Open Applications Group

Oracle 16th Anniversary OAGi Meeting
Opening Plenary
November 17, 2016

21 Years of Connecting Enterprises
Thank You to Oracle for 16 Years of Hosting
Open Applications Group

Anti-Trust Policy

“By participating in this meeting, you acknowledge that you and the company you represent accept the OAGi Anti-Trust Guidelines and the OAGi IPR Policy. Details of these policies and guidelines are available on the OAGi website at www.oagi.org.
Welcome and Introductions
## Thursday, November 17, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am</td>
<td>Registration and Coffee</td>
</tr>
</tbody>
</table>
| 8:30 am - 9:30 am | **Opening Plenary**  
|               | This session updates the audience on OAGi business status and technical initiatives.  
|               | David Connelly, OAGi                                                 |
| 9:30 am - 10:10 am | **Oracle Keynote - Implementing OAGIS in Modern Cloud Applications**  
|               | This session includes how OAGIS can be leveraged by modern cloud applications to increase customer value.  
|               | Central to this theme would be a demonstration of how Oracle SCM Cloud produces and consumes OAGIS 10.1 messages to support any and all forms of B2B communication.  
|               | Garret Minakawa, Director Product Strategy, Oracle                   |
| 10:10 am - 11:00 am | Coffee Break                                                         |
| 11:00 am - 12:00 pm | **Quality Content WG Update**                                       
|               | Scott Nieman, Land O’Lakes, Evan Wallace, NIST, Frank Riddick, NIST,  
|               | Frank Heinrich, IBM                                           |
| 12:00 pm - 1:10 pm | Lunch Break                                                          |
| 1:00 pm - 1:45 pm | **OAGI AIA and EBO WG Update**                                       
|               | Scott Nieman, Land O’Lakes, Jeff Rice, Boeing                       |
| 1:45 pm - 2:30 pm | **Boeing work with the Oracle EBO Contribution**                     
|               | Jeff Rice, Application Architect, Boeing                             |
| 2:30 pm - 3:30 pm | **Semantic Enhancement Working Group Review and Demo**               
|               | Boonsorn Kulvatanyou, NIST, Hakju Oh, NIST, Jeff Rice, Boeing, Scott Nieman, Land O’Lakes, Mike Rowell, Oracle |
| 3:30 pm - 4:15 pm | Coffee Break                                                          |
| 3:45 pm - 4:30 pm | **Smart Manufacturing Working Group Review and Demo**                
|               | Nenad Ivezic, NIST, Miroslav Ljubicic, NIST, Hyunbo Cho, Postech, Scott Nieman, Land O’Lakes, Evan Wallace NIST, Frank Riddick NIST |
| 4:30 pm - 5:00 pm | **Open Discussion**                                                  
|               | David, Mike, Jim                                                     |
| 5:00 pm       | **Matters Arising and Close**                                        |
| 5:30 pm - 6:00 pm | **Casual Dinner Together - Optional**                                |
Friday, November 18, 2016

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</tr>
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<td>David Connelly and Mike Rowell review the current OAGi Technical Programs and answer your questions in an Open Feedback Session.</td>
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<td>Coffee Break</td>
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<tr>
<td>11:30 am</td>
<td>Day Over</td>
</tr>
</tbody>
</table>
OAGi Membership Now

- ADP
- AgGateway
- Automotive Industry Action Group (AIAG)
- Amber Road
- Archer Daniels Midland
- Austen Consultancy
- Boeing
- Bright3 AB
- Cisco
- Command Alkon
- Data Communication Solutions
- DBI Poland

- E2open
- EDIFICE
- Emerson
- Etail Solutions
- GEFEG
- HR Open Standards
- iBASEt
- Infor
- ISA
- Japan Petrochemical Association
- Justransform
- Land O'Lakes

- Liaison Technologies
- London Drugs
- NIST
- OASIS
- Odette
- OpenText
- Oracle
- SAA Consultants
- Standards for Technology in Automotive Retail (STAR)
- Trisotech
- MESA
# OAGi Staff and Contractors

## Employees

David Connelly  
CEO  
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+1 770 331 8636

Michelle Rascoe  
Business Manager  
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+1 404 402 1962

