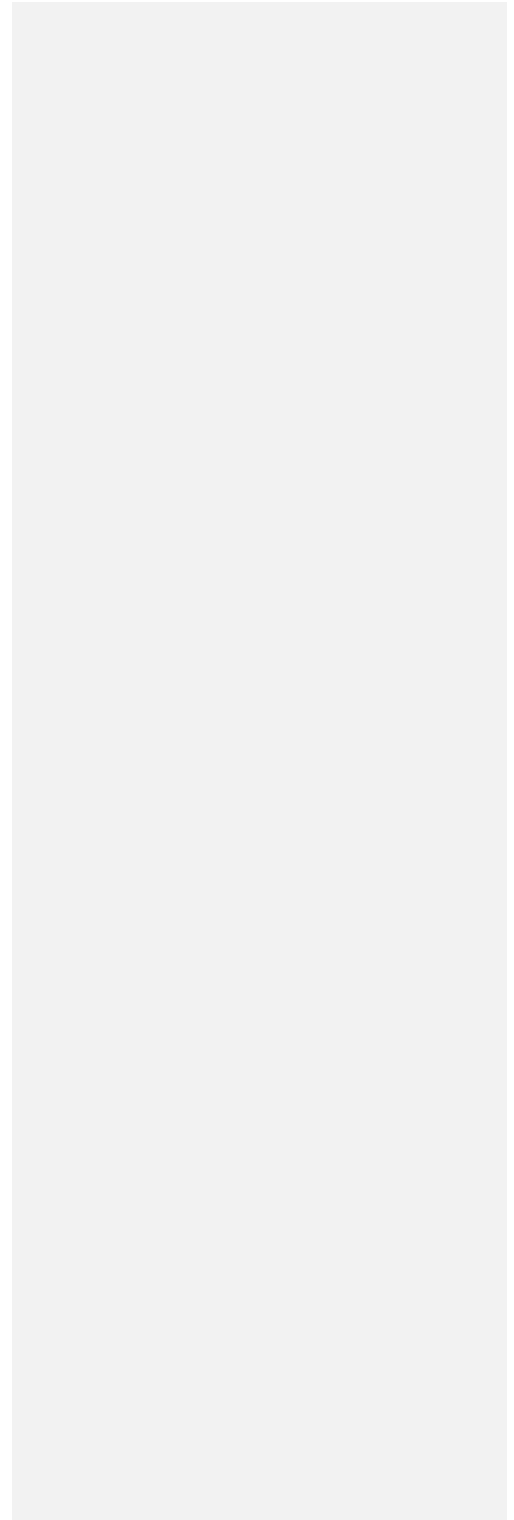# ClipFile

RESTful API version 2.0
Technical Documentation

Revision 1
Last update: 17-July-2012

Revision History

Revision 1a: 07-June-2011
Revision 1a contains the initial draft.

Revision 1b: 19-September-2011
Many changes and revisions, including the change to HTTPS-only.

Revision 2: 17-July-2012

Communications Requirements

HTTPS Protocol

API requests must be made only via the HTTPS protocol. HTTP alone is not acceptable because of security concerns.

Protocol	Endpoint
https	https://www.clipfile.com/rest/

HTTP Headers

All API requests should have the following headers:

Name	Type	Required?	Description
accept-encoding	string	yes	"gzip, deflate" to receive compressed content. Defaults to null.
version	string	no	API Version.: supported values "2.0". Defaults to "2.0" if undefined.
sessionID	string	usually	sessionID of currently logged-in user. Not required for login.

Response Status Codes

All API requests will return an HTTP status code from the following list:

Code	Description
200	Request successful
400	Bad request
500	Server-related error
606	Missing required parameters
608	Missing API version

Error Codes – if the request is well-formed but still results in an error, here are the error codes that may be returned in the response XML.

Code	Description

Commented [SB1]: Not sure how client app is going to set header params on GET requests.

Commented [SB2]: This version is not backwards compatible. Whoops.

Code	Description
404	No such value
450	Duplicate value
451	Value out of range
452	Bad email/password combination
453	Duplicate email address
454	Duplicate account name

API Version
Each API call can include a "version" parameter in its HTTP header. The current version is 2.0 and this is the default if "version" is not defined.

