



Creating A Single Global Electronic Market

ebXML

Revolutionizing e-Commerce Using XML

A personal view – Internal Use Only

Internal Presentation to Sun XML Summit

Menlo Park, December 2000

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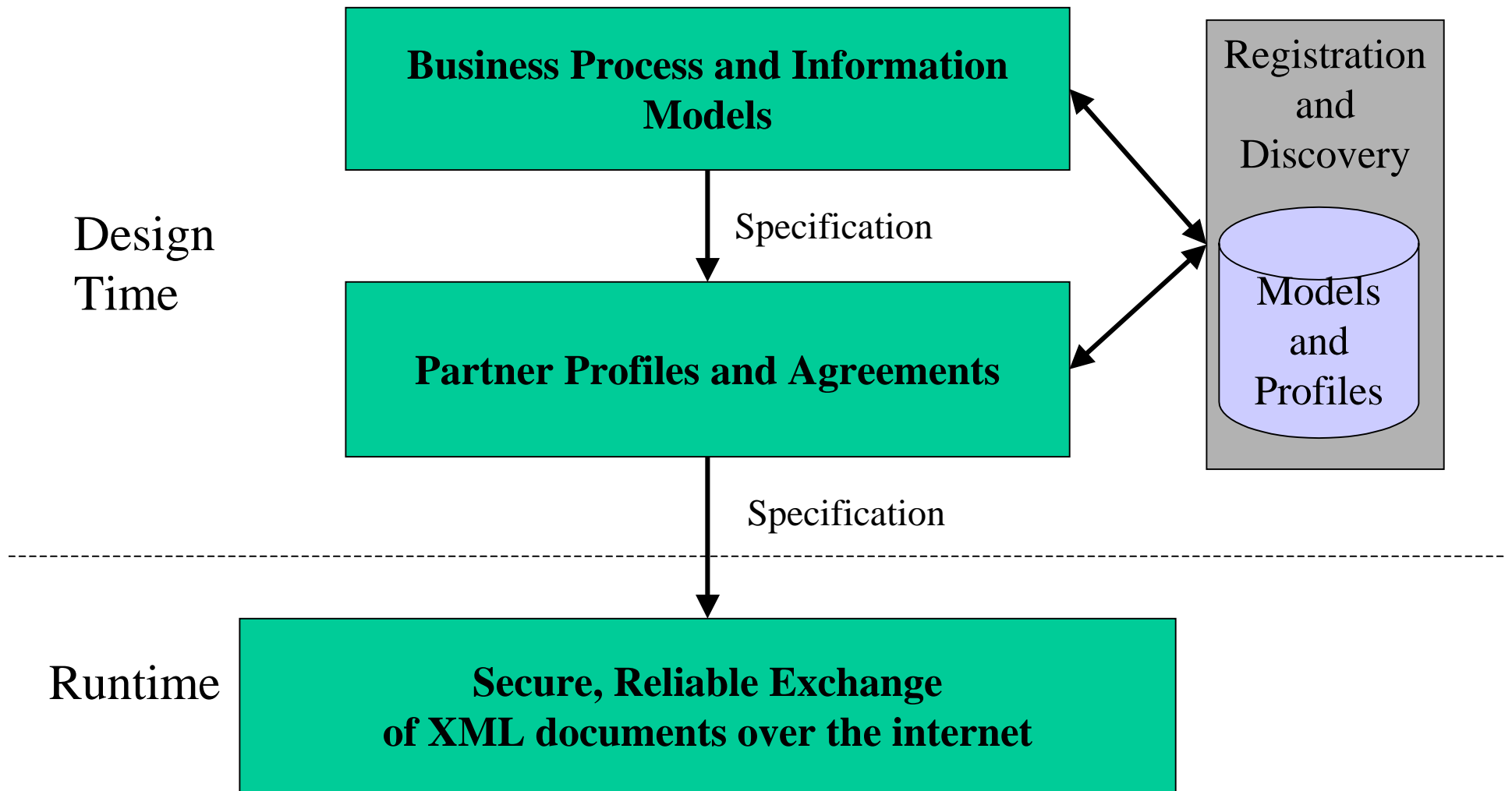


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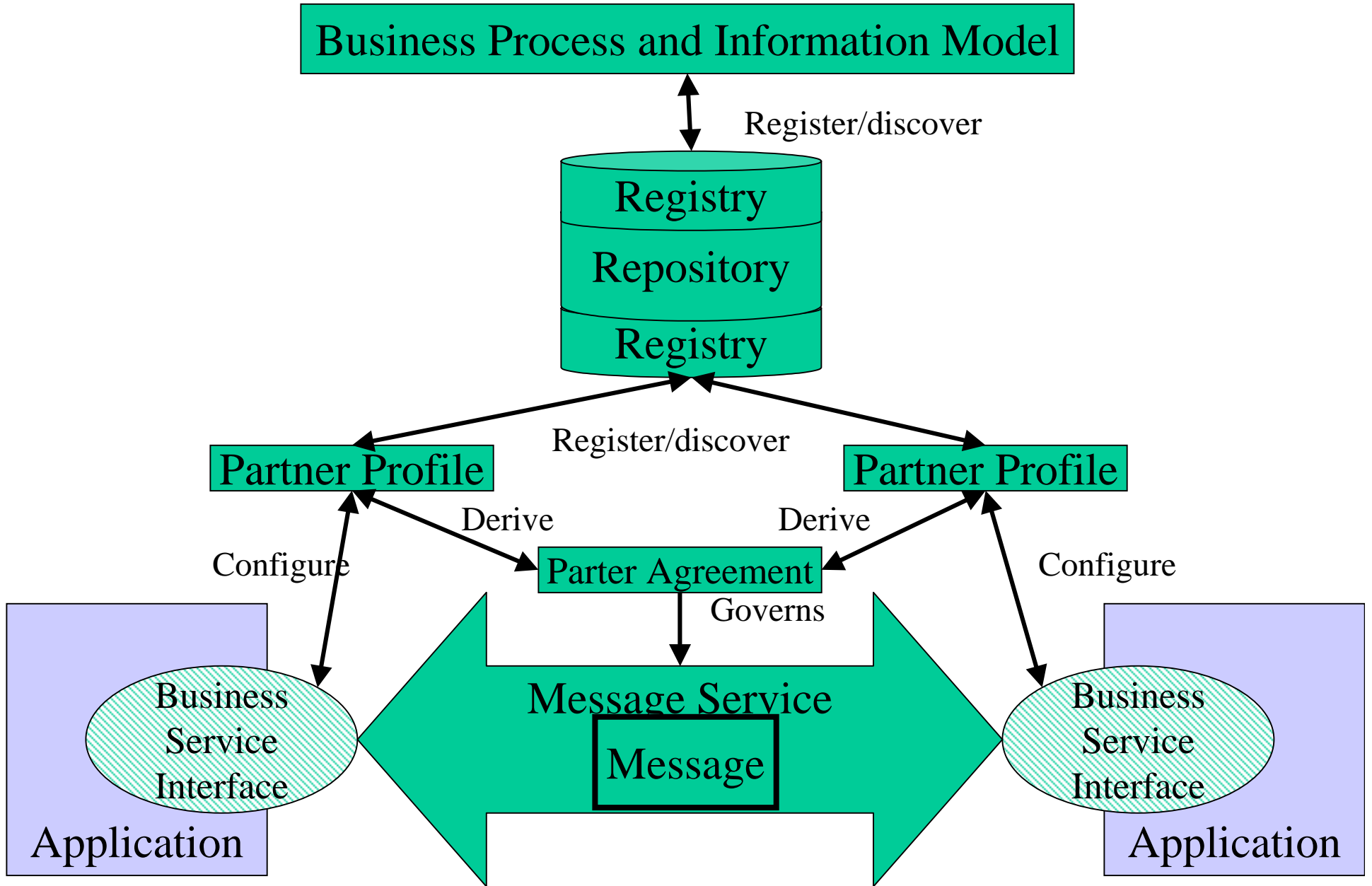
ebXML vision

