Enabling Java to use visualization tools in
Influenza Research Database (IRD) and Virus Pathogen Resource (ViPR)

IRD/ViPR Team - December 2017

Modern browsers use Java extensively. Some IRD and ViPR tools in particular use Java applications within the browser. These are JalView (multiple sequence alignment visualization), JMol (3D protein structure visualization), and Archaeopteryx (phylogenetic tree visualization). While these applications are currently being moved off Java to Javascript by the team, the instructions below can assist users who use Java in the interim.

These changes are necessary because after the Java Runtime Environment 7v51 update, Java-based applications and applets are disabled by default. Security is defaulted to “High” and there is now a “Very High” level.

Therefore if you receive a Java error screen (Figure right), you may need to re-enable Java in your operating system and/or your browser. Instructions follow, using JMol as an example.

First enable Java in your browser (PC and Mac):

Safari v10 (Mac) users:
1. Open the Safari > Preferences drop-down menu
2. Click the Security tab (Figure middle right);
3. Check "Allow Plug-ins";
4. Click "Plug-in Settings";
5. Click “Java” in the left pane. (Figure lower right).
   List websites that requested to run Java plug-ins;
6. Configured websites should be “On”;
7. Click “Done”;
8. Close the "Security" window;
9. Quit your browser and re-launch it.

In Safari v11 you may also need to uncheck the box at
Safari > Preferences > Advanced > Internet Plug-ins: Stop Plug-ins to save power.

Firefox v52 (all platforms)

We do not recommend Firefox to view JMol structures. Starting with Firefox Version 52 (released March 2017), Firefox has limited support for plug-ins, and therefore will not run Java.

Users of versions prior to 52.0.1 may see a JMol screen showing a black “Activate Java” message box. Simply check this phrase to activate the applet. Use the Java Control Panel to find your installed Java version.
If this is insufficient, also enable Java in the system:

1. Open System Preferences (Mac) or Settings (PC) > Java Control Panel;
2. Click the Security tab; (Figure right)
3. Make sure the top left checkbox "Enable Java content in the browser" is checked;
4. Lower the Security Level to High;
5. Click "Edit Site List";
6. Click "Add", (Figure lower right);
7. Paste the sites https://www.viprbrc.org and https://www.fludb.org into the Exception Site List; at the red exclamation point;
8. Click "OK" to confirm;
9. Click "OK" to exit the Java control panel; and
10. Close the Java Control Panel.

You should now be able to view the structure.