WEB OF SCIENCE™ CORE COLLECTION
CURRENT CONTENTS CONNECT®

XML

USER GUIDE

March, 2020

Clarivate Analytics

Table of Contents

Overview

Your contract for raw data entitles you to get timely updates, which you may store and process according to the terms of your agreement.

The associated XML schemas describe the record structure of the data and the individual elements that define the fields. You should familiarize yourself with these schemas as you configure your repository to manage this data.

Support and Questions

If you have questions about the raw XML format or data presentation, send an email to:
Thomson-RawDataProductionandSupport@clarivate.com

Selection Criteria

You may specify criteria in a variety of ways for ad hoc XML deliveries, including essentially all fields searchable in WOS product including things like publication years, journal title/ISSN, subject categories, addresses/institutions, and so on.

Annual XML data can be purchased based on publication year ranges and edition combinations. See the tables below for product editions.

Database Collection and Edition

Web of Science™ Core Collection

Database	Collection	Edition
Science Citation Index Expanded	WOS	WOS.SCI
Social Sciences Citation Index	WOS	WOS.SSCI
Arts & Humanities Citation Index	WOS	WOS.AHCI
Conference Proceedings Citation Index- Science	WOS	WOS.ISTP
Conference Proceedings Citation Index- Social Sciences & Humanities	WOS	WOS.ISSHP
Book Citation Index– Science	WOS	WOS.BSCI
Book Citation Index– Social Sciences & Humanities	WOS	WOS.BHCI
Emerging Science Citation Index	WOS	WOS.ESCI

Current Contents Connect®

Database	Collection	Edition
Agriculture, Biology & Environmental Sciences	CCC	CCC.CCCA
Arts & Humanities	CCC	CCC.CCCY
Clinical Medicine	CCC	CCC.CCCC
Engineering, Computing & Technology	CCC	CCC.CCCT
Life Sciences	CCC	CCC.CCCP
Physical, Chemical & Earth Sciences	CCC	CCC.CCCS
Social & Behavioral Sciences	CCC	CCC.CCCB
Business Collection	CCC	CCC.CCCEC
Electronic & Telecommunications Collection	CCC	CCC.CCCET

Clarivate URL Schema, new xmlns

<?xml version="1.0" encoding="UTF-8"?> <!-- Copyright (c) 2018 Clarivate Analytics Web of Science -->

<records xmlns="http://clarivate.com/schema/wok5.27/public/FullRecord">Schema Diagram

This is the core schema. It defines the basic XML framework for a record of a source document. Each record enclosed by the REC element consists of:

- **UID** - Unique item identifier
- **static_data** - Static bibliographic elements derived from source publications or from database-specific, value-added indexing
- **dynamic_data** - Bibliographic elements and metadata generated by database processing and integration

EWUID.rawxml.xsd

Elements in this schema define the identifiers that uniquely identify a database record and that supply additional processing capabilities.

summary.rawxml.xsd

Elements in this schema define the core bibliographic fields that make up a summary record in Web of Science.

common_types.rawxml.xsd

Elements in this schema extend the core list of elements in summary.xsd. Not every element defined in this schema is found in all editions. Conversely, some elements in this schema may occur in only one or two databases.

fullrecord_metadata.rawxml.xsd

Elements in this schema describe bibliographic fields and record metadata not displayed in summary records.

item_ccc.rawxml.xsd

Elements in this schema describe bibliographic fields and record metadata unique to Current Contents Connect.

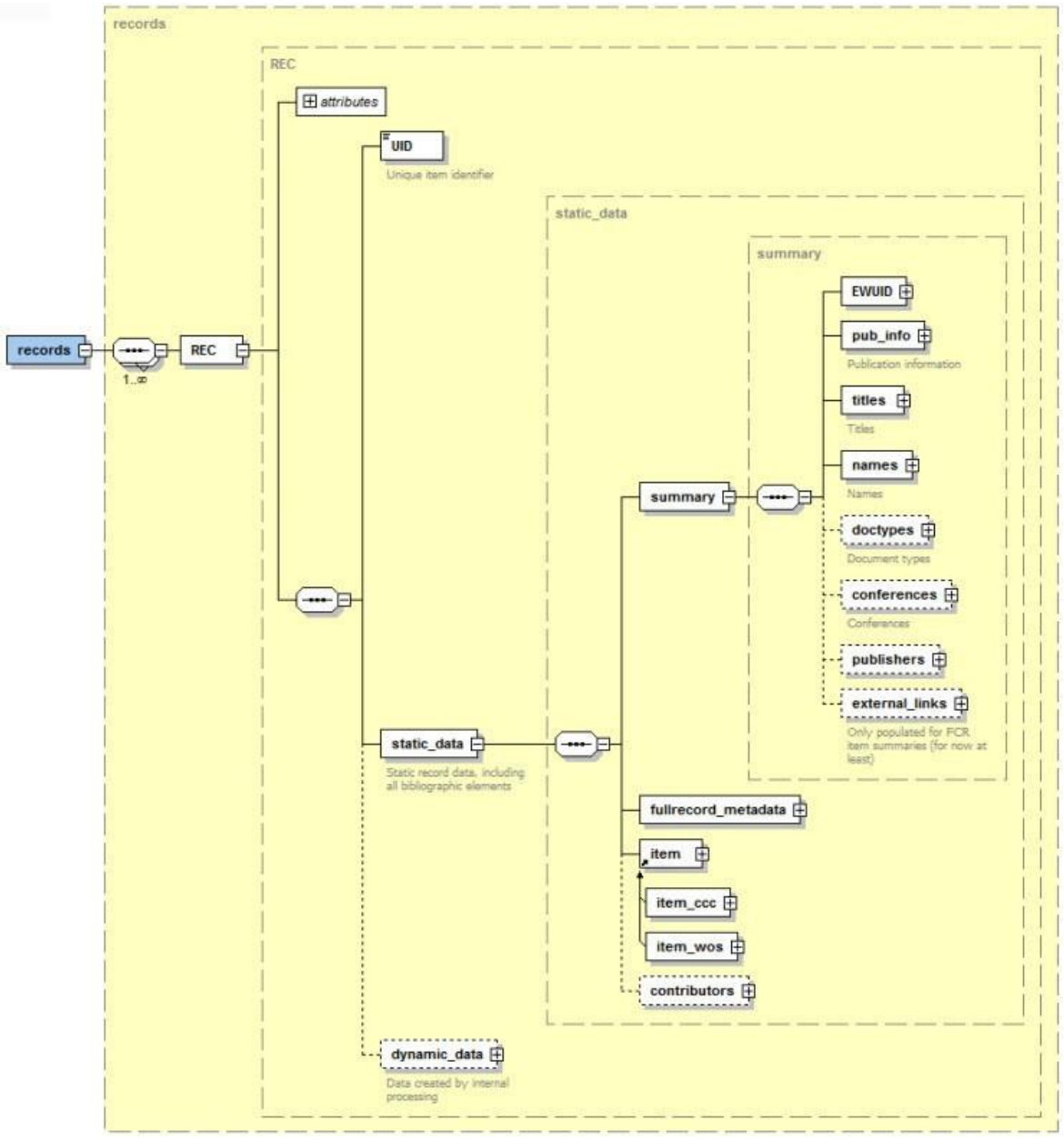
item_wos.rawxml.xsd

Elements in this schema describe bibliographic fields and record metadata unique to Web of Science Core Collection.

Schema Diagram

This graphic illustrates the basic hierarchy of the schema documents that make up the schema for Web of Science Core Collection and Current Contents Connect. The starting point is the <records> element in the core document, scientific.thomsonreuters.com.schema.wok5.X.rawxml.xsd

This diagram does not reveal the relationship of the document common_types.xsd to the other schemas. All schema documents except the core schema document and EWUID.xsd include common_types.xsd.



Source Record Identifiers

Each source record in Web of Science™ Core Collection and Current Contents Connect® has a unique identifier, the
UID. The UID is prefaced by an abbreviation of the collection (database) from which the record is retrieved (*CCC* for Current Contents Connect or *WOS* for Web of Science Core Collection). The UID is always the first child element of the <REC> element:

```
<REC r_id_disclaimer="ResearcherID data provided by Clarivate Analytics">
    <UID>WOS:000306312500009</UID>
```

```
<REC r_id_disclaimer="ResearcherID data provided by Clarivate Analytics">
    <UID>CCC:000282939200001</UID>
```

In a Web of Science record, the UID is labeled **Accession Number**.