## Contractors

Jim Wilson  
OAGi Chemical Industry/Ag Council Architect  
jwilson@oagi.org  
+1 (816) 525-2000

## Loaned Staff

Mike Rowell  
Chief Architect  
(part-time on loan from Oracle)  
mrowell@oagi.org or mrowell@oracle.com  
+1 704 630 6914
2016 OAGi Events YTD

- Approval from Oracle for EBO contribution
- Receipt of EBO contribution
- Started AIA EBO Working Group
- How are you using OAGIS? Survey launched
- Agreement with Trisotech for BPMN Cloud Service for OAGIS work
- Completed onboarding by Trisotech on BPMN Cloud Service
- 2016 Update of OAGi Development Methodology
- Completed Phase One of the Quality Content Working Group
- Delivery of OAIGIS 10.2
- Chem eStandards Release 5.4 delivered
2016 OAGi Events YTD

- Jim Wilson speaks at the CEDI meeting in Tokyo
- Completed Archer Daniels Midland training
- Completed E2open training
- Completed Boeing training
- Completed OAGIS and Canonical Model Overview for Infor Architects
- OAGi and NIST successfully host an Open Cloud Workshop for Smart Manufacturing
- OAGi Spring Plenary and Working Groups
- Traveled to Berlin to submit OAGIS 10.1 to ISO TC154 for fast track to Intl. Std.
- Delivery of OAGIS 10.2.1
Cloud BPMN Service

- Launched with Onboarding Video
- Quality Content and Smart Mfg. WG’s using the tool
- OAGi has 20 license for members to use for their OAGi standards work
- OAGi plans to adopt into the OAGi Development Methodology once members learn BPMN and become comfortable
JSON NDR and
REST API Design Guide

OAGi JSON Schema Naming and Design Rules (NDR)
and REST Usage Design Guide

Authors:
Michael Rowell, Oracle, OAGi
David Connelly, OAGi

Contributors:
Scott Nieman, Land O’Lakes
Steffen Fohn, ADP
Frank Heinrich, iBASEt
Kurt Kanaskie, Invited Expert
JSON NDR and
REST API Design Guide

- JSON Naming and Design Rules (NDR)
- Maps OAGIS Verbs to REST Verbs
- Recommends using components instead of entire BODs
- Endorses the OData URI convention for resource paths and query options, reflecting the goals of the Richardson Maturity Model
OAGi Working Groups

- Semantic Refinement and Tooling WG
- AIA EBO Migration WG
- Quality Content WG
- Smart Manufacturing WG
- Chem eStandards Maintenance WG
- Quality Assurance Working Group
ISA S-95 Outreach Activities
Current Release OAGIS 10.2.1

- Released in September, 2016
- Bug fixes
- JSON Instances
- OAGIS 10.2.1 is backwardly compatible with OAGIS Release 10.0.
OAGIS® 10.2.1 Scope

- **eCommerce**
  - e-Catalog
  - Price Lists
  - RFQ and Quote
  - Order Management
  - Compliance
  - Purchasing
  - Invoice
  - Payments

- **Manufacturing**
  - Engineering
  - MES
  - Shop Floor
  - Plant Data Collection
  - Conformance
  - Warehouse Management
  - Quality

- **Logistics**
  - Orders
  - Shipments
  - Routings
  - Tracking

- **CRM**
  - Opportunities
  - Sales Leads
  - Customer
  - Sales Force Automation

- **ERP**
  - Financials
  - Human Resources
  - Manufacturing
  - Credit Management
  - Sarbanes/Oxley & Control

---

EDI and XML Based Integration
- Customer
  - One

Windows 7 Phones
  - IPhones, iPads
  - Android Devices
  - Blackberrys

JSON Based Integration
- Cloud Service
  - Broker

XML Based Integration
- Application to
  - Integration

Firewall
- Cloud Service
  - Broker

JSON Based Integration
- Supplier
  - Two

Customer
  - One

Supplier
  - Two

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OAGIS 10.3 is Coming!

