

# Sample Document Using the datagidx Package

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August 29, 2013



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# Summary

This is a sample document illustrating the use of the `datagidx` package to create document `indices`, `glossaries` and `lists of acronyms` without the use of external `indexing` applications, such as `makeindex` or `xindy`. Please read the user guide (`datatool-user.pdf`) for further guidance.



# Chapter 1

## Introduction

Words can be **indexed**.

A **glossary** is a useful addition to any technical document, although a **glossary** can also simply be a collection of glosses, which is another thing entirely. Some documents have multiple **glossaries**.

A **bravo** is a cry of approval (plural **bravos**) but a **bravo** can also be a hired ruffian or killer (plural **bravoes**).

### 1.1 Characters

When defining entries be careful of **commas** (,) and **equal signs** (=) so they don't interfere with the key=value mechanism. The sort and label keys get expanded so be careful of special characters, such as **ampersand** (&), **underscore** (\_), **circumflex** (^), **dollar** (\$) and **tilde** (~).

Since we're not using **makeindex**, we don't need to worry about **makeindex**'s special characters, such as **double quote** ("), **exclamation mark** (!) and **vertical bar** (|). (Unless they've been made active by packages such as **ngerman** or **babel**.)

Non-alphabetical characters are usually grouped at the start of an index, and are usually followed by the number group. That is, the group of entries that are numerical, such as **0** (**zero**), **1** (**one**), **2** (**two**) and **3** (**three**).

### 1.2 Custom Fields

You can add custom fields. For example, this document has added three custom fields to the 'index' database.

## 1.3 Plurals

The plural of **glossary** is **glossaries**. The plural of **index** is **indices**. Some words have an **alternative plural**. For example, an alternative to **indices** is **indexes**.

## 1.4 Sorting

The only type of sorting available is letter sorting. If you want word sorting you'll need to use **makeindex** or **xindy**. So “**sea lion**” comes after “**seal**”.

The default sort is case-insensitive so **kite** before **Knuth** and **Knuth** before **koala**.

## 1.5 Using without indexing

Here's a defined entry that won't get into the glossary. Name: page list. Description: a list of individual pages or page ranges (e.g. 1,2,4,7–9). (Unless I later reference it using a command like `\gls`.)

## 1.6 Links to Entries

You can reference and index entries using `\gls`, `\Gls`, `\glspl`, `\Glspl`, `\glssym` and `\Glsym`. (Note, if you're used to using the **glossaries** package the syntax is different.)

Or you can reference a particular field using `\useentry` or `\Useentry`. So here's the description for **seal**: **sea mammal with flippers that eats fish**.

If the **hyperref** package has been loaded, commands like `\gls` will link to the relevant entry in the glossary or index. Referencing using `\glsdispenentry` and `\Glsdispenentry` won't have hyperlinks.

### 1.6.1 Enabling and Disabling Hyperlinks

If the **hyperref** package has been loaded, hyperlinks can be enabled and disabled. Either globally (here's a reference to seal without a hyperlink and here's a reference to **seal** with a hyperlink) or locally (here's a reference to seal without a hyperlink and here's a reference to **seal** with a hyperlink).

## 1.7 Acronyms

Here's an **acronym** referenced using `\acr`: hyper-text markup language (**html**). And here it is again: **html**. If you're used to the **glossaries** package, note the difference in using `\gls`: hyper-text markup language (**html**). And again (no difference): hyper-text markup language (**html**).



Now let's switch to displaying acronyms with a footnote. First use: `xml`<sup>1</sup>. Next use: `xml`.

However it would look better if the footnote text started with a capital letter, so let's tweak things a bit. Try with another acronym: `css`<sup>2</sup>. Next use: `css`.

Reset: Here are the acronyms again: hyper-text markup language (`html`), extensible markup language (`xml`) and cascading style sheet (`css`). Next use: `html`, `xml` and `css`. Full form: hyper-text markup language (`html`), extensible markup language (`xml`) and cascading style sheet (`css`).

Reset again. Start with a capital. Hyper-text markup language (`html`). Next: `Html`. Full: Hyper-text markup language (`html`).

Prefer small-caps? Cascading style sheet (`css`). Next: `css`. Full: cascading style sheet (`css`).

Prefer capitals? Extensible markup language (`XML`). Next: `XML`. Full: extensible markup language (`XML`).

