Reference Guide

virtua

Integrated Library System

Cataloging

VIRTUA ILS – INTEGRATED LIBRARY SYSTEM

Cataloging Reference Guide
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1. Introduction

T he *Virtua Cataloging Reference Guide* contains a variety of material for your reference when working with the Virtua Cataloging subsystem. The guide includes information on the following topics:

- Aspects of authority control, including default workforms
- System rules for creating authority records
- Authority headings tags for UNIMARC and MARC 21 (Swedish version)
- Authority heading conflicts
- Fixed field layouts for MARC 21, CATMARC, and UNIMARC
- The 2709 format for patron records
- Error and warning messages
- Use of Character Map
- Aspects of sorting browse results and sort character set mapping
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2. Authority Control in Virtua

This chapter provides a brief description of the MARC 21 format for authority records and then discusses how Virtua has adapted the format for unique purposes, including Virtua's use of locally-defined fixed fields in authority records. We also list the 1) bibliographic heading tags that Virtua indexes for searches and 2) authority heading tags that lie at the heart of Virtua authority control.

2.1 Virtua and the MARC 21 Format for Authority Data

Virtua's MARC 21 authority records reflect four basic attributes. The authority records…

- Are based on the MARC 21 Format for Authority Data.
- Contain three fixed fields that are locally assigned: Bib Level, Local Level, and Authority Language.
- Are designated as either provisional records or permanent records.
- Use MARC authority tag numbers (as distinct from MARC bibliographic tag numbers).

2.1.1 MARC 21 Format

Virtua's format for authority records is based on the MARC 21 authority format. As specified in the MARC standard, authority records can be based on…

- Subjects
- Authors/Names
- Series Titles
- Uniform Titles
- Authors/Titles Series
- Special Library-defined Categories
- Subdivision (Subjects)
- Genres/Forms

The *basic* MARC authority record structure is as follows:
> 1xx tag - established heading
> 4xx tag - *see* reference
> 5xx tag - *see also* reference
> 6xx tag - notes and series information
> 7xx tag - linked heading

The parallel content designation for 1xx, 4xx, 5xx, and 7xx tags is as follows:
> x00 – personal name
> x10 – corporate name
> x11 – conference or meeting name
> x30 – uniform title
> x50 – subject heading
> x51 – geographic name
> x55 – genre or form heading

As with other MARC formats, the record control number (Auth-ID) is in the 001 tag, and the Library of Congress control number is in the 010 tag. For details about the content designations of the format, see the *MARC 21 Format for Authority Data*.

The Virtua authority record format specifies a tag 008 fixed field display that contains data from the 008 tag, the Leader, and two unique Innovative fixed fields—Local Level and Auth Lang—which are stored in the Innovative-defined 999 VIRTUA tag. A third fixed field, Bib Level, is also stored in the 999 VIRTUA tag, but it cannot be edited using the Fixed Field Editor (see the section "The 999 VIRTUA Tag and Innovative-defined Authority Fixed Fields").

2.1.2 Authority Record 4xx/5xx Tags - First Indicator Values

In Virtua, the first indicator in the 4xx/5xx tags of a Virtua authority record conveys additional information that is not part of the standard MARC authority format. Using the first indicator, you can specify when and if:

- Specific headings are trapped for 1xx, 5xx/4xx conflicts.
- Cross-referenced headings appear in browse indexes (with or without a subfield $w value).

If the 4xx/5xx first indicator position is a dash ("–") or a nine ("9"), the heading will not appear in the browse index. Further, if the 4xx/5xx first indicator position is a dash, the heading is not indexed, preventing conflicts from being trapped. See the table below for examples.

Tag #	1st Indicator	Result
4xx	–	Not in browse, not indexed; conflicts are NOT trapped.
5xx	–	Not in browse, not indexed; conflicts are NOT trapped.
4xx	9	Not in browse; indexed only so that conflicts are trapped.
5xx	9	Not in browse; indexed only so that conflicts are trapped.

These rules apply to any 5xx heading contained in one or more bibliographic records, and thus existing as an established heading (1xx) in its own right. When a heading exists as a 5xx in one or more authority records only (i.e., with no corresponding 1xx authority record), additional rules are applied to determine if the heading should appear in a browse index.

2.1.3 The 999 VIRTUA Tag and Innovative-defined Authority Fixed Fields

Three unique Innovative fixed fields are stored in the 999 VIRTUA tag of authority records: Local Level, Authority Language, and Bib Level. The Local Level and Authority Language fixed fields are displayed in the Fixed Field Editor window when the editor is accessed from the authority 008 tag.

The Bib Level, which corresponds to Leader 07 in a bibliographic record, is the third locally-defined Innovative fixed field. In permanent authority records, the Bib Level is stored *only* in the 999 VIRTUA tag and not in Leader 07. The Bib Level is not displayed in the Fixed Field Editor window. If Virtua has not already assigned a Bib Level to the authority record, you can assign one by using the MARC Editor.

The default authority workform contains **x** as the Bib Level in the 999 VIRTUA tag. The Type (Leader 06) value for authority records is **z**. The fixed field layout for authority records is illustrated and described in the section "Authority 008" in this guide.

We discuss the three unique Innovative fixed fields in more detail below.

2.1.3.1 Local Level

The Local Level is a one-character value that indicates the method by which the record entered the Virtua system. The Local Level was used by the VTLS classic system to define the source of a record, but Virtua does not use the field in this way and instead stores these values for historical purposes only. Supported values are…

    0 – Transferred directly from an online utility (such as OCLC)

1 – Copied from another record in the same database or from another
   Innovative database
2 – Created as a provisional authority record
4 – Created by direct manual entry
5 – Loaded from tape

2.1.3.2 Authority Language

The Authority Language is a three-character value that indicates the language of the text of the associated MARC authority record. Note that the MARC 21 format no longer defines Language as a specification for authority records. It is considered obsolete. But in Virtua we have opted to keep Auth Lang for historical reasons.

2.1.3.3 Bib Level

According to the MARC 21 format, there is no Bib Level (Leader 07) for authority records. As a result, Virtua does not store a Bib Level value in Leader 07 of *permanent* authority records. (Note, however, that *provisional* authority records may contain a Bib Level value in Leader 07.) Although Virtua does not store a Bib Level value in Leader 07, it does store a locally-defined Bib Level in the 999 VIRTUA tag, position 18. Virtua uses this one-character Bib Level value to make three distinctions in the kind of authority data:

- The type of authority record, whether an author, a subject, or a title (series, uniform, or library-defined).
- Whether the heading is non-authoritative or authoritative (system-assigned only).
- Whether the authority heading is an Additional Access Point (AAP) heading (system-assigned only).

We discuss these distinctions in more detail below.

➢ **First, the bib lvl value is used to distinguish between two records with the same 1xx field.** For example, currently, if you want an authority record for MARC Twain as a name AND as a subject, you need to have two authority records. The bib lvl value distinguishes between the two records.

The following bib lvl values are defined in Virtua for authority records to determine whether the record is an author, subject or title record:

y – subject record (searchable as a subject)
x – author/name record (searchable as an author)
e – author/title (not series) record (searchable as an author)

t – series title record (searchable as a title)

u – uniform title record (searchable as a title) - Generated from 130 and 730 tags only

f – author/name series record (searchable as an author)

g – author/title series record (searchable as an author)

z – special library-defined record

d – subdivision authority record (searchable as a subject)

w – genre/form record (searchable as a subject)

q – subject record (searchable as a subject) (not appropriate for use as a main or added entry in bibliographic records). Note that most bib lvls can be determined in two ways: based on values in the authority record and on the value in the 999 VIRTUA tag. But bib lvl **q** (and bib lvl **y**) can be determined only by the value in the 999 VIRTUA tag.

r – subject record (searchable as a subject) that is an untraced reference , i.e., where the 008/09 = b and 010 LC prefix = 'sh' (not appropriate for use as a main or added entry in bibliographic records)

s – title record (searchable as a title) that is an untraced reference, i.e., where the 008/09 = b (not appropriate for use as a main or added entry in bibliographic records)

v – author/name record (searchable as an author) that is an untraced reference, i.e., where the 008/09 = b (not appropriate for use as a main or added entry in bibliographic records)

j – author/title record (searchable as an author) that is an untraced reference, i.e., where the 008/09 = b (not appropriate for use as a main or added entry in bibliographic records)

Note:
- In *provisional* author/title authority records, the tag in the bibliographic record determines whether the bib lvl of the provisional authority needs to be an **e** (not a series) or a **g** (series). So if the tag in the bibliographic record is a 4xx or 8xx (series control tags), then the bib lvl of the authority heading is **g**.
- In *permanent* author/title authority records, the values in the 008/12 and the 008/16 determine whether the bib lvl of the authority record needs to be an **e** or a **g**. If the value in the 008/12 is "a," "b," "c," or "z," and the value in the 008/16 is "a," the bib lvl is **g**.

For details about provisional vs. permanent authority records, see the section "Authority Records: Permanent vs. Provisional" in this guide. For details about assigning auth bib lvls, see the section "Auth Bib Lvls Assigned Upon Loading New Records" in this guide.

➢ **Secondly, the bib lvl value is used internally to distinguish between non-authoritative headings and authoritative headings that appear on the Browse window in the OPAC**. Virtua will not let you select the View Authority command or the Copy Heading/Merge Heading commands for a heading belonging to an authority record with one of the following bib lvl values:

n – title record (searchable as a title, but the authority record will not appear in the client)
o – name record (searchable as an author, but the authority record will not appear in the client)
p – subject record (searchable as a subject, but the authority record will not appear in the client)

About bib lvls n, o, and p

The MARC bibliographic format has several tags used for "authority-type" headings that do not have corresponding MARC authority records. Three of these tags are the **245 - Title Statement**; **653 - Added Entry, Uncontrolled Subject**; and **720 - Added Entry, Uncontrolled Name**. Virtua supports the use of all three tags, whose headings are "uncontrolled," meaning that if you try to view the authority record via the View Authority function, Virtua displays an error message: "No authority control over this type of record."

Even though the headings are "uncontrolled," in Virtua, we want the data in these fields to be as fully searchable as any other "title" or "author" field. To handle this situation, Virtua uses authority bib lvl values in authority *heading* records.

Virtua assigns heading records a bib lvl value to distinguish between non-authoritative and authoritative headings.

- The bib lvl **n** (non-authoritative title statement, searchable as a title) is assigned to the authority heading record for the title statement.
- The bib lvl **o** (non-authoritative name/author record, searchable as an author) is assigned to the authority heading record for the uncontrolled name.
- The bib lvl **p** (non-authoritative subject statement, searchable as a subject) is assigned to the authority heading record for the subject statement.

By default, the indexed subfield in the 245 tag, 653 tag, and 720 is subfield $a.

If an identical heading enters the database, and the only difference in the two headings is the bib lvl value (and the tag numbering), the heading generates the message: "Possible name heading duplication."

➢ **Thirdly, the bib lvl value is used internally to indicate an authority heading that is an Additional Access Point, formerly called a "pseudo."** Below, we list those bib lvl values and the AAP records they specify. Virtua will let you select the View Authority command but not the Copy Heading/Merge Heading commands for a heading belonging to a record with one of the following bib lvl values.

i – AAP author/name record – represents the author portion of a combined author/title field. (The record is searchable as an author; the authority record is displayed in the client as bib lvl **g** or **e**.) Example: In a record containing tag **700 $a Espley, John $t History of Innovative Interfaces, Inc.**, internal bib lvl **i** would indicate the heading Espley, John.

k – AAP title record – represents the title portion of a combined author/title field OR the title generated from the 240 or 243 field of a bibliographic record. (The record is searchable as a title; the authority record is displayed in the client as bib lvl **e**.) Example: In a record containing tag **700 $a Espley, John $t History of Innovative Interfaces, Inc.**, internal bib lvl **k** would indicate the heading History of Innovative Interfaces, Inc.

l – AAP author/title record – represents the 1xx and 240/243 fields of a bibliographic record. (The record is searchable as an author; the authority record is displayed in the client as bib lvl **e**.) Example: In a record containing tag **1xx $a Forester** and tag **240 $a Music**, internal bib lvl **l** would indicate the heading Forester with a $t Music.

m – AAP title record – represents subfield $a of a uniform title. (The record is searchable as a title; the authority record is displayed in the client as bib lvl **u**.) Example: In a record containing tag **130 $a Bible $p New Testament**, internal bib lvl **m** would indicate $a Bible.

h – AAP title series record – represents the title portion of a combined author/title series field. (The record is searchable as a title; the authority record is displayed in the client as bib lvl **g**.) Example: In a record containing tag **800 $a Bender $t Health and Fitness**, internal bib lvl **h** would indicate $a Health and Fitness.

In addition, the following special bib lvls are used only by the ISSN version of MARC 21 (i.e., when the ISSN version of the MARC 21 format is selected in the Virtua Profiler):

a – title record from 222 tag (searchable with Title and ISSN Title search)

b – title record from 246 or 247 tag (searchable with Title and ISSN Title search)

c – title record from 210 tag (searchable with Title and Abbreviated Title search)

2.2 Authority Records: Permanent vs. Provisional

In Virtua, there are two types of authority records: permanent and provisional.

Authority headings (i.e., author, title, and subject headings that are indexed for Browse searches in the OPAC) for both permanent and provisional authority records are stored in the same area of the database.

Hint: OPAC Display Options allow you to choose whether you want the Browse window to display only provisional authorities, only permanent authorities, or both types of authorities for Browse searches. For details, see the section "Authority Browse Filters" in the *Virtua Cataloging User's Guide*.

2.2.1.1 Permanent Authority Records

Permanent authority records are those that catalogers normally expect to find in an automated system. Permanent authority records have been explicitly created and processed as MARC authority records and are stored in the database as such. This means that specific actions were taken to…

- Establish an authoritative form of a heading in the 1xx field,
- Create any reference (*See* and *See also*) headings in the 4xx and 5xx fields, and
- Provide any other supporting information according to the MARC standard.

2.2.1.2 Provisional Authority Records

Provisional authority records have not been *explicitly* created and processed as MARC authority records, and they are NOT stored in the database. A provisional authority record is created "on-the-fly" for a bibliographic authority heading that is not under authority control (i.e., not linked to a permanent authority record) but that *is* in an authoritative field such as the 1xx, 4xx, 6xx, 7xx, 8xx or 240 in the bibliographic record.

When you select an authoritative heading from the Browse list in the OPAC and then choose View Authority from the pop-up menu (*Figure 2-1*), Virtua will formulate a provisional authority record on the View Authority Record window (*Figure 2-2*), creating "on-the-fly" a 1xx from the appropriate authoritative field in the bibliographic record.

Note: The View Authority command on the pop-up menu is disabled for records with bib lvl **n** or **o**.
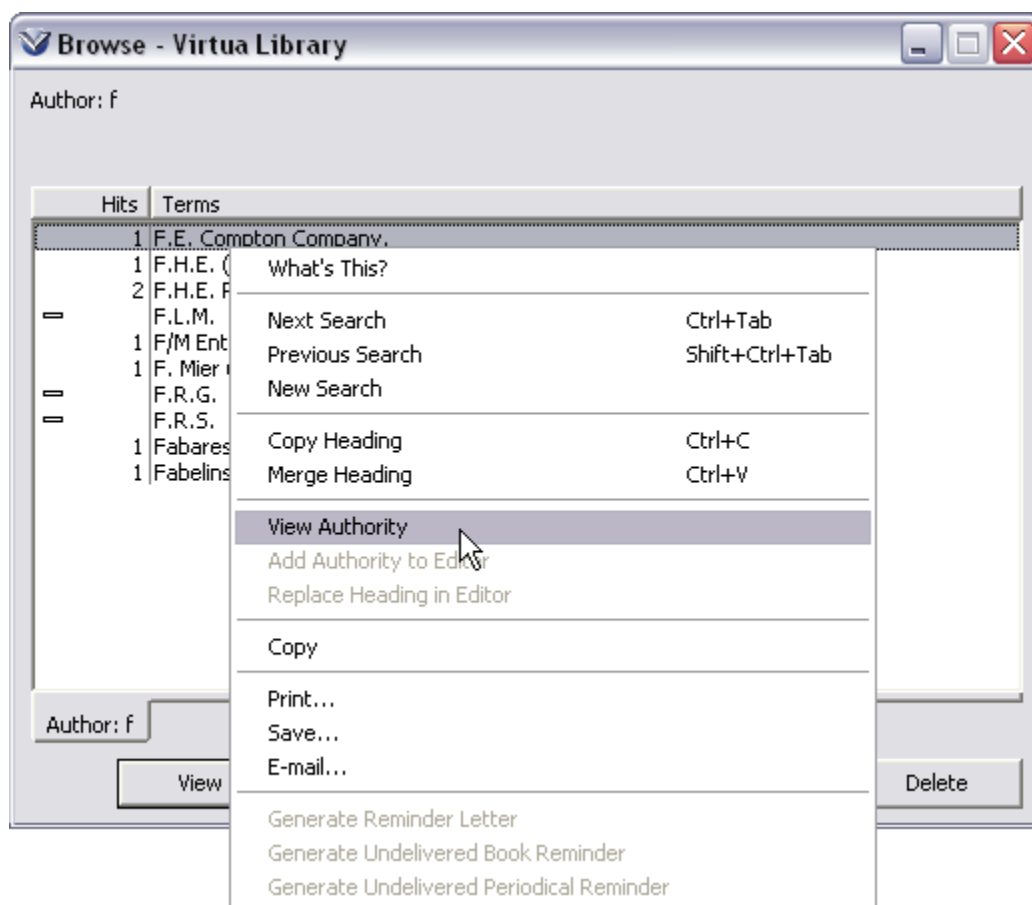
Figure 2-1. View Authority Function on the Browse Window

Note: The Add Authority option on the pop-up menu in Figure 2-1 is disabled. If a bibliographic or authority record were open in the MARC Editor, it would be enabled. For more information, see the *Basic Cataloging Workflow-based Reference Guide*.
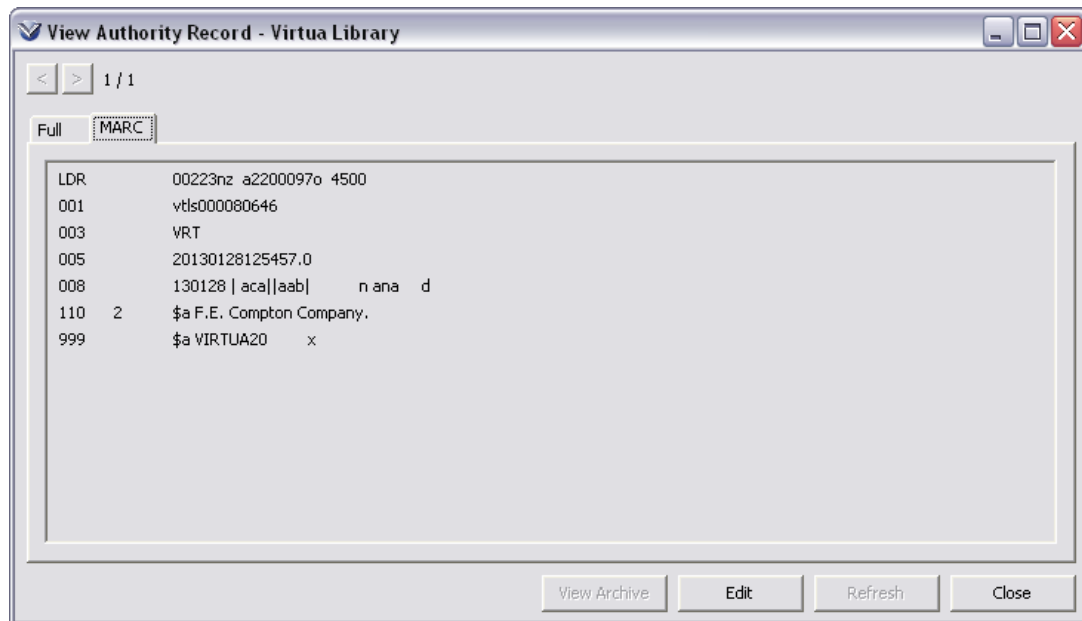
Figure 2-2. View Authority Record Window

A provisional authority record has the following data:

- 001 tag
- default 008/LDR (whose fixed fields appear in the Fixed Field Editor)
- 1xx tag
- 999 tag with the value of VIRTUA20

Note: When permanent authority records consist of a 1xx tag only, they should be converted back to provisional authority records. The scripts **PermAuthIdsToProv.ksh** and **ChangePermAuthorityToProv.ksh** remove unwanted permanent authority records in the database and convert them to provisional authority records. For details, see the *System Management: Cataloging User's Guide.*

2.3 Authoritative Tags in Authority and Bibliographic Records

In Virtua, when we speak of headings, we are generally referring to any author, title, or subject heading that is indexed for Browse searches. Most, but not all, headings are stored in *authoritative tags*, which are under authority control, either as part of an authority record or as part of a bibliographic record that is linked to a permanent authority record. But some headings, such as the heading stored in the 245 tag of the bibliographic record, are not in authoritative tags.

As noted, one of the purposes of the authority bib lvl is to distinguish between authoritative and non-authoritative headings. A heading record assigned the bib lvl of **n**, for example, is a non-authoritative heading.

If a heading that is in an authoritative tag in a bibliographic record is not linked to a permanent authority record, then Virtua creates a *provisional* authority record with a 1xx "on-the-fly" when you select the heading from the Browse list in the OPAC and then select View Authority. In order for Virtua to formulate a provisional authority record on the screen, creating a 1xx from, say, the 710, the heading must be in an authoritative tag—such as the 1xx, 4xx, 6xx, 7xx, 8xx or 240—in the bibliographic record.

The authoritative tags in the authority format are somewhat different from those in the bibliographic format. The correspondences between authoritative bibliographic and authority tags are shown below.

Bib tag	Auth tag	Auth bib lvl
089	150	y (*SWEMARC 21 only*)
100	*100	x (or e if it has $t)
110	*110	x (or e if it has $t)
111	*111	x (or e if it has $t)

Note: 100, 110, and 111 are used in author/name control in browse results.

130	130	u

Note: 130 is used in title (uniform) control in browse results.

222	130	u (a - ISSN only)
240	n/a	k
243	n/a	k

Bib tag	Auth tag	Auth bib lvl
400	*100	f (or g if it has $t)
410	*110	f (or g if it has $t)
411	*111	f (or g if it has $t)

Note: 400, 410, and 411 are used in author/name (series) control in browse results.

Bib tag	Auth tag	Auth bib lvl
440	130	t

Note: 440 is used in title (series) control in browse results.

Bib tag	Auth tag	Auth bib lvl
600 and	100	y (or **x** if no $x, $y, $z, or $v; or **e** if has $t no $x, $y, $z, or $v)
610 and	110	y (or **x** if no $x, $y, $z, or $v; or **e** if has $t no $x, $y, $z, or $v)
611 and	111	y (or **x** if no $x, $y, $z, or $v; or **e** if has $t no $x, $y, $z, or $v)
630	130	y (or u if no $x, $y, $z, or $v)
650	150	y
651	151	y (or x if no $x, $y, $z, or $v)

Note: 600, 610, 611, etc. are used in subject control in browse results.

Bib tag	Auth tag	Auth bib lvl
653	N/A	p
655	155	w
691	151	y
700	*100	x (or e if it has $t)
705	*100	x (or e if it has $t)
709	*100	x (or e if it has $t)
710	*110	x (or e if it has $t)
711	*111	x (or e if it has $t)
715	*110	x (or e if it has $t)
719	*110	x (or e if it has $t)

Note: 700, 705, 709, etc. are used in author/name control in browse results

Bib tag	Auth tag	Auth bib lvl
720	N/A	o
730	130	u
752	110	x
753	110	x
754	150	y
755	150	y

Bib tag	Auth tag	Auth bib lvl
760	130	u *tag must have $s)*
762	130	u (*tag must have $s*)
765	130	u (*tag must have $s*)
767	130	u (*tag must have $s*)
770	130	u (*tag must have $s*)
772	130	u (*tag must have $s*)
773	130	u (*tag must have $s*)
775	130	u (*tag must have $s*)
776	130	u (*tag must have $s*)
777	130	u (*tag must have $s*)
780	130	u (*tag must have $s*)
785	130	u (*tag must have $s*)
787	130	u (*tag must have $s*)
796	*100	x (or e if it has $t) (*Hebrew only*)
800	*100	f (or g if it has $t)
810	*110	f (or g if it has $t)
811	*111	f (or g if it has $t)

Note: 800, 810, and 811 are used in author/name (series) control in browse results

830	130	t
840	130	t
899	130	t (*Hebrew only*)
976	150	y (*SWEMARC 21 only*)

*With regard to tags 100, 110, and 111 in *permanent* author/title authority records, the bib lvl (whether **e** or **g**) is determined by the presence of and values in the 008/12 and 008/16 fixed fields (for details, see the section "Auth Bib Lvls Assigned Upon Loading New Records" in this guide).

The authority format uses some additional tags with "subdivision" records (see the section "X8X Tags" below for details). The authority bib lvl for these authorities is **d**. The additional tags are:

      X80 -- General subdivision
      X81 -- Geographic subdivision
      X82 -- Chronological subdivision
      X85 -- Form subdivision

2.3.1 X55 Tags

In the MARC bibliographic format, tag 655 is for genre or form headings such as Detective stories, Love stories, and Science Fiction. In the MARC authority format, the corresponding authority tags are 155, 455, and 555. Virtua accommodates the creation and addition of authority records with x55 tags as valid authority record tags.

As a default, the subfields in a 655 tag that are under authority control are: a, b, c, v, x, y, and z.

If a heading has the same text in an x55 and an x50 field, the 155 authority record uses a bib lvl value of **w**. If an identical heading enters the database, and the only difference in the two headings is the bib lvl value (and the tag numbering), the headings generate the message: "Possible subject heading duplication."

In the OPAC, you can choose to display or not to display the "heading type" in the Browse window. Genre/form (that is, 155 headings with bib lvl **w**) will be included in the heading types available, which currently are uniform title, series title, and additional access point.

2.3.2 X8X tags

The MARC authority format has a range of tags used in defining subdivision authority records. There are no equivalent bibliographic tags. Subdivision tags are used in permanent authority records *only*. The specific tags are:

180, 480, 580 -- General Subdivision
181, 481, 581 -- Geographic Subdivision
182, 482, 582 -- Chronological Subdivision
185, 485, 585 -- Form/Genre Subdivision

A subdivision is used in subject headings to subdivide the subject. Examples of subdivisions are Bibliography, History, and Civil War. Since the actual text can be identified as either a subdivision or a subject heading, some unique identification is needed. This unique identification of a subdivision record consists of two parts: the x8x tag, which is a subdivision tag, and the Innovative bib lvl **d**.

For example, let's say that a library has two authority records for the text "bibliography." The two records are:

150 $a Bibliography
Bib lvl y

AND

180 $x Bibliography
Bib lvl d

In the Browse window, the headings will appear as follows:

Bibliography
-- Bibliography

When one of the records is already in the database and the second one is added, the client will display the message "Possible subject heading duplication." Note that in the above example, the 150 Bibliography could have bibliographic records associated with it, but the 180 Bibliography will not.

In the OPAC, you can choose to display or not to display the "heading type" in the Browse window. In a future release, subdivision (with bib lvl **d**) will be included in the heading types available, which currently are uniform title, series title, and additional access point.

2.4 Authority Bib Lvls Assigned Upon Loading New Records

When new authority records are loaded into the database, Virtua assigns the records authority bib lvls based on whether the authority records contain specific tags, subfields, and 008 fixed field values. Below we define the criteria that Virtua uses to assign authority bib lvls upon loading permanent authority records.

Note: If there is a conflict between the bib lvl value in the 999 VIRTUA tag and the bib lvl that the system assigns based on other values in the authority record, the system-assigned bib lvl takes precedence.

If the authority record…	Then the authority is…	Comments
has tag 100, 110 or 111,	created with bib lvl **x** (author/name).	This will produce both a name and subject authority record as long as the values in tag 008, positions 14 and 15, are both **a**.
has the 008/12 defined as series AND the 008/16 =a AND tag 100, 110, or 111 contains subfield $t,	created with bib lvl **g** (author/title series).	This will produce a name, title series, and subject authority record as long as the values in tag 008, positions 14 and 15, are both **a**.
has the 008/12 defined as series AND the 008/16 =a AND tag 100, 110, or 111 does NOT contain subfield $t,	created with bib lvl **f** (author/name)	This should never happen.
has EITHER the 008/12 OR the 008/16 (but not both) AND tag 100, 110, or 111 contains subfield $t,	created with bib lvl **e** (author/title non-series).	This will produce a name, title, and subject authority record as long as the values in tag 008, positions 14 and 15, are both **a**.
has tag 130 AND the 008/12 has series type defined OR has the 008/16=a,	created with bib lvl **t** (title series).	This will produce both a title and subject authority record as long as the values in tag 008, positions 14 and 15, are both **a**.
has tag 130 AND neither the 008/16 nor the 008/12 is defined,	created with bib lvl **u** (uniform title).	This will produce both a title and subject authority record as long as the values in tag 008, positions 14 and 15, are both **a**.
has tag 150, OR has tag 100, 110, 111, or 130 AND the 008/14 =b and 008/15 = a OR has tag 151 AND NOT (008/14 = a and 008/15 = a) AND NOT (008/14 = a and 008/15 = b)	created with bib lvl **y** (subject).	

