黑客派

DNSBrood 解析 DNS 过程中进行 Debug

作者：liumapp
原文链接：https://hacpai.com/article/1499845976331
来源网站：黑客派
许可协议：署名-相同方式共享 4.0 国际 (CC BY-SA 4.0)

<blockquote>
DNSBrood 是一款基于 dnsJava 的 DNS server，尚处于开发过程中，所以需要在其解析 DNS 的过程中进行 Debug 测试。但出于一些原因，Debug 必须在其打包好且正在运行的 Jar 包上进行。以我将尝试 IDEA 的 Remote 远程 Debug 功能来进行测试工作。
</blockquote>
<script async src="https://pagead2.googlesyndication.com/pagead/js/adsbygoogle.js"></scr
pt>
<!-- 黑客派PC帖子内嵌-展示 -->
<ins class="adsbygoogle" style="display:block" data-ad-client="ca-pub-5357405790190342"
data-ad-slot="8316640078" data-ad-format="auto" data-full-width-responsive="true"></in
>
<script>
(adsbygoogle = window.adsbygoogle || []).push({});
</script>
<a href="https://link.hacpai.com/forward?goto=https%3A%2F%2Fgithub.com%2Fliuma
p%2FDNSBrood" target="_blank" rel="nofollow ugc">DNSBrood
<h3 id="IDEA配置Remote">IDEA 配置 Remote</h3>

 进入 IDEA 的 Edit Configure 页面
 在 add new configure 选项里面选择 remote
 相应视图如下： <img src="https://static.hacpai.com/images/img-loading.s
g" alt="1.pic.jpg" data-src="http://om40sen9v.bkt.clouddn.com/f6d5e71fa0204e73be668713
55ca11d.jpg"> 将红框框住的内容复制，用于下文的修改启动脚本，当然，这里有三段脚内容，具体选择哪一段要视自己的实际情况来定。
 点击确定。

<h3 id="修改启动脚本">修改启动脚本</h3>
修改启动脚本 blackhole.sh
首先设置两个变量：
<pre><code class="highlight-chroma">JVM_OPTION="-agentlib:jdwp=transport=dt_socket,
erver=y,suspend=n,address=5005"
HOME_JAR=/yourpath/target/blackhole-1.2.2.jar
</code></pre>
然后修改 start：
<pre><code class="highlight-chroma">start)

echo "Starting blackhole..."

java -jar {JVM_OPTION} -Djava.io.tmpdir="HOME_DIR/cache" HOME_JAR -d"HOME_DIR"not f
und render function for node [type=NodeHTMLEntity, Tokens=>]not found render function f
r node [type=NodeHTMLEntity, Tokens=>]not found render function for node [type=NodeH
MLEntity, Tokens=>]not found render function for node [type=NodeHTMLEntity, Tokens=>]
$HOME_DIR/log not found render function for node [type=NodeHTMLEntity, Tokens=&]
ot found render function for node [type=NodeHTMLEntity, Tokens=&]

;;
</code></pre>

在修改 restart:
<pre><code class="highlight-chroma">restart)

echo "Stopping blackhole..."

```
java -jar $HOME_DIR/lib/wifesays-1.0.0-alpha.jar -cshutdown not found render function for n
de [type=NodeHTMLEntity, Tokens=>]not found render function for node [type=NodeHTML
ntity, Tokens=>] /dev/null;

sleep 2;

echo "Starting blackhole..."

java -jar {JVM_OPTION} -Djava.io.tmpdir="HOME_DIR/cache" HOME_JAR -d"HOME_DIR"not f
und render function for node [type=NodeHTMLEntity, Tokens=>]not found render function f
r node [type=NodeHTMLEntity, Tokens=>]not found render function for node [type=NodeH
MLEntity, Tokens=>]not found render function for node [type=NodeHTMLEntity, Tokens=>]
$HOME_DIR/log not found render function for node [type=NodeHTMLEntity, Tokens=&]
ot found render function for node [type=NodeHTMLEntity, Tokens=&]

;;
```

</code></pre>

接下来启动 DNSBrood，打开日志文件，如果有：
<pre><code class="highlight-chroma">Listening for transport dt_socket at address: 5005
</code></pre>
就说明配置正确
<h3 id="断点测试">断点测试</h3>
因为整个项目是通过 socket 来判断用户处理 DNS 解析的请求，所以我们在运行 DNSBrood 的
候，还需要 DNSBee 来配合使用，两个系统的使用这篇博文先不多讲。
这里我们在 us.codecraft.wifesays.me.HusbandEar 这个类的 process 方法的
<pre><code class="highlight-chroma">logger.info("wife says \"" + lineIn + "\" ,what you sh
uld do?");
</code></pre>
这行代码上设置断点，然后通过 DNSBee 发送一段请求：
<pre><code class="highlight-chroma">17-07-12 10:17:44,908 INFO us.codecraft.wifesays.me
HusbandEar(HusbandEar.java:83) ## wife says "delete_zones_ip_127.0.0.1" ,what you should d
?

17-07-12 10:17:44,908 INFO us.codecraft.wifesays.me.HusbandEar(HusbandEar.java:83) ## wif
 says "add_zones_ip_127.0.0.1:6.7.4.5_gmail.liumapp.com" ,what you should do?

line is :127.0.0.1:6.7.4.5_gmail.liumapp.com

17-07-12 10:17:44,910 INFO us.codecraft.wifesays.me.HusbandEar(HusbandEar.java:83) ## wif
 says "add_zones_ip_127.0.0.1:55.55.55.55_gg.liumapp.com" ,what you should do?

line is :127.0.0.1:55.55.55.55_gg.liumapp.com

17-07-12 10:17:44,912 INFO us.codecraft.wifesays.me.HusbandEar(HusbandEar.java:83) ## wif
 says "add_zones_ip_127.0.0.1:88.88.88.8_tt.liumapp.com" ,what you should do?

line is :127.0.0.1:88.88.88.8_tt.liumapp.com
</code></pre>

<script async src="https://pagead2.googlesyndication.com/pagead/js/adsbygoogle.js"></scr
pt>

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>
<script>
    (adsbygoogle = window.adsbygoogle || []).push({});
</script>
如果 IDEA 出现如下 Debug 信息：
<img src="https://static.hacpai.com/images/img-loading.svg" alt="2.pic.jpg" data-src="h
tp://om40sen9v.bkt.clouddn.com/d6ef649c19814f36a791a6a2cd540055.jpg">
那就说明 Debug 测试成功了。