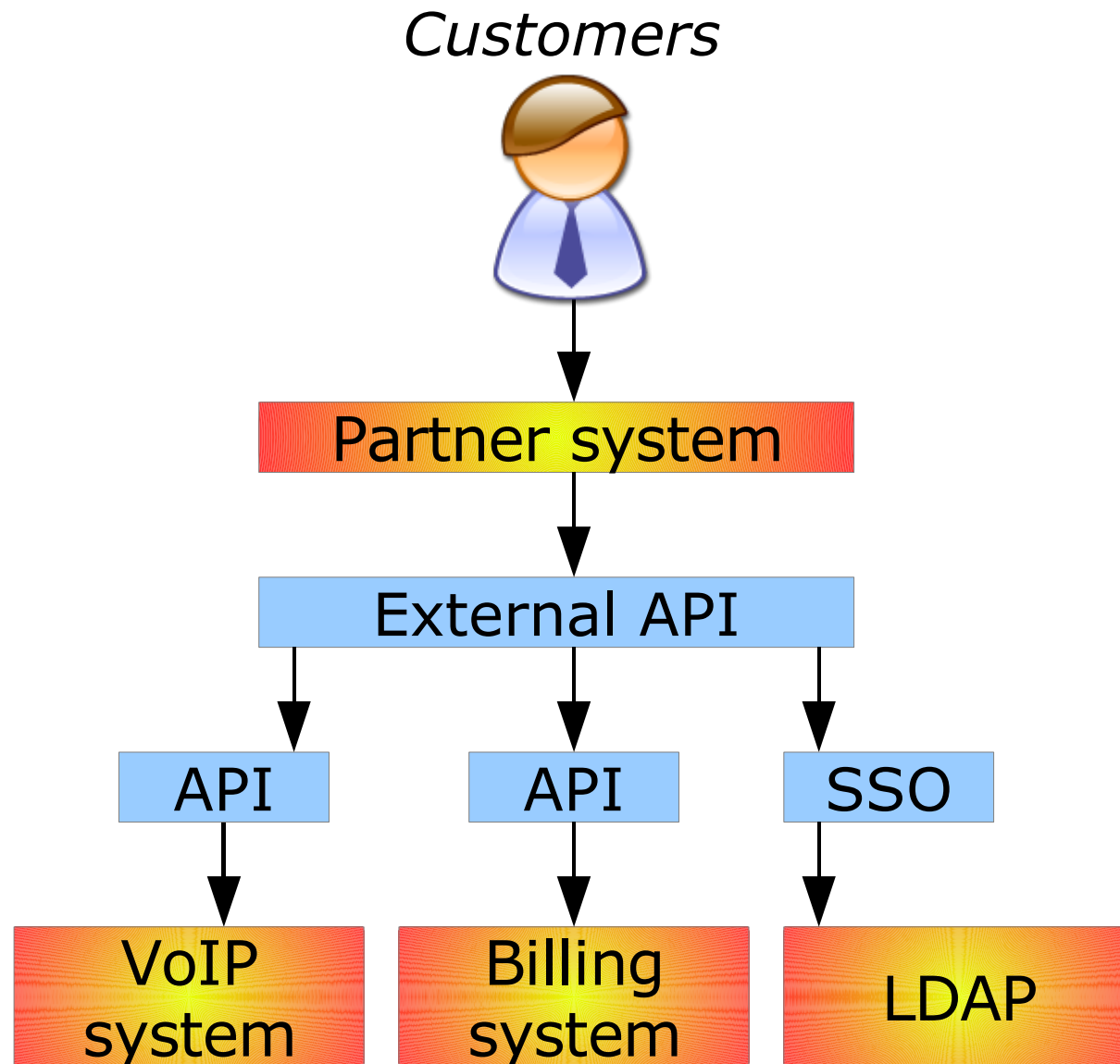
How is XINS applied? (2)



How is XINS applied? (3)



How is XINS applied? (4)



