Version: 2018-11-14
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Change History:
- 2018-11-14   changed API to v2 calls

Content

General Definitions

API URL

This is the API Version 2 which uses REST like syntax.

The API Url is working like this:
`<SERVER-URL>/api/v<version>/<action>/<parameterN>?<options>`

Options are always sent as GET parameters.

For SONOTON the base URL would be
https://www.sonofind.com/api/v2/

A typical API call with optional filter parameter can look like this:
https://www.sonofind.com/api/v2/newtracks/SCD?limit=100

Authentication

This API requires an API login.

All requests (except OPENSESSION) must be sent with an authentication token (auth token) which has to be sent within the HTTP Header. The customer HTTP header should contain this:
`SFAPIV2-SID:`

e.g. if you got SID 23d8… from the AUTH call, use this for all future calls as HTTP HEADER
`SFAPIV2-SID: 23d8tscbbiblli2rt4027o00dd`

The auth token will become invalid if it is not being renewed within 180 minutes. Each API call with an auth token will refresh the token life time.

RESPONSE

Format of Responses

Responses are in XML Format and usually have this structure:

```
<mmd>
        <cnt>1</cnt>
        <ax_success>1</ax_success>
        <ax_errmsg/>
        <ax_msg>Message from Server</ax_msg>
        <sid>gj3rrfldv4hvm0m04jamjovc00</sid>
</mmd>
```

<cnt>

This element will hold the number of nodes from the datablock. E.g. if you query for new tracks, this will hold the number of new tracks.

<ax_success>

This will be a negative number if there was an error.

<ax_errmsg>

This element holds any error message from the API – usually set if ax_success <0.

<ax_msg>

This element contains messages from the API – usually if only functionality without data is called (e.g. ack).

<sid> - auth token

The auth token (SID) is always added to all responses.

Error handling

On errors the API returns ax_success < 0. The element ax_msg holds an error message for the user. The element ax_errmsg only holds the error message. The element ax_errcode will hold a numeric error code.

```
<mmd>
        <ax_success>-1</ax_success>
        <ax_msg>
        Sonofind 2006 ERROR - 401
        ================================================
        Error: 401

        Username does not belong to a SONOfind Useraccount

        File: /www/docs/sonofind/search/glob/ext_sfData.inc.php
        Line: 378
        </ax_msg>
        <classname>sfAXBaseData</classname>
        <ax_errcode>401</ax_errcode>
        <ax_errmsg>Username does not belong to a SONOfind Useraccount</ax_errmsg>
        <sid>gj3rrfldv4hvm0m04jamjovc00</sid>
</mmd>
```

ACTIONS

Open session

/opensession
Initiates a new session.

REQUEST:

GET parameter	Required	Default	Description
lang	optional	en	language

e.g. <APIURL>/opensession

RESPONSE:
```
<mmd>
   <data />
   <ax_success>1</ax_success>
   <ax_msg>Session Generated - Welcome User</ax_msg>
   <classname>sfAXBaseData</classname>
   <sid>s7e23cc54picevjs4f60p9uqs5</sid>
</mmd>
```

Authenticate

/auth/<username>/<passwordhash>
Authenticates an API user with Username + Password. For security reasons, the password is concatenated with the sessionid and the MD5 hash of this string is used. You have to use the field sid from the opensession request. If this request was successful, further calls with this sid are authenticated.

HTTP-Header SFAPIV2-SID must be set!

REQUEST:

Parameter	Required	Default	Description
Parameter 1	X		Username
Parameter 2	X		Password as MD5 Hash of "password~SESSIONID"

e.g. to authenticate the user australia@sonoton.com with password abcdefg you have to create the md5 of "abcdefg~ s7e23cc54picevjs4f60p9uqs5" and use this in the call like this:

<APIURL>/auth/australia@sonoton.com/51d20fe3cc2708bc0b0db5059ffdf166
This requires auth token in HTTP-Header
SFAPIV2-SID: s7e23cc54picevjs4f60p9uqs5

RESPONSE:
```
<mmd>
   <data />
   <ax_success>1</ax_success>
   <ax_msg>Welcome User australia@sonoton.com</ax_msg>
   <classname>sfAXBaseData</classname>
   <sid>s7e23cc54picevjs4f60p9uqs5</sid>
</mmd>
```

Get list of available labels

/labels
Get a list of all available labels for this authenticated user.

e.g. <APIURL>/labels
This requires auth token in HTTP-Header
SFAPIV2-SID: s7e23cc54picevjs4f60p9uqs5

