

Advanced ARIS / Oracle BPA applications - The power of creativity

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ARIS / Oracle BPA is recognised as being one of the leading enterprise architecture tools by all the analysts, in addition to supporting in excess of 150 modelling methods it is also infinitely customisable. A powerful attribute of the tool is that configuring these customisations is fast, easy and requires no coding meaning you can adapt modelling use to support almost any scenario. However to harness this power you need some knowledge about what not to do and some creative thinking. Today I'll describe an example of how this can work and some simple steps to success.

One of the most common questions I get in delivering Oracle BPA / ARIS training or troubleshooting is "The tool is great, but would be even better if it could support x"

X being a specific domain application or architectural component such as; Product lifecycle management, Master data management, Security architecture etc. My usual answer being,

"I'm pretty sure it can."

To which the immediate reply is almost always something like,

"No you can't, I've searched the entire method library all 150 odd model types and there is nothing there that remotely supports x."

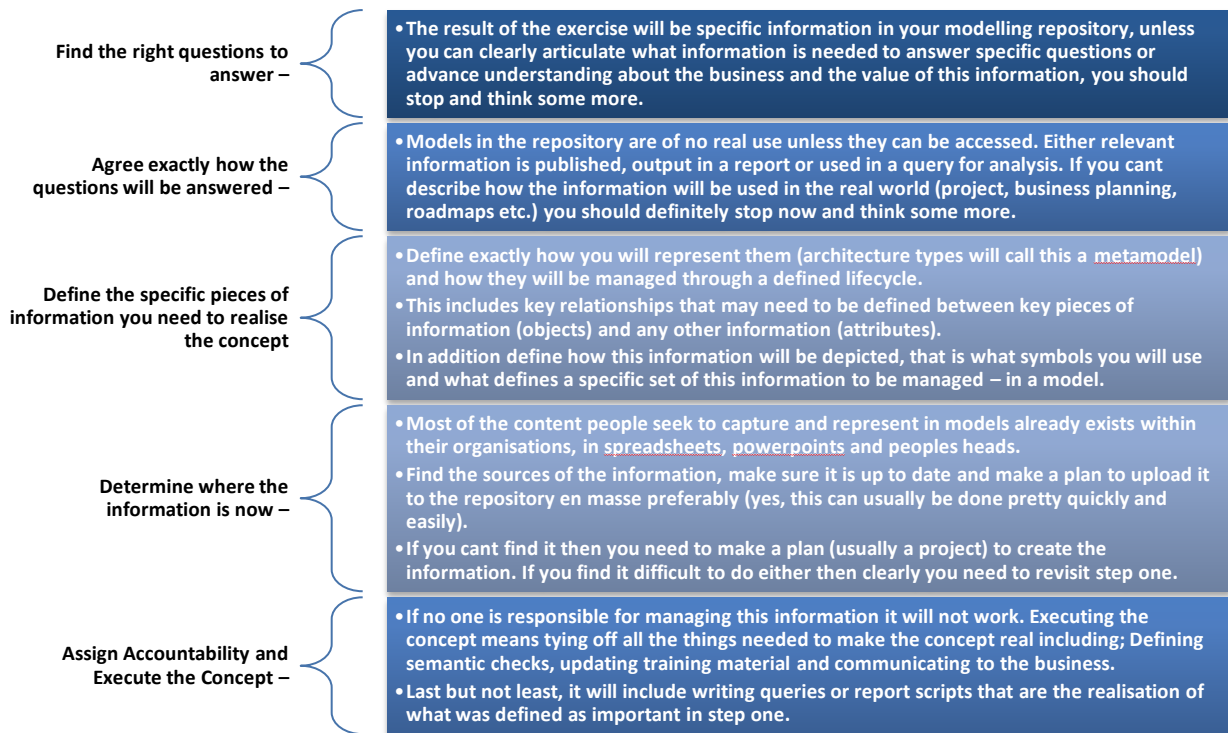
I would generally say, "you are probably right, but I'm still pretty sure it can be done, tell me exactly how this needs to be done here."

