

Sample Document Using the datagidx Package

Nicola L. C. Talbot

March 13, 2025

Contents

Summary	iii
1 Introduction	1
1.1 Characters	1
1.2 Custom Fields	1
1.3 Plurals	2
1.4 Sorting	2
1.5 Using without indexing	2
1.6 Links to Entries	2
1.6.1 Enabling and Disabling Hyperlinks	2
1.7 Acronyms	2
1.8 Conditionals	3
1.9 Symbols	3
1.10 Location Ranges	3
Glossaries	5
Glossary	5
Acronyms	5
Notation	5
Index	7

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`¹. 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`². 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: pglisn'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 `\glstdispenry`. 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.

¹extensible markup language.

²Cascading 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** an alphabetical list of names or subjects with references to their location in the document (pl. indices or indexes). [iii](#), [2](#)
- Sea lion** large seal. [2](#)
- 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](#)
- 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)	1	CSS	3, 5
” (double quote)	1	extensible markup language	<i>see</i> XML
\$ (dollar)	1	glossary	iii, 1, 2, 5
& (ampersand)	1	HTML	2, 3, 5
, (comma)	1	hyper-text markup language	<i>see</i>
0 (zero)	1		HTML
1 (one)	1	index	iii, 1, 2, 5
2 (two)	1	kite	2
3 (three)	1	Knuth, Donald E.	2
= (equal sign)	1	koala	2
^ (circumflex)	1	makeindex	iii, 1, 2
_ (underscore)	1	plural	2
acronym	2	alternative	<i>see</i> alternative plural
first use	2	xindy	iii, 2
list	iii	XML	3, 5
reset	3	(vertical bar)	1
alternative plural	2	~ (tilde)	1
cascading style sheet	<i>see</i> CSS		