

# Spring Professional Exam Tutorial v5.0

## Question 03

## Question 03 - What is the delegating filter proxy?

`DelegatingFilterProxy` is an internal Spring Framework class located in package `org.springframework.web.filter` of `spring-web` module.

This class acts as a Proxy between standard Servlet Filter and Spring-managed Bean that implements Servlet Filter. `DelegatingFilterProxy` is registered within application container and delegates all calls to Bean registered within Spring Application Context.

We may say that it acts like a bridge between Servlet Container and Spring Application Context.

Bean to which all calls should be delegated to is located based on Filter Name provided within Filter Configuration, usually it is named `springSecurityFilterChain` and is an instance of `FilterChainProxy`.

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DelegatingFilterProxy can be registered in following ways:

- ▶ **Servlet 3 - via AbstractSecurityWebApplicationInitializer**
  - ▶ **Method** insertSpringSecurityFilterChain **will register** DelegatingFilterProxy
- ▶ **Servlet 2 - via web.xml**

```
<filter>
  <filter-name>springSecurityFilterChain</filter-name>
  <filter-class>org.springframework.web.filter.DelegatingFilterProxy</filter-class>
</filter>
<filter-mapping>
  <filter-name>springSecurityFilterChain</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping>
```

springSecurityFilterChain is a default name for FilterChainProxy specified in AbstractSecurityWebApplicationInitializer#DEFAULT\_FILTER\_NAME

- ▶ **Spring Boot**
  - ▶ **uses** DelegatingFilterProxyRegistrationBean **instead of regular** DelegatingFilterProxy **to create specialized version of** DelegatingFilterProxy
  - ▶ **Registered by** SecurityFilterAutoConfiguration

## Question 03 - What is the delegating filter proxy?

Role of `DelegatingFilterProxy` is to delegate all calls to `FilterChainProxy`, which contains `SecurityFilterChain` responsible for Web Level authentication and authorization:



