



Deploying WebVue as a Java Web Start Application

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1 WebVue as an Application

In some case, it is interesting to deploy WebVue client as an application. In this case, Webvue, is not seen as an applet embedded in a browser; but as a full featured java application. Java WebStart technology is used to launch a java application by simply clicking link in a web or by directly typing the jnlp url.

1.1 Disclaimer

We do not actively promote WebVue to be run as a Java Web Start application. However, as individual customers may ask for this opportunity, we decided to prepare WebVue for being deployed and launched outside of a web browser context and document this feature. This option can more be seen as how apps are deployed nowadays.

The purpose of this document is to describe how the WebVue configuration must be changed in order to deploy it as a WebStart application.

1.2 Java WebStart advantages

- One click deployment
- Java Web Start ensures the most current version of the application will be deployed, as well as the correct version of the Java Runtime Environment (JRE).
- Users can create a desktop shortcut to launch a Java web start application outside the browser
- By default, applications have restricted access to local disk and network resources
- Applications are cached locally for improved performance
- Url restriction
- Off line cache for files

Please see <http://www.oracle.com/technetwork/java/javase/javawebstart/index.html> for additional information.

1.3 Basic deployment through Java Web Start

1.3.1 Jnlp file

At <PcvueWorkingDirectory>\WebServerExtensions\Webvue\classes,

- Create Webvue.jnlp file

```
<?xml version="1.0" encoding="UTF-8"?>
<jnlp spec="1.0+"
  codebase="http://192.168.1.45/classes"
  href="webvue.jnlp">
  <information>
    <title>Webvue</title>
    <vendor>Arc Informatique</vendor>
  </information>
  <resources>
    <j2se version="1.7+"
      href="http://java.sun.com/products/autodl/j2se"/>
    <jar href="AIWebvue-signed.jar" main="true" />
  </resources>
</jnlp>
```

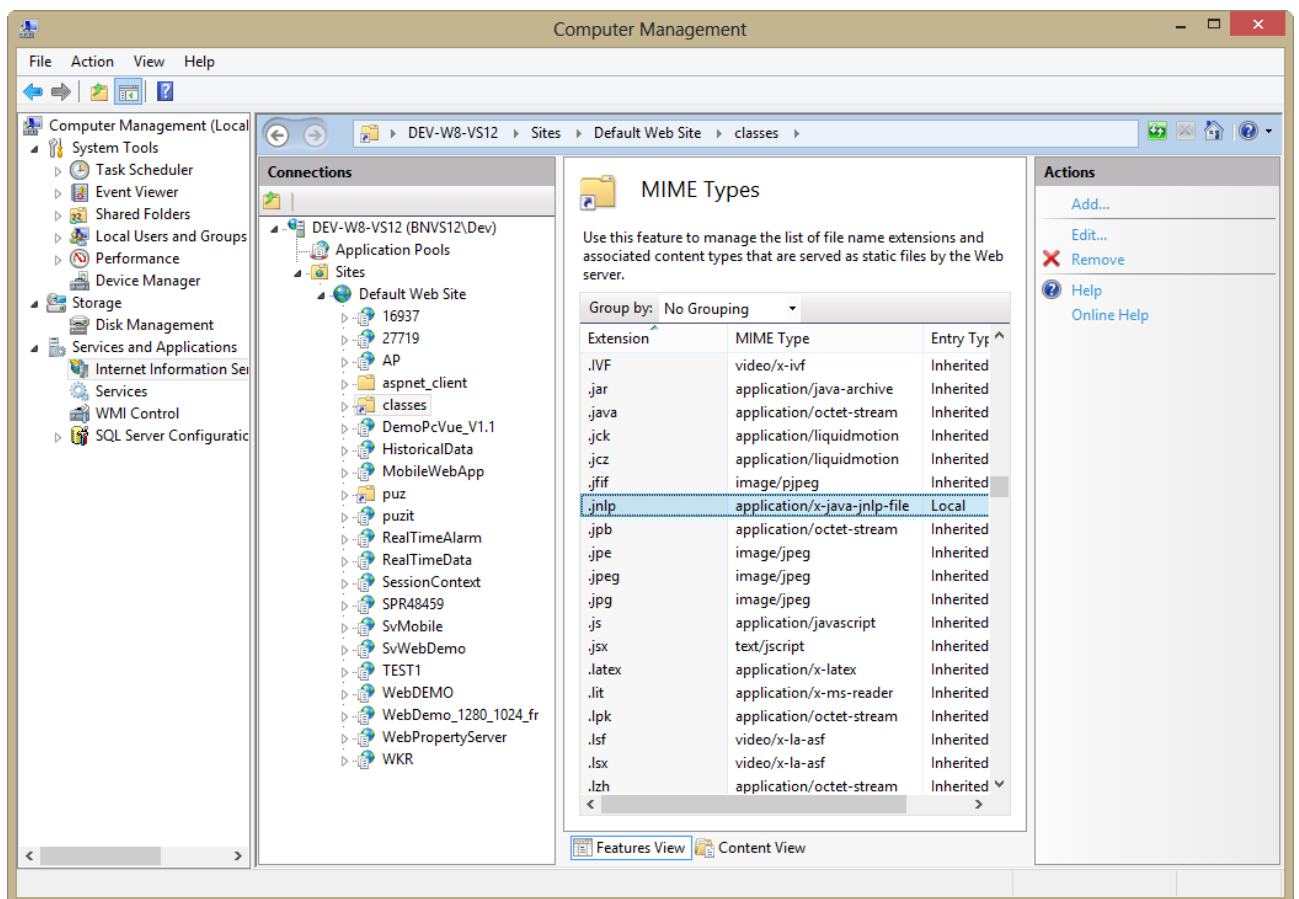
```

</resources>
<security>
  <all-permissions/>
</security>
<application-desc
  name="Webvue"
  main-class="svfc.launcher.WebVueClient">
  <argument>http:// 192.168.1.45/AP/</argument>
</application-desc>
<update check="background"/>
</jnlp>

