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NAME

stdf4_survey.pl - Surveys an STDF Version 4 file and outputs information about the file contents to standard output.

SYNTAX

```
perl stdf4_survey.pl [OPTIONS] ARGUMENTS

OPTIONS

-a, --about
    Displays information about this program.

-d, --debug
    Enables debug mode which outputs debug information to
    standard output.

-h, --help
    Displays help for this program.

-l, --log
    Enables log mode which outputs log information to
    standard output.

ARGUMENTS

StdFileSpec
    The input STDF file specification.

RETURNS

The program returns a value of unix true (0) if no errors
occur; otherwise, a value of unix false (1) is returned.

STANDARD INPUT

Standard input is ignored.

STANDARD OUTPUT

STANDARD ERROR

If an error occurs then a message is output to standard error.
```

SYNOPSIS

```
perl stdf4_survey.pl -a
perl stdf4_survey.pl --about

    Displays information about the program.

perl stdf4_survey.pl -h
perl stdf4_survey.pl --help

    Displays the help for the program.

perl stdf4_survey.pl StdFileSpec

    Surveys the STDF file specified by StdFileSpec and outputs
    the survey results to standard output.

perl stdf4_survey.pl -d StdFileSpec
perl stdf4_survey.pl --debug StdFileSpec

    Surveys the STDF file specified by StdFileSpec and outputs
    the survey results and debug information to standard output.
    ...
NOTE: Use command line redirection to capture standard
output to a file.
```

DESCRIPTION

This program surveys an STDF Version 4 file and outputs information about the file contents to standard output.

Default Output

The default output consists of the a header and the survey of each record in the STDF file.

A record survey consists of the record number (RECR), the absolute byte offset of the record in the file (ABO), the hex value of the record length (LENHEX), the decimal value of the record length (LENDEC), the hex value of the record type (TYPHEX), the decimal value of the record type (TYPDEC),the hex value of the record sub-type (SUBHEX), the decimal value of the record sub-type (SUBDEC),the hex value of the record data (DATHEX), the text of the record length (DATTXT).

NOTE: All control characters and ASCII characters equal to or greater than decimal 126 are filtered and replaced by the ^ character in the text representation of the data.

RECR	ABO	LENHEX	LENDEC	TYPHEX	TYPDEC	SUBHEX	SUBDEC	RECNAM	DATHEX	DATTXT
0	0200	2	00	0	0A	10	FRZ	0204	**	
2	6	A000	170	01	1	0A	10	MIR		
72F3684372F36843005920PFFF200C544A4541303336305930300D4D433953303847543630434644074A3735302D303804A43735301046696E616C5F546573745F3437166700C39533038474236305F4A3035000548523236380549472D584C07332E34302E30390346430E32D3430000000D4D4339533038475436304346440003544A4E00044C33315202320300000114D4339533038475436304346445F464348D43939393	r^hc^*hc^*py^*****TJMA0360Y00*MC9S08GT60CFD*7750-08*7750*Pinal_Test_44qfp*9S08GB60_J05**HRZ68*IG-XL*3.40.09*PCN*-40***MC9S08GT60CFD**TJN*L13R*20***MC9S08GT60CFD_FCN*9999	...								
4260	113748	0400	4	01	1	14	20	MRR	9C016943	**!C

Additional Log Output

If the log mode is enabled then log information is output in addition to the default output.

```
stdf4_survey.pl Copyright (C) 2005 Michael Hackerott. All Rights Reserved
STDF File Spec: ..\data\inp\STDF\FT_0750_112KB.stdf
STDF File Size: 113756 bytes
... <default outputs ...
Surveyed 113756 byte STDF file in 1 seconds (113756.0 bytes/second).
```

Additional Debug Output

If the debug mode is enabled then debug information is output in addition to the default output. (NOTE: debug mode increases the survey time and amount of output by approximately 15 to 25 times!)

```
$gOptions = ('log' => 1, 'debug' => 1);
$gStdfFileSpec = '..\data\inp\STDF\FT_0750_112KB.stdf';
$gStdfFileSize = 113756;
RECS  ABO  LENHEX  LENDEC  TYPHEX  TYPDEC  SUBHEX  SUBDEC  RECNAM  DATHEX  DATTXT
$gStdfFile{ 'ABO' } = 0;
$gStdfRrec{ 'LENBIN' } =
0000 00000010 02 2  0
0001 00000000 00 0  0
$gStdfRecordRead{ 'status' } = 2;
$gStdfRrec{ 'LENHEX' } = '0200';
$gStdfFile{ 'ENDIAN' } = 1;
$gStdfRecordRead{ 'lenhex' } = '0002';
$gStdfRrec{ 'LENDEC' } = '2';
$gStdfRrec{ 'TYPBIN' } =
0000 00000000 00 0  0
$gStdfRrec{ 'TYPHEX' } = '00';
$gStdfRrec{ 'TYPDEC' } = 0;
$gStdfRrec{ 'SUBBIN' } =
0000 00001010 0A 10  0
$gStdfRrec{ 'SUBHEX' } = '0A';
$gStdfRrec{ 'SUBDEC' } = 10;
$gStdfRrecName = 'FAR';
$gStdfRrec{ 'DATBIN' } =
0000 00000010 02 2  0
0001 00000100 04 4  0
$gStdfRrec{ 'DATHEX' } = '0204';
$gStdfRrec{ 'DATTXT' } = '000';
1 0 0200 2 00 0 0A 10 FAR 0204 00
...
```

REQUIRES

- Perl 5.6 or newer.
- Perl core module strict.
- Perl custom module TDF.pm.

SEE ALSO

- perl core and module documentation.
- STDF Specification V4 published by Teradyne, Inc.
- ATDF Specification V2 published by Teradyne, Inc.

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ACKNOWLEDGEMENT

The Standard Test Data Format (STDF) and ASCII Test Data Format (ATDF) specifications are the original works of Teradyne Inc.

KNOWN BUGS

HISTORY

1.0.0 (200512031456) Michael Hackerott

- Created program.