

ibexa

Summit 25

Empowering developers to easily upgrade projects with Ibexa Rector

ANDREW LONGOSZ



About me



Andrew Longosz

<https://github.com/alongosz>

andrew.longosz@ibexa.co

- ▶ From Katowice, Poland
- ▶ Senior Software Engineer at Ibexa's core development PHP Team
- ▶ With the Company since 2016
- ▶ Areas of interest: databases, public APIs, product maintenance & releases
- ▶ After work: addicted to teamwork cooperation video games



What is Ibexa Rector?

- ▶ Automated refactoring tool
- ▶ Built on top of RectorPHP: <https://github.com/rectorphp/rector>
- ▶ Uses Nikita Popov's PHP Parser: <https://github.com/nikic/PHP-Parser>
- ▶ Aimed for easier upgrade of projects' codebase at scale

```
1 <?php declare(strict_types=1);
2
3 final class Foo
4 {
5     /** @var int */
6     private $bar;
7
8     public function __construct()
9     {
10         $this->bar = 1000;
11     }
12 }
```



```
1 <?php declare(strict_types=1);
2
3 final class Foo
4 {
5     private int $bar;
6
7     public function __construct()
8     {
9         $this->bar = 1000;
10     }
11 }
```

Installing Ibexa Rector



```
composer require --dev ibexa/rector:4.6.x-dev
```



```
composer require --dev ibexa/rector:5.0.x-dev
```

Configuring

- ▶ Configuration available as a flex recipe
- ▶ `rector.php` file in a project directory
- ▶ Requires **PHP 8.3**

```
1 <?php declare(strict_types=1);
2
3 use Ibexa\Contracts\Rector\Sets\IbexaSetList;
4 use Rector\Config\RectorConfig;
5
6 return RectorConfig::configure()
7     ->withPaths(
8         [
9             __DIR__ . '/src'
10        ]
11    )
12    ->withSets(
13        [
14            IbexaSetList::IBEXA_46->value,
15        ]
16    );
```

Adding Symfony set lists

► rector/rector-symfony package

```
1 <?php declare(strict_types=1);
2
3 use Ibexa\Contracts\Rector\Sets\IbexaSetList;
4 use Rector\Config\RectorConfig;
5 use Rector\Symfony\Set\SymfonySetList;
6
7 return RectorConfig::configure()
8     ->withPaths(
9         [
10             __DIR__ . '/src'
11         ]
12     )
13     ->withSets(
14         [
15             IbexaSetList::IBEXA_46->value,
16             SymfonySetList::SYMFONY_54,
17         ]
18     );
```

Running Rector

- ▶ Assuming you have `rector.php` file in your project directory, run there:



```
php ./vendor/bin/rector process
```




