# Client server communications

Communications between client and server is done by the use of bson objects.

There are two kind of objects: the TOKEN object and the DATA.

TOKEN is used to request to the server a news.

While the DATA is the real news from the server.

## Retrieving the TOKEN

The first thing the application shall do is ask for a bson token to send to the service provider.

Tokens are retrieved using :

## Translate BSON to HASH

Note: the serialize return an HashMap<String,String> with name,value tuple. The most important part is

HASH\_FIELD\_CHECKSUM and HASH\_FIELD\_PATH. A valid news has CHECKSUM equal to 0 and a valid PATH to the decode news payload.

## Bson organization server side

Because bson is just a binarized json, here is shown the input json:

DATA ==> {

"ts": "1059492039482",

"type": "1",

"sha1": "530ecd668c4aa089c880a87840394816ce35ee26",

"frag": "1",

"title": "terrible news",

"headline": "from Africa to Malaysia",

"content": "no way to avoid assassin bees",

"payload": "sfkjjo434hvn3o5gnovtnvt4ngnbfnbv43ebnvldjsf",

}

The object contains the following fields:

#define HASH\_FIELDS 7

#define HASH\_FIELD\_TYPE "type"

#define HASH\_FIELD\_CHECKSUM "checksum" note: this field contains the information of the success or fails of the reception and translation of the object and its payload, 0 means ok , otherwise fail.

#define HASH\_FIELD\_SHA1 "sha1"

#define HASH\_FIELD\_PATH "path"

#define HASH\_FIELD\_TITLE "title"

#define HASH\_FIELD\_DATE "date"

#define HASH\_FIELD\_HEADLINE "headline"

#define HASH\_FIELD\_CONTENT "content"

#define HASH\_FIELD\_FRAGMENT "frag"

#define HASH\_FIELD\_PAYLOAD "payload"