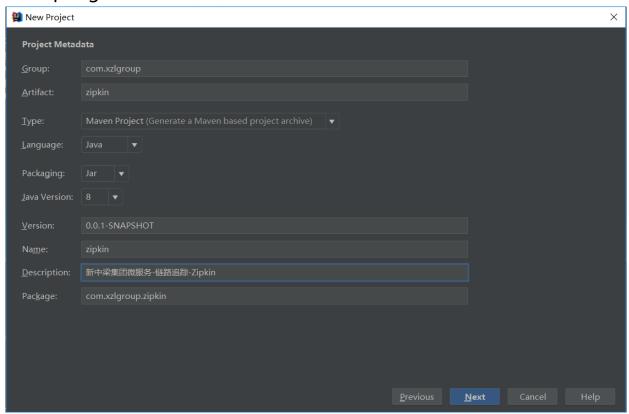
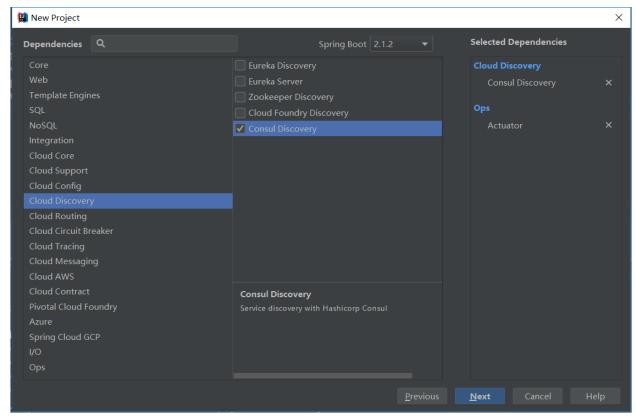
通过Spring Initializr创建项目





