FAQ J-ISIS and Web-JISIS

1) java.lang.UnsatisfiedLinkError:

```
com.sun.glass.ui.win.WinApplication._submitForLaterInvocation(Ljava/lang/Runnable;)V
at com.sun.glass.ui.win.WinApplication._submitForLaterInvocation(Native Method)
at com.sun.glass.ui.win.WinApplication.submitForLaterInvocation(Unknown Source)
[catch] at com.sun.glass.ui.InvokeLaterDispatcher.run(Unknown Source)
```

This error occurs when the wrong JDK is installed. It seems you have a mixture of Java JDK 1.7.0_25 and others. I would suggest to clean Java (remove All) and install JDK 1.7.0_45 (or newest).

This should solve the problem. Be careful to download the right JDK 1.7.0_45(or newest) for 64-bits or 32-bits, and check that only this version is installed.

2) J-ISIS doesn't show all the menu items.

This could happen after an aborted installation or after accepting to continue installation after an error message is displayed.
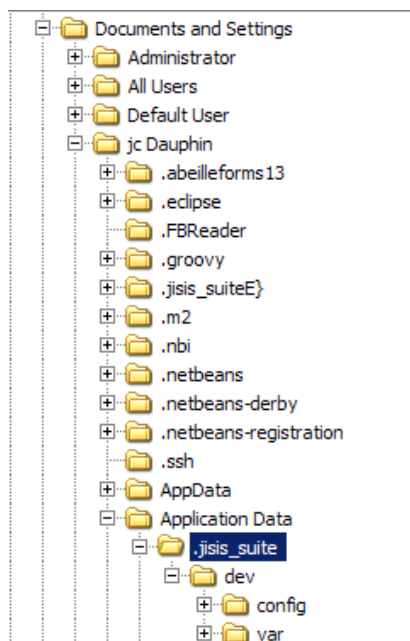
Start J-ISIS, click on "Tools" and "plugins", then choose the "Installed (27)" tab. Activate the 27 modules and you should get back the menu items (I hope !)

3) java.lang.NullPointerException

```
        at org.openide.util.Exceptions$AnnException.getMessage(Exceptions.java:238)
        at org.openide.util.Exceptions$AnnException.toString(Exceptions.java:321)
        at java.util.Objects.toString(Objects.java:157)
        at java.lang.Throwable.initCause(Throwable.java:456)
        at org.openide.util.Exceptions$AnnException.findOrCreate0(Exceptions.java:279)
        at org.openide.util.Exceptions$AnnException.findOrCreate0(Exceptions.java:286)
        at org.openide.util.Exceptions$AnnException.findOrCreate0(Exceptions.java:286)
        at org.openide.util.Exceptions$AnnException.findOrCreate(Exceptions.java:256)
        at org.openide.util.Exceptions.attachLocalizedMessage(Exceptions.java:99)
        at
org.netbeans.modules.settings.convertors.XMLSettingsSupport$SettingsRecognizer.readSerial(XMLSettingsSuppor
t.java:555)
        at
org.netbeans.modules.settings.convertors.XMLSettingsSupport$SettingsRecognizer.instanceCreate(XMLSettingsSu
pport.java:581)
        at
org.netbeans.modules.settings.convertors.SerialDataConvertor$SettingsInstance.instanceCreate(SerialDataConv
ertor.java:426)
        at
org.netbeans.core.windows.persistence.PersistenceManager.getTopComponentPersistentForID(PersistenceManager.
java:571)
        at
org.netbeans.core.windows.persistence.PersistenceManager.getTopComponentForID(PersistenceManager.java:681)
        at org.netbeans.core.windows.PersistenceHandler.getTopComponentForID(PersistenceHandler.java:489)
        at org.netbeans.core.windows.WindowManagerImpl.getTopComponentForID(WindowManagerImpl.java:957)
        java.lang.NullPointerException at
org.netbeans.core.windows.WindowManagerImpl.findTopComponent(WindowManagerImpl.java:292)
        at org.netbeans.core.io.ui.IOWindow$IOWindowImpl.findDefault(IOWindow.java:162)
        at org.netbeans.core.io.ui.IOWindow.impl(IOWindow.java:99)
        at org.netbeans.core.io.ui.IOWindow.add(IOWindow.java:105)
        at org.openide.windows.IOContainer.add(IOContainer.java:153)
        at org.netbeans.core.output2.Controller.createOutputTab(Controller.java:123)
        at org.netbeans.core.output2.Controller.performCommand(Controller.java:320)
        at org.netbeans.core.output2.Controller.eventDispatched(Controller.java:107)
        at org.netbeans.core.output2.IOEvent.dispatch(IOEvent.java:281)
        at java.awt.EventQueue.dispatchEventImpl(EventQueue.java:733)
        at java.awt.EventQueue.access$200(EventQueue.java:103)
        at java.awt.EventQueue$3.run(EventQueue.java:694)
        at java.awt.EventQueue$3.run(EventQueue.java:692)
        at java.security.AccessController.doPrivileged(Native Method)
        at java.security.ProtectionDomain$1.doIntersectionPrivilege(ProtectionDomain.java:76)
        at java.awt.EventQueue.dispatchEvent(EventQueue.java:703)
        at org.netbeans.core.TimableEventQueue.dispatchEvent(TimableEventQueue.java:159)
[catch] at java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:242)
        at java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:161)
        at java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:150)
        at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:146)
        at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:138)
        at java.awt.EventDispatchThread.run(EventDispatchThread.java:91)
```