- A global electronic market place where enterprises of any size, anywhere can:
 - Find each other electronically
 - Conduct business through the exchange of XML based messages
 - Using standard message structures
 - According to standard business process sequences
 - With clear business semantics
 - According to standard or mutually agreed trading partner agreements
 - Using off the shelf purchased business applications

ebXML high level architecture



Overall ebXML Architecture





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Main ebXML concepts

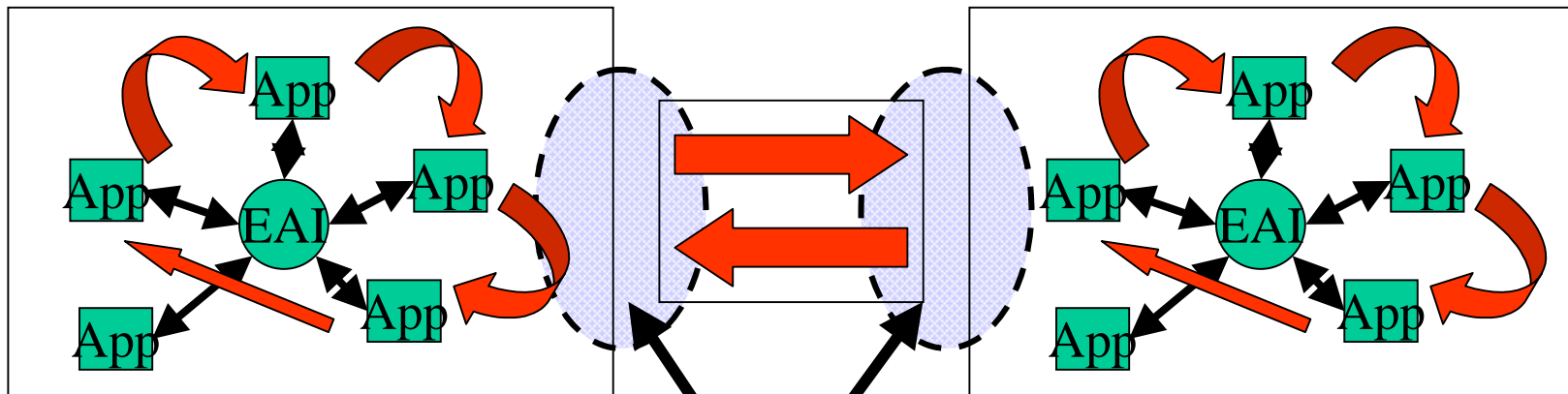
- Business Messages – Expressed in XML
- Business Processes – Defined in UML, Expressed in XML
- Business Service Interface – Handles one role in a business process – Expressed in XML
- Trading Partner Agreement – Specifies protocols properties required for two specific business service interfaces to talk to each other – Expressed in XML
- Transport and Routing Layer – Moves the actual XML data between business service interfaces

The integration challenge

EAI
integration

b2b
integration

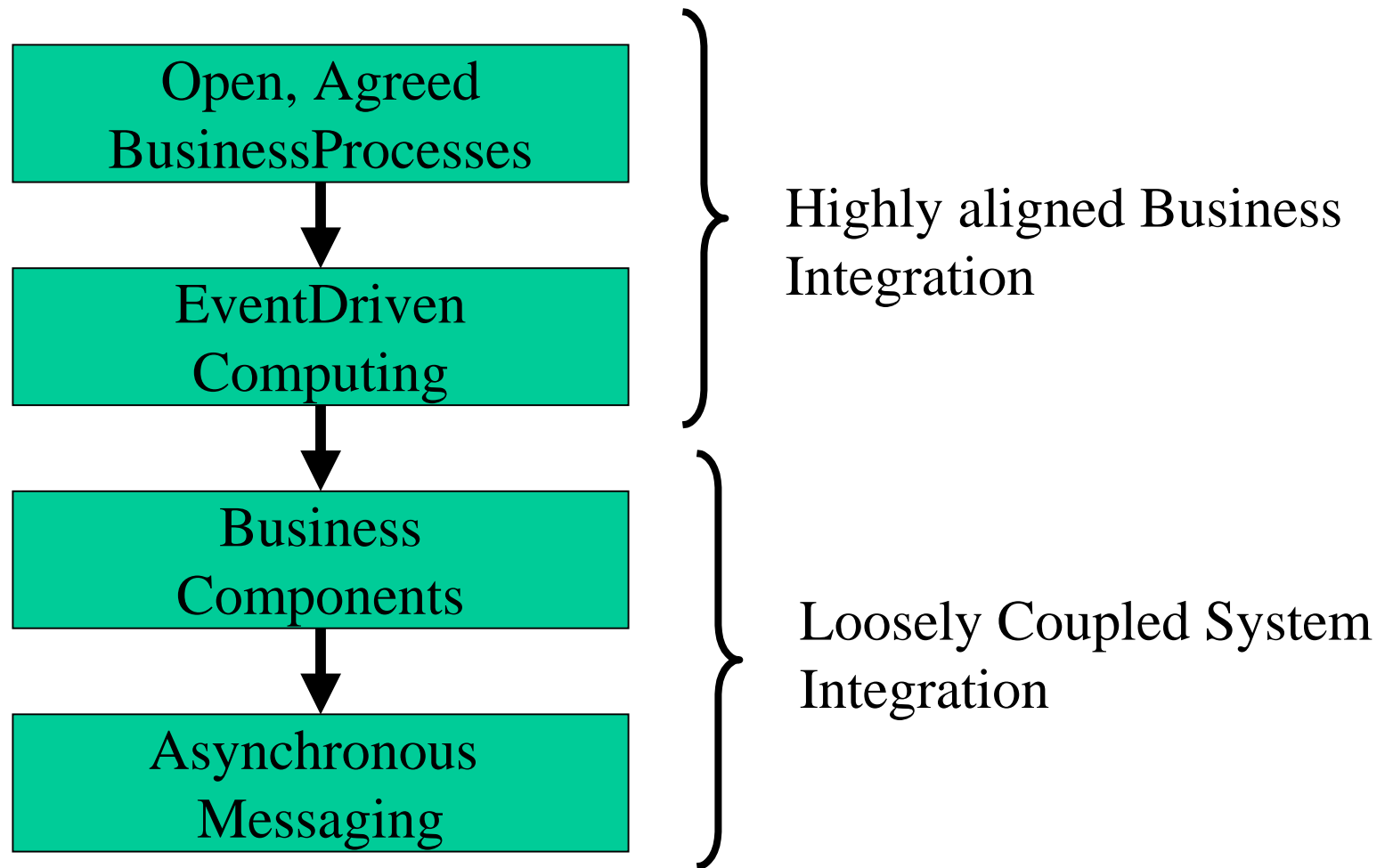
EAI
integration



b2b to EAI integration

And the boundaries keep moving

The Integration Solution



My version of the ebXML vision

- Bringing EDI out of the dark ages
- Bringing Business Documents alive as context based XML
- Out of the box Business Interoperability through XML base Business Process definitions
- Electronic dating for Business
- Managing complex supply chains
- Supporting .com business models you ain't even seen yet
- Web services for business
- A new hub for business computing ML's
- A unifying b2b architecture
- Make BizTalk irrelevant

