

Cocoon2.1.4EasyInstallation

Warning: many pages on this wiki imply that a servlet container must be installed before running Cocoon, this is **wrong** - see [NoServletContainerRequired](#). A basic installation of Cocoon for test or development purposes can be *very simple*.

Update The whole procedure has been tested with **Cocoon-2.1.5.1** on a Suse Linux 9.1 with j2sdk1.4.2_05 and jakarta-tomcat-5.0.27 and there are no changes so far. For using this instruction you just need to replace **cocoon-2.1.4** with **cocoon-2.1.5.1**.

This description has been created on a SuSE Linux 9.0 system with Tomcat 5.0.19 and j2sdk1.4.2_04 installed. As a good starting point for doing virtual hosting with Cocoon, Cocoon will be the default host and will listen to <http://cocoon:8080/> instead of <http://localhost:8080/cocoon/>. Tomcat is already installed in /opt and Cocoon, as shown below, will be installed there as well instead of being deployed to Tomcat's "webapps" directory.

```
otto@linux:/opt> ls -al
total 3
drwxr-xr-x  14 root    root          400 May  5 16:25 .
drwxr-xr-x  21 root    root          488 May  5 13:28 ..
drwxr-xr-x   6 root    root          352 Apr  1 10:27 OpenOffice.org1.1.1
drwxr-xr-x   3 root    root           72 May  5 16:37 cocoon
drwxr-xr-x   9 root    root          216 Jan 15 07:51 gnome
drwxr-xr-x  12 root    root          376 May  5 17:34 jakarta-tomcat-5
drwxr-xr-x   6 root    root          144 Apr 17 06:37 kde3
otto@linux:/opt>
```

Get Cocoon

Go to the directory you are using for downloads and create a subdirectory **cocoon**. Step into this **cocoon** directory and WGET Cocoon an its MD5 hash from the download server.

```
{{otto@linux:~> cd /tmp/
otto@linux:/tmp> mkdir cocoon otto@linux:/tmp> cd cocoon/
otto@linux:/tmp/cocoon>
otto@linux:/tmp/cocoon> wget -nd http://www.apache.org/dist/cocoon/cocoon-2.1.4-src.tar.gz.md5
-45-33-56- http://www.apache.org/dist/cocoon/cocoon-2.1.4-src.tar.gz.md5
=> `cocoon-2.1.4-src.tar.gz.md5' otto@linux:/tmp/cocoon> wget -nd http://www.apache.org/dist/cocoon/cocoon-2.1.4-src.tar.gz
-45-33-56- http://www.apache.org/dist/cocoon/cocoon-2.1.4-src.tar.gz
=> `cocoon-2.1.4-src.tar.gz'
}}}
```

After download is complete you should check MD5 sum of your download. Either do **md5sum -c *.md5** or check it manually.

```
otto@linux:/tmp/cocoon> md5sum cocoon-2.1.4-src.tar.gz
65a099094217ef0621e832ad5aa1cfc9 cocoon-2.1.4-src.tar.gz
otto@linux:/tmp/cocoon> cat cocoon-2.1.4-src.tar.gz.md5
65A099094217EF0621E832AD5AA1CFC9 cocoon-2.1.4-src.tar.gz
otto@linux:/tmp/cocoon>
```

Unpacking **cocoon-2.1.4-src.tar.gz** will create a new directory **cocoon-2.1.4**.

```
otto@linux:/tmp/cocoon> tar xzf cocoon-2.1.4-src.tar.gz
otto@linux:/tmp/cocoon> ls -al
insgesamt 37717
drwxr-xr-x   3 otto  users          168 2004-05-05 15:48 .
drwxr-xr-x   5 otto  users          128 2004-02-22 11:03 ..
drwxr-xr-x   6 otto  users          648 2004-02-12 09:48 cocoon-2.1.4
-rw-r--r--   1 otto  users       38577140 2004-02-12 10:31 cocoon-2.1.4-src.tar.gz
-rw-r--r--   1 otto  users           59 2004-02-12 10:31 cocoon-2.1.4-src.tar.gz.md5
otto@linux:/tmp/cocoon>
```

