

# How to listen to Core events

## Version compatibility

This recipe is compatible with **eZ Publish 5.2 / 2013.07**

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## Description

When you interact with the Public API, and with the content Repository in particular, **Signals** may be sent out, allowing you to react on actions triggered by the Repository. Those signals can be received by dedicated services called **Slots**.

To learn more about SignalSlot in eZ Publish, please refer to the [dedicated documentation page](#).

[Signals reference](#)

This recipe will describe how to register a Slot for a dedicated Signal.

## Registering a Slot for a given Signal

As described in the [SignalSlot documentation](#), a Slot is roughly like an event listener and must extend `eZ\Publish\Core\SignalSlot\Slot`.

A typical implementation is the following:

## OnPublishSlot

```
namespace Acme\TestBundle\Slot;

use eZ\Publish\Core\SignalSlot\Slot as BaseSlot;
use eZ\Publish\Core\SignalSlot\Signal;
use eZ\Publish\API\Repository\ContentService;

class OnPublishSlot extends BaseSlot
{
    /**
     * @var \eZ\Publish\API\Repository\ContentService
     */
    private $contentService;

    public function __construct( ContentService $contentService )
    {
        $this->contentService = $contentService;
    }

    public function receive( Signal $signal )
    {
        if ( !$signal instanceof Signal\ContentService\PublishVersionSignal )
        {
            return;
        }

        // Load published content
        $content = $this->contentService->loadContent( $signal->contentId, null,
$signal->versionNo );
        // Do stuff with it...
    }
}
```

OnPublishSlot now needs to be registered as a service in the ServiceContainer and identified as a valid Slot:

## services.yml (in your bundle)

```
parameters:
    my.onpublish_slot.class: Acme\TestBundle\Slot\OnPublishSlot

services:
    my.onpublish_slot:
        class: %my.onpublish_slot.class%
        arguments: [@ezpublish.api.service.content]
        tags:
            - { name: ezpublish.api.slot, signal: ContentService\PublishVersionSignal
}
```

Service tag `ezpublish.api.slot` identifies your service as a valid Slot. The signal part (mandatory) says that this slot is listening to `ContentService\PublishVersionSignal` (shortcut for `\eZ\Publish\Core\SignalSlot\Signal\ContentService\PublishVersionSignal`)

Internal signals emitted by Repository services are always relative to `eZ\Publish\Core\SignalSlot\Signal` namespace.

Hence `ContentService\PublishVersionSignal` means `eZ\Publish\Core\SignalSlot\Signal\ContentService\PublishVersionSignal`.

**Tip**

You can register a slot for any kind of signal by setting `signal` to `*` in the service tag.

## Using a basic Symfony event listener

eZ Publish comes with a generic slot that converts signals (including ones defined by user code) to regular event objects and expose them via the `EventDispatcher`. This makes it possible to implement a simple event listener/subscriber if you're more comfortable with this approach.

All you need to do is to implement an event listener or subscriber and register it.

### Simple example

This very simple example will just log the received signal.

#### services.yml (in your bundle)

```
parameters:
    my.signal_listener.class: Acme\TestBundle\EventListener\SignalListener

services:
    my.signal_listener:
        class: %my.signal_listener.class%
        arguments: [@logger]
        tags:
            - { name: kernel.event_subscriber }
```

```
<?php
namespace Acme\TestBundle\EventListener;

use eZ\Publish\Core\MVC\Symfony\Event\SignalEvent;
use eZ\Publish\Core\MVC\Symfony\MVCEvents;
use Psr\Log\LoggerInterface;
use Symfony\Component\EventDispatcher\EventSubscriberInterface;

class SignalListener implements EventSubscriberInterface
{
    /**
     * @var \Psr\Log\LoggerInterface
     */
    private $logger;

    public function __construct( LoggerInterface $logger )
    {
        $this->logger = $logger;
    }

    public function onAPISignal( SignalEvent $event )
    {
        $signal = $event->getSignal();
        // You may want to check the signal type here to react accordingly
        $this->logger->debug( 'Received Signal: ' . print_r( $signal, true ) );
    }

    public static function getSubscribedEvents()
    {
        return array(
            MVCEvents::API_SIGNAL => 'onAPISignal'
        );
    }
}
```