S1000D tools

S1000DTOOLS-KHZAE-00000-00

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List of abbreviations

BREX	Business Rules EXchange
CIR	Common Information Repository
PCT	Product Cross-reference Table

S1000D tools

Description

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Data module/Technical publication	Title
None	

Description

A set of small tools for manipulating S1000D data.

A more complete example of an S1000D data set produced with these tools is available at https://github.com/kibook/s1kd-tools-doc

s1kd-syncrefs

Description

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Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-syncrefs** tool copies all external references (dmRef, pmRef, externalPubRef) within the content of a data module and uses them to generate the <refs> element. Each unique reference is copied, sorted, and placed in to the <refs> element. If a <refs> element already exists, it is overwritten.

2   Usage

s1kd-syncrefs [-o <out>] <datamodules>

3   Options

-o <out>   The resulting data module is output to the file <out> instead of overwriting the original data module. This option only makes sense when <datamodules> contains only a single data module to synchronize. - can be specified to print to stdout.

<datamodules>   The data modules to synchronize references in. Each data module will
                       be overwritten as a result of this command.

s1kd-validate

Description

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Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-validate** tool validates an S1000D data module, checking whether it is a valid XML file and if it is valid against its own S1000D schema.

2   Usage

s1kd-validate [-d <dir>] [-vqD] [<datamodules>]

3   Options

-d <dir>	Search for schemas in <dir>. Normally, the URI of the schema is used to fetch it locally or over a network, but this option will force searching to be performed only in the specified directory.
-v -q -D	Set the verbosity of the output, verbose, quiet, and debug. Verbose will explictly indicate success, rather than simply not displaying any errors. Quiet will not output anything.

<datamodules>   Any number of data modules to validate.

3.1   Multi-spec directory with -d option
The -d option can point either to a directory containing the XSD schema files for a single S1000D spec (i.e. the last part of the schema URI), or to a directory containing schemas for multiple specs. The latter must follow a particular format for the tool to locate the appropriate schemas for a given spec:

```
schemas/    <-- The directory passed to -d
    S1000D_4-1/
        xml_schema_flat/
            [4.1 XSD files...]
    S1000D_4-2/
        xml_schema_flat/
            [4.2 XSD files...]
```

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s1kd-instance

Description

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Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-instance** tool filters a master S1000D data module on user-supplied applicability definitions, producing a new data module instance with non-applicable elements and (optionally) unused applicability statements removed.

2   Usage

s1kd-instance [-s <src>] [-e <ext>] [-c <dmc>] [-l <lang>] [-I <iss>] [-u <sec>] [-o <file>|-O <dir>] [-f] [-t <techName>] [-i <infoName>] [-a|-A] [-Y <text>] [-C <comment>] [-R <CIR> ...] [-S] [-N] [-P <PCT> -p <id>] [-L] [<applic>...]

3   Options

-s <src>   The source data module or publication module (default is to read from stdin).

-e <ext>	Specify an extension on the data module code (DME) or publication module code (PME) for the instance.
-c <dmc>	Specify a new data module code (DMC) or publication module code (PMC) for the instance.
-l <lang>	Set the language and country of the instance. For example, to create an instance for US English, lang would be "en-US".
-I <iss>	Set the issue and inwork numbers of the instance. By default, the issue and inwork number are taken from the source.
-u <sec>	Set the security classification of the instance. An instance may have a lower security classification than the source if classified information is removed for a particular customer.
-o <file>	Output instance to file instead of stdout.
-O <dir>	Output instance(s) in dir, automatically naming them based on:

–   the extension specified with -e, and/or

–   the code specified with -c, and/or

–   the language and country specified with -L

The issue information is copied from the source or taken as specified in the -I option.

-f	Overwrite existing file with same name as the filename generated automatically with -O, if it exists.
-t <techName>	Give the instance a different techName/pmTitle.
-i <infoName>	Give the data module instance a different infoName.
-a	Remove unused applicability annotations but not statements.
-A	Remove unused applicability annotations and simplify/remove unused applicability statements.
-Y <text>	Set the applicability for the whole data module/publication module using the user-defined applicability values, using text as the new display text.
-C <comment>	Add an XML comment to the top of the instance. Useful as another way of identifying a data module/publication module as an instance aside from the source address or extended code, or giving additional information about a particular instance.
-R <CIR> ...	Use a CIR (Common Information Repository) to resolve external dependencies in the master data module, making the instance data

module standalone. Additional CIRs can be used by specifying the -R option multiple times. Currently the functional item, warnings/cautions and applicability CIRs are supported.

