Need for separate variations of hunter eliminated

fecher's web-enabling of its recruiting software has modernized the UI for what is now a cross-platform browser-based app

Personnel consultancy firms and in-house recruiting departments that are professionally involved with recruiting are already familiar with hunter. The comprehensive recruiting solution has been among the market leaders in Europe for more than two decades. Originally developed to run only on Windows, several variants were later created for mobile and cloud use as well as client-connectivity via web. The software now has cross-platform usability as a browser-app thanks to fecher's web-enabling project. In just one project, the hunter UI has not only been modernized, it is now also usable on Mac and Linux in addition to Windows and separately developed mobile and web variants are no longer needed. The complex business logic's core did not need to be adapted.

"We already had plans to offer hunter as a pure web-variant for a while now, having given it a working title of hunterWEB", explains Gerhard Schickel, Head of Recruitment Solutions at fecher. "The more we thought about it, the clearer it became that the future of our software was not in adding more variants but rather in having a single, unified hunter variant." fecher therefore decided to web-enable the entire software solution.

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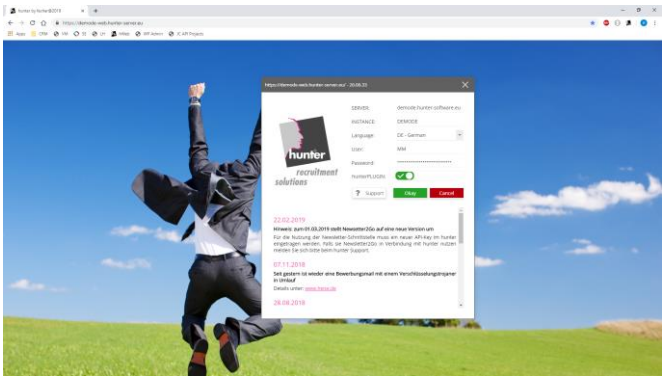
The team's initial experience with developing a web-interface for hunter was in 2011 when it developed hunterMOBILE. The key requirement at that time was to enable personnel consultants "on the go" to access important information about their hunter projects from a mobile device or public Internet terminal. Accordingly, hunter developers created a new UI-variant that was newly written in AngularJS, a JavaScript-based web framework. This variant only supported those functions needed for mobile use.



Already the new login screen awakens expectations

In 2015, a further variant called hunterONLINE was developed specifically for the SaaS (Software as a Service) rental model. As hunter could now be subscribed to as an online service from the computer center, the client company wouldn't need an in-house server. To achieve this, the UI was transferred via Windows Terminal Server and the resulting direct database-access needs, e.g. user settings or the uploading of emails, were rewritten and implemented as web services.

Searching for the 'philosopher's stone'

Even with all of this preparation, it would have taken a lot of time and money to develop a comprehensive web-interface. The costs would have skyrocketed from the scope of the work alone. Moreover, the crux of the matter is that "the workflows in recruiting are simply too complex to rewrite." explains Schickel. "We also had to find a way to keep the special adaptations we implemented for individual clients over the past 20 years as losing them was naturally not an option."

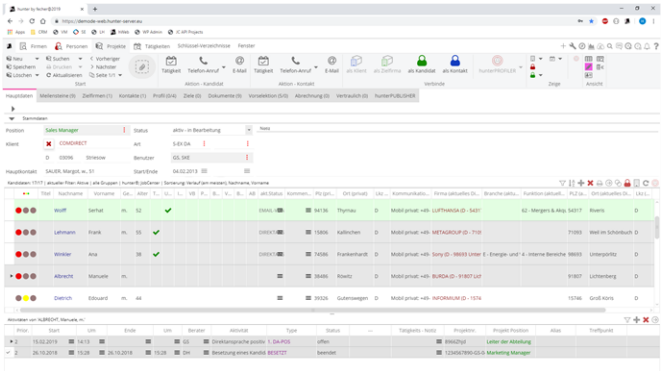
"Workflows in recruiting are simply too complex to rewrite the whole software."

A solution was needed that would take the existing .NET WinForms user interface and implement it directly into a web UI with minimal manual intervention. To accomplish this, the traditional client/server architecture would have to be automated to add a further layer for interactive browser use. Turns out, the hunter team found the "philosopher's stone" in-house: Colleagues in the application modernization department had namely just added web-enabling as a standardized service to their portfolio.

The basis for this web-enabling service is winformPORTER, an in-house developed tool that transforms every WinForm-based client/server application into a true web-app. The resulting application, in turn, is structured on the architecture foundation of Wisej, the Ice Tea Group's real-time web application framework. This combination would make it possible to isolate and swap hunter's graphic layer without the need for major refactoring; thereby leaving the source code, for the most part, untouched.

