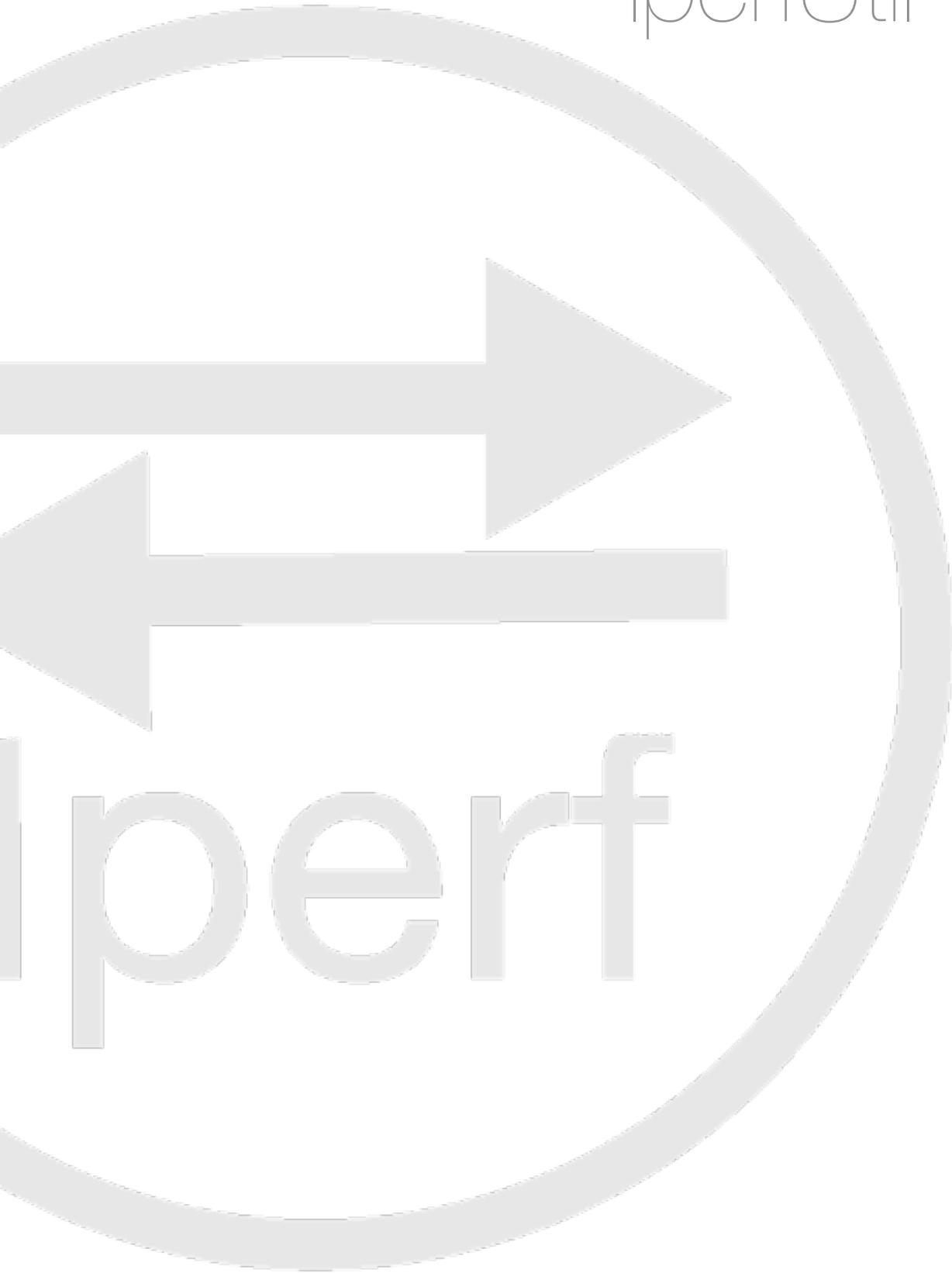


lperfUtil 1.0



@mitaCode

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IperfUtil User Manual



IperfUtil User manual

IperfUtil provides a simple and native macOS graphical interface for the Iperf3 performance tool.