- Accession Number: CCC:000282939200001
- Accession Number: WOS:000246155700009

Note that the UID of a record found in both Web of Science Core Collection and Current Contents Connect has the same UID:

- <UID>WOS:000306312500009</UID>
- <UID>CCC:000306312500009</UID

Other Identifiers

The WUID (for **W**eb of Science **U**nique **Id**entifier) identifies the collection and edition where the record is stored. The WUID is a child of EWUID (**e**dition WUID).

```
<EWUID>
    <WUID coll_id="WOS"/>
    <edition value="WOS.SCI"/>
</EWUID>
```

```
<EWUID>
    <WUID coll_id="CCC"/>
    <edition value="CCC.CCCP"/>
</EWUID>
```

Database Collection and Edition

Web of Science™ Core Collection

Database	Collection	Edition
Science Citation Index Expanded	WOS	WOS.SCI
Social Sciences Citation Index	WOS	WOS.SSCI

Arts & Humanities Citation Index	WOS	WOS.AHCI
Conference Proceedings Citation Index- Science	WOS	WOS.ISTP
Conference Proceedings Citation Index- Social Sciences & Humanities	WOS	WOS.ISSHP
Book Citation Index– Science	WOS	WOS.BSCI
Book Citation Index– Social Sciences & Humanities	WOS	WOS.BHCI
Emerging Science Citation Index	WOS	WOS.ESCI

Current Contents Connect®

Database	Collection	Edition
Agriculture, Biology & Environmental Sciences	CCC	CCC.CCCA
Arts & Humanities	CCC	CCC.CCCY
Clinical Medicine	CCC	CCC.CCCC
Engineering, Computing & Technology	CCC	CCC.CCCT
Life Sciences	CCC	CCC.CCCP
Physical, Chemical & Earth Sciences	CCC	CCC.CCCS
Social & Behavioral Sciences	CCC	CCC.CCCB
Business Collection	CCC	CCC.CCCEC
Electronic & Telecommunications Collection	CCC	CCC.CCCET

Digital Object Identifier (DOI)

When supplied by the source publication, an article's DOI is included in the source record in <identifier type="doi">

```
<identifiers>
<identifier type="accession_no" value="074OJ"/>
<identifier type="issn" value="1936-6582"/>
<identifier type="doi" value="10.1007/s10696-011-9117-0"/>
</identifiers>
```

If a DOI is not supplied in the source item, but we can find a match in Crossref, <identifier type="xref_doi"> will be added.

```
<identifiers>
<identifier type="accession_no" value="241EK"/>
<identifier type="issn" value="0021-4922"/>
<identifier type="xref_doi" value="10.1143/JJAP.38.L872"/>
</identifiers>
```

The DOI is a persistent identifier for a document, regardless of where the document appears. Note that not all records in Web of Science Core Collection and Current Contents Connect have DOI's. DOI's were captured from source publications starting in 2002.

Document and Source Titles

Document and source titles are given in the <title> element and categorized by the **type** attribute. Typically, the **item** type identifies the article title, and the **source** type identifies the publication title (journal or book). Note that for books in series, the **source** type identifies the book title, and the **book series** type identifies the series title.

Journal Article

```
<pub_info issue="2" pubtype="Journal" sortdate="2007-04-01" has_abstract="Y" coverdate="APR 2007"
 pubmonth="APR" vol="12" pubyear="2007">
  <page end="157" page_count="5" begin="153">153-157</page>
</pub_info>
  <titles count="6">
        <title type="source">ANNALS OF NONINVASIVE ELECTROCARDIOLOGY</title>
        <title type="source_abbrev">ANN NONINVAS ELECTRO</title>
        <title type="abbrev_iso">Ann. Noninvasive Electrocardiol.</title>
        <title type="abbrev_11">ANN NONINVA</title>
        <title type="abbrev_29">ANN NONINVASIVE ELECTROCARDIO</title>
        <title type="item">Preliminary observations on the effect of amitriptyline treatment in
 preventing syncope recurrence
        in patients with vasovagel syncope</title>
</titles>
```

Book

```
<pub_info has_abstract="N" coverdate="2011" pubtype="Book" pubyear="2011" sortdate="2011-01-01">
  <page end="244" page_count="65" begin="1">1-244</page>
</pub_info>
        <titles count="2">
        <title type="source">OPTICAL FLUORESCENCE MICROSCOPY: FROM THE SPECTRAL TO THE NANO
DIMENSION</ title>
        <title type="item">Optical Fluorescence Microscopy: From the Spectral to the Nano
Dimension</ title>
        </titles>
```

Book in Series

```
<pub_info pubtype="Book in series" sortdate="2011-01-01" has_abstract="Y" coverdate="2011"
vol="1239"  pubyear="2011">   <page end="70" page_count="12" begin="59">59-70</page>
</pub_info>
  <titles count="8">
 <title type="source">CRITICAL CONTRIBUTIONS OF THE ORBITOFRONTAL CORTEX TO BEHAVIOR</title>
 <title type="series">Annals of the New York Academy of Sciences</title>
 <title type="source_abbrev">ANN NY ACAD SCI</title>
 <title type="abbrev_iso">Ann.NY Acad.Sci.</title>
 <title type="abbrev_11">ANN NY ACAD</title>
 <title type="abbrev_29">ANN N Y ACAD SCI</title> <title type="item">Representations of appetitive
and aversive information in the primate orbitofrontal cortex</title> <title type="book_series"
translated="N">Annals of the New York Academy of Sciences</title>
  </titles>
```

Source Author Names

The names of all authors of source publications are captured in Web of Science™ Core Collection and Current Contents Connect®. The names are listed in database records in the same order in which they are listed in the source publications.

Child elements of the name element contain author name data:

Element	Description
name	Parent element for one author name.
display_name	Full name. If no full name is given, then the display_name is the wos_standard name.
full_name	Full name as given by the source publication
wos_standard	Surname followed by a comma and up to five initials.
first_name	First (given) name
last_name	Surname or family name
suffix	Generational suffix from a given name (JR, III, etc)
email_addr	Email address

Attributes of <name>

Attribute	Description
seq_no	Position of author in author list
addr_no	Indicates which address in the address field is associated with this author. An author can be associated with multiple addresses.
role	Role. Possible values include author, editor and inventor. The full list of roles can be found in the schema document *common_types.rawxml.public.xsd*.
reprint	Reprint flag. A value of Y indicates that the author is the reprint author.

Example

```
<name seq_no="1" addr_no="1 2" role="author" reprint="Y">
    <display_name>Aaltonen, Jonna</display_name>
    <full_name>Aaltonen, Jonna</full_name>
    <wos_standard>Aaltonen, J</wos_standard>
    <first_name>Jonna</first_name>
    <last_name>Aaltonen</last_name>
    <email_addr>jmaalt@utu.fi</email_addr>
</name>
```

Full Names and Abbreviations

Starting in May 2006, full names were captured from source journals. Before that, only full surnames were captured. First and middle names were abbreviated, and a name could have a maximum of five initials.

Before May 2006

Published Name	Processed Name
Albrecht-Schmitt, Theodore Ernest	Albrecht-Schmitt, TE
Brea, Rachel J.	Brea, RJ
Fournier, Jean-Baptiste	Fournier, JB
Sheng, D.	Sheng, D

May 2006 and Later

Full names are captured and presented in the database. The <wos_standard> element contains the Web of Science abbreviation.

Published Name	Processed Name <full_name>	Processed Name wos_standard>
Albrecht-Schmitt, Theodore Ernest	Albrecht-Schmitt, Theodore Ernest	Albrecht-Schmitt, TE
Brea, Rachel J.	Brea, Rachel J.	Brea, RJ
Fournier, Jean-Baptiste	Fournier, Jean-Baptiste	Fournier, JB
Sheng, D.	Sheng, D.	Sheng, D

Author Names 1964-1975

During data years 1964 to 1975, source author names were captured with a maximum of 11 characters: 8-character last names, followed by a space or a period (if truncated), and up to two initials. If the length of the last name permitted, more than 2 initials were captured. There might be some author names captured in full during these years if the journals were processed more recently to fill in gaps, or make corrections to the product.

For example, the majority of source authors were captured during 1964-1975 like this:

A. Johnston was captured as Johnston A
D.E. Hofstadter was captured as Hofstadt.De
A. Rodriguez was captured as Rodrigue.A
A. Rodrigues was captured as Rodrigue.A G.E.P. Box was captured as Box GEP

The possible false hits occur in the data years 1964-1975, for truncated names, if the first eight characters of the last name searched are the same as the first eight characters of another author's last name, with the same first name initial(s).

Chinese Author Names

If the journal is a Chinese publication, our approach is that the author name is in original Chinese name order: surname followed by first and middle names.

If the journal is not a Chinese publication, we assume that the Chinese names are in the same order as the other names in the journal (that is, not in original Chinese name order).

Hyphenated Names

The hyphenated portion of the name is presented as an initial, and the unhyphenated portion of the name is presented as the surname.

Published Name	Processed Name (full_name)	Processed Name (wos_standard)
Chang Hui-Lan	Chang, Hui-Lan	Chang, HL

Three-Part Hyphenated Names

If all three parts of a Chinese name are hyphenated, the name is processed as if there are no hyphens. The last name element becomes the last name; the other two parts become initials.

The name is processed following the normal rules for American names. For example:

Published Name	Processed Name (full_name)	Processed Name (wos_standard)
Lian-Tien-Sun	Sun, Lian-Tien	Sun, LT

Four-Part Names

Some Chinese names are presented in four parts. If some of the parts are hyphenated and some are not, the unhyphenated portion is processed as the last name; the other parts as initials. For example:

Published Name	Processed Name (full_name)	Processed Name (wos_standard)
W. Chia-Mo Wan	Wan, W. Chia-Mo	Wan, WCM

Unhyphenated Names

If no hyphens are present in the name, the first part of the name is processed as the surname. If the second part has only one syllable, only one initial is processed. For example:

Published Name	Processed Name (full_name)	Processed Name (wos_standard)
Ju Rui	Ju, Rui	Ju, R
Sun Shu	Sun, Shu	Sun, S
Hu Chau	Hu, Chau	Hu, C

If the second part of the name has two syllables, the first letter of each syllable is presented as initials. For example:

Published Name	Processed Name (full_name)	Processed Name (wos_standard)
Hong Longsheng	Hong, Longsheng	Hong, LS
Zhang Wanhua	Zhang, Wanhua	Zhang, WH
Shi Youngshan	Shi, Youngshan	Shi, YS
Chang Cheng-hseuh	Chang, Cheng-hseuh	Chang, CH

Chinese names that present a last name, first/middle name and an initial are processed following our policy for unhyphenated Chinese Names with two syllables, plus an initial. For example:

Published Name	Processed Name (full_name)	Processed Name (wos_standard)
Yu Seungju M	Yu, Seungui M.	Yu, SGM

Authors and Addresses

This excerpt from a Web of Science® Core Collection record shows that five names are associated with the source document and that one of them is Alvaro Rodriguez-Prieto.

```
<names count="5">
<name seq_no="1" role="author" reprint="Y" addr_no="1 2">
  <display_name>Rodriguez-Prieto, Alvaro</display_name>
  <full_name>Rodriguez-Prieto, Alvaro</full_name>
  <wos_standard>Rodriguez-Prieto, A</wos_standard>
  <first_name>Alvaro</first_name>
  <last_name>Rodriguez-Prieto</last_name>
  <email_addr>alvaro.rodriguez@invi.uned.es</email_addr>
</name>
```

Attributes of the name element reveal that Alvaro Rodriguez-Prieto is:

- The first of five names (seq_no="1").
- An author (role="author"). Most, but not all, names are author names.
- The reprint author.

