NAME

Sereal – Fast, compact, powerful binary (de−)serialization

SYNOPSIS

```
use Sereal qw(
    get_sereal_decoder
    get_sereal_encoder
    clear_sereal_object_cache

    encode_sereal
    decode_sereal

    read_sereal
    read_sereal_file
    write_sereal
    write_sereal_file

    looks_like_sereal
    scalar_looks_like_sereal

    sereal_encode_with_object
    sereal_decode_with_object
    decode_sereal_with_header_data

    sereal_decode_with_header_with_object
    sereal_decode_only_header_with_object
    sereal_decode_only_header_with_offset_with_object
    sereal_decode_with_header_and_offset_with_object
    sereal_decode_with_offset_with_object

    SRL_UNCOMPRESSED
    SRL_SNAPPY
    SRL_ZLIB
    SRL_ZSTD
);
# Note: For performance reasons, you should prefer the OO interface,
#       or sereal_(en|de)code_with_object over the stateless
#       encode_sereal/decode_sereal functions.
#       See the Sereal::Performance documentation for details.
```

DESCRIPTION

Sereal is an efficient, compact-output, binary and feature-rich serialization protocol. The Perl encoder is implemented as the Sereal::Encoder module, the Perl decoder correspondingly as Sereal::Decoder. They are distributed separately to allow for safe upgrading without downtime. (Hint: Upgrade the decoder everywhere first, then the encoder.)

This `Sereal` module is a very thin wrapper around both `Sereal::Encoder` and `Sereal::Decoder`. It depends on both and loads both. So if you have a user of both encoder and decoder, it is enough to depend on a particular version of `Sereal` and you'll get the most recent released versions of `Sereal::Encoder` and `Sereal::Decoder` whose version is smaller than or equal to the version of `Sereal` you depend on.

The protocol specification and many other bits of documentation can be found in the github repository. Right now, the specification is at <https://github.com/Sereal/Sereal/blob/master/sereal_spec.pod>, there is a discussion of the design objectives in <https://github.com/Sereal/Sereal/blob/master/README.pod>, and the output of our benchmarks can be seen at <https://github.com/Sereal/Sereal/wiki/Sereal−Comparison−Graphs>.

EXPORTED FUNCTIONS

It is recommended to use the object-oriented interface of `Sereal::Encoder` and `Sereal::Decoder` if you care about performance. For detailed performance considerations, see Sereal::Performance.

You can optionally import five functions from `Sereal`. `encode_sereal` is the same function as Sereal::Encoder's `encode_sereal` function. `decode_sereal` and `looks_like_sereal` are the same as Sereal::Decoder's functions of the same names. Finally, you can import the advanced functional interface `sereal_encode_with_object` and `sereal_decode_with_object`. Again, see Sereal::Performance for information about those.

After loading the `Sereal` module, both `Sereal::Encoder` and `Sereal::Decoder` are guaranteed to be loaded, so you can use their object-oriented interface.

get_sereal_encoder($OPTSHASH)

Returns a Sereal::Encoder with the given options. This encoder will be shared by other calls to this function.

get_sereal_decoder($OPTSHASH)

Returns a Sereal::Decoder with the given options. This encoder will be shared by other calls to this function.

clear_sereal_object_cache

Clears cache of objects created via **get_sereal_encoder()** and **get_sereal_decoder()**. Returns the number of objects that were removed from the cache (the sum of both types).

write_sereal_file($FILENAME,$STRUCT,$APPEND,$OPTS)

Write a sereal packet to `$FILENAME`. See **Sereal::Encoder::encode_to_file()**.

write_sereal($FILENAME,$STRUCT,$APPEND,$OPTS)

alias for **write_sereal_file()**

read_sereal_file($FILENAME,$OPTS,$ROOT)

Read a sereal packet from a file. See **Sereal::Decoder::decode_from_file()**.

read_sereal($FILENAME,$OPTS,$ROOT)

alias for **read_sereal_file()**

BUGS, CONTACT AND SUPPORT

For reporting bugs, please use the github bug tracker at <http://github.com/Sereal/Sereal/issues>.

For support and discussion of Sereal, there are two Google Groups:

Announcements around Sereal (extremely low volume): <https://groups.google.com/forum/?fromgroups#!forum/sereal−announce>

Sereal development list: <https://groups.google.com/forum/?fromgroups#!forum/sereal−dev>

AUTHOR

Steffen Mueller <smueller@cpan.org>

ACKNOWLEDGMENT

This module was originally developed for Booking.com. With approval from Booking.com, this module was generalized and published on CPAN, for which the authors would like to express their gratitude.

LICENSE

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

COPYRIGHT AND LICENSE

Copyright (C) 2012, 2013, 2014 by Steffen Mueller