

INVENTION DISCLOSURE

1. **Invention Title. Back-office application taxonomy system using semantic web technology**

2. **Invention Summary.**

A system for applying a Web Ontology Language to the application inventory for classifying, managing and analyzing the completeness and utility of the back-office of a service provider.

3. **Invention Description.**

a. Describe the invention in detail and/or attach a description, drawing(s) and/or diagram(s), if available.

The invention is to use semantic web technologies to create ontologies based upon standard systems for classification and management of an application inventory. These standard systems could be things like business process models from the Telemangement Forum or Service Lifecycles from ITIL standards or other systems of classification and management. The system would manage the inclusion of these different ontologies within a database, pulling the standard systems from the Internet as needed and combine them with a profile of an application created for this system.

The profile would include things like the vendor, the version, the support characteristics of the application, the owner and administrator of the application with their department and contact information and the other applications that are integrated with this application along with the form of that integration. The system would pull together this profile and the included classification systems to allow for the ease of identifying things such as:

- What applications does this application integrate with?
- What types of APIs or integrations are possible with this application?
- What business processes does this application support?
- Where in the enterprise do we have overlap of functionality?
- Based upon industry standard models where should we be looking to automate/integrate our applications?
- What is the impact of an upgrade to a single application?
- What version of the application are we running?
- How many applications do we have from a vendor?

Included in the system is a GUI for the maintenance of an application profile by an owner or administrator as well as the ability to search using the included taxonomies as guides for applications. The system also includes a webservice API to allow for the integration of the tool into the business process flow for an enterprise when it deploys an application.

b. Why was the invention developed? What problem(s) does the invention solve? How is it better?

The invention was developed to assist an enterprise in keeping track of the applications that they have in their back-office and to allow them to classify them against industry standard terminologies and taxonomies. The system is intended to allow the enterprise to have a common vocabulary for the classification, based upon whatever taxonomies are combined into the system, so that the entire enterprise uses the same system.

The invention is better than an arbitrary system of classification because it incorporates a dictionary from the included taxonomies that means the enterprise can consistently classify an application and the business processes that it participates in and they can see gaps from the tool where they could do further automation and improve efficiency and reduce costs easily using the system.

The system is also better because it incorporates an API that allows for updating and maintaining the data as well as diffuses the responsibility for maintaining the data to the owners and administrators of the application which will mean the data is more accurate than data compiled and maintained centrally by disconnected personnel.

c. Briefly outline the potential commercial value and customers of the invention.

For our members this system would be useful for the IT organization as well as for the operations people that work with many of the back-office applications. The system would be useful for planning, asset management, enterprise architecture, business process engineering, etc. Commercially this could be either sold or licensed as a software tool or run as Software as a Service (SaaS) as a CableLabs service.

4. HOW is your invention different from existing products, processes, systems?

The nearest thing to what we are doing are enterprise application planning tools like those from Casewise, Troux or BMC. The difference between what we are doing and what they do are many:

1. In those tools the emphasis is on planning the physical implementation of an application like what hardware it is running on, what IP Address the server has, what database server, etc. They are not built really to give a concise inventory against a classification system.
2. The closest to this is probably the Casewise tool since it can be bought with the TM Forum eTOM model built into it but it does not include the idea of plugging in different taxonomies like we are doing and it uses a thick client that each person has a copy of. It is not meant to be an enterprise repository like the one that we are envisioning here and it is not meant to be self-managing by the application owners nor does it have an external API for integration into operations.