Build Cocoon

Step into **cocoon-2.1.4** and list its content. You might read the INSTALL.txt and README.txt files, and check what's about the blocks.properties and build.properties.

```
otto@linux:/tmp/cocoon> cd cocoon-2.1.4/
otto@linux:/tmp/cocoon/cocoon-2.1.4> ls -al
insgesamt 223
drwxr-xr-x  6 otto  users      648 2004-02-12 09:48 .
drwxr-xr-x  3 otto  users       80 2004-05-05 15:57 ..
-rw-r--r--  1 otto  users    5106 2004-02-12 09:48 blocks.properties
-rw-r--r--  1 otto  users    2149 2004-02-12 09:48 build.bat
-rw-r--r--  1 otto  users    4617 2004-02-12 09:48 build.properties
-rwxr-xr-x  1 otto  users     470 2004-02-12 09:48 build.sh
-rw-r--r--  1 otto  users    2970 2004-02-12 09:48 build.xml
-rw-r--r--  1 otto  users   12233 2004-02-12 09:48 cli.xconf
-rw-r--r--  1 otto  users    6193 2004-02-12 09:48 cocoon.bat
-rwxr-xr-x  1 otto  users    4597 2004-02-12 09:48 cocoon.sh
-rw-r--r--  1 otto  users    3444 2004-02-12 09:48 CREDITS.txt
-rw-r--r--  1 otto  users     277 2004-02-12 09:48 DESKTOP.INI
-rw-r--r--  1 otto  users    3524 2004-02-12 09:48 forrest.properties
-rw-r--r--  1 otto  users   34872 2004-02-12 09:48 gump.xml
-rw-r--r--  1 otto  users    4644 2004-02-12 09:48 INSTALL.txt
-rw-r--r--  1 otto  users    9329 2004-02-12 09:48 KEYS
drwxr-xr-x  2 otto  users    2080 2004-05-05 15:48 legal
drwxr-xr-x  6 otto  users     168 2004-05-05 15:48 lib
-rw-r--r--  1 otto  users    2710 2004-02-12 09:48 README.txt
drwxr-xr-x 12 otto  users     320 2004-02-12 09:48 src
-rw-r--r--  1 otto  users   93042 2004-02-12 09:48 status.xml
drwxr-xr-x 10 otto  users     248 2004-02-12 09:46 tools
otto@linux:/tmp/cocoon/cocoon-2.1.4>
```

Normally it shouldn't be necessary to do any changes to the above files. You can directly start the program building cocoon.

```
otto@linux:/tmp/cocoon/cocoon-2.1.4> ./build.sh webapp
```

Building Cocoon will take some time and generate some output on your screen. Finally it will end up with

```
BUILD SUCCESSFUL
Total time: 4 minutes 37 seconds
otto@linux:/tmp/cocoon/cocoon-2.1.4>
```

The building procedure should have created a new directory **build** within **cocoon-2.1.4**. You may check it.

```
otto@linux:/tmp/cocoon/cocoon-2.1.4> cd build/
otto@linux:/tmp/cocoon/cocoon-2.1.4/build> ls -al
insgesamt 1
drwxr-xr-x  4 otto  users    104 2004-05-05 16:10 .
drwxr-xr-x  7 otto  users    672 2004-05-05 16:02 ..
drwxr-xr-x 11 otto  users    392 2004-05-05 16:12 cocoon-2.1.4
drwxr-xr-x  8 otto  users    336 2004-05-05 16:13 webapp
```

What we are going to use is the subdirectory **webapp**.

Install Cocoon

All steps until here should have been done without root privileges. Now become root **su root** and create a **cocoon** directory within **/opt**.

```
otto@linux:/tmp/cocoon/cocoon-2.1.4/build> su root
Password: (Enter your password)
linux:/tmp/cocoon/cocoon-2.1.4/build # mkdir /opt/cocoon
```

Now move your **/tmp/cocoon/cocoon-2.1.4/build/webapp/** directory into **/opt/cocoon/**.

```

linux:/tmp/cocoon/cocoon-2.1.4/build # mv webapp/ /opt/cocoon/
linux:/tmp/cocoon/cocoon-2.1.4/build # ls -al /opt/cocoon/
insgesamt 0
drwxr-xr-x  3 root    root          72 2004-05-05 16:35 .
drwxr-xr-x 14 root    root          400 2004-05-05 16:25 ..
drwxr-xr-x  9 otto    users         360 2004-05-05 16:27 webapp
linux:/tmp/cocoon/cocoon-2.1.4/build #

