MARC RECORD STRUCTURE

OCLC MARC Record in Raw Form:
00734cam 22002411 45*000100130000003006001300500170001900800410003601000170007704000230009404300 120011705000160012908200130014509200190015804900090017710000250018624500980021126000570030930003900 36635000090040550400300414651004800444*ocm00442080 *OCoLC*19940620065418.0*701012s1968 pauab b 000 0 eng * ‡a 68021623 * ‡aDLC‡cDLC‡dOCL‡dIPL‡an-us---*0 ‡aJK2556‡b.E2* ‡a325.3/73* ‡a325.373‡bEb61f* ‡aIPL1*1 ‡aEbleen, Jack Ericson.*14‡aThe first and second United States empires;‡bgovernors and territorial government, 1784-1912.*‡a[Philadelphia]‡bUniversity of Pittsburgh Press‡c[1968]* ‡aviii, 344 p.‡billus., map.‡c24 cm.* ‡a8.95* ‡aBibliography: p. 321-333.* 0‡aUnited States‡xTerritories and possessions.**

LEADER:
Logical record length: 00734
Record status/Type of record/Bibliographic level: cam
Two blanks/Indicator count/Subfield code count: bb22
Base address of data: 00241
Encoding level/Descriptive cat. form/Linked record code: 1bb
Length of length-of-field/Length of starting-character pos: 45
OCLC transaction type code: *
Undefined: 0

<table>
<thead>
<tr>
<th>FIELDS:</th>
<th>Tag</th>
<th>Length</th>
<th>Start</th>
<th>Text</th>
</tr>
</thead>
</table>
| 001     | 0013| 00000  | ocm00442080 | *  
| 003     | 0006| 00013  | OCoLC* |
| 005     | 0017| 00019  | 19940620065418.0* |
| 008     | 0041| 00036  | 701012s1968 pauab b 000 0 eng * |
| 010     | 0017| 00077  | #a 68021623 * |
| 040     | 0023| 00094  | #aDLC#cDLC#dOCL#dIPL* |
| 043     | 0012| 00117  | #an-us---* |
| 050     | 0016| 00129  | 0 #aJK2556‡b.E2* |
| 082     | 0013| 00145  | #a325.3/73* |
| ...     |     |        |       |      |

VS.
THE FUNCTIONS AND THEIR PARAMETERS

Version 99:
GetBibBLOB(BIB_ID)
GetMFHDBLOB(MFHD_ID)
GetAuthBLOB(AUTH_ID)

Version 2000+:
BIBBLOB_VW.MARC_Record
MFHDBLOB_VW.MARC_Record
AUTHBLOB_VW.MARC_Record

GetFieldRaw(MARCRec, DTag, Which)
GetField(MARCRec, DTag, Which)
GetFieldAll(MARCRec, DTag)
GetSubField(RawField, SFCCode, Which)

vs.
THE BLOB FUNCTIONS
AND THEIR RESULTS

GetBibBLOB(“1188178”) or BIBBLOB_VW.MARC_Record
THE BLOB FUNCTIONS AND THEIR RESULTS

GetMFHDBLOB(“834”) or MFHDBLOB_VW.MARC_Record
00224nx 2200109z 4500001000400000000400040000400050170008008003300025014001700058014001400075852002
50008983441519980612181839.09806122u u 1001uu 00000001‡aAAA0417PU0010‡9000000083310‡bstor‡h641.578‡iM189

GetAuthBLOB(“2200”) or AUTHBLOB_VW.MARC_Record
00856cz 2200169n 45000010005000000050170005080410002201001700063035001400080040001800094110002
6001124100025013851004100163670004200204670032700246670011300573220019980612191359.0790703n
acannaab a ana □‡an 79055737‡aCAAA8726PU‡aDLC‡cDLC‡dDLC20‡aChina Inland Mission.20‡aChung-kuo nei ti hui20‡wbnna‡aOverseas Missionary Fellowship‡aKuhn, I.‡bAscent to the tribes, 1956‡aNUCMC data from Wheaton College, Billy Graham Center Archives, for Overseas Missionary Fellowship. United States Home Council Records, 1853-1957‡b(China Inland Mission; Protestant mission agency working in China until 1950; later took name Overseas Missionary Fellowship and redirected work to other Far Eastern countries)‡aLin, M.M. Chung-kuo nei ti hui chih yen chiu, 1984‡bt.p. (Chung-kuo nei ti hui) p. 6 (China Inland Mission)
THE PARSING FUNCTIONS AND THEIR RESULTS

GetFieldRaw(<record 1188178>,"650",1)
650 0‡aReconciliation‡xReligious aspects‡xChristianity.

GetField(<record 1188178>,"650",1)
Reconciliation Religious aspects Christianity.

GetFieldAll(<record 1188178>,"650")
Reconciliation Religious aspects Christianity. äå
Peace Religious aspects.

GetSubField(<the raw field above>,"x",2)
Christianity.

vs.
### 99.1 FUNCTIONS vs. 2000.1 VIEWS

In version 2000.1, the Get*Blob functions have been replaced with database views. A view is a query that is stored within the Oracle database.

