Global Bio-Tech Company Saves $2.6M & Reduces Downtime by 90%

FACTS AT A GLANCE

Industry
BioTech (Genetic Testing & Digital Health)

Solution
AidenCore
AidenBot
AidenLabs

Benefits
• Streamline Software Packaging Processes
• Dramatic Time Savings
• Improve Cyber Hygiene
• Reduce Risk
• Enhance Compliance

Background

Downtime is a costly issue for any business, and for companies in biotech and healthcare, that cost can also be counted in human lives. But minimizing downtime is incredibly challenging as fixing issues requires compliance with numerous HIPAA, HITRUST, and FDA regulatory obligations. At this leading biotech firm that performs genetic testing to diagnose more patients correctly, earlier, and bring therapies to market faster, downtime to address software vulnerabilities or lab equipment failures could mean delaying the processing and production of vital patient test results impacting patients, revenue, and growth.

One of the primary regulatory obligations this Biotech company faced was maintaining strict access controls. Simply building patches and providing software packages for their genetic health screening lab environment required coordination between three teams—the developers who develop and maintain software for the data handling processes, IT technicians, and Lab Operations personnel. Since addressing any issues with lab equipment—including patching software vulnerabilities or addressing computer hardware-related system failures—is typically a high-touch, manual effort while physically in front of an affected system, the time it took to sync up schedules and obtain regulatory approval for the certified Software Bill of Materials (SBOM) meant that issues that arose in the environment typically required around two weeks or more to prepare and deploy.

Any downtime in our lab environment has significant impacts on revenue and operations costs related to recovery and remediation efforts. For every hour of downtime, we experience a reduction in production capacity with a direct bottom-line impact.

– Chief Information Security Officer, Biotech Company

The company's specialty lab equipment was exacerbating the risk of downtime. Much of the hardware in their environment is associated with lab equipment that uses specific versions of software deployed on older versions of Microsoft Windows. These older software versions are susceptible to the proliferation of malware and hardware-related system failures, often leading to configuration drift.

Specialty lab equipment continues to run older versions of Windows operating systems because of the long lead time to obtain FDA certification and regulatory approval for the use of medical devices. The company needed to get a complete picture of what specific versions of the software were required for each system in the environment and what associated security controls and system configurations needed to be enforced on those systems, which would require significant coordination between its many teams since much of this knowledge was tribal in nature and not documented in detail.

This was particularly urgent as the company has experienced massive growth over the past two years, nearly doubling in size. To scale for the anticipated exponential growth in testing volume, a new approach was needed to reduce the time required to recover from system failures and deploy patches for critical security vulnerabilities within the lab environment.

Aiden Intelligent Software Package Contents
Aiden Operationalizes Automated Installation and Configuration Management

The biotech company turned to Aiden to quickly plan and implement a solution that minimized the downtime associated with maintaining lab equipment while adhering to its strict regulatory compliance standards.

During the discovery phase, Aiden interviewed each team to understand the software they were responsible for installing and configuring. Then Aiden worked with each team to validate the configurations for each system and test the automated installation and configuration management process to obtain sign-off that Aiden's automation process achieved the desired and well-documented result.

Once each team validated the build process, the process was moved into full production in the lab for final acceptance and confirmation before becoming fully operationalized. Because this environment required detailed knowledge about a diverse set of systems, each with its secure configuration profile and set of installed software requirements, multiple system profiles

needed to be created to map to each system's business function within the system architecture design and production workflow.

See the Results of Hyperautomation

90%
Reduction in production downtime

$2.6M
in cost savings and revenue improvements per occurrence

37%
Increase in processing volumes

Streamlining with Intelligent Software Packaging

While a significant effort was invested during the system discovery phase, the benefits of using Aiden's automation solution have streamlined the entire process and vastly reduced the complexity of maintaining diverse systems in the lab environment.

Through Aiden's automation, production downtime impacts were reduced by 90%, resulting in cost savings and revenue improvements of over $2.6 million per occurrence.

– Chief Information Security Officer, Biotech Company

Hyperautomation Eliminates Critical Security Vulnerabilities

Aiden automated keeping the Windows OS and the installed applications fully compliant with approved software versions and all required security patches to reduce the risk of exploitable vulnerabilities.

With continuous patching and security configuration enforcement, the lab environment has eliminated unplanned downtime remediation due to emergency patching.

– Chief Information Security Officer, Biotech Company

Productivity Skyrockets Enabling Further Growth

By implementing Aiden, the company was able to keep critical systems in the production lab secure and up to date, which resulted in increased uptime and improved reliability of lab systems. This increased stability in lab processing operations also resulted in greater scalability and an increased sample processing volume.

Through the use of Aiden's automation, overall processing volumes have increased by 37%.

– Chief Information Security Officer, Biotech Company

WITH AIDEN, NOW YOU CAN . . .

…rebuild hardware anywhere, at any time…

Automate Windows Autopilot & provide an out-of-box experience with no extra work
Rebuild based on travel or employee status
Respond to ransomware with a clean new installation
Breathe new life into old machines

…get more out of software deployments…

Fully support WFA
Seamlessly swap out security tools
Effortlessly migrate to a new Windows OS
Finally package Microsoft store apps

…provision cloud environments in minutes…

Disaster recovery
Disposable environments
Temporary migrations
Isolation and containment