



Building jPOS from source on Microsoft Windows

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Purpose

- ▶ To demonstrate the steps required to acquire, setup and build jPOS and jPOS-EE from its source code.

Requirements

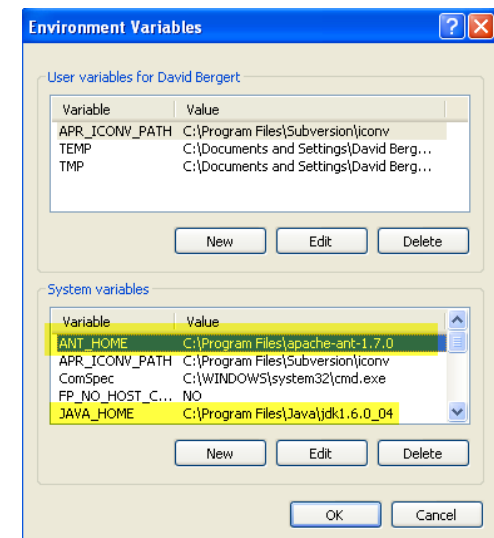
- ▶ **Install Sun Java JDK 1.5 or higher**
 - ▶ <http://java.sun.com/javase/downloads/index.jsp>
- ▶ **Install Apache Ant 1.7.0 or higher**
 - ▶ <http://ant.apache.org/>
- ▶ **Install SVN Client**
 - ▶ Command Line - <http://subversion.tigris.org/servlets/ProjectDocumentList?folderID=91>
 - ▶ GUI Version - <http://tortoissvn.net/downloads>

Requirements - continued

▶ Set Environment Variables

- ▶ ANT_HOME
- ▶ JAVA_HOME
- ▶ PATH

```
C:\Documents and Settings\David Bergert>set
ALLUSERSPROFILE=C:\Documents and Settings\All Users
ANT_HOME=C:\Program Files\apache-ant-1.7.0
APPDATA=C:\Documents and Settings\David Bergert\Application Data
APR_ICONV_PATH=C:\Program Files\Subversion\iconv
CLIENTNAME=Console
CommonProgramFiles=C:\Program Files\Common Files
COMPUTERNAME=WINKP
ComSpec=C:\WINDOWS\system32\cmd.exe
FP_NO_HOST_CHECK=NO
HOMEDRIVE=C:
HOMEPATH=\Documents and Settings\David Bergert
JAVA_HOME=C:\Program Files\Java\jdk1.6.0_04
LOGONSERVER=\\WINKP
NUMBER_OF_PROCESSORS=1
OS=Windows_NT
Path=C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\System32\Wbem;C:\Program Files\Subversion\bin;C:\Program Files\MySQL\MySQL
L Server 5.0\bin;C:\Program Files\apache-ant-1.7.0\bin
PATHEXT=.COM;.EXE;.BAT;.CMD;.UBS;.UBE;.JS;.JSE;.WSF;.WSH
PROCESSOR_ARCHITECTURE=x86
PROCESSOR_IDENTIFIER=x86 Family 6 Model 15 Stepping 8, GenuineIntel
PROCESSOR_LEVEL=6
PROCESSOR_REVISION=0F08
ProgramFiles=C:\Program Files
PROMPT=$P$G
SESSIONNAME=Console
SystemDrive=C:
SystemRoot=C:\WINDOWS
TEMP=C:\DOCUMENT~1\DAUIDB~1\LOCALS~1\Temp
TMP=C:\DOCUMENT~1\DAUIDB~1\LOCALS~1\Temp
USERDOMAIN=WINKP
USERNAME=David Bergert
USERPROFILE=C:\Documents and Settings\David Bergert
windir=C:\WINDOWS
```



Requirements - continued

▶ Test the required tools

```
C:\ Command Prompt
C:\Documents and Settings\David Bergert>ant
Buildfile: build.xml does not exist!
Build failed
C:\Documents and Settings\David Bergert>
C:\Documents and Settings\David Bergert>
C:\Documents and Settings\David Bergert>java -version
java version "1.6.0_04"
Java(TM) SE Runtime Environment (build 1.6.0_04-b12)
Java HotSpot(TM) Client VM (build 10.0-b19, mixed mode, sharing)
C:\Documents and Settings\David Bergert>svn
Type 'svn help' for usage.
C:\Documents and Settings\David Bergert>_
```

