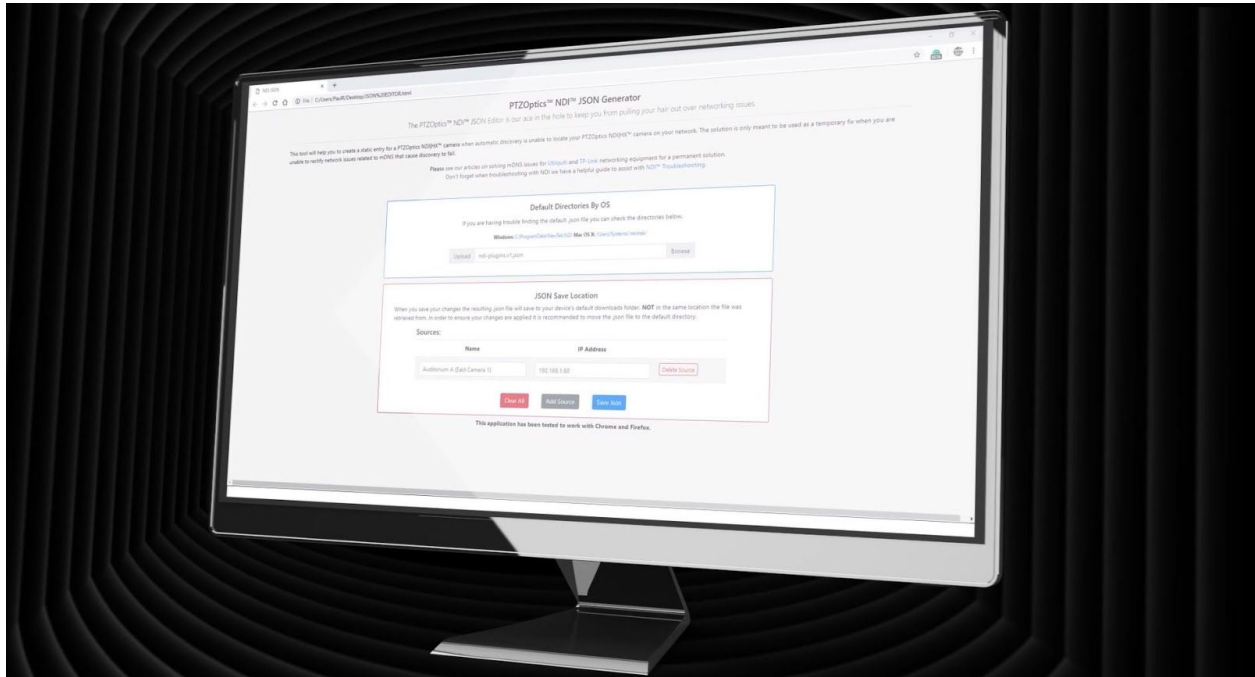# PTZOptics™ NDI™ JSON Generator

Welcome to another PTZOptics tutorial video. This video is a helpful addition to your PTZOptics NDI camera setup videos. In this tutorial video, we will review the PTZOptics™ NDI™ JSON Editor which is a new tool available from PTZOptics to help solve NDI discovery issues on your network. If you have ever had an issue with the discovery of NDI sources on your networking, this tool can help. This tool will help you to create a static entry for a PTZOptics NDI|HX™ camera when automatic discovery is unable to locate your PTZOptics NDI|HX™ camera on your network. This tool will work on any Mac or PC computer.
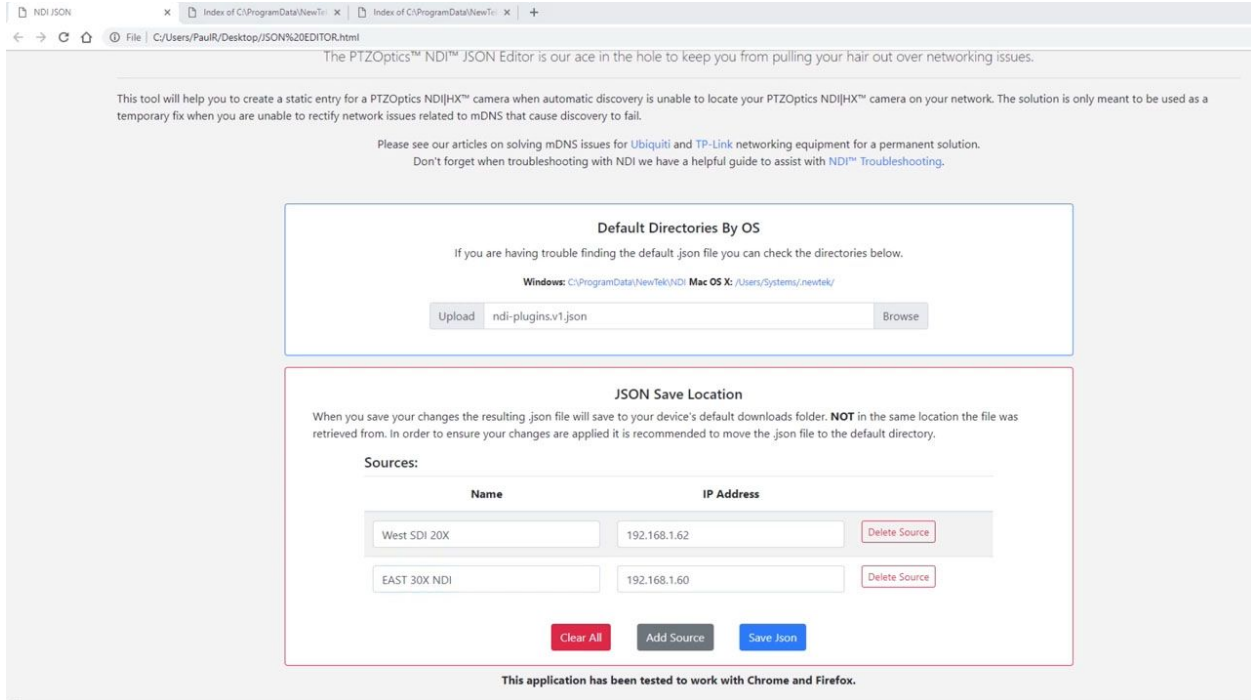
Note: It is always recommended to download the latest NDI Tools from NewTek when you are experiencing any issues as updates are regularly made to the software from NewTek to ensure the best compatibility between products.

