



CASE STUDY

Probix, Inc. out-sources application testing and software research for new Content Protection Software to Albertson Consulting, Inc.

Funded in October 2000, Probix<sup>TM</sup>, Inc., was in search of a testing house that could be relied upon to provide application testing for their new product. As a leading technology provider of secure sharing, protection, and management of digital content, Probix had one requirement: A vendor who was efficient, effective, and economical.

Albertson Consulting welcomed the challenge, knowing that not only could they provide application testing of the highest quality, but that it could be completed at a cost far lower than other companies could even dream of. This paramount prospect provided AC with a unique opportunity to demonstrate that North Dakotans can compete in the large-scale information age. Their geographical location provided AC with several advantages, including a strong work ethic, solid educational background, and significantly low operational costs compared to their competitors.

Enlisted in the spring of 2001, Albertson Consulting originally contracted with Probix to provide application testing and vulnerability research. AC agreed to analyze frequent builds of Probix software within a variety of environments and create detailed reporting results. To do this effectively, AC created a custom-designed webbased application for test result collection, which gave Probix engineers the ability to view real-time results and reports detailing the success rates. These reports provided Probix developers and engineers instant access to crucial data.

Because of the competence level at AC, the original agreement expanded to include development. Probix called on AC to develop and implement a web-based interface to control the backend management of their Probix Content Protection Network<sup>TM</sup> software. This system was a multi-tiered Java solution that utilized Tomcat<sup>TM</sup> as a front-end application server and a JNI gateway to a C++ API that was used to control the PCPN<sup>TM</sup> policy engine. AC engineers were able to draw upon their wide experience level, intuition, and understanding of system architecture and soon became a part of an on-going process aimed at enhancing Probix's PCPN. As always, security remained the highest priority. Probix took note of ACI's consistent, easy customer interaction and timely, organized development process and chose AC over other possible prospects for their administrative software. This product, designed and engineered by AC, is currently available commercially and in use by all Probix customers.

With Probix, Albertson Consulting has been called upon to deliver a wide range of testing, software, and engineering solutions as well as business consulting services. Always ready, AC has risen to the numerous challenges, proving themselves over and over again.



Company Name: Probix, Inc.

Contractor Name: Albertson Consulting Incorporated

Project Name: Infrastructure Development Project for Probix Trustee UI

Probix was in the early stages of developing several user interfaces for its core product which is called Trustee. It was determined that there would be 3 separate User Interfaces. The first was an Admin UI for managing the customers. The second was a policy UI which would allow customers to create policy for describing protected content. The third was an Audit Logging UI which would allow both Probix Administrator and customers to view log files. All three of the UI's would require a secure browser based interface. We began the project with the Audit Logging UI since we already had several prototypes of this UI in house. After a couple of weeks, we realized there was a tremendous amount of work that we were going to have to do here. At the time, we had a minimal amount of staff with the expertise required to do this work. We were already using Albertson Consulting (ACI) for other tasks, mostly testing. After discussing the situation with ACI, we agreed to give them the development tasks for the other 2 UI projects, namely the Admin UI and the Policy UI.

The situation was actually quite good because Dan Albertson and I would get together on a weekly basis, and he would manage his staff, leaving me to manage my own staff. The developers were also free to speak directly to our code project developers who were working on the API that the UI developers would need. Dan Albertson took on the full project responsibilities of design, implementation, testing, and documentation for both of the projects we gave him.

In the end, we were correct in assuming there was a tremendous amount of work to do for this project. It turned out to be about 9 months of development and testing. We were able to meet all of our projected milestones. Dan's team worked very hard to get all the functionality we needed into the project. They were very thorough and cooperative. It was especially gratifying; from a management point of view, to see 2 separate and remote development teams work so closely. Since we had to develop the API and they had to develop the UI to use our API, we were always in close communications with them.

I was very pleased with the work ACI did, and also very pleased with the way Dan managed his team. On a scale of 1 to 10, I would put him around 9.5, and I wouldn't hesitate to use his services again.

Sincerely,

Dan Robinson

Director of Engineering



To: Mr. Dan Albertson

From: Paul Vicha 12/27/2001

**Probix** 

833 N. Shoreline

Mountain View CA 94043

I want to take a moment and thank you and your staff for a tremendous contribution to the success of our products this past year.

Initially we started back in February with some testing tasks that grew into a number of beneficial projects for Probix. Some of the accomplishments have been:

- ★ Automated Testing tools like Web Monitor with real-time Web interface.
- \* Test Reporting Database with real-time Web interface.
- > Bug Reporting Database with real-time Web interface.
- ➤ Project Reporting Database with real-time Web interface.

Your Testers identified and helped mitigate over 500 software bugs last year. This is a significant accomplishment in such a short amount of time. This number continues to grow monthly.

Once instantiated as a testing resource you were able to sell us on a number of beneficial development projects that continue today and are actually running in our products.

- >< The Stronghold Vulnerability Research project helped increase our protection capability significantly.
- ➤ Your work on our API and UI has increased our time to market.
- >< The Network vulnerability testing and diagnostics will add to the robustness and customer satisfaction of our overall product.

You and your staff have been patient and aggressive in whatever role we have laid out. We are extremely grateful for the positive and results orientated attitudes of you, and your staff. Keep up the good work and let us make 2002 a banner year.

Sincerely,

Paul Vicha

Paul Vida

Probix Quality Assurance Manager