

1 :: What is Simple Object Access Protocol (SOAP)?

SOAP acts as a medium to provide basic messaging framework. On these basic messaging frameworks abstract layers are built. It transfers messages across the board in different protocols; it also acts as a medium to transmit XML based messages over the network.

2 :: Give an example about the functioning of SOAP?

Consider a real estate database with huge data ranges. If a user wants to search about a particular term, the message with all the required features such as price, availability, place, etc will be returned to the user in an XML formatted document which the user can integrate into third party site for additional performance.

3 :: Explain about Remote call procedure?

Remote call procedure is considered as a very important function in SOAP. In RCP a user (node) sends a request to another node (server) where the information is processed and sent to the user. It immediately sends message across the network.

4 :: Explain about Transport methods in SOAP?

Internet application layer is used to transfer messages from one end to another end. Various products have been transported successfully from one end to another end using SOAP. Both SMTP and HTTP are two successful transport protocols used in transmitting information, but HTTP has gained good ground than SMTP.

5 :: Explain about HTTPS in SOAP?

HTTPS is similar to HTTP but it has an additional layer underneath the internet application layer which makes the data encrypted. This protocol is widely used than IOP or DCOM because those protocols are filtered by firewalls. HTTPS protocol advocates WS-I method to provide security for transmission of secured data.

6 :: Explain about the role of XML in SOAP?

XML is chosen as a standard format because it was already in use by many large companies and immensely due to its open source nature. A wide variety of tools are available on shelves which ease the process of transition to SOAP. XML can significantly reduce the speed and efficiency but binary XML is being considered as a format for future.

7 :: Explain the difference between RPC and Local calls?

An important difference between Remote call procedure and local call is that remote call can fail often and this occurs without the knowledge of the user. Local calls are easily handled. Another main difficulty lies with the code writing capability because it is written in a low level language.

8 :: What are the elements which should be contained in SOAP message?

Following elements are contained in the SOAP message.

- 1) An envelope element which identifies and translates the XML document into a SOAP message.
- 2) A header element is a must as it should contain header message.
- 3) A body is required which should contain call and response message.
- 4) Fault element is required which can communicate about the errors occurred during the process

9 :: Explain about the SOAP Envelope element?

A SOAP message will have the SOAP element as the root element. SOAP element name space should always have the value of : as that defines the Envelope.

10 :: Explain about the actor element?

A SOAP message has to travel a very long distance between its client and server but during the process a part of the message may be intended to be deployed to another destination which is made possible by the SOAP elements actor attribute which address the header element to a particular location.

11 :: Explain about the SOAP body element?

This part of the element will contain the message which is intended for the ultimate delivery point. An element can be described inside the body element as a default namespace which indicates about the error message during the process. SOAP element acts just like a code to be processed during the execution of a certain application.