

ActiveMQ 实践作业

通过本实践了解 ActiveMQ 的安装使用等简单操作。

接受实践作业

[点此接受实践作业](#)

接受作业，获得实践项目源码。

环境准备

1. Linux 系统主机 x1

可访问 [免费使用活动](#) 领取试用云主机资源（相关规则参见活动页面描述）

2. 安装 Ubuntu 系统

3. 安装 maven 和 jdk

4. 安装 docker，示例：

```
monica@ubuntu:/$ sudo apt install docker.io=1.13.1-0ubuntu1~16.04.2
```

5. 安装 rabbitmq 镜像，示例：

```
monica@ubuntu:/$ sudo docker pull activemq
```

6. 创建容器

```
monica@ubuntu:/$ sudo docker run -itd --name rabbitmq -p61616:61616 -p8161:8161
```

7. 成功接受作业并进入 DevCloud 实践项目中后，点击代码 > 代码托管，点击右上角复制按钮，复制代码 git 地址，在 Linux 主机上使用 Git 命令行 clone 源码：

```
git clone https://codehub.devcloud.huaweicloud.com/***/activemq-demo.git
```

```
monica@ubuntu:~/git-devcloud/springboot-activemq$ mvn clean package
[INFO] Scanning for projects...
[INFO]
[INFO] -----
[INFO] Building springboot-activemq 0.0.1-SNAPSHOT
[INFO] -----
[INFO]
[INFO] --- maven-clean-plugin:3.0.0:clean (default-clean) @ springboot-activemq ---
[INFO] Deleting /home/monica/git-devcloud/springboot-activemq/target
[INFO]
[INFO] --- maven-resources-plugin:3.0.1:resources (default-resources) @ springboot-activemq ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 1 resource
[INFO] Copying 0 resource
[INFO]
[INFO] --- maven-compiler-plugin:3.7.0:compile (default-compile) @ springboot-activemq ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 6 source files to /home/monica/git-devcloud/springboot-activemq/target/classes
[INFO]
[INFO] --- maven-resources-plugin:3.0.1:testResources (default-testResources) @ springboot-activemq ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory /home/monica/git-devcloud/springboot-activemq/src/test/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.7.0:testCompile (default-testCompile) @ springboot-activemq ---
[INFO] No sources to compile
[INFO]
[INFO] --- maven-surefire-plugin:2.21.0:test (default-test) @ springboot-activemq ---
[INFO] No tests to run.
[INFO]
[INFO] --- maven-jar-plugin:3.0.2:jar (default-jar) @ springboot-activemq ---
[INFO] Building jar: /home/monica/git-devcloud/springboot-activemq/target/springboot-activemq-0.0.1-SNAPSHOT.jar
[INFO]
[INFO] --- spring-boot-maven-plugin:2.0.3.RELEASE:repackage (default) @ springboot-activemq ---
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 15.365 s
[INFO] Finished at: 2018-08-21T01:12:34-07:00
[INFO] Final Memory: 34M/296M
[INFO] -----
```

```
monica@ubuntu:~/git-devcloud/springboot-activemq/target$ java -jar springboot-activemq-0.0.1-SNAPSHOT.jar
```

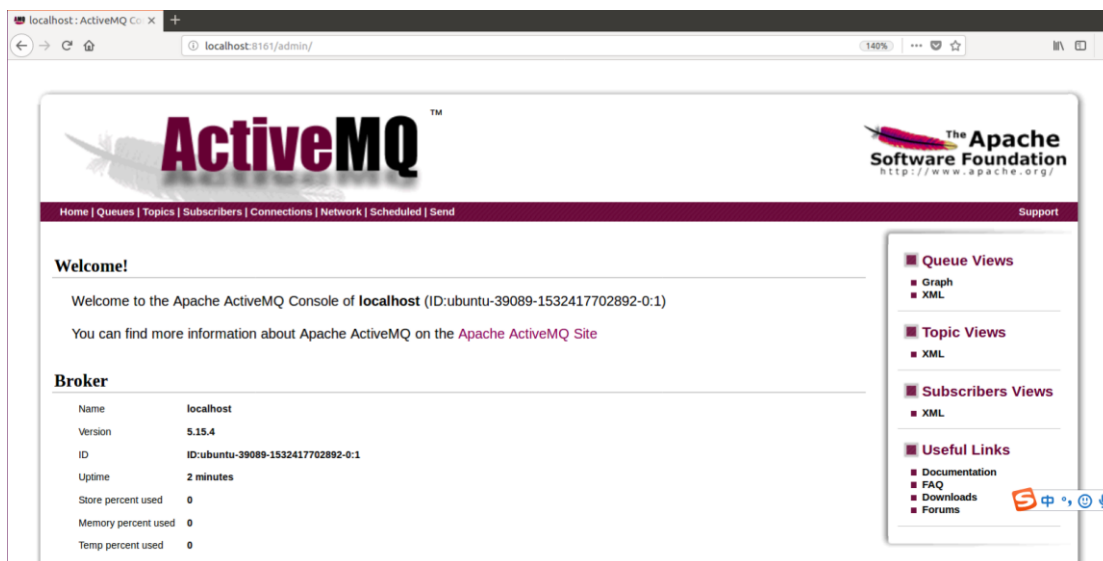
```

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Spring Boot
=====|=====||=/_/_/_/_/_
:: Spring Boot ::                (v2.0.3.RELEASE)

2018-08-21 01:17:54.079 INFO 5784 --- [           main] com.example.dxp.Application : Starting
it-devcloud/springboot-activemq/target/springboot-activemq-0.0.1-SNAPSHOT.jar started by monica in /home/monica
2018-08-21 01:17:54.089 INFO 5784 --- [           main] com.example.dxp.Application : No active profile found, using default "dev"
2018-08-21 01:17:54.225 INFO 5784 --- [           main] ConfigServletWebServerApplicationContext : Refreshing org.springframework.boot.web.servlet.context.AnnotationConfigServletWebServerApplicationContext@33c679bde: startup date [Tue Aug 21 01:17:54 PDT 2018]; root of context hierarchy
2018-08-21 01:17:56.095 INFO 5784 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s) 8080 (http)

