



Open Standards that Open Markets™

Open Applications Group



OAGIS –
An Open Standards
Based, Cross Industry
Canonical Model

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Agenda

- OAGi Introduction
- The OAGIS Standard
- OAGIS as a Canonical Model
- Users of OAGIS





A not-for-profit standards development organization

Founded in 1994, OAGi is focused on building enterprise ready, process-based data exchange standards for B2B, A2A and Cloud integration.

OAGi is the only truly cross industry business network integration standard that works with Cloud



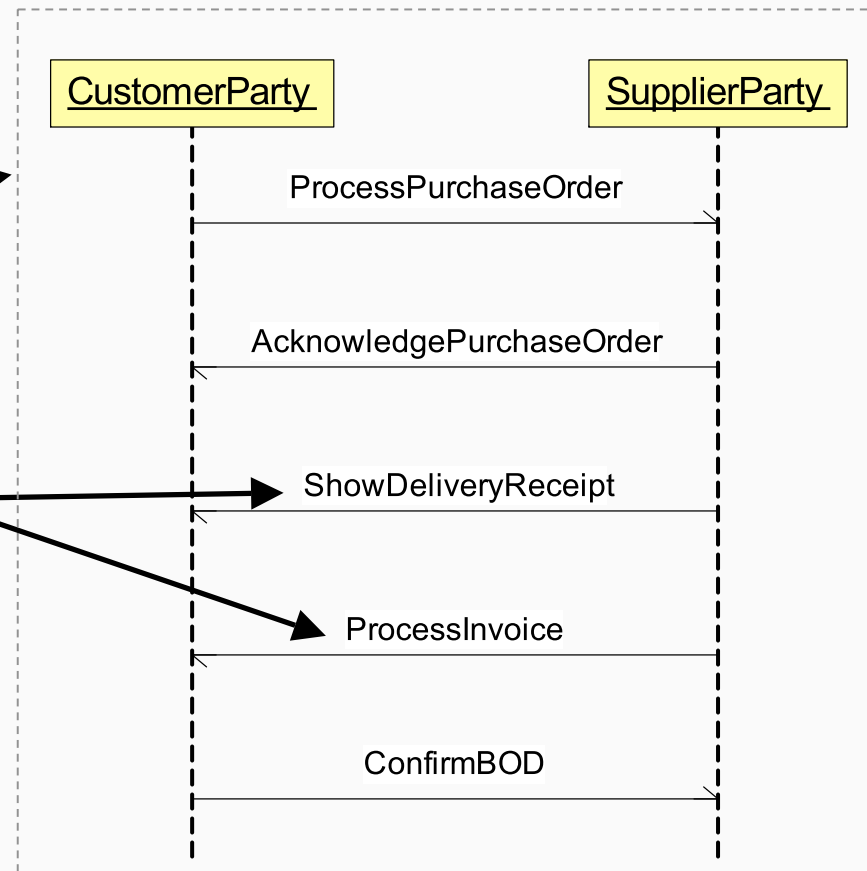
- **OAGi** is
The Open Applications Group,
Incorporated
- **OAGIS** is
The Open Applications Group
Integration Specification

OAGi Membership Today

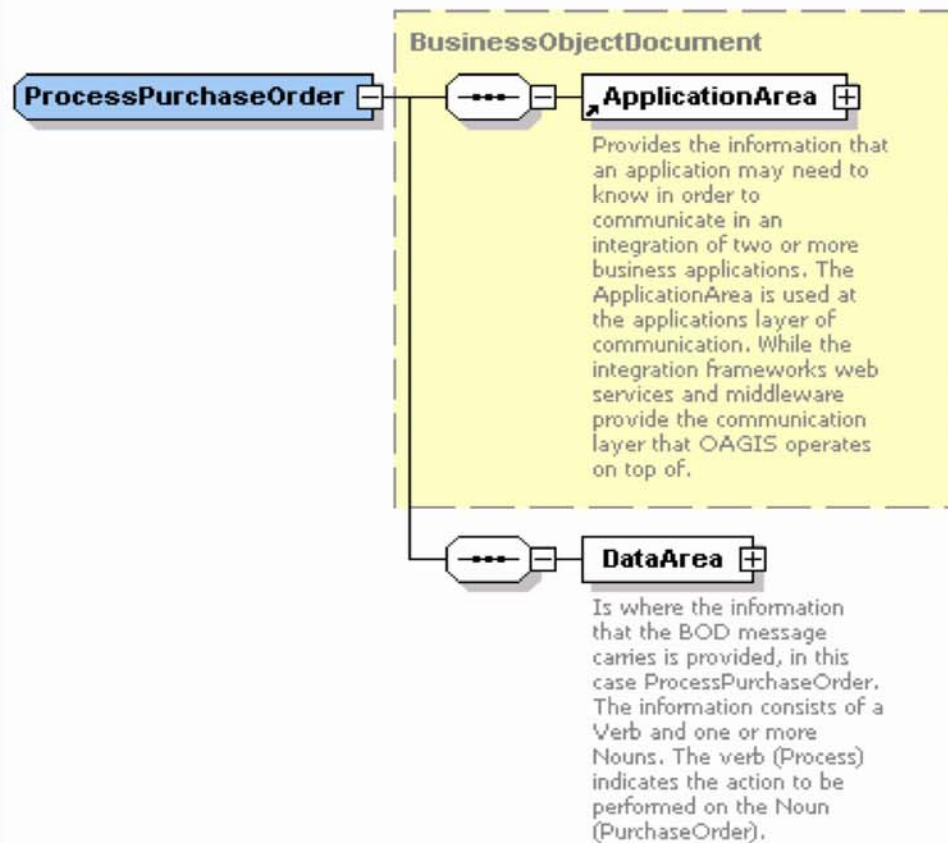
- ADP
- AgGateway
- AMC Theatres
- Ashland
- Automotive Industry Action Group (AIAG)
- Bayer MaterialScience
- Boeing
- CDC Software
- Cisco
- DBI Poland
- DHL
- DigitalIML
- Direct Insight
- Dow Chemical
- E2open
- EDIFICE
- Elemica
- Emerson
- GEFEG
- GXS
- HR-XML
- iBASEt
- IBM
- Infor
- Intel
- ISA
- Japan Petrochemical Association
- Kaba
- Liaison Technologies
- Metals Service Center Institute (MSCI)
- Microsoft
- NIST
- Nokia
- NXP Semiconductor
- Oakland Software
- OASIS
- Odette
- Oracle
- Rhodia
- Shell
- Softshare
- Standards for Technology in Automotive Retail (STAR)
- Talent Base
- Transentric
- Traxian
- UK Ministry of Defence
- Vortx
- World Batch Forum (WBF)

The OAGIS Standard is . . .

