

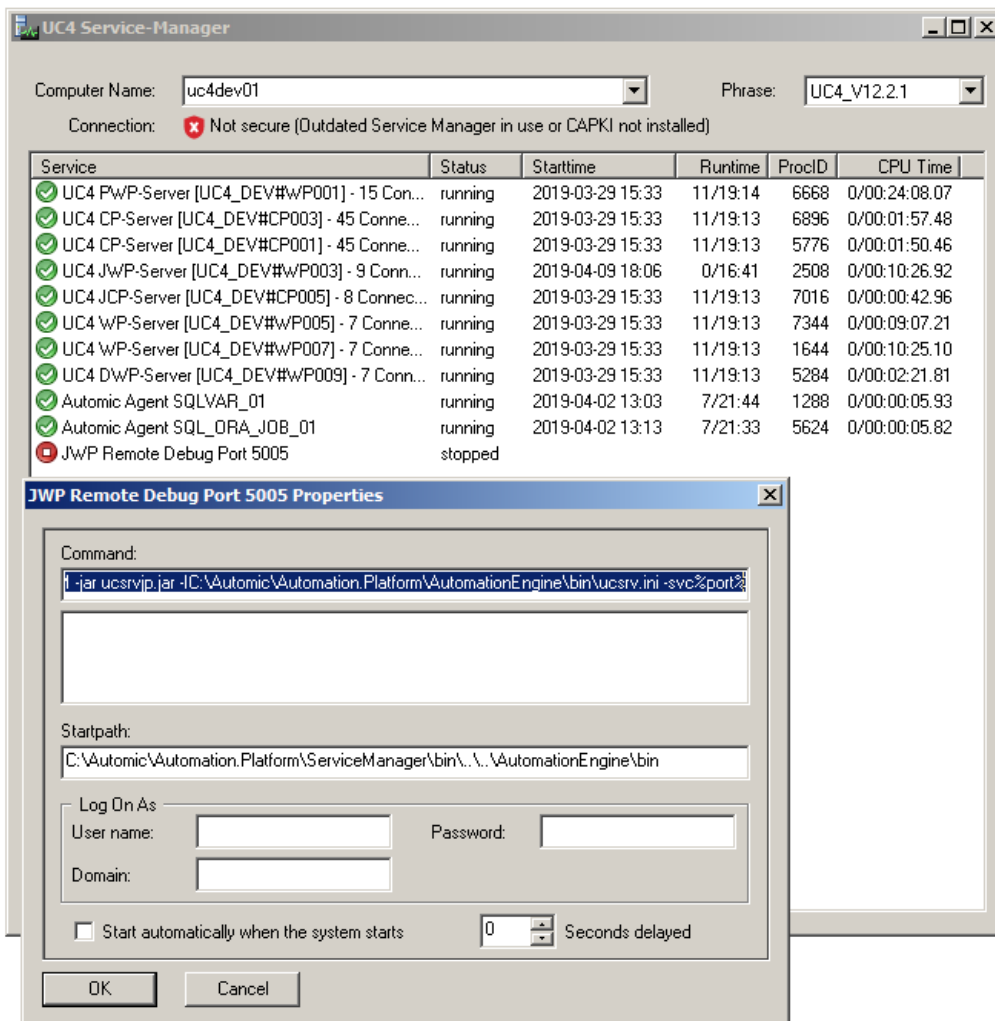
How to debug a JWP

After upgrading our Automic AE from V10 to V12 we had the problem that the JWP couldn't build the search index due to an object with a faulty XML documentation. Unfortunately the error message in the JWP log didn't had any information which object caused the index builder to crash. So we had to debug the JWP and see which object is processed when the error is happening.

We used the Eclipse framework for the remote debugging.

