

SiSU

Manual

Ralph Amissah

copy @ www.jus.uio.no/sisu/ *

Copyright © Ralph Amissah 2007, part of SiSU documentation, License GPL 3

Generated by SiSU [SiSU 0.59.1 of 2007w39/2] www.jus.uio.no/sisu

Copyright © 1997, current 2007 Ralph Amissah, All Rights Reserved.

SiSU is software for document structuring, publishing and search (with object citation numbering), www.sisudoc.org

SiSU is released under GPL 3 or later, <<http://www.fsf.org/licenses/gpl.html>>.

Document information:

sourcefile sisu_manual._sst

Generated by SiSU www.jus.uio.no/sisu

version information: SiSU 0.59.1 of 2007w39/2

For alternative output formats of this document check:

<http://www.jus.uio.no/sisu/sisu_manual/sisu_manifest.html>

Contents

SiSU - Manual, Ralph Amissah	1
What is SiSU?	1
1. Introduction - What is SiSU?	2
2. How does sisu work?	5
3. Summary of features	6
4. Help	9
4.1 SiSU Manual	9
4.2 SiSU man pages	9
4.3 SiSU built-in interactive help	10
4.4 Help Sources	10
5. Commands Summary	12
5.1 Synopsis	12
5.2 Description	12
5.3 Document Processing Command Flags	12
6. command line modifiers	17
7. database commands	18
8. Shortcuts, Shorthand for multiple flags	19
9. Introduction to SiSU Markup	20
9.1 Summary	20
9.2 Markup Examples	20
10. Markup of Headers	22
10.1 Sample Header	22
10.2 Available Headers	22
11. Markup of Substantive Text	26
11.1 Heading Levels	26
11.2 Font Attributes	26
11.3 Indentation and bullets	27
11.4 Footnotes / Endnotes	28
11.5 Links	28
11.6 Grouped Text	30
12. Composite documents markup	38
Markup Syntax History	39
13. Notes related to Files-types and Markup Syntax	40
14. SiSU filetypes	41
14.1 .sst .ssm .ssi marked up plain text	41
14.2 sisupod, zipped binary container (sisupod.zip, .ssp)	42
15. Experimental Alternative Input Representations	43
15.1 Alternative XML	43
16. Configuration	45
16.1 Determining the Current Configuration	45

Contents

16.2 Configuration files (config.yml)	45
17. Skins	46
17.1 Document Skin	46
17.2 Directory Skin	46
17.3 Site Skin	46
17.4 Sample Skins	46
18. CSS - Cascading Style Sheets (for html, XHTML and XML)	48
19. Organising Content	49
19.1 Directory Structure and Mapping	49
19.2 Organising Content	49
20. Homepages	50
20.1 Home page and other custom built pages in a sub-directory	50
20.2 Home page within a skin	50
21. Markup and Output Examples	51
21.1 Markup examples	51
21.2 A few book (and other) examples	52
21.3 SQL - PostgreSQL, SQLite	68
21.4 Lex Mercatoria as an example	69
21.5 For good measure the markup for a document with lots of (simple) tables	69
21.6 And a link to the output of a reported case	69
22. A Checklist of Output Features	70
23. SiSU Search - Introduction	71
24. SQL	72
24.1 populating SQL type databases	72
25. Postgresql	73
25.1 Name	73
25.2 Description	73
25.3 Synopsis	73
25.4 Commands	73
26. Sqlite	75
26.1 Name	75
26.2 Description	75
26.3 Synopsis	75
26.4 Commands	75
27. Introduction	77
27.1 Search - database frontend sample, utilising database and SiSU features, including object citation numbering (backend currently PostgreSQL)	77
27.2 Search Form	77
28. Hyperestraier	79
29. sisu_webrick	81
29.1 Name	81
29.2 Synopsis	81
29.3 Description	81
29.4 Summary of man page	81

Contents

29.5 Document processing command flags	81
29.6 Further information	81
29.7 Author	81
29.8 SEE ALSO	82
30. Remote Source Documents	83
Remote Document Output	84
31. Remote Output	85
31.1 commands	85
31.2 configuration	85
32. Remote Servers	86
Download	87
33. Download SiSU - Linux/Unix	88
SiSU Current Version - Linux/Unix	88
Installation	92
34. Installation	93
34.1 Debian	93
34.2 Other Unix / Linux	94
35. SiSU Components, Dependencies and Notes	96
35.1 sisu	96
35.2 sisu-complete	97
35.3 sisu-examples	98
35.4 sisu-pdf	98
35.5 sisu-postgresql	98
35.6 sisu-remote	99
35.7 sisu-sqlite	99
36. Quickstart - Getting Started Howto	101
36.1 Installation	101
36.2 Testing SiSU, generating output	103
36.3 Getting Help	104
36.4 Markup Samples	104
HowTo	106
37. Getting Help	107
37.1 SiSU “man” pages	107
37.2 SiSU built-in help	107
37.3 Command Line with Flags - Batch Processing	108
38. Setup, initialisation	109
38.1 initialise output directory	109
38.2 misc	111
38.3 remote placement of output	111
39. Configuration Files	112
40. Markup	113

40.1 Headers	113
40.2 Font Face	113
40.3 Endnotes	114
40.4 Links	115
40.5 Number Titles	115
40.6 Line operations	115
40.7 Tables	116
40.8 Grouped Text	117
40.9 Composite Document	117
41. Change Appearance	118
41.1 Skins	118
41.2 CSS	118
Extracts from the README	120
42. README	121
42.1 Online Information, places to look	122
42.2 Installation	122
42.3 Dependencies	125
42.4 Quick start	128
42.5 Configuration files	129
42.6 Use General Overview	129
42.7 Help	129
42.8 Directory Structure	130
42.9 Configuration File	130
42.10 Markup	130
42.11 Additional Things	131
42.12 License	131
42.13 SiSU Standard	131
Extracts from man 8 sisu	132
43. Post Installation Setup	133
43.1 Post Installation Setup - Quick start	133
43.2 Document markup directory	134
44. FAQ - Frequently Asked/Answered Questions	137
44.1 Why are urls produced with the -v (and -u) flag that point to a web server on port 8081?	137
44.2 I cannot find my output, where is it?	137
44.3 I do not get any pdf output, why?	137
44.4 Where is the latex (or some other interim) output?	137
44.5 Why isn't SiSU markup XML	138
44.6 LaTeX claims to be a document preparation system for high-quality type- setting. Can the same be said about SiSU?	138
44.7 How do I create GIN or GiST index in Postgresql for use in SiSU	139
44.8 Where is version 1.0?	140
45. Editor Files, Syntax Highlighting	141

Contents

46. Help Sources	143
46.1 man pages	143
46.2 sisu generated output - links to html	144
Document Information (metadata)	150
Metadata	150
Information on this document copy and an unofficial List of Some web related information and sources	151
Information on this document copy	151
Links that may be of interest	151

SISU - MANUAL, RALPH AMISSAH	1
WHAT IS SISU?	2

1. Introduction - What is SiSU?

SiSU is a system for document markup, publishing (in multiple open standard formats) and search

SiSU¹ is a² framework for document structuring, publishing and search, comprising of (a) a lightweight document structure and presentation markup syntax and (b) an accompanying engine for generating standard document format outputs from documents prepared in sisu markup syntax, which is able to produce multiple standard outputs that (can) share a common numbering system for the citation of text within a document.

SiSU is developed under an open source, software libre license (GPL3). It has been developed in the context of coping with large document sets with evolving markup related technologies, for which you want multiple output formats, a common mechanism for cross-output-format citation, and search.

SiSU both defines a markup syntax and provides an engine that produces open standards format outputs from documents prepared with **SiSU** markup. From a single lightly prepared document sisu custom builds several standard output formats which share a common (text object) numbering system for citation of content within a document (that also has implications for search). The sisu engine works with an abstraction of the document's structure and content from which it is possible to generate different forms of representation of the document. Significantly **SiSU** markup is more sparse than html and outputs which include html, LaTeX, landscape and portrait pdfs, Open Document Format (ODF), all of which can be added to and updated. **SiSU** is also able to populate SQL type databases at an object level, which means that searches can be made with that degree of granularity. Results of objects (primarily paragraphs and headings) can be viewed directly in the database, or just the object numbers shown - your search criteria is met in these documents and at these locations within each document.

Source document preparation and output generation is a two step process: (i) document source is prepared, that is, marked up in sisu markup syntax and (ii) the desired output subsequently generated by running the sisu engine against document source. Output representations if updated (in the sisu engine) can be generated by re-running the engine against the prepared source. Using **SiSU** markup applied to a document, **SiSU** custom builds various standard open output formats including plain text, HTML, XHTML, XML, OpenDocument, LaTeX or PDF files, and populate an SQL database with objects³ (equating generally to paragraph-sized chunks) so searches may be performed and matches returned with that degree of granularity (e.g. your search criteria is met by these documents and at these locations within each document). Document output formats share a common object numbering system for locating content. This is particularly suitable for "published" works (finalized texts as opposed to works that are frequently changed or updated) for which it provides a fixed means of reference of content.

In preparing a **SiSU** document you optionally provide semantic information related to the

¹ "**SiSU** information Structuring Universe" or "Structured information, Serialized Units". also chosen for the meaning of the Finnish term "sisu".

² Unix command line oriented

³ objects include: headings, paragraphs, verse, tables, images, but not footnotes/endnotes which are numbered separately and tied to the object from which they are referenced.

document in a document header, and in marking up the substantive text provide information on the structure of the document, primarily indicating heading levels and footnotes. You also provide information on basic text attributes where used. The rest is automatic, *sisu* from this information custom builds⁴ the different forms of output requested.

SiSU works with an abstraction of the document based on its structure which is comprised of its frame⁵ and the objects⁶ it contains, which enables **SiSU** to represent the document in many different ways, and to take advantage of the strengths of different ways of presenting documents. The objects are numbered, and these numbers can be used to provide a common base for citing material within a document across the different output format types. This is significant as page numbers are not suited to the digital age, in web publishing, changing a browser's default font or using a different browser means that text appears on different pages; and in publishing in different formats, html, landscape and portrait pdf etc. again page numbers are of no use to cite text in a manner that is relevant against the different output types. Dealing with documents at an object level together with object numbering also has implications for search.

One of the challenges of maintaining documents is to keep them in a format that would allow users to use them without depending on a proprietary software popular at the time. Consider the ease of dealing with legacy proprietary formats today and what guarantee you have that old proprietary formats will remain (or can be read without proprietary software/equipment) in 15 years time, or the way the way in which html has evolved over its relatively short span of existence. **SiSU** provides the flexibility of outputting documents in multiple non-proprietary open formats including html, pdf⁷ and the ISO standard ODF.⁸ Whilst **SiSU** relies on software, the markup is uncomplicated and minimalistic which guarantees that future engines can be written to run against it. It is also easily converted to other formats, which means documents prepared in **SiSU** can be migrated to other document formats. Further security is provided by the fact that the software itself, **SiSU** is available under GPL3 a licence that guarantees that the source code will always be open, and free as in libre which means that that code base can be used updated and further developed as required under the terms of its license. Another challenge is to keep up with a moving target. **SiSU** permits new forms of output to be added as they become important, (Open Document Format text was added in 2006), and existing output to be updated (html has evolved and the related module has been updated repeatedly over the years, presumably when the World Wide Web Consortium (w3c) finalises html 5 which is currently under development, the html module will again be updated allowing all existing documents to be regenerated as html 5).

The document formats are written to the file-system and available for indexing by independent indexing tools, whether off the web like Google and Yahoo or on the site like Lucene and Hyperestraier.

SiSU also provides other features such as concordance files and document content certificates,

⁴ i.e. the html, pdf, odf outputs are each built individually and optimised for that form of presentation, rather than for example the html being a saved version of the odf, or the pdf being a saved version of the html.

⁵ the different heading levels

⁶ units of text, primarily paragraphs and headings, also any tables, poems, code-blocks

⁷ Specification submitted by Adobe to ISO to become a full open ISO specification

<<http://www.linux-watch.com/news/NS7542722606.html>>

⁸ ISO/IEC 26300:2006

and the working against an abstraction of document structure has further possibilities for the research and development of other document representations, the availability of objects is useful for example for topic maps and the commercial law thesaurus by Vikki Rogers and Al Krtizer, together with the flexibility of **SiSU** offers great possibilities.

SiSU is primarily for published works, which can take advantage of the citation system to reliably reference its documents. **SiSU** works well in a complementary manner with such collaborative technologies as Wikis, which can take advantage of and be used to discuss the substance of content prepared in **SiSU** . 14

<<http://www.jus.uio.no/sisu>>

15

2. How does sisu work?

16

SiSU markup is fairly minimalistic, it consists of: a (largely optional) document header, made up of information about the document (such as when it was published, who authored it, and granting what rights) and any processing instructions; and markup within the substantive text of the document, which is related to document structure and typeface. **SiSU** must be able to discern the structure of a document, (text headings and their levels in relation to each other), either from information provided in the document header or from markup within the text (or from a combination of both). Processing is done against an abstraction of the document comprising of information on the document's structure and its objects,[2] which the program serializes (providing the object numbers) and which are assigned hash sum values based on their content. This abstraction of information about document structure, objects, (and hash sums), provides considerable flexibility in representing documents different ways and for different purposes (e.g. search, document layout, publishing, content certification, concordance etc.), and makes it possible to take advantage of some of the strengths of established ways of representing documents, (or indeed to create new ones).

17

3. Summary of features

- sparse/minimal markup (clean utf-8 source texts). Documents are prepared in a single UTF-8 file using a minimalistic mnemonic syntax. Typical literature, documents like “War and Peace” require almost no markup, and most of the headers are optional.
- markup is easily readable/parsable by the human eye, (basic markup is simpler and more sparse than the most basic HTML), [this may also be converted to XML representations of the same input/source document].
- markup defines document structure (this may be done once in a header pattern-match description, or for heading levels individually); basic text attributes (bold, italics, underscore, strike-through etc.) as required; and semantic information related to the document (header information, extended beyond the Dublin core and easily further extended as required); the headers may also contain processing instructions. **SiSU** markup is primarily an abstraction of document structure and document metadata to permit taking advantage of the basic strengths of existing alternative practical standard ways of representing documents [be that browser viewing, paper publication, sql search etc.] (html, xml, odf, latex, pdf, sql)
- for output produces reasonably elegant output of established industry and institutionally accepted open standard formats.[3] takes advantage of the different strengths of various standard formats for representing documents, amongst the output formats currently supported are:
 - html - both as a single scrollable text and a segmented document
 - xhtml
 - XML - both in sax and dom style xml structures for further development as required
 - ODF - open document format, the iso standard for document storage
 - LaTeX - used to generate pdf
 - pdf (via LaTeX)
 - sql - population of an sql database, (at the same object level that is used to cite text within a document)

Also produces: concordance files; document content certificates (md5 or sha256 digests of headings, paragraphs, images etc.) and html manifests (and sitemaps of content). (b) takes advantage of the strengths implicit in these very different output types, (e.g. PDFs produced using typesetting of LaTeX, databases populated with documents at an individual object/paragraph level, making possible granular search (and related possibilities))

- ensuring content can be cited in a meaningful way regardless of selected output format. On-line publishing (and publishing in multiple document formats) lacks a useful way of citing text internally within documents (important to academics generally and to lawyers) as page numbers are meaningless across browsers and formats. sisu seeks to provide a common way of pinpoint the text within a document, (which can be utilized for citation and by search engines). The outputs share a common numbering system that is meaningful (to man and machine) across

all digital outputs whether paper, screen, or database oriented, (pdf, HTML, xml, sqlite, postgresql), this numbering system can be used to reference content.

- Granular search within documents. SQL databases are populated at an object level (roughly headings, paragraphs, verse, tables) and become searchable with that degree of granularity, the output information provides the object/paragraph numbers which are relevant across all generated outputs; it is also possible to look at just the matching paragraphs of the documents in the database; [output indexing also work well with search indexing tools like hyperestraier]. 32
- long term maintainability of document collections in a world of changing formats, having a very sparsely marked-up source document base. there is a considerable degree of future-proofing, output representations are “upgradeable”, and new document formats may be added. e.g. addition of odf (open document text) module in 2006 and in future html5 output sometime in future, without modification of existing prepared texts 33
- SQL search aside, documents are generated as required and static once generated. 34
- documents produced are static files, and may be batch processed, this needs to be done only once but may be repeated for various reasons as desired (updated content, addition of new output formats, updated technology document presentations/representations) 35
- document source (plaintext utf-8) if shared on the net may be used as input and processed locally to produce the different document outputs 36
- document source may be bundled together (automatically) with associated documents (multiple language versions or master document with inclusions) and images and sent as a zip file called a sisupod, if shared on the net these too may be processed locally to produce the desired document outputs 37
- generated document outputs may automatically be posted to remote sites. 38
- for basic document generation, the only software dependency is **Ruby** , and a few standard Unix tools (this covers plaintext, HTML, XML, ODF, LaTeX). To use a database you of course need that, and to convert the LaTeX generated to pdf, a latex processor like tetex or texlive. 39
- as a developers tool it is flexible and extensible 40

Syntax highlighting for **SiSU** markup is available for a number of text editors. 41

SiSU is less about document layout than about finding a way with little markup to be able to construct an abstract representation of a document that makes it possible to produce multiple representations of it which may be rather different from each other and used for different purposes, whether layout and publishing, or search of content 42

i.e. to be able to take advantage from this minimal preparation starting point of some of the strengths of rather different established ways of representing documents for different purposes, whether for search (relational database, or indexed flat files generated for that purpose whether of complete documents, or say of files made up of objects), online viewing (e.g. html, xml, pdf), or paper publication (e.g. pdf)... 43

the solution arrived at is by extracting structural information about the document (about headings within the document) and by tracking objects (which are serialized and also given hash values) in the manner described. It makes possible representations that are quite different from those offered at present. For example objects could be saved individually and identified by their hashes, with an index of how the objects relate to each other to form a document. 44

4. Help

4.1 SiSU Manual

The most up to date information on sisu should be contained in the sisu_manual, available at:

`<http://www.jus.uio.no/sisu/sisu_manual/>`

and (from **SiSU** 0.59 onwards) installed locally at:

`/usr/share/doc/sisu/sisu_manual/`

or equivalent directory

Within the **SiSU** tarball at:

`./data/doc/sisu/sisu_manual/`

4.2 SiSU man pages

If **SiSU** is installed on your system usual man commands should be available, try:

`man sisu`

`man sisu_markup`

`man sisu_commands`

Most **SiSU** man pages are generated directly from sisu documents that are used to prepare the sisu manual, the sources files for which are located within the **SiSU** tarball at:

`./data/doc/sisu/sisu_manual/`

Once installed, directory equivalent to:

`/usr/share/doc/sisu/sisu_manual/`

Available man pages are converted back to html using man2html:

`/usr/share/doc/sisu/html/`

`./data/doc/sisu/html/`

The **SiSU** man pages can be viewed online at:⁹

An online version of the sisu man page is available here:

- various sisu man pages¹⁰

⁹ generated from source using rman

`<http://polyglotman.sourceforge.net/rman.html>`

With regard to **SiSU** man pages the formatting generated for markup syntax is not quite right, for that you might prefer the links under:

`<http://www.jus.uio.no/sample>`

- `sisu.1` ¹¹ 69
- `sisu.8` ¹² 70
- `sisu_examples.1` ¹³ 71
- `sisu_webrick.1` ¹⁴ 72

4.3 SiSU built-in interactive help 73

This is particularly useful when current installation information is obtained as the interactive help is able to provide information on your sisu configuration and setup. 74

`sisu -help` 75

`sisu -help [subject]` 76

`sisu -help env` [for feedback on the way your system is setup with regard to sisu] 77

`sisu -V` [same as above command] 78

`sisu -help commands` 79

`sisu -help markup` 80

Apart from real-time information on your current configuration the **SiSU** manual and man pages are likely to contain more up-to-date information than the sisu interactive help (for example on commands and markup). 81

NOTE: Running the command `sisu` (alone without any flags, filenames or wildcards) brings up the interactive help, as does any sisu command that is not recognised. Enter to escape. 82

4.4 Help Sources 83

For lists of alternative help sources, see: 84

man page 85

`man sisu_help_sources` 86

man2html 87

`/usr/share/doc/sisu/sisu_manual/sisu_help_sources/index.html` 88

sisu generated html 89

`/usr/share/doc/sisu/html/sisu_help_sources/index.html` 90

¹⁰ `<http://www.jus.uio.no/sisu/man/>`

¹¹ `<http://www.jus.uio.no/sisu/man/sisu.1.html>`

¹² `<http://www.jus.uio.no/sisu/man/sisu.8.html>`

¹³ `<http://www.jus.uio.no/sisu/man/sisu_examples.1.html>`

¹⁴ `<http://www.jus.uio.no/sisu/man/sisu_webrick.1.html>`

< http://sisudoc.org/sisu_manual/sisu_help_sources/index.html >	91
< http://www.jus.uio.no/sisu/sisu_manual/sisu_help_sources/index.html >	92

5. Commands Summary

5.1 Synopsis

SiSU - Structured information, Serialized Units - a document publishing system

`sisu [-abcDdFHhLiMmNnopqRrSsTtUuVvwXxYyZz0-9] [filename/ wildcard]`

`sisu [-Ddev] [instruction]`

`sisu [-CcFLSVvW]`

Note: commands should be issued from within the directory that contains the marked up files, `cd` to markup directory.

5.2 Description

SiSU **SiSU** is a document publishing system, that from a simple single marked-up document, produces multiple of output formats including: plaintext, html, LaTeX, pdf, xhtml, XML, info, and SQL (PostgreSQL and SQLite), which share numbered text objects (“object citation numbering”) and the same document structure information. For more see: <http://www.jus.uio.no/sisu>

5.3 Document Processing Command Flags

-a [filename/wildcard]

produces plaintext with Unix linefeeds and without markup, (object numbers are omitted), has footnotes at end of each paragraph that contains them [-A for equivalent dos (linefeed) output file] [see -e for endnotes]. (Options include: `--endnotes` for endnotes `--footnotes` for footnotes at the end of each paragraph `--unix` for unix linefeed (default) `--msdos` for msdos linefeed)

-b [filename/wildcard]

produces xhtml/XML output for browser viewing (sax parsing).

-C [--init-site]

configure/initialise shared output directory files initialize shared output directory (config files such as css and dtd files are not updated if they already exist unless modifier is used). `-C --init-site` configure/initialise site more extensive than `-C` on its own, shared output directory files/force update, existing shared output config files such as css and dtd files are updated if this modifier is used.

-CC

configure/initialise shared output directory files initialize shared output directory (config files such as css and dtd files are not updated if they already exist unless modifier is used). The equivalent of: `-C --init-site` configure/initialise site, more extensive than `-C` on its own, shared output directory files/force update, existing shared output config files such as css and dtd files are updated if `-CC` is used.

-c [filename/wildcard]

107

screen toggle ansi screen colour on or off depending on default set (unless -c flag is used: if sisurc colour default is set to 'true', output to screen will be with colour, if sisurc colour default is set to 'false' or is undefined screen output will be without colour).

-D [instruction] [filename]

108

database postgresql (-pgsql may be used instead) possible instructions, include: -createdb; -create; -dropall; -import [filename]; -update [filename]; -remove [filename]; see database section below.

-d [-db-[database type (sqlite|pg)]] -[instruction] [filename]

109

database type default set to sqlite, (for which -sqlite may be used instead) or to specify another database -db-[pgsql, sqlite] (however see -D) possible instructions include: -createdb; -create; -dropall; -import [filename]; -update [filename]; -remove [filename]; see database section below.

-F [-webserv=webrick]

110

generate examples of (naive) cgi search form for sqlite and postgresql depends on your already having used sisu to populate an sqlite and/or postgresql database, (the sqlite version scans the output directories for existing sisu_sqlite databases, so it is first necessary to create them, before generating the search form) see -d -D and the database section below. If the optional parameter -webserv=webrick is passed, the cgi examples created will be set up to use the default port set for use by the webrick server, (otherwise the port is left blank and the system setting used, usually 80). The samples are dumped in the present work directory which must be writable, (with screen instructions given that they be copied to the cgi-bin directory). -Fv (in addition to the above) provides some information on setting up hyperestraier for sisu

-H [filename/wildcard]

111

produces html without link suffixes (.html .pdf etc.) ("Hide"). Requires an appropriately configured web server. [behaviour switched after 0.35 see -h].

-h [filename/wildcard]

112

produces html (with hardlinks i.e. with name suffixes in links/local urls). html, with internal document links that include the document suffix, i.e. whether it is .html or .pdf (required for browsing directly off a file system, and works with most web servers). [behaviour switched after 0.35 see -H].

-I [filename/wildcard]

113

produces texinfo and info file, (view with pinfo).

-L

114

prints license information.

-M [filename/wildcard/url]

115

maintenance mode files created for processing preserved and their locations indicated. (also see -V)

-m [filename/wildcard/url]

116

assumed for most other flags, creates new meta-markup file, (the metaverse) that is used in all

subsequent processing of other output. This step is assumed for most processing flags. To skip it see -n

-N [filename/wildcard/url]

document digest or document content certificate (DCC) as md5 digest tree of the document: the digest for the document, and digests for each object contained within the document (together with information on software versions that produced it) (digest.txt). -NV for verbose digest output to screen.

-n [filename/wildcard/url]

skip meta-markup (building of “metaverse”), this skips the equivalent of -m which is otherwise assumed by most processing flags.

-o [filename/wildcard/url]

output basic document in opendocument file format (opendocument.odt).

-p [filename/wildcard]

produces LaTeX pdf (portrait.pdf and landscape.pdf). Default paper size is set in config file, or document header, or provided with additional command line parameter, e.g. -papersize-a4 preset sizes include: ‘A4’, U.S. ‘letter’ and ‘legal’ and book sizes ‘A5’ and ‘B5’ (system defaults to A4).

-q [filename/wildcard]

quiet less output to screen.

-R [filename/wildcard]

copies sisu output files to remote host using rsync. This requires that sisurc.yml has been provided with information on hostname and username, and that you have your “keys” and ssh agent in place. Note the behavior of rsync different if -R is used with other flags from if used alone. Alone the rsync -delete parameter is sent, useful for cleaning the remote directory (when -R is used together with other flags, it is not). Also see -r

-r [filename/wildcard]

copies sisu output files to remote host using scp. This requires that sisurc.yml has been provided with information on hostname and username, and that you have your “keys” and ssh agent in place. Also see -R

-S

produces a sisupod a zipped sisu directory of markup files including sisu markup source files and the directories local configuration file, images and skins. Note: this only includes the configuration files or skins contained in ./sisu not those in ~/.sisu -S [filename/wildcard] option. Note: (this option is tested only with zsh).

-S [filename/wildcard]

produces a zipped file of the prepared document specified along with associated images, by default named sisupod.zip they may alternatively be named with the filename extension .ssp This provides a quick way of gathering the relevant parts of a sisu document which can then for example be emailed. A sisupod includes sisu markup source file, (along with associated documents if a master file, or available in multilingual versions), together with related images

and skin. **SiSU** commands can be run directly against a sisupod contained in a local directory, or provided as a url on a remote site. As there is a security issue with skins provided by other users, they are not applied unless the flag `-trust` or `-trusted` is added to the command instruction, it is recommended that file that are not your own are treated as untrusted. The directory structure of the unzipped file is understood by sisu, and sisu commands can be run within it. Note: if you wish to send multiple files, it quickly becomes more space efficient to zip the sisu markup directory, rather than the individual files for sending). See the `-S` option without [filename/wildcard].

-s [filename/wildcard]

126

copies sisu markup file to output directory.

-t [filename/wildcard (*.termsheet.rb)]

127

standard form document builder, preprocessing feature

-U [filename/wildcard]

128

prints url output list/map for the available processing flags options and resulting files that could be requested, (can be used to get a list of processing options in relation to a file, together with information on the output that would be produced), `-u` provides url output mapping for those flags requested for processing. The default assumes sisu.webrick is running and provides webrick url mappings where appropriate, but these can be switched to file system paths in `sisurc.yml`

-u [filename/wildcard]

129

provides url mapping of output files for the flags requested for processing, also see `-U`

-V

130

on its own, provides **SiSU** version and environment information (`sisu -help env`)

-V [filename/wildcard]

131

even more verbose than the `-v` flag. (also see `-M`)

-v

132

on its own, provides **SiSU** version information

-v [filename/wildcard]

133

provides verbose output of what is being built, where it is being built (and error messages if any), as with `-u` flag provides a url mapping of files created for each of the processing flag requests. See also `-V`

-W

134

starts ruby's webrick webserver points at sisu output directories, the default port is set to 8081 and can be changed in the resource configuration files. [tip: the webrick server requires link suffixes, so html output should be created using the `-h` option rather than `-H`; also, note `-F` webrick].

-w [filename/wildcard]

135

produces concordance (wordmap) a rudimentary index of all the words in a document. (Concordance files are not generated for documents of over 260,000 words unless this limit is increased

in the file sisurc.yml)

-X [filename/wildcard]

136

produces XML output with deep document structure, in the nature of dom.

-x [filename/wildcard]

137

produces XML output shallow structure (sax parsing).

-Y [filename/wildcard]

138

produces a short sitemap entry for the document, based on html output and the sisu_manifest. –sitemaps generates/updates the sitemap index of existing sitemaps. (Experimental, [g,y,m announcement this week])

-y [filename/wildcard]

139

produces an html summary of output generated (hyperlinked to content) and document specific metadata (sisu_manifest.html). This step is assumed for most processing flags.

-Z [filename/wildcard]

140

Zap, if used with other processing flags deletes output files of the type about to be processed, prior to processing. If -Z is used as the lone processing related flag (or in conjunction with a combination of -[mMvVq]), will remove the related document output directory.

-z [filename/wildcard]

141

produces php (zend) [this feature is disabled for the time being]

6. command line modifiers

142

-no-ocn

143

with -h -H or -p

switches off object citation numbering. Produce output without identifying numbers in margins of html or LaTeX/pdf output.

-no-annotate

144

strips output text of editor endnotes ^{*1} denoted by asterisk or dagger/plus sign

-no-asterisk

145

strips output text of editor endnotes ^{*2} denoted by asterisk sign

-no-dagger

146

strips output text of editor endnotes ⁺¹ denoted by dagger/plus sign

^{*1} square brackets

^{*2} square brackets

⁺¹ square brackets

7. database commands

dbi - database interface

-D or -pgsql set for postgresql -d or -sqlite default set for sqlite -d is modifiable with -db=[database type (pgsql or sqlite)]

-Dv -createall

initial step, creates required relations (tables, indexes) in existing postgresql database (a database should be created manually and given the same name as working directory, as requested) (rb.dbi) [-dv -createall sqlite equivalent] it may be necessary to run sisu -Dv -createdb initially NOTE: at the present time for postgresql it may be necessary to manually create the database. The command would be 'createdb [database name]' where database name would be SiSU_[present working directory name (without path)]. Please use only alphanumerics and underscores.

-Dv -import

filename/wildcard
imports data specified to postgresql db (rb.dbi) [-dv -import sqlite equivalent]

-Dv -update

filename/wildcard
updates/imports specified data to postgresql db (rb.dbi) [-dv -update sqlite equivalent]

-D -remove

filename/wildcard
removes specified data to postgresql db (rb.dbi) [-d -remove sqlite equivalent]

-D -dropall

kills data" and drops (postgresql or sqlite) db, tables and indexes [-d -dropall sqlite equivalent]

The v in e.g. -Dv is for verbose output.

8. Shortcuts, Shorthand for multiple flags

-update [filename/wildcard]

Checks existing file output and runs the flags required to update this output. This means that if only html and pdf output was requested on previous runs, only the -hp files will be applied, and only these will be generated this time, together with the summary. This can be very convenient, if you offer different outputs of different files, and just want to do the same again.

-0 to -5 [filename or wildcard]

Default shorthand mappings (note that the defaults can be changed/configured in the sisurc.yml file):

-0

-mNhwpAobxXyYv [this is the default action run when no options are give, i.e. on 'sisu [filename]']

-1

-mNHwpy

-2

-mNHwpaoy

-3

-mNhwpAobxXyY

-4

-mNhwpAobxXDyY -import

-5

-mNhwpAobxXDyY -update

add -v for verbose mode and -c for color, e.g. sisu -2vc [filename or wildcard]

consider -u for appended url info or -v for verbose output

8.0.1 Command Line with Flags - Batch Processing

In the data directory run sisu -mh filename or wildcard eg. "sisu -h cisg.sst" or "sisu -h *.{sst,ssm}" to produce html version of all documents.

Running sisu (alone without any flags, filenames or wildcards) brings up the interactive help, as does any sisu command that is not recognised. Enter to escape.

9. Introduction to SiSU Markup¹⁵ 170

9.1 Summary 171

SiSU source documents are plaintext (UTF-8)¹⁶ files 172

All paragraphs are separated by an empty line. 173

Markup is comprised of: 174

- at the top of a document, the document header made up of semantic meta-data about the document and if desired additional processing instructions (such an instruction to automatically number headings from a particular level down) 175

- followed by the prepared substantive text of which the most important single characteristic is the markup of different heading levels, which define the primary outline of the document structure. Markup of substantive text includes: 176

- heading levels defines document structure 177

- text basic attributes, italics, bold etc. 178

- grouped text (objects), which are to be treated differently, such as code blocks or poems. 179

- footnotes/endnotes 180

- linked text and images 181

- paragraph actions, such as indent, bulleted, numbered-lists, etc. 182

Some interactive help on markup is available, by typing `sisu` and selecting markup or `sisu -help markup` 183

9.2 Markup Examples 184

9.2.1 Online 185

Online markup examples are available together with the respective outputs produced from `<http://www.jus.uio.no/sisu/SiSU/2.html>` or from `<http://www.jus.uio.no/sisu/sisu_examples/>` 186

There is of course this document, which provides a cursory overview of `sisu` markup and the respective output produced: `<http://www.jus.uio.no/sisu/sisu_markup/>` 187

Some example marked up files are available as html with syntax highlighting for viewing: `<http://www.jus.uio.no/sisu/sample/syntax>` 188

an alternative presentation of markup syntax: `<http://www.jus.uio.no/sisu/sample/on_markup.txt>` 189

¹⁵ From sometime after SiSU 0.58 it should be possible to describe SiSU markup using SiSU, which though not an original design goal is useful.

¹⁶ files should be prepared using UTF-8 character encoding

9.2.2 Installed

190

With **SiSU** installed sample skins may be found in: `/usr/share/doc/sisu/sisu_markup_samples/dfsg`¹⁹¹ (or equivalent directory) and if `sisu-markup-samples` is installed also under: `/usr/share/doc/sisu/sisu_markup_sa`
free

10. Markup of Headers

Headers consist of semantic meta-data about a document, which can be used by any output module of the program; and may in addition include extra processing instructions.

Note: the first line of a document may include information on the markup version used in the form of a comment. Comments are a percentage mark at the start of a paragraph (and as the first character in a line of text) followed by a space and the comment:

```
% this would be a comment
```

10.1 Sample Header

This current document has a header similar to this one (without the comments):

```
% SiSU 0.57
@title: SiSU
@subtitle: Markup
@creator: Ralph Amissah
@rights: Copyright (C) Ralph Amissah 2007, part of SiSU documentation, License GPL 3
@type: information
@subject: ebook, epubliing, electronic book, electronic publishing, electronic document, electronic citation, data structure, citation systems,
search
@date.created: 2002-08-28
@date.issued: 2002-08-28
@date.available: 2002-08-28
@date.modified: 2007-09-16
@date: 2007-09-16
@level: new=C; break=1; num_top=1
% comment: in this @level header num_top=1 starts automatic heading numbering at heading level 1 (numbering continues 3 levels down);
the new and break instructions are used by the LaTeX/pdf and odf output to determine where to put page breaks (that are not used by html
output or say sql database population).
@skin: skin_sisu_manual
% skins modify the appearance of a document and are placed in a sub-directory under ./sisu/skin ~ /./sisu/skin or /etc/sisu/skin. A skin may
affect single documents that request them, all documents in a directory, or be site-wide. (A document is affected by a single skin)
@bold: /Gnu|Debian|Ruby|SiSU/
@links: { SiSU Manual }http://www.jus.uio.no/sisu/sisu_manual/
{ Book Samples and Markup Examples }http://www.jus.uio.no/sisu/SiSU/2.html
{ SiSU @ Wikipedia }http://en.wikipedia.org/wiki/SiSU
{ SiSU @ Freshmeat }http://freshmeat.net/projects/sisu/
{ SiSU @ Ruby Application Archive }http://raa.ruby-lang.org/project/sisu/
{ SiSU @ Debian }http://packages.qa.debian.org/s/sisu.html
{ SiSU Download }http://www.jus.uio.no/sisu/SiSU/download.html
{ SiSU Changelog }http://www.jus.uio.no/sisu/SiSU/changelog.html
```

10.2 Available Headers

Header tags appear at the beginning of a document and provide meta information on the document (such as the Dublin Core), or information as to how the document as a whole is to be processed. All header instructions take either the form @headname: or 0~ headname. All Dublin Core meta tags are available

@identifier: information or instructions

where the “identifier” is a tag recognised by the program, and the “information” or “instructions” belong to the tag/identifier specified 202

Note: a header where used should only be used once; all headers apart from @title: are optional; the @structure: header is used to describe document structure, and can be useful to know. 203

This is a sample header 204

% SiSU 0.38 [declared file-type identifier with markup version] 205

@title: [title text] This is the title of the document and used as such, this header is the only one that is mandatory 206

@subtitle: The Subtitle if any 207

@creator: [or @author:] Name of Author 208

@subject: (whatever your subject) 209

@description: 210

@publisher: 211

@contributor: 212

@translator: [or @translated_by:] 213

@illustrator: [or @illustrated_by:] 214

@prepared_by: [or @digitized_by:] 215

@date: 2000-08-27 [also @date.created: @date.issued: @date.available: @date.valid: @date.modified:] 216

@type: article 217

@format: 218

@identifier: 219

@source: 220

@language: [or @language.document:] [country code for language if available, or language, English, en is the default setting] (en - English, fr - French, de - German, it - Italian, es - Spanish, pt - Portuguese, sv - Swedish, da - Danish, fi - Finnish, no - Norwegian, is - Icelandic, nl - Dutch, et - Estonian, hu - Hungarian, pl - Polish, ro - Romanian, ru - Russian, el - Greek, uk - Ukranian, tr - Turkish, sk - Slovak, sl - Slovenian, hr - Croatian, cs - Czech, bg - Bulgarian) [however, encodings are not available for all of the languages listed.] 221

[@language.original: original language in which the work was published] 222

@papersize: (A4|US_letter|book_B5|book_A5|US_legal) 223

@relation: 224

@coverage: 225

@rights: Copyright (c) Name of Right Holder, all rights reserved, or as granted: public domain, copyleft, creative commons variant, etc. 226

@owner: 227

@keywords: text document generation processing management latex pdf structured xml citation [your keywords here, used for example by rss feeds, and in sql searches]	228
@abstract: [paper abstract, placed after table of contents]	229
@comment: [...]	230
@catalogue: loc=[Library of Congress classification]; dewey=[Dewey classification]; isbn=[ISBN]; pg=[Project Gutenberg text number]	
@classify_loc: [Library of Congress classification]	232
@classify_dewey: [Dewey classification]	233
@classify_isbn: [ISBN]	234
@classify_pg: [Project Gutenberg text number]	235
@prefix: [prefix is placed just after table of contents]	236
@prefix_a: [prefix is placed just before table of contents - not implemented]	237
@prefix_b:	238
@rcs: \$Id: sisu_markup.sst,v 1.2 2007/09/08 17:12:47 ralph Exp \$ [used by rcs or cvs to embed version (revision control) information into document, rcs or cvs can usefully provide a history of updates to a document]	239
@structure: PART; CHAPTER; SECTION; ARTICLE; none; none; optional, document structure can be defined by words to match or regular expression (the regular expression is assumed to start at the beginning of a line of text i.e. <i>defaultmarkers : A~to : C~and1fo6canbeusedwithintextinstead, withoutthisheadertag, andmaybeusedtosupplementtheinstructions</i>)	240
@level: newpage=3; breakpage=4 paragraph level, used by latex to breakpages, the page is optional eg. in newpage	241
@markup: information on the markup used, e.g. new=1,2,3; break=4; num_top=4 [or newpage=1,2,3; breakpage=4; num_top=4] newpage and breakpage, heading level, used by LaTeX to breakpages. breakpage: starts on a new page in single column text and on a new column in double column text; newpage: starts on a new page for both single and double column texts. num_top=4 [auto-number document, starting at level 4. the default is to provide 3 levels, as in 1 level 4, 1.1 level 5, 1.1.1 level 6, markup to be merged within level] num_extract [take numbering of headings provided (manually in marked up source document), and use for numbering of segments. Available where a clear numbering structure is provided within document, without the repetition of a number in a header.] [In 0.38 notation, you would map to the equivalent levels, the examples provided would map to the following new=A,B,C; break=1; num_top=1 [or newpage=A,B,C; breakpage=1; num_top=1] see headings]	242
@bold: [regular expression of words/phrases to be made bold]	243
@italics: [regular expression of words/phrases to italicise]	244
@vocabulary: name of taxonomy/vocabulary/wordlist to use against document	245
@skin: skin_doc_[name_of_desired_document_skin]	246

skins change default settings related to the appearance of documents generated, such as the urls of the home site, and the icon/logo for the document or site.

@links: { **SiSU** }<http://www.jus.uio.no/sisu/>; 247
{ **FSF** }<http://www.fsf.org>

@promo: sisu, ruby, search_libre_docs, open_society 248
places content in right pane in html, makes use of list.yml and promo.yml, commented out sample in document sample: free_as_in_freedom.richard_stallman_crusade_for_free_software.sam_williams.sst

11. Markup of Substantive Text

249

11.1 Heading Levels

250

Heading levels are :A~ ,:B~ ,:C~ ,1~ ,2~ ,3~ ... :A - :C being part / section headings, followed by other heading levels, and 1 -6 being headings followed by substantive text or sub-headings. :A~ usually the title :A~ ? conditional level 1 heading (used where a stand-alone document may be imported into another)

251

:A~ [**heading text**] Top level heading [this usually has similar content to the title @title:]
NOTE: the heading levels described here are in 0.38 notation, see heading

252

:B~ [**heading text**] Second level heading [this is a heading level divider]

253

:C~ [**heading text**] Third level heading [this is a heading level divider]

254

1~ [**heading text**] Top level heading preceding substantive text of document or sub-heading 2, the heading level that would normally be marked 1. or 2. or 3. etc. in a document, and the level on which sisu by default would break html output into named segments, names are provided automatically if none are given (a number), otherwise takes the form 1~my_filename_for_this_segment

255

2~ [**heading text**] Second level heading preceding substantive text of document or sub-heading 3, the heading level that would normally be marked 1.1 or 1.2 or 1.3 or 2.1 etc. in a document.

256

3~ [**heading text**] Third level heading preceding substantive text of document, that would normally be marked 1.1.1 or 1.1.2 or 1.2.1 or 2.1.1 etc. in a document

257

1~ filename level 1 heading,

258

% the primary division such as Chapter that is followed by substantive text, and may be further subdivided (this is the level on which by default html segments are made)

11.2 Font Attributes

259

markup example:

260

```
normal text !{emphasis}! *{bold text}* _{underscore}_ /{italics}/ "{citation}" {superscript}{subscript},+{insertedtext}+
normal text
!{emphasis}!
*{bold text}*
_{underscore}_
/{italics}/
"{citation}"
{superscript}
,{subscript},
+{inserted text}+
-{strikethrough}-
```

261

resulting output:

262

normal text **emphasis** **bold text** underscore *italics* ;cite¿citation¿/cite¿ ^{superscript} subscript
inserted text ~~strikethrough~~

263

normal text

264

emphasis	265
bold text	266
<u>underscore</u>	267
<i>italics</i>	268
<code><cite>{citation}</cite></code>	269
superscript	270
subscript	271
<u>inserted text</u>	272
strikethrough	273

11.3 Indentation and bullets 274

markup example:	275
ordinary paragraph	276

.1 indent paragraph one step
.2 indent paragraph two steps
.9 indent paragraph nine steps

resulting output:	277
--------------------------	-----

ordinary paragraph	278
indent paragraph one step	279
indent paragraph two steps	280
indent paragraph nine steps	281

markup example:	282
. * bullet text	283

.1 * bullet text, first indent
.2 * bullet text, two step indent

resulting output:	284
--------------------------	-----

● bullet text	285
● bullet text, first indent	286
● bullet text, two step indent	287

Numbered List (not to be confused with headings/titles, (document structure))	288
---	-----

markup example:	289
# numbered list numbered list 1., 2., 3, etc.	290

<=hash> numbered list numbered list indented a., b., c., d., etc.

11.4 Footnotes / Endnotes

Footnotes and endnotes not distinguished in markup. They are automatically numbered. Depending on the output file format (html, odf, pdf etc.), the document output selected will have either footnotes or endnotes.

markup example:

{ a footnote or endnote }

resulting output:

17

markup example:

normal text { self contained endnote marker & endnote in one } continues

resulting output:

normal text¹⁸ continues

markup example:

normal text { * unnumbered asterisk footnote/endnote, insert multiple asterisks if required } continues

normal text { ** another unnumbered asterisk footnote/endnote } continues

resulting output:

normal text * continues

normal text ** continues

markup example:

normal text [* editors notes, numbered asterisk footnote/endnote series] continues

normal text [+ editors notes, numbered asterisk footnote/endnote series] continues

resulting output:

normal text ^{*3} continues

normal text ⁺² continues

Alternative endnote pair notation for footnotes/endnotes:

% note the endnote marker "

the standard and pair notation cannot be mixed in the same document

11.5 Links

11.5.1 Naked URLs within text, dealing with urls

urls are found within text and marked up automatically. A url within text is automatically

¹⁷ a footnote or endnote

¹⁸ self contained endnote marker and endnote in one

* unnumbered asterisk footnote/endnote, insert multiple asterisks if required

** another unnumbered asterisk footnote/endnote

^{*3} editors notes, numbered asterisk footnote/endnote series

⁺² editors notes, numbered asterisk footnote/endnote series

hyperlinked to itself and by default decorated with angled braces, unless they are contained within a code block (in which case they are passed as normal text), or escaped by a preceding underscore (in which case the decoration is omitted).

markup example:

normal text `http://www.jus.uio.no/sisu` continues

resulting output:

normal text `<http://www.jus.uio.no/sisu>` continues

An escaped url without decoration

markup example:

normal text `http://www.jus.uio.no/sisu` continues

deb `http://www.jus.uio.no/sisu/archive` unstable main non-free

resulting output:

normal text `http://www.jus.uio.no/sisu` continues

deb `http://www.jus.uio.no/sisu/archive` unstable main non-free

where a code block is used there is neither decoration nor hyperlinking, code blocks are discussed later in this document

resulting output:

deb `http://www.jus.uio.no/sisu/archive` unstable main non-free

deb-src `http://www.jus.uio.no/sisu/archive` unstable main non-free

To link text or an image to a url the markup is as follows

markup example:

about { SiSU }`http://url.org` markup

11.5.2 Linking Text

resulting output:

about SiSU markup

A shortcut notation is available so the url link may also be provided automatically as a footnote

markup example:

about {

resulting output:

about SiSU¹⁹ markup

11.5.3 Linking Images

markup example:

¹⁹ `<http://www.jus.uio.no/sisu/>`

```
{tux.png 64x80 }image
% various url linked images
{tux.png 64x80 "a better way" }http://www.jus.uio.no/sisu/
{GnuDebianLinuxRubyBetterWay.png 100x101 "Way Better - with Gnu/Linux, Debian and Ruby" }http://www.jus.uio.no/sisu/
{
```

resulting output:

Gnu/Linux - a better way

[ruby_logo (png missing)] ²⁰



Way Better - with Gnu/Linux, Debian and Ruby

linked url footnote shortcut

```
{
text marker *ñame
```

note at a heading level the same is automatically achieved by providing names to headings 1, 2 and 3 i.e. 2[ñame] and 3[ñame] or in the case of auto-heading numbering, without further intervention.

11.6 Grouped Text**11.6.1 Tables**

Tables may be prepared in two either of two forms

markup example:

```
table{ c3; 40; 30; 30;
```

²⁰ <<http://www.ruby-lang.org/en/>>

This is a table
 this would become column two of row one
 column three of row one is here
 And here begins another row
 column two of row two
 column three of row two, and so on
 }table

resulting output:

This is a table
 And here begins another row

this would become column two of row one
 column two of row two

column three of row one is here
 column three of row two, and so on

a second form may be easier to work with in cases where there is not much information in each column

markup example: ²¹

!_ Table 3.1: Contributors to Wikipedia, January 2001 - June 2005

{table~ h 24; 12; 12; 12; 12; 12; 12; }

|Jan. 2001|Jan. 2002|Jan. 2003|Jan. 2004|July 2004|June 2006

Contributors* | 10| 472| 2,188| 9,653| 25,011| 48,721

Active contributors** | 9| 212| 846| 3,228| 8,442| 16,945

Very active contributors*** | 0| 31| 190| 692| 1,639| 3,016

No. of English language articles| 25| 16,000| 101,000| 190,000| 320,000| 630,000

No. of articles, all languages | 25| 19,000| 138,000| 490,000| 862,000|1,600,000

Contributed at least ten times; * at least 5 times in last month; * more than 100 times in last month.

resulting output:

Table 3.1: Contributors to Wikipedia, January 2001 - June 2005

	Jan. 2001	Jan. 2002	Jan. 2003	Jan. 2004	July 2004	June 2006
Contributors*	10	472	2,188	9,653	25,011	48,721
Active contributors**	9	212	846	3,228	8,442	16,945
Very active contributors***	0	31	190	692	1,639	3,016
No. of English language articles	25	16,000	101,000	190,000	320,000	630,000
No. of articles, all languages	25	19,000	138,000	490,000	862,000	1,600,000

* Contributed at least ten times; ** at least 5 times in last month; *** more than 100 times in last month.

