

Managing Java Versions with Browsium Ion

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Summary

By default, Internet Explorer will only invoke the newest version of Java installed on your system, regardless of which version is needed for a particular web page or web application. Browsium Ion allows you to run specific version of Java for a specific web page or web application in much the same way you can run multiple IE engines side-by-side with Ion. This allows you to deploy and use a variety of different Java engines in your environment and run the ones you want where you want them all without incurring any usability costs for your users.

Overview

This document details the steps you need to take to configure Ion Profiles to run different versions of Java. In order for this to work, make sure all required versions of Java are installed on the local machine in unique directories. This is a requirement of Java. For versions of Java 1.4 and newer, there is a requirement to have a specific Java CPL setting enabled; this setting is detailed in the section "Java CPL - Overriding Java 1.4, 1.5 (Java 5), 1.6 (Java 6) or 1.7 (Java 7)."

In the example detailed later in this document, we have used a variety of Java versions that can be located in the following paths:

Java Version	Location of Java binaries	
1.4.x	C:\Program Files (x86)\Java\j2re1.4.x_x\	
1.5.x	C:\Program Files (x86)\Java\jre1.5.0_x\	
1.6.x	C:\Program Files (x86)\Java\jre6\bin	
1.7.x	C:\Program Files (x86)\Java\jre7\bin	
Table 1 (Locations of Java bina	ries used as either source or target files)	

Note: The most current installation of Java will be placed in the above locations and overwrite the previous version installed in that location. Installing any earlier version of Java will place that version in a release-specific folder (C:\Program Files (x86)\Java\jre1.6.0_30 for 1.6.0 Update 30 if you have Update 31 or newer installed.). If your system is 32-bit, omit (x86) from the above paths.

See which version of Java is running in your browser

Check which version of Java is running on this machine by default. Open Internet Explorer (Ion supports IE8, IE9 and IE10) then navigate to <u>http://javatester.org/version.html</u>. Here is a screenshot showing Internet Explorer without any Ion rules or profiles, running the latest version of Java & IE by default (Java 1.7.0 Update 45 in IE10):

🧲 (🔶 🗾 ht	p/javatester.org/version.html 🔎 + 🗟 Č 🚺 Java Tester - What Version ×	↑ ★ ¤
Jar	a Tester	Website by Michael Horowitz
Home	See my Defensive Computing blog at Computerworld.com	
Java Version	What Version of Java Are You Using?	
Java News	On a computer with multiple web browsers, be sure to check the Java version in every browser. I say this because multiple copies of Java can sometin different browsers using different copies. Also, Java can be enabled in one browser and disabled in another. Note: The portion of Java that runs programs is referred to as either the Java Run-time Environment (JRE) or the Java Virtual Machine (JVM).	nes be installed with
Installing Java	Method 1: Ask Java	
Other Testers	This is my favorite - straight from the horse's mouth (so to speak). The Java Run-time Environment is aware of its version and the company that auth simple applet (the source code is on the <u>About</u> page) that gets this information from the JRE and displays it in a pink rectangle.	ored it. So I wrote a very
JavaScript	The version and vendor from the JRE	
About	Java Version: 1.7.0_45 from Oracle Corporation	
	If Java is working, you will see a pink rectangle above with one line of text that says something like:	
	Jara Version 1.7.0_21 from Gradel Corporation or Jara Version 1.6.0_36 from Sun Microsystems Inc. or Jara Version 1.6.0_33 from Apple Inc.	
	Version number translation: 1.6.0_34 is, in English, Java 6 Update 34 The initial "1" is ignored as is the third digit. Ask Oracle why.	

Figure 1 - Java inside of IE10

This web site contains a Java applet (the pink rectangle) whose only purpose is to report the version of the Java engine that it's running. You can see here it reports 1.7.0 Update 45 from Oracle as the currently running version.

Java Version Manager

Browsium Ion 3.0 introduced the new Java Version Manager wizard to make configuration easy. Customers are encouraged to use the Java Version Manager when possible as it removes potential configuration issues.

The Java Version Manager is launched by clicking 'Java Version Manager' link in the Actions Pane.