-S   Do not include <sourceDmIdent>/<sourcePmIdent>/ <repositorySourceDmIdent> in the instance.

-w   Check the applicability of the whole data module/publication module against the user-defined applicability. If the whole data module/ publication module is not applicable, then no instance is created.

-N   Omit issue/inwork numbers from automatically generated filenames.

-P <PCT>   PCT (Product Cross-reference Table) file to read product definitions from (-p).

-p <id>   Product ID of the product to read applicability definitions from, using the specified PCT data module (-P).

-L   Source (-s or stdin) is a list of data module/publication module filenames to create instances of, rather than a single data module/ publication module.

<applic>...   Any number of applicability definitions in the form of: <ident>:<type>=<value>

3.1   -a vs -A

The -a option will remove applicability annotations (applicRefId) from elements which are deemed to be unambiguously valid (their validity does not rely on applicability values left undefined by the user). The applicability statements themselves however will be untouched.

The -A option will do the above, but will also attempt to simplify unused parts of applicability statements or remove unused applicability statements entirely. It simplifies a statement by removing <assert> elements determined to be either unambiguously valid or invalid given the user-defined values, and removing unneeded <evaluate> elements when they contain only one remaining <assert>.

Note

The -A option may change the **meaning** of certain applicability statements without changing the **display text**. Display text is always left untouched, so using this option may cause display text to be technically incorrect.

3.2   Identifying source data module of an instance

The resulting data module instance will contain the element <sourceDmIdent>, which will contain the identification elements of the data module specified with the -s option. Publication module instances will contain the element <sourcePmIdent> instead.

Additionally, the instance will contain an element <repositorySourceDmIdent> for each CIR specified with the -R option.

If the -S option is used, neither the <sourceDmIdent>/<sourcePmIdent> elements or <repositorySourceDmIdent> elements are added. This can be useful when this tool is not used to make an "instance" per se, but more generally to make a data module based on an existing data module.

3.3 Instance data module code (-c) vs extension (-e)

When creating a data module instance, the instance should have the same data module code as the master data module, with an added extension code, the DME. However, in cases where a vendor does not support this extension or possibly when this tool is used to create "instances" which will from that point on be maintained as normal standalone data modules, it may be desirable or necessary to change the data module code instead. These two options can be used together as well to give an instance a new DMC as well an extension.

s1kd-brexcheck

Description

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Table 1 References

Data module/Technical publication	Title
None	

Description

1　General

The **s1kd-brexcheck** tool validates an S1000D data module using the context rules of one or multiple BREX (Business Rules EXchange) data modules. All errors are displayed with the <objectUse> message, the line number, and a representation of the invalid XML tree.

2　Usage

s1kd-brexcheck [-b <brex>] [-I <path>] [-w <severities>] [-vVqDsxlSh?] <datamodules>

3　Options

-b <brex>　　　　　　Check the data modules against this BREX. Multiple BREX data modules can be specified by adding this option multiple times. When no BREX data modules are specified, the BREX data module

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referenced in <brexDmRef> in the data module is attempted to be used instead.

-I <path>	Add a search path for BREX data modules. By default, only the current directory is searched.
-v -V -q -D	Verbosity of the output.
-s	Use shortened, single-line messages to report BREX errors instead of multiline indented messages.
-x	Output an XML report instead of a plain-text one.
-l	Use the layered BREX concept. BREX data modules referenced by other BREX data modules (either specified with -b or referenced by the specified data modules) will also be checked against.
-w <severities>	Specify a list of severity levels for business rules.
-S	Check SNS rules. The SNS of each specified data module is checked against the combination of all SNS rules of all specified BREX data modules.
-h -?	Show the help/usage message.

3.1   Business rule severity levels (-w)

The attribute brSeverityLevel on a BREX rule allows for distinguishing different kinds of errors. The -w option takes an XML file containing a list of severity levels, their user-defined type, and optionally if they should not be counted as true errors (causing the tool to return a "failure" status) but merely warnings.

