

# White Paper **Definition Documents and Naming Standards** Key to an effective Business Information Repository

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David and Roderick are passionate about helping organizations understand and document their own business processes, using frameworks such as APQC's Process Classification Framework and standards such as BPMN as well as applying simple approaches to improve and simplify these business processes.

### Enterprise Architecture and Business Process Analysis Repositories are key sources of Organizational Knowledge that support decision-making within Organizations.

Making the best decisions for an Organization requires that the best quality information be available for use in the decision making process. However, many (if not most) Enterprise Architecture and Business Process Analysis Repositories have grown organically, starting from simple collections of unstructured information and then built up over time into more structured Repositories. Not surprisingly, these Repositories tend to get 'cluttered' with information in all sorts of formats and structure, with little or no thought to standards or templates.

Unfortunately, this lack of consistent or standardized modeling, in both structure and naming will most likely result in an inability to deliver many of the benefits expected of repository-based tools, such as Orbus Software's iServer, which allow organizations to:

- Reduce or eliminate the duplication of information and effort;
- Allow the re-use of standardised information; and
- Accurately determine the impact of change

This white paper will use examples to identify the importance of:

- Creating a set of standardised templates for 'Definition Documents'; and
- Introducing naming standards.

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At first glance, it may seem that the application of these two approaches is more relevant if you are using a repository based tool however, this is not necessarily correct.

Even if you are not using a repository based tool, you still need to carefully consider both the types of things (or 'objects') that you are going to collect information about and how you are going to name them.

# **Definition Document**

### What are Definition Documents?

A Definition Document provides detailed information about a specific object. For example, a Process Definition Document contains details about a specific process.

There is usually a set of Definition Document Templates, one for each type of objects you want to define that provide the list of items to explain and define your objects. For example, if you are documenting processes using BPMN, you will need templates for:

- Swim Lanes to document the Pools and Lanes being used;
- Processes to document the different Processes and Activities used with your processes;
- Events to document the different types of Events used within your processes; and
- Data to document the different types of Data objects, such as Inputs and Outputs used.

Definition Documents and their Templates may be stored in different forms, depending on the tool set you are using, for example:

- If you are using web based to tools to create your diagrams, then it is more than likely that your Definition Documents will also be created using similar web based tools;
- If you are using Microsoft Visio to create your diagrams, then it is more than likely that your Definition Documents will be created using other Microsoft Office products, such as Microsoft Word; and
- If you're using Orbus Software's iServer (together with Microsoft Visio), then your Definition Documents will be created and stored as properties within iServer, rather than as separate documents.

In the case of iServer, Definition Documents are not so much "Documents" as attributes or information stored in the iServer Database.

The Object Types you want to cover with your Definition Document Templates form the basis of what is called a Meta Model. The Open Group Architecture Framework (TOGAF) includes two complementary definitions for the Meta Model in their TOGAF Version 9 training materials<sup>1</sup>:

- 1. A metamodel is a precise definition of the constructs and rules needed for creating models; and
- 2. A model that describes how and with what the architecture will be described in a structured way.

Wikipedia defines "Metamodeling" as:

... the construction of a collection of "concepts" (things, terms, etc.) within a certain domain. A model is an abstraction of phenomena in the real world; a metamodel is yet another abstraction, highlighting properties of the model itself. A model conforms to its metamodel in the way that a computer program conforms to the grammar of the programming language in which it is written.<sup>2</sup>

In the context of Definition Documents, the key components of these definitions are the "constructs" or the "what". Each of these "constructs" represents the Objective Types for which the Definition Document Templates will be created.

# What are the benefits of Definition Documents?

As described earlier, a Definition Document provides detailed information about a specific object, for example a specific process. The information contained in the document will include sufficient information to identify and describe specific objects, such as:

- A Process or Activity;
- An Event; or
- A Data Object.

<sup>&</sup>lt;sup>1</sup> http://www.togaf.info/togaf9/togafSlides9/TOGAF-V9-M7-Metamodel.pdf

<sup>&</sup>lt;sup>2</sup> http://en.wikipedia.org/wiki/Metamodeling

# **Guidelines for Definition Documents**

### Overview

There are basically four steps to undertake as part of preparing Definition Documents, namely:

- 1. Deciding which Tool or Tools to use for preparing and storing Definition Documents and their supporting Templates;
- 2. Identifying the Objects to define;
- 3. Creating the Definition Document Templates for each identified Object; and
- 4. Creating the Definition Documents for each instance of the identified Object.

Although the majority of the effort will be spent in Step 4, the importance of taking the time and effort to correctly complete the preceding steps cannot be underestimated.

