Package Build Instruction

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How-to guide in building OpenAttestation SDK from source to package ready for installation

2   *System Requirements*

2.1   System requirement

The build environment has been validated in using Fedora 14 x86_64 system

2.2   Proxy Configuration setup

If you building package behind firewall, you would need to setup following proxies in order to download needed libraries

```
export  http_proxy=<proxy_server>:<proxy_port>

export  https_proxy=<proxy_server>:<proxy_port>

export  ftp_proxy=<proxy_server>:<proxy_port>

export ANT_OPTS="-Dhttp.proxyHost=<proxy_server> -Dhttp.proxyPort=<proxy_port>"
```
   Where proxy_server/proxy_port is your proxy server

2.3   Download and Install Tomcat

Download and install tomcat 7.0.26 from

   "http://archive.apache.org/dist/tomcat/tomcat-7/v7.0.26/bin/apache-tomcat-7.0.26.tar.gz".

Untar package into <tomcat-dir> as preferred – note <tomcat-dir> is the directory of tomcat package which you download. It will be used in package build process.

```
tar -zxvf apache-tomcat-7.0.26.tar.gz
```

2.4   Software requirement

Install basic packages

```
yum install rpm-build

yum install ant

yum install trousers-devel
```

Also install following packages

    * autoconf 2.63

    * automake 1.11

    * gcc 3.4

    * pam 1.1

    * java 1.6

3 Download OpenAttestation Required Components

3.1 Download OpenAttestation Source

Please download source tree, say <OAT_DIR>/ OpenAttestation, you are to see following tree structure, <OAT_DIR> is the directory of OAT package.

<OAT_DIR>/ OpenAttestation/Source –

> HisAppraiser
>
> HisClient
>
> HisPrivacyCAWebServices2
>
> OpenAttestationAdminConsole
>
> OpenAttestationManifestWebServices
>
> OpenAttestationWebServices
>
> Portal
>
> PrivacyCA
>
> TPMModule
>
> Build.sh

<OAT_DIR>/ OpenAttestation/Installer –

> …….

<OAT_DIR>/ OpenAttestation/docs -

3.2 Download required libraries

OpenAttestation project in open source tree doesn't include all the necessarily runtime libraries, such as JAR files for Java runtime …

To download runtime libraries, do

- cd <OAT_DIR>/ OpenAttestation /Installer
- sh download_jar_packages.sh
- sh distribute_jar_packages.sh

4 *Package building*

4.1 Building RPM Package

In order to build this package, you need to perform with ROOT super user mode.
Here is not just simply switch to root because of environment variable issues. You
must log on as root mode or you can switch to root by "su –".

cd <OAT_DIR>/ OpenAttestation/Installer

    sh rpm.sh -s <OAT_DIR>/ OpenAttestation/Source -t <tomcat_dir>/apache-
    tomcat-x.x.x

Where <tomcat_dir> is from *section#2.3 Download and install Tomcat.* <OAT_DIR> is
from section #3.1 Download OpenAttestation. Both <tomcat_dir> and <OAT_DIR>
are absolute path.

You should see "RPM build: -------- [OK]" at the end

4.2 Get rpm package

You should find rpm package in /root/rpmbuild/RPMS/x86_64/OAT-Appraiser-Base-
OATapp-1.0.0-2.fcxx.x86_64.rpm.

5 *Import Projects to Eclipse*

In order to build OpenAttestation project within Eclipse, you should have Eclipse setup proxy accordingly as *section#2.2 Proxy Configuration Setup.*

<OAT_DIR>/ OpenAttestation/Source –

> HisAppraiser
>
> HisClient
>
> HisPrivacyCAWebServices2
>
> OpenAttestationAdminConsole
>
> OpenAttestationManifestWebServices
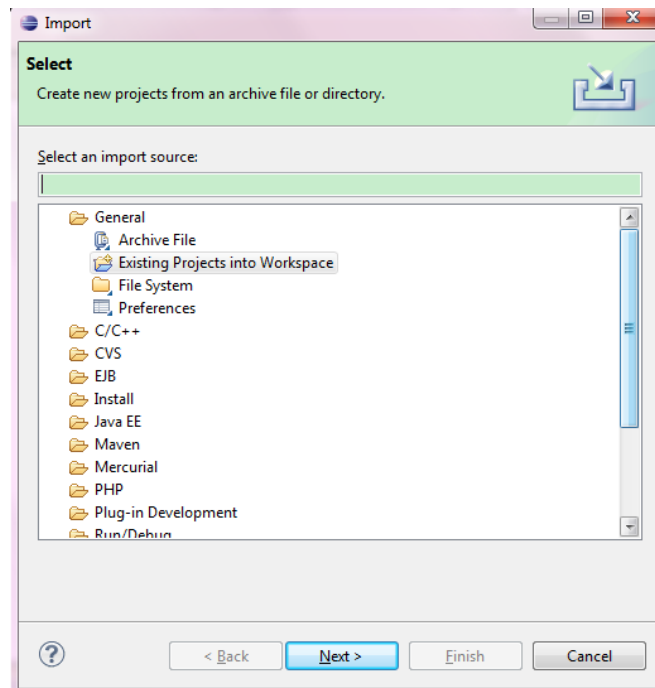>
> OpenAttestationWebServices
>
> PrivacyCA
>
> TPMModule