In addition, starting at the beginning of 2008, Web of Science data capture policy was changed to index the links between authors and addresses. This linking is done via the sequence numbers associated with the addresses. The addr_no attribute identifies the sequence number of the addresses linked to this author (separated by a space if there are more than one). So in this case we also know that Alvaro Rodrigues-Prieto is linked to the first and second addresses.

This excerpt from the addresses section shows the article has two addresses. Three authors are associated with the first address. The first of these is Alvaro Rodriguez-Prieto.

```
<addresses count="2">
<address_name>
<address_spec addr_no="1">
    <full_address>Argonne Natl Lab, Appl Mat Div, Lemont, IL 60539 USA</full_address>
    <organizations count="4">
            <organization>Argonne Natl Lab</organization>
            <organization pref="Y">Argonne National Laboratory</organization>
            <organization pref="Y">University of Chicago</organization>
            <organization pref="Y">United States Department of Energy (DOE)</organization>
    </organizations>
    <suborganizations count="1">
            <suborganization>Appl Mat Div</suborganization>
    </suborganizations>
    <city>Lemont</city>
    <state>IL</state>
    <country>USA</country>
    <zip location="AP">60539</zip>
</address_spec>
<names count="3">
    <name seq_no="1" role="author" reprint="Y" addr_no="1" r_id="">
            <display_name>Rodriguez-Prieto, Alvaro</display_name>
            <full_name>Rodriguez-Prieto, Alvaro</full_name>
            <wos_standard>Rodriguez-Prieto, A</wos_standard>
            <first_name>Alvaro</first_name>
            <last_name>Rodriguez-Prieto</last_name>
            <email_addr>alvaro.rodriguez@invi.uned.es</email_addr>
    </name>
```

```
        <name seq_no="3" role="author" addr_no="1" r_id="">
                <display_name>Aragon, Ana M.</display_name>
                <full_name>Aragon, Ana M.</full_name>
                <wos_standard>Aragon, AM</wos_standard>
                <first_name>Ana M.</first_name>
                <last_name>Aragon</last_name>
        </name>
        <name seq_no="5" role="author" addr_no="1">
                <display_name>Yanguas-Gil, Angel</display_name>
                <full_name>Yanguas-Gil, Angel</full_name>
                <wos_standard>Yanguas-Gil, A</wos_standard>
                <first_name>Angel</first_name>
                <last_name>Yanguas-Gil</last_name>
        </name>
</names>
</address_name>
<address_name>
<address_spec addr_no="2">
        <full_address>Univ Nacl Educ Distancia, Dept Mfg Engn, E-28040 Madrid, Spain</full_address>
        <organizations count="2">
                <organization>Univ Nacl Educ Distancia</organization>
                <organization pref="Y">Universidad Nacional de Educacion a Distancia (UNED)</organization>
        </organizations>
        <suborganizations count="1">
                <suborganization>Dept Mfg Engn</suborganization>
        </suborganizations>
        <city>Madrid</city>
        <country>Spain</country>
        <zip location="BC">E-28040</zip>
</address_spec>
<names count="3">
        <name seq_no="1" role="author" reprint="Y" addr_no="2" r_id="">
                <display_name>Rodriguez-Prieto, Alvaro</display_name>
                <full_name>Rodriguez-Prieto, Alvaro</full_name>
                <wos_standard>Rodriguez-Prieto, A</wos_standard>
                <first_name>Alvaro</first_name>
                <last_name>Rodriguez-Prieto</last_name>
                <email_addr>alvaro.rodriguez@invi.uned.es</email_addr>
        </name>
        <name seq_no="2" role="author" addr_no="2" r_id="M-1685-2014">
                <display_name>Camacho, Ana M.</display_name>
                <full_name>Camacho, Ana M.</full_name>
                <wos_standard>Camacho, AM</wos_standard>
                <first_name>Ana M.</first_name>
                <last_name>Camacho</last_name>
        </name>
        <name seq_no="4" role="author" addr_no="2" r_id="">
                <display_name>Sebastian, Miguel A.</display_name>
                <full_name>Sebastian, Miguel A.</full_name>
                <wos_standard>Sebastian, MA</wos_standard>
                <first_name>Miguel A.</first_name>
                <last_name>Sebastian</last_name>
        </name>
</names>
</address_name>
</addresses>
```

Finally, the article has 2 reprint addresses. The same author Alvaro Rodriguez-Prieto is associated with two different reprint addresses.

```
<reprint_addresses count="2">
<address_name>
<address_spec addr_no="1">
<full_address>Argonne Natl Lab, Appl Mat Div, Lemont, IL 60539 USA</full_address>
<organizations count="4">
      <organization>Argonne Natl Lab</organization>
      <organization pref="Y">University of Chicago</organization>
      <organization pref="Y">United States Department of Energy (DOE)</organization>
      <organization pref="Y">Argonne National Laboratory</organization>
</organizations>
<suborganizations count="1">
      <suborganization>Appl Mat Div</suborganization>
</suborganizations>
<city>Lemont</city>
<state>IL</state>
<country>USA</country>
<zip location="AP">60539</zip>
</address_spec>
<names count="1">
<name seq_no="1" role="author" reprint="Y" addr_no="1">
      <display_name>Rodriguez-Prieto, Alvaro</display_name>
      <full_name>Rodriguez-Prieto, Alvaro</full_name>
      <wos_standard>Rodriguez-Prieto, A</wos_standard>
      <first_name>Alvaro</first_name>
      <last_name>Rodriguez-Prieto</last_name>
      <email_addr>alvaro.rodriguez@invi.uned.es</email_addr>
</name>
</names>
</address_name>
<address_name>
<address_spec addr_no="2">
<full_address>Univ Nacl Educ Distancia, Dept Mfg Engn, E-28040 Madrid, Spain</full_address>
<organizations count="2">
      <organization>Univ Nacl Educ Distancia</organization>
      <organization pref="Y">Universidad Nacional de Educacion a Distancia (UNED)</organization>
</organizations>
<suborganizations count="1">
      <suborganization>Dept Mfg Engn</suborganization>
</suborganizations>
<city>Madrid</city>
<country>Spain</country>
<zip location="BC">E-28040</zip>
</address_spec>
<names count="1">
<name seq_no="1" role="author" reprint="Y" addr_no="2">
      <display_name>Rodriguez-Prieto, Alvaro</display_name>
      <full_name>Rodriguez-Prieto, Alvaro</full_name>
      <wos_standard>Rodriguez-Prieto, A</wos_standard>
      <first_name>Alvaro</first_name>
      <last_name>Rodriguez-Prieto</last_name>
      <email_addr>alvaro.rodriguez@invi.uned.es</email_addr>
</name>
</names>
</address_name>
</reprint_addresses>
```

Prior to 1998, a research address that matches a reprint address is not included in the list of research addresses. Beginning in 1998, we do not remove a duplicate address if it appears as both a research and a reprint address. Prior to 2016, one reprint/corresponding author/address was indexed per paper. Beginning in 2016, we index all reprint/corresponding authors and addresses per paper.

No addresses were processed for the following editions and years (except in the case where a gap issue is processed):

- Science Citation Index Expanded 1945-1964
- Social Sciences Citation Index 1956-1965

Organizations

The names of organizations are extracted from the author address and identified by the *organization* element:

Organization names can be presented differently in different publications. These names can refer to constituent organizations, and often they contain abbreviations. Many records contain a preferred organization name, signifying that organization that has undergone unification of these variants. The mapping of variant organization names to the preferred name is an ongoing process.

A value of "Y" for the attribute *pref* signifies a preferred organization name.

```
<address_spec addr_no="5"> <full_address>Univ Penn, Dept Pathol, Div Transfus Med, Stem Cell
Lab, Philadelphia, PA 19104 USA</ full_address> <organizations count="2">
  <organization>Univ Penn</organization>
  <organization pref="Y">University of Pennsylvania</organization>
 </organizations>
 <suborganizations count="3">
  <suborganization>Dept Pathol</suborganization>
  <suborganization>Div Transfus Med</suborganization>
  <suborganization>Stem Cell Lab</suborganization>
 </suborganizations>
 <city>Philadelphia</city>
 <state>PA</state>
 <country>USA</country>
 <zip location="AP">19104</zip>
</address_spec>
```

There may be multiple preferred names. For example:

```
<address_spec addr_no="3">
 <full_address>Texas A&amp;M Univ Syst, Hlth Sci Ctr, Scott &amp; White Healthcare, Donor Serv, Temple,
 TX 76508 USA</full_address>
 <organizations count="3">
  <organization>Texas A&amp;M Univ Syst</organization>
  <organization pref="Y">Texas A&amp;M Health Science Center</organization>
<organization pref="Y">Texas A&amp;M University System</organization>
 </organizations>
 <suborganizations count="3">
  <suborganization>Hlth Sci Ctr</suborganization>
  <suborganization>Scott &amp; White Healthcare</suborganization>
<suborganization>Donor Serv</suborganization>
 </suborganizations>
 <city>Temple</city>
 <state>TX</state>
 <country>USA</country> <zip
location="AP">76508</zip>
</address_spec>
```

Contributors

The contributors element contains the names of authors for whom a ResearcherID or an ORCID identifier is provided. Some authors have both a ResearcherID and an ORCID identifier.