Image: Content Override Manager Source File Target File Register Active Source File Target File Register Active Source File Source File Target File Register Active Source File Source File Target File Source File Target File Source File Target File Source File Target File Source File Source File Source File Target File Source File	Browsium Ion Configuration Manager			
Ele Edit Usities Help Objects Projects Custom Files Manager Adaptive IE Quirks Mode Profile Override file system entries and specify ActiveX controls/DLLs for a Profile. Ion hosts these items Image: Custom Files Image: Custom Files <td>🔇 🔊 🔹 🖳 Projects 👻 🖥 New Project 🔹</td> <td>🕈 Profiles 👻 🗐 Adaptive IE Quirk</td> <td>s Mode Profile 🔹 层 Custom Files Manager</td> <td>2 🖄 🧕</td>	🔇 🔊 🔹 🖳 Projects 👻 🖥 New Project 🔹	🕈 Profiles 👻 🗐 Adaptive IE Quirk	s Mode Profile 🔹 层 Custom Files Manager	2 🖄 🧕
Process Monitor Regex Builder	Ele Edt Utilities Help	Custom Files Ma Override file system entries and sp internally, so nothing is applied or Source File Target File	Nager peofy ActiveX controls/DLLs for a Profile. Ion hosts these items modified on the system. Register Active	Actions Actions Actions Actions

Once launched, select the version of Java you need for your web application and the wizard will create all of the necessary configuration entries.

ava Version Manager	
Java Version Manager	
If your application needs to override the curren another version installed on your system. Use t	itly installed version of Java, you can choose to use he "System Default" if you don't need to override Java.
System Default (Java 7.0.400.43) ▼ System Default (Java 7.0.400.43) Java 1.4.2.190 Java 1.4.2.190 Java 6.0.70.6 Java 6.0.450.6 Java 7.0.450.450	Select the version of Java required for your web application. Browsium Ion will ensure Internet Explorer loads the required Java version in place of the default Java version installed. Project settings created by the Java Version Manager can be viewed and edited in the Custom Files Manager. Note: The locations (file and path names) used when creating this configuration are based on settings of the machine running the Ion Configuration Manager. If client systems will not have Java files installed or accessible in the same locations you will need to manually edit the settings later. The path to Program Files on both 32-bit and 64-bit systems is handled automatically by use of the %ProgramFiles% system variable.
Your application will use this Java plugin: %ProgramFiles%\Java\jre7\bin\npjpi170_40	.dll OK Cancel

Note – The Java Version Manager will only display the versions of Java installed on the local machine. To include other versions of Java, simply install those versions and re-launch the wizard.

More information on using the Java Version Manager is available in section 3.3 of the <u>Browsium Ion Administration</u> <u>Guide</u>. The remainder of this document provides details on how to manually configure Ion for Java replacements.

Manual Java Override Information

For customers wanting to run a custom version of Java 1.3, 1.4, 1.5 (Java 5), 1.6 (Java 6) or 1.7 (Java 7) should refer to the steps below. Customers wanting to run Java 1.3 should also refer to the section "Running Java 1.3" below.

Customers wanting to run the Microsoft JVM should refer to this document: http://www.browsium.com/faqs/managing-microsoft-java-vm-msjvm-ion/

Java Override Table

Refer to this table to determine which binaries you need to use to override a newer version of Java with an older one. Note that customers wanting to run Java 1.3 require extra steps – those are detailed later this document.

For example, if you want to run an old version of Java 1.4 with a version of Java 1.5 (Java 5), refer to the 2nd line of this table. If you want to run Java 1.6.0 Update 4 instead of Java 1.6.0 Update 6, refer to the 10th line of this table.

The left column is the version of Java you want to run, and the 3rd column is the version of Java you want to override.

Java version to run	Source file to run	Java version to override	Target file to override
1.3.x	NPJava13x_x.dll	All versions	See below
1.4.x	NPJPI14 <i>x_x</i> .dll	1.5.x	NPJPI15 <i>x_x</i> .dll
1.4.x	NPJPI14 <i>x_x</i> .dll	1.6.0 Update 7 or older	NPJPI16 <i>x_x</i> .dll
1.4.x	NPJPI14 <i>x_x</i> .dll	1.6.0 Update 8 or newer	JP2IEXP.DLL
1.4.x	NPJPI14x_x.dll	1.7.x	JP2IEXP.DLL
1.5.x	NPJPI15 <i>x_x</i> .dll	1.5.x	NPJPI15 <i>x_x</i> .dll
1.5.x	NPJPI15 <i>x_x</i> .dll	1.6.0 Update 7 or older	NPJPI16x_x.dll
1.5.x	NPJPI15 <i>x_x</i> .dll	1.6.0 Update 8 or newer	JP2IEXP.DLL
1.5.x	NPJPI15x_x.dll	1.7.x	JP2IEXP.DLL
1.6.0 Update 7 or older	NPJPI16x_x.dll	1.6.0 Update 7 or older	NPJPI16x_x.dll
1.6.0 Update 7 or older	NPJPI16x_x.dll	1.6.0 Update 8 or newer	JP2IEXP.DLL
1.6.0 Update 8 or newer	NPJPI16x_x.dll	1.6.0 Update 8 or newer	JP2IEXP.DLL
1.6.0 Update 8 or newer	NPJPI16x_x.dll	1.7.x	JP2IEXP.DLL
1.7.x	NPJPI17x_x.dll	1.7.x	JP2IEXP.DLL

Table 2: Java override files

NOTE: " x_x " in a file name will be replaced by the Java subversion of the file (see below for examples). For example, Java 1.4.2.19 has a file name of NPJPI142_19.DLL. Java 1.5.0 Update 12 has a file name of NPJPI150_12.DLL.

