

Alephino X-Services

From: Swami Wiki

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General Information

Along with the introduction of MARC XML for universal data exchange format the Alephino was fitted with services providing direct communication with the Alephino server. With these HTTP based set of services it is possible to search for Alephino records of any type as well as creating new records, updating them and also doing deletions. The online data interface and its services are subjects of this documentation.

An executable program **alix(.exe)** acts as CGI gateway to the Alephino server and therefore has to be added to the respective HTTP server configuration. The general syntax of Alephino HTTP requests is as follows:

`http://address[:port]/alix?op=request_name&base=database_name¶m=value...`

- Parameter names and values are dealt with case sensitive.
- Character set is UTF-8.
- The methods GET and POST of the HTTP protocol are supported.

Request types of the Alephino X-Server

For main parameter **op=** the following values will be accepted:

| | |
|----------------------|---|
| find | Find records by search request |
| getrec | Get record MARC XML formatted |
| putrec | Write MARC XML record back to the database |
| delrec | Delete record |
| publish_avail | Get record MARC XML formatted plus availability information (for Primo) |
| getbor | Get borrower record PLIF XML formatted |
| putbor | Write PLIF XML borrower record back to the database |

The parameters listed below are valid for all request types:

| | |
|------------|---------------------|
| usr | Staff user name |
| pwd | Staff user password |

The above parameters can be omitted if the general system configuration file **etc/alephino.cfg** contains the following entry:

```
(XService)
User = <User>
Password = <Password>
```

find

| op=find | Parameter |
|----------------|--|
| base | Data pool and master file in Alephino notation, i.e. M-TIT for data pool M(arc) master file TIT(le) |
| query | Search query in Alephino CCL notation, i.e. WRD=Mathematics and PER=Leach* |

Antwort (Beispiel):

```
<?xml version="1.0" encoding="UTF-8" ?>
<find>
  <query> wrd=mathematics and per=leach* </query>
  <base>M-TIT</base>
  <set_number>17</set_number>
  <no_entries>1</no_entries>
</find>
```

getrec

| op=getrec | Parameter |
|------------------|---|
| base | Data pool and master file in Alephino notation, i.e. M-TIT for data pool |

M(arc) master file TIT(le)

idn Identification number of the respective record

alternatively...

set_number Number of a result set (result of a subsequently performed **find**)

number_entry Record position within that result set (beginning with number one)

Pls. note that for this the staff user must have "Update" permission.

Response (Example):

```
<?xml version="1.0" encoding="UTF-8" ?>
<collection>
<document base="M-TIT" idn="000000713">
<controlfield tag="001">000000713</controlfield>
<controlfield tag="002">20091120</controlfield>
<controlfield tag="003">DDB</controlfield>
<controlfield tag="005">20100804153942</controlfield>
<controlfield tag="008">030829s2004 gw u000|u eng d</controlfield>
<datafield tag="015" ind1=" " ind2=" ">
<subfield code="a">GFR-CIP-03,N39,0574</subfield>
<subfield code="a">DNB-04,A08,0870</subfield>
</datafield>
<datafield tag="016" ind1="7" ind2=" ">
<subfield code="2">GyFmDB</subfield>
<subfield code="a">968675239</subfield>
</datafield>
<datafield tag="020" ind1=" " ind2=" ">
<subfield code="a">1-85233-767-2 :</subfield>
<subfield code="c">Pp. : EUR 128.35</subfield>
</datafield>
<datafield tag="040" ind1=" " ind2=" ">
<subfield code="a">DDB</subfield>
<subfield code="b">ger</subfield>
<subfield code="e">RAK-WB</subfield>
</datafield>
<datafield tag="041" ind1="0" ind2=" ">
<subfield code="a">eng</subfield>
</datafield>
<datafield tag="100" ind1="1" ind2=" ">
<subfield code="L">000000706</subfield>
<subfield code="a">Leach, John A.</subfield>
</datafield>
<datafield tag="245" ind1="1" ind2="0">
<subfield code="a">Matched asymptotic expansions in reaction diffusion theory /</subfield>
<subfield code="c">J. A. Leach ; D. J. Needham.</subfield>
</datafield>
<datafield tag="260" ind1=" " ind2=" ">
<subfield code="a">London ;</subfield>
<subfield code="a">Berlin ;</subfield>
<subfield code="a">Heidelberg ;</subfield>
<subfield code="a">New York ;</subfield>
<subfield code="a">Hong Kong ;</subfield>
<subfield code="a">Milan ;</subfield>
<subfield code="a">Paris ;</subfield>
<subfield code="a">Tokyo :</subfield>
<subfield code="b">Springer,</subfield>
<subfield code="c">2004.</subfield>
</datafield>
<datafield tag="300" ind1=" " ind2=" ">
<subfield code="a">X, 290 S. :</subfield>
<subfield code="b">graph. Darst. ;</subfield>
<subfield code="c">24 cm.</subfield>
</datafield>
<datafield tag="490" ind1="0" ind2=" ">
```

```

<subfield code="a">Springer monographs in mathematics</subfield>
</datafield>

<datafield tag="500" ind1=" " ind2=" ">
<subfield code="a">Literaturverz. S. 283 - 287</subfield>
</datafield>

<datafield tag="650" ind1=" " ind2="7">
<subfield code="2">SWD</subfield>
<subfield code="a">Reaktions-Diffusionsgleichung</subfield>
<subfield code="x">Asymptotische Entwicklung.</subfield>
<subfield code="L">000000679</subfield>
</datafield>

<datafield tag="700" ind1="1" ind2=" ">
<subfield code="L">000000707</subfield>

<subfield code="a">Needham, David J.</subfield>
</datafield>
<datafield tag="FMT" ind1=" " ind2=" ">BK</datafield>
<leader>00902nam 2200241 i 4500</leader>
<datafield tag="LNG" ind1=" " ind2=" ">eng</datafield>
</document>
</collection>