Element	Description
contributors	Parent element for the list of contributor information coming from RID/ORCID. The count attribute shows the number of contributors in the contributor list
contributor	The information for a single contributor
name	Attributes of the name element contain the ResearcherID or ORCID identifier.
display_name	Name as given in the RID or ORCID account
full_name	Full name, same as display_name
first_name	First (given) name, as parsed from the full_name
last_name	Surname or family name, as parsed from the full_name

Attributes of <name>

Attribute	Description
orcid_id	ORCID identifier
rid_id	ResearcherID. This attribute is always accompanied by the role attribute whose value is researcher_id.
seq_no	The value of this attribute is the sequence number in the list of contributors.

Example

```
<contributors count="4">
 <contributor>
  <name orcid_id="0000-0003-1069-212X" r_id="A-7779-2008" role="researcher_id"
seq_no="1">
   <display_name>Calbet, Albert</display_name>
   <full_name>Calbet, Albert</full_name>
   <first_name>Albert</first_name>
   <last_name>Calbet</last_name>
  </name>
 </contributor>
 <contributor>
  <name orcid_id="0000-0003-2611-0067" r_id="K-4263-2014" role="researcher_id"
seq_no="2">
   <display_name>Saiz, Enric</display_name>
   <full_name>Saiz, Enric</full_name>
   <first_name>Enric</first_name>
   <last_name>Saiz</last_name>
  </name>
 </contributor>
 <contributor>
```

```
  <name orcid_id="0000-0002-4803-2306" r_id="B-6462-2015" role="researcher_id"
seq_no="3">
   <display_name>Alcaraz, Miquel</display_name>
   <full_name>Alcaraz, Miquel</full_name>
   <first_name>Miquel</first_name>
   <last_name>Alcaraz</last_name>
  </name>
 </contributor>
 <contributor>
  <name orcid_id="0000-0002-1213-1361" r_id="A-7670-2013" role="researcher_id" seq_no="4">
   <display_name>Duarte, Carlos M</display_name>
   <full_name>Duarte, Carlos M</full_name>
   <first_name>Carlos M</first_name>
   <last_name>Duarte</last_name>
  </name>
 </contributor>
</contributors>
```

Cited References

All references cited by the source document are included in the source record in Web of Science™ Core Collection. Cited references may be classified into two broad categories: 1) references to source items in Web of Science Core Collection and 2) references that do not have matching source items in Web of Science Core Collection.

Element	Description
<uid>	Cited reference identifier. There are two types of uid values: 1) the UID of a matching source item in Web of Science and 2) the UID of the parent (citing) document, followed by an increment. A value of the second type indicates a reference for which there is no matching source item. Note that because of data corrections and deletions, the uid of a cited reference can change. In addition, a uid can be added to a cited reference that previously had none.
<citedAuthor>	First author of the cited document.
<year>	Publication year of the cited document.
<page>	Starting page number of the cited document. Be aware that the value of the <page> element may be an identifier such as ARTN (article number). The identifier may appear twice in a cited reference, once in the <page> element and once in the <art_no> element.
<citedTitle>	Title of the cited document. For references processed from 2012 forward, cited references are captured with full titles when those titles are supplied by the citing article, regardless of whether the cited reference matches a source item. For references processed prior to 2012, it is likely that a citing title will not be included. However, some earlier cover dates may have been updated in 2012 or later. In this case there may be a full citing title presented if the title is covered as a source, or the author included the full cited title in the reference.
<citedWork>	Title of the cited publication. The value of this element may be a full work title or an abbreviated work title. The full work title is shown if the reference is from an article processed in 2012 or later *and* the cited publication is also a source publication *or* the author included the full title in the reference. An abbreviated work is shown if the reference refers to a publication that is not covered as a source and the author did not provide the full work title or the cited reference is from an article processed before 2012.
<doi>	Digital Object Identifier. From 2002 forward, the doi of a cited reference is captured when supplied by the citing article.
<art_no>	Article number.

	The article number is a unique item identifier assigned by the journal in which the citing article is published and not by the authors of the citing article. This identifier is prefaced by ARTN (for article number), PII (for publisher item identifier), or UNSP (for unspecified). Not all cited references have this element.

Sample Cited Reference to a Source Item

The value of the uid is the UID of a matching source item in Web of Science Core Collection

```
<reference>
<uid>WOS:000253911800008</uid>
<citedAuthor>Gouw, AA</citedAuthor>
<year>2008</year>
<page>247</page>
<volume>25</volume> <citedTitle>Reliability and sensitivity of visual scales versus volumetry for
evaluating white matter hyperintensity progression</citedTitle> <citedWork>CEREBROVASCULAR
DISEASES</citedWork>
<doi>10.1159/000113863</doi>
</reference>
```

Sample Cited Reference to a Non-Source Item

Here the value of the uid is the UID of the parent (citing) document, followed by a sequence number pertaining to that item's location in the paper's bibliography.

```
<reference>
<uid>000313229500012.8</uid>
<citedAuthor>Clark, L.</citedAuthor>
<year>2008</year>
<page>349</page>
<citedWork>Heart Failure</citedWork>
</reference>
```

Citations to Articles from Journal Supplements

When both a volume number *and* a supplement number are provided in the cited reference, the volume number is keyed in the volume field, and an S is appended to the cited work, along with the supplement number.

Example

Johnson, L.A., Albers, J.G., Willems, C.M.T. and Sybesman,W. Effectiveness of fresh and frozen boar semen under practical conditions. J Anim. Sci. 49: Suppl. 1, 306, (1979).

```
<reference>
<citedAuthor>JOHNSON LA</citedAuthor>
<year>1979</year>
<page>306</page>
<volume>49</volume>
<citedWork>J ANIM SCI S1</citedWork>
</reference>
```

When only one number is present, the number is keyed in the volume field and an *S* is appended to the cited work.

Example

Bojensen, E. A method for determination of insulin in plasma and urine, Acta med. scand. Suppl. No. 266, p. 275, 1952.

```
<reference>
<citedAuthor>BOJENSEN E</citedAuthor>
<year>1952</year>
<page>275</page>
<volume>266</volume>
<citedWork>ACTA MED SCAND S</citedWork>
</reference>
```

There will only be an ‘S’ in the citation data when the citation itself indicates a Supplement. Sometimes an ‘S’ precedes the page number, to indicate a supplement. In that case, we will include this *S* with the page number.

Issue Information in the Volume Field

Following is an example of a cited reference presentation that is different from the usual. In this case we process the issue number in the volume field. Here is a reference from a source article:

[58] C. Poriel, Y. Ferrand, P. Le Maux, G. Simonneaux, Synlett 1 (2002) 71.

Here is the reference after it has been processed in Web of Science:

```
<reference>
<citedAuthor>Poriel C</citedAuthor>
<year>2002</year>
<page>71</page>
<volume>1</volume>
<citedWork>Synlett</citedWork>
</reference>
```

Synlett does not have volume numbers. **1** is the issue number.

Cited Authors in References to Proceedings and Patents

1. The cited author name in a reference to a proceedings paper has a limit of 38 characters before the name is truncated.

2. The patent assignees field has a limit of 20 characters.
   Patent assignees have the property right to the patent.

```
<reference>
<uid>WOS:000074419100021.44</uid>
<assignee>LAI SY</assignee>
<year>1993</year>
<patent_no>US 5272236</patent_no>
</reference>
```

Counting Citations

It is possible to count the number of times a source item has been cited from reference data in the XML file.

Each source record in the XML file has a primary key, the UID. A cited reference also has an identifier, the uid.

- XPath for source record identifier: /records/REC/UID
- XPath for cited reference identifier: /records/REC/static_data/fullrecord_metadata/references/reference/uid

If the value of the <UID> element in record 1 matches the value of the <uid> element found in the reference list of record 2, then record 1 has been cited by record 2.

For each UID in the file, there may be zero to many matching uid values found in cited reference lists of other source records. The number of times a UID is found in a reference list is the number of times the paper was cited. The source records containing the reference lists with the matching uid's are the citing documents.

We recommend setting up two dynamic indexes, one for uids in cited references and another for UIDs in source items. Use the UID as a key for searching against the uids in reference lists. The number of items returned from this search is the item's citation count.

Note that a UID identifier never changes. However, the uid in a cited reference can be removed or replaced for various reasons when corrections are issued for citing source items.

Be aware that the citation count derived this way may or may not match the Times Cited value given for any given source record in Web of Science. The algorithm used to calculate Times Cited in Web of Science Core Collection takes into account more than matching UID-uid values. Other factors that affect the Times Cited calculation include:

- changes to cited reference uid's
- gap records
- data updates and corrections

As an alternative to compiling and maintaining citation counts, you may license a file of Times Cited values from Clarivate Analytics.

Times Cited File

A file containing Times Cited numbers from Clarivate Analytics is also available. This file, updated weekly, provides up to-date Times Cited data in a tab-delimited format. The file provides the UID of the cited source item and current Times Cited values for that source item broken down by various combinations of WOS editions (as well as a total).

Each Times Cited file has a timestamp. You should process the files as they are received or if updating less frequently, simply use the latest version.

This file is not available for Current Contents Connect.

