

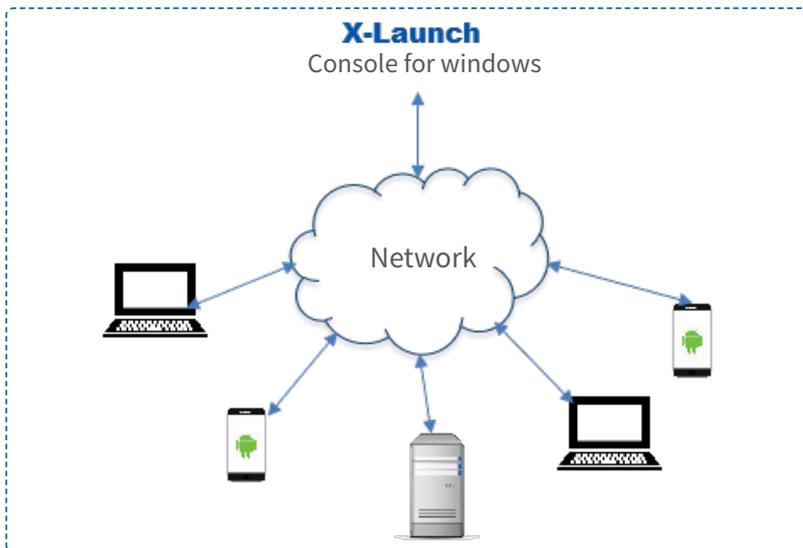
IP network performance test tool(X-Launch)

Introduction

The X-Launch tests the end-to-end performance of the network and the application quality of service by simulating real network traffic.

X-Launch supports comprehensive network performance evaluation and device test by simulating real application protocols on hundreds of endpoints

X-Launch can also evaluate the performance of wired or wireless networks; Support REST API to facilitate automated testing; Support PDF report and detailed test results; Support U-Key mode license.



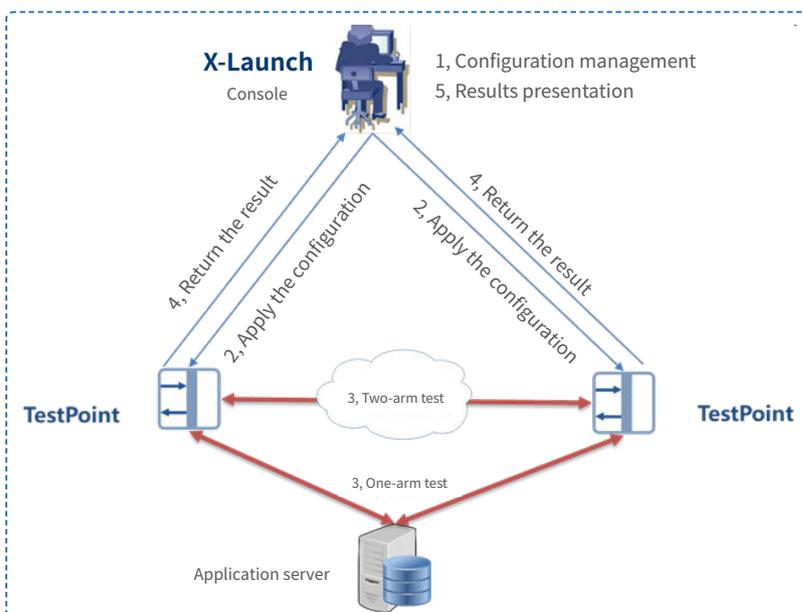
System

X-Launch consists of the control end(TestConsole) and the test endpoint(TestPoint):

- The X-Launch console software is installed in Windows 7/10(64 bit), CentOS or Ubuntu. PC requirement: 4-core CPU, 8 GB memory or above, and 150 GB hard disk or above
- The test endpoint supports Linux, Windows, Android, IOS, VxWorks.

Test process

After activation, the test endpoints proactively register with the X-Launch console. Then the users can configure test cases and parameters, which are applied to the test endpoints. The test endpoints conduct tests based on these configurations and return the results.



Protocol

Application	Protocol	Metric
TCP service	TCP_TP TCP_RR TCP_CRR	TCP connection establishment time, throughput, transaction rate, transaction time
UDP service	UDP_TP UDP_STREAM UDP_RR	One way delay, jitter, out-of order, throughput, transaction rate, transaction time
Internet data service	HTTP, FTP, POP3, SMTP	TCP connection establishment time, user login time, service response time, TTFB, TTLB, and application layer throughput
Voice service	VOICE	Session establishment time, call success ratio, R value, MOS
DNS service	DNS	Resolution response time
Video service	RTSP	Delay, jitter, packet loss ratio
ICMP	PING Trace route	Response time, loss rate

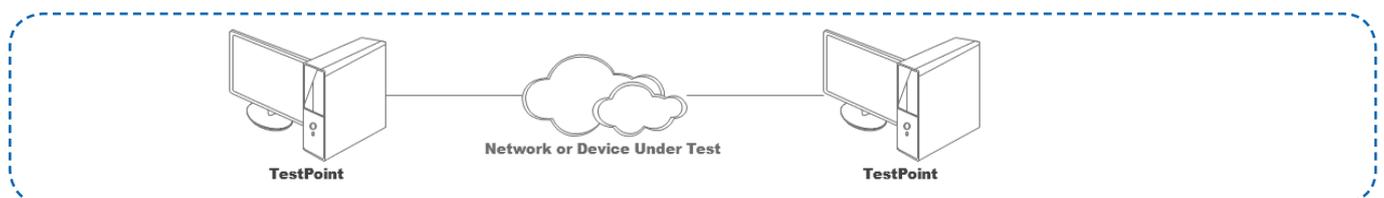
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Test topology

X-Launch supports two types of test: two-arm test and one-arm test.

Two-arm Test

Both sides of the NUT/DUT are X-Launch test endpoints, which generate real traffic between test endpoints to test the performance of NUT/DUT.



One-arm test

The test endpoint initiates an application session to test a real server (such as a website). In the test topology, one side acts as the test initiator, while the other side is the real server being tested.