11.6.2 Poem

basic markup:

poem{

Your poem here

}poem

Each verse in a poem is given a separate object number.

markup example:

poem{

'Fury said to a

²¹ Table from the Wealth of Networks by Yochai Benkler

<http://www.jus.uio.no/sisu/the_wealth_of_networks.yochai_benkler>

mouse, That he
met in the
house,
"Let us
both go to
law: I will
prosecute
YOU. –Come,
I'll take no
denial; We
must have a
trial: For
really this
morning I've
nothing
to do."
Said the
mouse to the
cur, "Such
a trial,
dear Sir,
With
no jury
or judge,
would be
wasting
our
breath."
"I'll be
judge, I'll
be jury,"
Said
cunning
old Fury:
"I'll
try the
whole
cause,
and
condemn
you
to
death."

}poem

resulting output:

'Fury said to a
mouse, That he
met in the
house,
"Let us

372

373

both go to
law: I will
prosecute
YOU. –Come,
I'll take no
denial; We
must have a
trial: For
really this
morning I've
nothing
to do.”
Said the
mouse to the
cur, “Such
a trial,
dear Sir,
With
no jury
or judge,
would be
wasting
our
breath.”
“I'll be
judge, I'll
be jury,”
Said
cunning
old Fury:
“I'll
try the
whole
cause,
and
condemn
you
to
death.””

11.6.3 Group

374

basic markup:

375

```
group{  
  Your grouped text here  
}group
```

376

A group is treated as an object and given a single object number.

markup example:

377

```
group{  
  'Fury said to a  
    mouse, That he  
    met in the  
    house,  
  "Let us  
    both go to  
    law: I will  
    prosecute  
    YOU. –Come,  
    I'll take no  
    denial; We  
    must have a  
    trial: For  
    really this  
    morning I've  
    nothing  
    to do."  
  Said the  
    mouse to the  
    cur, "Such  
    a trial,  
    dear Sir,  
    With  
    no jury  
    or judge,  
    would be  
    wasting  
    our  
    breath."  
  "I'll be  
    judge, I'll  
    be jury,"  
    Said  
    cunning  
    old Fury:  
  "I'll  
    try the  
    whole  
    cause,  
    and  
    condemn  
    you  
    to
```

378

death.”

}group

resulting output:

‘Fury said to a
mouse, That he
met in the
house,
“Let us
both go to
law: I will
prosecute
YOU. –Come,
I’ll take no
denial; We
must have a
trial: For
really this
morning I’ve
nothing
to do.”
Said the
mouse to the
cur, “Such
a trial,
dear Sir,
With
no jury
or judge,
would be
wasting
our
breath.”
“I’ll be
judge, I’ll
be jury,”
Said
cunning
old Fury:

379

380

“I’ll
try the
whole
cause,
and
condemn
you
to
death.””

11.6.4 Code

381

Code tags are used to escape regular sisu markup, and have been used extensively within this document to provide examples of **SiSU** markup. You cannot however use code tags to escape code tags. They are however used in the same way as group or poem tags.

382

A code-block is treated as an object and given a single object number. [an option to number each line of code may be considered at some later time]

383

use of code tags instead of poem compared, resulting output:

384

’Fury said to a
mouse, That he
met in the
house,
”Let us
both go to
law: I will
prosecute
YOU. –Come,
I’ll take no
denial; We
must have a
trial: For
really this
morning I’ve
nothing
to do.”
Said the
mouse to the
cur, ”Such
a trial,
dear Sir,
With
no jury
or judge,
would be
wasting
our

385

breath.”
“I’ll be
judge, I’ll
be jury,”
Said
cunning
old Fury:
“I’ll
try the
whole
cause,
and
condemn
you
to
death.””

12. Composite documents markup

386

It is possible to build a document by creating a master document that requires other documents. The documents required may be complete documents that could be generated independently, or they could be markup snippets, prepared so as to be easily available to be placed within another text. If the calling document is a master document (built from other documents), it should be named with the suffix **.ssm**. Within this document you would provide information on the other documents that should be included within the text. These may be other documents that would be processed in a regular way, or markup bits prepared only for inclusion within a master document **.sst** regular markup file, or **.ssi** (insert/information). A secondary file of the composite document is built prior to processing with the same prefix and the suffix **.sst**.

387

basic markup for importing a document into a master document

388

```
<< |filename1.sst|@|^j
```

389

```
<< |filename2.ssi|@|^j
```

The form described above should be relied on. Within the Vim editor it results in the text thus linked becoming hyperlinked to the document it is calling in which is convenient for editing. Alternative markup for importation of documents under consideration, and occasionally supported have been.

390

391

```
r{filename}
{filename.ssi}require
<< {filename.ssi}
% using textlink alternatives
|filename.ssi|@|^jrequire
<< |filename.ssi|@|^j
% using thlnk alternatives
<url:filename.ssi>require
<< <url:filename.ssi>
```

MARKUP SYNTAX HISTORY

392

13. Notes related to Files-types and Markup Syntax

- 0.38 is substantially current, depreciated 0.16 supported, though file names were changed at 0.37 393
- 0.52** (2007w14/6) declared document type identifier at start of text/document: 395
SiSU 0.52 396
- or, backward compatible using the comment marker: 397
% SiSU 0.38 398
- variations include '**SiSU** (text|master|insert) [version]' and 'sisu-[version]' 399
- 0.51** (2007w13/6) skins changed (simplified), markup unchanged 400
- 0.42** (2006w27/4) * (asterisk) type endnotes, used e.g. in relation to author 401
- 0.38** (2006w15/7) introduced new/alternative notation for headers, e.g. @title: (instead of 0~ title), and accompanying document structure markup, :A,:B,:C,1,2,3 (maps to previous 1,2,3,4,5,6) 402
- 0.37** (2006w09/7) introduced new file naming convention, .sst (text), .ssm (master), .ssi (insert), markup syntax unchanged 403
- 0.35** (2005w52/3) sisupod, zipped content file introduced 404
- 0.23** (2005w36/2) utf-8 for markup file 405
- 0.22** (2005w35/3) image dimensions may be omitted if rmagick is available to be relied upon 406
- 0.20.4** (2005w33/4) header 0~ links 407
- 0.16** (2005w25/2) substantial changes introduced to make markup cleaner, header 0~ title type, and headings [1-6]~ introduced, also percentage sign (%) at start of a text line as comment marker 408

14. SiSU filetypes

SiSU has plaintext and binary filetypes, and can process either type of document.

14.1 .sst .ssm .ssi marked up plain text

SiSU documents are prepared as plain-text (utf-8) files with SiSU markup. They may make reference to and contain images (for example), which are stored in the directory beneath them `_sisu/image`. SiSU plaintext markup files are of three types that may be distinguished by the file extension used: regular text `.sst`; master documents, composite documents that incorporate other text, which can be any regular text or text insert; and inserts the contents of which are like regular text except these are marked `.ssi` and are not processed.

SiSU processing can be done directly against a sisu documents; which may be located locally or on a remote server for which a url is provided.

SiSU source markup can be shared with the command:

```
sisu -s [filename]
```

14.1.1 sisu text - regular files (.sst)

The most common form of document in SiSU, see the section on SiSU markup.

<http://www.jus.uio.no/sisu/sisu_markup>

<http://www.jus.uio.no/sisu/sisu_manual>

14.1.2 sisu master files (.ssm)

Composite documents which incorporate other SiSU documents which may be either regular SiSU text `.sst` which may be generated independently, or inserts prepared solely for the purpose of being incorporated into one or more master documents.

The mechanism by which master files incorporate other documents is described as one of the headings under SiSU markup in the SiSU manual.

Note: Master documents may be prepared in a similar way to regular documents, and processing will occur normally if a `.sst` file is renamed `.ssm` without requiring any other documents; the `.ssm` marker flags that the document may contain other documents.

Note: a secondary file of the composite document is built prior to processing with the same prefix and the suffix `._sst`²²

<http://www.jus.uio.no/sisu/sisu_markup>

<http://www.jus.uio.no/sisu/sisu_manual>

²² `.ssc` (for composite) is under consideration but `._sst` makes clear that this is not a regular file to be worked on, and thus less likely that people will have “accidents”, working on a `.ssc` file that is overwritten by subsequent processing. It may be however that when the resulting file is shared `.ssc` is an appropriate suffix to use.

14.1.3 sisu insert files (.ssi)

Inserts are documents prepared solely for the purpose of being incorporated into one or more master documents. They resemble regular **SiSU** text files except they are ignored by the **SiSU** processor. Making a file a .ssi file is a quick and convenient way of flagging that it is not intended that the file should be processed on its own.

14.2 sisupod, zipped binary container (sisupod.zip, .ssp)

A sisupod is a zipped **SiSU** text file or set of **SiSU** text files and any associated images that they contain (this will be extended to include sound and multimedia-files)

SiSU plaintext files rely on a recognised directory structure to find contents such as images associated with documents, but all images for example for all documents contained in a directory are located in the sub-directory _sisu/image. Without the ability to create a sisupod it can be inconvenient to manually identify all other files associated with a document. A sisupod automatically bundles all associated files with the document that is turned into a pod.

The structure of the sisupod is such that it may for example contain a single document and its associated images; a master document and its associated documents and anything else; or the zipped contents of a whole directory of prepared **SiSU** documents.

The command to create a sisupod is:

```
sisu -S [filename]
```

Alternatively, make a pod of the contents of a whole directory:

```
sisu -S
```

SiSU processing can be done directly against a sisupod; which may be located locally or on a remote server for which a url is provided.

```
<http://www.jus.uio.no/sisu/sisu_commands>
```

```
<http://www.jus.uio.no/sisu/sisu_manual>
```

15. Experimental Alternative Input Representations

15.1 Alternative XML

SiSU offers alternative XML input representations of documents as a proof of concept, experimental feature. They are however not strictly maintained, and incomplete and should be handled with care.

convert from sst to simple xml representations (sax, dom and node):

`sisu -to-sax [filename/wildcard] or sisu -to-sxs [filename/wildcard]`

`sisu -to-dom [filename/wildcard] or sisu -to-sxd [filename/wildcard]`

`sisu -to-node [filename/wildcard] or sisu -to-sxn [filename/wildcard]`

convert to sst from any sisu xml representation (sax, dom and node):

`sisu -from-xml2sst [filename/wildcard [.sxs.xml,.sxd.xml,sxn.xml]]`

or the same:

`sisu -from-sxml [filename/wildcard [.sxs.xml,.sxd.xml,sxn.xml]]`

15.1.1 XML SAX representation

To convert from sst to simple xml (sax) representation:

`sisu -to-sax [filename/wildcard] or sisu -to-sxs [filename/wildcard]`

To convert from any sisu xml representation back to sst

`sisu -from-xml2sst [filename/wildcard [.sxs.xml,.sxd.xml,sxn.xml]]`

or the same:

`sisu -from-sxml [filename/wildcard [.sxs.xml,.sxd.xml,sxn.xml]]`

15.1.2 XML DOM representation

To convert from sst to simple xml (dom) representation:

`sisu -to-dom [filename/wildcard] or sisu -to-sxd [filename/wildcard]`

To convert from any sisu xml representation back to sst

`sisu -from-xml2sst [filename/wildcard [.sxs.xml,.sxd.xml,sxn.xml]]`

or the same:

`sisu -from-sxml [filename/wildcard [.sxs.xml,.sxd.xml,sxn.xml]]`

15.1.3 XML Node representation

To convert from sst to simple xml (node) representation:

`sisu -to-node [filename/wildcard] or sisu -to-sxn [filename/wildcard]`

To convert from any sisu xml representation back to sst

`sisu -from-xml2sst [filename/wildcard [.sxs.xml,.sxd.xml,sxn.xml]]`

or the same:

`sisu -from-sxml [filename/wildcard [.sxs.xml,.sxd.xml,sxn.xml]]`

16. Configuration

16.1 Determining the Current Configuration

Information on the current configuration of **SiSU** should be available with the help command:

```
sisu -v
```

which is an alias for:

```
sisu --help env
```

Either of these should be executed from within a directory that contains sisu markup source documents.

16.2 Configuration files (config.yml)

SiSU configuration parameters are adjusted in the configuration file, which can be used to override the defaults set. This includes such things as which directory interim processing should be done in and where the generated output should be placed.

The **SiSU** configuration file is a yaml file, which means indentation is significant.

SiSU resource configuration is determined by looking at the following files if they exist:

```
./_sisu/sisurc.yml
```

```
~/sisu/sisurc.yml
```

```
/etc/sisu/sisurc.yml
```

The search is in the order listed, and the first one found is used.

In the absence of instructions in any of these it falls back to the internal program defaults.

Configuration determines the output and processing directories and the database access details.

If **SiSU** is installed a sample sisurc.yml may be found in /etc/sisu/sisurc.yml

17. Skins

Skins modify the default appearance of document output on a document, directory, or site wide basis. Skins are looked for in the following locations:

`./_sisu/skin`

`~/.sisu/skin`

`/etc/sisu/skin`

Within the skin directory are the following the default sub-directories for document skins:

`./skin/doc`

`./skin/dir`

`./skin/site`

A skin is placed in the appropriate directory and the file named `skin_[name].rb`

The skin itself is a ruby file which modifies the default appearances set in the program.

17.1 Document Skin

Documents take on a document skin, if the header of the document specifies a skin to be used.

`@skin: skin_united_nations`

17.2 Directory Skin

A directory may be mapped on to a particular skin, so all documents within that directory take on a particular appearance. If a skin exists in the `skin/dir` with the same name as the document directory, it will automatically be used for each of the documents in that directory, (except where a document specifies the use of another skin, in the `skin/doc` directory).

A personal habit is to place all skins within the `doc` directory, and symbolic links as needed from the site, or `dir` directories as required.

17.3 Site Skin

A site skin, modifies the program default skin.

17.4 Sample Skins

With **SiSU** installed sample skins may be found in:

`/etc/sisu/skin/doc` and `/usr/share/doc/sisu/sisu_markup_samples/dfsg/_sisu/skin/doc`

(or equivalent directory) and if `sisu-markup-samples` is installed also under:

`/usr/share/doc/sisu/sisu_markup_samples/non-free/_sisu/skin/doc`

Samples of list.yml and promo.yml (which are used to create the right column list) may be found in: 514

/usr/share/doc/sisu/sisu_markup_samples/dfsg/_sisu/skin/yml (or equivalent directory) 515

18. CSS - Cascading Style Sheets (for html, XHTML and XML)

516

CSS files to modify the appearance of **SiSU** html, XHTML or XML may be placed in the configuration directory: `./_sisu/css`; `~/sisu/css` or; `/etc/sisu/css` and these will be copied to the output directories with the command `sisu -CC`.

517

The basic CSS file for html output is `html.css`, placing a file of that name in directory `_sisu/css` or equivalent will result in the default file of that name being overwritten.

518

HTML: `html.css`

519

XML DOM: `dom.css`

520

XML SAX: `sax.css`

521

XHTML: `xhtml.css`

522

The default homepage may use `homepage.css` or `html.css`

523

Under consideration is to permit the placement of a CSS file with a different name in directory `_sisu/css` or equivalent, and change the default CSS file that is looked for in a skin.²³

524

²³ **SiSU** has worked this way in the past, though this was dropped as it was thought the complexity outweighed the flexibility, however, the balance was rather fine and this behaviour could be reinstated.

19. Organising Content

525

19.1 Directory Structure and Mapping

526

The output directory root can be set in the `sisurc.yml` file. Under the root, subdirectories are made for each directory in which a document set resides. If you have a directory named `poems` or `conventions`, that directory will be created under the output directory root and the output for all documents contained in the directory of a particular name will be generated to subdirectories beneath that directory (`poem` or `conventions`). A document will be placed in a subdirectory of the same name as the document with the filetype identifier stripped (`.sst` `.ssm`)

527

The last part of a directory path, representing the sub-directory in which a document set resides, is the directory name that will be used for the output directory. This has implications for the organisation of document collections as it could make sense to place documents of a particular subject, or type within a directory identifying them. This grouping as suggested could be by subject (`sales_law`, `english_literature`); or just as conveniently by some other classification (X University). The mapping means it is also possible to place in the same output directory documents that are for organisational purposes kept separately, for example documents on a given subject of two different institutions may be kept in two different directories of the same name, under a directory named after each institution, and these would be output to the same output directory. Skins could be associated with each institution on a directory basis and resulting documents will take on the appropriate different appearance.

528

19.2 Organising Content

529

20. Homepages

SiSU is about the ability to auto-generate documents. Home pages are regarded as custom built items, and are not created by **SiSU**. More accurately, **SiSU** has a default home page, which will not be appropriate for use with other sites, and the means to provide your own home page instead in one of two ways as part of a site's configuration, these being:

1. through placing your home page and other custom built documents in the subdirectory `_sisu/home/` (this probably being the easier and more convenient option)
2. through providing what you want as the home page in a skin,

Document sets are contained in directories, usually organised by site or subject. Each directory can/should have its own homepage. See the section on directory structure and organisation of content.

20.1 Home page and other custom built pages in a sub-directory

Custom built pages, including the home page `index.html` may be placed within the configuration directory `_sisu/home/` in any of the locations that is searched for the configuration directory, namely `./_sisu`; `~/_sisu`; `/etc/sisu` From there they are copied to the root of the output directory with the command:

```
sisu -CC
```

20.2 Home page within a skin

Skins are described in a separate section, but basically are a file written in the programming language **Ruby** that may be provided to change the defaults that are provided with `sisu` with respect to individual documents, a directories contents or for a site.

If you wish to provide a homepage within a skin the skin should be in the directory `_sisu/skin/dir` and have the name of the directory for which it is to become the home page. Documents in the directory `commercial_law` would have the homepage modified in `skin_commercial_law.rb`; or the directory `poems` in `skin_poems.rb`

```
class Home
  def homepage
    # place the html content of your homepage here, this will become index.html
    <<HOME <html>
    <head></head>
    <doc>
    <p>this is my new homepage.</p>
    </doc>
    </html>
  end
end
```

21. Markup and Output Examples

542

21.1 Markup examples

543

Current markup examples and document output samples are provided at <http://www.jus.uio.no/sisu/SiSU/2.html>

Some markup with syntax highlighting may be found under <http://www.jus.uio.no/sisu/sample/syntax> but is not as up to date. 545

For some documents hardly any markup at all is required at all, other than a header, and an indication that the levels to be taken into account by the program in generating its output are. 546

21.2 A few book (and other) examples

547



Aukio, by Leena Krohn²⁴

548

“The Wealth of Networks”, Yochai Benkler

549

“The Wealth of Networks”, Yochai Benkler

550

document manifest²⁵

551

html, segmented text

552

html, scroll, document in one

553

pdf, landscape

554

pdf, portrait

555

open document

556

xhtml scroll

557

²⁴ Reproduced with the kind permission of author and artist Leena Krohn, <<http://www.kaapeli.fi/krohn>> “Aukio” is from the work “*Sphinx or Robot*” <http://www.jus.uio.no/sisu/sphinx_or_robot.leena_krohn.1996> which is included as a book example in this section, together with another of the author’s works, “*Tainaron*” <http://www.jus.uio.no/sisu/tainaron.leena_krohn.1998>

²⁵ <http://www.jus.uio.no/sisu/sisu_manual/the_wealth_of_networks.yochai_benkler/sisu_manifest.html>

xml, sax	558
xml, dom	559
plain text utf-8	560
concordance	561
dcc, document content certificate (digests)	562
markup source text	563
zipped markup source pod	564
<i>“Free Culture”, Lawrence Lessig</i>	565
“Free Culture”, Lawrence Lessig	566
document manifest ²⁶	567
html, segmented text	568
html, scroll, document in one	569
pdf, landscape	570
pdf, portrait	571
open document	572
xhtml scroll	573
xml, sax	574
xml, dom	575
plain text utf-8	576
concordance	577
dcc, document content certificate (digests)	578
markup source text	579
zipped markup source pod	580
<i>“Free as in Freedom: Richard Stallman’s Crusade for Free Software”, by Sam Williams</i>	581
“Free as in Freedom: Richard Stallman’s Crusade for Free Software”, by Sam Williams	582
document manifest ²⁷	583
html, segmented text	584
html, scroll, document in one	585
pdf, landscape	586

pdf, portrait	587
open document	588
xhtml scroll	589
xml, sax	590
xml, dom	591
plain text utf-8	592
concordance	593
dcc, document content certificate (digests)	594
markup source text	595
zipped markup source pod	596
 <i>“Free For All: How Linux and the Free Software Movement Undercut the High Tech Titans”,</i> by Peter Wayner	 597
“Free For All: How Linux and the Free Software Movement Undercut the High Tech Titans”, by Peter Wayner	598
document manifest ²⁸	599
html, segmented text	600
html, scroll, document in one	601
pdf, landscape	602
pdf, portrait	603
open document	604
xhtml scroll	605
xml, sax	606
xml, dom	607
plain text utf-8	608
concordance	609
dcc, document content certificate (digests)	610
markup source text	611
zipped markup source pod	612

<i>“The Cathedral and the Bazaar”, by Eric S. Raymond</i>	613
“The Cathedral and the Bazaar”, by Eric S. Raymond	614
document manifest ²⁹	615
html, segmented text	616
html, scroll, document in one	617
pdf, landscape	618
pdf, portrait	619
open document	620
xhtml scroll	621
xml, sax	622
xml, dom	623
plain text utf-8	624
concordance	625
dcc, document content certificate (digests)	626
markup source text	627
zipped markup source pod	628
 <i>“Accelerando”, Charles Stross</i>	 629
“Accelerando”, Charles Stross	630
document manifest ³⁰	631
html, segmented text	632
html, scroll, document in one	633
pdf, landscape	634
pdf, portrait	635
open document	636
xhtml scroll	637
xml, sax	638
xml, dom	639
plain text utf-8	640
concordance	641


²⁶ <http://www.jus.uio.no/sisu/sisu_manual/free_culture.lawrence_lessig/sisu_manifest.html>

²⁷ <http://www.jus.uio.no/sisu/sisu_manual/free_as_in_freedom.richard_stallman_crusade_for_free_software.sam_williams/sisu_manifest.html>

²⁸ <http://www.jus.uio.no/sisu/sisu_manual/free_for_all.peter_wayner/sisu_manifest.html>

²⁹ <http://www.jus.uio.no/sisu/sisu_manual/the_cathedral_and_the_bazaar.eric_s_raymond/sisu_manifest.html>

³⁰ <http://www.jus.uio.no/sisu/sisu_manual/accelerando.charles_stross/sisu_manifest.html>

dcc, document content certificate (digests)	642
markup source text	643
zipped markup source pod	644
“Tainaron”, Leena Krohn	645
“Tainaron”, Leena Krohn	646
document manifest ³¹	647
html, segmented text	648
html, scroll, document in one	649
pdf, landscape	650
pdf, portrait	651
open document	652
xhtml scroll	653
xml, sax	654
xml, dom	655
plain text utf-8	656
concordance	657
dcc, document content certificate (digests)	658
markup source text	659
zipped markup source pod	660
“Sphinx or Robot”, Leena Krohn	661
	662
Sphinx or Robot by Leena Krohn	
“Sphinx or Robot”, Leena Krohn	663
document manifest ³²	664
html, segmented text	665
html, scroll, document in one	666
pdf, landscape	667

pdf, portrait	668
open document	669
xhtml scroll	670
xml, sax	671
xml, dom	672
plain text utf-8	673
concordance	674
dcc, document content certificate (digests)	675
markup source text	676
zipped markup source pod	677
“War and Peace”, Leo Tolstoy, PG Etext 2600	678
“War and Peace”, Leo Tolstoy ³³	679
document manifest ³⁴	680
html, segmented text	681
html, scroll, document in one	682
pdf, landscape	683
pdf, portrait	684
open document	685

³¹ <http://www.jus.uio.no/sisu/sisu_manual/tainaron.leena_krohn.1998/sisu_manifest.html>

³² <http://www.jus.uio.no/sisu/sisu_manual/sphinx_or_robot.leena_krohn.1996/sisu_manifest.html>

³³ <http://www.jus.uio.no/sisu/war_and_peace.leo_tolstoy/toc.html>

The ascii text was taken from Project Gutenberg. The markup transforms required are trivial. Of interest, in this instance I am saved by having alternative syntaxes/(structural modes) for marking up endnotes... as it was possible to do a simple search and replace to make the Project Gutenberg ascii presentation suitable for **SiSU**, using the older endnote markup style. This example instructs the program to use regular expressions, in this example the words: none; none; BOOK|FIRST|SECOND; CHAPTER; occurring at the beginning of a line, to identify what should be treated as different levels of heading in a document (and used to make the table of contents). Note that there was very little markup required after the document headers and Project Gutenberg legal notices. As I presume the legal notices are similar in Project Gutenberg documents, (and I could not bear to think of preparing the same legal notices twice), I moved those to the “skin” for the Project, and these are now represented in the markup by <:insert1> and <:insert2> and the legal notices are available for similar insertion into the next Project Gutenberg text prepared for **SiSU**, should there be one.