This solution is only meant to be used as a temporary fix when you are unable to rectify network issues related to mDNS that can cause discovery to fail.

If you would like to learn more about networking solutions for NDI and solving mDNS discovery issues check out our knowledge base articles focusing on Ubiquiti and TP-Link networking equipment for a permanent solution at help.ptzoptics.com.

Don't forget when troubleshooting with NDI we have a helpful guide to assist with NDI™ Troubleshooting.

How to use the tool?
The tool is very simple to use and requires you to have the tool / html file on the PC you are using with NDI™, a PTZOptics™ NDI|HX™ source and a network.

Adding Sources
1. Open the PTZOptics™ NDI™ JSON generator *.html file
2. Read all notes and instructions available on the main interface of the page
3. Click the "Browse" button and navigate to the default directory of your NDI™ JSON file
   a. Windows Default Directory: C:\ProgramData\NewTek\NDI *(hidden by default)*
   b. Mac OS X Default Directory: /Users/Systems/.newtek/

Note that if you have changed the default installation location of the NDI™ tools these default directories may not be accurate for you.

4. Select the *.json file in this directory typically titled "ndi-plugins.v1.json" and click "Open"
    Note that If you have never made a static entry into your JSON file, either manually or using NDI™ Access Manager, you will see no entries made and be provided a warning that no sources currently exist.
5. Click on the "Add Source" button
6. Enter a name for the PTZOptics™ NDI|HX™ Source under "Name"
    Note that when naming a static entry you can supply a simple name such as "Camera 1" or you can create a group of cameras with unique names under the group title by naming sources as such "Auditorium A (Camera 1)" using the "( )" where the group title is "Auditorium A" and the sub selection will be "Camera 1"
7. Enter the static IP address for the PTZOptics™ NDI|HX™ source under "IP Address"
8. Repeat steps 5 - 8 for as many static entries as you wish to make and when finished simply click the "Save Json" button which will download the new JSON file to your default downloads directory
9. Manually copy and replace the original *.json file located in the directory you used for Step 3 with the new file that has been saved to your default downloads directory
    Note that the file name MUST be exactly the same as the original JSON file or the NDI™ Tools will fail to use the new file.
10. You should now be able to launch NDI™ Studio Monitor, or any NDI™ compatible Production Software, and immediately see your static entries.

Deleting Sources
1. Open the PTZOptics™ NDI™ JSON generator *.html file
2. Read all notes and instructions available on the main interface of the page
3. Click the "Browse" button and navigate to the default directory of your NDI™ JSON file
    a. Windows Default Directory: C:\ProgramData\NewTek\NDI *(hidden by default)*
    b. Mac OS X Default Directory: /Users/Systems/.newtek/
    Note that if you have changed the default installation location of NDI™ Tools these default directories may not be accurate for you.
4. Select the *.json file in this directory typically titled "ndi-plugins.v1.json" and click "Open"
5. You should now see any static NDI™ entries that have been made listed
6. Click on the "Delete Source" button next to any static entry you wish to remove
7. Repeat step 6 for as many static entries as you wish to remove and when finished simply click the "Save Json" button which will download the new JSON file to your default downloads directory
8. Manually copy and replace the original *.json file located in the directory you used for Step 3 with the new file that has been saved to your default downloads directory
    Note that the file name MUST be exactly the same as the original JSON file or the NDI™ Tools will fail to use the new file.
9. You should now be able to launch Studio Monitor, or NDI Production Software, and immediately see the changes made to your static entries.

Warning & Suggestions

It is highly recommended to make a backup copy of your original json file before replacing the file. This way if anything becomes unstable you can always return the system to the original state with a simple copy and replace. For convenience, you can save the original copy in the same directory as the new file, just change its name until you need to reuse it.

This tool has been designed for use with cameras that have been assigned a static IP; if you are using this with cameras using DHCP if / when they change their IP address your static entry will no longer function. As a result we highly suggest only using this tool with cameras that have been given a static IP on your network.

> If you have made a static entry for a DHCP assigned camera and the camera changes its IP or you have a camera that has been disconnected from the network, you may cause Studio Monitor, or related NDI™ Production Software, to crash upon attempting to connect to the now non-existent source.

If you are using a mix of the PTZOptics™ NDI™ JSON Generator, NDI™ Access Manager and NDI™ Studio Monitor note that you MAY see the same PTZOptics™ NDI|HX™ source show up as three (3) separate instances.

Please note we do not provide any support in relation to this tool and take no responsibility for any impact or losses that may result from following its use.