

GurbaniDB Cloud API

User Guide

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1 Introduction

This document describes the JSON-RPC & REST services of the GurbaniDB Cloud API. It aims to assist software developers to access GurbaniDB, with examples in Python 2.7.1 and PHP. Alternatively, developers may use our database to build offline apps.

2 License

All applications which use the GurbaniDB Cloud API or the GurbaniDB SQL Database, must also release the source code of their application under the [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#) or a similar open source software license, for example, the [GNU General Public License](#).

This means that all those who use GurbaniDB services must also attribute The Sikher Project and GurbaniDB, only use it for non-commercial purposes and must release their project under this same or similar license (including all the source code for the application into the public domain). This is to encourage collaboration and development of better software.

3 Offline Applications - GurbaniDB SQL Database

We at The Sikher Project generally discourage developers from using this database, as it's nowadays much quicker and easier to connect remotely (and we also update our database regularly).

However, in case you have a problem with speed of access or a lack of an internet connection, you can use our GurbaniDB SQL Database to develop offline applications:

<http://sourceforge.net/projects/sikher/files/Database/Database.tar.gz/download>. Please note that this is the FULL GurbaniDB database.

If you would rather download the database in smaller chunks, and pick and choose which translations and transliterations to load into it we have now (as of February 2013) made our database available as individual files. Our readme is available here:

<https://github.com/sikher/docs/blob/master/README.md> and the SQL files are available here: <http://www.sikher.com/sql/>.

Our database is released under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.

4 Parameters of GurbaniDB Cloud API Functions

This chapter describes all parameters of the GurbaniDB Cloud API that is used in both JSON-RPC and REST functions.

4.1 SearchText

This is a keyword which the developers want to search, as a string.

4.2 SearchMode

This is an integer which indicates what type of search is being conducted:

Value	Meaning	Description
1	SEARCH_ALL_WORDS	By - “SEARCH_ALL_WORDS” searches the lines which have the word, includes the SearchText .
2	SEARCH_FIRST_LETTERS	By - “SEARCH_FIRST_LETTERS” searches all the first letters of words e.g. My Fair Lady would be “MFL.
3	SEARCH_EXACT_PHRASE	By - “SEARCH_EXACT_PHRASE” searches the lines which have the word, just like with of SearchText .

4.3 SearchLanguage

This is an integer which indicates what the language of the SearchText is:

Value	Meaning
-1	Gurmukhi
1	Afrikaans
2	Albanian
3	Arabic
4	Belarusian
5	Bulgarian
6	Catalan
7	Chinese Simplified
8	Chinese Traditional
9	Croatian

10	Czech
11	Danish
12	Dutch
13	English
14	Estonian
15	Filipino
16	Finnish
17	French
18	Galician
19	German
20	Greek
21	Haitian
22	Hebrew
23	Hindi
24	Hungarian
25	Icelandic
26	Indonesian
27	Irish
28	Italian
29	Japanese
30	Korean
31	Latvian
32	Lithuanian
33	Macedonian
34	Malay
35	Maltese
36	Norwegian
37	Persian
38	Polish
39	Portuguese
40	Romanian
41	Russian
42	Serbian
43	Slovak
44	Slovenian
45	Spanish
46	Swahili
47	Swedish
48	Thai
49	Turkish
50	Ukrainian
51	Vietnamese
52	Welsh
53	Yiddish

4.4 SearchAuthor

This is an integer that indicates the authors you want to search:

Value	Meaning
0	All Authors
1	Guru Nanak Dev
2	None
3	Guru Ram Das
4	Guru Arjan Dev
5	Guru Amar Das
6	Guru Angad Dev
7	Saint Kabir
8	Saint Trilochan
9	Saint Beni
10	Saint Ravidas
11	Guru Tegh Bahadur
12	Saint Kabir and Guru Arjan Dev
13	Saint Namdev
14	Saint Dhana
15	Saint Sheikh Farid
16	Saint Jaidev
17	Bhai Mardana
18	Saint Bhikhan
19	Saint Sain
20	Saint Pipa
21	Saint Sadhana
22	Baba Sundar
23	Bhai Balwand and Satta
24	Saint Ramanand
25	Saint Parmanand
26	Saint Surdas
27	Poet Kalshar
28	Poet Jalap
29	Poet Kirat
30	Poet Bhika
31	Poet Salh
32	Poet Bhalh
33	Poet Nalh
34	Poet Gayand
35	Poet Mathura
36	Poet Balh
37	Poet Harbans
38	Unknown

