

RED1 COMPIERE WORKSHOP

REMOTE DEBUG

Using Eclipse to Remote Debug JBoss for Accounts and Web modules version 1.0

The technique described here is taught by Arul Mani of Tenth Planet to red1.

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Introduction

As has been oft-remarked, the Accounts and Web modules are mandated to the JBoss container for client-server and web performances. When Eclipse debugs Compiere, it only handles the codes directly ascribed to its JVM and JBoss behaves as a separate machine. To debug what is run by JBoss will require remote debugging which is provided by Eclipse.

This mystery was on the author's mind for a long time as remarked in his <http://compiere.red1.org/Callout.zip>. However artisans on such obscure mastery are hard to come by, and it was one fortunate online chat with one such Compierean that the author's itch was finally scratched.

Arul Mani from Chennai just scribbled the steps on to the Messenger pad and I faithfully transfer it to another Petri dish, and almost forgot about it until a few weeks later, when another chance evening as I was sitting in my wireless garden, began to itch again to try them. And it was a matter of minutes to see the Compiere accounting codes been stopped in its tracks and was that moment a sweet moment. Here I shall demonstrate how to setup the remote debugging mode for Compiere to talk to JBoss and put to rest all your itches too.

I thank Arul Mani profusely for this. He is such a generous chap, and as I promise him that I shall pay tribute to him in such a tutorial, I therefore am now tapping my best on the keyboard in accordance to what the English Language provides:

Please send him a thank you note with a traveler's cheque to arul@tenth-planet.com.

The Steps

Here we first detail the important steps we need to do the whole remote debugging process:

1. Uncomment JPDA option in JBoss run file
2. Create a Remote Java Application in Eclipse
3. Running the RJA in Debug mode
4. Start up the Compiere service
5. Running Compiere in Debug mode
6. Breaking into Accounts source
7. tah-tah

Set JBoss Run

We shall uncomment the JPDA statement in the run.bat or run.sh in the JBoss/bin directory of Compiere2.

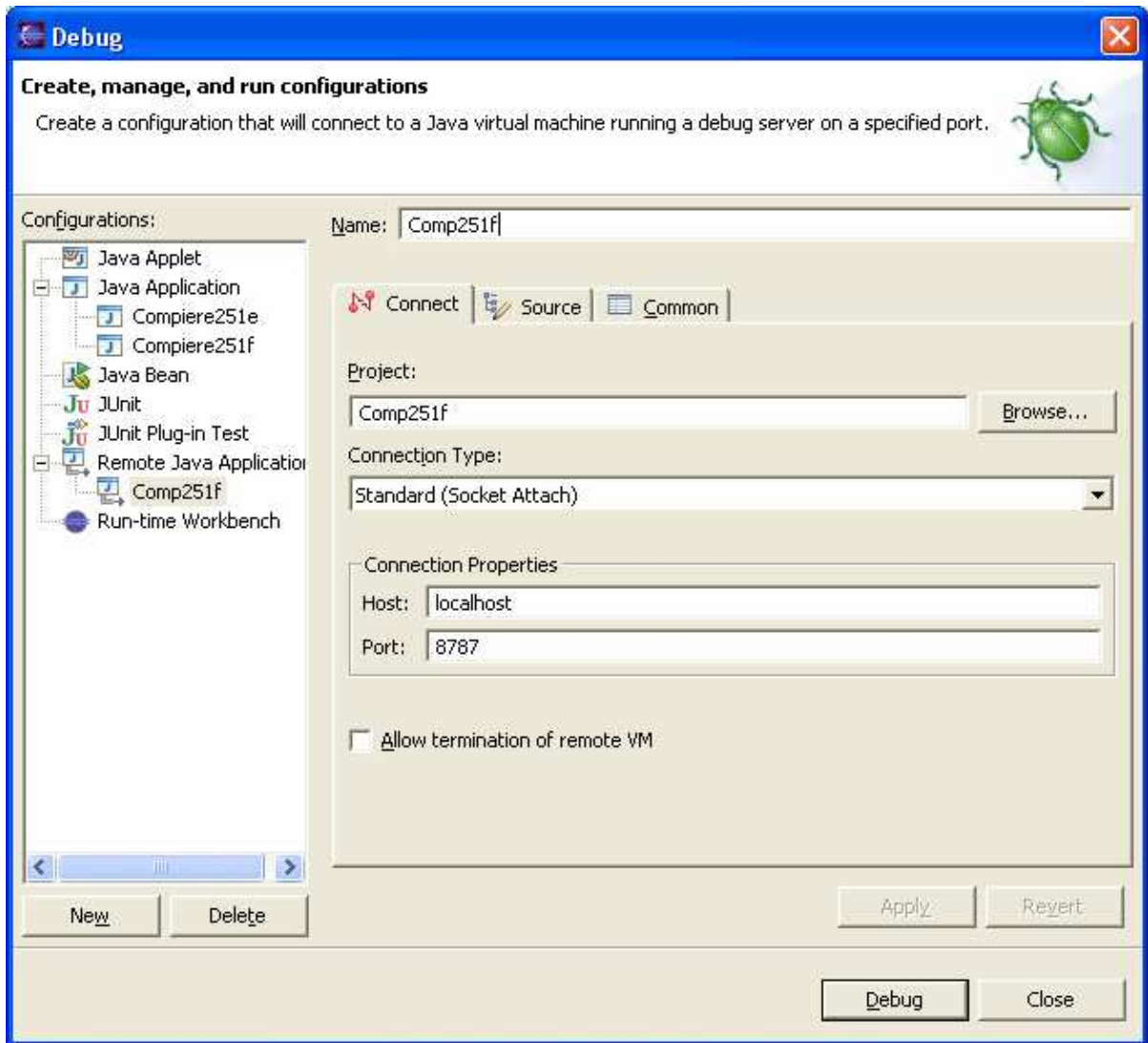
Here is the statement:

```
rem JPDA options. Uncomment and modify as appropriate to enable remote debugging.  
rem set JAVA_OPTS=-classic -Xdebug -Xnoagent -Djava.compiler=NONE -  
Xrunjdwp:transport=dt_socket,address=8787,server=y,suspend=y %JAVA_OPTS%
```

