

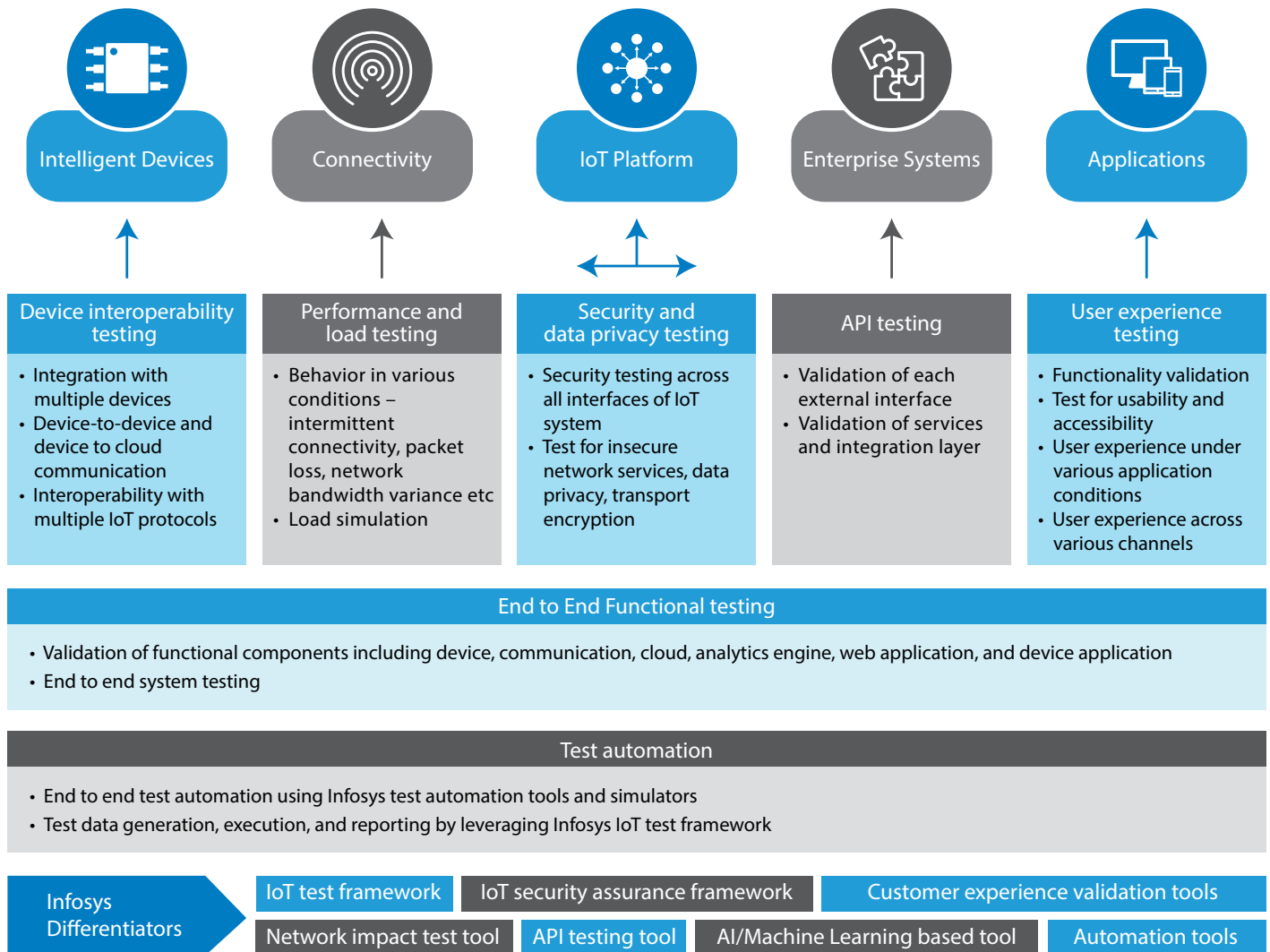
Infosys IoT Validation Services

End-to-end testing for better efficiencies under the avalanche of connected things.

Enterprises are building various connected and smart IoT applications to help improve efficiencies and deliver customer value across the full range of consumer and business to business scenarios. According to recent market reports, the number of connected 'things' is set to explode and expected to reach 25 billion by 2020. A typical IoT application constitutes multiple sub-systems and provides multiple usage. Considering the unique characteristic of IoT solutions, there is a need to define robust end-to-end validation strategy for testing IoT applications that will ensure higher stability, scalability, interoperability and provide rich user experience.

Infosys IoT Validation Solution

Infosys IoT validation solution enables end-to-end testing of IoT systems across multiple sub systems, devices, interfaces and applications.



Infosys differentiators for IoT testing

Infosys has various tools and solutions that can be leveraged to perform end to end testing of IoT solutions.

Infosys tool / solution	Description
Infosys IoT Test framework	Infosys IoT test framework is capable of real-time data simulation of various sensor & device data, supports data generation through pre-defined or customizable algorithms, and provides ability to recreate scenarios. Test framework is capable of simulating multiple devices sending data simultaneously to IoT platform and helps in performing load testing.
Infosys IoT security assurance framework	Infosys IoT security assurance framework helps in assessing vulnerabilities and security threats across device layer, gateway, back end enterprise components and application layers of the IoT system. It helps in assessing the security implementation of IoT system as per OWASP top10 risks
Infosys Network Impact testing tool	Enables testing of an IoT application against wide range of network conditions by allowing the user to emulate real user conditions
Infosys Customer Experience validation tools	Customer Experience Index –validates various aspects of customer experience – functional, performance, usability, security, accessibility and provides a unified score of perceived CX across web and mobile and Customer Sentiments Analytics –uses machine learning techniques to analyze customer feedback
Infosys API testing tool	This is a light-weight framework with a single interface which orchestrates the SOA/API testing activities helping to reduce the time it takes to plan and execute tests. This tool is highly customizable and can easily be enhanced to meet the evolving trends in the API world
Infosys Functional Automation tool	Accelerated automation framework for testing web and mobile applications, supports Responsive Web design, and provides 70% reusability of scripts across web and mobile
AI / Machine Learning based Testing Tool	This tool helps in optimizing the test cases based on the risk based assessment, past performance data and most probable cause of failure. Tool also helps in performing the requirements traceability and identify the gaps in test coverage

Benefits to Business

Infosys IoT validation solution helps our customers to Engage, Integrate and Accelerate their IoT solution deployments

- Engage - Best-in-class user experience across multiple channels (device, web, mobile) by leveraging Infosys Customer Experience and Analytics tools and design thinking methodologies
- Integrate - Provide an integrated approach to validate the functional and non-functional requirements of IoT solutions. Future-proofing of business through extensive interoperability, security and performance testing
- Accelerate - Faster time-to-market by leveraging early automation, Infosys automation tools and re-usable test scripts. Infosys AI Platform for testing to optimize testing and bring in efficiencies

Success Stories

- Tier1 Automotive OEM: Responsible for end to end testing of the telematics solution. Customized regression suite based on requirements resulting into effort savings and reduced time to market by 15%. Improved test productivity by 25% through usage of tools and creation of vehicle test data repository
- Tier1 IoT Platform Provider: Responsible for device interoperability testing for an IoT product. Setup a lab with 100+ devices and provided 40% TCO reduction within 1st year of operations. Helped client expand business in new geographies through customized test strategy for various regions - North America, Europe and APAC.

For more information, contact askus@infosys.com

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