# ISNI AtomPub API / Capabilities, Sample Requests, Assignment

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1 Introduction

The ISNI Assignment Request API is using the ‘AtomPub publishing protocol standard’ (version 1 October 2007). AtomPub is an application-level protocol for publishing and editing Web resources. The protocol is based on HTTP transfer of Atom-formatted representations.

The actual ISNI Assignment Request should be in xml in the form of the ISNI Request schema available here: http://isni.oclc.org:8080/isni/atompub/.


2 Capabilities AtomPub API

The API allows you to:
✓ Submit your names for ISNI assignment
✓ Re-submit your names where ISNI has detected a possible duplicate in ISNI
✓ Assign your provisional names originating from an offline load
✓ Assign provisional names you entered on the ISNI Web interface
✓ Use the merge facility to resolve duplicate records in ISNI

2.1 Submit and resubmit your names for ISNI assignment

When you submit a Request through the AtomPub API, the Response is either ISNIAssigned or NoISNI.

The ISNI matching software will try to find a matching name for your data:
• When a confident match is found, ISNI adds your data (source) to the ISNI-record and returns the Response ISNIAssigned.
  See Sections 4 (example) and Section 20.
• When the name is not yet in the ISNI-Database, ISNI enters a new record with your data (single source record) and returns the Response ISNIAssigned.
  See sections 9 and 10 (examples) and Section 21.
• When ISNI finds a possible match for your name in the ISNI-database, the Response NoISNI is returned with the system id of the possible match in ISNI. Your data (source) is NOT yet entered in ISNI. You must resubmit the Request.
  See sections 5-7 (examples and resolutions) and Sections 19 and 20.

2.2 Assign your provisional names in ISNI

You may have provisional ISNI’s in the database from an offline load, or if you may have entered provisional ISNI’s on the ISNI Web interface. Mostly the status is still ‘provisional’ because ISNI requires additional data to warrant the status ‘assigned’.

You can assign these names on the ISNI Web interface by adding additional data in the edit function. Or you can submit an AtomPub Request with additional data.

See sections 13 and 14.
2.3 Merge facility

The ‘request to merge’ facility allows you to request the merge of duplicates on the ISNI database. Only use the merge structure if you need to merge records already on the ISNI database.

2.3.1 AtomPub reports possible match cannot be assigned

ISNI will not assign an ISNI despite a confident match when the matching record in ISNI has a link to possible duplicate.

For example

Your AtomPub request
Name: Pjotr Smith
Title: The internet and your privacy
Lived: 1988-03-12

For assignment of an ISNI you must resubmit your request with a merge instruction for A and B. See section 6.

2.3.2 Merge instruction for your duplicate records in the ISNI database

If you have duplicate names with your data (source) in ISNI, you enter a ‘merge A to B’ instruction with the AtomPub API.
See section 8.

2.4 Requests for the ISNI Quality Team

There are two actions you are not authorized to perform in the ISNI database.

2.4.1 Remove your source from an ISNI record

It is not possible to remove data with the AtomPub API. If you wish to delete your source from ISNI, you notify the ISNI Quality Team by adding a General Note to the record on the ISNI Web interface.
2.4.2 Your source is on a mixed identity record
A mixed identity exists on ISNI when the names of two different identities have been contributed to the same ISNI. It is not possible to split a mixed identity record into two separate records with the AtomPub API. Please notify the ISNI Quality Team by adding a General Note to the record on the ISNI Web interface.

3 Data elements required for a successful request
Include as many data elements as possible to increase the matching confidence. The ISNI assignment request schema is available here: http://isni.oclc.org:8080/isni/atompub/. See section 21.
4  Confident match (ISNIAssigned)

A confident match for your request occurs when ISNI finds a similarity>0.85.000 between your name and the matching name in ISNI.

See section 20.

This sample includes the data elements for a confident match.

```
<Request>
  <requestID>
    <dateTimeOfRequest>2014-09-25T13:40:22</dateTimeOfRequest>
    <requestorTransactionId>anything</requestorTransactionId>
  </requestID>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>test oclc 1234</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Lewis-Senior</surname>
          <forename>Dorette</forename>
        </personalName>
        <birthDate>1965-09-19</birthDate>
        <resource>
          <creationClass>cre</creationClass>
          <creationRole>aut</creationRole>
          <titleOfWork>
            <title>The @Layman's Guide To Understanding Complementary and Alternative Medicine</title>
          </titleOfWork>
        </resource>
      </personOrFiction>
    </identity>
    <externalInformation>
      <information>Author Website</information>
      <URI>http://www.drs2health.com</URI>
    </externalInformation>
  </identityInformation>
</Request>
```
4.1 Response ISNIAssigned

ISNI reports a confident match when the similarity score between the submitted name and a matching ISNI-record is > 085.00.

This sample matches on family name, forename, title and website. The Response ISNI Assigned is returned with all ISNI metadata of all sources (with exception of data declared private by a source). The matching criteria and similarity are marked in yellow. In this sample, the matching confidence is 100 %.

```
<responseRecord>
  <ISNIAssigned>
    <isniUnformatted>0000000458963328</isniUnformatted>
    <isniURI>http://isni.org/isni/0000000458963328</isniURI>
    <dataConfidence>60</dataConfidence>
    <ISNIMetadata>
      <identity>
        <personOrFiction>
          <personalName>
            <forename>Dorette</forename>
            <surname>Lewis-Senior</surname>
            <nameUse>public and private</nameUse>
            <source>BNF</source>
          </personalName>
          <personalName>
            <forename>Dorette</forename>
            <surname>Lewis-Senior</surname>
            <source>NG</source>
          </personalName>
          <creativeActivity>
            <creationRole source="BNF">aut</creationRole>
            <creationRole source="NG">aut</creationRole>
            <creationRole source="NG">cre</creationRole>
            <creationClass source="BNF">cre</creationClass>
            <creationClass source="NG">text</creationClass>
            <creationClass source="NG">audiovisual</creationClass>
            <titleOfWork source="BNF">
              <title>The @Layman's Guide To Understanding Complementary and Alternative Medicine</title>
            </titleOfWork>
            <titleOfWork source="NG">
              <title>The @Layman's Guide To Understanding Complementary and Alternative Medicine</title>
            </titleOfWork>
          </creativeActivity>
        </personOrFiction>
      </identity>
      <sources>
        <codeOfSource>NG</codeOfSource>
        <sourceIdentifier>26</sourceIdentifier>
      </sources>
      <sources>
        <codeOfSource>BNF</codeOfSource>
        <sourceIdentifier>test oclc 1234</sourceIdentifier>
      </sources>
    </ISNIMetadata>
    <matches>
      <matchData>
```

```
<matchDataType>title</matchDataType>
  <matchDataString>laymans guide to understanding complementary and alternative medicine</matchDataString>
</matchData>

<matchConfidence>1.000000</matchConfidence>
<dateTimeOfMatch>2016-11-29 13:23:57</dateTimeOfMatch>
</matches>
</ISNIAssigned>
</information>
</responseRecord>
5 Possible match (NoISNI)

When ISNI finds a matching record in ISNI, it compares your name with the ISNI record. ISNI reports a possible match when the similarity score between your name and a matching ISNI-record is between 060.00 and 085.00.
See section 22.

The Response NoISNI is returned with the data element `<possible match>`, the PPN (system ID) of the possible match and the evaluation score.

```
<responseRecord>
  <noISNI>
    <reason>no match initial database</reason>
    <possibleMatch>
      <PPN>............</PPN>
      <evaluationScore>…… </evaluationScore>
      <source>source#PERSON</source>
      <mergeInstruction>P</mergeInstruction>
    </possibleMatch>
  </noISNI>
  <information>
    data not accepted
  </information>
</responseRecord>
```

This sample Request includes the surname, date of birth and one initial. The data elements used for matching are marked in yellow.

```
<Request>
  <requestID>
    <dateTimeOfRequest>2015-01-10T09:19:59</dateTimeOfRequest>
    <requestorTransactionId>22222</requestorTransactionId>
  </requestID>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>CH 10814187</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Rickenmann</surname>
          <forename>J.</forename>
        </personalName>
        <birthDate>1974</birthDate>
      </personOrFiction>
      <resource>
        <creationClass>cre</creationClass>
        <creationRole>aut</creationRole>
      </resource>
    </identity>
  </identityInformation>
</Request>
```
<titleOfWork>
<title>Spring</title>
</titleOfWork>
<resource>
</personOrFiction>
</identity>
</identityInformation>
</Request>

5.1 Response possible match (noISNI)

The Response NoISNI is returned suggesting a possible match (P) with PPN 418088330. The similarity is 084.444 (a confident match requires a similarity higher than 085.000).

<responseRecord>
<noISNI>
<reason>no match initial database</reason>
<possibleMatch>
<PPN>418088330</PPN>
<evaluationScore>84.444</evaluationScore>
<source>BNF#PERSON</source>
<mergeInstruction>P</mergeInstruction>
</possibleMatch>
</noISNI>
<information>
data not accepted
</information>
</responseRecord>

5.1.1 PPN in Response is not your name

If the suggested PPN in the Response is for another name, you can insert a new record on the ISNI Web interface, or you can resubmit the request through AtomPub. Always include the PPN of the other record with the element <isNot> (AtomPub) or the relationship type ‘not related’ (Web interface).
5.1.1.1 Insert new ISNI on the Web interface

You can submit the request on the ISNI Web interface by selecting the WebCat and selecting Add an identity. Make sure to fill in the no relation fields.

Identifier

Other identifier

Name

Dates

Creation class

Creation role

Work

Instrument

Contributed to or performed

Name variant

Related person

Relation

Relationship dates

PPN

Related organisation

Relation

Relationship dates

PPN
5.1.1.2 Re-Submit Request <isNot>

For AtomPub Requests include the <isNot> element, see the ANNEX for more samples.

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>12344411reee1</identifier>
    </requestorIdentifierOfIdentity>
  <identity>
    <personOrFiction>
      <personalName>
        <nameUse>public and private</nameUse>
        <surname>Robertson</surname>
        <forename>Alexander Duff</forename>
      </personalName>
      <birthDate>1954-12-14</birthDate>
    </personOrFiction>
  </identity>
  <resource>
    <creationClass>cre</creationClass>
    <creationRole>aut</creationRole>
    <titleOfWork>
      <title>My childhood memories</title>
    </titleOfWork>
  </resource>
  <isNot>
    <relationName>
      <PPN>418088330</PPN>
    </relationName>
  </isNot>
</Request>
```