An example of the format of this file is given below:

```
<?xml version="1.0"?>
<brSeverityLevels>
  <brSeverityLevel value="brsl01" fail="yes">Error</brSeverityLevel>
  <brSeverityLevel value="brsl02" fail="no">Warning</brSeverityLevel>
</brSeverityLevels>
```

When the attribute `fail` has a value of "yes" (or is not included), BREX errors pertaining to rules with the given severity level value will be counted as errors. When it is no, the errors are still displayed but are not counted as errors in the exit status code of the tool.

4   Example

```
$ DMOD=DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-01_EN-CA.XML
$ BREX=DMC-S1000D-F-04-10-0301-00A-022A-D_001-00_EN-US.XML
$ cat $DMOD
[...]
<listItem id="stp-0001">
```

```
    <para>List items shouldn't be used as steps...</para>
</listItem>
[...]
<para>Refer to <internalRef internalRefId="stp-0001" internalRefTargetType="ir
[...]

$ s1kd-brexcheck -b $BREX $DMOD
BREX ERROR: DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-01_EN-CA.XML
  Only when the reference target is a step can the value of attribute
internalRefTargetType be irtt08 (Chap 3.9.5.2.1.2, Para 2.1).
  line 53:
    ELEMENT internalRef
      ATTRIBUTE internalRefId
        TEXT
          content=stp-0001
      ATTRIBUTE internalRefTargetType
        TEXT
          content=irtt08
```

s1kd-upissue

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-upissue** tool increases the in-work or issue number of an S1000D data module, publication module, etc.

Any files using an S1000D-esque naming convention, placing the issue and in-work numbers after the first underscore (_) character, can also be "upissued". Files which do not contain the appropriate S1000D metadata are simply copied.

2   Usage

s1kd-upissue [-viN] [-s <status>] <files>

3 Options

-v   Print the file name of the upissued data module.

-i   Increase the issue number of the data module. By default, the in-work issue is increased.

-s <status>   Set the status of the new issue. Default is 'changed'.

-N   Omit issue/inwork numbers from filename.

4 Examples
4.1 Data module with issue/inwork in filename

```
$ ls
DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-01_EN-CA.XML

$ s1kd-upissue DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-01_EN-CA.XML
$ ls
DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-01_EN-CA.XML
DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-02_EN-CA.XML

$ s1kd-upissue -i DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-02_EN-CA.XML
$ ls
DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-01_EN-CA.XML
DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_000-02_EN-CA.XML
DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_001-00_EN-CA.XML
```

4.2 Data module without issue/inwork in filename

```
$ ls
DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_EN-US.XML

$ s1kd-metadata DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_EN-CA.XML issueInfo
000-01
$ s1kd-upissue -N DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_EN-CA.XML
$ s1kd-metadata DMC-S1000DTOOLS-A-00-00-00-00A-040A-D_EN-CA.XML issueInfo
000-02
```

4.3 Non-XML file with issue/inwork in filename

```
$ ls
TXT-S1000DTOOLS-KHZAE-FOOBAR_000-01_EN-CA.TXT

$ s1kd-upissue TXT-S1000DTOOLS-KHZAE-00001_000-01_EN-CA.TXT
$ ls
TXT-S1000DTOOLS-KHZAE-FOOBAR_000-01_EN-CA.TXT
TXT-S1000DTOOLS-KHZAE-FOOBAR_000-02_EN-CA.TXT
```

s1kd-dmls

Description

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Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-dmls** tool lists data modules in a directory, with various options for columns for data module metadata which can be useful for sorting them with other tools.

2   Usage

s1kd-dmls [-acfHhilorTtpDP]

3   Options

-l   Show only the latest issue/inwork version of data modules.

-I   Show only official issues of data modules (inwork = 00).

-f   Do not show filename column.

-c   Show data module code column.

