CyberTools for Libraries Catalog Functions

2017-05-19, 2017-07-06, 2017-12-04, 2019-05-24,2022-01-24

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A. Workstation requirements

CyberTools for Libraries Catalog Functions run on Windows XP to current Windows with Chrome, Firefox, or Internet Explorer. CyberTools also runs on the Apple Mac OS 10.12.1 to current with Chrome, Firefox, or Safari. We found Firefox on the Mac difficult to install so it is not documented here, but it is tested and functioning at the time of testing.

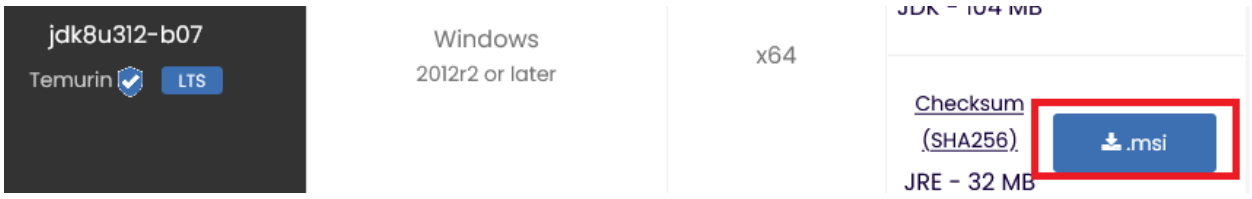
Any workstation that runs CyberTools Staff Functions must have an installed, working Java version 8. For Windows, there are two sources of Java. The traditional Oracle Java can be found at

https://www.java.com/en/download/manual.jsp

As of 2018 Oracle states that Java “permits certain uses, such as personal use and development use, at no cost -- but other uses authorized under prior Oracle Java licenses may no longer be available. …Commercial license and support is available with a low cost.” An alternative to Oracle’s Java is the open-source freeware Temurin found at

https://adoptium.net/releases.html?variant=openjdk8&jvmVariant=hotspot

If you are running Windows then you want to select “Temurin 8” then download “Windows 2012r2 or later” “x64” “JRE - 32 MB” [.msi download] and install as seen here:



If you select Temurin then you also need to download & install IcedTea from

https://www.azul.com/products/components/icedtea-web/

Select the Windows x86 64-bit [.msi] download and install as seen here:

Termurin needs IcedTea because CyberTools uses the Oracle JAWS method to run our Java applet (our Java program). The browser downloads the CyberTools Java Network Launch Protocol (JNLP) file and then notifies the workstation's Java to read the JNLP file. Java reads the JNLP file, downloads CyberJ, and runs it. The JAWS method removes the browser from the complexity of running a sophisticated application within the context and restrictions of a browser.

Temurin is sourced from Oracle's Java. The name Temurin is anagram of the word "runtime".

B. How does the new method differ from the old method?

1 .The old method required the browser to run Java. That is no longer true.

2. Windows users can again use Chrome and/or Firefox.

3. CyberTools now runs on and supports the Mac.

4. The new method can easily save your custom colors and fonts.

5. One former Catalog Function:
    5. Staff via old Firewall Backdoor (port 443, not secure)

is replaced by:
    5. Staff via new Firewall Backdoor (port 563)
6. Windows' browsers did not allow 64 bit Java, which can run better in most environments. This new method allows either 32 or 64 bit Java.

C. How it works

CyberTools assigns each library a unique URL to access CyberTools for Libraries. The URL looks like this: http://CyberToolsForLibraries.com/asp/asp.php?asp=MyLibraryAbbreviation. MyLibraryAbbreviation is a short identifier CyberTools assigns your library. This URL should only be used by library staffers. Please do not post this URL on your library homepage.

