

Entwickler-Schulung 17.04.2015

kivitendo

Bernd Bleßmann

Thema

- Einfaches Debugging

Debugging – Wohin?

Einstellungen in 'config/kivitendo.conf'

```
[debug]
```

```
...
```

```
file_name = /tmp/kivitendo-debug.log
```



Debugging – Was?

```
[debug]
```

```
...
```

```
#global_level = NONE
```

```
global_level = ALL
```



Debugging – Was?

```
# Possible values include:
# NONE - no debug output (default)
# INFO
# DEBUG1
# DEBUG2
# QUERY - Dump SQL queries (only in legacy code; see also "dbix_log4perl"
above)
# TRACE - Track function calls and returns
# BACKTRACE_ON_ERROR - Print a function call backtrace when $form->error() is called
# REQUEST_TIMER - Log timing of HTTP requests
# REQUEST - Log each request. Careful! Passwords get filtered, but
# there may be confidential information being logged here
# WARN - warnings
# ALL - all possible debug messages
#
# DEVEL - same as "INFO QUERY TRACE BACKTRACE_ON_ERROR REQUEST_TIMER"
#
# Example:
# global_level = TRACE QUERY
```

Debugging – Wie?

Im Programm-Code:

```
$::lxdebug->message(LXDEBUG::INFO, "bb: bla");
```

```
$::lxdebug->message(0, "bb: bla");
```

```
$::lxdebug->warn("bb: bla");
```



Debugging – Wie?

```
$::Ixdebug->dump(0, "bb: form", $::form);
```

```
my @my_array = ('a', 'b', 'c');
```

```
$::Ixdebug->dump(0, "bb: ma", \@my_array);
```

```
$::Ixdebug->dump(0, "bb: mc", \%::myconfig);
```



Debugging – Wie?

```
my $c = SL::DB::Manager::Customer->get_first;
```

```
$::Ixdebug->dump(0, "bb: customer", $c);
```

```
$::Ixdebug->dump(0, "bb: c-tree", $c->as_tree);
```


Debugging – Wie?

→ `global_level = TRACE`

```
sub my_sub {  
    $::lxdebug->enter_sub();  
    ...  
    $::lxdebug->leave_sub();  
}
```

Debugging – Timing

```
global_level = REQUEST_TIMER
```

→ gibt die Zeit für den Request am Ende dessen aus.

```
$_::lxdebug->log_time();
```

```
$_::lxdebug->log_time("bb: die Zeit");
```

→ gibt die Zeit seit Start des Requests aus.

Debugging – SQL-Queries

```
global_level = QUERY
```

- gibt die „alten“ SQL-Queries aus
- nicht aber die über ROSE generierten

```
dbix_log4perl = 1
```

- gibt auch ROSE-Queries aus
- braucht DBIx::Log4Perl



Debugging – watch me

```
watch_form = 1
```

```
# $form->{"Watchdog::<variable>"} = 1;
```

→ Hash-Einträge („Variablen“) in \$::form beobachten

```
# Beispiel: wo wird der Kunde gesetzt / geändert?
```

```
# also: $::form->{customer}
```

```
$::form->{"Watchdog::customer"} = 1;
```

Debugging – Informationen

→ Entwickler-Doku

(pdf oder `<meine_kivi>/doc/html/04.html`)

→ `config/kivitendo.conf.default`

→ `perldoc SL/LXDebug.pm`

Debugging – hands on

Mit TRACE und QUERY den Mahnungsfehler finden
(siehe <http://redmine.kivitendo-premium.de/issues/54>)