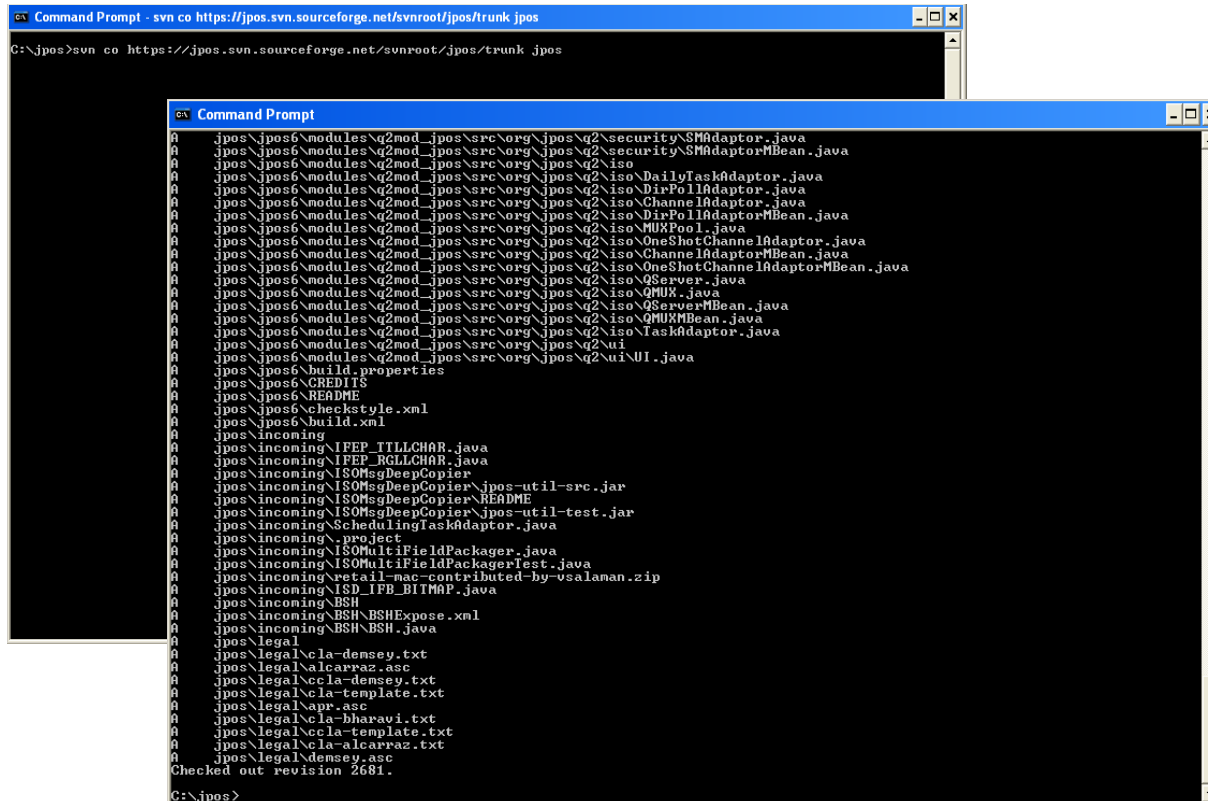
Ant Works !

