Using Endnote with BibTeX

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This howto describes the steps involved in using Endnote 6 [1] with BibTeX to create a referenced LaTeX document. Although Endnote can create a BibTeX reference library, for some reason it will not export the reference numbers used to mark temporary in-text citations, and can't automatically generate decent alternative labels. To make the integration between Endnote and LaTeX easier, I wrote a couple of Python scripts to generate citation labels (endnlib.py) and replace temporary Endnote citations with BibTeX-style citations (texref.py).

This method creates a label for each reference which will ultimately be used in both the Endnote and BibTeX citations, and has the following advantages:

- Endnote can be used to create and manage reference libraries, and to insert references into a document.

- Temporary citations inserted using Endnote do not contain LaTeX unfriendly characters; thus draft versions with unformatted citations can be compiled.

- Either BibTeX or Endnote can be used to format the final bibliography (although only the former method is described in this document).

- In-text citations are logically named, and do not depend on arbitrary reference numbers which might differ between reference libraries.

You will need Python 2.2.x, and texref.py and endnlib.py (available at www.unc.edu/˜nghoffma/software.html) to use this method. I use Mac OS 10.2, but there's no reason that it shouldn't work with Windows (though I certainly haven't tested it. Is Endnote available for LINUX/UNIX?).

1 Create a BibTeX library using Endnote

1.1 Export references from Endnote in "Endnote Export" format

Endnote has no built-in mechanism to generate Labels, so we'll use an easily parsed plain text version of the library.

1. Open the Endnote library containing your references.

2. Select all refs.

3. Select Edit → Output Styles → Open Style Manager and set style to "EndNote Export".

4. Export refs to a text file by selecting File → Export... (make sure "Text Only" is chosen under "Save file as type")

5. Close the Endnote library.

1.2 Convert the Label field in the exported reference library

Use endnlib.py to perform the conversion. For example:

```
% endnlib.py input_refs.endn -out=output_refs.endn
```

This script sets the label field to a string containing authorYear-Firstpage. If the page field is empty, the label includes the first word in the title over 5 letters long. If the author or year fields are empty, the label will incorporate the remaining fields and append "_badX" (where X is the current count of bad labels) to the end. Records for which the label was successfully constructed will contain "label_ok" appended to the contents of the Notes field; records with bad labels will be indicated with "label_not_ok".

You can search for these records (which must be manually modified) in either the `output_refs.endn` file or the Endnote library you'll create in the next step.

1.3 Create a new Endnote library containing the new labels

1. Create a new Endnote library under File → New...

2. Choose File → Import...

3. Select EndNote Import under Import Options in this dialog box.

4. Choose the file to import (e.g., `output_refs.endn`).

5. Import this file

Although you may of course add references to an existing library, it's probably a good idea not to add new references without properly formatted labels (i.e., don't directly download new references using Endnote's Connect feature; use an auxiliary Endnote library to do the download...export...convert process. Converted references can then be imported into the main library).

Note that Endnote reference numbering will be lost using this method (since there is no way to export the Endnote reference numbers).

1.4 Export a BibTeX reference library from Endnote

This is the reference library that you'll actually use to format your bibliography.

1. Choose "Bibtex Export" as the reference style (Edit → Output Styles → Open Style Manager).

2. Edit this style: remove all lines that look like '`Note = {'Notes'},`'. You might first want to make a backup of the BibTex export style file.

3. Select references to export (you can just select all to keep things simple).

4. Export a plain text file containing the BibTeX-formatted references by selecting File → Export... Save this file with a .bib extension.