The URL accesses your Search Catalog functions, Staff Functions, Circulation Functions, and the CyberTools Knowledge Center. If you have only one catalog at CyberTools then your page might look like this:

East Campus Library Catalog Functions

1. Search the Catalog (a.k.a. HTML OPAC)
2. Search the Catalog for the Visually Impaired
3. Staff Functions (port 20,004)
4. Staff via best Firewall Backdoor (port 21)
5. Staff via new Firewall Backdoor (port 563)
6. Staff via alternate Firewall Backdoor (port 23)
7. Staff via Tunnel
8. Staff via FIPS mode Secure Tunnel
9. Circulation Functions (port 20,004)
10. Circulation via best Firewall Backdoor (port 21)
11. Circulation via new Firewall Backdoor (port 563)
12. Circulation via alternate Firewall Backdoor (port 23)
13. Circulation via Tunnel
14. Circulation via FIPS mode Secure Tunnel
15. Help

Knowledge Center

If you access multiple catalogs then each catalog has its own named "Catalog Functions" section with a unique background color:

East Campus Library Catalog Functions

1. Search the Catalog (a.k.a. HTML OPAC)
2. Search the Catalog for the Visually Impaired
3. Staff Functions (port 20,004)
4. Staff via best Firewall Backdoor (port 21)
5. Staff via new Firewall Backdoor (port 563)
6. Staff via alternate Firewall Backdoor (port 23)
7. Staff via Tunnel
8. Staff via FIPS mode Secure Tunnel
9. Circulation Functions (port 20,004)
10. Circulation via best Firewall Backdoor (port 21)
11. Circulation via new Firewall Backdoor (port 563)
12. Circulation via alternate Firewall Backdoor (port 23)
13. Circulation via Tunnel
14. Circulation via FIPS mode Secure Tunnel
15. Help

West Campus Library Catalog Functions

1. Search the Catalog (a.k.a. HTML OPAC)
2. Search the Catalog for the Visually Impaired
3. Staff Functions (port 20,004)
4. Staff via best Firewall Backdoor (port 21)
5. Staff via new Firewall Backdoor (port 563)
6. Staff via alternate Firewall Backdoor (port 23)
7. Staff via Tunnel
8. Staff via FIPS mode Secure Tunnel
9. Circulation Functions (port 20,004)
10. Circulation via best Firewall Backdoor (port 21)
11. Circulation via new Firewall Backdoor (port 563)
12. Circulation via alternate Firewall Backdoor (port 23)
13. Circulation via Tunnel
14. Circulation via FIPS mode Secure Tunnel
15. Help

Knowledge Center

Not sure where to start for Staff Functions? Try 3, then 4, etc., until one works. All functions 3 through 14 are encrypted, but only 8 and 14 (both FIPS) meet federal HIPPA, DoD, and VA requirements for patient and employee data as fully documented here. Functions 3 through 6, and 9 through 12, are faster than 7, 8, 13, and 14.

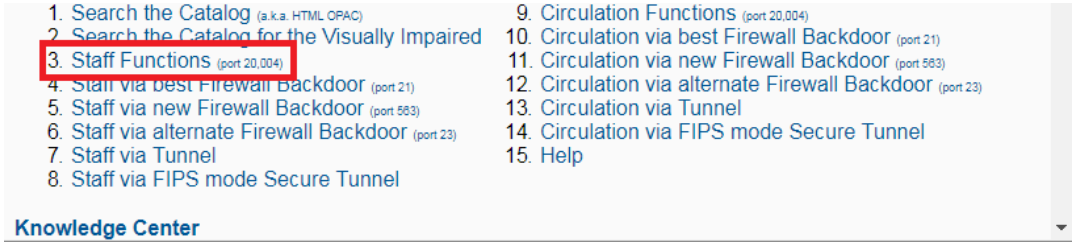
Functions 3 through 6 and 9 through 12 use non-standard browser TCP port numbers. You can see the port numbers next to the description, for example, "5. Staff via new Firewall Backdoor (port 563)". Functions 3 and 9 use port 20004. Port 20004 is unique to CyberTools. The other ports are common Internet ports thus are frequently open on firewalls. Functions 7 and 13 use the browser port 80, while 8 and 14 use the browser SSL port 443. Ports 80 and 443 will always work. If none of the functions 3 through 6 and 9 through 12 work, and functions 7, 8, 13, and 14 are slow, then you might need to ask your IT help desk to open one of the former ports to our server, for example, to open port 563 to CyberToolsForLibraries.com.

