VB6 Migration & Web Enabling by fecher

Empowering Police Professional Standards through Software Modernization

fecher's Web-Enabling project revitalizes Harris' Centurion software, attracting new clients and empowering developers

In the world of law enforcement, where efficiency and accuracy are paramount, Centurion stands as a beacon of reliability. Owned by Harris–a leading provider of mission-critical software solutions for the Public Sector, Healthcare, Utilities, and Private Sector verticals across North America, Europe, Asia, and Australia–Centurion is a powerful tool for case recording, management, and process control of Police Professional Standards data. Trusted by several thousand users in police forces throughout the UK, this software has a rich history that spans decades. Originally developed in Clarion in the late 70s, Centurion has weathered the test of time, going through successful migrations to VB3 in the 80s, and subsequent updates to VB4, VB5, and VB6. However, with VB6 no longer receiving support, the necessity for a crucial transition to the modern .NET framework emerged. Thanks to a combined VB6 migration and Web-Enabling project by fecher, Centurion now stands ready to embrace the challenges of the present, empowering law enforcement agencies to carry out their duties with utmost efficiency and effectiveness.

"Embracing the 2020s, VB6 proved to be a significant constraint," reminisces Craig Edwards, Operations Manager at Harris. "The challenges of deploying the software on premise grew increasingly arduous, and the absence of a viable migration path to a browser app added to our concerns. Regrettably, we also experienced the departure of some of our finest developers, as they sought modern technologies over the limitations of outdated ones." In response to these hurdles, Harris' management devised an ambitious strategy: to embark on the complete rewrite of Centurion as a cutting-edge, web-based .NET project.

When the new owners of the company took over in late 2019, a decision was made by Edwards and senior Harris management to approach the modernization of the Centurion application by way of migration using fecher. Matthew Keelagher, a former employee, mentioned this company to

Edwards when chatting about rejoining the team. The tool-based software migration approach by fecher intrigued the team with its potential to reduce both time and risk of the software modernization. Impressed by the idea, Keelagher offered to rejoin the team and spearhead the migration project.

A new approach that works

Edwards can't help but laugh as he recalls the fortuitous turn of events. "Truly, this was a stroke of luck for us," he remarks, acknowledging how Keelagher's expertise and willingness to lead the migration project breathed new life into the venture.

"fecher has a lot of automated tools that could do a large portion of the code migration consistently in a short time," elucidates Keelagher, emphasizing the key advantage of the chosen migration method. As there had been a successful migration project by fecher in another Harris company, where fecher transformed Harris Local Government's ERP solution from Visual Basic into a modern browser-based application, the decision for this project endeavour was an easy one. "Of course, rewriting from scratch may potentially be more ideal if you can afford the time and money, but sometimes you

just have to go with the pragmatic approach," Keelagher concludes.

In a half day presentation, the fecher team outlined their offerings and potential additional features, like a system tray object for word documents, which intrigued Harris. fecher then provided a tool to assess the application, gauging the number of lines of code, objects, subroutines, and potential issues. This comprehensive analysis enabled the team to precisely understand the scope of the project and what to expect.

The project takes off

The contractual aspects were discussed in a couple of Teams meetings between Harris' Executive Vice President, Kerry Lynn, and fecher's Managing Director, Günter Hofmann. fecher's offer, a fixed cost agreement based on the provided numbers, appeared to meet Harris' requirements, making it the ideal choice for the project. Alongside cost considerations, the timeframe was of utmost importance, with the migration estimated to span approximately 12 months. Negotiations progressed swiftly, leading to a mutually agreeable contract.

In February 2022, the project finally took off. "The interaction between our team and fecher throughout the project was exceptional," Keelagher emphasises. "We maintained a weekly meeting where we could openly discuss all our needs and concerns, facilitating a smooth collaboration. Whenever we encountered issues or felt that certain aspects needed improvement, we could raise them during these meetings, and the fecher team was highly responsive in addressing them promptly."

