Open Applications Group

Development Methodology

Project Definition → Construction → Review and Approval → Publication → Project Definition

Open Applications Group Development Methodology

Introduction

The purpose of the document is to describe the Open Applications Group development methodology, including the process for building an integration specification. This document assumes an overall familiarity with the Open Applications Group. This includes the technology, the architecture, and the current deliverables, including The Open Applications Group Integration Specification (OAGIS), the OAGIS Architecture, Chem eStandards, and associated documents and software to support the standards.

OAGIS is downloadable from our web site at: http://www.oagi.org.

This document describes several topics:

1. Open Applications Group development process and principles.
2. How the development meetings are run.
3. When to choose a Working Group due date.
4. How to propose a specification to the Open Applications Group.
5. How to design the specification content.
6. How to leverage the principle of re-use.
7. How to build the specification in the OAGi formats.
8. How to get an interface specification approved and published by the OAGi Working Group.

NOTE: This methodology is primarily oriented for building content. If your project is about adding or changing technology, we ask you follow the spirit on the methodology and use your best judgment on applying it to your Working Group efforts. If you have any questions or comments, please write us at info@oagi.org or visit our web site at http://www.oagi.org.

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Development Principles

Introduction

The Open Applications Group Inc. (the OAGi) is organized (i) to promote business process interoperability for both inter & intra enterprise business processes and (ii) to encourage the creation of and/or create and endorse one or more standards to assist organizations in achieving connectivity and multiple-source integration of inter & intra enterprise business processes.

Planning Assumptions:

1. You must be a Council Member or higher to initiate a Working Group and at least a General Member to participate in a Working Group. It is possible that certain "Invited Experts" may be allowed when invited by the Working Group Chair and approved by the OAGi staff or Policy Board.

   Invited Experts:
   - Must be appointed by the Working Group and approved by an OAGi Architect or CEO.
   - Must sign the OAGi IP Policy document and the Project Definition Signature Page.
   - May contribute and render expert knowledge but not vote on working group issues.

2. It takes a minimum of three OAGi members to form a Working Group. All Working Group members must formally join the Working Group and they must have a signed OAGi Membership Agreement and Signed OAGi IPR Agreement on file with the OAGi for their organization or for themselves. The OAGi IPR Agreement and Membership Agreement are freely available on the OAGi web site at www.oagi.org.

3. To formally join a Working Group, the OAGi member must sign the signature page in the Project Definition. This sets the scope of contributions to the scope of the Project Definition.

4. Working Group members must participate in the process if they want their contributions to be included in the final deliverables of the Working Group. This participation may include email lists, teleconferences, and face to face meetings. It is not required that members attend all Working Group meetings in order to vote on the Working Group content. If a member misses too many meetings, though, the Working Group Chair may ask the member to abstain from the approval process because of their lack of knowledge and participation.

5. Projects will not be initiated unless a member asks. No projects will be initiated without specific demand.

6. Projects will not be re-started when new members join the meetings. If a member gets involved late in the process and wishes to change the Working Group content, they may propose a new Working Group to re-consider the content and they can bring the work back through a full cycle for review and approval by the Working Group.

7. No feature regression is permitted. This means that no capabilities that are available in any previous version of OAGIS may be removed in a future version.

8. Backward compatibility must be maintained. This is usually accomplished by adding to the capabilities of a Scenario or a Business Object document, but not ever taking away capabilities that would render the existing implementations obsolete. This enables the current users to continue to rely on a message at a revision level to remain intact.

   Policy Board approval is required for any breakage of backward compatibility.

9. Content will be reused whenever possible. This is a key factor in keep OAGIS as a coherent Canonical Model for its users. Extensions to current work are allowed and encouraged to order to extend the current specification to meet new requirements.

   The Working Group Members and the Working Group are responsible for ensuring the maximum amount of reuse.

10. Consistency across Working Groups and deliverables is sought. An OAGi architect is assigned to each Working Group for review and consulting purposes. This architect will help the Working Group Chair when necessary on project as well as content issues.

   The OAGi Chief Architect, working with the Architecture Council, will review all deliverables during the project to ensure maximum re-use and consistency of business content and technical architecture in all deliverables.

11. All OAGi documents must be reviewed and approved by either the OAGi Quality Working Group. This includes drafts, beta, review, or final versions of documents. All drafts, beta, and review documents, when made public, must include the OAGi IPR Public Wording that defines the IPR rules associated with the document. All final documents must contain the OAGi License Agreement.

Meeting Procedures:

- Meetings may be held face to face, by teleconference, using web based collaboration tools, or in any other manner agreed to by the Working Group. The Working Group Chair will publish an agenda for the meeting.

- The Working Group Chair runs the meetings.

- Minutes are mandatory. They must include, at a minimum, Working Group name, date and time, meeting attendees, meeting agenda, decisions made,

action steps, next planned meeting date and time. A meeting minutes format can be provided by the OAGi Staff.

- The meetings are run by consensus. Consensus is defined by agreement of the majority in sentiment or belief [syn: general agreement]. We will strive for people to get to the point where they can say; "I can live with this."

- Anyone in the meeting may comment and make suggestions any time during a review unless otherwise stated.

- Sometimes we may ask that the Working Group holds their questions until after a presentation, but this will be stated when this is necessary.

- We ask that no negative remarks be made about any persons in the meeting.

- We ask that no negative remarks be made about any member organization during the meetings.