SVN Client Works

Java Works

Download the jPOS source code

- ▶ jPOS svn repository: (svn command line client example)
 - ▶ http://sourceforge.net/svn/?group_id=27878
 - ▶ svn co <https://jpos.svn.sourceforge.net/svnroot/jpos/trunk> jpos

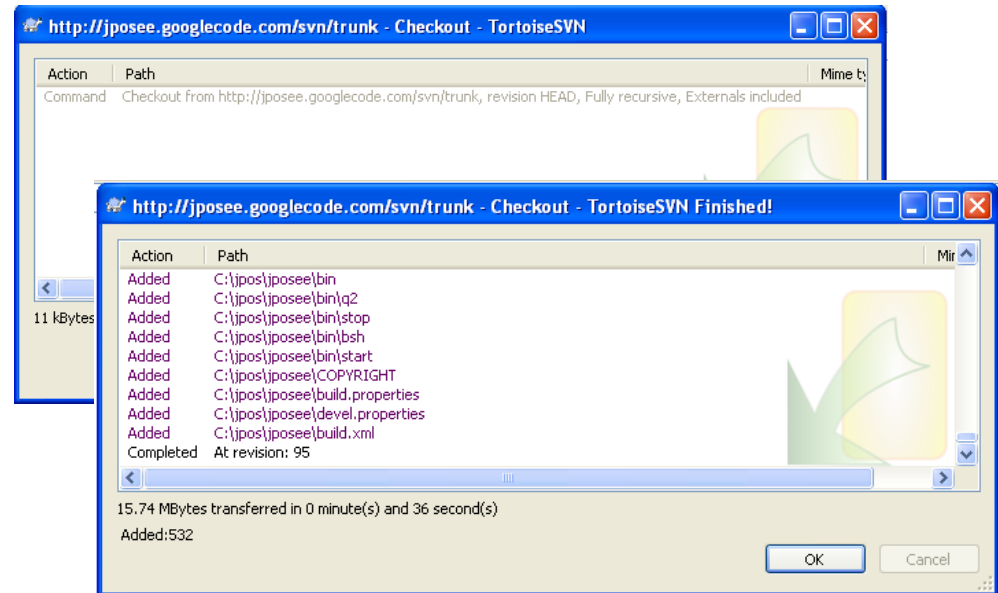
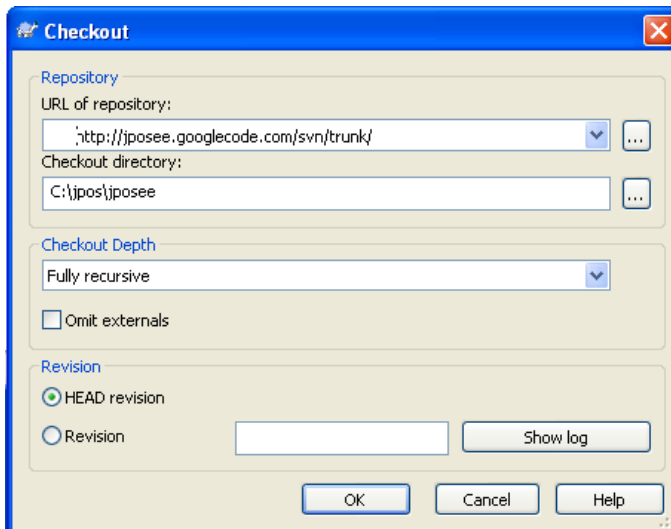


```
Command Prompt - svn co https://jpos.svn.sourceforge.net/svnroot/jpos/trunk jpos
C:\jpos>svn co https://jpos.svn.sourceforge.net/svnroot/jpos/trunk jpos

Command Prompt
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\security\SMAdaptor.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\security\SMAdaptorMBean.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\DailyTaskAdaptor.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\DirPollAdaptor.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\ChannelAdaptor.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\DirPollAdaptorMBean.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\MUXPool.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\OneShotChannelAdaptor.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\ChannelAdaptorMBean.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\OneShotChannelAdaptorMBean.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\QServer.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\QMUX.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\QServerMBean.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\QMUXMBean.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\iso\TaskAdaptor.java
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\ui
jpos\jpos6\modules\q2mod_jpos\src\org\jpos\q2\ui\UI.java
jpos\jpos6\build_properties
jpos\jpos6\CREDITS
jpos\jpos6\README
jpos\jpos6\checkstyle.xml
jpos\jpos6\build.xml
jpos\incoming
jpos\incoming\IFEP_TILLCHAR.java
jpos\incoming\IFEP_RGLLCHAR.java
jpos\incoming\ISOMsgDeepCopier
jpos\incoming\ISOMsgDeepCopier\jpos-util-src.jar
jpos\incoming\ISOMsgDeepCopier\README
jpos\incoming\ISOMsgDeepCopier\jpos-util-test.jar
jpos\incoming\SchedulingTaskAdaptor.java
jpos\incoming\project
jpos\incoming\ISOMultiFieldPackager.java
jpos\incoming\ISOMultiFieldPackagerTest.java
jpos\incoming\retail-mac-contributed-by-vsalamam.zip
jpos\incoming\ISD_IFB_BITMAP.java
jpos\incoming\BSH
jpos\incoming\BSH\BSHExpose.xml
jpos\incoming\BSH\BSH.java
jpos\legal
jpos\legal\cla-demsey.txt
jpos\legal\alcarraz.asc
jpos\legal\cc-la-demsey.txt
jpos\legal\cla-template.txt
jpos\legal\ap.asc
jpos\legal\cla-bharavi.txt
jpos\legal\cla-template.txt
jpos\legal\cla-alcarraz.txt
jpos\legal\demsey.asc
Checked out revision 2681.
C:\jpos>
```