4.5 SearchMelody

This is an integer that indicates the melody of the scriptures which you want to search:

Value	Meaning
0	All Melodies
1	None
2	Aasaa
3	Gujari
4	Gauri Deepaki
5	Dhanasari
6	Gauri Purbi
7	Siri Raag
8	Majh
9	Gauri Guarairi
10	Gauri
11	Gauri Dakhani
12	Gauri Chayti
13	Gauri Bairagan
14	Gauri Purbi Deepaki
15	Gauri Majh
16	Gauri Malva
17	Gauri Mala
18	Gauri Sorath
19	Aasaa Kafi
20	Asavari
21	Aasaa Asavari
22	Devgandhari
23	Bihagara
24	Vadhans
25	Vadhans Dakhani
26	Sorath
27	Jaitsiri
28	Todi
29	Bairari
30	Tilang
31	Tilang Kafi
32	Suhi
33	Suhi Kafi
34	Suhi Lalit
35	Bilaval
36	Bilaval Dakhani
37	Gond
38	Bilaval Gond
39	Ramkali

40	Ramkali Dakhani
41	Nat Narayan
42	Nat
43	Mali Gaura
44	Maru
45	Maru Kafi
46	Maru Dakhani
47	Tukhari
48	Kedara
49	Bhairao
50	Basant
51	Basant Hindol
52	Sarang
53	Malhar
54	Kaanara
55	Kalian
56	Kalian Bhopali
57	Parbhati Bibhas
58	Parbhati
59	Parbhati Dakhani
60	Bibhas Parbhati
61	Jaijavanti

4.6 OutputTransliteration

This is an integer that indicates the output transliteration language:

Value	Meaning
1	Arabic
2	Armenian
3	Bengali
4	Cyrillic
5	Devanagari
6	Georgian
7	Greek
8	Gujarati
9	Hangul
10	Hebrew
11	Hiragana
12	Jamo
13	Kannada
14	Katakana
15	Latin
16	Malayalam
17	Oryia

18	Syriac
19	Tamil
20	Telugu
21	Thaana
22	Thai

4.7 OutputTranslation

This is an integer that indicates the output translation language:

Value	Meaning
1	Afrikaans
2	Albanian
3	Arabic
4	Belarusian
5	Bulgarian
6	Catalan
7	Chinese Simplified
8	Chinese Traditional
9	Croatian
10	Czech
11	Danish
12	Dutch
13	English
14	Estonian
15	Filipino
16	Finnish
17	French
18	Galician
19	German
20	Greek
21	Haitian
22	Hebrew
23	Hindi
24	Hungarian
25	Icelandic
26	Indonesian
27	Irish
28	Italian
29	Japanese
30	Korean
31	Latvian
32	Lithuanian
33	Macedonian
34	Malay

35	Maltese
36	Norwegian
37	Persian
38	Polish
39	Portuguese
40	Romanian
41	Russian
42	Serbian
43	Slovak
44	Slovenian
45	Spanish
46	Swahili
47	Swedish
48	Thai
49	Turkish
50	Ukrainian
51	Vietnamese
52	Welsh
53	Yiddish

4.8 SearchPage

This is an integer between 1 and 1430 which indicates the page number of the Guru Granth Sahib which you want to search.

4.9 DeveloperName

Developer name is the same full name a developer signed up with during registration, written as a string. For example John Singh would become the string "John Singh".

You can use "test" for testing purposes, but please register as a developer here: <http://www.sikher.com/guru-granth-sahib/user/signin/add> if you have not already done so to get your own developer name.

If your developer name is not valid, no results are returned and instead you will receive the message "You must approved as a developer to use the RPC services."

Email info@sikher.com, if you have forgotten/misplaced your developer name.

5 Accessing JSON-RPC & REST Functions

The URL of the RPC Service is “<http://www.sikher.com/guru-granth-sahib/user/search/jsonrpc>”.

The URL of the REST Service is “<http://www.sikher.com/guru-granth-sahib/user/search/rpc>”.

These web services are for the software developers so that they can access the central database using whatever programming language they wish and create software using the GurbaniDB database.