zipkin没有spring cloud的依赖,另行导入添加如下依赖

1 <dependency>

启动项目后报错

```
1 Error starting ApplicationContext. To display the conditions report re-ru
n your application with 'debug' enabled.
2 2019-01-18 15:25:41.487 ERROR 14572 --- [ main] o.s.boot.SpringApplicatio
n : Application run failed
4 org.springframework.beans.factory.BeanDefinitionStoreException: Failed to
process import candidates for configuration class [zipkin.server.internal.I
nternalZipkinConfiguration]; nested exception is java.lang.IllegalStateExce
ption: Failed to introspect annotated methods on class zipkin.server.intern
al.ZipkinServerConfiguration
   at org.springframework.context.annotation.ConfigurationClassParser.proce
ssImports(ConfigurationClassParser.java:599) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
   at org.springframework.context.annotation.ConfigurationClassParser.doPro
cessConfigurationClass(ConfigurationClassParser.java:302) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
   at org.springframework.context.annotation.ConfigurationClassParser.proce
ssConfigurationClass(ConfigurationClassParser.java:242) ~[spring-context-5.
1.4.RELEASE.jar:5.1.4.RELEASE]
   at org.springframework.context.annotation.ConfigurationClassParser.proce
ssImports(ConfigurationClassParser.java:589) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
   at org.springframework.context.annotation.ConfigurationClassParser.doPro
cessConfigurationClass(ConfigurationClassParser.java:302) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
    at org.springframework.context.annotation.ConfigurationClassParser.proc
essConfigurationClass(ConfigurationClassParser.java;242) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
    at org.springframework.context.annotation.ConfigurationClassParser.pars
e(ConfigurationClassParser.java:199) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
    at org.springframework.context.annotation.ConfigurationClassParser.pars
e(ConfigurationClassParser.java:167) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
```

```
at org.springframework.context.annotation.ConfigurationClassPostProcess
or.processConfigBeanDefinitions(ConfigurationClassPostProcessor.java:315) ~
[spring-context-5.1.4.RELEASE.jar:5.1.4.RELEASE]
14 at org.springframework.context.annotation.ConfigurationClassPostProcess
or.postProcessBeanDefinitionRegistry(ConfigurationClassPostProcessor.java:2
32) ~[spring-context-5.1.4.RELEASE.jar:5.1.4.RELEASE]
    at org.springframework.context.support.PostProcessorRegistrationDelegat
e.invokeBeanDefinitionRegistryPostProcessors(PostProcessorRegistrationDeleg
ate.java:275) ~[spring-context-5.1.4.RELEASE.jar:5.1.4.RELEASE]
   at org.springframework.context.support.PostProcessorRegistrationDelegat
e.invokeBeanFactoryPostProcessors(PostProcessorRegistrationDelegate.java:95
~[spring-context-5.1.4.RELEASE.jar:5.1.4.RELEASE]
   at org.springframework.context.support.AbstractApplicationContext.invok
eBeanFactoryPostProcessors(AbstractApplicationContext.java:691) ~[spring-co
ntext-5.1.4.RELEASE.jar:5.1.4.RELEASE]
    at org.springframework.context.support.AbstractApplicationContext.refre
sh(AbstractApplicationContext.java:528) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
    at org.springframework.boot.web.servlet.context.ServletWebServerApplica
tionContext.refresh(ServletWebServerApplicationContext.java:142) ~[spring-b
oot-2.1.2.RELEASE.jar:2.1.2.RELEASE]
org.springframework.boot.SpringApplication.refresh(SpringApplication.java:7
75) [spring-boot-2.1.2.RELEASE.jar:2.1.2.RELEASE]
    at org.springframework.boot.SpringApplication.refreshContext(SpringAppl
ication.java:397) [spring-boot-2.1.2.RELEASE.jar:2.1.2.RELEASE]
    at org.springframework.boot.SpringApplication.run(SpringApplication.jav
a:316) [spring-boot-2.1.2.RELEASE.jar:2.1.2.RELEASE]
    at org.springframework.boot.SpringApplication.run(SpringApplication.jav
a:1260) [spring-boot-2.1.2.RELEASE.jar:2.1.2.RELEASE]
    at org.springframework.boot.SpringApplication.run(SpringApplication.jav
a:1248) [spring-boot-2.1.2.RELEASE.jar:2.1.2.RELEASE]
com.xzlgroup.zipkin.ZipkinApplication.main(ZipkinApplication.java:14) [clas
ses/:na]
26 Caused by: java.lang.IllegalStateException: Failed to introspect annotat
ed methods on class zipkin.server.internal.ZipkinServerConfiguration
    at org.springframework.core.type.StandardAnnotationMetadata.getAnnotate
dMethods(StandardAnnotationMetadata.java:169) ~[spring-core-5.1.4.RELEASE.j
ar:5.1.4.RELEASE
    at org.springframework.context.annotation.ConfigurationClassParser.retr
ieveBeanMethodMetadata(ConfigurationClassParser.java:392) ~[spring-context-
5.1.4.RELEASE.jar:5.1.4.RELEASE]
    at org.springframework.context.annotation.ConfigurationClassParser.doPr
ocessConfigurationClass(ConfigurationClassParser.java:317) ~[spring-
context-5.1.4.RELEASE.jar:5.1.4.RELEASE]
    at org.springframework.context.annotation.ConfigurationClassParser.proc
essConfigurationClass(ConfigurationClassParser.java:242) ~[spring-context-
```

```
5.1.4 RELEASE jar: 5.1.4 RELEASE
    at org.springframework.context.annotation.ConfigurationClassParser.proc
essImports(ConfigurationClassParser.java:589) ~[spring-context-5.1.4.RELEAS
E.jar:5.1.4.RELEASE]
   ... 20 common frames omitted
33 Caused by: java.lang.NoClassDefFoundError: org/springframework/boot/cont
ext/embedded/undertow/UndertowEmbeddedServletContainerFactory
    at java.lang.Class.getDeclaredMethods0(Native Method) ~[na:1.8.0 162]
    at java.lang.Class.privateGetDeclaredMethods(Class.java:2701) ~[na:1.8.
0_162
    at java.lang.Class.getDeclaredMethods(Class.java:1975) ~[na:1.8.0_162]
36
    at org.springframework.core.type.StandardAnnotationMetadata.getAnnotate
dMethods(StandardAnnotationMetadata.java:158) ~[spring-core-5.1.4.RELEASE.j
ar:5.1.4.RELEASE
   ... 24 common frames omitted
39 Caused by: java.lang.ClassNotFoundException: org.springframework.boot.co
ntext.embedded.undertow.UndertowEmbeddedServletContainerFactory
40 at java.net.URLClassLoader.findClass(URLClassLoader.java:381) ~[na:1.8.
0 162
   at java.lang.ClassLoader.loadClass(ClassLoader.java:424) ~
[na:1.8.0 162]
   at sun.misc.Launcher$AppClassLoader.loadClass(Launcher.java:338) ~
[na:1.8.0 162]
    at java.lang.ClassLoader.loadClass(ClassLoader.java:357) ~
[na:1.8.0 162]
    ... 28 common frames omitted
45
46
47 Process finished with exit code 1
```