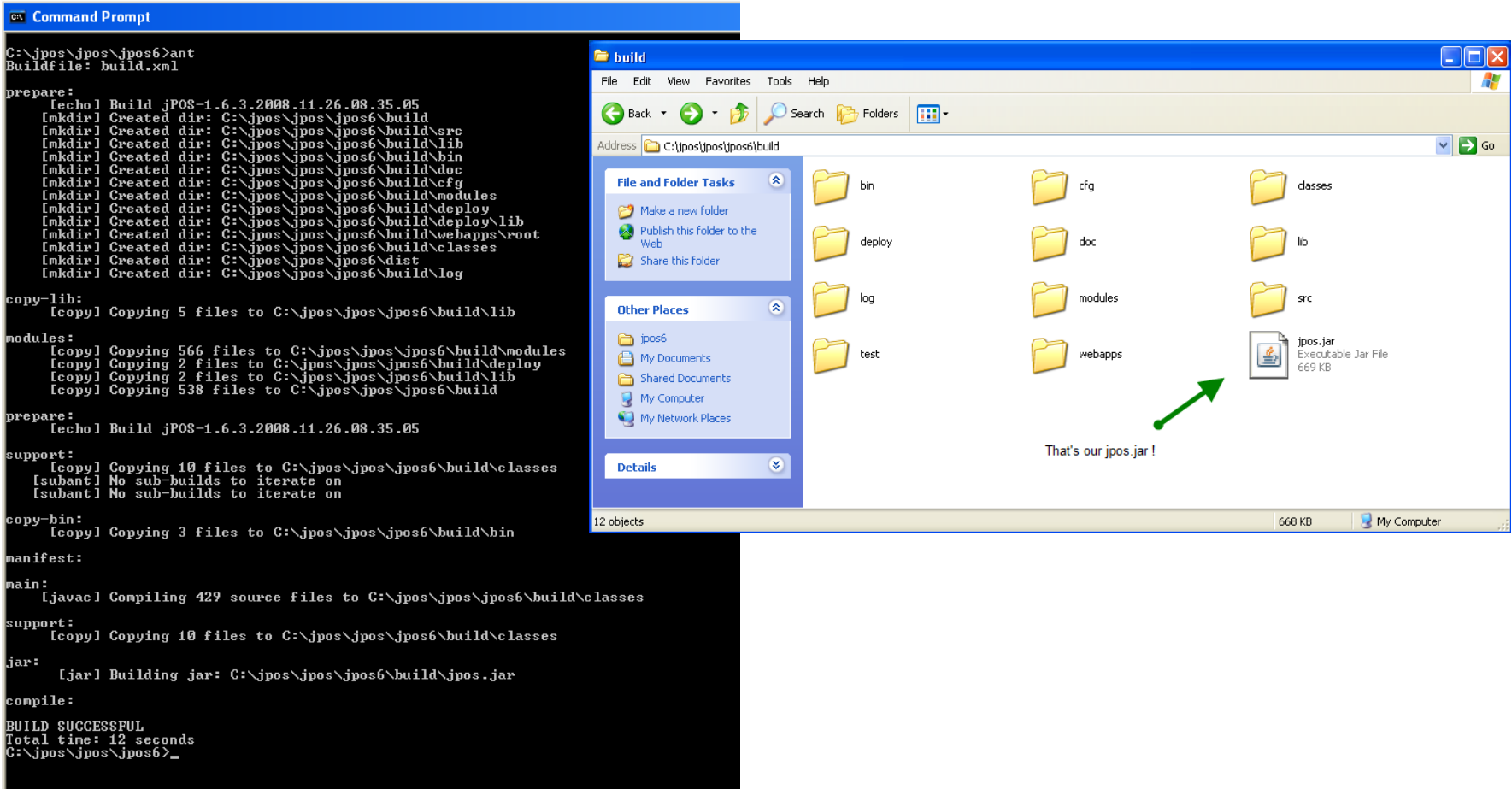
Download the jPOS-EE source code

- ▶ jPOS-ee svn repository: (svn GUI client example)
 - ▶ <http://code.google.com/p/jposee/source/checkout>
 - ▶ svn checkout **<http://jposee.googlecode.com/svn/trunk/>** jposee-read-only



Building jPOS

► Build jPOS using ant



```
C:\jpos\jpos\jpos6>ant
Buildfile: build.xml

prepare:
[echo] Build jPOS-1.6.3.2008.11.26.08.35.05
[mkdir] Created dir: C:\jpos\jpos\jpos6\build
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\src
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\lib
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\bin
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\doc
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\cfg
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\modules
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\deploy
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\deploy\lib
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\webapps\root