IperfUtil can run simultaneously an Iperf3 server available for remote Iperf3 clients.

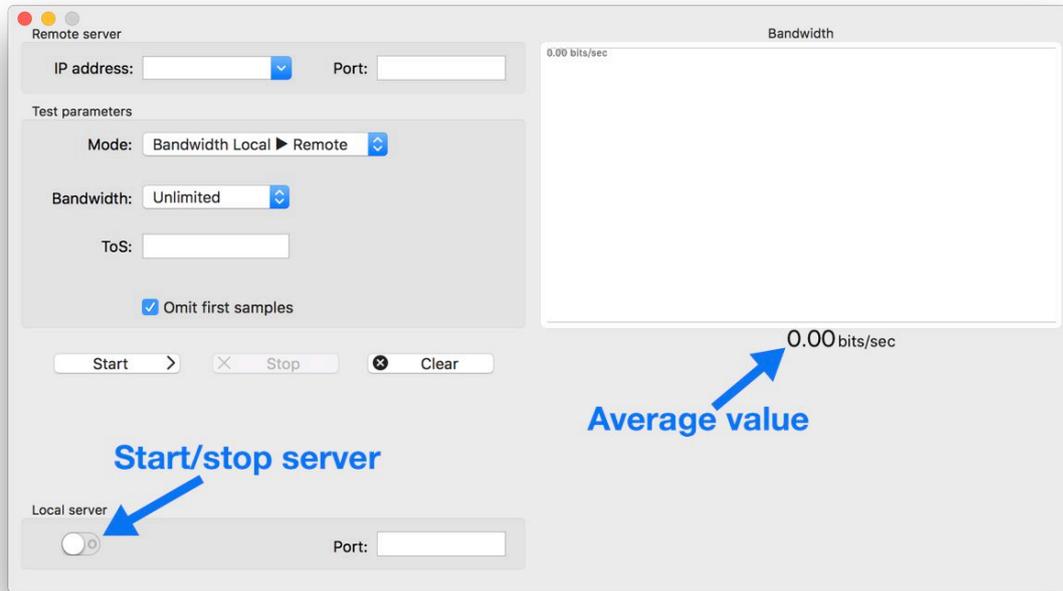
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Using IperfUtil

The left part of the window contains the configurable parameters used to perform a test. The right part displays the test results in function of the type of test.



The configurable parameters are divided in 3 parts:

- **Remote Server:** enter the **IP Address** (or DNS name) and the **Port** number of the remote Iperf3 server. If no port number is configured, the default port 5201 is used.
- **Test Parameters:** you can select the test **Mode** to be used and other parameters in function of the test.

Three modes are available:

Bandwidth Local ► Remote

Bandwidth Local ◄ Remote

Datagram Local ◄ Remote

You can use the **Omit first samples** checkbox to discard the 2 first samples to eliminate transitory effects into the chart.

After defining the remote Iperf3 server and the test parameters you can perform the test using the **Start** button or select the **File>Start Test** menu option. You can stop a running test using the **Stop** button or select the **File>Stop Test** menu option. Use the **Clear** button or the **File>Clear Test** menu option to clear the test results currently displayed.

- **Local Server:** IperfUtil can run simultaneously an Iperf3 server available for remote Iperf3 clients. You can control the server using these controls.

The right area of the window shows the test results using strip charts with an average value displays. The data shown is function of the current test being performed.