### **Deciding what Tools to use**

The first step is to decide what Tools to utilise in preparing the Definition Document Templates and the Definition Documents themselves.

It is relatively simple to use standard Microsoft Office products, such as Word, Excel and PowerPoint, for creating the Definition Document Templates and Definition Documents. In fact, many successful projects have done so in the past.

However, the use of Repository based products such as Orbus Software's iServer provides a simple to use and more powerful set of tools for creating the Templates and Definition documents themselves. For example:

- The templates are simple and easy to create and are managed within the Repository configuration;
- An individual Definition Document is held as an entry in the Repository, rather than as an individual Word, PowerPoint or Excel file, making management and reporting of a large collection of Definition Documents much simpler and more powerful; and
- Definition Documents are automatically linked and re-used each time an occurrence is used again.

### Identifying the Objects to Define

The second step is to identify what type of things you are going to define. As outlined above, these are essentially the Meta Model Constructs or Objects that form the basis for our Definition Document Templates. The Objects for which you will need Definition Document Templates will of course depend on what you are wanting to document. For example;

- Process Documentation Projects will require a set of Definition
   Document Templates relating to Processes, covering objects such as:
  - ◊ Swim Lanes (i.e. in BPMN terms, Pools and Lanes);
  - ◊ Processes;
  - ♦ Activities;
  - ◊ Events; and
  - ◊ Data Objects.
- Information Architecture related Projects will require a set of Definition Document Templates relating to Information (i.e. Data), covering objects such as:
  - ♦ Logical Data Components;
  - ◊ Data Entities;
  - Physical Data Components; and
  - ◊ Data Entity Relationships.

Application Architecture related Projects will require a set of Definition Document Templates relating to Applications, covering objects such as:

- ♦ Logical Application Components;
- ◊ Physical Application Components; and
- ◊ Data Entities (that are used by the Application Components).

### **Creating the Definition Document Templates**

As was outlined earlier, a Definition Document Template contains the Attributes (or "things") you want to capture about the object types that you are defining. For example, a Process Definition Document Template might contain the following attributes to define the Process:

- Name;
- Purpose;
- Description;
- Triggering Event(s);
- Activities Included;
- Who performs / executes the process;
- Process Owner
- Inputs;
- Outputs; and
- Metrics, such as Standard Time (i.e. the duration taken to execute process).

# Process Definition Document Template

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| Process Name        |  |
|---------------------|--|
| Purpose of Process  |  |
| Description         |  |
| ProcessOwner        |  |
| Triggering Events   |  |
| Performed By        |  |
| Included Activities |  |
| Inputs              |  |
| Outputs             |  |
| Process Metrics     |  |



|                       | Attribute Name Description<br>Process: Strategic Im                    | n<br>]]                 | Type<br>Text |
|-----------------------|--|-------------------------|--------------|
|                       | Attribute Name Description APQC: Identifier                            |                         | Type<br>Text |
|                       | Common Attributes Details Review APQC                                  |                         | 5            |
|                       | Attribute Name Description<br>Process: ID                              | Ty<br>Te                | pe<br>at     |
| Common                | Attributes Details Review APQC   |                         |              |
| Attribute<br>Standard | Name Description<br>s class Non-Standard, Proposed Standard, Provision | Type<br>al Standar Text |              |
| nmon Attributes C     | etails Review APQC   |                         | 5 11         |
| ttribute Name         | Description  | Туре                    |              |
| )                     | Unique identifier for the architecture object.                         | Text                    | 21           |
| ategory (General)     | User-definable categorization taxonomy for each meta                   | Text                    |              |
| wher                  | Location from where the information was collected.                     | Text                    |              |
|                       | • • • •  | -                       |              |

Figure 2: Example Definition Document Templates using Orbus Software's iServer

### **Create the Definition Documents**

Having now created your Definition Document Templates, the last step is to populate the Templates with the values of all the objects you are looking to document.



#### Figure 3: Example Definition Document from APQC

| System | m Properties:   |   |                       |  |  |
|--------|-----------------|---|-----------------------|--|--|
| Name   |                 | 6.1.1 Develop human resources strategy (10415)                          |                       |  |  |
|        |                 | 🕖 Link Shape  | e Text To Object Name |  |  |
| De     | escription      |   |                       |  |  |
| Lik    | 17 <b>2</b> 1/1 | D. Beferrere  | M. J. L               |  |  |
| 00     | Jidiy.          | D. Reference Models   |                       |  |  |
| Ту     | pe              | Microsoft Visio Shape (Process)   |                       |  |  |
| Sy     | stem Version:   | 2   | User Version:         |  |  |
| Lo     | ocation:        | D. Reference Models \APQC - Process Classification Framework \Cross-Inc |                       |  |  |
| Cn     | eated:          | Thursday, 1 September 2011 4:26:47 PM by System Administrator           |                       |  |  |
| La     | ast Modified:   | Wednesday, 28 September 2011 2:03:17 PM by System Administrator         |                       |  |  |
|        |                 |   |                       |  |  |

