Infor Open SOA Overview for OAGi

Pat O’Connor
BOD Father
## Who is Infor

<table>
<thead>
<tr>
<th>Enterprise Solutions Group</th>
<th>Strategic Solutions Group</th>
<th>Financial Solutions Group</th>
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<tbody>
<tr>
<td>SCT</td>
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<td>Varial Software</td>
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<td>Brain</td>
<td>Meropia Software</td>
<td>Extensity</td>
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<td>Future Three</td>
<td>Formation Systems</td>
<td>SSA Global</td>
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<td>Infor Business Solutions</td>
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<td>daly.commerce</td>
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<td>Nxtrend Technology</td>
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<td>Lilly Software Associates</td>
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<td>MAPICS</td>
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<td>Intuita Holdings</td>
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<td>Acquired: July 2005</td>
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<td>GEAC (Systems 21)</td>
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<tr>
<td>Acquired: March 2006</td>
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<td>SSA Global</td>
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<td>Acquired: August 2006</td>
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</tbody>
</table>
Who is Infor

SoftBrands
Provia
Brain
COM
JBA
FACTS
Ironside Technologies
SystemsUnion Group (Sun Systems)
Baan
Varial
CAPS Logistics
PRMS
LX
EXE
TakeStock
Datastream

Syteline
Geac
SCT Adage
Lilly
daly.commerce
Infinium (fka Software2000)

Damas
Hansen
Mercia
Visual
SupplyWeb
Infor
WM 9
Extensity
E-piphany

LN
BPCS

PRMS
Mapics
Mapics

Workbrain

NxTrend
Current Architecture

Monolithic ERP

Many application development companies built monolithic solutions.
Integration points are often application specific. Written only for the unique combination of applications.
Components are then interchangeable

Components communicate through a standard interface

Infor VISUAL Manufacturing

Infor BUS

Infor VISUAL Quality

Infor VISUAL CRM

Infor VISUAL DCMS
Components are then interchangeable

Customers can select the suite of products that match their requirements without affecting core applications.

Infor VISUAL Manufacturing

Infor BUS

Infor VISUAL Quality

Infor SyteLine CRM

Infor VISUAL DCMS
Proposed Centers of Excellence

Common Services & Architecture
- Financials
- Human Resources
- Enterprise Asset Management
- Product Life Cycle Management
  - Supply Chain Planning
  - Logistics
  - Inventory

Suppliers
- Supplier Relationship Management

Manufacturers and Distributors
- Production and Assembly
- Project Manufacturing
- Manufacturing Execution Systems
- Quality

Customers
- Customer Relationship Management
- Post Sales Service

Suppliers
- Customers

Manufacturers and Distributors
- Suppliers
Adding, Replacing or Upgrading Features

Costing

Transportation

Existing ERP

Legacy Financials

Web Store

EAM

SupplyWeb

Sales and Service

WMS

HCM

New Financials
Any combination of processes can be implemented. Purchase only what you need!
Because of the standard interface, processes can be updated individually thus avoiding a “big bang” when upgrading.
Infor Messaging

- Only one system owns a piece of information.
  - The primary system is the SOR
  - If data is replicated in another system it is subordinate

- SOA
  - Document Based
  - Canonical Data format
1. Requires in depth knowledge of each DB schema and any update / change can have unforeseen results

2. Any local logic (CRM/ERP) needs to be implemented in the sync process

3. High volume data can freeze / lock your DB

4. Very costly implementation when adding new application (new DB scripts to synch)

5. Agreeing on super customer definition takes a long time
Traditional way doing MDM #2

Hub & Spoke

1. Uses EAI technologies at the Hub, connecting to the remote applications (spokes)
2. Synchronous interaction from Hub to spokes
3. Requires high-end infrastructure
4. Very costly implementation when adding new application (new EAI adapters)
5. Agreeing on super customer definition takes a long time
Event Driven – Services Oriented Architecture

Infor Open SOA

Component A

Component B

OAGIS

Infor BUS
Infor Master Data Management

Customer MDM

Enters customer

OAGIS

Infor ESB

CRM

ERP
The mathematics of scaling up

12 Connections
The mathematics of scaling up

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

<table>
<thead>
<tr>
<th>Number of components to integrate</th>
<th>Apply traditional formula</th>
<th>Cost of traditional integration @ 0.1 FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>( n = 5 )</td>
<td>5(4) = 20</td>
<td>2 FTEs</td>
</tr>
<tr>
<td>( n = 10 )</td>
<td>10(9) = 90</td>
<td>9 FTEs</td>
</tr>
<tr>
<td>( n = 15 )</td>
<td>15(14) = 210</td>
<td>21 FTEs</td>
</tr>
<tr>
<td>( n = 20 )</td>
<td>20(19) = 380</td>
<td>38 FTEs</td>
</tr>
</tbody>
</table>
The mathematics of scaling up

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

<table>
<thead>
<tr>
<th>Number of components to integrate</th>
<th>Best practices formula</th>
<th>Cost of best practices integration @ 0.1 FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>$n = 5$</td>
<td>$5 \times 2.0 = 10$</td>
<td>1 FTE</td>
</tr>
<tr>
<td>$n = 10$</td>
<td>$10 \times 2.0 = 20$</td>
<td>2 FTEs</td>
</tr>
<tr>
<td>$n = 15$</td>
<td>$15 \times 2.0 = 30$</td>
<td>3 FTEs</td>
</tr>
<tr>
<td>$n = 20$</td>
<td>$20 \times 2.0 = 40$</td>
<td>4 FTEs</td>
</tr>
</tbody>
</table>
Where does OAGi fit

1. Canonical model is necessary for reducing the number of connections.
2. Agreeing on super customer definition takes a long time
3. A long time means a lot of money
4. Infor has implemented 113 Nouns
5. Or 113 times a lot of money
Standard Message Flows

SOR

- Sync
  - Notify Enterprise
- Process
- Acknowledge
  - Accept Requests
- Get
- Show
  - Implementation and Disaster Recovery
- Sync
  - Disaster Recovery
Tooling

- JMS
- JiBX
- EclipseLink
- CSI
- DEM/DCA
- Noun MetaData
CSI

- A common message audit data store to keep copies of all messages (routed through the Infor BUS) for auditing, tracing and error processing purposes.

- An error tracking, processing, and escalation process for either Infor ESB or Fortress generated errors.

- A notification component to deliver notification events to users or groups through different notification methods.

- Capability to resubmit Audited messages
DEM/DCA

- Define the environment
  - Servers
  - Resources
  - Containers
  - Components
- Define the routes
- Monitor the events
  - Missing events
Noun MetaData
Noun MetaData
Noun MetaData