

A black and white photograph of an adult elephant and a smaller calf standing in a savanna landscape under a cloudy sky. The bottom portion of the image is overlaid with a red gradient that transitions into the white background of the text below.

# CYBERSECURITY SERVICES FOR THE HEALTHCARE INDUSTRY

CENSUS offers a set of services to cover the cybersecurity needs of medical product vendors and healthcare institutions. These services can be acquired individually or through service bundles such as the Secure SDLC.

## **DESIGN LEVEL SECURITY REVIEW**

Unleash the full potential of the “Security by Design” paradigm through Design Level Security Reviews. These reviews allow for the earliest possible identification and mitigation of security issues, as they examine the product’s design elements before these materialize into system components. Information about the design elements is drawn from the available product documentation (e.g. hardware design, software design, network architecture or use case scenario documents). The deliverables of the service are technical documents that guide developers through the secure implementation of the desired features. When significant changes in the product architecture are required, multiple strategies are evaluated and proposed. Design level reviews have allowed vendors to build solid products from the ground up, taking into consideration the current best practices in secure systems development.

## **SOURCE CODE AUDITING**

Interested in quality releases? Source Code Audits remain the single, most effective method for identifying security vulnerabilities in the software and firmware implementations of products. Through line-by-line manual code review and functional security testing, CENSUS experts aim to identify all security vulnerabilities in the product code. The resulting reports come with a rich analysis that aids developers in understanding the origin of each issue, its context and impact, as well as the steps that need to be taken for remediation.

## APPLICATION SECURITY TESTING

Application Security Tests are “black box” security assessments for software, where CENSUS experts attempt to identify as many security issues as possible without having access to the software’s source code. They are well suited for healthcare institutions that wish to examine a certain software prior to its adoption, but also for vendors that wish to test a software product for critical issues without sharing the source code (or in a time-limited manner). Application Security Tests are carried out manually with the help of specialized tools (e.g. dynamic analysis and instrumentation tools) and can be performed for all types of software including Web Applications, Mobile Applications, Desktop Applications, Operating System components and firmware.

## DEVICE SECURITY TESTING

CENSUS is renowned for its Device Security Testing services, with Mayo Clinic enlisting CENSUS in 2017 as a Recommended Assessor. Through Device Security Testing, both vendors and medical institutions can test in a holistic manner the security of medical devices. Such testing includes device hardware, product enclosure, device communications, device input / output, device software and firmware.

## PENETRATION TESTING

The installation of smart medical devices and medical information systems comes with cybersecurity risks for healthcare institutions. Through Penetration Testing services CENSUS identifies ways that attackers may abuse policy, configuration, integration or implementation issues in the aforementioned systems, to achieve their malicious goals.

## COMPLIANCE

Medical devices and information systems come with strict compliance requirements. Pre-market and post-market provisions require from vendors to run and document specific cybersecurity procedures. CENSUS prepares security documentation (e.g. Threat Models, Risk Assessments etc.) to help meet the technical requirements of international markets.

## SECURITY TRAINING

From staff security awareness training to secure development training, CENSUS offers training courses that help healthcare organizations protect their operation from current cybersecurity risks and allows development teams to create products that follow security best practices.

## SECURE SDLC

Interested in an efficient and cost-effective way to release quality products, whose security properties can be attested by CENSUS? The Secure SDLC service enables product vendors to follow a secure development methodology for each product release, with CENSUS covering all product security tasks including training, consulting, security assessments and the generation of product security documentation.

## STAFF AUGMENTATION

Empower security teams with the experience and expertise of CENSUS. Through Staff Augmentation services, CENSUS lends its talent to security teams of medical institutions and product vendors around the world, enabling these teams to meet their security goals.



[www.census-labs.com](http://www.census-labs.com)

**USA**  
607 Boylston Street,  
Suite 165L, Boston, MA 02116  
T. +1 617-448-5050  
E. [usa@census-labs.com](mailto:usa@census-labs.com)

**EUROPE**  
128, Leoforos Andrea Syggrou,  
11745, Athens, Greece  
T. +30 210 220 8989-90  
E. [eu@census-labs.com](mailto:eu@census-labs.com)

**UK**  
4th floor, The Pinnacle,  
Station Way, Crawley RH10 1JH  
T. +44 (0) 1293 763 336  
E. [uk@census-labs.com](mailto:uk@census-labs.com)