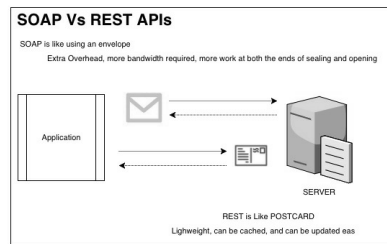


### SOAP Vs Rest Basics



### SOAP Message API (cont)

setEccCorrelator(stringcorrelator)	Associate outbound requests : ECC queue. Applicable to SO.
setEccParameter(name,value)	Override a value from the data payload
setEndpoint(endpoint)	Set the endpoint for the SOAP
setHttpTimeout(miliseconds)	Set the amount of time the SC the web service provider before
setLogLevel(level)	Sets the log level for this mess The Values of level can be ba:
setMIDServer(midservername)	Configure the SOAP message
setMutualAuth(profile-name)	Set the mutual authentication
setRequestBody(requestbody)	Set the body content to send t
setRequestHeader(headername,headervalue)	Set an HTTP header in the SC
setSOAPAction(soap-action)	Define the SOAP action this S
setStringParameter(name,value)	Set a variable with the specific record to the specified value.
setStringParameter-NoEscape(name,value)	Set a variable with the specific record to the specified value, c

### SOAP Structure

SOAP Envelope	It is the enclosing element of an XML message identifying it as a SOAP message.
SOAP Header	A collection of one or more header blocks targeted at each SOAP receiver.
SOAP Body	Contains the body of the message intended for the SOAP receiver. The interpretation and processing of SOAP body is defined by header blocks.

### Authentication Using SOAP

Basic Authentication	Basic Authentication can be enforced by setting a username and password for a webservice request. When the property is enabled 'glide.basicauth.required' then auth header is mandatory
----------------------	---

### SOAP Message API

execute()	Send the SOAP message to the endpoint.
executeAsync()	Send the SOAP message to the ECC queue.
getEndpoint()	Get End point of specified SOAP message
getRequestBody()	Get the content of the SOAP message body.
getRequestHeader(headername)	Get the value for an HTTP header specified by the SOAP client.
getRequestHeaders()	Get HTTP headers that were set by the SOAP client and the associated values.
setBasicAuth(username,password)	Set basic authentication headers for the SOAP message.



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### SOAP Message API (cont)

**setWSSecurity(keystreID,keystrealias,keystrep-swd,certificate)** Sets web service security values for the SOAP message.

### Are my Questions answered?

### SOAP Concepts & Terminology

**Provider** : Publishes web service for clients to invoke (consume).

**Consumer** : Invokes / consumes published web service.

**Standards** : Standards are described below

**WSDL** : Web Service Description Language , XML document describing functions, arguments, data schema, and endpoint (where / how to invoke the service, URL)

**SOAP** : Simple Object Access Protocol, XML document usually HTTP posted to web service endpoint described in WSDL SOAP:Envelope / SOAP:Header / SOAP:Body

**HTTP** : Hyper-Text Transfer Protocol, POST vs GET - Web Service is POSTed

### Direct Webservices

<b>getKeys</b>	Query the targeted table by example values and return a comma delimited sys_id list.	Data Retrieval API
<b>getRecords</b>	Query the targeted table by example values and return all matching records and their fields.	Data Retrieval API
<b>get</b>	Query a single record from the targeted table by sys_id and return the record and its fields.	Data Retrieval API
<b>aggregate</b>	Query using and aggregate functions SUM, COUNT MIN, MAX and AVG. To enable the aggregate functions, activate the Aggregate Web Service Plugin.	Data Retrieval API
<b>insert</b>	Creates a new record for the table targeted in the URL.	Data Modification API
<b>insertMultiple</b>	Creates multiple new records for the table targeted in the URL. To enable multiple inserts, activate the Web Service Insert Multiple Plugin.	Data Modification API
<b>update</b>	Updates a existing record in the targeted table in the URL, identified by the mandatory sys_id field.	Data Modification API

### Direct Webservices (cont)

**delete-Record** Deletes a record from the targeted table by sys\_id.

**deleteMultiple** Delete multiple records from the target table by example values.

The standard SOAP API is a set of globally defined functions in ServiceNow, these functions cant be changed.

Direct Webservice API is defined by the format `https://<ip>/<table name>.do`

### SOAP Response APIs

**getAllHeaders()** Return all headers contained in the SOAP response.

**getBody()** Get the content of the SOAP response.

**getCookies()** Returns all cookies included in the SOAP response.

**getErrorCode()** Get the numeric error code if there is an error. This is not Linked with the HTTP status code.

**getErrorMessage()** Get the error message if there was an error during the SOAP call.

**getHeader(name)** Get the value for a specified HTTP header. If the header is not found, it will return the last of duplicate headers.

**getStatusCode()** Get the numeric HTTP status code.

**haveError()** Indicate if there was an error during the SOAP call.

**waitForResponse(seconds)** Set the amount of time in seconds to wait for the response from the web service provider.

```
The API which uses these function is SOAPResponseV2.
var r = new sn_ws.SOAPOutMessageV2('SOAPMessage', '');
var resp = r.execute();
var hdrs = resp.getAllHeaders();
for(var i in hdrs){
    gs.log(hdrs[i].name + ': ' + hdrs[i].value);
}
```