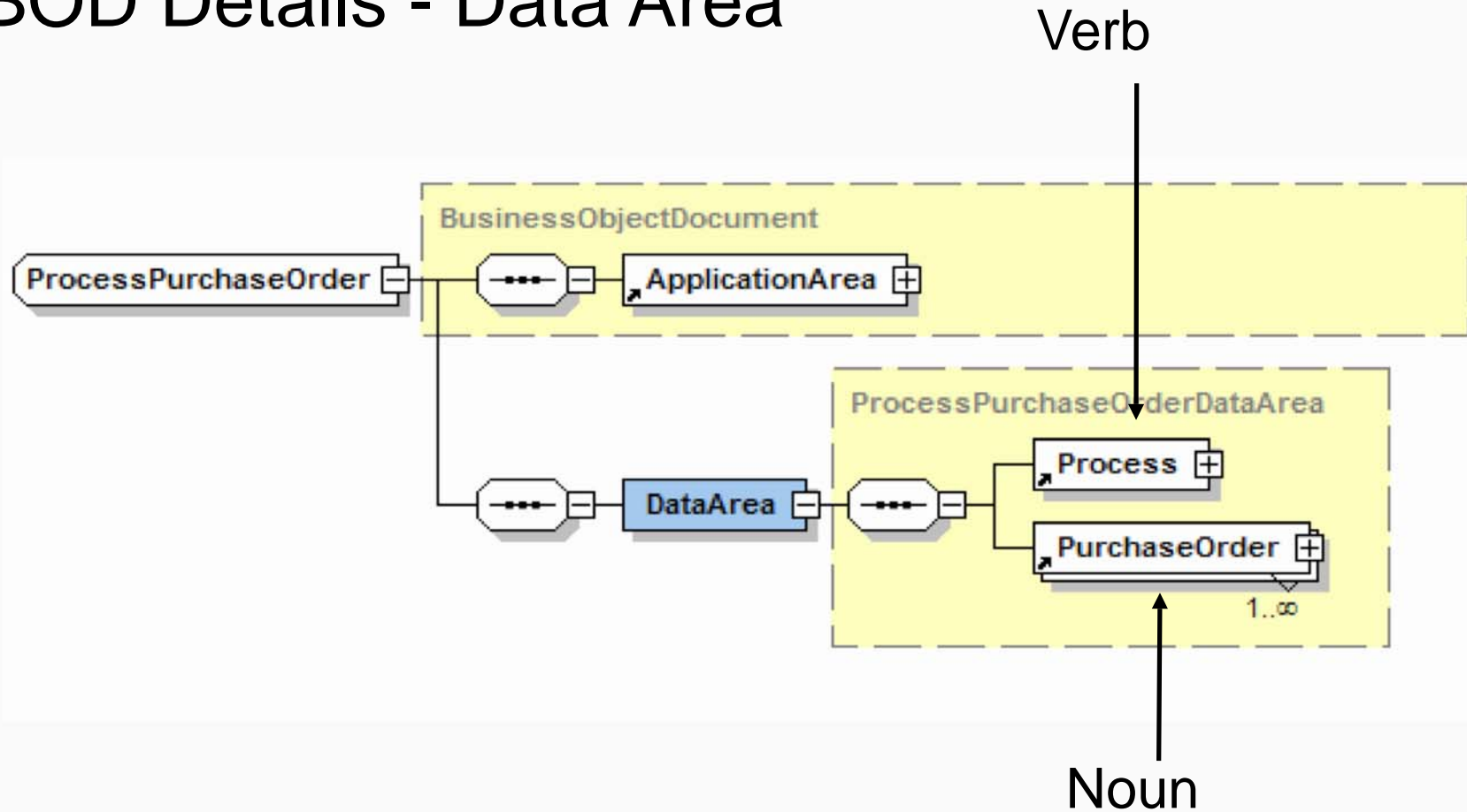
- Business Processes called Scenarios
- Business Messages called Business Object Documents (BODs)



Based on the BOD Architecture



BOD Details - Data Area



Verb Dialogs

Message Verb (Noun)	Verb Response
Process	Acknowledge
Sync	ConfirmBOD
Post (synonym for Process in financial scenarios)	Acknowledge
Load (Synonym for Sync in financial scenarios)	ConfirmBOD
Change	Respond
Update	Respond
Cancel	ConfirmBOD
Get	Show
Notify	

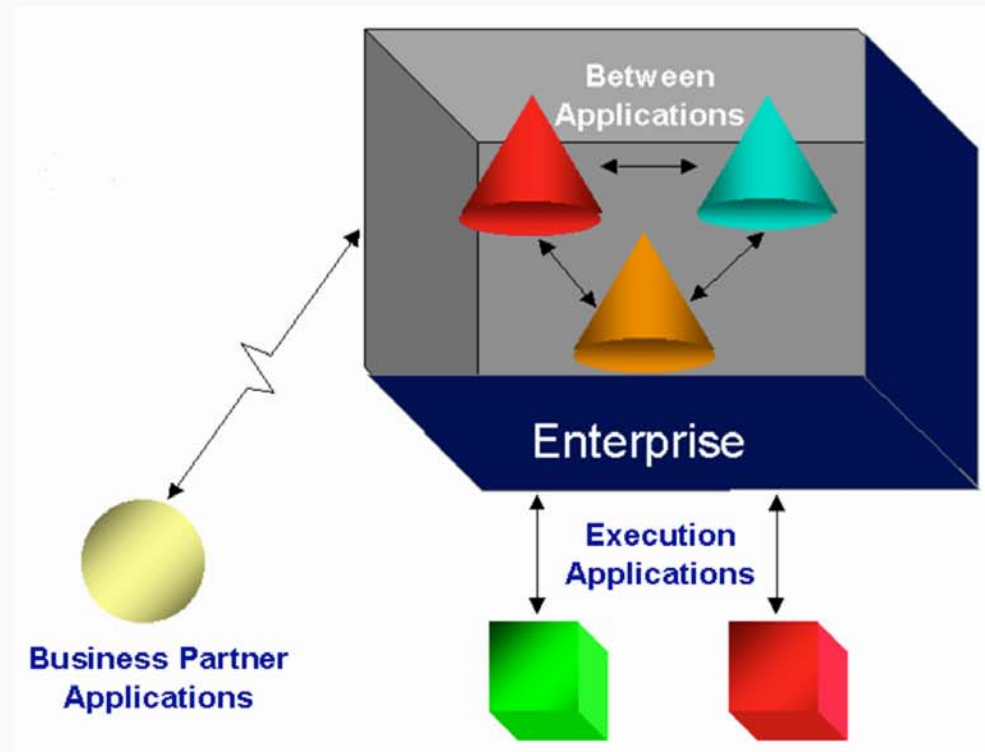
Sample BODs

- **Process**PurchaseOrder
- **Acknowledge**PurchaseOrder
- **Notify**Shipment
- **Process**Invoice
- **Acknowledge**Invoice
- **Get**InventoryCount
- **Show**InventoryCount



