



Cataloging of preservation surrogates

This is an outline of the essential contents of bibliographic records for preservation surrogates. This is not a set of rules but rather a general summary of what any kind of national or international cataloging rules should accommodate.

A general consensus about how preservation surrogates shall be described in cataloging has been reached in the last decade of the twentieth century. International bibliographic formats for electronic cataloging such as UNIMARC, INTERMARC and MARC21 but also most of the bibliographic formats used for modern cataloging software can accommodate the elements, which are essential for a record of a preservation surrogate. In spite of this some lack of awareness of the core elements that must be present in a record may result in a loss of important information. Full information is needed if a decision must be taken to repeat digitization or microfilming of an item or, more positively, to refrain from duplicating the work done elsewhere and to select other items instead.

1. Description of the original publication

It is an easy start where you can create a duplicate of the record describing the original item. The bibliographic identity of the original (incl. edition and year of publication) is essential information obviously. But also the physical item, which will be used for reformatting, is of importance. The book held by a library may differ in more than one respect from the same issue of another library even if the bibliographic description does not point to these differences. This is why the holdings information (incl. location and call number, perhaps its state of preservation) shall remain with the new record. If the original item is discarded after reformatting, this should be said.

2. Description of the surrogate

There are different types of surrogates but as preservation surrogate we are focusing on the master, or more precisely on the first generation preservation master. This is the surrogate produced directly from the original with no intermediate. It must contain the image of the printed or manuscript original. Only the true image allows the surrogate to be used as unequivocal reference in research and can replace the original edition on paper for most users.

With microforms we are used to refer to

- the preservation master as first generation,
- the printing master as second generation,
- and the user or service copy as third generation.

Similarly with digital forms we can regard

- the files created from the original in scanning as first generation; such files will be archived and refreshed (see below) periodically.
- Any subsequent files created as derivatives from the first set of archival files may be of rather different format, which is configured to meet different user demands (web access, local high quality access, printing, etc.). To call these derivatives 'second generation' may be misleading.



To bridge the waves of continuous change in hardware and software it will be necessary from time to time to migrate the archival files to new formats; this process is often termed refreshing. This will include using new or modified file formats, which will be more than just a clone of the first archival files.

These migrated archival files can rightly be termed second generation master files. Lossless migration will always be our aim but some change will inevitably occur.

2.1 Responsibility, producer, year of production

In some cases libraries or archives will be responsible for creating and publishing surrogates, in others commercial publishers will have responsibility or share this with the institution holding the original. To know about Responsibility for an item may be important when trying to clarify questions about availability and copyright.

The Producer of a surrogate may be taken as an indication of quality by those experienced in the field. If a record does not specify, who has done the technical job of producing the surrogate, it is understood that production has been done by the organization named for responsibility.

With technological development moving as fast as ever the Year of production again is an indication of what technology may have been used when creating the surrogate.

2.2 Location and call number of the preservation master

The archival surrogate obviously is of the best quality in comparison with all subsequent copies made from it. It is stored in an environment, which will help to ensure that the surrogate will last as long as possible.

It is essential to record information about where the surrogate is archived and under which call number the microform or data carrier can be found.

Because of the predominant focus on access with digital surrogates this information is often neglected. At present most producers or those responsible for creating the digital master are used to keep the archival version on optical discs or on magnetic tape. The staff involved knows where they are kept. But after a decade or more this knowledge might not be easy to retrieve and the local files or registries, where such information can be found, might not be up-to-date. This is why call number and location should be on the record when cataloguing.

2.3 Technical features of the master

Technical features (physical attributes) of the surrogate can be recorded in a note (Reproduction Note according to MARC21 #533 and UNIMARC #325, #455/#456). This will be done in the cataloguer's language and according to present day terminology.

Adding to this a set of codes has been agreed internationally to record such features in a way that will be independent of language and will retain its meaning over time (MARC21 #007h and #007c and UNIMARC #130 and #135). These codes allow recording the most essential general features.

