





Are your connected devices truly secure?

HCL's Device Security solutions for completely secure products and devices you can take to market now

As devices become smart and increasingly connected to the internet, they are becoming more vulnerable to cyber-attacks. To handle this situation, organizations need to transform their security implementation strategies for connected devices and bring together participants from within the ecosystem to embed security at every stage of device development.

HCL Device Security addresses this challenge and the end-to-end device security needs of organizations by leveraging its deep security engineering expertise, tools, engineering processes, and solutions that are needed to provide security at every stage of the device development life cycle.

HCL's device security expertise spans silicon, firmware, OS, communication, and embedded applications to help organizations embed the right layers of security in connected devices.

HCL Device Security service offerings



HCL is helping many Fortune 500 organizations embed security throughout their device development life cycle:



Security Consulting

Our customers consult us on ensuring device security across all the stages of the device development life cycle, right from the assessment stage to the design and testing of connected devices.



Regulation-Ready Device

Industries such as security risk assessment and threat modeling, design and implementation of security controls, static code analysis, and pen testing, to name a few. Our customers from these industries chose HCL for its mature device security engineering services to ensure that their devices comply with the latest industry-specific security standards.



Security Engineering/ Implementation

We provide a comprehensive set of security engineering services such as security risk assessment and threat modeling, design and implementation of security controls, static code analysis, and pen testing, to name a few.

We have deep expertise and experience to offer security engineering services to all the major industry verticals' devices, some of the verticals listed below:



Connected Vehicles



Medical Devices



Connected Industrial Products



Aerospace



Smart Home and Entertainment



Office Automation

HCL Device Security expertise you can count on



HCL's deep technology expertise addresses all the layers of device security:

- Hardware-based enablers for security (Trusted Execution Environment, TPM, Crypto Processor, etc.)
- 2 Security of bootloader and OS
- 3 Security of communication interfaces (Wi-Fi, BT, Serial, Zigbee, TCP/IP, CAN, etc.)
- 4 Embedded application security (Authentication, authorization, application data security, etc.).

We help our global customers achieve full compliance to security standards such as **NIST 800-53**, **IEC 62443**, **and WP.29**.

HCL Device Security success stories

A Germany-based Fortune 500 global medical device manufacturer needed to upgrade the security features of its existing medical device products. HCL performed a detailed security assessment of the device and defined security requirements considering compliance to required security standards. HCL helped in meeting the security requirements by designing, implementing, and testing the required security controls. This benefited the client significantly as it increased the life of the product in the market.

Security upgrade for an existing medical device

Security design and implementation for an industrial device

A U.S.-based Fortune 500 global industrial manufacturing client wanted to embed security into the design of a new, resource-constrained industrial device. HCL helped in the selection of product components (e.g., microcontroller) considering security features. HCL helped in implementing security features to ensure confidentiality and integrity of device data, compliance to the CERT C coding standard, and aligned to the IEC 62443 standard.





EXPERIENCE

We have the technical skills and experience to ensure complete device security, having worked on security product development for many of the world's leading security companies, while also supporting security-by-design for many Fortune 500 companies.



EXPERTISE

Our expertise extends to all layers of a device's security— hardware, firmware, OS, communication, and embedded applications



PARTNERSHIPS

Our customers benefit from our strategic relationships with partners across the ecosystem. These partnerships give HCL access to innovative security solutions and IPs, and access to world-leading security evaluation tools. Our partnerships with leading players in the ecosystem ensure that our clients get cutting-edge tools and technologies to ensure the security of their devices.



TOOLS ASSETS AND ACCELERATORS

- An industry-leading tool, AppScan, to help our customers with accurate and reliable static and dynamic application security testing.
- Safe, reliable, and reusable source code components that help our clients quickly implement key security features and reduce time-to-market.
- A ready-to-use repository of typical device vulnerabilities, threats, remediations for speeding up the security assessment and secure design of devices.





HCL Technologies (HCL) empowers global enterprises with technology for the next decade today. HCL's Mode 1-2-3 strategy, through its deep-domain industry expertise, customer-centricity and entrepreneurial culture of ideapreneurship™ enables businesses to transform into next-gen enterprises.

HCL offers its services and products through three lines of business - IT and Business Services (ITBS), Engineering and R&D Services (ERS), and Products & Platforms (P&P). ITBS enables global enterprises to transform their businesses through offerings in areas of Applications, Infrastructure, Digital Process Operations, and next generation digital transformation solutions. ERS offers engineering services and solution in all aspects of product development and platform engineering while under P&P HCL provides modernized software products to global clients for their technology and industry specific requirements. Through its cutting-edge co-innovation labs, global delivery capabilities, and broad global network, HCL delivers holistic services in various industry verticals, categorized under Financial Services, Manufacturing, Technology & Services, Telecom & Media, Retail & CPG, Life Sciences, and Healthcare and Public Services.

As a leading global technology company, HCL takes pride in its diversity, social responsibility, sustainability, and education initiatives. As of March 31, 2021, HCL Enterprise generates annual revenues of US\$ 10.1 billion and has 169,000 employees operating out of 50 countries.

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