-n	Show issue info (issueNumber-inWork).
-L	Show language info (languageIsoCode-countryIsoCode).
-t	Show tech and info name columns.
-T	Show title in single column (techName - infoName).
-i	Include the issue date column.
-r	Include the responsible partner company column.
-o	Include the originator column.
-a	Include the applicability column.
-H	Show headers on columns.
-w	Show only writable data module files.
-R	Recursively descend in to directories.
-p	Do not replace control characters (\n, \t) when printing.
-D, -P	List data modules/publication modules. If neither is specified, -DP is assumed.
-h	Show the usage message.

s1kd-newdm

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-newdm** tool creates a new S1000D data module with the data module code and other metadata specified.

2   Usage

s1kd-newdm [options]

3   Options

-d <defaults>   Specify the 'defaults' file name.

-D <dmtypes>	Specify the 'dmtypes' file name.
-p	Prompts the user for any values left unspecified.
-# <DMC>	The data module code of the new data module.
-L <language>	The language ISO code of the new data module.
-C <country>	The country ISO code of the new data module.
-n <issue>	The issue number of the new data module.
-w <inwork>	The inwork number of the new data module.
-c <sec>	The security classification of the new data module.
-r <RPC>	The responsible partner company enterprise name of the new data module.
-R <CAGE>	The CAGE code of the responsible partner company.
-o <orig>	The originator enterprise name of the new data module.
-O <CAGE>	The CAGE code of the originator.
-t <tech>	The tech name of the new data module.
-i <info>	The info name of the new data module.
-T <schema>	The type (schema) of the new data module. Supported schemas:

- appliccrossreftable - Applicability cross-reference table

- brdoc - Business rule document

- brex - Business rule exchange

- checklist - Maintenance checklist

- comrep - Common information repository

- condcrossreftable - Conditions cross-reference table

- descript - Descriptive

- fault - Fault information

- frontmatter - Front matter

- ipd - Illustrated parts data

- prdcrossreftable - Product cross-reference table

- proced - Procedural

	– process - Process
-N	Omit issue/inwork numbers from filename.
-b <BREX>	BREX data module code.
-v	Print the file name of the newly created data module.
-f	Overwrite existing file.

3.1 Prompt (-p) option

If this option is specified, the program will prompt the user to enter values for metadata which was not specified when calling the program. If a piece of metadata has a default value (from the 'defaults' and 'dmtypes' files), it will be displayed in square brackets [] in the prompt, and pressing Enter without typing any value will select this default value.

3.2 'defaults' file

This file sets default values for each piece of metadata. By default, the program will search the current directory for a file named 'defaults', but any file can be specified by using the -d option.

All of the s1kd-new* commands use the same 'defaults' file format, so this file can contain default values for multiple types of metadata.

Each line consists of the identifier of a piece of metadata and its default value, separated by whitespace. Lines which do not match a piece of metadata are ignored, and may be used as comments. Example:

```
# General
modelIdentCode          S1000DTOOLS
securityClassification  01
responsiblePartnerCompany khzae.net
originator              khzae.net
languageIsoCode         en
countryIsoCode          CA
issueNumber             000
inWork                  01

# Data modules
systemDiffCode          A
systemCode              00
subSystemCode           0
subSubSystemCode        0
assyCode                00
disassyCode             00
disassyCodeVariant      A
infoCode                040
infoCodeVariant         A
itemLocationCode        D
```

```
# Comments/DDN
senderIdent            KHZAE
yearOfDataIssue        2017
seqNumber              00001
city                   Toronto
country                Canada

# Comments
commentType            q
commentPriorityCode    cp01

# DDN
authorization          khzae.net

# Publication modules
pmIssuer               KHZAE
pmNumber               00001
pmVolume               00
```

Alternatively, the 'defaults' file can be written using an XML format, containing a root element `defaults` with child elements `default` which each have an attribute `ident` and an attribute `value`.

```
<?xml version="1.0"?>
<defaults>
  <!-- General -->
  <default ident="modelIdentCode" value="S1000DTOOLS"/>
  <default ident="securityClassification" value="01"/>
  [...]
</defaults>
```

3.3   'dmtypes' file

This file sets the default type (schema) for data modules based on their info code. By default, the program will search the current directory for a file named 'dmtypes', but any file can be specified by using the -D option.