- Negative remarks concerning a proposal or a specific point must be accompanied by a constructive alternative proposal.

- If important issues come up during a discussion, that issue will be taken off line so the Working Group can stay on topic unless the Working Group wishes as a group to address it at that time.

- One approval of deliverables per organization. If a member company has more than one representative on the Working Group, they have a collective opinion of approval.

Summary Overview of Process

Process Flow

The best way to visualize the entire process for building specifications and message is to review the diagram just below. This process will be described in more detail and each phase will be described with activities and deliverables.

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┌──────────────────┐         ┌──────────────────┐
│     Project      │────────▶│   Construction   │
│   Definition     │         │                  │
└──────────────────┘         └──────────────────┘
         ▲                            │
         │                            ▼
┌──────────────────┐         ┌──────────────────┐
│   Publication    │◀────────│   Review and     │
│                  │         │    Approval      │
└──────────────────┘         └──────────────────┘
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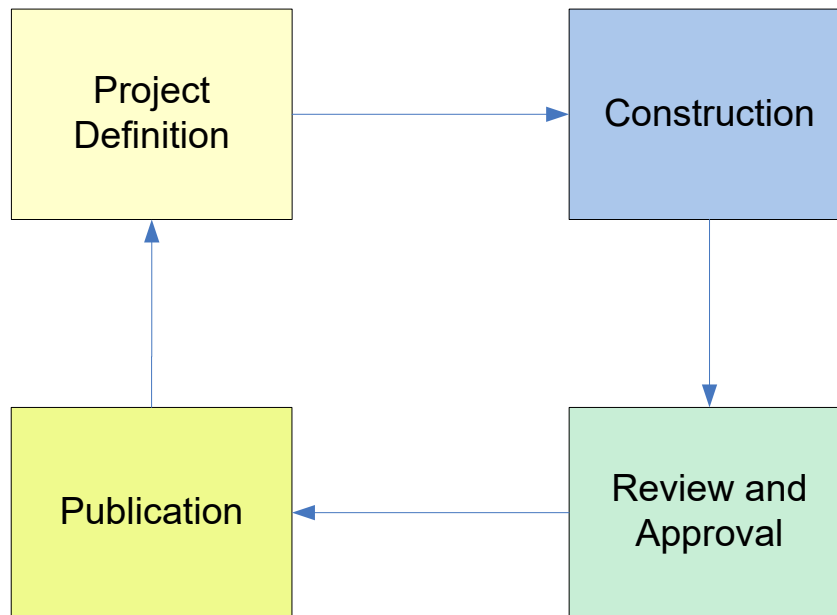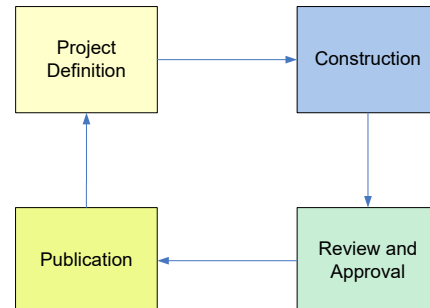
Definition Phase

The Open Applications Group Development Methodology has four phases:

1) Definition

2) Construction

3) Review and Approval

4) Publication

This section describes the first phase, the Definition Phase. Each of the other phases are described in detail later in this document.

Purpose of Definition Phase

The purpose of the Definition Phase is to define the scope of the Working Group, pick a Working Group Chair and team, develop a work plan and document what is to be done.

Deliverables of the Definition Phase

The Definition phase has three primary deliverables. The Working Group Chair is responsible for all of these deliverables.

1. Project Definition, including scope, planned deliverables, Working Group members, and planned schedule.
2. A Power Point based template is available for the Definition Phase.
3. Working Group member signatures.
4. A sharing and support group similar like Google Drive or similar.

Enhancements to Standards

Modifications to standards can come from many ways. This document primarily addresses new content, new technology, or medium to large additions or modifications. Small change requests posted through the website feedback form or email can sometimes be addressed though review of the Architecture Council only. If more opinions are required, the Chief Architect will ask 2 or 3 experts on the subject in question. This is allowed and encouraged as it is a key feedback loop mechanism to keep the standards vibrant and relevant.

Wherever possible, we have tried to made annotations in this document with options for those building enhancements. If you have any questions, please contact the OAGi staff and they will be glad to help out.

Of course, sometimes the project definition requires both new work, as well as modifications, and we support that also in one project definition. The OAGi staff can provide examples of all of the above cases.

Process Flow of Definition Phase
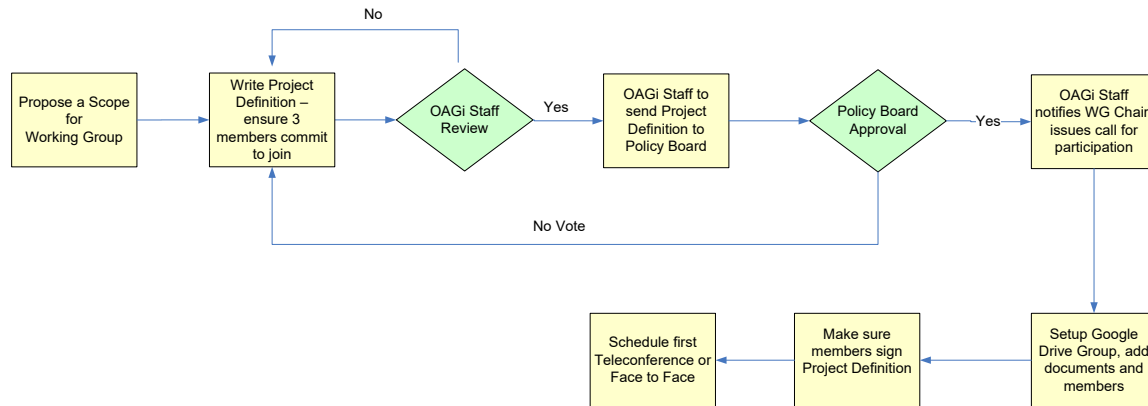
Activities of the Definition Phase

