# Local Connect - API Document

This shows usage of the Local Connect API.

## 1. Request and Response

* The client sends a request to the server with application/www-form-urlencoded type. The requests have parameters and headers according to the HTTP/1.1 protocol.
* After the server proceeded the request, the server returns responses to the client with application/json type. For details, see the RFC4627 standard.  
  <http://www.ietf.org/rfc/rfc4627>

## 2. Error

* When the server failed to proceed the request, it returns an error with the Error object. For details, see the specification of the object below.

### a. Error Codes

|  |  |  |
| --- | --- | --- |
| Code | HTTP Status | Description |
| NOT\_AUTHORIZED | 401 | When no session provided or the provided session is invalid. |
| ENDPOINT\_NOT\_FOUND | 404 | When the specified API endpoint is not found. |
| TOKEN\_NOT\_FOUND | 404 | When the provided token is invalid or expired. |
| USER\_NOT\_FOUND | 404 | When the user of the specified UUID is not found. |

## 3. Authentification and Authorization

* The user logs into the system with its token (may be as a QR code). At this time, the server provides a session to the client. Hereinafter, this is called **authentification** (authentificating).
* After the user logged in, when the client uses the API, the client creates a request with X-LocalConnect-Session header includes the session. At this time, the client gets restrictive permission (not permanently). Hereinafter, this is called **authorization** (authorizing).

## 4. Permissions

* If the user wants to read/write (object of) users or of **another groups** , it **also need read/write\_groups permission** .
* If the user wants to read/write (object of) users or groups of **another regions** , it **also need read/write\_regions permission** .

|  |  |
| --- | --- |
| Permission | Description |
| read\_permissions | Whether the user can read permissions. |
| read\_types | Whether the user can read user types. |
| read\_regions | Whether the user can read regions. |
| read\_groups | Whether the user can read groups. |
| read\_users | Whether the user can read users. |
| read\_documents | Whether the user can read documents. |
| read\_boards | Whether the user can read boards. |
| read\_events | Whether the user can read events. |
| read\_posts | Whether the user can read posts. |
| read\_profiles | Whether the user can read profiles. |
| read\_images | Whether the user can read images. |
| write\_types | Whether the user can create or edit user types. |
| write\_regions | Whether the user can create or edit regions. |
| write\_groups | Whether the user can create or edit groups. |
| write\_documents | Whether the user can create or edit documents. |
| write\_users | Whether the user can create or edit users. |
| write\_boards | Whether the user can create or edit boards. |
| write\_events | Whether the user can create or edit events. |
| write\_posts | Whether the user can post. |
| write\_profiles | Whether the user can edit profiles. |
| write\_images | Whether the user can upload images. |
| write\_service | Whether the user can edit service summary. |

## 5. Types

This shows the definition and the range of each types of values.

|  |  |  |
| --- | --- | --- |
| Type | Range | Description |
| bool | 0 - 1 | A boolean value. Also can be showed as true or false. |
| uint | 0 - 4,294,967,295 | A **unsigned** 32-bit numeric value. |
| ulong | 0 - 18,446,744,073,709,551,615 | A **unsigned** 64-bit numeric value. |
| string | N/A | A string value that contains chars of Unicode. |

## 6. Objects

The object shows a thing with member values. **Objects can be Types in JSON.**

### a. Error Object

This shows an error.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| error | string | An error code. |

### b. Permission object

This shows a permission. it is a **read-only** object.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the permission. |
| name | string | A name of the permission. |

### c. UserType Object

This shows a type of users.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the type. |
| name | string | A name of the type. (Max. 255 chars) |
| permissions | Permission[] | An array of permissions that the user has. |
| created\_at | ulong | A UNIX timestamp when the type created. |

### d. Region Object

This shows a region that has groups.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | An UUID of the region. |  |
| name | A name of the region. (Max. 255 chars) |  |
| created\_at | ulong | A UNIX timestamp when the region created. |

### e. Group Object

This shows a group in a region that has users.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | An UUID of the group. |  |
| region | Region | A region that the group is in. |
| name | A name of the group. (Max. 255 chars) |  |
| description | Detail of the group. (Max. 100K chars) |  |
| created\_at | ulong | A UNIX timestamp when the group created. |

### f. User Object

This shows a user.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | A unique identifier (hereinafter, this is called **an UUID**) of the user. |
| name | string | A name of the user. (Max. 255 chars) |
| type | UserType | The type of the user. |
| group | Group | The group that the user belongs to. |
| avatar | Image? | Nullable. The avatar of the user. |
| created\_at | ulong | A UNIX timestamp when the user created. |

### g. CreatedUser Object

This shows a created user. **This inherits User object** .

