

**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](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 decoder 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>

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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.

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