Recent versions of Java 1.6.0 (Update 8 or newer) have a fixed filename (JP2IEXP.DLL) and the file does not change its name regardless of version number.

Java CPL - Overriding Java 1.4, 1.5 (Java 5), 1.6 (Java 6) or 1.7 (Java 7)

Java 1.4 and later have a setting in the Java control panel which must be enabled for the override steps to work.

This setting is highlighted in Figure 2, below. This setting is enabled by default but in some organizations, this checkbox has been cleared. Please make sure that this setting is checked in order to allow Ion to load your custom version of Java.

🛓 Java Control Panel	
General Update Java Security Advanced	
Settings	er restart)
OK Canc	el Apply

Figure 2 - Java CPL advanced setting

Enabling this setting allows the ActiveX interface to load in Internet Explorer, which is what Ion hooks in order to load your custom version of Java. After changing this setting, please close and restart IE and verify that the Java add-ons are enabled in your browser's Manage Add-ons UI, as illustrated in Figure 3 below.

Manage Add-ons			
View and manage your Internet Explorer add-ons			
Add-on Types	Name	Publisher	Status
🚳 Toolbars and Extensions	Java(tm) Plug-In 2 SSV Helper	Sun Microsystems, Inc.	Enabled

Figure 3 - IE's Manage Add-ons UI showing the Java add-ons enabled

Running Java 1.3

Java 1.3 was released in 2000 and, given its age, requires an additional step not required for newer versions of Java. In order to override a current version of Java with an older version of Java 1.3, you will have to acquire JVM.DLL from Java 1.4 and provide an additional file override for that. Alternatively, install version Java 1.4 on the same machine. Configuration uses two custom file maps:

Java 1.3 File Override #1:

For the first file override, point the *SOURCE* to the NPJAVA131_xx.dll file from the version of Java 1.3 you want to run. Set the *TARGET* to the appropriate file for the version of Java you want to override (in this example, that's Java 1.6 installed in the java\jre6 directory). See table 2, above for more details about what file to use as the override for the newer version of Java

Source: C:\Program Files (x86)\JavaSoft\JRE\1.3.1_20\bin\NPJava131_20.dll

Target: C:\Program Files (x86)\Java\jre6\bin\jp2iexp.dll

Java 1.3 File Override #2:

For the second file override, set the SOURCE to the Java 1.4 JVM.DLL. Set the TARGET to the Java 1.3 JVM.DLL.

Source: C:\Program Files (x86)\Java\j2re1.4.2_19\bin\client\jvm.dll

Target: C:\Program Files (x86)\JavaSoft\JRE\1.3.1_20\bin\hotspot\jvm.dll

The following screenshot shows how this might look in your Ion Configuration Manager:

Browsium Ion Configuration Manager				
🔇 🔊 🖷 Projects 🔹 🚡 New Project	🔹 🛅 Profiles 🔹 🗍 Default Profile 🔹 层 Custom Files Manager			🥔 🖄 🍙
<u>Eile E</u> dit <u>U</u> tilities <u>H</u> elp				
Objects	Custom Files Manager Override file system entries and specify ActiveX controls/DLLs for a Pro internally, so nothing is applied or modified on the system.	file. Ion hosts these items		Actions Add Custom File
Custom Files Manager	Source File	Target File	Register Active	
Custom Registry Manager HTTP-Header Manager String Replacement Manager Rules Manager String Replacement Manager String Replacement Manager String Replacement Manager Rules Manager Process Monitor Regex Builder	C:\Program Files (x86)\JavaSoft\JRE[1.3.1_20\bin\VPJava131_20.dll C:\Program Files (x86)\Java\J2re1.4.2_19\bin\client\ym.dl	C: [Program Files (x86)]JavaSoftURE[1:3.1_20]bin/hotspot[jvm.dll C: [Program Files (x86)]JavaSoftURE[1:3.1_20]bin/hotspot[jvm.dll	False False	

These two file overrides are required for Java 1.3 to run on a modern OS. This is the only version of Java that requires two file overrides.