If the authority record…	Then the authority is…	Comments
has the 008/09=b and 010 LC prefix = 'sh,	created with bib lvl **r** (subject)	This will produce an untraced reference subject authority record.
has all the criteria that would normally produce a title AND the 008/09=b,	created with bib lvl **s** (title)	This will produce an untraced reference title authority record.
has all the criteria that would normally produce a name/author AND the 008/09=b,	created with bib lvl **v** (name/author)	This will produce an untraced reference author authority record.
has all the criteria that would normally produce an author/title AND the 008/09=b,	created with bib lvl **j** (author/title non-series)	This will produce an untraced reference author/title authority record.
has tag 151 AND EITHER the 008/14=a and 008/15=a OR the 008/14=a and 008/15=b,	created with bib lvl **x** (author/name)	This will produce both a name and subject authority record, where the author heading type is corporate name and the subject heading type is geographic name. **Note:** Authority records coded "ab" will be valid for use only as names, but they will still appear in subject searches so that you can view the instruction in the 667 tag.
has tag 155,	created with bib lvl **w** (genre).	
has tag 172,	created with bib lvl **z** (library-defined).	
has tag 180, 181, 182, or 185,	created with bib lvl **d** (subdivision).	

2.5 Criteria Used to Match Headings When Saving Records

When you save or load a bibliographic or an authority record to the database, Virtua uses a set of criteria to determine what to do with the record based on the headings in the records. Below we list the criteria used for matching headings.

When you save or load bibliographic records, the system tries to determine if a heading in the bibliographic record matches a heading that is already in the authority heading table:

- If all the criteria match, the heading is linked to an existing authority heading.
- If all the criteria do NOT match, a new heading is created.

When you save or load authority records, the system tries to determine if a heading in the authority record matches a heading that is already in the authority heading table:

- If all the criteria match, the heading is linked to an existing authority record.
- If all the criteria do NOT match, a new *permanent* authority record is created.

Note:
- All the matching criteria work the same for both bibliographic and authority records except for text matching, which depends on the heading type and whether bibliographic or authority records are being saved.
- For authority records, Virtua uses these matching criteria only when no other matching criteria, such as an LCCN or other control number, exist in the authority record.

2.5.1 Matching Criteria for Headings

- ➢ **Bib Lvl must match.**
    - y – subject record (searchable as a subject)
    - x – author/name record (searchable as an author)
    - e – author/title (not series) record (searchable as an author)
    - t – series title record (searchable as a title)
    - u – uniform title record (searchable as a title)
    - f – author/name series record (searchable as an author)

- g – author/title series record (searchable as an author)
- z – special user-defined record
- d – subdivision authority record (searchable as a subject)
- w – genre/form record (searchable as a subject)
- q – subject record (searchable as a subject)
- r – untraced reference subject record (searchable as a subject)
- s – untraced reference title record (searchable as a title)
- v – untraced reference author/name record (searchable as an author)
- j – untraced reference author/title record (searchable as an author)
- n – title record (searchable as title, but authority record not displayable in client)
- o – non-authoritative name record (searchable as an author, but authority record not displayable in client)
- p – non-authoritative subject record (searchable as a subject, but authority record not displayable in client)
- i – AAP (pseudo) author/name record from the author portion of a combined author/title field (searchable as an author, but authority record not displayable in client)
- k – AAP (pseudo) title record from the title portion of a combined author/title field OR the title generated from the 240 or 243 field of a bibliographic record (searchable as a title, but authority record not displayable in client)
- l – AAP (pseudo) author/title record from the 1xx and 240/243 fields of a bibliographic record (searchable as an author; but authority record not displayable in client)
- bib lvls must match exactly except for the following:

  ♦ bib lvl **t** matches bib lvl **h**
  ♦ bib lvl **x** matches bib lvl **i**
  ♦ bib lvl **u** matches bib lvl **m**
  ♦ bib lvl **e** matches bib lvl **l**

➢ **Type of Heading must match.**
  Heading type is based on the tag number:
- 0 - x00 – Personal name
- 1 - x10 – Corporate name
- 2 - x11 – Conference or meeting name
- 3 - x30 – Title
- 4 - x50 – Topical term
- 5 - x51 – Geographic name
- 6 - x55 – Genre or form term
- 7 - x80 – General subdivision

- 8 - x81 – Geographic subdivision
- 9 - x82 – Chronological subdivision
- 10 - x85 – Form subdivision

➢ **Non-filing indicators must match.**

➢ **Subfield codes must match.**

➢ **Text matching is different, depending on heading type and whether bibliographic records or authority records are being saved.**
- Ending punctuation [period(.), colon(:), semi-colon (;), comma(,)] is excluded.
- Text is normalized by uppercasing before matching…
  - ♦ For authors, subjects and user-defined headings when bibliographic records are being saved.
- Text must match exactly…
  - ♦ For all headings when authority records are being saved
  - ♦ For titles when bibliographic records are being saved.

2.5.2 Special Criteria for Matching in Author/Subject or Title/Subject Authority Records

When cataloging authority records, if an author/subject or title/subject record (i.e., an authority record with 008/14-15 = aa) is saved with 1xx tag data that matches the 1xx tag data of an existing subject authority record, Virtua behaves as follows:

- If the existing authority record is a local authority record (i.e., has no 010 tag), the 1xx data of the existing record is replaced with the 1xx data from the new record.
- If the existing authority record is a LC/NACO authority record (i.e., has an 010 tag), then the 1xx data is not replaced. Instead, the new record is placed in Error state and a message is displayed explaining that the subject part cannot be created because it is a duplicate.

2.6 MARC 21 Heading Tags and Indexed Subfields

Virtua indexes specific subfields in MARC 21 heading tags. The table of Authority Heading Tags lists the tags and subfields that contain the form of a name, title, or term used for both indexing and retrieval or for other organizational purposes. The table of Bibliographic Heading Tags lists the tags and subfields that are indexed for Browse searches on authors, titles, and subjects. This table also specifies the authority bib lvl assigned to the associated authority record or authority heading record.

Note: For UNIMARC Heading Tags, see Appendix C, and for MARC 21 (Swedish Version) Heading Tags, see Appendix D in this guide.

Virtua uses filing indicators in Browse indexing for the tags that use filing indicators based on the MARC format. It does this by removing the number of characters in the indicator from the beginning of the subfield to form the Browse index.

2.6.1 Bibliographic Heading Tags

Virtua stores author, title, and subject headings in specific MARC tags and subfields of bibliographic records. When you do a Browse search in the Virtua client or Vectors *i*Portal, the software searches the database for all bibliographic records containing headings that match your search term(s).

All subfields that are indexed are displayed on the Browse results window. Several factors determine how the subfield data are sorted in the results (for details, see the chapter "Sorting in Browse Results").

Search… and Auth Bib Lvl	Tag	Explanation	Subfields Indexed
		By Author	
x (or e if it has $t)	100	Main entry: personal name	all but 0, 2, 3, 4, 5, 6, 8, e, i, v, w, x
x (or e if it has $t)	110	Main entry: corporate name	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x

Search… and Auth Bib Lvl	Tag	Explanation	Subfields Indexed
x (or e if it has $t)	111	Main entry: meeting name	all but 0, 2, 3, 4, 5, 6, 8, i, v, w
x (or e if it has $t)	700 705 709	Added entry: personal name	all but 0, 2, 3, 4, 5, 6, 8, e, i, v, w, x
x (or e if it has $t)	710 715 719	Added entry: corporate name	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
x (or e if it has $t)	711	Added entry: meeting name	all but 0, 2, 3, 4, 5, 6, 8, i, v, w
o	720	Added entry; uncontrolled name	a
x	752	Added entry: hierarchical place name	all but 0, 2, 3, 4, 5, 6, 8
x	753	System details: access to computer files	all but 0, 2, 3, 4, 5, 6, 8
f (or g if it has $t)	796	Hebrew flag - Based on the alternate MARC flag	a, b, c, d, f, g, h, k, l, m, n, o, p, q, r, s, t
f (or g if it has $t)	800 400	Series added entry: personal name Series statement: personal name	all but 0, 2, 3, 4, 5, 6, 8, e, i, v, w, x
f (or g if it has $t)	810 410	Series added entry: corporate name Series statement: corporate name	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
f (or g if it has $t)	811 411	Series added entry: meeting name Series statement: meeting name	all but 0, 2, 3, 4, 5, 6, 8, i, v, w
By Subject		**Note:** The *second indicator* controls whether the subject tag is indexed or not. The 653, 754, and 755 tags are exceptions to this rule and are always indexed, regardless of the second indicator value.	
y	600****	Subject added entry: personal name	all but 0, 2, 3, 4, 6, 8, 9, e, i, w
y	610****	Subject added entry: corporate name	all but 0, 2, 3, 4, 6, 8, 9, i, w
y	611****	Subject added entry: meeting name	all but 0, 2, 3, 4, 6, 8, 9, i, w
y	630****	Subject added entry: uniform title	all but 0, 2, 3, 4, 6, 8, 9, i, w

Search… and Auth Bib Lvl	Tag	Explanation	Subfields Indexed
y	650****	Subject added entry: topical term	all but 0, 2, 3, 4, 6, 8, 9, i, w
y	651****	Subject added entry: geographic name	all but 0, 2, 3, 4, 6, 8, 9, i, w
p	653	Index term added entry that is not constructed by standard subject heading/thesaurus-building conventions	a
y	654****	Subject added entry: faceted topical terms	all but 0, 2, 3, 4, 6, 8, 9, i, w
w	655****	Index term: genre/form	all but 0, 2, 3, 4, 6, 8, 9, i, w
y	656****	Index term: occupation	all but 0, 2, 3, 4, 6, 8, 9, i, w
y	657****	Index term: function	all but 0, 2, 3, 4, 6, 8, 9, i, w
y	691****	Added entry in which the entry element is a geographic name	all but 0, 2, 3, 4, 6, 8, 9, i, w
y	6xx**** except 679, 680, 681, 682		all but 0, 2, 3, 4, 6, 8, 9, i, w
y	754 755	Added entry: taxonomical identification	all but 0, 2, 3, 4, 5, 6, 8, i, w
		By Title	
u	130	Main entry: uniform title	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
n(c - ISSN)	210*	Abbreviated title	all but 0,2, 3, 4, 5, 6, 8
n n n	211* 212* 214*	Acronym or Shortened title Variant Access title Augmented title	all but 0, 2, 3, 4, 5, 6, 8
u(a - ISSN)	222**	Key title	all but 0, 2, 3, 4, 5, 6, 8
k	240*	Uniform title	all but 0, 2, 3, 4, 5, 6, 8, w
n	242*	Translation of title by cataloging agency	all but 0, 2, 3, 4, 5, 6, 8
k	243*	Collective uniform title	all but 0, 2, 3, 4, 5, 6, 8

Search… and Auth Bib Lvl	Tag	Explanation	Subfields Indexed
n	245	Title statement	all but 0, 2, 3, 4, 5, 6, 8
n(b - ISSN)	246***	Title	all but 0, 2, 3, 4, 5, 6, 8, i, w
n(b - ISSN)	247*	Title	all but 0, 2, 3, 4, 5, 6, 8, w, x
n	248	Title	a, b, h, i, j, k
t	440	Series statement/added entry title	all but 0, 2, 3, 4, 5, 6, 8, v,w,x
u	730	Added entry: uniform title	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
n	740	Added entry: uncontrolled related/analytical title	all but 0, 2, 3, 4, 5, 6, 8
n	749	Added entry	a
	760, etc.	See **Note** below.	
t	830	Series added entry: uniform title	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
t	840	Series added entry: title	all but 0, 2, 3, 4, 5, 6, 8, v
t	899 (Hebrew only)	Series added entry: title	all but 2, 3, 5, 6, v, w, x

*Note: For tags 760, 762, 765, 767, 770, 772, 773, 775, 776, 777, 780, 785, 787, the following subfields are indexed as *separate* titles:

s - uniform title (bib lvl **u**)
t - title (bib lvl **n**)
q - title (bib lvl **n**)

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*   If the 1st indicator is 0, this tag is not indexed (except 240 if Hebrew).
**   If the 1st indicator is 0, 3, or blank, this tag is not indexed; (always indexed if the ISSN version of the MARC 21 format is being used)
***   If the 1st indicator is 0 or 2, this tag is not indexed.
****   Only indexed if 2nd indicator matches the Subject parameter.

In the following tags, subfield $e is controlled by a parameter:100, 400, 600, 700, and 800.

2.6.2 Authority Heading Tags

Tag	Information	Subfields Indexed Authors/Titles	Subfields Indexed Subjects
010	Indexed as a control number - $a (LCCN)		
100		a, b, c, d, f, g, h, j, k, l, m, n, o, p, q, r, s, t, y, z	a, b, c, d, f, g, h, j, k, l, m, n, o, p, q, r, s, t, v, x, y, z
110		a, b, c, d, f, g, h, k, l, m, n, o, p, r, s, t, x, y, z	a, b, c, d, e, f, g, h, k, l, m, n, o, p, r, s, t, v, x, y, z
111		a, c, d, e, f, g, h, k, l, n, p, q, s, t, x, y, z	a, c, d, e, f, g, h, k, l, n, p, q, s, t, v, x, y, z
130		a, d, f, g, h, k, l, m, n, o, p, r, s, t, y	r, s, t, v, x, y, z
150			a, b, v, x, y, z,
151		a	a, v, x, y, z
155	Genre (bib lvl **w**)		a, v, x, y, z
180	Subdivision (bib lvl **d**)		v, x, y, z
181	Subdivision (bib lvl **d**)		v, x, y, z
182	Subdivision (bib lvl **d**)		v, x, y, z
185	Subdivision (bib lvl **d**)		v, x, y, z
400		a, b, c, d, f, g, h, j, k, l, m, n, o, p, q, r, s, t, y, z	n, o, p, q, r, s, t, v, x, y, z
410		a, b, c, d, e, f, g, h, k, l, m, n, o, p, r, s, t, x, y, z	a, b, c, d, e, f, g, h, k, l, m, n, o, p, r, s, t, v, x, y, z
411		a, c, d, e, f, g, h, k, l, n, p, q, s, t, x, y, z	a, c, d, e, f, g, h, k, l, n, p, q, s, t, v, x, y, z
430		a, d, f, g, h, k, l, m, n, o, p, r, s, t, y	a, d, f, g, h, k, l, m, n, o, p, r, s, t, v, x, y, z
450			a, b, v, x, y, z
451		a	a, v, x, y, z
455			a, i, v, x, y, z
480	Subdivision (bib lvl **d**)		v, x, y, z
481	Subdivision (bib lvl **d**)		v, x, y, z
482	Subdivision (bib lvl **d**)		v, x, y, z
485	Subdivision (bib lvl **d**)		v, x, y, z
500		a, b, c, d, f, g, h, j, k, l, m, n, o, p, q, r, s, t, y, z	a, b, c, d, f, g, h, j, k, l, m, n, o, p, q, r, s, t, v, x, y, z

Tag	Information	Subfields Indexed Authors/Titles	Subfields Indexed Subjects
510		a, b, c, d, e, f, g, h, k, l, m, n, o, p, r, s, t, x, y, z	a, b, c, d, e, f, g, h, k, l, m, n, o, p, r, s, t, v, x, y, z
511		a, c, d, e, f, g, h, k, l, n, p, q, s, t, y	a, c, d, e, f, g, h, k, l, n, p, q, s, t, v, x, y, z
530		a, d, f, g, h, k, l, m, n, o, p, r, s, t, y	a, d, f, g, h, k, l, m, n, o, p, r, s, t, v, x, y, z
550			a, b, i, v, x, y, z
551		a	a, v, x, y, z
555			a, i, v, x, y, z
580	Subdivision (bib lvl **d**)		v, x, y, z
581	Subdivision (bib lvl **d**)		v, x, y, z
582	Subdivision (bib lvl **d**)		v, x, y, z
585	Subdivision (bib lvl **d**)		v, x, y, z
700		a, b, c, d, f, g, h, j, k, l, m, n, o, p, q, r, s, t, y, z	a, b, c, d, f, g, h, j, k, l, m, n, o, p, q, r, s, t, v, x, y, z
710		a, b, c, d, f, g, h, k, l, m, n, o, p, r, s, t, x, y, z	a, b, c, d, e, f, g, h, k, l, m, n, o, p, r, s, t, v, x, y, z
711		a, c, d, e, f, g, h, k, l, n, p, q, s, t, x, y, z	a, c, d, e, f, g, h, k, l, n, p, q, s, t, v, x, y, z
730		a, d, f, g, h, k, l, m, n, o, p, r, s, t, y	a, d, f, g, h, k, l, m, n, o, p, r, s, t, v, x, y, z
750			a, b, v, x, y, z
751		a	a, v, x, y, z
755			a, v, x, y, z
780	Subdivision (bib lvl **d**)		v, x, y, z
781	Subdivision (bib lvl **d**)		v, x, y, z
782	Subdivision (bib lvl **d**)		v, x, y, z
785	Subdivision (bib lvl **d**)		v, x, y, z

3. Fixed Field Layouts (MARC 21)

In MARC 21, the fixed fields are the 008 tag, the 006 tag, and the 007 tag.

3.1 008 Tag

Customization Tip: The Place of Publication drop-down list in the Fixed Field Editor may not contain the name of a country or region that you need to catalog. A quick fix to this problem is to manually edit the **ff008.tem** file, which resides in the Catalog directory of your Virtua client installation. The solution below is a workaround until Innovative adds the country permanently to the released version of the software.
1.   Open the **ff008.tem** file in a text editor.
2.   Scroll down to the <places> list, or do a search on <places> (include the brackets).
3.   Add your country code to the list.
4.   Instead of typing PLACE_LOOKUP in the second column, type the name of the country or region. This will be displayed in the client. Be aware that when you enter the country name in this way, it will not be translatable; it will always be displayed just as you entered it in the list.

3.1.1 Bibliographic 008

3.1.1.1 Books: Type = a or t; Bib Lvl = a, c, d, or m

MARC 21 008 - Books

Layout of fields including field of origin, starting position, and number of letters or numbers

BKS21			
	Local Lvl: (VT, 0, 1)	Analyzed: (VT, 1, 1)	Rec Stat: (L, 5, 1)
	Archive: (L, 8, 1)	Enc Lvl: (L, 17, 1)	Desc: (L, 18, 1)
	Multipart: (L, 19, 1)	Date Tp: (8T, 6, 1)	Date 1: (8T, 7, 4)
	Date 2: (8T, 11, 4)	Pl Pub: (8T, 15, 3)	Illus: (8T, 18, 4)
	Audience: (8T, 22, 1)	Form: (8T, 23, 1)	Contents: (8T, 24, 4)
	Govt Pub: (8T, 28, 1)	Conf Pub: (8T, 29, 1)	Festschr: (8T, 30, 1)
	Index: (8T, 31, 1)	Fiction: (8T, 33, 1)	Biography: (8T, 34, 1)
	Lang: (8T, 35, 3)	Mod Rec: (8T, 38, 1)	Source: (8T, 39, 1)
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                             8T = 008 Tag   39T = 039 Tag
                             ro => Read Only

3.1.1.2 Serial: Type = a; Bib Lvl = b or s

MARC 21 008 - Serial

Layout of fields including field of origin, starting position, and number of letters or numbers

SER21	Local Lvl: (VT, 0, 1)	Analyzed: (VT, 1, 1)	Rec Stat: (L, 5, 1)
	Archive: (L, 8, 1)	Enc Lvl: (L, 17, 1)	Desc: (L, 18, 1)
	Multipart: (L, 19, 1)	Pub Stat: (8T, 6, 1)	Date 1: (8T, 7, 4)
	Date 2: (8T, 11, 4)	Pl Pub: (8T, 15, 3)	Frequen: (8T, 18, 1)
	Regulr: (8T, 19, 1)	ISSN: (8T, 20, 1)	Ser Tp: (8T, 21, 1)
	Phys Med: (8T, 22, 1)	Form: (8T, 23, 1)	Entire Work: (8T,24,1)
	Contents: (8T, 25, 3)	Govt Pub: (8T, 28, 1)	Conf Pub: (8T, 29, 1)
	Alphabet: (8T, 33, 1)	S/L Entry: (8T, 34, 1)	Lang: (8T, 35, 3)
	Mod Rec: (8T, 38, 1)	Source: (8T, 39, 1)	
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                            8T = 008 Tag   39T = 039 Tag and ro => Read Only

3.1.1.3 Mixed Material: Type = p or b

MARC 21 008 - Mixed Material

Layout of fields including field of origin, starting position, and number of letters or numbers

MIXED21	Local Lvl: (VT, 0, 1)	Analyzed: (VT, 1, 1)	Rec Stat: (L, 5, 1)
	Archive: (L, 8, 1)	Enc Lvl: (L, 17, 1)	Desc: (L, 18, 1)
	Multipart: (L, 19, 1)	Date Tp: (8T, 6, 1)	Date 1: (8T, 7, 4)
	Date 2: (8T, 11, 4)	Pl Pub: (8T, 15, 3)	Form: (8T, 23, 1)
	Lang: (8T, 35, 3)	Mod Rec: (8T, 38, 1)	Source: (8T, 39, 1)
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                            8T = 008 Tag   39T = 039 Tag
                            ro => Read Only

3.1.1.4 Music: Type = c or d

MARC 21 008 - Music

Layout of fields including field of origin, starting position, and number of letters or numbers

MUSIC21	Local Lvl: (VT, 0, 1)	Analyzed: (VT, 1, 1)	Rec Stat: (L, 5, 1)
	Archive: (L, 8, 1)	Enc Lvl: (L, 17, 1)	Desc: (L, 18, 1)
	Multipart: (L, 19, 1)	Date Tp: (8T, 6, 1)	Date 1: (8T, 7, 4)
	Date 2: (8T, 11, 4)	Pl Pub: (8T, 15, 3)	Comp: (8T, 18, 2)
	Format: (8T, 20, 1)	Parts : (8T, 21, 1)	Audience: (8T, 22, 1)
	Form: (8T, 23, 1)	Accom Mat: (8T, 24, 6)	LTxt: (8T, 30, 2)
	Transposition (8T, 33, 1)	Lang: (8T, 35, 3)	Mod Rec: (8T, 38, 1)
	Source: (8T, 39, 1)		
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                          8T = 008 Tag   39T = 039 Tag
                          ro => Read Only

3.1.1.5 Sound Recording: Type = i or j

MARC 21 008 - Sound Recording

Layout of fields including field of origin, starting position, and number of letters or numbers

MUSIC21	Local Lvl: (VT, 0, 1)	Analyzed: (VT, 1, 1)	Rec Stat: (L, 5, 1)
	Archive: (L, 8, 1)	Enc Lvl: (L, 17, 1)	Desc: (L, 18, 1)
	Multipart: (L, 19, 1)	Date Tp: (8T, 6, 1)	Date 1: (8T, 7, 4)
	Date 2: (8T, 11, 4)	Pl Pub: (8T, 15, 3)	Comp: (8T, 18, 2)
	Format: (8T, 20, 1)	Parts : (8T, 21, 1)	Audience: (8T, 22, 1)
	Form: (8T, 23, 1)	Accom Mat: (8T,24, 6)	LTxt: (8T, 30, 2)
	Transposition (8T, 33, 1)	Lang: (8T, 35, 3)	Mod Rec: (8T, 38, 1)
	Source: (8T, 39, 1)		
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                         8T = 008 Tag   39T = 039 Tag
                         ro => Read Only

3.1.1.6 Map: Type = e or f

MARC 21 008 - Map

Layout of fields including field of origin, starting position, and number of letters or numbers

MAP21	Local Lvl: (VT, 0, 1)	Analyzed: (VT, 1, 1)	Rec Stat: (L, 5, 1)
	Archive: (L, 8, 1)	Enc Lvl: (L, 17, 1)	Desc: (L, 18, 1)
	Multipart: (L, 19, 1)	Date Tp: (8T, 6, 1)	Date 1: (8T, 7, 4)
	Date 2: (8T, 11, 4)	Pl Pub: (8T, 15, 3)	Relief: (8T, 18, 4)
	Proj: (8T, 22, 2)	Cart Tp: (8T, 25, 1)	Govt Pub: (8T, 28, 1)
	Form: (8T, 29, 1)	Index: (8T, 31, 1)	Spc Chrs: (8T, 33, 2)
	Lang: (8T, 35, 3)	Mod Rec: (8T, 38, 1)	Source: (8T, 39, 1)
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                          8T = 008 Tag   39T = 039 Tag
                          ro => Read Only

3.1.1.7 Visual Material: Type = g, k, o, or r

MARC 21 008 - Visual Material

Layout of fields including field of origin, starting position, and number of letters or numbers

VIS21	Local lvl: (VT, 0, 1)	Analyzed: (VT, 1, 1)	Rec Stat: (L, 5, 1)
	Archive: (L, 8, 1)	Enc Lvl: (L, 17, 1)	Desc: (L, 18, 1)
	Multipart: (L, 19, 1)	Date Tp: (8T, 6, 1)	Date 1: (8T, 7, 4)
	Date 2: (8T, 11, 4)	Pl Pub: (8T, 15, 3)	Run Tm: (8T, 18, 3)
	Audience: (8T, 22, 1)	Govt Pub: (8T, 28, 1)	Form: (8T, 29, 1)
	Type Mat: (8T, 33, 1)	Tech: (8T, 34, 1)	Lang: (8T, 35, 3)
	Mod Rec: (8T, 38, 1)	Source: (8T, 39, 1)	
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                             8T = 008 Tag   39T = 039 Tag
                             ro => Read Only

3.1.1.8 Computer File: Type = m

```
┌─────────────────────────────────────────────────────────────────────────┐
│ ◆ Fixed Field Editor                                                [?][X]│
│ ┌─Computer File 008 Fixed Fields──────────────────────────────────────┐  │
│ │                                                                       │ │
│ │  Local Lvl: [4    ]      Analyzed: [0    ]      Rec Stat: [New     ▼] │ │
│ │                                                                       │ │
│ │  Archive:  [No specific type ▼]  Enc Lvl: [(#) Full level ▼]  Desc: [AACR 2 ▼] │ │
│ │                                                                       │ │
│ │  Multipart:[Not specified or not applica ▼]  Date Tp:[      ▼]  Date 1: [      ] │ │
│ │                                                                       │ │
│ │  Date 2:  [        ]     Pl Pub: [Not specified ▼]  Audience:[Unknown or not specified ▼] │ │
│ │                                                                       │ │
│ │  Form:  [Unknown or not specified ▼]  File Tp:[Game ▼]  Govt Pub:[Not a govt. publication ▼] │ │
│ │                                                                       │ │
│ │  Lang:  [English (eng) ▼]    Mod Rec:[Not modified ▼]  Source:[Other ▼] │ │
│ │                                                                       │ │
│ │  Entered: [130123    ]   Virtua: [        ]     Used: [        ]      │ │
│ └───────────────────────────────────────────────────────────────────┘  │
│                                                   [  OK  ]   [ Cancel ]   │
└─────────────────────────────────────────────────────────────────────────┘
```

MARC 21 008 - Computer File

Layout of fields including field of origin, starting position, and number of letters or numbers

COMP21	Local Lvl: (VT, 0, 1)	Analyzed: (VT, 1, 1)	Rec Stat: (L, 5, 1)
	Archive: (L, 8, 1)	Enc Lvl: (L, 17, 1)	Desc: (L, 18, 1)
	Multipart: (L, 19, 1)	Date Tp: (8T, 6, 1)	Date 1: (8T, 7, 4)
	Date 2: (8T, 11, 4)	Pl Pub: (8T, 15, 3)	Audience: (8T, 22, 1)
	Form: (8T, 23, 1)	File Tp: (8T, 26, 1)	Govt Pub: (8T, 28, 1)
	Lang: (8T, 35, 3)	Mod Rec: (8T, 38, 1)	Source: (8T, 39, 1)
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                            8T = 008 Tag   39T = 039 Tag
                            ro => Read Only

3.1.2 Authority 008

3.1.2.1 Type = z

MARC 21 008 - Authority

Layout of fields including field of origin, starting position, and number of letters or numbers

AUTH21	Local Lvl: (VT, 0, 1)	Auth Lang (VT, 22, 3)	Rec Stat: (L, 5, 1)
	Enc Lvl: (L, 17, 1)	Geo Subd: (8T, 6, 1)	Roman: (8T, 7, 1)
	Cat Lang: (8T, 08, 1)	Rec Kind: (8T, 9, 1)	Cat Rules: (8T, 10, 1)
	Subj: (8T, 11, 1)	Series Tp: (8T, 12, 1)	Numb: (8T, 13, 1)
	Hd Main: (8T, 14, 1)	Hd Subj: (8T, 15, 1)	Hd Series:(8T, 16, 1)
	Subd Type: (8T, 17, 1)	Govt Ag:(8T, 28, 1)	Ref Eval: (8T, 29, 1)
	Updating: (8T, 31, 1)	Psnl Name:(8T, 32, 1)	Estab Lvl: (8T, 33, 1)
	Mod Rec: (8T, 38, 1)	Source: (8T, 39, 1)	
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   VT = Innovative Locally-defined Tag
                            8T = 008 Tag   39T = 039 Tag
                            ro => Read Only