<table>
<thead>
<tr>
<th>Version 99:</th>
<th>Version 2000+:</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetBibBLOB(BIB_ID)</td>
<td>BIBBLOB_VW.MARC_Record</td>
</tr>
<tr>
<td>GetMFHDBLOB(MFHD_ID)</td>
<td>MFHDBLOB_VW.MARC_Record</td>
</tr>
<tr>
<td>GetAuthBLOB(AUTH_ID)</td>
<td>AUTHBLOB_VW.MARC_Record</td>
</tr>
</tbody>
</table>

The processing on the server is faster than the processing on the workstation, but most of the time is in transferring data, which won’t change.

**THE BLOB**
TO END UP WITH QUICHE, YOU NEED TO START WITH A GROCERY LIST AND TRANSFORM IT STEP BY STEP

GROCERY LIST

SHOPPING

UNPACKING

GROCERIES

VS.

QUICHE

EGGS

COOKING
FUZZY MATH

GROCERIES = SHOP(GROCERY LIST)

EGGS = UNPACK(GROCERIES,"EGGS")

QUICHE = COOK(EGGS, 4)

SHORTHAND METHOD:
QUICHE = COOK(UNPACK(SHOP(GROCERY LIST),"EGGS"), 4)
APPLY THIS TO THE BLOB FUNCTIONS

[MFHD Record] = GetMFHDBLOB (MFHD_ID)
[Raw 852 Field] = GetFieldRaw ([MFHD Record], “852”, 1)
CLASSIFICATION = GetSubField ([Raw 852 Field], “h”, 1)

SHORTHAND VERSION:
CLASSIFICATION = GetSubField(GetFieldRaw(GetMFHDBLOB(MFHD_ID),”852”,1),”h”,1)

COMPARE:
QUICHE = COOK(UNPACK(SHOP(GROCERY LIST),”EGGS”),4)
USES FOR THE FUNCTIONS

ADD FIELDS TO A REPORT
Examples:  Add Subject Headings to a Bibliography
Add holdings to a serials list

CHECK FOR PRESENCE OF FIELDS
Examples:  Find serials records that contain multiple ISSNs
Find MFHDs with 899 fields

SCREEN RECORDS BASED ON FIELD CONTENT
Examples:  Select records based on cataloguer initials in a
local notes 9XX field
Find theses from a specific department by
examining the 502 field

VS.
ADDING BLOB FIELDS TO A REPORT

SERIALS IN A GIVEN LOCATION WITH THEIR HOLDINGS

HLDGS: GetFieldAll(GetMFHDBLOB([MFHD_MASTER].[MFHD_ID]),"866")
REPORT FROM THAT QUERY

vs.
Wildlife watching Australia Wallaby Creek (N.S.W.) Juvenile literature.
Zoology Australia Wallaby Creek (N.S.W.) Juvenile literature.
Zoology Australia Wallaby Creek (N.S.W.)
Wildlife watching.

Wildlife watching Australia Wallaby Creek (N.S.W.) Juvenile literature.
**PROS AND CONS**

<table>
<thead>
<tr>
<th></th>
<th>PROS</th>
<th>CONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetFieldAll</td>
<td>Get all matching fields in one call.</td>
<td>Get all subfields.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subfields separated by spaces.</td>
</tr>
<tr>
<td>GetField</td>
<td>Control over which fields you get.</td>
<td>Same as GetFieldAll</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Get only one field.</td>
</tr>
<tr>
<td>GetFieldRaw</td>
<td>Can use GetSubField to get exactly the subfields you want.</td>
<td>Not printable as is.</td>
</tr>
<tr>
<td></td>
<td>Can distinguish subfields.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>VS.</strong></td>
<td></td>
</tr>
</tbody>
</table>
CHECKING FOR FIELD PRESENCE

MFHDS WITH MULTIPLE 866 FIELDS:

WE DON’T CARE WHAT THE SECOND 866 FIELD CONTAINS, WE JUST CARE ABOUT WHETHER IT IS THERE

VS.
SCREENING ON FIELD CONTENT

SMALL BOOKS: SIZE UNDER 21 CENTIMETRES

```
SIZE: Val(getsubfield(getfielddraw(getbibblob([BIB_ID]),"300",1),"c",1))
```

VS.

```
SIZE: Val(getsubfield(getfielddraw(getbibblob([BIB_ID]),"300",1),"c",1))
```
CAVEAT ACCESSOR!

THE BLOB FUNCTIONS RUN ON THE WORKSTATION, NOT ON THE SERVER. BEFORE THEY CAN RUN, THE ENTIRE MARC RECORD MUST BE TRANSFERRED TO THE WORKSTATION ACROSS THE NETWORK.