XINS goals

- ♥ Easy to develop distributed applications
 - easy to understand
 - good time to market
 - avoid bugs
- ♥ Easy to monitor and operate
- ♥ Easy to test
- ♥ Consistent
- ♥ High quality
- ♥ Stable

DOD



Definition-oriented development:

- Focus on definitions, not on code
- Definitions are mandatory
- Definitions are leading
- First definitions, then coding

Advantages of DOD

- ♥ Easy to re-use, e.g. as:
 - runtime configuration for tools
- ♥ Easy to transform, e.g. to:
 - behavior (validation, business logic, etc.)
 - documentation
 - tools or tool configurations (test forms, etc.)
 - other kinds of definitions (WSDL, etc.)

DOD with XINS

- Write some definitions in XML, including examples
- From that, generate:
 - Documentation (HTML, ODF)
 - Server-side: Sandbox- and template code
 - Client-side: Calling code
 - Stubs
 - Automated tests

Coding with XINS

- Java
- Semantic equivalence
- Compile-time error detection
- Run-time error detection
- Extensive logging

Consistent approach

Provides/allows unified approach to:

- coding
- logging
- testing
- management, monitoring
- packaging
- error detection
- etc.

Separation of concerns

Separate:

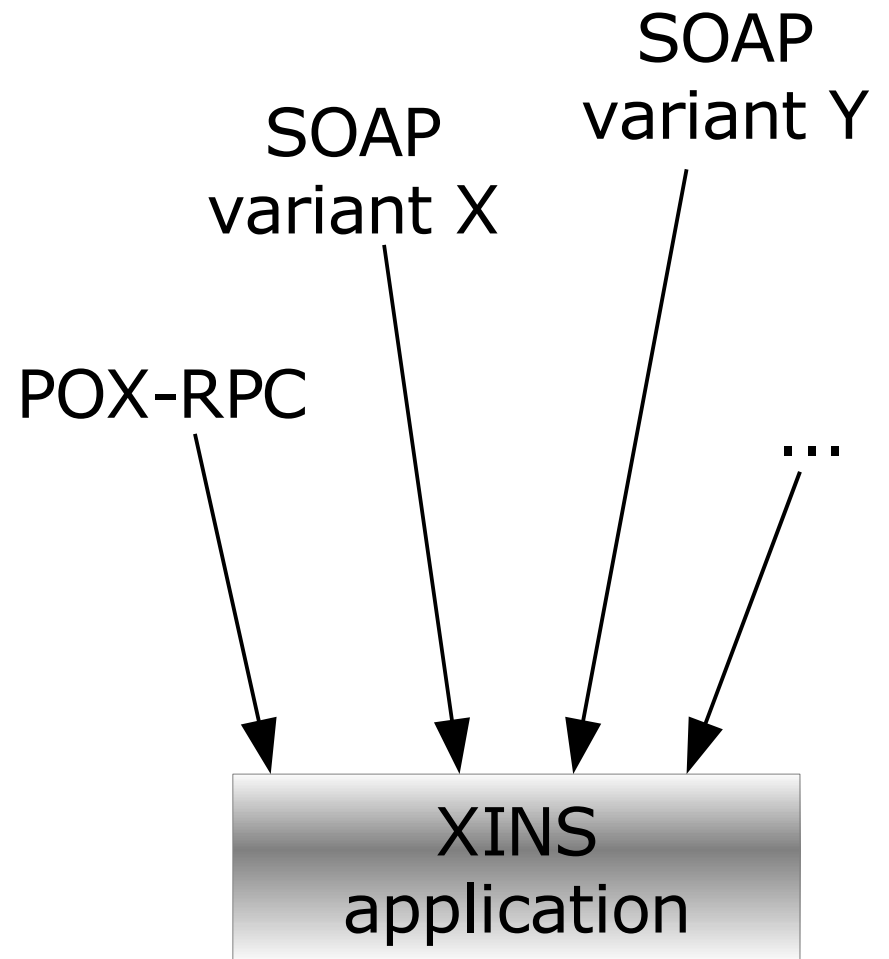
- specification and implementation
- data and presentation
- logging, code and translations

