

# 当Spring Boot遇上Arthas

## 深入细节和排查问题的实践



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# Arthas/阿尔萨斯

- Alibab开源的Java诊断工具
- 9月份开源，Star 8000+
- Github: <https://github.com/alibaba/arthas>
- Wiki: <https://alibaba.github.io/arthas/>
- Arthas开源交流QQ群：916328269
- Arthas开源交流钉钉群：21965291



# Arthas快速开始

```
$ wget https://alibaba.github.io/arthas/arthas-boot.jar  
$ java -jar arthas-boot.jar --repo-mirror aliyun
```

```
hengyunabcdeMacBook-Air:tmp hengyunabc$ java -jar arthas-boot.jar
```

```
* [1]: 22342
```

```
[2]: 42200 ClientDemoApplication
```

```
[3]: 42142 ServerDemoApplication
```

```
3
```

```
[INFO] arthas home: /Users/hengyunabc/.arthas/lib/3.0.5/arthas
```

```
[INFO] Try to attach process 42142
```

```
[INFO] Attach process 42142 success.
```

```
[INFO] arthas-client connect 127.0.0.1 3658
```

```
  _ _ _ _ _  
 / 0 \ | _ _ _ | _ _ _ | _ _ _ | _ _ _ |  
| _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ |  
| _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ |  
 \ 0 / | _ _ _ | _ _ _ | _ _ _ | _ _ _ |
```

```
wiki: https://alibaba.github.io/arthas
```

```
version: 3.0.5
```

```
pid: 42142
```

```
time: 2018-11-30 21:13:50
```

```
$
```



# Tips

- 使用阿里云下载 `--repo-mirror aliyun`
- 键盘Up/Down匹配历史
- Tab补全
- 快捷键: `keymap`
- Pipeline/grep
- Gitee文档镜像: <https://arthas.gitee.io>

# demo-arthas-spring-boot

<https://github.com/hengyunabc/spring-boot-inside/tree/master/demo-arthas-spring-boot>



# 案例一、HTTP请求500/404/401

- <http://localhost:8080/user/0> 500  
watch com.example.demo.arthas.user.UserController \* '{params, throwExp} -e
- <http://localhost:8080/a.txt> 404  
trace javax.servlet.Servlet \* > servlet.txt # 结果在 ~/logs/arthas-cache/
- <http://localhost:8080/admin> 401  
trace javax.servlet.Filter \*
- 动态修复代码/测试  
redefine -p UserController.class



# 案例二、应用日志乱打

- UserController的logger是什么实现？  
ognl '@com.example.demo.arthas.user.UserController@logger'
- 动态修改logger级别  
ognl '@org.slf4j.LoggerFactory@getLogger("root")  
.setLevel(@ch.qos.logback.classic.Level@DEBUG)'
- 获取logback的配置文件  
ognl '#map1=@org.slf4j.LoggerFactory@getLogger("root").loggerContext.objectMap,  
#map1.get("CONFIGURATION\_WATCH\_LIST)'
- 查找冲突的logback.xml/log4j.properties  
classloader -c 18b4aac2 -r logback.xml
- tomcat的日志为什么打印不出来？



# 案例三、深入细节

- Spring Boot应用的ClassLoader结构

`classloader -t`

`classloader -a -c 758f7d25`

- jad反编译jsp的实现

`jad org.apache.jsp.jsp.hello_jsp`

- tt 获取Spring Context

`tt -t`

`org.springframework.web.servlet.mvc.method.annotation.RequestMappingHandlerAdapter  
invokeHandlerMethod`

`tt -i 1000 -w 'target.getApplicationContext()'`



# 成为Arthas的Contributor

- 登记用户 <https://github.com/alibaba/arthas/issues/395>
- 修正错别字/改进文档
- 完善翻译/翻译user case
- 新的Command



# Arthas钉钉/QQ交流群

Arthas开源交流群

534人



扫一扫群二维码，立刻加入该群。



Alibaba Arthas开源交流群

扫一扫二维码，加入群聊。



The background is a dark blue, almost black, surface covered with a 3D pattern of hexagons. These hexagons are raised and have a slight blue tint on their edges, creating a textured, geometric effect.

Thank you !