Passing Parameters
Parameters to the ClipFile API shall be passed in the following fashion:
https://www.clipfile.com/rest/method?param1=value1&param2=value2&...
The order of param/value pairs does not matter.

Dates
Dates must be in the format YYYY-MM-DDTHH:MM:SS.SSSZONE
Example: 2011-08-27T22:04:57.235-0500

Password Encryption
All passwords will be encrypted on the client side before being sent to the API. The encryption will be accomplished via an MD5 hash with an added salt.

Results
All values returned in XML must be properly XML-encoded as follows:

RESTful API Requirements

/rest/getclips/
This method returns a set of "webpageclipping" entities along with their related subentities.

Parameters

Name	Type	Required?	Description
Search criteria specify which clippings to return and in which order			
d	string	yes	the **d**omain from which clippings will be chosen. possible values are: **a** (all) / **n** (network) / **m** (mine)
id	Integer	No	id of one clipping. if specified, at most one clipping will be returned (and possibly zero, depending on other filters).
mindate	date	no	date filter. No clippings from before this date will be returned. if absent, there is no minimum date.

Name	Type	Required?	Description
maxdate	date	no	date filter. No clippings from after this date will be returned. if absent, there is no maximum date.
s	string	yes	**s**ort order in which clippings are returned. possible values are: **r** (recent) / **p** (popular) / **b** (best).
maxp	float	no	if s=p, limit to clippings with popularity no higher than this.
maxb	float	no	if s=b, limit to clippings with bestness no higher than this.
n	integer	yes	requested **n**umber of clippings
src	string	no	if specified, limit to clippings with specified **source**
a	string	no	if specified, limit to clippings with specified **author**
q	string	no	if specified, limit to clippings matching query string
t	string	no	if specified, limit to clippings with matching **tag**
to	string	no	if specified, limit to clippings with matching **topic**
hl	integer	no	if equal to 1, limit to clippings highlighted by me
ta	integer	no	if equal to 1, limit to clippings tagged by me
rl	integer	no	if equal to 1, limit to clippings marked "read it later" by me
Display criteria specify which fields about each clipping to return			
d	string	no	comma-separated list of clipping fields to return. Possible choices are: **a** = author **s** = source **ti** = title **u** = url **t** = tags (not including tags representing a, s, ti, and u above) **h** = highlights **b** = clipped-by (user id) **cd** = date clipping was clipped **ad** = original date of article **sec** = security level (tbd)

Example:
http://www.clipfile.com/rest/getclips?d=m&maxdate=2011-08-27T22:04:57.235-0500&maxp=0.982&s=p&n=20&ta=1&d=a,s,ti,u,b,cd– "Of the current user's clippings from the on or after 8/27/2011 (etc.) with a popularity no higher than 0.982 that the current user has tagged, return 20 items sorted in descending order by popularity. For each returned clipping, include the author, source, title, url, clipped-by user, and date of clipping"

Response
Success:
```
   <Entities>
      <Entity>
            <EntityID>[integer id]</EntityID>
```

```
            <EntityTypeName>[type name]</EntityTypeName>
            (additional items, specific to the EntityTypeName)
        </Entity>
        <Entity>
            …
        </Entity>
    </Entities>
Failure:
    <FailureGetClips>
        Error expressed in <Code> and <Description> tags
    </FailureGetClips>
```

Each clipping in the response is represented by an Entity with the EntityTypeName of "WebPageClipping" and which includes these additional fields (if they're requested in the display parameters):

Name	Type	Required?	Description
SecurityLevel	string	yes	Visibility of item: Public, PrivateVisible, etc.
ClippedBy	integer	yes	userId of clipper
ClippedOn	timestamp	yes	UNIX timestamp of clipping date/time

All other Entities must include these fields:

Name	Type	Required?	Description
FromEntityID	string	yes	The associated Entity
ListPosition	integer	yes	The item's sort order amongst all entities with the same EntityTypeName and FromEntityID

An Entity with an EntityTypeName of "Tag" must also include a <Name> field whose value is the tag string itself. For example: <Name>hydrodynamics</Name>. Some tags contain paired items. For example, the <Name> field of a tag that represents the author of an article is "author:[name of author]". Likewise, there can be "source:[name of source]". When new kinds of information are added in the future, they will be returned as paired tags: "[type of entity]:[value of entity]". For example, the corporate owner of a news source might be a tag with a <Name> of "corporateowner:Clear Channel Communications".