OAGIS Scope – Internal/External/Cloud

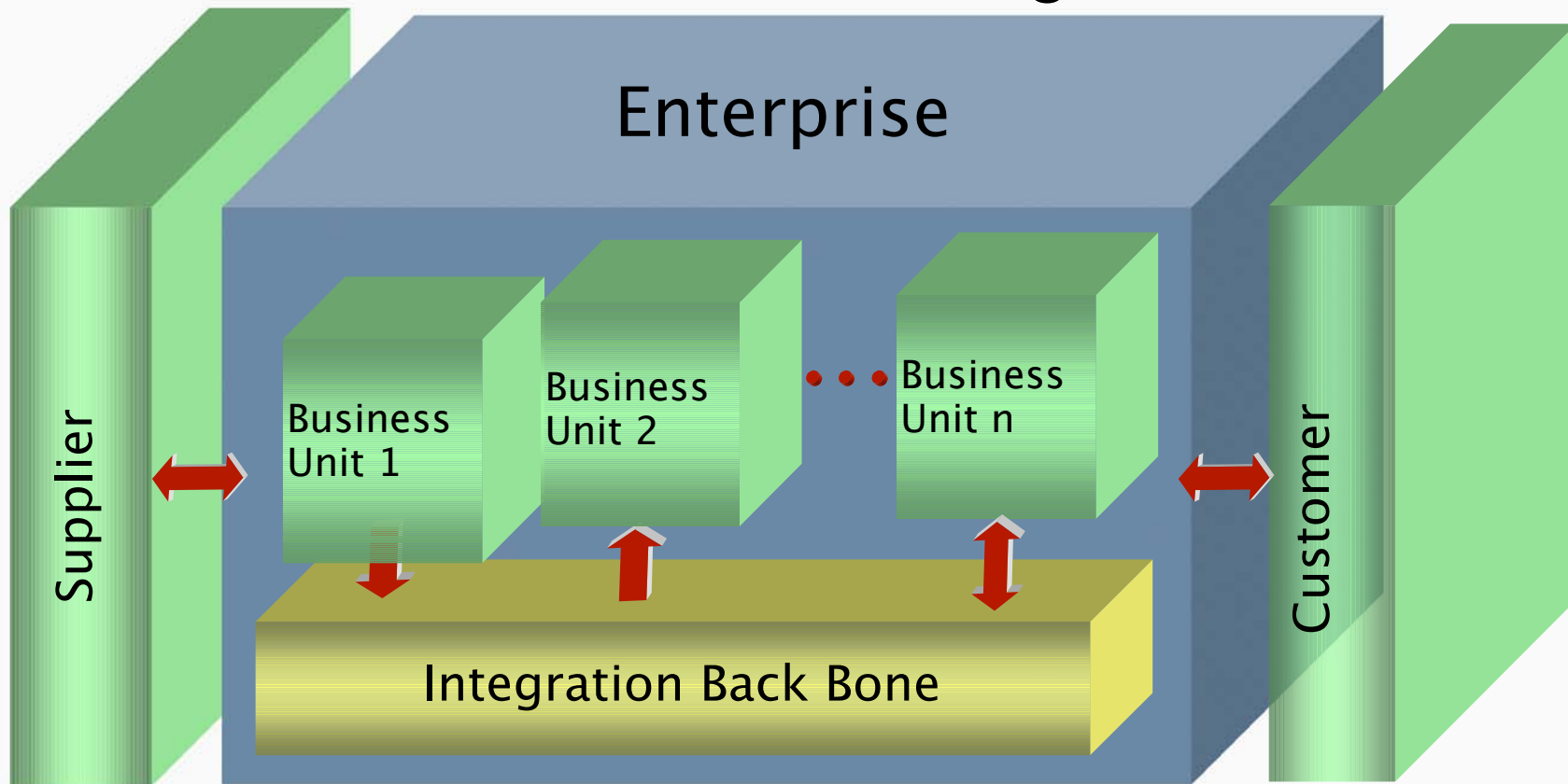
- CRM
 - Opportunities
 - Sales Leads
 - Customer
 - Sales Force Automation
- eCommerce
 - e-Catalog
 - Price Lists
 - RFQ and Quote
 - Order Management
 - Purchasing
 - Invoice
 - Payments
- ERP
 - Financials
 - Human Resources
 - Manufacturing
 - Credit Management
 - Sarbanes/Oxley & Controlu
- Manufacturing
 - MES
 - Shop Floor
 - Plant Data Collection
 - Engineering
 - Warehouse Management
 - Enterprise Asset Mgmt.
- Logistics
 - Orders
 - Shipments
 - Routings



OAGIS 9.5 - Current Version

- Released May 2011
- Combines 14 years in the field
- 68 Business Scenarios
- 12 Verbs Defined
- 80 Nouns (Common Objects) defined
- 498 Messages (BODs)

Business Challenges



Organizations need to “plug-In” their business partners and various departs and divisions

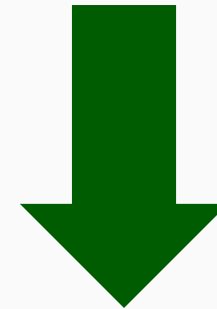
Business Challenges

- Multiplicity of applications across enterprise fulfilling the same function
- Several versions of “enterprise-objects” such as Product, Customer, etc
- Custom program interfaces or flat file exchange
 - Mostly at the data level
 - Mostly point to point