1. Build the Project Definition. A template is available for this purpose. The Project Definition contains the following items:

    - Proposed Scope

    - Key Deliverables Summary

    - Scenario Diagram

    - Business Workflow

    - message's/Nouns to be added

    - messages to be changed

    - Working Group Working Group Members

    - Planned Schedule

    - Assumptions, Dependencies, and Issues

    - Outside Resources

2. Propose the Working Group to the OAGi staff and members.

    The OAGi staff and members will review the Project Definition with the Working Group Chair and help them finalize the scope, approach, etc. If they have any concerns, they will escalate them to either the OAGi Architecture Working Group, or to the OAGi Executive Committee for discussion and resolution.

    This process will continue until the Project Definition is approved, modified, or cancelled. Early recruiting takes place at this point to ensure three members commit to join.

3. Send the Project Definition to the OAGi Policy Board for final approval.

   The OAGi staff will work with the Working Group to bring the Project Definition for a formal review and vote.

4. Issue call for participation.

   OAGi staff will issue a formal call for participation to the membership.

5. Pick the Working Group.

   When the Project Definition is approved, it is time to pick the Working Group if this has not already been done.

   This can be done by asking for volunteers during a Working Group meeting or the Nest meeting by sending out an email or soliciting participation in another meeting. The OAGi CEO or an OAGi Chief Architect can help with this task if the Working Group Chair wishes.

   You must be a member in good standing of the Open Applications Group to be a member of a Working Group. The one exception to this policy is the invited expert role defined above in this document. These rules are defined in detail the section describing working on workgroups later in this document.

6. Set up a Google Drive Folder or similar technology in the OAGi Folder on Google Drive. The OAGi Staff can help with this step.

7. Frequency of Workgroup meetings.

   The Working Group Chair may call teleconferences or face to face meetings to accomplish the work of the Project Definition Phase and any other phase of development of the OAGIS standard.

   The frequency of meetings is determined by the Working Group. For example once a week, twice a month, one a month etc. In addition, face to face meetings may be held during the OAGi face to face meetings, and in addition, at any time at the discretion of the Workgroup Chair and the team.

Special Note on Selecting Scope for the Project Definition

Perform Gap Analysis

Before you decide to build a new message, you should look to see if an existing Scenario is similar to what you want to do. The Scenario shows the names of the BODs that you should use to implement the Scenario.

Look for a message that sounds like it may meet your needs. Then do gap analysis to determine how closely the message may fit your requirements. You should use the following rules of thumb:

1. Use the message unchanged if possible.

2. Modify the message is it is missing key requirements. Message modifications can be part of the Workgroup scope as much as building new messages and Scenarios.

3. Build a new message as a last resort.

If you must build a new message, go to the component libraries in OAGIS Platform to look for content before you build new components.

Organizing the Working Group

Once the Working Group is chosen, the two primary actions steps are for the Working Group Chair to ensure are accomplished.

1. Someone from a member company must sign the signature page of the Project Definition before the member can formally participate in the Working Group. This is done to limit the IP exposure of the member to the content of the Working Group scope.

2. A schedule of meetings should be set up to begin working the issues and moving the project ahead. These meetings can be teleconferences or face to face meetings. The first meeting should cover the following topics:

    • Overall scope and intent of the Working Group

    • Identification of areas of interest of each member

    • Identification of Working Group member roles

    • Assigning of action steps to research or define the work to be accomplished

Please Note: More on the topic of Working Group members and their roles and efforts for Working Groups is covered in the last section of this document. The section is entitled: "Working on Open Applications Group Working Groups".

Setting the desired completion date

If you have a specific time frame you need to finish, it is important to schedule this like any project. Of course, the duration is directly connected to the scope of work and the number of persons on the Working Group.

We encourage short durations, if possible, to drive work out the door quickly and to avoid bureaucracy. 6 months is a good target time frame.

NOTE: Sometimes it is desirable for the Working Group members to wait until they are in the Construction Phase before setting the project completion date. Often not enough information is known during the Definition Phase to give an accurate completion date.

Construction Phase

Purpose of the Construction Phase

The purpose of the Construction Phase is to build the content of the standard's deliverables and to ensure involvement of the members to obtain a quality deliverable that can be supported by the membership.

