CASE STUDY

BAYSHORE NETWORKS

Protecting Utilities and Infrastructure with PreEmptive's .NET Solution, Dotfuscator

WHO IS BAYSHORE:

Bayshore Networks is a cyber security solutions provider for industrial control/critical infrastructure networks. Their products help water and energy providers transfer data without exposing the data to an untrusted network. Its unidirectional data diode provides a bridge to enable communications from the facility to the controller's platform.

THEIR NEED:

Bayshore creates a product, SCADAfuse, which sits in front of critical endpoints, protecting PLCs and SCADA/DCS devices from unauthorized use, dangerous instructions and activities, and remote takeover from hostile sources. SCADAfuse is the "last line of defense" a plant has and utilizes a Windows graphical front end. The graphical front end is exposed to potential attack, and Bayshore sought out a solution to protect this layer of their product.

PENETRATION TESTING:

Prior to protecting the graphical front end of SCADAfuse, the application was sent to a 3rd party pen testing team in Spain. The team was able to penetrate and compromise the tool, tampering with the application and "walking all over the code." After seeing the results of this pen test, the engineers chose PreEmptive Protection as the best way to mitigate reverse engineering and code tampering threats.

Conclusion

After protecting the SCADAfuse graphical interface with Dotfuscator, the code was unreadable even to the developers who wrote it. When asked about what factors contributed to choosing Dotfuscator, the lead Product Development Specialist described his ideal product: "I look for optimization of my time always. I don't want to become an expert in any product. I just want to know enough to get it to do what I need to do. And then not have to deal with it anymore. That's the perfect product."

> *The reason I chose to go with Dotfuscator is - since it's been around for so long I figured it was my best chance for success. It seems like you folks have the most history with Visual Studio. Comparing [your competitor's] sheet with your sheet, it seems to me, you had a richer feature set.*
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> **John Curry,**
> **Product Development Specialist**