Web Services

Web Service Client

You will need to create a web service client when you want to access any third party web service. All you need is the system function **#http** which takes 3 parameters, URL, http-method and an optional body. The body may be required for http-method POST and may need to be enclosed in a JSON, XML or any other format as required by the API.

```
    str
host="http://maps.googleapis.com/maps/api/geocode/json?address=American+Emba
ssy,+Dhaka,+Bangladesh"
        str response=#http(host,"GET","")
```

The raw response from the host may be encoded in a JSON, XML or any other format as defined by the API. You will need to extract the relevant data from the raw response. Try the method **ca_test_client.method** for an example.

Web Service Server - RESTful with JSON

To publish a RESTful web service in DreamApps, you will need to define

1. a JSON query format - must have parameters method, sessionid and any number of other parameters
2. a JSON response format - must have parameters status and any number of other parameters
3. a method to generate the response from the query.

While naming the resources, please follow the following convention to avoid confusion.

Query format - **name**_q.json

Response format - **name**_r.json

Method - **name**.method

DreamApps doesn't allow any web service without authentication. So, all calls to DreamApps web services need a sessionid which is obtained by a call to authentication web service **zx_auth** which returns a sessionid on successful authentication.

Try the method **ca_test_server.method** for an example of using the web service **ca_test**, which is implemented by **ca_test_q.json**, **ca_test_r.json** and **ca_test.method**.

Creating, Extracting and Replacing Data in JSONs

There is a single system function **#json** to manipulate JSONs in DreamApps. It can take up to 3

parameters.

Creating a JSON needs just one parameter and can have two formats.

```
str s=#json(file "filename.json")
```

or,

```
str s=#json("valid-text-string")
```

Extracting a field-value from a JSON needs 2 parameters.

```
str s=#json(json-string-name, key)
```

Inserting a field-value into a JSON needs 3 parameters.

```
str s=#json(json-string-name, key, field-value)
```

See the method **ca_test_server.method** for examples of #json usage.