Examples

The examples provide step by step guidance on how to manually configure Ion to override a specific version of Java that is required for a given web application. These examples assume the organization is trying to get their 'Aggrid' site to work properly in a modern version of IE. To work properly, the Aggrid site requires the 'Adaptive IE Quirks' rendering mode and a legacy version of Java. Setting the rendering mode with Ion is simple – the rendering mode is chosen when a profile is created. Specifying the version of Java requires an extra step, which is shown below.

Note – Customers are advised to use the Java Version Manager wizard over the manual configuration process.

Example 1: Overriding the most current version of Java with Java 1.4

In this example, we are going to run the oldest version of Java (1.4) instead of Java 1.7.0 Update 45.

Here are the basic steps:

- 1) Update the profile with the right Java settings
- 2) Add a rule to use the new profile on a site of our choice
- 3) Open IE and see that the right version of Java is running

Now update the profile to load the older version of Java. To do so, refer to Table 1, above. Select the Java version you'd like to run (in our case, 1.4) and the target version to override (in our case, 1.7.0 Update 45 (or newer)).

In our example, that means NPJPI14*x_x*.dll (the binary for Java 1.4) must override JP2IEXP.DLL (the binary for Java 1.7.0 Update 45). Since we're running Java 1.4.2 Update 19, we're going to run NPJPI142_19.dll and JPIEXP.DLL. This example assumes a profile has been created and verified that the Advanced Java setting in the Java CPL has been checked (see above).

1. Open the Configuration Manager and load the appropriate profile. For this example we'll create a Profile based on the "Adaptive IE Quirks" mode. Java replacements can be done on any profile type:

Browsium Ion Configuration Manager				
🔇 🔊 🔻 🖳 Projects 🔹 🖫 New Project	🔹 🛅 Profiles 🔹 🛄 Aggrid with	Adaptive Quirks 👻		🦉 🖾 🍺
Eile Edit Utilities Help				
Objects Profiles Aggrid with Adaptive Qurks Aggrid with Adaptive Qurks Custom Registry Manager Custom Registry Manager Custom Registry Manager Custom Registry Manager Rules Manager String Replacement Manager Process Monitor Regex Builder	Aggrid with Ad Profile Description Profile Name Profile Description Document Mode Examine Web Requests	Apgrid with Adaptive Quirks Profile Description adpativequirks Auto	 The field is used to provide more detail on the Profie, including specifics of what application it is targeting. Some organizations may want to include contact information for the Profie owner in this field. During the profie owner in this field. During contain any characters. 	Actions Actions Actions Add Rule using this Profile Add Rule using this Profile Remove Profile

2. Select the profile, Aggrid with Apaptive Quirks in this example, to use to set Java up with and click on "Custom File Manager"

Browsium Ion Configuration Manager			100.00	
🔇 🔊 🔹 💾 Projects 🔹 🖥 New Project	🔹 🛅 Profiles 🔹 🗍 Aggrid with Ad	daptive Quirks 🔻 层 Custom Files Manager		<i>Ø</i> 🖄 🎱
<u>Eile Edit Utilities H</u> elp				
Objects Constraints Profiles Approximation Adaptive Quirks Constraints Constra	Custom Files Mar Override file system entries and spe internally, so nothing is applied or m	hager sofy ActiveX controls/DLLs for a Profile. Ion hosts these oddfied on the system.	Items	Actions
Custom Fields Manager Custom Registry Manager Content Override Manager Content Override Manager Setting Replacement Manager Settings Process Monitor Regex Builder		Target File	Register ActiveX/COM?	

3. Click 'Add Custom File" to load the first override:

Custom Files Editor	
Custom Files Editor	
Create or Edit Custom File ma by side' running of different of	ppings to override default Browser loading behaviors or to enable 'side ontrol versions, etc.
Source File	This is the location of the
Target File	source file to be loaded by the plugin. This file
Register ActiveX/COM?	Disabled MUST exist and be read accessible to the client machine and user account. The file can be either local or remote. DLL and OCX files DO NOT have to be installed on the client machine.
	To insert an environment variable, use %VariableName%.
	OK Cancel

4. Click the '...' button to the right of the source file and locate the Java 1.4 file (NPJPI142_19.dll) using the file explorer. Note this file lives under the 'BIN' directory under the directory where Java was installed (in our case, C:\Program Files (x86)\java\j2re1.4.2_19\bin\):