The codes used for MARC21, UNIMARC and other bibliographic formats can easily be selected on this site.



3. Availability of an access version of a digital form

Preservation of works, which were published and printed, drawn or written on paper originally, in surrogate only makes sense, if the surrogate is accessible to users.

In most cases digital surrogates are accessible through the web, either free of charge or by subscription. The location (URI) of this use copies shall be recorded, preferably in form of persistent identifiers.

4. Description of surrogates in UNIMARC

This chapter gives examples about how records of surrogates can be described in the international exchange format UNIMARC. It starts with an overview of the important fields, followed by several examples of microform and digital surrogates.

4.1 Record Structure in UNIMARC

The description below uses the following abbreviations:

data provided by computer system
A mandatory if Applicable
C reCommended. Consult source: Try to fill
M Mandatory
NR Not Repeatable
O Optional
R Repeatable

The following fields contain information relating to the original:

0RL Record Label
001 Record Identifier
010 International Standard Book Number (ISBN)
011 International Standard Serial Number (ISSN)
100 General processing data
101 Language of the item
102 Country of publication
200 Title and statement of responsibility
205 Edition statement
207 Material specific area: Serials numbering
210 Publication, distribution etc.
215 Physical description
225 Series
300 General note
305 Notes pertaining to edition and bibliographic history
326 Frequency statement note (Serials)
327 Contents note
328 Dissertation (Thesis) note)
500 Uniform title
503 Uniform conventional heading
517 Other variant title
530 Key title (Serials)
610 Uncontrolled subject terms
686 Other class number
700 Personal name - Primary intellectual responsibility



701 Personal name - Alternative intellectual responsibility
702 Personal name - Secondary intellectual responsibility
710 Corporate body name - Primary intellectual responsibility
711 Corporate body name - Alternative intellectual responsibility
712 Corporate body name - Secondary intellectual responsibility
720 Family name - Primary intellectual responsibility
721 Family name - Alternative intellectual responsibility
722 Family name - Secondary intellectual responsibility
801 Originating source

The following fields contain information relating to the reproduction

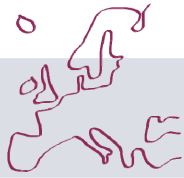
856 Electronic location and access to the use copy
913 Coded data (Physical attributes of the master)
921 Responsibility of reproduction
922 Availability of service copies
923 Physical description of reproduction (master)
925 Series statement of reproduction
930 Note pertaining to reproduction
951 Location and holdings of original item
952 Location of archival copy (master)
961 Holdings of the reproduction (serials)

4.2 Field for the ISBN of the reproduction

When the need arose, EROMM customized the field 910 for the ISBN of the reproduction, which is not covered by standard UNIMARC. Its implementation is described below:

ISBN of reproduction (field 910)

- **Occurrence**
 - Optional. Repeatable when more than one valid ISBN etc. is to be recorded.
- **Indicators**
 - Indicator 1: blank (not defined)
 - Indicator 2: blank (not defined)
- **Subfields**
 - \$a Number (M) (NR)
 - \$b Qualification (O) (NR)
 - ◆ An indication of the scope of the ISBN in subfield \$a (if present), usually the name of a publisher, an indication of the binding of the item, or an indication of the relationship of an ISBN to a set or to a particular volume. Not repeatable.
 - \$d Terms of Availability and/or Price (O) (NR)
 - ◆ The price of the item and any comment on its availability. Not repeatable.
 - \$z Erroneous ISBN (O) (R)
 - ◆ An ISBN that has been identified as being erroneously applied to an item or is otherwise invalid. It may have been allocated to two different publications and in this instance cancelled, or it may have been incorrectly printed. Repeatable.



4.3 Examples for Microform Record

Below you find the examples sorted by publication form. The underline (“_”) in field 200 subfield a (examples 2 and 5) is used to mark non sorting characters.

