

NorZIG Z39.50 Profile Version 2 Conformance statement

Draft 2
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This statement describes in detail how a Z39.50 product conforms to **NorZIG Z39.50 Profile Version 2** (<http://www.bibsys.no/norzig/profiles/profile2.html>) and to **NorZIG Holdings Profile version 2** (<http://www.bibsys.no/norzig/profiles/holdings2.html>).

This form may be used to describe two different product types:

Z39.50 target software: The capabilities of the software as such should be described, regardless of whether a certain option is actually used in a specific implementation or not.

Z39.50 target service: If the target offers access to *more than one* database, it may be necessary to fill in more than one form, depending on the diversity of the databases.

1. Product description

Name of product	
Name and address of supplier	
Name and email address of contact person	
URL for further info	

Type of product (check one):

Z39.50 target software
Z39.50 target service

To be filled in for services only:

Host address	
Port number	
Database name(s)	

(For a service with several databases, the database names that this statement applies to should be listed. If the statement applies to all databases at the target, please enter "ALL".)

1. Profile requirements

This statement applies to the following sections in the profile:

1A. Common requirements	
1B. Bibliographic Search and Retrieval	
1C. Holdings Information Search and Retrieval	
1E. Cross-domain Search and Retrieval	
2. Holdings requirements	

For the rest of this form please use the following codes only:

Y = Yes

N = No

N/A = Not applicable

C = Conditional

In case C is used, it should be accompanied by a note describing the particular details. Please collect all such notes on a separate sheet, and use numbers to reference them: C1, C2 . . .

The C value may be used to indicate that a certain requirement is fulfilled in a subset of the available databases.

1A. Common Requirements

Protocol Version

Targets (Servers) and Origins (Clients) must support <i>ISO 23950 i.e. Z39.50-1995 Version 3</i>	
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Attribute Sets

Targets and Origins must support the <i>Bib-1 attribute set</i> , (i.e., process requests and responses that contain the OID for Bib-1).	
Targets and Origins must support the <i>Bib-1 Diagnostic set</i> .	

Initialisation Facility

Targets may limit access to Origins based on ID/Authentication parameters UserID and Password. In case of denial, the Target must return a diagnostic from the Bib-1 diagnostic set, in the range 1010 to 1023.	
Targets may limit access to Origins based on IP authentication. In case of denial, the Target must return a valid Init response with the following diagnostic from the BIB-1 diagnostic set, 1016: "Init/AC: Blocked network address".	

Termination Facility

Targets and Origins must support the <i>Close Service</i> .	
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ExplainLite Facility

Targets should return an ExplainLite XML document with configuration information in response when requested to do so as part of an Init Request.	
Targets should additionally make the same ExplainLite XML document available on a web server.	

Character Set

Targets and origins must support <i>ISO 8859-1:1998 Latin-1</i> . This applies to character data within: <ul style="list-style-type: none">• Parameters of type InternationalString• Terms within search requests, scan requests and scan responses• NORMARC, SUTRS and XML records	
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1B. Bibliographic Search and Retrieval

Targets must support the Search service and the Present service as specified in this functional area. Additionally, targets should support the Scan service as specified in this functional area.	
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Search Service

Targets and Origins must support Query-type <i>Type-1</i> , i.e. RPN.	
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Targets must support the Database-names " <i>default</i> " and " <i>xxdefault</i> ". In the case when a target includes a database that to some degree is an aggregation of logical sub-databases, it is recommended that these default names should designate this particular database.	
Targets must support the <i>Result-set-name</i> parameter and should attempt to retain at least two named result sets for the duration of a session, if the Origin names at least two result sets.	
A Z39.50 Origin must supply values for the <i>Bib-1</i> attribute types <i>Use</i> and <i>Structure</i> . The Origin should supply values for the remaining four Bib-1 attribute types. Targets must interpret (i.e. neither ignore nor substitute) the values supplied for all of those attribute types, which are submitted in a given query.	
Targets must support the following values for <i>Relation-</i> , <i>Truncation-</i> , <i>Completeness-</i> and <i>Position-</i> attributes. <ul style="list-style-type: none"> • <i>Relation</i> = 3 i.e. <i>equal</i> • <i>Truncation</i> = 100, i.e. <i>do not truncate</i> • <i>Completeness</i> = 1, i.e. <i>Incomplete subfield</i> • <i>Position</i> = 3, i.e. <i>Any position in field</i> If one or more of those four attribute types are missing in a query, the Target may choose to substitute the values given above as default values for the missing attribute type - or reject the incomplete query with the following diagnostic from the Bib-1 diagnostic set, 118: "Unsupported Attribute Combination".	
The following <i>Structure</i> attribute values must be supported together with relevant <i>Use</i> attributes: <ul style="list-style-type: none"> • <i>Phrase</i> = 1 (e.g. "frühstück einer langschläferin") • <i>Word</i> = 2 (e.g. "langschläferin") • <i>Year</i> = 4 (four digits, e.g. "1994") • <i>Name normalised</i> = 101 (last name, first name(s), e.g. "bringsværd, tor åge") • <i>Name un-normalised</i> = 102 (first name last name, e.g. "tor åge bringsværd") Note that in the case of <i>Name normalised</i> , the required syntax is <i>last name, first name(s)</i> . Any spaces between the comma and the first name must be ignored by the Target.	