3.1.3 Holdings 008

3.1.3.1 Type = v, x, or y

MARC 21 008 - Holdings

Layout of fields including field of origin, starting position, and number of letters or numbers

HOLD21	Local Lvl: (VT, 0, 1)	Rec Stat: (L, 5, 1)	Enc Lvl: (L, 17, 1)
	Item: (L, 18, 1)	Acq Stat: (8T, 6, 1)	Acq Method: (8T, 7, 1)
	Cancel: (8T, 8, 4)	Gen Ret Policy:(8T, 12, 1)	Spec Ret: (8T, 13, 3)
	Comp: (8T, 16, 1)	Copies: (8T, 17, 3)	Lend Policy: (8T, 20, 1)
	Repro Policy: (8T, 21, 1)	Lang: (8T, 22, 3)	Composite: (8T, 25, 1)
	Report Date: (8T, 26, 6)		
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   8T = 008 Tag
                              VT = Innovative Locally-defined Tag   39T = 039 Tag
                              ro => Read Only

3.1.4 Community Information 008

3.1.4.1 Type = q

MARC 21 008 - Community Information

Layout of fields including field of origin, starting position, and number of letters or numbers

COMM21	Local Lvl: (VT, 0, 1)	Rec Stat: (L, 5, 1)	Data Lvl: (L, 7, 1)
	Vol Op: (8T, 6, 1)	Vol Avail: (8T, 7, 1)	Child Care: (8T, 8, 1)
	Speakers: (8T, 9, 1)	Supp Grps: (8T, 10, 1)	Rooms: (8T, 11, 1)
	Lang: (8T, 12, 3)		
	Entered: (8T, 0, 6) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   8T = 008 Tag
                            VT = Innovative Locally-defined Tag   39T = 039 Tag
                            ro => Read Only

3.1.5 Circulation Patron 008

3.1.5.1 Type = P; Subsystem level (Ldr 07) = a or c

MARC 21 008 - Patron

Layout of fields including field of origin, starting position, and number of letters or numbers

PATR21	Local Lvl: (VT, 0, 1)	Rec Stat: (L, 5, 1)	Permission: (8T, 8, 1)
	Non-Lib: (8T, 9, 1)	Addr Pref: (8T, 10, 1)	Minor: (8T, 11, 1)
	Valid: (8T, 12, 1)	Recall: (8T, 13, 1)	Proxy Not: (8T, 14, 1)
	Keep CO Hist: (8T, 15, 1)	Allow Dupl Cos: (8T, 16, 1)	Display Na: (8T, 17, 1)
	Entered: (8T, 0, 8) ro	Virtua: (39T, $y) ro	Used: (39T, $a) ro

Key to Origin Codes: L = Leader   8T = 008 Tag
                                              VT = Innovative Locally-defined Tag   39T = 039 Tag
                                              ro => Read Only

3.2 006 Tag

3.2.1 006 Fixed-Field Layouts

3.2.1.1 Book: 00 = a or t

MARC 21 006 - Book

Layout of fields, including position and number of letters or numbers

BKS21	Illus: (1, 4)	Audience: (5, 1)	Form: (6, 1)
	Contents: (7, 4)	Govt Pub: (11, 1)	Conf Pub: (12, 1)
	Festschr: (13, 1)	Index: (14, 1)	Fiction: (16, 1)
	Biography: (17, 1)		

3.2.1.2 Music: 00 = c or d

MARC 21 006 - Music

Layout of fields, including position and number of letters or numbers

MUSIC21	Comp: (1, 2)	Format: (3, 1)	Music parts (4, 1)
	Audience: (5, 1)	Form: (6, 1)	Accom Mat: (7, 6)
	LTxt: (13, 2)	Transposition (16, 1)	

3.2.1.3 Sound Recording: 00 = i or j

MARC 21 006 - Sound Recording

Layout of fields, including position and number of letters or numbers

MUSIC21	Comp: (1, 2)	Format: (3, 1)	Music Parts: (4, 1)
	Audience: (5, 1)	Form: (6, 1)	Accom Mat: (7, 6)
	LTxt: (13, 2)	Transposition: (16, 1)	

3.2.1.4 Map: 00 = e or f

MARC 21 006 - Map

Layout of fields, including position and number of letters or numbers

MAP21	Relief: (1, 4)	Proj: (5, 2)	Cart Tp: (8, 1)
	Govt Pub: (11, 1)	Form: (12, 1)	Index: (14, 1)
	Spc Chrs: (16, 2)		

3.2.1.5 Visual Material: 00 = g, k, o, or r

MARC 21 006 - Visual Material

Layout of fields, including position and number of letters or numbers

VIS21	Run Time: (1, 3)	Audience: (5, 1)	Govt Pub: (11, 1)
	Form: (12, 1)	Type Mat: (16, 1)	Tech: (17, 1)

3.2.1.6 Computer File: 00 = m

MARC 21 006 - Computer File

Layout of fields, including position and number of letters or numbers

COMP21	Audience: (5, 1) Govt Pub: (11, 1)	Form: (6, 1)	File: (9, 1)

3.2.1.7 Mixed Material: 00 = p

MARC 21 006 - Mixed Material

Layout of fields, including position and number of letters or numbers

MIXED21	Form: (6, 1)		

3.2.1.8 Serial: 00 = s

MARC 21 006 - Serial

Layout of fields, including position and number of letters or numbers

SER21	Frequency: (1, 1)	Regularity: (2, 1)	ISSN: (3, 1)
	Serial Tp: (4, 1)	Orig Item Fm:(5, 1)	Form: (6, 1)
	Entire Work: (7, 1)	Contents: (8, 3)	Govt Pub: (11, 1)
	Conf Pub: (12, 1)	Alphabet: (16, 1)	S/L Entry: (17, 1)

3.3 007 Tag

3.3.1 007 Fixed-Field Layouts

3.3.1.1 Map: 00 = a

MARC 21 007 - Map

Layout of fields, including position and number of letters or numbers

MAP21	SMD: (1, 1)	Color: (3, 1)	Phys Med: (4, 1)
	Type Repr: (5, 1)	Prd/Rep Det: (6, 1)	Pos/Neg Asp: (7, 1)

3.3.1.2 Computer File: 00 = c

MARC 21 007 - Computer

Layout of fields, including position and number of letters or numbers

COMP21	SMD: (1, 1)	Color: (3, 1)	Dimension (4, 1)
	Sound: (5, 1)	Image Depth: (6, 3)	File Formats: (7, 1)
	Quality Target: (8, 1)	Ante/Source: (9, 1)	Cmpressn Lvl: (10, 1)
	Ref Quality: (11, 1)		

3.3.1.3 Globe: 00 = d

MARC 21 007 - Globe

Layout of fields, including position and number of letters or numbers

GLOBES21	SMD: (1, 1)	Color: (3, 1)	Phys Med: (4, 1)
	Type Repr: (5, 1)		

3.3.1.4 Disabilities (CIF):   00 = e

MARC 21 007 – Disabilities (CIF)

Layout of fields, including position and number of letters or numbers

DISAB21	Ramps: (1, 1)	Doors: (2, 1)	Furniture: (3, 1)
	Restrooms: (4, 1)	Elevators: (5, 1)	Telephones: (6, 1)
	Emerg Light: (7, 1)	Sign Lang: (8, 1)	Subtitles: (9, 1)
	Parking: (10, 1)		

3.3.1.5 Tactile Materials: 00 = f

MARC 21 007 – Tactile Materials

Layout of fields, including position and number of letters or numbers

TACMAT21	SMD: (1, 1)	Braille Cls: (3, 1)	Contraction Lvl: (5, 1)
	Brl Music Format: (6, 3)	Phys Char: (9, 1)	

3.3.1.6 Projected Graphic: 00 = g

MARC 21 007 - Projected Graphic

Layout of fields, including position and number of letters or numbers

PROJGRAPH21	SMD: (1, 1)	Color: (3, 1)	Emul Base: (4, 1)
	Snd on Med: (5, 1)	Snd Med: (6, 1)	Dimensions: (7, 1)
	Sec Sup Mat: (8, 1)		

3.3.1.7 Microform: 00 = h

MARC 21 007 - Microform

Layout of fields, including position and number of letters or numbers

MICROFORMS21	SMD: (1, 1)	Pos/Neg Asp:(3, 1)	Dimension: (4, 1)
	Redct Range:(5, 1)	Redct Ratio: (6, 3)	Color: (9, 1)
	Film Emul: (10, 1)	Generation:(11, 1)	Film Base: (12, 1)

3.3.1.8 Non-projected Graphic: 00 = k

MARC 21 007 - Non-projected Graphic

Layout of fields, including position and number of letters or numbers

NONPROJGRAPH21	SMD: (1, 1)	Color: (3, 1)	Prm Sup Mat: (4, 1)
	Sec Sup Mat: (5, 1)		

3.3.1.9 Motion Picture: 00 = m

MARC 21 007 - Motion Picture

Layout of fields, including position and number of letters or numbers

MOVIES21	SMD: (1, 1)	Color: (3, 1)	Pres Form: (4, 1)
	Snd on Med: (5, 1)	Snd Med: (6, 1)	Dimension: (7, 1)
	Playback Ch: (8, 1)	Prod Elem: (9, 1)	Pos/Neg Asp:(10, 1)
	Generation: (11, 1)	Film Base: (12, 1)	Color Cat: (13, 1)
	Stock/Print: (14, 1)	Det Stage: (15, 1)	Completeness:(16, 1)
	Inspct Date: (17, 6)		

3.3.1.10 Kit: 00 = o
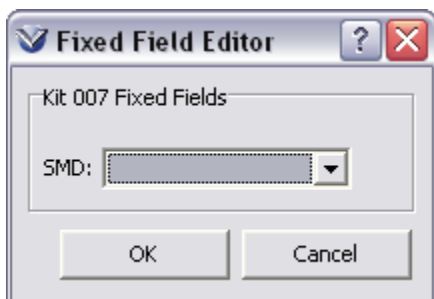
MARC 21 007 - Kit

Layout of fields, including position and number of letters or numbers

KIT21	SMD: (1, 1)		

3.3.1.11 Circulation Patron: Blocks and Restrictions: 00 = p

Note: Fields 17-19 and 22-24 are system controlled. You cannot edit them.

MARC 21 007 - Patron Blocks and Restrictions

Layout of fields, including position and number of letters or numbers

PATR21	Chrg Priv Deny: (1, 1)	Renw Priv Deny: (2,1)	Recl Priv Deny: (3,1)
	Hold Priv Deny: (4, 1)	ILL Priv Deny: (5, 1)	Card Lost: (6, 1)
	Card Stolen: (7, 1)	Max Itms Chrgd: (8, 1)	Max Itms Odue: (9, 1)
	Maxed Renewls:(10, 1)	Mx Itm Rt Clms:(11, 1)	Max Itms Lost:(12, 1)
	Excsv Fines: (13, 1)	Excsv Fees:(14, 1)	Recall Ovdue:(15, 1)
	Max Itms Billed:(16, 1)	Sys Chckout Blk: (17)	Sys Renw Blk: (18)
	Sys Hold Blk: (19)	Address Blk: (20, 1)	Other Circ Blks:(21, 1)
	Sys Loan Blk: (22)	Sys Recl Blk: (23)	Sys Page Blk: (24)
	Record Expired (25)	Institution (26-55)	

3.3.1.12 Notated Music: 00 = q

MARC 21 007 – Notated Music

Layout of fields, including position and number of letters or numbers

NOTMUSIC21	SMD: (1, 1)		

3.3.1.13 Remote Sensing Image: 00 = r

MARC 21 007 – Remote Sensing Image

Layout of fields, including position and number of letters or numbers

REMOTESENS21	SMD: (1, 1)	Altitude:(3, 1)	Attitude: (4, 1)
	Cloud Cvr: (5, 1)	Platform Type: (6, 1)	Platform Use: (7, 1)
	Sensor Type: (8, 1)	Date Type: (9, 2)	

3.3.1.14 Sound Recording: 00 = s

MARC 21 007 - Sound Recording

Layout of fields, including position and number of letters or numbers

SOUND21	SMD: (1, 1)	Speed: (3, 1)	Playbk Chan: (4, 1)
	Grv Wid/Pit: (5, 1)	Dimension: (6, 1)	Tape Width: (7, 1)
	Tape Cnfig: (8, 1)	Disc/Cyl/Tp: (9, 1)	Material: (10, 1)
	Cutting: (11, 1)	Playbk Char: (12, 1)	Cap Tech: (13, 1)

3.3.1.15 Text: 00 = t

MARC 21 007 - Text

Layout of fields, including position and number of letters or numbers

TEXT21	SMD: (1, 1)		

3.3.1.16 Video Recording: 00 = v

MARC 21 007 - Video Recording

Layout of fields, including position and number of letters or numbers

VIDEO21	SMD: (1, 1)	Color: (3, 1)	Format: (4, 1)
	Snd on Med: (5, 1)	Snd Med: (6, 1)	Dimension: (7, 1)
	Playbk Chan: (8, 1)		

3.3.1.17 Unspecified: 00 = z

MARC 21 007 - Unspecified

Layout of fields, including position and number of letters or numbers

UNSPEC21	SMD: (1, 1)		

4. Fixed Field Layout (CATMARC)

CATMARC defines ONE 008 fixed field layout for all types of bibliographic materials. It does not define any fixed field layouts for the 006 tag or 007 tag.

CATMARC - Bibliographic Material 008

The order of the display of fixed fields, starting in the first row and going left to right, is as follows:

- **Unique Innovative-defined fields** - *Nivell Local* and *Analitzat* from the 999 VIRTUA tag.
- **Leader fields** - *Estat del registre* and *Nivell de codificació* from the Leader.
- **008 fixed fields**
- **Other fields** - *Entrat* (from the 008), *Virtua* (from the 039 subfield $y), and *Modificat* (from the 039 subfield $a), all of which are read only.

5. Fixed Field Layouts (UNIMARC)

UNIMARC defines 1xx tags as fixed field tags in both bibliographic and authority records. Virtua supports fixed field editing for some of the 1xx tags but not all of them.

5.1 Bibliographic Fixed Fields

Fields for the following UNIMARC bibliographic record tags can be edited in the Fixed Field Editor: 100, 105, 110, 115, 116, 117, 120, 121, 126, 130, 135, 140, and 141.

UNIMARC - General Processing Data 100

UNIMARC - Textual Material, Monographic 105

UNIMARC - Serials 110

UNIMARC - Visual Projects, Video Recordings, and Motion Pictures 115

UNIMARC - Graphics 116

UNIMARC - Three-dimensional Artifacts and Realia 117

UNIMARC - Cartographic Materials: General 120

UNIMARC - Cartographic Materials: Physical Attributes 121

UNIMARC - Sound Recordings: Physical Attributes 126

UNIMARC - Microforms: Physical Attributes 130

UNIMARC - Electronic Resources 135

UNIMARC - Antiquarian: General 140

UNIMARC - Antiquarian: Copy Specific Attributes 141

5.2 Authority Fixed Fields

Fields for the following UNIMARC authority record tags can be edited in the 1xx Fixed Field Editor: 100, 106, 120, 150, and 154. In addition, the UNIMARC authority record tag 123 can be edited in the 123 Fixed Field Editor.

UNIMARC Authority Record: Tag 1xx

UNIMARC Authority Record: Tag 123

6. The 2709 Format for Patron Records in Virtua

This chapter describes the complete Innovative-defined 2709 MARC communications format for patron records. Additionally, the patron format is available via the Help menu in the Virtua client. For details on working with patron records, see the *Virtua Circulation Control/Patron Information User's Guide.*

Important: This format does not necessarily reflect the implementation of Virtua. We note exceptions where appropriate.

Throughout this format, the numbers in parentheses are the numbers from the "structured order chart" of Z39.69. Repeatability (or non-repeatability) of fields and subfields has not been defined in this format. That decision is being left to the implementation of the format.

<u>LEADER</u>

00-04   Logical record length

05   Record status (02)

          A code that indicates the status of the record for file maintenance purposes. A one-character code that indicates the relation of the record to a file.

          n   New record
          d   Deleted record
          c   Corrected or revised record

06   Type of record

          A code that indicates that this record is in the patron record format.

          P   name/address record

07   Subsystem level

          A code that identifies the pertinent subsystem the record is intended to be used with.

          a   Circulation patron

        c   Inter-library Loan library

08-09   Undefined

10   Indicator count

11   Subfield count

12-16   Base address of data

17-19   Undefined

20-23   Entry map

        20   Length of the length-of-field portion; contains a 4
        21   Length of the starting-character-position; contains a 5
        22   Length of the implementation-defined portion; contains a 0 (zero)
        23   Undefined entry map position; contains a 0 (zero)

DIRECTORY

Same as other MARC formats

MARC TAGS AND SUBFIELDS

001   Control number (01.02)

        The number assigned to a patron record by the system creating, using, or distributing the record. This number is unique in the system and is of variable length.

> **Important:** In Virtua, the value stored in the 001 tag is called the patron-ID.

003   Control Number Identifier/System of origin (01.01)

        Identifies system that generated the Control number. This element, together with the Control number, should be absolutely unique. This field contains the MARC 21 code for the agency whose system control number is present in field 001.

005   Date and time of latest batch transaction/Date and time of last batch update (03.01)

This field contains 16 characters that specify the date and time of the latest change to the content of the record (for example, changes in address or status) made by a batch program. The date is recorded according to *Representation for Calendar Date and Ordinal Date for Information Interchange* (ANSI X3.30). The date requires 8 numeric characters in the pattern *yyyymmdd* (4 for the year, 2 for the month, and 2 for the day). The time is recorded according to *Representation of Local Time of the Day for Information Interchange* (ANSI X3.43). The time requires 8 numeric characters in the pattern hhmmss.f (2 for the hour, 2 for the minute, 2 for the second, and 2 for a decimal fraction of the second, including the decimal point). The 24 hour clock (00-23) is used.

006   Date and time of latest manual transaction/Date and time of last manual update (03.02)

This field contains 16 characters that specify the date and time of the latest change to the content of the record (for example, changes in address or status) made manually by a human operator. The date is recorded according to *Representation for Calendar Date and Ordinal Date for Information Interchange* (ANSI X3.30). The date requires 8 numeric characters in the pattern *yyyymmdd* (4 for the year, 2 for the month, and 2 for the day). The time is recorded according to *Representation of Local Time of the Day for Information Interchange* (ANSI X3.43). The time requires 8 numeric characters in the pattern hhmmss.f (2 for the hour, 2 for the minute, 2 for the second, and 2 for a decimal fraction of the second, including the decimal point). The 24 hour clock (00-23) is used.

007   Blocks and restrictions fixed fields (05)

This field defines current restrictions that are a result of the patron's borrowing history. These blocks and restrictions may or may not be system-generated. The values for each character position may be 0 (zero) for "no" or 1 (one) for "yes". Following the practice of other 007 fields the first position is the "Category of material" with value "p" being used for patron records. [Underlined items are listed in Z39.69]

Note: In a consortium database, there may be one 007 for each institution. In a non-consortium database, the tag is non-repeatable.

01   Charging privileges denied
02   Renewal privileges denied
03   Recall privileges denied
04   Hold-placing privileges denied
05   ILL privileges denied

06	Card reported lost
07	Card reported stolen
08	Too many items charged
09	Too many items overdue
10	Has made too many renewals
11	Too many claims of items returned
12	Too many items lost
13	Excessive outstanding fines
14	Excessive outstanding fees
15	Has recall overdue
16	Too many items billed
17	System Check-out block
18	System Renewal block
19	System Request (hold) block
20	Address block
21	Other Circulation-related blocks (specified in field 043, Borrowing privilege note)
22	System Request (loan) block
23	System Request (recall) block
24	System Request (page) block
25	Patron record expired
26-55	Consortium only: Institution symbol for the institution at which the blocks apply.

008   Fixed length data elements

00-07   Date entered on file

The computer-generated, eight-character numeric string that indicates the date the MARC record was created. The date is recorded in the pattern *yyyymmdd*.

08   Permission to use this record (04.01)

This field is used for preserving patron privacy, by allowing patron to determine the degree to which patron's information may be shared.

0   Access is restricted to use within a single library and/or database

r   Patron record may be read by another library and/or database

c   Patron record may be copied to another library and/or database

09   Permission for non-traditional library use (04.01)

This field is used for indicating whether the information in this patron record may be used for non-traditional library activities, such as mailing lists.

a   Can be used for non-traditional library activities
blank   Cannot be used for non-traditional library activities

10   Current address preference flag (11.01)

This field is used to indicate which of the primary communication methods (paper, e-mail, text message, or text and e-mail) is to be used for the production of notices.

0   Use field 270 $a (primary paper address)
1   Use field 271 $a (primary e-mail address)
2   Use field 270 $j (text message, i.e., specialized telephone number)
3   Use 270 $j and 271 $a (text and e-mail)

11   Minor flag (12.01.08)

Whether a patron is to be held responsible for his or her own actions, with respect to the library.

0   Not a minor
1   Minor

12   Validation flag

This field defines whether the individual or corporate body identified in the record is considered "valid" for the intended use.

0   Valid
1   Not valid

13   Recall protection flag

This field defines whether the patron has the ability to be protected from the placement of recalls against items he/she has checked out.

0   Recalls can be placed against patron's items
1   Recalls cannot be placed against patron's items

14   Proxy notification flag

This one-character field establishes whether the responsible person (the person identified in the 015) is notified when subordinates are in default, or whether the subordinate (identified in 018) is notified before the responsible person is.

0   Responsible person notified first
1   Subordinate notified first

15-16   History Flags

This two-character field contains information concerning the storage of patron check-out history and whether an item in the history can be checked out more than once.
.
Position 15: Affects Chamo only. When the value is 1, patrons can view their check-out history in Chamo. Patrons can change the flag within the Chamo interface.
Position 16: Affects both Chamo and Virtua. But in Virtua, the flag controls two aspects: When the value is 0 (*default*), Virtua will maintain patron history, displaying the data on the Patron Information window; in addition, Virtua will not allow duplicate check-outs of items in the history list.

Note: As of version 2012.3, the server stores the time that the history flag was changed from OFF to ON. For patrons that already had their history list flag on, the date was set to Jan 1, 1970. For newly flagged patrons, the current system date is recorded in the patron table.

15

0   History list is not viewable by a patron in Chamo
1   History list is viewable by a patron in Chamo

16

0   Patron history is stored in Virtua, and items in the history are not allowed to be checked out again. The History page is present on the Activity tab of the Patron Information window.
1   Patron history is NOT stored in Virtua, and items in the history are allowed to be checked out again.

17   Name display flag

This one-character field contains information on whether the name of the patron is displayed in the client on records containing item (checked out) information.

0   Name is not displayed
1   Name is displayed

18   Block from e-resource access (HKPL only)

This one character field contains information on whether the patron is blocked from access to e-resources in Chamo.

0   Patron is not blocked from e-resource access
1   Patron is blocked from e-resource access

014   Chamo patron username

Unique identification of the patron that the record is describing. It is used to log in to Chamo. Multiple IDs may be issued to a patron only if the $5 is different (consortium only). Thus this field is not repeatable for non-consortium libraries except when the $x is included.

Indicators: blank

Subfields:

a   Chamo Username

Unique identification of patron within the system.

b   Patron Password

Unencrypted version of the password used to validate patron for logging in to Chamo. The unencrypted version of the password is present only when it is being used to set a new password.

c   Encrypted version of $b.

Encrypted version of the patron password, which originated in subfield $b.

d   Disabled Status Date

Represents the date of the current status of the ID
represented by the specific 014 tag, as indicated by the $x,
when present. Upon creation, there need not be a $d in the
record. If the ID is reported lost, the $d should be changed to
reflect the date the loss was reported. If a new ID is
subsequently provided to replace the lost ID, the $d will
contain the date of creation of the disabled status,
represented by the $x. This can be used to compare with a
date of issue on a new card to determine that the new card
was issued after the old card had been reported lost

o   Opt-in

Represents the patron's permission to use the specific ID for
circulation and authentication (see 017 tag for possible
values).

x   Disabled Reason

Indicates that the ID number in $a is disabled for the reason
given here.

5   The symbol of the institution that supplied this ID.
(Consortium only.)

015   Patron barcode number

Primary unique identification of patron the record is describing. Multiple
barcodes may be issued to a patron only if the $5 is different (consortium
only). Thus this field is required but not repeatable for non-consortium
libraries except when the $x is included.

Indicators: blank

Subfields:

a   Patron-ID number (07.04)

Unique identification of patron within the system. Normally
this would be a barcode number or an OCR number.

b   Patron Password (07.06)

Unencrypted version of the password used to validate the patron for restricted or confidential activities, such as charging items, placing holds, or looking at patron's own patron record. The data may be used for dial-in access. The unencrypted version of the password is present only when it is being used to set a new password or when the Keep Unencrypted Patron Record Passwords setting is turned on in the Profiler.

c   Encrypted version of $b.

Encrypted version of the patron password, which originated in subfield $b.

d   Disabled Status Date

Represents the date of the current status of the ID represented by the specific 015 tag, as indicated by the $x, when present. Upon creation, there need not be a $d in the record. If the ID is reported lost, the $d should be changed to reflect the date the loss was reported. If a new ID is subsequently provided to replace the lost ID, the $d will contain the date of creation of the disabled status, represented by the $x. This can be used to compare with a date of issue on a new card to determine that the new card was issued after the old card had been reported lost

o   Opt-in

Represents the patron's permission to use the specific ID for circulation and authentication (see 017 tag for possible values).

x   Disabled Reason

Indicates that the ID number in $a is disabled for the reason given here.

5   The symbol of the institution that supplied this ID. (Consortium only.)

Examples:

015 -- $a 2000123458 $b pcwren1945 $5 UCL
015 -- $a 2573687068 $5 UCL

016   Alternate Patron-ID

This field is used when an alternate ID is used on behalf of the main patron identified in field 015.

Note: for normal multiple IDs assigned a patron (at the same institution or different institutions) the 015 primary ID should always be used. Multiple IDs may be issued to a patron only if the $5 is different (consortium only). Thus this field is not repeatable for non-consortium libraries except when the $x is included.

Important: In Virtua, the value stored in the 016 tag is called the alternate patron barcode, not the alternate patron-ID as indicated here. The value in the 001 tag is the system-generated patron-ID.

Indicators: blank

Subfields:

a   Patron-ID number (08.04)

Unique identification of alternate patron within the system. Normally this would be a barcode number or an OCR number.

b   Patron Password (08.06)

Unencrypted version of the password used to validate the patron for restricted or confidential activities, such as charging items, placing holds, or looking at patron's own patron record. The data may be used for dial-in access. The unencrypted version of the password is present only when it is being used to set a new password or when the Keep Unencrypted Patron Record Passwords setting is turned on in the Profiler.

c   Encrypted version of $b.

Encrypted version of the patron password, which originated in subfield $b.

d   Disabled Status Date

Represents the date of the current status of the ID
represented by the specific 016 tag, as indicated by the $x,
when present. Upon creation, there need not be a $d in the
record. If the ID is reported lost, the $d should be changed to
reflect the date the loss was reported. If a new ID is
subsequently provided to replace the lost ID, the $d will
contain the date of creation of the disabled status,
represented by the $x. This can be used to compare with a
date of issue on a new card to determine that the new card
was issued after the old card had been reported lost

o   Opt-in

Represents the patron's permission to use the specific ID for
circulation and authentication (see 017 tag for possible
values).

x   Disabled Reason

Indicates that the ID number in $a is disabled for the reason
given here

5   The symbol of the institution that supplied this ID.
(Consortium only.)

Examples:

016 -- $a 2000123458 $b pcwren1945 $z 2000324769 $5 UCL

016 -- $a 2573687068 $5 UCL

016 -- $8 1 $a 2000000123

016 -- $8 2 $a 2123003355

016 -- $8 3 $a 2000000468

100 10 $a Espley $c Daughter $d 19790202 $h Dawn $s F $l French

711 10 $8 1 $a Espley $d 19450701 $e Mr. $f Jr. $h John $i 2000000025 $s M
        l Gaelic $r Father

715 10 $8 2 $a Chachra, Vinod $d 19790202 $i 2000000023 $r Business associate

715 10 $8 3 $a Wren, Percival Christopher, $d 19410202 $i 2000000853 $r Employer

770 -- $8 1 $a 800 McDaniel Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940825 $z 19941231 $6 US Mail $7 Home

770 -- $8 2 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940125 $z 19941231 $6 US Mail $7 Office

770 -- $8 3 $a 100 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940326 $z 19941231 $6 US Mail $7 Business

771 -- $8 2 $a chachrav@vtls.com $b Internet $f U.S.A. $p Dimitri Krinos $q Network Administrator $k 703-231-3605 $7 Office

771 -- $8 3 $a pcwren2345@aol.com $b America Online $f Canada $7 Home

017   HKID number

Unique Hong Kong ID number, required for all Hong Kong residents. Multiple IDs may be issued to a patron only if the $5 is different (consortium only). Thus this field is not repeatable for non-consortium libraries.