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\classes
[mkdir] Created dir: C:\jpos\jpos\jpos6\dist
[mkdir] Created dir: C:\jpos\jpos\jpos6\build\log

copy-lib:
[copy] Copying 5 files to C:\jpos\jpos\jpos6\build\lib

modules:
[copy] Copying 566 files to C:\jpos\jpos\jpos6\build\modules
[copy] Copying 2 files to C:\jpos\jpos\jpos6\build\deploy
[copy] Copying 2 files to C:\jpos\jpos\jpos6\build\lib
[copy] Copying 538 files to C:\jpos\jpos\jpos6\build

prepare:
[echo] Build jPOS-1.6.3.2008.11.26.08.35.05

support:
[copy] Copying 10 files to C:\jpos\jpos\jpos6\build\classes
[subant] No sub-builds to iterate on
[subant] No sub-builds to iterate on

copy-bin:
[copy] Copying 3 files to C:\jpos\jpos\jpos6\build\bin

manifest:

main:
[javac] Compiling 429 source files to C:\jpos\jpos\jpos6\build\classes

support:
[copy] Copying 10 files to C:\jpos\jpos\jpos6\build\classes

jar:
[jar] Building jar: C:\jpos\jpos\jpos6\build\jpos.jar

compile:
BUILD SUCCESSFUL
Total time: 12 seconds
C:\jpos\jpos\jpos6>
```

That's our jpos.jar !

