

Bibtex (.bib)

What is it?

From [bibtex.org](http://www.bibtex.org/)... "Bibtex stands for a tool and a file format which are used to describe and process lists of references, mostly in conjunction with LaTeX documents."

References stored in the bibtex format can be transformed into human-readable reference lists in a variety of forms, using the Bibtex and LaTeX tools.

How do I get data in this format?

Bibtex is a common format for storing bibliographic data. Many personal reference management programs such as EndNote can output their bibliographic data to the Bibtex format. Also, many internet resources containing bibliographic data, such as [CiteSeer](#) or [Publish or Perish](#), provide the option of downloading bibliographic data in the Bibtex format.

How is it used in Network Workbench?

Currently Bibtex files (ending in .bib) can be loaded as tables of bibliographic data into Network Workbench, where various networks can be extracted from them using the [Extract Co-Occurrence Network from Table](#) algorithm, or, depending on the source, [Burst Detection](#) can be performed.

What should I know about how NWB handles this format?

Bibtex files must end in ".bib" in order to be recognized by NWB.

Due to wide usage and lack of enforced conventions for the Bibtex format, bibtex data is typically not very clean. Depending on the source of the data, some preliminary cleaning outside of Network Workbench may be necessary, in order to achieve satisfactory results.

NWB performs no special operations on the bibtex data, except for normalizing the author column, so that authors are separated by "]" instead of the string " and ". Although it is common for bibtex data to separate multiple authors with " and ", this is not enforced, and as such not all bibtex files may be processed correctly in this respect.

Since Bibtex is a LaTeX format, you must follow LaTeX conventions for the content of the fields. Most notably, the NWB reader will be unable to fully read a reference if it contains a field with an unescaped '@' symbol. Also, unescaped quotes may cause errors (such as in the phrase ... My Best Friend "Mr. Bear), as will quotes or braces which are opened and not closed.

What should I know about the format itself?

For full information on the format, check <http://www.bibtex.org/Format/>, the official website.

Basically, Bibtex stores each reference in a record, which SHOULD contain

- 1) the type of reference (book, magazine, misc, etc..)
- 2) a unique identifying key (such as scheler-problems and kong91graham below)
- 3) a list of fields, such as author, date published, which have associated values.

Each file contains a list of records, and potentially some other meta-information.

Example File

This file contains two bibliographic records, and no meta-information.

```
@misc{ scheler-problems,
  author = "Gabriele Scheler",
  title = "36 Problems for Semantic Interpretation",
  url="citeseer.ist.psu.edu/1.html"
}

@misc{ kong91graham,
  author = "X. Kong and H. Everett and G. Toussaint",
  title = "The Graham Scan Triangulates Simple Polygons",
  text = "X. Kong, H. Everett, and G. Toussaint. The Graham Scan Triangulates Simple Polygons. Pattern
  Recogn. Lett., 11:713--716, Nov 1991.",
  year = "1991",
  url="citeseer.ist.psu.edu/2.html"
}
```

Relevant Links

- Home Page: <http://www.bibtex.org>
- Format Info: <http://www.bibtex.org/Format/>