这个问题可以查看github上的议题

https://github.com/spring-cloud/spring-cloud-sleuth/issues/912

最终官方给未出的大概意思就是:

升级到springboot 2.0后, zipkin不允许制作自定义服务器,即用IDE启动 zipkin

推荐直接部署服务: https://github.com/openzipkin/zipkin#quick-start

执行官方命令

1.下载jar包

```
1 curl -sSL https://zipkin.io/quickstart.sh | bash -s
```

```
1 → zipkin curl -sSL https://zipkin.io/quickstart.sh | bash -s
2 Thank you for trying OpenZipkin!
3 This installer is provided as a quick-start helper, so you can try Zipkin
out
4 without a lengthy installation process.
5
6 Fetching version number of latest io zipkin java zipkin-server release...
7 jq not found on path. This script will still do its best, but installing
jq
8 will allow it to parse data from Bintray in a more robust fashion.
9 > curl -SL 'https://api.bintray.com/search/packages/maven?g=io.zipkin.jav
a&a=zipkin-server&subject=openzipkin'
    % Total % Received % Xferd Average Speed Time Time Current
    Dload Upload Total Spent Left Speed
11
12 100 4742 0 4742 0 0 1411 0 --:-- 0:00:03 --:-- 1411
  Latest release of io.zipkin.java:zipkin-server seems to be 2.12.0
14
15 Downloading io.zipkin.java:zipkin-server:2.12.0:exec to zipkin.jar...
16 > curl -fL -o 'zipkin.jar' 'https://dl.bintray.com/openzipkin/maven/io/z
ipkin/java/zipkin-server/2.12.0/zipkin-server-2.12.0-exec.jar'
    % Total % Received % Xferd Average Speed Time Time Current
18
    Dload Upload Total Spent Left Speed
    0 0 0 0 0 0 0 0 --:-- 0:00:01 --:-- 0
  100 37.8M 100 37.8M 0 0 559k 0 0:01:09 0:01:09 --:-- 302k
21
22 Verifying checksum...
23 > curl -fL -o 'zipkin.jar.md5' 'https://dl.bintray.com/openzipkin/maven/
io/zipkin/java/zipkin-server/2.12.0/zipkin-server-2.12.0-exec.jar.md5'
    % Total % Received % Xferd Average Speed Time Time Current
    Dload Upload Total Spent Left Speed
26 100 32 100 32 0 0 27 0 0:00:01 0:00:01 --:-- 27
27 > md5sum --check <<< "$(cat zipkin.jar.md5) zipkin.jar"</pre>
28 zipkin.jar: OK
   Checksum for zipkin.jar passes verification
29
31 Verifying GPG signature of zipkin.jar...
32 > curl -fL -o 'zipkin.jar.asc' 'https://dl.bintray.com/openzipkin/maven/
io/zipkin/java/zipkin-server/2.12.0/zipkin-server-2.12.0-exec.jar.asc'
    % Total % Received % Xferd Average Speed Time Time Current
    Dload Upload Total Spent Left Speed
35 100 821 100 821 0 0 553 0 0:00:01 0:00:01 --:--- 553
```

```
36
37 JFrog BinTray GPG signing key is not known, skipping signature verificat
38 You can import it, then verify the signature of zipkin.jar, using the fo
llowing
   commands:
40
    gpg --keyserver keyserver.ubuntu.com --recv D401AB61
41
    # Optionally trust the key via 'gpg --edit-key D401AB61', then typing
'trust',
    # choosing a trust level, and exiting the interactive GPG session by 'q
43
uit'
    gpg --verify zipkin.jar.asc zipkin.jar
44
45
46
47 Verifying GPG signature of zipkin.jar.md5...
48 > curl -fL -o 'zipkin.jar.md5.asc' 'https://dl.bintray.com/openzipkin/ma
ven/io/zipkin/java/zipkin-server/2.12.0/zipkin-server-2.12.0-exec.jar.md5.a
sc'
    % Total % Received % Xferd Average Speed Time Time Current
49
    Dload Upload Total Spent Left Speed
   100 821 100 821 0 0 451 0 0:00:01 0:00:01 --:--- 451
52
53 JFrog BinTray GPG signing key is not known, skipping signature verificat
ion.
54 You can import it, then verify the signature of zipkin.jar.md5, using th
e following
   commands:
56
    gpg --keyserver keyserver.ubuntu.com --recv D401AB61
    # Optionally trust the key via 'gpg --edit-key D401AB61', then typing
58
'trust',
    # choosing a trust level, and exiting the interactive GPG session by 'q
uit'
    gpg --verify zipkin.jar.md5.asc zipkin.jar.md5
60
61
62
   You can now run the downloaded executable jar:
64
65
    java -jar zipkin.jar
```

2.运行jar包

```
1 java -jar zipkin.jar
```

```
1 → zipkin java -jar zipkin.jar
   ******
   ** **
4
   ** **
   ** **
   ** **
8
   *****
    ****
10
    ****
11
    **** ****
12
    ***** **** ***
13
    *************************
    ***** *** ***
15
    **** ****
17
    **
18
19
20
21
    ** ** ** * *** ** ***
    ***** ** ** ** ** ** **
24
26
   :: Powered by Spring Boot :: (v2.1.1.RELEASE)
28 2019-01-18 16:29:29.675 INFO 23822 --- [ main] z.s.ZipkinServer : Starti
ng ZipkinServer on ubuntu-ryzc with PID 23822 (/home/ryzc/springcloud/zipki
n/zipkin.jar started by ryzc in /home/ryzc/springcloud/zipkin)
29 2019-01-18 16:29:29.682 INFO 23822 --- [ main ] z.s.ZipkinServer : The fo
llowing profiles are active: shared
30 2019-01-18 16:29:31.667 INFO 23822 --- [ main ] i.u.servlet : Initializin
g Spring embedded WebApplicationContext
31 2019-01-18 16:29:31.668 INFO 23822 --- [ main] o.s.w.c.ContextLoader : R
oot WebApplicationContext: initialization completed in 1921 ms
32 2019-01-18 16:29:32.201 INFO 23822 --- [ main] o.s.s.c.ThreadPoolTaskExe
cutor : Initializing ExecutorService 'applicationTaskExecutor'
33 2019-01-18 16:29:32.714 INFO 23822 --- [ main] c.d.d.core : DataStax Jav
a driver 3.6.0 for Apache Cassandra
```

```
34 2019-01-18 16:29:32.729 INFO 23822 --- [ main] c.d.d.c.GuavaCompatibilit
y : Detected Guava >= 19 in the classpath, using modern compatibility layer
35 2019-01-18 16:29:33.027 INFO 23822 --- [ main] c.d.d.c.ClockFactory : Us
ing native clock to generate timestamps.
36 2019-01-18 16:29:33.221 INFO 23822 --- [ main] o.s.b.a.e.w.EndpointLinks
Resolver : Exposing 16 endpoint(s) beneath base path '/actuator'
37 2019-01-18 16:29:33.313 INFO 23822 --- [ main] o.xnio : XNIO version
3.6.5.Final
38 2019-01-18 16:29:33.328 INFO 23822 --- [ main] o.x.nio : XNIO NIO Implem
entation Version 3.6.5. Final
39 2019-01-18 16:29:33.368 INFO 23822 --- [ main] o.j.threads : JBoss Threa
ds version 2.3.2. Final
40 2019-01-18 16:29:33.501 INFO 23822 --- [ main] o.s.b.w.e.u.UndertowServl
etWebServer : Undertow started on port(s) 9411 (http) with context path ''
41 2019-01-18 16:29:33.506 INFO 23822 --- [ main ] z.s.ZipkinServer : Starte
d ZipkinServer in 4.612 seconds (JVM running for 5.676)
```

启动成功

默认端口 9411

访问网页, 没问题