An Entity with an EntityTypeName of "Highlight" must include a <Name> field whose value is the highlighted text. For example: <Name>Johnson said, "The value of media is in the message about the media's self-referential nature."</Name>.

(question – should non-clipping items every have "security", "clipped on", etc.? Doesn't seem to be useful, and runs the risk of contradiction with top-level item)

/rest/getauthors/
This method returns a set of entities representing the authors of a set of clippings that match various criteria. The search criteria parameters are exactly the same as those for /rest/getclips/,

so a request might be for "the *authors* of the current user's clippings from [date range] that the current user has tagged." The list of authors is always sorted in descending order by the number of relevant clippings that the author has written.

Parameters
The search criteria parameters are the same as for /rest/getclips/ with just the additions below
There are no display criteria; Name and Count are always returned for each author.

Name	Type	Required?	Description
n	integer	yes	number of authors to return per page
p	integer	yes	page number (first page = 1)

Response
Success:
```
<Authors>
    <Author>
            <Name>[author's name]</Name>
            <Count>[count of author's clips]</Count>
    </Author>
    <Author>
            …
    </Author>
</Authors>
```
Failure:
```
<FailureAuthors>
    Error expressed in <Code> and <Description> tags
</FailureAuthors>
```

(Shawn: this XML is highly structured—i.e. "Author" instead of "Entity"--because it doesn't seem worth keeping abstract [as getClips is]. What do you think?)

/rest/getsources/
This method returns a set of entities representing the sources of a set of clippings that match various criteria. It is exactly the same as /rest/getauthors except with "authors" replaced by "sources".

/rest/deletetag/
This method deletes a tag from the entire ClipFile system.

Name	Type	Required?	Description
t	string	yes	tag to delete

Response
Success: <DeleteTag/>
Failure:
```
<FailDeleteTag>
```

Error expressed in <Code> and <Description> tags
</FailDeleteTag>

/rest/renametag/

This method renames a tag across the entire ClipFile system.

Name	Type	Required?	Description
from	string	yes	The existing name of the tag to rename
to	string	yes	The desired new name

Response
Success: <RenameTag/>
Failure:
    <FailRenameTag>
        Error expressed in <Code> and <Description> tags
    </FailRenameTag>

/rest/gettags/

This method returns a list of tags that rate high in a particular quality

Name	Type	Required?	Description
q	string	yes	categoryimportance, topicimportance, or tagimportance
pct	string	yes	the percentage of all tags to return
s	string	no	The sort order. "a" for alphabetical, or default is "i" for by importance.

Response
Success:
    <Tags>
        <Tag>
            <Name>[tag name]</Name>
            <Quality>[tag's quality]</Quality>
        </Tag>
        <Tag>
            …
        </Tag>
    </Tags>
Failure:
    <FailGetTags>
        Error expressed in <Code> and <Description> tags
    </FailGetTags>

/rest/gettagnessess/

This method returns a set of values related to a single tag

Name	Type	Required?	Description
t	string	yes	a tag name

Response:
Success:
```
<Gettagnesses>
    <Categoryness>[float value]</Categoryness>
    <CategoryImportance>[float value]</CategoryImportance>
    <Topicness>[float value]</Topicness>
    <TopicImportance>[float value]</TopicImportance>
    <TagImportance>[float value]</TagImportance>
</Gettagnesses>
```

Failure:
```
<FailGetTagnesses>
    Error expressed in <Code> and <Description> tags
</FailGetTagnesses>
```

/rest/settagnessess/
This method sets values related to a single tag

Name	Type	Required?	Description
t	string	yes	a tag name
categoryness	float	no	the amount that a tag is a category.
categoryimportance	float	no	the importance of the tag as a category.
topicness	float	no	the amount that a tag is a topic.
topicimportance	float	no	the importance of the tag as a topic.
tagimportance	float	no	the importance of the tag.