I did a stylesheet/skin for the Gutenberg Project, ... I may have to remove. The markup transforms required are trivial. Of interest, in this instance I am saved by having alternative syntaxes/(structural modes) for marking up endnotes... as it is possible to do a simple search and replace to make Project Gutenberg ascii presentations suitable for **SiSU** using the older endnote markup style. There is very little markup required after the document headers and Project Gutenberg legal notices. As I presume the legal notices are similar in Project Gutenberg documents, (and I could not bear to think of preparing the same legal notices twice), I moved those to the “skin” for the Project, and these are now represented in the markup by the <:insert1> and <:insert2> markers and the legal notices are available for similar insertion into the next Project Gutenberg text prepared for **SiSU**, should there be one.

³⁴ <http://www.jus.uio.no/sisu/sisu_manual/war_and_peace.leo_tolstoy/sisu_manifest.html>

xhtml scroll	686
xml, sax	687
xml, dom	688
plain text utf-8	689
concordance	690
dcc, document content certificate (digests)	691
markup source text	692
zipped markup source pod	693
<i>“Don Quixote”, Miguel de Cervantes [Saavedra], translated by John Ormsby, PG Etext 996</i>	694
“Don Quixote”, Miguel de Cervantes [Saavedra]	695
document manifest ³⁵	696
html, segmented text	697
html, scroll, document in one	698
pdf, landscape	699
pdf, portrait	700
open document	701
xhtml scroll	702
xml, sax	703
xml, dom	704
plain text utf-8	705
concordance	706
dcc, document content certificate (digests)	707
markup source text	708
zipped markup source pod	709
<i>“Gulliver’s Travels”, Jonathan Swift, transcribed from the 1892 George Bell and Sons edition by David Price, PG Etext 829</i>	710
“Gulliver’s Travels”, Jonathan Swift	711
document manifest ³⁶	712
html, segmented text	713

html, scroll, document in one	714
pdf, landscape	715
pdf, portrait	716
open document	717
xhtml scroll	718
xml, sax	719
xml, dom	720
plain text utf-8	721
concordance	722
dcc, document content certificate (digests)	723
markup source text	724
zipped markup source pod	725

“Alice’s Adventures in Wonderland”, Lewis Carroll, PG Etext 11 726

“Alice’s Adventures in Wonderland”, Lewis Carroll	727
document manifest ³⁷	728
html, segmented text	729
html, scroll, document in one	730
pdf, landscape	731
pdf, portrait	732
open document	733
xhtml scroll	734
xml, sax	735
xml, dom	736
plain text utf-8	737
concordance	738
dcc, document content certificate (digests)	739
markup source text	740
zipped markup source pod	741

“Through The Looking-Glass”, Lewis Carroll, PG Etext 12 742

“Through The Looking-Glass”, Lewis Carroll	743
--	-----

³⁵ <http://www.jus.uio.no/sisu/sisu_manual/don_quixote.miguel_de_cervantes/sisu_manifest.html>

³⁶ <http://www.jus.uio.no/sisu/sisu_manual/gullivers_travels.jonathan_swift/sisu_manifest.html>

³⁷ <http://www.jus.uio.no/sisu/sisu_manual/alices_adventures_in_wonderland.lewis_carroll/sisu_manifest.html>

document manifest ³⁸	744
html, segmented text	745
html, scroll, document in one	746
pdf, landscape	747
pdf, portrait	748
open document	749
xhtml scroll	750
xml, sax	751
xml, dom	752
plain text utf-8	753
concordance	754
dcc, document content certificate (digests)	755
markup source text	756
zipped markup source pod	757
 <i>“Alice’s Adventures in Wonderland” and “Through The Looking-Glass”, Lewis Carroll, PG Etexts 11 and 12</i>	 758
 “Alice’s Adventures in Wonderland” and “Through The Looking-Glass”, Lewis Carroll	 759
document manifest ³⁹	760
html, segmented text	761
html, scroll, document in one	762
pdf, landscape	763
pdf, portrait	764
open document	765
xhtml scroll	766
xml, sax	767
xml, dom	768
plain text utf-8	769
concordance	770
dcc, document content certificate (digests)	771
markup source text	772
zipped markup source pod	773

³⁸ <http://www.jus.uio.no/sisu/sisu_manual/through_the_looking_glass.lewis_carroll/sisu_manifest.html>

³⁹ <http://www.jus.uio.no/sisu/sisu_manual/alices_adventures_in_wonderland_and_through_the_looking_glass.lewis_carroll/sisu_manifest.html>

“Gnu Public License 2”, (GPL 2) Free Software Foundation	774
“Gnu Public License 2”, (GPL 2) Free Software Foundation	775
document manifest ⁴⁰	776
html, segmented text	777
html, scroll, document in one	778
pdf, landscape	779
pdf, portrait	780
open document	781
xhtml scroll	782
xml, sax	783
xml, dom	784
plain text utf-8	785
concordance	786
dcc, document content certificate (digests)	787
markup source text	788
zipped markup source pod	789
 “Gnu Public License v3 - Third discussion draft”, (GPLv3) Free Software Foundation	 790
“Gnu Public License 3 - Third discussion draft”, (GPL v3 draft3) Free Software Foundation	791
document manifest ⁴¹	792
html, segmented text	793
html, scroll, document in one	794
pdf, landscape	795
pdf, portrait	796
open document	797
xhtml scroll	798
xml, sax	799
xml, dom	800
plain text utf-8	801
concordance	802

dcc, document content certificate (digests)	803
markup source text	804
zipped markup source pod	805
“Debian Social Contract”	806
“Debian Social Contract”	807
document manifest ⁴²	808
html, segmented text	809
html, scroll, document in one	810
pdf, landscape	811
pdf, portrait	812
open document	813
xhtml scroll	814
xml, sax	815
xml, dom	816
plain text utf-8	817
concordance	818
dcc, document content certificate (digests)	819
markup source text	820
zipped markup source pod	821
“Debian Constitution v1.3”, (simple/default markup)	822
“Debian Constitution v1.3”	823
document manifest ⁴³	824
html, segmented text	825
html, scroll, document in one	826
pdf, landscape	827
pdf, portrait	828
open document	829
xhtml scroll	830

xml, sax	831
xml, dom	832
plain text utf-8	833
concordance	834
dcc, document content certificate (digests)	835
markup source text	836
zipped markup source pod	837

“Debian Constitution v1.3”, (markup adjusted for output to more closely match the original) 838

“Debian Constitution v1.3”, (markup adjusted for output to more closely match the original) 839

document manifest ⁴⁴	840
html, segmented text	841
html, scroll, document in one	842
pdf, landscape	843
pdf, portrait	844
open document	845
xhtml scroll	846
xml, sax	847
xml, dom	848
plain text utf-8	849
concordance	850
dcc, document content certificate (digests)	851
markup source text	852
zipped markup source pod	853

“Debian Constitution v1.2”, (simple/default markup) 854

“Debian Constitution v1.2 (more translations)” 855

document manifest ⁴⁵	856
---------------------------------	-----

⁴⁰ <http://www.jus.uio.no/sisu/sisu_manual/gpl2.fsf/sisu_manifest.html>

⁴¹ <http://www.jus.uio.no/sisu/sisu_manual/gpl3_draft3.fsf/sisu_manifest.html>

⁴² <http://www.jus.uio.no/sisu/sisu_manual/debian_social_contract.v1.1/sisu_manifest.html>

⁴³ <http://www.jus.uio.no/sisu/sisu_manual/debian_constitution.v1.3/sisu_manifest.html>

⁴⁴ <http://www.jus.uio.no/sisu/sisu_manual/debian_constitution.v1.3.adjusted/sisu_manifest.html>

⁴⁵ <http://www.jus.uio.no/sisu/sisu_manual/debian_constitution.v1.2/sisu_manifest.html>

html, segmented text	857
html, scroll, document in one	858
pdf, landscape	859
pdf, portrait	860
open document	861
xhtml scroll	862
xml, sax	863
xml, dom	864
plain text utf-8	865
concordance	866
dcc, document content certificate (digests)	867
markup source text	868
zipped markup source pod	869
<i>“Debian Constitution v1.2”, (markup adjusted for output to more closely match the original)</i>	870
“Debian Constitution (more translations)”, (markup adjusted for output to more closely match the original)	871
document manifest ⁴⁶	872
html, segmented text	873
html, scroll, document in one	874
pdf, landscape	875
pdf, portrait	876
open document	877
xhtml scroll	878
xml, sax	879
xml, dom	880
plain text utf-8	881
concordance	882
dcc, document content certificate (digests)	883
markup source text	884
zipped markup source pod	885

“A Uniform Sales Terminology”, Vikki Rogers and Albert Kritzer	886
“A Uniform Sales Terminology”, Vikki Rogers and Albert Kritzer	887
document manifest ⁴⁷	888
html, segmented text	889
html, scroll, document in one	890
pdf, landscape	891
pdf, portrait	892
open document	893
xhtml scroll	894
xml, sax	895
xml, dom	896
plain text utf-8	897
concordance	898
dcc, document content certificate (digests)	899
markup source text	900
zipped markup source pod	901
“The Autonomous Contract” 1997 - markup sample	902
“The Autonomous Contract” 1997 - markup sample	903
document manifest ⁴⁸	904
html, segmented text	905
html, scroll, document in one	906
pdf, landscape	907
pdf, portrait	908
open document	909
xhtml scroll	910
xml, sax	911
xml, dom	912
plain text utf-8	913
concordance	914

dcc, document content certificate (digests)	915
markup source text	916
zipped markup source pod	917
<i>“The Autonomous Contract Revisited” - markup sample</i>	918
“The Autonomous Contract Revisited” - markup sample ⁴⁹	919
document manifest ⁵⁰	920
html, segmented text	921
html, scroll, document in one	922
pdf, landscape	923
pdf, portrait	924
open document	925
xhtml scroll	926
xml, sax	927
xml, dom	928
plain text utf-8	929
concordance	930
dcc, document content certificate (digests)	931
markup source text	932
zipped markup source pod	933

“United Nations Convention on Contracts for the International Sale of Goods”“United Nations Convention on Contracts for the International Sale of Goods”⁵¹document manifest⁵²

html, segmented text

html, scroll, document in one

pdf, landscape

pdf, portrait

open document

xhtml scroll

xml, sax

xml, dom

plain text utf-8

concordance

dcc, document content certificate (digests)

markup source text

zipped markup source pod

⁴⁶ <http://www.jus.uio.no/sisu/sisu_manual/debian_constitution_v1.2.adjusted/sisu_manifest.html>⁴⁷ <http://www.jus.uio.no/sisu/sisu_manual/a_uniform_international_sales_terminology.vikki_rogers.and.albert_kritzer/sisu_manifest.html>⁴⁸ <http://www.jus.uio.no/sisu/sisu_manual/the_autonomous_contract.amissah.19970710/sisu_manifest.html>⁴⁹ <http://www.jus.uio.no/sisu/autonomy_markup0/toc.html>

alternative markup variations revolving around endnotes

(i) as above, markup with embedded endnotes, and header list of words/phrases to emphasise

<http://www.jus.uio.no/sisu/sample/syntax/autonomy_markup0.sst.html><http://www.jus.uio.no/sisu/sample/markup/autonomy_markup0.sst>

(ii) Again markup with embedded endnotes, but font faces changed within paragraphs rather than in header as in i

<http://www.jus.uio.no/sisu/sample/syntax/autonomy_markup1.sst.html><http://www.jus.uio.no/sisu/sample/markup/autonomy_markup1.sst>

(iii) Markup with endnote placemarks within paragraphs, the endnotes following the paragraph that contains them

<http://www.jus.uio.no/sisu/sample/syntax/autonomy_markup2.sst.html><http://www.jus.uio.no/sisu/sample/markup/autonomy_markup2.sst>

(iv) Another alternative is to place the marked up endnotes sequentially and at the end of the text. This also works. The paragraph variant iii is perhaps easier to visually check should there be missing endnotes; but this variant iv may better suit the conversion of alternatively pre-prepared documents.

⁵⁰ <http://www.jus.uio.no/sisu/sisu_manual/autonomy_markup0/sisu_manifest.html>⁵¹ <http://www.jus.uio.no/sisu/un_contracts_international_sale_of_goods_convention_1980/toc.html>

This example instructs the program to use regular expressions, in this example the words: Part, Chapter, Section, Article occurring at the beginning of a line, to identify what should be treated as different levels of heading in a document (and used to make the table of contents).

This example instructs the program to use regular expressions, in this example the words: Part, Chapter, Section, Article occurring at the beginning of a line, to identify what should be treated as different levels of heading in a document (and used to make the table of contents).

⁵² <http://www.jus.uio.no/sisu/sisu_manual/un_contracts_international_sale_of_goods_convention_1980/sisu_manifest.html>

PECL the “Principles of European Contract Law”	950
“Principles of European Contract Law”	951
document manifest ⁵³	952
html, segmented text	953
html, scroll, document in one	954
pdf, landscape	955
pdf, portrait	956
open document	957
xhtml scroll	958
xml, sax	959
xml, dom	960
plain text utf-8	961
concordance	962
dcc, document content certificate (digests)	963
markup source text	964
zipped markup source pod	965
21.3 SQL - PostgreSQL, SQLite	966
A Sample search form is available at < http://search.sisudoc.org >	967
A few canned searches, showing object numbers. Search for:	968
English documents matching Linux OR Debian	969
GPL OR Richard Stallman	970
invention OR innovation in English language	971
copyright in English language documents	972
Note that the searches done in this form are case sensitive.	973
Expand those same searches, showing the matching text in each document:	974
English documents matching Linux OR Debian	975
GPL OR Richard Stallman	976
invention OR innovation in English language	977
copyright in English language documents	978

Note you may set results either for documents matched and object number locations within each matched document meeting the search criteria; or display the names of the documents matched along with the objects (paragraphs) that meet the search criteria.⁵⁴ 979

21.4 Lex Mercatoria as an example 980

There is quite a bit to peruse if you explore the site Lex Mercatoria: 981

`<http://www.lexmercatoria.org/>` ⁵⁵ 982

or perhaps: 983

`<http://lexmercatoria.org/treaties.and.organisations/lm.chronological>` ⁵⁶ 984

21.5 For good measure the markup for a document with lots of (simple) tables 985

SiSU is not optimised for table making, but does handle simple tables. 986

- SiSU marked up file with tables ⁵⁷ 987
- Output of table file example ⁵⁸ 988

21.6 And a link to the output of a reported case 989

`<http://www.jus.uio.no/lm/england.fothergill.v.monarch.airlines.hl.1980/toc.html>` 990

⁵³ `<http://www.jus.uio.no/sisu/sisu_manual/eu_contract_principles_parts_1_to_3_2002/sisu_manifest.html>`

⁵⁴ of this feature when demonstrated to an IBM software innovations evaluator in 2004 he said to paraphrase: this could be of interest to us. We have large document management systems, you can search hundreds of thousands of documents and we can tell you which documents meet your search criteria, but there is no way we can tell you without opening each document where within each your matches are found.

⁵⁵ `<http://www.jus.uio.no/lm/index>`

⁵⁶ `<http://www.jus.uio.no/lm/treaties.and.organisations/lm.chronological>`

⁵⁷ `<http://www.jus.uio.no/sisu/sample/syntax/un_conventions_membership_status.sst.html>`
`<http://www.jus.uio.no/sisu/sample/markup/un_conventions_membership_status.sst>`

⁵⁸ `<http://www.jus.uio.no/lm/un_conventions_membership_status/toc.html>`

22. A Checklist of Output Features

991

This table gives an indication of the features that are available for various forms of output of SiSU .⁵⁹

992

993

feature	txt	ltx/pdf	HTML	XHTML	XML/s	XML/d	ODF	SQLite	pgSQL
headings	*	*	*	*	*	*	*	*	*
footnotes	*	*	*	*	*	*	*	*	*
bold, under- score, italics	.	*	*	*	*	*	*	*	*
strikethrough	.	*	*	*	*	*	*		
superscript, sub- script	.	*	*	*	*	*	*		
extended ascii set (utf-8)	*	*	*	*	*	*	*		*
indents	*	*	*	*	*	*	*		
bullets	.	*	*	*	*	*	.		
groups									
* tables	*	*	*
* poem	*	*	*	.	.	.	*	.	.
* code	*	*	*	.	.	.	*	.	.
url	*	*	*	*	*	*	*	.	.
links	*	*	*	*	*	*	*	.	.
images	-	*	*	T	T	T	*	T	T
image caption	-	*	*						
table of contents		*	*	*	*	*	.		
page	-	*	*	*	*	*	t		
header/footer?									
line break	*	*	*	*	*	*	*		
page break		*					*		
segments			*						
skins	*	*	*	*	*	*			
ocn	.	*	*	*	*	*	-?	*	*
auto-heading	*	*	*	*	*	*	*	*	*
numbers									
minor list num- bering	*	*	*	*	*	*	*	*	*
special charac- ters	.	.	.						

994

Done

* yes/done

. partial

- not available/appropriate

Not Done

T task todo

t lesser task/todo

not done

⁵⁹ updated for sisu-0.36.6 on 2006-01-23

23. SiSU Search - Introduction

995

SiSU output can easily and conveniently be indexed by a number of standalone indexing tools, such as Lucene, Hyperestraier. 996

Because the document structure of sites created is clearly defined, and the text object citation system is available hypothetically at least, for all forms of output, it is possible to search the sql database, and either read results from that database, or just as simply map the results to the html output, which has richer text markup. 997

In addition to this **SiSU** has the ability to populate a relational sql type database with documents at an object level, with objects numbers that are shared across different output types, which make them searchable with that degree of granularity. Basically, your match criteria is met by these documents and at these locations within each document, which can be viewed within the database directly or in various output formats. 998

24. SQL

999

24.1 populating SQL type databases

1000

SiSU feeds sisu markup documents into sql type databases PostgreSQL⁶⁰ and/or SQLite⁶¹ database together with information related to document structure.

1001

This is one of the more interesting output forms, as all the structural data of the documents are retained (though can be ignored by the user of the database should they so choose). All site texts/documents are (currently) streamed to four tables:

1002

- one containing semantic (and other) headers, including, title, author, subject, (the Dublin Core...);
- another the substantive texts by individual “paragraph” (or object) - along with structural information, each paragraph being identifiable by its paragraph number (if it has one which almost all of them do), and the substantive text of each paragraph quite naturally being searchable (both in formatted and clean text versions for searching); and
- a third containing endnotes cross-referenced back to the paragraph from which they are referenced (both in formatted and clean text versions for searching).
- a fourth table with a one to one relation with the headers table contains full text versions of output, eg. pdf, html, xml, and ascii.

1003

1004

1005

1006

There is of course the possibility to add further structures.

1007

At this level **SiSU** loads a relational database with documents chunked into objects, their smallest logical structurally constituent parts, as text objects, with their object citation number and all other structural information needed to construct the document. Text is stored (at this text object level) with and without elementary markup tagging, the stripped version being so as to facilitate ease of searching.

1008

Being able to search a relational database at an object level with the **SiSU** citation system is an effective way of locating content generated by **SiSU**. As individual text objects of a document stored (and indexed) together with object numbers, and all versions of the document have the same numbering, complex searches can be tailored to return just the locations of the search results relevant for all available output formats, with live links to the precise locations in the database or in html/xml documents; or, the structural information provided makes it possible to search the full contents of the database and have headings in which search content appears, or to search only headings etc. (as the Dublin Core is incorporated it is easy to make use of that as well).

1009

⁶⁰ <<http://www.postgresql.org/>>
 <<http://advocacy.postgresql.org/>>
 <<http://en.wikipedia.org/wiki/Postgresql>>
⁶¹ <<http://www.hwaci.com/sw/sqlite/>>
 <<http://en.wikipedia.org/wiki/Sqlite>>

25. Postgresql 1010

25.1 Name 1011

SiSU - Structured information, Serialized Units - a document publishing system, postgresql dependency package 1012

25.2 Description 1013

Information related to using postgresql with sisu (and related to the sisu_postgresql dependency package, which is a dummy package to install dependencies needed for **SiSU** to populate a postgresql database, this being part of **SiSU** - man sisu). 1014

25.3 Synopsis 1015

sisu -D [instruction] [filename/wildcard if required] 1016

sisu -D -pg -[instruction] [filename/wildcard if required] 1017

25.4 Commands 1018

Mappings to two databases are provided by default, postgresql and sqlite, the same commands are used within sisu to construct and populate databases however -d (lowercase) denotes sqlite and -D (uppercase) denotes postgresql, alternatively -sqlite or -pgsql may be used 1019

-D or **-pgsql** may be used interchangeably. 1020

25.4.1 create and destroy database 1021

-pgsql -createall 1022

initial step, creates required relations (tables, indexes) in existing (postgresql) database (a database should be created manually and given the same name as working directory, as requested) (rb.dbi)

sisu -D -createdb 1023

creates database where no database existed before

sisu -D -create 1024

creates database tables where no database tables existed before

sisu -D -Dropall 1025

destroys database (including all its content)! kills data and drops tables, indexes and database associated with a given directory (and directories of the same name).

sisu -D -recreate 1026

destroys existing database and builds a new empty database structure

25.4.2 import and remove documents

1027

sisu -D -import -v [filename/wildcard]

1028

populates database with the contents of the file. Imports documents(s) specified to a postgresql database (at an object level).

sisu -D -update -v [filename/wildcard]

1029

updates file contents in database

sisu -D -remove -v [filename/wildcard]

1030

removes specified document from postgresql database.

26. Sqlite 1031

26.1 Name 1032

SiSU - Structured information, Serialized Units - a document publishing system. 1033

26.2 Description 1034

Information related to using sqlite with sisu (and related to the sisu_sqlite dependency package, which is a dummy package to install dependencies needed for **SiSU** to populate an sqlite database, this being part of **SiSU** - man sisu). 1035

26.3 Synopsis 1036

`sisu -d [instruction] [filename/wildcard if required]` 1037

`sisu -d -(sqlite|pg) -[instruction] [filename/wildcard if required]` 1038

26.4 Commands 1039

Mappings to two databases are provided by default, postgresql and sqlite, the same commands are used within sisu to construct and populate databases however -d (lowercase) denotes sqlite and -D (uppercase) denotes postgresql, alternatively -sqlite or -pgsql may be used 1040

-d or **-sqlite** may be used interchangeably. 1041

26.4.1 create and destroy database 1042

-sqlite -createall 1043

initial step, creates required relations (tables, indexes) in existing (sqlite) database (a database should be created manually and given the same name as working directory, as requested) (rb.dbi)

sisu -d -createdb 1044

creates database where no database existed before

sisu -d -create 1045

creates database tables where no database tables existed before

sisu -d -dropall 1046

destroys database (including all its content)! kills data and drops tables, indexes and database associated with a given directory (and directories of the same name).

sisu -d -recreate 1047

destroys existing database and builds a new empty database structure

26.4.2 import and remove documents

1048

sisu -d -import -v [filename/wildcard]

1049

populates database with the contents of the file. Imports documents(s) specified to an sqlite database (at an object level).

sisu -d -update -v [filename/wildcard]

1050

updates file contents in database

sisu -d -remove -v [filename/wildcard]

1051

removes specified document from sqlite database.

27. Introduction

27.1 Search - database frontend sample, utilising database and SiSU features, including object citation numbering (backend currently PostgreSQL)

Sample search frontend ⁶² A small database and sample query front-end (search from) that makes use of the citation system, object citation numbering to demonstrates functionality.⁶³

SiSU can provide information on which documents are matched and at what locations within each document the matches are found. These results are relevant across all outputs using object citation numbering, which includes html, XML, LaTeX, PDF and indeed the SQL database. You can then refer to one of the other outputs or in the SQL database expand the text within the matched objects (paragraphs) in the documents matched.

Note you may set results either for documents matched and object number locations within each matched document meeting the search criteria; or display the names of the documents matched along with the objects (paragraphs) that meet the search criteria.⁶⁴

sisu -F --webserv-webrick

builds a cgi web search frontend for the database created

The following is feedback on the setup on a machine provided by the help command:

```
sisu --help sql
Postgresql
user:      ralph
current db set:  SiSU_sisu
port:      5432
dbi connect:  DBI:Pg:database=SiSU_sisu;port=5432
sqlite
current db set:  /home/ralph/sisu_www/sisu/sisu_sqlite.db
dbi connect  DBI:SQLite:/home/ralph/sisu_www/sisu/sisu_sqlite.db
```

Note on databases built

By default, [unless otherwise specified] databases are built on a directory basis, from collections of documents within that directory. The name of the directory you choose to work from is used as the database name, i.e. if you are working in a directory called /home/ralph/ebook the database SiSU_ebook is used. [otherwise a manual mapping for the collection is necessary]

27.2 Search Form

sisu -F

⁶² <<http://search.sisudoc.org>>

⁶³ (which could be extended further with current back-end). As regards scaling of the database, it is as scalable as the database (here PostgreSQL) and hardware allow.

