How To Use LOC/PSTS Expands

Releases 12.2 – 12.4

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How to Use Location Expands

Note:
"location" = sub-library + collection + call number

1. The Old Expands (expand_doc_bib_loc_usm; expand_doc_psts)

Various expands have been used to include location information in bibliographic indexes and displays. Under 12.2, 12.3, and 12.4 these have been the following:

- expand_doc_bib_loc_usm and the
- expand_doc_bib_loc_disp.

They are described in the 12.4 *Database Management Guide*, section G.1.a.

In addition, North American customers have used the following expands:

- expand_doc_bib_psts and
- expand_doc_bib_psts_disp

The PSTS has differed from the LOC in that it has included item status (in a $$d sub-field) and item-process-status (in a $$e sub-field). The LOC generates a separate STS field with the item status code; the PSTS includes display forms of the item status and item-process-status as sub-fields in the PSTS field. (The problem with the separate STS field has been that when there are multiple locations it has been hard to tell which STS field goes with which location and it has not considered the processing status.)

Another difference: the LOC has included the $$o/$$3 Z30-MATERIAL; whereas the PSTS has not.

The PSTS field has **either** a $$d item status or a $$e item process status, **not** both.

When the item-process-status takes precedence:
If the item contains an item-process-status, a $$e will be generated; if the item-process-status is blank, the $$d will be generated.

Examples:

A LOC and STS field generated by the expand_doc_bib_loc_usm + expand_doc_bib_loc_disp:

```
LOC0  L $$bMAINS$$cBISTC$$hSB733$$i.T87$$oBOOK$$4MAIN
STORAGE$$5Biology Classified Materials$$3Book
STS   L $$a20
```

And, for the same record, a PSTS field generated by the expand_doc_psts + expand_doc_psts_disp:

```
PSTS  L $$bMAINS$$cBISTC$$hSB733 .T87$$dRegular LoanS$$4MAIN
STORAGE$$5Biology Classified Materials
```

<u>Note:</u>
Another expand which works with HOL records is expand_doc_bib_hol_usm.
This expand has been in the system since 11.4. Its main purpose is to get the 866 data into the BIB record for display. It has not been affected by these changes. This expand is described in the *Database Management Guide*, section G.1.a.

2. The New Expands (expand_doc_bib_loc_*n*… and expand_doc_sort_loc_*x* …)

The highly overlapping but separate LOC and PSTS expands were a maintenance problem, thus, with 14.1 rep_change 000225 (12.4 rep_change 000818; 12.3 rep_change 000929) they have been integrated into a single, modular set of expands.

The following two specific limitations of the old expands have been addressed:

(1) When all the items for a particular copy are in a temporary location, the HOL location is suppressed.
(2) The expands now work in the Course Reading library.

Intermediate PS1 fields are generated; the PS1's are sorted/dedup-ed into PST fields; and codes in the PST (sub-library, etc.) are expanded into display forms. The resulting PST field contains **all** of the sub-fields that were in the LOC and PSTS fields, plus additional sub-fields.

Optional steps are included, which mimic the old LOC and PSTS expands (by extracting the sub-fields used by those fields).

The individual new expands are:

```
expand_doc_bib_loc_1_a:    imports HOL library code, HOL doc no., and
                            852 indicator and 852 sub-fields into the
                            temporary field PS1.

expand_doc_bib_loc_1_b:    imports items into temp field PS1 using ADM
                            link; this is used in a regular xxx01 bib
                            library.

expand_doc_bib_loc_1_b2:   imports items into temp field PS1 using ITM
                            link (items associated with the bib via an
                            ITM link); this is used in the xxx30
                            Course Reading library and in any regular
                            xxx01 bib library that uses ITM links (e.g.
```

<pre>
                        analytical records, linking son to father
                        using ANA link)
</pre>

<u>Note:</u>
The Z16 records, used in the old LOC/PSTS, are **not** included.]

<pre>
expand_doc_bib_loc_1_c   1. In order to set priority for processing-
                             status over item status, uses $$e
                             (processing status) from the item record,
                             if $$e is present and ignores $$d (item
                             status); otherwise, it uses $$d.

                             2. Creates PST directly from HOL record,
                            bypassing creation of PS1, if there are no
                            items linked to the HOL record.

