

A Model for Storage of Different Volumes of a Journal in Electronic Data Processing: The Dortmund Online Library System DOBIS

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Martin Büren, "A Model for Storage of Different Volumes of a Journal in Electronic Data Processing: The Dortmund Online Library System DOBIS." *Proceedings of the IATUL Conferences*. Paper 17.
<http://docs.lib.purdue.edu/iatul/1983/papers/17>

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A MODEL FOR STORAGE OF DIFFERENT VOLUMES OF A JOURNAL IN
ELECTRONIC DATA PROCESSING

THE DORTMUND ONLINE LIBRARY SYSTEM DOBIS

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First of all I want to give a short survey of the history and today's situation of DOBIS, the Dortmund Online Library System at Dortmund University Library. Since 1972, DOBIS has been developed in coordination between university librarians and EDP-specialists of the University Computer Center. It has been designed as an integrated system for the support of all library tasks. In 1976 the online function "Circulation" including Inter-library Loan became operational.

Two years later we achieved main parts of the Cataloguing function and the offline part of Circulation - that means print of letters to users.

Cataloguing of periodicals including circulation of periodicals was added in 1980.

In 1982, the Cataloguing function was enlarged concerning multi-volume sets, serials and added entries.

The total book collection comes to 1,2 millions vols. with more than 7.000 current periodicals and about 50.000 acquisitions yearly.

It requires more expenditure to catalogue periodicals in an integrated system than in separate systems for cataloguing and circulation. On the one hand, bibliographically correct descriptions with information about the collection must be available for a catalogue output according to the cataloguing rules. On the other hand each single physical volume has to be marked and des-

cribed definitely for circulation.

We solved this problem in the following way:

Each volume, monograph or volume of a periodical, is labeled with bar codes containing the individual document number. The document number is at the same time the ID number for circulation.

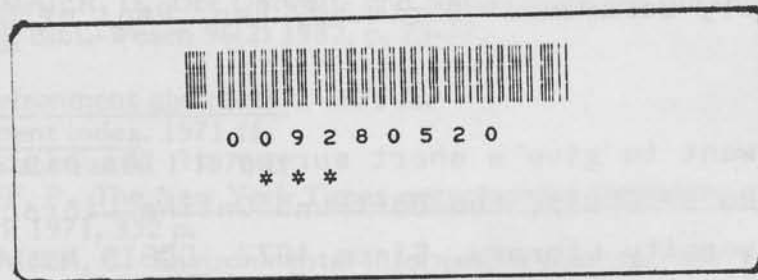


fig 1. Barcoded label

For each document marked in this way, there is a record in the bibliographic main data file, sorted by the document number. A record of this kind contains first of all the non-bibliographic data belonging to the document: Location, circulation conditions, current status, and the shelf-number.

Usually author and title of the document are stored there as so called "pointers" to the Access Point Files "persons" and "titles". For volumes of periodicals this bibliographic information is dispensable, so there we use a special kind of "shortened" record which contains as bibliographic information just fields for volume number, year, part number, part name and another field for the year of publication if it is different from the year under review. Additional statements (e.g. multiple volume numbering) are written into a provided field with space for 255 characters. The shelf number of a periodical is not stored in the volume record because the shelf number system of our library provides no individual shelf numbers for periodical volumes but only for the entire periodical.

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Katalogisierung
Bandaufführung
Vollinformation
ZL 166 #1950
00818840
1 Bestandsangabe nach KRAK:
  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

2 Bandzählung          91
3 Berichts-u.Ersch.jahr 1966
4 Teil: Bezeichnung    S.
5 Teil: Zählung        I-1392
6 Abweich Erschein.jahr -
  Stüctitel
Eingabe lfd Nr oder Code
j

Lokale Angaben zum Band
7 Standort             ZB Freih
8 Signatur             -
9 Leihfrist            2 Wc
10 Status               am St0
  Statusdatum           80-05-30
  Dok-Nr                 00285855

j ja

```

fig 2. Screen for cataloguing a volume

Having regarded the storage of periodical volumes on the level of the volumes, we realize that a connection between the volumes among one another and a connection between volumes and description of the periodical itself are still missing.

We put in the title description of the periodical, which of course applies to all volumes, with the same cataloguing dialogs as used for monographs.

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Katalogisierung
Bandaufführung

Dok-Nr      818840      Journal of bacteriology
Status      -           Journal of bacteriology : official organ of the Society of American Bacteriologists ...
St-Datum    80-05-30    Baltimore, Md.
Dok-Daten   vollst./COM 59.1950 ff ----> ZL 166
TA-Datum    83-04-21     Reg. 65/80 ----> ZL 166
Quelle       VTA-DD
HE-Typ      ST-Schr.
Dok-Typ     Zeitschr.
Zettel      2 Zettel
Leihfrist   s.Bd
Standort    s. Bd
Signatur    ZL 166 #1950
            +
            Sprache: engl.
            SK-Daten: -

Eingabe Code
f
s suchwrt      k kinfo
r regist
t teil         f auff         y ende

```

fig 3. Screen with full information of a main description

According to this title description, called main description, a record is produced also in the bibliographic main file although there is no physical volume belonging to it.

