

Simplenote API

Authentication

Simplenote uses a simple token based authentication system. All methods will require a valid authentication token to process.

Obtaining a token

Call the `/api/login` method supplying two fields, email and password. These should be the same as what you created your account with in the Simplenote application. The server will respond by attempting to set a cookie named 'auth' with the token as the value. Also, the HTTP response body will contain the token.

HTTP POST to the following URL:

```
https://simple-note.appspot.com/api/login
```

The body of the request should contain:

```
email=[email address]&password=[password]
```

The entire request body should be encoded in base64.

Using the token

Subsequent calls to the API methods will check that either the 'auth' cookie is present with a valid token or that the token is supplied as a query parameter (`&auth=[token]`). Once issued, the token is valid for 24 hours. The email address should also be passed with each request either as a query parameter or as a cookie.

Security

The Simplenote API allows either regular HTTP or encrypted HTTPS requests, except for the login method which can only be accessed through HTTPS.

Working with notes

Each note has a unique string associated with it, using this *key*, individual notes can be modified, created, retrieved, or deleted.

Retrieving a note

To retrieve a note, send a GET request to the following URL:

```
https://simple-note.appspot.com/api/note?key=[note_id]&auth=[auth_token]&email=[email]&encode=base64
```

The *key* parameter must be supplied, *auth* may be omitted if the 'auth' cookie is present, likewise for *email*. The *encode* parameter is also optional. Without it, the response body will be encoded in UTF-8. With it, the note content will be encoded in UTF-8, then base64 (the only supported encoding currently).

The response body will contain the note content. Note properties will be sent in the HTTP headers. The following headers are sent with the response:

Header Name	Value Description	Sample
note-key	note identifier	<i>agtzaW1wbG0LCxIETm90ZRjoBAw</i>
note-modifydate	last time modified (GMT)	<i>2008-12-18 04:04:20.554442</i>
note-createdate	time created (GMT)	<i>2008-12-18 04:04:20.554442</i>
note-deleted	true or false	<i>true</i>

Updating a note

To update a note, a POST request is made to the same URL with different parameters:

```
https://simple-note.appspot.com/api/note?key=[note_id]&auth=[auth_token]&email=[email]&modify=[modified_date]
```

The *key* parameter identifies the note being modified. *auth* and *email*, are optional depending if the 'auth' or 'email' cookies are available. *modify* is optional and indicates the last time the note was modified; if this isn't supplied then the server will assume the modification date is now, when the call is made.

The body of the request should be the note content, sent in UTF-8 then encoded in base64.

The server will respond with the response code 200 and the note *key* in the response body if successful.

Creating a note

To create a note, follow the same method as updating a note, but omit the *key* parameter. Optionally you can supply a *create* parameter; if omitted, the server will assume the creation date is when the call is made. The server will assign the note an identifier and will send it in the response if creation is successful.

Deleting a note

To delete a note, make a GET request to the following URL:

```
https://simple-note.appspot.com/api/delete?key=\[note\_id\]&auth=\[auth\_token\]&email=\[email\]
```

Deleting a note will mark it as deleted in the server. Actual deletion occurs when the Simplenote iPhone application synchronizes with the server. Deleted notes won't show up in searches, but will show up in the note index.

To permanently delete a note, add the following parameter:

```
dead=1
```

The URL should then be:

```
https://simple-note.appspot.com/api/delete?key=\[note\_id\]&auth=\[auth\_token\]&email=\[email\]&dead=1
```

WARNING:

The iPhone application will take care of permanently deleting a note if it has been marked deleted. If you use the API to permanently delete a note, and that note has already been synced to the iPhone, then it will be recreated the next time the iPhone syncs with the server.

To maintain compatibility with the Simplenote iPhone application, notes should be marked as deleted, this will allow the app to do the permanent delete itself when it syncs.

Getting the note index

To make it simple to synchronize your notes with other applications, the API provides an easy way to get an index of your notes. This method will return a JSON object with three main properties for each note: *key*, *modify*, and *deleted*. Some notes may be marked deleted; these notes will be removed permanently once the Simplenote iPhone application synchronizes with the server.

To get the index, make a GET request to the following URL:

```
https://simple-note.appspot.com/api/index?auth=\[auth token\]&email=\[email\]
```

The *auth* parameter is optional and is needed only if the 'auth' cookie is not present. The *email* parameter is also optional and is needed only if the 'email' cookie is not present.

Sample Index Response:

```
[
  { "key": "notekey1", "modify": "2008-11-30 14:10:40.123456",
    "deleted": false },
  { "key": "notekey2", "modify": "2008-11-30 02:19:37.123456",
    "deleted": true } [
    { "key": "notekey3", "modify": "2008-11-29 22:01:05.123456",
      "deleted": false },
  ]
]
```

Searching for notes

To search for notes that contain a particular term, make a GET request to the following URL:

```
https://simple-note.appspot.com/api/search?query=[search term]&results=[max results]&offset=[offset index]&auth=[auth token]&email=[email]
```

The response will contain a JSON object with the *key* and *content* for each note that matches the query. By default this method will return 10 results. If a different number is desired, then that can be specified with the *results* parameter.

Sample Query Response:

```
{
  "Response" :
  {
    "totalRecords" : 2,
    "Results" :
    [
      { "key": "notekey1", "content" : "This is the note" },
      { "key": "notekey2", "content" : "Another note" }
    ]
  }
}
```

The response includes a *totalRecords* field which indicates the total number of notes that matches the query. This may be more than the number of notes returned depending on the maximum number of results specified in the *results* query parameter.

Response codes

The HTTP response status code should always be checked to be sure that an operation has completed successfully. Successful operations return with a status code of 200. Any other code is an error.

Some common error codes:

400 - Bad Request
401 - Unauthorized
403 - Forbidden
404 - Not Found
500 - Server Error

Best practices for error codes in common API methods:

<https://simple-note.appspot.com/api/login>

Any error code, retry or ask for password

<https://simple-note.appspot.com/api/index>

401 - User invalid, either authorization key expired or user incorrect, retry login
Any other error, retry

<https://simple-note.appspot.com/api/note>

401 - User invalid, either authorization key expired or user incorrect, retry login
404 - Note does not exist, do not retry
Any other error, retry

<https://simple-note.appspot.com/api/delete>

401 - User invalid, either authorization key expired or user incorrect, retry login
404 - Note does not exist, do not retry
Any other error, retry