Each line consists of an info code and a schema identifier. Example:

```
00E    comrep
00W    appliccrossreftable
009    frontmatter
022    brex
024    brdoc
040    descript
520    proced
```

Like the 'defaults' file, the 'dmtypes' file may also be written in an XML format, where each child has an attribute `infoCode` and an attribute `schema`.

```
<?xml version="1.0">
```

```
<dmtypes>
  <type infoCode="040" schema="descript"/>
  <type infoCode="520" schema="proced"/>
</dmtypes>
```

4   Example

s1kd-newdm -# S1000DTOOLS-A-00-07-00-00A-040A-D -T descript

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s1kd-dmref

Description

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Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-dmref** tool generates the XML for a <dmRef> element using the specified code or data module filename. When using a filename, it can parse the data module to include the issue, language, and/or title information in the reference.

2   Usage

s1kd-dmref [-tlih?] [<code>|<filename>]

3   Options

-t   Include the dmTitle in the reference (target must be a file).

-l   Include the language information in the reference (target must be a file)

-i   Include the issue information in the reference (target must be a file)

-h -?	Show the usage message.
<code>|<filename>	Either a data module code, including the prefix DMC or DME (for extended identification), or the filename of a data module.

4   Example

```
$ s1kd-dmref DMC-S1000DTOOLS-A-00-08-00-00A-040A-D
<dmRef>
  <dmRefIdent>
    <dmCode modelIdentCode="S1000DTOOLS" systemDiffCode="A" systemCode="00" su
  </dmRefIdent>
</dmRef>
```

s1kd-metadata

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-metadata** tool provides a simple way to fetch and change metadata on S1000D data modules.

2   Usage

s1kd-metadata [-c <file>] [-t] [<name> [<value>]]

3   Options

-c <file>	Use <file> to edit metadata files. <file> consists of lines starting with a metadata name, followed by whitespace, followed by the new value for the metadata (the program uses this same format when outputting all metadata if no <name> is specified).

<name>   The name of the piece of metadata to fetch. If no name is specified, all available metadata names are printed with their values. This output can be sent to a text file, edited, and then specified with the -c option as a means of editing metadata in any text editor.

<value>   The new value for the piece of metadata.

3.1   Available metadata names

– act

– applic

– authorization

– brex

– language

– infoName

– issueDate

– issueInfo

– issueType

– originator

– originatorCode

– responsiblePartnerCompany

– responsiblePartnerCompanyCode

– schema

– securityClassification

– techName

– type

4   Example

```
$ ls
DMC-S1000DTOOLS-A-00-09-00-00A-040A-D_EN-CA.XML

$ s1kd-metadata DMC-S1000DTOOLS-A-00-09-00-00A-040A-D_EN-CA.XML
issueDate                      2017-08-14
techName                       s1kd-metadata(1) | General Commands Manual
```

```
responsiblePartnerCompany      khzae.net
originator                     khzae.net
securityClassification         01
schema                         http://www.s1000d.org/S1000D_4-2/xml_schema_fla
type                           dmodule
applic                         All
brex                           S1000D-F-04-10-0301-00A-022A-D
issueType                      new
language                       en-CA
issueInfo                      001-00
dmCode                         S1000DTOOLS-A-00-09-00-00A-040A-D

$ s1kd-metadata DMC-S1000DTOOLS-A-00-09-00-00A-040A-D_EN-CA.XML techName 'New
$ s1kd-metadata DMC-S1000DTOOLS-A-00-09-00-00A-040A-D_EN-CA.XML techName
techName                       New title
```

s1kd-newpm

Description

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Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-newpm** tool creates a new S1000D publication module with the publication module code and other metadata specified.

2   Usage

s1kd-newpm [options]

3   Options

-d   Specify the 'defaults' file name.

-p   Prompt the user for any values left unspecified.

-# <PMC>   The publication module code of the new publication module.

-L <language>	The language ISO code of the new publication module.
-C <country>	The country ISO code of the new publication module.
-n <issue>	The issue number of the new publication module.
-w <inwork>	The inwork number of the new publication module.
-c <sec>	The security classification of the new publication module.
-r <RPC>	The responsible partner company enterprise name of the new publication module.
-R <CAGE>	The CAGE code of the responsible partner company.
-t <title>	The title of the new publication module.
-b <BREX>	BREX data module code.
-v	Print the file name of the newly created publication module.
-f	Overwrite existing file.