Indicators: blank

Subfields:

a   HKID number

Unique Hong Kong ID number, required for all Hong Kong residents.

b   Patron Password

Password used to validate alternate patron for restricted or confidential activities, such as charging items, placing holds, or looking at one's own patron record. The data may be used for dial-in access, and it may be encrypted.

c   Encrypted version of $b.

The unencrypted version of the password is only present when it is being used to set a new password.

d   Disabled Status Date

Represents the date of the current status of the ID represented by the specific 017 tag, as indicated by the $x, when present. Upon creation, there need not be a $d in the record. If the ID is reported lost, the $d should be changed to reflect the date the loss was reported. If a new ID is subsequently provided to replace the lost ID, the $d will contain the date of creation of the disabled status, represented by the $x. This can be used to compare with a date of issue on a new card to determine that the new card was issued after the old card had been reported lost

o   Opt-in

Represents the patron's permission to use the specific ID for circulation and authentication. For HKPL, this field will be used to indicate whether a HKID card is valid as MASC, as illustrated in the table below:

$o value	Label	Description	HKID valid for authentication?
1	Opted in as new patron	Indicates that the patron opted in at the time his/her patron record was created. The Patron Record Creation Date = the MASC Opt-in Date.	Yes
2	Opted in as existing patron	Indicates that an existing patron chose to opt in at a later date. The Patron Record Creation Date is before the MASC Opt-in Date.	Yes
3	Replaced	Indicates a patron who registered but subsequently lost his card, and whose card has now been replaced by a new card. The Date of Issue => the Disabled Date.	Yes
0	Not opted in	Indicates a patron who has not opted in.	No
4	Discontinued	Indicates a patron who opted in at one time, but has since opted out.	No
5	Lost	Indicates a patron who opted in at one time, but subsequently lost his card and no valid MASC	No

		has been replaced. The Date of Issue < the Disabled Date.	
6	Lost and discontinued	Indicates a patron who opted in at one time, but subsequently lost his card and decided to opt out when he reported the card as lost. The Date of Issue => the Disabled Date.	No

    x   Disabled Reason

        Indicates that the ID number in $a is disabled for the reason given here.

    p   Opt-in Date

        Date when the patron *first* opted in to use the HKID for authentication. This subfield $p will be automatically populated with the current date upon saving of the record if the value of $o is changed from [blank] to either 1 or 2.

    5   The symbol of the institution that supplied this ID. (Consortium only.)

018   Subordinate information

This field is for identification and information relating to records of individuals that are subordinate to the patron. The patron is serving as a proxy to these individuals.

Indicators:

    1st   Online access

        0 Full access to subordinate activity and accounts
        1 Summary access to subordinate activity and accounts
        2 Summary access to subordinate activity and full access to accounts
        3 Full access to subordinate activity and summary access to accounts

    2nd   Batch reports

        0 Itemized notices and bills
        1 Summary notices and bills
        2 Summary notices and itemized bills
        3 Itemized notices and summary bills

Subfields:

a   Identification number of subordinate individual
b   Relationship of subordinate individual to proxy
8   Field link and sequence number

Examples:

018 00 $a 2123245789 $b son
018 23 $a 2573648977 $b law clerk

019   Patron PIN. This field is not repeatable.

Indicators: blank

Subfields:

a   Patron Personal Identification Number (PIN)
        PIN used to validate patron for restricted or confidential
        activities, such as charging items, placing holds, or looking at
        one's own patron record.

b   Encrypted version of $a
        Unencrypted version of the PIN is only present when it is
        being used to set a new PIN

020   Social Security or social insurance number. This field is not repeatable.

The social security or social insurance number assigned to the patron by a
political entity.

Indicators:

1st   Type of social number

        0   Social Security number
        1   Social insurance number

2nd   blank

Subfields:

a   Number (09.02)

Example:

020 0- $a 573687069

021   Driver's license or ID card information (09.01). This field is not repeatable.

        This field contains information on the patron's driver license or other
        identification card.

        Indicators:

                1st   Type of ID card

                        0   Driver's license
                        1   Not a driver's license

                2nd   blank

        Subfields:

                a   Number (09.0103)
                        The ID number on the patron's driver's license or ID card.

                d   Expiration date (09.01.02)
                        Date after which the patron's driver's license or ID card
                        ceases to be valid.

                y   State/province/country or other body issued (09.01.01)
                        State, province, country or other body that issued the driver's
                        license or ID card.

        Examples:

        021 0- $a 573687023 $d 19950702 $y Virginia
        021 1- $a 1230034 $d 19970615 $y Christiansburg High School

022   Passport Information (09.03). This field is not repeatable.

        This field contains information from the patron's passport.

        Indicators: blank

        Subfields:

                a   Passport number (09.03.01)

The identification number of the passport.

b   Passport expiration date (09.03.03)

The date after which the patron's passport is no longer valid.

c   Country issuing passport (09.03.02)

The country issuing the passport.

d   Visa number (09.03.04)

The identification number of the visa.

e   Visa expiration date (09.03.05)

The date after which the patron's visa is no longer valid.

Examples:

021 -- $a 0001237653 $d 19940622 $c United Kingdom
021 -- $a 002376 $d 19960801 $c Barsoom $d JC2345 $e 19950701

023 Military serial number information (09.04). This field is not repeatable

This field contains information from a military identification card.

Indicators: blank

Subfields:

a   Number (09.04.02)
The military identification of the patron.

b   Military rank (09.04.03)
The military rank of the patron.

Examples:

Colonel
Pfc
Sp5

c   Service (09.04.01)

The branch of service the patron is serving in.

Examples:

Army
Navy
Air Force
Marine Corps
Coast Guard

Examples:

023 -- $a US25734568 $b Captain $c Army
023 -- $a 762348 $b Commander $c Coast Guard

024   Academic ID information (09.05). This field is not repeatable

This field contains information on the academic institution the patron is
associated with.

Indicators: blank

Subfields:

     a   Academic ID number (09.05.03)
The ID number assigned to the patron by the academic
institution.

     d   Date ID number is valid (09.05.04)
The date at which the academic ID number becomes valid.

     z   Date ID number is invalid (09.05.05)
The date after which the academic ID number is no longer
valid.

     5   Institution code (09.05.01)
An encoded form of the name of the institution.

Examples:

024 -- $a 5736870 $d 19940901 $z 19980630 $5 BYU
024 -- $a 3248RA $d 19960701 $z 19970630 $5 UVA

025   Birth Certificate. This field is not repeatable.

This field contains information about the academic institution the patron is associated with.

Indicators: blank

Subfields:

      a   Birth certificate number
      b   Place of issue

026   Standard Address Number of maintainer

The standard address number of the institution maintaining the information in the patron record. The values found in NISO Standard Z39.43-1980 should be used.

Indicators:

      1st   Type of patron

              0   Primary (07.01)
              1   Alternate (08.01)

      2nd   blank

Subfields:

      a   The standard address number

027   Standard Address Number of patron

The standard address number for the entity described in the record. The values found in NISO Standard Z39.43-1980 should be used.

Indicators:

      1st   Type of patron

              0   Primary
              1   Alternate

      2nd   blank

Subfields:

        a   The standard address number

029   Other document number. This field is not repeatable.

      Indicators: blank

      Subfields:

          a   Other document number
                  Document number of another form of identification
                  accepted by the library. "Other ID" is an identification field
                  in the Patron Editor; an appropriate value must be typed in as
                  free text. There is no specific format required.

          b   Place of issue

030   Patron type code (12.01.01)

      This field is an encoded version of field 245, the patron type field. It reflects
      a relationship to the library. In a consortium system, there may be one patron
      type per institution. In a non-consortium system, this field is non-repeatable.

      Indicators: blank

      Subfields:

          a   Patron type code

      Examples:

      030 -- $a FC
      245 -- $a Faculty

      030 -- $a UG
      245 -- $a Undergraduate

      030 -- $a SN
      245 -- $a Senior Citizen

      030 -- $a MS
      245 -- $a Middle School student

031   Entity status code (12.01.03)

This field is a encoded version of field 246, the entity status field. It reflects a temporary relationship to the library.

Indicators: blank

Subfields:

      a   Patron status code

Examples:

031 -- $a IR
246 -- $a In residence $d 19941205

031 -- $a SR
246 -- $a Summer resident $d 19950715

031 -- $a CH
246 -- $a Closed for Holidays $d 19970801

032   Circulation Count

This field is used to record the cumulative number of circulation transactions for the patron

Indicators: blank

Subfields:

      a   Circulation count

Examples:

032 -- $a 234
032 -- $a 123,934

033   Waived Transaction Count

This field is used to record the cumulative number of waived circulation transactions for the patron

Indicators: blank

Subfields:

        a   Waived count
        b   Waived count since date (yyyymmdd)

Examples:

033 -- $a 234 $b 19980428
033 -- $a 123,934 $b 20001125

034   Waived Charges

This field is used to record the cumulative amount of financial charges that have been waived for the patron

Indicators: blank

Subfields:

        a   Waived cumulative amount
        b   Waived charges since date (yyyymmdd)

Examples:

034 -- $a $25.34 $b 19980428
034 -- $a £23.00 $b 20001125

035   System Control Number

This field may be used by consortia to store a unique patron identifier for the purpose of matching and updating.

Indicators: blank

Subfields:

        a   Unique patron identifier

Example:

035 -- $a Unique identifier

036   Circulation Counts (by institution)

This field contains circulation counts for disputed and lost items. A consortium may use it to store a patron's circulation counts by institution. In a non-consortium environment, this field is non-repeatable.

Indicators: blank

Subfields:

a   Dispute Count (number of times patron has disputed a
      check-out)
b   Lost Count (number of times patron has claimed an item as
      being lost)
5   Symbol of the institution that these counts apply to

039   Record History (03.03)

This field contains identification of the human operator who last updated
this patron record manually.

040   Record Source

The NUC symbol for or the name of the organization(s) that created the
original record, assigned a MARC 21 content designation, and transcribed
the record into machine-readable form or modified an existing MARC
record. Thus, this data specifies the parties responsible for the record.

Indicators   Blank

Subfields:

a   Consortium institution symbol (reserved for use by consortia
      only)

041   Language codes

MARC 21 codes for languages associated with a patron when the language
text in subfield l of the name fields is insufficient to convey full information
for a multilingual patron.

Indicators   Blank

Subfields:

a   Language code

042   Registration information dates and times

This field contains information about the registration, expiration, deletion,
and last activity date and time of the patron record.

Indicators   Blank

Subfields:

a   Start date and time (06.01)
         Date patron's library privileges begin.
b   Expiration date and time (06.02)
         Date after which patron is no longer an authorized borrower.
c   Automatic deletion date and time (06.03)
         Date on which the information in this record will be deleted.
d   Last activity date and time (06.04)
         Date of last transaction by this patron; e.g., book charged,
         fine paid, lost book returned. This is in contrast to the Date
         and time of latest update, which records the last change of
         any sort to the content of the patron record.
e   Registration date and time.
         Date the patron record was entered into the system.
f   Most recent third-party authentication date.
         Date the patron record was most recently accessed by a third-
         party system, such as a 3M SelfCheck station.
5   The symbol of the institution that supplied these dates.
         (Consortium only.)

043   Other specified blocks

This field identifies the other specified block indicated by value '1' in 007/21.

Indicators   Blank

Subfields:

a   Free text field indicating the other specified block. [In Classic
         VTLS this was a two-character alphabetic code]

b   A note that will be associated with the block "transaction."

d   The date/time that the block expires.

5   The symbol for the institution at which this block applies.
         If omitted in a consortium system, the block is global to all
         institutions. (Consortium only)

066   Character sets present

Information that indicates that the character set present in a record is other than the ANSEL, the ASCII, or the MARC 21 Greek subscript or superscript character sets.

Indicators   Blank

Subfields:

a	Non-ASCII G0 default character set designation
b	Non-ANSEL G1 default character set designation
c	Alternate graphic character set identification

100   Name of patron (Personal name)

This field contains the information on the patron's name.

Indicators: Blank

Subfields:

a	Last name of patron (10.01.01 and 10.01.02)

Note: Virtua will continue to support [last name,], [first name] in this subfield as well. This will prevent existing Virtua customers from having to re-catalog the patron names in their records.

c	Remaining names/qualifying information (10.01.3)
d	Date of birth

Note: If the "Valid Birth Date Required" parameter is set, this field is required.

e	Prefix (10.01.05)
f	Suffix (10.01.04)
h	First name of patron
s	Sex (10.01.07)
l	Language of service (10.01.08)
	The patron's preferred language of communication.

Note: Subfield $l of the 100 tag allows InfoStation® to generate Circulation notices in a patron's language of choice. For InfoStation to generate language-specific Circulation notices properly, the language codes used in your patron records must match the language codes used in your InfoStation strings files. For details, see the *InfoStation Reference Guide.*

   m   Middle name of patron
   o   Occupation

Examples:

100 10 $a Espley $d 19450701 $e Mr. $f Jr. $ John $s M $l Gaelic
100 13 $a de Chastonay $d 19700202 $h Isabelle $s F $l French

> **Note:** Although the patron MARC format provides separate subfields to store the patron's first, middle, and last names, Virtua also supports storing the entire patron name in the 100 tag subfield $a in the format **Last, First, Middle**.

110 Name of patron (Corporate name)

The name of the patron that is a corporate body.

Indicators: Blank

Subfields:

   a   Main unit of Corporate name (10.02.01)
   b   Subordinate unit (10.02.01)
   c   Remaining names/qualifying information
   d   Registration date

> **Note:** If the "Valid Birth Date Required" parameter is set, this field is required.

   l   Language of service
      The patron's preferred language of communication.

Examples:

110 20 $a Wren and Company $b Military Office.
110 20 $a Gubler & Sons $c Law Office $l Swiss German
110 23 $a La Maison Chanel. $l French

111 Other name of patron (Personal name)

Other name used for the patron, e.g., Chinese name.

Indicators: Blank

Subfields:

	a	Other name of patron
	f	Suffix

245   Patron type

This field is a textual version of the coded field, 030, Patron Type code. In a consortium system, there may be one patron type per institution. In a non-consortium system, this field is non-repeatable.

Indicators: Blank

Subfields:

	a	Patron type (12.01.02)
	5	The symbol of the institution linked to the Patron Type code. (Consortium only.)

Examples:

030 -- $a FC
245 -- $a Faculty $5 UCL

030 -- $a UG
245 -- $a Undergraduate $ UVA

030 -- $a SN
245 -- $a Senior Citizen $ BPL

030 -- $a MS
245 -- $a Middle School student $BPL

246   Entity status

This field is a textual version of the coded field, 031, Entity Status code.

Indicators: Blank

Subfields:

	a	Patron status (12.01.04)
	d	Date status became effective (12.01.05)

Examples:

031 -- $a IR
246 -- $a In residence $d 19941205

031 -- $a SR
246 -- $a Summer resident $d 19950715

247   Patron's home library

This field contains the library or branch responsible for the patron in multi-library systems. It could be used for reciprocal borrowing situations, for reimbursement control.

Indicators: Blank

Subfields:

a   Home library name (12.01.06)
b   Home library code (*required*)
5   Symbol of the institution that supplied this home library. This subfield must be present in order for the Vectors *i*Portal to work in a consortium environment. (Consortium only.)

Examples:

247 -- $a 42nd Street Branch $b 100 $5 UCL
247 -- $a Christchurch College $b 123459876 $5 UCL

248   Location or branch where patron registered

This field indicates the branch or location that issued the patron's card, i.e., established the patron's borrowing privileges.

Indicators: Blank

Subfields:

a   Location or branch where patron registered (12.01.07)
b   Jurisdiction or home library code (*required*)
5   Symbol of the institution that supplied this registering library. This subfield must be present in order for the Vectors *i*Portal to work in a consortium environment. (Consortium only.)

Examples:

248 -- $a Math library $b 0100 $5 UCL

248 -- $a Floyd County branch $b 345625555

250   Census Tract

This field contains information on the census tract district the patron resides in.

Indicators: Blank

Subfields:

        a   Census tract

Examples:

250 -- $a

270   Paper Address

This field contains the paper address to be used for the patron.

Indicators:

        1st   Level

                0   No level specified
                1   Primary
                2   Secondary

        2nd   Blank

Subfields:

        a   Address line (11.03.02)
        b   City (11.03.03)
        c   County or parish (11.03.04)
        d   State or province (11.03.05)
        e   ZIP or postal code (11.03.06)

                Note: If the Patron Cataloging Options window has the "ZIP code" setting selected, this field is required.

        f   Country (11.03.07)
        g   Title preceding attention name
        h   Attention name

i	Title following attention name
j	Specialized telephone number
k	Telephone number (11.04)
l	Fax (11.05)
o	TDD or TTY number
p	Contact person
q	Title of contact person
u	Miscellaneous information
x	Date address becomes valid (11.07)
z	Date address becomes invalid (11.08)
6	Type of mail (11.03.01)
	This subfield identifies the type of mail service.
7	Type of address
	This subfield identifies the type of address.

Examples:

270 1- $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940125 $z 19941231 $6 US Mail $7 Temporary

270 1- $a 123 W. Queen St. $a Suite 231 $b Toronto $d Ont. $e M5V R2C $f Canada $g Dr. $h Steven Temple $i Director $k 324-4723 $x 19940701 $7 Office

270 2- $a Watson Hall $a Room 421 $k x1253 $x 19940826 $z 19950602 $6 Campus mail

270 1- $a 132 Marlborough Ave. $A Reception on 2nd Floor $b Ottawa $d Ont. #E KIN 8G2 $f Canada $h Jim Shoobert $k 613-235-3937 $l 613-235-4930 $x 19951201 $z 19990101 $6 UPS (courier) $7 Office

271   E-mail Address

This field contains the electronic mail address to be used for the patron.

Indicators:

1st   Level

0   No level specified
1   Primary
2   Secondary

2nd   Blank

Subfields:

      a   Electronic mail address (11.06.02)
      m   Disabled from excessive failures (optional, non-repeatable)
               0 - enabled
               1 - disabled

Examples:

271 1- $a espleyj@vtls.com
271 2- $a johne2345@aol.com $

300   General organizational information for patron

This field contains information about the organization the patron is associated with.

Indicators: Blank

Subfields:

      a   Title of patron in organization (12.02.01)
      b   Organizational unit name (12.02.02)
      c   Organizational unit number or code (12.02.03)
      d   Project name (12.02.04)
      e   Project number or code (12.02.05)
      u   Miscellaneous information

Examples:

300 -- $a Law clerk $b Torts Division.
300 -- $a Principal Librarian $b Customer Services $c 20 $d MARC
           formats

301   Academic organizational information for patron

This field contains information about the patron's relationship to the academic organization which he or she is associated.

Indicators: Blank

Subfields:

a	Institutional affiliation (12.03.01)
	The role the patron plays with respect to the institution.
b	Institution name (12.03.02 and 09.05.02)
c	College or School (12.03.03)
d	Department (12.03.04)
e	Class (12.03.05)
f	Major (12.03.06)
g	Minor (12.03.07)
h	Date of expected awarding of degree (12.03.08)
i	Degree to be awarded (12.03.09)
j	Course
k	Tutor
m	Health Care Status
n	University Card Category
o	Isidore
u	Miscellaneous information

Examples:

301 -- $a Visiting professor $b Virginia Tech $c College of Arts & Sciences $d History Dept.

301 -- $a Graduate $b College of William & Mary $c School of International Relations $d Comparative Politics $e 1999 $f Middle Eastern Studies $g Religious Studies $h 1999 $i Ph.D.

302   Academic Codes

This field contains codes for values in the 301 tag. This field allows the user to populate the 301 tag with less typing. When the patron record is saved, the corresponding subfields in the 301 tag are populated with the values that the codes in this field stand for.

Indicators: Blank

Subfields:

c	College Code: Corresponds to the College in 301 $c.
d	Department Code: Corresponds to the Department in 301 $d.
j	Course Code: Corresponds to the Course in 301 $j.
k	Tutor Code: Corresponds to the Tutor in 301 $k.
m	Health Care Status Code: Corresponds to the Health Care Status in 301 $m.
n	University Card Category Code: Corresponds to the University Card Category in 301 $n

303   Reading Program information for patron

This field contains information about the reading program the patron is associated with.

Indicators: Blank

Subfields:
    a   Reading Program Category code
           I = Individual
           F = Family

    b   Nominator (e.g., Nominator Code)
           This is a controlled code field, intended to capture the nominator. The Virtua Profiler contains a parameter setting to define an alphanumeric code and nominator description (free text). Category descriptions consist of a default and one or more translations; codes must be unique across the database.

    c   Membership ID (formatted as noted)
           This field provides a place to record the membership ID of patrons who have joined the special program so their ability to participate can be verified. The ID consists of 8 characters in the form "XXX-NNNNN," where X is an alphabetic character and N is a number. The software will enforce this format for data input in the 303 $d.

    d   Date joined
           As with all dates, the format YYYYMMDD is required.

355   Security clearance (12.01.09)

This field contains the patron's security level as it applies to borrowing privileges.

Indicators: Blank

Subfields:

    a   Security clearance level

Examples:

355 -- $a Top secret
355 -- $a Secret

500   General/Miscellaneous notes (14.03)

General information for which a specialized 5xx note field has not been defined.

Indicators:

1st   Printed notice designation
0   Do not print on notices
1   Print on notices

2nd   Type of online alert
0   Display to public and alert to presence of note
1   Display to public, but do not alert to presence of note
2   Do not display to public, but alert to presence of note
3   Do not display to public and do not alert to presence of note

Subfields:

a   Note
5   Symbol of the institution that owns this note. The note is only printed/displayed at this institution. If omitted, the note is global to all institutions. (Consortium only.)
t   Transaction reference number (optional)

501   Borrowing privilege note (14.01)

A free text note relating to the patron's borrowing privileges.

Indicators:

1st   Printed notice designation
0   Do not print on notices
1   Print on notices

2nd   Type of online alert
0   Display to public and alert to presence of note
1   Display to public, but do not alert to presence of note
2   Do not display to public, but alert to presence of note
3   Do not display to public and do not alert to presence of note

Subfields:

    a   Note
    5   Symbol of the institution that owns this note. The note is only printed/displayed at this institution. If omitted, the note is global to all institutions. (Consortium only.)
    t   Transaction reference number (optional)

502   Borrower status note (14.02)

A free text note relating to the patron's borrowing status.

Indicators:

    1st   Printed notice designation
           0   Do not print on notices
           1   Print on notices

    2nd   Type of online alert
           0   Display to public and alert to presence of note
           1   Display to public, but do not alert to presence of note
           2   Do not display to public, but alert to presence of note
           3   Do not display to public and do not alert to presence of note

Subfields:

    a   Note
    5   Symbol of the institution that owns this note. The note is only printed/displayed at this institution. If omitted, the note is global to all institutions. (Consortium only.)
    t   Transaction reference number (optional)

503   Undelivered Notice

A free-text note indicating which notice failed to be delivered electronically to the patron.

Indicators:

    1st   Printed notice designation
           0   Do not print on notices
           1   Print on notices

2nd   Type of online alert
         0   Display to public and alert to presence of note
         1   Display to public, but do not alert to presence of note
         2   Do not display to public, but alert to presence of note
         3   Do not display to public and do not alert to presence
                 of note

Subfields:

         a   Note
         5   Symbol of the institution that owns this note. The note is
                 only printed/displayed at this institution. If omitted, the note
                 is global to all institutions. (Consortium only)
         t   Transaction reference number (optional)

504   Patron Switched to Paper Address Preference

A free text note indicating the patron was switched to Paper notice delivery
for too many electronic delivery failures.

Indicators:

         1st   Printed notice designation
         0   Do not print on notices
         1   Print on notices

         2nd   Type of online alert
         0   Display to public and alert to presence of note
         1   Display to public, but do not alert to presence of note
         2   Do not display to public, but alert to presence of note
         3   Do not display to public and do not alert to presence
                 of note

Subfields:

         a   Note
         5   Symbol of the institution that owns this note. The note is
                 only printed/displayed at this institution. If omitted, the note
                 is global to all institutions. (Consortium only)
         t   Transaction reference number (optional)

506   Further privacy restrictions (04.02)

This field is used to indicate any further privacy restrictions not indicated by fields 008/08 (Permission to use this record) and 008/09 (Permission for non-traditional library use).

Indicators:

1st	Printed notice designation	
	0	Do not print on notices
	1	Print on notices

2nd	Type of online alert	
	0	Display to public and alert to presence of note
	1	Display to public, but do not alert to presence of note
	2	Do not display to public, but alert to presence of note
	3	Do not display to public and do not alert to presence of note

Subfields:

a	Further privacy restrictions
5	Symbol of the institution that owns this note. The note is only printed/displayed at this institution. If omitted, the note is global to all institutions. (Consortium only.)
t	Transaction reference number (optional)

Example:

506 02 $a Do not require this patron to supply phone number

515   Billing information (12.01.11)

This field may be used for billing information when other fields do not suffice. For example, it could be used for "send bill to" information, which would override "Name of patron" as in the case where a bill for a visiting student may be sent to the student's home library.

Indicators:

1st	Printed notice designation	
	0	Do not print on notices
	1	Print on notices

2nd	Type of online alert	
	0	Display to public and alert to presence of note
	1	Display to public, but do not alert to presence of note

	2	Do not display to public, but alert to presence of note
	3	Do not display to public and do not alert to presence of note

Subfields:

	a	Billing information
	5	Symbol of the institution that owns this note. The note is only printed/displayed at this institution. If omitted, the note is global to all institutions. (Consortium only.)
	t	Transaction reference number (optional)

Example:

515 01 $a Send bill to Elm St. Library

541   Source of primary data (06.05)

This field contains the source of patron information found in the record, when it was derived from another system.

Indicators:

	1st	Printed notice designation	
		0	Do not print on notices
		1	Print on notices

	2nd	Type of online alert	
		0	Display to public and alert to presence of note
		1	Display to public, but do not alert to presence of note
		2	Do not display to public, but alert to presence of note
		3	Do not display to public and do not alert to presence of note

Subfields:

	a	Source of primary data
	5	Symbol of the institution that owns this note. The note is only printed/displayed at this institution. If omitted, the note is global to all institutions. (Consortium only.)
	t	Transaction reference number (optional)

Examples:

541 03 $a College registrar
541 03 $a Tax rolls

541 03 $a Human Resources Office.

551   Budget/fund identification (12.01.10)

This field is used for tracking budgetary items, where services are budgeted for individual projects.

Indicators:

1st	Printed notice designation	
	0	Do not print on notices
	1	Print on notices

2nd	Type of online alert	
	0	Display to public and alert to presence of note
	1	Display to public, but do not alert to presence of note
	2	Do not display to public, but alert to presence of note
	3	Do not display to public and do not alert to presence of note

Subfields:

a	Budget/fund identification
5	Symbol of the institution that owns this note. The note is only printed/displayed at this institution. If omitted, the note is global to all institutions. (Consortium only.)
t	Transaction reference number (optional)

Example:

551 02 $a Contrafund

700   Alternate patron name (personal name)

This field is for other forms of personal names, either former name or alias. It is also used for other patrons who share this account.

Indicators: Blank

Subfields:

a	Last name of patron
c	Remaining names/qualifying information
d	Date of birth

e	Prefix
f	Suffix
h	First name of patron
l	Language of service
	Patron's preferred language of communication.
m	Middle name of patron
r	Relationship to patron
s	Sex
8	Field link and sequence number

Examples:

```
016 --    $8 1 $a 2000000023
100 10    $a Espley $d 19450701 $e Mr. $f Jr. $h John $s M $l Gaelic
700 10    $8 1 $a Espley $c Daughter $h Dawn $d 19790202 $s F $l French


016 --        $8 1 $a 2000000012
016 --        $8 2 $a 2000000014
110 20    $a Gubler & Sons $c Law Office $l Swiss German
700 10    $8 1 $a Gubler $c Law clerk $h Robert
700 10    $8 2 $a West $c Law clerk $h Edward
```

710   Alternate patron name (corporate name)

This field is for other forms of corporate names, either former name or alias.
It is also used for other patrons who share this account.

Indicators: Blank

Subfields:

a	Main unit
b	Subordinate unit
r	Relationship to patron
8	Field link and sequence number

Examples:

```
016 --    $a 2123456789
110 20    $a Gubler & Sons $c Law Office $l Swiss German
710 20    $a Ambulance Chasers, Inc.
```

711   Responsible person (Designated Proxy)

This field indicates that the individual (e.g., parent, guardian, leader, supervisor) described will fulfill the patron's obligations.