5.1.1.2.1 New single source record (Response match confidence 0)

The Response for a new record, includes the match string <matchConfidence>0</matchConfidence>, and <matchDataString>is_rich</matchDataString>.

```xml
<responseRecord>
  <ISNIAssigned>
    <isniUnformatted>0000000464080513</isniUnformatted>
    <isniURI>http://isni-url-acc.oclc.org/isni/0000000464080513</isniURI>
    <dataConfidence>60</dataConfidence>
    <ISNI/Metadata>
      <identity>
        <personOrFiction>
```

---

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<personalName>
  <forename>Alexander Duff</forename>
  <surname>Robertson</surname>
  <nameUse>public and private</nameUse>
  <source>BL</source>
</personalName>

<creativeActivity>
  <creationRole source="BL">aut</creationRole>
  <creationClass source="BL">cre</creationClass>
  <titleOfWork source="BL">
    <title>@My childhood memories</title>
  </titleOfWork>
</creativeActivity>

<isRelatedPerson>
  <relationshipType>see also:</relationshipType>
  <forename>Duffy</forename>
  <surname>Robertson</surname>
  <source>BL</source>
</isRelatedPerson>

</identity>

<sources>
  <codeOfSource>BL</codeOfSource>
  <sourceIdentifier>12344411reee1</sourceIdentifier>
</sources>

</ISNIAssigned>

<information>
  ---
  &gt; 464080517
</information>

</responseRecord>
5.1.2 **PPN in Response is your name**

If the suggested PPN in the Response is correct, you can select the edit function on the ISNI Web interface and add your name and local identifier, or you can resubmit the request with the PPN included in the element `<otherIdentifierOfIdentity>`.

The currently installed ISNI evaluation software (July 2018) has 1 set of evaluation and assignment criteria for all AtomPub requests, regardless of the workflow of the ISNI Member or Regional Agency (RAG).

Including the ISNI or PPN of the matching ISNI-record after a manual check for example, does not guarantee assignment.

ISNI handles such requests like any other request. The ISNI evaluation software compares your name with the matching record and generates the Response **NoISNI** if it concludes that the similarity is beneath `<085.000` regardless of the match on the PPN or ISNI.

See example in section 12.

ISNI also refuses a request if the incoming and matching ISNI-record have conflicting “lived dates”. Or if the matching ISNI-record has conflicting dates.

Increasingly, ISNI contributors use the AtomPub API to generate AtomPub requests in conjunction with a local API where the requesters check and enter their own data.

Contributing libraries such as the National Library of Korea, do a manual check before generating an AtomPub request.

To accommodate the above workflows, a adjusted set of evaluation rules is investigated.
5.1.2.1 Re-Submitted Request with PPN

After checking the reported possible duplicate, you can resubmit the request with the PPN in the data element `<otherIdentifierOfIdentity>`.
Make sure you include as many metadata as possible to ensure a confident match.

```xml
<Request>
  <requestID>
    <dateTimeOfRequest>2015-01-10T09:19:59</dateTimeOfRequest>
    <requestorTransactionId>2222</requestorTransactionId>
  </requestID>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>CH 10814187</identifier>
    </requestorIdentifierOfIdentity>
    <otherIdentifierOfIdentity>
      <identifier>418088330</identifier>
      <type>PPN</type>
    </otherIdentifierOfIdentity>
    <personOrFiction>
      <personalName>
        <nameUse>public and private</nameUse>
        <surname>Rickenmann</surname>
        <forename>Juliane</forename>
      </personalName>
      <birthDate>1974</birthDate>
    </personOrFiction>
    <resource>
      <creationClass>cre</creationClass>
      <creationRole>aut</creationRole>
      <titleOfWork>
        <title>Spring</title>
      </titleOfWork>
    </resource>
  </identityInformation>
</Request>
```
The Response ISNIAssigned is returned with all the ‘ISNI Metadata’ from the record and the matching confidence 0.888889.

<responseRecord>
<ISNIAssigned>
<isniUnformatted>0000000418088338</isniUnformatted>
<isniURI>http://isni.org/isni/0000000418088338</isniURI>
<dataConfidence>50</dataConfidence>
<ISNIMetadata>
<identity>
<personalName>
<forename>Juliane</forename>
<surname>Rickenmann</surname>
<nameUse>public and private</nameUse>
<source>BNF</source>
</personalName>
<personalName>
<forename>Juliane</forename>
<surname>Rickenmann</surname>
<source>SWISP</source>
</personalName>
<creativeActivity>
<creationRole source="BNF">aut</creationRole>
<creationRole source="SWISP">prf</creationRole>
<creationClass source="BNF">cre</creationClass>
<creationClass source="SWISP">music</creationClass>
<titleOfWork source="BNF">
<title>@Social Welfare</title>
</titleOfWork>
<titleOfWork source="SWISP">
<title>@Happy Cells</title>
</titleOfWork>
<titleOfWork source="SWISP">
<title>@Don't worry life is a funny game</title>
</titleOfWork>
<titleOfWork source="SWISP">
<title>@Over past</title>
</titleOfWork>
<titleOfWork source="SWISP">
<title>@What Africa is doing in Asia</title>
</titleOfWork>
<titleOfWork source="SWISP">
<title>@Chorinho pra 8:30</title>
</titleOfWork>
<titleOfWork source="SWISP">
<title>@Spring</title>
</titleOfWork>

<isRelatedOrganisation>
<mainName>Juliane Rickenmann</mainName>
</isRelatedOrganisation>
</personOrFiction>
</identity>
</sources>
</ISNIAssigned>
</information>
---&gt; 418088330
</information>
</responseRecord>
5.1.2.2 Add your identifier and main name on the ISNI Web interface

Retrieve the reported PPN on the ISNI Web interface. If the suggested PPN in the Response is correct, you can select the option edit in the left-hand menu and add your local identifier and the name:

![ISNI Web interface screenshot](screenshot.png)
6 Possible match cannot be assigned (noISNI)

When you submit a Request, ISNI may still return the Response NoISNI despite having found a confident match. This happens when ISNI finds that the matching record for your name is linked to another possibly matching record.

To avoid duplicate assigned ISNI’s for the same identity, ISNI will not yet assign an ISNI to your name. You must resubmit the request with the resolution of the possible match.

This request matches with an ISNI-record that is linked to another ISNI-record.

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>ID 112-908</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <surname>Artistandmore</surname>
        </personalName>
        <birthDate>1965</birthDate>
      </personOrFiction>
      <resource>
        <creationClass>music</creationClass>
        <creationRole>aut</creationRole>
        <titleOfWork>
          <title>Popsongs by the artist</title>
        </titleOfWork>
      </resource>
    </identity>
  </identityInformation>
</Request>
```
The Response includes the PPN of the matching record that has a possible link.

```xml
<responseRecord>
  <noISNI>
    <PPN>46749701X</PPN>
    <reason>possible match cannot be assigned</reason>
    <possibleMatch>
      <PPN>467496897</PPN>
      <evaluationScore>75.155</evaluationScore>
      <source>MUBZ#PERSON</source>
      <mergeInstruction>P</mergeInstruction>
    </possibleMatch>
  </noISNI>
  <information>
    data not accepted
  </information>
</responseRecord>
```
6.1 Resolve ‘possible match cannot be assigned’ on the ISNI Webinterface

Retrieve the PPN reported in <possible match>. Records with a possible match are displayed like this.

Click on compare to resolve the duplicate

Clicking on Equal will set the merge instruction from P possible match to M merge the records.
See section 15 for follow up on merges.
6.2 Re-Submit AtomPub Request with Merge instruction Merge

Submit the Request with:

- the instruction **M merge** with the PPN or ISNI of the preferred record
- the PPN or ISNI of the preferred or other in <otherIdentifierOfIdentity>
- the required data elements

Sample request to request a M merge for the name Petrik Albert. PPN 453184928 is the preferred record.

```xml
<Request>
  <merge>
    <mergeToPPN>453184928</mergeToPPN>
    <mergeInstruction>M</mergeInstruction>
  </merge>

  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>TEST ID 1191112W</identifier>
    </requestorIdentifierOfIdentity>

    <otherIdentifierOfIdentity>
      <identifier>391142801</identifier>
      <type>PPN</type>
    </otherIdentifierOfIdentity>

    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Albert</surname>
          <forename>Petrik</forename>
        </personalName>

        <birthDate>1876</birthDate>
        <deathDate>1916</deathDate>

        <resource>
          <creationClass>cre</creationClass>
          <creationRole>aut</creationRole>
          <titleOfWork>
            <title>Hungarian paprika</title>
          </titleOfWork>
          <titleOfWork>
            <title>Hungarian foodies</title>
          </titleOfWork>
        </resource>
      </personOrFiction>
    </identity>
  </identityInformation>

  <isRelated/>
</Request>
```
6.2.1 **Response possible match cannot be assigned / instruction M merge**

The Response reports that the merge instruction has been updated from P possible match to M merge.

The record has now the Merge instruction Merge.