You will need to delete the Cache and Config files. You can get the cache and config files path by clicking on the *Help->About* menu item in J-ISIS.

About

Java CDS/ISIS

www.unesco.org

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Product Version: JISIS Suite 201408251540
Java: 1.7.0_45; Java HotSpot(TM) 64-Bit Server VM 24.45-b08
Runtime: Java(TM) SE Runtime Environment 1.7.0_45-b18
System: Windows 7 version 6.1 running on amd64; Cp1252; en_EN (jisis_suite)
User directory: C:\Users\jcd\AppData\Roaming\.jisis_suite\dev
Cache directory:
C:\Users\jcd\AppData\Roaming\.jisis_suite\dev\var\cache

Close

4) Web-JISIS diacritics

How to support UTF-8 URIEncoding with Tomcat

```
Change the Tomcat setting about url param encoding: [URIEncoding].
It is described in this document:
http://tomcat.apache.org/tomcat-6.0-doc/config/http.html
```

If your POST and GET parameters are not UTF-8 encoded when using Tomcat , try to adjust the Connector configuration in Tomcat server.xml like this:

```
<!-- Define a non-SSL HTTP/1.1 Connector on port 8080 -->
   <Connector port="8080" maxHttpHeaderSize="8192"
              maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
              enableLookups="false" redirectPort="8443" acceptCount="100"
              connectionTimeout="20000" disableUploadTimeout="true"
              URIEncoding="UTF-8"
   />
```

5) Ubuntu (Linux) - J-ISIS starts but locks up after a few screens.

When running J-ISIS with OpenJDK/OpenJFX it seems to work, i.e. it opens, but is locks up after a few screens.

The problem is that OpenJFX is yet under development anf buggy. The solution is to replace OpenJDK/OpenJFX by Oracle JDK 1.7.0_45(or newest) for 64-bits or 32-bits.

step-by-step tutorials:

http://www.wikihow.com/Install-Oracle-Java-on-Ubuntu-Linux

http://www.dzone.com/links/r/installing_oracle_sun_java_jdk_and_setting_javaho.html

6) J-ISIS doesn't work with JDK 8 (Java Development Kit)

 Several Users reported that J-ISIS crashes, locks or doesn't work as expected with Java 8.