After some discussion a prototype of the concept can usually be fleshed out and put together in a couple of days. Concept to production can take as little as a week and quite often whatever you are trying to do, it's probably been done before (the tools have been around for 15 years).

In this example the client was using Oracle BPA to support their Enterprise Architecture framework and a key requirement was to integrate the security architecture approach within the repository. A decision was made to use the [Open Security Architecture \(OSA\)](#) framework to support the concept. Without going into detail, OSA is a framework for modeling, managing and presenting enterprise blueprints of IT security initiatives and how IT systems are secured.

"But wait!" I hear everyone say. "Neither ARIS or Oracle BPA support the OSA."

I know it can. There are a number of simple steps to execute this and any other creative requirement. I have described these in the table below;



It sounds complicated, in reality it is not. There are many standard ways of depicting conceptual information already exist and are well defined such as OSA for security architecture. Translating your specific requirements into the ARIS / Oracle BPA context requires specific knowledge and experience in the tool, but while this is knowledge is more specialised it is probably the easiest part of the process (did I mention this was a process?).

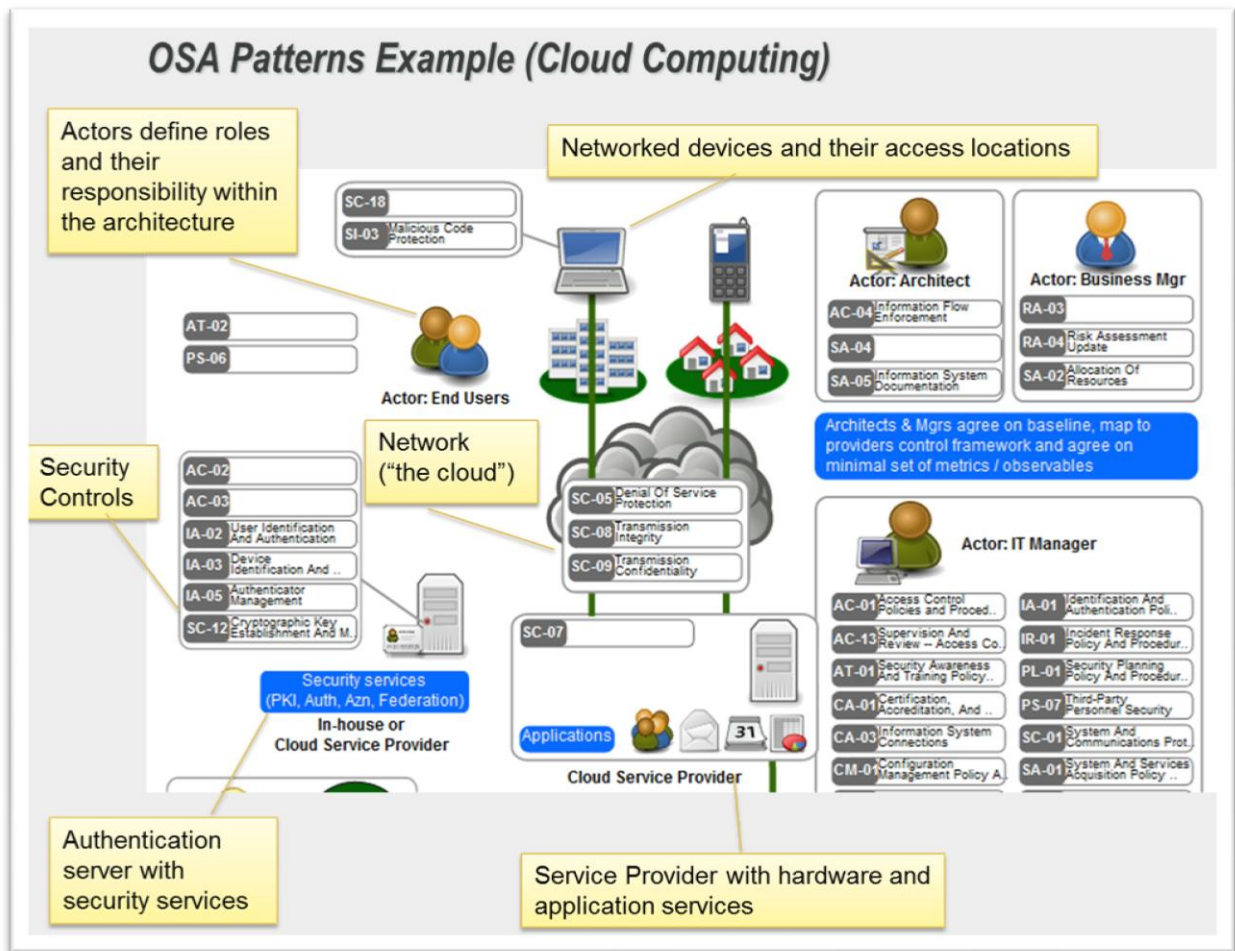
Most importantly, if you can successfully do steps one and two, but cant clearly define your concept in ARIS terms that integrate into your wider collection of methods you must stop and think some more. I always recommend getting some help at this stage, if this information is important, then a couple days of expert advice will save you a lot of time and effort down the line. If it's not that important, you should have stopped at step one.