```

1.3.2 Mime type

A mime type for jnlp file has to be created.
For IIS, defines mime type for classes virtual directory.



1.3.3 Default document

If possible (see above) change the default document of the WebVue virtual directory to WebVue.jnlp.

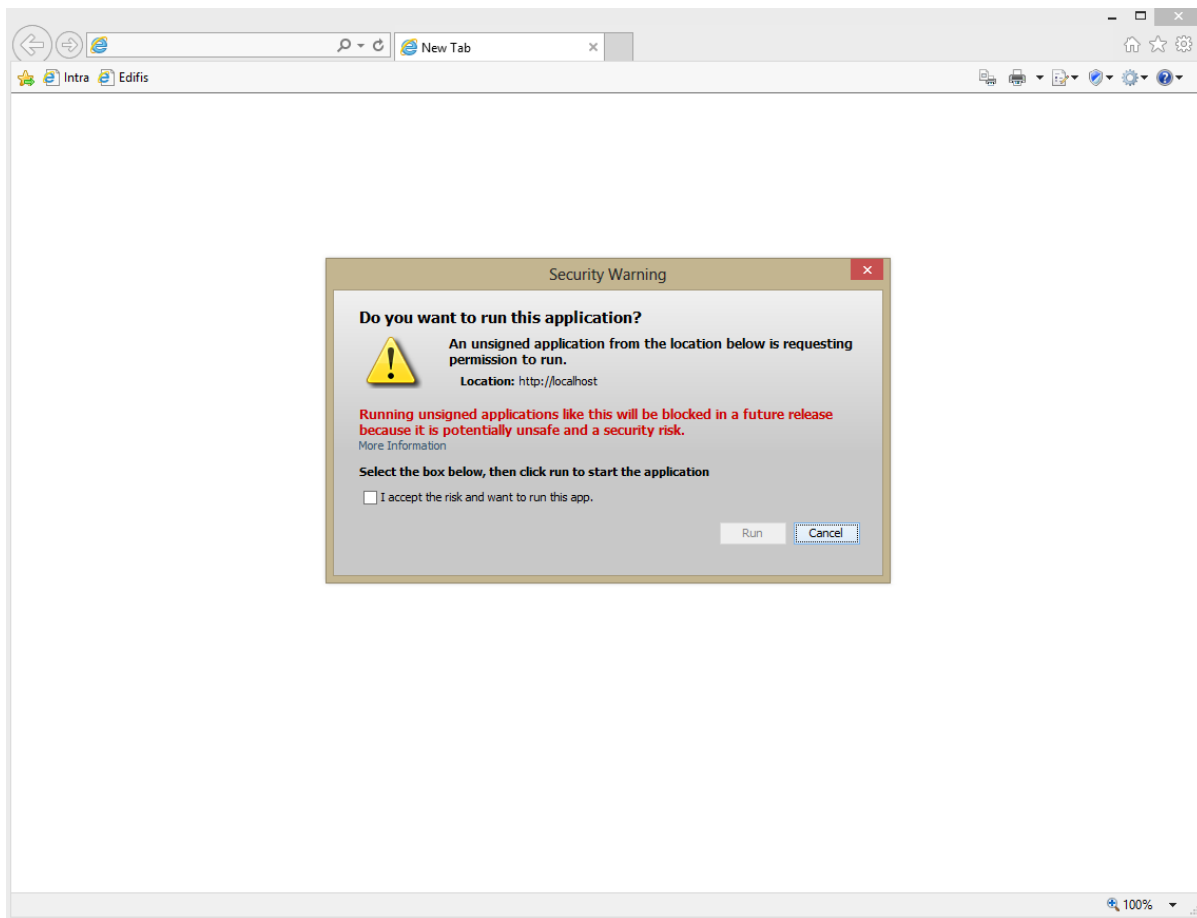
1.3.4 Deploying Webvue application

