Debugging in jWB 3.2.1

Overview

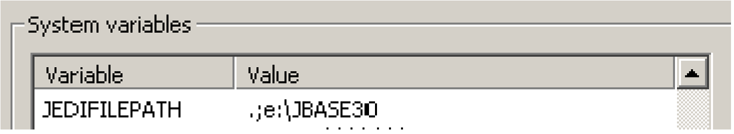
One of the most useful abilities in a jBC program or subroutine is the ability to step into and execute the code line by line. This allows you to view the results of statements and assignments as they happen.

By following the steps below, you will also be able to debug subroutines (written) in jWB 3.2.1 giving you total control over your server side scripting. This white paper is not going to tell you how to use the debugger, it merely sets up jWB and a jShell so that you are in a debug "mode"

For more information on using the debugger, see the jBASE knowledge base at: http://www.jbase.com/knowledgebase/manuals/3.0/30manpages/man/sup22_debugger.htm#DebuggerCommands)

Prerequisites:

Make sure that your system wide environment variable JEDIFILEPATH has a "." Added to it. I.e. it should look something like



System variables

Variable	Value
JEDIFILEPATH	.;e:\JBASE30

Check it by doing the following

A) right click on "**My computer**"
B) select "**Properties**"
C) Select "**Advanced**"
D) Select "**Environment Variables**"
E) In the "**system variables**" window, if "**JEDIFILEPATH**" is not defined,
    a. Click "**New**"
    b. In "**Variable Name**", type "**JEDIFILEPATH**"
    c. In "**Variable Value**" type "**.;jbase30**"

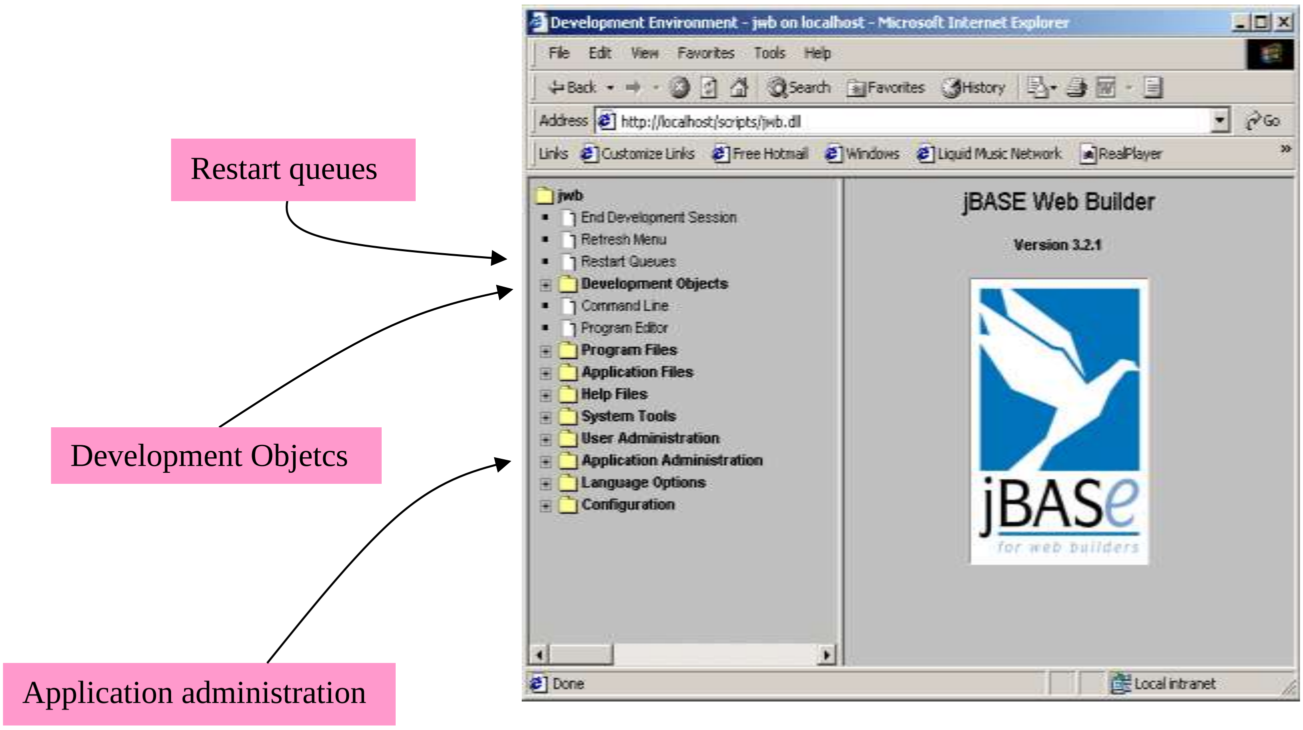
If "**JEDIFILEPATH**" is defined,
    d. select it and click "**Edit**".
    e. Modify the "**Variable Value**" to include a ".". (remember that semicolons delimit the values)

Breakdown of the Main Steps

(which are expanded on below later in the document)

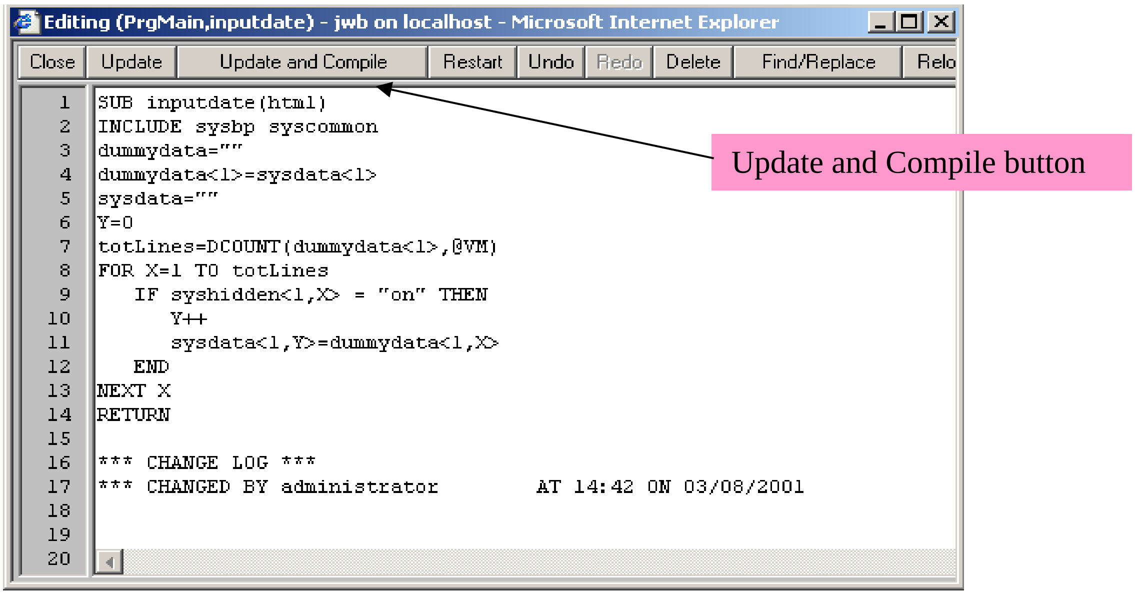
1) Import the debug patch or service release
2) Put a "**DEBUG**" statement in your pre page routine, or whatever subroutine you wish to debug
3) "**Update and Catalog**" the subroutine
4) Restart your jWB queues
5) Fire up a jShell session
6) Change to your account directory
7) Execute the "**jsh.cmd**" environment settings file
8) Execute "**sysdebug <queue name>"**
9) Change to your jWB session window
10) Select the page which you're trying to debug
11) "**Debug Preview**" the page you wish to debug (usually the page with a pre page routine)
12) Type the queue name that you would like to debug (as in **step 8**)
13) Change back to the jShell and you should find that the execution of the Subroutine has halted where your "**DEBUG"** statement is placed.

NOTE 1: The steps below assume that you have a jWB development account open and you are looking at the following screen:


Development Environment - jwb on localhost - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://localhost/scripts/jwb.dll
Links Customize Links Free Hotmail Windows Liquid Music Network RealPlayer
jwb
End Development Session
Refresh Menu
Restart Queues
Development Objects
Command Line
Program Editor
Program Files
Application Files
Help Files
System Tools
User Administration
Application Administration
Language Options
Configuration
jBASE Web Builder
Version 3.2.1
jBASE
for web builders
Done
Local intranet
Restart queues
Development Objetcs
Application administration

Screenshot 1: jWB development window

NOTE 2: It is assumed that you have a subroutine that you wish to debug, and that you are familiar with the following screen:


Editing (PrgMain,inputdate) - jwb on localhost - Microsoft Internet Explorer
Close
Update
Update and Compile
Restart
Undo
Redo
Delete
Find/Replace
Relo
Update and Compile button

```
SUB inputdate(html)
INCLUDE sysbp syscommon
dummydata=""
dummydata<1>=sysdata<1>
sysdata=""
Y=0
totLines=DCOUNT(dummydata<1>,@VM)
FOR X=1 TO totLines
   IF syshidden<1,X> = "on" THEN
      Y++
      sysdata<1,Y>=dummydata<1,X>
   END
NEXT X
RETURN

*** CHANGE LOG ***
*** CHANGED BY administrator        AT 14:42 ON 03/08/2001
```

Screenshot 2: jWB Editor window

NOTE 3: Make sure you know your jWB development account name. (it is the name of the dll in Screenshot 1; in the above case: **jwb**)

Main Steps

1) Make sure that you have the following “Import” file

Patch : patch321.002
or
Service Release : sr321.001

Imported into your jWB account. To check whether the patch or service release is imported, do the following:

1.1) In the jwb development environment, select **“Application Administration”**
1.2) select “**Imports**”
1.3) If either of the two files above are shown in the right hand window, skip to **step 2.**
1.4) If not, Hit the button “**Import File**”.
1.5) Type the path and filename to the patch or service release file
1.6) Hit “**OK**”

NOTE. The cursor will change to an egg timer as the import file in imported into the jWB environment. Sometimes jWB will “Timeout” in which case just hit “**F5**” on you keyboard to refresh the screen. The imported patch should now be viewable in “**Application Administration>Imports**”

2) Open whichever subroutine you wish to debug in the jWB environment and Type “**DEBUG**” on an empty line. (near the start of the subroutine is usually best)

3) Hit “**Update and Compile**” in the editor window

4) Hit “**Restart Queues**” in the jWB development environment

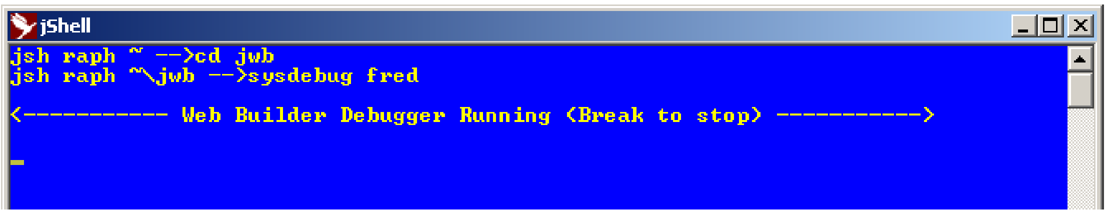
5) Fire up a jShell. (Navigate in windows to **“Start>Programs>jBASE 3.0>jShell”**)

6) CD to your jWB account directory. If you don’t know this, do the following:

6.1) Launch internet explorer and go to
http://”machine_name”/scripts/wbadmin.dll
6.2) log in and click “**Account Administration”**
6.3) Find your jWB “**Account Name**” (as described in NOTE: 3 above) and note the path of it. (under “**Account Path**”)

7) In the jShell, after changing to your account directory, type “**jsh.cmd**” and hit “**return**”. This sets your environment to be synchronised with your jWB session.

8) Type “**sysdebug fred**”. (fred is the name of the debug queue. It can be any name but needs to match the name in **step 12**). You should see the following



```
jsh raph ~ -->cd jwb
jsh raph ~\jwb -->sysdebug fred

<----------- Web Builder Debugger Running (Break to stop) ----------->

_
```

Screenshot 3: executing sysdebug

9) Change to your jWB session window. [Screenshot 1]

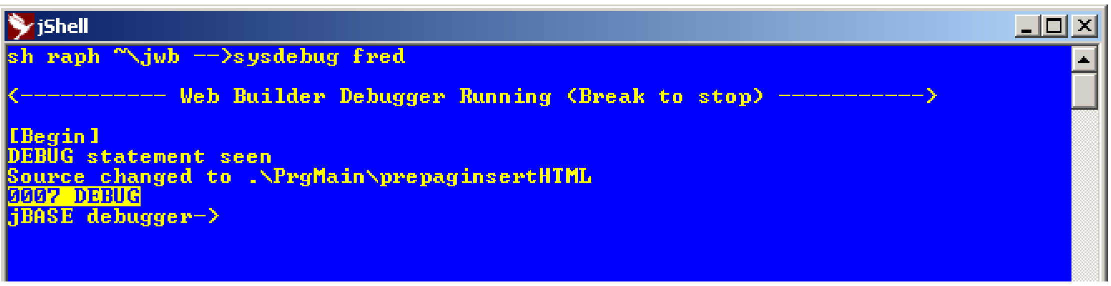
10) Open the jWB page, which you are trying to debug by doing the following

> **10.1)** Select "**Development objects**" [Screenshot 1]
> **10.2)** Select the Module, which you're debugging
> **10.3)** Select "**HTML Page**" from the drop down menu
> **10.1)** Click the ... button next the the page which has the debug statement in the pre page routine

11) Hit "**Debug Preview**" button at the top of the page

12) You will be prompted to type the queue name. Type "**fred**" (or whatever queue name you specified in **step 8**) and hit "**OK**"

13) When jWB tries to execute your subroutine, it will halt when it hits the "**DEBUG**" line. You will then be able to change to your jShell window, where you should see the following:



```
sh raph ~\jwb -->sysdebug fred

<----------- Web Builder Debugger Running (Break to stop) ----------->

[Begin]
DEBUG statement seen
Source changed to .\PrgMain\prepaginsertHTML
0007 DEBUG
jBASE debugger->
```

Screenshot 4: jWB hitting the "DEBUG" statement

You can now use the debugger commands to step through and view the line by line execution of your code.

Summary

You should now be able to get the debugger in jWB functioning so that you can step through your BASIC/Web Builder subroutines at your leisure.