Bringing EDI out of the dark ages

- VAN-free, use the Internet
- Secure, reliable Transport
- XML payload
- Multipart Mime, send the X-ray along
- Security
- Provide Business Process Context
- Provide Context Based Content

Bringing Business Documents alive as “Context based XML”

- Dynamic, context based composition
- Dynamic, context based interpretation
- Your event, my action, or my statistic
- State of the collaboration

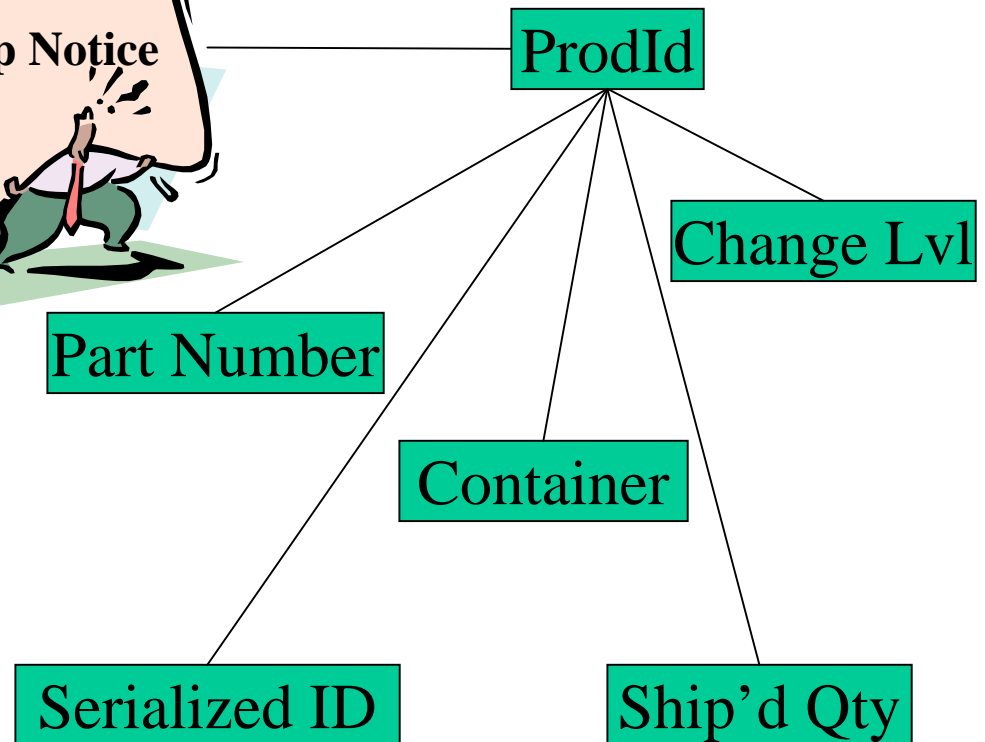
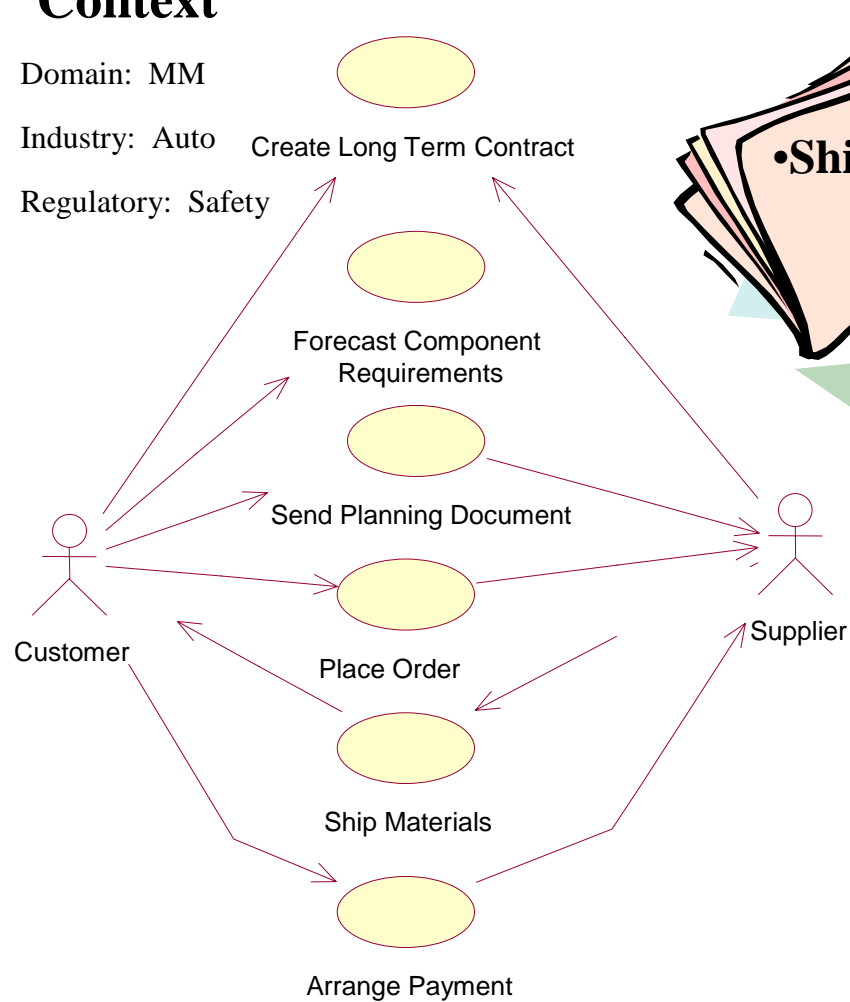
Context based Information Model