RESPONSE:

```
<mmd>
  <labelinfo label="CAVCD">
   <label>CAVCD</label>
   <lc>07053</lc>
   <catalog>Cavendish Music</catalog>
   <library>Cavendish Music</library>
   <provider>BOO</provider>
   <labelcode></labelcode>
   <publisher></publisher>
   <int_lbid></int_lbid>
  </labelinfo>
  <labelinfo label="CLC">
   <label>CLC</label>
   <lc>07573</lc>
   <catalog>Commercial Length Cuts - CLC</catalog>
   <library>Commercial Length Cuts</library>
   <provider>SON</provider>
   <labelcode></labelcode>
   <publisher></publisher>
   <int_lbid></int_lbid>
  </labelinfo>
…..
  <cnt>12</cnt>
  <ax_success>1</ax_success>
  <sid>s7e23cc54picevjs4f60p9uqs5</sid>
</mmd>
```

Get list of CDs from a label

/cds/<label>
Get a list of CDs in MMD format for a specific label.

REQUEST:

Parameter	Required	Default	Description
Parameter 1	X		Label

e.g. <APIURL>/cds/SCDV

This requires auth token in HTTP-Header
```
SFAPIV2-SID: s7e23cc54picevjs4f60p9uqs5
```

RESPONSE:

```
<mmd>
 <cd cdcode="SCDV0001">
  <provider>SON</provider>
  <label></label>
  <cdnr></cdnr>
  <cdcode>SCDV0001</cdcode>
  <disc></disc>
  <descriptions>
   <description lang="en">Great AOR - adult-orientated rock from the 70s and 80s in a variety of upfront and heavy styles; recorded at
  </descriptions>
  <titles>
   <title lang="en">BURNING TROLL AT ABBEY ROAD</title>
  </titles>
  <releasedat>2007-04-11</releasedat>
  <publishdat>0000-00-00</publishdat>
  <newcd>0</newcd>
  <ean>4020771077014</ean>
  <upc>4020771077014</upc>
  <lc>07573</lc>
  <webmix>1</webmix>
  <publisher>Sonoton</publisher>
  <library>Sonoton Virtual - SCDV</library>
 </cd>
 <cd cdcode="SCDV0002">
  <provider>SON</provider>
  <label></label>
  <cdnr></cdnr>
  <cdcode>SCDV0002</cdcode>
  <disc></disc>
  <descriptions>
   <description lang="en">20th century avant-garde - classics of tomorrow. Excerpts from contemporary works for symphony orchestra,
chamber orchestra and solo instruments. For full length versions contact your local SONOTON agent.</description>
  </descriptions>
  <titles>
   <title lang="en">AVANT-GARDE Music of the 20th Century</title>
  </titles>
  <releasedat>2007-04-11</releasedat>
  <publishdat>0000-00-00</publishdat>
  <newcd>0</newcd>
  <ean>4020771077021</ean>
  <upc>4020771077021</upc>
  <lc>07573</lc>
  <webmix>1</webmix>
  <publisher>Sonoton</publisher>
  <library>Sonoton Virtual - SCDV</library>
 </cd>
…..
 <cnt>281</cnt>
 <ax_success>1</ax_success>
 <sid>s7e23cc54picevjs4f60p9uqs5</sid>
</mmd>
```

Get CD/track data from a CD

/mmd/<cdcode or trackcode>
This call can be used to get metadata in MMD format for a whole album if used with a cdcode.
If used with a trackcode, you only receive all metadata for a specific track.
The metadata includes download links for audio and artwork files.
An audio download requires a separate API call (see below).
For a full description and xsd schema on MMD please see https://www.musicmetadata.org

REQUEST:

Parameter	Required	Default	Description
Parameter 1	X		cdcode or trackcode

e.g. <APIURL>/mmd/SCDV0002

This requires auth token in HTTP-Header
```
SFAPIV2-SID: s7e23cc54picevjs4f60p9uqs5
```

RESPONSE:
```
<mmd>
 <cd cdcode="SCDV0002">
  <provider>SON</provider>
  <label>SCDV</label>
  <cdnr>2</cdnr>
.....
 </cd>
 <track trackcode="SCDV000201">
  <provider>SON</provider>
  <label>SCDV</label>
  <cdnr>2</cdnr>
  <disc></disc>
  <tracknr>1</tracknr>
  <indexpoint>0</indexpoint>
  <cdcode>SCDV0002</cdcode>
  <trackcode>SCDV000201</trackcode>
  <seconds>1130</seconds>
  <bpm>0</bpm>
....
  <files>
  <file content="cover">https://www.sonofind.com/cover/max/CLC0105.png</file>
    <file content="audio" type="mp3" quality="320">http://sfdev.sonoton.de/sonofind/search/api/v2/audio/SCDV000201/0</file>
    <file content="audio" type="mp3" quality="128">http://sfdev.sonoton.de/sonofind/search/api/v2/audio/SCDV000201/2</file>
    <file content="audio" type="wav">http://sfdev.sonoton.de/sonofind/search/api/v2/audio/SCDV000201/1</file>
    <file content="audio" type="wav">http://sfdev.sonoton.de/sonofind/search/api/v2/audio/SCDV000201/3</file>
  </files>
 </track>
 <cnt>281</cnt>
 <ax_success>1</ax_success>
 <sid>s7e23cc54picevjs4f60p9uqs5</sid>
</mmd>
```

Download audio files

/audio/<trackcode>/<filetype>

Get audio for a track as mp3/wav/aiff. This creates a downloadURL which can be used to download the audio file (this downloadlink is an one time link !).