4.3.1 Monographic microforms

Example 1

```
0RL 00000nam0 2200000 450
001 gbm96030904
100 ##$a19960306d1771 |||y0engy0103 ba
101 0#$alat
102 ##$aSE
200 1#$aDissertatio botanica genera Tournefortii stilo reformato
    & botanico sistens$ecujus partem primam ... publicae
    censurae subjiciunt Petrus Hernquist et A.
    Christophersson, etc
210 ##$aLondini Gothorum$d1771
215 ##$d4
700 #1$aCHRISTOPHERSSON$bAndreas
702 #1$aHERNQUIST$bPetrus
801 #2$aGB$bBL$nm96030904
913 ##$adbfa|||aaaa
921 ##$aLondon$cBritish Library$d1990
923 ##$aMicrofilm : 1 reel $d35 mm
930 ##$aImperfect; wanting all after p. 24
951 ##$aGB$bLondon : British Library$cDPB$dB.29.(15.)
952 ##$aGB$bLondon : British Library$dNeg: PB.Mic.C.9619
```

Example 2

```
0RL 00000nam|0 2200000||450
001 n1147702887
100 ##$a19960503|1917 |||u| y ba
101 9#$aeng
102 ##$aUS
200 1#$aA _complete guide to the game of chess$fby Maxim La Roux
210 ##$aBaltimore, MD$cOtteneheimer$d[1917]
215 ##$a64 p$cdiagr$d13 cm
225 1#$aNew joke books$vno. 43
300 ##$aOmslagtitel: How to play chess
700 #1$aLa Roux$bMaxim
801 #2$aNL$bKB Den Haag$c19960503$n1147702887
913 ##$adbfa009aaaa
921 ##$aDen Haag$cKoninklijke Bibliotheek$d1996
923 ##$a1 microfilm reel
951 ##$aNL$bDen Haag : Koninklijke Bibliotheek$dXSE 735
952 ##$aNL$bDen Haag : Koninklijke Bibliotheek$dNBM Mfm 678
```



Example 3

```
0RL 00000nam0 2200000|i 450
001 desub005163Y
100 ##$a19890604d1744 u||ulgery0103 ba
101 9#$ager
102 ##$aDE
200 1#$aGrundsätze einer recht reinen teutschen Orthographie$fJ.
    N. H. Fuchs
210 ##$aErfurt$d1744
215 ##$d8
700 #1$aFuchs,$bJohann N.
801 #2$aDE$bNiedersächsische Staats- und Universitätsbibliothek
    Göttingen$c19930228$gPI$gRAK-WB$n005163Y
913 ##$aebmb|||aaa
921 ##$aGöttingen$cNiedersächsische Staats- und
    Universitätsbibliothek$d[198.]$eGöttingen
    $gNiedersächsische Staats- und Universitätsbibliothek
923 ##$al Mikrofiche$cnegativ, 16x-30x, monochrom,
    Silberhalogenid, Master,
    Sicherheitsträgermaterial$d105x148mm
951 ##$aDE$bGöttingen : Niedersächsische Staats- und
    Universitätsbibliothek$d8 LING VII, 4364
952 ##$aDE$bGöttingen : Niedersächsische Staats- und
    Universitätsbibliothek$cFotostelle$d7: MC 8 LING VII, 4364
```

4.3.2. Journal / Series microforms

Example 4

```
0RL 00000nas0 2200000 450
001 gbo000000631
100 ##$a19940309b19201925|||y0engy0103 ba
101 0#$aeng
102 ##$aGB
200 1#$aEngineering production
207 #1$aVol.1,no.1(Jan. 1920) - Vol.8,no.152(May 1925)
210 ##$aLondon$d1920-1925
215 ##$d35cm.$a10 items
300 ##$aThen merged in "The Automobile engineer"
801 #2$aGB$bBL$no000000631
913 ##$adbfa|||aaa
921 ##$aOxford$cBodleian Library$d1993
923 ##$aMicrofilm : 9 reels(4970fr.)$d35 mm
951 ##$aGB$bOxford : Bodleian Library$cPR$dN.1861 c.10
952 ##$aGB$bOxford : Bodleian Library$dNeg: 4630-4638
```

