Debugging & Profiling

Debug with Print

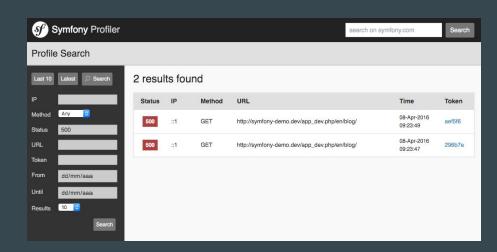
```
# PHP
die(print_r($variable));
var_dump($variable);
dump($variable);
\Symfony\Component\VarDumper\VarDumper::dump($variable);
# Twig
{{ dump(variable) }}
{% dump(variable) %}
```

Symfony Debug Component

- Symfony\Component\Debug\Debug
- Symfony\Component\Debug\ErrorHandler
- Symfony\Component\Debug\ExceptionHandler
- Symfony\Component\Debug\DebugClassLoader

Debug Toolbar

- Profile request
- Profile ajax requests
- Profile curl call
- Extend
- Overview Oro Toolbar tabs



Symfony Debug Class Wrappers

Traceable*

- EventDispatcher/Debug
- TraceableUrlMatcher
- TraceableValidator
- etc.

Helps to Debug Toolbar, but complicates debug with xDebug

Xdebug

Helps to understand what code actually doing

- Doesn't require code changes
- Breakpoints
- Full stack trace
- Step into the code
- Live values

Xdebug

- Debugger
- Profiler (not recommended)
- Configurable
- Supports remote debugging
 - https://xdebug.org/docs/remote
- Quick way to enable/disable xdebug
 - phpenmod / phpdismod xdebug + restart
 - bash script

Xdebug in PhpStorm

- Debug from web browser
 - Chrome extensions, eg. Xdebug helper
- Debug from CLI
 - export XDEBUG_CONFIG="remote_enable=on idekey=PHPSTORM remote_host=127.0.0.1 remote_port=9000 remote_handler=dbgp" && export PHP_IDE_CONFIG="serverName=YOUR_SERVER_NAME"

Setup Xdebug

- Configuring with PhpStorm
- xDebug on Demand
- Evaluate expressions
- Watches
- Conditional breakpoints
- Max simultaneous connections

Blackfire.io

- High overhead, could be used in production
- A lot of ways to use, from CURL to Player
- Profile comparing
- Sharing
- Cross platform support
- Testing by all the metrics
- Periodic builds on production
- Profile every N request on overloaded application