Hybrid Cloud Data Management API

Hybrid Cloud Data Access This set of services offer the interaction with the object data stored in the Hybrid Cloud storage platform.	List data objects of a user and container	List all the public data objects stored by the utility in a specific directory of the Hybrid Cloud storage platform. Default endpoint will be pointing at the platform deployed in Ireland with historic EVSE energy records. 'Ireland' is the only trial offering this service.
	Upload data object	Upload a data object to the public or private data storage. User should specify the name of the object and also in which container wants to be stored. 'Ireland' is the only trial offering this service.
	Download data object	Download a data object from the public or private data storage. User should specify the name of the object and also in which container it is stored. 'Ireland' is the only trial offering this service.
	Create a new data container	Create a data container in the public or private data storage. User should specify the name of the object and also in which container it is stored. 'Ireland' is the only trial offering this service.
	Delete data object	Delete a data object or a container from the public or private data storage. User should specify the name of the object and also in which container it is stored. 'Ireland' is the only trial offering this service.

Description of the Services

The following tables specify the different services offered by the HCDM DSE

Authenticate

NAME	AUTHENTICATE		
METHOD	POST / GET		
URL	/api/authenticate		
PARAMETERS	username	Required	string
	password	Required	string
	host	Optional	IP hostname IP:port hostname:port
RESPONSE	Encoding	JSON	
	CODE	200	OK -> TOKEN + AUTH
		400	Bad Request. Para meters are incorrect
		401	Username or password incorrect
		500	INTERNAL ERROR
		504	Gateway Timeout (provably using a wrong host)

TYPICAL RESPONSE	{
	   "token": "3a0842b29340d1b7f82971721090addf",
	   "auth_url": "http://controller:8080/v1/AUTH_0000000000000000000000000008206",
	   "auth": "AUTH_0000000000000000000000000008206"
	}		

Example call Authenticate:

curl --silent -X GET

"http://$host:$portHTTP/api/authenticate?username=$username&password=$password"

List

NAME	LIST		
METHOD	GET		
URL	/api/list		
PARAMETERS	token	Required	string
	auth	Required	string
	host	Optional	IP or hostname
	container	Optional	string (path of the container. If not set, the / is used)
RESPONSE	Encoding	JSON	
	CODE	201	{"status":"ok"} (created)
		400	Bad Request. Parameters are incorrect
		401	Token or Auth incorrect
		404	Not Found. The container trying to list doesn't exist
		500	INTERNAL ERROR
		504	Gateway Timeout (provably using a wrong host)

TYPICAL RESPONSE	{
	  "items": [
	    "api/",
	    "cdmiAPI_CONTAINER/",
	    "cookies/",
	    "cookies2/",
	    "cookies3/",
	    "demoA/",
	    "demoB/",
	    "demoC/",
	    "demoU/",
	    "demoV/",
	    "demoW/",
	    "demoX/",
	    "demoY/",
	    "demoZ/",
	    "home/"
	  ]
	}		

Example call List:

curl --silent -X GET "http://$host:$portHTTP/api/list?auth=$auth&token=$token&container=$1

Create

NAME	CREATE CONTAINER			
METHOD	PUT/GET			
URL	/api/create			
PARAMETERS	Token	Required		string
	Auth	Required		string
	Host	Optional		IP or hostname
	container	Required		string (path of the new container. Do **not** start with /)
RESPONSE	Encoding	JSON		
	CODE	200		OK
		400		Bad Request. Parameters are incorrect
		401		Token or Auth incorrect
		404		Not Found. The parent container doesn't exist.
		500		INTERNAL ERROR
		504		Gateway Timeout (provably using a wrong host)
TYPICAL RESPONSE	{"status":"ok"}			

Example call Create:

curl --silent -X GET

"http://$host:$portHTTP/api/create?auth=$auth&token=$token&container=$1

Delete

NAME	DELETE		
METHOD	DELETE / GET		
URL	/api/delete		
PARAMETERS	token	Required	string
	auth	Required	string
	host	Optional	IP or hostname
	container	Required	string (path of the container. Do **not** start with /)
	object	Optional	Object to delete
RESPONSE	Encoding	JSON	
	CODE	200	OK -> data
		400	Bad Request. Parameters are incorrect
		401	Token or Auth incorrect
		404	Not Found. The container or file doesn't exist
		500	INTERNAL ERROR
		504	Gateway Timeout (provably using a wrong host)
TYPICAL RESPONSE	{"status":"ok"}		
NOTES	In order to delete a container, all objects must be deleted first. If no 'object' is set, it will try to delete the container specified.		

Example call Authenticate:

curl --silent -X GET

"http://$host:$portHTTP/api/delete?auth=$auth&token=$token&container=$1

Download

NAME	DOWNLOAD		
METHOD	GET		
URL	/api/download		
PARAMETERS	token	Required	String
	auth	Required	String
	host	Optional	IP or hostname
	container	Required	string (path of the container. Do **not** start with /)
	object	Required	String, (name of the object to download)
RESPONSE	Encoding		
	CODE	200	OK -> data
		400	Bad Request. Parameters are incorrect
		401	Token or Auth incorrect
		404	Not Found. The container or file doesn't exist
		500	INTERNAL ERROR
		504	Gateway Timeout (provably using a wrong host)
TYPICAL RESPONSE	{"status":"ok"}		
NOTES	In order to delete a container, all objects must be deleted first If no 'object' is set, it will try to delete the container specified.		

Example call Download plain object:

curl -X GET -o download.png --silent

"http://$host:$portHTTP/api/download?auth=$auth&token=$token&container=$1&object=$2

Example call Download encrypted object:

curl -X GET -o downloadEncrypted.png –silent

"http://$host:$portHTTP/api/download?auth=$auth&token=$token&container=$1&object=$2
&key=$3

Upload

NAME	UPLOAD		
METHOD	PUT		
URL	/api/upload		
PARAMETERS	token	Required	String
	auth	Required	String
	host	Optional	IP or hostname
	container	Required	string (Path of the container. Do **not** start with /)
	Object	Optional	string (object name stored)
PAYLOAD	File	Required	string (Content of the file. Upload only the file contents (not multipart/form-data))
RESPONSE	Encoding	JSON	
	CODE	200	OK -> data
		400	Bad Request. Parameters are incorrect
		401	Token or Auth incorrect
		404	Not Found. The container or file doesn't exist
		500	INTERNAL ERROR
		504	Gateway Timeout (provably using a wrong host)
TYPICAL RESPONSE	{"status":"created"}		
NOTES			

curl --silent -X PUT --data-binary "@$2"

"http://$host:$portHTTP/api/upload?auth=$auth&token=$token&container=1param