

HOW-TO CONFIGURE LINUX TO USE COROTSKY

This procedure describes how to configure Linux, the Java Runtime Environment and the web browser in order to execute correctly CorotSky tool.

The Linux distribution used for testing this procedure was Red Hat 7.3. CorotSky should work in other previous distribution but, we are not sure it works in newer ones like Red Hat 8.0.

Moreover, we have tested CorotSky with web browsers Netscape 4.76 and 4.79. We think it should work with newer versions of Netscape (7.0), but it does not work with Mozilla web browsers.

1- Installing and configuring the Java Runtime Environment (JRE)

First, you must download and install correctly the JRE. We have tested the Sun JRE 1.3.1 and it does not work. We discover that the web browser does not execute the Java VM, so it renders CorotSky unable to work.

Thus we recommend the IBM JRE 1.3.0. It can be downloaded from the address:

<http://www-106.ibm.com/developerworks/java/jdk/linux140/jre-info.html>

After downloading the file, the JRE must be installed :

<Login as root>

```
$ cd <directory_where_is_the_JRE>  
$ rpm -i IBMJava2-JRE-1.3.1-3.0.i386.rpm
```

The Java control panel can be accessed with the command :

<as normal user>

```
$ /opt/IBMJava2-131/jre/bin/JavaPluginControlPanel
```

2- Installing the Java plug-in in the web browser

Usually, the IBM JRE will be installed in /opt/IBMJava2-131 directory. You should create a symbolic link.

<Login as root>

```
$ cd /usr/lib/netscape/plugins  
$ ln -s /opt/IBMJava2-131/jre/bin/javaplugin.so .
```

See the Sun web page about the plug-in for more details and information on how to install the plug-in.

<http://java.sun.com/j2se/1.3/jre/install-linux.html>

But, it is not an obligation.

3- Testing the plug-in

Before executing CorotSky, you must be sure that the JRE is well configured and installed.

First, you must verify that the web browser can find the plug-in. For this, after executing the browser :

\$ netscape

you open the menu item:

Help -> About plug-ins

Netscape will display all plug-ins he has found.

After that, you should verify that the plug-in works correctly. For this, you can open a web page that contains several Sun examples. If you can view/execute these pages the plug-in works correctly. Here is an example of such a web page :

http://java.sun.com/products/plugin/1.3.1_01a/demos/applets.html

4- Modifying the security manager

You must modify the file java.policy . Before modifying this file we recommend that you make a backup of it :

```
$ cd </opt/IBMJava2-131/jre/lib/security/>  
$ cp java.policy      java.policy.backup  
$ vi java.policy
```

And in the **grant** section of this file, add the line in red :

```
grant {  
    // Allows any thread to stop itself using the  
    java.lang.Thread.stop()  
    // method that takes no argument.  
    // Note that this permission is granted by default only to  
    remain  
    // backwards compatible.  
    // It is strongly recommended that you either remove this  
    permission  
    // from this policy file or further restrict it to code sources  
    // that you specify, because Thread.stop() is potentially  
    unsafe.  
    // See "http://java.sun.com/notes" for more information.  
    permission java.lang.RuntimePermission "stopThread";  
  
    // Added  
    permission java.lang.RuntimePermission "modifyThreadGroup";  
    ....
```

This fix a Java exception related to permissions with Thread Group when running CorotSky.

5- Accesing CorotSky

The system is now configured. You can open the web browser and go to the address:

<http://internet1-ci.cnes.fr:8882/servlet/corotsky.server.CorotServer>

And, CorotSky will appear.

6- Know problems

- Red Hat 8.0 work or doesn't. Red Hat 8.0 uses the new GCC compiler version 3.x, which is binaryly incompatible with previous releases. That means, software not compiled with this version probably does not work, as for example Sun JDK.
- Sun JDK does not work. Neither JDK 1.3.1 nor JRE 1.31. We have not tested the JDK 1.4
- Mozilla 0.9.9 does not work. It crashes suddenly.

IMPORTANT NOTE: Maybe we are wrong about Sun JDK and Mozilla web browsers but we had no success with them. If someone has successfully configure these software, we would like to know about it.