Context

Domain: MM

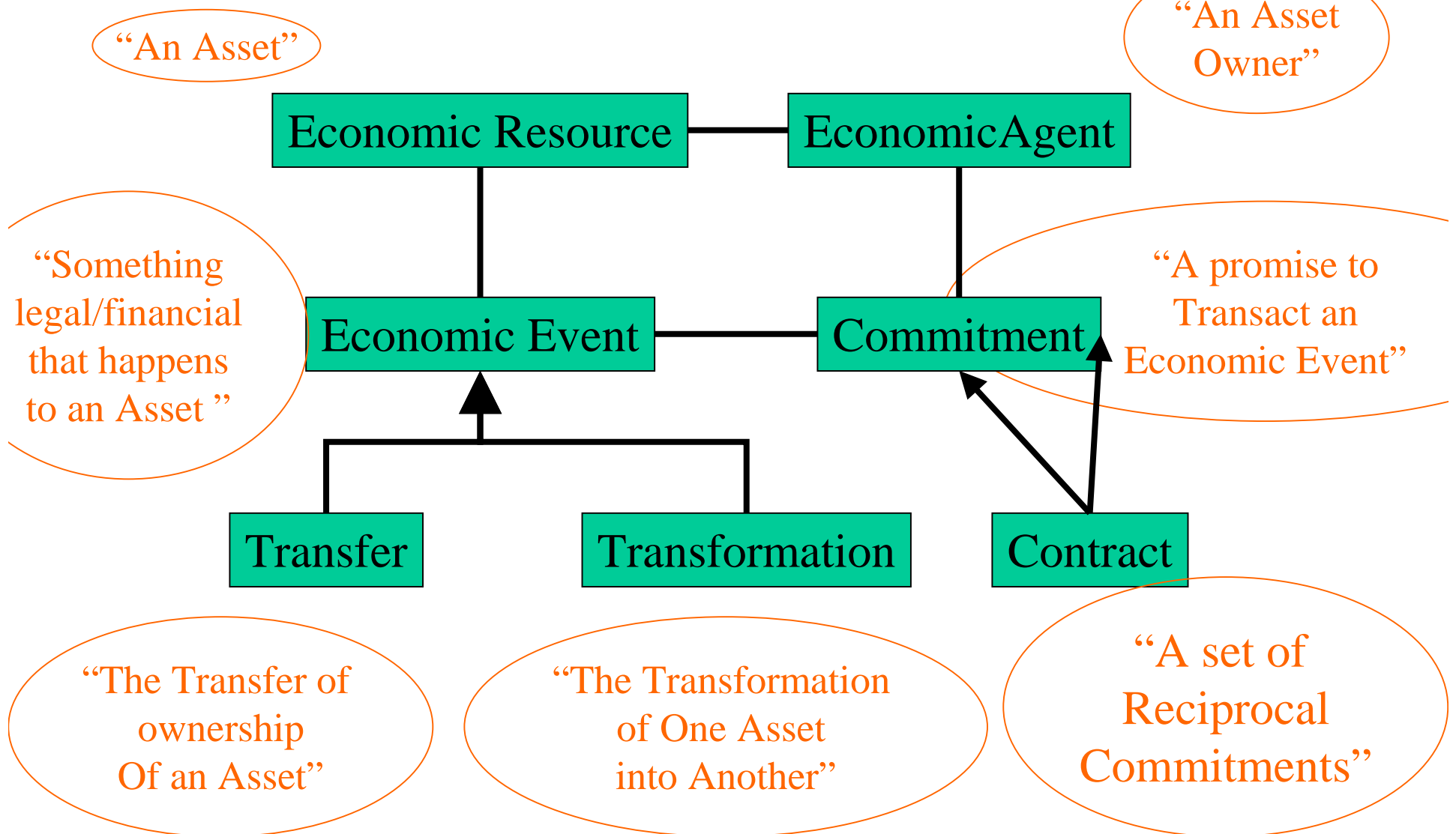
Industry: Auto

Regulatory: Safety

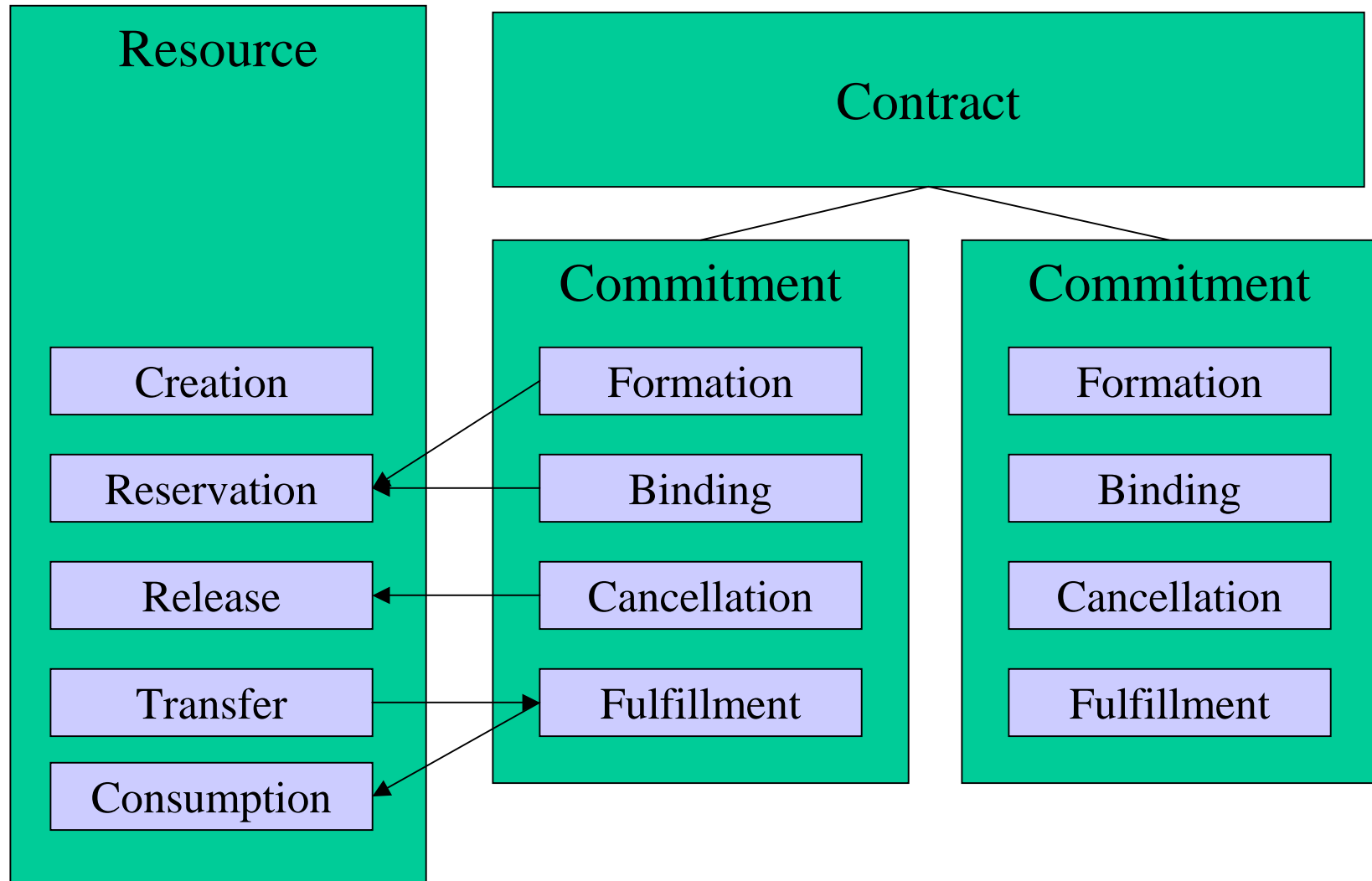


Business Interoperability

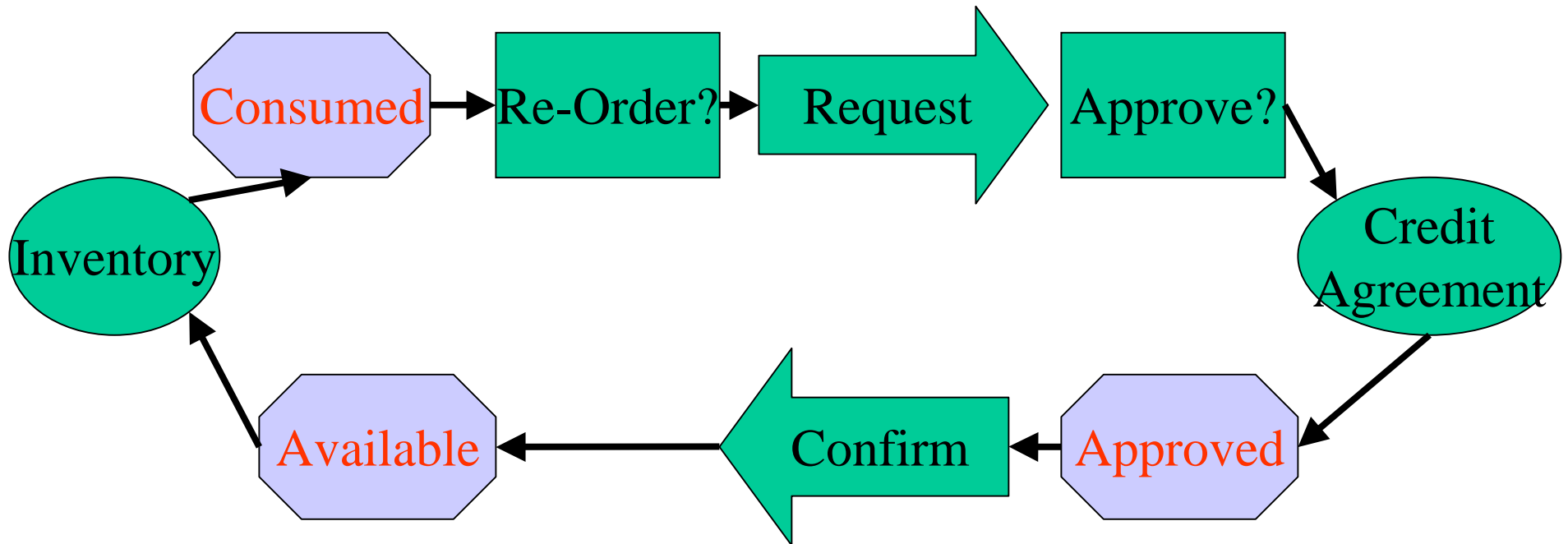
Basic REA Model (conceptual)



Events happen to Resources and Commitments



Event based Business Process Definition

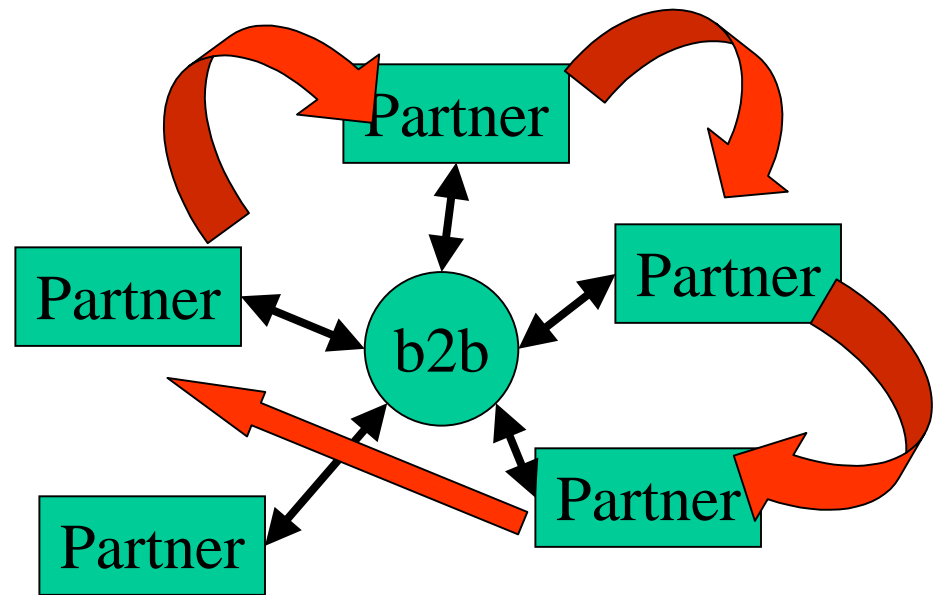


Electronic dating for Business

- Discover Business Processes in your field
- Search on classification parameters like geography, industry, product category, regulatory compliance