1,200,000 BIB RECORDS
X 907 BYTES AVERAGE MARC RECORD
1,088,400,000 BYTES TRANSFERRED

REDUCE THE SIZE OF YOUR SAMPLE AS MUCH AS POSSIBLE BEFORE YOU USE THE BLOB FUNCTIONS

VS.
GENERIC MATCHING

THE GETSUBFIELD FUNCTION AND ALL OF THE GETFIELD FUNCTIONS DO GENERIC MATCHING:

FIND THE FIRST SUBFIELD IN THE FIRST ISBN FIELD
GetSubField(GetFieldRaw(GetBibBLOB(BIB_ID),”020”,1),””,1)

GET THE MAIN ENTRY, NO MATTER WHAT ITS TYPE
GetField(GetBibBLOB(BIB_ID),”1”,1)

GET AN “a” SUBFIELD FROM THE FIRST LOCAL CALL NUMBER
GetSubField(GetFieldRaw(GetBibBLOB(BIB_ID),”09”,1),”a”,1)

GET ALL OF THE SUBJECT FIELDS
GetFieldAll(GetBibBLOB(BIB_ID),”6”)

VS.
EXTENDING THE FUNCTIONS

WOULDN’T IT BE NICE…

SPECIFY THE DESIRED SUBFIELDS
GetFieldAll(MFHDBLOB_VW.MARC_Record,"866","az")
instead of
0 ca:6-29-91

SPECIFY THE DESIRED SUBFIELDS AND SEPARATOR
GetField(BIBBLOB_VW.MARC_Record, “650”,1,”axyz”,”--”)
Reconciliation--Religious aspects--Christianity.
instead of
Reconciliation Religious aspects Christianity.

VS.
Function GetField(marcrec As String, DTag As String, which As Long, Optional SubFlds As String = "", Optional Sep As String = " ") As String

Dim sRawField As String
Dim iStart As Integer
Dim iEnd As Integer
Dim iLength As Integer

GetField = ""
sRawField = GetFieldRaw(marcrec, DTag, which)
iLength = Len(sRawField)
iStart = InStr(1, sRawField, Chr(31)) + 1

While iStart < iLength
    iEnd = InStr(iStart, sRawField, Chr(31))
    If iEnd = 0 Then
        iEnd = iLength + 1
    End If
    If ((SubFlds = "") Or (InStr(SubFlds, Mid(sRawField, iStart, 1)) <> 0)) Then
        If (GetField <> "") Then
            GetField = GetField & Sep & Mid(sRawField, iStart + 1, (iEnd - iStart - 1))
        Else
            GetField = Mid(sRawField, iStart + 1, (iEnd - iStart - 1))
        End If
    End If
    iStart = iEnd + 1
Wend
End Function

VS.

DON’T EVEN TRY TO READ THIS. JUST GRAB THE POWERPOINT FILE FROM SUPPORTWEB AND COPY AND PASTE FROM IT TO YOUR MODULE.
AND HERE’S GETFIELDALL

Function GetFieldAll(marcrec As String, DTag As String, Optional SubFlDs As String = "", Optional Sep As String = " ") As String
    Dim sField As String
    Dim iWhich As Long

    iWhich = 1
    sField = Trim(GetField(marcrec, DTag, iWhich, SubFlDs, Sep))

    While Len(sField) > 0
        GetFieldAll = GetFieldAll & sField & vbCrLf
        iWhich = iWhich + 1
        sField = Trim(GetField(marcrec, DTag, iWhich, SubFlDs, Sep))
    Wend

    Dim iLength As Integer
    iLength = Len(GetFieldAll)
    If iLength > 2 Then
        GetFieldAll = Left(GetFieldAll, (iLength - 2))
    End If
End Function

JUST COPY AND PASTE!
REALLY USING THE FUNCTIONS

Function GetRecsToPrt()
    Do
        RecNum = bibnums![BIB_ID]
        marcrec = getmarcrec(RecNum)    ' Get the MARC record and the call number
        Set callnoqdf = imcdb.CreateQueryDef("", "select display_call_no from mfhd_master...")
        Set callnorst = callnoqdf.OpenRecordset(dbOpenForwardOnly)
        Title = ""
        currfld = GetFld(marcrec, "245", 1)
        If (currfld <> "") Then
            strval = GetSubFld(currfld, "a", 1)
            If (Mid(currfld, 5, 1) <> "0") Then
                skipbytes = Val(Mid(currfld, 5, 1))
                sort_title = UCase(Mid(strval, skipbytes + 2))   'Strip off non-filing chars
            Else
                sort_title = UCase(Mid(strval, 2))
            End If
        End If
        Title = Mid(strval, 2)        ' Add the 245 as is
    End If
    strval = ""
    Do
        strval = strval & " " & callnorst![DISPLAY_CALL_NO]   'Concatenate call numbers
        callnorst.MoveNext
    Loop While Not callnorst.EOF
    call_number = strval
    Loop While Not bibnums.EOF
End Function

THIS CODE IS MISSING VITAL PIECES!

USING THE FUNCTIONS TO THEIR FULLEST POTENTIAL REQUIRES SOME PROGRAMMING

VS.

THE BLOB
THE HARD FACTS

• GETTING DATA FROM THE BLOBS IS IMPORTANT
• GETTING DATA FROM THE BLOBS IS DIFFICULT
• THE BLOB FUNCTIONS MAKE GETTING DATA FROM THE BLOBS EASIER
• NOTHING WILL MAKE GETTING DATA FROM THE BLOBS REALLY EASY

VS.