1.3.4.1 Enter the url of jnlp file in your favorite browser

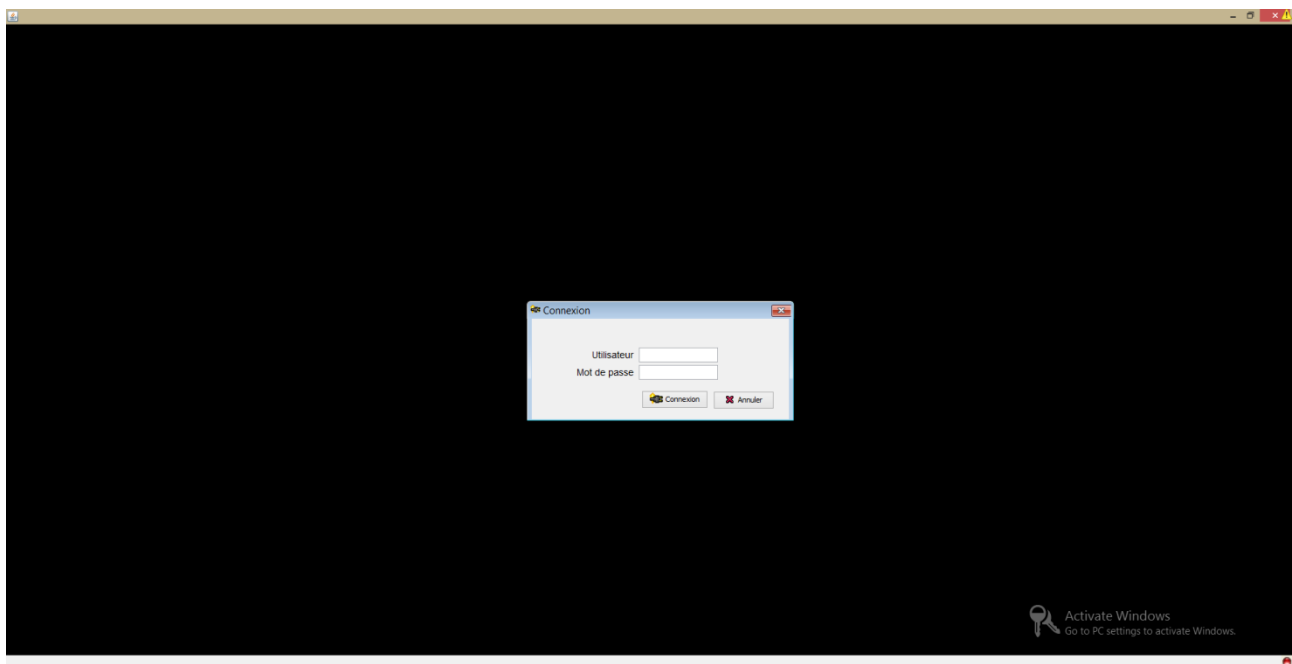


Note: If the default document is set as described

1.3.4.2 Agree and run application thanks to standard webstart dialog box

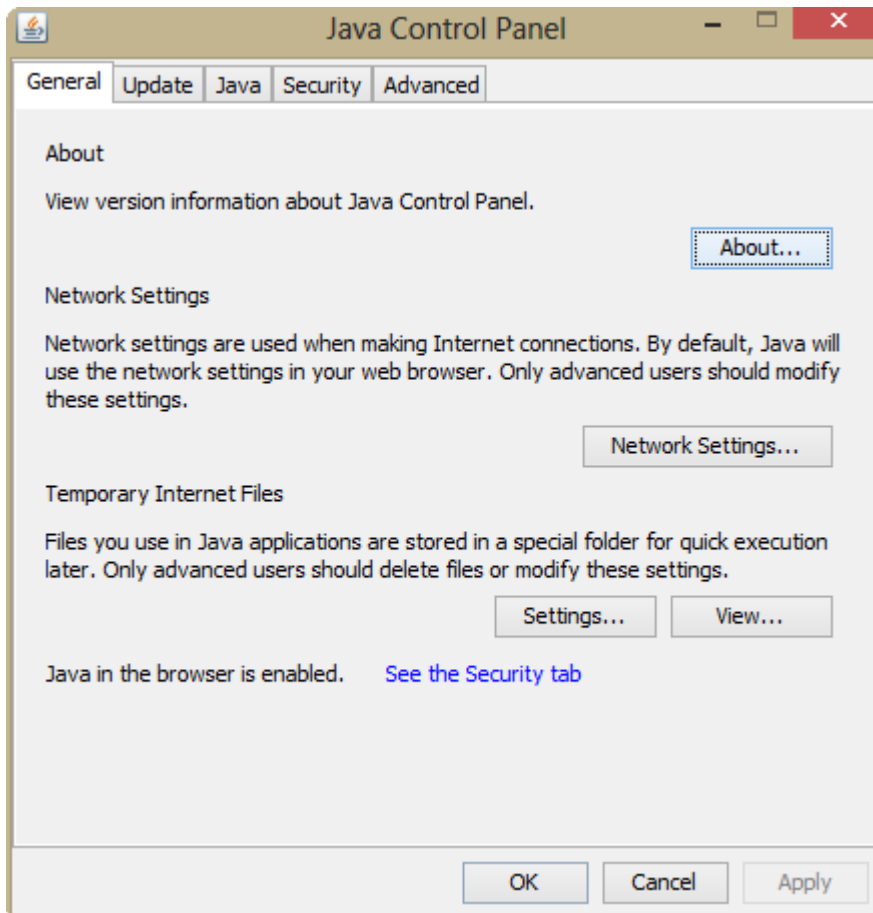


1.3.4.3 Webvue is started as an application

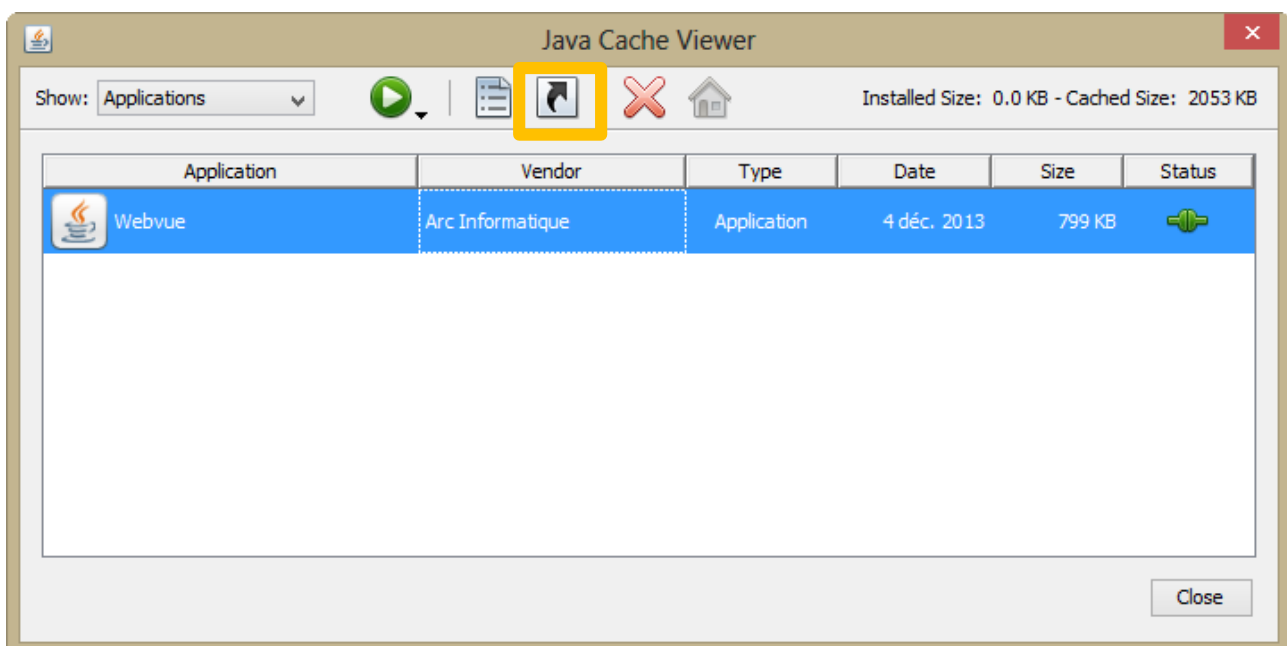


1.3.4.4 Creating a shortcut on the desktop

- Go to Control Panel .
- Start Java Panel



- Select View in General Panel



- Click on the arrow button to create a shortcut

1.4 Java Webstart deployment and security

Refer the the standard documentation about web start to implement security.
<http://docs.oracle.com/javase/tutorial/deployment/webstart/deploying.html>