3.1   'defaults' file

Refer to s1kd-newdm(1) for information on the 'defaults' file which is used by all the s1kd-new* commands.

s1kd-newimf

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1　　　　General

The **s1kd-newimf** tool creates a new S1000D ICN metadata file for specified ICN files.

2　　　　Usage

s1kd-newimf [options] <ICNs>...

3　　　　Options

-d <defaults>	Specify the 'defaults' file name.
-p	Prompts the user for any values left unspecified.
-n <issue>	The issue number of the new ICN metadata file.
-w <inwork>	The inwork issue of the new ICN metadata file.

-c \<sec\>	The security classification of the new ICN metadata file.
-r \<RPC\>	The responsible partner company enterprise name of the new ICN metadata file.
-R \<CAGE\>	The CAGE code of the responsible partner company.
-o \<orig\>	The originator enterprise name of the new ICN metadata file.
-O \<CAGE\>	The CAGE code of the originator.
-t \<title\>	The ICN title (if creating multiple ICNs, they will all use this title).
-b \<BREX\>	BREX data module code.
-v	Print the file name of the newly created IMF.
-f	Overwrite existing file.

s1kd-neutralize

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

Generates neutral metadata for the specified data modules. This includes:

–   XLink attributes for references, using the S1000D URN scheme.

–   RDF and Dublin Core metadata.

2   Usage

s1kd-neutralize [-o <file>] [-rh?] <datamodules>

3   Options

-o <file>   Output neutralized data module XML to <file> instead of overwriting the source data module.

-h -? Show usage message.

4 Example

```
$ DMOD=DMC-XLINKTEST-A-00-00-00-00A-040A-D_000-01_EN-CA.XML
$ xmllint --xpath "//description/dmRef" $DMOD
<dmRef>
  <dmRefIdent>
    <dmCode modelIdentCode="XLINKTEST" systemDiffCode="A"
systemCode="00" subSystemCode="0" subSubSystemCode="0" assyCode="01"
disassyCode="00" disassyCodeVariant="A" infoCode="040"
infoCodeVariant="A" itemLocationCode="D"/>
  </dmRefIdent>
  <dmRefAddressItems>
    <dmTitle>
      <techName>XLink test</techName>
      <infoName>Referenced data module</infoName>
    </dmTitle>
  </dmRefAddressItems>
</dmRef>

$ s1kd-neutralize $DMOD
$ xmllint --xpath "//description/dmRef" $DMOD
<dmRef xlink:type="simple"
xlink:href="URN:S1000D:DMC-XLINKTEST-A-00-00-01-00A-040A-D"
xlink:title="XLink test - Referenced data module">
[...]
</dmRef>
```

s1kd-transform

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

Applies an XSLT stylesheet to S1000D data modules. The original data module files are overwritten, but their DTD is preserved.

2   Usage

s1kd-transform [-h?] [-s <stylesheet> ...] [-i] [-o <file>] <datamodules>

3   Options

-h -?   Show usage message.

-s <stylesheet>   An XSLT stylesheet file to apply to each data module. Multiple stylesheets can be specified by supplying this argument multiple times. The stylesheets will be applied in the order they are listed.

-i   Includes an "identity" template in to each specified stylesheet.

-o <file>   Output to <file> instead of overwriting the original data module file. This option only makes sense when the input is a single data module.

<datamodules>   Any number of data modules to apply all specified stylesheets to. The original files are overwritten with the results of the transformations.

3.1   Identity template

The -i option includes an "identity" template in to each stylesheet specified with the -s option. The template is equivalent to this XSL:

```
<xsl:template match="@*|node()">
  <xsl:copy>
    <xsl:apply-templates select="@*|node()"/>
  </xsl:copy>
</xsl:template>
```

This means that any attributes or nodes which are not matched by a more specific template in the user-specified stylesheet are copied.

s1kd-newcom

Description

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List of tables

References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-newcom** tool creates a new S1000D comment with the code and metadata specified.

2   Usage

s1kd-newcom [options]

3   Options

-d <defaults>   Specify the 'defaults' file name.

-p   Prompt the user for values left unspecified.

-# <code>   The code of the comment, in the form of MODELIDENTCODE-SENDERIDENT-YEAR-SEQ-TYPE.