```

putrec

op=putrec

Parameter

mode **LOAD** = Load without checking / [**otherwise**] = Import including script controlled checkings

data MARC XML record (see reply from **getrec**)

Pls. note that for this the staff user must have "Update" permission.

Response = Source XML data record enriched with warnings or error messages
(Example):

```

<?xml version="1.0" encoding="UTF-8" ?>
<collection>
<document base="M-TIT" idn="000000713">
<controlfield tag="001">000000713</controlfield>
<controlfield tag="002">20091120</controlfield>
<controlfield tag="003">DDB</controlfield>
<controlfield tag="005">20100804153942</controlfield>
<controlfield tag="008">030829s2004      gw                      u000|u eng d</controlfield>
...
<datafield tag="100" ind1=" " ind2=" ">
<subfield code="L">000000706</subfield>
<subfield code="a">Leach, John A.</subfield>
</datafield>
<error type="tag">Indicator 1 not allowed</error>
...
</document>
</collection>

```

delrec

| op=delrec | Parameter |
|------------------|--|
| base | Data pool and master file in Alephino notation, i.e. M-TIT for data pool M(arc) master file TIT(le) |
| idn | Identification number of the record to be deleted |

Pls. note that for this the staff user must have "Update" permission.

Response (Example):

```
<?xml version="1.0" encoding="UTF-8" ?>
<delrec>
<error>Deletion not possible: dependent records ! </error>
</delrec>
<delrec>
```

alternatively (on success) ...

```
<?xml version="1.0" encoding="UTF-8" ?>
<base>M-TIT</base>
<idn>713</idn>
</delrec>
```

publish_avail

| op=publish_avail | Parameter |
|-------------------------|---|
| library | Data pool in Alephino notation, i.e. M for data pool M(arc) or ... external name of the database according to alephino.cfg, Block (Consort), i.e.: LO |
| doc_num | Identification number of the record |