REQUEST:

Parameter	Required	Default	Description
Parameter1	X		track code
Parameter2	optional	0	0=mp3(320k),1=wav,2=mp3(128k),3=aiff

e.g. <APIURL>/audio/SCDV000201/1

This requires auth token in HTTP-Header
SFAPIV2-SID: s7e23cc54picevjs4f60p9uqs5

RESPONSE:

```
<mmd>
   <data />
   <ax_success>1</ax_success>
   <ax_msg />
   <classname>sfAXBaseData</classname>

<url>http://locdev.sonoton.net/sonofind/search/html/../basket/directload.php?bid=333695&amp;sid=qvur2sb2e7sepk4u6b8cl4kbu3&amp;sprache=EN</url>
   <sid>s7e23cc54picevjs4f60p9uqs5</sid>
</mmd>
```

Acknowledge receipt of track or whole album

/ack/<cdcode or trackcode>
Acknowledge the receipt of a track or whole album.
This marks the track as received and removes them from the new tracks listing.

REQUEST:

Parameter	Required	Default	Description
Parameter 1	X		cdcode or trackcode

e.g. <APIURL>/ack/SCD0720

This requires auth token in HTTP-Header
`SFAPIV2-SID: s7e23cc54picevjs4f60p9uqs5`

RESPONSE:
```
<?xml version="1.0"?>
<mmd>
  <data />
  <ax_success>1</ax_success>
  <ax_msg>ack: 66 rows for SCD0720</ax_msg>
  <ax_addstatus>1</ax_addstatus>
  <classname>sfAXBaseData</classname>
  <sid>4q1lntak76kvnibojpbu99hmdb</sid>
</mmd>
```

List of unacknowledged (new) tracks

/newtracks/<label>

Get a track list of new (unacknowledged) tracks. If you acknowledge all downloads, you can use this for receiving all the new tracks.

REQUEST:

Parameter	Required	Default	Description
Parameter1	optional		Label – filter new tracks for this label

REQUEST:

GET parameter	Required	Default	Description
limit=	optional	25000	maximum number of tracks to load
skipstems=	optional	0	1 => to skip stem tracks

e.g. <APIURL>/newtracks/SCD

This requires auth token in HTTP-Header
`SFAPIV2-SID: s7e23cc54picevjs4f60p9uqs5`

RESPONSE:

```
<?xml version="1.0"?>
<mmd>
  <data />
  <ax_success>1</ax_success>
  <ax_msg>ack:  rows for </ax_msg>
  <ax_addstatus>1</ax_addstatus>
  <classname>sfAXBaseData</classname>
  <trackcodes>
    <data>SCD072007</data>
    <data>SCD072008</data>
    <data>SCD072011</data>
...
    <data>SCD072049</data>
    <data>SCD0720492</data>
  </trackcodes>
  <cnt>59</cnt>
  <sid>4q1lntak76kvnibojpbu99hmdb</sid>
</mmd>
```

SONOfind - Error Codes

100 Unable to activate User as Country is not Activated - Please contact your Master Agent to do so !! (sfUserAdm.inc)

303 Streaming File not found

600   Customer Not Found (sfUserAdm)
601 Customer Not Activated (sfUserAdm)
602 Customer Not Active (sfUserAdm)
603 Username already taken (sfUser)
604 Userid does not exist

610 Username does not belong to a SONOfind Useraccount (sfUserData)
611 Password mismatch (sfUserData)

620 SessionID no longer exists - or SessionUser not valid

630 ProjectID does not exist
631 Invalid ProjectID for this user!
632 ProjectID Parameter is missing
633 ProjectRowID does not exist
634 Project contains no data - empty project
635 Project XML could not be loaded - maybe Problem with XML Structure
640 Invalid Email Adress

650 Invalid QueryType in Pulldowns (myAxPulldowns)
651 Missing QueryType

660 No Data found

670 File does not exist
671 Label is not available in Users Country

690 Invlaid QueryType in AppConnect

2010 Missing Data - Data not found
2020 Download-Limit: Time based limit reached
2021 Download-Limit: Number of Download based limit reached
2022 Download-Limit: Size limit reached