If your LAN uses a proxy server, you must make an exception for CyberToolsForLibraries.com.

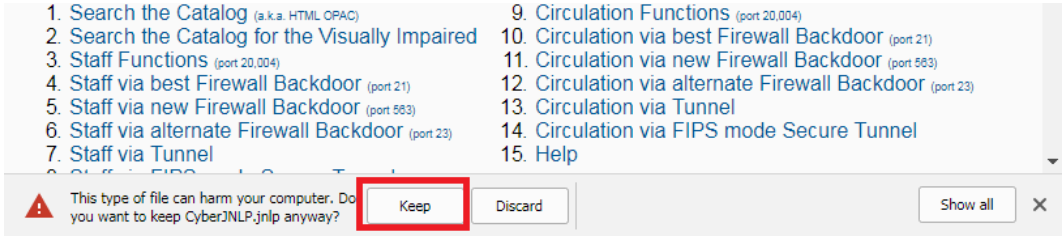
D. Workstation and browser notes

D.1. Windows with Chrome

Copy your CyberTools URL to the browser's address field and press Enter. Select a function from 3 to 14:



Notice the message at the bottom of Chrome. Select [Keep].

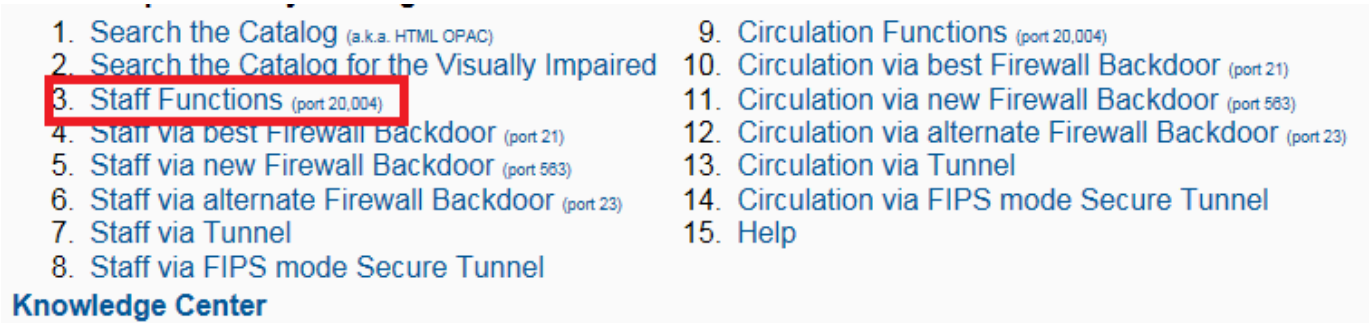


CyberJNLP.jnlp is now blinking in the bottom left corner: click on it.