Goals of the Solution

- Lower the cost of ownership
- Greater agility

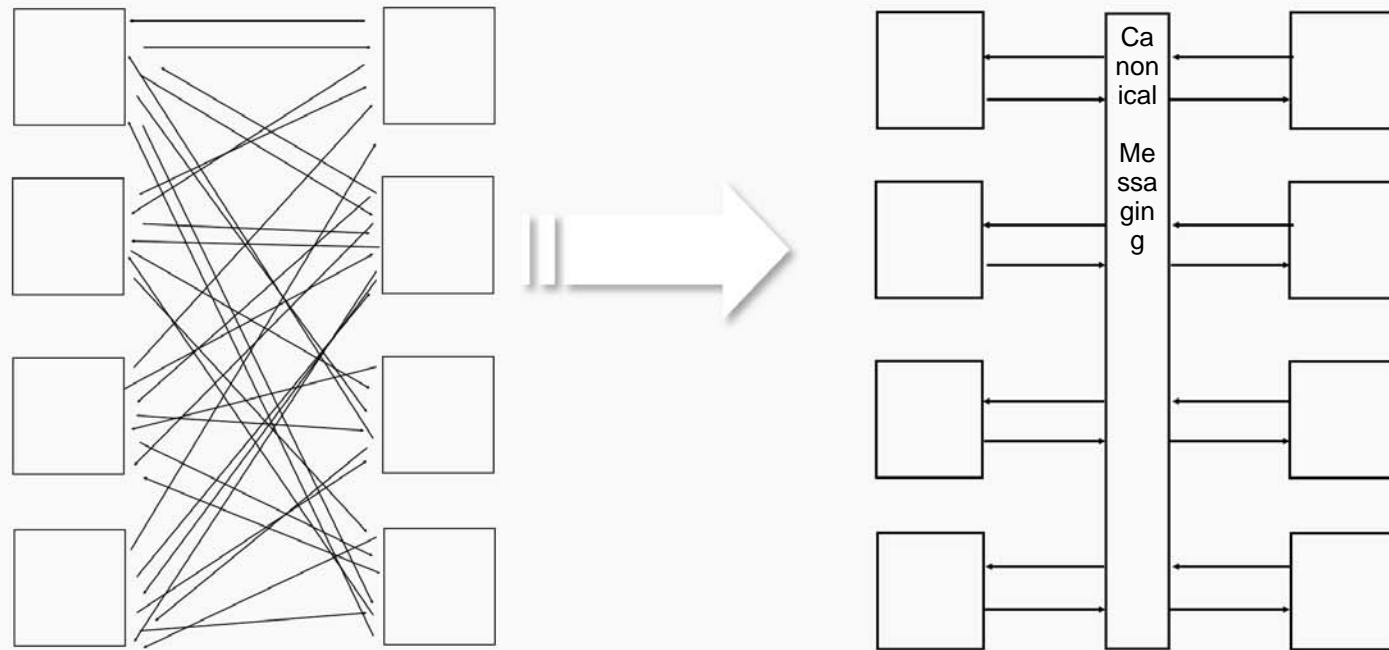


Canonical Model

- **CANON**
 - Derived from the Greek and Latin meaning a rule or standard
- **CANONICAL**
 - Reduced to the simplest and most significant form possible without loss of generality;
"a basic story line";
"a canonical syllable pattern"

A Case for a Canonical Model

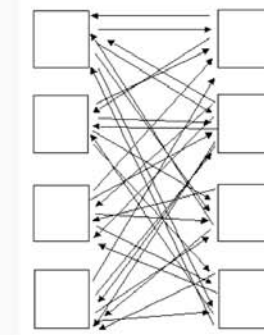
From <many to many> to <many to one>



The Mathematics of Scaling Up

Traditional point to point for <many to many> integration:

The number of possible connections among any number of items is $n(n-1)$ for two way connections.

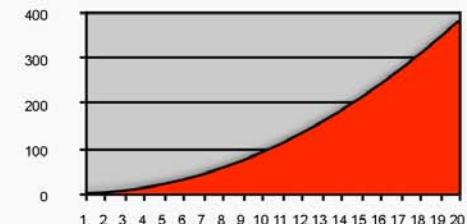


Number of components to integrate

Apply traditional formula

Cost of traditional integration @ 0.1 FTE

$n = 5$	$5(4) = 20$	2 FTEs
$n = 10$	$10(9) = 90$	9 FTEs
$n = 15$	$15(14) = 210$	21 FTEs
$n = 20$	$20(19) = 380$	38 FTEs

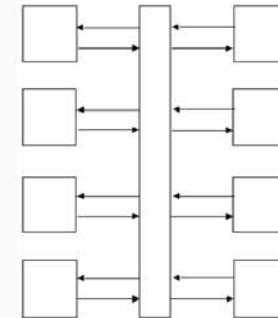


38 FTEs

The Mathematics of Scaling Up

Best practice <many to one> integration:

The number of possible connections among any number is $n \times 2.0$



Number of components to integrate

Best practices formula

Cost of best practices integration @ 0.1 FTE

n = 5

$$5 * 2.0 =$$

1 FTE

10

2 FTEs

n = 10

$$10 * 2.0 =$$

3 FTEs

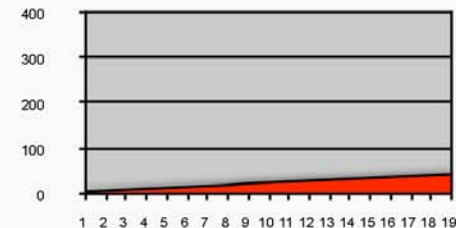
20

4 FTEs

n = 15

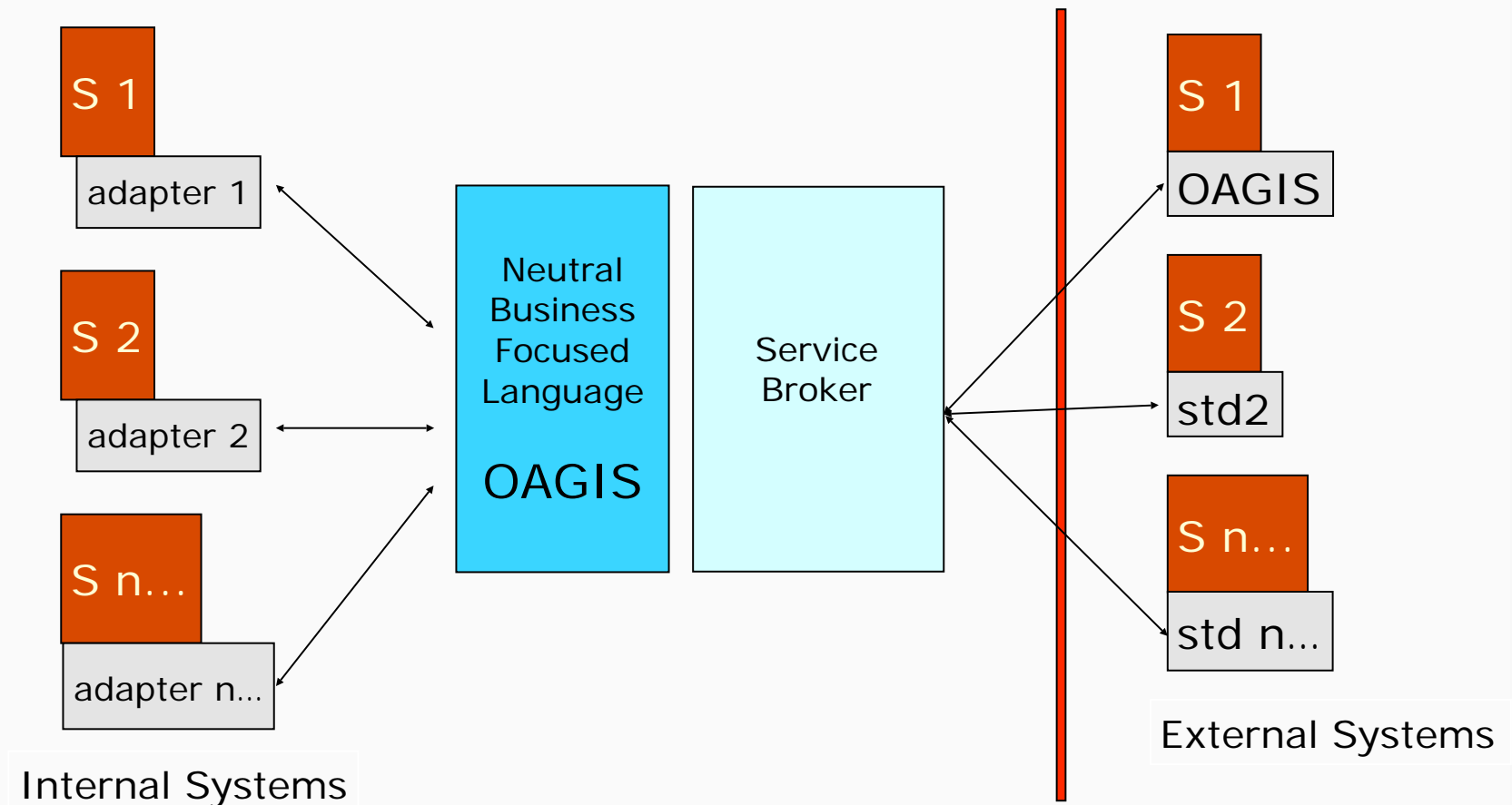
$$15 * 2.0 =$$

30



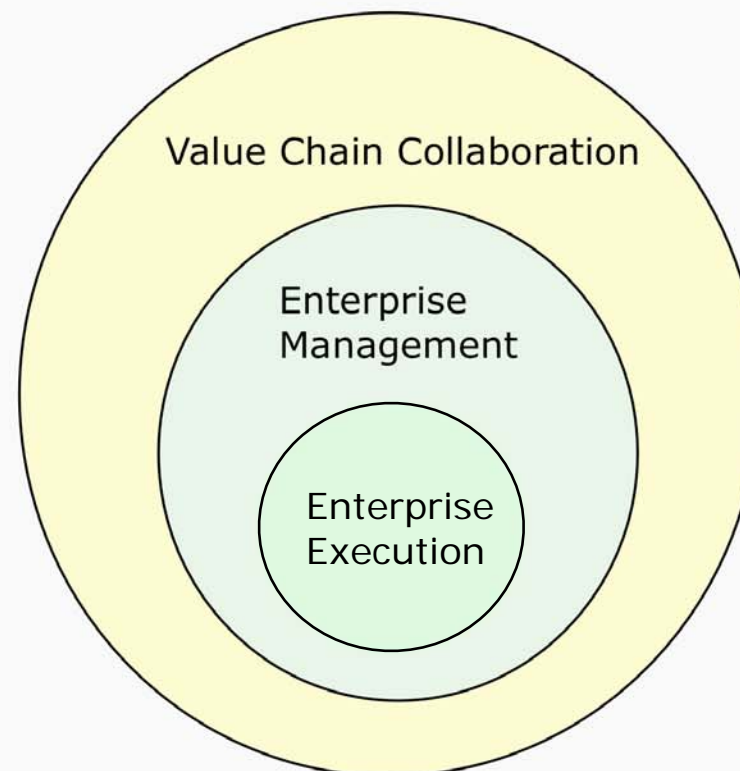
4 FTEs

Canonical - a Single Horizontal Language



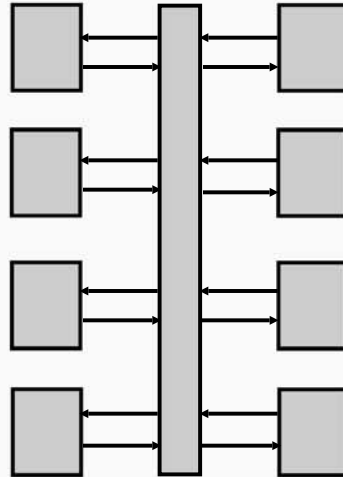
OAGIS Scope Drives Diverse Implementations

