

Z970 – SYNONYMS

The Z970 table is used for defining synonym groups. Synonyms are words that share the same bitmap value; in other words, they are considered equals. For example, if “karel”, “karl”, “carol” and “charles” are set as synonyms, a Find command on any of these words will retrieve the documents of all the other words.

This type of functionality can be achieved through cross-references defined in the authority records, together with setting the WORD indexing in the library’s tab_expand table to expand_doc_bib_accref. The Z970 table can be used to set this type of synonym relations in a direct manner, without authority control.

A synonym group is identified by a common word (Z970-COMM-WORD); this word is set by the system (first word of the group in the Z970 table). In the following example from the Z970 table, the words cat, feline, kitten, kitty and mouser are identified with the common word ‘cat’:

Z970-COMM-WORD	Z970-WORD
cat	cat
cat	feline
cat	kitten
cat	kitty
cat	mouser

To accomplish this, the Z97-REC-NUMBER field of the Z97 (word dictionary) table is used in order to identify the word record for which the word is a synonym. The Z97-REC-NUMBER-2 field of this table contains the unique key of the word, if the word is not a synonym, the Z97-REC-NUMBER and the Z97-REC-NUMBER-2 are the same. If the word is a synonym, the value of the Z97-REC-NUMBER will be the same as the value of the Z97-REC-NUMBER-2 of the “common word”.

In the above example, the words cat, feline, kitten, kitty and mouser have the same Z97-REC-NUMBER. These words have the same bitmap and therefore are considered the same word.

Synonym groups are created and maintained through the Web Utilities. Web utilities are available from the Web Staff Menu; click Utilities, and choose the bibliographic library. Then choose one of the synonym management options.

Note that if the database configuration for adjacency searching is based on pre-coordinated adjacent word pairs (ADJACENCY_TYPE is set to "2"), the synonyms are NOT active when an adjacency search is performed.

For the synonym functionality, the following lines must be present in the file_list of the relevant bibliographic library/ies:

TAB z970	100K	100K	ts0
IND z970_id	100K	100K	ts1
IND z970_id1	100K	100K	ts1

Note that when word indexing (manage_01) is run from scratch, the system first builds Z97 record from the Z970 table.

In the following table, (X) denotes an alphanumeric field and (9) denotes a numeric field. All alphanumeric fields are left-aligned with trailing spaces; all numeric fields are right-aligned with leading zeroes. Decimal positions are indicated by the symbol V. The total number of decimal digits is designated by the number of nines following the V.

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01  Z970.
    02 Z970-REC-KEY.
        03 Z970-COMM-WORD          PICTURE X(70).
    02 Z970-WORD                   PICTURE X(70).

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Z970-REC-KEY			
Z970-COMM-WORD	M	X(70)	DESC: “Common word” that identifies a group of synonyms. This word is set by the system; it is – by default – the first word of the group of synonyms. CONV: Relevant string (word).
Z970-WORD	M	X(70)	DESC: Synonym. The bitmap value of the “common word” defined in the Z970-COMM-WORD field is assigned to the word defined in this field. CONV: Relevant string (word).