The GurbaniDB Cloud API has the following functions:

5.1 Search

```
Search($SearchText,  
$SearchMode,  
$SearchLanguage,  
$SearchAuthor,  
$SearchMelody,  
$OutputTransliteration,  
$OutputTranslation,  
$DeveloperName)
```

It searches the lines with the conditions of SearchText, SearchMode, SearchLanguage, SearchAuthor, and SearchMelody and returns the search results in the languages of the OutputTransliteration and OutputTranslation.

It returns the array of the searching results.

The searching results is a array of the “Scripture”, “ScriptureOriginal”, “Author”, “Melody”, “Page”, “Line”, “Translation” and “Transliteration” of a scripture.

REST Example

```
http://www.sikher.com/guru-granth-sahib/user/search/rpc?  
method=Search&SearchText=&SearchMode=1&SearchLanguage=13&Search  
Author=1&SearchMelody=1&OutputTransliteration=15&OutputTranslation=1  
3&DeveloperName=test
```

JSON-RPC PHP Example

The following is a php example which calls the JSON-RPC service of "Search". And it only show results 11-13.

```
<?php
    $exampleService = new jsonRPCClient( "http://www.sikher.com/guru-granth-
sahib/user/search/jsonrpc" );
    try{
        $testingSearch = $exampleService->Search("There is no", 1, 13, 0,
0, 15, 13, "Developer Name");
        for($ind=10; $ind<13; $ind++)
        {
            print_r($testingSearch[$ind]);
        }
    } catch(Exception $e) {
        echo nl2br($e->getMessage()).'<br />'. "\n";
    }
?>
```

Then the results is as follows.:

```
Array ( [Scripture] => ਕੇਤਾ ਆਖਣੁ ਆਖੀਐ ਆਖਣਿ ਤੋਟਿ ਨ ਹੋਇ ॥ [ScriptureOriginal] =>
ਕੇਤਾਆਖਣੁਆਖੀਐਆਖਣਿਤੋਟਿਨਹੋਇ॥ [Author] => Guru Nanak Dev [Melody] => Siri Raag
[Page] => 18 [Line] => 6 [Translation] => How can we describe Him with
words? There is no end to the descriptions of Him. [Transliteration] => kētā
ākhan ākhīai ākhan tōt n hōi . )
Array ( [Scripture] => ਜਿਉ ਭਾਵੈ ਤਿਉ ਰਾਖੁ ਤੂੰ ਮੈ ਅਵਰੁ ਨ ਦੂਜਾ ਕੋਇ ॥੧॥ ਰਹਾਉ ॥ [ScriptureOriginal] =>
ਜਿਉਭਾਵੈਤਿਉਰਾਖੁਤੂੰਮੈਅਵਰੁਨਦੂਜਾਕੋਇ॥੧॥ਰਹਾਉ॥ [Author] => Guru Nanak Dev [Melody] => Siri Raag
[Page] => 20 [Line] => 4 [Translation] => As it pleases You, Lord, You save
me. There is no other for me at all. ||1||Pause|| [Transliteration] => jiu bhāvai
tiu rākh tū mai avar n dūjā kōi .1. rahāu . )
Array ( [Scripture] => ਹੋਰੁ ਕਿਤੈ ਭਗਤਿ ਨ ਹੋਵਈ ਬਿਨੁ ਸਤਿਗੁਰ ਕੇ ਉਪਦੇਸ ॥੧॥ [ScriptureOriginal] =>
ਹੋਰੁਕਿਤੈਭਗਤਿਨਹੋਵਈਬਿਨੁਸਤਿਗੁਰਕੇਉਪਦੇਸ॥੧॥ [Author] => Guru Nanak Dev [Melody] => Siri Raag
[Page] => 22 [Line] => 11 [Translation] => There is no other way to perform
devotional worship, except through the Teachings of the True Guru. ||1||
[Transliteration] => hōr kitai bhagat n hōvāi bin satigur kē upadēs .1. )
```

JSON-RPC Python Example

Download JSON-RPC module for Python: <http://json-rpc.org/wiki/python-json-rpc>

```
from jsonrpc import ServiceProxy
s = ServiceProxy("http://www.sikher.com/guru-granth-
sahib/user/search/jsonrpc")
a = s.Search('God is great',1,13,0,0,15,13,'Developer Name')
print a[0]['Author']
print "^ Search returns just the author from the first search result of 'God is
great'"
```

5.2 SearchPage

```
SearchPage($SearchPage,  
$OutputTransliteration,  
$OutputTranslation,  
$DeveloperName)
```

It searches the lines on the page of SearchPage.
And it returns the search results in the languages of the
OutputTransliteration and OutputTranslation.

