

@Controller vs. @RestController

The key difference between @Controller vs. @RestController is how the HTTP response is getting created.

In Spring MVC, @RestController = @Controller + @ResponseBody

Any method annotated with @ResponseBody, spring automatically convert the return value and written into HTTP response body

@Controller is to create a Map of model object and find a view

```
@Controller
@RequestMapping("customer")
public class Customer {
    Customer customer = new Customer ();
    @RequestMapping(value = "/{name}", method = RequestMethod.GET, produces = "application/json")
    public @ResponseBody Customer getCustomer(@PathVariable String name) {
        customer.setName(name);
        customer.setEmail("test@mycompany.com");
        return customer;
    }
}
```

```
@Target(value=TYPE)
@Retention(value=RUNTIME)
@Documented
@Component
public @interface Controller
```

Using @RestController

@RestController simply returns the object and object data is directly written into HTTP response as JSON or XML.

Spring v4.0 onwards

```
@RestController
@RequestMapping("customer")
```

```
public class Customer {  
    Customer customer = new Customer ();  
    @RequestMapping(value = "/{name}", method = RequestMethod.GET, produces = "application/json")  
    public Customer getCustomer(@PathVariable String name) {  
        customer.setName(name);  
        customer.setEmail("test@mycompany.com");  
        return customer;  
    }  
}
```

Declaration of @RestController looks like

```
@Target(value=TYPE)  
@Retention(value=RUNTIME)  
@Documented  
@Controller  
@ResponseBody  
public @interface RestController
```