NAME

Data::Dump::Filtered – Pretty printing with filtering

DESCRIPTION

The following functions are provided:

add_dump_filter(\&filter)
: This registers a filter function to be used by the regular *Data::Dump::dump()* function. By default no filters are active.

  Since registering filters has a global effect is might be more appropriate to use the *dump_filtered()* function instead.

remove_dump_filter(\&filter)
: Unregister the given callback function as filter callback. This undoes the effect of add_filter.

dump_filtered(..., \&filter)
: Works like *Data::Dump::dump()*, but the last argument should be a filter callback function. As objects are visited the filter callback is invoked at it might influence how objects are dumped.

  Any filters registered with *add_filter()* are ignored when this interface is invoked. Actually, passing `undef` as \&filter is allowed and `dump_filtered(..., undef)` is the official way to force unfiltered dumps.

Filter callback

A filter callback is a function that will be invoked with 2 arguments; a context object and reference to the object currently visited. The return value should either be a hash reference or `undef`.

```
sub filter_callback {
    my($ctx, $object_ref) = @_;
    ...
    return { ... }
}
```

If the filter callback returns `undef` (or nothing) then normal processing and formatting of the visited object happens. If the filter callback returns a hash it might replace or annotate the representation of the current object.

Filter context

The context object provide methods that can be used to determine what kind of object is currently visited and where it's located. The context object has the following interface:

`$ctx->`object_ref
: Alternative way to obtain a reference to the current object

`$ctx->`class
: If the object is blessed this return the class. Returns "" for objects not blessed.

`$ctx->`reftype
: Returns what kind of object this is. It's a string like ''SCALAR'', ''ARRAY'', ''HASH'', ''CODE'',...

`$ctx->`is_ref
: Returns true if a reference was provided.

`$ctx->`is_blessed
: Returns true if the object is blessed. Actually, this is just an alias for `$ctx->class`.

`$ctx->`is_array
: Returns true if the object is an array

`$ctx->`is_hash
: Returns true if the object is a hash

`$ctx->is_scalar`
: Returns true if the object is a scalar (a string or a number)

`$ctx->is_code`
: Returns true if the object is a function (aka subroutine)

`$ctx->container_class`
: Returns the class of the innermost container that contains this object. Returns "" if there is no blessed container.

`$ctx->container_self`
: Returns an textual expression relative to the container object that names this object. The variable `$self` in this expression is the container itself.

`$ctx->object_isa( $class )`
: Returns TRUE if the current object is of the given class or is of a subclass.

`$ctx->container_isa( $class )`
: Returns TRUE if the innermost container is of the given class or is of a subclass.

`$ctx->depth`
: Returns how many levels deep have we recursed into the structure (from the original *dump_filtered()* arguments).

`$ctx->expr`
`$ctx->expr( $top_level_name )`
: Returns an textual expression that denotes the current object. In the expression `$var` is used as the name of the top level object dumped. This can be overridden by providing a different name as argument.

Filter return hash

The following elements has significance in the returned hash:

dump => `$string`
: incorporate the given string as the representation for the current value

object => `$value`
: dump the given value instead of the one visited and passed in as `$object`. Basically the same as specifying `dump => Data::Dump::dump($value)`.

comment => `$comment`
: prefix the value with the given comment string

bless => `$class`
: make it look as if the current object is of the given `$class` instead of the class it really has (if any). The internals of the object is dumped in the regular way. The `$class` can be the empty string to make Data::Dump pretend the object wasn't blessed at all.

hide_keys => ['key1', 'key2',...]
hide_keys => \&code
: If the `$object` is a hash dump is as normal but pretend that the listed keys did not exist. If the argument is a function then the function is called to determine if the given key should be hidden.

SEE ALSO

Data::Dump