Response:
Success:
```
<Settagnesses/>
```
Failure:
```
<FailSettagnesses>
    Error expressed in <Code> and <Description> tags
</FailGettagnesses>
```

/rest/settagweighting/
This method sets a **category** weighting for a single tag, adding the tag if necessary

Name	Type	Required?	Description
t	string	yes	a tag name
weighting	float	yes	category weighting

Response:
Success: \<SetTagWeighting/>
Failure:
    \<FailSetTagWeighting>
        Error expressed in \<Code> and \<Description> tags
    \</FailSetTagWeighting>

/rest/getrelatedtags/

This method returns a set of tags that are related to a tag in a certain way. For example, "all the tags that are considered topics when related to the category 'Internet'".

Name	Type	Required?	Description
supertag	string	yes	a tag name
tagtype1	string	yes	"category", "topic", or "tag"
tagtype2	string	yes	"category", "topic", or "tag"

Response:
Success:
    \<Tags>
        \<Tag>
            \<Name>[tag name]\</Name>
            \<Weighting>[weighting in this relationship]\</Weighting>
        \</Tag>
        \<Tag>
            …
        \</Tag>
    \</Tags>
Failure:
    \<FailGetRelatedTags>
        Error expressed in \<Code> and \<Description> tags
    \</FailGetRelatedTags>

/rest/setrelatedtagweighting/

This method updates a relationship between two tags. For example, "when 'Internet' is a category, 'Ethernet' can be considered a topic with a weighting of 0.80"

Name	Type	Required?	Description
supertag	string	yes	a tag name
subtag	string	yes	a tag name
tagtype1	string	yes	"category", "topic", or "tag"
tagtype2	string	yes	"category", "topic", or "tag"
weighting	float	yes	a weighting

Response:
Success:
    <RelationshipUpdated/>
Failure:
    <FailRelationshipUpdated>
        Error expressed in <Code> and <Description> tags
    </FailRelationshipUpdated>

/rest/addhighlighttoclip/

Add a highlight to a clipping

Name	Type	Required?	Description
id	integer	yes	id of a clip
highlight	string	yes	The highlight to add

Response:
Success: <AddHighlightToClip/>
Failure:
    <FailAddHighlightToClip>
        Error expressed in <Code> and <Description> tags
    <FailAddHighlightToClip>

/rest/addtagtoclip/

Add a tag to a clipping

Name	Type	Required?	Description
id	integer	yes	id of a clip
tag	string	yes	the tag to add

Response:
Success: <AddTagToClip/>
Failure:
    <FailAddTagToClip/>
        Error expressed in <Code> and <Description> tags
    <FailAddTagToClip>

/rest/deletetagfromclip/

Delete a tag from a clipping

Name	Type	Required?	Description
id	integer	yes	id of a clip
tag	string	yes	the tag to delete

Response:
Success: <DeleteTagFromClip/>
Failure:
   <FailDeleteTagFromClip/>
      Error expressed in <Code> and <Description> tags
   <FailDeleteTagFromClip>

/rest/login/
Log into the ClipFile system

Name	Type	Required?	Description
email	string	yes	user's email address
pass	string	yes	encrypted password

Response:
Success:
   <Login>
      <id>[user's user id]</id>
   </Login>
Failure:
   <FailLogin/>
      Error expressed in <Code> and <Description> tags
   <FailLogin>

/rest/register/
Register a new user in the ClipFile system

Name	Type	Required?	Description
email	string	yes	user's email address
pass	string	yes	encrypted password
name	string	yes	account name (e.g. "Joseph Millett")

Response:
Success:
   <Register>
      <id>[user's user id]</id>
   </Register>
Failure:
   <FailRegister/>
      Error expressed in <Code> and <Description> tags
   <FailRegister>

/rest/update/
Register a new user in the ClipFile system.

Name	Type	Required?	Description
email	string	no	updated email address, if provided
pass	string	no	updated encrypted password, if provided
name	string	no	updated account name, if provided

Response:
Success:
    <Update/>
Failure:
  <FailUpdate/>
     Error expressed in <Code> and <Description> tags
  <FailUpdate>