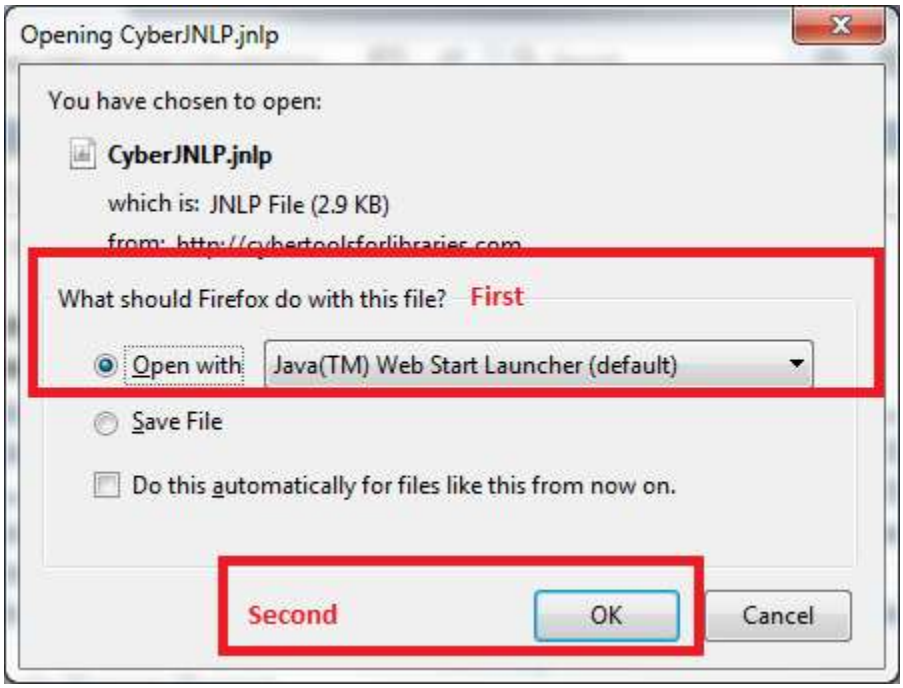
Now go to this document's section D.4. Java on Windows.

D.2. Windows with Firefox

Copy your CyberTools URL to the browser's address field and press Enter. Select one of the functions from 3 to 14:



Firefox will respond with:



Select

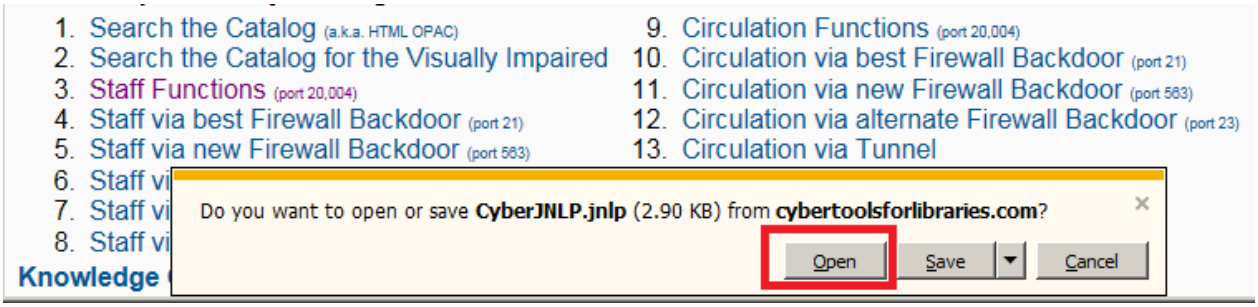
then select [Ok].

Now go to this document's section D.4. Java on Windows.

D.3. Windows with Internet Explorer

Copy your CyberTools URL to the browser's address field and press Enter. Select one of the functions from 3 to 14:

IE will respond with

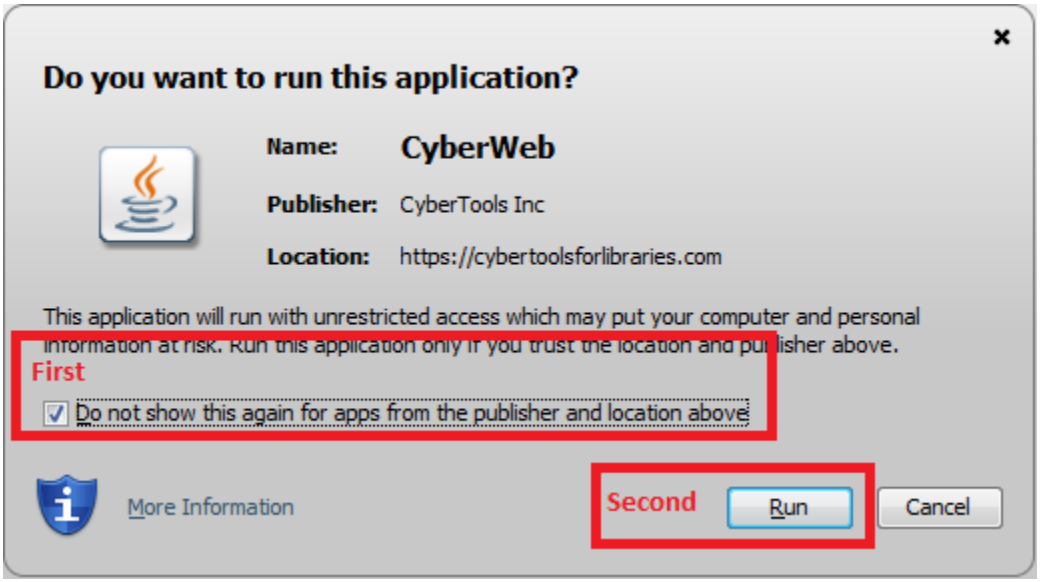


Select [Open].

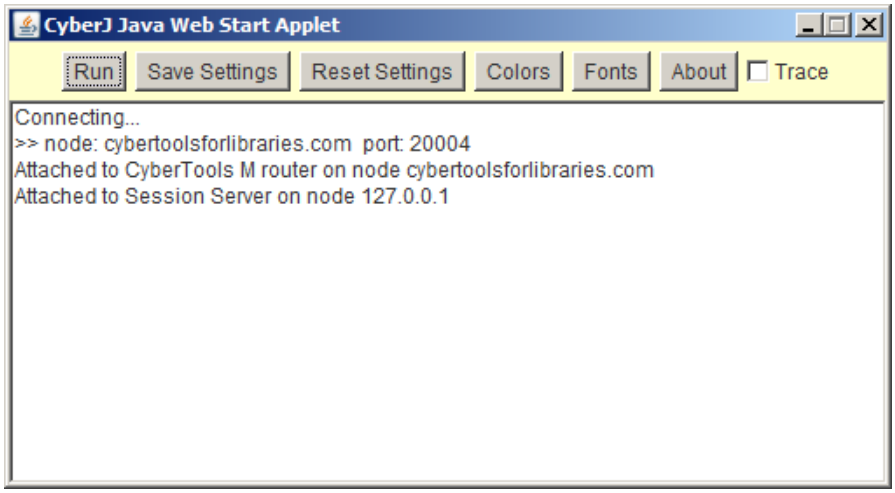
Now go to this document's section D.4. Java on Windows.

D.4. Java on Windows

You might see this pop-up in which case select the checkbox "Do not show this again for apps from the publisher and location above" and then select [Run].



You will now see the CyberJ Java applet running on your desktop:



Then the Staff Login window:

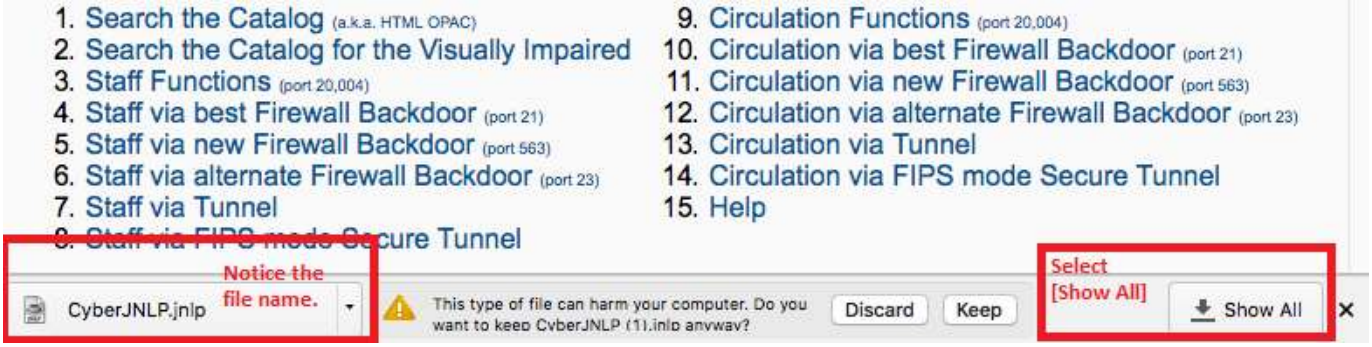
IMPORTANT: drag the file CyberJNLP.jnlp to your desktop and reuse it by clicking on it!