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| token | string | A token of the created user. |

### h. Session Object

This shows a session.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the user. |
| user | User | A user that has the session. |
| created\_at | ulong | A UNIX timestamp when the session created. |

### i. CreatedSession Object

This shows a created session. **This inherits Session object** .

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| secret | string | A secret of the created session. |

### j. Document Object

This shows a universal documentation.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the document. |
| author | User | A user who created the document. |
| title | string | Title of the document. (Max. 512 chars) |
| content | string | Content of the document. |
| attachments | Attachment[] | An array of attachments of the document. |
| created\_at | ulong | A UNIX timestamp when the document created. |

### k. Attachment Object

This shows an attachment of a document.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the attachment. |
| type | string | The type of the object. |
| object | object (any) | An object attached to the document. |

### l. Board Object

This shows a bulletin board.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID for the board. |
| group | Group | A group that the board provided in. |
| documents | Document[] | Array of documents in the board. |
| created\_at | ulong | A UNIX timestamp when the board created. |

### m. BoardRead Object

This shows a user-read mark of a board.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the mark. |
| user | User | A user who read the board. |
| board | Board | A board that the user read. |
| created\_at | ulong | A UNIX timestamp when the user read the board. |

### n. Event Object

This shows a event.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the event. |
| author | User | A user who created the event. |
| document | Document | A document that is described the event. |
| date | ulong | A UNIX timestamp when the event will start. |
| attendances | EventAttendance[] | An array of attendnaces of the event. |
| created\_at | ulong | A UNIX timestamp when the event created. |

### o. EventAttendance Object

This shows a attendance of a event and a user.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the attendance. |
| user | User | A user of the attendee. |
| created\_at | ulong | A UNIX timestamp when the attendee decided to join. |

### p. Post Object

This shows a user post.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the post. |
| author | User | A user who posted. |
| document | Document | A document of the content of the post. |
| likes | PostLike[] | An array of like reactions of the post. |
| created\_at | ulong | A UNIX timestamp when the post created. |

### q. PostLike Object

This shows a “Like!” reaction of a post.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the reaction. |
| user | User | A user who liked. |
| created\_at | ulong | A UNIX timestamp when the user liked the post. |

### r. Profile Object

This shows a profile of a user.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | string | An UUID of the user. |
| user | User | A user that has the profile. |
| hobbies | string | Hobbies of the user. (Max. 512 chars) |
| favorites | string | Favorite things of the user. (Max. 512 chars) |
| mottoes | string | Mottoes of the user. (Max. 512 chars) |
| updated\_at | ulong | A UNIX timestamp when the profile last updated. |

### s. Image object

This shows an image.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| id | An UUID of the image. |  |
| owner | User | A user who uploaded the image. |
| created\_at | ulong | A UNIX timestamp when the image created. |

### t. Service object

This shows the service summary.

|  |  |  |
| --- | --- | --- |
| Member | Type | Description |
| description | string | Detail of the service. (Max. 100K chars) |

## 7. Endpoints

### a. GET /permissions/show

This provides a permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the permission to show. |

#### ii. Response

This returns a Permission object.

### b. GET /permissions/list

This provides a list of permissions.

#### i. Request Parameters

This needs **no** parameters.

#### ii. Response

This returns an array of Permissions objects.

### c. GET /types/show

This provides a user type. This requires **read\_types** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the type to show. |

#### ii. Response

This returns a UserType object.

### d. GET /types/list

This provides a list of user types. This requires **read\_types** permission.

#### i. Request Parameters

This needs **no** parameters.

#### ii. Response

This returns an array of UserType objects.

### e. POST /types/create

This creates or edits a user type. This requires **write\_types** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | Optional. If this is provided, the user can edit the type. |
| permissions | string (comma-separated array) | Permissions that the user of the type has. |

#### ii. Response

This returns the UserType object that the user created or edited.

### f. GET /regions/show

This provides a region. This requires **read\_regions** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the region to show. |

#### ii. Response

This returns a Region object.

### g. GET /regions/list

This provides a list of regions. This requires **read\_regions** permission.

#### i. Request Parameters

This needs **no** parameters.

#### ii. Response

This returns an array of Region objects.

### h. POST /regions/create

This creates or edits a region. This requires **write\_regions** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | Optional. If this is provided, the user can edit the region. |
| name | string | A name of the region. |
| description | string | Detail of the group. (Max. 100K chars) |

#### ii. Response

This returns a Region object that the use created or edited.

### i. GET /groups/show

This provides a group. This requires **read\_groups** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the group to show. |

#### ii. Response

This returns a Group object.

### j. GET /groups/list

This provides a list of groups in a region. This requires **read\_groups** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| region | string | Optional. The UUID of the region to list groups. (Default: the region of current user) |

#### ii. Response

This returns an array of Group objects.

