

Agenda

1. Introduction to SOAP Services.
2. Difference between SOAP & REST Services
3. When to Use SOAP Services
4. Challenges in SOAP Services

Introduction to SOAP Services

- ▶ SOAP - Simple Object Access Protocol
- ▶ SOAP is a protocol which was designed before REST came into the picture.
- ▶ The main idea behind the design was to provide the way of communication (data exchange) between different platform which were built on different platform & different language.

Difference between SOAP & REST

SOAP	REST
Simple Object Access Protocol	Representational State Transfer
SOAP follows standards for design as it's a design. SOAP uses WSDL file which has required information about what to consume.	REST is an Architectural Style in which a web service can only be related to a RestFul service.
SOAP Can not make use of REST	REST is an Architectural style, so it can make use of SOAP
SOAP uses WSDL to expose functionality to client.	REST uses Uniform Service Locators to access the components. For example, Employ data is stored at https://sfdcpanther.com , then data can be accessed using below urls. https://sfdcpanther.com/employees .

Difference between SOAP & REST

SOAP	REST
SOAP Requires more bandwidth. Since SOAP message contains more information inside it.	REST requires less information as REST mostly contains the JSON inside it.
SOAP can only work with XML format	REST permits different data format such as Plain text, HTML, XML, JSON, etc. But the most preferred format for transferring data is JSON.

When to Use SOAP

1. Can not compromise with Security.
2. The formal mean of Communication.
3. Stateful operation
4. Platform to Platform Integration

Challenges in SOAP

1 - WSDL file

2 - Document Size