
MAPPING BATH PROFILE SEARCHES TO Z39.50 ATTRIBUTE ARCHITECTURE SETS

In this document, the basic bibliographic searches, as defined in Functional Area A of the Bath Profile, are mapped to search attributes of the Bib-2 Attribute Set (OID: 1.2.840.100003.3.18). Bib-2 was designed for use when searching bibliographic databases containing description of a wide range of bibliographic materials, created according to accepted cataloguing rules such as the Anglo-American Cataloguing Rules. It was formulated according to the Z39.50 Attribute Architecture and uses attributes from more general attribute sets, such as the Cross-Domain Attribute Set and the Utility Attribute Set. In addition, specific attributes have been defined in the Bib-2 Attribute Set to support the searching of bibliographic databases.

AUTHOR SEARCHES

Author Search — Keyword: To search for complete words in access points that contain the name of a person or entity responsible for a resource (Bath 2.01. 5.A.0.1.):

- (1) Access [Cross-domain] = (3) name
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (2) all of these words
- (9) Format/structure [Bib-2] = (1) set of words
- (12) Functional Qualifier [Bib-2] = (aut) author relator code

Author Search — Keyword with Right Truncation: To search for complete word beginning with the specified character string in fields that contain the name of a person or entity responsible for a resource (Bath 2.01. 5.A.1.1.):

- (1) Access [Cross-domain] = (3) name
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (2) all of these words
- (5) Expansion/interpretation [Utility] = (4) right truncation on character boundary
- (9) Format/structure [Bib-2] = (1) set of words
- (12) Functional Qualifier [Bib-2] = (aut) author relator code

Author Search — Exact Match: To search for complete string as specified in fields that contain the name of a person or entity responsible for a resource (Bath 2.01. 5.A.1.2.):

- (1) Access [Cross-domain] = (3) name
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Utility] = (15) no other expansion
- (9) Format/structure [Bib-2] = (3) name, comma delimited, entry element first
- (12) Functional Qualifier [Bib-2] = (aut) author relator code

Author Search — First Words in Field: To search for complete word(s) in the order specified in author fields, where the field begins with the specified character string (Bath 2.01. 5.A.1.2.):

- (1) Access [Cross-domain] = (3) name

- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (4) left anchored
- (5) Expansion/interpretation [Utility] = (2) right truncation on word boundary
- (9) Format/structure [Bib-2] = (3) name, comma delimited, entry element first
- (12) Functional Qualifier [Bib-2] = (aut) author relator code

Author Search — First Characters in Field: To search for the specified character string in author fields, where the author field begins with the specified character string (Bath 2.01. 5.A.1.4.):

- (1) Access [Cross-domain] = (3) name
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (4) left anchored
- (5) Expansion/interpretation [Utility] = (4) right truncation on character boundary
- (9) Format/structure [Bib-2] = (3) name, comma delimited, entry element first
- (12) Functional Qualifier [Bib-2] = (aut) author relator code

TITLE SEARCHES

Title Search — Keyword: To search for a complete word in a title of a resource (Bath 2.01. 5.A.0.2.):

- (1) Access [Cross-domain] = (1) title
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (2) all of these words
- (9) Format/structure [Bib-2] = (1) set of words

Title Search — Keyword with Right Truncation: To search for a complete word beginning with the specified character string in fields that contain a title of a resource (Bath 2.01. 5.A.1.5.):

- (1) Access [Cross-domain] = (1) title
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (2) all of these words
- (5) Expansion/interpretation [Utility] = (4) right truncation on character boundary
- (9) Format/structure [Bib-2] = (1) set of words

Title Search — Exact Match: To search for the complete string as specified in fields that contain a title of a resource. (Bath 2.01. 5.A.1.6.):

- (1) Access [Cross-domain] = (1) title
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Utility] = (1) adjacent words
- (9) Format/structure [Bib-2] = (1) set of words

Title Search — First Words in Field: To search for complete word(s) in the order specified in fields that contain a title of a resource where the field begins with the specified character string (Bath 2.01. 5.A.1.7.):

- (1) Access [Cross-domain] = (1) title
- (8) Comparison [Utility] = (3) equal

- (5) Expansion/interpretation [Bib-2] = (1) adjacent words
- (5) Expansion/interpretation [Bib-2] = (4) left anchored
- (5) Expansion/interpretation [Utility] = (2) right truncation on word boundary
- (9) Format/structure [Bib-2] = (1) set of words

Title Search — First Characters in Field: To search for the specified character string in fields that contain a title of a resource, where the title begins with the specified character string (Bath 2.01. 5.A.1.8.):

- (1) Access [Cross-domain] = (1) title
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (1) adjacent words
- (5) Expansion/interpretation [Bib-2] = (4) left anchored
- (5) Expansion/interpretation [Utility] = (4) right truncation on character boundary
- (9) Format/structure [Bib-2] = (1) set of words

Key Title Searches: The Key Title searches specified as Bibliographic Level 2 searches (Bath 2.01 Section 5.A.2.1 – 5.A.2.5) can be obtained by adding the (2) Semantic Qualifier of (11) Key Title to the corresponding Title search.