2 Insert references into your LaTeX document

2.1 Set Endnote preferences

Open the preferences dialog box by selecting Endnote 6.0 → Preferences, and set the Temporary Citations preferences as shown in Figure 1. Temporary citations should now look like this:
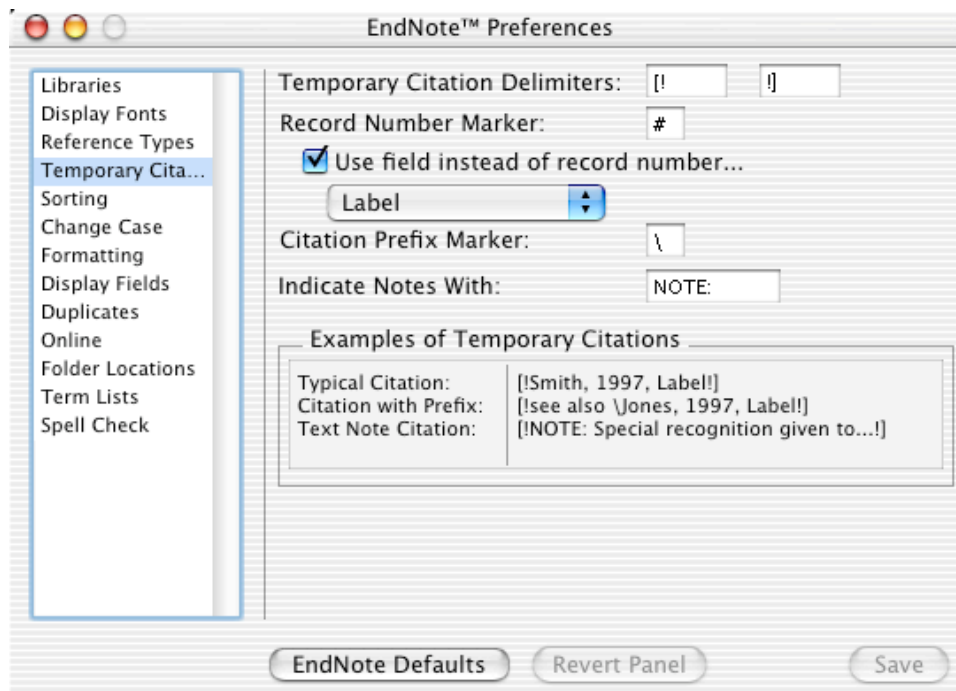
```
[!Hoffman, 2002, hoffman2002-3852!]
```

Figure 1: Endnote 6 preferences dialog box to set temporary citation format.

These citations are LaTeX friendly, so draft versions of the document can be compiled with these citations in place. Note that the labels created using endnlib.py are used in these citations instead of Endnote reference numbers.

I've chosen this [!...!] citation format because a) it is unlikely to appear by chance, b) LaTeX doesn't mind it, and c) it's easy to find using regular expressions in Python. You can, of course choose something else, but you'll have to modify texref.py (see below) if you want to use it to convert the citations to BibTeX format.

2.2 Insert references into the document

Insert references using Endnote (i.e., by copy-pasting, dragging-and-dropping, typing, etc).

3 Convert Endnote references to BibTeX citations

We need to change the Endnote temporary citation format ([!Author, Year, Label!]) to BibTeX (\cite{Label}). I feel certain that there's a way to do this using Endnote, but I chose to write a Python script, texref.py, to do the job instead. Running the script gives you something like this:

```
texref.py document.tex
Found 9 references in 6 citations.
Backed up "document.tex" to "document_021107-1304.tex"
Writing document.tex with modified citations.
```

document.tex now contains BibTeX formatted citations. No external data file is required, because all of the necessary information is contained in the Label field of the Endnote citations.

4   Create the formatted bibliography

Now you should have a LaTeX document with BibTeX citations (e.g. document.tex), and a BibTeX reference file (e.g. refs.bib). The rest is standard LaTeX stuff, and there are lots of guides out there describing how to compile the references document, but in short (using pdflatex):

```
% pwd
document.tex refs.bib
% pdflatex document
% bibtex document
% pdflatex document
% pdflatex document
```

That's it. Be sure to refer to document.tex without the .tex extension, or the auxiliary files that are generated might not be named correctly.

References

[1] Thomson ISI. Endnote 6.0.1, 2002.