

When building an Api using Symfony3, you'll be smart to process all input through Forms, and my strong recommendation is to do so via unique form classes for each Entity.

However, when doing so with custom `datetime` fields, you'll need to explicitly specify a format so you don't waste countless hours debugging what you are **certain** is a proper `DateTime`!

Using `phpunit` to validate a simple node creation, the entire request-to-response flow is as follows:

1. Api Request
2. Controller
3. Form
 1. Validation
4. ORM (Doctrine)
5. Response

This simple Unit Test is simulating a form submission with a `body` and `post_date` field populated for a simple `Node` entity. If we were creating this in a Controller or elsewhere, we could assign the value of `post_date` with a simple `DateTime` object and Symfony would do its magic of parsing it correctly for us.

For example, in the constructor of the `Node` you'll see I'm automatically assigning the `create_date` when the `Node` is first created.

```
public function __construct()  
{  
    $now = new \DateTime();  
    $tz = new \DateTimeZone('America/New_York');  
    $now->setTimezone($tz);  
    $this->create_date = $now;  
}
```

Unfortunately, when submitting to an Api, the object translation doesn't happen in a Unit Test

as its passing raw encoded (JSON in this case) data. So we need to explicitly enter the date as a string with format that matches exactly what we're expecting.

```
//tests/Api/Controllers/Node
public function testNodeCreate()
{
    $token = $this->authorize();

    $faker = \Faker\Factory::create('en_EN');

    $data = array(
        'body' => 'Fake description.',
        'post_date' => $faker->dateTimeThisMonth->format('Y-m-d
h:i:s'),
    );
    $url = 'http://api.myapp.dev/api/v1/nodes';

    $client = new Client($url, array(
        'request.options' => array(
            'exceptions' => false,
        )
    ));

    $request = $client->post($url, null, json_encode($data));
    $request->addHeader('Authorization', sprintf('Bearer %s',
$token));
    $response = $request->send();

    $this->assertEquals(200, $response->getStatusCode());
}
```

The form itself then simply needs to define the `post_date` field, the widget type and format allowed.

```
//MyApp/Bundle/CoreBundle/Forms/Node
use Symfony\Component\Form\Extension\Core\Type\DateTimeType;

public function buildForm(FormBuilderInterface $builder, array
$options)
{
    $builder
        ->add('body')
        ->add('post_date', DateTimeType::class, array(
            'invalid_message' => 'Please enter a valid date with time
for post date: Y-m-d h:i:s',
            'widget' => 'single_text',
            'format' => 'Y-m-d h:i:s',
        ))
        ->add('submit', SubmitType::class)
    ;
}
```

What's important is that you match the input in your submission *precisely* to the format specified in the form. Submitting a `DateTime` object will not be recognized correctly, nor will any string that does not explicitly match.