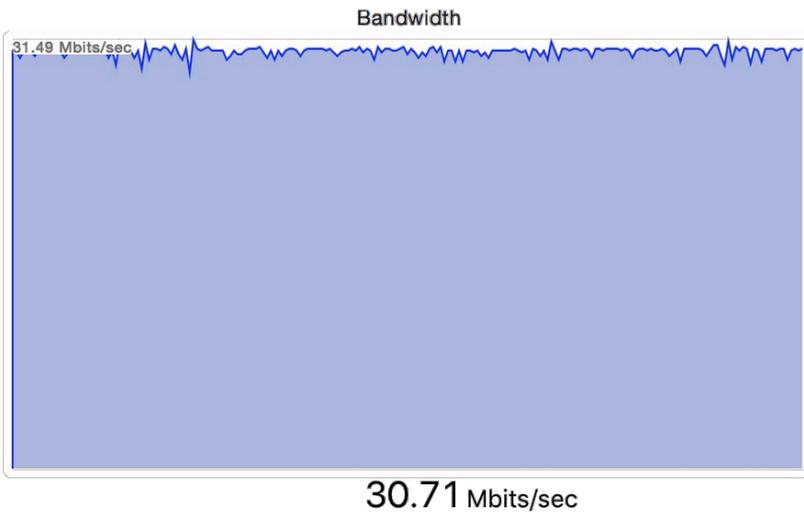


Performing Tests

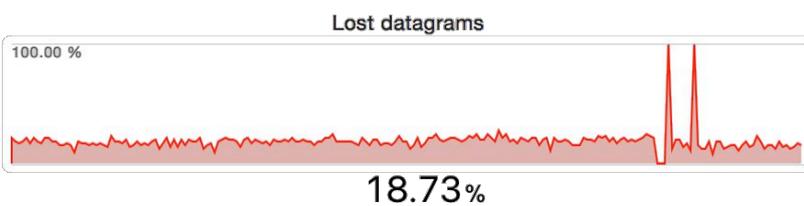
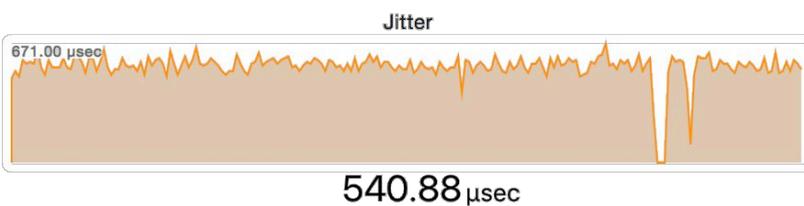
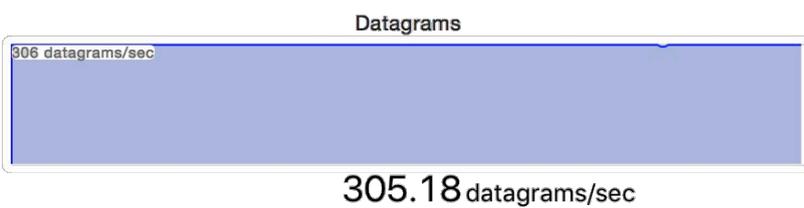
Test modes available:

- Available bandwidth from the local host to a remote host (mode Bandwidth Local ► Remote).
- Available bandwidth from a remote host to the local host (mode Bandwidth Local ◀ Remote).
- Datagram bandwidth, speed, jitter and packet loss from a remote host to the local host (mode Datagram Local ◀ Remote).

The bandwidth tests show a strip chart and the average value:



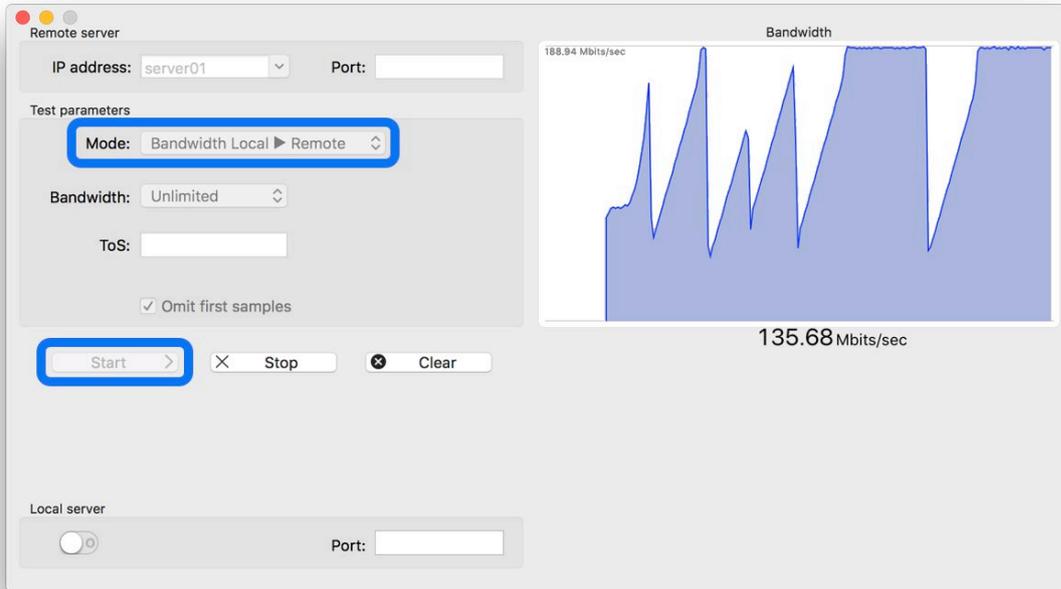
The datagram test shows 4 strip charts with the average values:





Bandwidth Local ▶ Remote

To perform a bandwidth test from the local host to a remote Iperf3 server, select the **Bandwidth Local ◀ Remote** test **Mode**, the desired **Bandwidth** limit (select **Unlimited** to measure the available bandwidth) and optionally the **ToS** (IP Type of Service) value and click the **Start** button or select the **File>Start Test** menu option. The current bandwidth (bits/sec) and the average value are displayed:



You can examine the values of the graph right clicking and dragging on it:



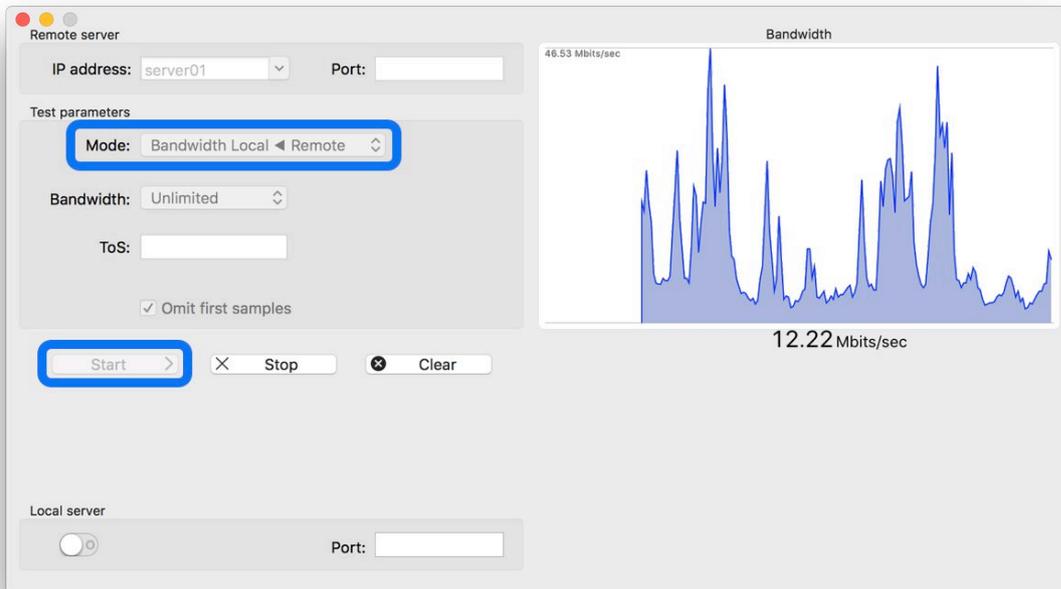
This test mode is equivalent to execute Iperf3 in the command line as follows:

```
iperf3 -c iperfhost -b bandwidth -t 0
```