⁶⁴ of this feature when demonstrated to an IBM software innovations evaluator in 2004 he said to paraphrase: this could be of interest to us. We have large document management systems, you can search hundreds of thousands of documents and we can tell you which documents meet your search criteria, but there is no way we can tell you without opening each document where within each your matches are found.

generates a sample search form, which must be copied to the web-server cgi directory

sisu -F –webserv-webrick

1065

generates a sample search form for use with the webrick server, which must be copied to the web-server cgi directory

sisu -Fv

1066

as above, and provides some information on setting up hyperestraier

sisu -W

1067

starts the webrick server which should be available wherever sisu is properly installed

The generated search form must be copied manually to the webserver directory as instructed

1068

28. Hyperestraier

See the documentation for hyperestraier:

```
<http://hyperestraier.sourceforge.net/>
```

```
/usr/share/doc/hyperestraier/index.html
```

```
man estcmd
```

on `sisu_hyperestraier`:

```
man sisu_hyperestraier
```

```
/usr/share/doc/sisu/sisu_markup/sisu_hyperestraier/index.html
```

NOTE: the examples that follow assume that `sisu` output is placed in the directory `/home/ralph/sisu_www`

(A) to generate the index within the webserver directory to be indexed:

```
estcmd gather -sd [index name] [directory path to index]
```

the following are examples that will need to be tailored according to your needs:

```
cd /home/ralph/sisu_www
```

```
estcmd gather -sd casket /home/ralph/sisu_www
```

you may use the ‘find’ command together with ‘egrep’ to limit indexing to particular document collection directories within the web server directory:

```
find /home/ralph/sisu_www -type f | egrep '/home/ralph/sisu_www/sisu/.+?.html$' | estcmd  
gather -sd casket -
```

Check which directories in the webserver/output directory (`~/sisu_www` or elsewhere depending on configuration) you wish to include in the search index.

As `sisu` duplicates output in multiple file formats, it is probably preferable to limit the `estraier` index to `html` output, and as it may also be desirable to exclude files ‘`plain.txt`’, ‘`toc.html`’ and ‘`concordance.html`’, as these duplicate information held in other `html` output e.g.

```
find /home/ralph/sisu_www -type f | egrep '/sisu_www/(sisu|bookmarks)/.+?.html$' |  
egrep -v '(doc|concordance).html$' | estcmd gather -sd casket -
```

from your current document preparation/markup directory, you would construct a `rune` along the following lines:

```
find /home/ralph/sisu_www -type f | egrep '/home/ralph/sisu_www/([specify first direc-  
tory for inclusion])[specify second directory for inclusion][another directory for inclu-  
sion? ...])/.+?.html$' | egrep -v '(doc|concordance).html$' | estcmd gather -sd /home/ralph/sisu_www/cas-  
ket -
```

(B) to set up the search form

(i) copy `estseek.cgi` to your `cgi` directory and set file permissions to 755:

```
sudo cp -vi /usr/lib/estraier/estseek.cgi /usr/lib/cgi-bin
```

```
sudo chmod -v 755 /usr/lib/cgi-bin/estseek.cgi
```

```
sudo cp -v /usr/share/hyperestraier/estseek.* /usr/lib/cgi-bin 1094
```

[see estraier documentation for paths] 1095

(ii) edit estseek.conf, with attention to the lines starting ‘indexname:’ and ‘replace:’:

```
indexname: /home/ralph/sisu_www/casket 1097
```

```
replace: file : ///home/ralph/sisu_www{!} 1098
```

```
replace: /index.html?${!}/ 1099
```

(C) to test using webrick, start webrick: 1100

```
sisu -W 1101
```

and try open the url: <<http://localhost:8081/cgi-bin/estseek.cgi>> 1102

29. sisu_webrick	1103
29.1 Name	1104
SiSU - Structured information, Serialized Units - a document publishing system	1105
29.2 Synopsis	1106
sisu_webrick [port]	1107
or	1108
sisu -W [port]	1109
29.3 Description	1110
sisu_webrick is part of SiSU (man sisu) sisu_webrick starts Ruby 's Webrick web-server and points it to the directories to which SiSU output is written, providing a list of these directories (assuming SiSU is in use and they exist).	1111
The default port for sisu_webrick is set to 8081, this may be modified in the yaml file: ~ /.sisu/sisurc.yml a sample of which is provided as /etc/sisu/sisurc.yml (or in the equivalent directory on your system).	1112
29.4 Summary of man page	1113
sisu_webrick, may be started on it's own with the command: sisu_webrick [port] or using the sisu command with the -W flag: sisu -W [port]	1114
where no port is given and settings are unchanged the default port is 8081	1115
29.5 Document processing command flags	1116
sisu -W [port] starts Ruby Webrick web-server, serving SiSU output directories, on the port provided, or if no port is provided and the defaults have not been changed in ~ /.sisu/sisurc.yml then on port 8081	1117
29.6 Further information	1118
For more information on SiSU see: < http://www.jus.uio.no/sisu/ >	1119
or man sisu	1120
29.7 Author	1121
Ralph Amissah ralph@amissah.com or ralph.amissah@gmail.com	1122

29.8 SEE ALSO

sisu(1)	1123
sisu_vim(7)	1124
sisu(8)	1125
	1126

30. Remote Source Documents

1127

SiSU processing instructions can be run against remote source documents by providing the url of the documents against which the processing instructions are to be carried out. The remote **SiSU** documents can either be sisu marked up files in plaintext .sst or .ssm or; zipped sisu files, sisupod.zip or filename.ssp

1128

.sst / .ssm - sisu text files

1129

SiSU can be run against source text files on a remote machine, provide the processing instruction and the url. The source file and any associated parts (such as images) will be downloaded and generated locally.

1130

1131

```
sisu -3 http://[provide url to valid .sst or .ssm file]
```

Any of the source documents in the sisu examples page can be used in this way, see <http://www.jus.uio.no/sisu/SiSU/2.htm> and use the url for the desired document.

NOTE: to set up a remote machine to serve **SiSU** documents in this way, images should be in the directory relative to the document source ../_sisu/image

1133

sisupod - zipped sisu files

1134

A sisupod is the zipped content of a sisu marked up text or texts and any other associated parts to the document such as images.

1135

SiSU can be run against a sisupod on a (local or) remote machine, provide the processing instruction and the url, the sisupod will be downloaded and the documents it contains generated locally.

1136

1137

```
sisu -3 http://[provide url to valid sisupod.zip or .ssp file]
```

Any of the source documents in the sisu examples page can be used in this way, see <http://www.jus.uio.no/sisu/SiSU/2.htm> and use the url for the desired document.

REMOTE DOCUMENT OUTPUT

1139

31. Remote Output

1140

Once properly configured **SiSU** output can be automatically posted once generated to a designated remote machine using either rsync, or scp. 1141

In order to do this some ssh authentication agent and keychain or similar tool will need to be configured. Once that is done the placement on a remote host can be done seamlessly with the -r (for scp) or -R (for rsync) flag, which may be used in conjunction with other processing flags, e.g. 1142

sisu -3R sisu_remote.sst 1143

31.1 commands

1144

-R [filename/wildcard]

1145

copies sisu output files to remote host using rsync. This requires that sisurc.yml has been provided with information on hostname and username, and that you have your “keys” and ssh agent in place. Note the behavior of rsync different if -R is used with other flags from if used alone. Alone the rsync --delete parameter is sent, useful for cleaning the remote directory (when -R is used together with other flags, it is not). Also see -r

-r [filename/wildcard]

1146

copies sisu output files to remote host using scp. This requires that sisurc.yml has been provided with information on hostname and username, and that you have your “keys” and ssh agent in place. Also see -R

31.2 configuration

1147

[expand on the setting up of an ssh-agent / keychain] 1148

32. Remote Servers

1149

As **SiSU** is generally operated using the command line, and works within a Unix type environment, **SiSU** the program and all documents can just as easily be on a remote server, to which you are logged on using a terminal, and commands and operations would be pretty much the same as they would be on your local machine.

1150

DOWNLOAD

1151

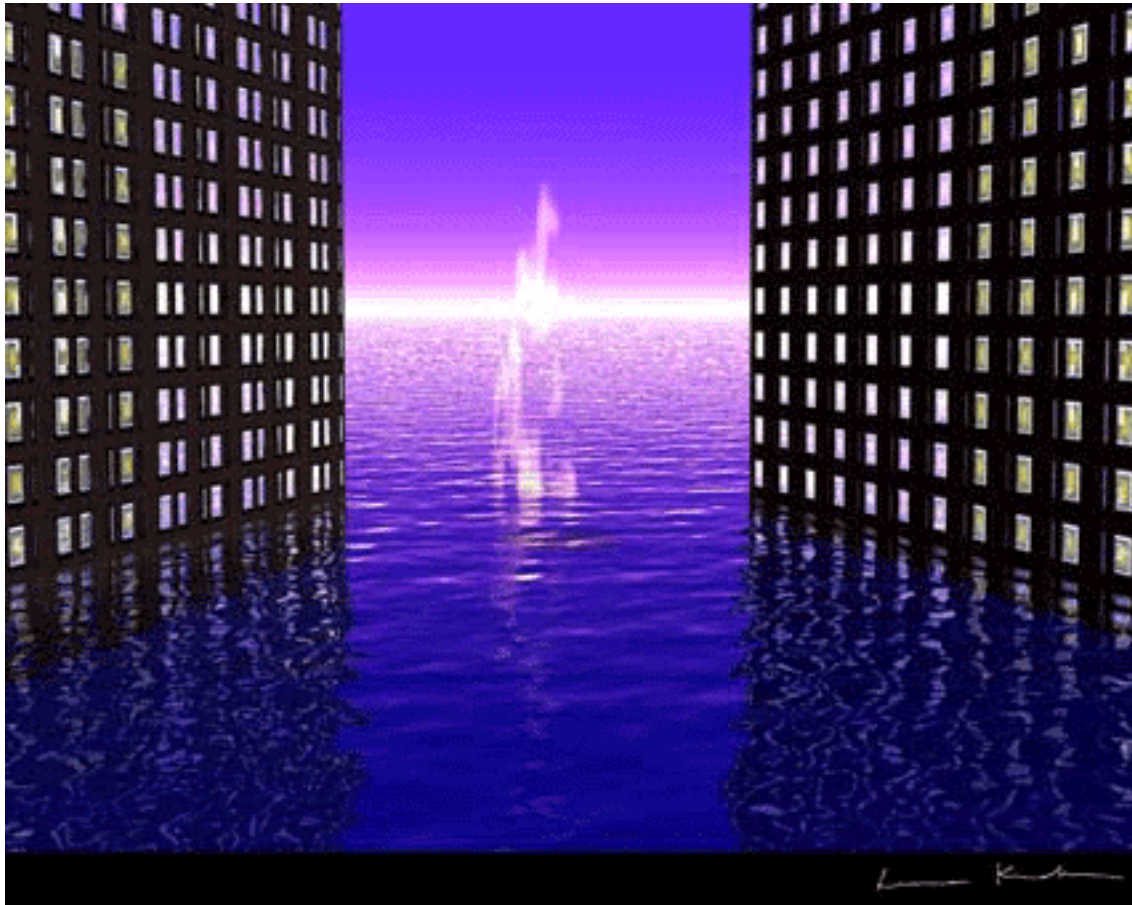
33. Download SiSU - Linux/Unix	1152
SiSU Current Version - Linux/Unix	1153
Source (tarball tar.gz)	1154
Download the latest version of SiSU (and SiSU markup samples): ⁶⁵	1155
• <code>sisu_0.59.1.orig.tar.gz</code> (of 2007-09-23:38/7) ⁶⁶	1156
cgi generated sample search form	1157
order results on files of the same title, in multiple files (with different filenames)	1158
postgresql, character case sensitivity, control, on/off	1159
tail decoration, gplv3 and sisu info	1160
texinfo/info (pinfo) module starts to do something vaguely useful again [not a much used module, testing required]	1161
print XML rendition of document structure to screen -T	1162
help on environment visited, <code>sisu -V</code>	1163
<code>sisurc.yml</code> default, color set to true [apologies if this causes anyone any inconvenience, it is configurable in <code>sisurc.yml</code>]	1164
help and man pages, some work man(8) related	1165
<code>sisu-install</code> (install ruby rant script renamed) and permissions set to executable	1166
• <code>sisu-markup-samples_1.0.8.orig.tar.gz</code> (of 2007-08-19:33/7) ⁶⁷	1167
For installation notes see <http://www.jus.uio.no/sisu/SiSU/download.html>	1168
For changelogs see <http://www.jus.uio.no/sisu/SiSU/changelog.html>	1169

⁶⁵ Breakage and Fixes Report

[<http://www.jus.uio.no/sisu/SiSU/breakage_and_fixes.html>](http://www.jus.uio.no/sisu/SiSU/breakage_and_fixes.html)

⁶⁶ [<http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu_0.59.1.orig.tar.gz>](http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu_0.59.1.orig.tar.gz)

⁶⁷ [<http://www.jus.uio.no/sisu/archive/pool/non-free/s/sisu-markup-samples/sisu-markup-samples_1.0.7.orig.tar.gz>](http://www.jus.uio.no/sisu/archive/pool/non-free/s/sisu-markup-samples/sisu-markup-samples_1.0.7.orig.tar.gz)



Tulva, by Leena Krohn ⁶⁸

1170

Git (source control management)

1171

Git repository currently at:

1172

- `git clone git://sisudoc.org/git/sisu/`
- `<http://search.sisudoc.org/cgi-bin/gitweb.cgi?p=sisu;a=summary>`

1173

1174

Debian

1175

This section contains information on the latest **SiSU** release. For installation notes see http://www.jus.uio.no/sisu/sisu_download/installation.html

1176

SiSU is updated fairly regularly in **Debian** testing and unstable, and should be available therefrom.

1177

To add this archive, should you still choose to do so, add the following lines to your `/etc/apt/sources.list`

1178

1179

⁶⁸ Reproduced with the kind permission of author and artist Leena Krohn, <http://www.kaapeli.fi/krohn> Tulva is from the work Sphinx or Robot http://www.jus.uio.no/sisu/sphinx_or_robot.leena_krohn.1996 other works available online include Tainaron http://www.jus.uio.no/sisu/tainaron.leena_krohn.1998, these two works can be found in the book sample section

deb <http://www.jus.uio.no/sisu/archive> unstable main non-free
 deb-src <http://www.jus.uio.no/sisu/archive> unstable main non-free

Source

- [sisu_0.59.1.orig.tar.gz](#)⁶⁹
- [sisu_0.59.1-1.diff.gz](#)⁷⁰
- [sisu_0.59.1-1.dsc](#)⁷¹

Debs

- [sisu_0.59.1-1_all.deb](#)⁷²
- [sisu-complete_0.59.1-1_all.deb](#)⁷³
- [sisu-pdf_0.59.1-1_all.deb](#)⁷⁴
- [sisu-postgresql_0.59.1-1_all.deb](#)⁷⁵
- [sisu-sqlite_0.59.1-1_all.deb](#)⁷⁶

For changelogs see:

<<http://www.jus.uio.no/sisu/SiSU/changelog.html>>

<http://www.jus.uio.no/sisu/sisu_changelog/changelog.html>

non-free

Book markup samples have been moved to non-free as the substantive text of the documents

<http://www.jus.uio.no/sisu/SiSU/2.html#sample>

⁶⁹ <http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu_0.59.1.orig.tar.gz>

⁷⁰ <http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu_0.59.1-1.diff.gz>

⁷¹ <http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu_0.59.1-1.dsc>

⁷² <http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu_0.59.1-1_all.deb>

sisu, the base code, (the main package on which the others depend), without any dependencies other than ruby (and for convenience the ruby webrick web server), this generates a number of types of output on its own, other packages provide additional functionality, and have their dependencies

Depends: ruby (≥1.8.2), libwebrick-ruby

Recommends: sisu-pdf, sisu-sqlite, sisu-postgresql, sisu-examples, vim-sisu, librmagick-ruby, trang, tidy, libtidy, librexml-ruby, zip, unzip, openssl

⁷³ <http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu-complete_0.59.1-1_all.deb>

a package that pulls in other packages to build the whole of sisu (excluding sisu-examples)

Depends: ruby (≥1.8.2), sisu, sisu-pdf, sisu-postgresql, sisu-remote, sisu-sqlite, vim-sisu

Recommends: sisu-examples

⁷⁴ <http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu-pdf_0.59.1-1_all.deb>

dependencies used by sisu to produce pdf from LaTeX generated

Depends: sisu, tetex-bin, tetex-extra, latex-ucs

Suggests: evince, xpdf

⁷⁵ <http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu-postgresql_0.59.1-1_all.deb>

dependencies used by sisu to populate postgresql database (further configuration is necessary)

Depends: sisu, postgresql-8.1, libdbi-ruby, libdbm-ruby, libdbd-pg-ruby

Suggests: pgaccess, libdbd-pgsql, postgresql-contrib-8.1

⁷⁶ <http://www.jus.uio.no/sisu/archive/pool/main/s/sisu/sisu-sqlite_0.59.1-1_all.deb>

dependencies used by sisu to populate sqlite database

Depends: sisu, sqlite, libdbi-ruby, libdbm-ruby, libdbd-sqlite-ruby

Suggests: libdbd-sqlite

are available under the author or original publisher's license, and usually do not comply with the **Debian** Free Software Guidelines.

- `sisu-markup-samples_1.0.8-1_all.deb` ⁷⁷ 1195

- `sisu-markup-samples_1.0.8-1.dsc` ⁷⁸ 1196

For changelogs see: 1197

`<http://www.jus.uio.no/sisu/SiSU/changelog_markup-samples.html>` 1198

`<http://www.jus.uio.no/sisu/sisu_markup-samples_changelog/changelog_markup-samples.html>` 1199

RPM 1200

The RPM is generated Alien⁷⁹ from two deb packages (`sisu` and `sisu-doc`). Dependencies are not handled, not even that of the essential **Ruby** . 1201

- `sisu-0.59.1-2.noarch.rpm` ⁸⁰ 1202

- `sisu-0.59.1-2.noarch.rpm` ⁸¹ 1203

- `sisu-markup-samples_1.0.8.orig-2.noarch.rpm` ⁸² 1204

`sudo rpm -i [package name]` 1205

⁷⁷ `<http://www.jus.uio.no/sisu/archive/pool/non-free/s/sisu-markup-samples/sisu-markup-samples_1.0.8-1_all.deb>`
marked up documents and other examples related to `sisu`, a larger package containing a number of texts
Depends: `sisu`

⁷⁸ `<http://www.jus.uio.no/sisu/archive/pool/non-free/s/sisu-markup-samples/sisu-markup-samples_1.0.8-1.dsc>`

⁷⁹ `<http://www.kitenet.net/programs/alien/>`

⁸⁰ `<http://www.jus.uio.no/sisu/pkg/rpm/sisu-0.59.1-2.noarch.rpm>`
untested, created using: `alien -r sisu_0.59.1-1_all.deb`

⁸¹ `<http://www.jus.uio.no/sisu/pkg/rpm/sisu-doc-0.59.1-2.noarch.rpm>`
untested, created using: `alien -r sisu-doc_0.59.1-1_all.deb`

⁸² `<http://www.jus.uio.no/sisu/pkg/rpm/sisu-markup-samples_1.0.6.orig-2.noarch.rpm>`
untested, created using `alien`

INSTALLATION

1206

34. Installation

See the download pages⁸³ for information related to installation.

34.1 Debian

SiSU is developed on **Debian**, and packages are available for **Debian** that take care of the dependencies encountered on installation.

The package is divided into the following components:

sisu, the base code, (the main package on which the others depend), without any dependencies other than ruby (and for convenience the ruby webrick web server), this generates a number of types of output on its own, other packages provide additional functionality, and have their dependencies

sisu-complete, a dummy package that installs the whole of greater sisu as described below, apart from sisu-examples

sisu-pdf, dependencies used by sisu to produce pdf from LaTeX generated

sisu-postgresql, dependencies used by sisu to populate postgresql database (further configuration is necessary)

sisu-remote, dependencies used to place sisu output on a remote server (further configuration is necessary)

sisu-sqlite, dependencies used by sisu to populate sqlite database

sisu-markup-samples, sisu markup samples and other miscellany (under **Debian** Free Software Guidelines non-free)

SiSU is available off Debian Unstable and Testing⁸⁴ install it using apt-get, aptitude or alternative **Debian** install tools. **SiSU** is currently comprised of eight packages.

Initial packaging is done here and to get the latest version of **SiSU** available you may add the following line(s) to your sources list:

```
#/etc/apt/sources.list
deb http://www.jus.uio.no/sisu/archive unstable main non-free
deb-src http://www.jus.uio.no/sisu/archive unstable main non-free
```

The non-free section is for sisu markup samples provided, which contain authored works the substantive text of which cannot be changed, and which as a result do not meet the debian free software guidelines.

On **Debian** there is little more to know beyond how to install software on **Debian** using apt, aptitude or synaptic.

```
#Using aptitude:
aptitude update
aptitude install sisu-complete sisu-markup-samples
```

⁸³ <<http://www.jus.uio.no/sisu/SiSU/download>>

<http://www.jus.uio.no/sisu/sisu_download>

⁸⁴ <<http://packages.qa.debian.org/s/sisu.html>>

Using apt-get
 apt-get update
 apt-get install sisu-complete sisu-examples

34.2 Other Unix / Linux

A source tarball or an rpms built using alien are available, (however dependencies have not been tested). **SiSU** is first packaged and tested with dependency handling for **Debian**.⁸⁵ Information on dependencies configured for **Debian** is provided as this may be of assistance.

34.2.1 source tarball

installation with provided install script

To install **SiSU**, in the root directory of the unpacked **SiSU** as root type:⁸⁶

```
ruby install
```

Once installed see man 8 sisu for information on additional programs that sisu makes use of.

Further notes on install script.

The install script is prepared using Rant, and a Rantfile is provided,⁸⁷ with more comprehensive install options, and post install and setup configuration and generation of first test file, if you have installed Stefan Lang's Rant⁸⁸ installed. While in the package directory, type: rant help, or rant -T, or to install **SiSU** as root, type:

install is an install script prepared using Stefan Lang's Rant⁸⁹ It should work whether you have previously installed Rant or not. It has fairly comprehensive install options, and can do some post install and setup configuration and generation of first test file. For options type:

```
ruby install -T
```

To install as root type:

```
ruby install
```

For a minimal install type:

```
ruby install base
```

installation with setup.rb

setup.rb⁹⁰ is provided the package and will install **SiSU**⁹¹ installation is a 3 step process⁹² the

⁸⁵ Notes on dependencies are provided in the section that follows

⁸⁶ This makes use of rant and the provided Rantfile. Note however, that additional external package dependencies, such as tetex-extra are not taken care of for you.

⁸⁷ a Rantfile has been configured to do post installation setup

⁸⁸ <<http://make.rubyforge.org/>> <<http://make.rubyforge.org/>>

<http://rubyforge.org/frs/?group_id=615>

⁸⁹ <<http://make.rubyforge.org/>> <<http://make.rubyforge.org/>>

<http://rubyforge.org/frs/?group_id=615>

following string assumes you are in the package directory and that you have root as sudo:

```
ruby setup.rb config ruby setup.rb setup sudo ruby setup.rb install
```

1243

installation of rpm

1244

The RPM is generated from the source file using Alien.⁹³ Dependencies are not handled, not even that of the essential **Ruby** .

1245

⁹⁰ <<http://i.loveruby.net/en/projects/setup/>>

⁹¹ **Minero Aoki**

<<http://i.loveruby.net/en/projects/setup/doc/>>

⁹² **Installation instructions**

<<http://i.loveruby.net/en/projects/setup/doc/usage.html>>

⁹³ <<http://www.kitenet.net/programs/alien/>>

35. SiSU Components, Dependencies and Notes

The dependency lists are from the **Debian** control file for **SiSU** version 0.36, and may assist in building **SiSU** on other distributions.

