

## Module 9 – Written Exercise Chapter 9, Exercise #8 (SOAP versus REST)

**In about 200 words, outline the difference between the Simple Object Access Protocol (SOAP) and the Representational State Transfer (REST) principle as they are used in the creation of Web servers. In your answer, discuss the advantages and disadvantages of each.**

Simple Object Access Protocol, or SOAP as it is known for in the web community, was the first approach to Web services that became widely used. It uses 3 different types of message-based protocols/specifications to exchange information across the networks from one application to another (Schneider 406).

Representational State Transfer principle, or REST, is the more commonly used approach for web services now. The RESTful design processing for applications is a principle for specific ways of finding and accessing web services instead of a protocol (Schneider 406). While SOAP uses interfaces with client applications for functionality, REST uses uniform service locators that can be accessed from anywhere (Guru99).

By comparison, both formats get the job done. It's how they work including ease of use, design, speed and efficiency that sets them apart. The SOAP was very useful when created to take care of a need in coding and network exchanges. Unfortunately, it uses a lot more bandwidth to run and process, and it only works with XML coding. The REST principle allows the use of text, XML, HTML and JSON which makes it more useful to more users. Because REST is a design, or "architectural pattern" to handle web services, it can utilize some of the features of Simple Object Access Protocols (SOAP). Since SOAP is already a protocol, it can't use REST designs to help it along (Guru99).

### Works Cited

Guru99. *SOAP vs REST: Difference Between Web API Services* (<https://www.guru99.com/comparison-between-web-services.html>). n.d. website. 17 04 2021.

Schneider, Gary P. *Electronic Commerce Twelfth Edition*. Cengage Learning, 2017. book.