

VA ENTERPRISE DESIGN PATTERNS PRIVACY AND SECURITY MEDICAL DEVICE SECURITY



Office of Technology Strategies (TS)
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EXECUTIVE SUMMARY

Scope

A Medical Device Security Model sets standards for how network connected devices are assessed and integrated into the Department of Veterans Affairs (VA) enterprise to maintain integrity for the sake of patient safety. This enterprise design pattern (EDP) includes: a review of the areas of information technology (IT) risk for new medical devices; strategies for connecting medical devices to the enterprise network; strategies for ongoing risk management of medical devices with longer lifetimes than other network devices.

Business Need

VA has been cited by the VA Office of Inspector General (OIG) for deficiencies in the Medical Device Protection Program (MDPP). VA Chief Information Officer (CIO) has set a goal to resolve the Material Weakness by 2017. As VA continues to see cyber security incidents affecting medical devices, establishing guidance for medical device security will help stake-holders to understand: what security requirements to consider when procuring new devices; how to properly protect medical devices at the moment they are plugged into the net-work; how to quickly identify and prioritize medical devices to enable risk management that considers both security and patient risks; how to monitor and manage medical devices.

Approach

The Medical Device Security EDP defines an enterprise medical device security model that addresses all phases of the medical device lifecycle. It starts with the assessment of medical devices procured, continues with the protection and risk management of devices on the

network, and concludes with the disposal of the device. This model will help stakeholders meet VA security requirements for medical devices and avoid integrity and availability issues due to compromise. VA must scale the design of the future medical device security approach to meet VA needs.

Enterprise Design Patterns (EDPs) are developed by TS in coordination with internal and external subject matter experts and stakeholders. An EDP is a reusable capability guidance document that identifies best practice approaches and resources for achieving VA IT strategic objectives. The EDP Team uses industry trends and innovations; enterprise architectural standards; and guiding principles for capabilities and constraints to improve efficiency and effectiveness and define solutions to reoccurring technical problems. The EDP helps guide the design of IT systems and services by VA project teams.