REST Example

[http://www.sikher.com/guru-granth-sahib/user/search/rpc?
method=SearchPage&Page=100&OutputTransliteration=15&OutputTranslation=13&DeveloperName=test](http://www.sikher.com/guru-granth-sahib/user/search/rpc?method=SearchPage&Page=100&OutputTransliteration=15&OutputTranslation=13&DeveloperName=test)

Note that in REST, the first argument \$SearchPage is simply \$Page

JSON-RPC PHP Example

The following is a php example which calls the JSON-RPC service of
"SearchPage".

And it only show results 11-20.

```
<?php  
    $exampleService = new jsonRPCClient( "http://www.sikher.com/guru-granth-sahib/user/search/jsonrpc" );  
    try{  
        $testingSearch = $exampleService->SearchPage(10, 15, 13,  
"Developer Name");  
        for($ind=10; $ind<20; $ind++)  
        {  
            print_r($testingSearch[$ind]);  
        }  
    } catch(Exception $e) {  
        echo nl2br($e->getMessage()).'<br />'. "\n";  
    }  
?>
```

JSON-RPC Python Example

Download JSON-RPC module for Python: <http://json-rpc.org/wiki/python-json-rpc>

```
from jsonrpc import ServiceProxy  
s = ServiceProxy("http://www.sikher.com/guru-granth-sahib/user/search/jsonrpc")  
b = s.SearchPage(14,15,13,'Developer Name')
```

```
print b[0]
print "^ Returns first line of specified page"
```

5.3 RandomPage

```
RandomPage($OutputTransliteration,
$OutputTranslation,
$DeveloperName)
```

It searches the lines on a random page.
And it returns the search results in the languages of the
OutputTransliteration and OutputTranslation.

REST Example

<http://www.sikher.com/guru-granth-sahib/user/search/rpc?method=RandomPage&OutputTransliteration=15&OutputTranslation=13&DeveloperName=test>

JSON-RPC PHP Example

The following is a php example which calls the JSON-RPC service of
"SearchPage".
And it only show results 11-20.

```
<?php
    $exampleService = new jsonRPCClient( "http://www.sikher.com/guru-granth-
sahib/user/search/jsonrpc" );
    try{
        $testingSearch = $exampleService->RandomPage(15, 13,
"Developer Name");
        for($ind=10; $ind<20; $ind++)
        {
            print_r($testingSearch[$ind]);
        }
    } catch(Exception $e) {
        echo nl2br($e->getMessage()).'<br />'. "\n";
    }
?>
```

JSON-RPC Python Example

Download JSON-RPC module for Python: <http://json-rpc.org/wiki/python-json-rpc>

```
from jsonrpc import ServiceProxy
s = ServiceProxy("http://www.sikher.com/guru-granth-
sahib/user/search/jsonrpc")
c = s.RandomPage(15,13,'Developer Name')
```



```
print c[1]
print "^ Returns Second Line of Random Page"
```

5.4 UpdateGurbaniDB

UpdateGurbaniDB (\$scriptureid,
\$DeveloperName)

It returns the newest translations of the scripture, after supplying a ScriptureID of 10. This is the only integer which should be supplied to receive all new translation updates.

REST Example

<http://www.sikher.com/guru-granth-sahib/user/search/rpc?method=UpdateGurbaniDB&ScriptureID=10&DeveloperName=test>

Note: The REST API for this method is still in development, and may not be functioning correctly.

JSON-RPC PHP Example

The following is a php example which calls the JSON-RPC service of "SearchPage".
And it only show results 11-20.

```
<?php
    $exampleService = new jsonRPCClient( "http://www.sikher.com/guru-granth-sahib/user/search/jsonrpc" );
    try{
        $testingSearch = $exampleService->UpdateGurbaniDB(10,
"Developer Name");
        print_r($testingSearch);
    } catch(Exception $e) {
        echo nl2br($e->getMessage()).'<br />'. "\n";
    }
?>
```

JSON-RPC Python Example

Download JSON-RPC module for Python: <http://json-rpc.org/wiki/python-json-rpc>

```
from jsonrpc import ServiceProxy
s = ServiceProxy("http://www.sikher.com/guru-granth-sahib/user/search/jsonrpc")
d = s.UpdateGurbaniDB(10, 'Developer Name')
print d
```



print "^ Update GurbaniDB - any updates to translations are received here
line by line"