Just remove the second rem, so that the set statement comes alive. Remember to do this in the Compiere2 and not the Compiere-all.

Eclipse' Remote Run

Now, we launch Eclipse and open up our Compiere project. On the menu bar, we select Debug as to open the following window:

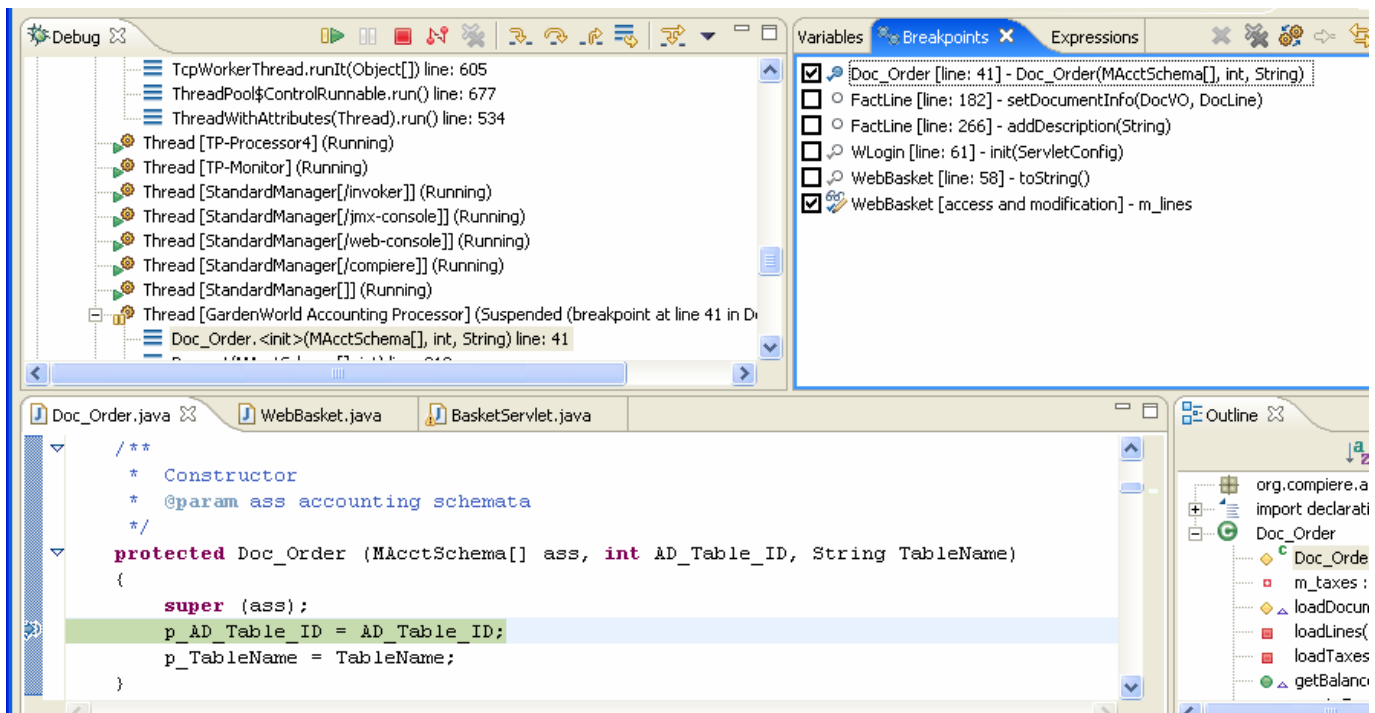


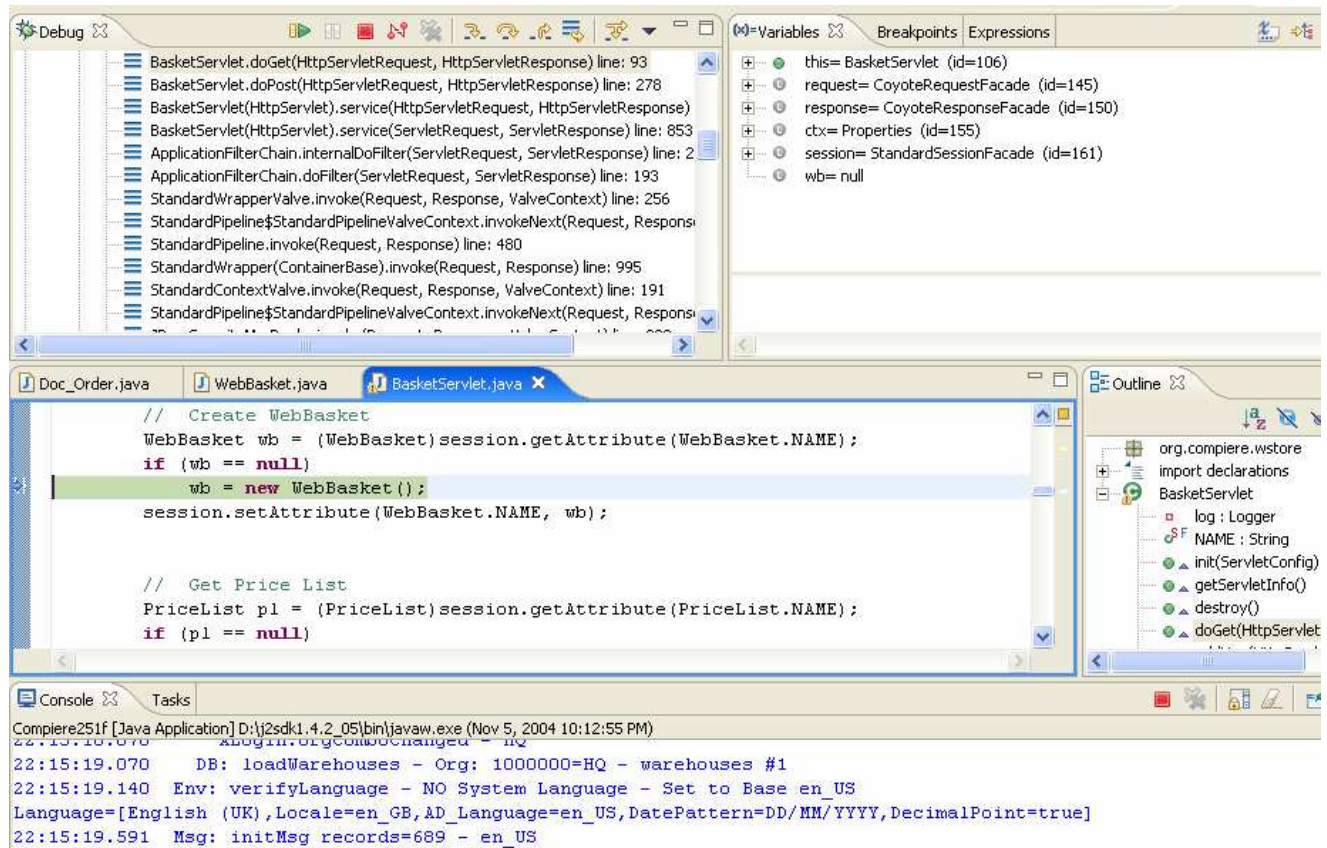
- Select Remote Java Application and click on **New**
- Click on **Connect**
- Browse for your **Project**
- Set **Host** to localhost
- Set **Port** to 8787
- Save your Configuration with a name

