

WebPDF-4+ 2016

TECHNICAL QUESTIONS TO HELP YOU DETERMINE
IF WEBPDF-4+ 2016 CAN RUN ON YOUR NETWORK

September 2016



How does the WebPDF-4+ work?

ICDD's WebPDF-4+ Java Web Start program allows you to use Java platform using a web browser.

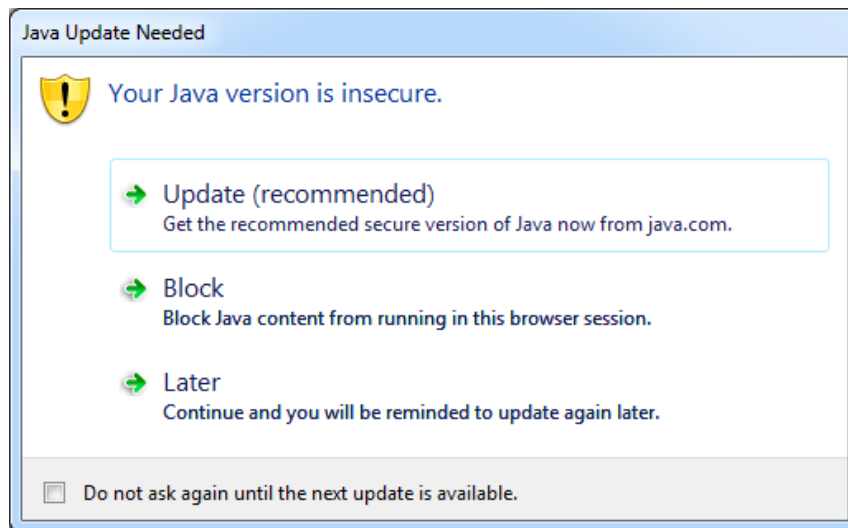
Java Web Start ensures the most current version of ICDD's applications files is installed on your system. It will automatically update one or more *.jar files to your system if ICDD updates any of its applications.

As a layer of security, ICDD uses Verisign to digitally sign its *.jar file using Symantec Code Signing Certificates. The trusted *.jar files contain a certificate which can be viewed.

Sometimes Java displays a message to update your version. All Java Web Start applications have this check automatically. You should always choose to "Update". The next slide shows the message.

Why did my version of Java become insecure?

When a new version of Java is available, Java Web Start wants to ensure you have the most recent version of Java and its security features. You will see a message like the one below, if you do, always choose **“Update”**. This is for your computer’s protection.



What is Network Latency? I'm more familiar with bandwidth.

Network latency is simply defined as the time delay observed as data transmits from one point to another. Doing a latency test will determine if you want to purchase the WebPDF-4+ product. **I will show you how to test for latency in the next two slides.**

Latency usually occurs when you are no longer using your Internet Service Provider's network and you get routed to another Internet Service Provider's network. Most of the time it is transparent when using a web browser due to webpages not requiring lots of bandwidth, but you can have problems accessing information from the internet.

The other key aspect is bandwidth. Bandwidth with regard to the internet is generally referred to as the amount of data that can be uploaded or downloaded to or from a server. The more bandwidth, the faster files can be uploaded or downloaded depending on your total network traffic.

Examining Network Latency – Reliable Connection

Click on Start, then Run (or use the keyboard shortcut by pressing the Windows Key and the letter r) type cmd, and then click OK. Once you get to a command prompt dialog window, type `tracert 198.139.133.139`. In my example, I picked a random IP Address. What to look for:

Look at milliseconds (ms), are these numbers over 100 ms in more than 3 - 5 rows? This `tracert` example shows a good reliable connection and you can consider the purchase of WebPDF-4+ since the example numbers are less than 100 ms.

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\sunzeri>tracert 74.125.228.51

Tracing route to iad23s06-in-f19.1e100.net [74.125.228.51]
over a maximum of 30 hops:
  0  1 ms  <1 ms  <1 ms  198.139.133.129
  1  3 ms  3 ms  3 ms  v12637.na31.b001318-0.ph101.atlas.cogentco.com [198.139.133.129]
  2  3 ms  2 ms  2 ms  v13834.mag02.ph101.atlas.cogentco.com [38.20.32.149]
  3  3 ms  2 ms  2 ms  te4-1.ccr01.ph101.atlas.cogentco.com [154.54.85.149]
  4  5 ms  5 ms  5 ms  te4-1.ccr01.bwi01.atlas.cogentco.com [154.54.2.173]
  5  7 ms  7 ms  7 ms  te0-1-0-7.mpd21.dca01.atlas.cogentco.com [154.54.25.86]
  6  8 ms  8 ms  8 ms  be2113.ccr41.iad02.atlas.cogentco.com [154.54.16.169]
  7  21 ms  23 ms  23 ms  38.122.62.74
  8  40 ms  23 ms  24 ms  209.85.252.80
  9  22 ms  22 ms  22 ms  72.14.238.175
 10  21 ms  21 ms  21 ms  iad23s06-in-f19.1e100.net [74.125.228.51]

Trace complete.