Targets must support the following combinations of Bib-1 attributes:

Name	Use	Rel	Pos	Struct	Trunc	Compl	
Personal name - normalized	1	3	3	101	1, 100	1	
Corporate name	2	3	3	2	1, 100	1	
Conference name	3	3	3	2	1, 100	1	
Title - phrase	4	3	3	1	100	1	
Title - word	4	3	3	2	1, 100	1	

Title - first characters	4	3	1	1	1	1	
Title - exact	4	3	1	1	100	3	
Title series	5	3	3	2	1, 100	1	
ISBN	7	3	3	2	1, 100	1	
ISSN	8	3	3	2	1, 100	1	
Local number	12	3	3	2	100	1	
Dewey	13	3	3	2	1, 100	1	
UDC	14	3	3	2	1, 100	1	
Local class number	20	3	3	2	1, 100	1	
Subject - phrase	21	3	3	1	100	1	
Subject - word	21	3	3	2	1, 100	1	
Subject - first characters	21	3	1	1	1	1	
Subject - exact	21	3	1	1	100	3	
Date of publication - year	31	3	3	4	100	1	
National bibliography number	48	3	3	2	100	1	
Author - normalized	1003	3	3	101	1, 100	1	
Author - un-normalized	1003	3	3	102	1, 100	1	
Author-name personal	1004	3	3	101	1, 100	1	
Author-name corporate	1005	3	3	102	1, 100	1	
Author-name conference	1006	3	3	102	1, 100	1	
Any	1016	3	3	2	1, 100	1	
Doc-id	1032	3	3	2	100	1	
Possessing institution	1044	3	3	2	100	1	

The requirement to support an attribute combination is not absolute, but should only apply in the case when the data type corresponding to the use attribute is present in the database. If not, the target must fail the search, and return the following diagnostic from the Bib-1 diagnostic set, 114: "Unsupported use attribute".	
Targets are recommended to support additional combinations enumerated in the Bath Profile V1 requirements for Level-1 Bibliographic Search and Retrieval.	

Present Service

Targets must support the following types of *Preferred-record-syntaxes*:

SUTRS	
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NORMARC	
MARC21	

For each of these record syntaxes, targets must support the following *Element-set-names* (ESN):

<i>F</i> for Full, e.g. all available bibliographic elements. Targets should include summary Holdings data in the records, if this information is available (e.g. MARC21 fields 85x and 86x)	
<i>B</i> for Brief, e.g. Author, Title and Publication date.	
<i>R</i> for Reduced, i.e. same bibliographic information as <i>F</i> but without any Holdings data.	

When holdings data elements are supplied as part of a bibliographic record, they must conform to the NorZIG Holdings Profile Version 2.	
Targets must encode all records in <i>ISO 8859-1:1998 Latin-1</i> .	

Scan Service

Targets supporting the Scan service must comply with the requirements in this section.

Targets must support the Database names " <i>default</i> " and " <i>xxdefault</i> ", c.f. the requirement for Search Service.	
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Targets must support the following combinations of Bib-1 attributes:

Name	Use	Structure	
Personal name - normalized	1	101	
Corporate name	2	2	
Conference name	3	2	
Title - phrase	4	1	
Title - word	4	2	
Title series	5	2	
Dewey	13	2	
UDC	14	2	
Local class number	20	2	
Subject - phrase	21	1	
Subject - word	21	2	
Author - normalized	1003	101	
Author-name personal	1004	101	
Author-name corporate	1005	102	
Author-name conference	1006	102	

Any	1016	2	
Possessing institution	1044	2	

The requirement to support an attribute combination is not absolute, but should only apply in the case when the data type corresponding to the use attribute is present in the database. If not, the target should fail the scan, and return the following diagnostic from the BIB-1 diagnostic set, 114: "Unsupported use attribute".	
Target must support <i>Step-size</i> = 0, i.e. "do not skip any entries" and <i>Position-in-response</i> = 1.	
Target must return the number of entries (hits) associated with each SCAN Term.	