                            (This would be used at sites where the items
                            and HOL are linked. North American
                            sites would use this.)

expand_doc_bib_loc_1_c2   Same as expand_doc_bib_loc_1_c except
                            it does not perform the second step, that
                            is, it does not move the HOL if no items)
                            (This would be used at sites
                            where the items and HOL are not linked.
                            North American sites would NOT use this.)

expand_doc_sort_loc_a
                           Uniquely sorts the PS1 (ITEMS + HOLS)
                           creating PST for each unique PS1. PS1 match
                           for uniqueness is on sub-library, collection,
                           call number and status.
                             (This would be used at sites
                             where the items and HOL are not linked.
                             North American sites would NOT use this.)

expand_doc_sort_loc_b
                           Uniquely sorts the PS1 (ITEMS) creating PST
                           for each unique PS1. PS1 match for uniqueness
                           is sub-library, collection, call number and
                           status. Note that the HOLs that do not have
                           linked items already have PST created
                           directly (in expand_doc_bib_loc_1_c). (This
                           would be used at sites where the items and
                           HOL are linked. North American
                           sites would use this.)

expand_doc_bib_loc_2_a   : "enrich" the PST item lines with HOL
                             information, if it exists.

expand_doc_bib_loc_3_a   : adds sub-fields 3,4,5,6,7 for display
                             purposes.

expand_doc_bib_loc_4_a   : imitates the old LOC expand
</pre>

```
expand_doc_bib_loc_4_b    : imitates the old PSTS expand

expand_doc_bib_loc_cleanup : removes the intermediate PS1 fields
```

Note:
expand_doc_sort_loc_a and expand_doc_sort_loc_b are mutually exclusive.
You can use only one of these at a time.

The following is a sample PST field which is produced.

Note:
The "2" is the first indicator, the call number type. :

```
PST2  L $$0Z30$$1000000501000010$$bXHLTH$$cGEN$$oBOOK$$d32$$e$$y00000$$fN$$rEXU6
0-000000536$$n2$$hW 44$$iG964 1978$$aICEXU$$91$$3Book$$4Health Library$$6Three Week
Loan
```

Sub-fields in PST field:
$$0 source: Z30 or HOL
$$1 source record number: an item record number or an HOL record number
$$b sub-library code
$$c collection code
$$o z30_material type
$$d z30_item_status
$$e z30_item_process_status
$$y z30_copy number
$$f z30_temp_location flag
$$r (for $$0 type Z30 only) is the HOL record to which the item is linked
$$n call_number_type
$$h call number (classification part)
$$i call number (cutter part)
$$k, $$l, $$m other call number parts
$$a NUC code (from the HOL record)
$$9 852 occurrence (from the HOL record; present only in certain converted records)
$$3 display form of the material type
$$4 display form of the sub-library
$$5 display form of the collection
$$6 display form of the item status
$$7 display form of the item-process-status
other sub-fields from the HOL 852, such as the $$z public note

Note:
The PST field has **either** a $$d item status code or a $$e item process status code, **not**
both.   The item-process-status takes precedence: if the item contains an item-
process-status, a $$e will be included; if the item-process-status is blank, the $$d will
be included.   The $$e, if present, is expanded into a $$7; otherwise the $$d is
expanded into a $$6.

The basic logic is as follows:

- Using the expand_doc_bib_loc_1_a, expand_doc_bib_loc_1_b, and/or expand_doc_bib_loc_1_b2 generate PS1 (temporary) fields from the HOL record and the item records.

- Using expand_doc_bib_loc_1_c (or expand_doc_bib_loc_1_c2), process the PS1's:

  1. If the item PS1's for a particular HOL do not all have the same $$d/$$e status value, then remove the $$d/$$e.
     (When there are many items with many different statuses we do not want to flood the display with multiple fields for the same copy; instead, we will let the user rely on the Holdings Detail display to get the status.)

  2. If it is an HOL without any items, create a PST directly.
     (`expand_doc_bib_loc_1_c2` is the same as `expand_doc_bib_loc_1_c` except that it does **not** perform this second step.)

- Using `expand_doc_sort_loc_b`, sort the PS1's: eliminate any which have the same HOL#, sub-library, collection, call number (and status). Output the resulting fields as PST's.

