Title: Java Proxy Installation version 1.0

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Intended Audience:

Technical staff of all levels should be able to configure this web application.
Administration experience with Tomcat or JBOSS is assumed.

Prerequisites:

```
Java:          JDK 1.5
URL:               http://java.sun.com/javase/downloads/index_jdk5.jsp
Recommend:         /opt/java

App Server:    Tomcat 5.5+
URL:               http://tomcat.apache.org/download-55.cgi
Recommend:         /opt/tomcat

If using HTTPS, see Appendix.
```

Proxy Overview:

This proxy enables web-based clients to call i2b2 cells located on remote domains.

Proxy Download (Version 1.0)

http://repo.chip.org/maven/org/spin/i2b2/tags/1.0/proxy

Proxy Installation

1. Unzip proxy archive
$ unzip *.zip

2. Copy javascript configuration to home directory of web UI (the webclient and the proxy must live in the same webserver/webapp container):

$ cp i2b2_config_data.js /var/www/html

3. Copy war to tomcat webapps folder (or JBOSS)
$ cp *.war $TOMCAT_HOME/webapps/

Appendix A: SSL Certificates

```
SPINCertificate[.sh|.bat] creates self signed certificates and a local keystore file.
To generate private and public key pair:
```

- Edit the SPINCertificate script and set the following variables to your local settings:

  SERVERNAME   (fully qualified machine name or IP address)
  INSTITUTION   (e.g. Brigham And Women's Hospital)

- You may also change the variables <u>KEYSTORE</u> and <u>PASSWORD</u>.

- Run the script with:
  SPINCertificate -generate
  This will generate a file named **spin.keystore**, which holds your private key, and your certificate in a file named **your.server.name.edu.cer**.

- To import the certificate from another peer (e.g. vsl-bwh.partners.org), run the script with:

  SPINCertificate.sh   -import vsl-bwh-partners.org

- Run the ConfigWizard to setup the global properties for the keystore

  $./ConfigWizard.sh keystore

Appendix B: Tomcat SSL setup

Official SSL howto guide:
http://tomcat.apache.org/tomcat-5.5-doc/ssl-howto.html

Setting the keystore file location and password:
keystoreFile Add this attribute if the keystore file you created is not in the default place that Tomcat expects (a file named .keystore in the user home directory under which Tomcat is running). You can specify an absolute pathname, or a relative pathname that is resolved against the $CATALINA_BASE environment variable. keystorePass Add this element if you used a different keystore (and Certificate) password than the one Tomcat expects (changeit).

Example:
```
<!-- Define a SSL HTTP/1.1 Connector on port 8443 -->
<Connector port="8080"
    maxHttpHeaderSize="8192"
    maxThreads="150"
    minSpareThreads="25"
    maxSpareThreads="75"
    enableLookups="false"
    disableUploadTimeout="true"
    acceptCount="100"
    scheme="https"
    secure="true"
    clientAuth="false"
    sslProtocol="TLS"
    keystoreFile="/opt/spin/main/conf/spin.keystore"
    keystorePass="spinkeystore"/>
```

Appendix C: Logging

<u>Log4J</u>

SPIN uses log4j to set the logging level (DEBUG, INFO, WARN, ERROR, FATAL) and set the output targets (FILE, CONSOLE).

Log4J is described in detail here: http://logging.apache.org/log4j/docs/ , though most users will only need to set the logging level and/or the location of the log file.

Log4j logging levels are hierarchal, meaning that an ERROR message will also be logged if the level is set to DEBUG. The relationship between the levels is as follows:

DEBUG > INFO > WARN > ERROR >FATAL

Log4J also allows multiple *appender* types such as CONSOLE or FILE or even SMTP.

Defaults

By default, VSL will use the log4j configuration file located in /opt/spin/main/conf

This lo4j configuration will log all WARN, ERROR, or FATAL level messages to Tomcat STDOUT. Any SPIN messaging related classes will log at the INFO level, also to Tomcat STDOUT.

Appendix D: Building from source

```
Version Control:  Subversion 2
URL:              http://subversion.tigris.org/getting.html#binary-packages
Recommend:        /opt/svn

Build Tool:       Maven2
URL:              http://www.apache.org/dyn/closer.cgi/maven/binaries/apache-maven-2.0.9-bin.zip
Recommend:        /opt/maven2

Source Code:      Proxy version 1.0
URL:              $svn co https://scm.chip.org/svn/repos/spin/i2b2/tags/1.0/proxy/
Recommend:        ~/proxy_v1

Source Code:      Proxy latest (trunk)
URL:              $svn co https://scm.chip.org/svn/repos/spin/i2b2/trunk/proxy/
Recommend:        ~/proxy_trunk
```