1C. Holdings Information Search and Retrieval

Search service

Targets must support the <i>Use</i> attribute number 1044 i.e. <i>Possessing-Institution</i> within bibliographic searches, as required in area B.	
The expected value of this attribute is a code (library symbol or other code) of the institution which possesses the document.	

Present service

Targets must support Level-1 Holdings	
and should support Level-2 Holdings	

Level-1 Holdings

The Minimal bibliographic level holdings data must be returned within NORMARC or MARC 21.	
Level-1 Retrieval of Holdings information is initiated by a Present Request where Record syntax = NORMARC or = MARC21 and ESN = B1.	

Level-2 Holdings

The Summary bibliographic level holdings must be returned within an XML structure corresponding to the Z39.50 Holdings XML Schema for Element Set B2.	
Level-2 Retrieval of Holdings information is initiated by a Present Request where Record syntax = XML and ESN = B2.	

1E. Cross-domain Search and Retrieval

Search service

The requirements for Functional Area B search service all apply, except the support of the attribute combinations.	
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For the Cross-domain search, Origins and Targets must support the following combinations of Bib-1 attributes:

Name	Use	Rel	Pos	Struct	Trunc	Compl	
DC.Title - phrase	1097	3	3	1	1, 100	1	
DC.Title - word	1097	3	3	2	1, 100	1	
DC.Title - first characters	1097	3	1	1	1	1	
DC.Title - exact	1097	3	1	1	100	3	
DC.Creator - normalized	1098	3	3	101	1, 100	1	
DC.Creator - un-normalized	1098	3	3	102	1, 100	1	
DC.Subject - phrase	1099	3	3	1	1, 100	1	
DC.Subject - word	1099	3	3	2	1, 100	1	
DC.Subject - first characters	1099	3	1	1	1	1	
DC.Subject - exact	1099	3	1	1	100	3	
DC.Publisher	1101	3	3	1	1, 100	1	
DC.Date	1102	3	3	2	100	1	
DC.Identifier	1104	3	3	2	100	1	

Present service

Dublin Core metadata elements are encoded according to the DC/RDF XML specification.	
The metadata will correspond to the Reduced (R) Element Set Name	

described in the Present Service specification in functional area B.	
The DC/RDF XML information must be returned in response to a Present Request where Record Syntax = <i>XML</i> and Element Set Name= <i>R</i> . For the purpose of alignment with the ONE-2 profile, a Present Request where Record Syntax = <i>XML</i> and Element Set Name= <i>F</i> should be treated in the same way, however without holdings data.	

2. Holdings requirements

Periodicals

NORMARC:

The target must include one or several 850 fields, containing the following subfields, where the Norwegian descriptions are quoted from the NORMARC standard:

Subfield	Description	Description (Norwegian)	
\$a	Institution/location	Eiende bibliotek/avdeling	
\$b	Sublocation/collection	Filial- avdelings- eller samlingskode	
\$c	Shelving location	Hyllesignatur	
\$g	Holdings string	(Not in NORMARC)	
\$i	First volume	Første bind i biblioteket	
\$j	Parallel numbering for first volume	Parallell bindnummerering til første bind	
\$k	First year	Første år i biblioteket	
\$l	Last volume	Siste bind i biblioteket	
\$m	Parallel numbering for last volume	Parallell bindnummerering til siste bind	
\$n	Last year	Siste år i biblioteket	

MARC21:

The target must include one or several 866 fields, containing the following subfields:

Subfield	Description	
\$a	Holdings string	

SUTRS:

The target should include one or several "records" - each consisting of one or several lines - with the same contents as in the NORMARC case for subfields \$a, \$b and \$c, but without subfield information or other punctuation. Holdings data should be expressed in human-readable form, e.g. in the same way as in subfield \$g.	
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Monographs

NORMARC:

The target must include one or several 850 fields, containing the following subfields, where the Norwegian descriptions are quoted from the NORMARC standard:

Subfield	Description	Description (Norwegian)	
\$a	Institution/location	Eiende bibliotek/avdeling	
\$b	Sublocation/collection	Filial- avdelings- eller samlingskode	
\$c	Shelving location	Hyllesignatur	
\$f	Use restrictions	(Not in NORMARC)	
\$h	Circulation status	(Not in NORMARC)	
\$x	Date of circulation status	(Not in NORMARC)	
\$y	Loan expiry date	(Not in NORMARC)	

MARC21:

The Target must include one or several 852 fields, containing the following subfields:

Subfield	Description	
\$a	Institution/location	
\$b	Sublocation/collection	
\$c	Shelving location	

SUTRS:

The target should include one or several "records" - each consisting of one or several lines - with the same contents as in the NORMARC case for subfields \$a, \$b and \$c, but without subfield information or other punctuation. Use restrictions and circulation status should be expressed in a human-readable form.	
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