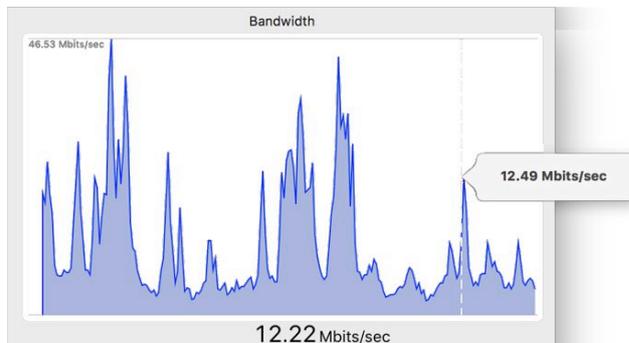


Bandwidth Local ◀ Remote

To perform a bandwidth test from a remote Iperf3 server to the local host, select the **Bandwidth Local ◀ Remote** test **Mode**, the desired **Bandwidth** limit (select **Unlimited** to measure the available bandwidth) and optionally the **ToS** (IP Type of Service) value and click the **Start** button or select the **File>Start Test** menu option. The current bandwidth (bits/sec) and the average value are displayed:



You can examine the values of the graph right clicking and dragging on it:



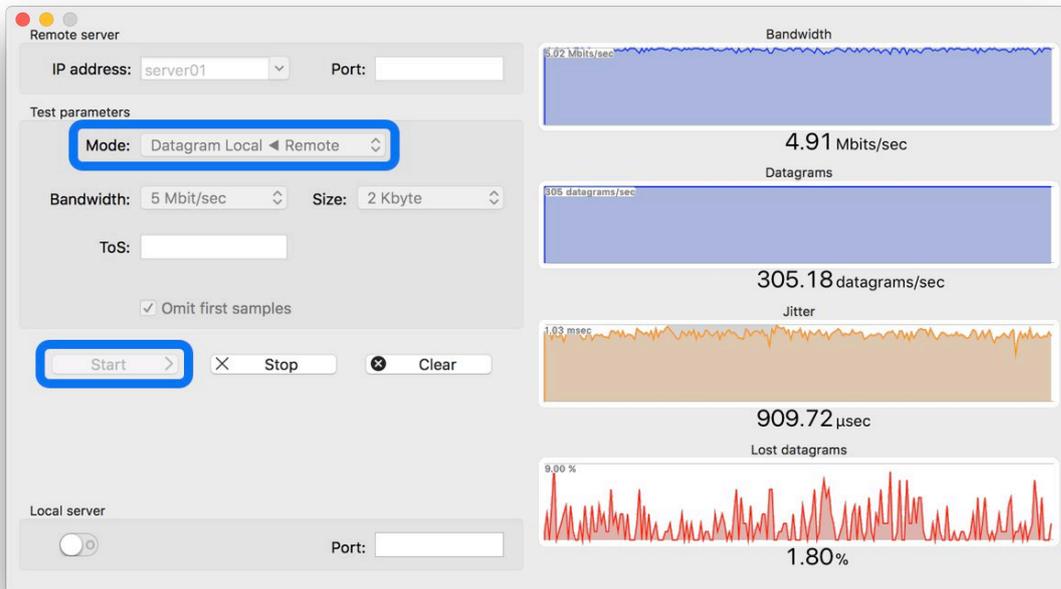
This test mode is equivalent to execute Iperf3 in the command line as follows:

```
iperf3 -c iperfhost -R b bandwidth -t 0
```



Datagram Local ◀ Remote

To perform a datagram test from a remote Iperf3 server to the local host, select the **Datagram Local ◀ Remote** test **Mode**, the desired **Bandwidth** limit (select **Unlimited** to measure the available bandwidth), the datagram **Size** and optionally the **ToS** (IP Type of Service) value and click the **Start** button or select the **File>Start Test** menu option. The current bandwidth (bits/sec), datagrams/sec, jitter and lost datagrams and the averages values are displayed:



You can examine the values of a graph right clicking and dragging on it:



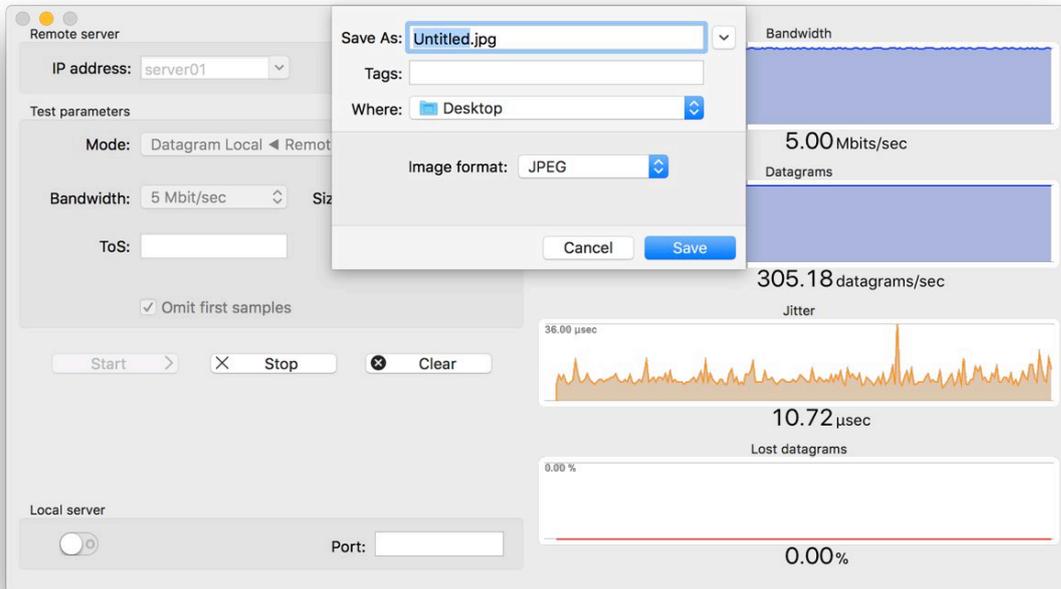
This test mode is equivalent to execute Iperf3 in the command line as follows:

```
iperf3 -c iperfhost -u -R b bandwidth -t 0
```



Saving to an Image File

If you need to include a test result in a document, you can save it to an Image File and then import it into your document. To save the test results shown in the right area of the window click the **File>Save Image...** menu option.

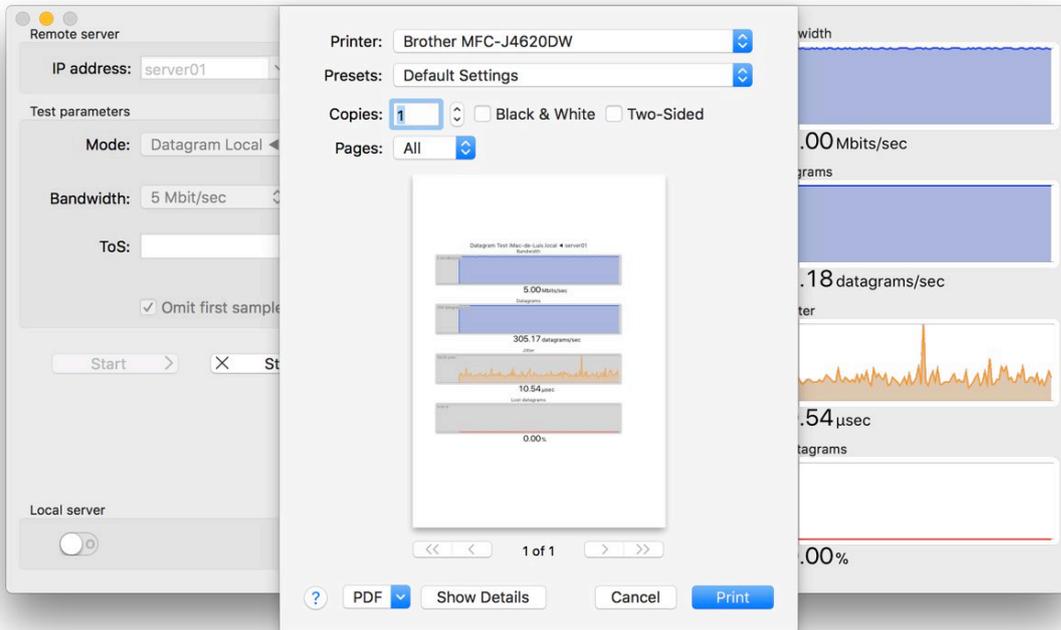


Available Image Formats are JPEG, JPEG-2000, PNG, GIF and TIFF.