The construction phase workflow is depicted below:
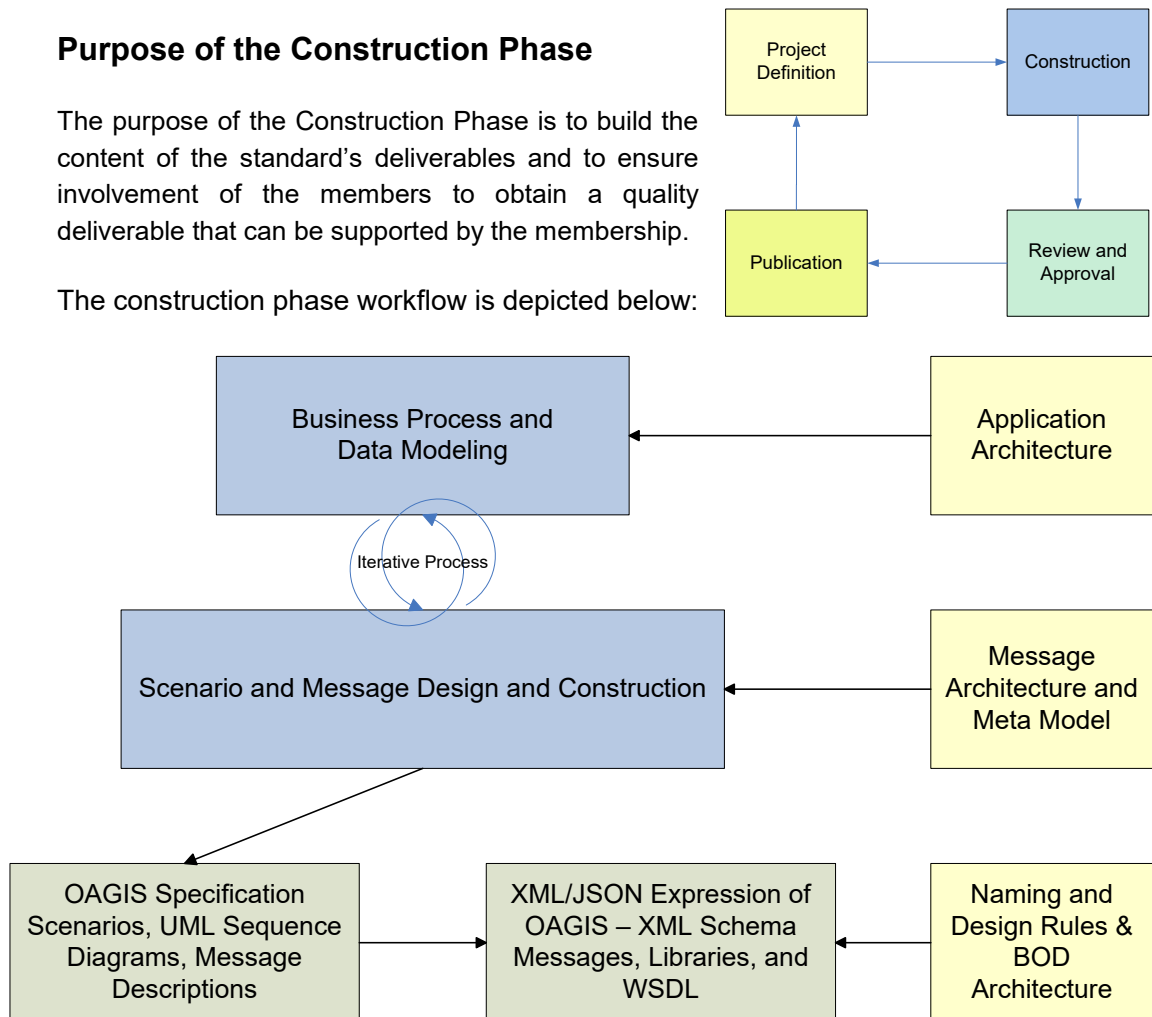
Deliverables of the Construction Phase

1. Integration Scenarios

    The Open Applications Group requires the use of the UML Sequence Diagram for depicting the Scenario. Working Groups may also use BPMN if they wish. The OAGi staff can give you access to their shared tool. We also require documentation for the Scenario, including but not limited to the items below. There is a sample format available for the working group to review. More detail is included in the activities section below.

    - Assumptions about the process
    - Component Definitions – Description of the boxes depicting components, applications, or entities used in the Sequence Diagram
    - Business Sequence or Flow
    - Exception Handling

    An example of a Scenario UML Sequence Diagram is just below. Another example of a Scenario Description is in Appendix B.
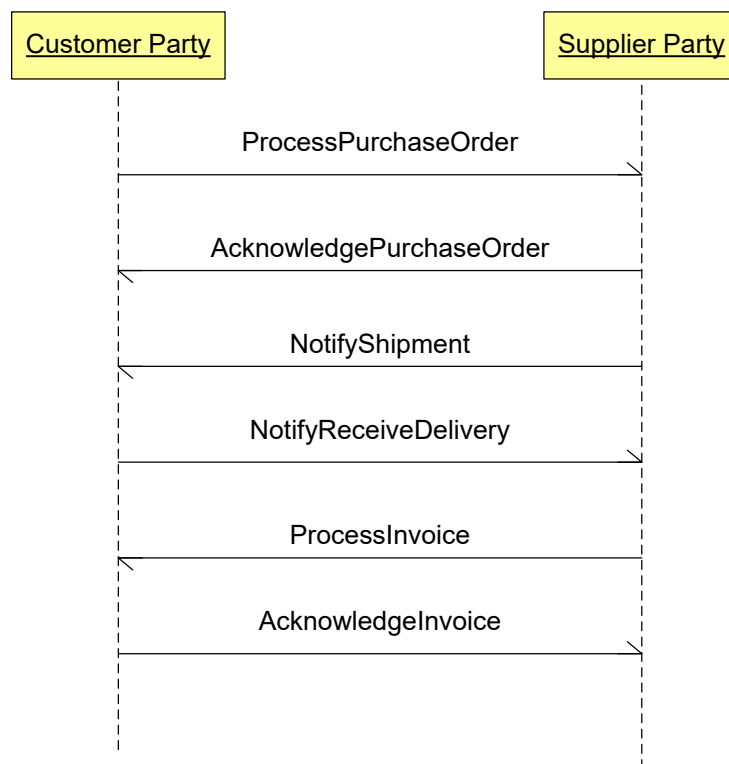
2. Business Object Document definitions