One standout aspect was fecher's ability to propose alternative solutions for specific functionality

challenges. When Harris presented a requirement, the fecher team showcased their previous implementations and offered to tailor those solutions to closely meet Harris' needs. Keelagher describes, "This approach not only saved time but also ensured that we received solutions aligned with our preferences."

A notable example involved a spell checker functionality that initially did not work as expected with one of the objects. The fecher team resolved this in direct communication with the original software owners to implement a solution, ensuring the spell checker functioned seamlessly within the application. fecher displayed their dedication to offering a polished and user-friendly experience by addressing these seemingly minor adjustments, even though they could be time-consuming.

Rigorous testing and customized pilots

"Overall, the strong collaboration between our team and fecher, along with their dedication to resolving challenges and integrating third-party components, significantly contributed to the project's success," Operations Manager Edwards adds. "Their willingness to go the extra mile and their proficiency in offering tailored solutions exemplify their commitment to delivering a high-quality product that aligns with our requirements and legacy expectations."

However, when the ported code returned from fecher, a comprehensive and rigorous testing process ensued. The testing efforts were a collaborative endeavour within the Harris team, with Keelagher spearheading the communication between the team and fecher, addressing any identified issues. "To be honest," Keelagher reveals, "there were instances when the project stretched our testing capabilities to the limit, as we diligently sought to

provide valuable feedback and pinpoint any faults to fecher."

In spring 2023, testing was finally completed, and Harris invited various customers to participate in a pilot program. The concept was to have a separate copy of their live database in a secure test environment. This pilot phase allowed them to gather valuable feedback and identify any potential issues before proceeding to the user acceptance testing phase and finally deploying the product to live systems.
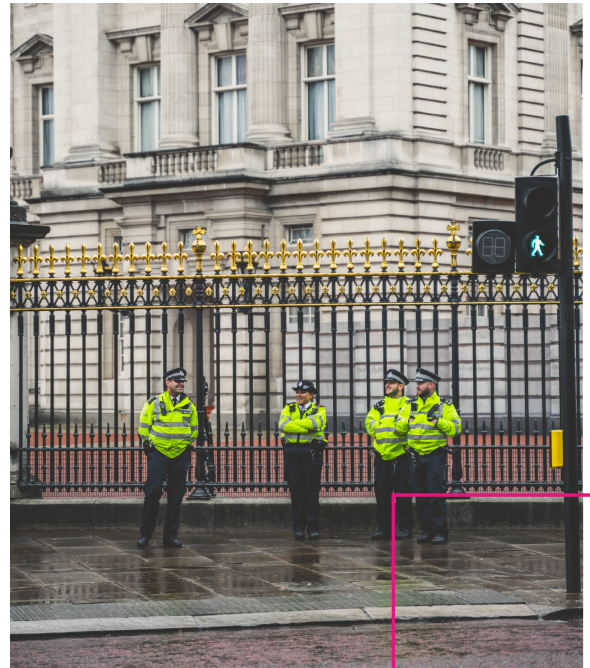
By meticulously testing and validating the product in different force environments, Harris aims to ensure a successful and seamless transition to the modern web-based solution. However, before adopting the new platform, each force will conduct its own pilot to assess its unique security requirements and operational needs, ensuring a smooth and customized migration process for all.

fecher.

It's results that matter

Reflecting on the successful project, Edwards highlights three significant advantages that have had a profound impact on Harris. First and foremost, the migration from the legacy product marks a significant achievement. Harris has successfully stepped away from the constraints of the outdated system, embracing a modern and forward-looking approach that positions them for growth and innovation. Equally important is the perception it creates for their customers. By transitioning to a modern environment, Harris instills confidence and assurance in their clientele. This enhanced perception fosters a positive impression, demonstrating the company's commitment to staying current with technological advancements and catering to their customers' evolving needs.

Furthermore, the project has unlocked new possibilities for the development team. With the transition to the modern environment, the development process has become more agile and flexible. This newfound agility empowers the team to respond swiftly to changing market demands, iterate on features more efficiently, and adapt to emerging technologies, fostering a culture of continuous improvement and innovation. "With the new environment, we can confidently embrace the upcoming retirement of more of our VB developers at year-end," Edwards concludes.

fecher.