Let's look at a quick summary of how this played out with the client;

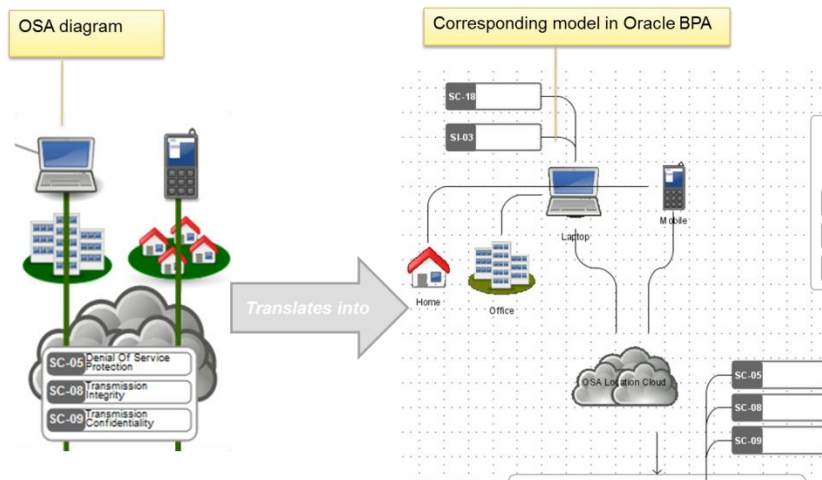
Step One: Security Architecture designs need to be constructed for each aspect of the technology portfolio, as this was a 'greenfield' site, security designs need to be provided as part of the overall design package to be signed off for each project stream. Understanding how security impacts the design of the technology portfolio and how this key information is managed is a key requirement for the customer. The client had already determined that the OSA framework was to be used and it is agreed with all key stakeholders that this initiative is extremely important.

Step Two: The design information will be ultimately provided in the form of a document with all the models, risks, threats, mitigations etc. In other words a simple report – this is how the information is to be used. The second requirement was understanding how specific components (threats and vulnerabilities) were distributed across different technology platforms. In other words there was a need to define some specific queries that may be used in a report. Document templates for these reports had already been developed providing an understanding of exactly what information was required.

Step Three: Because the OSA framework has already been specified it provides the specific directives about what and how information is captured. In the case of OSA it is quite comprehensive with many components as illustrated in the example security pattern below;



Because the framework are freely available and the symbols specified these can be quickly updated within ARIS / Oracle BPA once it is understood how the components integrate with the existing Enterprise Architecture approach as shown below.