OAGi models the data in XML itself rather than use UML Class Modeling tool. Some Working Groups also use UML One can start with a spreadsheet during the requirements but the construction is done directly into the schema. Most of the time the requirements are given to the OAGi Chief Architect to do the actual XML work, but sometimes the work is done by the member and then handed to the OAGi Chief Architect for putting it into the final XML.

All modifications to Nouns, Components, and Elements must be documented.

3. XML Schema Files – messages and component libraries

The Business Object Documents must be expressed in XML Schema during this phase. New messages may be constructed or existing messages may be modified as part of this process. NOTE: All data work is done on the OAGIS Class Libraries in order to maintain the Canonical Model. Then the BODs are effectively "assembled". More detail is included in the activities section below.

4. XML Examples

It is incumbent upon the Working Group to develop examples of the Schema's with a real instance of an XML document using realistic data. Most XML tools will do this automatically from the Schema.

5. JSON and WSDL

JSON and WSDL will be developed by the OAGi either at the same time of the Working Group or at a later date.

Activities of the Construction Phase

BUILDING THE SCENARIO:

The design of the integration Scenario drives the model for integration. The Scenario needs to be designed and thought through before the messages can be designed. The Scenario design process leads to the "discovery" of the messages necessary to complete an integration Scenario.

When working through the problem, think of using the following as a checklist to ensure that all needs of the integration Scenario are met. Come back to this list as you work though the project.

Entity Identification	This creates the boxes in the Scenario diagram.
Process mapping & reconciliation	This creates the arrows in the Scenario diagram.

Data mapping & reconciliation	This creates the data structure and elements in the message chapter.
Data synchronization	Think of sequence in the Scenario. What needs to be synchronized before transaction flow begins.
Transaction Processing	What are the transaction flows necessary between business software components? Does this Scenario require What is the sequence of transactions or business events? This sequence is captured in Section Two of OAGIS in the Scenario description chapters.
Query and Reporting	What are the requirements for asking for information between business software components? This will help determine if the Verbs Get and Show are required.

NOTE: Try to reuse existing content where possible.

To start building the Scenario, we suggest you start with existing Scenarios for re-use. You can use any tool you prefer to build the UML Diagram, as the OAGi staff will import it into the complete OAGIS model. It would be best if you used a tool that others are using, and the OAGi staff can help you find the right tool.

It is very important to capture all of the information about the integration Scenario, not just the picture. OAGi has a format and examples of an Integration Scenario.

It is important to capture the assumptions about the integration Scenario. This includes information such as the business environment. Examples of this include single cycle or dual cycle accounting, process or discrete manufacturing, request and reply or publish and subscribe assumptions. Other examples would be whether this is an external process or an internal process. Take care; many internal processes are becoming external processes in today's world.

Other information to be documented includes the component definitions, process flow sequence and interdependencies, and any exception handling necessary under the specific circumstances.

BUILDING THE MESSAGE:

OAGIS requires the use of the most recently approved OAGIS Naming and Design Rules for building schemas. Failure to do so will result in non-approval of the deliverables.

Once you have the data design the way you want it, Use the Verb tables to help pick the Verbs you require. OAGi Staff can provide the Verb tables if you don't have them.

Whether you are building a new message or modifying an existing message, please check with the OAGi Chief Architect to ensure that you have the most current revision of content.

When developing new Elements, Components, or Nouns, make sure that the definition is clear and concise. Use examples and synonyms where possible to clarify semantic meaning.

If there is a generally accepted definition of a term from an industry accepted body of work, use it wherever possible. Examples of this are the Financial Accounting Standards Board (FASB), and the American Production and Inventory Control Society (APICS).

Please Note: If the value or values for an Element can be specified, please define the values.

If there is a universally accepted standard for values of an Element, use the standard. Examples of previously adopted standard values include ISO639/2, 3, or 4 for Language and ISO1000 for Unit of Measure.

Duplicate names for Elements, Components, and Nouns are not allowed. Please be careful when developing these.

When developing new element names, use the Data Types that OAGIS has included. These provide an important consistency to the OAGIS specification both inside and when mapping to other standards.

DOCUMENTATION

All elements, attributes, and components must be fully documented. In the final versions of OAGIS deliverables, these must be in the annotations portions of the Schema. Please look at the existing schemas for examples.
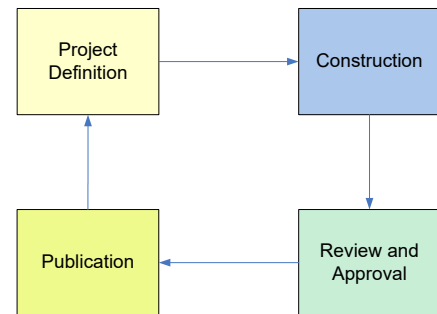
Review and Approval Phase

Purpose of the Review and Approval Phase

The purpose of the Review and Approval Phase is to create buy in from the members of the Open Applications Group, to ensure that members can and will support the work, and to ensure quality deliverables.