SUBJECT SEARCHES:

Subject Search — Keyword: To search for a complete word in subject fields in a record (Bath 2.01 5.A.0.3.):

- (1) Access [Cross-domain] = (2) subject
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (2) all of these words
- (9) Format/structure [Bib-2] = (1) set of words

Subject Search — Keyword with Right Truncation: To search for the complete word beginning with the specified character string in subject fields of a record (Bath 2.01. 5.A.1.9.):

- (1) Access [Cross-domain] = (2) subject
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (2) all of these words
- (5) Expansion/interpretation [Utility] = (4) right truncation on character boundary
- (9) Format/structure [Bib-2] = (1) set of words

Subject Search — Exact Match: To search for the complete string specified in subject fields (Bath 2.01. 5.A.1.10.):

- (1) Access [Cross-domain] = (2) subject
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Utility] = (1) adjacent words
- (9) Format/structure [Bib-2] = (1) set of words

Subject Search — First Words in Field: To search for complete words(s) in the order specified in subject fields (Bath 2.01. 5.A.1.11.):

- (1) Access [Cross-domain] = (2) subject
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (1) adjacent words
- (5) Expansion/interpretation [Bib-2] = (4) left anchored
- (5) Expansion/interpretation [Utility] = (2) right truncation on word boundary
- (9) Format/structure [Bib-2] = (1) set of words

Subject Search — First Characters in Field: To search for the specified character string in subject fields, where the subject field begins with the specified character string (Bath 2.01. 5.A.1.12.):

- (1) Access [Cross-domain] = (2) subject
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (1) adjacent words
- (5) Expansion/interpretation [Bib-2] = (4) left anchored
- (5) Expansion/interpretation [Utility] = (4) right truncation on character boundary
- (9) Format/structure [Bib-2] = (1) set of words

SEARCHES OVER ALL ACCESS POINTS

Any Search — Keyword: To search for one or more complete words in all access points supported by the server (Bath 2.01. 5.A.0.4.):

- (1) Access [Utility] = (11) all access points
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (2) all of these words
- (9) Format/structure [Bib-2] = (1) set of words

Any Search — Keyword with Right Truncation: To search for the complete word beginning with the specified character string in all access points supported by the server (Bath 2.01. 5.A.1.13.):

- (1) Access [Utility] = (11) all access points
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Bib-2] = (2) all of these words
- (5) Expansion/interpretation [Utility] = (4) right truncation on character boundary
- (9) Format/structure [Bib-2] = (1) set of words

STANDARD IDENTIFIER SEARCHES

Standard Identifier Search: To search for any of the standard identifiers such as ISBN, ISSN, CODEN, etc., without identifying the specific standard number scheme (Bath 2.01. 5.A.1.14.):

- (1) Access [Cross-Domain] = (8) resource identifier
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Utility] = (15) no other expression

DATE SEARCHES:

Date of Publication Search: To search for the year in which a resource was published (Bath 2.01. 5.A.1.15.):

- (1) Access [Cross-Domain] = (5) date
- (8) Comparison [Utility] = (3) equal
- (5) Expansion/interpretation [Utility] = (15) no other expression
- (9) Format/structure [Bib-2] = (1) ISO 8601:1998
- (2) Functional qualifier [Bib-2] = (4) publication date

Date of Publication Range Search: To search for a resource published between two specified dates (Bath 2.01. 5.A.2.9.):

- (1) Access [Cross-Domain] = (5) date
- (8) Comparison [Utility] = (9) contained within
- (5) Expansion/interpretation [Utility] = (15) no other expression
- (9) Format/structure [Bib-2] = (1) ISO 8601:1998
- (2) Functional qualifier [Bib-2] = (4) publication date

REFERENCES:

Attribute Architecture

Z39.50 Attribute Architecture. December 2000.
<<http://www.loc.gov/z3950/agency/attrarch/attrarch.html>>

Bib-2

Bib-2 Attribute Set (Z39.50). Version 1.0 2002/03/31
<http://www.nlc-bnc.ca/iso/z3950/bib2_v1_0>

Cross domain:

The Z39.50 Cross-Domain Attribute Set. Version 1.4. 1999/08/04
<<http://www.oclc.org/~levan/docs/crossdomainattributeset.html>>

Utility:

Z39.50 Utility Attribute Set: Version 1. November 1999.
<<http://www.loc.gov/z3950/agency/attrarch/util.html>>

DOCUMENT HISTORY:

Preliminary draft prepared by Lennie Stovel, October 17, 2001; updated by Barb Shuh, 12 March 2002, with changes made in response to Joe Zeeman's comments of 19 October 2001 & the release of Draft 1 of Version 2 of Bath Profile.

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