C:\Users\sunzeri>
```

Good, fast and reliable connection

Note: “ms” is a thousandth of a second. A `tracert` is a computer network diagnostic tool for displaying the route (path) and measuring transit delays of packets across an Internet Protocol (IP) network.

Examining Network Latency – Unreliable Connection

Click on Start, then Run (or use the keyboard shortcut by pressing the Windows Key and the letter r) and type cmd, then click OK. Once you get to a command prompt dialog window, type tracert 198.139.133.139. In my example, I picked a random IP Address. What to look for:

```
cmd C:\WINDOWS\system32\cmd.exe
Tracing route to sapo.pt [213.13.146.140]
over a maximum of 30 hops:
  0  <1 ms  <1 ms  <1 ms  198.139.133.129
  1  3 ms  4 ms  8 ms  v12637.na31.b001318-0.phl01.atlas.cogentco.com [38.104.110.169]
  2  2 ms  2 ms  2 ms  v13534.mag01.phl01.atlas.cogentco.com [38.20.32.11]
  3  2 ms  2 ms  2 ms  te3-1.ccr01.phl01.atlas.cogentco.com [154.54.85.137]
  4  5 ms  5 ms  6 ms  te0-0-0-19.mpd21.jfk02.atlas.cogentco.com [154.54.2.110]
  5  80 ms  83 ms  80 ms  te0-2-0-5.mpd21.lon13.atlas.cogentco.com [154.54.84.134]
  6  80 ms  80 ms  80 ms  te0-7-0-27.ccr21.lon01.atlas.cogentco.com [154.54.57.97]
  7  80 ms  82 ms  80 ms  te4-2.ccr01.lon07.atlas.cogentco.com [130.117.1.178]
  8  97 ms  107 ms  94 ms  149.11.30.26
  9  123 ms  126 ms  124 ms  lisi-cr1-be4.cprn.net [195.8.4.45]
 10  123 ms  99 ms  123 ms  telepac1.cprn.net [195.8.30.142]
 11  123 ms  125 ms  119 ms  te1-1.lcat2.telepac.net [213.13.135.150]
 12  122 ms  122 ms  127 ms  telepac1.cprn.net [195.8.30.142]
 13  124 ms  123 ms  123 ms  te1-1.lcat2.telepac.net [213.13.135.150]
 14  125 ms  122 ms  125 ms  dial-b1-169-158.telepac.pt [194.65.169.158]
 15  123 ms  120 ms  131 ms  sapo.pt [213.13.146.140]