								- 0	×
🕞 🕞 🗸 🕨 🕨 Compute	r 🕨 Local Disk (C:) 🕨 Program	n Files (x86) 🕨 Java	▶ j2re1.4.2_19 ▶ bit	1)	▼ 4 ₇	Search bin			P
Organize 👻 Include in	library 🔻 Share with 🔻	New folder					=	· 🔳	0
👉 Favorites	Name		Date modified	Туре	Size				-
E Desktop	🕌 client		12/19/2012 1:13 AM	File folder					
Downloads	awt.dll		11/9/2008 10:43 PM	Application extens	973 KB				
3 Recent Places	axbridge.dll		11/9/2008 11:34 PM	Application extens	93 KB				E
🐌 Textd	cmm.dll		11/9/2008 10:53 PM	Application extens	137 KB				
鷆 Browsium	🚳 dcpr.dll		11/9/2008 10:47 PM	Application extens	137 KB				
퉬 Ion	🚳 dt_shmem.dll		11/9/2008 11:03 PM	Application extens	25 KB				
🗘 Dropbox	🚳 dt_socket.dll		11/9/2008 11:03 PM	Application extens	21 KB				
Documents (172.	🚳 eula.dll		11/9/2008 11:34 PM	Application extens	61 KB				
🜸 iCloud Photos 😑	🚳 fontmanager.dll		11/9/2008 10:49 PM	Application extens	325 KB				
	🚳 hpi.dll		11/9/2008 10:10 PM	Application extens	29 KB				
🥃 Libraries	🚳 hprof.dll		11/9/2008 10:22 PM	Application extens	49 KB				
Documents	ioser12.dll		11/9/2008 10:55 PM	Application extens	25 KB				
👌 Music	🚳 jaas_nt.dll		11/9/2008 10:59 PM	Application extens	21 KB				
Pictures	🚳 java.dll		11/9/2008 10:15 PM	Application extens	101 KB				
Videos	🔳 java		11/9/2008 10:16 PM	Application	45 KB				
	💷 javaw		11/9/2008 10:16 PM	Application	45 KB				
👰 Computer	🚳 jawt.dll		11/9/2008 10:58 PM	Application extens	21 KB				
🚢 Local Disk (C:)	🚳 jcov.dll		11/9/2008 10:23 PM	Application extens	61 KB				
	JdbcOdbc.dll		11/9/2008 10:56 PM	Application extens	49 KB				
Network	idwn dll		11/9/2008 11-02 PM	Annlication extens	101 KR				Ŧ
58 items									

5. Select 'open' in this dialog and the path to this file now appears in the 'source' line:

Custom Files Editor		
Custom Files Editor Create or Edit Custom File mapp by side' running of different con	nigs to override default Browser loading behaviors trol versions, etc.	or to enable 'side
Source File Target File Register ActiveX/COM?	C:\Program Files (x86)\java\j2re1.4.:	Select this option to register the file as an ActiveX/COM library to the plugin. In general, set this to Enable for OCX and DLL files and Disable for non-binary file types like TXT or HLP files. Note: When running multiple versions of Java, leave the setting set to Disable. Selecting this option WILL NOT register or install any files on the client machine. OK Cancel
		OK Cancel

Click the '...' button next to the Target File and locate the appropriate file for Java 1.7.0 Update 45 (JP2IEXP.dll). This file also lives under the 'BIN' directory where this version of Java was installed (in our case, C:\Program Files (x86)\ Java\jre7\bin). It should be noted that this location differs from previous versions of Java 1.7 (Java 7) and 1.6 (Java 6). Please refer to the table on page 2 for more information on default Java installation locations.

Custom Files Editor							
Custom Files Editor							
Create or Edit Custom File mappings to override default Browser loading behaviors or to enable 'side by side' running of different control versions, etc.							
Source File	C:\Program Files (x86)\Java\j2re1.4.	This is the location of the					
Target File	C:\Program Files (x86)\Java\jre7\bin'	will replace. The file can					
Register ActiveX/COM?	Disabled 🔹	be either local or remote.					
		To insert an environment variable, use					
		%VariableName%.					
		OK Cancel					

7. Leave the 'Register ActiveX Control/COM Library?' option set to 'Disabled' and select OK. You now have the Java override in your profile:

Browsium Ion Configuration Manager				
🔇 🔊 🔹 🖳 Projects 👻 Aggrid with A	daptive Quirks 🔹 🛅 Profiles 📼 🗍 Adaptive IE Quirks Mode I	Profile 🔹 🔚 Custom Files Manager		<i>8</i> 🖄 鱼
<u>Ele E</u> dit <u>U</u> tilities <u>H</u> elp				
Objects Agord with Adaptive Qurks Adaptive EC Qurks Adaptive EC Qurks Mode Profile User Agent String Manager Gutsm Tifes Manager Gutsm Tifes Manager Gutsm Agent String Manager Gutsm Agent String Manager	Custom Files Manager Override file system entries and specify ActiveX controls/DLLs for internally, so avoiding is applied or modified on the system. Source File C:(Program Files (x85)UavaUzre.1.4.2_19/bin/VP2PE142_19.dll	a Profile. Ion hosts these items Target File C:[Program Files (x86)]Java]tre7[bin]tp:2exp.dl	Register Active False	Actions
Content Overlie Manager Content Overlie Manager Rules Manager Settings Process Monitor Regex Builder				

8. The profile is done, so we must add a rule to use it. Click the 'Rules Manager' on the objects pane to bring up the list of rules.