- Decide which role you want to play
- Define your profile
- Auto-match your profile with mirror image profiles
- Merge two profiles to an agreement
- Fill in the agreement
- Do business

Managing complex supply chains

- Right now binary collaboration
- Synthesize into multi party
- The BSI stack
 - Binary Transaction management
 - Multi Party Collaboration management
- State of the collaboration



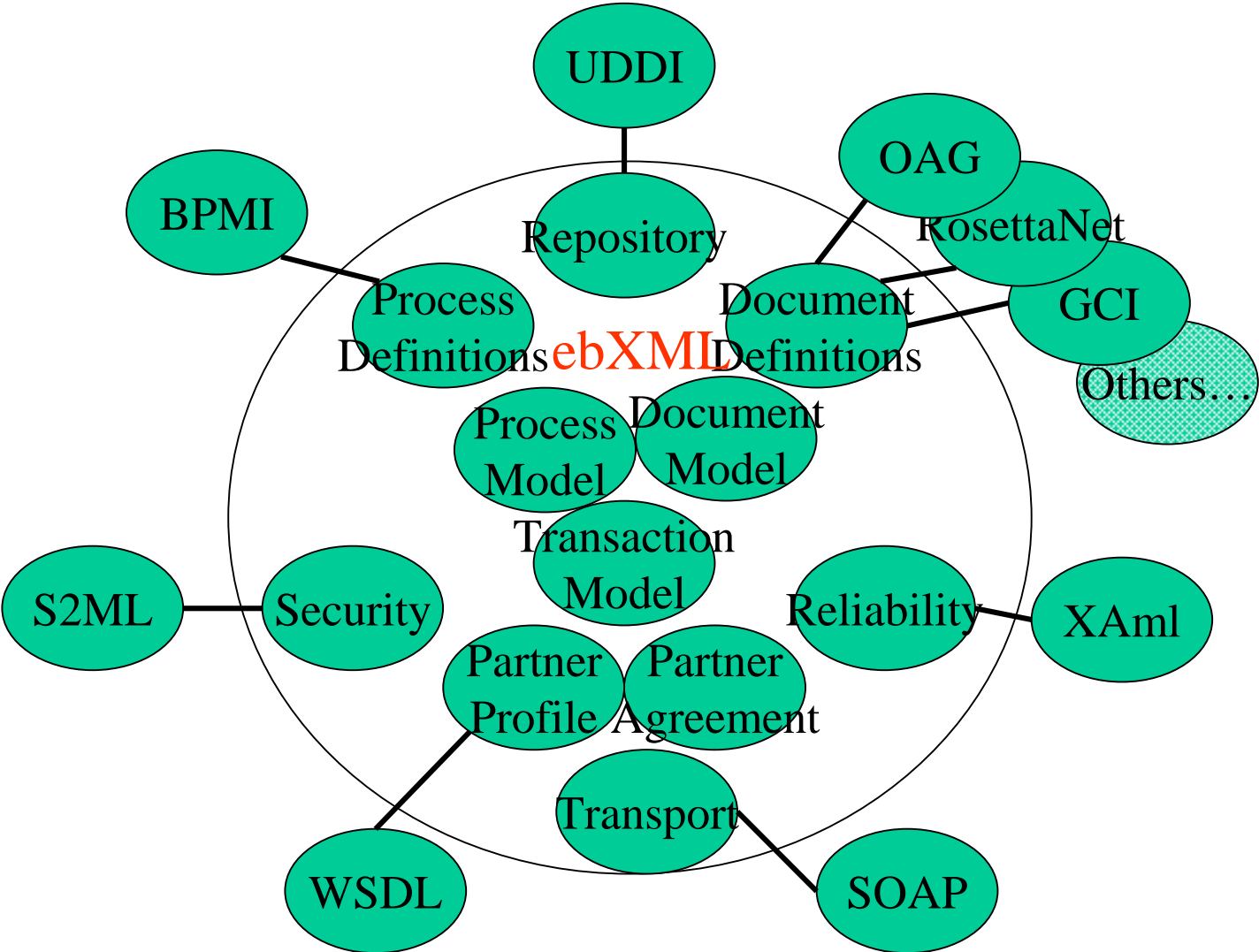
Supporting .com business models you ain't even seen yet

- Web services are registered
- Web services are discoverable
- Make your own web service by cobbling together anyone else's web services
- Subcontracting on the fly
- Recursive composition
- Publish and subscribe

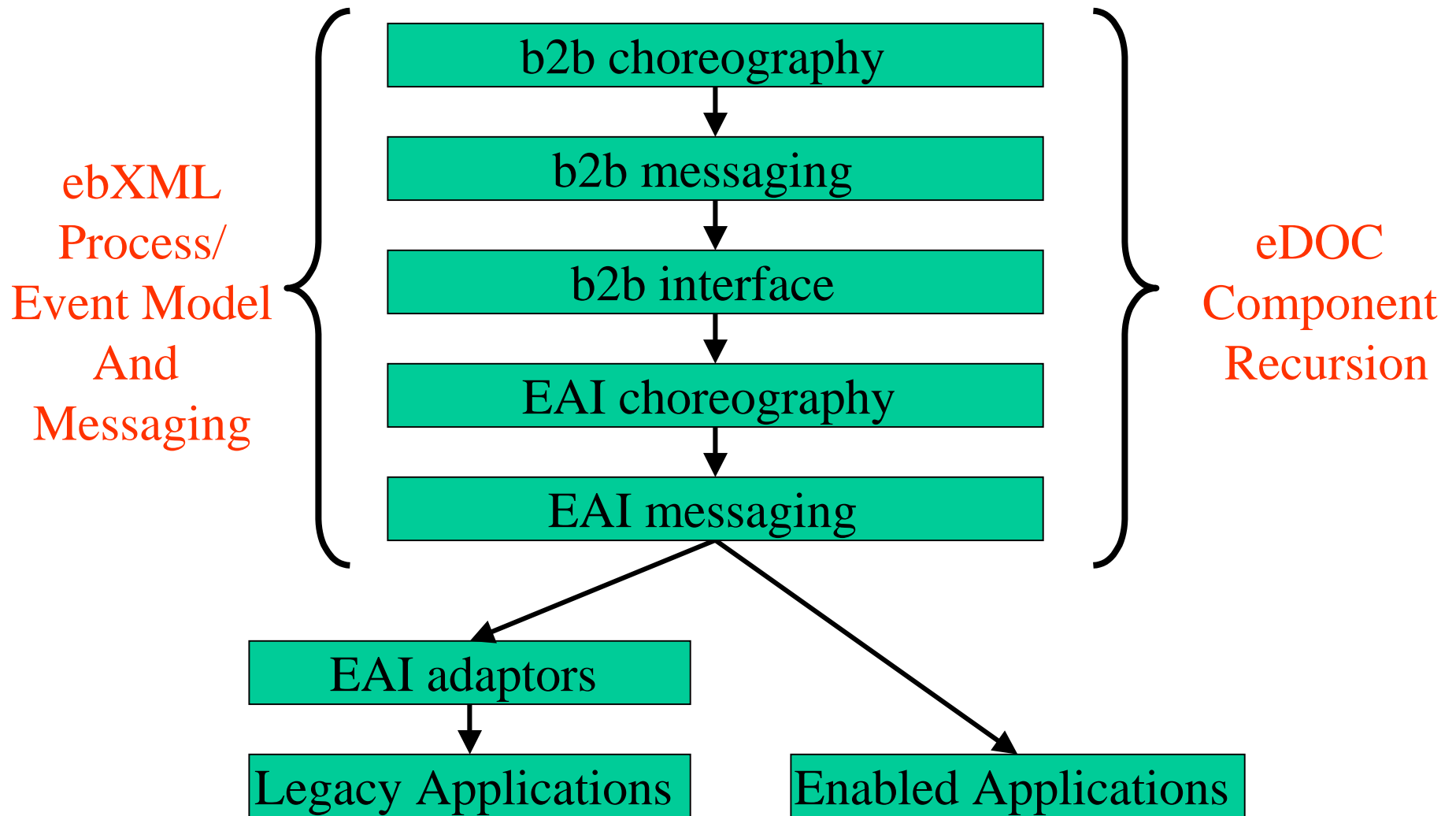
ebXML web-services for Business

- A partner profile is a web service interface
 - It tells you what you can do
 - What sequence you can do it in
 - What the technical protocol is
 - What information you supply
 - What information you get back
- An ebXML web-service can be dynamically and intelligently configured based on context
- ebXML services can be recursively composed into higher level services - .com opportunities
- ebXML web services are Production Strength