```xml
<responseRecord>
  <noISNI>
    <PPN>391142801</PPN>
    <reason>possible match cannot be assigned</reason>
    <possibleMatch>
      <PPN>453184928</PPN>
      <source>COPYRUS#PERSON</source>
      <mergeInstruction>M</mergeInstruction>
    </possibleMatch>
  </noISNI>
  <information>
    ---&gt; 391142801
  </information>
</responseRecord>
```

See section 15 for follow up on merges.
7 Possible match (your name is already in ISNI with another ID)

When your source is already present in the matching ISNI-record with another identifier, no ISNI is assigned regardless of the status of the matching record (provisional or assigned) or the similarity score of both sources.
The Response is ‘possible match’.

<responseRecord>
  <noISNI>
    <reason>no match initial database</reason>
    <possibleMatch>
      <PPN>…..</PPN>
      <evaluationScore>.........</evaluationScore>
      <source>your source#PERSON</source>
      <mergeInstruction>P</mergeInstruction>
    </possibleMatch>
  </noISNI>
  <information>
    data not accepted
  </information>
</responseRecord>

See example on the next page.
Record for the source BNF is in ISNI with the local identifier 17145170:

```
000 463581652
 002 $aTpx
 003 $00000000463581658512017-11-01 01:52:57$aassigned$sbno match initial databaseSc50
 008 $a(lb)Sc5dSeEfM$g$hn$Sj$kSc$II$Em$Sn$Ss$Sp$S$Sr$Ss
 00A BNF:01-11-17
 00B BNF:01-11-17 01:52:57 000
 00D BNF:01-11-17
 00U utf8
 00X 0
035 $1BNF$17145170
370 $#Sa$r2BNF
375 $#same$r2BNF
377 $#same$r2BNF
700 $#S7$La$in$Sa$Ab$el, Bernard$3pub$r2BNF
901 $#Sn9782754736046$r2BNF
910 $#Sa$L'éveil à l'état d'esprit qui change tout$r2BNF
921 $#Sales Éditions du Panthéon$r2BNF
941 $#Saaut$r2BNF
943 $#Sa2017$r2BNF
944 $#Sa$s$r2BNF
970 $#Sa1987-08-06$r2BNF
976 $#2BNF$Sa$BNF$5b2017-11-01 01:52:57Scis_rich$Sdbirthyear etc. SeOSi0
```
BNF submit a request for the person but with another local identifier 222333668:

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>222333668</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <surname>Abel</surname>
          <forename>Bernard</forename>
        </personalName>
        <birthDate>1967-08-06</birthDate>
      </personOrFiction>
    </identity>
  </identityInformation>
</Request>
```

Despite the 93.443 similarity score between the name submitted by BNF and the matching ISNI-record with the BNF source, the Response is noISNI. ISNI found that the matching record already has a BNF source with another local identifier.

```xml
<responseRecord>
  <noISNI>
    <reason>no match initial database</reason>
    <possibleMatch>
      <PPN>463581652</PPN>
      <evaluationScore>93.443</evaluationScore>
      <source>BNF#PERSON</source>
      <mergeInstruction>P</mergeInstruction>
    </possibleMatch>
  </noISNI>
  <information>
    data not accepted
  </information>
</responseRecord>
```
8 Resolve your duplicate names in ISNI

If you have duplicate names in ISNI, you can enter the instruction M merge. Submit the Request with:
- the instruction M merge with the PPN or ISNI of the preferred record
- the PPN or ISNI of the preferred record in <otherIdentifierOfIdentity>
- the required data elements

When ISNI merges two records it will keep both your local identifiers in the ISNI record. You can tell ISNI which is the deprecated identifier. ISNI will then add the sub field deprecated to the identifier.

This sample request includes the element for the deprecated identifier.

```xml
<Request>
  <merge>
    <mergeToPPN>459276018</mergeToPPN>
    <mergeInstruction>M</mergeInstruction>
  </merge>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>13899999</identifier>
      <deprecatedLocalIdentifier>13890544</deprecatedLocalIdentifier>
    </requestorIdentifierOfIdentity>
    <otherIdentifierOfIdentity>
      <identifier>0000000467497111</identifier>
      <type>ISNI</type>
    </otherIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Simpleton</surname>
          <forename>Truid</forename>
        </personalName>
        <resource>
          <creationClass>cre</creationClass>
          <creationRole>aut</creationRole>
          <titleOfWork>
            <title>Qoud licet bovi non licet lovi</title>
            <titleOfWork/>
          </titleOfWork>
        </resource>
      </personOrFiction>
    </identity>
  </identityInformation>
</Request>
```
When the merge instruction is successful, ISNI returns the Response
<mergeInstruction>M</mergeInstruction> indicating that the record has now the status M merge. See

<responseRecord>
  <noISNI>
    <PPN>467497117</PPN>
    <reason>possible match cannot be assigned</reason>
    <possibleMatch>
      <PPN>354892320</PPN>
      <source>BNF#PERSON</source>
      <mergeInstruction>M</mergeInstruction>
    </possibleMatch>
  </noISNI>
  <information>
    ---&gt; 467497117
  </information>
</responseRecord>

Records with instruction Merge are on display as Equal on the ISNI Web interface, see the screen print on the next page.
An offline tool picks up your records with merge instruction M merge on a daily basis at 12:00 PM and at 17:00 PM (=Central European Time).
9   New ISNI for your personal name

A new ISNI-record with your name data is entered in the database if your name is unique, or, if the ISNI concluded a ‘no match’ after comparing your name with a possibly matching record in ISNI.

See section 21.

9.1   Personal Name is unique (ISNIAssigned)

The Request includes a family name, a forename or given name and a date of birth. The name has not been found in ISNI (several searches are done, with complete name, initial instead of full forename, complete name string etc.)

```
<Request>
  <requestID>
    <dateTimeOfRequest>2014-09-25T13:40:22</dateTimeOfRequest>
    <requestorTransactionId>anything</requestorTransactionId>
  </requestID>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>TEST ID 1234</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Newnameforconnery</surname>
          <forename>NewforenameforJohn</forename>
        </personalName>
        <birthDate>1966-12-13</birthDate>
        <creationClass>cre</creationClass>
        <creationRole>aut</creationRole>
        <titleOfWork>
          <title>Editing wikipedia articles</title>
        </titleOfWork>
      </personOrFiction>
    </identity>
    <externalInformation>
      <information>wikipedia</information>
      <URI>http://en.wikipedia.org/wiki/Gordon_Connery</URI>
    </externalInformation>
  </identityInformation>
</Request>
```

9.1.1   Personal Name is unique / Match confidence 0

The Response ISNI Assigned is returned with the ‘ISNI metadata’ from the record and the reason for assignment: the name is unique. This is indicated with the element

```
<matchConfidence>0</matchConfidence>
```

```
<responseRecord>
  <ISNIAssigned>
```
Personal Name not unique (no match initial database / data not accepted)

Requests must be submitted with enough data for ISNI to determine a confident match or a definitive 'no match'.
See section 21.1.
10 New ISNI for your organization

A new ISNI-record for your organization is entered in the database if your name is unique, or, if ISNI concluded a no match after having compared your name with a possible matching name in ISNI.

See section 21.

10.1 Organization is unique (ISNIAssigned)

The Request includes the organization name, type of organization, the UN location and an URL.

```xml
<Request>
<identityInformation>
<requestorIdentifierOfIdentity>
<identifier>my local test ID B1234</identifier>
</requestorIdentifierOfIdentity>
<identity>
<organisation>
<mainName>IBM Research and Development</mainName>
<organisationName>
<organisationType>For Profit Corporation</organisationType>
<resource>
<titleOfWork>Annual notes</titleOfWork>
</resource>
<location>
<countryCode>GB</countryCode>
</location>
<usageDateFrom>2012</usageDateFrom>
</organisation>
</identity>
</identityInformation>
<isRelated>
<relationType>isUnitOf</relationType>
<relationName>
<organisationName>
<mainName>IBM</mainName>
</organisationName>
</relationName>
</isRelated>
```
10.1.1 Organization is unique / Match confidence 0 (new ISNI assigned)

The Response ISNI Assigned is returned with the ‘ISNI metadata’ from the record and the reason for assignment: the name is unique. This is indicated with the element <matchConfidence>0</matchConfidence>.

```
<responseRecord>
  <ISNIAssigned>
    <isniUnformatted>0000000467497074</isniUnformatted>
    <isniURI>http://isni-url-test.oclc.org/isni/0000000467497074</isniURI>
    <dataConfidence>60</dataConfidence>
  </ISNIAssigned>
  <ISNIMetadata>
    <identity>
      <organisation>
        <organisationType>For Profit Corporation</organisationType>
        <organisationName>
          <mainName>IBM Research and Development</mainName>
          <source>BNF</source>
        </organisationName>
        <creativeActivity>
          <creationRole source="ISNI">cre</creationRole>
          <creationClass source="ISNI">und</creationClass>
        </creativeActivity>
        <additionalInformation>
          <location>
            <countryCode>GB</countryCode>
            <source>BNF</source>
          </location>
        </additionalInformation>
      </organisation>
      <isRelatedOrganisation>
        <mainName>IBM</mainName>
        <relationshipType>isUnitOf</relationshipType>
      </isRelatedOrganisation>
    </identity>
    <sources>
      <codeOfSource>BNF</codeOfSource>
      <sourceIdentifier>my local test ID B1234</sourceIdentifier>
    </sources>
  </ISNIMetadata>
  <matches>
    <matchData>
      <matchDataType>none</matchDataType>
      <matchDataString>is_unique</matchDataString>
    </matchData>
    <matchConfidence>0</matchConfidence>
  </matches>
</responseRecord>
```
<dateTimeOfMatch>2018-07-02 18:26:19</dateTimeOfMatch>

<matches>
</ISNIAssigned>

<information>
---&gt; 467497079
</information>

</responseRecord>

10.1.2 Organization not unique (no match initial database / data not accepted)

This request includes complete data which is not enough to establish a confident match or no match. The Request must be resubmitted with enough data for ISNI to determine a confident match or a definitive ‘no match’.

See section 21.2

<Request>

<identityInformation>

<requestorIdentifierOfIdentity>

<identifier>my local test ID B1234</identifier>
</requestorIdentifierOfIdentity>

</identityInformation>

<isRelated>

<responseRecord>

<noISNI>

<reason>no match initial database</reason>
</noISNI>

<information>

data not accepted
</information>
</responseRecord>

</isRelated>

</Request>
10.2 How to resolve ‘data not accepted’ for organization

For organizations two options are available. Resubmit the request with data making the organization unique, or, resubmit the request with rich data.

10.2.1 Submit Request for ‘unique’ organization

Resubmit the request with a UNESCO Location code, the type of organization and an URL.

```xml
<Request>
<identityInformation>
<requestorIdentifierOfIdentity>
<identifier>my local test ID B1234</identifier>
</requestorIdentifierOfIdentity>
<identity>
<organisation>
<organisationName>
<mainName>IBM Research and Development UK</mainName>
</organisationName>
<organisationType>For Profit Corporation</organisationType>
<resource>
<titleOfWork>Annual notes</titleOfWork>
</resource>
<location>
<locode>GB LON</locode>
</location>
</organisation>
</identity>
<externalInformation>
<information>test web page</information>
<URI>www.fictionalibm.com</URI>
</externalInformation>
</identityInformation>
</Request>
```

The Response is ISNI Assigned is returned with the ‘ISNI metadata’ from the record and the reason for assignment: the name is new. This is indicated with the element <matchConfidence>0</matchConfidence>.

```xml
<responseRecord>
<ISNIAssigned>
<isniUnformatted>0000000472351299</isniUnformatted>
<isniURI>http://isni-url-acc.oclc.org/isni/0000000472351299</isniURI>
<dataConfidence>60</dataConfidence>
<ISNIMetadata>
<identity>
<organisation>
<organisationType>For Profit Corporation</organisationType>
```
<organisationName>
  <mainName>IBM Research and Development UK</mainName>
  <source>BL</source>
</organisationName>

<creativeActivity>
  <creationRole source="ISNI">cre</creationRole>
  <creationClass source="ISNI">und</creationClass>
</creativeActivity>

<additionalInformation>
  <location>
    <countryCode>GB</countryCode>
    <locode>GB LON</locode>
    <regionOrState>LND</regionOrState>
    <city>London</city>
    <source>BL</source>
  </location>
</additionalInformation>

<sources>
  <codeOfSource>BL</codeOfSource>
  <sourceIdentifier>my local test ID B1234</sourceIdentifier>
</sources>

<externalInformation>
  <information>test web page</information>
  <URI>www.fictionalibm.com</URI>
</externalInformation>

</ISNIMetadata>

<matches>
  <matchData>
    <matchDataType>none</matchDataType>
    <matchDataString>is_unique</matchDataString>
  </matchData>
  <matchConfidence>0</matchConfidence>
  <dateTimeOfMatch>2018-07-03 11:14:04</dateTimeOfMatch>
</matches>

</ISNIAssigned>

<information>
  ---&gt; 47235129X
</information>

</responseRecord>
11 Sparse common name (NoISNI Sparse common name)

Requests for common names must include more data elements to increase the match confidence. See section 21.2.

11.1 Sample request sparse common name person

A Request for the name Robertson is submitted. Robertson features on ISNI’s list of common names. To be accepted by the AtomPub Server, the request must include additional data elements.

```
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>123444111111</identifier>
    </requestorIdentifierOfIdentity>
    <otherIdentifierOfIdentity>
      <identifier>0000000423815480</identifier>
      <type>ISNI</type>
    </otherIdentifierOfIdentity>
  </identityInformation>
  <identity>
    <personOrFiction>
      <personalName>
        <nameUse>public and private</nameUse>
        <surname>Robertson</surname>
        <forename>Alexander Duff</forename>
      </personalName>
    </personOrFiction>
  </identity>
</Request>
```

The Response No ISNI is returned with the error Sparse common name.

11.2 How to resolve <Sparse common name>?

By resubmitting the request with at least the required data elements for a common name as defined in section 18.2.1.

This Request includes the name of a related person of the type of relationship co-author. See Data element values.doc for the available types of relationship. See the ANNEX for more relationship samples.

```
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>123222q</identifier>
    </requestorIdentifierOfIdentity>
    <otherIdentifierOfIdentity>
      <identifier>0000000423815480</identifier>
      <type>ISNI</type>
    </otherIdentifierOfIdentity>
  </identityInformation>
  <identity>
    <personOrFiction>
      <personalName>
        <nameUse>public and private</nameUse>
        <surname>Robertson</surname>
        <forename>Alexander Duff</forename>
      </personalName>
    </personOrFiction>
  </identity>
</Request>
```
<requestIdentifierOfIdentity>

<identity>

<personOrFiction>

<personalName>

<nameUse>public and private</nameUse>

<surname>Robertisoni</surname>

<forename>A.</forename>

</personalName>

<resource>

<creationClass>cre</creationClass>

<creationRole>aut</creationRole>

<titleOfWork>

<title>My geriatric memories</title>

</titleOfWork>

</resource>

</personOrFiction>

</identity>

</identityInformation>

</Request>
12 Sample noISNI for correct request?

The currently installed software for the AtomPub Server applies the same evaluation and validation routines to requests regardless of the source, or the source’s work flow. Even if the ISNI of the matching record is included in the request after a human check, ISNI submits the request to the same evaluation rules as any other request. And ISNI rejects request if the similarity turns out to be <085.000, or if the matching record has a possible duplicate. See sample below.

Example: Copyrus has provisional ISNI for Smithson , COPYRUS is the only source

COPYRUS submits Requests with corrected lived date: 1995

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>TEST ID 11111111</identifier>
    </requestorIdentifierOfIdentity>
    <otherIdentifierOfIdentity>
      <identifier>0000000472351328</identifier>
      <type>ISNI</type>
    </otherIdentifierOfIdentity>
  </identityInformation>
  <personOrFiction>

```
ISNI evaluates the incoming records, find a 10 year difference (new 1995, old 1985) and concludes similarity 0.

<responseRecord>
  <noISNI>
    <reason>no match initial database</reason>
    <possibleMatch>
      <PPN>47235132X</PPN>
      <evaluationScore>0.000</evaluationScore>
      <source>COPYRUS#PERSON</source>
      <mergeInstruction>P</mergeInstruction>
    </possibleMatch>
  </noISNI>
</responseRecord>
<information>
data not accepted
</information>
</responseRecord>
13 Assign your provisional names in ISNI

If you have batch loaded names for ISNI assignment, it is likely that you have provisional ISNI’s on the ISNI Database. You will also have provisional ISNI’s if you have entered a new name on the ISNI Web interface with insufficient data for assignment.

13.1 Your batch loaded provisional names

OCLC makes available files with the batch loaded provisional ISNI’s after each batch load. There is a separate file for the provisional names. For details consult the document ‘ISNI Data Contributors reports and notifications guidelines.docx’ on the web page http://www.isni.org/content/documents-related-data-submission-output.

13.2 How to retrieve your provisional names in ISNI

You can find your provisional names on the ISNI Web interface or with the ISNI Search API for Members and RAGs:

- To search on the ISNI Web interface, use URL:
  https://isni-m.oclc.org/username=<yourusername>/password=<yourpassword>/DB=1.3
- To search with the SRU Search API, use URL:
  https://isni-oclc.org/sru/username=<yourusernamehere>/password=<yourpasswordhere>/DB=1.3

To find your provisional names in ISNI, use the search src: 1 <your source> & st: p not st: a. St: p is status provisional, st: a is status assigned. Src: 1 is to find single source records with your source.

13.3 How to assign your provisional names

You can change the status from provisional to assigned with an AtomPub Request. or, you can logon with the ISNI Web interface and enrich the record to assign. See section 21.1.

13.4 Request with rich data (ISNIdassigned)

This sample Request includes the required data. The name of a person related to Kate Stewart is included.

<?xml version="1.0" encoding="UTF-8" ?>
<Request>
  <requestID>
    <dateTimeOfRequest>2015-01-10T09:19:59</dateTimeOfRequest>
    <requestorTransactionId>22222testOCLC</requestorTransactionId>
  </requestID>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>16975987</identifier>
    </requestorIdentifierOfIdentity>
    <otherIdentifierOfIdentity>
      <identifier>0000000453379472</identifier>
    </otherIdentifierOfIdentity>
    <type>ISNI</type>
  </identityInformation>
  <identity>
    <personOrFiction>
      <personalName>
      </personalName>
    </personOrFiction>
  </identity>
</Request>
<nameUse>public and private</nameUse>
<surname>Stewart</surname>
<forename>Kate</forename>
</personalName>
<birthDate>1974-12-13</birthDate>
<resource>
<creationClass>cre</creationClass>
<creationRole>aut</creationRole>
<titleOfWork>
<title>Our children and other animals the cultural construction of human-animal relations in childhood</title>
</titleOfWork>
<titleOfWork>
<title>Animal relations in childhood</title>
</titleOfWork>
</resource>
</personOrFiction>
</identity>
</identityInformation>
<isRelated>
<relationName>
<personalName>
<surname>Cole</surname>
<forename>Matthew</forename>
</personalName>
</relationName>
</isRelated>
</Request>

13.4.1 Response ISNI Assigned

The Response ISNIAssigned is returned and the ‘ISNI Metadata’ of the source.

<responseRecord>
<ISNIAssigned>
<isniUnformatted>0000000453379472</isniUnformatted>
<isniURI>http://isni.org/isni/0000000453379472</isniURI>
<dataConfidence>50</dataConfidence>
<ISNIMetadata>
<identity>
<personOrFiction>
<personalName>
<forename>Kate</forename>
<surname>Stewart</surname>
</personalName>
<creativeActivity>
<creationRole source="BNF">aut</creationRole>
<creationClass source="BNF">cre</creationClass>
<titleOfWork source="BNF">@Our children and other animals the cultural construction of human-animal relations in childhood</title>
</titleOfWork>
<titleOfWork source="BNF">@Animal relations in childhood</title>
</creativeActivity>
</isRelatedPerson>
<relationshipType>see also</relationshipType>
<forename>Matthew</forename>
</forename>
</forename>
</isRelatedPerson>
</relationName>
</isRelated>
</Request>
<surname>Cole</surname> <source>BNF</source> 
</isRelatedPerson> 
</personOrFiction> 
</identity> 
<sources> 
<codeOfSource>BNF</codeOfSource> 
<sourceIdentifier>16975987</sourceIdentifier> 
</sources> 
</ISNIAssigned> 
</information> 
--- &gt; 453379478 
</information> 
</responseRecord>
14 Resolve your provisional names with link to a possible duplicate

If you have batch loaded ISNI’s offline, it is likely that you have provisional names with a link to a possible duplicate in ISNI.

OCLC makes available files with the batch loaded provisional ISNI’s after each batch load. There is a separate file for the provisional names with links to possible duplicates. For details consult the document ‘ISNI Data Contributors reports and notifications guidelines.docx’ on the web page http://www.isni.org/content/documents-related-data-submission-output.

You may also have entered provisional names on the Web interface where ISNI concluded that there is a possible match for the record.

You can find your provisional names with link to a possible duplicate on the ISNI Web interface or with the ISNI Search API for Members and RAGs:

• To search on the ISNI Web interface, use URL: https://isni-m.oclc.org/username=<yourusername>/password=<yourpassword>/DB=1.3
• To search with the SRU Search API, use URL: https://isni-.oclc.org/sru/username=<yourusernamehere>/password=<yourpasswordhere>/DB=1.3

To find your ISNI’s with a possible match, use the search src: 1 <your source> & bs:[#]* & st: p. Bs:[#]* retrieves all your records with a possible duplicate regardless of the similarity score.

You can resolve the duplicates by submitting an AtomPub request with the merge instruction M merge or N no merge. Or you can logon with the ISNI Web interface and resolve the request online.
14.1 Instruction M Merge or No Merge

This sample shows a record for the source COPYRUS with a link to a possible match

14.1.1 How to resolve the possible match?

The quickest way is to resolve the possible match is to click on compare, determine whether the records in the Web interface for the same name and then immediately change the merge instruction from Possible match to M merge or N no merge.

See the ISNI Web interface usage guidelines on the web page http://www.isni.org/content/documents-related-data-submission.

An alternative is to submit an AtomPub Request with the instruction Merge or No Merge. See section 5 for examples.
15 Follow up on your merge requests on the ISNI Web interface

An offline tool picks up your records with merge instruction M merge or N no merge on a daily basis at 12:00 PM and at 17:00 PM (CET). The tool merges records where the instruction is Merge. Where the instruction is No Merge, the tool enters a new, assigned name. See section 22.

To be sure that your requests to merge or not to merge have been successful, you can check the results online on the ISNI Web interface or with the ISNI Search API for members and RAGs:

- To search on the ISNI Web interface, use URL:
  https://isni-m.oclc.org/username=<yourusername>/password=<yourpassword>/DB=1.3
- A search with the SRU Search API:
  https://isni-m.oclc.org/sru/username=<yourusername>/password=<yourpassword>/DB=1.3

To find the ISNI’s use the search for the merges done at 12:00 or at 17:00:

\[ cn: <your source> \& st: a \& [upd: <YYYYMMDD12* or cn: <your source> \& st: a \& [upd: <YYYYMMDD17* \\
For example cn: korea \& st: a \& upd: 2018070512* or cn: korea \& st: a \& upd: 2018070517*.


16 Test your AtomPub Requests
To access ISNI’s AtomPub server, your IP address or IP address range needs to be whitelisted by OCLC.

16.1 Request to whitelist your IP address(es)
Please mail your whitelist request to support-nl@oclc.org, do not forget to include your ISNI source code.

16.2 Test tool RESTer
To test your requests, you can download the free and user friendly tool RESTer. For a **test** request post the request to **https://isni-m-acc.oclc.org:/ATOM/isni?** For a **real live request** post the request to **https://isni-m.oclc.org:/ATOM/isni?**

Sample TEST Request

![Sample TEST Request](image-url)
Sample TEST Response, but ....

```
<Response 200 OK>

Date: Tue, 03 Jul 2018 12:26:35 GMT
Server: Central System Dispatcher/1.1
Content-Type: application/atom+xml
Content-Length: 344
Keep-Alive: timeout=15, max=100
Connection: Keep-Alive

<responseRecord>
  <noISNI>
    <PPN>391142801</PPN>
    <reason>possible match cannot be assigned</reason>
  </noISNI>
  <possibleMatch>
    <PPN>453184928</PPN>
    <source>COPYRIGHT#PERSON</source>
    <mergeInstruction>M</mergeInstruction>
  </possibleMatch>
</responseRecord>
```
17 Assignment criteria ISNI AtomPub Request
The Response ISNIAssigned is return where
  o A request for a new name has been submitted successfully
  o A confident match has been found in ISNI for the requested name

When you submit an ISNI request through the AtomPub API, a number of checks is done before ISNI submits the request for assignment.

18 Initial checks on data before import
Only AtomPub requests in the correct xml-structure are passed on to ISNI. Incorrect data structures return the error message ‘406- not acceptable’. See also section for error messages.
AtomPub request that are not in accordance with the AtomPub Request Schema are also refused, see section for error messages

18.1 Validation before import
Before the Request is passed on to the ISNI database, formal checks are done:
  • Character encoding must be in UNICODE UTF-8.
  • Data must pass formal checks (ISO language codes, UNESCO location codes and ISO country codes)
  • ISNI-codes for roles, relationship types etc. must be valid and present in ISNI tables
  • Dates for (Date lived for persons and Date active for organizations) must be in ISO format etc.
  • URL’s must include @, contain no blanks etc.

18.2 Required data elements
ISNI distinguishes between sparse, complete and rich request data.
For requests submitted with AtomPub, it is recommended to supply ‘rich’ data whenever possible so that ISNI can conclude a confident match or ‘no match’ when it finds possible matches in ISNI.
If your name is unique, ISNI will enter a new record for a request submitted with complete data.

18.2.1 Sparse data (Response noISNI with message ‘too sparse’)
Requests with sparse data do not include sufficient data for finding a confident match in ISNI. Requests are refused with the message ‘too sparse’.
The data must at least be complete to be processed.
19 ‘Complete’ data

A Request with complete data qualifies for assignment when a confident match is found. These data elements must be included in the request for a personal name:

- records for persons must include a name *) and a local identifier (=your identifier for the name)

AND

- records for persons must score at least 1 point from the following list, common names **) must score at least 2 points):
  - Persons: “Birth date” of type lived (score 1)
  - Persons: “Death date” of type lived (score 1)
  - Birth date (type is not “lived” AND date is before 1800: score 1)
  - Death date (type is not “lived” AND date is before 1800: score 1)
  - Publisher (publisher or publishers: score 1)
  - Title (title or titles: score 2)
  - Co-author or Organisation affiliation (one: score 1; two or more: score 2)

*) Provide names with forenames if possible, unless there is a given name. Names without forename or with initials only are treated in a similar way to common surnames.

**) Common surnames have more than 500 hits in ISNI

Requests for Organizations must include the name of the organization, the type of organization and at least one of the following data elements:
- Date of commencement of name use
- Date of end of name use
- Title publication
- Affiliated organization
- Related person
- Country (ISO code).

20 Confident match

The Response ISNIAssigned is returned for a request with complete data where a confident match is found with a record already on the database at a sufficient confidence level as determined by the software. A match is confident when the similarity score is >085.000. The matching process for persons favors:

- ISNI
- Your local identifier
- match on name and title
- match on name and resource identifier (ISBN, ISSN ..)
- match on name and instrument or voice
- match on full name and live date, where the name is not on the common surname list
- match on name, and other elements, co-authors, organization affiliations, publishers
➢ match on name and title
➢ partial match on name, and other factors, co-authors, organization affiliations, publishers

If there are multiple definite matches, the best candidate is chosen and the record is merged with it (best candidate = assigned selected before provisional and suspect; else if there are multiple possible records with the same status, then the record with the highest match score is chosen as the best candidate).

The matching process for organizations favors:
➢ ISNI
➢ Your local identifier
➢ match on organization name
➢ match organization type
➢ match on persons affiliated to the organisation
➢ match on affiliated organizations
➢ match on date the organisation is active
➢ match on the country
➢ match on the organisation’s url
➢ match on publisher
➢ match on another identifier for the organisation

If there are multiple definite matches, the best candidate is chosen and the record is merged with it (best candidate = assigned selected before provisional and suspect; else if there are multiple possible records with the same status, then the record with the highest match score is chosen as the best candidate).
21 New name assignment

The Response ISNI Assigned is returned when a unique name has been submitted with the required data elements, or when the request has been submitted with rich data and the ISNI evaluation software concluded a ‘no match’ for a possibly matching record in ISNI.

21.1 Rich data

A personal name is rich if it includes a surname and forename or given name AND one or more of the following cases:

- Full dates of birth and death
- Year of birth or year of death + (1 title or instrument associated with the person or 1 related name)
- (1 title or instrument) + (1 URL link or 1 related name)
- The request includes an “isNot” statement for an identity with the same name string

Note that Related name = co-author or affiliated institution

An organisation is rich if it includes a name AND one or more of the following cases:

- Both a beginning and an end date
- Beginning year or end date + (1 title or instrument or 1 related name)
- (1 title or instrument) + (1 URL link or 1 related name)
- The request includes an “isNot” statement for an identity with the same name string

Note that Related name = co-author or affiliated institution

21.2 Unique name assignment

A new ISNI is entered if ISNI concludes that the name is unique.

Personal names are unique if:

- the request includes at least one full forename or given name
- all name variants “surname plus one initial” or given names are unique
- data are not sparse

An unique name for an organization name is considered unique and assigned if the requested name does not consist only of initials and if the Request includes:

- a full UN/LOCODE (http://www.unece.org/cefact/locode/service/location.)
- and an Organization type
- and Organization URL
22 Possible match (noISNI)

The Response NoISNI is returned when a possible match is found in the ISNI database. An uncertain match occurs when the matching and evaluation software has found one or more similar names in ISNI. There are four cases of uncertain match –

1. Where the matching score is between the no match threshold and the match threshold (usually, for similarity scores between 0.6 and 0.85)
2. Where the incoming record and the match record have the same data contributor (source) code and the local identifier of the incoming record is different from that on the match record
3. Where the incoming and match record disagree on birth or death date and the data confidence of both records is the same
4. Where the incoming and match record share the same local identifier but their similarity is below threshold.
23 ISNI / AtomPub error messages

Messages come in four categories:
- error messages at system level;
- errors in the xml structure of the Request;
- from ISNI: message 200 Transaction OK with message ISNIAssigned
- from ISNI: message 200 Transaction OK with message NoISNI and an error message

24 Error messages at system level

The Atom Protocol uses the response status codes defined in HTTP to indicate the success or failure of an operation. Consult the HTTP specification RFC2616 for detailed definitions of each status code.

If the ISNI AtomPub server is unable to process the request, a HTTP message is returned:
- Status 0 – request has been posted and server was not found (error in address ISNI server)
- 401 – Unauthorized is used for IP addresses that are not yet whitelisted.
- 503 - Service unavailable when the ISNI Atom Pub catcher server or one of its components is down.
- 504 – Gateway timeout.

Contact the OCLC support desk support-nl@OCLC.org, if one of the above messages occurs.

Note: ISNI is firewalled, notify OCLC of your IP-addresses or IP range before submitting Requests with the AtomPub API.

25 Errors in the xml-structure (error 406 – Non acceptable)

Requests submitted with an incorrect xml-structure are returned with the message:
- 406 – Non acceptable

If ISNI refuses the request because of an error in the xml data, the error 406 is returned with the message Input for xsl server is non xml: for example
- Input for xsl-server is non-xml: line <....> "not well-formed (invalid token)" (for example element with token > instead of <)
- Input for xsl-server is non-xml: line <.....>: "mismatched tag" (for example typo in tag name).

Refer to the document ‘ISNI Request Schema’ on the ISNI website.
26 AtomPub messages

Requests that pass the xml-validation give the message 200 – Transaction OK. This message is returned with the ISNI Response. The message 200 – Transaction OK combined with the Response ‘ISNIAssigned’ confirms that your name has been assigned an ISNI. The Response includes the ISNI, the metadata from the record and the reason for assignment. The Response NoISNI includes a message.

26.1 Response NoISNI (Data not accepted/reason possible match)
The message Data not accepted is returned when
- ISNI has found a possible match in ISNI for your name: <possible match>
- ISNI has found that your name is already in ISNI, but with another identifier <possible match>.

26.2 Response NoISNI (Data not accepted / no reason given)
ISNI has not enough data to evaluate your name with the matching record it has found in ISNI. You must resubmit the request with more data.

26.3 Response ISNI (Data not accepted / possible match cannot be assigned)
ISNI can not assign your name because the matching record in ISNI has a link to a possible record.

26.4 Response NoISNI (invalid data)
Responses ‘NoISNI’ are returned with an error message in the element <reason> when ISNI rejects for example coded data. See the document ISNI Data element values on the website http://www.isni.org/content/documents-related-data-submission.

A sample Response for a Request with an incorrect content for the element <gender>:

```
<responseRecord
   xsi:noNamespaceSchemaLocation="ISNI%20response.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <requestID>anythingoes</requestID>
  <dateTimeOfResponse>2017-05-10T14:51:02Z</dateTimeOfResponse>
  <noISNI>
    <reason>invalid data</reason>
    <information>
      Invalid code 'females' in 013@/00$a; allowed codes: female, male, unknown
      TRACE: 18694_00000095
    </information>
  </noISNI>
</responseRecord>
```
A sample Response for a Request with an incorrect country code in the element <location>.

<responseRecord
    xsi:noNamespaceSchemaLocation="ISNI%20response.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <requestID>24</requestID>
    <noISNI>
        <reason>invalid data</reason>
        <information>
            The length of 'RUS' in 019A/00$a has to be 2 characters
            TRACE: 18694_00000097
        </information>
    </noISNI>
</responseRecord>
26.5 Invalid data / Wrong ancestor
The message is returned when the submitted request includes a data element that is in the wrong main element, see the request schema here on the web page http://isni.oclc.org:8080/isni/atompub/.

Request

......
  <personOrFiction>
    <personalName>
    <nameUse>public and private</nameUse>
    <surname>Howell</surname>
    <forename>Maud</forename>
  </personalName>
  <gender>females</gender>
  <birthDate>1999</birthDate>
  <resource>
    <nationality>FR</nationality>
    <creationClass>cre</creationClass>
    <creationRole>aut</creationRole>
    <titleOfWork>
      <title>Rich mister Jones</title>
    </titleOfWork>
  </resource>
  .........

Response

<responseRecord
  xsi:noNamespaceSchemaLocation="ISNI%20response.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <requestID>anythingoes</requestID>
  <dateTimeOfResponse>2017-05-10T14:53:24Z</dateTimeOfResponse>
  <noISNI>
    <reason>invalid data</reason>
    <information>
      Wrong ancestor &lt;nationality&gt; 'FR' in &lt;resource&gt;. Expected path:
      Request/identityInformation/identity/personOrFiction
      TRACE: 18694_00000096
    </information>
  </noISNI>
</responseRecord>

Correct Request

......
  <personOrFiction>
    <personalName>
26.6 Request a trace from the ISNI AtomPub Server

It is possible to include a trace of the ISNI import server from ISNI by submitting the Request with `<Request trace="import">` instead of `<Request>`. The Response will include a trace of all checks done by ISNI and their outcome. The details should be helpful in analyzing the cause of a NoISNI Response. See the ANNEX Request includes Trace.
27 ANNEX Sample requests

ISNI Request for a personal name with <isNot> PPN element

.getRequest
  <identityInformation>
  <requestorIdentifierOfIdentity>
    <identifier>12344411 test id</identifier>
  </requestorIdentifierOfIdentity>
  <identity>
    <personOrFiction>
      <personalName>
        <nameUse>public and private</nameUse>
        <surname>Robbers</surname>
        <forename>Fritzi</forename>
      </personalName>
      <resource>
        <creationClass>cre</creationClass>
        <creationRole>aut</creationRole>
        <titleOfWork>
          <title>My memories</title>
        </titleOfWork>
      </resource>
    </personOrFiction>
  </identity>
  <isNot>
    <relationName>
      <PPN>391718320</PPN>
    </relationName>
  </isNot>
</Request>
ISNI Request for a personal name with <isNot> ISNI element

<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>12344411 test id</identifier>
    </requestorIdentifierOfIdentity>
  </identity>
  <identity>
    <personOrFiction>
      <personalName>
        <nameUse>public and private</nameUse>
        <surname>Robbers</surname>
        <forename>Fritzi</forename>
      </personalName>
    </personOrFiction>
  </identity>
  <resource>
    <creationClass>cre</creationClass>
    <creationRole>aut</creationRole>
    <titleOfWork>
      <title>My memories</title>
    </titleOfWork>
  </resource>
  <isNot>
    <relationName>
      <ISNI>0000000391718327</ISNI>
    </relationName>
  </isNot>
</Request>
ISNI Request for a personal name

<Request>
  <requestID>
    <dateTimeOfRequest>2014-09-25T13:40:22</dateTimeOfRequest>
    <requestorTransactionId>OCLCTEST</requestorTransactionId>
  </requestID>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>addyouridentifier</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>AddnewsurnamenotyetinISNI</surname>
          <forename>Addnewforname</forename>
        </personalName>
        <gender>male</gender>
        <birthDate>1901-01-22</birthDate>
        <deathDate>1933-01-17</deathDate>
        <nationality>GB</nationality>
        <resource>
          <creationClass>cre</creationClass>
          <creationRole>aut</creationRole>
          <titleOfWork>
            <title>Add a title</title>
          </titleOfWork>
        </resource>
      </personOrFiction>
    </identity>
  </identityInformation>
</Request>
Request with special status (status is free text)

<Request>
  <requestID>
    <dateTimeOfRequest>2014-09-25T13:40:22</dateTimeOfRequest>
    <requestorTransactionId>anythingoes</requestorTransactionId>
  </requestID>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>1q1q1q1xx</identifier>
      <specialStatus>legal deposit</specialStatus>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Mullermuller</surname>
          <forename>Mirellamirella</forename>
          <personalName>
            <gender>female</gender>
            <birthDate>1999</birthDate>
            <nationality>IT</nationality>
            <resource>
              <creationClass>cre</creationClass>
              <creationRole>aut</creationRole>
              <titleOfWork>
                <title>Great pottery throw down</title>
              </titleOfWork>
              <resource>
                <personOrFiction>
                  <identity>
                    <identityInformation>
                      ...
                    </identityInformation>
                  </identity>
                </personOrFiction>
              </resource>
            </resource>
          </personalName>
        </personalName>
      </personOrFiction>
    </identity>
  </identityInformation>
</Request>
Request with isRelated element (person is affiliated with hospital)

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>12344411reee1</identifier>
    </requestorIdentifierOfIdentity>
  </identityInformation>
  
  <identity>
    <personOrFiction>
      <personalName>
        <nameUse>public and private</nameUse>
        <surname>Robertson</surname>
        <forename>Alexander Duff</forename>
      </personalName>
      <birthDate>1954-12-14</birthDate>
    </personOrFiction>
  </identity>

  <resource>
    <creationClass>cre</creationClass>
    <creationRole>aut</creationRole>
    <titleOfWork>
      <title>My childhood memories</title>
    </titleOfWork>
  </resource>

  <isRelated>
    <relationType>isAffiliatedWith</relationType>
    <organisationName>
      <mainName>121st Combat Support Hospital</mainName>
    </organisationName>
  </isRelated>

</Request>
```
Request with isRelated element (person is affiliated with hospital) PPN of hospital is included

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>12344411reee1</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Robertson</surname>
          <forename>Alexander Duff</forename>
        </personalName>
        <birthDate>1954-12-14</birthDate>
        <resource>
          <creationClass>cre</creationClass>
          <creationRole>aut</creationRole>
          <titleOfWork>
            <title>My childhood memories</title>
          </titleOfWork>
        </resource>
      </personOrFiction>
    </identity>
  </identityInformation>
  <isRelated>
    <relationType> isAffiliatedWith</relationType>
    <relationName>
      <PPN>40642375X</PPN>
    </relationName>
  </isRelated>
</Request>
```
Request with isRelated element (person is affiliated with hospital) ISNI of hospital is included

<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>12344411reee1</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Robertson</surname>
          <forename>Alexander Duff</forename>
        </personalName>
        <birthDate>1954-12-14</birthDate>
      </personOrFiction>
    </identity>
    <resource>
      <creationClass>cre</creationClass>
      <creationRole>aut</creationRole>
      <titleOfWork>
        <title>My childhood memories</title>
      </titleOfWork>
    </resource>
    <isRelated>
      <relationType>isAffiliatedWith</relationType>
      <organisationName>
        <mainName>121st Combat Support Hospital</mainName>
      </organisationName>
    </isRelated>
  </identityInformation>
  <ISNI>00000040642375X</ISNI>
</Request>
Request with isRelated element (person has colleague named Ursli Herzli)

```
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
    <identifier>12344411reee1</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Robertson</surname>
          <forename>Alexander Duff</forename>
        </personalName>
        <birthDate>1954-12-14</birthDate>
      </personOrFiction>
      <resource>
        <creationClass>cre</creationClass>
        <creationRole>aut</creationRole>
        <titleOfWork>
          <title>My childhood memories</title>
        </titleOfWork>
      </resource>
    </identity>
    <isRelated>
      <relationType>colleague / collaborator</relationType>
      <relationName>
        <personalName>
          <surname>Herzli</surname>
          <forename>Ursli</forename>
        </personalName>
      </relationName>
      </isRelated>
  </identityInformation>
</Request>
```
Request with isRelated element (person has colleague named Ursli Herzli) Herzli’s PPN is included

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>12344411reee1</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Robertson</surname>
          <forename>Alexander Duff</forename>
        </personalName>
        <birthDate>1954-12-14</birthDate>
      </personOrFiction>
      <resource>
        <creationClass>cre</creationClass>
        <creationRole>aut</creationRole>
        <titleOfWork>
          <title>My childhood memories</title>
        </titleOfWork>
      </resource>
    </identity>
    <isRelated>
      <relationType>colleague / collaborator</relationType>
      <relationName>
        <PPN>467497052</PPN>
        <personalName>
          <surname>Herzli</surname>
          <forename>Ursli</forename>
        </personalName>
      </relationName>
    </isRelated>
  </identityInformation>
</Request>
```
Request with isRelated element (person has colleague named Ursli Herzli) Herzli’s ISNI is included

```
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>12344411reee1</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public and private</nameUse>
          <surname>Robertson</surname>
          <forename>Alexander Duff</forename>
        </personalName>
        <birthDate>1954-12-14</birthDate>
        <resource>
          <creationClass>cre</creationClass>
          <creationRole>aut</creationRole>
          <titleOfWork>
            <title>My childhood memories</title>
          </titleOfWork>
        </resource>
      </personOrFiction>
    </identity>
    <isRelated>
      <relationType>colleague / collaborator</relationType>
      <relationName>
        <ISNI>0000000467497058</ISNI>
        <personalName>
          <surname>Herzli</surname>
          <forename>Ursli</forename>
        </personalName>
      </relationName>
    </isRelated>
  </identityInformation>
</Request>
```
Request organisation includes isRelated element for an employee named Ursli Herzli, Herzli’s ISNI is included.

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>my local test ID 14531 testbarbara</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <organisation>
        <organisationName>
          <mainName>Münster Landwirtschaftsverlag in Nord Rhein Westfalen</mainName>
          <subdivisionName>BioBauer Ausgaben</subdivisionName>
        </organisationName>
        <organisationNameVariant>Bauernverlag</organisationNameVariant>
        <organisationType>Publisher</organisationType>
        <location>
          <countryCode>DE</countryCode>
          <locode>DE MSR</locode>
          <city>Münster</city>
          <regionOrState>NW</regionOrState>
        </location>
        <resource>
          <creationClass>cre</creationClass>
          <creationRole>pbl</creationRole>
          <titleOfWork>
            <title>Top Agrar : das Magazin für moderne Landwirtschaft</title>
            <identifier>
              <identifierType>ISSN</identifierType>
              <identifierValue>1236360X</identifierValue>
            </identifier>
          </titleOfWork>
        </resource>
      </organisation>
    </identity>
    <isRelated>
      <relationType>hasEmployee</relationType>
      <relationName>
        <ISNI>0000000467497058</ISNI>
        <personalName>
          <surname>Herzli</surname>
          <forename>Ursli</forename>
        </personalName>
      </relationName>
    </isRelated>
  </identityInformation>
</Request>
```
Request organisation includes isRelated element for a related person

```xml
:request
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>my local test ID 14531 testbarbara</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <organisation>
        <organisationName>
          <mainName>Münster Landwirtschaftsverlag in Nord Rhein Westfalen</mainName>
          <subdivisionName>BioBauer Ausgaben</subdivisionName>
        </organisationName>
        <organisationNameVariant>Bauernverlag</organisationNameVariant>
        <organisationType>Publisher</organisationType>
        <location>
          <countryCode>DE</countryCode>
          <locode>DE MSR</locode>
          <city>Münster</city>
          <regionOrState>NW</regionOrState>
        </location>
        <resource>
          <creationClass>cre</creationClass>
          <creationRole>pbl</creationRole>
          <titleOfWork>
            <title>Top Agrar : das Magazin für moderne Landwirtschaft</title>
            <identifier>
              <identifierType>ISSN</identifierType>
              <identifierValue>1236360X</identifierValue>
            </identifier>
            </titleOfWork>
          </resource>
        </organisation>
        </identity>
      </identityInformation>
      <isRelated>
        <relationType>isRelatedTo</relationType>
        <relationName>
          <personalName>
            <surname>Orelli</surname>
            <forename>Beat</forename>
          </personalName>
        </relationName>
      </isRelated>
    </request>
```
Request organisation includes isRelated element for related organisation

```xml
<Request>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <identifier>my local test ID 14531 testbarbara</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <organisation>
        <organisationName>
          <mainName>Münster Landwirtschaftsverlag in Nord Rhein Westfalen</mainName>
          <subdivisionName>BioBauer Ausgaben</subdivisionName>
        </organisationName>
        <organisationNameVariant>Bauernverlag</organisationNameVariant>
        <organisationType>Publisher</organisationType>
        <location>
          <countryCode>DE</countryCode>
          <locode>DE MSR</locode>
          <city>Münster</city>
          <regionOrState>NW</regionOrState>
        </location>
        <resource>
          <creationClass>cre</creationClass>
          <creationRole>pbl</creationRole>
          <titleOfWork>
            <title>Top Agrar : das Magazin für moderne Landwirtschaft</title>
            <identifier>
              <identifierType>ISSN</identifierType>
              <identifierValue>1236360X</identifierValue>
            </identifier>
          </titleOfWork>
        </resource>
      </organisation>
    </identity>
    <isRelated>
      <relationType>isUnitOf</relationType>
      <relationName>
        <organisationName>
          <mainName>Bauernpresse</mainName>
        </organisationName>
        <relationName>
          <isRelated>
        </Request>
```
28 ANNEX Response includes TRACE

When a Request returns the Response ‘No ISNI’ instead of the expected result ‘ISNI Assigned’, you can re-submit the request and ask for a trace.

Example
The Request for the DJ Don Tosti is returns the Response No ISNI with the error message Data not accepted, the latter indicates that the data are not rich enough for ISNI to conclude a confident match or a confident no match.
The resubmitted Request asks for a trace of the import.

```
<?xml version="1.0" encoding="UTF-8"?>
<Request trace="import">
  <requestID>
    <dateTimeOfRequest>2017-03-24T19:15:39.318+01:00</dateTimeOfRequest>
    <requestorTransactionId>7933.9318.1423.3813</requestorTransactionId>
  </requestID>
  <identityInformation>
    <requestorIdentifierOfIdentity>
      <referenceURI>ark:/12148/cb14233813z</referenceURI>
      <identifier>14233813</identifier>
    </requestorIdentifierOfIdentity>
    <identity>
      <personOrFiction>
        <personalName>
          <nameUse>public</nameUse>
          <surname>Tosti</surname>
          <forename>Don</forename>
          <script>Latn</script>
        </personalName>
        <gender>male</gender>
        <deathDate>2004-08-02</deathDate>
        <nationality>us</nationality>
      </personOrFiction>
      <resource>
        <creationClass>cre</creationClass>
        <titleOfWork>
          <title>Shaken not stirred</title>
          <imprint>
            <publisher>Rykodisc (Salem, Mass.)</publisher>
            <publisher>distrib. Harmonia mundi France</publisher>
            <date>1997 ()</date>
          </imprint>
        </titleOfWork>
      </resource>
      <resource>
        <creationClass>cre</creationClass>
        <creationRole>cmp</creationRole>
        <titleOfWork>
```

```
28.1 Response includes a trace

    <responseRecord>
      <noISNI>
        <reason>no match initial database</reason>
      </noISNI>
      <information>
        data not accepted
      </information>
    </responseRecord>
045R $acre$2BNF
032C $acmp$2BNF
021A $aCoca roca samba$2BNF
033A $æditions musicales Peter Maurice$2BNF
032B $a1949$2BNF
028Z $ULatn$sdRay$aGilbert$tco-author$3public$2BNF
</record>

<!-- DBG: TIME + 0.000: Calling filter -->
<filter>
  <path>/IMPORT/module/generate-date</path>
</filter>
<record label="PPF" ppn="" other_ppn="" origin="">UNCHANGED</record>

<!-- DBG: TIME + 0.001: Calling filter -->
<filter>
  <path>/IMPORT/module/locode-expand</path>
</filter>
<record label="PPF" ppn="" other_ppn="" origin="">UNCHANGED</record>

<!-- DBG: TIME + 0.002: Calling filter -->
<filter>
  <path>/PAR</path>
  <p3command>
    WEB \VAL 2 \VAL IMPORT#REJECT</p3command>
</filter>
<record label="PPF" ppn="" other_ppn="" origin="">UNCHANGED</record>

<!-- DBG: TIME + 0.007: Calling filter -->
<filter>
  <path>/PAR</path>
  <p3command>WEB \AUT</p3command>
</filter>
<record label="PPF" ppn="" other_ppn="" origin="">001A $0BNF:28-04-17
001B $0BNF:28-04-17$t17:15:08.000
001D $0BNF:28-04-17
001U $utf8
001X $0
002@ $0tpx
002D $a|$b|$c|$d|$e|$f|$gn|\hn$S|$j|$k|$l|$m|$n|$oa$Sp|$q|$r|$s|
003E $aprosional$bno match initial database$c50
003Z $IBNF$014233813
013@ $S##$amale$2BNF
019A $S##$aus$2BNF
021A $S##$a@Shaken not stirred$2BNF
021A $S##$a@Coca roca samba$2BNF
028C $S##$ULatn$sdDon$aTosti$t3public$2BNF
028Z $S#$ULatn$SrRay$aGilbert$tco-author$3public$2BNF
032A $S#$b2004-08-02$2BNF
032B $S#$a1997 ()$2BNF
032B $S#$a1949$2BNF
032C $S#$acomp$2BNF
033A $S#$nRykodisc (Salem, Mass.)$2BNF
033A $S#$ndistrib. Harmonia mundi France$2BNF
033A $S#$ñéditions musicales Peter Maurice$2BNF
045R $S#$acre$2BNF
045R $S#$acre$2BNF
</record>

<!-- DBG: TIME + 0.010: Calling filter -->
<filter>
  <parameter name="use_P3VPP_for">re-import</parameter>
  <parameter name="re_import_title_filter">!(003Z$! = "BNF")
      and (003E$a != "assigned")</parameter>
  <path>/IMPORT/module/match-merge</path>
</filter>

<!-- DBG: TIME + 0.004: Use match-software, to find a matching record. -->
<!-- DBG: TIME + 0.005: \12(OR) NO_SEARCH_CMD GOTO(2) read=0 eval=0 -->
<!-- DBG: TIME + 0.009: \6105(OR) NO_HIT GOTO(3) read=0 eval=0 -->
<!-- DBG: TIME + 0.009: \6107(OR) NO_SEARCH_CMD GOTO(4) read=0 eval=0 -->
<!-- DBG: TIME + 0.360: \3000(TRUNC(99),\9000(1),\9021(A)) NO_HIT GOTO(4) read=0 eval=0 -->
<!-- DBG: TIME + 0.363: \3000(TRUNC(99),\9000(1),\9021(A)) NO_HIT GOTO(4) read=0 eval=0 -->
<!-- DBG: TIME + 0.363: \3000(TRUNC(99),\9000(1),\9021(A)) NO_SEARCH_CMD GOTO(5) read=0 eval=0 -->
<!-- DBG: TIME + 0.363: NONE(0,0,100) NO_HIT GOTO(6) read=0 eval=0 -->
<!-- DBG: TIME + 0.970: \3003(TRUNC(1),\9000(1),\9021(A),ER) NO_CAND GOTO(6) read=1 eval=1 -->
<!-- DBG: TIME + 0.970: \3003(TRUNC(1),\9000(1),\9021(A),ER) NO_SEARCH_CMD GOTO(8) read=0 eval=0 -->
<!-- DBG: TIME + 0.970: NONE(0,0,100) NO_CAND GOTO(9) read=0 eval=0 -->
<!-- DBG: TIME + 0.974: \3000(TRUNC(99),\9000(1),\9021(PS)) NO_HIT GOTO(9) read=0 eval=0 -->
<!-- DBG: TIME + 0.978: \3000(TRUNC(99),\9000(1),\9021(PS)) NO_HIT GOTO(9) read=0 eval=0 -->
<!-- DBG: TIME + 0.978: \3000(TRUNC(99),\9000(1),\9021(PS)) NO_SEARCH_CMD GOTO(10) read=0 eval=0 -->
<!-- DBG: TIME + 0.978: NONE(0,0,100) NO_CAND GOTO(11) read=0 eval=0 -->
<!-- DBG: TIME + 1.088: \3003(TRUNC(1),\9000(1),\9021(PS),ER) NO_HIT GOTO(11) read=0 eval=0 -->
<!-- DBG: TIME + 1.088: \3003(TRUNC(1),\9000(1),\9021(PS),ER) NO_SEARCH_CMD GOTO(13) read=0 eval=0 -->
<!-- DBG: TIME + 1.088: NONE(0,0,100) NO_CAND NEW read=0 eval=0 -->
+000 A $0BNF:28-04-17
001B $0BNF:28-04-17$t17:15:08.000
001U $0utf8
002@ $0Tpx
002D $a|$b|$c|$d|$e|$f|$g|$h|$i|$j|$k|$l|$m|$n|$oa$p|$q|$r|$s|
003E $aprov$ional$bno match initial database$c50
003Z $lBNF$014233813
013@ $S##$amale$2BNF
019A $S##$aus$2BNF
021A $S##$a@Shaken not stirred$2BNF
021A $S##$a@Coca roca samba$2BNF
028C $S##$ULatn$dDon$aTosti$3public$2BNF
028Z $S##$ULatn$dRay$aGilbert$tco-author$3public$2BNF
032A $S##$b2004-08-02$2BNF
032B $S##$a1997 ()$2BNF
032B $S##$a1949$2BNF
032C $S##$aRykodisc (Salem, Mass.)$2BNF
033A $S##$and$1949$m$2BNF
032A $S##$nÉditions musicales Peter Maurice$2BNF
045R $S##$acre$2BNF
045R $S##$acre$2BNF
</record>
28.1.1 What to look for in the trace

Each Request passes through 6 filters which are reflected in the trace:

- Generate-date
- Validation (sparse input)
- Autocomplete (add system tags)
- Match-merge (find match identities and compare data)
- New-assign (apply rules for a assignment: rich/complete and unique)
- Prevent-unassigned (AtomPub only: provisional names are not entered)

28.1.1.1 Filter 1 Generate date

The request for Don Tosti has a correct date of death: 2004-08-02, meaning that the request passes the first check. An incorrect date in the request like 2018-08-0888 would give the error invalid data and information about the incorrect date, for example: ‘1333’ in ‘2018-08-0888’ in 032A/00$a must be less than 32.

28.1.1.2 Filter 2 Validation (sparse input)

The request for Don Tosti is not sparse, it passes the second filter. A sparse request, for example without the ‘familyname’ Tosti, would return the message Invalid data and information about the missing name, for example: 028C/00$a is mandatory.

28.1.1.3 Filter 3 Autocomplete

The filter adds the required system generated tags like the system dates and time stamp, the source code of the requester, the type or record and the initial status of the record.

The outcome of filters 1-3 is the AtomPub request converted to ISNI’s machine format:
The matching part of the trace shows that the name Don Tosti has been found in ISNI. The ISNI-record has an assigned ISNI.

28.1.1.4 Filter 4 Match-merge (find match identities and compare data)

The matching part of the trace shows that the name Don Tosti has been found in ISNI. The ISNI-record has an assigned ISNI.
The submitted record and the ISNI record in are evaluated. The outcome is reflected in the trace with the end result:

- **No confident match**
- **No possible match**

The above messages are based on the similarity 0.000000 between the incoming and matching ISNI record.

<table>
<thead>
<tr>
<th>Commando: csft_evaltest -m PERSON -a bnf_test1 -b bnf_test2 -r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resultaat:</td>
</tr>
<tr>
<td>EVALUATION: 1, title nr: 1 from handle '-x/-a' and title: 1 from handle '-y/-b'</td>
</tr>
<tr>
<td>FINAL</td>
</tr>
<tr>
<td>name ISNI_NAME (status: 2, sim: 1.000000) =&gt; 0.000000</td>
</tr>
<tr>
<td>prs_affil ISNI_SUBSTRSIM (status: 3, sim: 0.166667) =&gt; 0.000000</td>
</tr>
<tr>
<td>publisher ISNI_PUBLISHER (status: 3, sim: 0.000000) =&gt; 0.000000</td>
</tr>
</tbody>
</table>

The outcome 0.000000 is based on comparisons of data available in both records:

- **name**: only one name could be compared
- **prs-affil**: the affiliated person in ISNI have next to nothing in common (Lalo Guerrero and the Ray Gilbert), the similarity is very low: 0.166667.
- **publisher**: none of the publishers were the same.

### 28.1.1.5 Filter 5 New-assign

The rules for a assignment for a new record are applied:

- Is the submitted rich enough? No
- Is the submitted record unique? No

The outcome for both checks is a negative

- there is already a Don Tosti in ISNI (not unique)
- and the submitted request does not fulfill these richness criteria:
  * criterium_1 = has_full_birth_and_full_death(ttl); -> no
  * criterium_2 = has_birth_year_plus_title_or_instrument_plus_related_name(ttl); -> no date of birth
  * criterium_3 = has_title_or_instrument_plus_URLlink_plus_related_name(ttl); -> no URLlink
  * criterium_4 = atleast_one_ISNOT(ttl); -> no isNot

### 28.1.1.6 Filter 6 Prevent-unassigned

The last filter applies to all AtomRequests: contrary to the offline batch load and the ISNI Web interface AtomPub will **not** enter a provisional name.