D.5. Mac with Chrome

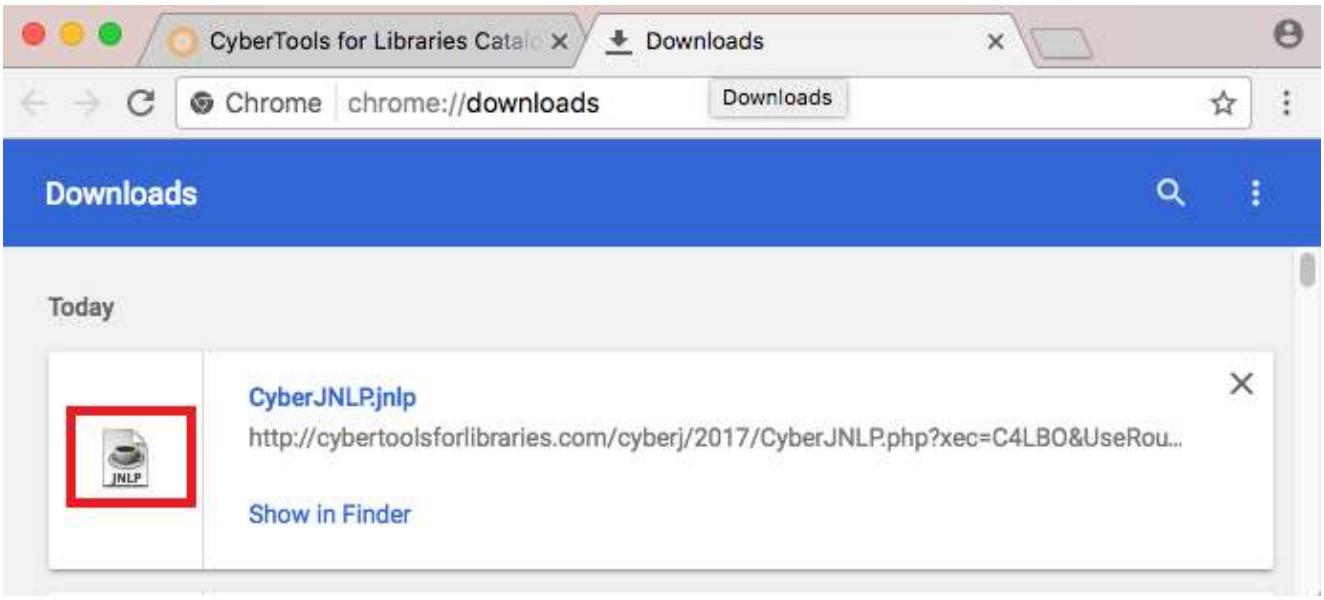
Copy your CyberTools URL to the browser's address field and press function key return.
Select one of the functions from 3 to 14:

Chrome presents a message at its bottom: select [Keep]:

The display shows the file name in the bottom left. Select [Show All] in the bottom right:



[Show All] adds a tab to Chrome to display the Downloads. Drag the icon [JNLP] to your desktop:



Now go to this document's section D.7. Java on the Mac.

D.6. Mac with Safari

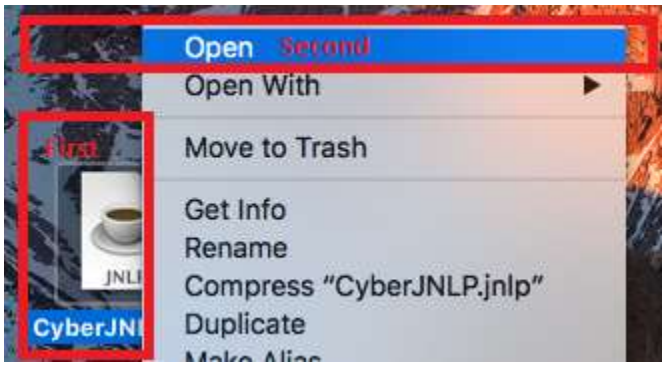
Copy your CyberTools URL to the browser's address field and press function key return. Select one of the functions from 3 to 14:

You'll see the file CyberJNLP.jnlp move from Safari to Downloads on the Dock. Drag the file from Downloads to the Desktop.