Using Rector

Live demo time

Creating custom rules

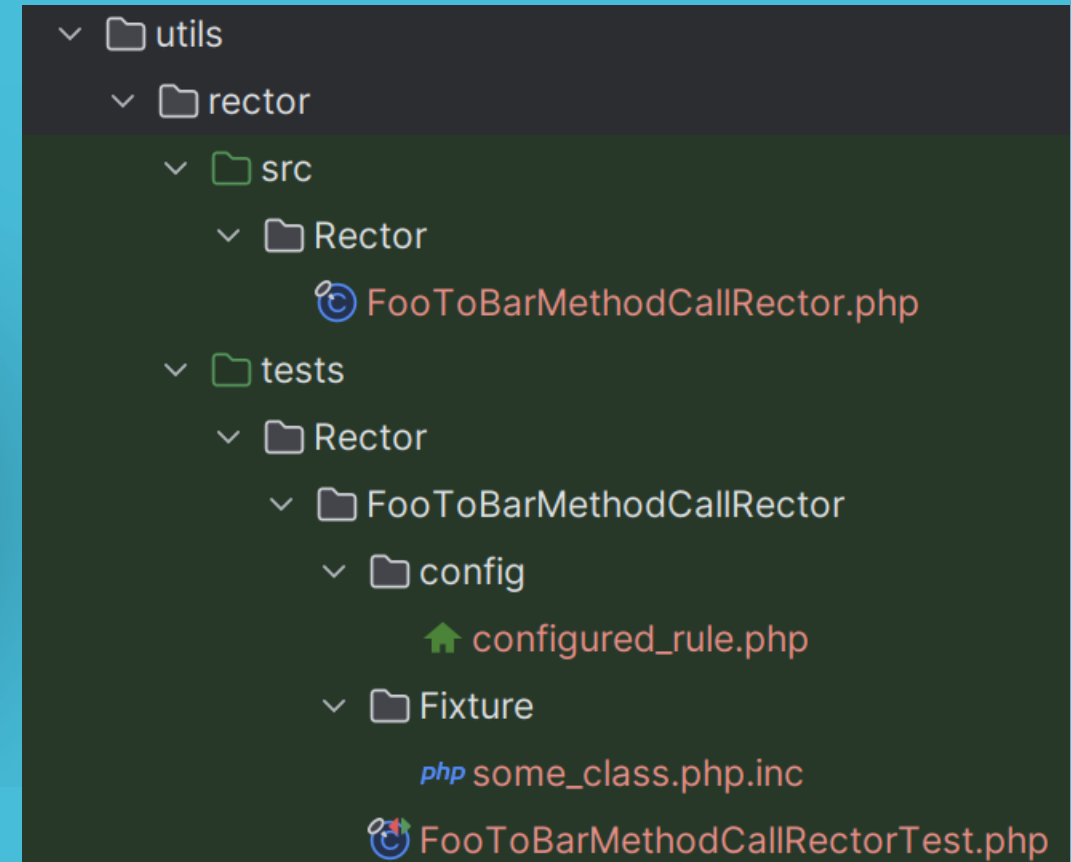
Project-specific rules

- ▶ Use Rector's built-in, interactive, command for any project-specific use case
- ▶ Generate directory structure:



```
php ./vendor/bin/rector custom-rule
```

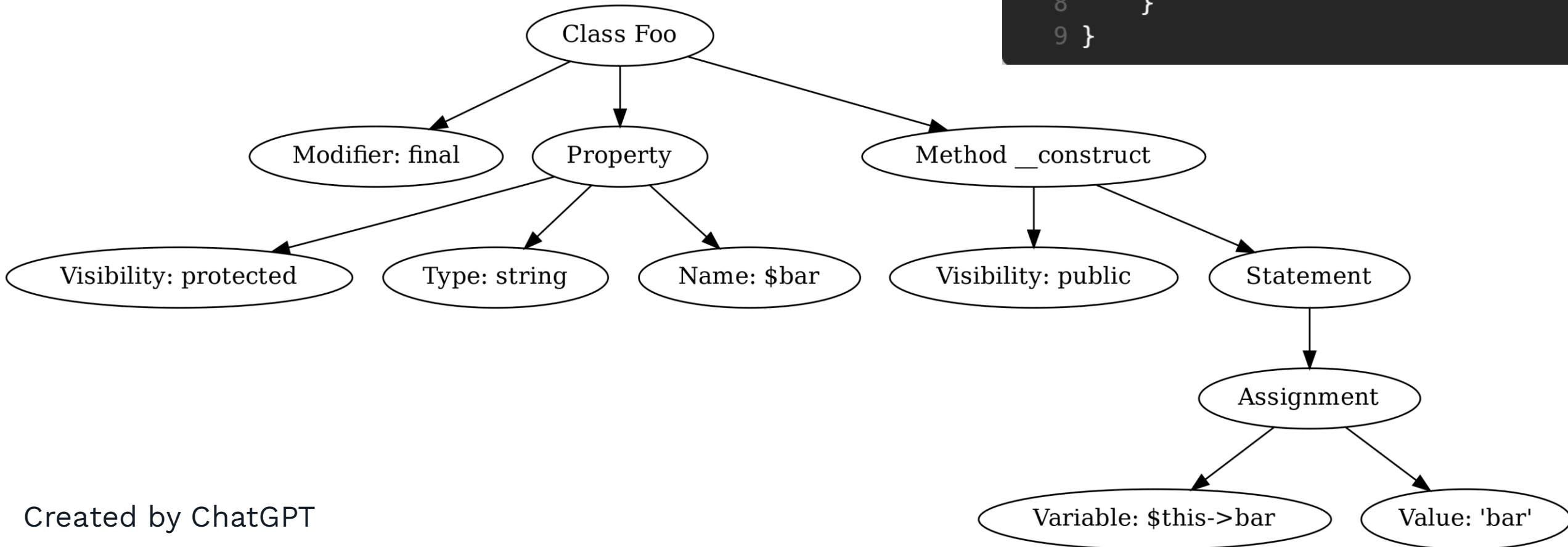
- ▶ Implement rule's Rector inside generated class
- ▶ Add test coverage using generated structure & test class