Example 5

```
0RL 00000nas0 2200000 450
001 gbm86070925
100 ##$a19860715a19229999|||y0engy0103 ba
101 0#$aeng
102 ##$aZA
```



```
200 1#$aThe _Journal of the Medical Association of South Africa,  
    etc  
210 ##$aCape Town$d1927-31  
215 ##$d4o  
300 ##$aContinued as: South African Medical Journal. 1932-  
710 01$aAfrica$c(South: Union of South Africa).$bMedical  
    Association of South Africa  
801 #2$aGB$bBL$nm86070925  
913 ##$adbfa|||aaaa  
921 ##$aLondon$cBritish Library$d1984  
923 ##$aMicrofilm : 34 reels(19,484fr.)$d35 mm  
951 ##$aGB$bLondon : British Library$cDPB$dP.P.2881.aaa.  
952 ##$aGB$bLondon : British Library$dNeg: PB.Mic.C.159  
961 ##$aHoldings: Jan. 1927 - Oct. 1950
```

4.3.3. Newspaper microform

Example 6

```
ORL 00000nas0 2200000 450  
001 gbm86070925  
100 ##$a19860715a19229999|||y0engy0103 ba  
101 0#$aeng  
102 ##$aZA  
200 1#$a^The _Journal of the Medical Association of South  
    Africa, etc  
210 ##$aCape Town$d1927-31  
215 ##$d4o  
300 ##$aContinued as: South African Medical Journal. 1932-  
710 01$aAfrica$c(South: Union of South Africa).$bMedical  
    Association of South Africa  
801 #2$aGB$bBL$nm86070925  
913 ##$adbfa|||aaaa  
921 ##$aLondon$cBritish Library$d1984  
923 ##$aMicrofilm : 34 reels(19,484fr.)$d35 mm  
951 ##$aGB$bLondon : British Library$cDPB$dP.P.2881.aaa.  
952 ##$aGB$bLondon : British Library$dNeg: PB.Mic.C.159  
961 ##$aHoldings: Jan. 1927 - Oct. 1950
```

4.4 Examples for Microform Record

Below you find the examples sorted by publication form.

4.4.1. Monographic digital forms

Example 1

```
ORL 00000nam0|22|||||1||450|  
001 degbv235191906  
100 ##$a20011106c1612|||||||u|gery0103||||ba  
101 9#$alat  
102 ##$adr  
200 1#$aIndiae occidentalis historia, ...$fopera & studio  
    Gasparis Ens  
210 ##$aColoniae$cLutzenkirchen$d1612
```




```
215 ##$a370 S
300 ##$aCopyright: SUB Göttingen
700 #1$aEns$bGaspar
801 #2$aDE$bGBV
801 #2$aDE$bEROMM$c20011106
856 4#$uhttp://www-gdz.sub.uni-goettingen.de/cgi-
    bin/digbib.cgi?PPN235191906$qCGI
913 2#$adoug 001auabp
921 ##$aGöttingen: Niedersächsische Staats- und
    Universitätsbibliothek$d1997
930 ##$aDigdoc: TIFF, Vers.6.0, 600 dpi, 1 bit (s/w), ITU group
    4; Digitalisierungsvorlage: Primärausgabe
951 ##$aDE$bSUB Göttingen$cHSD$d8 HIST AM I, 290 RARA
```

