

# Assure Quality of IoT Applications

Solution to test and validate IoT applications (simulating testing environment To validating IoT application flow)



Internet-of-Things (IoT) technology has seen widespread development and adoption in numerous applications and domains. With the rapid expansion of the IoT ecosystem, there is a need to ensure that IoT applications are continuously and thoroughly tested before deployment in the connected space.

## What is IoT Data Validator (IDV)?

IoT Data Validator is a testing tool that empowers the testers, to create and execute test scenarios, in a simulated environment, to validate the IoT applications behavior in accordance with the program specification. The tool also provides functionality to validate live devices (deployed in the field). Features in the tool, enables the team to improve the test coverage, reduce the testing cycle time plus efforts and accelerate the deployment of a quality IoT Application.



## Why customers use IDV

- Reduced overall testing cost by simulation / virtualization of device models
- Simulate Virtual devices to perform load and regression testing
- Enable faster time to market a quality assured IoT Application
- Validate Live Devices deployed in field (against the OEM Specifications)
- Curate and execute test scenarios to validate edge conditions (rare in live environment)
- UI driven interface provides shallow learning curve for the testers to master the tool

## Simulate Virtual Devices

- Template based approach for defining virtual devices
- Build Device definitions, message format
- Simulate volume, variety and velocity of data for various device models and messages

## Validations of IoT Application and Devices

- Build test cases for messages which are sent by virtual devices & validate application response
- Validating physical device against the OEM provided specs
- Record and playback messages from live devices

## Regression Testing

- Create test scenario groups to perform regression testing of new application builds
- Simulate millions of geographically dispersed concurrent device models and messages to test the application under huge loads