Example

COLLECTION:UID	WOS_TOTAL		SCIE_SSCI_AHCI			SCIE		SSCI		AHCI		CPCI-S_CPCI-S:
WOS:000003907500001	4	4	3	1	0	0	0	0	0	0	0	
WOS:000003907500002	61	57	54	7	2	6	5	1	2	2	0	0
WOS:000003907500003	23	23	23	0	0	0	0	0	0	0	0	0
WOS:000003907500004	26	25	25	0	0	2	2	0	1	1	0	0
WOS:000003907500005	108	108	108	0	0	1	1	0	0	0	0	0
WOS:000003907500006	29	28	28	0	0	3	3	0	1	1	0	0
WOS:000003907500007	34	34	34	0	0	1	1	0	0	0	0	0
WOS:000003907500008	673	643	643	4	0	32	32	0	13	13	0	7
WOS:000003907500009	2	2	2	0	0	0	0	0	0	0	0	0

Delivery Schedule

Web of Science™ Core Collection

Every week, you will be notified via email that your data file is ready to be downloaded via FTP. You are provided with an ID and password in advance to access a private FTP directory. This directory will include files based on your agreement with Clarivate Analytics. If your credentials do not work, contact a production coordinator (page 4) at Clarivate Analytics.

The zip file you download consists of one or more XML files. Each file has a timestamp. It is imperative that you process files chronologically--by date *and* time.

Any one data file may contain a combination of newly processed source items, corrections and gap records.

Current Contents Connect®

Every day, you will be notified via email that your data file is ready to be downloaded via FTP. You are provided with an ID and a password to access a private FTP directory. This directory will include files based on your agreement with Clarivate Analytics. If your credentials do not work, contact a production coordinator (page 4) at Clarivate Analytics.

The zip file you download consists of one XML file. Every file has a timestamp. You should always process the files in the order you receive them.

On Saturday or Sunday, you will be notified that a file of corrections is available. You should always process the corrections file, and its data should be in your repository before you process the new daily update.

Corrections and Gap Records

Corrections

As part of our ongoing commitment to quality, editors and customer care specialists log reports of errors and inconsistencies reported by users or identified by in-house staff. Corrections are researched, verified, and then added to the database as quickly as possible--sometimes within hours.

Any XML file you receive may contain corrections. There is no data element or indicator that flags a record as a correction or update. A corrected record will always be a *complete* record. Consequently, if a record in a newly delivered file has a UID that matches the UID of a record in your repository, it should replace the old record. If the publication year of the record (identified by the pubyear attribute of the pub_info element) precedes the earliest year of your subscription, then you should not add the record to your repository. For example, if you subscribe to Web of Science Core Collection starting with publication year 2000, any record you receive that has a pubyear earlier than 2000 should not be added to your repository.

Gap Records

Gap records are new records of articles from journals published before the current database year. Usually, these articles come from journal issues or supplements that were missing in the course of regularly scheduled publication processing. Aside from one exception, gap records should be processed just like any other new record you receive.

The exception is this: if the publication year of the gap record (identified by the pubyear attribute of the pub_info element) precedes the earliest year of your subscription, then you should not add the gap record to your repository. For example, if you subscribe to Web of Science Core Collection starting with publication year 2000, any record you receive that has a pubyear earlier than 2000 should not be added to your repository.

Note that a gap record may contain indexing or data enhancements that were not in practice in that record's year of publication, causing it to appear to contain more or different data than other records published in the same year, indexed closer to their publication date. Current indexing and data entry policies are applied whenever new records are added to the database, regardless of the year of the source publication. For example, Web of Science Core Collection began including author email addresses for authors in 1997. If a gap record for a 1995 article is created in 2013, and if the article includes author email addresses, then the gap record will include the email addresses.

This is worth noting particularly for occasional backfill project where large data may be processed from older dates, adhering to the current policy. This is rare, but two recent examples would be the ESCI backfill, started in 2018, and the CPCI backfill started in 2017.

Deletions

Deletions from Web of Science Core Collection and Current Contents Connect are in a separate deletions text file. There is one designated delete item per line. When deletions are necessary, the file will be in your FTP directory.

The format for the deleted record begins with either WOS or CCC followed by a comma and then the UID of the item. The Y flag verifies that we deleted the record. You need to delete these records from your own repository.

Sample List of Records Deleted from Web of Science Core Collection

```
WOS,000208518000001,Y
WOS,000208518000002,Y
WOS,000208518000003,Y
WOS,000208518000004,Y
WOS,000208518000005,Y
```

Sample List of Records Deleted from Current Contents Connect

```
CCC,000208518000001,Y
CCC,000208518000002,Y
CCC,000208518000003,Y
CCC,000208518000004,Y
CCC,000208518000005,Y
```

Journal Lists

To explore the full list of journals covered by Web of Science™ Core Collection and Current Contents Connect®, visit the Master Journal List page located here: https://mjl.clarivate.com/home

Appendix 1 Subject Categories

Subject Categories (Ascatype)

The subject element contains the subject category of a journal, and every record from a journal in a Web of Science™ Core Collection database should have this element. The term *ascatype*, which is an attribute of subject, is a system term for *subject category*.

XML Tag	Example
<subject ascatype="traditional">	<subject ascatype="traditional">Engineering, Manufacturing</ subject>

A "traditional" ascatype (tASCA type) indicates that the subject category comes from the list on page 30.

Every journal indexed in Web of Science Core Collection is assigned to at least one tASCA type. It is also not unusual for a journal to be assigned more than one. You can explore journals and their categories via the master journal list page, located here - https://mjl.clarivate.com/home

An "extended" ascatype (eASCA type) indicates that the subject category comes from the list on page 34. This is referred to as a “research area” in WOS product. The eASCA types provide a small level of aggregation on top of the tASCA types, with the aim of providing a single subject category scheme across all Web of Science databases. They are added by applying a mapping to the tASCA values. As such, there are fewer unique eASCA values than tASCA values. eASCA types themselves also map to “heading” and “subheading” values (which are also elements within the “category_info” node). These are even broader fields, and are present in the mapping on page 34 (which is in the form Heading|Subheading|eASCA/Research Area).

XML Tag	Example
<subject ascatype="extended">	<subject ascatype="extended">Engineering</subject>

Web of Science™ Core Collection Subject Areas (Traditional Ascatype)

Web of Science™ Core Collection Subject Areas
Acoustics
Agriculture
Allergy
Anatomy & Morphology
Anesthesiology
Anthropology
Archaeology
Architecture
Area Studies
Art
Arts & Humanities - Other Topics

Asian Studies
Astronomy & Astrophysics
Audiology & Speech-Language Pathology
Automation & Control Systems
Behavioral Sciences
Biochemistry & Molecular Biology
Biodiversity & Conservation
Biomedical Social Sciences
Biophysics
Biotechnology & Applied Microbiology
Business & Economics
Cardiovascular System & Cardiology
Cell Biology
Chemistry
Classics
Communication
Computer Science
Construction & Building Technology
Criminology & Penology
Critical Care Medicine
Crystallography
Cultural Studies
Dance
Demography
Dentistry, Oral Surgery & Medicine
Dermatology
Development Studies
Developmental Biology
Education & Educational Research
Electrochemistry
Emergency Medicine
Endocrinology & Metabolism
Energy & Fuels
Engineering
Entomology
Environmental Sciences & Ecology
Ethnic Studies
Evolutionary Biology
Family Studies
Film, Radio & Television
Fisheries
Food Science & Technology

Forestry
Gastroenterology & Hepatology
General & Internal Medicine
Genetics & Heredity
Geochemistry & Geophysics
Geography
Geology
Geriatrics & Gerontology
Government & Law
Green & Sustainable Science & Technology
Health Care Sciences & Services
Hematology
History
History & Philosophy of Science
Imaging Science & Photographic Technology
Immunology
Infectious Diseases
Information Science & Library Science
Instruments & Instrumentation
Integrative & Complementary Medicine
International Relations
Legal Medicine
Life Sciences & Biomedicine - Other Topics
Linguistics
Literature
Marine & Freshwater Biology
Materials Science
Mathematical & Computational Biology
Mathematical Methods In Social Sciences
Mathematics
Mechanics
Medical Ethics
Medical Informatics
Medical Laboratory Technology
Metallurgy & Metallurgical Engineering
Meteorology & Atmospheric Sciences
Microbiology

Microscopy
Mineralogy
Mining & Mineral Processing
Music
Mycology
Neurosciences & Neurology
Nuclear Science & Technology
Nursing
Nutrition & Dietetics
Obstetrics & Gynecology
Oceanography
Oncology
Operations Research & Management Science
Ophthalmology
Optics
Orthopedics
Otorhinolaryngology
Paleontology
Parasitology
Pathology
Pediatrics
Pharmacology & Pharmacy
Philosophy
Physical Geography
Physical Sciences - Other Topics
Physics
Physiology
Plant Sciences
Polymer Science
Psychiatry
Psychology
Public Administration
Public, Environmental & Occupational Health
Radiology, Nuclear Medicine & Medical Imaging
Quantum Science & Technology
Regional & Urban Planning
Rehabilitation
Religion
Remote Sensing
Reproductive Biology
Research & Experimental Medicine
Respiratory System

Science & Technology - Other Topics
Social Issues
Social Sciences - Other Topics
Social Work
Sociology
Spectroscopy
Sport Sciences
Substance Abuse
Surgery
Technology - Other Topics
Telecommunications
Theater
Thermodynamics
Toxicology
Transplantation
Transportation
Tropical Medicine
Urban Studies
Urology & Nephrology
Veterinary Sciences
Virology
Water Resources
Women's Studies
Zoology

Research Areas (Extended Ascatype)