Running Remote Debug

- If you are using the Compiere service given by Alexandria Consulting, then stop it.
- Start the Server2 service from Compiere2/utils/.
- You will notice that it runs but hangs as if its waiting. Actually its listening for the Remote Debug to run.
- In Eclipse, select your new Remote Java Application via the Debug button. You will notice that the Server2 window now runs and boy! Does it really runs!
- Notice in Eclipse that the panel comes alive.
- Now execute your usual Debug which is the Compiere application proper.
- Go to the Java Perspective and put some breaks in any of the Accounting codes you want to stop.
- Operate your Compiere application to the point where you do the accounting stuff.
- You will notice that the break will stop the execution and you may proceed accordingly

Screenshots





For debugging the Web codes it should also work as shown above. Here I simply put a stop along the `WebBasket.java` and could trace it into `BasketServlet.java`.

Ending Remote Debug

Remember to comment the JPDA back in the run file of JBoss/bin after you have finished or else it may hang during normal deployment.

- end -

"I feel the Earth move, under my feet, I feel
the sky tumbling down!"

- from a song,
though here it's the cyber earth and it aint
beneath us.

Here is the chatter I had with with Arul Mani:

Arul Mani: that's very simple.. go to the run.bat or run.sh file in your jboss_home/bin
open that and search for JPDA options uncomment the following line
Arul Mani: go to eclipse create a new debug config..
Arul Mani: click the remote debugging..
Arul Mani: specify the host name and specify the port as 8787
Arul Mani: make sure that you have restarted the server..
Arul Mani: that will be in listen mode..
Arul Mani: only when you start debugging it proceeds further..
Arul Mani: start the compiere server[jboss]
Arul Mani: go to eclipse, create a new remote debug config..
Arul Mani: start debugging you could see the server running further from that moment..
red1: And can u then debug the whole compiere one shot? meaning i am debugging from normal
debug then when it reach the posting commitment which happens in JBoss i can still follow it
thru, step by step?
Arul Mani: set break points in server codes [webstore] execute and see your debugger stopping
there..
Arul Mani: now config one more debug for the compiere client code..
Arul Mani: start that, both will run parallely no worries..
red1: great i will give it a try next time
Arul Mani: so you could debug client as well as server in one single shot.. it's a complete
walk through
red1: I tell u, I will certainly put your name in, and nominate you to the Indian Congress
Arul Mani: sure it's simple no problem... i am sure you will get this in a single shot
Arul Mani: hahaha
Arul Mani: i happened to know this bit earlier that's it... nothing else
Arul Mani: there was a necessity for me to debug the FactLine class so i browsed and
understood the way..
red1: Do you have the latest Miss India photos? I mean the Open Source ones? Hehe*
Arul Mani: wana trade?

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Have a nice day!

red1