



When searching for infrastructure to build its smart cloud information security platform, SparkCognition turned to Catalyst, the SoftLayer startup program. Now, having graduated the program, the company continues to build its thriving business on SoftLayer.

The Need for Cognitive Security Analytics

SparkCognition is the world's first cognitive security analytics company. It creates unique information security solutions that address the growing incidents of online security breaches.

The company protects its users' online and IT assets through its Cognitive Security Insights (CSI) application, the industry's most intelligent security application. CSI monitors activity from physical and virtual machines for discrepancies in order to protect against attacks and breaches. It is built on patent-pending pattern recognition and machine learning techniques, which gives the product unique cognitive capability that protects at every point of possible breach.

MindSpark, SparkCognition's proprietary platform powering CSI, continuously learns from data to secure and protect assets 24 hours a day. When exposed to security data, CSI intelligently finds patterns of attack, identifies vectors, and models attacker behavior. A cloud-born solution with mobility baked in, MindSpark is able to automatically draw insights from structured and unstructured data from disparate sources. Through a series of algorithms and analysis, the platform not only identifies security breaches, but it also provides valuable insights—including potential machine failures, downtime, and instances of criminal activity. Its system is dynamic, cloud-based, and a smart defense against hackers.

Leveraging the SoftLayer Catalyst Program

When creating MindSpark, SparkCognition recognized that the platform needed to be built in the cloud in order to match the dynamic nature of cloud security attacks. Infrastructure and hands-on advice from SoftLayer experts provided by SoftLayer's Catalyst program helped SparkCognition create an infrastructure environment ideally suited for its product.

SparkCognition uses a mix of SoftLayer virtual and bare metal servers. Bare metal servers outperform shared hardware and provide the scalability and consistent performance that SparkCognition requires to manage its workloads.

The company runs a variety of workloads on its SoftLayer bare metal servers, including data acquisition, large-scale NLP (Natural Language Processing) activities, real-time network feed ingestion, log ingestion, and predictive analytics workflows. These highly multi-threaded activities have significant I/O needs and rely on big data infrastructure components such as MongoDB, Hadoop, HBase, Memcache, and similar subsystems running on SoftLayer's powerful bare metal servers.

SparkCognition's use of SoftLayer bare metal servers also extends to systems that interface with physical sensor and data acquisition infrastructure. In situations where the company is ingesting data for an industrial Internet environment, it requires



Industry

Cloud information security

Challenge

Finding the right infrastructure solution that could be both scalable and robust enough to support the company's security platform.

Why SoftLayer, an IBM Company

SoftLayer offers bare metal and virtual servers that can scale on demand to meet the dynamic needs of the cloud security industry.

servers that can tie into a customer's or partner's DAQ (Data Acquisition) systems.

Maintaining full control of its infrastructure environment is also important to SparkCognition. Many of the company's end users require that data be kept on-premises for compliance reasons. The only way to interface with and process this data, then, is to have appliances and systems local to one data center. In other cases, some customers have real-time data ingest needs that cannot be supported over a wide area network (WAN). In these cases, it is important to have a locally present appliance that can ingest data, conduct first order processing, implement data reduction, and then transmit over a WAN.

After graduating from the Catalyst program, Spark Cognition continued on as a SoftLayer customer. Beyond knowing that SoftLayer is a trusted cloud provider with a proven record of success, SparkCognition has experienced first-hand the capabilities of SoftLayer's cloud platform.

"SoftLayer's robust cloud portfolio initially attracted us to its offering," said Usman Shuja, vice president market development at SparkCognition. "They have more options and flexibility to mix and match than any other provider out there. We're able to create a unique infrastructure that gives us the highest performing cloud infrastructure available and a competitive advantage in our market. And because they are such a high-caliber, entrepreneurial-

minded partner, we're able to build a stable path to future growth."

After implementing their cloud security software on SoftLayer's flexible platform, SparkCognition emerged from stealth mode in April 2014. The company also won IBM's Innovate App Throwdown 2014 Competition.

SparkCognition's Cognitive Security capabilities are featured in the Powered by SoftLayer program.