35.1 sisu

- the base code, (the main package on which the others depend), without any dependencies other than ruby (and for convenience the ruby webrick web server), this generates a number of types of output on its own, other packages provide additional functionality, and have their dependencies

Depends: on ruby (≥1.8.2), libwebrick-ruby

Recommends: sisu-pdf, sisu-sqlite, sisu-postgresql, sisu-examples, librmagick-ruby, trang, tidy, libtidy, librexml-ruby, zip, unzip, openssl

initialise directory

sisu -CC

html

sisu -hv [filename/wildcard]

sisu -Hv [filename/wildcard]

LaTeX (but sisu-pdf dependencies required to convert that to pdf)

sisu -pv [filename/wildcard]

plain text Unix with footnotes

sisu -av [filename/wildcard]

plain text Dos with footnotes

sisu -Av [filename/wildcard]

plain text Unix with endnotes

sisu -ev [filename/wildcard]

plain text Dos with endnotes

sisu -Ev [filename/wildcard]

openoffice odt

sisu -ov [filename/wildcard]

xhtml

sisu -bv [filename/wildcard]

XML SAX

sisu -xv [filename/wildcard]

XML DOM

sisu -Xv [filename/wildcard]	1274
wordmap (a rudimentary index of content)	1275
sisu -wv [filename/wildcard]	1276
document content certificate	1277
sisu -Nv [filename/wildcard]	1278
placement of sourcefile in output directory	1279
sisu -sv [filename/wildcard]	1280
creation of source tarball with images, and placement of source tarball in ouput directory	1281
sisu -Sv [filename/wildcard]	1282
manifest of output produced (polls output directory and provides links to existing output)	1283
sisu -yv [filename/wildcard]	1284
url for output files -u -U	1285
sisu -uv[and other flags] [filename/wildcard]	1286
sisu -Uv [filename/wildcard]	1287
toggle screen colour	1288
sisu -cv[and processing flags] [filename/wildcard]	1289
verbose mode	1290
sisu -v[and processing flags] [filename/wildcard]	1291
sisu -V[and processing flags] [filename/wildcard]	1292
quiet mode	1293
sisu -q[and processing flags] [filename/wildcard]	1294
maintenance mode, intermediate files kept -M	1295
sisu -Mv[and other flags] [filename/wildcard]	1296
[the -v is for verbose]	1297
start the webrick server	1298
sisu -W	1299

35.2 sisu-complete 1300

- a dummy package that installs the whole **SiSU** , apart from sisu-examples 1301

Depends: ruby (≥1.8.2), sisu, sisu-pdf, sisu-postgresql, sisu-remote, sisu-sqlite 1302

Recommends: sisu-examples 1303

35.3 sisu-examples

- installs sisu markup samples and other miscelleny

Depends: sisu

35.4 sisu-pdf

- dependencies used by sisu to produce pdf from LaTeX generated

Depends: sisu, tetex-bin, tetex-extra, latex-ucs

Suggests: evince, xpdf

converts sisu LaTeX produced to pdf

sisu -pv [filename/wildcard]

[the -v is for verbose]

35.5 sisu-postgresql

- dependencies used by sisu to populate postgresql database (further configuration is necessary)

Depends: sisu, postgresql-8.1, libdbi-ruby, libdbm-ruby, libdbd-pg-ruby

Suggests: pgaccess, libdbd-pgsql, postgresql-contrib-8.1

installs dependencies for sisu to work with and populate postgresql database

create database

sisu -Dv createall

drop database

sisu -Dv dropall

import content

sisu -Div [filename/wildcard]

sisu -Dv import [filename/wildcard]

update content

sisu -Duv [filename/wildcard]

sisu -Dv update [filename/wildcard]

[the -v is for verbose]

The following are available without installation of the sisu-postgresql component, but are of interest in this context

generate a sample database query form for use with webserver on port 80

sisu -F

or for use with webrick server 1333
 sisu -F webrick 1334
to start webrick server 1335
 sisu -W 1336

35.6 sisu-remote 1337

- dependencies used to place sisu output on a remote server (further configuration is necessary) 1338

scp 1339

 sisu -vr[and processing flags] [filename/wildcard] 1340

rsync 1341

 sisu -vR[and processing flags] [filename/wildcard] 1342

[the -v is for verbose] 1343

Depends: sisu, rsync, openssh-client|lsh-client, keychain 1344

35.7 sisu-sqlite 1345

- dependencies used by sisu to populate sqlite database 1346

Depends: sisu, sqlite, libdbi-ruby, libdbm-ruby, libdbd-sqlite-ruby 1347

Suggests: libdbd-sqlite 1348

installs dependencies for sisu to work with and populate sqlite database 1349

create database 1350

 sisu -dv createall 1351

drop database 1352

 sisu -dv dropall 1353

update content 1354

 sisu -div [filename/wildcard] 1355

 sisu -dv import [filename/wildcard] 1356

update content 1357

 sisu -duv [filename/wildcard] 1358

 sisu -dv update [filename/wildcard] 1359

[the -v is for verbose] 1360

The following are available without installation of the sisu-sqlite component, but are of interest in this context 1361

generate a sample database query form for use with webserver on port 80 1362

sisu -F	1363
or for use with webrick server	1364
sisu -F webrick	1365
to start webrick server	1366
sisu -W	1367

36. Quickstart - Getting Started Howto

1368

36.1 Installation

1369

Installation is currently most straightforward and tested on the **Debian** platform, as there are packages for the installation of sisu and all requirements for what it does.

1370

36.1.1 Debian Installation

1371

SiSU is available directly from the **Debian** Sid and testing archives (and possibly Ubuntu), assuming your `/etc/apt/sources.list` is set accordingly:

1372

```
aptitude update
aptitude install sisu-complete
```

1373

The following `/etc/apt/sources.list` setting permits the download of additional markup samples:

1374

```
#/etc/apt/sources.list
deb http://ftp.fi.debian.org/debian/ unstable main non-free contrib
deb-src http://ftp.fi.debian.org/debian/ unstable main non-free contrib
d
```

1375

The aptitude commands become:

1376

```
aptitude update
aptitude install sisu-complete sisu-markup-samples
```

1377

If there are newer versions of **SiSU** upstream of the **Debian** archives, they will be available by adding the following to your `/etc/apt/sources.list`

1378

```
#/etc/apt/sources.list
deb http://www.jus.uio.no/sisu/archive unstable main non-free
deb-src http://www.jus.uio.no/sisu/archive unstable main non-free
```

1379

repeat the aptitude commands

1380

```
aptitude update
aptitude install sisu-complete sisu-markup-samples
```

1381

Note however that it is not necessary to install `sisu-complete` if not all components of `sisu` are to be used. Installing just the package `sisu` will provide basic functionality.

1382

36.1.2 RPM Installation

1383

RPMs are provided though untested, they are prepared by running `alien` against the source package, and against the debs.

1384

They may be downloaded from:

1385

<http://www.jus.uio.no/sisu/SiSU/download.html#rpm>

1386

as root type:

1387

```
rpm -i [rpm package name]
```

1388

36.1.3 Installation from source

To install **SiSU** from source check information at:

<http://www.jus.uio.no/sisu/SiSU/download.html#current>

- download the source package
- Unpack the source

Two alternative modes of installation from source are provided, `setup.rb` (by Minero Aoki) and a `rant`(by Stefan Lang) built install file, in either case: the first steps are the same, download and unpack the source file:

For basic use **SiSU** is only dependent on the programming language in which it is written **Ruby** , and **SiSU** will be able to generate html, various XMLs, including ODF (and will also produce LaTeX). Dependencies required for further actions, though it relies on the installation of additional dependencies which the source tarball does not take care of, for things like using a database (postgresql or sqlite)⁹⁴ or converting LaTeX to pdf.

setup.rb

This is a standard ruby installer, using `setup.rb` is a three step process. In the root directory of the unpacked **SiSU** as root type:

```
ruby setup.rb config
ruby setup.rb setup
#[and as root:]
ruby setup.rb install
```

further information on `setup.rb` is available from:

<<http://i.loveruby.net/en/projects/setup/>>

<<http://i.loveruby.net/en/projects/setup/doc/usage.html>>

“install”

The “install” file provided is an installer prepared using “rant”. In the root directory of the unpacked **SiSU** as root type:

```
ruby install base
```

or for a more complete installation:

```
ruby install
```

or

```
ruby install base
```

This makes use of Rant (by Stefan Lang) and the provided Rantfile. It has been configured to do post installation setup setup configuration and generation of first test file. Note however, that additional external package dependencies, such as `tetex-extra` are not taken care of for you.

Further information on “rant” is available from:

<<http://make.rubyforge.org/>>

1411

<http://rubyforge.org/frs/?group_id=615>

1412

For a list of alternative actions you may type:

1413

ruby install help

1414

ruby install -T

1415

36.2 Testing SiSU, generating output

1416

To check which version of sisu is installed:

1417

sisu -v

1418

Depending on your mode of installation one or a number of markup sample files may be found either in the directory:

1419

...

1420

or

1421

...

1422

change directory to the appropriate one:

1423

cd /usr/share/doc/sisu/sisu_markup_samples/dfsg

1424

36.2.1 basic text, plaintext, html, XML, ODF

1425

Having moved to the directory that contains the markup samples (see instructions above if necessary), choose a file and run sisu against it

1426

sisu -NhwoabxXyv free_as_in_freedom.rms_and_free_software.sam_williams.sst

1427

this will generate html including a concordance file, opendocument text format, plaintext, XHTML and various forms of XML, and OpenDocument text

1428

36.2.2 LaTeX / pdf

1429

Assuming a LaTeX engine such as tetex or texlive is installed with the required modules (done automatically on selection of sisu-pdf in **Debian**)

1430

Having moved to the directory that contains the markup samples (see instructions above if necessary), choose a file and run sisu against it

1431

sisu -pv free_as_in_freedom.rms_and_free_software.sam_williams.sst

1432

sisu -3 free_as_in_freedom.rms_and_free_software.sam_williams.sst

1433

should generate most available output formats: html including a concordance file, opendocument text format, plaintext, XHTML and various forms of XML, and OpenDocument text and pdf

1434

⁹⁴ There is nothing to stop MySQL support being added in future.

36.2.3 relational database - postgresql, sqlite

1435

Relational databases need some setting up - you must have permission to create the database and write to it when you run sisu.

1436

Assuming you have the database installed and the requisite permissions

1437

```
sisu -sqlite -recreate
```

1438

```
sisu -sqlite -v -import free_as_in_freedom.rms_and_free_software.sam_williams.sst
```

1439

```
sisu -pgsql -recreate
```

1440

```
sisu -pgsql -v -import free_as_in_freedom.rms_and_free_software.sam_williams.sst
```

1441

36.3 Getting Help

1442

36.3.1 The man pages

1443

Type:

1444

```
man sisu
```

1445

The man pages are also available online, though not always kept as up to date as within the package itself:

1446

- [sisu.1](#) ⁹⁵
- [sisu.8](#) ⁹⁶
- [man directory](#) ⁹⁷

1447

1448

1449

36.3.2 Built in help

1450

```
sisu -help
```

1451

```
sisu -help -env
```

1452

```
sisu -help -commands
```

1453

```
sisu -help -markup
```

1454

36.3.3 The home page

1455

```
<http://www.jus.uio.no/sisu>
```

1456

```
<http://www.jus.uio.no/sisu/SiSU>
```

1457

36.4 Markup Samples

1458

A number of markup samples (along with output) are available off:

1459

⁹⁵ <http://www.jus.uio.no/sisu/man/sisu.1>

⁹⁶ <http://www.jus.uio.no/sisu/man/sisu.8>

⁹⁷ <http://www.jus.uio.no/sisu/man>

<<http://www.jus.uio.no/sisu/SiSU/2.html>>

1460

Additional markup samples are packaged separately in the file:

1461

*

1462

On **Debian** they are available in non-free⁹⁸ to include them it is necessary to include non-free in your `/etc/apt/source.list` or obtain them from the sisu home site.

1463

⁹⁸ the **Debian** Free Software guidelines require that everything distributed within **Debian** can be changed - and the documents are authors' works that while freely distributable are not freely changeable.

HowTo

1464

37. Getting Help

An online manual of sorts should be available at:

<<http://www.jus.uio.no/sisu-manual/>>

The manual pages provided with **SiSU** are also available online, and there is an interactive help, which is being superseded by the man page, and possibly some document which contains this component.

37.1 SiSU “man” pages

If **SiSU** is installed on your system usual man commands should be available, try:

man sisu

The **SiSU** man pages can be viewed online at:⁹⁹

An online version of the sisu man page is available here:

- various sisu man pages¹⁰⁰
- sisu.1¹⁰¹
- sisu.8¹⁰²
- sisu_examples.1¹⁰³
- sisu_webrick.1¹⁰⁴

37.2 SiSU built-in help

sisu -help

sisu -help [subject]

sisu -help env [for feedback on the way your system is setup with regard to sisu]

sisu -V [same as above command]

sisu -help commands

sisu -help markup

37.3 Command Line with Flags - Batch Processing

1486

Running sisu (alone without any flags, filenames or wildcards) brings up the interactive help, as does any sisu command that is not recognised. 1487

In the data directory run sisu -mh filename or wildcard eg. “sisu -h cisg.sst” or “sisu -h *.{sst,ssm}” to produce html version of all documents. 1488

⁹⁹ generated from source using rman

<<http://polyglotman.sourceforge.net/rman.html>>

With regard to **SiSU** man pages the formatting generated for markup syntax is not quite right, for that you might prefer the links under:

<<http://www.jus.uio.no/sample>>

¹⁰⁰<<http://www.jus.uio.no/sisu/man/>>

¹⁰¹<<http://www.jus.uio.no/sisu/man/sisu.1.html>>

¹⁰²<<http://www.jus.uio.no/sisu/man/sisu.8.html>>

¹⁰³<http://www.jus.uio.no/sisu/man/sisu_examples.1.html>

¹⁰⁴<http://www.jus.uio.no/sisu/man/sisu_webrick.1.html>

38. Setup, initialisation

1489

38.1 initialise output directory

1490

Images, css files for a document directory are copied to their respective locations in the output directory.

1491

while within your document markup/preparation directory, issue the following command

1492

```
sisu -CC
```

1493

38.1.1 Use of search functionality, an example using sqlite

1494

SiSU can populate PostgreSQL and Sqlite databases and provides a sample search form for querying these databases.

1495

This note provides an example to get you started and will use sqlite

1496

It is necessary to:

1497

(1) make sure the required dependencies have been installed

1498

(2) have a directory with sisu markup samples that is writable

1499

(3) use sisu to create a database

1500

(4) use sisu tp populate a database

1501

(5) use sisu to start the webrick (httpd) server

1502

(6) use sisu to create a search form

1503

(7) copy the search form to the cgi directory

1504

(8) open up the form in your browser

1505

(9) query the database using the search form

1506

(1) make sure the required dependencies have been installed

1507

if you use **Debian**, the following command will install the required dependencies

1508

```
aptitude install sisu-sqlite
```

1509

(2) have a directory with sisu markup samples that is writable

1510

ideally copy the sisu-examples directory to your home directory (because the directory in which you run this example should be writable)

1511

```
cp -rv /usr/share/sisu-examples/sample/document_samples_sisu_markup ~/.
```

1512

(3) use sisu to create an sqlite database

1513

within the sisu-examples directory

1514

```
sisu -dv createall
```

1515

(4) use sisu tp populate a database with some text

1516

within the sisu-examples directory

1517

sisu -div free_*.sst 1518

or 1519

sisu -dv import free_*.sst debian_constitution_v1.2.sst debian_social_contract_v1.1.sst gpl2.fsf.sst 1520

(5) use sisu to start the webrick (httpd) server (if it has not already been started): 1521

sisu -W 1522

(6) use sisu to create a search form (for use with the webrick server, and your sample documents) 1523

within the sisu-examples directory 1524

sisu -F webrick 1525

#here i run into a problem, you are working from a read only #directory..., not my usual mode 1526
of operation, to complete the example #the following is necessary sudo touch sisu_sqlite.cgi
sisu_pgsql.cgi sudo -P chown \$USER sisu_sqlite.cgi sisu_pgsql.cgi

#now this should be possible: sisu -F webrick 1527

(7) copy the search form to the cgi directory 1528

the string should be provided as output from the previous command 1529

sudo cp -vi /usr/share/sisu-examples/sample/document_samples_sisu_markup/sisu_sqlite.cgi /usr/lib/cgi- 1530
bin

sudo chmod -v 755 /usr/lib/cgi-bin/sisu_sqlite.cgi 1531

(8) open up the form in your browser and query it 1532

url: 1533

<http://localhost:8081/cgi-bin/sisu_sqlite.cgi> 1534

or as instructed by command sisu -F webrick 1535

(9) query the database using the search form 1536

if there are other options in the dropdown menu select 1537

document_samples_sisu_markup 1538

and search for some text, e.g.: 1539

aim OR project 1540

- selecting the **index** radio button gives an index of results using the object numbers 1541
- selecting the **text** radio button gives the content of the matched paragraphs with the match highlighted 1542

(10) to start again with a new database 1543

to start from scratch you can drop the database with the command 1544

sisu -dv dropall 1545

and go to step 3 1546

to get to step 3 in one step with a single command 1547

sisu -dv recreate 1548

continue subsequent steps 1549

38.2 misc 1550

38.2.1 url for output files -u -U 1551

sisu -uv[and other flags] [filename/wildcard] 1552

sisu -Uv [filename/wildcard] 1553

38.2.2 toggle screen color 1554

sisu -cv[and processing flags] [filename/wildcard] 1555

38.2.3 verbose mode 1556

sisu -v[and processing flags] [filename/wildcard] 1557

sisu -V[and processing flags] [filename/wildcard] 1558

38.2.4 quiet mode 1559

sisu -q[and processing flags] [filename/wildcard] 1560

38.2.5 maintenance mode intermediate files kept -M 1561

sisu -Mv[and other flags] [filename/wildcard] 1562

38.2.6 start the webrick server 1563

sisu -W 1564

38.3 remote placement of output 1565

configuration is necessary 1566

scp 1567

sisu -vr[and processing flags] [filename/wildcard] 1568

rsync 1569

sisu -vR[and processing flags] [filename/wildcard] 1570

39. Configuration Files

1571

Sample provided, on untarring the source tarball:

1572

 conf/sisu/sisurc.yaml

1573

and on installation under:

1574

 /etc/sisu/sisurc.yaml

1575

The following paths are searched:

1576

 ./_sisu/sisurc.yaml

1577

 ~/.sisu/sisurc.yaml

1578

 /etc/sisu/sisurc.yaml

1579

40. Markup

See sample markup provided on

<<http://www.jus.uio.no/sisu>>

<http://www.jus.uio.no/sisu_markup>

<<http://www.jus.uio.no/sisu/SiSU>>

in particular for each of the document output samples provided, the source document is provided as well

<http://www.jus.uio.no/sisu/SiSU/2#books>

on untarring the source tarball:

data/sisu-examples/sample/document_samples_sisu_markup/

or the same once source is installed (or sisu-examples) under:

/usr/share/sisu-examples/sample/document_samples_sisu_markup/

Some notes are contained within the man page, **man sisu** and within sisu help via the commands **sisu help markup** and **sisu help headers**

SiSU is for literary and legal text, also for some social science material. In particular it does not do formula, and is not particularly suited to technical documentation. Despite the latter caveat, some notes will be provided here and added to over time:

40.1 Headers

Headers @headername: provide information related to the document, this may relate to

1. how it is to be processed, such as whether headings are to be numbered, what skin is to be used and markup instructions, such as the document structure, or words to be made bold within the document

2. semantic information about the document including the dublin core

40.2 Font Face

Defaults are set. You may change the face to: bold, italics, underscore, strikethrough, ...

40.2.1 Bold

bold: [list of words that should be made bold within document]

bold line

!_ bold line

bold word or sentence

!{ bold word or sentence }!

{ bold word or sentence } 1605

boldword or **boldword** 1606

boldword or **!boldword!** 1607

40.2.2 Italics 1608

italics: [list of words that should be italicised within document] 1609

italicise word or sentence 1610

/ { italicise word or sentence } / 1611

italicisedword 1612

/italicisedword/ 1613

40.2.3 Underscore 1614

underscore word or sentence 1615

- { underscore word or sentence } - 1616

underscoreword 1617

40.2.4 Strikethrough 1618

~~strikethrough word or sentence~~ 1619

~~- { strikethrough word or sentence } -~~ 1620

~~strikeword~~ 1621

~~-strikeword-~~ 1622

40.3 Endnotes 1623

There are two forms of markup for endnotes, they cannot be mixed within the same document 1624

here¹⁰⁵ 1625

1. preferred endnote markup 1626

here~ { this is an endnote }~ 1627

2. alternative markup equivalent, kept because it is possible to search and replace to get markup in existing texts such as Project Gutenberg 1628

here~ 1629

~thisisanendnote 1630

¹⁰⁵this is an endnote

40.4 Links

SiSU

{ SiSU }http://sisudoc.org



{ sisu.png }http://sisudoc.org



{ tux.png 64x80 }image

SiSU¹⁰⁶

{ SiSU }http://sisudoc.org

is equivalent to:

{ SiSU }http://sisudoc.org ~ { <http://sisudoc.org> }~

the same can be done with an image:



SiSU¹⁰⁸

{ sisu.png "SiSU" }http://sisudoc.org

40.5 Number Titles

Set with the header @markup:

40.6 Line operations

Line Operations (marker placed at start of line)

!_ bold line

bold line

_1 indent paragraph one level

indent paragraph one level

_2 indent paragraph two steps

¹⁰⁶<http://sisudoc.org>

¹⁰⁸<http://sisudoc.org>

indent paragraph two steps

1654

_* bullet paragraph

1655

• bullet paragraph

1656

{# number paragraph (see headers for numbering document headings)

1657

1. number paragraph (see headers for numbering document headings)

1658

_# number paragraph level 2 (see headers for numbering document headings)

1659

a. number paragraph level 2 (see headers for numbering document headings)

1660

40.7 Tables

1661

Table markup sample

1662

```
table{~ h c3; 26; 32; 32;
```

1663

1664

This is a table, column1

this would become row one of column two

column three of row one is here

1665

column one row 2

column two of row two

column three of row two, and so on

1666

column one row three

and so on

here

1667

```
}table
```

Alternative form of table markup

1668

```
{t~ h}
```

1669

```
|Mon|Tue|Wed|Thu|Fri|Sat|Sun
```

```
0 |*|*|*|*|*|*|*
```

```
1 |*|*|*|*| | |
```

```
2 | - |*|*|*|*|*|
```

```
3 | - |*|*|*|*|*|*
```

```
4 | - | | |*|*|*|
```

```
5 |*|*|*|*|*|*|*
```

40.8 Grouped Text

```
5.times { puts 'Ruby' }
```

```
code{
```

```
5.times { puts 'Ruby' }
```

```
}code
```

A Limerick

There was a young lady from Clyde,
who ate a green apple and died,
but the apple fermented inside the lamented,
and made cider inside her inside.

```
poem{
```

There was a young lady from Clyde,
who ate a green apple and died,
but the apple fermented inside the lamented,
and made cider inside her inside.

```
}
```

40.9 Composite Document

To import another document, the master document or importing document should be named filename.r3 (r for require)

```
<< { filename.sst }
```

```
<< { filename.ssi }
```

41. Change Appearance

41.1 Skins

“Skins” may be used to change various aspects related to the output documents appearance, including such things as the url for the home page on which the material will be published, information on the credit band, and for html documents colours and icons used in navigation bars. Skins are ruby files which permit changing of the default values set within the program for **SiSU** output.

There are a few examples provided, on untarring the source tarball:

```
conf/sisu/skin/doc/
```

```
data/sisu-examples/sample/document_samples_sisu_markup/_sisu/skin/doc
```

and on installation under:

```
/etc/sisu/skin/doc/
```

```
/usr/share/sisu-examples/sample/document_samples_sisu_markup/_sisu/skin/doc
```

The following paths are searched:

```
./_sisu/skin
```

```
~/.sisu/skin
```

```
/etc/sisu/skin
```

Skins under the searched paths in a per document directory, a per directory directory, or a site directory, named:

doc [may be specified individually in each document]

dir [used if identifier part of name matches markup directory name]

site

It is usual to place all skins in the document directory, with symbolic links as required from dir or site directories.

41.2 CSS

The appearance of html and XML related output can be changed for an output collection directory by preparing and placing a new css file in one of the sisu css directories searched in the sisu configuration path. These are located at:

```
./_sisu/css
```

```
~/.sisu/css
```

and

```
/etc/sisu/css
```

The contents of the first directory found in the search path are copied to the corresponding sisu

output directory with the commnd:

sisu -CC

1709

The **SiSU** standard css files for **SiSU** output are:

1710

dom.css html.css html_tables.css index.css sax.css xhtml.css

1711

A document may specify its own/bespoke css file using the css header.

1712

css:

1713

[expand]

1714

EXTRACTS FROM THE README

1715

42. README

SiSU 0.55 2007w27/6 2007-07-07

Homepage: <<http://www.jus.uio.no/sisu/>>

Description

SiSU is lightweight markup based document creation and publishing framework that is controlled from the command line. Prepare documents for **SiSU** using your text editor of choice, then use **SiSU** to generate various output document formats.

With minimal preparation of a plain-text (UTF-8) file using its native markup-syntax, **SiSU** produces: plain-text, HTML, XHTML, XML, ODF:ODT (Opendocument), LaTeX, PDF, and populates an SQL database (PostgreSQL or SQLite) in paragraph sized chunks so that document searches are done at this “atomic” level of granularity.

Outputs share a common citation numbering system, and any semantic meta-data provided about the document.

SiSU also provides concordance files, document content certificates and manifests of generated output.

SiSU takes advantage of well established open standard ways of representing text, and provides a bridge to take advantage of the strengths of each, while remaining simple. **SiSU** implements across document formats a “useful common feature set” [coming from a humanities, law, and possibly social sciences perspective, rather than technical or scientific writing] ... focus is primarily on content and data integrity rather than appearance, (though outputs in the various formats are respectable).

A vim syntax highlighting file and an ftplugin with folds for sisu markup is provided. Vim 7 includes syntax highlighting for **SiSU**.

man pages, and interactive help are provided.

Dependencies for various features are taken care of in sisu related packages. The package sisu-complete installs the whole of **SiSU**.

Additional document markup samples are provided in the package sisu-markup-samples which is found in the non-free archive the licenses for the substantive content of the marked up documents provided is that provided by the author or original publisher.

Homepage: <<http://www.jus.uio.no/sisu/>>

SiSU - simple information structuring universe, is a publishing tool, document generation and management, (and search enabling) tool primarily for literary, academic and legal published works.

SiSU can be used for Internet, Intranet, local filesystem or cd publishing.

SiSU can be used directly off the filesystem, or from a database.

SiSU’s scalability, is be dependent on your hardware, and filesystem (in my case Reiserfs), and/or database Postgresql.

Amongst it’s characteristics are:

- simple mnemonoic markup style, 1735
- the ability to produce multiple output formats, including html, structured XML, LaTeX, pdf (via LaTeX), stream to a relational database whilst retaining document structure - Postgresql and Sqlite, 1736
- that all share a common citation system (a simple idea from which much good), possibly most exciting, the following: if fed into a relational database (as it can be automatically), the document set is searchable, with results displayed at a paragraph level, or the possibility of an indexed display of documents in which the match is found together with a hyperlinked listing for each of each paragraph in which the match is found. In any event citations using this system (with or without the relational database) are relevant for all output formats. 1737
- it is command line driven, and can be set up on a remote server 1738
- Documents are marked up in **SiSU** syntax in your favourite editor. **SiSU** syntax may be regarded as a type of smart ascii - which in its basic form is simpler than the most elementary html. There is currently a syntax highlighter, and folding for Vim. Syntax highlighters for other editors are welcome. 1739

Input files should be UTF-8 1740

Once set up it is simple to use. 1741

42.1 Online Information, places to look 1742

<<http://www.jus.uio.no/sisu>> 1743

Download Sources: 1744

<http://www.jus.uio.no/sisu/SiSU/download.html#current> 1745

<http://www.jus.uio.no/sisu/SiSU/download.html#debian> 1746

42.2 Installation 1747

NB. Platform is Unix / Linux. 1748

42.2.1 Debian 1749

If you use **Debian** use the **Debian** packages, check the information at: 1750

<http://www.jus.uio.no/sisu/SiSU/download.html#debian> 1751

(A) **SiSU** is available directly off the **Debian** archives for Sid and testing. It should necessary only to run as root: 1752

aptitude update 1753

aptitude install sisu-complete 1754

(B) If there are newer versions of **SiSU** upstream of the **Debian** archives, they will be available by adding the following to your /etc/apt/sources.list 1755

`deb <http://www.jus.uio.no/sisu/archive> unstable main non-free` 1756

`deb-src <http://www.jus.uio.no/sisu/archive> unstable main non-free` 1757

[the non-free line is for document markup samples, for which the substantive text is provided under the author or original publisher's license and which in most cases will not be debian free software guideline compliant] 1758

Then as root run: 1759

`aptitude update` 1760

`aptitude install sisu-complete` 1761

42.2.2 RPM 1762

RPMs are provided though untested, they are prepared by running alien against the source package, and against the debs. 1763

They may be downloaded from: 1764

<http://www.jus.uio.no/sisu/SiSU/download.html#rpm> 1765

42.2.3 Source package .tgz 1766

Otherwise to install **SiSU** from source, check information at: 1767

<http://www.jus.uio.no/sisu/SiSU/download.html#current> 1768

alternative modes of installation from source are provided, `setup.rb` (by Minero Aoki), `rake` (by Jim Weirich) built install file, `rant` (by Stefan Lang) built install file, 1769

Ruby is the essential dependency for the basic operation of **SiSU** 1770

1. Download the latest source (information available) from: 1771

<http://www.jus.uio.no/sisu/SiSU/download.html#current> 1772

2. Unpack the source 1773

Note however, that additional external package dependencies, such as `texlive` or `postgresql` should you desire to use it are not taken care of for you. 1774

42.2.4 to use `setup.rb` 1775

this is a three step process, in the root directory of the unpacked **SiSU** as root type: 1776

`ruby setup.rb config` 1777

`ruby setup.rb setup` 1778

as root: 1779

`ruby setup.rb install` 1780

further information: 1781

<<http://i.loveruby.net/en/projects/setup/>>

1782

<<http://i.loveruby.net/en/projects/setup/doc/usage.html>>

1783

42.2.5 to use install (prapared with “Rake”)

1784

Rake must be installed on your system:

1785

<<http://rake.rubyforge.org/>>

1786

<http://rubyforge.org/frs/?group_id=50>

1787

in the root directory of the unpacked **SiSU** as root type:

1788

rake

1789

or

1790

rake base

1791

This makes use of Rake (by Jim Weirich) and the provided Rakefile

1792

For a list of alternative actions you may type:

1793

rake help

1794

rake -T

1795

42.2.6 to use install (prapared with “Rant”)

1796

(you may use the instructions above for rake substituting rant if rant is installed on your system, or you may use an independent installer created using rant as follows:)

1797

in the root directory of the unpacked **SiSU** as root type:

1798

ruby ./sisu-install

1799

or

1800

ruby ./sisu-install base

1801

This makes use of Rant (by Stefan Lang) and the provided Rantfile. It has been configured to do post installation setup setup configuration and generation of first test file. Note however, that additional external package dependencies, such as tetex-extra are not taken care of for you.

1802

further information:

1803

<<http://make.rubyforge.org/>>

1804

<http://rubyforge.org/frs/?group_id=615>

1805

For a list of alternative actions you may type:

1806

ruby ./sisu-install help

1807

ruby ./sisu-install -T

1808

42.3 Dependencies

1809

Once installed see ‘man 8 sisu’ for some information on additional programs that sisu makes use of, and that you may need or wish to install. (this will depend on such factors as whether you want to generate pdf, whether you will be using **SiSU** with or without a database, ...) ‘man sisu_markup-samples’ may also be of interest if the sisu-markup-samples package has also been installed.

1810

The information in man 8 may not be most up to date, and it is possible that more useful information can be gleaned from the following notes taken from the **Debian** control file (end edited), gives an idea of additional packages that **SiSU** can make use of if available, (the use/requirement of some of which are interdependent for specific actions by **SiSU**).

1811

The following is from the debian/control file of sisu-0.58.2, which amongst other things provides the dependencies of sisu within **Debian** .

1812

1813

```
Package: sisu
Architecture: all
Depends: ruby (>= 1.8.2), libwebrick-ruby, unzip, zip
Conflicts: vim-sisu, sisu-vim, sisu-remote
Replaces: vim-sisu, sisu-vim
Recommends: sisu-pdf, sisu-sqlite, sisu-postgresql, librmagick-ruby, trang,
tidy, librexml-ruby, openssl, rsync, openssh-client | lsh-client, keychain,
hyperestraier, kdissert, vim-addon-manager
Suggests: rcs | cvs, lv, texinfo, pinfo
Package: sisu-complete
Depends: ruby (>= 1.8.4), sisu, sisu-pdf, sisu-postgresql, sisu-sqlite
Recommends: hyperestraier
Package: sisu-pdf
Architecture: all
Depends: sisu, texlive-latex-base, texlive-fonts-recommended,
texlive-latex-recommended, texlive-latex-extra
Suggests: evince, xpdf
Package: sisu-postgresql
Depends: sisu, postgresql-8.1, libdbi-ruby, libdbm-ruby, libdbd-pg-ruby
Suggests: pgaccess, libdbd-pgsql, postgresql-contrib-8.1
Package: sisu-sqlite
Depends: sisu, sqlite, libdbi-ruby, libdbm-ruby, libdbd-sqlite-ruby
Suggests: libdbd-sqlite
Package: sisu-markup-samples
Depends: sisu
Source: sisu
Section: text
Priority: optional
Maintainer: Ralph Amissah <ralph@amissah.com>
Build-Depends: debhelper (>= 5)
Standards-Version: 3.7.2
Package: sisu
Architecture: all
Depends: ruby (>= 1.8.2), ruby (<< 1.9), libwebrick-ruby, unzip, zip
Conflicts: vim-sisu, sisu-vim, sisu-remote
Replaces: vim-sisu, sisu-vim
Recommends: sisu-doc, sisu-pdf, sisu-sqlite, sisu-postgresql, hyperestraier, keychain, librmagick-ruby, librexml-ruby, openssl, openssh-client
| lsh-client, rsync, tidy, vim-addon-manager
```

1814

Suggests: kdissert, lv, rcs | cvs, pinfo, texinfo, trang

Description: documents - structuring, publishing in multiple formats and search

SiSU is a lightweight markup based, command line oriented, document structuring, publishing and search framework for document collections.

.

With minimal preparation of a plain-text, (UTF-8) file, using its native markup syntax in your text editor of choice, SiSU can generate various document formats (most of which share a common object numbering system for locating content), including plain text, HTML, XHTML, XML, OpenDocument text (ODF:ODT), LaTeX, PDF files, and populate an SQL database with objects (roughly paragraph-sized chunks) so searches may be performed and matches returned with that degree of granularity: your search criteria is met by these documents and at these locations within each document. Object numbering is particularly suitable for "published" works (finalized texts as opposed to works that are frequently changed or updated) for which it provides a fixed means of reference of content. Document outputs also share semantic meta-data provided.

.

SiSU also provides concordance files, document content certificates and manifests of generated output.

.

A vim syntax highlighting file and an ftplugin with folds for sisu markup is provided, as are syntax highlighting files for kate, kwrite, gedit and diakonos. Vim 7 includes syntax highlighting for SiSU.

.

man pages, and interactive help are provided.

.

Dependencies for various features are taken care of in sisu related packages.

The package sisu-complete installs the whole of SiSU.

.

Additional document markup samples are provided in the package sisu-markup-samples which is found in the non-free archive the licenses for the substantive content of the marked up documents provided is that provided by the author or original publisher.

.

Homepage: <<http://www.jus.uio.no/sisu>>

Package: sisu-complete

Architecture: all

Depends: ruby (>= 1.8.2), ruby (<< 1.9), sisu, sisu-doc, sisu-pdf, sisu-postgresql, sisu-sqlite

Recommends: hyperestraier

Description: installs all SiSU related packages

This package installs SiSU and related packages that enable sisu to produce pdf and to populate postgresql and sqlite databases.

.

SiSU is a lightweight markup based document structuring, publishing and search framework for document collections.

.

See sisu for a description of the package.

.

Homepage: <<http://www.jus.uio.no/sisu>>

Package: sisu-doc

Architecture: all

Depends: sisu

1815

1816

Recommends: sisu-pdf, sisu-postgresql, sisu-sqlite

Description: sisu manual and other documentation for sisu

Multiple file formats generated output of sisu documentation generated from
sisu markup source documents included in the main package

.

SiSU is a lightweight markup based document structuring, publishing and search
framework for document collections.

.

Homepage: <<http://www.jus.uio.no/sisu>>

1817

Package: sisu-pdf

Architecture: all

Depends: sisu, texlive-latex-base, texlive-fonts-recommended, texlive-latex-recommended, texlive-latex-extra

Recommends: sisu-doc

Description: dependencies to convert SiSU LaTeX output to pdf

This package enables the conversion of SiSU LaTeX output to pdf.

.

SiSU is a lightweight markup based document structuring, publishing and search
framework for document collections.

.

Homepage: <<http://www.jus.uio.no/sisu>>

1818

Package: sisu-postgresql

Architecture: all

Depends: sisu, libdbd-pg-ruby, libdbi-ruby, libdbm-ruby, postgresql

Recommends: sisu-doc, libfcgi-ruby

Suggests: postgresql-contrib

Description: SiSU dependencies for use with postgresql database

This package enables SiSU to populate a postgresql database. This is done at
an object/paragraph level, making granular searches of documents possible.

.

This relational database feature of SiSU is not required but provides
interesting possibilities, including that of granular searches of documents
for matching units of text, primarily paragraphs that can be displayed or
identified by object citation number, from which an index of documents
matched and each matched paragraph within them can be displayed.

.

SiSU is a lightweight markup based document structuring, publishing and search
framework for document collections.

.

Homepage: <<http://www.jus.uio.no/sisu>>

1819

Package: sisu-sqlite

Architecture: all

Depends: sisu, sqlite, libdbd-sqlite-ruby, libdbi-ruby, libdbm-ruby

Recommends: sisu-doc, libfcgi-ruby

Description: SiSU dependencies for use with sqlite database

This package enables SiSU to populate an sqlite database. This is done at an
object/paragraph level, making granular searches of documents possible.

.

This relational database feature of SiSU is not required but provides
interesting possibilities, including that of granular searches of documents
for matching units of text, primarily paragraphs that can be displayed or
identified by object citation number, from which an index of documents
matched and each matched paragraph within them can be displayed.

.

SiSU is a lightweight markup based document structuring, publishing and search framework for document collections.

Homepage: <<http://www.jus.uio.no/sisu/>>

42.4 Quick start

Most of the installation should be taken care of by the aptitude or rant install. (The rant install if run in full will also test run the generation of the first document).

After installation of sisu-complete, move to the document samples directory

```
cd /usr/share/doc/sisu/sisu_markup_samples/dfsg
```

and run

```
sisu -3 free_as_in_freedom.rms_and_free_software.sam_williams.sst
```

or the same:

```
sisu -NhwpobxXyv free_as_in_freedom.rms_and_free_software.sam_williams.sst
```

look at output results, see the “sisu_manifest” page created for the document

or to generate an online document move to a writable directory, as the file will be downloaded there and e.g.

```
sisu -3 <http://www.jus.uio.no/sisu/free\_culture.lawrence\_lessig/free\_culture.lawrence\_lessig.sst>
```

the database stuff is extra perhaps, the latex stuff could be considered extra perhaps but neither needs to be installed for most of sisu output to work

examine source document, vim has syntax support

```
gvim free_as_in_freedom.rms_and_free_software.sam_williams.sst
```

additional markup samples in

```
<http://www.jus.uio.no/sisu/SiSU/2.html>
```

For help

```
man sisu
```

or

```
sisu --help
```

e.g.

for the way sisu “sees/maps” your system

```
sisu --help env
```

for list of commands and so on

```
sisu --help commands
```

42.5 Configuration files

The default configuration/setup is contained within the program and is altered by configuration settings in *etc*[sisu version]/sisurc.yml or in *~/.sisu/sisurc.yml*

- configuration file - a yaml file

/etc/sisu/[sisu version]/sisurc.yml

~/.sisu/sisurc.yml

- directory structure - setting up of output and working directory.

* skins - changing the appearance of a project, directory or individual documents within *~/.sisu/skin*

~/.sisu/skin/doc contains individual skins, with symbolic links from

~/.sisu/skin/dir if the contents of a directory are to take a particular document skin.

- additional software - eg. Tex and LaTeX (tetex, tetex-base, tetex-extra on **Debian**), PostgreSQL, [sqlite], trang, tidy, makeinfo, ... none of which are required for basic html or XML processing.

- if you use Vim as editor there is a syntax highlighter and fold resource config file for **SiSU** . I hope more syntax highlighters follow.

There are post installation steps (which are really part of the overall installation)

sisu -C in your marked up document directory, should do some auto-configuring provided you have the right permissions for the output directories. (and provided the output directories have already been specified if you are not using the defaults).

42.6 Use General Overview

Documents are marked up in **SiSU** syntax and kept in an ordinary text editable file, named with the suffix *.sst*, or *.ssm*

Marked up **SiSU** documents are usually kept in a sub-directory of your choosing

use the interactive help and man pages

sisu --help

man sisu

42.7 Help

interactive help described below, or man page:

man sisu

man 8 sisu

‘man sisu_markup-samples’ [if the sisu-markup-samples package is also installed] 1868

Once installed an interactive help is available typing ‘sisu’ (without) any flags, and select an option: 1869

sisu 1870

alternatively, you could type e.g. 1871

sisu -help commands 1872

sisu -help env 1873

sisu -help headers 1874

sisu -help markup 1875

sisu -help headings 1876

etc. 1877

for questions about mappings, output paths etc. 1878

sisu -help env 1879

sisu -help path 1880

sisu -help directory 1881

42.8 Directory Structure 1882

Once installed, type: 1883

sisu -help env 1884

or 1885

sisu -V 1886

42.9 Configuration File 1887

The defaults can be changed via **SiSU** ’s configure file sisurc.yml which the program expects to find in ./_sisu ~ /.sisu or /etc/sisu (searched in that order, stopping on the first one found) 1888

42.10 Markup 1889

See man pages. 1890

man sisu 1891

man 8 sisu 1892

Once installed there is some information on **SiSU** Markup in its help: 1893

sisu -help markup 1894

and 1895

`sisu --help headers`

Sample marked up document are provided with the download tarball in the directory:

`./data/doc/sisu/sisu_markup_samples/dfsg`

These are installed on the system usually at:

`/usr/share/doc/sisu/sisu_markup_samples/dfsg`

More markup samples are available in the package `sisu-markup-samples`

<http://www.jus.uio.no/sisu/SiSU/download.html#sisu-markup-samples>

Many more are available online off:

`<http://www.jus.uio.no/sisu/SiSU/2.html>`

42.11 Additional Things

There is syntax support for some editors provided (together with a README file) in

`./data/sisu/conf/syntax`

usually installed to:

`/usr/share/sisu/conf/syntax`

42.12 License

License: GPL 3 or later see the copyright file in

`./data/doc/sisu`

usually installed to:

`/usr/share/doc/sisu`

42.13 SiSU Standard

SiSU uses:

- Standard **SiSU** markup syntax,
- Standard **SiSU** meta-markup syntax, and the
- Standard **SiSU** object citation numbering and system

© Ralph Amissah 1997, current 2006 All Rights Reserved.

- however note the License section

CHANGELOG

`./CHANGELOG`

and see

`<http://www.jus.uio.no/sisu/SiSU/changelog.html>`

`<http://www.jus.uio.no/sisu/SiSU/changelog_markup_samples.html>`

EXTRACTS FROM MAN 8 SISU

1927

43. Post Installation Setup

43.1 Post Installation Setup - Quick start

After installation of sisu-complete, move to the document samples directory,

```
cd /usr/share/doc/sisu/sisu_markup_samples/dfsg
```

[this is not where you would normally work but provides sample documents for testing, you may prefer instead to copy the contents of that directory to a local directory before proceeding]

and in that directory, initialise the output directory with the command

```
sisu -CC
```

then run:

```
sisu -l free_as_in_freedom.rms_and_free_software.sam_williams.sst
```

or the same:

```
sisu -NhwpobxXyv free_as_in_freedom.rms_and_free_software.sam_williams.sst
```

look at output results, see the “sisu_manifest” page created for the document

for an overview of your current sisu setup, type:

```
sisu --help env
```

or

```
sisu -V
```

To generate a document from a remote url accessible location move to a writable directory, (create a work directory and cd into it) as the file will be downloaded there and e.g.

```
sisu -l <http://www.jus.uio.no/sisu/gpl3.fsf/gpl3.fsf.sst>
```

```
sisu -3 <http://www.jus.uio.no/sisu/free_culture.lawrence_lessig/free_culture.lawrence_lessig.sst>
```

examine source document, vim has syntax highlighting support

```
gvim free_as_in_freedom.rms_and_free_software.sam_williams.sst
```

additional markup samples in

```
<http://www.jus.uio.no/sisu/SiSU/2.html>
```

it should also be possible to run sisu against sisupods (prepared zip files, created by running the command `sisu -S [filename]`), whether stored locally or remotely.

```
sisu -3 <http://www.jus.uio.no/sisu/free_culture.lawrence_lessig/sisupod.zip>
```

there is a security issue associated with the running of document skins that are not your own, so these are turned off by default, and the use of the following command, which switches on the associated skin is not recommended:

```
sisu -3 --trust <http://www.jus.uio.no/sisu/free_culture.lawrence_lessig/sisupod.zip>
```

For help

man sisu 1956

sisu -help 1957

sisu -help env for the way sisu “sees/maps” your system 1958

sisu -help commands for list of commands and so on 1959

43.2 Document markup directory 1960

Perhaps the easiest way to begin is to create a directory for sisu marked up documents within your home directory, and copy the file structure (and document samples) provided in the document sample directory: 1961

```
mkdir ~/sisu_test 1962
```

```
cd ~/sisu_test 1963
```

```
cp -a /usr/share/doc/sisu/sisu_markup_samples/dfsg/* ~/sisu_test/. 1964
```

Tip: the markup syntax examples may be of interest 1965

<<http://www.jus.uio.no/sisu/sample/>> 1966

Tip: 1967

```
sisu -U [sisu markup filename] 1968
```

should printout the different possible outputs and where sisu would place them. 1969

Tip: if you want to toggle ansi color add 1970

```
c 1971
```

to your flags. 1972

43.2.1 Configuration files 1973

SiSU configuration file search path is: 1974

```
./_sisu/sisurc.yaml 1975
```

```
~/_sisu/sisurc.yaml 1976
```

```
/etc/sisu/sisurc.yaml 1977
```

Debian Installation Note 1978

43.2.2 Debian INSTALLATION Note 1979

It is best you see 1980

<http://www.jus.uio.no/sisu/SiSU/download.html#debian> 1981

for up the most up to date information.

1982

notes taken from the **Debian** control file (end edited), gives an idea of additional packages that **SiSU** can make use of if available, (the use/requirement of some of which are interdependent for specific actions by **SiSU**):

1983

Package: sisu

1984

SiSU is a lightweight markup based, command line oriented, document structuring, publishing and search framework for document collections.

1985

With minimal preparation of a plain-text, (UTF-8) file, using its native markup syntax in your text editor of choice, **SiSU** can generate various document formats (most of which share a common object numbering system for locating content), including plain text, HTML, XHTML, XML, OpenDocument text (ODF:ODT), LaTeX, PDF files, and populate an SQL database with objects (roughly paragraph-sized chunks) so searches may be performed and matches returned with that degree of granularity: your search criteria is met by these documents and at these locations within each document. Object numbering is particularly suitable for “published” works (finalized texts as opposed to works that are frequently changed or updated) for which it provides a fixed means of reference of content. Document outputs also share semantic meta-data provided.

1986

SiSU also provides concordance files, document content certificates and manifests of generated output.

1987

A vim syntax highlighting file and an ftplugin with folds for sisu markup is provided, as are syntax highlighting files for kate, kwrite, gedit and diakonos. Vim 7 includes syntax highlighting for **SiSU**.

1988

man pages, and interactive help are provided.

1989

Dependencies for various features are taken care of in sisu related packages. The package sisu-complete installs the whole of **SiSU**.

1990

Additional document markup samples are provided in the package sisu-markup-samples which is found in the non-free archive the licenses for the substantive content of the marked up documents provided is that provided by the author or original publisher.

1991

Homepage: <<http://www.jus.uio.no/sisu>>

1992

43.2.3 Document Resource Configuration

1993

sisu resource configuration information is obtained from sources (where they exist):

1994

~/.sisu/sisurc.yaml

1995

/etc/sisu/[sisu version]/sisurc.yaml

1996

sisu program defaults

1997

43.2.4 Skins

1998

Skins default document appearance may be modified using skins contained in sub-directories located at the following paths:

1999

./_sisu/skin

2000

~/.sisu/skin

2001

/etc/sisu/skin

2002

more specifically, the following locations (or their /etc/sisu equivalent) should be used:

2003

~/.sisu/skin/doc

2004

skins for individual documents;

2005

~/.sisu/skin/dir

2006

skins for directories of matching names;

2007

~/.sisu/skin/site

2008

site-wide skin modifying the site-wide appearance of documents.

2009

Usually all skin files are placed in the document skin directory:

2010

~/.sisu/skin/doc

2011

with softlinks being made to the skins contained there from other skin directories as required.

2012

44. FAQ - Frequently Asked/Answered Questions

2013

44.1 Why are urls produced with the -v (and -u) flag that point to a web server on port 8081?

2014

Try the following rune:

2015

- `sisu -W`

2016

This should start the ruby webserver. It should be done after having produced some output as it scans the output directory for what to serve.

2017

44.2 I cannot find my output, where is it?

2018

The following should provide help on output paths:

2019

- `sisu --help env`
- `sisu -V` [same as the previous command]
- `sisu --help directory`
- `sisu --help path`
- `sisu -U [filename]`
- `man sisu`

2020

2021

2022

2023

2024

2025

44.3 I do not get any pdf output, why?

2026

SiSU produces LaTeX and pdf_latex is run against that to generate pdf files.

2027

If you use **Debian** the following will install the required dependencies

2028

- `aptitude install sisu-pdf`

2029

the following packages are required: tetex-bin, tetex-extra, latex-ucs

2030

44.4 Where is the latex (or some other interim) output?

2031

Try adding -M (for maintenance) to your command flags, e.g.:

2032

- `sisu -HpMv [filename]`

2033

this should result in the interim processing output being retained, and information being provided on where to find it.

2034

- `sisu --help directory`

2035

- `sisu --help path`

2036

should also provide some relevant information as to where it is placed.

