

# How do I add a component

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You might first want to read [Writing Components](#) for a background in how to implement a new component. Typically it means you write an implementation of the [Component](#) interface, usually deriving from [DefaultComponent](#).

You can then register your component explicitly via

```
CamelContext context = new DefaultCamelContext(); context.addComponent("foo", new FooComponent(context));
```

However you can use the auto-discovery feature of Camel where by Camel will automatically add a [Component](#) when an endpoint URI is used. To do this you would create a file called

```
/META-INF/services/org/apache/camel/component/foo
```

with contents

```
class=org.acme.FooComponent
```

(you can add other property configurations in there too if you like)

Then if you refer to an endpoint as `foo://somethingOrOther` Camel will auto-discover your component and register it.

The `FooComponent` can then be auto-injected with resources using the [Injector](#), such as to support [Spring](#) based auto-wiring, or to support `@Resource` (EJB3 style) injection or Guice style `@Inject` injection.

## Working with Spring XML

You can configure a component via Spring using the following mechanism...{snippet:id=example|lang=xml|url=camel/trunk/components/camel-jms/src/test/resources/org/apache/camel/component/jms/jmsRouteUsingSpring.xml}Which allows you to configure a component using some name (activemq in the above example), then you can refer to the component using `activemq:[queue:|topic:]destinationName`.

If you want to add explicit Spring 2.x XML objects to your XML then you could use the `xbean-spring` which tries to automate most of the XML binding work for you; or you could look in camel-spring at `CamelNamespaceHandler` you'll see how we handle the Spring XML stuff (warning its kinda hairy code to look at 🤪). If you wanted `<fooComponent>` to be a standard part of the core Camel schema then you'd hack that file to add your component & [contribute a patch](#) to the camel XSD. Otherwise you could write your own namespace & schema if you prefer.

## See Also

- [Writing Components](#)
- [How Do I Configure Endpoints?](#)