Deliverables of the Review and Approval Phase

1. Final version of Integration Scenarios.

2. Final versions of messages, including all documentation.

3. A 30 day or 60 day Public Review depending on the scope of changes. This decision will be recommended to the Policy Board by the OAGi staff and the Policy Board will make the final decision.

4. Review and approval of Public Review Change Requests by the OAGi Architecture Council Quality Working Group.

5. Approval of Public Review Change Requests by the originating Working Group.

6. Affirmative vote by the Quality Working Group.

7. Affirmative vote by the OAGi Policy Board.

Summary of Activities of the Review and Approval Phase

1. Review final deliverables with OAGi Chief Architect.

2. Work with the OAGi Architect to finalize the deliverables for Public Review.

3. OAGi staff will execute the formal Member Review period.

4. OAGi staff tracks all change requests during the Public Review Process.

5. OAGi Quality Working Group staff reviews, categorizes, and consolidates the change requests from the Public Review with the related Working Groups.

6. Review and disposition the consolidated change requests with the affected Working Groups.

7. Perform final OAGi Architecture technical review.

8. Present the results to the OAGi Policy Board for final approval.

The overall Review and Approval process is pictured below
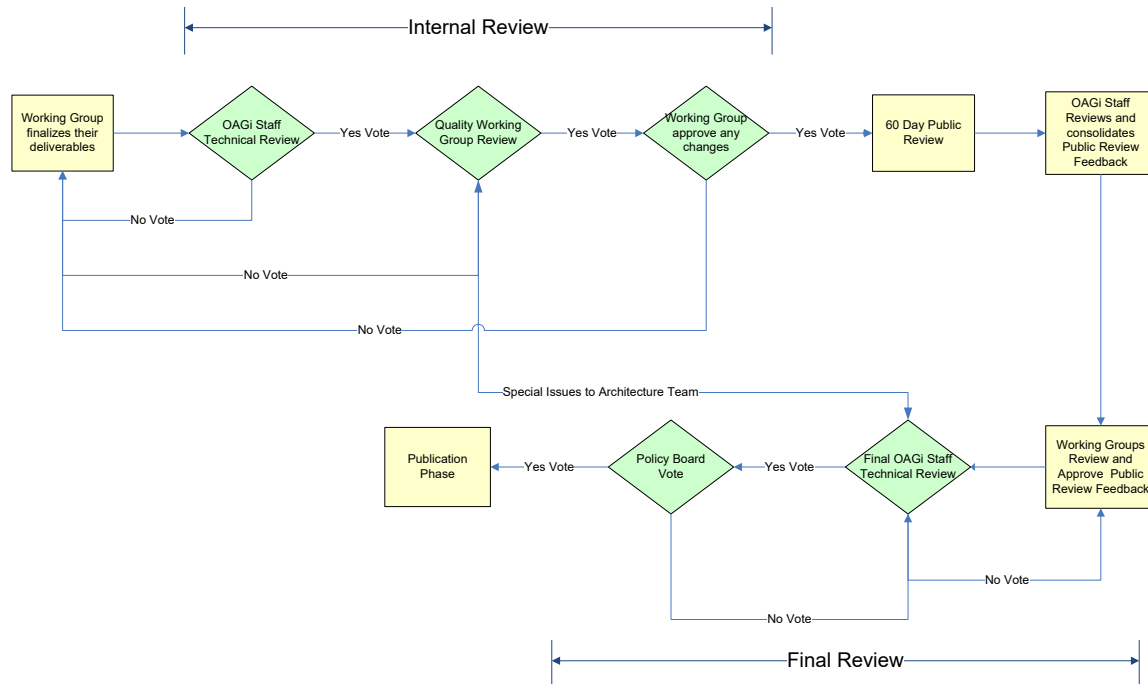
OAGIS Member Review Process

The purpose of the OAGIS Member Review process is to ensure the quality of the work, to preserve the integrity of the open standards process, and to give the public a good idea of what they will be seeing in the form of the standard in the not too distant future.

The OAGi staff may bundle the work with other completed projects and merge it all into the base OAGIS for an overall planned release of OAGIS. This is done with strict source code processes and revisioning processes. OAGi manages versions of OAGIS as software source code.

The OAGi staff will build a web site page for the Member Review with information on the review, including a summary of the content and the duration of the review. The new version of OAGIS will be posted for download and a registration page will be built.

The Member Review is then announced and also made prominent on the front of the OAGi web site.

During the member review, reviewers will be able to download the version of OAGIS in question, review it, and provide feedback with a feedback form posted on the OAGi web site. OAGi staff will gather and track all comments in preparation for the close of the review.

Once the Member Review is completed, the release candidate of OAGIS will be taken off the web site. All comments are reviewed, and determinations made on accepting or rejecting each one. All work accepted will be incorporated in the final version of OAGIS in preparation for the Publication Phase.

NOTE: It is important to make sure that a team proofing exercise take place to ensure the quality of the planned deliverable. Please see the flow chart above.

Publication Phase

Purpose of the Publication Phase

The purpose of the Review and Approval Phase is to package and deliver all of the components in OAGIS into a final release, post the release on the OAGi web site, and announce it.

Deliverables of the Publications Phase

1. Final OAGIS Specification available for download from the OAGi web site, including Documentation, Scenarios, messages, Component libraries, Schema messages, sample XML, JSON, and any other deliverables deemed necessary.