J-ISIS application is compiled to JDK 7 and there are some incompatibilities between JDK 8 and JDK 7. Thus for the time being, you should use JDK 7 (Latest release)

http://www.oracle.com/technetwork/java/javase/downloads/java-archive-downloads-javase7-521261.html

The problem actually with JDK 8 is that it cannot be installed on 32-bit operating systems such as Windows XP.

7) J-ISIS Search Results display is different from the Data Viewer display For Specific Print Formats.

The problem comes from the highlighting algorithm used to highlight the Search terms. J-ISIS uses a HTML parser to retrieve the terms to highlight in the output produced by the Print Format.

The Data Viewer Embedded browser is more fault tolerant than the HTML parser, i.e. if the HTML generated by the PFT is not valid, the HTML parser will not parse properly the PFT output while the Data Viewer will succeed to display it.

8) java.lang.OutOfMemoryError: Java heap space

Q: Very often I am getting the "java.lang.OutOfMemoryError: Java heap space" in the server, where we have our online database. Would you please help me to set right this error.

```
java.lang.OutOfMemoryError: Java heap space
        at java.nio.HeapByteBuffer.<init>(HeapByteBuffer.java:57)
        at java.nio.ByteBuffer.allocate(ByteBuffer.java:335)
        at org.unesco.jisis.corelib.common.MessageNIO.readMessage(MessageNIO.java:200)
        at org.unesco.jisis.corelib.common.MessageNIO.read(MessageNIO.java:82)
        at org.unesco.jisis.corelib.server.Handler.readMessage(Handler.java:238)
        at org.unesco.jisis.corelib.server.Handler.read(Handler.java:133)
        at org.unesco.jisis.corelib.server.Handler.run(Handler.java:116)
        at org.unesco.jisis.corelib.server.Reactor.dispatch(Reactor.java:217)
        at org.unesco.jisis.corelib.server.Reactor.run(Reactor.java:186)
        at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1142)
        at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:617)
        at java.lang.Thread.run(Thread.java:745)
```

A: Two JVM options are often used to tune JVM heap size: -Xmx for maximum heap size, and -Xms for initial heap size.

The Heap size must be lower than the your computer's physical memory.

In jisis_suite/etc, edit the —*J-Xmx* command line Java startup switch in the `jisis_suite.conf` file, the default values are the following:

```
# command line switches

default_options="--branding jisis_suite -J-Xms256m -J-Xmx512m  -J-
Dlogback.configurationFile=etc/logback.xml -J-
Dnetbeans.logger.console=true -J-
Dnetbeans.slow.system.clipboard.hack=false -J-ea -J-
Duser.language=en -J-Duser.country=EN"
```

You can try the following (m or M means megabytes, g or G means gigabytes):

```
default_options="--branding jisis_suite -J-Xms512m -J-Xmx1g  -J-
Dlogback.configurationFile=etc/logback.xml -J-Dnetbeans.logger.console=true
-J-Dnetbeans.slow.system.clipboard.hack=false -J-ea -J-Duser.language=en -
J-Duser.country=EN"
```

9) Server returned HTTP response code: 403 for URL: http://www.loc.gov/standards/mods/v3/MARC21slim2MODS3-4.xsl or when accessing any other Library of Congress file stylesheet files

For Security Reasons, the Library of Congress has begun filtering (blocking) HTTP requests that do not express a userAgent in the header. Regular human access with a standard browser is not affected by this, because browsers attach a userAgent, telling the site what sort of software is being used to make the request.

However, J-ISIS is accessing XML validation stylesheets without using a browser but by programming and has problems accessing the content.

