IoT Load Tester

Emulate a city's worth of IoT devices!

OVERVIEW

The Valid8 Internet of Things (IoT) Load Tester provides an all-in-one, cost-effective solution for emulating and testing against large numbers of IoT devices.
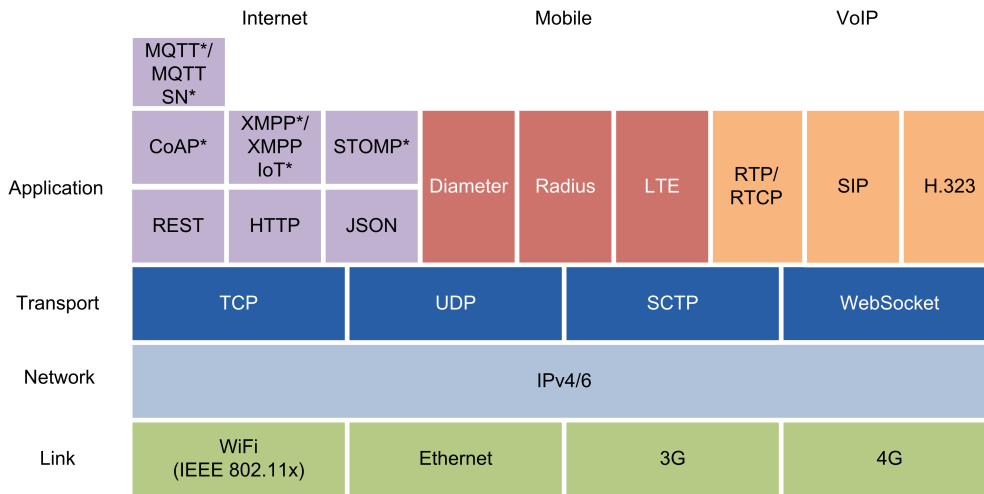
WHAT IT CAN DO FOR YOU

The Valid8 IoT Load Tester is a fully automatable solution that addresses the unique challenges brought by IoT testing by supporting a wide range of protocols, industries, and manufacturers.

WHY IT'S DIFFERENT

- Software-based solution can be run on high-end customer hardware/VM to achieve better performance, or in the Cloud (e.g. Amazon AWS) for maximum versatility
- Web-based Graphical User Interface provides the customer with intuitive, easy access via browser
- API's used (REST, HTTP) enable automated testing using test tools.
- Emulated nodes behave exactly as true real nodes, due to Finite State Machine architecture
- Testing is scalable across multiple cores and multiple systems

FEATURES

- Measure Key Performance Indicators (KPIs) such as number of simultaneous sessions
- HTTP, MQTT, COAP, SIP sessions
- Generate valid and invalid/negative messages and call-scenarios
- Supports sending invalid responses including malformed, dropped and misordered packets
- Alerts and notifications

	Internet			Mobile			VoIP		
	MQTT*/ MQTT SN*								
Application	CoAP*	XMPP*/ XMPP IoT*	STOMP*	Diameter	Radius	LTE	RTP/ RTCP	SIP	H.323
	REST	HTTP	JSON						
Transport	TCP			UDP		SCTP		WebSocket	
Network	IPv4/6								
Link	WiFi (IEEE 802.11x)			Ethernet		3G		4G	

* = Roadmap

SUBSYSTEMS

VALID8.com

KPIs

- Session Call Attempts
- Session Call Successes
- Session Call Failures
- Session Calls per second (CPS)

Configurable Parameters

- Mobile Country Code
- Mobile Network Code
- eNodeB Type
- IPAddresS1 Interface
- IP Address eNodeB
- Primary DNS Address
- Secondary DNS Adress
- MAC Address Public Gateway
- GTP Tunnel IP Address and Port
- GTP Tunnel eNodeB IP Address
- Integrity Algorithm
- IP Address to assign UEs on LAN

AUTOMATION API

User commands can be fully automated using REST API. This includes performing all test control functions as well as collecting results and metrics.

SCRIPTING

The application's subsystems can be edited directly in the browser using Javascript or by using the graphical tools seen below. The Message Workshop allows for creating of test scenarios directly from the hex stream of a remote capture, while the Graphical Editor allows for creating customized call scenarios by dragging and dropping the call flow to meet your test needs.

USE CASES

IOT GATEWAY UNDER TEST

For testing the IoT Gateway, the Valid8 Tester can generate MQTT,
COAP, HTTP, SIP calls to test performance and stability.

Supported Scenarios:

- MQTT
- COAP
- SIP
- HTTP
- other on request

SUMMARY OF SPECIFICATIONS

SPECIFICATIONS

Update in Progress

PRODUCT DETAILS

IOT Load Tester