

Elegant way to make logging.LoggerAdapter available to other modules

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I use a `LoggerAdapter` to let my python logging output Linux TIDs instead of the long unique IDs. But this way I don't modify an existing `logger` but I create a new object:

```
new_logger = logging.LoggerAdapter(
    logger=logging.getLogger('mylogger'),
    extra=my_tid_extractor())
```

Now I want this `LoggerAdapter` be used by certain modules. As long as I know a global variable being used as `logger` I can do something like this:

```
somemodule.logger = new_logger
```

But this is not nice - it works only in a couple of cases and you need to know the logger variables used by the modules.

Do you know a way to make a `LoggerAdapter` available globally e.g. by calling s.th. like

```
logging.setLogger('mylogger', new_logger)
```

Or alternatively: is there some other way to let Python `logging` output Linux thread IDs like

asked Jan 20 '15 at 16:30



[frans](#)

2,434 ● 2 ● 21 ● 58

2 Answers

Alternatively, you can to implement custom logger, and make it default in logging module.

Here is example:

```
import logging
import ctypes

SYS_gettid = 186
libc = ctypes.cdll.LoadLibrary('libc.so.6')

FORMAT = '%(asctime)-15s\n'
logging.basicConfig(level=logging.DEBUG, format=FORMAT)

def my_tid_extractor():
    tid = libc.syscall(SYS_gettid)
    return {'tid': tid}

class CustomLogger(logging.Logger):
    def _log(self, level, msg, extra=None, **kwargs):
        if extra is None:
            extra = my_tid_extractor()
        super(CustomLogger, self)._log(level, msg, extra, **kwargs)

logging.setLoggerClass(CustomLogger)

logger = logging.getLogger(__name__)
logger.debug('test')
```

Output sample:

```
2015-01-20 19:24:09,782
```

edited Jan 20 '15 at 17:20

answered Jan 20 '15 at 16:49



[Dmitry Nedbaylo](#)

1,758 ● 16 ● 19

Beautiful solution. :)
Thanks! – [erip](#) May
16 '16 at 12:40

I think you need override
LoggerAdapter.process()
method Because the
default
LoggerAdapter.process
method will do nothing,
Here is example :

```
import logging
import random
L=logging.getLogger('na

class myLogger(logging.
    def process(self,ms
        return '(%d),%s

#put the randint functi
LA=myLogger(L,{'name1':

#now,do some logging
LA.debug('some_logging_m

out>>DEBUG:name:(167),s
```

answered Dec 28 '15 at 11:46



[user4554063](#)

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