Now go to this document's section D.7. Java on the Mac.

D.7. Java on the Mac

Hold down the function key Control and click on the desktop icon [JNLP] then select Open:

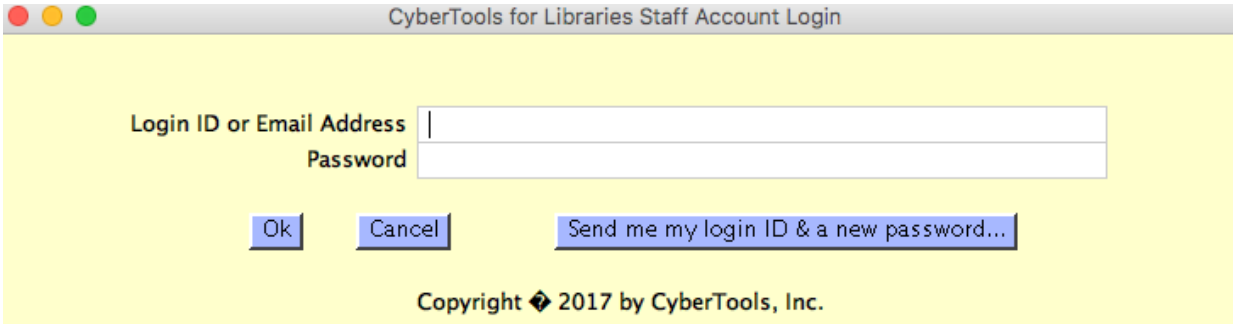


The Mac offers a pop-up where you will select [Open]. You will not need to repeat this step.

The Mac segues to the Java permission pop-up where you should select the checkbox "Do not show this again for apps from the publisher and location above" and then select [Run].

The CyberJ applet will open:

The CyberTools Staff Account Login window opens:



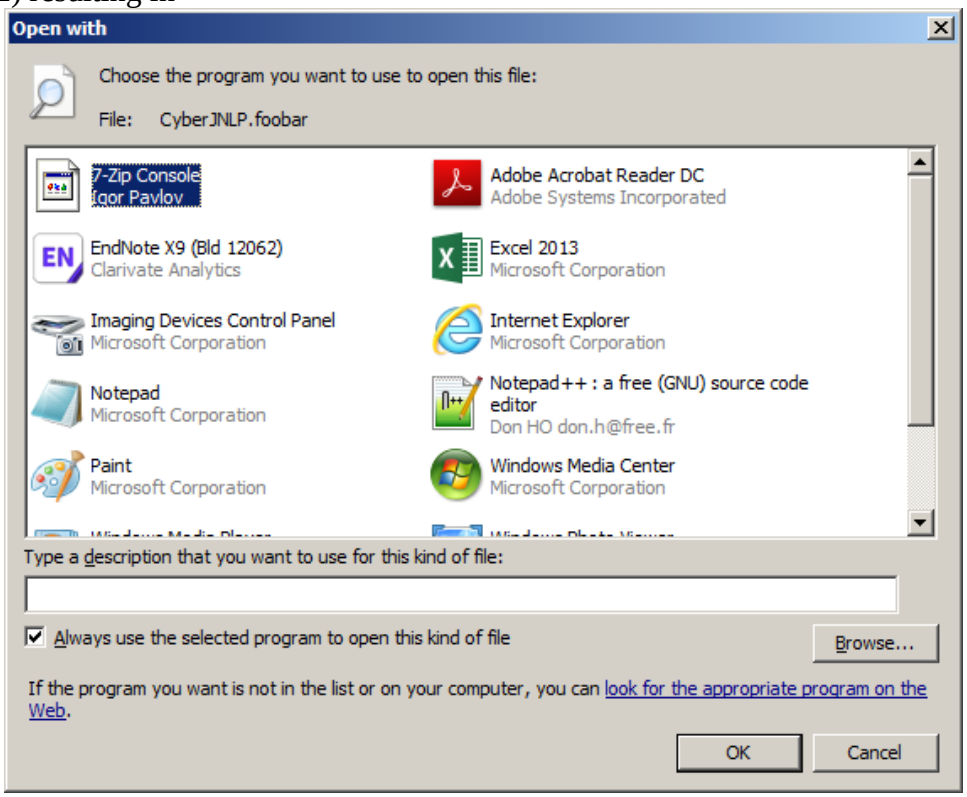
IMPORTANT: you can re-use the app CyberJNLP.jnlp on your desktop.