```

1. 登录 activemq (访问 云主机的弹性 IP:PORT)



2. 在 8080 端口发送消息，value 后可以赋予不同的值

弹性 IP:8080/jms/queue?value=123













3. Log 查看消息接收

```
2018-08-21 01:28:02.951 INFO 6471 --- [ost-startup-1] o.s.b.w.servlet.FilterRegistrationBean : Mapping filter: 'requestContextFilter' to: [/]
2018-08-21 01:28:03.340 INFO 6471 --- [ost-startup-1] o.s.w.s.handler.SimpleUrlHandlerMapping : Mapped URL path [/**/favicon.ico] onto handler of type [class org.springframework.web.servlet.resource.ResourceHttpRequestHandler]
2018-08-21 01:28:03.583 INFO 6471 --- [main] s.w.s.m.a.RequestMappingHandlerAdapter : Looking for @ControllerAdvice: org.springframework.boot.web.servlet.context.AnnotationConfigServletWebServerApplicationContext@3e3e1ee: startup date [Tue Aug 21 01:28:00 PDT 2018]; root of context hierarchy
2018-08-21 01:28:03.675 INFO 6471 --- [main] s.w.s.m.a.RequestMappingHandlerMapping : Mapped " [/jms/queue],methods=[GET]" onto public void com.example.dxp.web.rest.controller.JmsQueueTemplate(java.lang.String)
2018-08-21 01:28:03.677 INFO 6471 --- [main] s.w.s.m.a.RequestMappingHandlerMapping : Mapped " [/jms/topic],methods=[GET]" onto public void com.example.dxp.web.rest.controller.JmsTopicTemplate(java.lang.String)
2018-08-21 01:28:03.682 INFO 6471 --- [main] s.w.s.m.a.RequestMappingHandlerMapping : Mapped " [/error],produces=[text/html]" onto public org.springframework.web.servlet.ModelAndView org.springframework.boot.autoconfigure.web.servlet.error.BasicErrorController.errorHtml(javax.servlet.http.HttpServletRequest,javax.servlet.http.HttpServletResponse)
2018-08-21 01:28:03.683 INFO 6471 --- [main] s.w.s.m.a.RequestMappingHandlerMapping : Mapped " [/error]" onto public org.springframework.http.ResponseEntity<java.util.Map<java.lang.String, java.lang.Object>> org.springframework.boot.autoconfigure.web.servlet.error.BasicErrorController.error(javax.servlet.http.HttpServletRequest)
2018-08-21 01:28:03.733 INFO 6471 --- [main] o.s.w.s.handler.SimpleUrlHandlerMapping : Mapped URL path [/**] onto handler of type [class org.springframework.web.servlet.resource.ResourceHttpRequestHandler]
2018-08-21 01:28:03.734 INFO 6471 --- [main] o.s.w.s.handler.SimpleUrlHandlerMapping : Mapped URL path [/**] onto handler of type [class org.springframework.web.servlet.resource.ResourceHttpRequestHandler]
2018-08-21 01:28:04.074 INFO 6471 --- [main] o.s.j.e.a.AnnotationMBeanExporter : Registering beans for JMX exposure on startup
2018-08-21 01:28:04.086 INFO 6471 --- [main] o.s.c.support.DefaultLifecycleProcessor : Starting beans in phase 2147483647
2018-08-21 01:28:04.452 INFO 6471 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path ''
2018-08-21 01:28:04.455 INFO 6471 --- [main] com.example.dxp.Application : Started Application in 4.361 seconds (JVM running for 4.829)
2018-08-21 01:28:22.720 INFO 6471 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring FrameworkServlet 'dispatcherServlet'
2018-08-21 01:28:22.721 INFO 6471 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : FrameworkServlet 'dispatcherServlet': initialization started
2018-08-21 01:28:22.740 INFO 6471 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : FrameworkServlet 'dispatcherServlet': initialization completed in 19 ms
queue2 监听到的消息内容为: 123
queue2 监听到的消息内容为: 456
queue2 监听到的消息内容为: 789
queue1 监听到的消息内容为: abc
queue1 监听到的消息内容为: def
```

4. Activemq 页面查看消息数增长

Queue Name

Queues

Name	Number Of Pending Messages	Number Of Consumers	Messages Enqueued	Messages Dequeued	Views	Operations
activemq.queue	0	0	0	0	Browse Active Consumers Active Producers  	Send To Purge Delete
activemq.queue2	0	0	0	0	Browse Active Consumers Active Producers  	Send To Purge Delete
adapterQueue	0	0	0	0	Browse Active Consumers Active Producers  	Send To Purge Delete
defaultResponseQueue	0	0	0	0	Browse Active Consumers Active Producers  	Send To Purge Delete
queue	0	0	0	0	Browse Active Consumers Active Producers  	Send To Purge Delete
queueTest	0	6	10	10	Browse Active Consumers Active Producers  	Send To Purge Delete

Queue Views

- [Graph](#)
- [XML](#)

Topic Views

- [XML](#)

Subscribers Views

- [XML](#)

Useful Links

- [Documentation](#)
- [FAQ](#)
- [Downloads](#)
- [Forums](#)