Response (Example):

```
<?xml version="1.0" encoding="UTF-8" ?>
<publish-avail><OAI-PMH xmlns="http://www.openarchives.org/OAI/2.0/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/
http://www.openarchives.org/OAI/2.0/OAI-PMH.xsd">
<ListRecords>
<record>
<header>
<identifier>aleph-publish:000001149</identifier>
</header>
<metadata>
<document base="LOTIT" idn="000001149">
<controlfield tag="001">000001149</controlfield>
<controlfield tag="002">20091120</controlfield>
<controlfield tag="003">DDB</controlfield>
<controlfield tag="005">20100804153942</controlfield>
```

```

<controlfield tag="008">030917s2003    gw a          u000|u eng d</controlfield>
<datafield tag="015" ind1=" " ind2=" ">
<subfield code="a">GFR-CIP-03,N41,1210</subfield>
<subfield code="a">DNB-04,A08,1812</subfield>
</datafield>
<datafield tag="016" ind1="7" ind2=" ">
<subfield code="2">GyFmDB</subfield>
<subfield code="a">968792812</subfield>
</datafield>
<datafield tag="020" ind1=" " ind2=" ">
<subfield code="a">3-525-53984-3 (Vandenhoeck & Ruprecht) :</subfield>

<subfield code="c"> kart. : EUR 52.00</subfield>
</datafield>
<datafield tag="020" ind1=" " ind2=" ">
<subfield code="a">3-7278-1444-6 (Univ. Press) :</subfield>
<subfield code="c"> kart.</subfield>
</datafield>
<datafield tag="040" ind1=" " ind2=" ">
<subfield code="a">DDB</subfield>
<subfield code="b">ger</subfield>
<subfield code="e">RAK-WB</subfield>

</datafield>
<datafield tag="041" ind1="1" ind2=" ">
<subfield code="a">eng</subfield>
<subfield code="h">fre</subfield>
</datafield>
<datafield tag="044" ind1=" " ind2=" ">
<subfield code="a">XA-DE-NI</subfield>
</datafield>
<datafield tag="245" ind1="0" ind2="4">
<subfield code="a">The excavations of Khirbet Qumran and Ain Feshkha.</subfield>
<subfield code="c">ed. by J.-B. Humbert and A. Chambon. Transl. and rev. by Stephen J.
Pfann.</subfield>
<subfield code="n">1B,</subfield>

<subfield code="p">Synthesis of Roland de Vaux's field notes </subfield>
</datafield>
<datafield tag="260" ind1=" " ind2=" ">
<subfield code="a">Fribourg, Switzerland :</subfield>
<subfield code="b">Univ. Press,</subfield>
<subfield code="c">2003.</subfield>
</datafield>
<datafield tag="300" ind1=" " ind2=" ">
<subfield code="a">109 S. :</subfield>
<subfield code="b">Ill., graph. Darst., Kt.</subfield>

</datafield>
<datafield tag="490" ind1="1" ind2=" ">
<subfield code="a">Novum testamentum et orbis antiquus / im Auftr. des Biblischen Instituts
der Universitat Freiburg, Schweiz. Series archaeologica ;</subfield>
<subfield code="v">1B</subfield>
</datafield>
<datafield tag="700" ind1="1" ind2=" ">
<subfield code="L">000001231</subfield>
<subfield code="a">Vaux, Roland de.</subfield>
</datafield>
<datafield tag="700" ind1="1" ind2=" ">
<subfield code="L">000001232</subfield>
<subfield code="a">Humbert, Jean-Baptiste,</subfield>

</datafield>
<datafield tag="700" ind1="1" ind2=" ">
<subfield code="L">000001233</subfield>
<subfield code="a">Pfann, Stephen J.,</subfield>
</datafield>
<datafield tag="830" ind1=" " ind2="0">
<subfield code="a">Novum testamentum et orbis antiquus / Series archaeologica ;</subfield>
<subfield code="v">1B.</subfield>
</datafield>
<datafield tag="FMT" ind1=" " ind2=" ">BK</datafield>
<leader>01179nam 2200265 i 4500</leader>

<datafield tag="LNG" ind1=" " ind2=" ">eng</datafield>

```

```

<datafield tag="AVA" ind1=" " ind2=" ">
<subfield code="a">LOTIT</subfield>
<subfield code="b">ZB</subfield>
<subfield code="c"></subfield>
<subfield code="d"></subfield>
<subfield code="e">available</subfield>
<subfield code="f">2</subfield>
<subfield code="g">0</subfield>
<subfield code="h">N</subfield>

<subfield code="i">0</subfield>
<subfield code="j"></subfield>
</datafield>
</document>
</metadata>
</record>
</ListRecords>
</OAI-PMH>
</publish-avail>

```

or ...

```

<publish-avail>
<OAI-PMH xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/
http://www.openarchives.org/OAI/2.0/OAI-PMH.xsd">
<ListRecords>
<record>
<header status="deleted">
<identifier>alephino-publish:000005465</identifier>
</header>
<metadata>
</metadata>
</record>
</ListRecords>
</OAI-PMH>
</publish-avail>

```

getbor

op=getbor

Parameter

base

Data pool in Alephino notation, i.e. **M** for database M(arc)

idn

Identification number of a borrower record

action

PLIF action indicator:

Response (Example):

```

<?xml version="1.0" encoding="UTF-8" ?>
<PLIF-SET>
<UPDATE-BOR>
<USER-REC>
<USER-REC-ACTION>A</USER-REC-ACTION>
<USER-REC-MATCH-ID-TYPE>0</USER-REC-MATCH-ID-TYPE>
<USER-REC-MATCH-ID>3</USER-REC-MATCH-ID>
<USER-REC-NAME-TITLE>Dr.</USER-REC-NAME-TITLE>
<USER-REC-NAME>Biermann, Harald</USER-REC-NAME>

```

```

<USER-REC-BIRTH-DATE>0000000</USER-REC-BIRTH-DATE>
<USER-REC-DELINQ-INDEX>1</USER-REC-DELINQ-INDEX>
<USER-REC-DELINQ>0</USER-REC-DELINQ>
<USER-REC-FIELD-INDEX>1</USER-REC-FIELD-INDEX>
</USER-REC>
<NO-ID-REC>2</NO-ID-REC>
<NO-ADDR-REC>1</NO-ADDR-REC>
<NO-BOR-REC>1</NO-BOR-REC>
<LOGIN-REC>
<LOGIN-REC-ACTION>A</LOGIN-REC-ACTION>
<LOGIN-REC-TYPE>0</LOGIN-REC-TYPE>
<LOGIN-REC-NO>0000003</LOGIN-REC-NO>
<LOGIN-REC-VERIFICATION>topsecret</LOGIN-REC-VERIFICATION>
</LOGIN-REC>
<LOGIN-REC>
<LOGIN-REC-ACTION>A</LOGIN-REC-ACTION>
<LOGIN-REC-TYPE>1</LOGIN-REC-TYPE>
<LOGIN-REC-NO>M001</LOGIN-REC-NO>
</LOGIN-REC>
<ADDR-REC>
<ADDR-REC-ACTION>A</ADDR-REC-ACTION>
<ADDR-REC-SEQUENCE>1</ADDR-REC-SEQUENCE>
<ADDR-REC-TYPE>3</ADDR-REC-TYPE>
<ADDR-REC-ADDR-1>Herr Dr. Harald Biermann</ADDR-REC-ADDR-1>
<ADDR-REC-ADDR-2>Willy-Brandt-Allee 14</ADDR-REC-ADDR-2>
<ADDR-REC-ADDR-3>53113 Bonn</ADDR-REC-ADDR-3>
<ADDR-REC-ZIP>53113</ADDR-REC-ZIP>
<ADDR-REC-PHONE>111</ADDR-REC-PHONE>
<ADDR-REC-E-MAIL>h.biermann@hdg.de</ADDR-REC-E-MAIL>
<ADDR-REC-START-DATE>00000000</ADDR-REC-START-DATE>
<ADDR-REC-STOP-DATE>00000000</ADDR-REC-STOP-DATE>
</ADDR-REC>
<BOR-REC>
<BOR-REC-ACTION>A</BOR-REC-ACTION>
<BOR-REC-SUB-LIBRARY>ZB</BOR-REC-SUB-LIBRARY>
<BOR-REC-STATUS>01</BOR-REC-STATUS>
<BOR-REC-EXPIRY-DATE>20211024</BOR-REC-EXPIRY-DATE>
</BOR-REC>
</UPDATE-BOR>
<UPDATE-BOR>
...
</UPDATE-BOR>
</PLIF-SET>

```

putbor

op=putbor

Parameter

base Data pool in Alephino notation, i.e. **M** for database M(arc)

data Borrower data in PLIF XML format

Response (Example):

```
<UPDATE-BOR>OK</UPDATE-BOR>
```

or:

```
<UPDATE-BOR>  
<ADDR-REC>IDN=3 SEQ=1: already exists</ADDR-REC>  
</UPDATE-BOR>
```