One for all, all for one

"This was the ideal solution for us as it provides us with everything our clients need", summarizes Schickel. "When hunter, with all of its functions, is running in web browsers, we can perfectly serve our clients with only one version. It will not matter if the client is using a desktop or a mobile device and it will not matter if the operating system they use is Windows, Mac or Linux. SaaS (Software as a Service) is also covered." Once the goal of unifying all of the variants was in sight, a decision was made to refer to it as the future hunter software and no longer as hunterWEB.



For the user, known workflows remain unaltered and can be recognized in the screens

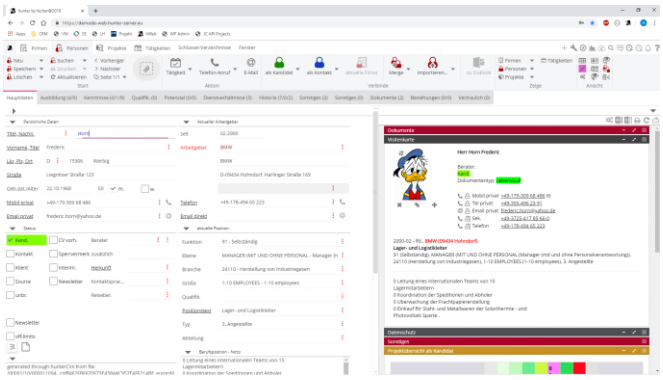
The webification process began in Spring 2018 with an extensive evaluation phase. The hunter team and the application modernization team agreed the project would strictly adhere to the proven process model also used for external client projects. Accordingly, the project began by analyzing

the code along with a cost estimate from which a realistic schedule for the individual steps was produced. The primary objective was to minimize the duration of the code-freeze during which the just-processed code could not be further developed.

“For this reason, we first conducted a dry run of the entire web-enabling project as it let us see where problems could occur” reports Andreas Glomm, Head of Application Modernization at fecher. “We conducted the actual conversion only after we had developed a suitable solution for every problem we found.” This phase was completed that summer after the 3-person project team had finished processing the automatically converted code and had confirmed it was compilable with no errors. “Of course, this is when the actual test phase really starts”, explains the experienced project manager.

The focus is on the user

The hunter team was then tasked with function-testing again, this time from a "user perspective" starting in October. When a problem was found, it was reported as an “issue” in a Sharepoint portal set up exclusively for this project. When additional information was needed, it was also communicated via this portal. In turn, all corrected errors were marked as “done” in the portal. This is how the project team produced the promised executable solution in accordance with the agreed-upon “all inclusive” project type by year-end 2018.



Even complex screens have been optimized to fit the new browser interface

“We wanted to take the opportunity to make the user interface simpler and more intuitive for our users.“

A redesign of the user interface was started at the same time. “As we were going to have to deal with the user interface anyway, we wanted to take the opportunity to make it simpler and more intuitive for our users” explains Schickel. To accomplish this, another fecher service was used, namely the UI/UX Redesign. Based on the existing UI, a web designer developed proposals for the color scheme, fonts, spacing, icons and other design elements. After several voting rounds with the hunter team, the new design was approved and finalized: Firstly, as a binding design guide in written form and secondly as a directly utilizable theme for the new web-app.

The end result is a modernized interface that is more elegant and less cluttered. Existing hunter users are quickly able to find their way around with ease. Although, for example, we kept the MS Office-style ribbon toolbar, a drop zone has been added into which users can drag & drop any local data in order to import them into hunter.

Yet, some things are different

Manual reprocessing meant connections to Outlook, Word and Excel were also needed. In the past, the application offered direct interfaces to Office packages that were easily managed within local Windows systems. Since the conversion to the browser interface, this is now only possible using workarounds. “For such scenarios, clients usually use supporting software that can be installed in the Windows tray”, states Glomm. The hunter team however chose a different path; it developed a browser plug-in that runs on all of the other platforms, as well. “As a result, we are simply more flexible”, explains Schickel.

The UI is now also flexible; it’s responsive to the device in use, adjusting to the available display space. Control elements that sit side-by-side on a large monitor are displayed one-above-the-other when a tablet is used. Font and icon sizes adjust to the device in use, as well. Glomm suggests that “with a little extra time and expense, “bare bones” UIs can also be created containing only the most important elements, which would be suitable for smart phones.”

To further optimize process operations for users, Schickel plans to continuously implement these and other improvements to hunter’s user interface. “The new hunter has, however, to first be delivered”, he points out.

“The feedback we are receiving is very encouraging“

Final optimizations ‘in the field’

The first step consisted of a test phase in which selected clients tried out the software in January 2019. “We needed to gain experience in scaling a server to enable it to serve a specific number of users well”, explains Schickel. fecher consequently developed a model enabling Azure to automatically ensure adequate scaling of the web-server and an even load distribution. This model is currently in use during a second test phase in which users can already work with their own data. During this phase, the new browser interface is available parallel to the old Windows application. “The feedback we are receiving is very encouraging”, reports Schickel. “Our clients like the new hunter app’s interface. We are all looking forward to that day in the future when we can uniformly use it on all platforms.”

***Contact & Legal Notice**:*

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