Research Areas
Arts & Humanities|Arts & Humanities - Other Topics
Arts & Humanities|Architecture
Arts & Humanities|Art
Arts & Humanities|Asian Studies
Arts & Humanities|Classics
Arts & Humanities|Dance
Arts & Humanities|Film, Radio & Television
Arts & Humanities|History
Arts & Humanities|History & Philosophy of Science
Arts & Humanities|Literature
Arts & Humanities|Music

Arts & Humanities|Philosophy
Arts & Humanities|Religion
Arts & Humanities|Theater
Science & Technology|Science & Technology - Other Topics
Science & Technology|Life Sciences & Biomedicine|Life Sciences & Biomedicine - Other Topics
Science & Technology|Life Sciences & Biomedicine|Agriculture
Science & Technology|Life Sciences & Biomedicine|Allergy
Science & Technology|Life Sciences & Biomedicine|Anatomy & Morphology
Science & Technology|Life Sciences & Biomedicine|Anesthesiology
Science & Technology|Life Sciences & Biomedicine|Anthropology
Science & Technology|Life Sciences & Biomedicine|Audiology & Speech-Language Pathology
Science & Technology|Life Sciences & Biomedicine|Behavioral Sciences
Science & Technology|Life Sciences & Biomedicine|Biochemistry & Molecular Biology
Science & Technology|Life Sciences & Biomedicine|Biodiversity & Conservation
Science & Technology|Life Sciences & Biomedicine|Biophysics
Science & Technology|Life Sciences & Biomedicine|Biotechnology & Applied Microbiology
Science & Technology|Life Sciences & Biomedicine|Cardiovascular System & Cardiology
Science & Technology|Life Sciences & Biomedicine|Cell Biology
Science & Technology|Life Sciences & Biomedicine|Critical Care Medicine
Science & Technology|Life Sciences & Biomedicine|Dentistry, Oral Surgery & Medicine
Science & Technology|Life Sciences & Biomedicine|Dermatology
Science & Technology|Life Sciences & Biomedicine|Developmental Biology
Science & Technology|Life Sciences & Biomedicine|Emergency Medicine
Science & Technology|Life Sciences & Biomedicine|Endocrinology & Metabolism
Science & Technology|Life Sciences & Biomedicine|Entomology
Science & Technology|Life Sciences & Biomedicine|Environmental Sciences & Ecology
Science & Technology|Life Sciences & Biomedicine|Evolutionary Biology
Science & Technology|Life Sciences & Biomedicine|Fisheries
Science & Technology|Life Sciences & Biomedicine|Food Science & Technology
Science & Technology|Life Sciences & Biomedicine|Forestry
Science & Technology|Life Sciences & Biomedicine|Gastroenterology & Hepatology
Science & Technology|Life Sciences & Biomedicine|General & Internal Medicine
Science & Technology|Life Sciences & Biomedicine|Genetics & Heredity
Science & Technology|Life Sciences & Biomedicine|Geriatrics & Gerontology
Science & Technology|Life Sciences & Biomedicine|Health Care Sciences & Services
Science & Technology|Life Sciences & Biomedicine|Hematology
Science & Technology|Life Sciences & Biomedicine|Immunology
Science & Technology|Life Sciences & Biomedicine|Infectious Diseases

Science & Technology|Life Sciences & Biomedicine|Integrative & Complementary Medicine
Science & Technology|Life Sciences & Biomedicine|Legal Medicine
Science & Technology|Life Sciences & Biomedicine|Marine & Freshwater Biology
Science & Technology|Life Sciences & Biomedicine|Mathematical & Computational Biology
Science & Technology|Life Sciences & Biomedicine|Medical Ethics
Science & Technology|Life Sciences & Biomedicine|Medical Informatics
Science & Technology|Life Sciences & Biomedicine|Medical Laboratory Technology
Science & Technology|Life Sciences & Biomedicine|Microbiology
Science & Technology|Life Sciences & Biomedicine|Mycology
Science & Technology|Life Sciences & Biomedicine|Neurosciences & Neurology
Science & Technology|Life Sciences & Biomedicine|Nursing
Science & Technology|Life Sciences & Biomedicine|Nutrition & Dietetics
Science & Technology|Life Sciences & Biomedicine|Obstetrics & Gynecology
Science & Technology|Life Sciences & Biomedicine|Oncology
Science & Technology|Life Sciences & Biomedicine|Ophthalmology
Science & Technology|Life Sciences & Biomedicine|Orthopedics
Science & Technology|Life Sciences & Biomedicine|Otorhinolaryngology
Science & Technology|Life Sciences & Biomedicine|Paleontology
Science & Technology|Life Sciences & Biomedicine|Parasitology
Science & Technology|Life Sciences & Biomedicine|Pathology
Science & Technology|Life Sciences & Biomedicine|Pediatrics
Science & Technology|Life Sciences & Biomedicine|Pharmacology & Pharmacy
Science & Technology|Life Sciences & Biomedicine|Physiology
Science & Technology|Life Sciences & Biomedicine|Plant Sciences
Science & Technology|Life Sciences & Biomedicine|Psychiatry
Science & Technology|Life Sciences & Biomedicine|Public, Environmental & Occupational Health
Science & Technology|Life Sciences & Biomedicine|Radiology, Nuclear Medicine & Medical Imaging
Science & Technology|Life Sciences & Biomedicine|Rehabilitation
Science & Technology|Life Sciences & Biomedicine|Reproductive Biology
Science & Technology|Life Sciences & Biomedicine|Research & Experimental Medicine
Science & Technology|Life Sciences & Biomedicine|Respiratory System
Science & Technology|Life Sciences & Biomedicine|Rheumatology
Science & Technology|Life Sciences & Biomedicine|Sport Sciences
Science & Technology|Life Sciences & Biomedicine|Substance Abuse
Science & Technology|Life Sciences & Biomedicine|Surgery
Science & Technology|Life Sciences & Biomedicine|Toxicology
Science & Technology|Life Sciences & Biomedicine|Transplantation
Science & Technology|Life Sciences & Biomedicine|Tropical Medicine
Science & Technology|Life Sciences & Biomedicine|Urology & Nephrology

Science & Technology|Life Sciences & Biomedicine|Veterinary Sciences
Science & Technology|Life Sciences & Biomedicine|Virology
Science & Technology|Life Sciences & Biomedicine|Zoology
Science & Technology|Physical Sciences|Physical Sciences - Other Topics
Science & Technology|Physical Sciences|Astronomy & Astrophysics
Science & Technology|Physical Sciences|Chemistry
Science & Technology|Physical Sciences|Crystallography
Science & Technology|Physical Sciences|Electrochemistry
Science & Technology|Physical Sciences|Geochemistry & Geophysics
Science & Technology|Physical Sciences|Geology
Science & Technology|Physical Sciences|Mathematics
Science & Technology|Physical Sciences|Meteorology & Atmospheric Sciences
Science & Technology|Physical Sciences|Mineralogy
Science & Technology|Physical Sciences|Mining & Mineral Processing
Science & Technology|Physical Sciences|Oceanography
Science & Technology|Physical Sciences|Optics
Science & Technology|Physical Sciences|Physical Geography
Science & Technology|Physical Sciences|Physics
Science & Technology|Physical Sciences|Polymer Science
Science & Technology|Physical Sciences|Thermodynamics
Science & Technology|Physical Sciences|Water Resources
Science & Technology|Technology|Technology - Other Topics
Science & Technology|Technology|Acoustics
Science & Technology|Technology|Automation & Control Systems
Science & Technology|Technology|Computer Science
Science & Technology|Technology|Construction & Building Technology
Science & Technology|Technology|Energy & Fuels
Science & Technology|Technology|Engineering
Science & Technology|Technology|Imaging Science & Photographic Technology
Science & Technology|Technology|Information Science & Library Science
Science & Technology|Technology|Instruments & Instrumentation
Science & Technology|Technology|Materials Science
Science & Technology|Technology|Mechanics
Science & Technology|Technology|Metallurgy & Metallurgical Engineering
Science & Technology|Technology|Microscopy
Science & Technology|Technology|Nuclear Science & Technology
Science & Technology|Technology|Operations Research & Management Science
Science & Technology|Technology|Remote Sensing
Science & Technology|Technology|Robotics
Science & Technology|Technology|Spectroscopy
Science & Technology|Technology|Telecommunications
Science & Technology|Technology|Transportation

Social Sciences|Social Sciences - Other Topics
Social Sciences|Archaeology
Social Sciences|Area Studies
Social Sciences|Biomedical Social Sciences
Social Sciences|Business & Economics
Social Sciences|Communication
Social Sciences|Criminology & Penology
Social Sciences|Cultural Studies
Social Sciences|Demography
Social Sciences|Education & Educational Research
Social Sciences|Ethnic Studies
Social Sciences|Family Studies
Social Sciences|Geography
Social Sciences|Government & Law
Social Sciences|International Relations
Social Sciences|Linguistics
Social Sciences|Mathematical Methods In Social Sciences
Social Sciences|Psychology
Social Sciences|Public Administration
Social Sciences|Social Issues
Social Sciences|Social Work
Social Sciences|Sociology
Social Sciences|Urban Studies
Social Sciences|Women's Studies

Current Contents Subject Codes

The value of the subject element is the subject area or discipline to which the source publication has been assigned. Subjects are assigned to one of the nine editions of Current Contents. (See page 38.)