Building jPOS-EE

► Build jPOS-EE using ant

```
Command Prompt
C:\jpos\jposee>ant
Buildfile: build.xml

prepare:
[echo] Build jPOS-EE-1.6.3.2008.11.26.08.39.42

modules:
[copy] Copying 371 files to C:\jpos\jposee\build\modules
[copy] Copying 8 files to C:\jpos\jposee\build\deploy
[copy] Copying 33 files to C:\jpos\jposee\build\lib
[copy] Copying 4 files to C:\jpos\jposee\build\bin
[copy] Copying 208 files to C:\jpos\jposee\build\webapps
[copy] Copying 97 files to C:\jpos\jposee\build\webapps

prepare:
[echo] Build jPOS-EE-1.6.3.2008.11.26.08.39.42

support:
[copy] Copying 21 files to C:\jpos\jposee\build\classes

prepare:
[copy] Copying 1 file to C:\jpos\jposee\build\src\org\jpos\ee
[delete] Deleting: C:\jpos\jposee\build\src\org\jpos\ee\Constants.tmp
[copy] Copying 1 file to C:\jpos\jposee\build\src\org\jpos\ee
[delete] Deleting: C:\jpos\jposee\build\src\org\jpos\ee\Constants.tmp

prepare:
prepare:
[copy] Copying 1 file to C:\jpos\jposee\build\classes

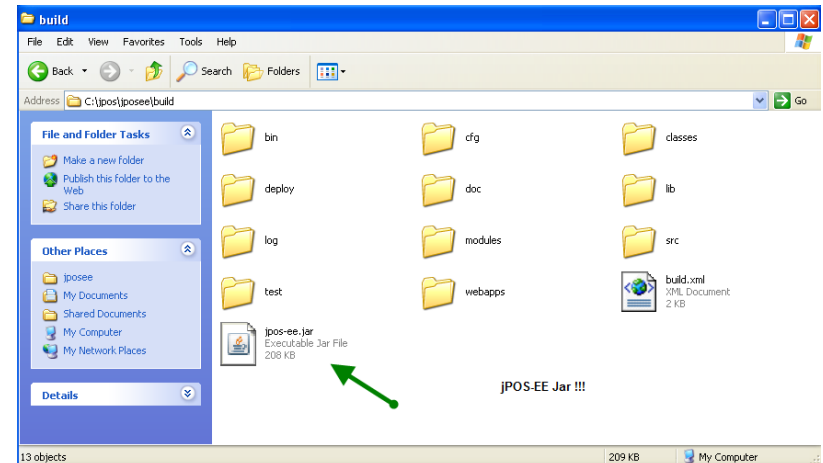
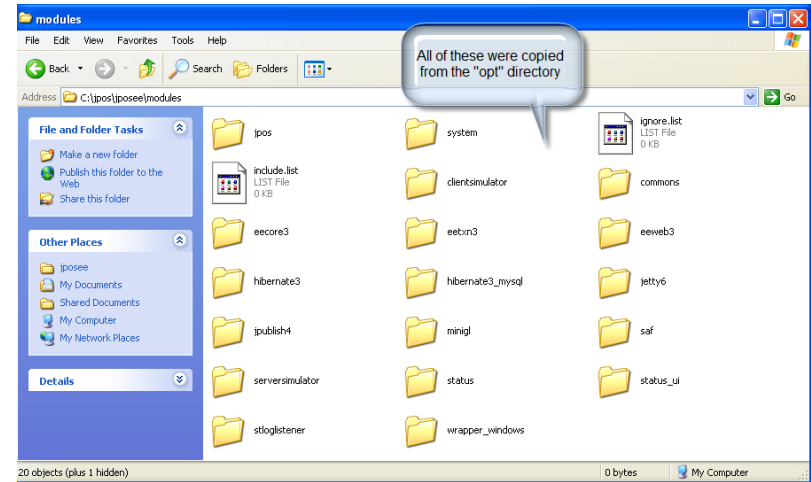
config:
[echo] hibernate3: generating build\cfg\hibernate.cfg.xml
[copy] Copying 1 file to C:\jpos\jposee\build\cfg
[copy] Copying 1 file to C:\jpos\jposee\build\cfg
[delete] Deleting: C:\jpos\jposee\build\cfg\hibernate.cfg.tmp

copy-bin:
manifest:
main:
[javac] Compiling 115 source files to C:\jpos\jposee\build\classes
[javac] Note: Some input files use unchecked or unsafe operations.
[javac] Note: Recompile with -Xlint:unchecked for details.

support:
[copy] Copying 23 files to C:\jpos\jposee\build\classes

jar:
[ljar] Building jar: C:\jpos\jposee\build\jpos-ee.jar

compile:
BUILD SUCCESSFUL
Total time: 15 seconds
C:\jpos\jposee>
```



Questions ?

- ▶ Visit jPOS.org mailing lists:
 - ▶ http://jpos.org/wiki/JPOS_Mailing_List_Readme_first