

## 1. Installation guide of joPAS-DEMO

### 1.1. What is joPAS?

The joPAS API has been created by Group PAS of the University of Deusto. It allows the programmer to use the Octave language calculation power from Java, the user can create programs in Java with the advantage of implementing all the mathematical part in Octave. In addition, the syntax of Octave is compatible with Matlab, and all the sentences created for Matlab also can be used in joPAS.

### 1.2. Requirements

In order to be able to develop applications using the joPAS API, the java JDK 1.5 version and Octave interprets must be installed.

### 1.3. Windows installation of joPAS-DEMO

1) Install of JAVA JDK 1.5 version from <http://java.sun.com>

a. Change the system path adding the JDK

```
set path=%path%;C:\Archivos de programa\Java\jdk1.5.0_06\bin
```

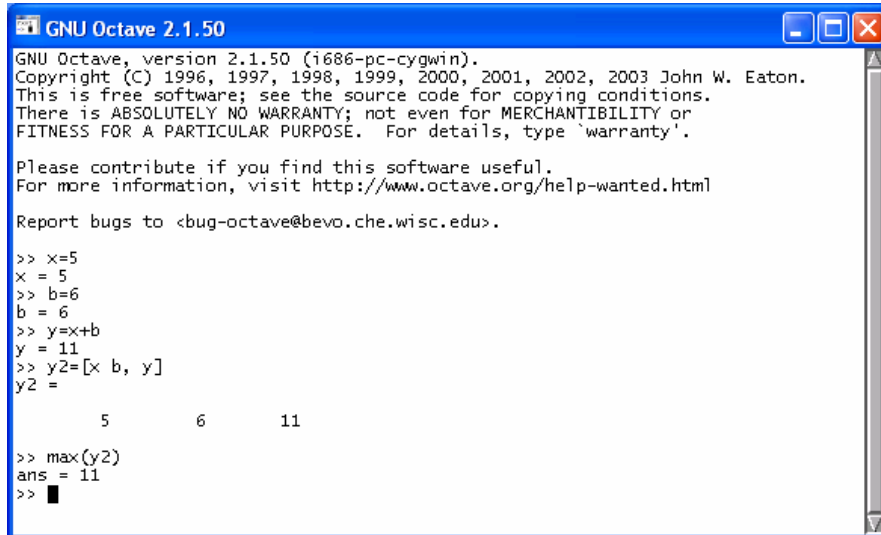
b. Check the running JAVA compiler version.

```
C:\>javac -version  
javac 1.5.0_06
```

c. Check the running JAVA virtual machine.

```
C:\>java -version  
java version "1.5.0_06"  
Java(TM) 2 Runtime Environment, Standard Edition (build 1.5.0_06-b05)  
Java HotSpot(TM) Client VM (build 1.5.0_06-b05, mixed mode, sharing)
```

- 2) Install Octave interpreter from <http://octave.sourceforge.net>
  - a. Check OCTAVE installation



```
GNU Octave 2.1.50
GNU Octave, version 2.1.50 (i686-pc-cygwin).
Copyright (C) 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003 John W. Eaton.
This is free software; see the source code for copying conditions.
There is ABSOLUTELY NO WARRANTY; not even for MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. For details, type 'warranty'.

Please contribute if you find this software useful.
For more information, visit http://www.octave.org/help-wanted.html
Report bugs to <bug-octave@bevo.che.wisc.edu>.

>> x=5
x = 5
>> b=6
b = 6
>> y=x+b
y = 11
>> y2=[x b, y]
y2 =

      5      6     11

>> max(y2)
ans = 11
>>
```

- 3) Download joPAS-DEMO from <http://jopas.sourceforge.net>
  - a. Extract the file and check the contents.

```
C:\Example>dir
El volumen de la unidad C no tiene etiqueta.
El número de serie del volumen es: 5481-ECAD

Directorio de C:\Example

21/12/2005 16:46 <DIR>      .
21/12/2005 16:46 <DIR>      ..
05/12/2005 18:2251      compile.bat
02/12/2005 16:25      11.736 Demo.java
30/11/2005 18:34      5.536 DemoDialog.java
30/11/2005 16:42      30.494 joPAS (blanco).png
05/12/2005 18:17      2.727.011 JOPAS.jar
05/12/2005 18:23      70 JOPAS.properties
05/12/2005 18:21      37 run.bat
      7 archivos      2.774.935 bytes
      2 dirs          1.381.777.408 bytes libres
```

b. Modify the “**JOPAS.properties**” file with the path of OCTAVE’s installation.

```
Octave_path = C:/Archivos de programa/GNU Octave 2.1.50/bin/octave.exe
```

c. Compile joPAS-DEMO.

```
C:\Example>compile

C:\Example>javac *.java -classpath .\JOPAS.jar -deprecation
Demo.java:128: warning: [deprecation] show() in java.awt.Window has been
deprecated
    this.show();
```

d. Run joPAS-DEMO.

```
C:\Example>run

C:\Example>java -classpath ".\;.JOPAS.jar" Demo
```

e. Check the result.