Applicable to: All

S1000DTOOLS-A-00-0G-00-00A-040A-D

-L <lang>	The language ISO code of the new comment.
-C <country>	The country ISO code of the new comment.
-c <sec>	The security classification of the new comment.
-o <orig>	The enterprise name of the originator of the comment.
-t <title>	The title of the new comment.
-r <type>	The response type of the new comment.
-b <BREX>	BREX data module code.
-v	Print the file name of the newly created comment.
-f	Overwrite existing file.

3.1   'defaults' file

Refer to s1kd-newdm(1) for information on the 'defaults' file which is used by all the s1kd-new* commands.

s1kd-newddn

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-newddn** tool creates a new S1000D data dispatch note with the code, metadata, and list of files specified.

2   Usage

s1kd-newddn [options] <files>...

3   Options

-d <defaults>   Specify the 'defaults' file name.

-p <showprompts>   Prompt the user for values left unspecified.

-# <code>   The code of the new data dispatch note, in the form of MODELIDENTCODE-SENDER-RECEIVER-YEAR-SEQUENCE.

-o \<sender\>	The enterprise name of the sender.
-r \<receiver\>	The enterprise name of the receiver.
-t \<city\>	The sender's city.
-T \<city\>	The receiver's city.
-n \<country\>	The sender's country.
-N \<country\>	The receiver's country.
-a \<auth\>	Specify the authorization.
-h -?	Show help/usage message.
-b \<BREX\>	BREX data module code.
-v	Print the file name of the newly created DDN.
-f	Overwrite existing file.

3.1 'defaults' file

Refer to s1kd-newdm(1) for information on the 'defaults' file which is used by all the s1kd-new*
commands.

s1kd-checkrefs

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-checkrefs** tool takes a list of S1000D data modules and pub modules, and lists any invalid references to data/pub modules within them (references to modules not included in the list). It can also update the address items (title, issueDate if applicable) of all valid references using the corresponding address items of the given modules.

2   Usage

s1kd-checkrefs [-s <source>] [-t <target>] [-cuFvh?] <modules>...

3   Options

-s <source>   Use only the specified module as the source of address items. Only references to this module will be checked and/or updated in all other modules.

-t \<target\>	Only check and/or update references within this module. All other modules will only be used as sources.
-c	Only check/update references within the content section of modules.
-u	Update the address items of all valid references found within the specified modules.
-F	Fail on first invalid reference and return an error code.
-e	Check/update external publication references against a pre-defined list of publications.
-v	Verbose output.
-h -?	Show help/usage message

3.1 External publication list (-e)

Since external publications can be of any format, in order to check references to them, their metadata must be specified in an XML format for the s1kd-checkrefs tool to read.

The root element of the XML file is the `externalPubs` element. Each external publication is represented by an element `externalPubAddress`. The identifying elements of the publication are stored in the `externalPubIdent` element (corresponding with the `externalPubRefIdent` element). The address items are stored in the `externalPubAddress` element (corresponding with the `externalPubRefAddressItems` element).

Example:

```
<?xml version="1.0"?>
<externalPubs>
  <externalPubAddress>
    <externalPubIdent>
      <externalPubCode>s1kd-checkrefs</externalPubCode>
      <externalPubTitle>s1kd-checkrefs manual</externalPubTitle>
    </externalPubIdent>
    <externalPubAddressItems>
      <externalPubIssueDate year="2017" month="08" day="14"/>
    </externalPubAddressItems>
  </externalPubAddress>
</externalPubs>
```

s1kd-acronyms

Description

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1   General

The **s1kd-acronyms** tool generates a list of unique acronyms used in S1000D data modules.

2   Usage

s1kd-acronyms [-pxdth?] [-n <#>] [-T <types>] [-o <file>] [<datamodules>]

3   Options

-p   Pretty print text/XML output.

-x   Use XML output instead of plain text.

-d   Format XML output as an S1000D `<definitionList>`.

-t   Format XML output as an S1000D `<table>`.

-n <#>   Minimum number of spaces after the term in pretty-printed text output.

-T <types>   Only search for acronyms with an attribute `acronymType` whose value is contained within the string <types>.

-o <file>   Output to <file> instead of stdout.

-h -?   Show help/usage message.

<datamodules>   Data modules to find acronyms in.