



HCL ELECTRONIC DEVICE AUTOMATION TESTING (HCL eDATTM)

 $\mathsf{HCL}\ \mathsf{eDAT}^\mathsf{TM}$ is a Modular, Scalable, Extendable and Highly Customizable framework for automated testing of electronic devices. It enables test automation using black box approach through hardware and software interface accelerators.

BUSINESS CHALLENGES ADDRESSED

- In the present digital world, wide array of devices; enormous testing requirements
- Long time to market and high costs due to manual testing processes
- · Product revision related challenges; modifications induce side effects and hence instability
- Commercial test automation platforms that provide insufficient ROI

• GUI Testing

• Test departments are overburdened with the amount of testing required.

HCL eDAT™ Architecture & Key Features PC Environment PC Environment SRS IN PSEUDO FORMAT INPUT FOR SCRIPT USER INPUT INPUT SIMULATION AND SYSTEM CONFIGURATION OUTPUT VERIFICATION XML Script Execution in Test Application Tool Decides when to communicate with DUT/ eDAT and also similar for responses COTS + HCL Owned • ATCG, ATSG • Input Simulation Testing Vision based Testing Audio & Video Testing KEY • OCR - Optical Character Recognition • Imaging Algorithms • Interfaces supported - BT, USB, Wi-Fi, • Robotic Arm based Non-intrusive **FEATURES** Ethernet, CAN **Testing** Touch Screen Testing Multi platform Testing

Remote Testing

WHY HCL eDAT™ SOLUTION?







SAMPLE HCL eDAT™ SETUP SCREENSHOTS

- HCL eDAT[™] delivers high coverage (~ 50-60%) while enabling faster time to market.
- Reduces testing costs, time-to-market, and defect leakage.
- Customized to fit to your specific environment and test requirements.
- Ensures optimal return on investment as one HCL eDAT[™] setup supports multiple devices-under-test (DUTs).
- Offers objective testing evidence in Reports and Pinpoints defects, thereby allowing faster troubleshooting.

PROOF POINTS



- Automated testing of photocopier application for a leading Japanese Technology Company.
- Built Modular test Setup to simulate input and capture images from the device application.
- Reduced testing costs by 36% and testing cycle times by 80%.



- Testing of Online Video app for leading ISV.
- Leveraged Image Comparison to capture text from display images for testing.
- Reduced testing costs by 47% and testing cycle times by 80%.



- Automated testing of shower control unit for leading French Aerospace Company.
- Simulated shower control inputs for testing.
- Reduced testing costs by 47% and testing cycle times by 68%.



- Point Of Care Device Automated Localization Testing for a Leading Health Care Company.
- Single setup to test multiple language GUI with 85% UI string coverage.
- Reduced testing costs 45% and testing cycle times by 47%.



Hello, I'm from HCL's Engineering and R&D Services. We enable technology led organizations to go to market with innovative products and solutions. We partner with our customers in building world class products and creating associated solution delivery ecosystems to help bring market leadership. We develop engineering products, solutions and platforms across Aerospace and Defense, Automotive, Consumer Electronics, Software, Online, Industrial Manufacturing, Medical Devices, Networking & Telecom, Office Automation, Semiconductor and Servers & Storage for our customers.

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