NAME

1.6to1.7.1.noun.poly – mapping from polysemous noun senses in WordNet 1.6 to corresponding 1.7.1 senses

1.6to1.7.1.noun.mono – mapping from monosemous noun senses in WordNet 1.6 to corresponding 1.7.1 senses

1.6to1.7.1.verb.poly – mapping from polysemous noun senses in WordNet 1.6 to corresponding 1.7.1 senses

1.6to1.7.1.verb.poly – mapping from monosemous noun senses in WordNet 1.6 to corresponding 1.7.1 senses

DESCRIPTION

WordNet users who have semantically tagged text to senses in version 1.6, or who have statically assigned or used 1.6 senses in other applications should upgrade to WordNet 1.7.1 if possible. To help users automatically convert 1.6 noun and verb senses to their corresponding 1.7.1 senses, we provide sense mapping information with version 1.7.1.

The sense mapping was done as follows:

- Nouns and verbs unique to either database were ignored.
- Nouns and verbs that are monosemous in both databases were found and their *sense_key*s and *synset_offset*s were mapped. These sense mappings are in the files **1.6to1.7.1.**{**noun,verb**}**.mono**.
- All senses of polysemous nouns and verb in version 1.6 were mapped to senses in version 1.7.1. Various heuristics were used to evaluate the similarity of 1.6 and 1.7.1 senses, and a score was assigned to each comparison. For each word, each 1.6 sense was compared to all of the 1.7.1 senses for the same word, and the 1.7.1 sense (or senses) with the highest score was deemed the best mapping. These sense mappings are in the file **1.6to1.7.1.**{**noun,verb**}**.poly**.

  Heuristics include comparison of sense keys, similarity of synset terms, and relative tree location (comparision of hypernyms). Glosses are not used for comparisions, as they are often significantly modified.

File Format

A sense mapping is generally represented by two *sense_key synset_offset* pairs, one for the 1.6 sense and one for its corresponding 1.7.1 sense. For the polysemous sense mappings, *sense_number* is also in each pair. This field is not needed in the monosemous mappings since all monosemous words are assigned *sense_number* **1.** **See senseidx**(5WN) for a detailed description of these fields.

In all the mapping files, a space is the field delimiter unless otherwise noted, and each line is terminated with a newline character.

1.6to1.7.1.{**noun,verb**}**.mono**

These files contain the mapping of sense keys for nouns and verbs that are monosemous in both WordNet 1.6 and 1.7.1. Although the actual words and sense numbers are the same in both databases, not all *sense_keys* are the same, and the *synset_offset*s are different. This file is an alphabetized list of one mapping per line. Each line is of the form:

*1.6_sense_key***;***1.6_synset_offset 1.7.1_sense_key***;***1.7.1_synset_offset*

1.6to1.7.1.{**noun,verb**}**.poly**

These files contain the mapping of sense keys for nouns and verbs that are polysemous in WordNet 1.6 and are also found in 1.7.1. This file is sorted by score from highest score (100) to lowest (0), and then

alphabetically within each score. Each line lists all 1.7.1 sense(s) that the corresponding 1.6 sense maps to with that score. Each line is of the form:

score 1.6_sense_info 1.7.1_sense_info [1.7.1_sense_info...]

where *sense_info* consists of the following three fields:

*sense_key***;***synset_offset***;***sense_number*

SCORES AND STATISTICS

Scores range from 0 to 100, and are an indication of how confident the mapping heuristics are that the senses are the same – a higher score indicates greater reliability in the mapping. The vast majority of senses mapped with a score of 90 or 100. Mapping with a score greater than 90 are 96% of the total nouns senses mapped, and 94% of the total verb senses mapped.

Noun Statistics

There are 116,317 noun senses in WordNet 1.6. A total of 115,904 senses have been mapped to senses in version 1.7.1. The remaining 413 senses represent noun senses unique to version 1.6.

A total of 35,741 senses for polysemous nouns are mapped in the file **1.6to1.7.1.noun.poly**, with the following scores:

Score	Count
100	30072
90	4605
80	412
70	230
60	145
50	19
40	43
30	48
20	135
0	32

80,163 monosemous nouns are mapped in the file **1.6to1.7.1.noun.mono**.

Verb Statistics

There are 24,169 verb senses in WordNet 1.6. A total of 21,963 senses have been mapped to senses in version 1.7.1. The remaining 2,206 senses represent verb senses unique to version 1.6.

A total of 16,685 senses for polysemous verbs are mapped in the file **1.6to1.7.1.verb.poly**, with the following scores:

Score	Count
100	12690
90	3167
80	321
70	149
60	79
50	41
40	47
30	25
20	120
0	46

5,278 monosemous verbs are mapped in the file **1.6to1.7.1.verb.mono**.

NOTES

The number of senses of a polysemous word in version 1.6 often differs from the number of senses for the same word in version 1.7.1. While there will always be a mapping for each 1.6 sense to one or more 1.7.1 senses, there may be 1.7.1 senses to which no 1.6 sense is mapped.

WordNet 1.6 words not found in either of the monsemous maps are unique to version 1.6, and therefore cannot be mapped to version 1.7.1.

ENVIRONMENT VARIABLES

WNHOME Base directory for WordNet. Unix default is **/usr/local/WordNet-1.7.1**, Windows default is **C:\Program Files\WordNet\1.7.1**.

FILES

All files are in **WNHOME/sensemap** on Unix platforms, **WNHOME\sensemap** on Windows.

FILES

1.6to1.7.1.noun.poly mapping of polysemous 1.6 noun senses to 1.7.1 senses

1.6to1.7.1.verb.poly mapping of polysemous 1.6 verb senses to 1.7.1 senses

1.6to1.7.1.noun.mono mapping of monosemous 1.6 noun senses to 1.7.1 senses

1.6to1.7.1.verb.mono mapping of monosemous 1.6 verb senses to 1.7.1 senses

SEE ALSO

senseidx(5WN), **wndb**(5WN), **wnpkgs**(7WN).