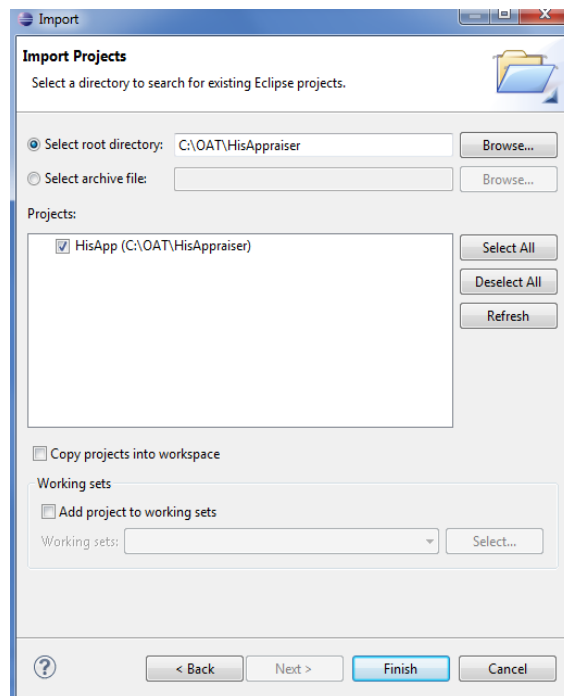<OAT_DIR> is from section #3.1 Download OpenAttestation.

5.1 Import to Eclipse

1. Open Eclipse; click File option, select Import option, select General options, and then select Existing Projects into Workspace.

2. Click Next, select one of those 7 subdirectories as the root directory, then project name will be listed in the Projects box, select the project and click Finish.

3. Project should be displayed in Eclipse Explorer Window:
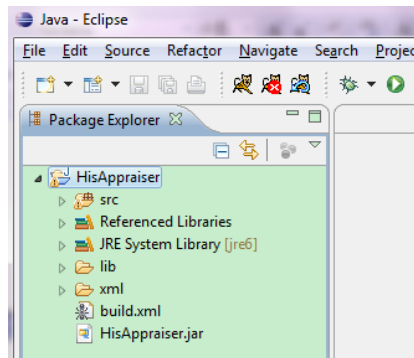
4. For each of the other sub-directory, repeat step 2.

5.2   TPMModule

This module to be deployed onto the TPM client systems. This is a C++ project and should build in different ways between Windows and Linux. Here I only introduce how to build in Linux.

Below packages should be installed:
* autoconf 2.63
* automake 1.11
* gcc 3.4
* pam 1.1
* trousers 0.3.1
* trousers-devel 0.3.1
* java 1.6
* rpm 4.7.2

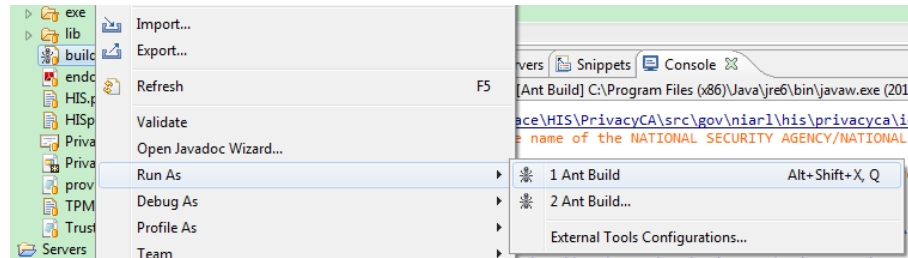To build TPMModule, open a terminal window,

cd <OAT_DIR>/Source/TPMModule/sha1/linux/

make

<OAT_DIR> is from section #3.1 Download OpenAttestation.

5.3   PrivacyCA

There is build.xml in this project so that Eclipse can build it easily.

1. In Eclipse Explorer window, expand PrivacyCA, right click on build.xml, then select Run As, then 1 Ant Build;

2. The build will start and output messages in Console window. You will see BUILD SUCCESSFUL in Console at the end of build. Then you will get a PrivacyCA.jar file in this project.
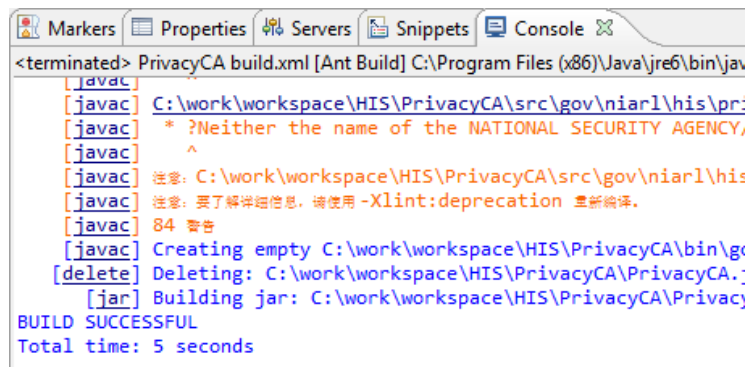
5.4   HisAppraiser

This module can be built on either machine. The same build steps as PrivacyCA.

5.5   HisClient

This module can be built on either machine. The same build steps as PrivacyCA.

5.6   HisPrivacyCAWebServices2

This module can be built on either machine. The same build steps as PrivacyCA.

5.7   HisWebServices

This module can be built on either machine. The same build steps as PrivacyCA.

5.8   Portal

This is a PHP web application and is deployed under Apache. No need to build.