SOLUTION :

You can set globally the user agent string with a parameter that must be set into the jisis_suite.conf file located in the "/etc" folder. Open the jisis_suite.conf with an editor like NotePad++ and modify the line just below "# command line switches"

you neeed to add -J-Dhttp.agent=\"Mozilla/5.0 (Windows NT 10.0; WOW64; rv:50.0) Gecko/20100101 Firefox/50.0\" to the command line switches which will look like this:

default_options="--branding jisis_suite -J-Xms256m -J-Xmx512m -J-Dlogback.configurationFile=etc/logback.xml -J-Dnetbeans.logger.console=true -J-Dhttp.agent=\"Mozilla/5.0 (Windows NT 10.0; WOW64; rv:50.0) Gecko/20100101 Firefox/50.0\" -J-Dnetbeans.slow.system.clipboard.hack=false -J-ea -J-Duser.language=en -J-Duser.country=EN"

Save the file and restart J-ISIS

Please note that the change should also be done for the Mac version. This parameter will be added to the jisis_suite.conf file for next releases

10) The User Interface is not appropriately scaled in Hi-DPI mode

To solve this problem, two additional JVM parameters must be set into the jisis_suite.conf file located in the "/etc" folder. Open the jisis_suite.conf with an editor like NotePad++ and modify the line just below "# command line switches" adding:

default_options="--branding jisis_suite **-J-Dprism.allowhidpi=false -J-Dsun.java2d.dpiaware=false**

J-Xms256m -J-Xmx512m -J-Dlogback.configurationFile=etc/logback.xml -J-Dnetbeans.logger.console=true -J-Dhttp.agent=\"Mozilla/5.0 (Windows NT 10.0; WOW64; rv:50.0) Gecko/20100101 Firefox/50.0\" -J-Dnetbeans.slow.system.clipboard.hack=false -J-ea -J-Duser.language=en -J-Duser.country=EN"

Save the file and restart J-ISIS

Please note that these changes may not be necessary for the Mac version.

11) An exception "**OutOfMemoryError: GC overhead limit exceeded**" is raised when indexing a database

java.lang.OutOfMemoryError: GC overhead limit exceeded

at
org.apache.lucene.codecs.compressing.CompressingTermVectorsReader.get(CompressingTermVectorsReader.java:403)

at
org.apache.lucene.codecs.compressing.CompressingTermVectorsWriter.merge(CompressingTermVectorsWriter.java:835)

at org.apache.lucene.index.SegmentMerger.mergeVectors(SegmentMerger.java:210)

at org.apache.lucene.index.SegmentMerger.merge(SegmentMerger.java:144)

at org.apache.lucene.index.IndexWriter.mergeMiddle(IndexWriter.java:4353)

at org.apache.lucene.index.IndexWriter.merge(IndexWriter.java:3928)

The solution is to increase the memory heap space as in point 8 above

12) Logging debug information

- You can view the IDE Log just after an exception is raised through the J-ISIS Menu Bar
  ("View"->"IDE Log")

- The detailed log file is not created by default but you can ask J-ISIS to create it as follows:

  Edit the "`logback.xml`" file located in the `jisis_suite/etc` folder and change

  ```
  <root level="OFF">
  to
  <root level="ALL">
  ```

  Then re-start J-ISIS and a file named "`J-ISIS-log.txt`" will be created into the `jisis_suite` directory.

13) Some Applications need to use an earlier version of Java JDK while J-ISIS needs JDK 1.8.0

If for example you have an application that absolutely needs JDK 6.0.31 to run and you want to be able to run J-ISIS that needs JDK 1.8.0, you can proceed as follow:

a) You will need to have both version of JDK installed
    JDK 1.8.0_162 or more recent
and
    JDK 6.0.31
You may install different JDKs easily: just specify different folders. And you can set JDK 6.0.31 as default version in Windows 10.

b) You can override the default location of JDK/JRE used by J-ISIS by using --jdkhome <dir> switch
For this you will need to edit the *jisis_suite.conf* file located in the "/etc" folder. Open the *jisis_suite.conf* with an editor like NotePad++ and modify the line:
#jdkhome="/path/to/jdk"
Remove the hash comment character "#" and enter the path to the jdk 8 folder
jdkhome="/path/to/jdk"

Save the file and start J-ISIS

After this change you should be able to run J-ISIS and your application that needs jdk 6