Spring Tools 4 - Spring Boot Tooling für Eclipse, VSCode und Atom

Martin Lippert
@martinlippert
Our Mission

Support Spring developers around the globe writing modern Spring applications
Introducing Spring Tools 4
Spring Tools 4

All-new Spring tooling

• mostly implemented from scratch
• focused on Spring Boot and annotation-driven Spring app development
• lightweight and super fast
• IDE agnostic
Key areas

Super easy getting started experience

New Spring Starter Project

- Service URL: http://start.spring.io
- Name: demo
- Location: /Users/mlippert/Documents/workspace-spring-tool-suite-4
- Type: Maven
- Packaging: Jar
- Java Version: 1.8
- Language: Java
Key areas

Spring-aware smart code completion

```java
@Value("${serv}")
protected Long server.address

@Value(TeamServerProperties.SERVICAL_PROP)
protected Long server.compression.enabled

@Value(TeamServerProperties.SERVER_PROP)
protected Long server.compression.excluded-user-alias

@Value(TeamServerProperties.SERVICAL_PROP)
protected Long server.compression.mime-types

@Value(TeamServerProperties.SERVER_PROP)
protected Long server.compression.min-response-size

@Value(TeamServerProperties.SERVER_PROP)
protected Long server.connection-timeout

@Value(TeamServerProperties.SERVER_PROP)
protected Long server.context-parameters

@Value(TeamServerProperties.SERVER_PROP)
protected Long server.context-path

@Value(TeamServerProperties.SERVER_PROP)
protected Long server.display-name
```
Key areas

Ultra-fast navigating the source code
Key areas

See live information from your running apps directly in your source code

```java
defpackage org.springframework.context.annotation.Bean

import
import

@Configure

package org.springframework.context.annotation.Bean

public

public class MySpecialService {

    @Bean(name="superbean")
    public MySpecialService specialService() {

        Injection report for Bean [id: superbean]

        Process [PID=14325, name= hello.Application ]:

        Bean [id: superbean, type: hello.MySpecialService ] injected into:

        • Bean [id: myAutomaticallyWiredComponent, type: hello.MyAutomaticallyWiredComponent ]
```
Spring Tools 4 - Public Beta

Spring Tools 4 for Eclipse

Spring Tools 4 for Visual Studio Code

Spring Tools 4 for Atom IDE

public beta available

https://spring.io/tools4
Demo Time
Recap

What we have seen
• boot dashboard
• ultra-fast navigation to Spring elements (@/, @+, @)
• live information from running apps (wiring reports, profiles)
• different editors / IDEs
Much more

What we have not seen

- additional specialized navigation (e.g. @> for functions)
- live information for property values (@Value)
- code completions (@Value, @Scope)
- code templates (@...Mapping methods)

Working on more

- specific navigation for Spring Data repositories, WebFlux definition
- support for annotations in class files
- maybe more editors / IDEs
Behind the scenes
Introducing a New Tooling Architecture

Spring Tools 4
- re-written from scratch
- IDE agnostic
- focused on supporting Spring

New tooling architecture
- adopting the Language Server Protocol
Separate Processes

Visual Studio Code <-> JSON <-> Spring Boot Java Language Server
Independent Platforms

Visual Studio Code

JSON

Spring Boot Java Language Server

node.js

JVM

Independent Platforms
One Language Server to Serve Them All

Eclipse

JSON

Spring Boot Java Language Server

JVM

JVM
Flexibility on Both Sides

Visual Studio Code
Eclipse
Atom
...

Java Language Support
Spring Boot Java Language Server
JavaScript Support
...

JSON
Outlook
Timeline

July 2018 - Sep 2018:
• STS 3.9.x will continue to receive updates
• Spring Tools 4 Public Beta continues to receive updates

Sep 2018:
• Spring Tools 4 will go GA

Sep 2018 - Jun 2019:
• STS 3.9.x will continue to receive updates
• STS 3.9.x components will become add-on components to Spring Tools 4
From STS 3.9.x to Spring Tools 4

Spring Tools 4 for Eclipse - Spring Tool Suite 4

• full featured Eclipse distribution (similar to STS 3.9.x, but more lightweight)
• allows you to install old STS 3.9.x components as add-ons
• allows you to have both

STS 3.9.x components

• will receive maintenance updates
• will continue to be available via update sites
• will continue to be available as distribution on Eclipse Photon (4.8)
• will have its EOL in June 2019
Learn More. Stay Connected.

Spring Tools 4 - Public Beta
https://spring.io/tools4

SpringOne Platform by Pivotal
@s1p #springone