**Difference between REST and SOAP**

**REST is stateless**

|  |  |
| --- | --- |
| **REST Web Service** | **SOAP Web Service** |
| REST is an architectural style, any web service following REST architecture is called RESTFul Web Service. | SOAP is a protocol, a set of rules which must be followed while creating a web service |
| Doesn’t impose any constraint in data format, supports multiple data formats – JSON, XML, CSV etc. | Supports XML message format only |
| REST resources are exposed by the service URI and HTTP Verbs- GET, PUT, POST and DELETE | SOAP exposes its named methods to be consumed by a client. For example – a SOAP web service “WeatherWS” exposes its various operations as methods like – GetWeatherInformationResponse, GetCityForecastByZIP, WeatherDescription etc. |
| REST is considered light weight and faster(no XML parsing is required) | Slower than REST because of the use of verbose XML format. But it is considered more secure. This is because it uses WS-security, a component of Web Service Specification for improving web service security. |
| REST APIs consume less bandwidth. This is because the request doesn’t require SOAP headers in every message. REST make use of HTTP headers for any meta information | SOAP Web services use SOAP headers with their requests. These headers contain meta/additional information about the request |
| RESTful web services are easier and faster to create | SOAP web service follow a contract and are preferred for implementing complex logic |
| Last difference, REST stands for Representational State Transfer | SOAP stands for Simple Object Access Protocol |