

LAMBDA Boxes: CFML & FB Apps on the Cheap

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Not LAMB, LAMBDA “λ”

- **L**inux (RedHat, SuSE, Gentoo)
- **A**pache (1.3.x/2.0.x)
- **M**ySQL (4.x) or PostgreSQL (7.4)
- **B**lue**D**ragon 6.1
- **A**pplication

BlueDragon 6.1

- Three flavors
 - Free Server
 - Database: MySQL and PostgreSQL
 - JX Server
 - Database: MS-SQL, Oracle, and JDBC
 - Encrypted distributable applications/templates
 - JSP Support
 - More webserver adapter support (iPlanet/SunONE)
 - J2EE

Apache & BD

- BD installer does not allow you to specify an Apache install directory
 - Need to create a symbolic link from your installation of Apache to /usr/local/apache before installing BD

```
# ln -s /opt/apache /usr/local/apache
```

- See BD Installation Guide Section 3.7.5 for more details

Install & Run BD (non-root)

- NewAtlanta has identified this as Bug #1034
 - Issue goes back to the installer limitations
- Create user & home directory

```
# useradd -d "/opt/bluedragon-6.1/" -c "BlueDragon CFML Server"  
          -s /bin/sh -m bdragon  
  
# passwd -l bdragon  
  
# chmod 755 /opt/bluedragon-6.1
```

- NewAtlanta directory issue

```
# mkdir /usr/local/NewAtlanta  
  
# chown bdragon.bdragon /usr/local/NewAtlanta
```

Install & Run BD (non-root)

- Check links for /usr/local/apache
- Make sure bdragon can execute **/usr/local/apache/bin/httpd -v**

```
# cd /opt/bluedragon-6.1  
  
# su bdragon  
  
$ ./BlueDragon_Server_61-Linux.sh -i console
```

- Installer will not be able to modify **httpd.conf** or add **mod_servletexec.so**, need to manually

mod_servletexec.so

- Manually install **mod_servletexec.so**

```
$ exit
```

```
# cp bin/apache/mod_servletexec.so /opt/apache/libexec/.
```

- Apache 1.3.x compiled with mod_ssl, need to get mod_servletexec.so compiled with EAPI
 - ftp://ftp.newatlanta.com/public/bluedragon/6_1/server/mod_servletexec.so-eapi

httpd.conf

- Additional **httpd.conf** lines for BlueDragon
 - See ServletExec 4.2 Installation Guide Section 6.5.3

```
LoadModule servletexec_module libexec/mod_servletexec.so
AddModule mod_servletexec.c

ServletExecInstances default 127.0.0.1:9999
ServletExecAliases default /servlet servlet .jsp .cfc .cfm .cfml

<Location /servlet>
    SetHandler servlet-exec
</Location>

<Location servlet>
    SetHandler servlet-exec
</Location>

AddHandler servlet-exec jsp
AddHandler servlet-exec cfc
AddHandler servlet-exec cfm
AddHandler servlet-exec cfml
```


/etc/init.d/bluedragon

- Need to create script to start/stop

```
#!/bin/sh
# Startup script for the BlueDragon Server
. /etc/rc.d/init.d/functions

bdstart=/opt/bluedragon-6.1/bin/StartBlueDragon.sh
bdstop=/opt/bluedragon-6.1/bin/StopBlueDragon.sh

bduser=bdragon

prog="BlueDragon Server"
start() {
    echo -n "Starting $prog: ";
    daemon --user=$bduser $bdstart ;
    echo ; RETVAL=$? ; return $RETVAL ; }

stop() {
    echo -n "Stopping $prog: ";
    daemon --user=$bduser $bdstop ;
    echo ; RETVAL=$? ; return $RETVAL ; }

case "$1" in
    start) start& ;;
    stop) stop ;;
    restart) stop; start ;;
    *) echo $"Usage: $prog {start|stop|restart}"
        exit 1
esac
```

MySQL & BD

- BlueDragon does not ship MySQL JDBC drivers, need to download from MySQL
 - <http://dev.mysql.com/downloads/connector/j/3.0.html>
 - Copy and rename **mysql-connector-java-3.0.14-production-bin.jar** to **{bluedragon_install}/lib/mysql.jar**
 - Restart BlueDragon
- NewAtlanta's FAQ entry on MySQL
 - http://www.newatlanta.com/biz/c/products/bluedragon/self_help/faq/detail?faqId=216

CFML Compatibility

- BlueDragon is designed to be highly compatible with CFMX
 - **Unsupported Tags**
 - cfreport, cfchart, cfgrid, cftrace, cflogin
 - **New Tags**
 - cfimage, cfimap, cfpause, cfconstructor, cfdebugger
 - There are many other subtle differences which are documented in BD CFML Compatibility Guide

Fusebox & BD

- Fusebox 3
 - works without modification
- Fusebox 4.0
 - needs **`fusebox40.parser.cfm`** patched
- Fusebox 4.1

– ?

Fusebox 4.0 Parser Patch

- Fixes issue with BD processing `<cfscript>`

Line 255 of fusebox40.parser.cfm.x.cfm

```
fb_.parsedfile = fb_.parsedfile & repeatString(fb_.indentBlock,  
    min(fb_.maxIndentLevel, fb_.indentLevel)) &  
    '<CFSCRIPT>getPageContext().forward("' &  
    fb_.fuseQ[fb_.i].xmlAttributes.url &  
    '");</CFSCRIPT>';
```

changes to

```
fb_.parsedfile = fb_.parsedfile & repeatString(fb_.indentBlock,  
    min(fb_.maxIndentLevel, fb_.indentLevel)) &  
    '<cfset getPageContext().forward("' &  
    fb_.fuseQ[fb_.i].xmlAttributes.url & '")>';
```

Example Fusebox 4 Application and BlueDragon Admin Demonstration

Getting BD Updates

- NewAtlanta publishes updates/patches to their FTP server
 - ftp://ftp.newatlanta.com/public/bluedragon/6_1/hotfix/
- Highly recommend installing September 2004 hotfix set
- Be sure to follow **ReadMe.txt**

BlueDragon's Future

- NewAtlanta is planning BD 6.2 for Nov/Dec
 - Features to match the way CFMX 6.1 does stuff
 - CFHTTP (including SSL support)
 - CFMAIL
 - CFTRACE
 - try/catch in CFSCRIPT
 - CFLOGIN, CFLOGINUSER, CFLOGOUT
 - Info from BD-Interest list
- BD 7.0? Who knows...

Uninstalling BD

- BD Uninstaller removes all files
 - Backup wwwroot, customtags (good idea)
- BD will still create its default directory and write a file there, need to remove it to reinstall
 - /usr/local/NewAtlanta/.registry

CFAnywhere

- Run CFML applications from CD or desktop, primarily worked on by Dick Applebaum
 - <http://67.124.145.42/CFAnywhereDocs/CFAnywhere.html>
- Built on BlueDragon J2EE

Resources

- BlueDragon Interest List Archive
 - http://www.newatlanta.com/products/bluedragon/self_help/archive_search/
- BlueDragon-Blog – Charlie Arehart
 - <http://bluedragon.blog-city.com/>
- Apache 1.3 Documentation
 - <http://httpd.apache.org/docs/>
- Securing Apache Step by Step
 - http://www.cgisecurity.com/lib/ryan_barnett_gcux_practical.html
- MySQL Documentation
 - <http://dev.mysql.com/doc/>

Thank you

- Please be sure to fill out the evaluations