

# IP NETWORK IMPAIRMENT:

SHOULD I USE FREEWARE PLATFORM OR A COMMERCIAL SOLUTION?

**FREEWARE PLATFORM**

**COMMERCIAL SOLUTION**

**NEED A WIDE RANGE OF IMPAIRMENTS?**

Just basics:  
Delay, jitter, drop,  
reorder are enough

**NO**

**YES**

Need controlled  
recovery testing.

Need to modify  
packet contents.

Need live network  
emulation, such as line  
breaks and traffic bursts

**HANDLING HIGH LINE RATES?**

Well below  
100Mbps

**NO**

**YES**

Over 100Mbps

Optical connectivity needed

High p/s (packet-per-second) rate

**NEED TIME ACCURACY?**

My tests are  
not time critical

**NO**

**YES**

Testing Telecom  
base stations

Network sync testing

Need to follow specific jitter  
profiles, etc from standards

**NEED TO FOCUS ON SPECIFIC USER FLOWS?**

It is OK to do the  
impairment on the  
whole traffic

**NO**

**YES**

Need to focus on  
specific flow(s) within  
the whole traffic

**IS TEST AUTOMATION NEEDED?**

Manual testing is OK

**NO**

**YES**

Automated  
testing is a must

The test is a part of a large  
testing framework

Remote access is needed

**NEED TO VALIDATE YOUR RESULTS TO YOUR CUSTOMER?**

Results are for internal  
evaluation purposes

**NO**

**YES**

Need comparable results that are  
independent from testing site.

I will need to be able to  
accurately duplicate any test.

**FREEWARE PLATFORM**

**COMMERCIAL SOLUTION**

If you hit the red circles even once, you'll need a commercial solution for the task at hand.  
Freeware and appliances both have their uses.  
For more info on IP impairment, contact us at [support@ruggedtooling.com](mailto:support@ruggedtooling.com)

**RUGGED** TOOLING