## 1.8 Conditionals

You can test if a term has been defined using `\iftermexists`. For example: seal exists. Another example: jabberwocky doesn't exist.

You can test if a term has been used via `ifentryused`. For example: seal has been used. Another example: pglist hasn't been used.

## 1.9 Symbols

Terms may have an associated symbol. The symbol can be accessed using `\glssym` or if you don't want to add information to the location list you can use `\glstdispenentry`. Here's the symbol associated with the `cardinality` entry:  $|\mathcal{S}|$ .

A `set` (denoted  $\mathcal{S}$ ) is a collection of objects. The `universal set` is the set of everything. The `empty set` contains no elements. The `cardinality` of a set (denoted  $|\mathcal{S}|$ ) is the number of elements in the set.

### 1.10 Location Ranges

A range is formed if a location sequence contains more than 2 locations. Here's `seal` again.

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<sup>1</sup>extensible markup language.

<sup>2</sup>Cascading style sheet.



# Glossaries

## Glossary

- Bravo** 1) cry of approval (pl. bravos). [1](#) 2) hired ruffian or killer (pl. bravoos). [1](#)
- Glossary** 1) collection of glosses. [1](#) 2) list of technical words. [iii](#), [1](#), [2](#)
- Index** *see also* [index](#) an alphabetical list of names or subjects with references to their location in the document (pl. indices or indexes). [iii](#), [1](#), [2](#)
- Sea lion** large seal. [2](#)
- Seal** *see also* [seal](#) sea mammal with flippers that eats fish. [2](#), [3](#)

## List of Acronyms

- CSS** Cascading Style Sheet. [3](#)
- HTML** Hyper-text Markup Language. [2](#), [3](#)
- XML** Extensible Markup Language. [3](#)

## Notation

- Set** a collection of distinct objects. ( $\mathcal{S}$ ) [3](#)
- Universal** the set containing everything. ( $\mathcal{U}$ ) [3](#)
- Empty** the set with no elements. ( $\emptyset$ ) [3](#)
- Cardinality** the number of elements in the set  $\mathcal{S}$ . ( $|\mathcal{S}|$ ) [3](#)



# Index

Locations in bold indicate primary reference. Locations in *italic* indicate definitions in the glossaries.

|                            |                 |                                       |                                 |
|----------------------------|-----------------|---------------------------------------|---------------------------------|
| ! (exclamation mark) ..... | <b>1</b>        | alternative plural .....              | <b>2</b>                        |
| ” (double quote) .....     | <b>1</b>        | cascading style sheet .....           | <i>see</i> <b>CSS</b>           |
| \$ (dollar) .....          | <b>1</b>        | CSS .....                             | <b>3, 5</b>                     |
| & (ampersand) .....        | <b>1</b>        | extensible markup language <i>see</i> | <b>XML</b>                      |
| , (comma) .....            | <b>1</b>        | glossary .....                        | <b>iii, 1, 2, 5</b>             |
| = (equal sign) .....       | <b>1</b>        | HTML .....                            | <b>2, 3, 5</b>                  |
| ^ (circumflex) .....       | <b>1</b>        | hyper-text markup language .....      | <i>see</i>                      |
| _ (underscore) .....       | <b>1</b>        |                                       | <b>HTML</b>                     |
| (vertical bar) .....       | <b>1</b>        | index .....                           | <b>iii, 1, 2, 5</b>             |
| ~ (tilde) .....            | <b>1</b>        |                                       | <i>see also</i> <b>glossary</b> |
| 0 (zero) .....             | <b>1</b>        | kite .....                            | <b>2</b>                        |
| 1 (one) .....              | <b>1</b>        | Knuth, Donald E. ....                 | <b>2</b>                        |
| 2 (two) .....              | <b>1</b>        | koala .....                           | <b>2</b>                        |
| 3 (three) .....            | <b>1</b>        | <b>makeindex</b> .....                | <b>iii, 1, 2</b>                |
| acronym .....              | <b>2</b>        | plural .....                          | <b>2</b>                        |
| first use .....            | <b>2</b>        | alternative <i>see</i>                | <b>alternative plural</b>       |
| list .....                 | <b>iii</b>      | <b>xindy</b> .....                    | <b>iii, 2</b>                   |
| reset .....                | <b>3</b>        | XML .....                             | <b>3, 5</b>                     |
| <i>see also</i>            | <b>glossary</b> |                                       |                                 |