Keysight IxLoad for OSM Hackfest

Oliver Ferch & Ruben Gutierrez
Who is Keysight?
A Brief History of Keysight

1939–1998: Hewlett-Packard years
A company founded on electronic measurement innovation

1999–2013: Agilent Technologies years
Spun off from HP, Agilent became the World’s Premier Measurement Company
In September 2013, it announced the spinoff of its electronic measurement business

2014+: Keysight years
On November 1, Keysight became an independent company focused on the electronic measurement industry
Technology Innovation is Driving Perpetual Change
Keysight is accelerating innovation to connect and secure the world

**WIRELESS**
$3.6T 5G mobile value chain by 2035\(^1\)

**AUTOMOTIVE**
70% of new vehicles and trucks shipped will be connected by 2023\(^2\)

**QUANTUM**
Nations investing >$10B through 2024 for leadership\(^3\)

**NETWORKING / CLOUD**
Data center capacity expected to grow 4X by 2022\(^4\)

**IOT**
127 new IoT devices connected to the internet every second\(^5\)

**AEROSPACE / DEFENSE**
New satellite launches could grow 3X by 2025\(^6\)

---

\(^1\) Qualcomm 5G Economy. \(^2\) Statista March 2019. \(^3\) HSRC 2018. \(^4\) Various industry sources. \(^5\) McKinsey Global Institute 2017. \(^6\) MIT Technology Review.
OUR MISSION AT IXIA / Keysight

We challenge the infrastructure, harden security and visualize the applications

VISIBILITY
✓ Improve network and application visibility and performance

SECURITY
✓ Find and eliminate security vulnerabilities

TEST
✓ Validate network and security equipment performance and application Quality of Experience
Tool of choice: IxLoad
Introducing IxLoad

IxLoad provides converged multiplay service emulation to validate the **quality of experience** of real-time and business-critical application services.

Multiplay Service Delivery Over Wired & Wireless Networks

- Application Delivery
- Video Delivery
- Voice Delivery
- Security
- Storage
IxLoad GUI

Test controller
- Start
- Stop
- Graceful Stop

Navigation Panel
- Configuration
- Stats
- Analyzer ➔ Network Capture

Adaptative canvas
- It depends on Navigation panel

Log/Event viewer
Radius Configuration

How to check the configuration
FreeRadius → Radius stats
Asterisk ➔ VoIP Configuration

How to check the configuration
Asterisk → VoIP stats
How to check the configuration
VYOS → stats
How to check the configuration
OpenDNS → DNS stats
Something is wrong with IxLoad?

Contact Keysight guys:

- Ruben Gutierrez
- Oliver Ferch
Happy Testing!!
Questions?