- CRM
 - Opportunities
 - Sales Leads
 - Customer
 - Sales Force Automation
- eCommerce
 - e-Catalog
 - Price Lists
 - RFQ and Quote
 - Order Management
 - Purchasing
 - Invoice
 - Payments
- ERP
 - Financials
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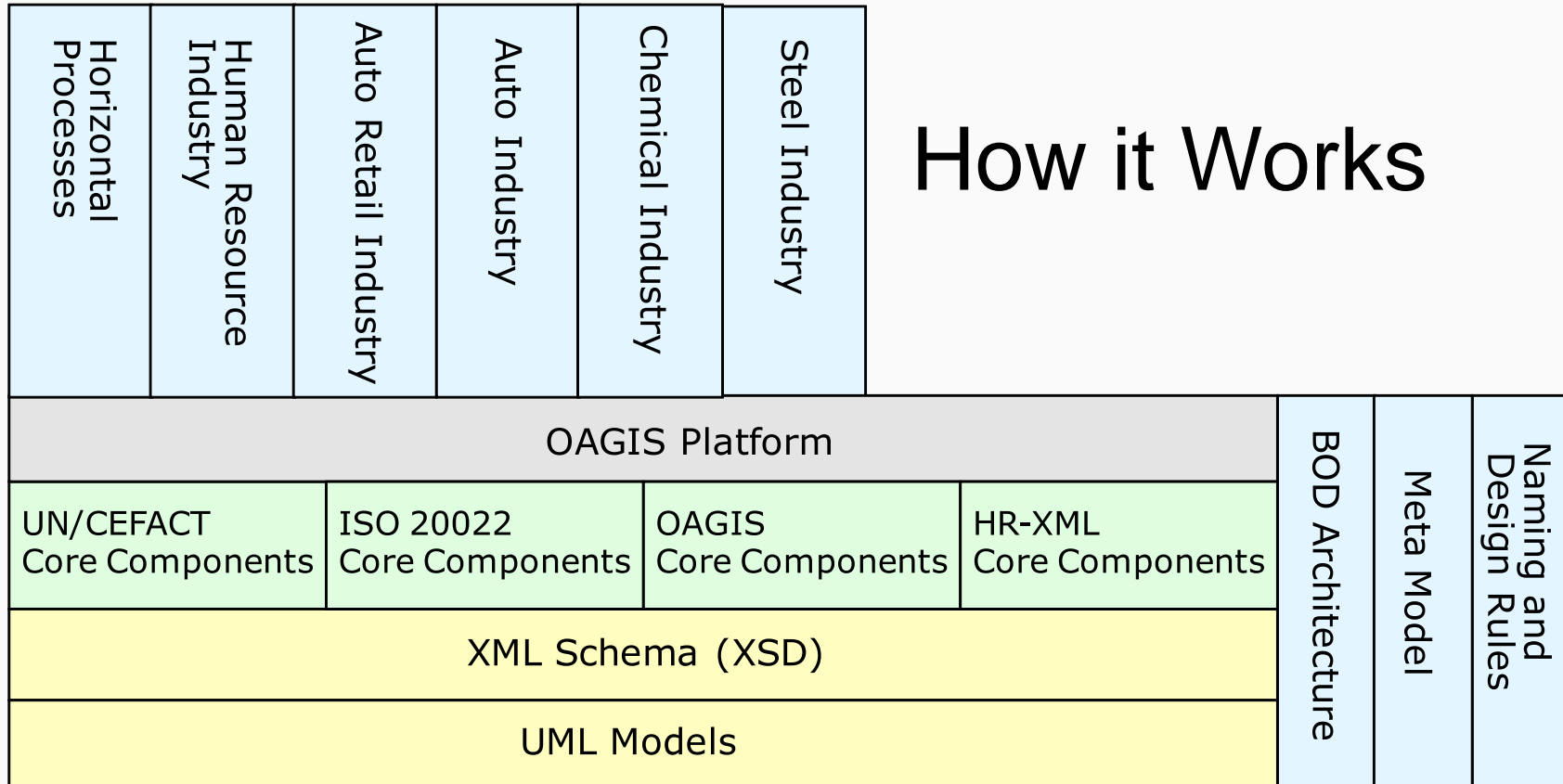
Partial List of OAGIS Users

- ADP
- Agilent
- Amersham Health
- Boeing
- Campbell's Soup (Australia)
- Canadian Tire
- Cisco
- Ford
- General Electric
- General Motors



- Goodrich Aerospace
- Goodyear
- IBM
- Microsoft
- Nokia
- Oxylane Group
- SKF
- Telia Sonera
- Weyerhaeuser
- Woolworths (Australia)

How it Works

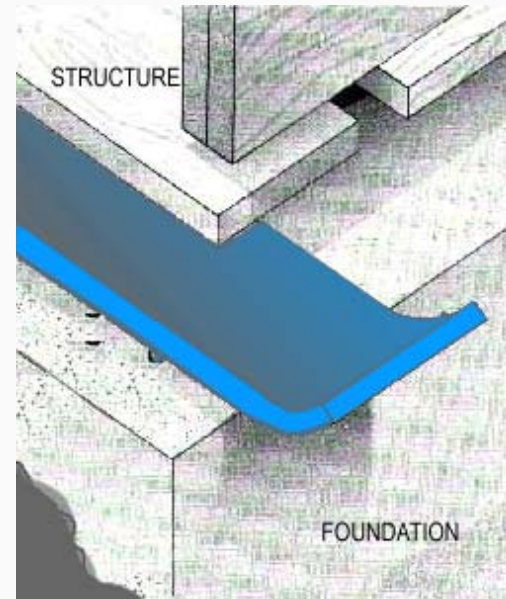


OAGIS as a Platform

OAGIS 9 is More than Messages

OAGIS 9 provides a foundation for messages as well as a message library

- Canonical Data Model
- Component Libraries
- Application Architecture
- Technical Architecture (BOD)
- Transaction Model
- Naming and Design Rules