2037

44.5 Why isn't SiSU markup XML

I worked with text and (though I find XML immensely valuable) disliked noise ... better to sidestep the question and say:

SiSU currently “understands” three XML input representations - or more accurately, converts from three forms of XML to native **SiSU** markup for processing. The three types correspond to SAX (structure described), DOM (structure embedded, whole document must be read before structure is correctly discernable) and node based (a tree) forms of XML document structure representation. Problem is I use them very seldom and check that all is as it should be with them seldom, so I would not be surprised if something breaks there, but as far as I know they are working. I will check and add an XML markup help page before the next release. There already is a bit of information in the man page under the title **SiSU** VERSION CONVERSION

```
sisu -to-sax [filename/wildcard]
```

```
sisu -to-dom [filename/wildcard]
```

```
sisu -to-node [filename/wildcard]
```

The XML should be well formed... must check, but lacks sensible headers. Suggestions welcome as to what to make of them. [For the present time I am satisfied that I can convert (both ways) between 3 forms of XML representation and **SiSU** markup].

```
sisu -from-xml2sst [filename/wildcard]
```

44.6 LaTeX claims to be a document preparation system for high-quality typesetting. Can the same be said about SiSU?

SiSU is not really about type-setting.

LaTeX is the ultimate computer instruction type-setting language for paper based publication.

LaTeX is able to control just about everything that happens on page and pixel, position letters kerning, space variation between characters, words, paragraphs etc. formula.

SiSU is not really about type-setting at all. It is about a lightweight markup instruction that provides enough information for an abstraction of the documents structure and objects, from which different forms of representation of the document can be generated.

SiSU with very little markup instruction is able to produce relatively high quality pdf by virtue of being able to generate usable default LaTeX; it produces “quality” html by generating the html directly; likewise it populates an SQL database in a useful way with the document in object sized chunks and its meta-data. But **SiSU** works on an abstraction of the document's structure and content and custom builds suitable uniform output. The html for browser viewing and pdf for paper viewing/publishing are rather different things with different needs for layout - as indeed is what is needed to store information in a database in searchable objects.

The pdfs or html produced for example by open office based on open document format and other office/word processor suits usually attempt to have similar looking outputs - your document rendered in html looks much the same, or in pdf... **sisu** is less this way, it seeks to

have a starting point with as little information about appearance as possible, and to come up with the best possible appearance for each output that can be derived based on this minimal information.

Where there are large document sets, it provides consistency in appearance in each output format for the documents. 2053

The excuse for going this way is, it is a waste of time to think much about appearance when working on substantive content, it is the substantive content that is relevant, not the way it looks beyond the basic informational tags - and yet you want to be able to take advantage of as many useful different ways of representing documents as are available, and for various types of output to be/look as good as it can for each medium/format in which it is presented, (with different mediums having different focuses) and **SiSU** tries to achieve this from minimal markup. 2054

44.7 How do I create GIN or GiST index in Postgresql for use in SiSU 2055

This at present needs to be done “manually” and it is probably necessary to alter the sample search form. The following is a helpful response from one of the contributors of GiN to Postgresql Oleg Bartunov 2006-12-06: 2056

“I have tsearch2 slides which introduces tsearch2 <http://www.sai.msu.su/~megera/wiki/tsearch2slides>
FTS in PostgreSQL is provided by tsearch2, which should work without any indices (GiST or GIN) ! Indices provide performance, not functionality. 2058

In your example I'd do (simple way, just for demo): 2059

0. compile, install tsearch2 and load tsearch2 into your database 2060

`cd contrib/tsearch2; make makeinstall make installcheck; psql DB < tsearch2.sql` 2061

1. Add column fts, which holds tsvector 2062

`alter table documents add column fts tsvector;` 2063

2. Fill fts column 2064

`update document set fts = to_tsvector(clean);` 2065

3. create index - just for performance ! 2066

`create index fts_gin_idx on document using gin(fts);` 2067

4. Run vacuum 2068

`vacuum analyze document;` 2069

That's all. 2070

Now you can search: 2071

`select lid, metadata_tid, rank_cd(fts, q,2) as rank from document, plainto_tsquery('markup syntax') q where q @@ fts order by rank desc limit 10;` 2072

44.8 Where is version 1.0?

2073

SiSU works pretty well as it is supposed to. Version 1.0 will have the current markup, and directory structure. At this point it is largely a matter of choice as to when the name change is made.

2074

The feature set for html,¹¹⁰ LaTeX/pdf and opendocument is in place. XML, and plaintext are in order.

2075

html and LaTeX/pdf may be regarded as reference copy outputs

2076

With regard to the populating of sql databases (postgresql and sqlite), there is a bit to be done.

2077

We are still almost there.

2078

¹¹⁰html w3c compliance has been largely met.

45. Editor Files, Syntax Highlighting

The directory:

`./data/sisu/conf/editor-syntax-etc/`

`/usr/share/sisu/conf/editor-syntax-etc`

contains rudimentary sisu syntax highlighting files for:

- (g)vim <<http://www.vim.org>>

package: sisu-vim

status: largely done

there is a vim syntax highlighting and folds component

- gedit <<http://www.gnome.org/projects/gedit>>

- gobby <<http://gobby.0x539.de/>>

file: sisu.lang

place in:

`/usr/share/gtksourceview-1.0/language-specs`

or

`~/.gnome2/gtksourceview-1.0/language-specs`

status: very basic syntax highlighting

comments: this editor features display line wrap and is used by Goby!

- nano <<http://www.nano-editor.org>>

file: nanorc

save as:

`~/.nanorc`

status: basic syntax highlighting

comments: assumes dark background; no display line-wrap; does line breaks

- diakonos (an editor written in ruby) <<http://purepistos.net/diakonos>>

file: diakonos.conf

save as:

`~/.diakonoss/diakonos.conf`

includes:

status: basic syntax highlighting

comments: assumes dark background; no display line-wrap

- kate and kwrite <<http://kate.kde.org>>

- file: sisu.xml 2111
- place in: 2112
- /usr/share/apps/katepart/syntax 2113
- or 2114
- ~/.kde/share/apps/katepart/syntax 2115
- [settings::configure kate::{highlighting,filetypes}] 2116
- [tools::highlighting::{markup,scripts}::SiSU] 2117
- nedit <<http://www.nedit.org>> 2118
 - file: sisu_nedit.pats 2119
 - nedit -import sisu_nedit.pats 2120
 - status: a very clumsy first attempt [not really done] 2121
 - comments: this editor features display line wrap 2122
 - emacs <<http://www.gnu.org/software/emacs/emacs.html>> 2123
 - files: sisu-mode.el 2124
 - to file ~/.emacs add the following 2 lines: 2125
 - (add-to-list 'load-path "/usr/share/sisu-examples/config/syntax_hi") 2126
 - (require 'sisu-mode.el) 2127
 - [not done / not yet included] 2128
 - vim and gvim <<http://www.vim.org>> 2129
 - files: 2130
 - package is the most comprehensive sisu syntax highlighting and editor environment provided to date (is for vim/ gvim, and is separate from the contents of this directory) 2131
 - status: this includes: syntax highlighting; vim folds; some error checking 2132
 - comments: this editor features display line wrap 2133
- NOTE: 2134
- [SiSU parses files with long lines or line breaks, but, display linewrap (without line-breaks) is a convenient editor feature to have for sisu markup] 2135

46. Help Sources 2136

For a summary of alternative ways to get help on **SiSU** try one of the following: 2137

man page 2138

man sisu_help 2139

man2html 2140

<file:///usr/share/doc/sisu/html/sisu_help.1.html> 2141

<http://www.jus.uio.no/sisu/man/sisu_help.1.html> 2142

sisu generated output - links to html 2143

<file:///usr/share/doc/sisu/sisu_manual/sisu_help/index.html> 2144

<http://sisudoc.org/sisu_manual/sisu_help/index.html> 2145

<http://www.jus.uio.no/sisu/sisu_manual/sisu_help/index.html> 2146

help sources lists 2147

Alternative sources for this help sources page listed here: 2148

man sisu_help_sources 2149

<file:///usr/share/doc/sisu/sisu_manual/sisu_help_sources/index.html> 2150

<file:///usr/share/doc/sisu/html/sisu_help_sources/index.html> 2151

<http://sisudoc.org/sisu_manual/sisu_help_sources/index.html> 2152

<http://www.jus.uio.no/sisu/sisu_manual/sisu_help_sources/index.html> 2153

46.1 man pages 2154

46.1.1 man 2155

man sisu 2156

man sisu_commands 2157

man 7 sisu_complete 2158

man sisu_configuration 2159

man 8 sisu_faq 2160

man sisu_filetypes 2161

man sisu_help 2162

man sisu_help_sources 2163

man 8 sisu_howto 2164

man sisu_introduction 2165

man sisu_markup 2166

man sisu_output_overview	2167
man 7 sisu_pdf	2168
man 7 sisu_postgresql	2169
man 8 sisu_quickstart	2170
man 8 sisu_remote	2171
man 8 sisu_search	2172
man sisu_skin	2173
man 7 sisu_sqlite	2174
man 8 sisu_syntax_highlighting	2175
man 7 sisu_vim	2176
man sisu_webrick	2177

46.2 sisu generated output - links to html 2178

Note **SiSU** documentation is prepared in **SiSU** and output is available in multiple formats including amongst others html, pdf, and odf which may be also be accessed via the html pages¹¹¹ 2179

46.2.1 locally installed 2180

<file:///usr/share/doc/sisu/sisu_manual/sisu_manual/index.html>	2181
<file:///usr/share/doc/sisu/sisu_manual/sisu_help/index.html>	2182
<file:///usr/share/doc/sisu/sisu_manual/sisu_help_sources/index.html>	2183
/usr/share/doc/sisu/sisu_manual/sisu/index.html	2184
/usr/share/doc/sisu/sisu_manual/sisu_commands/index.html	2185
/usr/share/doc/sisu/sisu_manual/sisu_complete/index.html	2186
/usr/share/doc/sisu/sisu_manual/sisu_configuration/index.html	2187
/usr/share/doc/sisu/sisu_manual/sisu_description/index.html	2188
/usr/share/doc/sisu/sisu_manual/sisu_examples/index.html	2189
/usr/share/doc/sisu/sisu_manual/sisu_faq/index.html	2190
/usr/share/doc/sisu/sisu_manual/sisu_filetypes/index.html	2191
/usr/share/doc/sisu/sisu_manual/sisu_help/index.html	2192
/usr/share/doc/sisu/sisu_manual/sisu_help_sources/index.html	2193
/usr/share/doc/sisu/sisu_manual/sisu_howto/index.html	2194

/usr/share/doc/sisu/sisu_manual/sisu_introduction/index.html	2195
/usr/share/doc/sisu/sisu_manual/sisu_manual/index.html	2196
/usr/share/doc/sisu/sisu_manual/sisu_markup/index.html	2197
/usr/share/doc/sisu/sisu_manual/sisu_output_overview/index.html	2198
/usr/share/doc/sisu/sisu_manual/sisu_pdf/index.html	2199
/usr/share/doc/sisu/sisu_manual/sisu_postgresql/index.html	2200
/usr/share/doc/sisu/sisu_manual/sisu_quickstart/index.html	2201
/usr/share/doc/sisu/sisu_manual/sisu_remote/index.html	2202
/usr/share/doc/sisu/sisu_manual/sisu_search/index.html	2203
/usr/share/doc/sisu/sisu_manual/sisu_skin/index.html	2204
/usr/share/doc/sisu/sisu_manual/sisu_sqlite/index.html	2205
/usr/share/doc/sisu/sisu_manual/sisu_syntax_highlighting/index.html	2206
/usr/share/doc/sisu/sisu_manual/sisu_vim/index.html	2207
/usr/share/doc/sisu/sisu_manual/sisu_webrick/index.html	2208

46.2.2 www.sisudoc.org

<http://www.sisudoc.org/sisu_manual/sisu_manual/index.html>	2209
<http://www.sisudoc.org/sisu_manual/sisu_manual/index.html>	2210
<http://www.sisudoc.org/sisu_manual/sisu/index.html>	2211
<http://www.sisudoc.org/sisu_manual/sisu_commands/index.html>	2212
<http://www.sisudoc.org/sisu_manual/sisu_complete/index.html>	2213
<http://www.sisudoc.org/sisu_manual/sisu_configuration/index.html>	2214
<http://www.sisudoc.org/sisu_manual/sisu_description/index.html>	2215
<http://www.sisudoc.org/sisu_manual/sisu_examples/index.html>	2216
<http://www.sisudoc.org/sisu_manual/sisu_faq/index.html>	2217
<http://www.sisudoc.org/sisu_manual/sisu_filetypes/index.html>	2218
<http://www.sisudoc.org/sisu_manual/sisu_help/index.html>	2219
<http://www.sisudoc.org/sisu_manual/sisu_help_sources/index.html>	2220
<http://www.sisudoc.org/sisu_manual/sisu_howto/index.html>	2221
<http://www.sisudoc.org/sisu_manual/sisu_introduction/index.html>	2222
<http://www.sisudoc.org/sisu_manual/sisu_manual/index.html>	2223
<http://www.sisudoc.org/sisu_manual/sisu_markup/index.html>	2224
<http://www.sisudoc.org/sisu_manual/sisu_output_overview/index.html>	2225

<http://sisudoc.org/sisu_manual/sisu_pdf/index.html>	2226
<http://sisudoc.org/sisu_manual/sisu_postgresql/index.html>	2227
<http://sisudoc.org/sisu_manual/sisu_quickstart/index.html>	2228
<http://sisudoc.org/sisu_manual/sisu_remote/index.html>	2229
<http://sisudoc.org/sisu_manual/sisu_search/index.html>	2230
<http://sisudoc.org/sisu_manual/sisu_skin/index.html>	2231
<http://sisudoc.org/sisu_manual/sisu_sqlite/index.html>	2232
<http://sisudoc.org/sisu_manual/sisu_syntax_highlighting/index.html>	2233
<http://sisudoc.org/sisu_manual/sisu_vim/index.html>	2234
<http://sisudoc.org/sisu_manual/sisu_webrick/index.html>	2235

46.2.3 www.jus.uio.no/sisu

<http://www.jus.uio.no/sisu/sisu_manual/sisu_manual/index.html>	2237
<http://www.jus.uio.no/sisu/sisu_manual/sisu/index.html>	2238
<http://www.jus.uio.no/sisu/sisu_manual/sisu_commands/index.html>	2239
<http://www.jus.uio.no/sisu/sisu_manual/sisu_complete/index.html>	2240
<http://www.jus.uio.no/sisu/sisu_manual/sisu_configuration/index.html>	2241
<http://www.jus.uio.no/sisu/sisu_manual/sisu_description/index.html>	2242
<http://www.jus.uio.no/sisu/sisu_manual/sisu_examples/index.html>	2243
<http://www.jus.uio.no/sisu/sisu_manual/sisu_faq/index.html>	2244
<http://www.jus.uio.no/sisu/sisu_manual/sisu_filetypes/index.html>	2245
<http://www.jus.uio.no/sisu/sisu_manual/sisu_help/index.html>	2246
<http://www.jus.uio.no/sisu/sisu_manual/sisu_help_sources/index.html>	2247
<http://www.jus.uio.no/sisu/sisu_manual/sisu_howto/index.html>	2248
<http://www.jus.uio.no/sisu/sisu_manual/sisu_introduction/index.html>	2249
<http://www.jus.uio.no/sisu/sisu_manual/sisu_manual/index.html>	2250
<http://www.jus.uio.no/sisu/sisu_manual/sisu_markup/index.html>	2251
<http://www.jus.uio.no/sisu/sisu_manual/sisu_output_overview/index.html>	2252
<http://www.jus.uio.no/sisu/sisu_manual/sisu_pdf/index.html>	2253
<http://www.jus.uio.no/sisu/sisu_manual/sisu_postgresql/index.html>	2254
<http://www.jus.uio.no/sisu/sisu_manual/sisu_quickstart/index.html>	2255
<http://www.jus.uio.no/sisu/sisu_manual/sisu_remote/index.html>	2256

<http://www.jus.uio.no/sisu/sisu_manual/sisu_search/index.html>	2257
<http://www.jus.uio.no/sisu/sisu_manual/sisu_skin/index.html>	2258
<http://www.jus.uio.no/sisu/sisu_manual/sisu_sqlite/index.html>	2259
<http://www.jus.uio.no/sisu/sisu_manual/sisu_syntax_highlighting/index.html>	2260
<http://www.jus.uio.no/sisu/sisu_manual/sisu_vim/index.html>	2261
<http://www.jus.uio.no/sisu/sisu_manual/sisu_webrick/index.html>	2262

46.2.4 man2html

46.2.5 locally installed

<file:///usr/share/doc/sisu/html/sisu_manual.1.html>	2265
<file:///usr/share/doc/sisu/html/sisu_help.1.html>	2266
<file:///usr/share/doc/sisu/html/sisu_help_sources.1.html>	2267
/usr/share/doc/sisu/html/sisu.1.html	2268
/usr/share/doc/sisu/html/sisu_commands.1.html	2269
/usr/share/doc/sisu/html/sisu_complete.7.html	2270
/usr/share/doc/sisu/html/sisu_configuration.1.html	2271
/usr/share/doc/sisu/html/sisu_faq.8.html	2272
/usr/share/doc/sisu/html/sisu_help.1.html	2273
/usr/share/doc/sisu/html/sisu_help_sources.1.html	2274
/usr/share/doc/sisu/html/sisu_howto.8.html	2275
/usr/share/doc/sisu/html/sisu_markup.1.html	2276
/usr/share/doc/sisu/html/sisu_pdf.7.html	2277
/usr/share/doc/sisu/html/sisu_postgresql.7.html	2278
/usr/share/doc/sisu/html/sisu_quickstart.8.html	2279
/usr/share/doc/sisu/html/sisu_remote.8.html	2280
/usr/share/doc/sisu/html/sisu_search.8.html	2281
/usr/share/doc/sisu/html/sisu_skin.1.html	2282
/usr/share/doc/sisu/html/sisu_sqlite.7.html	2283
/usr/share/doc/sisu/html/sisu_syntax_highlighting.8.html	2284
/usr/share/doc/sisu/html/sisu_vim.7.html	2285
/usr/share/doc/sisu/html/sisu_webrick.1.html	2286

46.2.6 www.sisudoc.org

<http://sisudoc.org/man/sisu_manual.1.html>	2287
<http://sisudoc.org/man/sisu_help.1.html>	2288
<http://sisudoc.org/man/sisu_help_sources.1.html>	2289
<http://sisudoc.org/man/sisu.1.html>	2290
<http://sisudoc.org/man/sisu_commands.1.html>	2291
<http://sisudoc.org/man/sisu_complete.7.html>	2292
<http://sisudoc.org/man/sisu_configuration.1.html>	2293
<http://sisudoc.org/man/sisu_faq.8.html>	2294
<http://sisudoc.org/man/sisu_help.1.html>	2295
<http://sisudoc.org/man/sisu_help_sources.1.html>	2296
<http://sisudoc.org/man/sisu_howto.8.html>	2297
<http://sisudoc.org/man/sisu_markup.1.html>	2298
<http://sisudoc.org/man/sisu_pdf.7.html>	2299
<http://sisudoc.org/man/sisu_postgresql.7.html>	2300
<http://sisudoc.org/man/sisu_quickstart.8.html>	2301
<http://sisudoc.org/man/sisu_remote.8.html>	2302
<http://sisudoc.org/man/sisu_search.8.html>	2303
<http://sisudoc.org/man/sisu_skin.1.html>	2304
<http://sisudoc.org/man/sisu_sqlite.7.html>	2305
<http://sisudoc.org/man/sisu_syntax_highlighting.8.html>	2306
<http://sisudoc.org/man/sisu_vim.7.html>	2307
<http://sisudoc.org/man/sisu_webrick.1.html>	2308

46.2.7 www.jus.uio.no/sisu

<http://www.jus.uio.no/sisu/man/sisu_manual.1.html>	2310
<http://www.jus.uio.no/sisu/man/sisu_help.1.html>	2311
<http://www.jus.uio.no/sisu/man/sisu_help_sources.1.html>	2312
<http://www.jus.uio.no/sisu/man/sisu.1.html>	2313
<http://www.jus.uio.no/sisu/man/sisu_commands.1.html>	2314
<http://www.jus.uio.no/sisu/man/sisu_complete.7.html>	2315
<http://www.jus.uio.no/sisu/man/sisu_configuration.1.html>	2316

< http://www.jus.uio.no/sisu/man/sisu_faq.8.html >	2318
< http://www.jus.uio.no/sisu/man/sisu_help.1.html >	2319
< http://www.jus.uio.no/sisu/man/sisu_help_sources.1.html >	2320
< http://www.jus.uio.no/sisu/man/sisu_howto.8.html >	2321
< http://www.jus.uio.no/sisu/man/sisu_markup.1.html >	2322
< http://www.jus.uio.no/sisu/man/sisu_pdf.7.html >	2323
< http://www.jus.uio.no/sisu/man/sisu_postgresql.7.html >	2324
< http://www.jus.uio.no/sisu/man/sisu_quickstart.8.html >	2325
< http://www.jus.uio.no/sisu/man/sisu_remote.8.html >	2326
< http://www.jus.uio.no/sisu/man/sisu_search.8.html >	2327
< http://www.jus.uio.no/sisu/man/sisu_skin.1.html >	2328
< http://www.jus.uio.no/sisu/man/sisu_sqlite.7.html >	2329
< http://www.jus.uio.no/sisu/man/sisu_syntax_highlighting.8.html >	2330
< http://www.jus.uio.no/sisu/man/sisu_vim.7.html >	2331
< http://www.jus.uio.no/sisu/man/sisu_webrick.1.html >	2332

¹¹named index.html or more extensively through sisu_manifest.html

DOCUMENT INFORMATION (METADATA)

Metadata

Document Manifest @

<http://www.jus.uio.no/sisu/sisu_manual/sisu_manual/sisu_manifest.html>

Dublin Core (DC)

DC tags included with this document are provided here.

DC Title: SiSU - Manual

DC Creator: Ralph Amissah

DC Rights: Copyright (C) Ralph Amissah 2007, part of SiSU documentation, License GPL 3

DC Type: information

DC Date created: 2002-08-28

DC Date issued: 2002-08-28

DC Date available: 2002-08-28

DC Date modified: 2007-08-30

DC Date: 2007-08-30

Version Information

Sourcefile: sisu_manual._sst

Filetype: SiSU text insert 0.58

Sourcefile Digest, MD5(sisu_manual._sst)= 978fceb89bd099b135fc44be7e8073e

Skin_Digest: MD5(/home/ralph/grotto/theatre/dbld/builds/sisu/sisu/data/doc/sisu/sisu_markup_samples/sisu_n
20fc43cf3eb6590bc3399a1aef65c5a9

Generated

Document (metaverse) last generated: Tue Sep 25 02:51:58 +0100 2007

Generated by: SiSU 0.59.1 of 2007w39/2 (2007-09-25)

Ruby version: ruby 1.8.6 (2007-06-07 patchlevel 36) [i486-linux]

Information on this document copy and an unofficial List of Some web related information and sources

”Support Open Standards and Software Libre for the Information Technology Infrastructure”
RA

Information on this document copy www.jus.uio.no/sisu/

Generated by SiSU found at www.jus.uio.no/sisu/ [SiSU 0.59.1 2007w39/2] www.sisudoc.org. SiSU is software for document structuring, publishing and search (using SiSU: object citation numbering, markup, meta-markup, and system) Copyright © 1997, current 2007 Ralph Amissah, All Rights Reserved.

SiSU is released under GPL 3 or later (www.fsf.org/licenses/gpl.html).

W3 since October 3 1993  SiSU 1997, current 2007.

SiSU presentations at www.jus.uio.no/sisu/

SiSU **pdf** versions can be found at:

http://www.jus.uio.no/sisu/sisu_manual/portrait.pdf

http://www.jus.uio.no/sisu/sisu_manual/landscape.pdf

SiSU **html** versions may be found at:

http://www.jus.uio.no/sisu/sisu_manual/toc.html OR

http://www.jus.uio.no/sisu/sisu_manual/doc.html

SiSU Manifest of document output and metadata may be found at:

http://www.jus.uio.no/sisu/sisu_manual/sisu_manifest.html

SiSU found at: www.jus.uio.no/sisu/

Links that may be of interest at SiSU and elsewhere:

SiSU Manual

http://www.jus.uio.no/sisu/sisu_manual/

Book Samples and Markup Examples

<http://www.jus.uio.no/sisu/SiSU/2.html>

SiSU @ Wikipedia

<http://en.wikipedia.org/wiki/SiSU>

SiSU @ Freshmeat

<http://freshmeat.net/projects/sisu/>

SiSU @ Ruby Application Archive

<http://raa.ruby-lang.org/project/sisu/>

SiSU @ Debian

<http://packages.qa.debian.org/s/sisu.html>

SiSU Download

<http://www.jus.uio.no/sisu/SiSU/download.html>

SiSU Changelog

<http://www.jus.uio.no/sisu/SiSU/changelog.html>

SiSU help

http://www.jus.uio.no/sisu/sisu_manual/sisu_help/

SiSU help sources

http://www.jus.uio.no/sisu/sisu_manual/sisu_help_sources/

SiSU home:

www.jus.uio.no/sisu/