Part of this description is the text of an abbreviated condensed volume description which has to be kept up-to-date independent of cataloguing. These condensed description entries constitute the bibliographic correct information on the collection of periodicals.

The connection between main description and single volumes of a periodical is established by the sorted storage of the document numbers of the volumes as references in the record of the main description.

This solution allows to see all volumes belonging to one periodical in a sorted order on the screen after having called the main description.

Katalogisierung					
Bandaufführung					
Bestandsübersicht					
ZL 166 #1950 Journal of bacteriology					
00818840					
01	00285859	ZB	Freih	am St0	93.1967, S. 1-1203
02	00285858	ZB	Freih	am St0	92.1966, S. 804-1870
03	00285857	ZB	Freih	am St0	92.1966, S. 1-803
04	00285856	ZB	Freih	am St0	91.1966, S. 1393-2409
05	00285855	ZB	Freih	am St0	*XXXXXXXXXXXXXXXXXXXXXXXXXXXX
06	00285854	ZB	Freih	am St0	90.1965, S. 837-1807
07	00285853	ZB	Freih	am St0	90.1965, S. 1-836
08	00285852	ZB	Freih	am St0	89.1965, S. 931-1648
09	00285851	ZB	Freih	am St0	89.1965, S. 1-930
10	00285850	ZB	Freih	am St0	88.1964, S. 817-1834
11	00285849	ZB	Freih	am St0	88.1964, S. 1-816
Eingabe lfd Nr oder Code					
5					
s	suchwt	w	weitr		
r	regist			v	vinfo
t	teil			e	ergnz
				y	ence

fig 4. Screen with sorted list of volumes

This list is sorted according to the following order:

1. year
2. volume
3. part number
4. part name

The volumes are sorted in inverse chronological order. By this means the recent volumes which are mainly of interest are shown on the screen first.

Sometimes the statements of the four sorting elements are not sufficient to achieve the right order of the volumes. In this special case the field for additional statements is used. The most differentiated statements can therefore be made here without sorting functions. The sorting fields then have the sole task of receiving the information by which the volume is inserted correctly into the list of volumes. The output screen however displays the field with the complete bibliographic information.

Five to eleven volumes can be presented on each screen depending upon whether oneline or twoline entries were made. This kind of search can be tedious since 300 or more volumes of a periodical are no rarity. Browsing a card catalogue yields a much faster and more convenient overview in such cases. Therefore a solution had to be found equivalent to this conventional method or at least comparable in its service.

The periodical volumes whose records had been linked with the bibliographically complete main record were distributed to several main records. Consequently there is one main record that contains the bibliographic data of a periodical, and possibly additional main records without bibliographic data.

Each of these main records contains maximally 41 volumes, generally four screens with line repetitions. The number 41 is purely organizational, a limitation for quick browsing, and may be changed for superior bibliographical reasons. The main records are retrieved via shelf number which received an addition-- usually an added year of publication--for each main record.

c) Refresher and/or follow up courses which may involve any one person or organization. Most thoroughness will vary according to the staff's knowledge, background or interpretation. Some large library authorities may offer some form of courses to staff, or a committee may do so, or a variety of professional organizations may take responsibility. Either way there is no uniformity or co-ordination.

The main problem is to link theory and practice and here is the justification for education. 199

Katalogisierung			
Bandaufführung			
1	ZL 165 *1961+	1	
2	ZL 166 *R	1	
3	ZL 166 *1950+	1	
4	ZL 166 *1967	1	
5	ZL 166 *1976	1	
6	ZL 167 *1953+	1	
7	ZL 168 *1948+	1	
8	ZL 169 *1962+	1	
9	ZL 169 *1969+	1	
10	ZL 17 *1964+	1	
11	ZL 170 *1958+	1	
12	ZL 171 *1964+	1	
13	ZL 172 *1950+	1	
14	ZL 173 *1971+	1	
Eingabe lfd Nr oder Code			
3			
s	suchwrt	w	weiter
r	regist	z	zurück
		d	detail
		e	ergnz

fig 5. Screen with a section of the shelf number file

This added year of publication indicates the first volume in the volume set. By this way certain volumes are ordered to 'individual' main record shelf numbers which enable a quicker and more convenient access without the document number.

When the DOBIS function 'Cataloguing of Periodicals' was installed in the library-production, about 400.000 volumes had to be introduced to the system. All periodical volumes in the library were listed by the librarians according to the format of impending online processing in formatted data sheets, then the data were punched and merged by an offline program into the data base. Current acquisitions of course are catalogued by online dialogue.