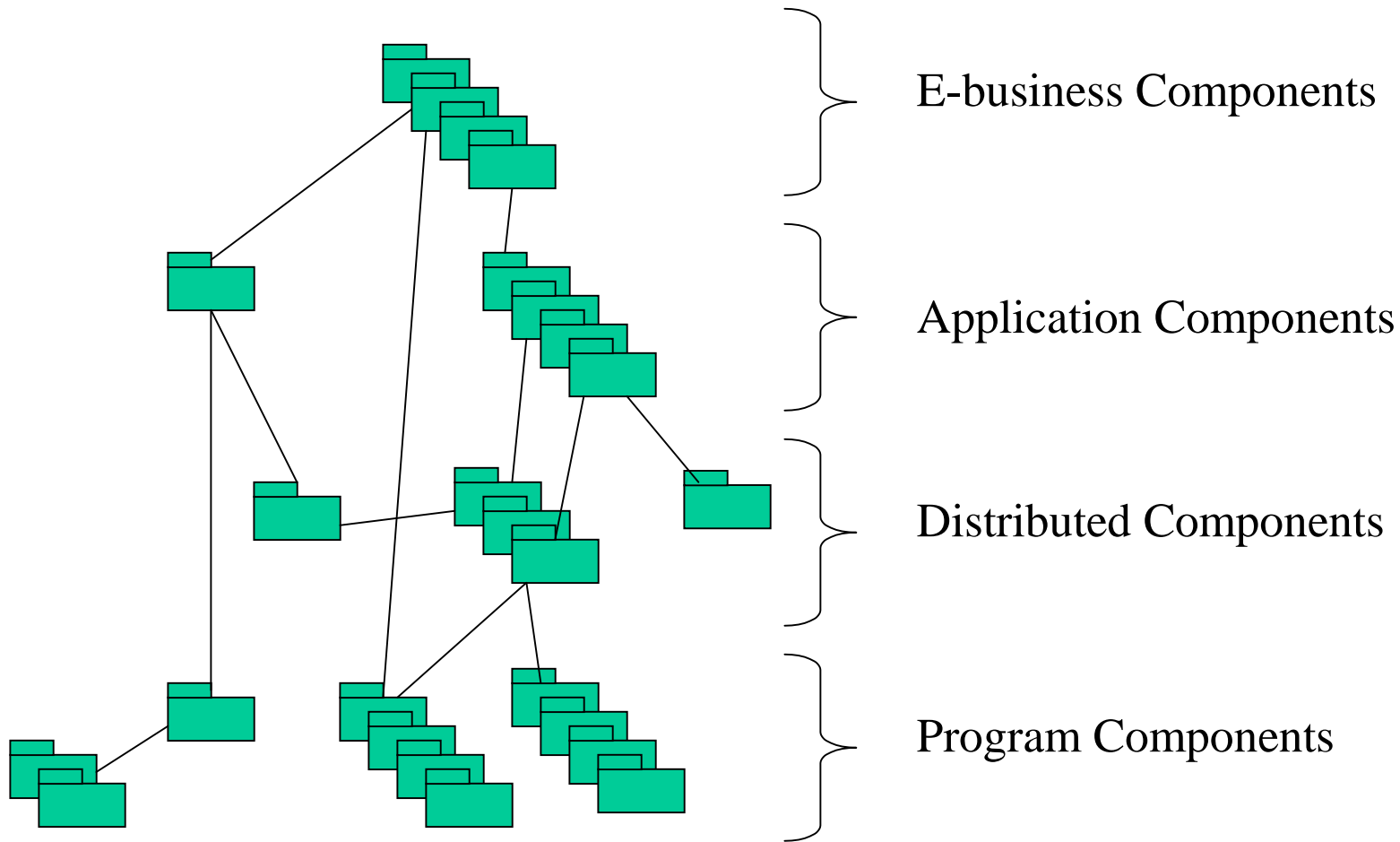
A new hub for business computing ML's



A unifying b2b architecture



Recursive Components



Unified Architecture

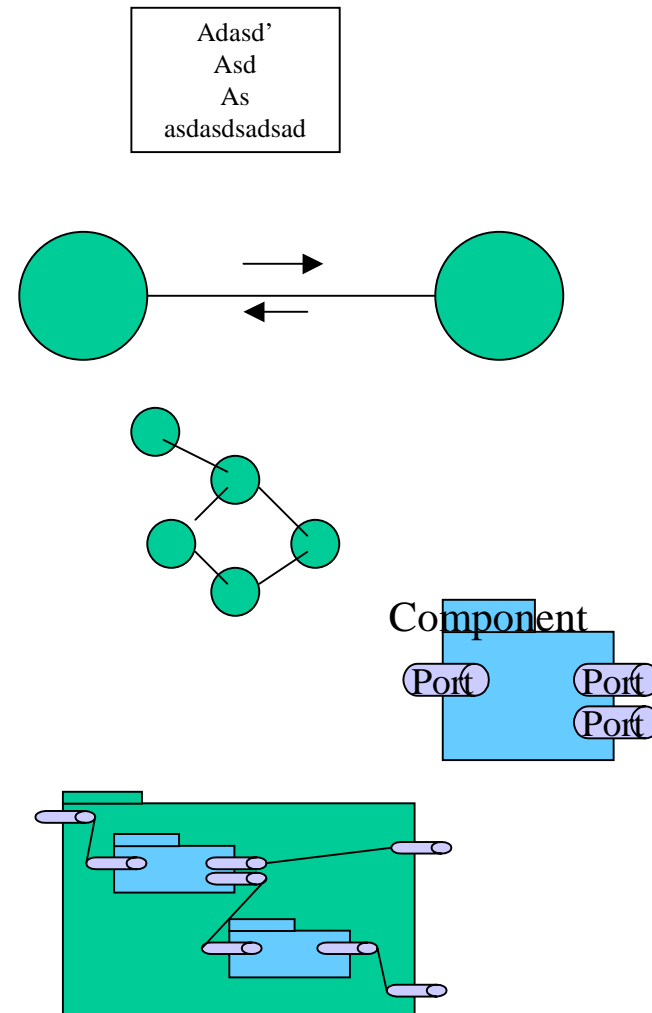
Document Information Model

Document Interchange Events
Between Component Roles

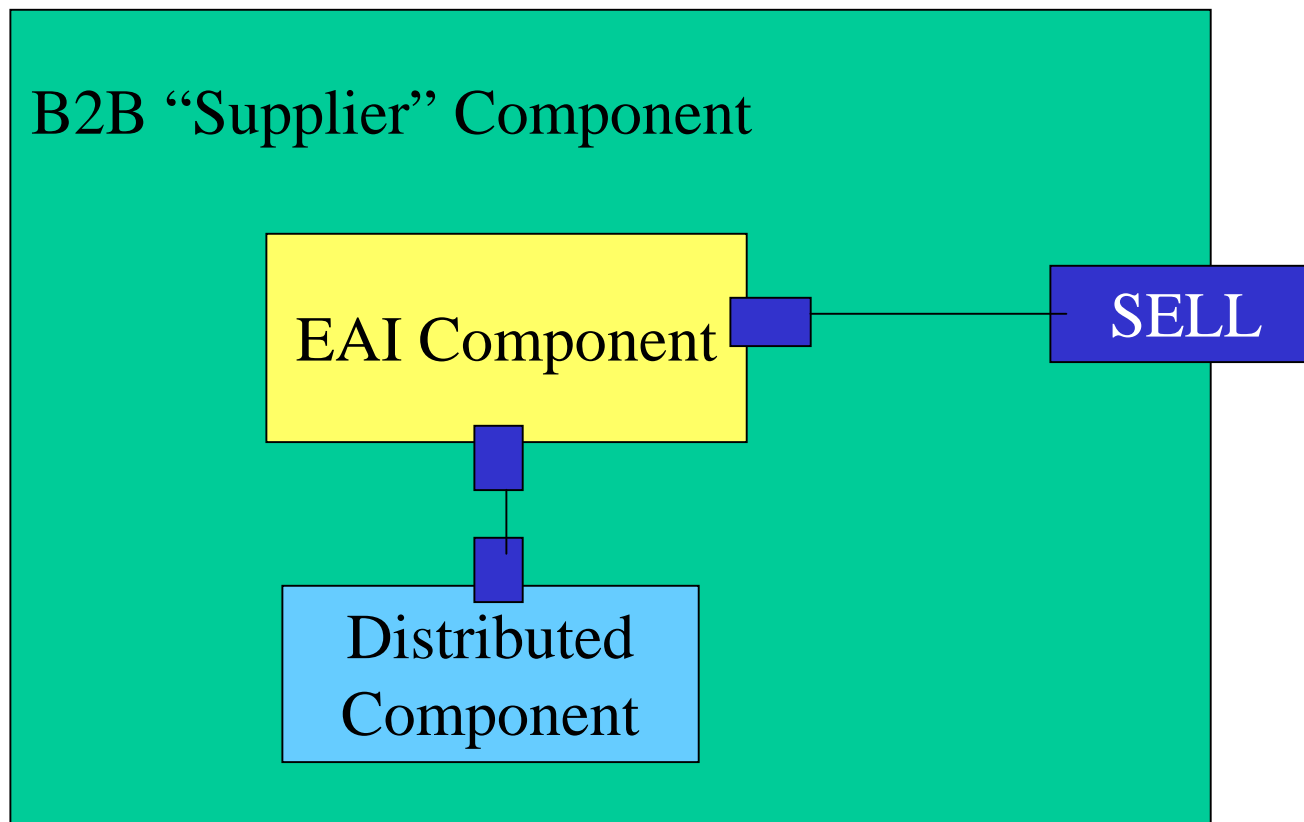
Choreography of interchange

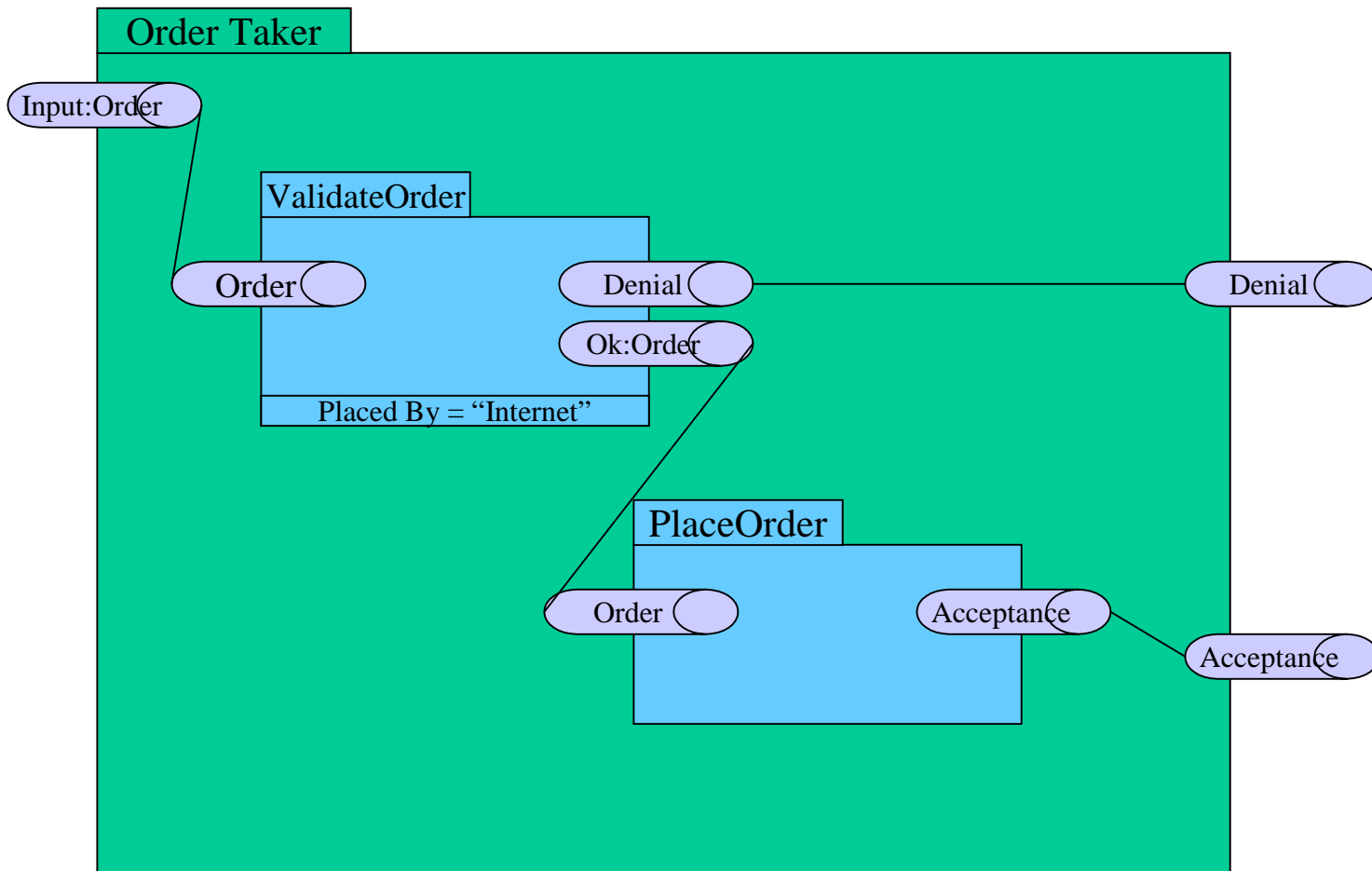
Components Implementing
Roles

Composition of Components
(Recursive)



Composition across layers





Make BizTalk irrelevant

- Complex Collaboration, Collaboration State
- REA base, Event based XML messaging
- Context based XML content
- Electronic profile matching (XML)
- Open architecture
- Recursive components collaborating thru XML
- Open Component/Service marketplace

ebXML deliverables

- Infrastructure Release early April 2000
 - Architecture
 - Transport/Routing/Packaging
 - Trading Partner profile and agreement
 - Including BP specification Schema
 - Reg/Rep
- “Business Collaboration Release” TBD
 - Full Collaboration BP and Information metamodel
 - Common information structure “templates”
 - Common business process “templates”
 - Mechanism for context based BP construction



Creating A Single Global Electronic Market

ebXML Project Teams

- Technical Architecture
 - Security Team
- Business Process / Information Model (Core Components)
- Registry/Repository
- Trading Partner Profile / Agreement
- Transport/Routing/Packaging
- Quality Review
- Proof of Concept
- Marketing

Sun Product Opportunities