Browsium Ion Configuration Manager						- D X
🔇 🔊 👻 🖳 Projects 👻 🖥 New Project	🕶 🙀 Rules Manager					6 🛱 🍥
<u>Ele Edit U</u> tilities <u>H</u> elp						
Objects Projects New Project Profiles Object Profiles	Rules Manager Actions Create or Edit Rules to manage which Profile is loaded for a given set of conditions 4 Add Rules					
Cuton Registry Manager Cuton Registry Manager Cuton Registry Manager HTTP Heade Manager String Reducement Manager String Reducement Manager Tools Process Monitor Regex Builder	Rule Name	Match Method	Value	Profie		

9. Select 'Add Rule...' from the Actions pane on the right to add a new rule:

Rule Editor: New Rule								
New Rule								
Rules control which Profile is loaded when matched to a set of defined conditions.								
Set Rule	Enabled	By default, new Rules						
Rule Name	New Rule	to Disable, the Rule will not be loaded.						
Match Method	Simple	An organization may						
Value		choose to set the Rule to Disable rather than						
Profile		 delete it from a Project file in case the Rule is 						
		needed at a later date.						
		OK Cancel						

10. Give the rule a friendly name ("Java 1.4 at Javatester.org") and enter 'javatester.org' in the 'value' field. Finally, select the correct profile from the profile dropdown (in our case, we called our profile "Aggrid with Adaptive Quirks":

Rule Editor: Java 1.4 at Javates	ter.org						
Java 1.4 at Javatester.org							
Rules control which Profile is l	loaded when matched to a set of defined conditio	ons.					
Set Rule	Enabled	 Select the Profile needed to properly run the web 					
Rule Name	Java 1.4 at Javatester.org	application. Any configured Profiles in the					
Match Method	Simple	currently loaded Project will be listed in this					
Value	javatester.org	dropdown.					
Profile	Aggrid with Adaptive Quirks	. ◀					
		OK Cancel					

11. Click 'OK' to add this rule to the list:

Browsium Ion Configuration Manager								
😮 🔊 • 🗒 Projects • 🖫 New Project • 🙀 Rules Manager								
Eile Edit Utilities Help	Ele Edt Utildes Hep							
Objects Projects New Project New Project Profiles	Rules Manager Create or Edit Rules to manage which	n Profile is loaded for a	given set of condition	S		Actions		
🗄 🍓 User Agent String Manager	Rule Name	Match Method	Value	Profile				
Cutton Registry Manager HITP Heads Manager String Registry Manager String Registry Manager Trith Heads String Registry Manager Regist Manager Registry Manager	Java 1.4 et Javatester.org	Simple	jevetester.org	Aggrid with Adaptive Qurks				

12. Your rule and profile are now ready to use! Open the 'File' menu and then 'Save Local Settings' and keep the default (Current User):



13. Once the settings have been committed, open your IE browser and navigate to http://javatester.org/version.html. You should see the correct version of Java in the pink rectangle:



14. That's it! Your rule & profile are ready to be used

Example 2: Overriding versions of Java 1.6 (Java 6)

In this example, we are going to run Java 1.6.0 Update 7 instead of Java 1.6.0 Update 29. Because Java 1.6.0 Update 7 is newer than Java 1.4, we do not have to over-ride Java 1.4. This example assumes you have not just performed the steps in example 1 (if you have, please remove all existing Java overrides from the profile before continuing). For this example, we've already verified that the Advanced Java setting in the Java CPL has been checked (see above). In this example it is assumed the most current version of Java installed on the system is 1.6.0 Update 29.

Here are the basic steps:

- 1) Update the profile with the right Java settings
- 2) Add a rule to use the new profile on a site of our choice
- 3) Open IE and see that the right version of Java is running

First, we must update the Profile to override the wrong version of Java with the right one:

1. Open the Configuration Manager and load the appropriate profile. For this example we'll create a Profile based on the same "Adaptive IE Quirks" mode used in the prior example. Java replacements can be done on any profile type.