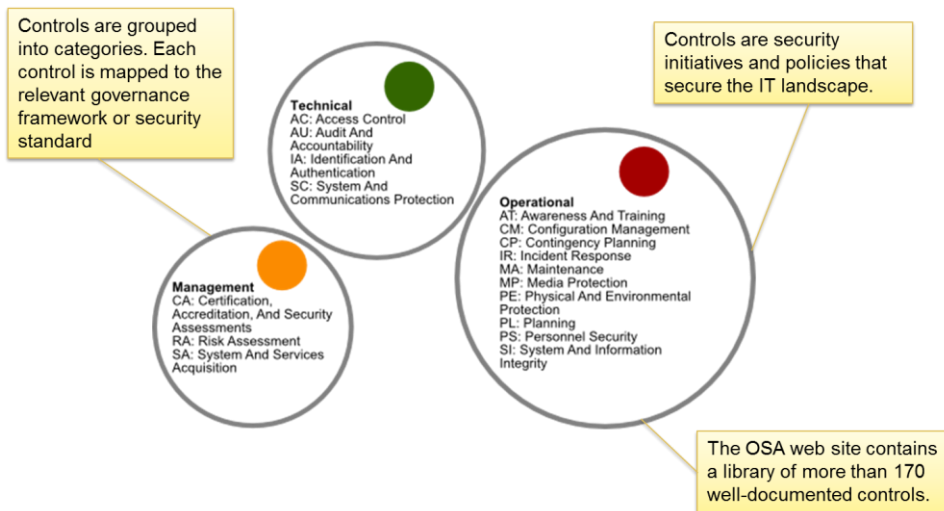


Example translation of OSA diagram into Oracle BPA

Additional information requirements such as those from the document template or other external sources can also be defined as shown below;

BITS Meta Data Attribute	ARIS Object Attribute
Threat Event	Name
Vulnerability	Description
Security Control	Keyword (Security Control)
ISO Domain Reference	Parameter List (ISO Domain Reference)
Basel Loss for Category for Operational Risk	LNC Title 1 (Basel Loss for Category for Operational Risk)

Once the representation concept was completed, a process and governance structure was defined around how all the components are managed in the repository, this included links to external sources of information that can change over time, for example the threat categories in the example below.



"The control catalog is based on NIST 800-53 (2006) and provides details on all controls that are needed to create security solutions. The controls will be extended over time to include tests, as well as mappings against other standards, regulations, legislation and governance standards."

<http://csrc.nist.gov/publications/nistpubs/800-53-Rev2/sp800-53-rev2-final.pdf>

Step Four: As this was a Greenfield site, the key existing information was sourced through the OSA catalog above and an external reference database. This information was imported via excel and the library models automatically generated. Semantic checks defined and a number of other necessary repository tasks configured.

Step Five: Communication and conventions packs were put together and presented to key stakeholders along with some reference examples and the concept was executed.

All up the process took about 3 weeks from conception to delivery with about 5 days of Leonardo assistance. So you can see that it is possible to achieve some pretty solid results in short order. The most common troubleshooting queries I get from clients is when this process has not been followed. Typically unwinding the problems takes more effort than taking some thinking time up front.

By far the most common mistake I see organisations make to get them in that state is doing this process in reverse, there is a natural inclination to take a tool, start modelling the world and then ask what is in here that we could possibly use. It's a bit like building a house with all its rooms and then going in with a hammer to knock out where all the doors and windows should be.

Everyone has a picture of their dream house, your Oracle BPA / ARIS house is no different, if you have a 'grand design' or just need to do some renovating, Leonardo Consulting can assist in two ways;

1. By providing you with specific product training about how to realise your tool configuration and manage your meta-model.
2. By providing workshops, advice and services to realise your specialist requirements.

Over the past 7 years with Leonardo, I have seen many even more creative examples of tool application such as building a model driven safety assurance system, the only limitation is imagination, some structured process to realise the concepts and some good advice.

About the Author: *Coming from a business background in facility management, Alastair has worked in a broad spectrum of positions, all of which have proven to be important waypoints along the path to his current and enduring special interest in BPM. Alastair has had considerable exposure to the realities of what it means to be responsible for business performance results, maintenance of enterprise-wide quality outcomes and the continuous improvement of business processes. Alastair is the Director of Business Development in the Leonardo Consulting team.*