First we had to make the JWP ready for remote debugging. Therefore we only need some extra parameter for the start command in the ServiceManager. Just copy the existing entry for the JWP and add the following to the command, use a free port as address:

```
-Xdebug  
-Xnoagent  
-Djava.compiler=NONE  
-Xrunjdpw:transport=dt_socket,server=y,suspend=n,address=5005
```

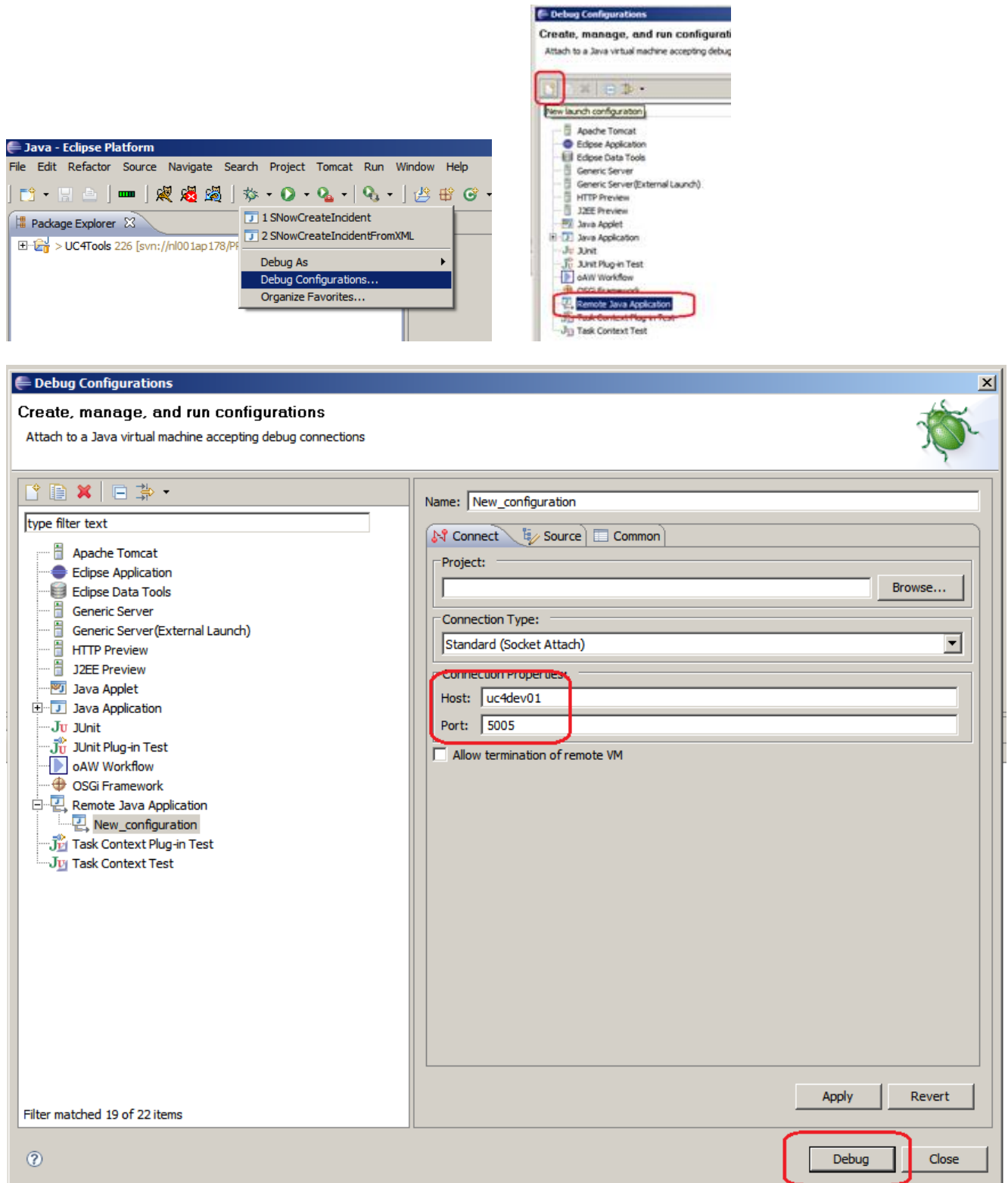


For us the command will look like this:

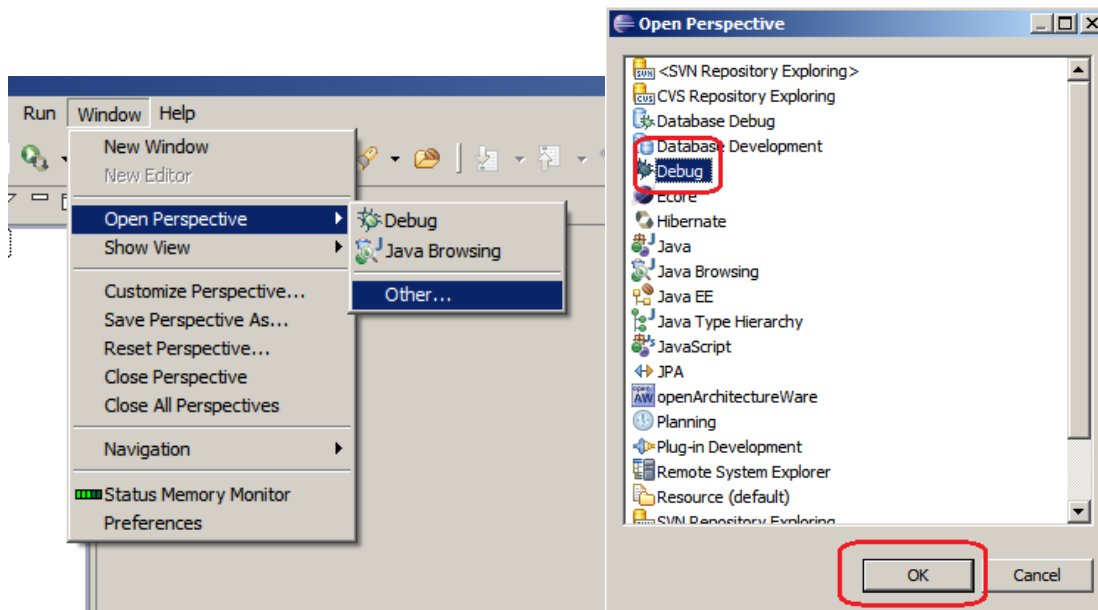
```
C:\Automic\External.Resources\JDK\jdk1.8.0_144\bin\java -Xdebug -Xnoagent -Djava.compiler=NONE  
-Xrunjdpw:transport=dt_socket,server=y,suspend=n,address=5005 -Xrs -Xmx512M -jar ucsrvjp.jar -  
IC:\Automic\Automation.Platform\AutomationEngine\bin\ucsrv.ini -svc%port%
```

Now we can stop the running JWP and start the new one and we are ready for remote debugging.

In Eclipse create a debug configuration for the JWP and start debugging.