OAGIS Libraries

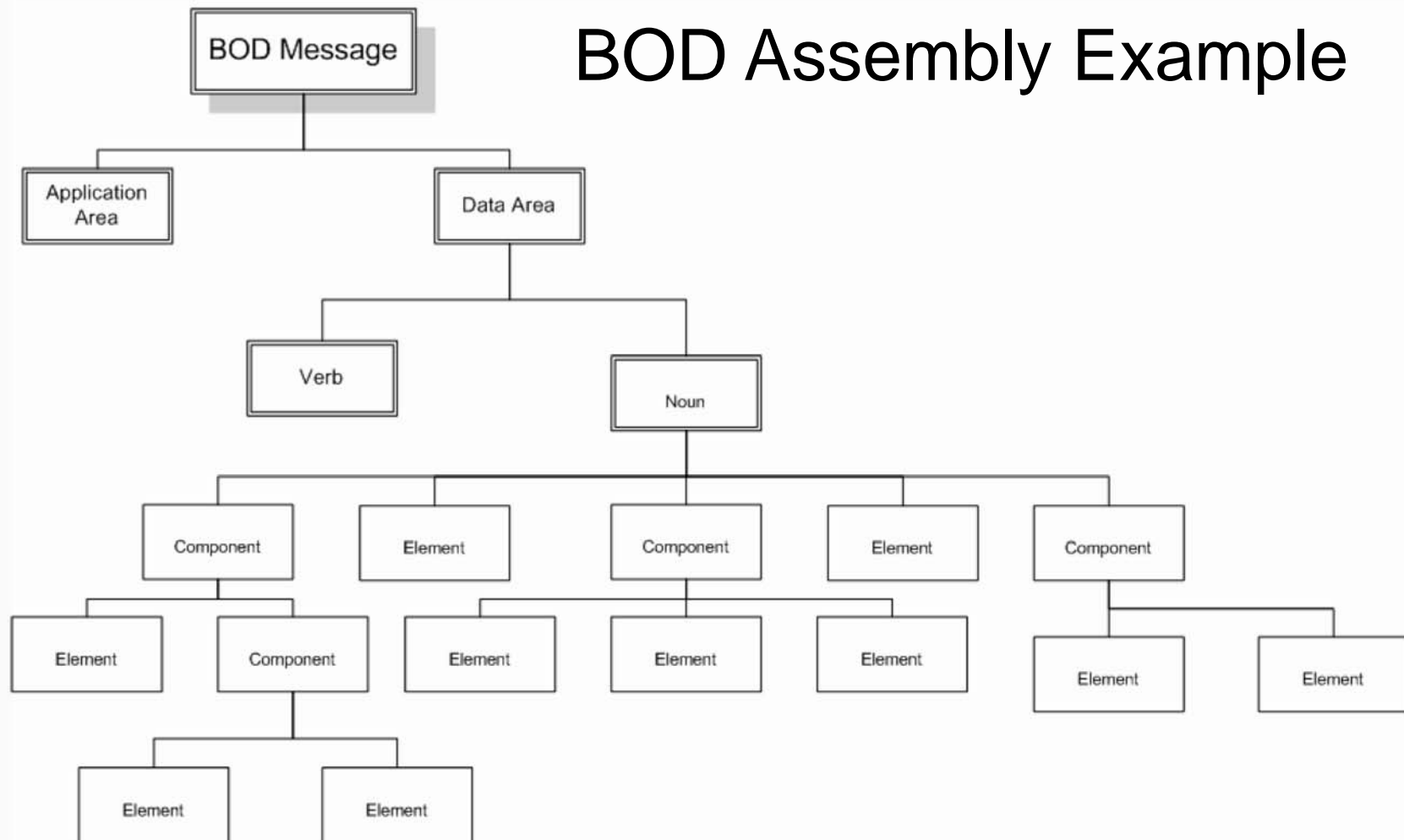
- OAGiBusinessProcessIntegrationPlatform
 - org_openapplications_oagis
 - 9_4_1
 - Developer
 - BODs
 - Nouns
 - OAGIS-Nouns.xsd
 - Documentation
 - Instances
 - Services
 - WebServices
 - Standalone
 - BODs
 - index.html
 - OAGi License Agreement.txt
 - OAGi License Agreement.xml
 - OAGIS.xsd
 - ReadMe.txt
 - org_openapplications_platform
 - 1_1_1
 - BODs
 - Common
 - ISO
 - ISO20022
 - Spain.001.001.01.xsd
 - Spain.002.001.01.xsd
 - OAGi
 - Components
 - CodeLists.xsd
 - Components.xsd
 - CRMComponents.xsd
 - Fields.xsd
 - FinancialComponents.xsd
 - LogisticsComponents.xsd
 - ManufacturingComponents.xsd
 - Meta.xsd
 - OrderManagementComponents.xsd
 - UNCEFACT
 - ATG
 - TBG17
 - Documentation
 - Nouns

include doc Fields.xsd		
complexType	BusinessObjectDocumentType	ann:Is the schema based inheritance for all BODs. The logical mo
complexType	ApplicationAreaType	ann:
complexType	SenderType	ann:Identifies the sender of the given BOD instance
complexType	ReceiverType	ann:Identifies the intended receiver of the given BOD instance.
complexType	SignatureType	ann:Allows any digital Signatures to be added to the Instance of I
element	ApplicationArea	ann:Provides the information that an application may need to know
element	OriginalApplicationArea	ann:A copy of the ApplicationArea for the original BOD that was
element	Sender	ann:Identifies characteristics and control identifiers that relate to
element	Receiver	ann:Identifies the intended receiver of the given BOD instance.
element	Signature	ann:If the BOD is to be signed the signature element is included, c
element	CreationDateTime	ann:is the date time stamp that the given instance of the Business
element	BODID	ann:The BODId provides a place to carry a Globally Unique Identif
element	LogicalID	ann:Provides the logical location of the server and applications fr
element	ComponentID	ann:Provides a finer level of control than Logical Identifier and req
element	TaskID	ann:Describes the business event that initiated the need for the E
element	ReferenceID	ann:Enables the sending application to indicate the instance ident
element	ConfirmationCode	ann:is an option controlled by the Sender business application. It
complexType	SuccessMessageType	ann:The processing was a success. Possible, non-fatal warning
complexType	FailureMessageType	ann:The processing has failed. Provides a list of error and warni
complexType	BODFailureMessageType	ann:
complexType	BODSuccessMessageType	ann:
complexType	MessageType	ann:
element	NounSuccessMessage	ann:Indicates that the processing of this noun has succeeded; m

Attributes Identity constraints			
Name	Type	Use	Default

Text Grid Schema WSDL XBRL Authentic Browser

BOD Assembly Example



Standards within the OAGIS Standard

- W3C - URI/URL
- W3C - XML Schema 1.0 Part 1
- W3C - XSL Schema 1.0 Part 2.0
- W3C - XML Style Language
- W3C - XML Path Language (XPath) Version 1.0
- ISO - ISO11179
- ISO - ISO1500-5 Core Components Type Specification
- ISO - ISO20022 (UNIFI Financial Standard)
- ISO - ISO4217 - Currency Codes
- ISO - ISO639 - Language Codes
- UN/CEFACT ATG2 Naming and Design Rules - NDR
- UN/CEFACT Harmonized Core Components – TBG17
- OASIS – SOAP 1.2
- MIME Media Type Code
- UNECE Unit Code
- OMG UML 2.0

OAGIS Extensibility Model

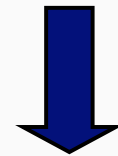
- OAGIS provides the user a unique form of extensibility to stretch the standard without breaking it.



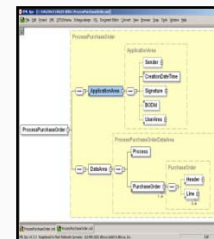
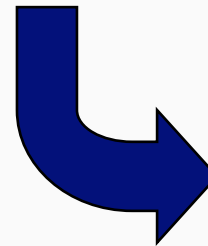
OAGIS Overlay Example

- Your new content
- OAGIS platform/framework
- OAGIS standards
- XSD overlay technology
- Canonical solutions for your business challenges

