

# More Secure Medical Devices using Advantech Platforms with Timesys Vigiles

## Reduce Risk with RISC with Vulnerability Monitoring & Management for Medical Devices

Medical device security is critical. A successful cybersecurity attack can put patients at risk, compromise health care outcomes and violate privacy laws.

With more than 20 years of embedded system development and maintenance experience, Timesys has captured the industry's best practices for embedded system security. Our tools and services enable medical device manufacturers to streamline development and maintenance of secure products.

Timesys Vigiles is the industry's only vulnerability tracking and security maintenance service optimized for embedded systems. Your products will be more secure at release and stay secure throughout the lifecycle.

### Faster Time-to-Market with More Secure Medical Products Using Superior Vulnerability Data

Gone are the days when you could freeze your software at release and never touch it again. Device connectivity is now the norm, and hundreds of new vulnerabilities are uncovered every week, putting devices and customers at risk of compromise.

Vigiles continuously monitors multiple vulnerability feeds including the National Vulnerability Database (NVD) for better coverage across all vulnerabilities affecting your products and automatically sifts through the noise to flag only those issues that affect your products. Our curated service provides a 40% accuracy improvement over NVD data alone. Now your team wastes less time chasing "Vulnerability Ghosts" and false positives.

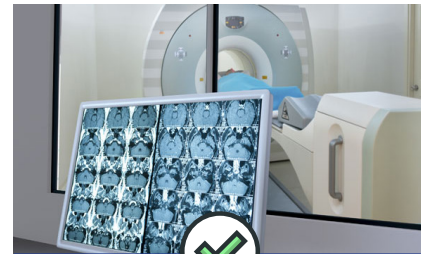
Vigiles also features expedited notification of newly reported vulnerabilities before they appear in the NVD. You have a critical head start in addressing vulnerabilities before they hit the news.

Now your software incorporates the latest, most secure versions of Linux and other open source software components, including updates and patches. Linux kernel configuration and U-Boot configuration tracking filters out vulnerabilities that affect features not used in your product. On average this reduces the vulnerability triage burden by a factor of 4X.

### Boost Compliance with FDA Guidance & Standards

IEC 62304 requires medical device makers to ensure security of third-party software used in medical devices, such as Linux and open source packages. FDA medical device security guidance mirrors these requirements. Vigiles provides simple-to-use tools to streamline security maintenance and boost compliance with these security requirements:

- Security integration with design tools and workflows, including Yocto
- Accurate, continuous vulnerability reporting based on your actual documented system configurations and Software Bill of Materials (SBOM)
- Streamlined security issue investigation, triage, and mitigation
- Timely notification of third-party software updates and patches correlated to identified vulnerabilities
- Reports enabling you to document security maintenance, aligning with FDA premarket guidance for products in development and postmarket guidance for released products



- Industry's only SCA tools optimized for embedded open source, including Yocto, Buildroot, and Timesys Factory Linux, and open source package monitoring
- On-demand vulnerability monitoring and simple security maintenance for more secure medical device products
- Boosts security standard compliance: IEC 62304, FDA Premarket and Postmarket Security Guidance
- Filter, triage, investigate and mitigate vulnerabilities based on your exact SBOM
- Most accurate vulnerability tracking for embedded systems for fewer false positives
- Advance notice on vulnerabilities before general industry notifications
- Get started now for free

## Secure by Design

In addition, Timesys also offers proven, expert guidance on Secure by Design best practices including secure boot and encrypted data storage. Even if your medical device is not handling patient data directly, Timesys solutions cut the chance that a breach would put other systems at risk. Our solutions help your customers avoid privacy breaches of Protected Health Information (PHI) of the sort protected under HIPAA and other regulations.

## Accelerate and simplify secure medical device, embedded system product development and maintenance

Vigiles reduces work cycles spent analyzing and addressing vulnerabilities by 90 percent or more.

Vigiles is available in three versions including Vigiles Basic, a completely free version that enables you to start vulnerability monitoring of your product SBOM today. More advanced commercially supported versions of Vigiles include patch monitoring, suggested mitigations for vulnerabilities, collaboration features helpful to distributed software engineering and product security teams, and advanced vulnerability triage tools.

Learn more at: <https://www.timesys.com/security/vigiles-vulnerability-management-patch-monitoring/>



### Get Started Now with Vigiles for Free with select Advantech Arm/RISC Platforms

Timesys' Vigiles service encompasses the extensive i.MX applications processor families. Customers engaging in i.MX processor-based projects have access to Timesys' Vigiles Security Vulnerability Monitoring & Management service and can receive three months free of charge for Vigiles Prime, the top tier of the Vigiles security monitoring service.

The service enables product developers to ensure their products stay secure in today's heightened security breach environment by automatically monitoring and identifying vulnerabilities in open source software components and Yocto Linux BSPs.

To start your complimentary Vigiles Prime 90-day evaluation, visit [timesys.com/medical-advantech/](https://www.timesys.com/medical-advantech/)

## Timesys Vigiles is available for these Advantech Arm/RISC Platforms



### ROM-7720

NXP i.MX8 QuadMax Qseven 2.1 Computer-on-Module



### ROM-5720

NXP Arm® Cortex®-A53 i.MX 8M SMARC2.0 Module



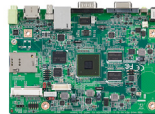
### RSB-6410

Mini-ITX Motherboard with NXP Arm® Cortex®-A9 i.MX6D Dual Core



### RSB-4411

NXP Arm® Cortex®-A9 i.MX6 Quad Core 3.5" Single Board Computer



### RSB-4410

NXP Arm® Cortex®-A9 i.MX6 Dual Core 3.5" Single Board Computer



### RSB-3410

Circuit Board with NXP Arm® Cortex®-A9 i.MX6 Dual Lite



### EPC-R6410

Computer System with NXP Arm® Cortex®-A9 i.MX6 Dual/Quad



### UBC-DS31

2 Display NXP Arm® Cortex®-A9 i.MX6 HD Digital Signage Player



### UBC-220

2 Display NXP Arm® Cortex®-A9 i.MX6 HD Digital Signage Player

The bundled offers are available from Advantech resellers and online ordering system. **To extend the bundled offering and optionally purchase a subscription to Timesys' Vigiles Prime Security Monitoring & Management Service, contact Advantech or Timesys sales.**



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