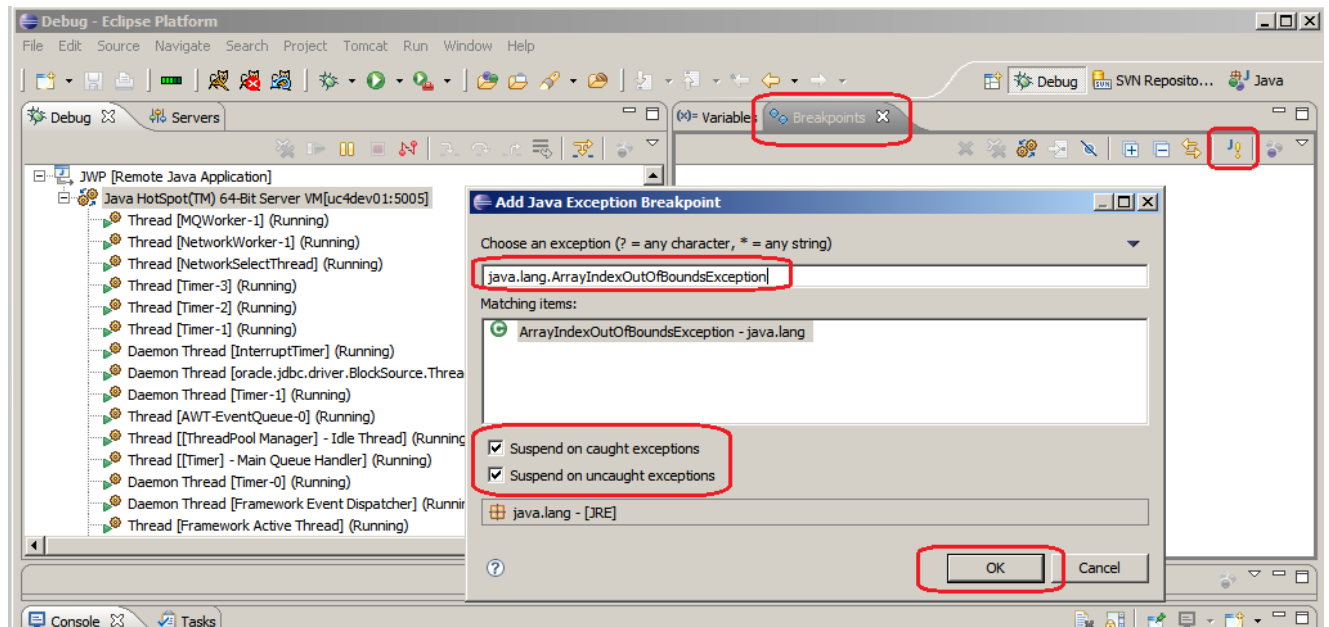


Open the debug perspective in Eclipse.