XML Tag	Example
<subject code="" edition="">	<subject code="F" edition="CCCA">FOOD SCIENCE/NUTRITION</ subject>

Current Contents Editions and Subjects

Agriculture, Biology & Environmental Sciences (CCCA)

Subject Code	Subject (Discipline)
CMA	Agricultural Chemistry
A/A	Agriculture/Agronomy
AS	Animal Sciences
AQU	Aquatic Sciences
BIO	Biology
BTC	Biotechnology & Applied Microbiology

CCB	Current Book Contents
ENT	Entomology/Pest Control
ENV	Environment/Ecology
F	Food Science/Nutrition
MUL	Multidisciplinary
PL	Plant Sciences
VET	Veterinary Medicine/Animal Health

Arts & Humanities (CCCY)

Subject Code	Subject (Discipline)
ARC	Archaeology
ART	Arts & Architecture
CLS	Classical Studies
CCB	Current Book Contents
GEN	General
HIS	History
LIP	Language & Linguistics
LIT	Literature
PER	Performing Arts
PHL	Philosophy
REL	Religion & Theology

Clinical Medicine (CCCC)

Subject Code	Subject (Discipline)
AIC	Anesthesia & Intensive Care
CAR	Cardiovascular & Respiratory Systems
PSY	Clinical Psychology & Psychiatry
CCB	Current Book Contents
DEN	Dentistry/Oral Surgery & Medicine
DER	Dermatology
GAS	Gastroenterology and Hepatology
GNC	General & Internal Medicine
HEM	Hematology
HLT	Health Care Sciences & Services
INF	Clinical Immunology & Infectious Disease
MED	Research/Laboratory Medicine & Medical Technology
NEU	Neurology
NUR	Nursing
NUT	Endocrinology, Metabolism & Nutrition
ONC	Oncology
OPH	Ophthalmology
ORT	Orthopedics, Rehabilitation & Sports Medicine

OTO	Otolaryngology
PED	Pediatrics
PMC	Pharmacology/Toxicology
RAD	Radiology, Nuclear Medicine & Imaging
REP	Reproductive Medicine
RHU	Rheumtology
SOC	Environmental Medicine & Public Health
SUR	Surgery
URO	Urology & Nephrology

Engineering, Computing & Technology (CCCT)

1. **Subject Code**	**Subject (Discipline)**
2. AER	Aerospace Engineering
3. ARA	AI, Robotics, and Automatic Control
4. CME	Chemical Engineering
5. CIV	Civil Engineering
6. CSE	Computer Science & Engineering
7. CCB	Current Book Contents
8. EEE	Environmental Engineering & Energy
9. EL	Electrical & Electronics Engineering
10. EMA	Engineering Mathematics
11. GNE	Engineering Management/General
12. GPM	Geological, Petroleum & Mining Engineering
13. IST	Information Technology & Communication Systems
14. I/M	Instrumentation & Measurement
15. MTR	Materials Science & Engineering
16. MEC	Mechanical Engineering
17. MET	Metallurgy
18. NCL	Nuclear Engineering
19. O/A	Optics & Acoustics

Life Sciences (CCCP)

Subject Code	**Subject (Discipline)**
AN	Animal & Plant Sciences
BIL	Biochemistry & Biophysics
CVS	Cardiovascular & Hematology Research
CML	Chemistry & Analysis
CEL	Cell & Developmental Biology
CCB	Current Book Contents

END	Endocrinology, Nutrition & Metabolism
EXP	Experimental Biology
IMM	Immunology
DGX	Medical Research, Diagnosis & Treatment
MGN	Medical Research, General Topics
OGS	Medical Research, Organs & Systems
MCB	Microbiology
MBG	Molecular Biology & Genetics
MUL	Multidisciplinary
BEH	Neurosciences & Behavior
CGX	Oncogenesis & Cancer Research
PHM	Pharmacology & Toxicology
PSL	Physiology

Physical, Chemical & Earth Sciences (CCCS)

Subject Code	Subject (Discipline)
APP	Applied Physics/Condensed Matter/Materials Science
CMP	Chemistry
CCB	Current Book Contents
EAR	Earth Sciences
INC	Inorganic & Nuclear Chemistry
MTH	Mathematics
MUL	Multidisciplinary
ORG	Organic Chemistry/Polymer Science
PHC	Physical Chemistry/Chemical Physics
PHS	Physics
SIA	Spectroscopy/Instrumentation/Analytical Sciences
SP	Space Sciences

Social & Behavioral Sciences (CCCB)

Subject Code	Subject (Discipline)
ANT	Anthropology
ECO	Economics
EDU	Education
COM	Communication
CCB	Current Book Contents
GEO	Environmental Studies, Geography & Development
LAW	Law
LIB	Library & Information Science
MGT	Management
POL	Political Science & Public Administration
PSI	Psychiatry

PSO	Psychology
PUB	Public Health & Health Care Science
REH	Rehabilitation
S/I	Social Work & Social Policy
S/S	Sociology & Social Sciences

Business Collection (CCCEC)

Subject Code	Subject (Discipline)
ACC	Accounting & Finance
BEC	Business & Economics
EMP	Employee Relations & Human Resources
ISC	Computer Technology & Information Systems
LW	Business Law & Reviews
MOR	Management & Organization
MAR	Marketing & Business Communication
PSP	Political Science, Public Admin. & Development

Electronic & Telecommunications Collection (CCCET)

Subject Code	Subject (Discipline)
CPP	Chemistry & Physics, Pure & Applied
CST	Computer Science, Technology & Applications
ELE	Electronics & Electrical Engineering
OLR	Optics & Laser Research & Technology
SEM	Semiconductors & Solid State Materials Technology
SPC	Signal Processing/Circuits & Systems
TCT	Telecommunications Technology
TRD	Technology R&Danagement

Appendix 2 Document Types

Document Types

The value of the <doctype> element identifies the document type. Most Web of Science™ Core Collection and Current Contents Connect® records have one document type, however it is also possible that they may have two. This is most often the case for items with type “Proceedings Paper” and “Early Access.” For instance, a Proceeds Paper may also be an Article if the paper was presented at a conference, but subsequently published in an academic journal.

An example of a paper with multiple document types would look like:

```
<doctypes count="2">
<doctype>Article</doctype>
<doctype>Early Access</doctype>
</doctypes>
```

Web of Science Core Collection Document Types

Abstract of Published Item
Art Exhibit Review
Article
Bibliography
Biographical-Item
Book
Book Chapter
Book Review
Chronology
Correction
Correction, Addition
Dance Performance Review
Data Paper
Database Review
Discussion (coded as Editorial Material effective 1996)
Early Access
Editorial Material

Excerpt
Fiction, Creative Prose
Film Review
Hardware Review
Item About an Individual
Letter
Main Cite
Meeting Abstract
Meeting Summary
Music Performance Review
Music Score
Music Score Review
News Item
Note (coded as Article effective 1996)
Poetry
Proceedings Paper
Press Digest
Record Review
Reprint
Retracted Publication
Retraction
Review
Script
Software Review
Theater Review
TV Review, Radio Review
TV Review, Radio Review, Video

Current Contents Connect Document Types

Art Exhibit Review
Article
Bibliography
Biographical-Item
Book

Book Chapter
Book Review
Correction
Dance Performance Review
Database Review
Discussion (coded as Editorial Material effective 1996)
Early Access
Editorial Material
Excerpt
Fiction, Creative Prose
Film Review
Hardware Review
Letter
Meeting Abstract
Meeting Summary
Music Performance Review
Music Score
Music Score Review
News Item
Note (coded as Article effective 1996)
Poetry
Record Review
Reprint
Review
Script
Software Review
TV Review, Radio Review
Theater Review

Appendix 3 Abbreviations and Acronyms

Address Abbreviations

XML Tag	Example
<full_address>	<full_address>Auburn Univ, Dept Chem & Biochem, Auburn, AL 36849 USA</full_address>