Activities of the Publication Phase

1. The OAGi Chief Architect will merge the work of all of the Working Group Chairs into a final version for publication.

2. The release is posted on the OAGi web site, including the Standard Edition, Platform Editions, and Enterprise Editions.

3. The new release will be announced by email and sometimes also a press release may be constructed and published announcing the new release of OAGIS.
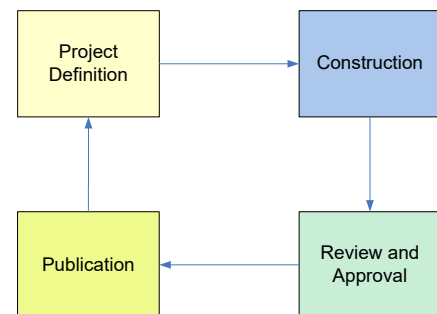
Appendix A - Working on Open Applications Group Working Groups

Introduction

You must be a member of the Open Applications Group to participate in a Working Group. All Working Group members must sign the Project Definition that Working Group.

It is possible that certain "Invited Experts" may be allowed when invited by the Working Group Chair and approved by the OAGi staff or Policy Board. These "Invited Experts" must also sign the IP Policy Agreement and the Project Definition signature page as all Working Group members do in order to participate. It is possible to by[ass this last step if the "Invited Expert" is participating on behalf of an OAGi Partner with an signed agreement, such as ISA.

Working Group members must participate in the process if they want their contributions to be included in the final deliverables of the Working Group. This participation may include email lists, teleconferences, and face to face meetings. It is not required that members attend all Working Group meetings in order to vote on the Working Group content. If a member misses too many meetings, though, the Working Group Chair may ask the member to abstain from voting because of their lack of knowledge and participation.

NOTE: All face to face meetings and teleconferences must take attendance and note in the meeting minutes.

WORKING GROUP CHAIR ROLE:

The Working Group Chair may come from any OAGi member if good standing.

The Working Group Chair is usually the primary author of the Working Group deliverables. This is not required if other members of the Working Group are willing to collaborate on developing deliverables.

The Working Group Chair presents the status of the project at Working Group Meetings. Usually between face to face meetings the Working Group Chair may call one or more teleconferences with the Working Group Members to continue the work remotely. OAGi can provide support for this with their WebEx account.

The amount and pace of effort that goes into this activity is determined by the capacity of the Working Group Chair to this work in addition to their regular job responsibilities.

This may be driven by several factors, including the date the Working Group Chair or members want to complete the project. Often the date is based on the Working

Group member organizations requirement to complete something so they can ship product for their organization.

Other Roles:

The other roles on the Working Groups generally require less time commitment Chair, although it is important to remember that a member's time commitment is controlled by their ability to contribute time and effort.

There are two other roles for persons on OAGi Working Groups. They include:

CONTRIBUTOR ROLE

The contributor is an active member of the workgroup and participates in the meetings, emails and may contribute and work on the content of the Working Group. This is a voting role as well.

All Contributors must be OAGi members with the exception of the Invited Expert Role as noted below. All Contributors must sign the Working Group specific IP Policy based on the Project Definition.

INVITED EXPERT ROLE

The OAGi Working Group Chair may, at their discretion and with the approval of OAGi Staff or the Policy Board, invite certain non-member experts to contribute to the Working Group. This person must also sign the OAGi IP Policy and the signature page of the Project Definition for the Working Group they are participating in before they can participate in this role.

This is a non-voting role.

Appendix B – Full Example of an OAGi Scenario Description as a Deliverable

Scenario 47 - Full Cycle Purchasing

47.0 OVERVIEW

Scenario #47 describes the integration of full cycle purchasing of inventory goods through the interface points between buyer and supplier systems.

The purpose of this Scenario is to enable the visualization of the participants in the process and the dialogs between them for this specific integration. This Scenario is not meant to be the only model for integrating general ledger applications to a budget applications. This is simply one model that may be used to guide one's own integration efforts.

The Scenario diagram below shows an integration that involves a buyer with a purchasing system, receiving system, and an accounts payable system interacting with the supplier side which consists of an order management system, a shipping system, and a billing system. Typically the buyer places an order through their purchasing system which then interacts with the seller's order management system wherein the order is acknowledged. The inventory system fulfills the order internal to the seller and the shipping system notifies the buyer that the shipment has been made by the buyer's system. The receiving system receives the shipment and the seller's billing system issues an invoice to the buyer's system.

47.1 SCENARIO DIAGRAM

The Scenario below contains the participants involved in the interaction, the dialog flows or conversation between them, certain assumptions about the sequence of events, and assumptions about the technical approach, for example, publish and subscribe.