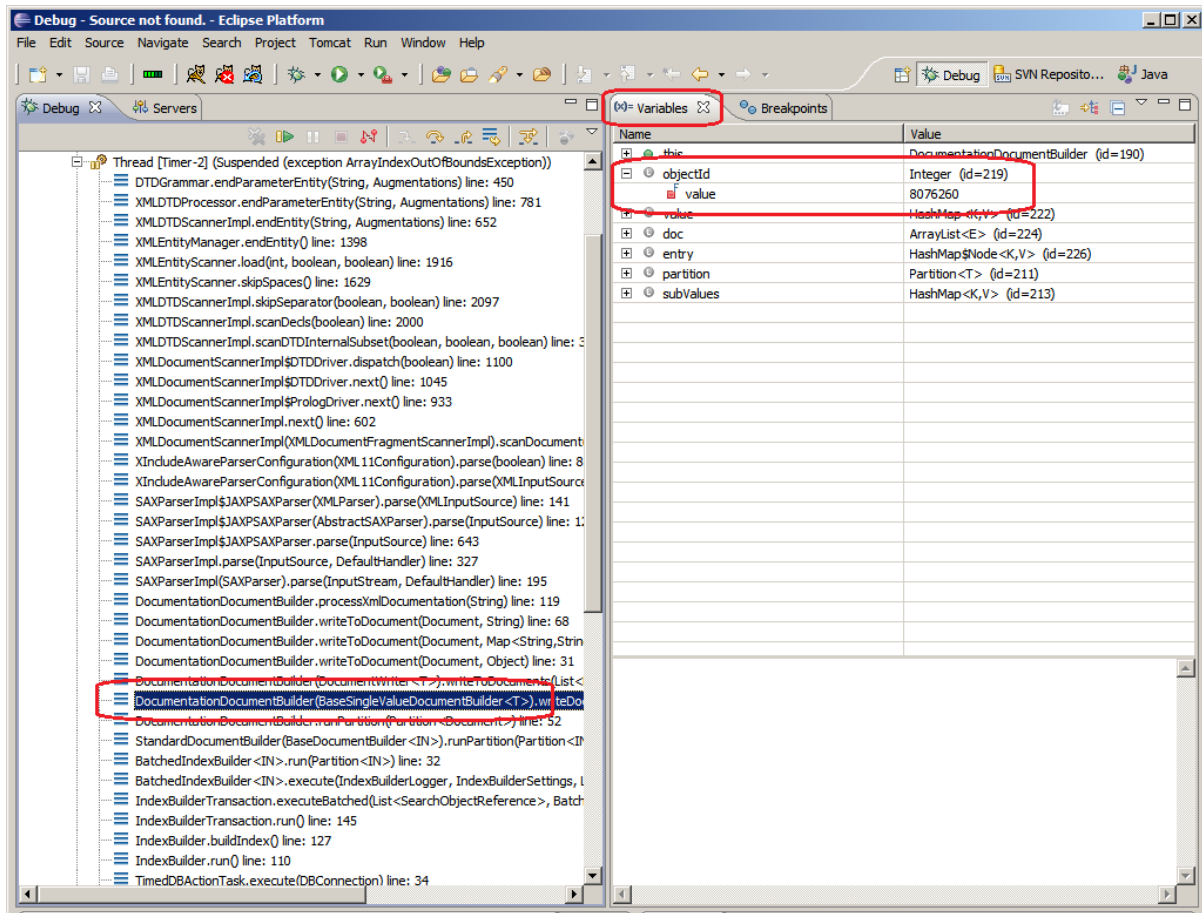


To suspend the JWP at the point of the failure we need a breakpoint. From the error message in the log we know the exception so we can add a Java exception breakpoint.

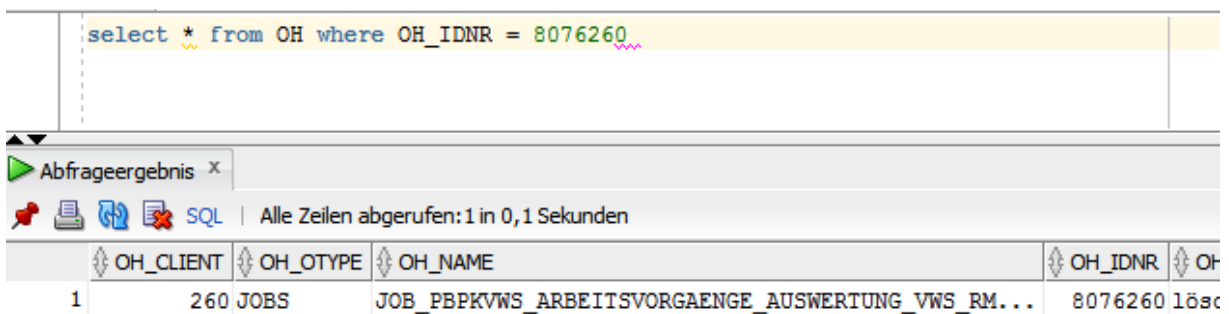
```
U00045014 Fehler 'java.lang.ArrayIndexOutOfBoundsException: "-1"' in  
'com.sun.org.apache.xerces.internal.impl.dtd.DTDGrammar.endParameter  
Entity():450'.
```



Now we just wait for the exception and see where we can get the objectID of the processed object.

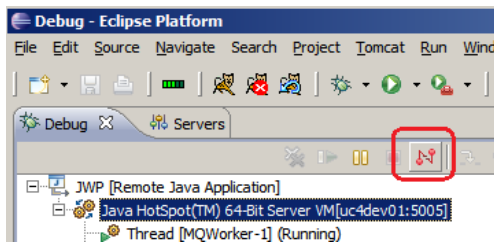


Based on the Object ID we can see which object causes all the trouble. With SQL select the object from OH and use the Object ID as OH_IDNR.



We didn't try to repair the faulty object; we just deleted it and created it new. As soon as the Object was deleted the JWP was able to build the search index.

When we are done we can disconnect the debugger, stop the JWP and start the one without debugging, because the enabled debugging slows down the JWP.



**I hope this tutorial was helpful for you. If you have any suggestion you can contact me at:
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