- **Quality Content**
  - Three new Nouns
    - CorrectiveActionRequest
    - CorrectiveActionPlan
    - CorrectiveAction

- First generation EBO based enhancements
- BPMN Version of Scenarios
- Planned for late 1Q, 2017
Current OAGi Standards

- OAGIS 10.0, 10.1, 10.2.1
- OAGIS Release 9.6.1
- OAGIS 9.X Naming and Design Rules
- JSON NDR and REST API Design Guide
- Data Management Guide
- Confirm BOD Usage
- Get/Show Usage guide
- Chem eStandards Use Report
- Chem eStandards Business Process Guidelines
OAGi User Demographics
## 2016 How do you use OAGIS?

Please tell us how you are using OAGIS or plan to use OAGIS.

<table>
<thead>
<tr>
<th>Answer</th>
<th>0%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business to Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application to Application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business to Consumer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the Cloud</td>
<td></td>
<td></td>
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<tr>
<td>Mobile</td>
<td></td>
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<tr>
<td>In APIs</td>
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<tr>
<td>Web Services</td>
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<tr>
<td>SOA Implementation</td>
<td></td>
<td></td>
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<tr>
<td>Other (View all)</td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th></th>
<th>Number of Responses</th>
<th>Response Ratio</th>
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<tbody>
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<td>60.0%</td>
</tr>
<tr>
<td>Application to Application</td>
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<td>30.0%</td>
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<tr>
<td>Business to Consumer</td>
<td>1</td>
<td>10.0%</td>
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<tr>
<td>In the Cloud</td>
<td>4</td>
<td>40.0%</td>
</tr>
<tr>
<td>Mobile</td>
<td>1</td>
<td>10.0%</td>
</tr>
<tr>
<td>In APIs</td>
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<td>20.0%</td>
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<tr>
<td>Web Services</td>
<td>5</td>
<td>50.0%</td>
</tr>
<tr>
<td>SOA Implementation</td>
<td>1</td>
<td>10.0%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Totals: 10 100.0%

[View comments (2)]
2016 How do you use OAGIS?

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</tr>
<tr>
<td>SOA Implementation</td>
<td></td>
</tr>
<tr>
<td>Other [View all]</td>
<td></td>
</tr>
</tbody>
</table>
**Sample of BODs implemented**

**Which OAGi BODs have you implemented?**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProcessRemittanceAdvice in production</td>
<td>Anonymous</td>
</tr>
<tr>
<td>SyncTestMethod in UAT</td>
<td>Anonymous</td>
</tr>
<tr>
<td>SyncTestSpecification in UAT</td>
<td>Anonymous</td>
</tr>
<tr>
<td>ProcessInspectionOrder in UAT</td>
<td>Anonymous</td>
</tr>
<tr>
<td>SyncTestResult in UAT</td>
<td>Anonymous</td>
</tr>
<tr>
<td>SyncPartyMaster in Discovery</td>
<td>Anonymous</td>
</tr>
<tr>
<td>SyncInvoice in Development</td>
<td>Anonymous</td>
</tr>
<tr>
<td>SyncPurchaseOrder in Development</td>
<td>Anonymous</td>
</tr>
</tbody>
</table>

Catalog
Credit
CustomerPartyMaster
InventoryBalance
inventoryConsumption
Invoice
termMaster
PartyMaster
Personnel
PlanningSchedule
ProductionPerformance
ProductionSchedule
PurchaseOrder
ReceiveDelivery
RemittanceAdvice
SalesOrder
Shipment
ShipmentSchedule
ShipmentUnit

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Who Downloads OAGIS?

- OAGi gets over 8 new registrations per business day
- 12,459 as of November 3, 2016
- They come from all over the world
## Country Representation Website Registrations

<table>
<thead>
<tr>
<th>Continent</th>
<th>Number of Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>12</td>
</tr>
<tr>
<td>Asia</td>
<td>17</td>
</tr>
<tr>
<td>Australia/Oceana</td>
<td>4</td>
</tr>
<tr>
<td>Europe</td>
<td>40</td>
</tr>
<tr>
<td>Middle East</td>
<td>8</td>
</tr>
<tr>
<td>North America</td>
<td>7</td>
</tr>
<tr>
<td>South America</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total Registrations</strong></td>
<td><strong>99</strong></td>
</tr>
</tbody>
</table>
Who Uses OAGIS?
Hello Dave,

Thanks for the invitation to join OAG. At Campbells Asia Pacific (I am based in Sydney, Australia) we have already adopted OAGIS as our message content schema (canonical form) in our EAI projects. We are a Tibco shop, and leverage the toolset for both B2B and A2A integrations. We reviewed ebXML for the initial B2B integration with a 3PL that was our first EAI project, but since the particular trading partner in question did not have a messaging framework in place enabling the infrastructure level interoperability, we leveraged the default Tibco framework (tibXML) as the most appropriate alternative because it is simpler to implement and to deploy and was sufficient for the 3PL integration.

