Profound UI PC Integration Applet

INTRODUCTION

The PC Integration applet allows you to integrate your browser screens with PC applications. For example, you may have the need to call up your PC-based imaging or document management application to view an invoice, part image, etc., based on a user action in the browser screen.

Another typical use for the PC Integration applet is to replace usage of Client Access's PC Organizer, when transitioning from green-screen 5250 emulation to browser-based screens.

For obvious security reasons, the browser vendors have made it so that Web-based applications cannot call programs or retrieve data on the PC under normal security settings. This makes it challenging to integrate your browser-based screens with other applications in your environment.

The PC Integration applet provides a solution for this. The API is packaged as a "trusted' applet, meaning that it is digitally signed so the end-users PC can trust the applet to call programs on the PC.

The applet is a piece of Java code, but no Java programming is required to use it. The applet is packaged into a JAR file that is placed on your server's file system, and downloaded by the user's browser through the HTTP server.

There is a JavaScript API provided that you can use to easily load the applet in your browser page. Once this is done, you can access the applet's functionality using simple JavaScript APIs that are provided.

PC REQUIREMENTS

The PC Integration applet runs in the Java Virtual Machine's browser plug-in on the end user's PC. Java plug-ins are available for all the major browsers, including Microsoft Internet Explorer, Mozilla FireFox, Apple Safari, and Google Chrome.

The Sun Java Version 6 plug-in is required to run the PC Integration applet. Please note that the Sun plug-in differs from the default Java that is installed in most Windows PCs. If the end-user does not have the Sun plug-in installed, it is freely available for download from Sun and installs in just a few minutes.

If the applet does not work for a particular end user, please have the user update their Java plug-in to the latest version from Sun.

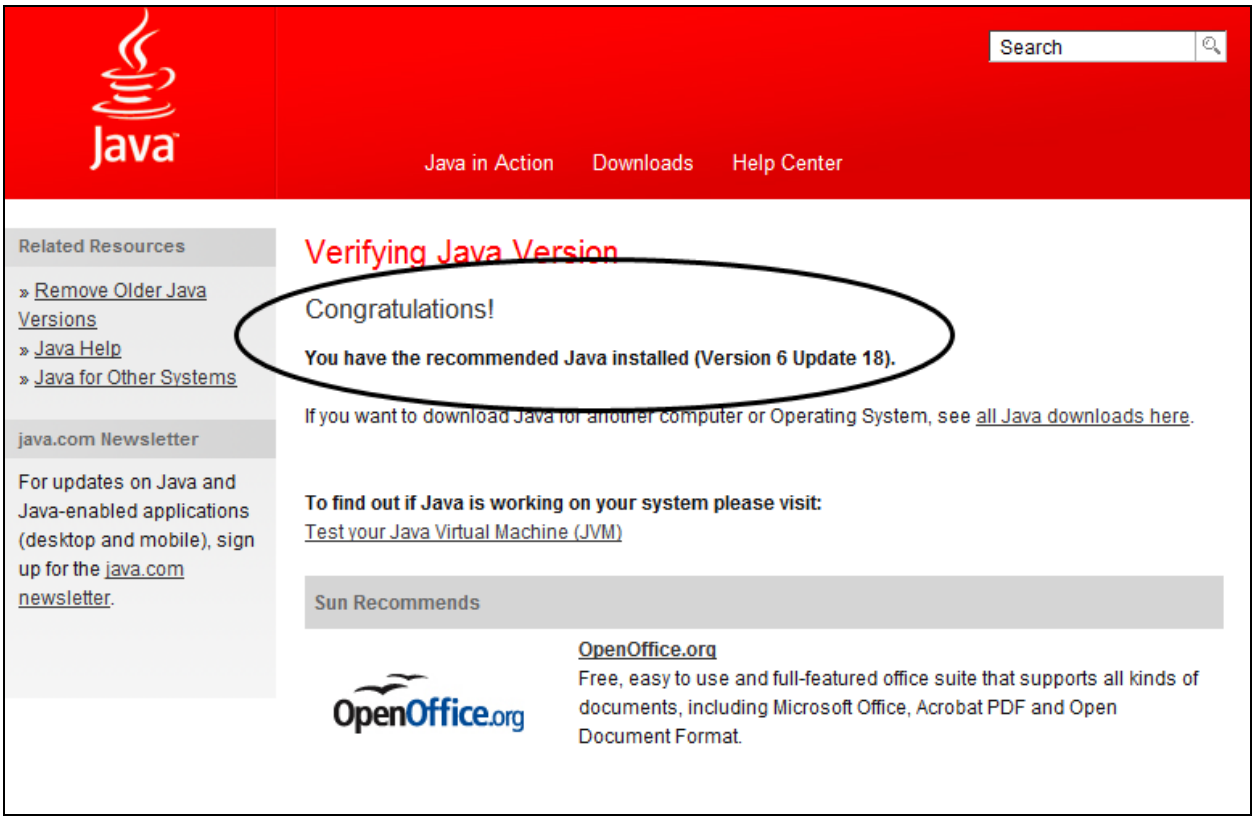
INSTALLING PC JAVA PLUG-IN AND VERIFYING VERSION

As mentioned above, the Sun plug-in is required. The user can verify the version and install if necessary at this URL:

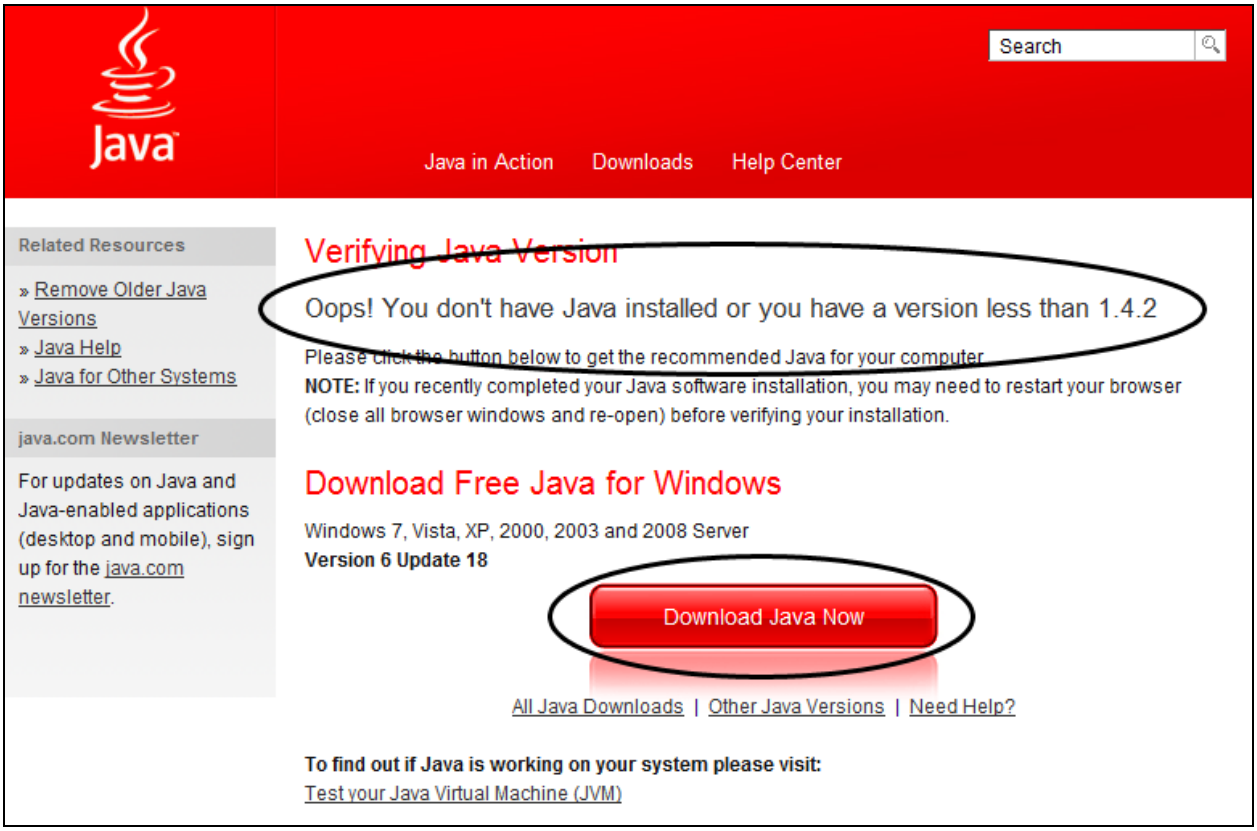
http://www.java.com

Click on the “Do I have Java?” hyperlink to test the version.

This brings up the verification page. If the latest version of Sun Java is installed, a “congratulations” message will appear:



If the latest Sun Java plug-in is not installed, a notification message will display:



If this is the case, the user can click the Download Java Now button to get Java. Installation is automated and takes just a few minutes.

JAVASCRIPT API USAGE

The following JavaScript API functions are included with the applet:

loadPCCommandApplet(callback)

This function is the starting point for usage of the applet. A call to it is required before any other actions can be performed. For example, it could be called in the “onload” event of the page. The function loads the applet into your page.

The “callback” parameter is optional, but it is recommended that you use it. The parameter accepts the name of a JavaScript function (in string format) that the applet will call when it is loaded and ready to go.

This is very useful to prevent the user from attempting to use the applet before it has finished loading in the browser.

For example, your callback function may enable a button that the user can then click on to launch an action.

Once this call completes successfully and your callback has been invoked, it is safe to start using the other functions.

Example:

loadPCCommandApplet(“myFunc”);

In this example, the applet will be loaded and it will call JavaScript function **myFunc()** (if defined) when the applet has finished loading.

runPCCommand(command)

This function allows you to run any command against the local PC’s command interpreter. You can use this to launch PC-side programs.

The “command” parameter is a JavaScript string containing the command to run.

Any standard windows environment variables can be built right into the command string. The applet will resolve them to their actual values before the command is run.

Please note that the backslash (\) character commonly used in Windows paths is used as the beginning of an escape sequence in JavaScript. For this reason, include 2 of the characters for each 1 you want to represent in your command string, as shown in the example below.

Example:

```
var command = "%PROGRAMFILES%\\Vendor XYX\\XYZImagingProgram.exe";
runPCCommand(command);          //this will run XYZImagingProgram.exe
```

Example:

```
runPCCommand("notepad.exe");    //this will open up an empty notepad document
```

Example:

```
runPCCommand("calc.exe");       //this will run the system's calculator
```

If for some reason the command cannot be executed successfully, an error message will be displayed in the browser using an alert box. This might happen, for example, if the program you are trying to run is not installed on the local PC.

copyToClipboard (data)

This function allows you to copy text to the PC's clipboard. This is very useful as there is otherwise no built-in way for browser applications to interact with the clipboard.

Example:

```
copyToClipboard ("Hello, world.");
```

In this example, the text "Hello, world." will be copied to the PC's clipboard.

SECURITY WARNINGS

Since the applet attempts to run in “trusted” mode, the end-user must confirm trust of the applet and allow it to run. It is normal that the user will see this dialog on first run of the applet:

The user must click the “Run” button to trust Profound Logic’s digital signature and allow access.

If the users do not wish to see this dialog each time the applet is used, they can check the box “Always trust content from this publisher”.