E. Common Problems and Solutions

1. "Windows can't open this file: CyberJNLP.jnlp"

If your workstation complains that "Windows can't open this file", then follow these steps. Go to your CyberTools for Libraries® Catalog Functions and Knowledge Center-> Staff Functions link. When the browser gives you the option to Open or Save CyberJNLP.jnlp, select Save. Save it to your desktop or an easily accessed folder. Now open Windows Explorer (not Internet Explorer) and navigate to the folder (or your desktop) containing the file CyberJNLP.jnlp. Right click on file CyberJNLP.jnlp. Select Open resulting in this pop-up:

Select (1) and (2) resulting in



Select [Browse]. Another Windows Explorer should open in folder "C:\Program Files". Go up one folder: do you see the folder ProgramData? If so then select it and then select Oracle->Java->javapath-> javaws.exe and finally [Open]. The entire path should be C:\ProgramData\Oracle\Java\javapath with you selecting javaws.exe then [Ok].

If you do not have C:\ProgramData then stay in "C:\Program Files" and select Java->{your version of Java with the highest version number, e.g., jre1.8.0_181}->bin-> javaws.exe then select [Open]. The entire link should be "C:\Program Files\Java\jre1.#.0_###\bin\" with you selecting javaws.exe then [Ok].
Now go back to the first Windows Explorer and double click on CyberJNLP.jnlp: it should run. Close it. Go back to your browser and your Catalog Functions and Knowledge Center page, select your Staff Functions: it too should run.

2. Tell Java that it's ok to download from CyberTools.
This is probably the simplest fix to many problems running CyberJNLP.jnlp. Unfortunately many IT groups prevent users from making the following changes (for some of you only your IT group can make these changes).

Go to your Java Control Panel. Windows XP users go to Control Panel->Java. Windows 7 users go to Control Panel->System & Security->Programs->Java. Windows 10 users click on Windows Start->Programs->Java->Configure Java.

For Java 7 & 8, go to Security->Edit the Site List->Add->

http://cybertoolsforlibraries.com/
https://cybertoolsforlibraries.com/

For Java 9, go to Web Setting->Location->Add->

http://cybertoolsforlibraries.com/
https://cybertoolsforlibraries.com/

The path is optional so we recommend not including it. For more information visit https://docs.oracle.com/javase/9/deploy/java-control-panel.htm#JSDPG775.

3. Pop-up reports an error: "ClassNotFoundException"
This is probably due to a firewall blocking the download of the file http://cybertoolsforlibraries.com/cyberj/2017/CyberWeb_plugin17.jar.
Try step E.2, found above, or contact your firewall administrator.

4. Pop-up reports an error: "Unable to load resource"
This is probably due to a firewall blocking the download of the file http://cybertoolsforlibraries.com/cyberj/2017/CyberWeb_plugin17.jar.
Try step E.2, found above, or contact your firewall administrator.

If you continue to have issues after following these steps, please contact the CyberTools Support Group for responsive help. Please try to be specific with the exact steps you have taken and the results: Support@CyberToolsForLibraries.com .

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