The principle we've adopted is that all messages hitting the Tibco message "bus" will be mapped into a standard "canonical" XML content schema - OAGIS - to ensure future reuse of any data published on the bus.

We found OAGIS supported most of the B2B transactions we needed for 3PL . . .
OAGIS around the world

Approx 100 Countries
Some Industries Supported by OAGIS

- Aerospace
- Automotive
- Agriculture
- Chemical
- Service
- High Tech
- Military
- Metals
- Discrete Manufacturing
- Government Agencies
- Life Sciences
- Retail Supply Chain
- Shipping
Other Industry Adoption Examples

- Telia Sonera
- Land O'Lakes
- US Steel
- Merck
- Ingersoll Rand (Ireland)
- IBM
- National Bank of Abu Dhabi
- UK Ministry of Defence
- General Electric
- SKF (Sweden)
- Black and Decker
- Campbell's Soup (Australia)
- Staples
- Woolworths (Australia)
- British and American Tobacco
- Siemens
- Johnson and Johnson
- Engelhard
- Cargill
- Emerson
- Agilent
Questions?
The Way Forward
OAGIS 10.X The Way Forward

- The OAGIS Cloud, Mobile, JSON work will be OAGIS Release 10.X based
- Focus for Cloud and Mobile is REST-based API’s using OAGIS components and Nouns
- All new technology and content enhancements will go into OAGIS Release 10.X
- It is the Platform of the Future for OAGIS
The Model

- All of the building blocks
  - The Platform
  - The Meta Model
  - BOD Architecture
  - Messaging Architecture
  - Nouns
  - Verbs

- The “OAGIS Standard Edition” is a set of generated expressions from the model
- Enables Contextualized Versions all based on the same model
- Enables generating of other expressions such as JSON while maintaining the normative Model
Model Concept

OAGIS Model

OAGIS Expression

OAGIS Expression

OAGIS Expression

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OAGIS in an RDMS

- Part of our Semantic Enhancement and Tool Working Group
- Put OAGIS in an RDMS and build software to generate objects from our Core Components based on context drivers
- To generate expressions of OAGIS in XSD and JSON
- First versions to support Oracle
- Not replacing XML/XSD, complementing it
Questions?
OAGi Resources Available
Open Applications Group
Open Standards that Open Markets

Business and Technical Resources for members

OAGI Training Video - How to do OAGIS 10.X Extensions
A Short Walk through OAGIS 9.6
An insightful presentation on how to navigate the OAGIS Standard and Architecture.
OAGIS Training Video 1 of 3
Flash video recording of OAGIS Training, 7 Minutes, 7 MB
OAGIS Training Video 2 of 3
Flash video recording of OAGIS Training, 42 Minutes, 58 MB
OAGIS Training Video 3 of 3
Flash video recording of OAGIS Training, 27 Minutes, 35 MB
Chemical Industry Webinar 1 Recording
Download the recording of the May 18, 2010 featuring Tom Fannon of Ashland and Chair of the OAGI Chemical Industry Council.
Chemical Industry Webinar 2 Recording
This webinar features Nancy Fazzoni from Dow and Tom Fannon from Ashland. In this webinar Nancy and Tom discuss their experiences with implementing B2B.
Core Components Training Class
See the April 2010 issue of our monthly newsletter for an update on announcements, accomplishments, and activities.
Who Uses OAGIS?
An update on industries and companies using OAGIS.

Member Business
OAGI Calendar
OAGI Development Methodology
OAGI IPR Policy
OAGI Anti-Trust Policy

OAGIS Releases and Resources

These are the resources that are free only to OAGI members. The others are available on the regular website here.

