

Beth Israel Deaconess

Website www.bidco.org

Region North America, United States

Sector Healthcare

Partner

Arcadia Healthcare Solutions

Trend Micro Solutions

- Deep Security
- OfficeScan
- Endpoint Encryption

IT Environment

VMware, with 12 physical servers, 100 virtual servers, and VMware ESXI 5.5 hypervisor

Business Benefits

- Protects physical, virtual, and private cloud environments
- Provides visibility and control required for data protection and accelerated compliance
- Simplifies management with a single dashboard
- Reduces costs by eliminating cumbersome tasks with automated security

Beth Israel Deaconess Care Organization (BIDCO) Secures Healthcare Systems and Protects Member and Patient Data

Trend Micro™ Deep Security™ Protects Physical, Virtual, and Private Cloud Environments

OVERVIEW

Beth Israel Deaconess Care Organization (BIDCO) is a value-based physician and hospital network and an Accountable Care Organization (ACO). With corporate offices located in Westwood, MA, BIDCO offers physicians and hospitals the structure to contract, share risk, and build care management systems together, with the goal of providing the highest quality care in the most cost-efficient way.

To deliver value to patients, commercial payers, and government, BIDCO leverages the shared skills of more than 2,500 primary care physicians (PCPs) and specialists and seven hospitals, including a tertiary affiliation with Beth Israel Deaconess Medical Center in Boston, MA. BIDCO was an early adopter of merging global budget accountability with the delivery of high-quality care, is one of the original 32 Pioneer ACOs contracted with the Centers for Medicare and Medicaid Services (CMS), and has been among the top-performing ACOs in the U.S. since joining the program in 2012.

CHALLENGES

With more than 2,500 PCPs and specialists and their support staff using computers and mobile devices to connect to the BIDCO network, BIDCO's IT security team is constantly challenged to keep healthcare information protected. In addition to complying with federal healthcare mandates like HIPAA, BIDCO's security must also meet Massachusetts' more stringent healthcare regulations, as well as internal security standards.

BIDCO protects the servers and data in its own central data center, and the data it receives from more than 100 private PCP sites, which reside in BIDCO's private cloud. "At our central data center, everything is transmitted via SSL and protected by Trend Micro Deep Security, which keeps our environment secure," said Thomas M. Cifrino Jr., Technology Manager at BIDCO.



"As IT complexity and security risks have grown, Trend Micro Deep Security has grown without becoming cumbersome, and keeps our organization steps ahead of cyber criminals."

Thomas M. Cifrino Jr., Technology Manager, BIDCO

CHALLENGES Continued

To create its cloud environment to support Electronic Health Records (EHRs), BIDCO implemented a VMware platform in 2009. However, the system had to be flexible because BIDCO was unsure how many physician practices would participate. "Dynamically protecting systems at the host level offered the most efficient and flexible way to scale resources up and down, distribute solutions across practices, and rapidly take on more practices without adding more resources," said Cifrino.

To track the progress of PCPs with specific measures, BIDCO generates a variety of reports, including data analytics, which compare results across the multiple physician practices. While this process of collecting data from multiple sites delivers real value to both BIDCO and its physicians, it also opens the door to cyber risk. "We gather information from more than 100 different databases to ensure contractual obligations, run analytic reports, and prepare reports for CMS," said Cifrino. "We needed a dynamic security solution to keep this data protected."

Finally, the physician practice portals presented several challenges of their own. For example, when one PCP CPU activity spiked, it would significantly reduce performance for all of the other practices using the same server. "We needed a way to quickly identify and solve issues on PCP sites before they presented problems for other members," said Cifrino. "That took real-time analytic capabilities."

WHY TREND MICRO

BIDCO's relationship with Trend Micro began almost 10 years ago, when they deployed an early version of what became Deep Security. Since then, the solution has evolved to stay ahead of new and emerging security threats. This continual evolution combined with its seamless integration into BIDCO's VMware environment were key to their selection of Trend Micro. "Trend Micro Deep Security offers an agentless solution for our VMware environment. With Deep Security, we're confident we can protect our physical, virtual and private cloud environments," said Cifrino.

However, it was also Trend Micro's support team that set them apart from competing vendors. "We can call anybody on the Trend Micro support team and they will always help us directly. Some of their core support team have been together for 10 years, so they really know the solution," said Cifrino.

SOLUTION

BIDCO is currently in the process of moving its VMware virtualized servers from Deep Security's agent-based protection to its virtual appliance solution, which was started in September 2015. "The old system was up and running for 10 years, so this transition is like changing engines in a moving car – we want to take our time because we can't afford any downtime," said Cifrino.

Since first installing Deep Security a decade ago, Cifrino has seen consistent improvements to the solution. "As IT complexity and security risks have grown, Trend Micro Deep Security has evolved without becoming cumbersome. Trend Micro has managed to keep our organization several steps ahead of cyber criminals," said Cifrino. "We use Deep Security's Intrusion Prevention System (IPS) to guard against zero-day vulnerabilities. We know there's always a patch to keep our systems protected during the gap between regular maintenance cycles."

BIDCO also uses Trend Micro Deep Security's log aggregation tool to ensure greater efficiency and security when working with hosted PCP sites. BIDCO's IT team created a dashboard to monitor all physician activity, collect data for analytics, and use that information to help optimize individual PCP performance. "Using Deep Security's log aggregation tool and dashboard, we could quickly identify if a performance issue was caused by faulty hardware, poor wireless connections, or some other reason," said Cifrino. "Once we know the cause of a problem, we can send someone to the practice and fix it."

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RESULTS

With the combination of Trend Micro Deep Security, Trend Micro™ Endpoint Encryption, and Trend Micro™ OfficeScan™ solutions protecting its IT environment, BIDCO's security team can rest assured their physician and patient data is safe, and they remain compliant with state and federal regulations. The agentless Deep Security solution also reduces time and costs by eliminating cumbersome configuration, patching, and upgrading tasks.

The new agentless Deep Security deployment will continue across the data center over the next few months, and BIDCO is already pleased with the results. "Agentless Deep Security has already enabled our organization to remove agents – and the more agents we can remove, the more room we have for servers," said Cifrino. "The automated solution has also improved our team's visibility into the threat landscape with its single dashboard."

WHAT'S NEXT?

The security team at BIDCO understands there will always be new IT challenges for healthcare organizations in their mission to protect physician environments and patient data. In addition to Deep Security and OfficeScan, the organization also uses Trend Micro Endpoint Encryption for its mobile users, which reports when mobile devices are encrypted and allows them to remotely lock down mobile devices in case they are lost or stolen.

BIDCO is interested in Trend Micro's ability to customize log aggregation for Windows[®] environments. "To be able to report on who is using a server at a specific time, and what changed during that time, has immense value," said Cifrino. "With that information, we can quickly identify issues and resolve them before they turn into problems."

After 10 years together, BIDCO considers Trend Micro a great partner. "That's rare today," said Cifrino. "Trend Micro made it clear from the start they could adapt Deep Security to perfectly fit our complex environment," said Cifrino. "They not only delivered, but the solution continues to grow with us today."

MORE INFORMATION

For more information, please contact **www.trendmicro.com**



Securing Your Journey to the Cloud

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