What are Web Services? & Fulfilling the Web Services promise.

**Summary:**

In the first article, it give a definition of web services, which is a software application identified by a URI, whose interfaces and bindings are capable of being defined, described, and discovered as XML artifacts. And Web Services Description language (WSDL) descripts the detail of web services architecture and contains all the information needed to invoke the service. In the second article, it mentions about the set of technologies necessary for web services and identifies the current technical challenges. The web service architecture includes: interact, description, and discovery agency. Web service is developed by hieratical technology. There are three layers for interaction from service requester over network to the service provider: *transport layer, packaging layer*, and *extensions layer*. Four layers describe a service in the description section: *composition layer*, *orchestration layer*, *business level agreements layer* and *service level agreements layer*. Discovery agencies section encompass the technologies that enable service descriptions to be published, support the discovery of services descriptions, and provide inspection of sites for the description of hosted service. Finally, in order to fulfill the web services promise a set of technologies must be specified, standardized, the architecture of web services needs to be better understood, and new technologies need to be developed.

**Critique:**

**Strength:**

- The web services architecture provides clear layers, and explains in detail the functionality of them.
- XML give a power to web service, they can be combined in a loosely coupled way in order to achieve complex operations.

**Weakness:**

- The most challenge part is security issue; the article didn’t give a specific way how to deal with the security issue in web services.
- In order to interact with a web service, people need to exchange information with it. The paper didn’t specify how data for transfer in an interoperable manner.

**Question:**

1. A web service sends and receives message, what is the format for the massage?
2. What type of protocol does the web service use to exchange the message?
3. What is different between web services inspection language and Web Services Description language?

**Reference:**