Literature Review + Outline: Object Shells

DeDominic, Anthony
Eastern Connecticut State University
Willimantic, USA
dedominica@my.easternct.edu

Abstract

This is merely the background on my subject, tying together research garnered over the weeks. Below I will discuss the importance of a shell with modern data structures and object like constructs I will also discuss problems that are being solved with such shells. I will also talk about processes that will be used in my project.

1. Background

1.1 Related Works

1.1 SOA

Service Oriented Architectures, or SOA, are the modern way to construct, highly available, data rich web applications. In short, a service oriented architecture is a way for applications to share state and provide services over middleware and structured, serialized objects. [1] One way of transacting states between services is through Representational state transfer, or REST. With REST, services are able to share well structured data through document structures like JSON, XML, etc. [2]

Currently popular shells have no built-in feature complete way of transacting or using structured documents. As a result, working with web oriented services becomes a hassle; A hassle that involves very long and contrived text pipelines full of tools like: sed, grep, awk, xargs, tr, paste, cut, tee, and so on. What results is some sort of string tokenized parser.

In order to unify the web and systems management, tools like ansible were created. Ansible, ends up using a general purpose language like python which can natively handle these structures.

1.2 Process

Citations

[1] E. Newcomer and G. Lomow, "Understanding SOA with Web services." Addison-Wesley, 2005.

[2] R. Battle and E. Benson, "Bridging the semantic Web and Web 2.0 with representational state transfer (REST)." Elsevier, 2008. 10.1016/j.websem.2007.11.002