This is a model to be used as a design recommendation, not a required approach.
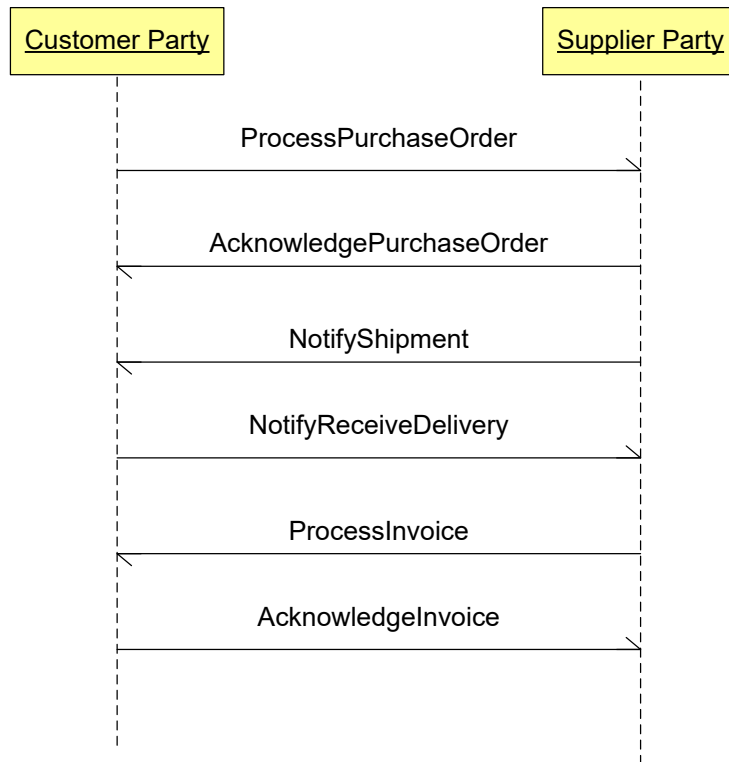
47.2 Assumptions

This Scenario assumes a loosely coupled, asynchronous approach with transaction management required but not explicitly defined.

The environment for this integration may be within a single enterprise, or across enterprises.

This Scenarios describes a model for production execution. The environment for this first part of this integration is typically within an enterprise and within a division. The environment for the second part of this integration is typically between two enterprises.

This Scenario also assume that one application will maintain the master data for integration.

47.3 P ARTICIPANT D EFINITIONS

This Scenario contains two participants or overall roles:

- Buyer - the party who is purchasing

- Seller - the party who is providing the requested good or service.

Participant applications typically consists of:

1. The buyer's purchasing system, receiving system and accounts payable system

2. The seller's order management system, shipping system and billing system

Note that the buyer's systems (purchasing, receiving, and accounts payable systems) could be part of a single or possibly within different ERP systems within the buying enterprise. Likewise the seller's systems (order management, shipping, and billing systems) could be part of a single or possibly separate ERP systems in the seller's enterprise.

The definitions and details of these applications are left to the designer but are assumed to contain the functionality as defined by what is commonly sold in the commercial market place today. This definition is broadly accepted by the Scenario designers and is a direct result of the decision not to define how the processing takes place within any individual application.

Each application must be able to perform the services defined by the message BOD (business object document), but the internals of the application are not required or desired to be exposed at this level of standardized abstraction.

The most important factors in defining these participants is to ensure that an integration designer can communicate the requirements precisely enough to detail the interfaces needed and their interrelationships.

47.4 BUSINESS WORKFLOW (SEQUENCE)

The business workflow is graphically represented by starting at the Scenario top and reading from top down and from left to right.

The Scenario contains the following events in the workflow sequence.

- Something within the Buyer organization identifies the need to purchase something and a supplier is found. These steps are not addressed in this Scenario, but are addressed in other OAGIS Scenarios.

The actual sequence consists of:

1. A purchase order is issued to the supplier and received by the suppliers order management system.

2. The order management system chooses to accept, reject, or suggest modifications to the purchase order which triggers acknowledgment of the purchase order being sent back to the buyer's purchasing system. From that point there can be a series of exchanges to address terms, conditions and availability. This dialog can occur using ChangePurchaseOrder BOD not shown in this workflow. This Workflow assumes that the order is accepted and confirmed with the Acknowledge PurchaseOrder.

3. Next step is for the order management system to communicate the order to the inventory system such that the order can be picked and sent to shipping. Since this communication is internal to the seller it is not shown here.

4. Next step is for the seller's shipping system to pack the order and send via a carrier.

5. Once the order is packed and advanced shipping notice (ASN) is sent to the buyer's system via the ShowDelivery BOD.

6. Next step is for the buyer's receiving system to receive the ASN and prepare for the shipment followed by the actual physical shipment. Typically, the shipment then would be stored in inventory at the buyer's receiving location. It may also be sent to inspection depending upon the situation.

7. Next step is for the seller's billing system to issue an invoice for the goods sent according to the terms agreed to in the purchase order.

8. Finally, the Buyer's accounts payable system acknowledges receipt and payment of the Invoice.

47.5 EXCEPTION HANDLING

Exception handling is highly localized as the result of an implementation's infrastructure, management and business rules. As such, this section of the Scenario documentation is planned to be used as a guide to help understand the additional intent of these Scenarios. If no exceptions are noted, then it can be assumed that the Scenario designers agreed they wanted to keep the flow clean, understanding that each organization implementing the Scenario will have their own exception requirements.

- Note that the Confirm BOD is not shown in the Scenario. Full Confirm BOD use is described in other OAGIS documentation, but it should be noted that the specific use of the Confirm BOD may vary significantly from Scenario to Scenario and from integration to integration.

- The Confirm BOD is intended to be used by the original receiving application to communicate to the sending application that the information it sent in the message BOD (business object document) was received and understood and can be processed.

- If the information was not received or nor understood, or contained errors of any type, it is recommended for the OAGIS users to presume that the data was not acted on and in the absence of a Confirm BOD within a partnership previously agreed to time limit to resend the original message again.

- As errors and assumptions are a problem for most organizations, it is strongly recommended that the Confirm BOD be used to prevent any potential problem although it is not a requirement for OAGIS use.