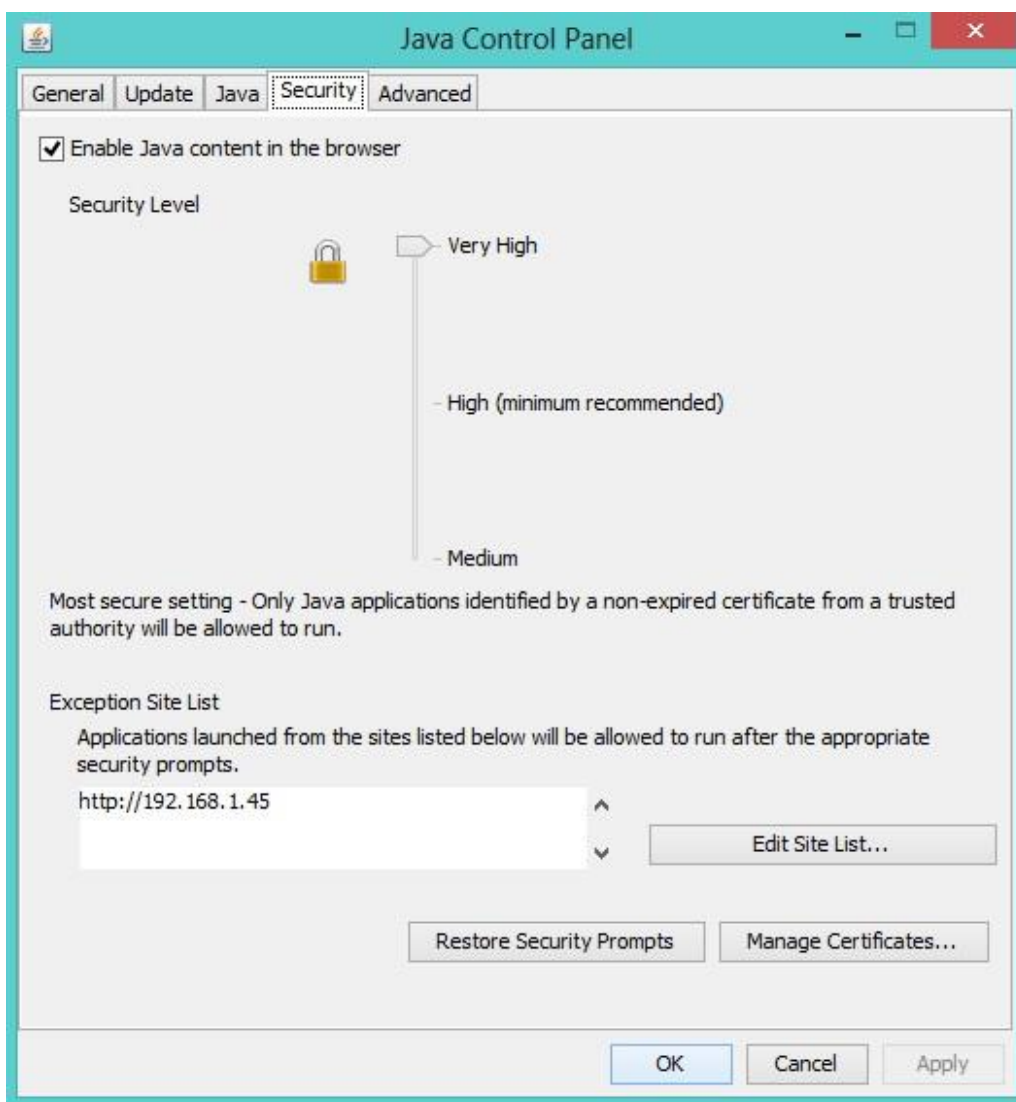
Mainly, there is 2 actions to consider

- Enhancing Security with Manifest Attributes
- Signing JAR files

1.5 Prerequisites to use Webvue as a web start application

It is mandatory to use a signed jar file. Arc Informatique supplies a signed jar file called AiWebVue-signed.jar.

The signed jar is supplied with no certification authority; so a message warns the user about it.



To ensure maximum security about the web application, it is recommended to set security level to high or very high and specify allowed http url.

1.6 Performance issue

Web application is very interesting when working with poor ping delay. It is due to the fact that for web application, files downloaded through http are seen as offline. The http request to ensure no update has been done on a file is never realized. Bad pinging is generally obtained with satellite link, some wifi link, access through virtual machine, complex intranet network. If your project contains many pictures (it can be images in symbols), using webstart has interest to have high performance to access your project pages. More generally, users use a desktop application with a statically defined http url. From a security point of view, it is possible to forbid any access to web browser and not defined http url.

1.6.1 Test

A virtual machine is configured to be Pcvue web server. A client accesses the server through a wifi link.

A Pcvue window contains 10 images (png files)

1.6.1.1 Performance through a browser.

In this case, a classic pinging occurs for each image request .
12 seconds are mandatory to obtain the window.

1.6.1.2 Performance of a web start application

Images are read offline.
Window is obtained instantaneously.