#### Figure 4: Example of Definition Document in Orbus Software's iServer

# **Naming Standards**

### Overview

Recently organizations have realised the importance of naming standards and responded by establishing it as a corporate discipline. The organization will approve words and acronyms that may be unique to the organization and define them in a glossary in order to encourage re-use and reduce ambiguity.

### What are Naming Standards?

A naming standard or naming convention is a collection of rules, which, when applied consistently, result in a set of documents and objects named in a logical and standardised way. These document and object names inform the user about the contents of a document or the scope of an object. Naming standards assist users with achieving efficient use and reuse of information while maximising their understanding of information both within and outside each business unit.

### What are the benefits of Naming Standards?

Naming objects and documents consistently, logically and in a predictable way distinguishes similar documents, objects and process models from one another at a glance, and by doing so facilitates the storage and retrieval of information, which will enable users to browse a repository of information in an effective and efficient manner.

It is important to not only spend the effort in developing a naming standard for process models but also for other areas of a repository and the objects. Introducing the discipline of naming documents according to agreed conventions will make file naming easier in the repository because names will not need to be reinvented each time.

A standard will help documents, process models and objects to be identified and retrieved quickly and accurately, and enable users to recognise existing material. In addition a consistent approach will help provide an effective link that promotes the flow of information across an organization.

As we know one of the benefits of a repository is not only that process models are stored in a central location but that the user is able to re-use objects and more easily identify what is common within a business unit and across an organization. This benefit of working within a repository is lost without a well-defined naming standard.

### **Guidelines for Naming Standards**

Regardless of whether one is naming a process model or an object, it is important to follow some simple guidelines;

- Name the model, object or document clearly. There should be no ambiguity
- Choose a name that is short, descriptive and intuitive
- Be consistent in the naming to facilitate maintenance, navigation between objects and process models and ease of understanding
- Ensure that the name is descriptive and specific.
- Do not use abbreviations or acronyms without explaining what these are before hand

# **Examples of Naming Standards**

### Overview

The structure of naming standards is dependent on the object that is to be named. The naming standards explained below are variations in the pattern <Verb> <Qualifier> <Data Object>.

### Naming of Processes and Activities

The most widely held view when developing a standard for naming processes and activities is that the name must be a verb - noun combination, beginning with the verb. A suggested approach is to use </br><Verb> <Qualifier> <Data Object>pattern. As the figure sets out below;

- The verb describes the action that is to be undertaken,
- The qualifier provides clarity for the data object and this often describes the type of object and would be specific to your industry, for example in banking the qualifier may be Savings, Pensions, Insurance and so on;
- The data object is the data on which the activity or process will operate, for example a Document or Form



#### Figure 5: Approach to naming of Processes and Activities

In addition to setting a standard for naming the model, it is important to also set a standard to ensure consistency and standardisation of appearance. This is important to allow the user of the information to quickly identify the type of information they are looking at. This means considerations needs to be given to such matters as:

- Will each <Verb> <Qualifier> <Data Object> start in upper case or lower case; or
- Will events be treated and will these be in lower case?

### Naming of Events

The naming of events in a Business Process Model and Notation (BPMN) Diagram is important as the event describes the state of what has occurred. A suggested approach is describing these in the past tense and to use <Qualifier> <Data Object> <Verb in past tense form>. The figure below explains the format.



Figure 6: Approach to naming of Events

### Naming of Data Objects

In setting the naming standard for data objects it is important to understand the scope of what a data object is in the business and process modelling context. A data object in this context is a physical object, for example an application form, a letter or a form that a user may key information into.



Figure 7: Approach to naming of Data Objects

Data objects are named using <Qualifier> and <Data Object>. For example:

- Pensioner Form;
- Account Opening Letter; and
- Duty Document.

### In summary

Investing the effort into developing both Meta models and naming standards for the capturing of information should mean that the information is collected once and in a manner that is understood by all parties. Having these convention defined in advance for the Enterprise Architecture Repository will provide comfort that:

- The Enterprise Architecture Repository chosen by the organization is less likely to be clattered with information in all sorts of formats;
- The information will be standardised;
- The information will be more easily re-usable;
- The information can be gathered and analysed in a standard manner; and
- Business decisions can be discussed and analysed with a common language.

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