Protocol independence

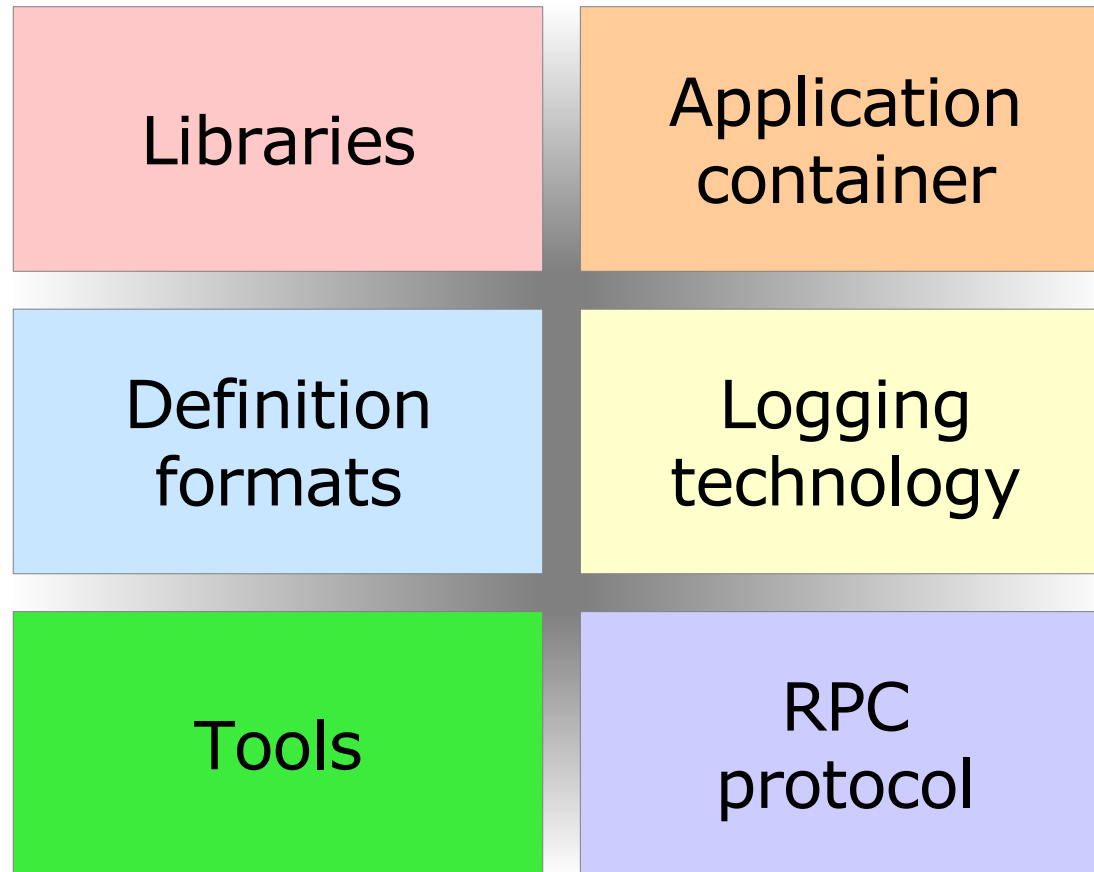
Out-of the box,
XINS supports:

- XML-RPC
- SOAP
- POX-RPC
- XSLT

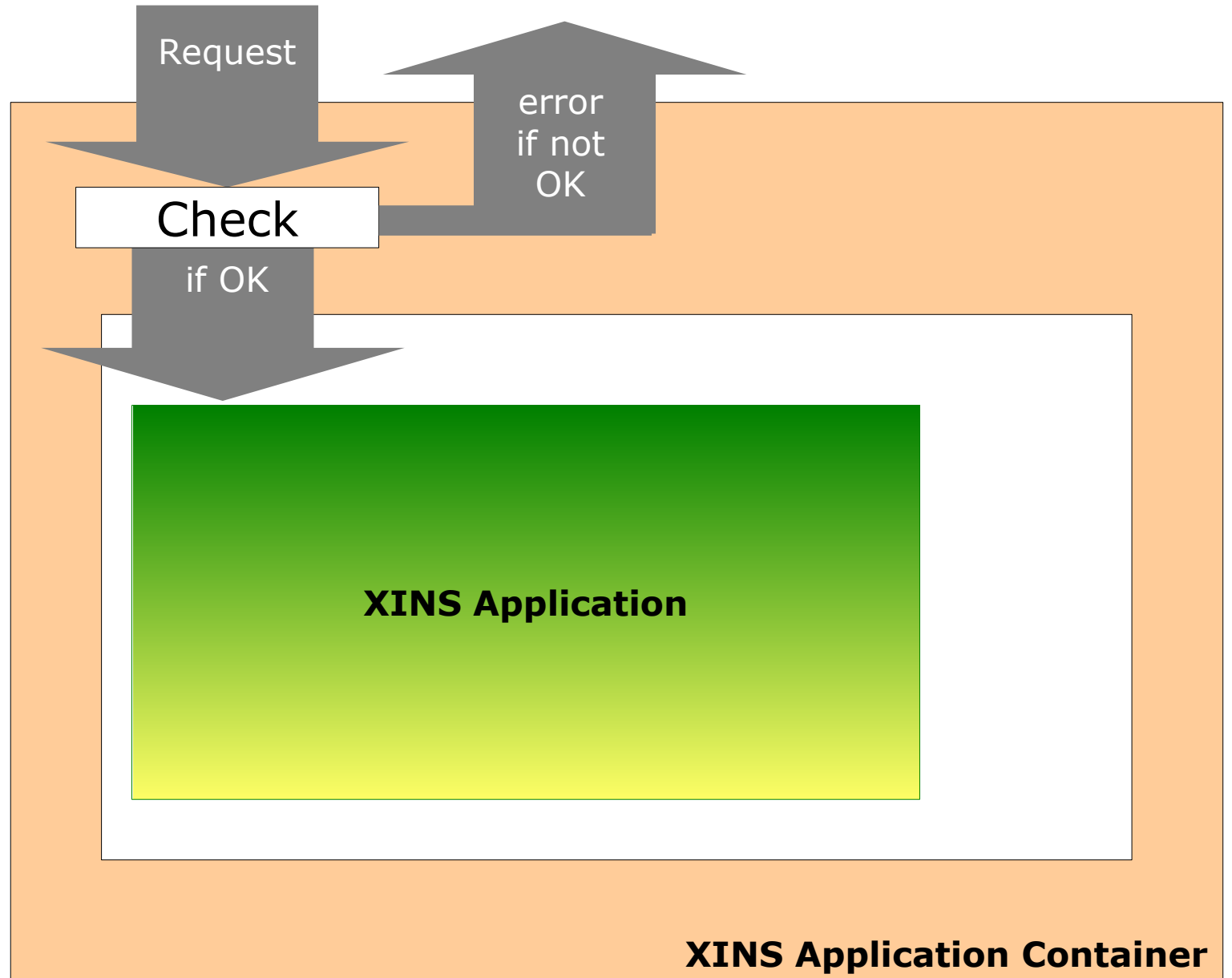
- Easy to add custom protocols



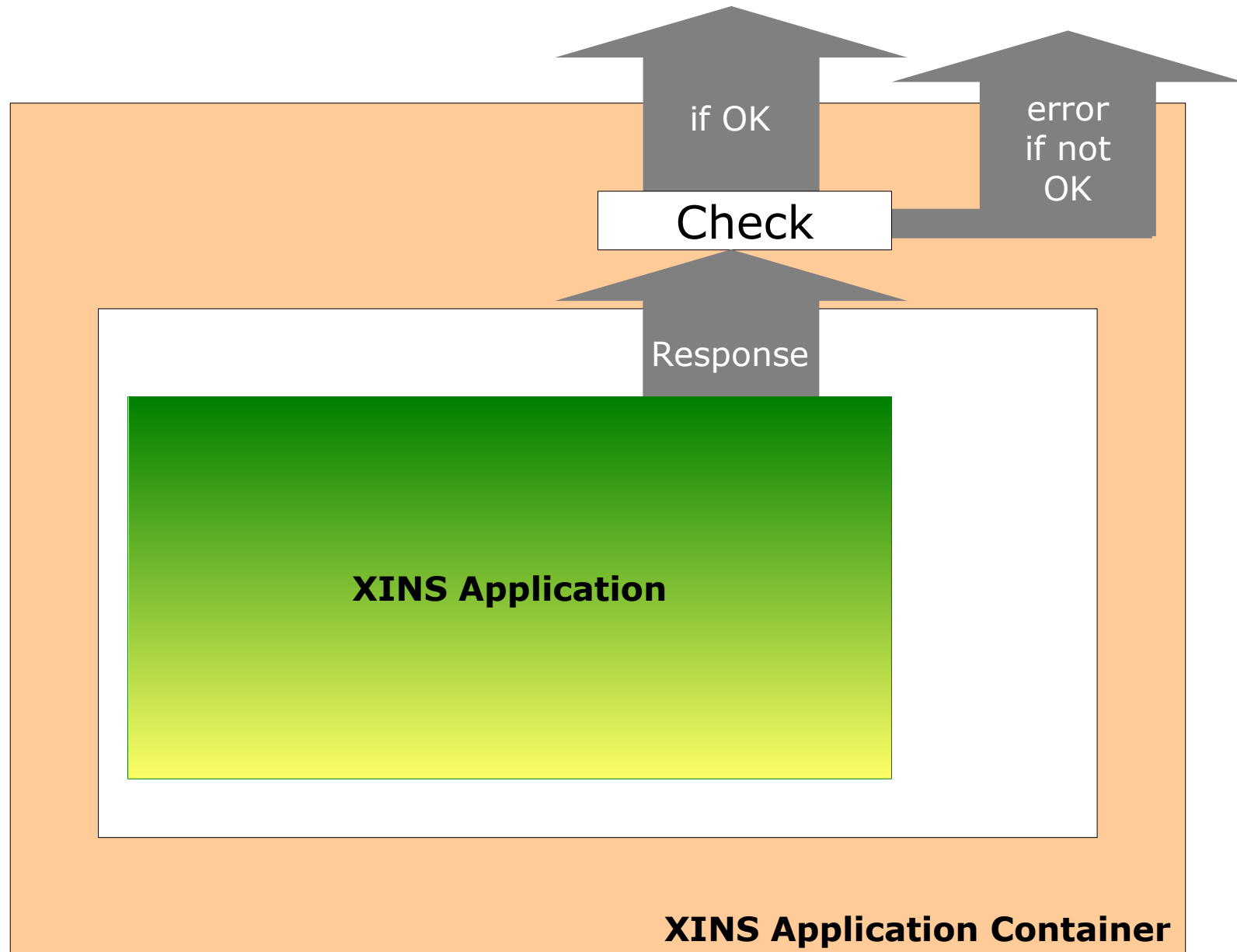
XINS components



Sandbox: Input validation



Sandbox: Output validation



Meta functions

- Monitoring:
 - "are you alive?"
 - live performance statistics
- Remote management:
 - En-/disable functionality
- Checking
 - Settings
 - Check ACLs

Brief history

Apr 2002 : Project initiated

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Nov 2005 : 1.3.0

May 2006 : 1.4.0

- Used in production since end of 2002

What does XINS bring?

- Quicker to implement
- Less bugs
- Easier to detect and solve issues
- Easier to manage/operate