Indicators: Blank

Subfields:

a	Last name of patron
c	Remaining names/qualifying information
d	Date of birth
e	Prefix
f	Suffix
h	First name of patron
i	ID number of responsible individual
l	Language of service
	Patron's preferred language of communication.
r	Relationship to patron
s	Sex
8	Field link and sequence number

Examples:

100 10 $a Espley, Dawn $c Daughter $d 19790202 $s F $l French

711 10 $a Espley, John, $d 19450701 $e Mr. $f Jr. $i 2000000025 $s M $l Gaelic $r Father

016   -- $8 1 $a 2000000123

016   -- $8 2 $a 2123003355

016   -- $8 3 $a 2000000468

100 10 $a Espley, Dawn $c Daughter $d 19790202 $s F $l French

711 10 $8 1 $a Espley, John, $d 19450701 $e Mr. $f Jr. $i 2000000025 $s M $l Gaelic $r Father

713 10 $8 2 $a Chachra, Vinod $d 19790202 $i 2000000023 $r Business associate

715 10 $8 3 $a Wren, Percival Christopher, $d 19410202 $i 2000000853 $r Employer

770 -- $8 1 $a 800 McDaniel Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940825 $z 19941231 $6 US Mail $7 Home

770 -- $8 2 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940125 $z 19941231 $6 US Mail $7 Office

770 -- $8 3 $a 100 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940326 $z 19941231 $6 US Mail $7 Business

712   Responsible organization

          This field indicates that the corporate body (e.g., company, institution,
          organization) described will fulfill the patron's obligations.

          Indicators: Blank

          Subfields:

                    a   Main unit
                    b   Subordinate unit
                    r   Relationship to patron
                    8   Field link and sequence number

          Examples:

          100 10 $a Gubler, Robert, $c Law clerk
          712 20 $a Gubler & Sons $b Law Office $l Swiss German $r employer

          100 10 $a Espley, John, $d 19450701 $e Mr. $f Jr. $s M $l Gaelic
          712 21 $a VTLS Inc. $b Education, Training, & Testing Dept. $r employer

          016   -- $8 1 $a 2000000123
          016   -- $8 2 $a 2123003355
          016   -- $8 3 $a 2000000468
          100 10 $a Espley, Cathy, $d 19490201 $e Mrs. $s F $l German
          712 20 $8 1 $a Gubler & Sons $b Law Office $l Swiss German $r Trustee
          714 20 $8 2 $a VTLS Inc. $b Education, Training, & Testing Dept. $r
                    employer
          716 20 $8 3 $a Jones Private School $b Library $r employer
          770 -- $8 1.1 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d
                    VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x
                    19940125 $z 19941231 $6 US Mail $7 Office
          770 -- $8 1.2 $a 123 W. Queen St. $a Suite 231 $b Toronto $d Ont. $e
                    M5V R2C $f Canada $g Dr. $h Steven Temple $i Director $k 324-
                    4723 $x 19940701 $7 Office
          770 -- $8 2 $a Watson Hall $a Room 421 $k x1253 $x 19940826 $z
                    19950602 $6 Campus mail
          770 -- $8 3 $a 674 Adelaide Ave. $b Rochester $d NY $e 000234 $k 203-
                    432-4589 $6 Federal Express

713   Name of referral (Personal name)

This field indicates that the individual (e.g., parent, guardian, leader, supervisor) described is who referred the patron to the library. This is used in rare book libraries, special libraries, specialized collections, etc., which do not allow use without a referral from a recognized individual.

Indicators: Blank

Subfields:

a	Name of patron
c	Remaining names/qualifying information
d	Date of birth
e	Prefix
f	Suffix
i	ID number of responsible individual
l	Language of service
	Patron's preferred language of communication.
r	Relationship to patron
s	Sex
8	Field link and sequence number

Examples:

100 10 $a Espley, David, $d 19450701 $e Mr. $s M $l Spanish

713 10 $a Wren, Percival Christopher, $d 19410202 $i 2000000853 $r Employer

016   -- $8 1 $a 2000000123

016   -- $8 2 $a 2123003355

016   -- $8 3 $a 2000000468

100 10 $a Espley, Dawn $c Daughter $d 19790202 $s F $l French

711 10 $8 1 $a Espley, John, $d 19450701 $e Mr. $f Jr. $i 2000000025 $s M $l Gaelic $r Father

713 10 $8 2 $a Chachra, Vinod $d 19790202 $i 2000000023 $r Business associate

715 10 $8 3 $a Wren, Percival Christopher, $d 19410202 $i 2000000853 $r Employer

770 -- $8 1 $a 800 McDaniel Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940825 $z 19941231 $6 US Mail $7 Home

770 -- $8 2 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940125 $z 19941231 $6 US Mail $7 Office

770 -- $8 3 $a 100 Kraft Dr. $b Blacksburg $c Montgomery County $d VA.
          $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940326 $z
          19941231 $6 US Mail $7 Business

714   Name of referral (Corporate name)

This field indicates that the corporate body (e.g., company, institution,
organization) described is who referred the patron to the library. This is used
in rare book libraries, special libraries, specialized collections, etc., which do
not allow use without a referral from a recognized individual.

Indicators: Blank

Subfields:

a	Main unit
b	Subordinate unit
r	Relationship to patron
8	Field link and sequence number

Examples:

100 10 $a Gubler, Robert, $c Law clerk
714 20 $a Gubler & Sons $b Law Office $l Swiss German $r employer

016   -- $8 1 $a 2000000123
016   -- $8 2 $a 2123003355
016   -- $8 3 $a 2000000468
100 10 $a Espley, Cathy, $d 19490201 $e Mrs. $s F $l German
712 20 $8 1 $a Gubler & Sons $b Law Office $l Swiss German $r Trustee
714 20 $8 2 $a VTLS Inc. $b Education, Training, & Testing Dept. $r
          employer
716 20 $8 3 $a Jones Private School $b Library $r employer
770 -- $8 1.1 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d
          VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x
          19940125 $z 19941231 $6 US Mail $7 Office
770 -- $8 1.2 $a 123 W. Queen St. $a Suite 231 $b Toronto $d Ont. $e
          M5V R2C $f Canada $g Dr. $h Steven Temple $i Director $k 324-
          4723 $x 19940701 $7 Office
770 -- $8 2 $a Watson Hall $a Room 421 $k x1253 $x 19940826 $z
          19950602 $6 Campus mail
770 -- $8 3 $a 674 Adelaide Ave. $b Rochester $d NY $e 000234 $k 203-
          432-4589 $6 Federal Express

715   Reference (Personal name)

This field indicates that the individual (e.g., parent, guardian, leader, supervisor) described is whom the patron lists as their reference.

Indicators: Blank

Subfields:
a	Name of patron
c	Remaining names/qualifying information
d	Date of birth
e	Prefix
f	Suffix
i	ID number of responsible individual
l	Language of service
	Patron's preferred language of communication.
r	Relationship to patron
s	Sex
8	Field link and sequence number

Examples:

100 10 $a Espley, Dawn $c Daughter $d 19790202 $s F $l French
715 10 $a Espley, John, $d 19450701 $e Mr. $f Jr. $i 2000000025 $s M $l
          Gaelic $r Father

100 10 $a Espley, John, $d 19450701 $e Mr. $f Jr. $s M $l Gaelic
715 10 $a Chachra, Vinod $d 19790202 $i 2000000023 $r Business
             associate

100 10 $a Espley, David, $d 19450701 $e Mr. $s M $l Spanish
715 10 $a Wren, Percival Christopher, $d 19410202 $i 2000000853 $r
          Employer

016   -- $8 1 $a 2000000123
016   -- $8 2 $a 2123003355
016   -- $8 3 $a 2000000468
100 10 $a Espley, Dawn $c Daughter $d 19790202 $s F $l French
711 10 $8 1 $a Espley, John, $d 19450701 $e Mr. $f Jr. $i 2000000025 $s M
          $l Gaelic $r Father
713 10 $8 2 $a Chachra, Vinod $d 19790202 $i 2000000023 $r Business
          associate
715 10 $8 3 $a Wren, Percival Christopher, $d 19410202 $i 2000000853 $r
          Employer

770 -- $8 1 $a 800 McDaniel Dr. $b Blacksburg $c Montgomery County $d
VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x
19940825 $z 19941231 $6 US Mail $7 Home
770 -- $8 2 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d
VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x
19940125 $z 19941231 $6 US Mail $7 Office
770 -- $8 3 $a 100 Kraft Dr. $b Blacksburg $c Montgomery County $d VA.
$e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940326 $z
19941231 $6 US Mail $7 Business

716   Reference (organization)

This field indicates that the corporate body (e.g., company, institution,
organization) described is whom the patron lists as their reference.

Indicators: Blank

Subfields:

a	Main unit
b	Subordinate unit
r	Relationship to patron
8	Field link and sequence number

Examples:

100 10 $a Gubler, Robert, $c Law clerk
716 20 $a Gubler & Sons $b Law Office $l Swiss German $r employer

100 10 $a Espley, John, $d 19450701 $e Mr. $f Jr. $s M $l Gaelic
716 20 $a VTLS Inc. $b Education, Training, & Testing Dept. $r employer

100 10 $a Espley, Cathy, $d 19490201 $e Mrs. $s F $l German
716 20 $a Gubler & Sons $b Law Office $l Swiss German $r employer

016   -- $8 1 $a 2000000123
016   -- $8 2 $a 2123003355
016   -- $8 3 $a 2000000468
100 10 $a Espley, Cathy, $d 19490201 $e Mrs. $s F $l German
712 20 $8 1 $a Gubler & Sons $b Law Office $l Swiss German $r Trustee
714 20 $8 2 $a VTLS Inc. $b Education, Training, & Testing Dept. $r
employer
716 20 $8 3 $a Jones Private School $b Library $r employer

770 -- $8 1.1 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940125 $z 19941231 $6 US Mail $7 Office

770 -- $8 1.2 $a 123 W. Queen St. $a Suite 231 $b Toronto $d Ont. $e M5V R2C $f Canada $g Dr. $h Steven Temple $i Director $k 324-4723 $x 19940701 $7 Office

770 -- $8 2 $a Watson Hall $a Room 421 $k x1253 $x 19940826 $z 19950602 $6 Campus mail

770 -- $8 3 $a 674 Adelaide Ave. $b Rochester $d NY $e 000234 $k 203-432-4589 $6 Federal Express

719   Guarantor information

This field indicates the parent, guardian, leader, supervisor or similar who will guarantee the patron's obligations.

Indicators: Blank

Subfields:
    a   Name of guarantor
    b   Alternate name of guarantor (e.g., Chinese name)
    c   Prefix (title) of guarantor
    d   HKID number of guarantor
    e   Address of guarantor
    f   Telephone number of guarantor
    g   Alternate telephone number of guarantor
    h   Suffix (title) of alternate name of guarantor

770   Address of alternate/additional names

This field contains the paper address of the alternate or additional name.

Indicators: Blank

Subfields:

    a   Address line (11.03.02)
    b   City (11.03.03)
    c   County or parish (11.03.04)
    d   State or province (11.03.05)
    e   Zip or postal code (11.03.06)
    f   Country (11.03.07)
    g   Title preceding attention name
    h   Attention name
    i   Title following attention name

j	Specialized telephone number
k	Telephone number (11.04)
l	Fax (11.05)
o	TDD or TTY number
p	Contact person
q	Title of contact person
u	Miscellaneous information
x	Date address becomes valid (11.07)
z	Date address becomes invalid (11.08)
6	Type of mail (11.03.01)
	This subfield identifies the type of mail service.
7	Type of address
	This subfield identifies the type of address.
8	Field link and sequence number

Examples:

770 -- $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940125 $z 19941231 $6 US Mail $7 Temporary

770 -- $a 123 W. Queen St. $a Suite 231 $b Toronto $d Ont. $e M5V R2C $f Canada $g Dr. $h Steven Temple $i Director $k 324-4723 $x 19940701 $7 Office

770 -- $a Watson Hall $a Room 421 $k x1253 $x 19940826 $z 19950602 $6 Campus mail

770 -- $a 674 Adelaide Ave. $b Rochester $d NY $e 000234 $k 203-432-4589 $6 Federal Express $7 Shipping

016 -- $8 1 $a 2000000123
016 -- $8 2 $a 2123003355
016 -- $8 3 $a 2000000468
100 10 $a Espley, Dawn $c Daughter $d 19790202 $s F $l French
711 10 $8 1 $a Espley, John, $d 19450701 $e Mr. $f Jr. $i 2000000025 $s M $l Gaelic $r Father
715 10 $8 2 $a Chachra, Vinod $d 19790202 $i 2000000023 $r Business associate
716 10 $8 3 $a VTLS Inc. $b Customer Services $i 2000000853 $r Employer
770 -- $8 1 $a 800 McDaniel Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940825 $z 19941231 $6 US Mail $7 Home

770 -- $8 2 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d
          VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x
          19940125 $z 19941231 $6 US Mail $7 Office

770 -- $8 3 $a 100 Kraft Dr. $b Blacksburg $c Montgomery County $d VA.
          $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940326 $z
          19941231 $6 US Mail $7 Business

771   E-mail address of alternate/additional names

This field contains the electronic mail address of the alternate or additional
corporate names.

Indicators: Blank

Subfields:

a	Electronic mail address (11.06.02)
b	Electronic mail service (11.06.01)
c	Vendor SAN/SUFFIX
d	Customer SAN/SUFFIX
f	Country (11.03.07)
j	Specialized telephone number
k	Telephone number (11.04)
p	Contact person
q	Title of contact person
u	Miscellaneous information
x	Date address becomes valid (11.07)
z	Date address becomes invalid (11.08)
6	Type of mail (11.03.01) This subfield identifies the type of e-mail service; e.g., x12, SMF, EDIFACT, etc.
7	Type of address This subfield identifies the type of address.
8	Field link and sequence number

Examples:

771 -- $a espleyj@vtls.com $b Internet $f U.S.A. $p Dimitri Krinos $q
          Network Administrator $k 703-231-3605 $7 Office

771 -- $a johne2345@aol.com $b America Online $f Canada $7 Home

016   -- $8 1 $a 2000000123
016   -- $8 2 $a 2123003355
016   -- $8 3 $a 2000000468
100 10 $a Espley, Dawn $c Daughter $d 19790202 $s F $l French

711 10 $8 1 $a Espley, John, $d 19450701 $e Mr. $f Jr. $i 2000000025 $s M $l Gaelic $r Father

715 10 $8 2 $a Chachra, Vinod $d 19790202 $i 2000000023 $r Business associate

715 10 $8 3 $a Wren, Percival Christopher, $d 19410202 $i 2000000853 $r Employer

770 -- $8 1 $a 800 McDaniel Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940825 $z 19941231 $6 US Mail $7 Home

770 -- $8 2 $a 1800 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940125 $z 19941231 $6 US Mail $7 Office

770 -- $8 3 $a 100 Kraft Dr. $b Blacksburg $c Montgomery County $d VA. $e 24060 $f U.S.A. $k 703-231-3605 $l 703-231-3648 $x 19940326 $z 19941231 $6 US Mail $7 Business

771 -- $8 2 $a chachrav@vtls.com $b Internet $f U.S.A. $p Dimitri Krinos $q Network Administrator $k 703-231-3605 $7 Office

771 -- $8 3 $a pcwren2345@aol.com $b America Online $f Canada $7 Home

771 -- $c 1691783 $f USA $p Joe Wright $x 19950131 $z 19981231 $6 X12 $7 Orders

856   Electronic Location and Access

This field contains the information required to locate an electronic item. In a circulation system this item could be a digitized image of a photograph of the person identified in the record.

The indicators and subfields are identical to the 856 as defined in the MARC 21 Bibliographic and MARC 21 Holdings formats.

934   Local Count

This field is used to record any locally defined numeric fields. In previous systems this was the occurrence field.

Indicators: blank

Subfields:

     a   Circulation count

Examples:

934 -- $a 234

934 -- $a 123,934

7. Default Values for New Items

The default values for items depend on whether the item is the first item being added, or an item being added to a record that already has at least one item.

7.1 For First Item Added (Not from the Serials Check-in Window)

When you add the first item to a bibliographic or holdings record, Virtua provides several default values on the Item Information window (*Figure 7-1*).

Figure 7-1. Item Information Window

The table below shows the data elements of the item record along with the default values.

Data Element	Editable Field?	Default Value	Mandatory Field?
Barcode ID	Yes	<none>	No, but an item cannot circulate without a barcode
Barcode Type	Yes	Regular	Yes
Location	Yes	User's current log-in location	Yes
Shelving Location	Yes	User's current log-in location	Yes
Use (Circulation) Matrix *or* Use Load Period	Yes	Defined by a parameter in the Virtua Profiler and dependent on the user's log-in location	Yes
Loan Period in days	Yes, but only if Use Loan Period is selected	Defined by a parameter in the Virtua Profiler and dependent on the user's log-in location	Yes, but only if Use Loan Period is selected
Allow Request	Yes	Defined by a parameter in the Virtua Profiler and dependent on the user's log-in location	Yes
Item Class	Yes	Defined by a parameter in the Virtua Profiler and dependent on the user's log-in location	Yes
Reserves Item Class	No	If a reserve item: Value is set via the Add Reserve Item function. If not a reserve item: No value is set.	No
Number of Pieces	Yes	1	Yes
Item Price	Yes	0	Yes
EPN Number	Yes	<none>	No
Accession Number	Yes	<none>	No
Lamination	Yes	None	Yes
Copy Number	Yes	Defined by a parameter in the Virtua Profiler and dependent on the user's log-in location	No
Call Number	Yes	<none>	No
Item-level Call Number	Yes	<none>	No
2nd Item-level Call Number	Yes, but only if enabled via a parameter in the Virtua Profiler	<none>	No
Units	Yes	None	No
Preservation and Conservation	Yes	<none>	No
Non-Parameterized Shelf Location	Yes	<none>	No

7.2 For Subsequent Items Added

To add an item after the first item has been added to a bibliographic or holdings record, you access the Items tab of the View Record or View Holdings Record window, highlight the first item, and then click the Add Item button.

The Item Information window appears (*Figure 7-2*), displaying appropriate values.

Figure 7-2. Item Information Window

For items that you add after the first item, the default values are taken from the highlighted item on the record window. The software copies the following values:

- Item Class
- Location
- Shelving Location

- Call Number

Note that the copy number is not copied. Instead, the software uses as the copy number the default value set in the Library Names parameter on the Global tab of the Virtua Profiler. Item notes and statuses are not copied either.

8. Error Messages Related to Record Processing

When you save a new or modified record to the database, the system processes it and verifies its validity. If there is an error in processing the record, the system displays the error in a Message window. Similarly, when you load records to the database using **vload.exe** and the system encounters an error in processing a record, the system reports the error in a Detailed Processing Summary.

In both cases, the system not only reports the error, but also creates a copy of the record, called an Error state record. If a record is in Error state, the label *Error* will appear in the upper right corner on the View Record window.

You can print, save, or e-mail the contents of a cataloging errors Message window. To do this, choose the desired function from the right-click, pop-up menu or from the File menu in the Virtua menu bar.

8.1 Cataloging Errors Report

Using InfoStation®, the Virtua Web-reporting subsystem, you can run a report called Cataloging Errors, which produces a list of cataloging errors based on the date range and Virtua user criteria set in the report configuration. The report groups the errors according to two record types, Bibliographic Records and Authority Records, and contains the following information for each error:

- Record ID
- The Virtua username associated with the error.
- Diagnostic text, which indicates the nature of the error.

Note: Until you correct the problems in ERROR state records, they will not be fully available in the database and will continue to appear in the Cataloging Errors report. The records will not appear to OPAC users, and they will not be available for Circulation functions.

8.2 Error and Warning Messages

Here are typical error messages, warnings, and other types of notifications that may appear in the Messages window during online processing.

During batch processing with **vload.exe**, if the load program encounters a problem with a record, the program writes the file number of that record and diagnostic error data to a flat file in the database directory. This flat file becomes the Detailed Processing Summary. The error data is in code. To translate the code into the actual messages you see below (and into your language of choice), you need to run a utility called **AddDiagnosticText.exe**. This executable requires two inputs: 1) A language file and 2) the name of the vload.log file. For details about running **AddDiagnosticText.exe**, see the *Virtua Record Loading User's Guide*.

In the error messages discussed below, the information following the equal sign (=) is data supplied from the individual record.

8.2.1 Invalid ISBN, ISRC or ISSN

WARNING – Not a valid ISBN: BIB-ID = [FOLLOWED BY ISBN]
WARNING – INVALID ISRC: BIB-ID = [FOLLOWED BY ISRC]
WARNING – INVALID ISSN: BIB-ID = [FOLLOWED BY ISSN]

These warning messages mean that a bibliographic record with an invalid ISBN, ISRC, or ISSN has been transferred to the database.

8.2.2 Invalid LCCN

WARNING -- INVALID LCCN TAG : BIB-ID = [FOLLOWED BY LCCN]
Appears when no numeric data is found in the tag.

ERROR -- INVALID LCCN TAG <HYPHEN>: BIB-ID =
Appears when the year before the hyphen is not valid.

ERROR -- INVALID LCCN TAG <DIGITS> : BIB-ID =
Appears when the data following the hyphen are not digits.

ERROR -- INVALID LCCN TAG <PREFIX> : BIB-ID =
Appears when the prefix is too long.

WARNING -- NO LCCN IN TAG: BIB-ID =
Appears when subfield $a is not the first subfield in the tag.

8.2.3 Duplicate Control Numbers

WARNING: DUPLICATE LCCN =
WARNING: DUPLICATE ISSN =
WARNING: DUPLICATE ISBN =

These warning messages mean that a bibliographic record that has been transferred to the database contains an LCCN, ISSN, or ISBN that already exists in the database. The "Duplicate ISBN/ISSN" message appears only when the 020/022 is duplicated, not when the control number is in subfield $x or subfield $y of a linking tag.

8.2.4 Duplicate Authority Headings
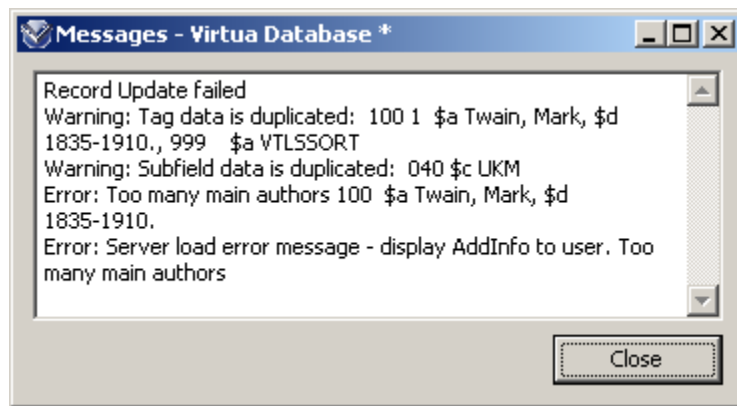
Upon saving a record to the database, Virtua checks for duplicate main authors, main titles, or uniform titles appearing in the same bibliographic record. If it encounters a duplicate, it displays an error message (such as the one in the figure above) and puts the record in Error state.

8.2.5 Possible Heading Duplication

WARN-POSSIBLE SUBJECT DUP: [followed by the tag and the first 50 characters of the heading]

WARN-POSSIBLE AUTHOR DUP: [followed by the tag and the first 50 characters of the heading]

WARN-POSSIBLE TITLE DUP: [followed by the tag and the first 50 characters of the heading]

WARN-POSSIBLE Z/ DUP: [followed by the tag and the first 50 characters of the heading]

These warning messages mean that the subject, author, title or user-defined (Z-search) heading of a record that has been transferred to the database is so similar to an existing heading as to be considered the same heading for filing purposes but is not, in fact, identical character for character. The differences are usually in punctuation, capitalization, and/or subfield coding.

8.2.6 Possible Heading Duplication Automatically Corrected

AUTO FIXED SUBJECT HEAD: [followed by the tag and the first 50 characters of the heading]

AUTO FIXED AUTHOR HEAD: [followed by the tag and the first 50 characters of the heading]

AUTO FIXED TITLE HEAD: [followed by the tag and the first 50 characters of the heading]

AUTO FIXED Z/ HEAD: [followed by the tag and the first 50 characters of the heading]

These messages mean that when the Heading Replacement Flag is set in the Virtua Profiler and a subject, author, title, or user-defined (Z-search) heading is found to be a possible duplicate with a permanent authority heading, the heading in the record is replaced with the permanent heading.

8.2.7 Valid Heading Exists as 4xx

**CONFLICT-EXISTS AS 4XX: [followed by the tag and the first 50 characters of heading]

This message means that a bibliographic record has been retained because a heading in the record matches a 4xx in an existing authority record. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.8 Valid Heading Exists as 4xx and Is Automatically Corrected.

CONFLICT CHANGED TO: [followed by the tag and the first 50 characters of the heading]

This message means that if the MARC Heading Conflict Flag is set in the Virtua Profiler and the error "Conflict Exists as 4xx" is reported, the system will automatically change the heading in the bibliographic record to the 1xx heading corresponding to the 4xx heading matched.

8.2.9   Existence of Permanent Authority Record

WARN-NO SUBJECT AUTHORITY: [followed by the tag and the first 50 characters of heading]

WARN-NO AUTHOR AUTHORITY: [followed by the tag and the first 50 characters of heading]

WARN-NO TITLE AUTHORITY: [followed by the tag and the first 50 characters of heading]

WARN-NO Z/ AUTHORITY: [followed by the tag and the first 50 characters of heading]

These warning messages mean that a heading in a newly transferred bibliographic record does not have a corresponding permanent authority record.

8.2.10   Deleted Records

DELETED: AUTH-ID =
DELETED: BIB-ID =
DELETED: HOLDINGS-ID =
DELETED: PATRON-ID =
DELETED: VENDOR-ID =

These messages mean that a MARC authority, bibliographic, holdings, patron, or vendor record associated with the ID number was deleted from the database.

8.2.11 Bib Record Not Deleted

ATTACHED ITEMS/HOLDINGS TO BIB - NOT DELETED: BIB-ID =

This message means that a bibliographic record with the status of DELETE was not deleted from the database because items and/or holdings were still associated with the record. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.12 Auth Record Not Deleted

ATTACHED BIB RECORDS TO AUTHORITY - NOT DELETED: AUTH-ID =

This message means that an authority record with the status of DELETE was not deleted from the database because bibliographic records were still associated with the established heading of the authority record. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.13 Holdings Record Not Deleted

ATTACHED SERIALS INFO TO HOLDINGS - NOT DELETED: HOLDINGS-ID =

This message means that a holdings record with the status of DELETE was not deleted from the database because serial information (such as check-in or claim screens) was still associated with the holdings record. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.14 Patron Record Not Deleted

ATTACHED CIRC INFO TO PATRON - NOT DELETED: PATRON-ID =

This message means that a patron record with the status of DELETE was not deleted from the database because circulation information was still associated with the patron record. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.15 Vendor Record Not Deleted

ATTACHED ACQ INFO TO VENDOR - NOT DELETED: VENDOR-ID =

This message means that a vendor record with the status of DELETE was not deleted from the database because acquisitions information was still associated with the holdings record. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.16 Invalid Bib Lvl for Authority Records

INVALID BIB-LVL: AUTH-ID =

This message means that an authority record has a bib lvl fixed field value that is NOT a lower case x, u, t, g, c, d, w, or y. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.17 Invalid LCCN

INVALID LCCN -- VERIFY: AUTH-ID =

This message means that an authority record has an invalid value in its 010 field. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.18 Invalid Established Heading

INVALID EST HEADING -- VERIFY: AUTH-ID =

This message means that an authority record contains an invalid 1xx (established) tag number. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.19 Required Subfields

*** MISSING REQUIRED SUBFIELDS: AUTH-ID =

This message means that an authority record contains a field that is missing required subfields.   Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.20 New Headings

WARN-NEW SUBJECT HEADING: [followed by the tag and the first 50 characters of heading]

WARN-NEW AUTHOR HEADING: [followed by the tag and the first 50 characters of heading]

WARN-NEW TITLE HEADING: [followed by the tag and the first 50 characters of heading]

WARN-NEW Z/ HEADING: [followed by the tag and the first 50 characters of heading]

These warning messages mean that the heading listed, which was just added to the database, did not already exist in the database.

8.2.21 Duplicate LCCN for Auth Records

DUPLICATE LCCN -- CORRECT: AUTH-ID =

This message means that an authority record has been retained because the value in its 010 field matches the 010 of an existing but different authority record. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

8.2.22 Authority Conflict Messages

**CONFLICT-EXISTS AS 4XX: [followed by the tag and the first 50 characters of the heading]
This message means that an authority record has been retained because the 1xx or 5xx matches a 4xx in an existing authority record. Until the problem is corrected, an ERROR message will appear on the Cataloging Errors report.

> **Note:** The **CONFLICT-EXISTS AS 4XX** message can also appear when there is a
> problem with a bibliographic cross-reference, but in such a case, the message is a
> Warning only.

****CONFLICT-EXISTS AS 1XX: [followed by the tag and the first 50
characters of the heading]**
This message means that an authority record has been retained because a 4xx matches
a 1xx in an existing authority record. Until the problem is corrected, an ERROR
message will appear on the Cataloging Errors report.

****CONFLICT-EXISTS AS 5XX: [followed by the tag and the first 50
characters of the heading]**
This message means that an authority record has been retained because a 4xx matches
a 5xx in an existing authority record. Until the problem is corrected, an ERROR
message will appear on the Cataloging Errors report.

8.2.23   Override Status

****OVERRIDE-EXISTS AS 4XX: [followed by the tag and the first 50
characters of heading]**

****OVERRIDE-EXISTS AS 1XX: [followed by the tag and the first 50
characters of heading]**

****OVERRIDE-EXISTS AS 5XX: [followed by the tag and the first 50
characters of heading]**

These messages mean that conflicts exist, but the authority records were transferred to
the database anyway because the OVERRIDE status was assigned to the records.

8.2.24   Multiple LCCNs

--MULTIPLE 010 TAGS--ONLY FIRST USED AS LCCN: LCCN =

This message means that a record has more than one 010 tag. The record was
processed, but only the *first* 010 was indexed as the LCCN.

8.2.25   Incorrect Control Number

CONTROL NUMBER EQUAL TO ZERO: BIB-ID=

This message means that a record has a control number such as 010, 020, 022, or 035 that is equal to zero.

8.2.26 Control Number Match without Bib ID Match

WARN: RECORD REPLACED BASED ON BIB CONTROL NUMBER MATCH WITHOUT A BIB-ID MATCH

This message appears when…

The bibliographic record contains tag 001 (Bib-ID), tag 003 (library's NUC symbol), and tag 035 (control number).
-AND-
No record exists in the database that matches the Bib-ID, but a record does exist in the database that matches the control number.

In such a case, the record in the database containing a match on the 035 tag will be replaced by the incoming record.

8.2.27 035 Tags Linked to Multiple Bib Records

ERROR: BIB RECORD PUT INTO ERROR STATE BECAUSE ITS 035 TAGS ARE LINKED TO MULTIPLE EXISTING BIB RECORDS

This message means that the incoming record contains more than one 035 tag (including the one possibly created from the 001/003 tag), and the 035 tags match different records in the database.

8.2.28 Change in Personal Name Differentiation

Warning: Change in personal name differentiation: |->n

This message appears when authority records are being imported into the Virtua database (via **vload.exe** or the Virtua client) and an incoming LC record matches an existing record with a different 008/32 field. Specifically, the message appears when the 008/32 value of 'b' in an existing authority record has been replaced by an 008/32 value of 'a' (or vice versa) in an incoming record.

8.2.29 Invalid VITAL PID

Sorry, digital content could not be added to the bibliographic record. Please check your VITAL parameter configuration.

When the Add Digital Content option on the View Bibliographic Record window is accessed, a PID is generated for the VITAL object. If the returned PID is invalid or if any of the VITAL parameters are invalid, this message is displayed.

9. Using Character Map

If you wish to use an alternative to the On-screen Keyboard, which is discussed in "Setting Language Options for Your Cataloging Needs," Windows offers the Character Map program, which you can use to input special characters. The Character Map program is available for Windows XP, Windows Vista, Windows 7, and Windows 8.

> **Important:** If you are using a pre-XP Windows operating system, do NOT attempt to edit records in the MARC Editor containing characters not supported by your version of Windows. Clicking on a field with characters not supported by your operating system will corrupt the data in that record.

9.1 Accessing Character Map

Character Map is a standard component of Windows. You can find the Character Map executable by searching for **charmap.exe** on your PC. Below we describe how you can access Character Map from the Windows Start menu.

To access Character Map from the Windows Start menu,

1. On the Windows taskbar, click Start.
2. Highlight Programs/Accessories/System Tools.
3. Click Character Map.

   The Character Map window appears (*Figure 9-1*).
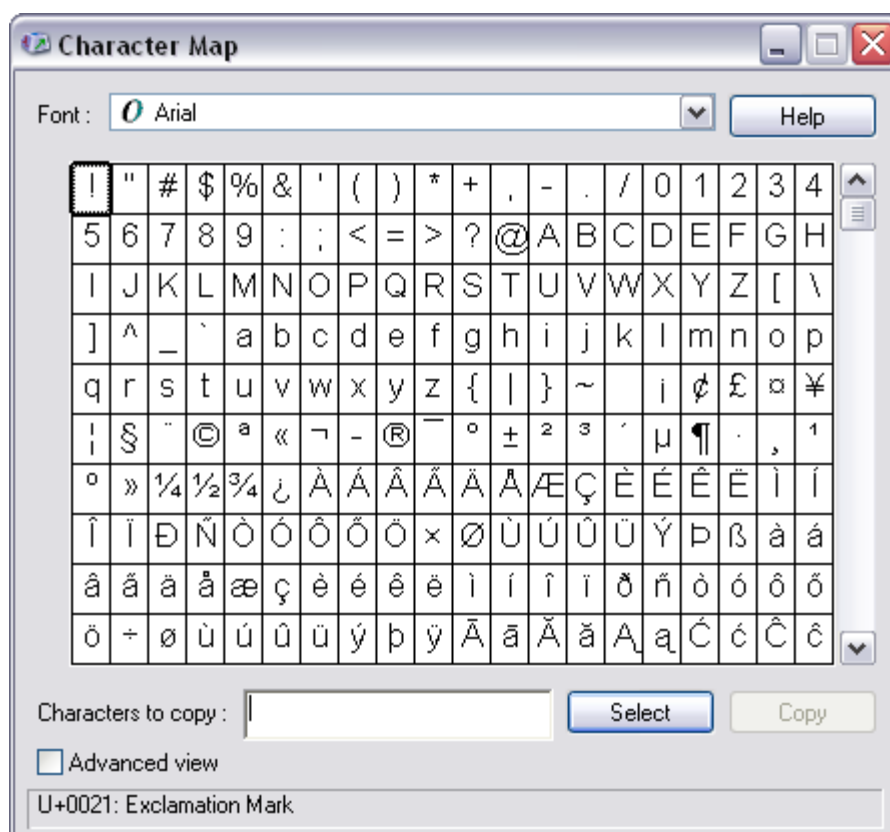
Figure 9-1. Character Map Window

Note: Depending on your version of Windows, the Character Map window may look slightly different from Figure 9-1. The functionality of Character Map, however, is the same for all versions of Windows.

9.2 Using Character Map

You can use Character Map in the following two ways:

• You can copy characters from the Character Map window and paste them into another application.
  -OR-

• You can use shortcut key combinations to insert characters that appear in Character Map into another application such as the MARC Editor.

> **Note:** Before you begin using special characters, verify that your code page and font support all the characters you need to use; otherwise, your data will be corrupted. For details, consult your Windows documentation.

9.2.1 Copying Characters from Character Map

To copy a character from Character Map and paste it into another application,

1. On the Character Map window, highlight a character in the list. The character becomes large and superimposed on the window. For example, in Figure 9-2, the character **é** is selected.
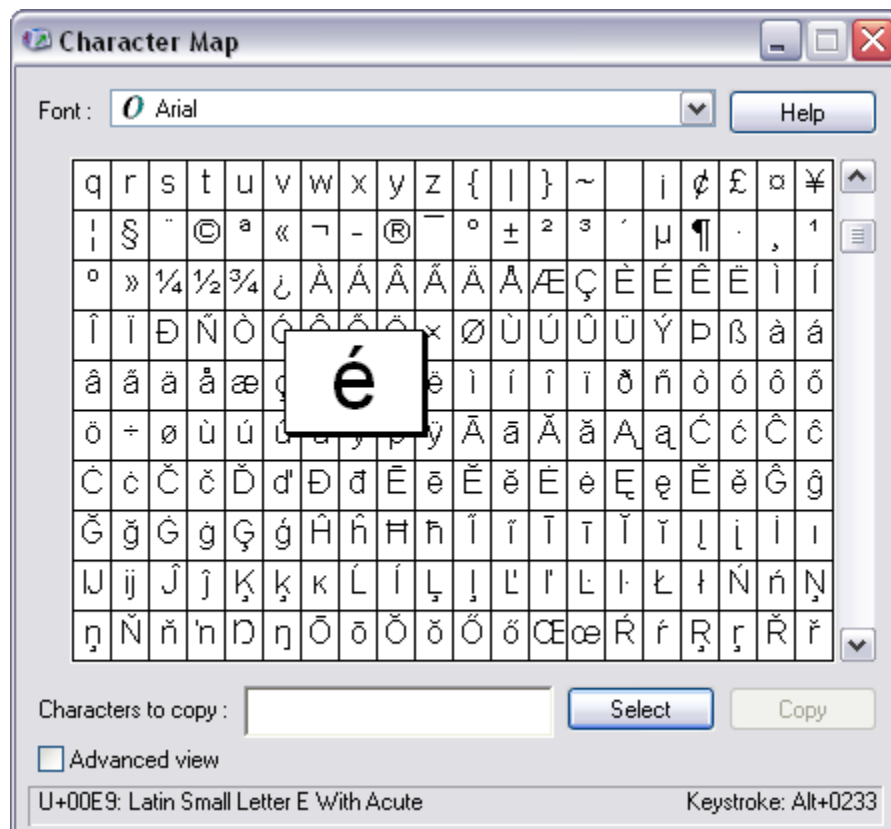
Figure 9-2. Character Map Window: Character Highlighted

2. Click the Select button.
   -OR-
   Press the Enter key.
   -OR-

Press the ALT + S keys.

The character appears in the Characters to Copy text box at the bottom of the Character Map window (*Figure 9-3*).
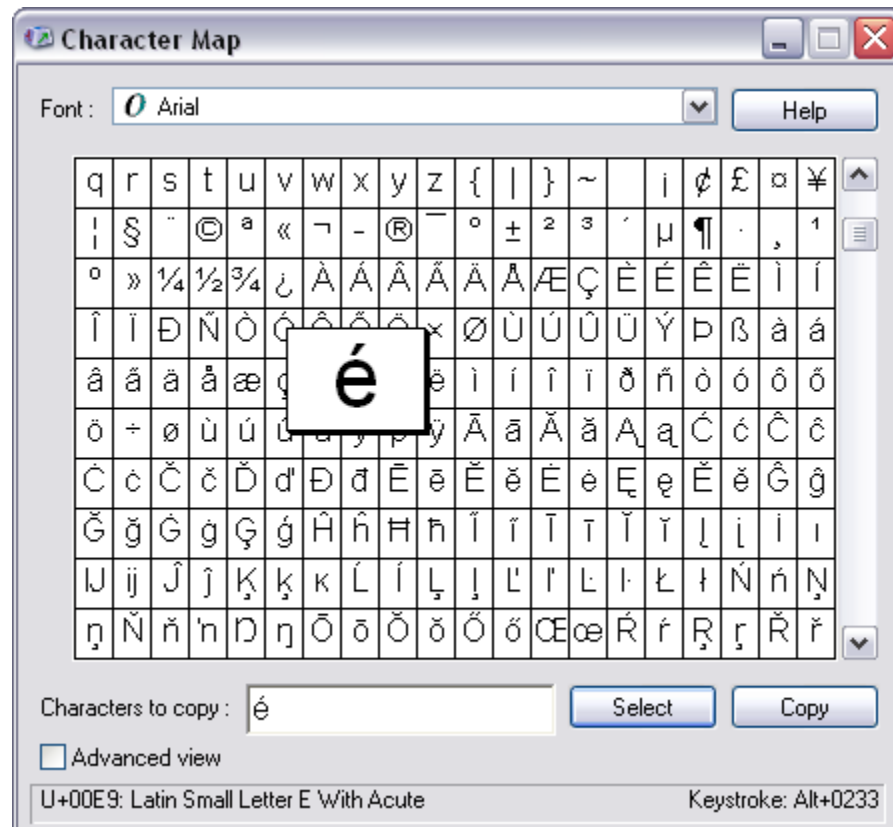
Figure 9-3. Character Map Window: Character Selected

3. If you wish, select one or more additional characters. If you like, you can construct an entire word in the text box. In addition, you can use your keyboard to type text in and delete text from the box.

4. Click the Copy button.
    -OR-
    Press the ALT + C keys.

    The contents of the text box are copied to the clipboard.

5. Paste the character(s) into a different application. For example, to paste the character(s) into the MARC Editor in Virtua,
   a. Open a record in the MARC Editor.
   b. Put your text cursor in the field where you want to paste the character(s).
   c. From the right-click, pop-up menu, choose Paste.
      -OR-
      On the Virtua menu bar click Edit, and then choose Paste.
      -OR-
      Press the CTRL + V keys.

   The characters appear in the appropriate place.

9.2.2 Using Shortcut Key Combinations

Many characters that appear in the list on the Character Map window have a corresponding shortcut key combination. You can use the shortcut key combination to insert characters into other applications.

On the Character Map window, when you highlight a character, the shortcut key combination appears in the status bar at the bottom of window. For example, in Figure 9-4 below, an arrow indicates the shortcut key combination for the character é.
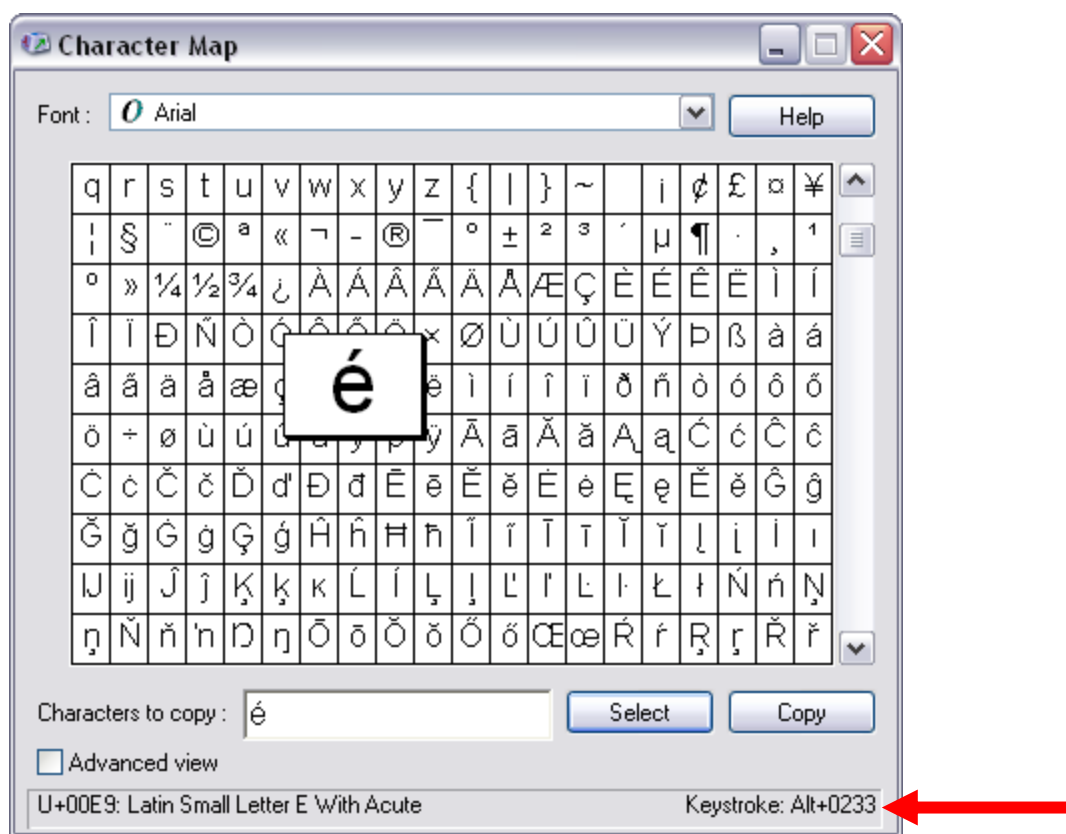
Figure 9-4. Character Map Window: Shortcut Key Combination

To insert an é into another application,

- Press ALT + 0233, where 0233 is a sequence of numbers that you press using the number pad on your keyboard.

The table below provides a list of characters and their shortcut key combinations for a sample character set. Keep in mind that…

- NOT all characters that appear on the Character Map window have a shortcut key combination.
- The list below includes *most* of the characters that have shortcut key combinations.

For each character in the table below, the Windows shortcut key combination (i.e., the key sequence that appears at the bottom of the Character Map window) appears in the Windows Key Sequence column. Some characters also have an extended ASCII key sequence, which appears in the Extended ASCII Key Sequence column.

Both Windows and extended ASCII shortcut key combinations consist of ALT + [the number in the Key Sequence column].

Table of Characters and Their Corresponding Key Sequences

Character	Description	Windows Key Sequence (ALT + [number])	Extended ASCII Key Sequence (ALT + [number])
Symbols			
€	Euro sign	0128	none
'	Single quotation mark (signe mou)	0146	none
¡	Inverted exclamation mark	0161	173
¢	Cent sign	0162	none
£	Pound sign	0163	156
¤	Currency sign	0164	none
¥	Yen sign	0165	157
¨	Diaeresis	0168	none
ª	Feminine ordinal indicator	0170	166
´	Acute accent (aigu)	0180	none
¸	Cedilla	0184	none
º	Masculine ordinal indicator	0186	167
¿	Inverted question mark	0191	168
A			
Æ	Latin capital letter **Æ**	0198	146
æ	Latin lowercase letter **æ**	0230	145
Å	Latin capital letter **A** with circle (cercle suscrit)	0197	143
å	Latin lowercase letter **a** with circle (cercle suscrit)	0229	134
Ã	Latin capital letter **A** with tilde	0195	none
ã	Latin lowercase letter **a** with tilde	0227	none

Character	Description	Windows Key Sequence (ALT + [number])	Extended ASCII Key Sequence (ALT + [number])
Ä	Latin capital letter **A** with diaeresis (umlaut)	0196	142
ä	Latin lowercase letter **a** with diaeresis (umlaut)	0228	132
Â	Latin capital letter **A** with circumflex	0194	none
â	Latin lowercase letter **a** with circumflex	0226	130
À	Latin capital letter **A** with grave	0192	none
à	Latin lowercase letter **a** with grave	0224	133
Á	Latin capital letter **A** with acute (aigu)	0193	none
á	Latin lowercase letter **a** with acute (aigu)	0225	160
C			
Ç	Latin capital letter **C** with cedilla	0199	128
ç	Latin lowercase letter **c** with cedilla	0231	135
E			
Ë	Latin capital letter **E** with diaeresis (tréma)	0203	none
ë	Latin lowercase letter **e** with diaeresis (tréma)	0235	137
Ê	Latin capital letter **E** with circumflex	0202	none
ê	Latin lowercase letter **e** with circumflex	0234	136
È	Latin capital letter **E** with grave	0200	none
è	Latin lowercase letter **e** with grave	0232	138

Character	Description	Windows Key Sequence (ALT + [number])	Extended ASCII Key Sequence (ALT + [number])
É	Latin capital letter **E** with acute (aigu)	0201	144
é	Latin lowercase letter **e** with acute (aigu)	0233	none
I			
Ï	Latin capital letter **I** with diaeresis (tréma)	0207	none
ï	Latin lowercase letter **i** with diaeresis (tréma)	0239	139
Î	Latin capital letter **I** with circumflex	0238	0238
î	Latin lowercase letter **e** with circumflex	0238	140
Ì	Latin capital letter **I** with grave	0204	none
ì	Latin lowercase letter **i** with grave	0236	141
Í	Latin capital letter **I** with acute (aigu)	0205	none
í	Latin lowercase letter **i** with acute (aigu)	0237	161
N			
Ñ	Latin capital letter **N** with tilde	0209	165
ñ	Latin lowercase letter **n** with tilde	0241	164
O			
Œ	Latin capital ligature **OE**	0140	none
œ	Latin lowercase ligature **oe**	0156	none
Õ	Latin capital letter **O** with tilde	0213	none
õ	Latin lowercase letter **o** with tilde	0245	none
Ö	Latin capital letter **O** with diaeresis (umlaut)	0214	153
ö	Latin lowercase letter **o** with diaeresis (umlaut)	0246	148
Ô	Latin capital letter **O** with circumflex	0212	none

Character	Description	Windows Key Sequence (ALT + [number])	Extended ASCII Key Sequence (ALT + [number])
ô	Latin lowercase letter **o** with circumflex	0244	147
Ò	Latin capital letter **O** with grave	0210	none
ò	Latin lowercase letter **o** with grave	0242	149
Ó	Latin capital letter **O** with acute (aigu)	0211	none
ó	Latin lowercase letter **o** with acute (aigu)	0243	162
S			
Š	Latin capital letter **S** with caron (hachek)	0138	none
š	Latin lowercase letter **s** with caron (hachek)	0154	none
U			
Ú	Latin capital letter **U** with acute (aigu)	0218	none
ú	Latin lowercase letter **u** with acute (aigu)	0250	163
Ù	Latin capital letter **U** with grave	0217	none
ù	Latin lowercase letter **u** with grave	0249	151
Û	Latin capital letter **U** with circumflex	0219	none
û	Latin lowercase letter **u** with circumflex	0251	150

Character	Description	Windows Key Sequence (ALT + [number])	Extended ASCII Key Sequence (ALT + [number])
Ü	Latin capital letter **U** with diaeresis (umlaut)	0220	154
ü	Latin lowercase letter **u** with diaeresis (umlaut)	0252	129
Y			
Ý	Latin lowercase letter **y** with acute (aigu)	0221	none
ý	Latin capital letter **Y** with acute (aigu)	0253	none
Ÿ	Latin capital letter **Y** with diaeresis (tréma)	0159	none
ÿ	Latin lowercase letter **y** with diaeresis (tréma)	0255	none

10. Sorting in Browse Results

Virtua uses different sorting methods depending on the type of data being sorted. This section describes the following elements of sorting in Virtua:

- Sorting of Bibliographic Headings
- Sorting of UDC Characters
- Sort Character Set Mapping Supported by Virtua

10.1 Sorting of Bibliographic Headings

In Virtua, bibliographic headings that appear in the results of a Browse search consist of three parts:

- Sort form
- Display form
- Raw data

The **sort form** is the form of the heading that the software uses to sort by. The software generates the sort form from the raw form of the heading. It does this by taking the raw form and doing the following:

- Removing both the subfield code and data for subfields $c and $h of *title* headings.
- Removing all subfield codes.
- Mapping data to a sort form based on the mapping table in the database.
- Removing non-filing data based on any non-filing characters or indicators.
- Normalizing the data based on the following rules:
  a) Keep all the following characters: alphabetic, numeric, space, &, @, =, #, +
  b) Replace period (.), comma (,), dash (-), slash (/) with a space.
  c) Remove all other punctuation.
  d) Reduce all spaces to a single space.

The **display form** is the form of the heading that is used for the display in the browse list. The software generates the display form by replacing all subfield codes with one space.

The **raw data** is the original form of the data in the heading. Raw data is data that has been unaffected by any of the rules for creating the sort form and display form.

After the software processes a heading to generate its sort form and display form, the heading (sort form) is actually sorted according to the ASCII sort sequence.

If a number of headings have the *same* sort form, the software provides a secondary sort by the Auth ID, which is stored in the heading table.

10.2 Sorting of UDC Characters

Universal Decimal Classification (UDC) characters have their own special sort order in browse results.

For a UDC number, the following characters in addition to all alphabetic characters are allowable:

```
+/:[]=()\"*-0123456789'.
```

The following constants are the sort ordering for the UDC characters. Any characters not found here are not mapped in any special way, so they will sort as normal.

plus +
slash /
space
single quote '
colon :
bracket [
double colon ::
equal =
paren zero (0
paren (
paren equal (=
double quote "
space A
space B
space C
space D
space E
space F
space G
space H
space I
space J
space K
space L

space M
space N
space O
space P
space Q
space R
space S
space T
space U
space V
space W
space X
space Y
space Z
DASH -
DOT ZERO ZERO .00
DASH ZERO   -00
PERIOD   .
STAR   *

More than one sort entry is created in the browse list when one of the following characters is present: **+ / : [(**

The string in which the character is found is reshuffled to create a new sort form for the browse list.

Example 1

The following string: **1234:5678**
…creates the following two browse entries: **1234:5678** and **5678:1234**

Example 2

The following string: **1997/2000**
…creates the following four browse entries: **19972000**, **1998**, **1999**, and **2000**

Note that even though the software changes the sort form of the UDC, the display form remains the same. This explains why, in some cases, the browse entries look out of order.

10.3 Sort Character Set Mapping Supported by Virtua

Virtua supports a number of sort character set mapping tables to meet the sorting needs of our international customers. Our default mapping table is Sort2-intl, which includes Arabic, Cyrillic, and Greek, as well as Latin characters. To support a sorting pattern, Virtua uses a table that defines what character substitutions take place to map text to its sort form. In general, mapping involves removing diacritics and making all alphabetic characters uppercase.

The software uses the tables to sort indexes and headings in the order that a library prefers; for example, in the table for the Swiss sort, Ä is sorted as AE. The results of the sort forms can be seen in the list of established headings and names in the Browse results list as well as in the List of Titles.

Below, we list the sorts that Virtua supports. The sort form must be established in the database before any records are loaded. You must use map codes to specify which character maps you want to load to your empty database. See the *System Management Reference Guide* for the codes for:
*   Sort maps
*   Input maps
*   Output maps

The following sort types are supported in Virtua:

Catalan
UK Catalan
Chinese
Europa3
German
Greek
Improved Sort2 (Z39.47)
Inuktitut
Latin character set
Latvian
Polish
Portuguese
Scandinavian
Slovakian
Sort2
Sort2-intl (includes Arabic, Cyrillic, and Greek)
Spanish - Mexican

Swiss
Thai
Turkish
Vietnamese

11. Types and Bib Levels for CATMARC

Type

This Value:	Designates:
a	Language material
b	Language material, manuscript
c	Printed music
d	Manuscript music
e	Printed cartographic material
f	Manuscript cartographic material
g	Projected medium
h	Microforms
i	Nonmusical sound recording
j	Musical sound recording
k	2D non-projectable graphic
l	Machine-readable data file
m	Computer file
o	Kit
r	Tri-dimensional objects

Bib Level

This Value:	Designates:
a	Analytic
b	Part component
c	Collection
m	Monograph
s	Serial

12. Authority Record Creation – Default Workforms

The Create Authority Record(s) feature in the Virtua client gives you a direct and simple way to create authority records from bibliographic heading tags that you can select. For each selected heading, the software automatically creates an authority record in the MARC Editor, using one of a set of pre-defined authority creation workforms. These workforms reside in the same directory as all the other cataloging workforms that Virtua provides.

For your reference, in this chapter we offer a screen capture of each available authority record creation workform as it appears in the MARC Editor:

- For authorities created from MARC 21 bibliographic records: get100.wfm, get110.wfm, get130.wfm, get650.wfm, get651.wfm, get655.wfm, get800.wfm, get810.wfm, and get830.wfm.

- For authorities created from UNIMARC bibliographic records: getuni410.wfm, getuni500.wfm, getuni600.wfm, and getuni700.wfm.

MARC Editor - Virtua Database *

008			000000nn a|a||aab| a a|a d
040			\a VRT \c VRT
999			\a VIRTUA4 x

(z) Authority data   ▼   (x) Author/Name   ▼

| < | > | MARC 21 Authority: Authority | Workform | |

\get100.wfm / get110.wfm / get130.wfm / get650.wfm / get655.wfm / get800.wfm /

MARC 21 Authority: get100.wfm

MARC 21 Authority: get110.wfm

MARC 21 Authority: get130.wfm

MARC 21 Authority: get650.wfm

MARC Editor – Virtua Library II

008			000000	n a	a		bab	a a	a d
040			\a VRT \c VRT
999			\a VIRTUA4 x

(z) Authority data   (x) Author/Name

| < | > | MARC 21 Authority: Authority | Workform | Modified |

\get651.wfm

MARC 21 Authority: get651.wfm

MARC 21 Authority: get655.wfm

MARC 21 Authority: get800.wfm

MARC Editor – Virtua Database *

08			000000nn a	a		aaa	a a	a d
040			\a VRT \c VRT
999			\a VIRTUA4 g

(z) Authority data ▼ (g) Author/Title (Series) ▼

< >   MARC 21 Authority: Authority   Workform

\get130.wfm /get650.wfm /get655.wfm /get800.wfm /get810.wfm /get830.wfm /

MARC 21 Authority: get810.wfm

MARC 21 Authority: get830.wfm

MARC Editor - muse.vtls.com

100			\a 20081003cengy03 ba0
801		0	\a US \b VRT \c 20081003
999			\a VIRTUA4 t

(x) Single-part item holdings   (t) Series Title   □ Masked

< >   UNIMARC (w/UNIMARC Auth) Bib: Authority   Workform

\getuni410.wfm/

UNIMARC Authority: getuni410.wfm

MARC Editor - muse.vtls.com

100			\a 20081003cengy03 ba0
801		0	\a US \b VRT \c 20081003
999			\a VIRTUA u

(x) Single-part item holdings   (u) Uniform Title   Masked

UNIMARC (w/UNIMARC Auth) Bib: Authority   Workform

getuni500.wfm

UNIMARC Authority: getuni500.wfm

UNIMARC Authority: getuni600.wfm

```
┌─────────────────────────────────────────────────────────────────────────────┐
│ 🗎 MARC Editor - muse.vtls.com                                    ─  ☐  ✕      │
├─────────────────────────────────────────────────────────────────────────────┤
│ │100│ │  │ │  │ \a 20081003cengy03     ba0                                    │
│ │801│ │  │ │0 │ \a US \b VRT \c 20081003                                      │
│ │999│ │  │ │  │ \a VIRTUA        x                                            │
│                                                                               │
│                                                                               │
│                                                                               │
│                                                                               │
│                                                                               │
│                                                                               │
│                                                                               │
│                                                                               │
│                                                                               │
│                                                                               │
│ (x) Single-part item holdings          ▼ │(x) Author/Name        ▼  □ Masked  │
│ ┌─┬─┐                                                                         │
│ │<│>│        UNIMARC (w/UNIMARC Auth) Bib: Authority       Workform           │
│ └─┴─┘                                                                         │
│ \getuni700.wfm /                                                              │
└─────────────────────────────────────────────────────────────────────────────┘
```

UNIMARC Authority: getuni700.wfm

13. System Rules for Authority Record Creation

In authority record creation, once Virtua chooses the appropriate authority workform for the specified bibliographic tag, it follows specific rules to decide what the authority record should contain. Here are the rules, or algorithm, that Virtua follows for MARC 21 bibliographic records and UNIMARC bibliographic records.

13.1 Authority Creation Rules For MARC 21 Bibliographic Records

STEP 1:

- If the heading tag is a 100, 400, 600, 700, or 800 tag, create a 100 tag in the authority record.

  The 100 tag's first indicator should be the same in the heading tag, and the second indicator should be blank. Copy only the a, b, c, d, f, g, h, k, l, m, n, o, p, q, r, s, t, x, y, v, z subfields to the 100 tag, removing any right or left square brackets and any trailing blank, period, comma, forward slash, colon, and semicolon characters.

- If the heading tag is a 110, 410, 610, 710, or 810 tag, create a 110 tag in the authority record.

  The 110 tag's first indicator should be the same in the heading tag, and the second indicator should be blank. Copy only the a, b, c, d, e, f, g, h, k, l, m, n, o, p, r, s, t, x, y, v, z subfields to the 110 tag, removing any right or left square brackets and any trailing blank, period, comma, forward slash, colon, and semicolon characters.

- If the heading tag is a 111, 411, 611, 711, or 811 tag, create a 111 tag in the authority record.

  The 111 tag's first indicator should be the same in the heading tag, and the second indicator should be blank. Copy only the a, c, d, e, f, g, h, k, l, n, o, p, q, s, t, x, y, v, z subfields to the 111 tag, removing any right or left square brackets and any trailing blank, period, comma, forward slash, colon, and semicolon characters.

- If the heading tag is a 130, 440, 490, 630, 730 or 830 tag, create a 130 tag in the authority record.

The 130 tag's first indicator should be blank. The second indicator depends on the source (bibliographic record) tag as follows:

- If the source tag is 130, the second indicator is the source tag's first indicator.
- If the source tag is 211, the second indicator is the source tag's second indicator.
- If the source tag is 214, the second indicator is the source tag's second indicator.
- If the source tag is 222, the second indicator is the source tag's second indicator.
- If the source tag is 240, the second indicator is the source tag's second indicator.
- If the source tag is 242, the second indicator is the source tag's second indicator.
- If the source tag is 243, the second indicator is the source tag's second indicator.
- If the source tag is 245, the second indicator is the source tag's second indicator.
- If the source tag is 249, the second indicator is the source tag's second indicator.
- If the source tag is 440, the second indicator is the source tag's second indicator.
- If the source tag is 490, the second indicator is blank.
- If the source tag is 630, the second indicator is the source tag's first indicator.
- If the source tag is 730, the second indicator is the source tag's first indicator.
- If the source tag is 740, the second indicator is the source tag's first indicator.
- If the source tag is 830, the second indicator is the source tag's second indicator.
- If the source tag is 840, the second indicator is the source tag's second indicator.

For 630 source tag headings only, copy the x and v subfields to the 130 tag, removing any right or left square brackets and any trailing blank, period, comma, forward slash, colon, and semicolon characters.

- If the heading tag is 240 (and there is a 1xx tag in the bibliographic record), create a 1xx tag in the authority record.

  - The 1xx tag's first indicator should be the same as the source 1xx tag, and the second indicator should be blank.
  - Copy the subfields as described above, depending on if the source tag is a 100, 110, or 111 tag.

- If the last character of the subfield is anything other than a question mark or hyphen, append a period to the last subfield.
- If there is an /a subfield in the 240 tag, copy it to the 1xx tag as a /t subfield, removing any right or left square brackets and any trailing blank, period, comma, forward slash, colon, and semicolon characters.
- Copy the a, d, f, g, h, k, l, m, n, o, p, r and s subfields from the 240 to the 1xx, removing any right or left square brackets and any trailing blank, period, comma, forward slash, colon, and semicolon characters.

- If the heading tag is 650, create a 150 tag in the authority record.

  Both indicators are blank in the authority record. Copy all the subfields into the authority record.

- If the heading tag is 651, create a 151 tag in the authority record

  Both indicators are blank in the authority record. Copy all the subfields into the authority record.

- If the heading tag is 655, create a 155 tag in the authority record

  Both indicators are blank in the authority record. Copy all the subfields into the authority record.

STEP 2:

- If the heading tag is not a 6xx or an 8xx tag, proceed with step 2. If the heading tag **is** a 6xx or an 8xx tag, do not perform step 2.

- If the bib record contains a 245 tag with an /a subfield, add a 670 tag to the authority record. Both indicators of the 670 tag should be blank. Create an /a subfield in the 670 tag with /a, /n, and /p subfield data from the 245 tag concatenated and separated with a space character. Remove any trailing blanks, periods, commas, forward slashes, colons, and semicolons.

- If the bib record contains a 245 tag with a /k subfield and no /a, /n or /p subfield, add a 670 tag to the authority record. Both indicators of the 670 tag should be blank. Create an /a subfield in the 670 tag with the subfield /k and /f data from the 245 tag concatenated and separated with a space character. Remove any right or left square brackets and any trailing blanks, periods, commas, forward slashes, colons, and semicolons removed.

STEP 3:

- If the bib record contains a 260 tag with a /c subfield, append the /c subfield data (preceded by a comma and space) to the /a subfield in the 670 tag created in step 2. If a 670 tag was not created in step 2, do not perform step 3.

STEP 4:

If a 670 tag was previously created in step 2, AND the bib lvl of the authority record is **x**, AND the bib record contains a 245 tag with a /c subfield, append a colon to the end of the subfield /a of the 670 tag. Then add a subfield /b to the 670 tag and make its data to be "t.p. (" plus the 256 tag subfield /c data—devoid of trailing blanks, periods, commas, slashes, colons, and semicolons—plus ")".

STEP 5:

If the heading tag of the bibliographic record is a 440 tag or 490 tag, add a subfield /b to the 670 tag previously created and set its data to the 440 (or 490) tag's subfield /a data surrounded by parentheses and devoid of any trailing blanks, periods, commas, slashes, colons, and semicolons. If no 670 tag was previously created, do not do this step.

STEP 6:

- If there is now a 100 tag in the authority record that contains a subfield /a and a subfield /q, but not a subfield /t or /k, and in the subfield /a there is at least one word to the right of the initial comma, create a 400 tag in the authority record and add a subfield /a containing the value of 100 tag subfield /a up to and including the first comma. The first indicator of the 400 tag should be 1 and the second indicator should be blank. Then add a space to the /a subfield and append the value of the 100 tag subfield /q, removing any parentheses.

- If the 100 tag has a subfield /d, add a /d subfield to the 400 tag with the same value but without any trailing period.

STEP 7:

- If there is now a 100 tag in the authority record that contains a subfield /a and a subfield /q, but not a subfield /t or /k, AND in the subfield /a there is more than one word to the left of the initial comma, AND there is at least one word to the right of the initial comma, create a 400 tag in the authority record for each word to the left of the initial comma *except* the first word. Each 400 tag should contain 1) the word left of the comma (known as a "surname") capitalized in a subfield /a, 2)

the rest of the 100 tag subfield /a devoid of any trailing blanks or punctuation, and 3) all the words before the word to the left of the comma in subfield /a.

- If the 100 tag also has a subfield /d, then add a comma to the end of the 400 tag's subfield /a and add a subfield /d to the 400 tag with the 100 tag's subfield /d data.

STEP 8:

- If the heading tag has an occurrence of a subfield /x, /y, or /z, the 008/14 will be assigned a value of 'b'; otherwise 008/14 will be left to the default value in the workform.

13.2 Authority Creation Rules For UNIMARC Bibliographic Records

STEP 1:

Determine which workform is to be used, according to the mapping rules in the section "Authority Record Creation – Default Workforms" in this user's guide.

STEP 2:

- If the heading tag is a 600, 604, 700, 701, or 702 tag, create a 200 tag in the authority record.

  The 200 tag's first indicator should be blank and the second indicator should be copied from the bibliographic record's tag first indicator. Copy all bibliographic subfields.

- If the heading tag is a 601, 710, 711, or 712 tag, create a 210 tag in the authority record.

  The 210 tag's first indicator should be blank and the second indicator should be copied from the bibliographic record's tag first indicator. Copy all bibliographic subfields.

- If the heading tag is a 607 tag, create a 215 tag in the authority record.

  Both indicators are blank. Copy all bibliographic subfields.

- If the heading tag is a 720, 721, or 722 tag, create a 220 tag in the authority record.

Both indicators are blank. Copy all bibliographic subfields.

- If the heading tag is a 410, 411, 500, 503, 530, 545, or 605 tag, create a 230 tag in the authority record.

  Both indicators are blank. Copy all bibliographic subfields.

- If the heading tag is 606 or 626, create a 250 in the authority record.

  Both indicators are blank. Copy all bibliographic subfields.

- If the heading tag is 620, create a 260 in the authority record.

  Both indicators are blank. Copy all bibliographic subfields.

- If the heading tag is 608, create a 280 in the authority record.

  Both indicators are blank. Copy all bibliographic subfields.

STEP 3:

Add 801 tag to the authority record with the following subfields and data: /a US /b VTLS /c current date (in YYYYMMDD format).

14. Fixed Field Values Assigned by Default in Provisional Authorities

When Virtua creates a provisional authority from a bibliographic authority heading, it automatically assigns specific fixed field values in the 008 tag of the authority record. In this chapter, we provide those values by showing you what the Authority 008 Fixed Field Editor looks like for different types of provisional authority records.

When Virtua creates a provisional **author** authority with bib lvl x or e and the bib heading tag is 100, the following authority 008 fixed field values are assigned:

Figure 14-1. Fixed Fields for Default Provisional Author Authority with bib lvl x or e

When Virtua creates a provisional **author** authority with bib lvl x or e and the bib heading tag is 110 or 111, the following authority 008 fixed field values are assigned:

Figure 14-2. Fixed Fields for Default Provisional Author Authority with Bib Heading Tag 110 or 111

If a bibliographic record has a 110 tag with 1st indicator = 1 and only a subfield $a, then the provisional authority record that is produced with the View Authority option will change the 110 tag to a 151 tag and set the 008/14-15 to indicate that, if saved, it will become both a **name and subject** authority record.

Thus if the bibliographic record looks like this:
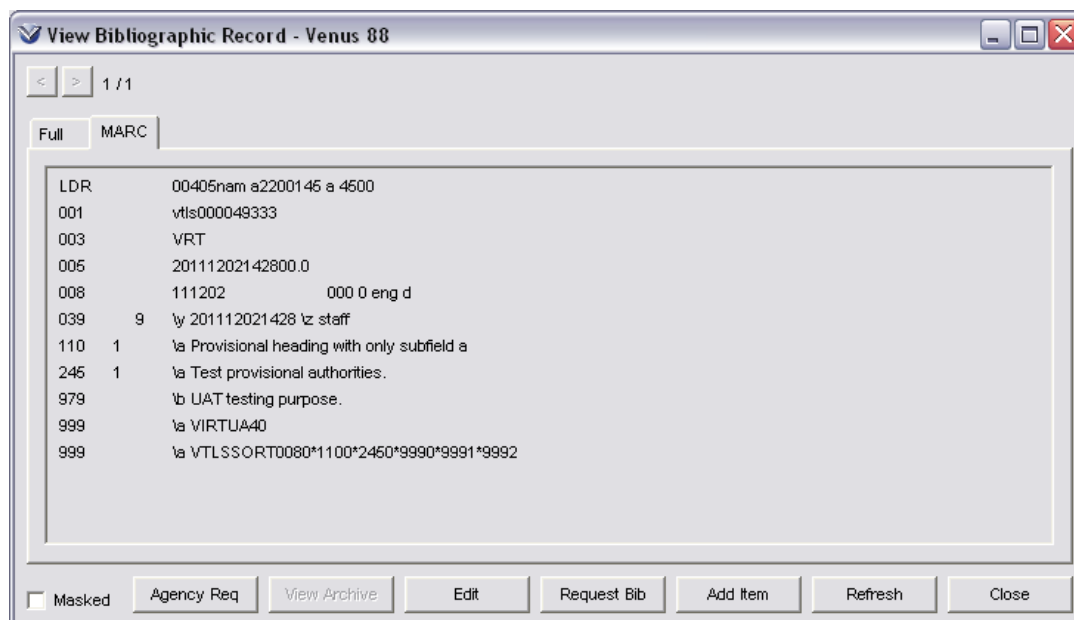
Figure 14-3. Bibliographic Record - MARC View

Virtua will create a provisional authority record from the 110 tag that looks like this:
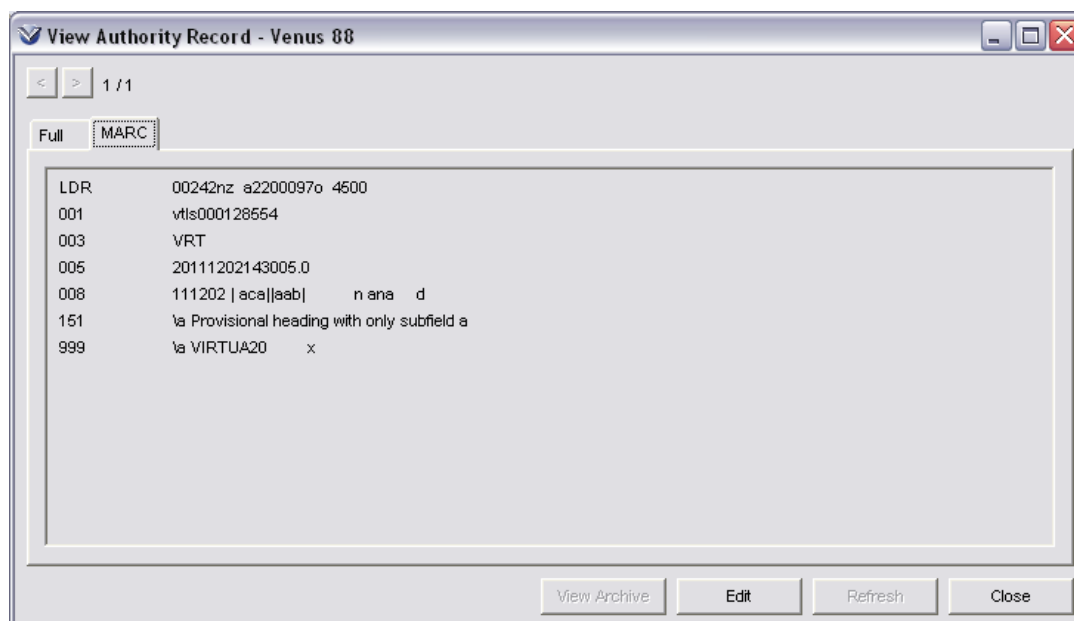
Figure 14-4. Provisional Authority Record Created from 110 Tag

And the Fixed Field Editor for the authority 008 will look like this:

Figure 14-5. Fixed Fields for Provisional Author Authority Created from 110 Tag

When Virtua creates a provisional **subject** authority with bib lvl y, w, or d, the following authority 008 fixed field values are assigned:

Figure 14-6. Fixed Fields for Provisional Subject Authority with Bib Lvl y, w, or d

When Virtua creates a provisional **user-defined** authority with bib lvl z, the following authority 008 fixed field values are assigned:

Figure 14-7. Fixed Fields for Provisional User-defined Authority with Bib Lvl z

When Virtua creates a provisional **title or author/title** authority with bib lvl t, g, or f, the following authority 008 fixed field values are assigned:

Figure 14-8. Fixed Fields for Provisional Title or Author/Title Authority with Bib Lvl t, g, or f

When Virtua creates a provisional **title** authority with bib lvl u, the following authority 008 fixed field values are assigned:

Figure 14-9. Fixed Fields for Provisional Title Authority with Bib Lvl u

15. Setting Language Options for Your Cataloging Needs

This chapter provides instructions for setting up your PC in a Windows XP environment for handling cataloging in different languages. The following topics are covered in this section:

- Finding the Languages You Need
- Installing Additional Languages
- Setting Time and Date Formats
- Setting the Font for the Virtua Client
- Working with Directionality in Virtua
- Working with Keyboard Options

15.1 Finding the Languages You Need

In order for you to type and display the characters you need in your cataloging tasks, the appropriate languages must be installed on your PC.

To find the languages that are installed on your PC,

1. On the Window Start menu, click Control Panel.
2. Click the Date, Time, Language, and Regional Options link.
3. Click the Add Other Languages link.

The Regional and Language Options window appears (*Figure 15-1*).
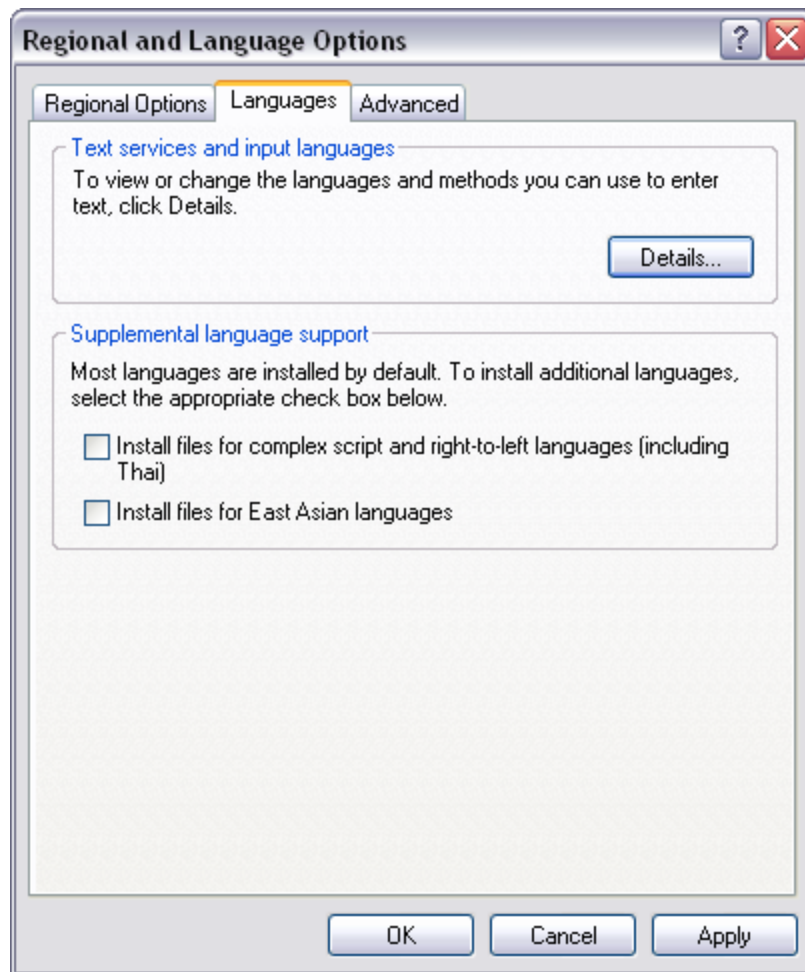
Figure 15-1. Regional and Language Options Window - Languages Tab

4. Click the Details button to view or change the languages and methods you can use to enter text.

    The Text Services and Input Languages window appears (*Figure 15-2*), displaying the default input language for your PC.
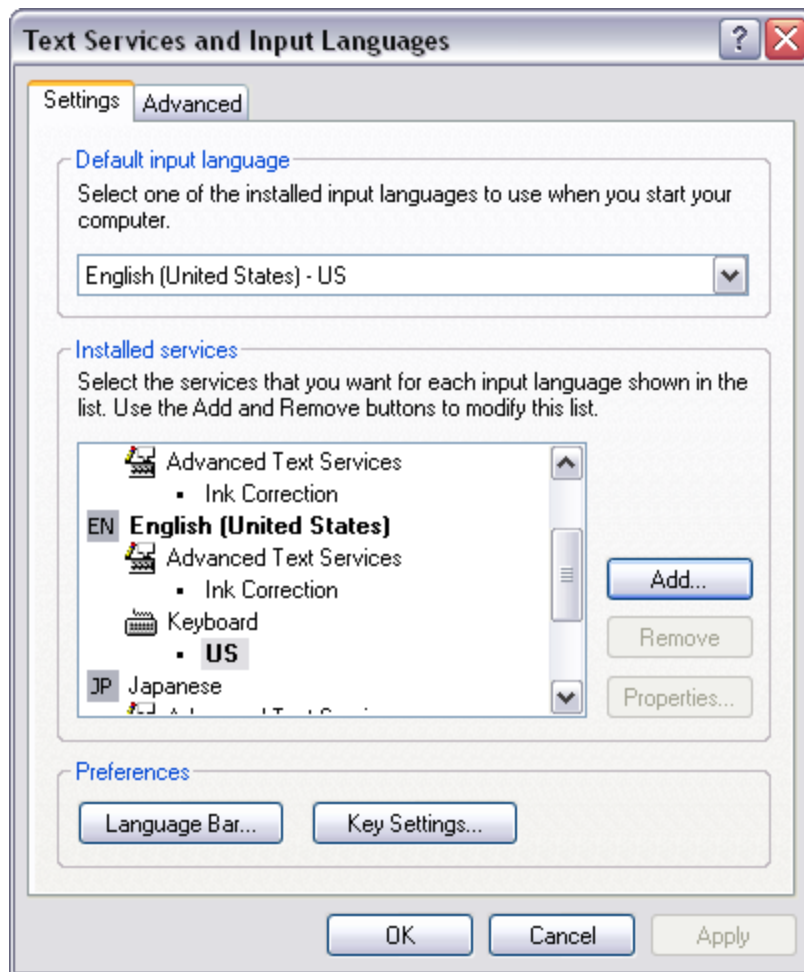
Figure 15-2. Text Services and Input Languages Window - Settings Tab

5. Click the Add button to select additional input languages and accompanying keyboard services.

   - Once you have selected additional input languages and clicked the Apply button, the languages will appear in the drop-down list on the Text Services and Input Language window. From the drop-down list, you can select a new default input language for your PC.

   - Once you have selected additional keyboard services to accompany additional input languages and clicked the Apply button, you can set Preferences. Preferences let you choose a Language Bar for your desktop and hot key combinations for quick access to input languages and keyboard layouts (see the section "Switching On-screen Keyboards").

15.2 Installing Additional Languages

With Windows XP, most languages are installed by default, but you can install additional languages.

To install additional languages on your PC,

1. On the Languages tab of the Regional and Language Options window (*Figure 15-3*), select one or both check boxes in the Supplemental Language Support area.
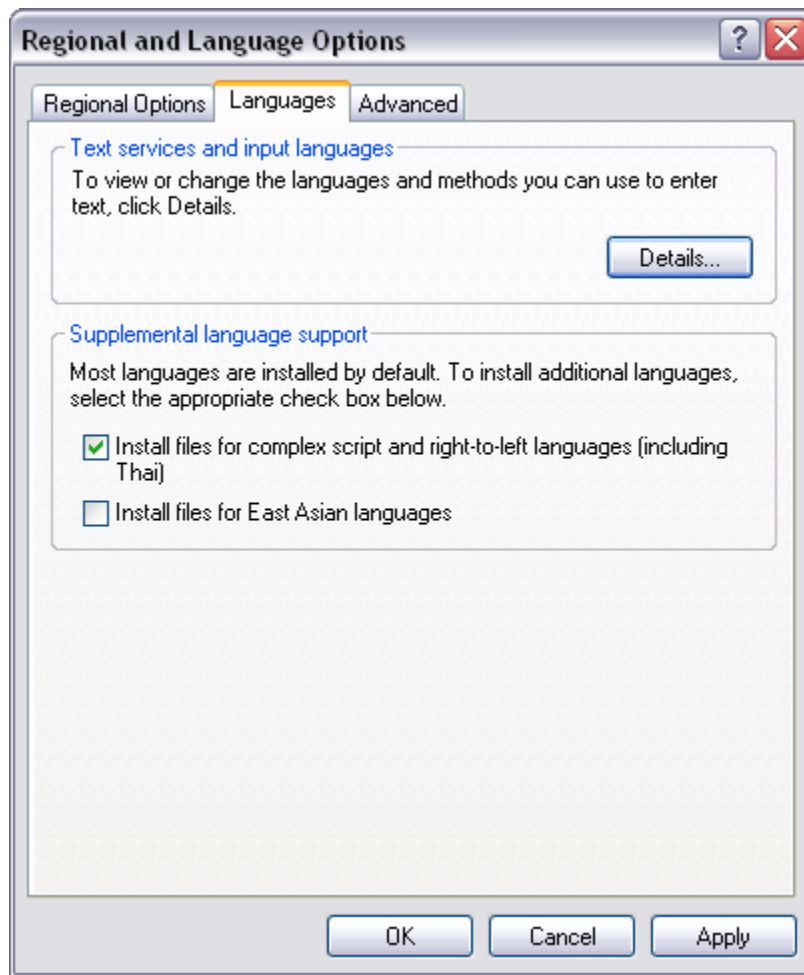
Figure 15-3. Regional and Language Options Window - Language Tab

2. A warning message will appear to inform you that these languages will take up a notable amount of disk space (*Figure 15-4*). Click the OK button to close this message window

Figure 15-4. Supplemental Language Support Warning Message

3. On the Regional and Language Options window, click the Apply button.

15.3 Setting Time and Date Formats

The Regional and Language Options window also offers a Regional Options tab (*Figure 15-5*) where you can define the formats of numbers, currency, time, and dates. The settings for the time and date affect how your system displays these elements, so you should make sure that these settings suit your needs.

Figure 15-5. Regional and Language Options Window - Regional Options Tab

15.4 Setting the Font for the Virtua Client

Font settings for text displayed in the Virtua client are stored in the **virtua.ini** file. A newly installed Virtua client uses 8-point Tahoma as the default font. We chose Tahoma because it supports *most* Latin and non-Latin characters.

You can change the font style and size for the client by changing the settings in the Font window.

To change the Font settings for the client,

1. On the Options menu, click Font.

    The Font window appears, displaying the current default font (*Figure 15-6*).
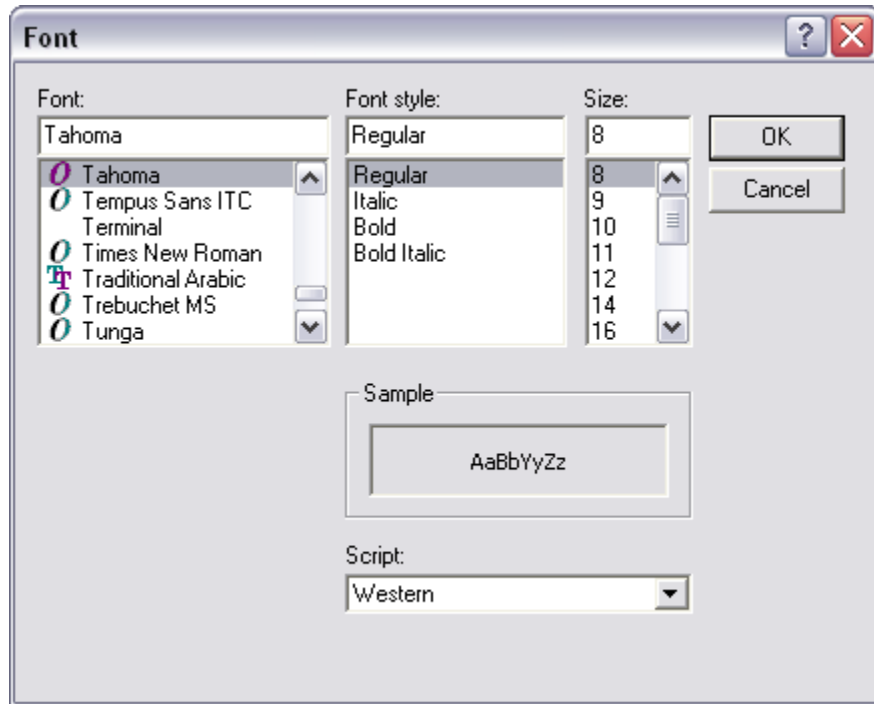
Figure 15-6. Font Window

2. Choose your font settings.

    Note: Make sure you choose a font such as Arial Unicode MS to support any special characters that you will need for data entry.

3. Click the OK button.

Your font settings are saved in the **virtua.ini** file, and the text on all Virtua windows appears with your new font settings.

Note: Fonts of an unusually large size can cause some text to run off its window or control.

15.5 Working with Directionality in Virtua

Virtua can handle both languages that are displayed right-to-left as well as those that are displayed left-to right.

- You automatically have support for right-to-left mapping of *input text* in Virtua IF you choose Arabic or Hebrew as your keyboard layout.

- You have support for right-to-left mapping of the *interface* in Virtua IF the default language, i.e., the system locale on your PC, is set to Arabic or Hebrew AND you choose Right to Left from the Directionality submenu.

To set right-to-left directionality in Virtua,

1. Make sure you meet the criteria described above for your OS.
2. On the Virtua menu bar, click Options.
3. Choose Directionality.
4. Choose Right to Left.

The Virtua client now displays interface elements from right to left.

Note: The Directionality submenu also contains the option Left to Right Soft, which will display the labels in the interface as left to right but the actual Arabic or Hebrew data as right to left

15.6 Working with Keyboard Options

The Virtua client relies on the Unicode features of Windows to provide you with an On-screen Keyboard for entering search queries, inputting commands, and recording data. This feature can function as a working keyboard or simply as a visual reference for entering data in the language of your choice.

Note: The Character Map is an alternate way to insert special characters. For details on using the Character Map, see the chapter "Using Character Map" in this guide.

15.6.1 Accessing an On-screen Keyboard

Once you have installed the keyboard layouts you need, you will want to be able to access them. For your easy reference, Virtua comes with the On-screen Keyboard program already set up in the **virtua.ini** file. This means that you can access the program from the Virtua Tools menu.

If you are using an upgraded version of Virtua, you may have to add the On-screen Keyboard program manually to your **virtua.ini** file. To do this, open the **virtua.ini** file in your editor of choice and after the WordPad entry, type:
OnScreen Keyboard=osk.exe

To access an On-screen Keyboard,

1. On the Virtua menu bar, click Tools.
2. Choose On Screen Keyboard.

    The On-screen Keyboard for the default input locale appears (*Figure 15-7*).

Figure 15-7. On-screen Keyboard

3. With the On-screen Keyboard as a reference, use your actual keyboard to input the characters you need.
    -OR-
    Use the On-screen Keyboard itself as your keyboard.

To input characters from the On-screen Keyboard, just click each key with y our mouse. For example, if you are in the MARC Editor, place your text cursor in the desired text box and then click the keys you need on the On-screen Keyboard.

Hint:
*   You can position the On-screen Keyboard anywhere on your screen by dragging the window by the title bar.

- To customize the keyboard, on the menu bar of the On-screen Keyboard, click Keyboard and choose an option from the pull-down menu.

15.6.2 Switching On-screen Keyboards

Once you are viewing one keyboard layout, you might need to switch to another layout to input characters from another language.

To be able to switch keyboard layouts by using the Windows taskbar or by using hot keys, or keyboard shortcuts, you need to make certain selections on the Input Locales tab on the Regional Options window (**Error! Reference source not found.**). On this indow, as described above, you can…

- Select the check box Enable Indicator on the Taskbar
- Create hot keys for fast switching

After you make your selections, you can easily switch to another keyboard layout using the Taskbar indicator or the hot key combination.

To switch to another keyboard layout,

1. On the Windows taskbar, click the keyboard layout indicator such as **EN** at the lower right of your computer screen.

   The list of available keyboard layouts pops up (*Figure 15-8*).

Figure 15-8. Available Keyboard Layouts

2. From the pop-up menu, click the layout you want.
3. Pass your mouse cursor over the displayed keyboard to see it switch to the new layout.

-OR-

1. Click the title bar of the On-screen Keyboard.
2. On your actual keyboard, press the Left ALT + SHIFT keys (or any other shortcut combination that you set up).

   The keyboard layout changes each time you press the SHIFT key. In this way, you can cycle through the available keyboard layouts.

Now the characters you type from your actual or On-screen Keyboard will be in the selected language.

Note: The keyboard layout indicator in your Windows Taskbar controls the language of both the actual keyboard and the On-screen Keyboard. If you close the On-screen Keyboard, your actual keyboard maintains the layout that you selected for the On-screen Keyboard until you change it again.

When you open the On-screen Keyboard, it assumes the current keyboard layout.

16. Appendix A - Handling Authority Heading Conflicts

In this appendix we discuss ways of handling 1xx/4xx authority heading conflicts.

Authority heading conflicts occur when headings used in new or edited bibliographic records match the 4xx tags (*See* references) in existing authority records. Authority heading conflicts can also occur between authority records when new authority records are loaded to the database.

The following situation describes an authority heading, or 1xx/4xx, conflict:

- **1xx tags** in authority records contain *valid* headings (terms that are used)
- **4xx tags** in authority records contain *invalid* headings (terms that are not used)
- **1xx, 7xx, 4xx, 8xx,** and **6xx tags** (subject headings) in bibliographic records are saved as 1xx tags in authority records when a new or edited bibliographic record is saved to the database, creating new authority records.
- Virtua cannot create an authority record with a *1xx tag* for the tag in the incoming bibliographic record if a *4xx tag* for that term already exists in another authority record.

16.1 How Virtua Behaves when There is a Conflict

So how does Virtua behave when it encounters an authority heading, or 1xx/4xx, conflict?

- When Virtua attempts to create an authority record with a 1xx tag (valid heading) for a tag in a bibliographic record…

    AND

- The *same term* exists as a 4xx tag (invalid heading) in another authority record…

    THEN

- The MARC Heading Conflict Flag parameter in the Virtua Profiler will determine what happens when the 1xx/4xx conflict occurs.

♦ If the MARC Heading Conflict Flag is set to YES, Virtua automatically replaces the bibliographic record's heading with the conflicting authority record's 1xx heading. The bibliographic record is saved to the database.

> **Note:** Regardless of how the MARC Heading Conflict Flag is set, the incoming record is put in Error state when more than one authority record has the same term in a 4xx tag.

♦ If the MARC Heading Conflict Flag is set to NO, Virtua warns the cataloger of the conflict. Because Virtua cannot resolve the conflict, the bibliographic record is put in Error state (*Figure 16-1*).
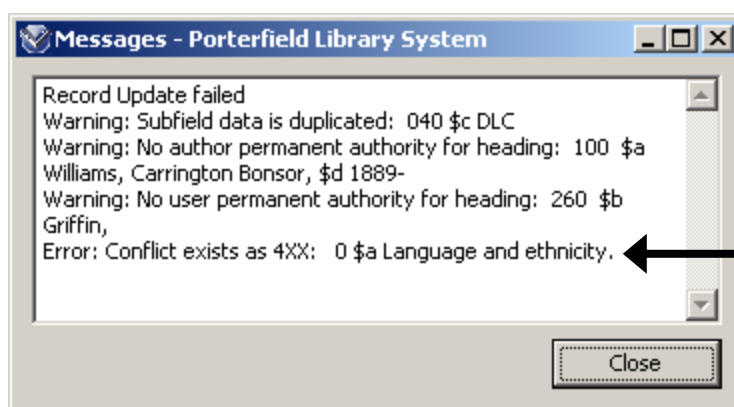
Figure 16-1. Error Message: 1xx/4xx Conflict

If Virtua encounters a 1xx/4xx conflict between an incoming and an existing authority record AND there is no match on the 010 tag subfield $a or subfield $z fields, the following special rules apply:

- If the incoming authority record's 1xx exactly matches an existing authority record's 1xx but the 010 tag subfield $a data of the two records does NOT match, the incoming record is put in Error state.

- If the incoming authority record's 1xx exactly matches an existing authority record's 4xx OR the incoming authority record's 4xx matches an existing authority record's 1xx but the 010 tab subfield $a data of the two records does NOT match, the incoming record is put in Error state.

> **Note:** An exception to the above rule is made if the incoming record contains an 010 tag with a subfield $z that matches the 010 tag subfield $z of a single existing authority record AND the existing authority record does not contain an 010 tag subfield $a. In this situation, the incoming record replaces the existing authority record.

- If a record has an authority bib lvl of **q**, its 1xx and 4xx authority headings CANNOT be overwritten by incoming authority records.

  Note: Authority records with the bib lvl **q** are not linked to any bibliographic record.

When a record is placed in Error state, Virtua will also identify the heading causing the 1xx/4xx conflict. You can find the heading by doing an OPAC search for records in Error state. On the Records by State window, if you select the desired record ID, the associated error messages along with the offending heading will appear at the bottom of the window on the right-hand side (*Figure 16-2*).
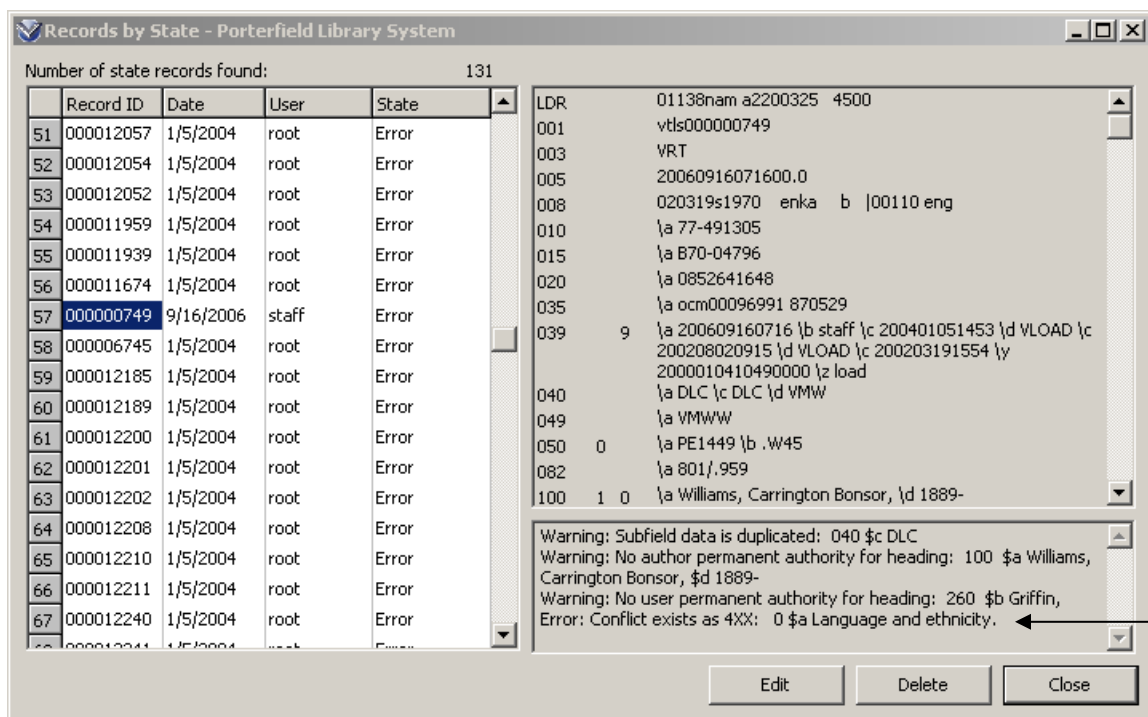
Figure 16-2. Records by State Window

Note: For a list of problems that will cause a record to go into Error state, see "Error Messages Related to Record Processing" in this guide.

16.2 Options for Resolving the Conflict

You have several options for resolving a 1xx/4xx conflict. You can change either the bibliographic record or the authority record.

To resolve the conflict, do ONE of the following:

- Delete the term from the **4xx** tag of the *authority* record so that an authority record may be created for the term in the bibliographic record.

   OR

- Change the 4xx tag of the authority record to a 5xx

   OR

- Edit the term in the tag of the *bibliographic* record to match the *valid* authority heading (i.e., the 1xx tag of the authority record containing the 4xx tag) so that the bibliographic record contains the valid term.

> **Tip:** When searching for the correct term in the authority records, turn on the display of blind references in the OPAC. It may be that the valid term is not in use but has an authority record in the database.

17. Appendix B - Options for Processing 240/243 Tags

You have the option of determining how Virtua will treat the 240 tag in bibliographic records. Via a script, you can choose to enable Virtua to index an incoming 240 tag as a uniform title authority and use the 240 $a to create an additional access point (AAP). The default behavior is NOT to index an incoming 240 tag in that manner (see details below).

To set a flag to treat the 240 tag as a separate title—where Virtua will index the 240 tag as a uniform title authority—run the script **SetTag240IsSeparateTitleFlag.sh**.

➢ **When the flag is ON**, bib lvl **k** will match bib lvl **u**, and the uniform AAP will be formed from bib lvl **k** as well as **u**. Once you have run **SetTag240IsSeparateTitleFlag.sh** to set the flag, run **ReProcess240Titles.sh** to reprocess the 240 titles in your database.

➢ **When the flag is OFF**, which is the default setting, Virtua handles the 240 tag in bibliographic records as described below:

   • For incoming 240/243 tags…

      ▪ Virtua EITHER a) creates an AAP for the title only (internal bib lvl **k**) OR b) matches an existing AAP title record (bib lvl **k**) from the title portion of a combined author/title field.
      ▪ Virtua generates an AAP (internal bib lvl **l**) that consists of either the 1xx+240 and/or 1xx+243 unless that combination matches with an existing name-title authority (bib lvl **e**), in which case the combination is linked to that authoritative heading.

   • Any 1xx+240 authority heading that is created originally as an AAP (bib lvl **l**) can become a permanent name+title authority (bib lvl **e**) via the following method:

      ▪ In the browse index, right-click and choose View Authority from either the title portion (bib lvl **k**) or from the name+title portion (bib lvl **l**), which will generate a provisional authority record that you can then save as a permanent authority (bib lvl **e**).

- Changes made to a name+title authority record are reflected back to both the 1xx and 240 tags of the bibliographic record as well as the 7xx and 8xx tags from which the name+title was generated. Specifically…

  - If an incoming 1xx+240 heading is linked to an existing name+title authority record (bib lvl **e**) that was generated from a 7xx+$t, and the title portion of the name+title record is updated, the changes will be reflected in the 240 tag of the bibliographic record as well as in the title ($t) portion of the 7xx and 8xx tags.

  - If an incoming 1xx+240 heading is linked to an existing name+title authority record (bib lvl **e**) that was generated from a 7xx+$t, and the name portion of the name+title record is updated, the changes will be reflected in the 1xx tag of the bibliographic record as well as in the name ($a) portion of the 7xx and 8xx tags.

17.1 Follow-up Processing Program

The **ReProcess240Titles.sh** script mentioned above changes the modification date in the authority records. If this is an issue for your library, you can run another program **RestoreAuthorityNoteModifyDate.exe**, which will change the modification date *back* to what it was before the migration.

RestoreAuthorityNoteModifyDate.exe will update the 005 and 039 tags in the selected authority records, which are stored in the note_record column of the authority_note_record table, and it will also update the modify_date column in the authority_note_record table.

Usage: `RestoreAuthorityNoteModifyDate.exe [options] >authIdsFile`

Where allowed [options] are as follows:

-? [--help] - Print usage statement.
-s [--start-date] - Start date (YYYYMMDDHH24MISS). Records with modify_date within given range will have their old modify_date restored. Default: all records
-e [--end-date] - End date (YYYYMMDDHH24MISS). Records with modify_date within given range will have their old modify_date restored. Default: all records

Output: A file of Auth IDs from the authority records that were changed.

18. Appendix C - UNIMARC Heading Tags

18.1 UNIMARC Bibliographic Heading Tags

Bib tag	Auth tag MARC 21	Auth tag (UNIMARC)	Auth bib lvl	Search as	Subfields Indexed
200	n/a	n/a	n	Title	All, except z, 5
410	130	230	t	Title (series)	t if not preceded by $1 (one)
411	130	230	t	Title (series)	t if not preceded by $1 (one)
421	n/a	n/a	n	Title	t if not preceded by $1 (one)
422	n/a	n/a	n	Title	t if not preceded by $1 (one)
423	n/a	n/a	n	Title	t if not preceded by $1 (one)
430	n/a	n/a	n	Title	t if not preceded by $1 (one)
431	n/a	n/a	n	Title	t if not preceded by $1 (one)
432	n/a	n/a	n	Title	t if not preceded by $1 (one)
433	n/a	n/a	n	Title	t if not preceded by $1 (one)
434	n/a	n/a	n	Title	t if not preceded by $1 (one)
435	n/a	n/a	n	Title	t if not preceded by $1 (one)
436	n/a	n/a	n	Title	t if not preceded by $1 (one)
437	n/a	n/a	n	Title	t if not preceded by $1 (one)
440	n/a	n/a	n	Title	t if not preceded by $1 (one)
441	n/a	n/a	n	Title	t if not preceded by $1 (one)
442	n/a	n/a	n	Title	t if not preceded by $1 (one)
443	n/a	n/a	n	Title	t if not preceded by $1 (one)
444	n/a	n/a	n	Title	t if not preceded by $1 (one)
445	n/a	n/a	n	Title	t if not preceded by $1 (one)
446	n/a	n/a	n	Title	t if not preceded by $1 (one)
447	n/a	n/a	n	Title	t if not preceded by $1 (one)
448	n/a	n/a	n	Title	t if not preceded by $1 (one)
451	n/a	n/a	n	Title	t if not preceded by $1 (one)
452	n/a	n/a	n	Title	t if not preceded by $1 (one)
453	n/a	n/a	n	Title	t if not preceded by $1 (one)
454	n/a	n/a	n	Title	t if not preceded by $1 (one)
455	n/a	n/a	n	Title	t if not preceded by $1 (one)

Bib tag	Auth tag MARC 21	Auth tag (UNIMARC)	Auth bib lvl	Search as	Subfields Indexed
456	n/a	n/a	n	Title	t if not preceded by $1 (one)
461	n/a	n/a	n	Title	t if not preceded by $1 (one)
462	n/a	n/a	n	Title	t if not preceded by $1 (one)
463	n/a	n/a	n	Title	t if not preceded by $1 (one)
464	n/a	n/a	n	Title	t if not preceded by $1 (one)
470	n/a	n/a	n	Title	t if not preceded by $1 (one)
481	n/a	n/a	n	Title	t if not preceded by $1 (one)
482	n/a	n/a	n	Title	t if not preceded by $1 (one)
488	n/a	n/a	n	Title	t if not preceded by $1 (one)
500 1*	130	230	u	Title	All, except j,v,x,y,z, 2,3
501 1*	130	235	u	Title	All, except j,v,x,y,z,2,3
503 1*	130	230	u	Title	All, except j,v,x,y,z,2,3
510 1*	n/a	n/a	n	Title	a,e,h,i,j,n,z
512 1*	n/a	n/a	n	Title	a,e, h,I,j,n,z
513 1*	n/a	n/a	n	Title	a,e,h,i,j,n,z
514 1*	n/a	n/a	n	Title	a,e, h,i,j,n.z
515 1*	n/a	n/a	n	Title	a,e,h,i,j,n,z
516 1*	n/a	n/a	n	Title	a,e,h,i,j,n,z
517 1*	n/a	n/a	n	Title	a,e,h,i,j,n,z
518 1*	n/a	n/a	n	Title	a,e,h,i,j,n,z
520 1*	n/a	n/a	n	Title	a,e,h,i,j,n
530 1*	130	230	u	Title	a,b,j,v
531 **	n/a	n/a	n	Title	a,b,v
532 1*	n/a	n/a	n	Title	a,z
540 1*	n/a	n/a	n	Title	a,e,h,i,j,n,z
541 1*	n/a	n/a	n	Title	a,e,h,i,z
545 1*	130	230	u	Title	a,e,h,i,j,n,z
600	100	200	y	Subject	all, except 1,2,3
601	110	210	y	Subject	all, except 1,2,3
602	100	220	y	Subject	all, except 1,2,3
604	100	200	y	Subject	all, except 1,2,3
605	130	230	y	Subject	all, except 1,2,3
606	150	250	y	Subject	all, except 1,2,3
607	151	215	y	Subject	all, except 1,2,3
608	155	280	w	Subject	all, except 1,2,3
610	n/a	n/a	p	Subject	all, except 1,2,3
615	150	250	y	Subject	all, except 1,2,3
620	151	260	y	Subject	all, except 1,2,3
626	150	250	y	Subject	all, except 1,2,3
700	100	200	x (or e if has \t)	Author	all, except 3,4

Bib tag	Auth tag MARC 21	Auth tag (UNIMARC)	Auth bib lvl	Search as	Subfields Indexed
701	100	200	x (or e if has \t)	Author	all, except 3,4
702	100	200	x (or e if has \t)	Author	all, except 3,4,5
710	110	210	x (or e if has \t)	Author	all, except 3,4
711	110	210	x (or e if has \t)	Author	all, except 3,4
712	110	210	x (or e if has \t)	Author	all, except 3,4,5
716	n/a	n/a	o	Author	all except 3
720	100	220	x (or e if has \t)	Author	all, except 3,4
721	100	220	x (or e if has \t)	Author	all, except 3,4
722	100	220	x (or e if has \t)	Author	all, except 3,4,5
730	n/a	n/a	o	Author	all, except 4

18.2 UNIMARC Authority Heading Tags

Tag	Information	Subfields Indexed Authors/Titles	Subfields Indexed Subjects
200	Personal Name	a, b, c, d, f, g	a, b, c, d, f, g, j, x, y, z
210	Corporate Body Name	a, b, c, d, e, f, g, h	a, b, c, d, e, f, g, h, j, x, y, z
215	Territorial or Geographical Name		a, j, x, y, z
216	Trademark	a, f, c	a, f, c, j, x, y, z
220	Family Name	a, f	a, f, j,x, y, z
230	Uniform Title	a, b, h, i, k, l, m, n, q, r, s, u, w	a, b, h, i, k, l, m, n, q, r, s, u, w, j, x, y, z
235	Collective Uniform Title	a, b, e, k, m, r, s, u, w	a, b, e, k, m, r, s, u, w, j, x, y, z
240	Name/Title (bib lvl e or g)	a,t	a, t, j, x, y, z
245	Name/Colective Uniform Title (bib lvl e or g)	a,t	a, t, j, x, y, z
250	Topical Subject		a, j, x, y, z
260	Place Access		a, b, c, d
280	Form, Genre or Physical Characteristics (bib lvl **w**)		a, j, x, y, z
400	Personal Name	a, b, c, d, f, g	a, b, c, d, f, g, j, x, y, z
410	Corporate Body Name	a, b, c, d, e, f, g, h	a, b, c, d, e, f, g, h, j, x, y, z
415	Territorial or Geographical Name		a, j, x, y, z
416	Trademark	a,f,c	a,f,c,j,x,y,z
420	Family Name	a, f	a, f, j,x, y, z
430	Uniform Title	a, b, h, i, k, l, m, n, q, r, s, u, w	a, b, h, i, k, l, m, n, q, r, s, u, w, j, x, y, z
440	Name/Title	a,t	a, t, j, x, y, z
445	Name/Colective Uniform Title (bib lvl e or g)	a,t	a, t, j, x, y, z
450	Topical Subject		a, j, x, y, z
460	Place Access		a, b, c, d
480	Form, Genre or Physical Characteristics (bib lvl **w**)		a, j, x, y, z
500	Personal Name	a, b, c, d, f, g	a, b, c, d, f, g, j, x, y, z
510	Corporate Body Name	a, b, c, d, e, f, g, h	a, b, c, d, e, f, g, h, j, x, y, z
515	Territorial or Geographical		a, j, x, y, z

Tag	Information	Subfields Indexed Authors/Titles	Subfields Indexed Subjects
	Name		
516	Trademark	a, f, c	a, f, c, j, x, y, z
520	Family Name	a, f	a, f, j, x, y, z
530	Uniform Title	a, b, h, i, k, l, m, n, q, r, s, u, w	a, b, h, i, k, l, m, n, q, r, s, u, w, j, x, y, z
540	Name/Title	a, t	a, t, j, x, y, z
545	Name/Collective Uniform Title (bib lvl e or g)	a, t	a, t, j, x, y, z
550	Topical Subject		a, j, x, y, z
560	Place Access		a, b, c, d
580	Form, Genre or Physical Characteristics (bib lvl **w**)		a, j, x, y, z
700	Personal Name	a, b, c, d, f, g	a, b, c, d, f, g, j, x, y, z
710	Corporate Body Name	a, b, c, d, e, f, g, h	a, b, c, d, e, f, g, h, j, x, y, z
715	Territorial or Geographical Name		a, j, x, y, z
716	Trademark	a, f, c	a, f, c, j, x, y, z
720	Family Name	a, f	a, f, j, x, y, z
730	Uniform Title	a, b, h, i, k, l, m, n, q, r, s, u, w	a, b, h, i, k, l, m, n, q, r, s, u, w, j, x, y, z
740	Name/Title	a, t	a, t, j, x, y, z
745	Name/Collective Uniform Title (bib lvl e or g)	a, t	a, t, j, x, y, z
750	Topical Subject		a, j, x, y, z
760	Place Access		a, b, c, d
780	Form, Genre or Physical Characteristics (bib lvl **w**)		a, j, x, y, z

19. Appendix D – MARC 21 (Swedish Version) Heading Tags

Bib tag	Auth tag (US)	Auth bib lvl	Search as	Subfields indexed
089	150	y	Subject	A
100	100	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, ei, v, w, x
110	110	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
111	111	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w
130	130	u	Title (Uniform)	all but 0, 2, 3, 5, 6, 8, i v, w, x
210	n/a	n	Title	all but 6, 2
211*	n/a	n	Title	all but 2, 6
212*	n/a	n	Title	all but 2, 6
214*	n/a	n	Title	all but 2, 6
222**	130	u	Title (Uniform)	all but 2, 6
240	n/a	k	Title	all but 2, 6, w
242*	n/a	n	Title	all but 2, 6
243	n/a	n	Title	all but 2, 6
245***	n/a	n	Title	if $n exists, index all up to but not including $n, else all but 2, 6
246	n/a	n	Title	all but 2, 5, 6, i, w
247	n/a	n	Title	All
248	n/a	n	Title	a, b, h, i, j, k
249	n/a	n	Title	All
400	100	f (or g if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8,ei v, w, x
410	110	f (or g if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
411	111	f (or g if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w
440	130	t	Title (Series)	all but 2, 6, 9, v, w, x
490	130	t	Title (Series)	all but 2, 6, 9, v, w, x
600****	100	y	Subject	all but 0, 2, 3, 4, 5, 6, 8. e, w
610****	110	y	Subject	all but 0, 2, 3, 4, 5, 6, 8, w
611****	111	y	Subject	all but 0, 2, 3, 4, 5, 6, 8, w

Bib tag	Auth tag (US)	Auth bib lvl	Search as	Subfields indexed
630****	130	y	Subject	all but 0, 2, 3, 4, 5, 6, 8, w
650****	150	y	Subject	all but 2, 3, 6, w
651****	151	y	Subject	all but 2, 3, 6, w
653	n/a	p	Subject	a
654****	150	y	Subject	all but 2, 5, w
655****	155	w	Subject	all but 2, 5, w
656****	150	y	Subject	all but 2, 5, w
657****	150	y	Subject	all but 2, 5, w
691****	151	y	Subject	all but 2, 3, 6, w
6xx**** except 679, 680, 681, 682	150	y	Subject	all but 2, 3, 5, 6, w
700	100	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, e, i, v, w, x
705	100	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, e, i, v, w, x
709	100	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, e, i, v, w, x
710	110	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
711	111	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w
715	110	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
719	110	x (or e if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x
720	n/a	o	Author	a
730	130	u	Title (Uniform)	all but 0, 2, 3, 5, 6, 8, i, v, w, x
740	n/a	n	Title	all but 0, 2, 3, 4. 5, 6, 8
749	n/a	n	Title	a
752	110	x	Author	all but 2, 6
753	110	x	Author	all but 2, 6
754	150	y	Subject	all but 2, 3, 5, 6, w
755	150	y	Subject	all but 2, 3, 5, 6, w
772	130	u or n +	Title	s, t (and c if follows t), q (separate titles)
800	100	f (or g if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, e, i, v, w, x
810	110	f (or g if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w, x

Bib tag	Auth tag (US)	Auth bib lvl	Search as	Subfields indexed
811	111	f (or g if has \t)	Author	all but 0, 2, 3, 4, 5, 6, 8, i, v, w
830	130	t	Title (Series)	all but 0, 2, 3, 5, 6, 8, i, v, w, x
840	130	t	Title (Series)	all but 0, 2, 3, 4, 5, 6, 8, v
976	150	y	Subject	A

*not indexed if 1st indicator = 0

**not indexed if 772 is indexed as main title

***not indexed if 222 or 772 is indexed as main title

**** only index if 2nd indicator matches subject parameter

+ u if subfield s, n if subfield t or q

20. Appendix E - Changes in this Guide

20.1 Changes for Version 16.1

No changes were made.

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