# Wasteland API Documentation

## API Request

Any requests to the Wasteland server should be a single JSON object in the following format:

```
{
  "auth": request_auth,
  "action": request_action,
  "data": request_data
}
```

### Request Authentication

request_auth is a JSON object containing authentication information of the requester. Depending on the method of request, the content will vary.

Authentication as an administrator:

```
{
  "username": STRING,
  "password": STRING
}
```

Authentication using a QR ID-card:

```
{
  "certificate": STRING
}
```

Authentication using a session code:

```
{
  "session": STRING
}
```

### Request Action

request_action is a string describing what the request wants to accomplish. Possible values are:

```
"create" OR "read" OR "update" OR "delete" OR "link" OR null
```

A null value signifies that the request does not want to access the database, but only check if authentication was successful (eg. to get a session code).

### Request Data

request_data is an object describing the specifics of the request. The possible contents of this varies depending on the value of request_action

**Create**

```
{
  "type": data_type,
  "values": [value_object, ...]
}
```

**Read**

```
{
  "type": data_type,
  "view": "list" OR "details",
  "ids": [INT, ...] OR null
}
```

The "view" value determines what should be read. A list of accessible objects to the requesting user, or details about specific objects
"ids" should be null if "view" is "list". If view is "details" it should be an array of integer ids of the objects required.

**Update**

```
{
  "type": data_type
  "values":
  [
    {
      "id": INT,
      "value": value_object
    },
    ...
  ]
}
```

**Link**

```
{
  "profile": INT,
  "department": INT,
  "link":
  [
    {
      "type": "pictogram" OR "application",
      "id": INT,
      "settings": STRING
    },
    ...
  ],
  "unlink":
  [
    {
      "type": "pictogram" OR "application",
      "id": INT,
    },
    ...
  ]
}
```

Exactly one of  department  or  profile  should be set, not both.

settings  is only used if  profile  is set, and  type  is  "application"

**Delete**

```
{
  "type": data_type,
  "ids": [INT, ...]
}
```

## API Response

The Wasteland server responds to any request with a single JSON object.

```
{
  "status": status_code,
  "errors": [STRING, ...],
  "data": response_data,
  "session": session_info
}
```

### Status code

status_code  is a string telling how the request went. If unnsuccessful, more details will be written in the  errors  array. Possible values are:

"OK"  Everything went fine.

"SYNTAXERROR"  The request did not conform to the json syntax

"BADREQUEST"  Keys or types in the request was wrong.

"AUTHFAILED"  The authentification details were wrong.

`"ACCESSDENIED"`  The user did not have access to the action or ids requested, or requested ids were not found.

## Response Data

The type and value of `data` depends on the `request_action` of the request, and whether any errors were found.

**Errors were found**

`null`

**Actions delete, update and link**

`null`

**Action create**

`[INT, ...]`  A list of ids of the objects created.

**Action read**

- If view is details:  `[value_object, ...]`

- If view is list:  `[light_value_object, ...]`

## Session Info

`session_info` is an object containing information about the currently authenticated user and session. It looks like this:

```
{
  "user": INT,
  "profile": INT OR null,
  "session": STRING (NOT YET IMPLEMENTED)
}
```

If the request was not successful, this object will be replaced by a null-value.

# Data Types

All image and sound files are expected to be base 64 encoded.
Depending on what is being accessed, different parameters are available.
Updating some fields might have different access rights. (TODO: describe clearly)

`OPTIONAL`  means that create calls does not need to provide this value

`RESPONSE ONLY`  means that create and update calls should not provide this value, but read calls will return it

`REQUEST ONLY`  means the value can be updated and created, but never read.

`CONSTANT`  < means that the value can only be changed on create

`"light_value_object"`  is always response only, in list views

## Users

`"type": "user"`

```
"value_object": {
  "id": RESPONSE ONLY INT,
  "profile": INT,
  "username": CONSTANT STRING,
  "profile": CONSTANT INT,
  "password": REQUEST ONLY OPTIONAL STRING,
  "certificate": REQUEST ONLY OPTIONAL STRING
}
```

Note: At least one of password or certificate must be defined.

```
"light_value_object": {
  "id": INT,
  "username": STRING
}
```

## Profiles

```
"type": "profile"
```

```
"value_object": {
  "id": RESPONSE ONLY INT,
  "name": STRING,
  "email": OPTIONAL STRING,
  "department": INT,
  "user": RESPONSE ONLY INT,
  "role": INT,
  "guardian_of": OPTIONAL [INT, ...],
  "address": STRING,
  "phone": OPTIONAL STRING,
  "picture": OPTIONAL STRING,
  "settings": OPTIONAL STRING
}
```

```
"light_value_object": {
  "id": INT,
  "name": STRING,
  "role": INT
}
```

## Departments

```
"type": "department"
```

```
"value_object": {
  "id": RESPONSE ONLY INT,
  "name": STRING,
  "address": STRING,
  "phone": STRING,
  "email": STRING,
  "subdepartments": OPTIONAL RESPONSE ONLY [INT, ...],
  "topdepartment": INT
}
```

```
"light_value_object": {
  "id": INT,
  "name": STRING
}
```

## Pictograms

```
"type": "pictogram"
```

```
"value_object": {
  "id": RESPONSE ONLY INT,
  "name": STRING,
  "public": BOOL,
  "image": OPTIONAL STRING,
  "sound": OPTIONAL STRING,
  "text": OPTIONAL STRING,
  "categories": OPTIONAL [STRING, ...],
  "tags": OPTIONAL [STRING, ...]
}
```

```
"light_value_object": {
  "id": INT,
  "name": STRING,
  "categories": [STRING, ...],
  "tags": [STRING, ...]
}
```

## Applications

```
"type": "application"
```

```
"value_object": {
  "id": RESPONSE ONLY INT,
  "name": CONSTANT STRING,
  "version": STRING,
  "icon": STRING,
  "package": STRING,
  "activity": STRING,
  "settings": OPTIONAL STRING,
  "description": OPTIONAL STRING
}
```

```
"light_value_object": {
  "id": INT,
  "name": STRING
}
```

## Categories

```
"type": "category"
```

```
"value_object": {
  "id": RESPONSE ONLY INT,
  "name": STRING,
  "colour": STRING,
  "icon": OPTIONAL STRING,
  "topcategory": OPTIONAL INT
}
```

```
"light_value_object": {
  "id": INT,
  "name": STRING
  "topcategory": INT
}
```