For JPEG-2000, PNG, GIF and TIFF formats it is possible to set an image transparent background unsetting the **Fill Image Background** check button.

Printing

To print the test results shown in the right area of the window click the **File>Print...** menu option.



Select the printer and press the **Print** button or use the **PDF** menu to save a PDF copy to disk.



Running the Server

IperfUtil can run concurrently an Iperf3 server available for remote Iperf3 clients.

You can control the server using the lower box of the IperfUtil window:



To start the server click on the switch or select the **File**> **Local Server** main menu option. To stop the server click on the switch or select the **File**> **Local Server** main menu option.

The **Port** field defines the server port used to listen for incoming client test requests. If no port number is configured, the default port 5210 is used.

The field at the right or the switch shows the IP Address of the remote client when performing a test with the server. This field shows also server errors. Frequently the cause is another Iperf3 server listening on the configured port (message **! Port in use**).

it is possible to control which clients can perform tests using the local server using the access list available in the Preferences panel. This option causes the local server to only accept performance test requests from the IP addresses included in the list. Requests from the local machine (*localhost*) are always accepted, so you do not need to include the *localhost* IP address 127.0.0.1 in the access list.

While the server is running a test, the dock icon signals this situation displaying a badge:



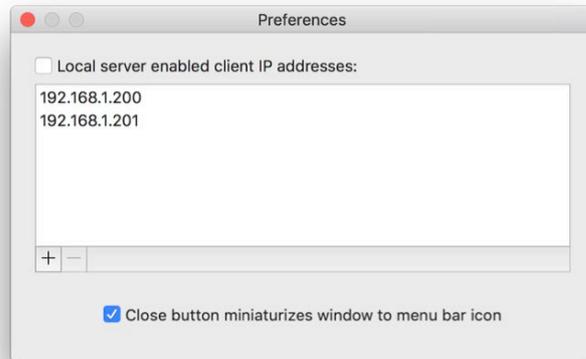
If the **Miniaturize window to menu bar icon** Preferences option is enabled, the server test is also indicated in the menu bar icon:





Preferences

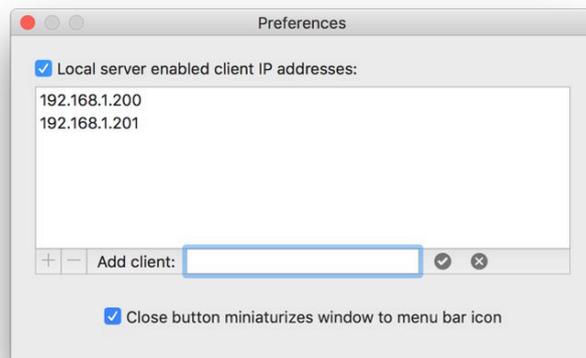
To open the Preferences panel click the **IperfUtil>Preferences...** menu option:



The following options are available:

- **Local server enabled client IP addresses.** Enable this option to cause the local server to only accept performance test requests from the IP addresses included in the list. Requests from the local machine (*localhost*) are always accepted, so you do not need to include the *localhost* IP address 127.0.0.1 in the list.

To add a new IP address to the access list click the **+** button:



Enter the new enabled client IP address and click the **✓** button to add it to the access list or click the **✗** button to cancel.

To remove an IP address from the access list select it and click the **-** button.

- **Close button miniaturizes window to menu bar icon.** This option causes the IperfUtil window to miniaturize as a status bar menu icon when closing it:

