# RESTFUL INTERFACES

## Introduction

In this document, the all interfaces of the components of the project are describe. This should be the main reference when integrating them, especially in terms of structure of the input and output.

# Components interfaces

#### Client

The client refers to the application deployed on the end user environment. It consists in a HTML application that relies on JQuery to perform its HTTP requests to the interfaces of the remote server and an interaction with a Third Part server for authentication.

#### Server

This is the component reached by the clients through its RESTful interface to perform the remote services of the system.

URL	Service	Inp	out / Output
/displaygrps (POST)	Get the list of the groups, the client belongs to	ı	{"token": "token_str"}
		O	Success: {"groups": [{"id": "id1", "name": "name1"}, {"id": "id2", "name": "name2"}]} Fail: {"error": "error_msg", "error_type": "error_type"}
/creategrp (POST)	Create a group and add users as members	I	{"token": "token_str", "group_name": "name", "members": ["user1@gmail.com", "user2@gmail.com"]}
		0	Success: {"group_id": "id"} Fail: {"error": "error_msg", "error_type": "error_type", "members": ["user1@gmail.com"], "group_name": "name"}
/addusers (POST)	Add users as members of a group	I	{"token": "token_str", "group_id": "id", "members": ["user1@gmail.com", "user2@gmail.com"]}
		0	Success: {"status": "OK"} Fail: {"error": "error_msg", "error_type": "error_type", "members": ["user1@gmail.com"], "group_id": "id"}
	Get the list of files within a group	1	{"token": "token_str", "group_id": "id"}
/displayfiles (POST)		0	Success: {"files_list": [{"name": "name1", "id": "id1"}, {"name": "name2", "id": "id2"}]} Fail: {"error": "error_msg", "error_type": "error_type"}
/displayusers (POST)	Get the list of users within a group	T	{"token": "token_str", "group_id": "id"}
		0	Success: {"users_list": ["mail1", "mail2"]} Fail: {"error": "error_msg", "error_type": "error_type"}
/downloadfileinfos (POST)	Retrieve the IP of the server to query to get a file	1	{"token": "token_str", "group_id": "id", "file_id": "file_id"}
		0	Success: {"server": "ip_server"} Fail: {"error": "error_msg", "error_type": "error_type"}
/getfileinfos (POST)	Give information	1	{"group_id": "id", "file_id": "id"}
	about the version of a particular file on the server	0	Success: {"version": "timestamp"} (timestamp == 0, no file) Fail: {"error": "error_msg", "error_type": "error_type"}

/getfile (POST)	Download a file from a server	ı	{"token": "token_str", "group_id": "id", "file_id": "file_id"}
			(Success: HTTP response (content type: application)) or
		0	Success: {"file": "base64_file"} (+33%)
			Fail: {"error": "error_msg", "error_type": "error_type"}
/uploadfile (POST)	Upload a file to the servers	ı	(HTTP form request (enctype: multipart)) or
			{"token": "token_str", "group_id": "id", "file": "base64_file"}
		0	Fail: {"error": "error_msg", "error_type": "error_type"}

## Server BDD

This specific kind of server provides the same services than the one identified above but with the addition of the services related to the authentication, authorization and information about the content of groups in terms of files and members (users in a group).

URL	Service	Inp	out / Output
/verifyuser (POST)	Authentication and Authorization for accessing a group	T	{"token": "token_str", "group_id": "id"}
		0	Success: {"auth": "OK"} Fail: {"error": "error_msg", "error_type": "error_type"}
/getgrps (POST)	Get the groups names whom the client belongs	ı	{"token": "token_str"}
		0	Success: {"groups": [{"id": "id1", "name": "name1"}, {"id": "id2", "name": "name2"}]} Fail: {"error": "error_msg", "error_type": "error_type"}
/setgrp (POST)	Add a new group and add members	I	{"token": "token_str", "group_name": "name", "members": ["user1@gmail.com", "user2@gmail.com"]}
		o	Success: {"group_id": "id"} Fail: {"error": "error_msg", "error_type": "error_type", "members": ["user1@gmail.com"], "group_name": "name"}
/setusers (POST)	Add users as members of a group	ı	{"token": "token_str", "group_id": "id", "members": ["user1@gmail.com", "user2@gmail.com"]}
		o	Success: {"status": "OK"} Fail: {"error": "error_msg", "error_type": "error_type", "members": ["user1@gmail.com"], "group_id": "id"}
/getfileslist (POST)	Get the list of files within a group	1	{"token": "token_str", "group_id": "id"}
		0	Success: {"files_list": [{"name": "name1", "id": "id1"}, {"name": "name2", "id": "id2"}]} Fail: {"error": "error_msg", "error_type": "error_type"}
/getuserslist (POST)	Get the list of users within a group	ı	{"token": "token_str", "group_id": "id"}
		0	Success: {"users_list": ["mail1", "mail2"]} Fail: {"error": "error_msg", "error_type": "error_type"}
/upfile (POST)	Update file table when upload	ı	{"file_name": "name", "group_id": "id"}
		0	Success: {"file_id": "id"} Fail: {"error": "error_msg", "error_type": "error_type"}