

Technical Information

Notes for Java Runtime Environment 8 When Using Web Visualizations with AC500

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1 Introduction

The *Java Runtime Environment* is required if you want to run software programmed in Java, such as the AC500 web visualization. With the update to Java version 8 not only bug fixes but also new features and changes have been added. The safety rules regarding the implementation of Rich Internet Applications (Java applets) are tightened. These changes provide that the application will start only if it contains a digital signature. This was not the case in the previous versions. The following two options describe how to get the Web visualization running again.

For more information, see https://java.com/en/download/faq/index_general.xml.

2 Devices Affected

The following devices are affected:

- Computer and Laptops with Java version 8 and any browser like (Firefox, Internet Explorer, Opera,...)

The following devices are **not** affected:

- CP600-WEB HMI panels
- MicroBrowser (Android & iPhone/iPad App)

3 Solutions

There are two approaches that differ in whether a project download in the PLC is possible or not. If the PLC cannot be stopped in any case, the first approach is recommended. This is a workaround and the version 7 will be reactivated. The second approach involves replacing the Java applets with a newer signed version and re-download the project to the controller. This stops the PLC program.








3.1 Using the New Applets, Including Project Download

You can replace the affected Java applet files in their existing setup or upgrade your setup to ABB Automation Builder V1.1. In the latter case, you can skip steps 1) and 2).

1.  Locate the CoDeSys V2.3 installation directory:



- On Windows 32-bit versions usually following path:
`C:\Program Files\3S Software\CoDeSys V2.3\Visu`
- On Windows 64-bit versions usually following path:
`C:\Program Files (x86)\3S Software\CoDeSys V2.3\Visu`

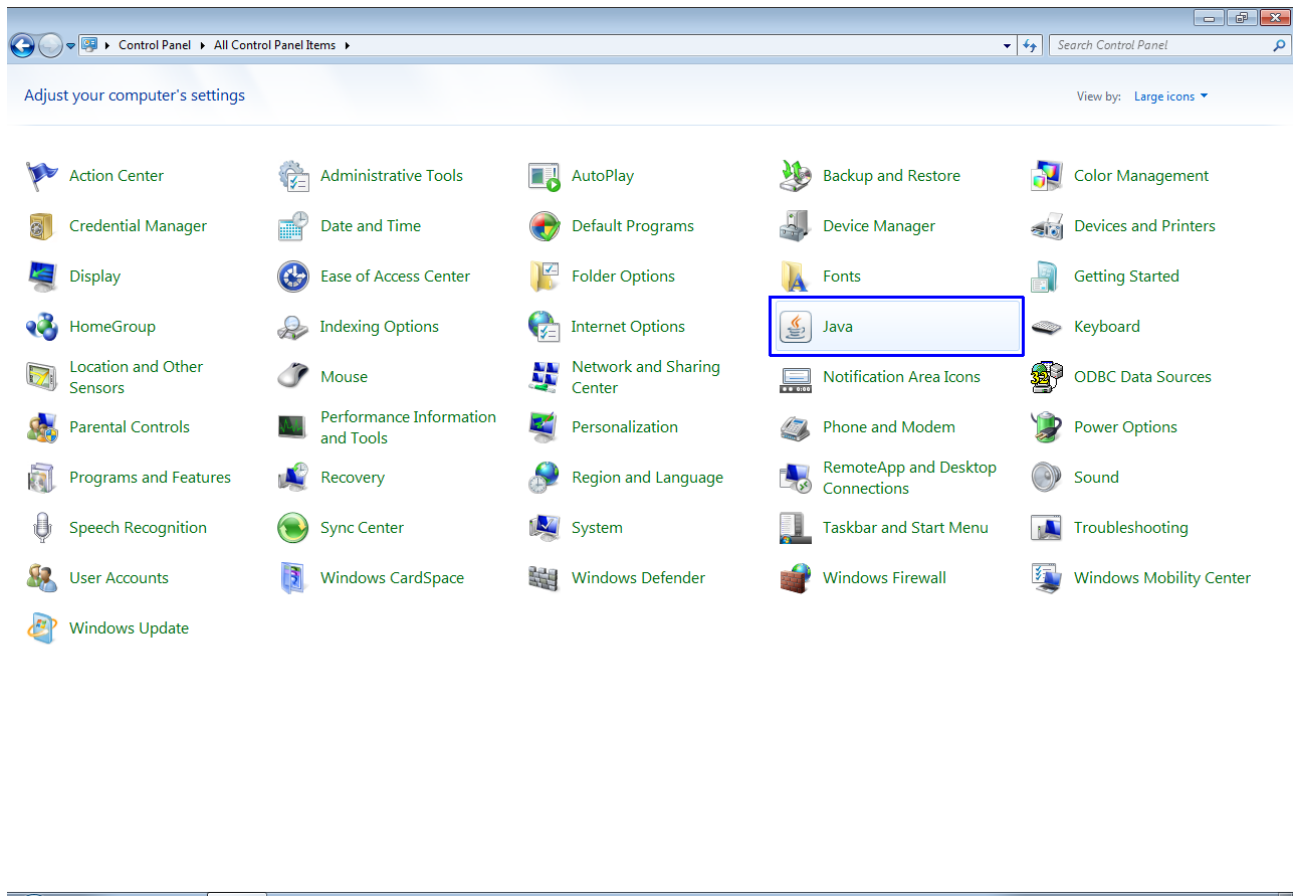
2.  Copy the supplied files `webvisu.jar`, `miniml.jar` and `webvisu_unsigned.jar` in the appropriate directory from step 1) and overwrite existing files if necessary.
3.  Open your existing project in Control Builder Plus or Automation Builder.
4.  Open the PLC application on which the web visualization runs.
5.  Select “Project → Clean All” and then “Project → Compile All”.
6.  Login into your PLC and download the program to the PLC. After that, create a boot project (“Online → Login”, “Online → Create Boot Project”).
7.  The download of the the current program stops the PLC (display shows `STOP`). You can restart the project by selecting: “Online → Start”.
8.  Call the URL (e.g <http://xxx.xxx.xxx.xxx/webvisu.htm>) and verify that the new Applet is loaded.