### k. POST /groups/create

This creates or edits a group. This requires **write\_groups** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | Optional. If this is provided, the user can edit the group. |
| region | string | The UUID of the region that the group belongs to. |
| name | string | A name of the group. |
| description | string | Detail of the group. (Max. 100K chars) |

#### ii. Response

This returns the Group object that the user created or edited.

### l. GET /users/me

This provides who is the authorized user with the current session.

#### i. Request Parameters

This needs **no** parameters.

#### ii. Response

This returns an User object of the current user.

### m. GET /users/show

This provides a user. This requires **read\_users** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the user to show. |

#### ii. Response

This returns an User object.

### n. GET /users/list

This provides a list of users in a group. This requires **read\_users** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| group | string | Optional. The UUID of the group to list users. (Default: the group of current user) |

#### ii. Response

This returns an array of User objects.

### o. POST /users/create

This creates or edits a user. This requires **write\_users** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | Optional. If this is provided, it can edit the user. |
| group | string | The UUID of the group that the user belongs to. |
| type | string | The UUID of the user type. |
| name | string | The name of the user. |

#### ii. Response

This returns the CreatedUser object that the user created or edited.

### p. POST /users/set\_avatar

This sets the avatar of the user. This requires **write\_users** permission **when setting other user’s one**.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| user | string | Optional. The UUID of the user. (Default: current user) |
| avatar | string | The UUID of the image to set. |

#### ii. Response

This returns the User object with the avatar.

### q. GET /sessions/current

This provides the current session.

#### i. Request Parameters

This needs **no** parameters.

#### ii. Response

This returns the Session object of the current session with 200 OK status.

### r. POST /sessions/create

This creates a session from the token. This **doesn’t need to authorize** .

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| token | string | A token to create the session. |

#### ii. Response

This returns the created CreatedSession object with 200 OK status.

### s. DELETE /sessions/destroy

This destroys the session.

#### i. Request Parameters

This needs **no** parameters.

#### ii. Response

This returns only 204 No Content status.

### t. GET /documents/show

This provides a document. This requires **read\_documents** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the document to show. |

#### ii. Response

This returns an Document object.

### u. GET /documents/list

This provides a list of documents of a user. This requires **read\_documents** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| user | string | Optional. The UUID of the user to list documents. (Default: current user) |
| until | string | Optional. The oldest document that it returns. |
| since | string | Optional. The latest document that it returns. |

#### ii. Response

This returns an array of Document objects. (Descending to latest one) The array contains **100 objects max.** If the objects between until and since are over maximum of the array, it returns from latest.

### v. POST /documents/create

This creates or edits a document. This requires **write\_documents** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | Optional. If this is provided, the user can edit the document. |
| title | string | A title of the document. |
| content | string | A content of the document. |
| attachments | string (comma-separated array) | Optional. An array of attachments to attach to the document. |

#### ii. Response

This returns the Document object that the user created or edited.

### w. GET /boards/show

This provides a board. This requires **read\_boards** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the board to show. |

#### ii. Response

This returns an Board object.

### x. GET /boards/reads

This provides who read the board. This requires **read\_boards** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the board to show read marks. |

#### ii. Response

This returns an array of BoardRead objects.

### y. GET /boards/list

This provides a list of boards of a group. This requires **read\_boards** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| group | string | Optional. The UUID of the group to list boards. (Default: current group) |
| until | string | Optional. The oldest document that it returns. |
| since | string | Optional. The latest document that it returns. |

#### ii. Response

This returns an array of Board objects. The array contains **100 objects max.** If the objects between until and since are over maximum of the array, it returns from latest.

### z. POST /boards/read

This mark a board read. This requires **read\_boards** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| board | string | The UUID of the board to mark. |

#### ii. Response

This returns a BoardRead object that the user marked.

### aa. POST /boards/create

This creates or edits a board. This requires **write\_boards** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | Optional. If this is provided, the user can edit the board. |
| documents | string (comma-separated array) | UUIDs of documents that the board has. |

#### ii. Response

This returns the Board object that the user created or edited.

### ab. GET /events/show

This provides a event. This requires **read\_events** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the event to show. |

#### ii. Response

This returns an Event object.

### ac. GET /events/list\_user

This provides a list of events that a user hold. This requires **read\_events** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| user | string | Optional. The UUID of the user to list events. (Default: current user) |
| until | string | Optional. The oldest document that it returns. |
| since | string | Optional. The latest document that it returns. |

#### ii. Response

This returns an array of Event objects. The array contains **100 objects max.** If the objects between until and since are over maximum of the array, it returns from latest.