- Java API's for all parts of ebXML
 - Registry/Repository
 - Transport
 - Trading Partner agreement
 - Collaboration management
- EAI integration tools
- b2b Portal tools
- Web Service Architecture
- ebXML prototype



Creating A Single Global Electronic Market

ebXML at end of 2002

- Easy to use, context based, business process and information model definition tools
- ebXML EAI tools are commonplace
- At least 5 commercially available ebXML compliant repository services
- At least 5 commercially available ebXML compliant transport services



Creating A Single Global Electronic Market

ebXML at end of 2002

- A rich set of ebXML compliant and registered core components/business objects and core processes
- Hundreds of industry standard, ebXML compliant and registered business processes
- Thousands of ebXML compliant and registered partner profiles
 - industry standard business processes
 - ‘roll-your-own-process’ service providers
- Thousands of explicit or implicit ebXML compliant Partner Agreements
- Millions of ebXML based business transactions conducted via the internet daily



Creating A Single Global Electronic Market

How will ebXML change the future

- Out-of-the-box technical interoperability
- Unambiguous commercial interoperability
- Wire businesses that today only can conduct business via e-mail, snail-mail, and telephone
 - Commercially available solutions
 - Low entry barrier
- Service based business process architecture
- Enable the evolution of many new business models and patterns