3.2 Using Java V1.7 (Not Recommended)

To make the variable update on the web visualization work without updating the Java applet files on the PLC, you have to install the Java 7 update 67 runtime. The latest version can be downloaded here:

<http://www.oracle.com/technetwork/java/javase/downloads/java-archive-downloads-javase7-521261.html#jre-7u67-oth-JPR>

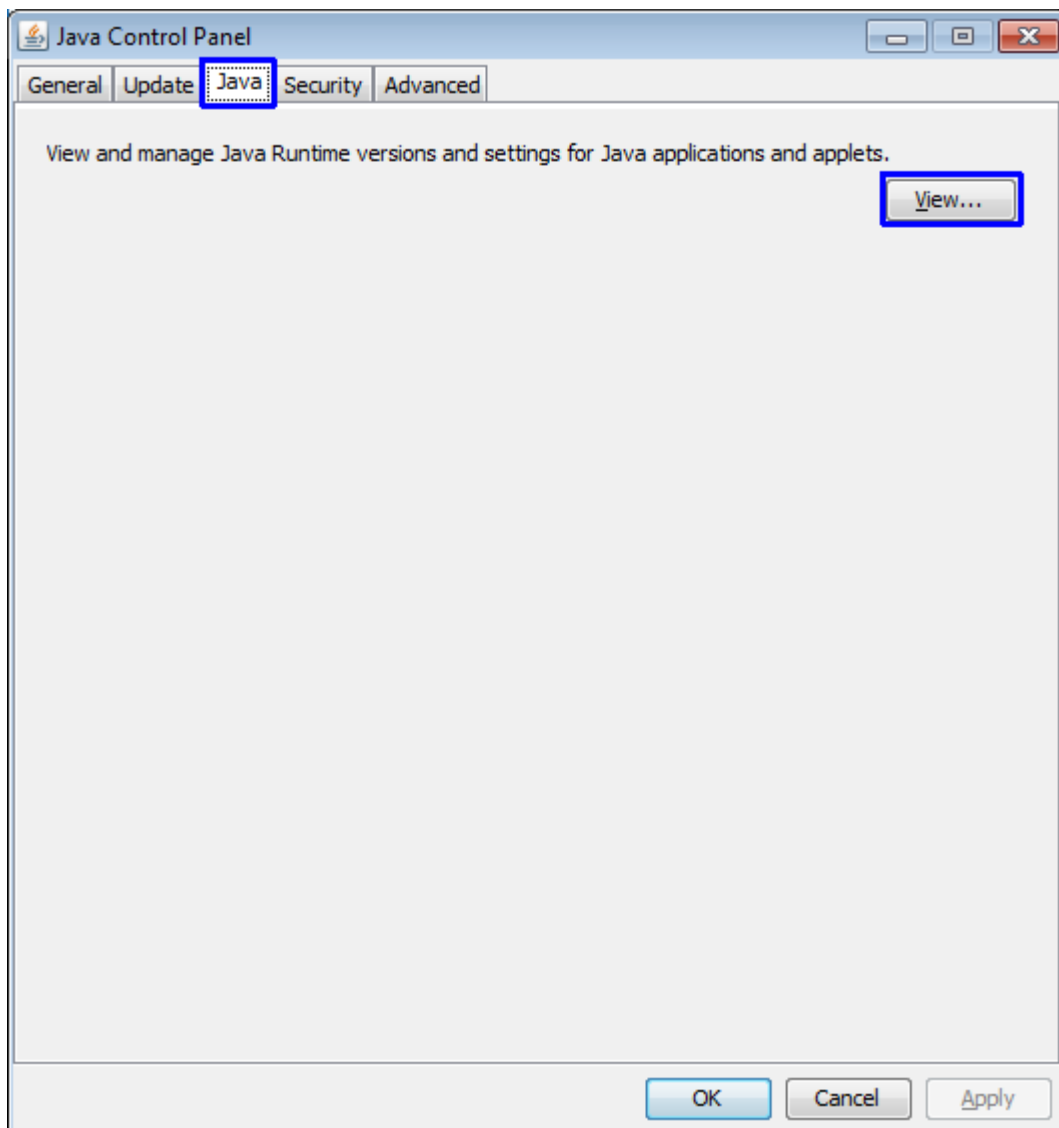
1. Open the Microsoft Windows control panel and navigate to Java.