Abstract Syntax Tree

- Represented in Nikic's PHP Parser as an array of nested objects corresponding to all the nodes

```
1 final class Foo
2 {
3     protected string $bar;
4
5     public function __construct()
6     {
7         $this->bar = 'bar';
8     }
9 }
```





Creating custom Rector rules

Live demo time



Contributing to Ibexa Rector

Ibexa-specific rules

- ▶ Clone **ibexa/rector** package
- ▶ Generate file & directory structure



```
$ git clone git@github.com:ibexa/rector.git
```

```
$ cd rector
```

```
$ composer update
```

```
$ composer define-custom-rule Ibexa50/<RectorName>
```

Contributing to Ibexa Rector

Directory structure


- ▶ Write rule, write tests
- ▶ Create a Pull Request to **ibexa/rector**

```

└─ lib
  └─ Composer
  └─ Rule
    └─ Ibexa50
      └─ MagicPropertyToStrictGetterRector.php
```


```

└─ tests
  └─ lib
    └─ Composer
    └─ Rule
      └─ Ibexa50
        └─ MagicPropertyToStrictGetterRector
          └─ config
            └─ configured_rule.php
          └─ Fixture
            └─ some_class.php.inc
            └─ MagicPropertyToStrictGetterRectorTest.php
```

Contributing to Ibexa Rector

Live demo time



Closing words

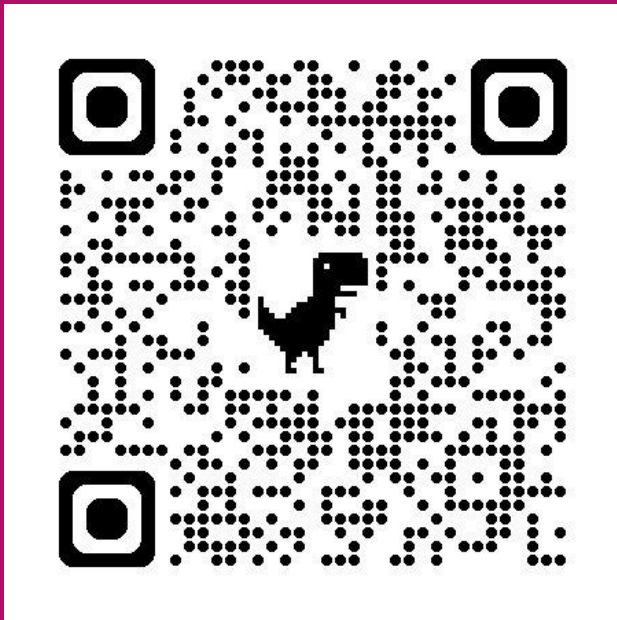
- ▶ Ibexa Rector is an Open Source package, supported for versions 4.6 LTS, 5.0 LTS, and beyond
- ▶ It speeds up project refactoring by automating it
- ▶ It requires PHP 8.3
- ▶ Its capabilities will grow given real use cases discovered





Q&A

Get Ibexa Rector:



<https://github.com/ibexa/rector>

Slide deck & examples:



<https://github.com/ibexa/summit-2025-rector>

Thank you!