Address Abbreviations

Abteilung
Abt

Academy, Academic
Acad

Accident
Accid

Acquired Immunodeficiency Syndrome
AIDS

Administration, Administrative
Adm

Advance(d)
Adv

Aerospace
Aerosp

Agency
Agcy

Agriculture, Agricultural
Agr

Air Force
AF

Air Force Base
AFB

Akademy
Akad

America(n)
Amer

Analysis
Anal

Anatomy, Anatomie, Anatomia
Anat

Angewandte
Angew

Animal
Anim

Anthropol (any ending such as Anthropology or Anthropologist)
Anthropol

Apparatus

Kardiologie
Kardiol

Kemiai
Kem

Klinik
Klin

Konference/Konferenz
Konf

Laboratories
Labs

Laboratory
Lab

Lecture
Lect

Library
Lib

Limited
Ltd

Maladies
Malad

Manufacturing
Mfg

Marketing
Mkt

Material
Mat

Mathematics
Math

Mechanical
Mech

Medicine, Medical, Medicinal
Med

Meditskkaya
Med

Medizin
Med

Memorial

Apparat

Applied
Appl

Arch (any ending such as Archive or Archives)
Arch

Arthritis
Arthrit

Association
Assoc

Astrophysics
Astrophys

Atomic
Atom

Augenklinik
Augenklin

Avenue
Ave

Behavior(al)
Behav

Biochemistry
Biochem

Bibliog (any ending such as Bibliography or Bibliographies)
Bibliog

Biotechnology
Biotechnol

Biol (any ending such as Biology or Biologist)
Biol

Botany, Botanic, Botanical
Bot

Boulevard
Blvd

Brothers
Bros

Building
Bldg

Bureau
Bur

Cancer
Canc

Center
Ctr

Central
Cent

Chem (any ending such as Chemistry or Chemical)
Chem

Chimie
Chim

Chirurgie
Chirurg

Mem

Metabolic, Metabolism
Metab

Metal, Metallurgy, Metallurgical
Met

Miltary
Mil

Mining
Min

Ministry
Minist

Molecular, Molecule, Molekular
Mol

Mount, Mountain
Mt

Nacional
Nacl

National
Natl

Nature, Natural
Nat

Navigation, Navigational
Nav

Nazionale
Nazl

North
N

Northeast, Northeastern
Ne

Northern
No

Northwest, Northwestern
Nw

Nuclear
Nucl

Nuklear
Nukl

Nutrition
Nutr

Observatory
Observ

Obstetrics
Obstet

Office
Off

Organization
Org

Ospedale
Osped

Paediatrics

Cientificas
Cient

Clin (any ending such as Clinic or Clinical)
Clin

College
Coll

Comite
Com

Committee
Comm

Communication
Commun

Company
Co

Comparat(any ending such as Comparative)
Comparat

Compounds
Cpds

Computer
Comp

Conference
Conf

Corporation
Corp

County
Cty

Cytology, Cytologie, Cytologi
Cytol

Cultivation
Cultivat

Defence or Defense
Def

Dental, Dentistry
Dent

Department
Dept

Deutsch
Deutsch

Development
Dev

Diabetes
Diabet

Diagnosis
Diag

Disease
Dis

District
Dist

Division
Paediat

Park
Pk

Parkway
Pkwy

Pediatrics
Pediat

Petroleum
Petr

Pharmaceut (any ending such as Pharmaceutical or Pharmaceuticals)
Pharmaceut

Pharmacol (any ending such as Pharmacology or Pharmacologist)
Pharmacol

Pharmacy
Pharm

Physics, Physical, Physician(s)
Phys

Physiol (any ending such as Physiology or Physiologist)
Physiol

Place
Pl

Post Office
Po

Post Office Box
Pob

Process, Processing
Proc

Products
Prod

Professor
Prof

Propulsion
Prop

Protein
Prot

Province, Provincial
Prov

Psychiatry, Psychiatric
Psychiat

Psychol (any ending such as Psychology or Psychologist)
Psychol

Pulmonary
Pulm

Quimica
Quim

Radiat (any ending such as Radiation)

Div

Drive
Dr

East
E

Econ (any ending such as Economy or Economist)
Econ

Education
Educ

Egyetem
Egyet

Electric, Electronic, Electricity
Elect

Electroencephalographic
EEG

Elektrische/Elektronik
Elekt

Engineering
Engn

Environment, Environmental
Environm

Establishment, Etablissement
Estab

Etablissement
Etab

Étude
Etud

Experiment(al)
Expt

Faculty
Fac

Fakultat
Fak

Farmacia
Farm

Federal
Fed

Fisica
Fis

Forschung
Forsch

Fort
Ft

Foundation
Fdn

Fysica
Fys

General
Gen

Geology

Radiat

Recherche
Rech

Rehabilitation
Rehabil

Reproduction, Reproductive
Reprod

Research
Res

Respiratory
Resp

Ricerche
Ric

Road
Rd

Saint, Streete
St

Sanatorium
Sanat

Sanitary
Sanit

School
Sch

Science, Scientific
Sci

Semiconductor
Semicond

Service
Serv

Society
Soc

South
S

Southeast, Southeastern
Se

Southern
So

Southwest, Southwestern
Sw

Spectroscopy
Spect

Square
Sq

Standard
Stand

Station
Stn

Statistics, Statistical
Stat

Strasse, Straat

Geol

Gesellschaft
Gesell

Government
Govt

Graduate
Grad

Group
Grp

Health
Hlth

Heights
Hts

History, Historic, Historical
Hist

Hochschule
Hsch

Hogeskole
Hgsk

Hopital
Hop

Horticulture, Horticultural
Hort

Hospital
Hosp

Husbandry
Husb

Hygiene
Hyg

Immunology
Immunol

Incorporated
Inc

Industry
Ind

Infectious
Infect

Infirmary
Infirm

Ingegneria
Ingn

Institute
Inst

International
Int

Intro (any ending such as Introduction)
Intro

Island
Isl

Str

Street
St

Structure, Structural
Struct

Substance
Subst

Superior
Super

Surgery, Surgeon(s)
Surg

Synthesis
Synth

System(s)
Syst

Technical, Technische, Technique
Tech

Technical High School, Technische Hochschule
TH

Telephone
Tel

Temperature
Temp

Territory, Terrestrial
Terr

Textile(s)
Text

Theoretical
Theoret

Transact (any ending such as Transactions)
Transact

Tuberculosis
Tb

Tudomanyos
Tud

United States
US

University
Univ

Vascular
Vasc

Veterans Administration
Vet Adm

Veterinary, Verterans
Vet

Weapons
Weap

Welfare
Welf

West
W

Istituto
Ist

Junior
Jr

Wissenschaft (es) (er) (en)
Wissensch

Zentral
Zent

Country Abbreviations

Names of countries are spelled out as space permits (up to 15 characters). The following abbreviations are used for countries with names longer than 15 characters.

Antigua & Barbuda
Antigua & Barbu

Bosnia & Hercegovina
Bosnia & Herceg

Central African Republic
Cent Afr Republ

Dominican Republic
Dominican Rep

Equatorial Guinea
Equat Guinea

French Austral Lands
Fr Austr Lands

French Polynesia
Fr Polynesia

Malagasy Republic
Malagasy Republ

Mongolian People's Republic
Mongol Peo Rep

Netherlands Antilles
Neth Antilles

Northern Ireland
North Ireland

Papua New Guinea
Papua N Guinea

People's Republic of China
Peoples R China

Republic of Georgia

Rep of Georgia

Sao Tome E Principe
Sao Tome E Prin

Saint Kitts & Nevis
St Kitts & Nevi

Trinidad & Tobago
Trinid & Tobago

United Arab Emirates
U Arab Emirates

United States of America
USA

States, Provinces and Territories

United States and Possessions

Alaska **AK**	Kentucky **KY**	Oklahoma **OK**
Alabama **AL**	Louisiana **LA**	Oregon **OR**
Arkansas **AR**	Massachusetts **MA**	Pennsylvania **PA**
American Samoa **AS**	Maryland **MD**	Puerto Rico **PR**
Arizona **AZ**	Maine **ME**	Rhode Island **RI**
California **CA**	Michigan **MI**	South Carolina **SC**
Colorado **CO**	Minnesota **MN**	South Dakota **SD**
Connecticut **CT**	Missouri **MO**	Tennessee **TN**
Canal Zone **CZ**	Mississippi **MS**	Trust Territories **TT**
District of Columbia **DC**	Montana **MT**	Texas **TX**
Delaware **DE**	North Carolina **NC**	US Overseas Military **AA, AE, AP**
Florida **FL**	North Dakota **ND**	Utah **UT**
Georgia **GA**	Nebraska **NE**	Virginia **VA**
Guam **GU**	Nevada **NV**	Virgin Islands **VI**
Hawaii **HI**	New Hampshire **NH**	Vermont **VT**
Iowa **IA**	New Jersey **NJ**	Washington **WA**
Idaho **ID**	New Mexico **NM**	Wisconsin **WI**
Illinois **IL**	New York **NY**	West Virginia **WV**
Indiana **IN**	Northern Mariana Islands **CM**	Wyoming **WY**
Kansas **KS**	Ohio **OH**	

Canadian Provinces and Territories

Alberta **AB**	Ontario **ON**

British Columbia **BC** **Manitoba** **MB** New Brunswick **NB** Newfoundland **NF** Nova Scotia **NS**	Prince Edward Island **PE** Quebec **PQ** Saskatchewan **SK** Northwest Territories **NT** Yukon Territory **YT**

Australian States and Territories

Australian Capital Territory **ACT** New South Wales **NSW** Northern Territory **NT** Queensland **QLD**	South Australia **SA** Tasmania **TAS** Victoria **VIC** Western Australia **WA**

Corporate and Institution Acronyms and Abbreviations

XML Tag	Example
<organization>	<organization>WHO</organization>

Acronyms or abbreviations are used in place of the full titles of organizations, companies and governmental agencies wherever possible.

Cited Patent Country Abbreviations

The following are abbreviations for the names of issuing countries used in the <references> block of the XML raw data, when the reference is to a cited patent.

XML Tag	Example
<patent_no>	<patent_no>US 4096196</patent_no>

The ISO two-character standard country abbreviation was adopted for issuing country names in 1995. Please note that variations of these abbreviations can be found in the data, particularly in older files.

Cited Patent Country Abbreviations

Abbreviation Pre-1995	Abbrev 1995 & Later	Country
ARG	AR	Argentina
AUST	AU	Australia
AU	AT	Austria
BE	BE	Belgium

BRAZ	BR	Brazil
BU	BG	Bulgaria
CAN	CA	Canada
	CL	Chile
CH	CN	China
	HR	Croatia
CZ	CZ	Czechoslovakia/Czech Republic
DA	DK	Denmark
EGY	EG	Egypt
	EP	European
FI	FI	Finland
FR	FR	France
GB	GB	Great Britain/United Kingdom
GE	DE	Germany
	GR	Greece
	HK	Hong Kong
HU	HU	Hungary
IND	IN	India
IR	IE	Ireland
IS	IL	Israel
IT	IT	Italy
JA	JP	Japan
MEX	MX	Mexico
NE	NL	Netherlands
	NG	Nigeria
NO	NO	Norway
NZ	NZ	New Zealand
PH	PH	Philippines
PL	PL	Poland
PT	PT	Portugal
RM	RO	Romania
	RU	Russian Federation
	SA	Saudi Arabia
	SG	Singapore
	SK	Slovakia
	SI	Slovenia

SA	ZA	South Africa
SAM		South America
	KR	South Korea
SP	ES	Spain
SW	SE	Sweden
SWIT	CH	Switzerland
	TW	Taiwan
	TH	Thailand
	TR	Turkey
	UA	Ukraine
US	US	United States (also used for USSR some years)
USSR		Union of Soviet Socialist Republics
VE	VE	Venezuela
	WO	World
YU	YU	Yugoslavia