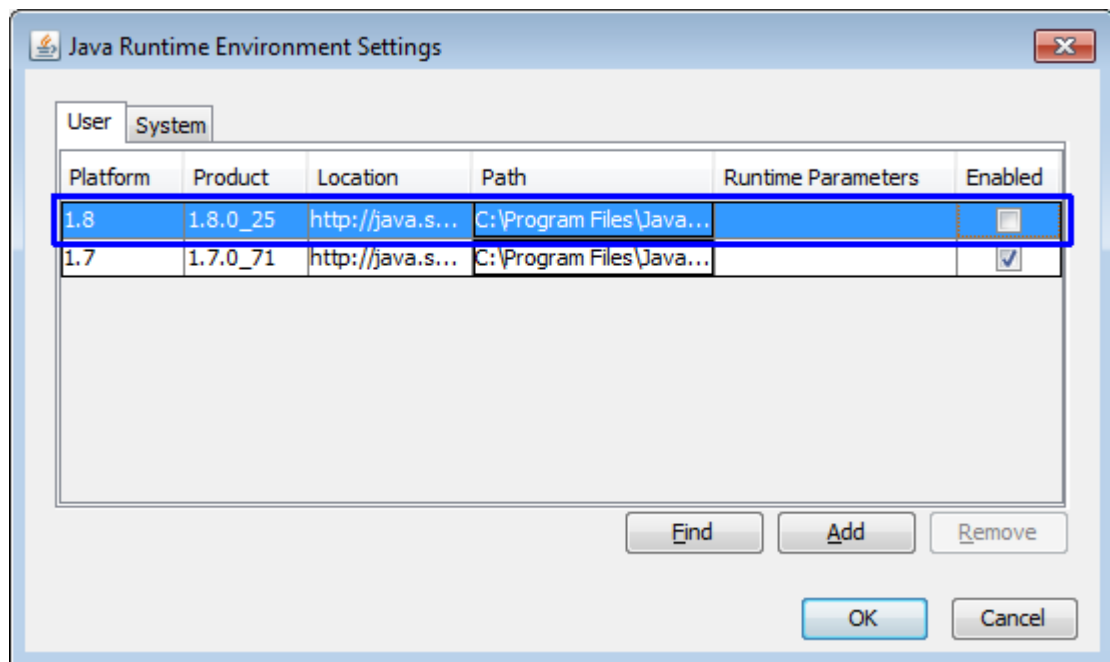
Solutions

Using Java V1.7 (Not Recommended)

2. Select the “Java” tab and click “View...” button.



3. ➤ Deactivate the Java V8 runtime like this:

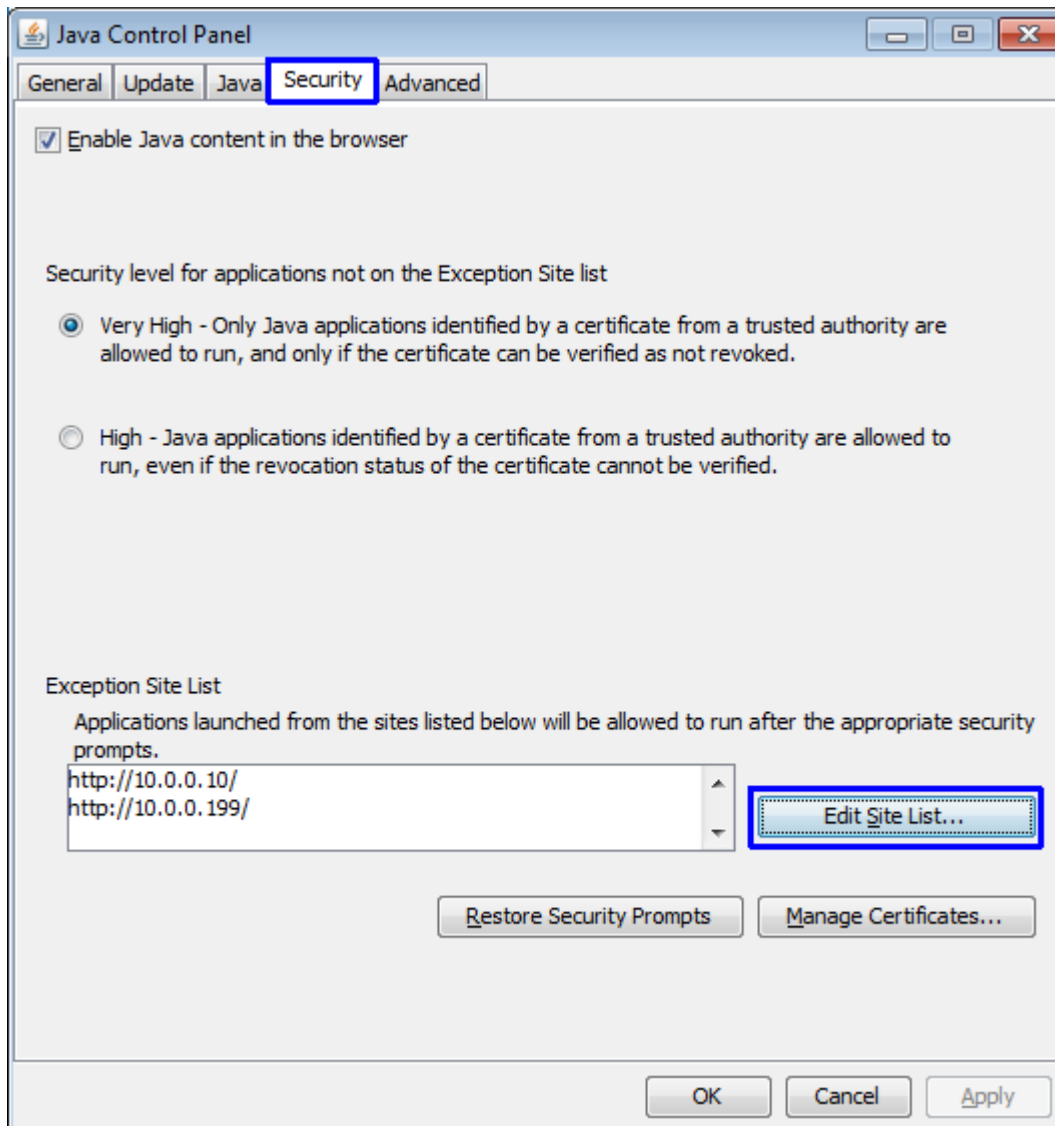


4. ➤ Click "OK" button.

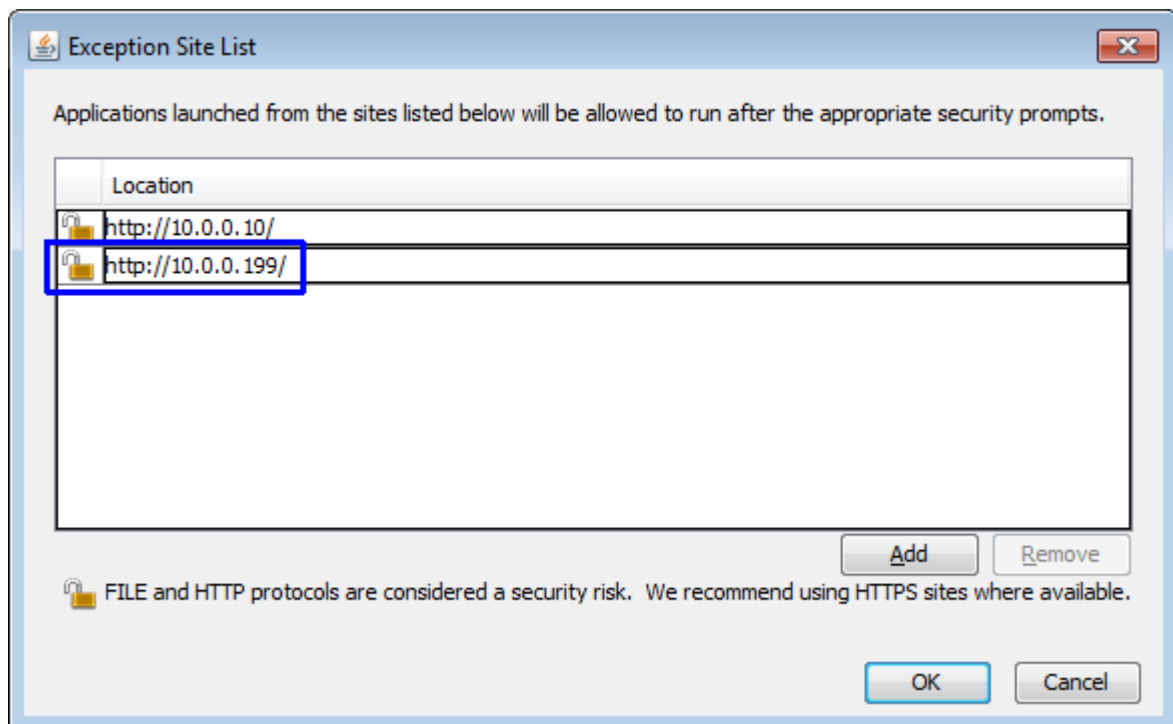
Solutions

Using Java V1.7 (Not Recommended)

5. Select “Security” tab and click “Edit Site List...” button.



6. ➤ Add the IP address or hostname of your PLC like this: *http://xxx.xxx.xxx.xxx/*



7. ➤ Click "OK" button.
⇒ A security prompt appears:
8. ➤ Accept with "Continue" button.

