

Spring 3.0

Short History of Spring

- Spring 2.0: Jun -06
- 2.5: Nov -07
- 2.5.6-SEC01: Apr -09
- 3.0.0.M1: Dec -08
- 3.0.0.RELEASE: Dec -09

Major Themes in 3.0

- Java 5
- Configuration Options
- Spring Expression Language
- REST Support

Java 5

- Java 1.4 and earlier no longer supported
- APIs revised for Java 5 features
 - Generics
 - Varargs

API Changes (Examples)

```
<T> T BeanFactory.getBean(  
    String name,  
    Class<T> requiredType)
```

```
public interface RowMapper<T> {  
    T mapRow(ResultSet rs, int rowNum);  
}
```

```
<T> T JmsTemplate.execute(SessionCallback<T> sc)
```

Configuration Options

- More Configuration Annotations
- Spring JavaConfig

Configuration Annotations

@Component

```
public class MyService {  
    @Autowired  
    private SomeRepository repo;  
  
    @Value("#{myprops.maxConnections}")  
    private int maxConnections;  
  
    @PostConstruct  
    void init() {  
        ...  
    }  
}
```

Java Config

@Configuration

```
public class MyConfiguration {  
    @Value("#{jdbc.url}")  
    String url;
```

@Bean

```
public MyService myService() {  
    MyServiceImpl service = new MyServiceImpl();  
    // initialize  
    return service;  
}  
}
```


Spring Expression Language

- Custom Expression Parser
- Compatible with Unified EL; significantly more powerful
- Used in configuration
 - Annotations or XML

Spring EL in XML Config

```
<bean class="com.example.MyService">
  <property
    name="maxConnections"
    value="#{myprops.maxConnections}" />
  <property
    name="executionStrategy"
    value="#{strategyFactory.executionStrategy}" />
</bean>

<bean id="strategyFactory"
  class="com.example.MyStrategyFactory" />
```

Spring EL in Annotations

```
@Component
public class MyService {
    @Value("#{myprops.maxConnections}")
    private int maxConnections;

    @Value("#{strategyFactory.executionFactory}")
    private ExecutionStrategy es;

    ...
}
```

EL Implicit Attributes

- `systemProperties`
- Spring-managed beans by id
- web-specific
- JSF
- ...
- Extensible

REST Support

- In Spring MVC
- Using JAX-RS
- Client-side RestTemplate

REST in Spring MVC

```
@Controller  
public class MyRestController  
  
    @RequestMapping(  
        value="/persons/{id}",  
        method=RequestMethod.GET)  
    public void person(@PathVariable("id") long id){  
        ...  
    }  
}
```

Everything Else

- JEE6 Compatible
- JPA 2.0
- Threading and Scheduling
- Embedded Database Support
- Revised Type Conversion
- Revised OXM

Everything Else

- MVC Improvements
- Portlet 2.0

Questions?