- Using `expand_doc_bib_loc_2_a`, take sub-fields from the HOL 852 which are not in the item record (such as copy-level notes) and include them in the PST.

- (Optional) using `expand_doc_bib_loc_4_a`, produce a LOC field which creates a subset of sub-fields which mimic the (old) LOC expand.

- (Optional) using `expand_doc_bib_loc_4_b`, produce a PSTS field which creates a subset of sub-fields which mimic the (old) PSTS expand.

- Using `expand_doc_bib_loc_cleanup`, remove the PS1's (leaving just the PST, LOC, and/or PSTS). (In diagnosing problems, you may want to temporarily omit this `expand_doc_bib_loc_cleanup` for U39-DOC so you can see the PS1's in UTIL F 4.)

3. Scenarios

Note:
Some of the following scenarios refer to an "HOL-items link". This means that the items contain the record number (Z30-HOL-DOC-NUMBER) of the HOL record with which they are associated, and that (except in the case of temp locations) their locations are synchronized with the HOL locations. Almost all North American sites have the HOL-items link.

Scenario 1: You are in 12.3 or 12.4 and you have an HOL-items link:

The only changes you should need to make are to tab_expand. You should not have to change edit_doc_999 or other tables, provided that you include expand_doc_bib_loc_4_a and _b, in order to create PSTS and LOC fields.

By including this set of expands everywhere you used the old bib_loc_usm and/or the psts, you can produce the same PSTS and LOC fields you have had previously--except that the HOL-suppression and Course Reading limitations of the old expands (see above) will be overcome:

```
(In the xxx01/tab/tab_expand: )
XXX-XXX    expand_doc_bib_loc_1_a
XXX-XXX    expand_doc_bib_loc_1_b
XXX-XXX    expand_doc_bib_loc_1_b2
XXX-XXX    expand_doc_bib_loc_1_c
XXX-XXX    expand_doc_sort_loc_b
XXX-XXX    expand_doc_bib_loc_2_a
XXX-XXX    expand_doc_bib_loc_3_a
XXX-XXX    expand_doc_bib_loc_4_a
XXX-XXX    expand_doc_bib_loc_4_b
XXX-XXX    expand_doc_bib_loc_cleanup
```

The xxx30/tab/tab_expand would be the same.

Scenario 2: You are in 12.3 or 12.4 and you don't have an HOL-items link

The only changes you should need to make are to tab_expand. You should not have to change edit_doc_999 or other tables.

```
(In the xxx01/tab/tab_expand: )
XXX-XXX    expand_doc_bib_loc_1_a
XXX-XXX    expand_doc_bib_loc_1_b
XXX-XXX    expand_doc_bib_loc_1_b2
XXX-XXX    expand_doc_bib_loc_1_c2
XXX-XXX    expand_doc_sort_loc_a
XXX-XXX    expand_doc_bib_loc_2_a
XXX-XXX    expand_doc_bib_loc_3_a
XXX-XXX    expand_doc_bib_loc_4_a
XXX-XXX    expand_doc_bib_loc_4_b
XXX-XXX    expand_doc_bib_loc_cleanup
```

The xxx30/tab/tab_expand would be the same.

Scenario 3: You are in 14.2, you have an HOL-items link, and you want to use the single PST field instead of the LOC/PSTS:

```
(In the xxx01/tab/tab_expand: )
XXX-XXX    expand_doc_bib_loc_1_a
XXX-XXX    expand_doc_bib_loc_1_b
XXX-XXX    expand_doc_bib_loc_1_b2
XXX-XXX    expand_doc_bib_loc_1_c
XXX-XXX    expand_doc_sort_loc_b
XXX-XXX    expand_doc_bib_loc_2_a
XXX-XXX    expand_doc_bib_loc_3_a
XXX-XXX    expand_doc_bib_loc_cleanup
```

The *xxx*30/tab/tab_expand would be the same.

You will need to change edit_doc_999.*lng*, edit_field.*lng*, tab11, www_tab_short.*lng*, and other tables to refer to PST instead of LOC or PSTS.

Scenario 4: You are in 14.2, you don't have an HOL-items link, and you want to use the single PST field instead of the LOC/PSTS:

```
(In the xxx01/tab/tab_expand: )
XXX-XXX    expand_doc_bib_loc_1_a
XXX-XXX    expand_doc_bib_loc_1_b
XXX-XXX    expand_doc_bib_loc_1_b2
XXX-XXX    expand_doc_bib_loc_1_c2
XXX-XXX    expand_doc_sort_loc_a
XXX-XXX    expand_doc_bib_loc_2_a
XXX-XXX    expand_doc_bib_loc_3_a
XXX-XXX    expand_doc_bib_loc_cleanup
```

The *xxx*30/tab/tab_expand would be the same.

You will need to change edit_doc_999.*lng*, edit_field.*lng*, tab11, www_tab_short.*lng*, and other tables to refer to PST instead of LOC or PSTS.

4. Formatting Expanded Location Information (edit_field.*lng*, edit_doc_999.*lng*, etc.)

As stated above, if expand_doc_bib_loc_4_a and _b are used, then LOC and PSTS fields will be created, and there will be no need for changing formatting in 12.3 or 12.4. (Libraries already running 12.3/12.4 should prefer this, in order to avoid rebuilding indexes.)

Once you have created a location field (LOC, PSTS, or PST) via tab_expand you can use different tables to edit, index or display the field.

- **edit_field.***lng*

These expanded fields contain many sub-fields. You may want to create special versions of the field for different display purposes: for displaying in the Web or GUI full display; for displaying in the Web or GUI brief display; etc. These different versions of the field are created via the *xxx*01/tab/edit_field.*lng*.

You will usually want to use the display forms of the sub-library, collection, item status, and processing status ($$4, $$5, $$6, and $$7, respectively).

Each version of the field has a unique edit-field-ID (column 4). This version has an edit-field-ID of "L":

```
1 L PST## L B
2                   4 A
2                   5 A ^^           ^:^
2                   k A ^
2                   h A ^
2                   i A ^
2                   j A ^
2                   l A ^
2                   m A ^
2                   p A ^
2                   7 A ^^
```

(For details on edit_field.*lng* consult the *Database Management Guide*, section UTIL I.1.)

- **edit_doc_999.***lng*

The specification that a particular version of the PST (or LOC or PSTS) field should be used in the Web or GUI full display is made in column 6 of the xxx01/tab/edit_doc_999.*lng*:

```
## PST##                 L LLibrary Info         Y L     E        W
```

Here we are specifying that we want to use edit-field-ID "L" for the PST field in edit_field.*lng*.

(For details on edit_doc_999.*lng* consult the *Database Management Guide*, section UTIL I.8.)

- **www_tab_short.***lng*

The specification that a particular version of the PST (or LOC or PSTS) field should be used in the Web is made in column 8 of the xxx01/tab/www_tab_short.*lng*:

```
5 L Link for Items                          L              ## PST
```

Here we are specifying that we want to use edit-field-ID "L" for the PST field in edit_field.*lng*.

(For details on www_tab_short.*lng* consult the *Database Management Guide*, section UTIL I.4.)

- **tab11**

The specification that a particular version of the PST (or LOC) field should be used in the call number index is made in *xxx*01/tab/tab11.

Note:
The PSTS does not have first-indicator-sensitivity and can not be used for indexing:

```
11 A PST0#              LCA    him
```

Here we specify that we want PST fields with first indicator 0, sub-fields "h", "i", and "m" to be included in the LCA (Library of Congress call number) index.

The PST (or LOC) field may also be used to index the sub-library and collection field for keyword searching:

```
     11 W PST##              b                B1    WSL
11 W PST##            c                B1    WCL
```

(For details on tab11 consult the *Database Management Guide*, section UTIL I.4.)

For a more general discussion of this topic, consult the document "How To Format Bib Info Displays".

(Note that 852 location info included directly via the expand_doc_bib_hol_usm in the HOL library –used, for instance, in the Web Holdings Detail display--, uses the entry for the 852 tag in the xxx60/tab/edit_field.eng:

```
1 L 852## D B
2                      b  Location:
2                      c  ^
2                      k  ^
          2                      h  ^
2                      i  ^
2                      p  ^
2                      z A ^
```

not the PST, PSTS or LOC fields.)

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