Screenshots - How to use

Copy the executable to a folder on disk.

Receive data

Open command prompt and change current directory to directory where you copied these executable files.

At the command prompt type:

MulticastReceive.exe -h

and press <Return>

```
C:\GitHub\Repositories\MulticastTest\out\MulticastReceive.exe -h
MulticastReceive 1.0.0.0
Copyright c 2017

-a, --multicastip (Default: 238.0.0.1) Multicast IP address to send data
-p, --port (Default: 5050) Port to send data
--help Display this help screen.

C:\GitHub\Repositories\MulticastTest\out\
```

You will get output of help screen usage.

As you see, from the help screen, if you start program without any parameters, program will be start to listen for multicast IP network traffic on IP address 238.0.0.1 and port 5050.

```
Microsoft Windows Server 2008 x64 DEBUG Build Environment - Multicast Receive.exe

C:\GitHub\Repositories\MulticastTest\out>MulticastReceive.exe

Multicat IP address: 238.0.0.1

Port: 5050

Waiting for data.. each 5 seconds received packet number will be reset to 0

Received 0 Packet of Size 0

Received 0 Packet of Size 0

Received 0 Packet of Size 0
```

Each 5 second program will display statistic for received packet on listen multicast IP address and port.

In this case that will be IP=238.0.0.1 and port=5050

For example if you wish to start program to listen for multicast IP traffic on IP address 224.0.0.1 and port 5000, you will use the following syntax:

```
Microsoft Windows Server 2008 x64 DEBUG Build Environment - MulticastReceive.exe -a 224.0.0.1 -p 500

C:\GitHub\Repositories\MulticastTest\out\MulticastReceive.exe -a 224.0.0.1 -p 500

Multicat IP address: 224.0.0.1

Port: 5000

Waiting for data.. each 5 seconds received packet number will be reset to 0

Received 0 Packet of Size 0
```

After execution, program will continue to listen for network traffic on IP address and port.

To stop program execution, press CTRL+C on the command prompt.

Send data (generate multicast IP traffic)

Open command prompt and change current directory to directory where you copied these executable files.

At the command prompt type:

MulticastSend.exe -h

and press <Return>

```
Microsoft Windows Server 2008 x64 DEBUG Build Environment
                                                                                 ×
                  ries\MulticastTest\out>MulticastSend.exe -h
                           (Default: 238.0.0.1) Multicast IP address to send
 -a, --multicastip
 -p, --port
                           (Default: 5050) Port to send data
                           (Default: 3) Time To Live (TTL - Hop Limit)
 -t, --ttl
                           (Default: 5) Number of packet to sent
 -n, --numberofpacket
                           (Default: 30) UDP Packet size in byte (1 byte=1
 -s, --size
 --help
                           Display this help screen.
::\GitHub\Repositories\MulticastTest\out>
```

You will get output of help screen usage.

As you see, from the help screen, if you start program without any parameters, program will be start to send multicast IP packet to IP address 238.0.0.1, port 5050, with maximum Hop Limit of 5, 5 packet with size of 30 characters each.

For example if you wish to start program to send multicast IP traffic to IP address 224.0.0.1, port 5000, with 3 hop limit, 10 packet with size of 128 characters, you will use the following syntax:

MulticastSend.exe -a 224.0.0.1 -p 5000 -t 3 -n 10 -s 128

After execution program will exit to command prompt.

Test Example

To test multicast IP network traffic on IP address 224.0.0.1 and port 5000, we need to use the following syntax:

For receiving data:

MulticastReceive.exe -a 224.0.0.1 -p 500

MulticastSend.exe -a 224.0.0.1 -p 5000 -t 3 -n 5 -s 10

MulticastReceive - screen

```
Microsoft Windows Server 2008 x64 DEBUG Build Environment - MulticastReceive.exe -a 224.0.0.1 -p 500

C:\GitHub\Repositories\MulticastTest\out\MulticastReceive.exe -a 224.0.0.1 -p 500

Multicat IP address: 224.0.0.1

Port: 5000

Naiting for data.. each 5 seconds received packet number will be reset to 0
```

```
C:\GitHub\Repositories\MulticastTest\out>MulticastSend.exe -a 224.0.0.1 -p 5000
-t 3 -n 5 -s 10
Multicat IP address: 224.0.0.1
Port: 5000
TIL: 3
Packet Number: 5
Packet Size: 10
MCASI Send on Group: 224.0.0.1 Port: 5000 TTL: 3
Connecting...
Sending data...
TX: 0123456789
TX: 0123456789
TX: 0123456789
TX: 0123456789
TX: 0123456789
Closing Connection...
Sent 5 Packet of Size 10
C:\GitHub\Repositories\MulticastTest\out>
```

After execute MulticastSend program, on MulticastReceive program, you will get the following output

```
Microsoft Windows Server 2008 x64 DEBUG Build Environment - MulticastReceive.exe -a 224.0.0.1 -p 500

C:\GitHub\Repositories\MulticastTest\out\MulticastReceive.exe -a 224.0.0.1 -p 50

Multicat IP address: 224.0.0.1
Port: 5000

Waiting for data.. each 5 seconds received packet number will be reset to 0

RX: 0123456789
Received 5 Packet of Size 10

Received 0 Packet of Size 0
```

To stop MulticastRecive program, press CTRL+<C> on the command prompt screen

```
Multicat IP address: 224.0.0.1
Port: 5000
Auiting for data.. each 5 seconds received packet number will be reset to 0
8X: 0123456789
8X: 0123456789
8X: 0123456789
8X: 0123456789
Received 5 Packet of Size 10
Received 0 Packet of Size 0
Received 0 Packet of Size 0
C: GitHub\Repositories\MulticastTest\out>
```