

## ISBN-13 Support

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### Assumptions/Background

Effective January 1, 2007, the International Standard Book Number (ISBN) expands from a 10-digit number to a 13-digit number. The new ISBN is the same as the European Article Number (EAN) which is represented as a barcode printed on most trade and paperback books.

Voyager ISBN support includes indexing support for 13-digit ISBNs in the 020\$*a* and \$*z*, the 024 3 \_\$*a* and \$*z*, and in EDI (Electronic Data Interchange) messages.

The book industry uses 978 or 979 as prefixes for the EAN. The expanded 13-digit ISBN standard also uses 978 or 979 as prefixes.

EDItEUR, the group responsible for standardizing EDI messages, published a series of recommendations for libraries and vendors as the library community moves to the 13-digit ISBN.

### Voyager ISBN-13 Support

The Voyager implementation of ISBN-13 support includes changes that affect the following.

- Indexes
- EDI/Acquisitions

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## Indexes

With ISBN-13 support, the list of search indexes expands to include the following.

- 024I
- 024Y
- ISB3

See [Table D-1](#) for a description of these indexes.

**Table D-1. ISBN-13 Support Indexes Added**

Code / Name	Description
024I * ISBN-13 (024a)-Indicator 3	Single-field, left-anchored index for 024 3_#a.  <b>NOTE:</b> Only subfields that contain 13 digits and begin with 978 or 979 are indexed; and only the 13 digits are indexed. Any parenthetical qualifiers are ignored.
024Y * ISBN-13 : Cancelled (024z)-Indicator 3	Single-field, left-anchored index for 024 3_#z.  <b>NOTE:</b> Only subfields that contain 13 digits and begin with 978 or 979 are indexed; and only the 13 digits are indexed. Any parenthetical qualifiers are ignored.
ISB3 * ISBN (ISBN-13s will match ISBN-10s)	Single-field, left-anchored index for 020#a.  See <a href="#">ISB3 Left-Anchored Indexing / Searching</a> on <a href="#">page D-3</a> and <a href="#">Deduplication</a> on <a href="#">page D-3</a> for more information.

**NOTE:**

\* This code may vary on your system if, at installation, this code already exists. The Voyager installation script automatically adjusts the index code when duplicate existing codes are encountered on your system.

To ensure appropriate indexing, Voyager maintains a composite index that contains both the 020#a and the 024 3\_#a if the EAN begins with 978 or 979. This composite index updates the existing ISBL index.

**NOTE:**

There are no changes made by the Voyager system to MARC records as a result of ISBN conversions.

## ISB3 Left-Anchored Indexing / Searching

Voyager provides an additional left-anchored index, ISB3, that consolidates ISBNs in the ISBN-13 format with ISBN-10 formatted data that is converted/normalized to the ISBN-13 format. The new index is named “ISBN (ISBN-13s will match ISBN-10s).”

Search text entered to search the ISB3 index is converted/normalized using the same rules followed to create the ISB3 index. As a result, the enduser may enter either ISBN-10 or ISBN-13 formatted data in searches utilizing the ISB3 index to find matching data.

## Deduplication

The ISB3 index may be used in deduplication profiles.

When the ISB3 index is used in a deduplication profile, incoming records with ISBN-13 formatted data in the 020 fields match existing records with the equivalent ISBN-10 formatted data in the 020 field even when the existing records do not contain ISBN-13 formatted data. The ISB3 index is built to handle these occurrences.

## Keyword Indexing / Searching

When building the keyword index, the bibliographic record's 020\$a is examined for ISBN-10 formatted data. Prior to building the index, a process is used to duplicate and convert data in a manner that generates indexed data that enables the enduser to complete a keyword search for either the ISBN-10 or ISBN-13 form of the data.

**NOTE:**

Any duplicate data is only used for building the index and is not stored in the database.

## EDI/Acquisitions

The 10-digit ISBN is transmitted in the EDI message's PIA (additional product information) segment, while the 13-digit ISBN is expected to be located in the LIN (line item) segment as it has always been. Since 13-digit ISBNs are ordinary EAN numbers, they are coded as EANs, not as ISBNs, within EDI messages.

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## Invoices

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In EDI invoices, Voyager recognizes the ISBN-13 in the LIN element, qualified as an EAN. The format is as follows.

LIN+5+9781234567890:EN

Invoices may have contained these LIN values in the past since they are valid EANs now.

When incoming EDI invoices are loaded, Voyager attempts to match invoice line items with purchase order line items using a variety of criteria that includes the ISBN values.

Voyager continues to match the 10-digit ISBN in the PIA segment with the values in the 020A index.

If there is no PIA value, Voyager uses the EAN value in the LIN segment and attempts a match with the 024A index for a 13-digit ISBN. If there is no match with the 024A index, the 020A index is searched for a matching 13-digit ISBN.

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## Purchase Orders

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When Voyager generates purchase orders, the ISBN from the first 020\$a of the MARC record is placed in the EDI PIA segment with an IB suffix. Previous versions of Voyager used the same method for populating the PIA segment. After the library community fully shifts to ISBN-13, Endeavor may consider eliminating this procedure in favor of storing the 13-digit ISBN in the LIN segment.

If there is no 020\$a found in the MARC record, Voyager looks for a value in the 024 3\_ \$a that begins with 978 or 979 and places it in the LIN segment qualified as an EAN. Only the first 024 3\_ \$a found is placed in the LIN segment.

Additionally if the source purchase order line item has a Vendor title number, it is placed as always in a PIA field with a suffix of SA even if it seems to be a 10- or 13-digit ISBN.

Consistent with pre-existing rules, Voyager uses the first ISBN in a record when generating EDI purchase orders. This rule also applies to records that contain both a 10-digit ISBN in the 020\$a and a 13-digit ISBN (EAN) in the 024\$a. Voyager treats the 020\$a and the 024\$a as repeated ISBNs.

## **Serial Claims and Claim Responses**

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No changes have been made to the EDI processing for serials claims and claim responses since these types of messages should not contain ISBN data.

## **Monographic Claims and Claim Responses**

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Support for monographic claims and claims responses via EDI remains consistent with the support provided in Voyager 5.0.

## **Acquisitions/Reporter Purchase Order Line Printing**

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Support is provided in Acquisitions and Reporter for printing 10-digit and 13-digit ISBNs from the 020\$<sub>a</sub> when the operator chooses the ISBN as the standard number to print.

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