

# A SEAMLESS .NET LAB SOFTWARE UPDATE INTEGRATION SOLUTION FOR A NATIONWIDE LABORATORY TESTING ORGANIZATION

## ORGANIZATION

The client is a healthcare technology provider specializing in innovative tools for monitoring patients and clients across behavioral health, chronic pain, and criminal justice programs. Operating nationwide, they offer industry-leading laboratory testing and adherence monitoring solutions to improve outcomes and effectively manage substance use disorder, mental health, chronic pain, and criminal justice initiatives. Their unique drug testing programs provide actionable data, enhancing clinician protection and driving more effective interventions for better patient and client outcomes.

## CHALLENGE

The client's existing software faced challenges due to outdated technology and lack of user-friendly features. Their Perl-based system required modernization, including dynamic text fields for scanned lab documents, UI enhancements, and database updates. They sought XTIVIA's expertise to revamp their software, enabling efficient lab operations and improved user experience.

## TECHNICAL SOLUTION

XTIVIA implemented a comprehensive solution to address the client's needs. Leveraging the MVC framework with C#/ASP.NET, the team redesigned the software architecture for scalability and flexibility. They integrated WinForms for document scanning, optimizing performance and compatibility. Through collaborative daily standup meetings and live demos, XTIVIA ensured continuous communication and client feedback integration. The implementation of custom "hot" keys enhanced user interaction, facilitating mouse-free navigation. Integration of DevExpress library provided robust form field validations, enhancing data accuracy and reliability. The solution emphasized extensibility and reusability, ensuring long-term viability.

## BUSINESS RESULT

The client successfully adopted the updated software, experiencing significant improvements in lab operations efficiency and user satisfaction. With streamlined document scanning, enhanced UI, and improved data validation, they achieved higher accuracy in lab test results processing. The solution enabled smoother workflows, contributing to improved customer service and operational excellence. Through XTIVIA's partnership, the client transformed their laboratory testing operations, positioning themselves for continued success in the healthcare industry.

### KEYWORDS

MVC framework, C#, ASP.NET, WinForm DevExpress, document scanning, user experience enhancement

### SOFTWARE

C#, ASP.NET, DevExpress

## ABOUT XTIVIA

XTIVIA is a proven technology integration and innovation company known for delivering leading-edge technology solutions to our clients' specific requirements, regardless of project complexity. We bring next-level business operations to reality through Application Development, Business Intelligence, Data Warehousing, Database Support & Management, Enterprise Information Management, Digital Experience Solutions, and Enterprise Resource Planning. Our success stems from a demonstrated ability to deliver deep expertise via professional services, empowering clients to leverage their chosen technology successfully, competitively, and profitably. XTIVIA has offices in Colorado, New York, New Jersey, Missouri, Texas, Virginia, and India. [www.xtivia.com](http://www.xtivia.com)