BlackRidge Technology: Beyond the Firewall

BlackRidge Technology was founded in 2010 to commercialize its military grade and patented identity-based network security technology that had been protecting servers and equipment deployed on the battlefield. The patented technology is designed to cloak and protect networks, servers, and network spans.

The BlackRidge Transport Access Controller (TAC) authenticates users, identity, and applies policy on the First Packet of network sessions. This supplies a new level of real-time security protection that blocks or redirects unauthorized and unidentified traffic to stop known and unknown cyber-attacks. It also protects against insider and third party threats with policy-based network segmentation and access control to applications and services.

Company: BlackRidge Technology
Industry: Technology and Cybersecurity
Location: Poughkeepsie, NY
Website: http://www.blackridge.us/

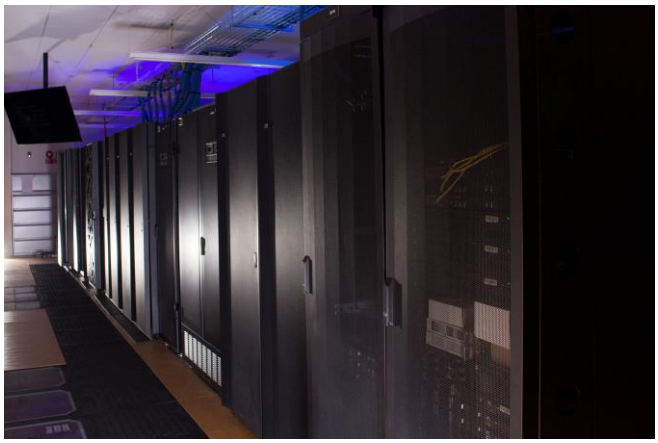
With the veracity of cyber attacks occurring globally, a new paradigm of operations must be developed to change the game. BlackRidge's cloaking technology is a first step in the new way of thinking.

THE CHALLENGE

As BlackRidge developed the technology it became difficult to acquire the multiple platforms, including enterprise-level servers, to use as test beds and even more difficult to generate real-world traffic in a commercialized security environment such as active directory.

The Cloud Computing and Analytics Center (CCAC) at Marist College provides businesses of all sizes multiple platforms for research, development, proof-of-concept, and real-world production environments. BlackRidge partnered with the CCAC at Marist to utilize the multi-platform test beds and to attempt to implement its security solution within the Marist private cloud that currently hosts 25 organizations.

NEW SOLUTIONS



With the ever-growing cyberattacks on financial institutions, educational organizations, research centers, and insurance carriers, it became apparent that legacy firewall technology could not keep up with the ever-changing attack strategies. The CCAC researchers and developers designed a test bed of multiple platforms and traffic patterns, along with honeypots and decoy targets to provide BlackRidge a three-hundred-and-sixty-degree view of the type of attacks most commonly leveraged against targets containing sensitive data.

BlackRidge used these platforms and data intelligence to provide a new level of network security protection that operates end-to-end across network and cloud boundaries with multiple policy enforcement points transparent to the user and system. Since initial development, BlackRidge has successfully implemented the solution at Marist College by cloaking servers containing sensitive information using the College's directory access protocols. Having successfully completed this proof-of-concept, BlackRidge has been able to continue to raise capital for future development of its solutions.

This is all made possible through funding from the Division of Science Technology and Innovation (NYSTAR) of the Empire State Development Corporation (ESD) through its High Performance Computing Consortium (hpc-ny.org) and the New York State Regional Economic Development Council.

ECONOMIC IMPACTS

The computational and network resources made available to BlackRidge Technology are unique to the CCAC at Marist. BlackRidge Technology was able to save over $260,000 over the last year by utilizing the CCAC Lab and College infrastructure, create seven new jobs in New York, provide rich technology experience to four students through internships, raise over $3.3 million in capital, and increase revenue by $210,000.

RESULTS

After successfully developing software within the CCAC and using it in the College's production environment, BlackRidge was able to prove that their technology works.

The success of the proof of concept was key to gaining the support of a New York based fortune 100 technology company that is now assisting BlackRidge with the development of their product and portfolio.

"BlackRidge Technology began research at Marist College to take advantage of the unique Joint Studies model that the College developed and utilizes to bring nascent technologies to the market to achieve full commercialization." — Robert Graham, CEO, BlackRidge Technology Holdings, Inc.

ABOUT HPC^{NY}

Funded by ESD and NYSTAR, HPC^{NY} is a partnership between NYSERNet, a private not-for-profit corporation created to foster science and education in New York, and three supercomputing centers: the Rensselaer Polytechnic Institute Center for Computational Innovations, Stony Brook University/Brookhaven National Laboratory's New York Center for Computational Sciences, and the University at Buffalo's Center for Computational Research.

HPC^{NY} provides businesses and research organizations with access to world-class advanced computing expertise through accelerating the engineering and development path of complex, ground-breaking designs to reliable, accurate, innovative product and process performance that can provide a distinct competitive advantage.

ABOUT THE CLOUD COMPUTING AND ANALYTICS CENTER (CCAC)

In 2012, New York State awarded Marist a $3 million grant to establish the New York State Cloud Computing and Analytics Center (CCAC). The Center was developed to greatly expand the College's role as a driver of economic development in the Hudson Valley and across the state by providing IT services to new and growing businesses, including hardware, software, training, and consulting. The CCAC works with companies on early-stage IT projects with the goal of developing and testing ways to deploy commercial cloud computing environments.

In addition, the CCAC provides cloud-based education and training in analytics and cloud computing, as well as other critical areas. Housed in the Hancock Center, the CCAC is part of the existing regional and global technology initiatives for which Marist has earned a leadership reputation. The Hancock Center is also home the Linux Open Source Development Lab, the Institute for Data Center Professionals (IDCP), the IBM-Marist Joint Study Project, and the Software Defined Network (SDN) Innovation Lab.

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