Example 2

```
ORL 00000nam0|22|||||1||450|
001 degbv234688475
100 ##$a20011106c1925||||||u|gery0103||||ba
101 9#$ager
102 ##$adr
200 1#$aVorlesungen über ebene algebraische Kurven und
    algebraische Funktionen $rmit 126 Abbildungen$fvon
    Alexander Brill
210 ##$aBraunschweig$cVieweg$d1925
215 ##$aX, 340 S$cgraph. Darst
700 #1$aBrill$bAlexander
801 #2$aDE$bGBV
801 #2$aDE$bEROMM$c20011106
856 4#$uhttp://www-gdz.sub.uni-goettingen.de/cgi-
    bin/digbib.cgi?PPN234688475$qCGI
913 2#$adoug 001auabp
921 ##$aGöttingen$cNiedersächsische Staats- und
    Universitätsbibliothek$d1997
930 ##$aTIFF, Vers. 6.0, 400 dpi, 1 bit (s/w), ITU group 4;
    Digitalisierungsvorlage: Primärausgabe
951 ##$aDE$bSUB Göttingen$d8 MATH III, 8070
```

4.4.2. Journal / Series digital forms

Example 3

```
ORL 00000nax0|22|||||1||450|
001 deZDB105510742
035 ##$adeZDB21926025
100 ##$a20060928|18901893||||u|gery0103    ba
101 |#$ager
102 ##$aXA-DE
135 ##$adobn 001aaadp
200 1#$aZeitschrift für bildende Gartenkunst
207 #0$aN.F. 1=8.1890 - 4=11.1893
210 ##$aNeudamm$cNeumann$d1890-1893
305 ##$aOnline-Ressource
306 ##$aBerlin : Grundmann; 1890-1892
308 ##$aDruckausg.: Zeitschrift für bildende Gartenkunst
```




308 ##\$aVorg.: Jahrbuch für Gartenkunde und Botanik
308 ##\$aForts.: Zeitschrift für Gartenbau und Gartenkunst
325 ##\$al=8.1890 - 4=11.1893
801 #2\$aDE\$bZDB\$c20050620\$n2192602-5
801 #2\$aDE\$bEROMM\$c20060228
856 4#\$qTeX\$uhttp://gartentexte-digital.ub.tu-berlin.de
921 ##\$cBücherei des Deutschen Gartenbaues
e.V\$d2003\$eBerlin\$gMIK-Center GmbH
951 ##\$aDE\$bTU Berlin, Universitätsbibliothek\$d4 Zf 96 /
Bücherei des Deutschen Gartenbaues e.V
952 ##\$aDE\$bTU Berlin, Universitätsbibliothek\$dBücherei des
Deutschen Gartenbaues e.V
961 ##\$al=8.1890 - 4=11.1893

Example 4

ORL 00000nas0|22|||||1||450|
001 degbv235181684
100 ##\$a20011106c1869||||||u|gery0103||||ba
101 9#\$ager
102 ##\$ade
200 1#\$aMathematische Annalen\$fbegr. 1868 durch Alfred Clebsch
[u.a.]
207 #1\$a1.1869 - 119.1943/44,2; 120.1947/49 - 191.1971
210 ##\$aBerlin\$aGöttingen\$aHeidelberg\$cSpringer\$d1869
306 ##\$aLeipzig : Teubner [früher]
801 #2\$aDE\$bGBV
801 #2\$aDE\$bEROMM\$c20011106
856 4#\$uhttp://www-gdz.sub.uni-goettingen.de/cgi-
bin/digbib.cgi?PPN235181684\$qCGI
913 2#\$adoug 001auabp
921 ##\$aGöttingen\$cNiedersächsische Staats- und
Universitätsbibliothek\$d1997
921 ##\$aGöttingen\$cNiedersächsische Staats- und Universitätsbib-
liothek\$d2000
930 ##\$aTIFF, Vers.6.0, 400 dpi, 1 bit (s/w), ITU group 4;
Digitalisierungsvorlage: Primärausgabe
951 ##\$aDE\$bSUB Göttingen\$d8 MATH I, 760