Trace complete.
C:\U>
```

Look at “ms”, are these numbers over 100 ms in more than 3 - 5 rows? This tracert shows a bad connection. In this case we recommend the purchase of PDF-4+ on CD or DVD.

Notice the amount of times you switch ISPs.

Bad, slow and unreliable connection

Why do we need to open Internet Ports?

WebPDF-4+ provides the needed portability for accessing the PDF-4+ database via the internet. It enables full functionality of the PDF-4+ database using a high-speed internet connection. For more information about WebPDF-4+ click: http://www.icdd.com/products/flyers/WebPDF4_Flyer.pdf

Internet ports allow internet applications to communicate with one another over the internet. For example, your web browser uses port 80 to communicate based on http:// in the URL or port 443 based on https.

Firewalls are the best way to open or close internet ports. There are two types of Firewalls: software and hardware. Firewalls are used to monitor, route (allow), or restrict communication between internet applications. They can be found in operating systems like Windows®, in routers, and as stand-alone appliances. Home users have little, if any restrictions. Business and government institutions usually have more restrictions and will likely require changes to the firewall. If there are no restrictions, these ports are not blocked by your firewall.

You may need to explain the WebPDF-4 ports to your I.T. Manager so these ports can be opened.

Why do we need to open Internet Ports?

The WebPDF-4+ 2016 uses two ports: 22220 and 3331. The server name is <http://webpdf4.icdd.com>.

The ICDD communicator is an internet application used to validate your software license. It also verifies that you only have one instance of the WebPDF-4+ running at a time. Once you are verified, it will display your license on your screen and you will be able to use the WebPDF-4+ 2016. **The WebPDF-4+ 2016 ICDD communicator uses port 22220.**

The ICDD Communicator enables access to the WebPDF-4+ when the USB dongle is connected. Stopping the ICDD Communicator or removing the USB dongle will disable your access to the database.

The ICDD database also uses another internet port. This allows you to retrieve information from our database. **The WebPDF-4+ 2016 database uses port 3331.** Most business and government users will need to consult their I.T. departments and provide the following to facilitate opening of ports:

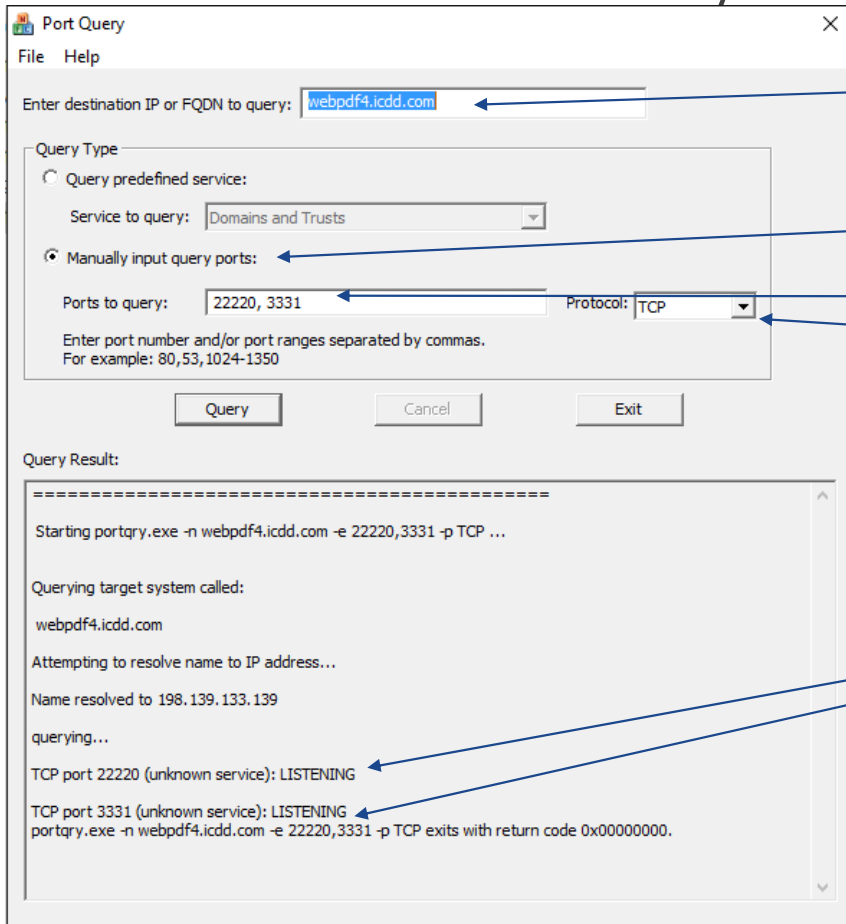
Server = <http://webpdf4.icdd.com> or IP Address 198.139.133.139 & TCP/IP Ports=22220 and 3331.

More information is located at <http://webpdf4.icdd.com/2016/files/WebPDF42016ReadMe.pdf>

How can I tell if my TCP/IP ports are open?

1. Download the port query utility from Microsoft®
<http://www.microsoft.com/en-us/download/details.aspx?displaylang=en&id=24009>
2. Run the downloaded file and follow the on-screen directions. Make a note of where the utility is placed.
3. Find and run portqryui.exe – the default location is C:\PortQryUI\.
4. Enter “webpdf4.icdd.com” or 198.139.133.139 for the destination.
5. Select “Manually Input Query Ports”.
6. Enter “22220, 3331” for the ports.
7. Open ports will show as "LISTENING". Any other response means the ports are not open.
8. If the ports are not open, contact your I.T. department. Your I.T. department can open these ports for you.
9. **The next slide shows you how to determine if your ports are open.**

How can I tell if my computer's TCP/IP ports are open?



Enter "webpdf4.icdd.com" or the IP of 198.139.133.139

Select "Manually input query ports".

Enter ports "22220, 3331"
Protocol = TCP

Click "Query"

Open ports will show as "LISTENING". Any other response means the ports are not closed and you will not be able to access the database.

Tips with Vendor Software

1. If you are using vendor software, you would likely build binary files. In this case, make sure you are on a **“wired connection”**. Also, make sure the network adapter does not go into power saving mode by unchecking “Allow the computer to turn off this device to save power” in the “Device Manager”. You may need your I.T. Department to set this option.
2. If your vendor’s software does not work with the current WebPDF+4 2016, you will still need to install and register the WebPDF-4+ 2016. This will allow you to use the WebPDF+4 2015 product by extending last year’s product by one year.

Installing your product

If you are renewing your software subscription download it from:

<http://webpdf4.icdd.com/2016/downloads/WebPDF-4+2016.exe>

If you just purchased the WebPDF-4+ 2016, the installation will be located on your dongle. If you accidentally delete your installation program, you can download it from the site above.

Be sure to read the ReadMe.pdf:

<http://webpdf4.icdd.com/2016/files/WebPDF42016ReadMe.pdf>. It explains how to install the product after the ports are opened and has a FAQ section.

If the computer you're using requires more than one IP address the WebPDF-4+ will not work.

Review

1. If you did not observe delays in data transmission using the tracert command and you are interested in purchasing the WebPDF-4+ 2016 database, please contact the ICDD sales department at 610-325-9814 or sales@icdd.com.
2. If you did observe delays in your data transmission using tracert, then you may want to reconsider and purchase a DVD or CD of the PDF-4+ 2016 product. If you still want the WebPDF-4+, it may impact access time for your search analysis.
3. If your ports are not opened, explain to your I.T. Department what the ports are being used for and you would like to use the WebPDF-4+ 2016.
4. If you have any questions or need help installing your product, please contact ICDD at 610-325-9814 or webpdf4support@icdd.com.