```

Now, we want Cocoon to act as the Default Context of its own host that we are going to configure in Tomcat. This sounds complicated? So let's do it. In Tomcat's configuration we'll make **/opt/cocoon** the Application Base for a new host. Any host setup in Tomcat will check it's configured Application Base for a subdirectory **ROOT** and regard this one as it's default context. So, let's simply rename our **webapp** to **ROOT**, spelt with four upper case letters.

```

linux:/tmp/cocoon/cocoon-2.1.4/build # cd /opt/cocoon/
linux:/opt/cocoon # ls -al
insgesamt 0
drwxr-xr-x  3 root    root          72 2004-05-05 16:35 .
drwxr-xr-x 14 root    root          400 2004-05-05 16:25 ..
drwxr-xr-x  9 otto    users         360 2004-05-05 16:27 webapp
linux:/opt/cocoon # mv webapp/ ROOT/
linux:/opt/cocoon # ls -al
insgesamt 0
drwxr-xr-x  3 root    root          72 2004-05-05 16:37 .
drwxr-xr-x 14 root    root          400 2004-05-05 16:25 ..
drwxr-xr-x  9 otto    users         360 2004-05-05 16:27 ROOT
linux:/opt/cocoon #

```

This will make **ROOT** to be recognized by Tomcat as the default webapp in **/opt/cocoon/**. Now let's make Tomcat regard **/opt/cocoon/** as a webapp directory:

Edit server.xml

If you happened to have Tomcat already running, you should stop it now! Go to Tomcat's configuration directory

```

linux:/opt/cocoon # cd ../jakarta-tomcat-5/conf/
linux:/opt/jakarta-tomcat-5/conf # ls -al
insgesamt 101
drwxr-xr-x  3 root    root          496 2004-05-05 16:26 .
drwxr-xr-x 11 root    root          352 2004-02-25 08:57 ..
drwxr-xr-x  4 root    root           96 2004-02-25 09:09 Catalina
-rw-r--r--  1 root    root        6804 2004-02-14 11:26 catalina.policy
-rw-r--r--  1 root    root       2715 2004-02-14 11:26 catalina.properties
-rw-r--r--  1 root    root         778 2004-02-14 11:26 jk2.properties
-rw-r--r--  1 root    root        1128 2004-02-14 11:26 server-minimal.xml
-rw-r--r--  1 root    root        1756 2004-03-05 12:45 server.xml
-rw-r--r--  1 root    root         433 2004-05-05 16:26 tomcat-users.xml
-rw-r--r--  1 root    root       37477 2004-02-14 11:26 web.xml

```

and with your favourite editor open the file **server.xml**. Don't forget to backup a copy before. Search for the starting tag of Catalina Engine

```
<Engine defaultHost="localhost" name="Catalina">
```

Below it, add the following lines that create a new host **cocoon** with an Application Base **../cocoon**. The relative path used here starts from **\$CatalinaHome**, which in our case is **/opt/jakarta-tomcat-5/**.

```

<Host appBase="../cocoon" name="cocoon">
  <Logger className="org.apache.catalina.logger.FileLogger"
    prefix="cocoon_log." suffix=".txt" timestamp="true"/>
</Host>

```

and change Catalina's default host to cocoon

```
<Engine defaultHost="cocoon" name="Catalina">
```

So that, excluded all the comments, Catalina now looks like

```
<Engine defaultHost="cocoon" name="Catalina">

  <Host appBase="../cocoon" name="cocoon">
    <Logger className="org.apache.catalina.logger.FileLogger"
      prefix="cocoon_log." suffix=".txt" timestamp="true"/>
  </Host>

  <Host appBase="webapps" name="localhost">
    <Logger className="org.apache.catalina.logger.FileLogger"
      prefix="localhost_log." suffix=".txt" timestamp="true"/>
  </Host>

  <Logger className="org.apache.catalina.logger.FileLogger"
    prefix="catalina_log." suffix=".txt" timestamp="true"/>

  <Realm className="org.apache.catalina.realm.UserDatabaseRealm"/>

</Engine>
```

Save your changes, close "server.xml" and restart Tomcat

```
linux:/opt/jakarta-tomcat-5/conf # cd ..
linux:/opt/jakarta-tomcat-5 # bin/startup.sh
Using CATALINA_BASE:   /opt/jakarta-tomcat-5
Using CATALINA_HOME:   /opt/jakarta-tomcat-5
Using CATALINA_TMPDIR: /opt/jakarta-tomcat-5/temp
Using JAVA_HOME:       /usr/lib/java
linux:/opt/jakarta-tomcat-5 #
```

Now it's done. Become normal user and start your browser. If you follow the link <http://cocoon:8080/> it should now take you to Cocoon's welcome page whereas <http://localhost:8080/> still will go to Tomcat's welcome page with its docs and examples. But, as we changed Catalina's default host to Cocoon, now any other <http://anyhost:8080/> will go to Cocoon as well. We will use this feature for doing virtual hosting with Cocoon in a future description.

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