Member Only OAGIS Releases
These are available at the Members Only tab on the top right Webpage Menu

OAGIS Resources
OAGIS EDI Cross Reference
OAGIS BOD Flattener
OAGIS 10.X Architecture Document
Confirm BOD Specification
Get/Show Usage Position Paper
Data Management Position Paper
OAGIS 9.5.1 Data Dictionary – Excel and .HTML formats
OAGI Navigator for Chem eStandards (zip, 3.2 MB)

OAGI Member Badges

Learn more about discounts on OAGIS Training and Service here
OAGi You Tube Channels
Some OAGI Registrations
The Billentis Report 2016
E-Invoicing / E-Billing: Digitisation & Automation

Your report covers:
> E-invoicing & e-procurement
> Improving data accuracy
> Automated e-invoicing

Download Your Report Now

Latest News
- Industry report indicates e-Invoicing is still in its infancy with new innovations shaping the future!
- Financial Pressures Accelerating Uptake in e-Invoicing/Billing
- Celtrino in the Sunday Business Post
- Celtrino achieves a Microsoft Silver Independent Software Vendor competency
- Celtrino Express e-Billing Service Launched

Hidden Costs of Email
Download this guide which compares the use of email with best practices for the exchange of business documents. The guide includes information about email in relation to principles such as:
1. Sharing information in a timely, reliable manner
2. Providing shared visibility of document processing status

Customer Case Studies

Tweets by @Celtrino
Barefoot Wine & Bubbly

With 33 different types of wine including Barefoot Cellars, Bubbly and Refresh, it's easy to get Barefoot and have a great time!

Learn More
We are making our planet more productive

At Praxair, making our planet more productive is our mission. We believe this phrase demonstrates how well we provide efficiency, energy, and environmental advantages to our customers around the world.

Understand Our Commitment
GLOBAL TRADE MANAGEMENT. END-TO-END ASSURANCE.

Partner with the best. Livingston scales best-in-class trade solutions to augment your team with the right talent, business processes, and technology. Reduce your cost, risk, and cycle time. Reliably.

Lower your costs.
Trade has many cost-lowering opportunities. Trade agreements, manufacturing regimes and proper classification are just a few ways to ensure effective and accurate duty management. Streamline your supply chain and develop measurable best practices.

Get to market faster.
Time is money. We eliminate bottlenecks in your supply chain, ensure accurate product classification, improve operational performance, and accelerate delivery/payment cycle times. You get to market ahead of the competition.

Free up resources.
The right partners free up valuable resources. That is our skill. When you strengthen your compliance program with our expertise, you become better able to focus on your core competencies. We integrate with your supply chain to meet your targets. Consistently.
novomind - IQ Interactive

SUPERIOR E-BUSINESS SOLUTIONS FROM ONE SOURCE

Our software solutions give your company a decisive headstart.

TO OUR SOLUTIONS

OUR SOLUTIONS

Contact Centre
E-communication solutions

novomind AGENT is our solution for the contact and service centre. Because we know how digital communication works.

FIND OUT MORE

E-Shops
Next generation e-commerce

novomind SHOP and IBM WebSphere Commerce are our solutions for interactive multi-channel B2C and B2B retail.

FIND OUT MORE

PIM
Product Information Management

novomind PIM is our B2C and B2B PIM (Product Information Management) system. High product data quality pays off immediately.

FIND OUT MORE

NEWSLETTER

Thank you for your interest in novomind E-Business solutions.

E-Mail *

ORDER
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Are you searching for a Data Integration Software? Flow Software is the answer.

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Rapidly Deployed
Implement Integrations and EDI in a fraction of the time of other software

Powerful
Enterprise level processing power

Lightweight
Minimal hardware and infrastructure required

Scalable
Grows with your business, giving you as many connections and as much data as you need
Si prende cura del tuo benessere

FOCUS ON

Saline supplements
What they are and how they act

Movement
How to keep fit

Power
The seven golden rules

Eyes
Mirror of the soul

Stress and fatigue
What to do to counter them and feel better

Skin
Health Mirror

Lactic ferments
Why do well and are essential to our body

Constipation traveler
Parts with the right advice
Questions?