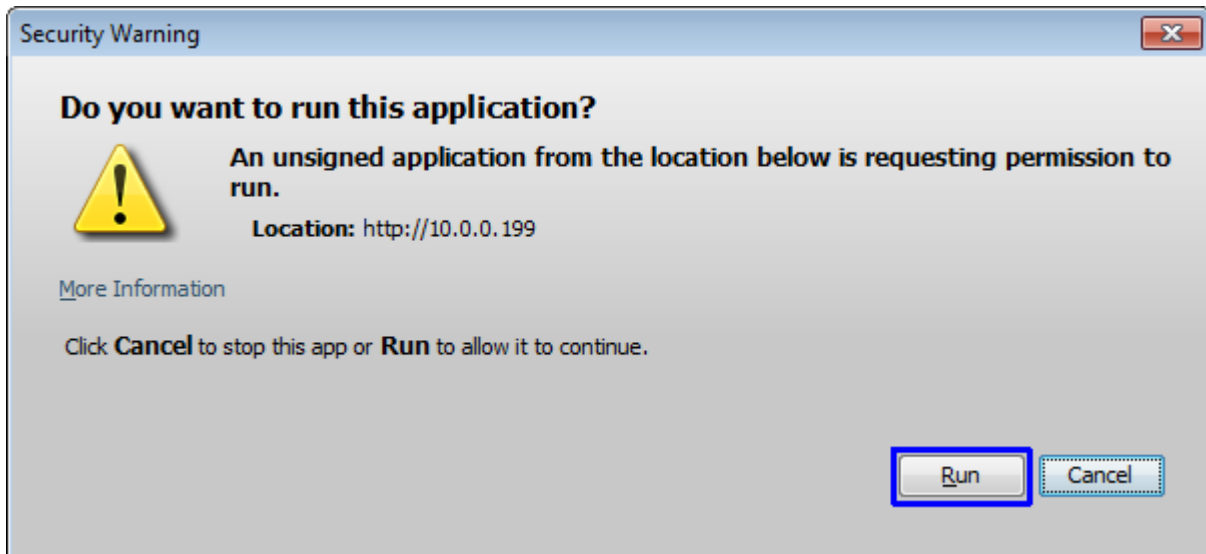


9. ➤ Access the URL via Internet browser: *http://xxx.xxx.xxx.xxx/webvisu.htm*

Solutions

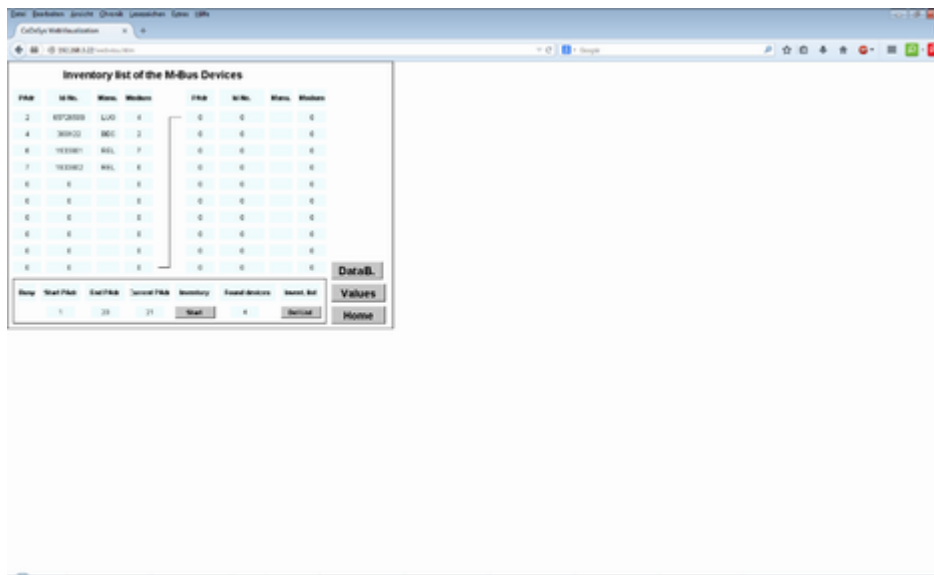
Using Java V1.7 (Not Recommended)

⇒ Another security prompt appears:



10. Click "Run" button.

⇒ The webvisualization appears.



If you forgot to add the correct IP address to the Site List, this prompt will appear instead of the web visualization:



If this is the case, please retry the steps 5 - 7.