2. Select the profile you want to use to set Java up with and click on "Custom File Manager"

Browsium Ion Configuration Manager				
🔇 🔊 • 🖳 Projects • 🚡 New Project	🔹 🛅 Profiles 🔹 📑 Aggrid with A	daptive Quirks 🔹 🧮 Custom Files Manager		6 🖄 🍛
Ele Edit Utilities Help				
Objects Projects New Project Profies Agrid with Adaptive Quirks Content String Manager	Custom Files Ma Override file system entries and sp internally, so nothing is applied or	Actions		
Custom Files Manager Custom Resider Manager Content Overlide Manager Content Overlide Manager Schrift Resident Manager Settings Settings Regex Builder		Target File	Register ActiveX/COM?	

3. Click 'Add Custom File" to load the first override:

C	ustom Files Editor		
	Custom Files Editor Create or Edit Custom File mapping by side' running of different contro	s to override default Browser loading behaviors o I versions, etc.	r to enable 'side
	Source File Target File Register ActiveX/COM?	Disabled	This is the location of the source file to be loaded by the plugin. This file MUST exist and be read accessible to the client machine and user account. The file can be either local or remote. DLL and OCX files DO NOT have to be installed on the client machine.
			To insert an environment variable, use %VariableName%.

4. Click the '...' button to the right of the source file and locate the Java 1.6.0 Update 7 file (NPJPI160_07.dll) using the file explorer. Note this file lives under the 'BIN' directory under the directory where Java was installed (in our case, C:\Program Files (x86)\Java\jre1.6.0_07\bin\):

Select File						l	x
🚱 🕞 – 📕 « Wind	ows ((C:) ▶ Program Files (x86) ▶ Java	▶ jre1.6.0_07	in ⊧	▼ ♣ Search bin		٩
Organize 🔻 New f	older	r				:≡ ▼ 🔳	?
📃 Desktop	*	Name		Date modified	Туре	Size	*
🔋 间 Downloads		npjava14.dll		6/10/2008 5:27 AM	Application extens	124 KB	
📃 Recent Places		🚳 npjava32.dll		6/10/2008 5:27 AM	Application extens	124 KB	
		🚳 npjpi160_07.dll		6/10/2008 5:27 AM	Application extens	130 KB	
🔚 Libraries		🚳 npoji610.dll		6/10/2008 5:27 AM	Application extens	124 KB	
Documents		🚳 npt.dll		6/10/2008 5:27 AM	Application extens	8 KB	
J Music	Ξ	orbd.exe		6/10/2008 2:56 AM	Application	25 KB	
Pictures		pack200.exe		6/10/2008 2:56 AM	Application	25 KB	
Podcasts		📧 policytool.exe		6/10/2008 2:36 AM	Application	25 KB	
Videos		🚳 regutils.dll		6/10/2008 5:44 AM	Application extens	232 KB	
		🚳 rmi.dll		6/10/2008 5:27 AM	Application extens	5 KB	_
🍓 Homegroup		💷 rmid.exe		6/10/2008 2:47 AM	Application	25 KB	-
		rmiregistry.exe		6/10/2008 2:47 AM	Application	25 KB	=
👰 Computer		servertool.exe		6/10/2008 2:56 AM	Application	25 KB	
🏭 Windows (C:)		🚳 splashscreen.dll		6/10/2008 5:27 AM	Application extens	128 KB	
RECOVERY (D:)	-	🚳 ssv.dll		6/10/2008 5:27 AM	Application extens	498 KB	-
Fi	File name: npjpi160_07.dll						•
					Open	Cancel	

5. Select 'open' in this dialog and the path to this file now appears in the 'source' line:

Custom Files Editor					
Custom Files Editor Create or Edit Custom File mappings to override default Browser loading behaviors or to enable 'side by side' running of different control versions, etc.					
Source File ava\jre1.6.0_07\bin\\NPJPI160_07.dl	Select this option to register the file as an ActiveX/COM library to the plugin. In general, set this to Enable for OCX and DLL files and Disable for non-binary file types like TXT or HLP files. Note: When running multiple versions of Java, leave the setting set to Disable. Selecting this option WILL NOT register or install any files on the client machine.				

Click the '...' button next to the Target File and locate the appropriate file for Java 1.6.0 Update 29 (JP2IEXP.dll). This file also lives under the 'BIN' directory where this version of Java was installed (in our case, C:\Program Files (x86)\Java\jre6\bin\).