Your Overlay



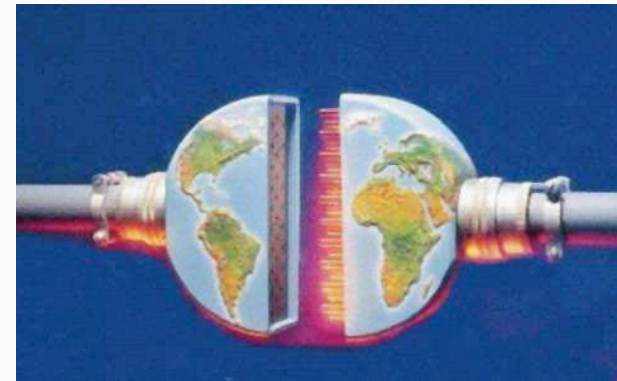
OAGIS Framework/Standards



Your Solution

OAGIS – the Canonical Model

- Created/vetted by multiple industries
- Developed by enterprise level users
- Based on accepted business processes
- Semantically rich and deep
- Built on a reusable library/platform
- Tailor made for Cloud
- Extensible as needed

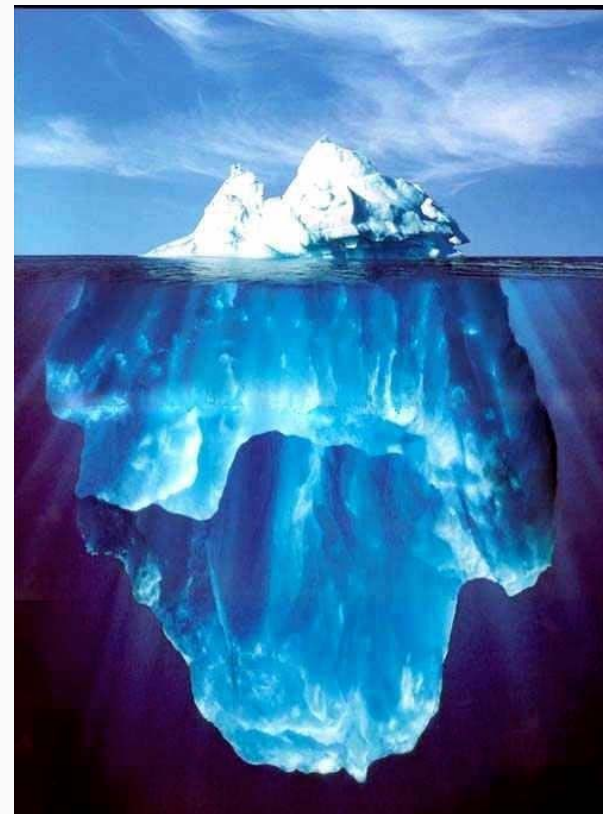


Questions?

OAGi User Demographics

Knowledge of OAGIS Adoption

- Difficult to know full adoption number
- OAGIS® is free and the download only requires a registration
- We learn from
 - Word of mouth
 - Emails
 - Surveys
 - Luck
- We count downloads
- We track emails
- Probably know 10% of user base



OAGIS live users in 40 known countries

- Australia
- Austria
- Bahrain
- Belgium
- Brazil
- Canada
- Chile
- China
- Croatia
- Czech Republic
- Denmark
- Ireland
- Finland
- France
- Germany
- Hungary
- India
- Israel
- Italy
- Japan
- Korea (South)
- Lithuania
- Mexico
- Netherlands
- Norway
- Papua New Guinea
- Poland
- Russia
- Saudi Arabia
- Singapore
- Slovenia
- Slovakia
- South Africa
- Spain
- Sweden
- Switzerland
- Turkey
- United Arab Emirates
- United Kingdom
- United States

OAGIS live users in over 40 industries

- Aerospace
- Agri-Business
- Automotive Manufacturing
- Automotive Retail
- Automotive Aftermarket
- Banking
- Brewing
- CPG
- Chemical
- Computer Hardware
- Computer Software
- Consumer Goods – Electronics
- Cosmetics
- Defense
- Distributors
- Federal Government
- Food Manufacturing
- Furniture Manufacturing
- Mortgage
- Pharmaceutical
- Insurance
- Industrial Goods Manufacturing
- Logistics
- Medical Device Manufacturing
- Mining
- Oil
- Natural Gas
- Paint
- Paper
- Publishing
- Retail
- Shipping
- State Government
- Local Government
- Telecommunications
- Tire Manufacturing
- Tobacco
- Trucking
- Universities
- Electric Utilities

How is OAGIS Used?

If you are using, implementing, or evaluating OAGIS, how are you using it or plan to use it? Check all that apply.

Answer	0%	100%	Number of Responses	Response Ratio
Business to Business			58	64.4%
Application to Application			66	73.3%
Business to Consumer			8	8.8%
In a Cloud			10	11.1%
For SOA Implementation			47	52.2%
To Implement Web Services			41	45.5%
For Master Data Management			24	26.6%
For Data Warehousing			5	5.5%
Other			4	4.4%
Totals			90	100%

As of July 1, 2010

Country Representation Website Registrations

- Over 3500 Registrations
- 6 – 10 new per day

Website Registration Countries

- Egypt
- Kenya
- Morocco
- Mozambique
- Nigeria
- South Africa
- Swaziland
- Tunisia
- Uganda
- Zimbabwe
- Russian Federation
- Saudi Arabia
- Singapore
- Sri Lanka
- Taiwan
- Thailand
- Korea
- Malaysia
- Pakistan
- Philippines

Website Registration Countries

- Australia
- New Zealand
- Tuvalu
- French Polynesia
- Austria
- Belgium
- Bulgaria
- Croatia
- Czech Republic
- Denmark
- Greece
- Hungary
- Norway
- Poland
- Portugal
- Iceland
- Romania
- Ireland
- Scotland
- Italy
- Serbia
- Latvia
- Slovakia
- Lithuania
- Slovenia
- Luxembourg
- England
- Spain
- Estonia
- Sweden
- Finland
- Switzerland
- France
- Ukraine
- Germany
- Wales
- Moldova
- Yugoslavia
- Netherlands
- Turkey

Website Registration Countries

- Dubai
- Israel
- Jordan
- Kuwait
- Lebanon
- Palestinian Territory
- Saudi Arabia
- United Arab Emirates
- Argentina
- Belize
- Bolivia
- Canada
- Brazil
- Costa Rica
- Chile
- Mexico
- Columbia
- Puerto Rico
- Ecuador
- United States
- Panama
- Peru
- Uruguay
- Venezuela



Open Standards that Open Markets™



Thank you!

Dank English
German **Merci** French

ขอบคุณ
Thai

多谢

多謝

Simplified Chinese

Traditional Chinese

Grazie
Italian

धन्यवाद
Hindi

Спасибо
Russian

Gracia
Spanish

شكراً
Arabic

Obrigado
Brazilian Portuguese

감사합니다
Korean

Kiitos
Finnish

ありがとうございました
Japanese

www.oagi.org