### ad. GET /events/list\_joined

This provides a list of events that the user joined. This requires **read\_events** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| user | string | Optional. The UUID of the user to list joined events. (Default: current user) |
| until | string | Optional. The oldest document that it returns. |
| since | string | Optional. The latest document that it returns. |

#### ii. Response

This returns an array of Event objects. The array contains **100 objects max.** If the objects between until and since are over maximum of the array, it returns from latest.

### ae. GET /events/list\_group

This provides a list of events of a group. This requires **read\_events** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| group | string | Optional. The UUID of the group to list events. (Default: the group of current user) |
| until | string | Optional. The oldest document that it returns. |
| since | string | Optional. The latest document that it returns. |

#### ii. Response

This returns an array of Event objects. The array contains **100 objects max.** If the objects between until and since are over maximum of the array, it returns from latest.

### af. POST /events/join

This creates attendance of a event and a user. This requires **read\_events** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| event | string | The UUID of the event to mark. |

#### ii. Response

This returns the EventAttendance object.

### ag. POST /events/create

This creates or edits a event. This requires **write\_events** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | Optional. If this is provided, the user can edit the event. |
| document | string | The UUID of the document that is explained the event. |
| date | ulong | A UNIX timestamp when the event will start. |

#### ii. Response

This returns the Event object that the user created or edited.

### ah. GET /posts/show

This provides a post. This requires **read\_posts** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the post to show. |

#### ii. Response

This returns an Post object.

### ai. GET /posts/list\_user

This provides a list of posts of a user. This requires **read\_posts** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| user | string | Optional. The UUID of the user to list posts. (Default: current user) |
| until | string | Optional. The oldest document that it returns. |
| since | string | Optional. The latest document that it returns. |

#### ii. Response

This returns an array of Post objects. The array contains **100 objects max.** If the objects between until and since are over maximum of the array, it returns from latest.

### aj. GET /posts/list\_group

This provides a list of posts of a user. This requires **read\_posts** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| group | string | Optional. The UUID of the group to list posts. (Default: current group) |
| until | string | Optional. The oldest document that it returns. |
| since | string | Optional. The latest document that it returns. |

#### ii. Response

This returns an array of Post objects. The array contains **100 objects max.** If the objects between until and since are over maximum of the array, it returns from latest.

### ak. POST /posts/like

This likes a post. This requires **read\_posts** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| post | string | The UUID of the post to like. |

#### ii. Response

This returns a PostLike object that the user reacted.

### al. POST /posts/create

This creates or edits a post. This requires **write\_posts** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | Optional. If this is provided, the user can edit the post. |
| document | string | The UUID of the document of the post. |

#### ii. Response

This returns the Post object that the user created or edited.

### am. GET /profiles/mine

This provides a profile of the user who has the current session.

#### i. Request Parameters

This needs **no** parameters.

#### ii. Response

This returns an Profile object of the profile of the current user.

### an. GET /profiles/show

This provides a profile. This requires **read\_profiles** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the profile to show. |

#### ii. Response

This returns an Profile object.

### ao. GET /profiles/lookup

This provides a profile of a user. This requires **read\_profiles** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| user | string | The UUID of the user to show the profile. |

#### ii. Response

This returns an Profile object.

### ap. POST /profiles/create

This creates or edits a profile of the current user. This requires **write\_posts** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| hobbies | string | Hobbies of the user. (Max. 512 chars) |
| favorites | string | Favorite things of the user. (Max. 512 chars) |
| mottoes | string | Mottoes of the user. (Max. 512 chars) |

#### ii. Response

This returns the Profile object that the user created or edited.

### aq. GET /images/show

This provides a image. This requires **read\_images** permission. **This doesn’t return JSON data**.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| id | string | The UUID of the image to show. |

#### ii. Response

This returns **image binary data**.

### ar. POST /images/create

This creates a image from the uploaded file. This requires **write\_images** permission.

#### i. Request

This requires image binary data to upload in the request body.

#### ii. Response

This returns the Image object that the user created.

### as. POST /attachments/create

This creates a attachment from specified object. This requires **write\_documents** permission. **If the attachments that has same object exists, the system can recycle the attachment**.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| type | string | The type of the object to attach. (e.g. ‘Image’ or ‘Event’) |
| object\_id | string | The UUID of the object to attach. |

#### ii. Response

This returns the Attachment object that the user created.

### at. GET /service/show

This provides the service summary. This **doesn’t need to authorize** .

#### i. Request Parameters

This needs **no** parameters.

#### ii. Response

This returns the Service object.

### au. POST /service/edit

This edits the service summary. This requires **write\_service** permission.

#### i. Request Parameters

|  |  |  |
| --- | --- | --- |
| Parameter | Type | Description |
| description | string | Detail of the service. (Max. 100K chars) |