Custom Files Editor						
Custom Files Editor						
Create or Edit Custom File mapping by side' running of different control	Create or Edit Custom File mappings to override default Browser loading behaviors or to enable 'side by side' running of different control versions, etc.					
Source File	ava\jre1.6.0_07\bin\WPJPI160_07.dll	This is the location of the				
Target File	Tiles (x86)\Java\jre6\bin\jp2iexp.dll	will replace. The file can				
Register ActiveX/COM?	Disabled 💌	be either local or remote.				
		To insert an environment variable, use				
		%VariableName%.				
		OK Cancel				

7. Leave the 'Register ActiveX Control/COM Library?' option set to 'Disabled' and select OK. You now have the Java override in your profile:

Browsium Ion Configuration Manager						
🗙 🔊 👻 💾 Projects 👻 Aggrid with Ar	daptive Quirks 🔹 🛅 Profiles 🔹 🗍 Adaptive IE Quirks Mode	Profile 👻 局 Custom Files Manager		2 🖄 🙆		
Ele Edit Utilites Help						
Objects Aggrid with Adaptive Quirks Aggrid with Adaptive Quirks Aggrid with Adaptive E Quirks Mode Profile Aggrid with Adaptive IE Quirks Mode Profile	Custom Files Manager Override file system entries and specify ActiveX controls/DLLs fo internally, so nothing is applied or modified on the system.	Actions Add Custom Fle 				
Custom Files Manager	Source File	Target File	Register Active			
Reger Builder	[C: Program Files (v86)]Javalye 1.6.0_07/bm/kP3P1160_07.dl	C:Program Files (x86))Javaijes(ijanijo2exp.dl	False			

8. The profile is done, so we must add a rule to use it. Click the 'Rules Manager' on the objects pane to bring up the list of rules.

Browsium Ion Configuration Manager						
🔇 🔊 👻 🖳 Projects 🔹 🚡 New Project	🕶 🛱 Rules Manager					6 🖾 🍳
Eile Edit Utilities Help						
Objects Projects New Project Profiles Profiles	Create or Edit Rules to manage wh	Actions				
User Agent String Manager Custom Files Manager	Rule Name	Match Method	Value	Profile		
Custom Registry Manager						
Content Override Manager						
Rules Manager						
E Tools						

9. Select 'Add Rule...' from the Actions pane on the right to add a new rule:

Rule Editor: New Rule				
New Rule				
Rules control which Profile is l	oaded when matched to a set of	defined conditions.		
Set Rule	Enabled		By default, new Rules	
Rule Name	New Rule		to Disable, the Rule will not be loaded.	
Match Method	Simple	•	An organization may	
Value			choose to set the Rule to Disable rather than	
Profile		•	delete it from a Project file in case the Rule is	
			needed at a later date.	
			OK Cancel	

10. Give the rule a friendly name ("Java 1.6.0 Update 7 at Javatester.org") and enter 'javatester.org' in the 'value' field. Finally, select the correct profile from the profile dropdown (in our case, we called our profile "Aggrid with Adaptive Quirks":

Rule Editor: Java 1.6.0 Updat	te 7 at Javatester.org					
Java 1.6.0 Update 7 at Javatester.org						
Rules control which Profile i	Rules control which Profile is loaded when matched to a set of defined conditions.					
Set Rule	Enabled 🗸	This field is used to name the specific Rule, and				
Rule Name	Java 1.6.0 Update 7 at Javatester.org	should be meaningful to your organization, Rule				
Match Method	Simple 👻	Names should be short and clear and may				
Value	javatester.org	contain any characters. For example, the name				
Profile	Aggrid with Adaptive Quirks ▼	 'HR – Benefits System' would be a great way to uniquely identify this Rule for a specific HR team application. While two Rules could contain the same name, care should be take to use unique names to avoid confusion. 				
		OK Cancel				

11. Click 'OK' to add this rule to the list:

Browsium Ion Configuration Manager		-				- 0 - X-
🔇 🔊 🔹 🖳 Projects 🔹 🖫 New Project	🕶 🚰 Rules Manager					🥔 🖾 🍥
Eile Edit Utilities Help						
Objects Projects Project Profiles Profiles Profiles Profiles	Rules Manager Create or Edit Rules to manage which Profile is loaded for a given set of conditions					Actions
Custom Files Manager	Rule Name	Match Method	Value	Profile		
Reger builder	Y java ⊥o.0 uposte / at Javatestel.org	Sinpe	jara elestar, org	Ağıyla mir Adapave Qarka		

12. Your rule and profile are now ready to use! Open the 'File' menu and then 'Save Local Settings' and keep the default (Current User):



13. Once the settings have been committed, open your IE browser and navigate to http://javatester.org/version.html. You should see the correct version of Java in the pink rectangle:



14. That's it! Your rule & profile are ready to be used

For more information

Please visit Browsium's support web site at <u>http://support.browsium.com</u>