



# TRC secures multi-cloud environment with flexible, scalable security solution

Trend Micro<sup>™</sup> Deep Security<sup>™</sup> provides elasticity and visibility to protect workloads and control costs

## OVERVIEW

TRC is a national engineering, consulting, and construction management firm that provides integrated services to the energy, environmental, and infrastructure markets. TRC implements complex, end-to-end projects for a broad range of clients in government and industry. In late 2015, TRC added a new Pipeline Services division, and grew to 4,100 employees in 120 U.S. offices with the acquisition of Willbros Groups' Professional Services division.

The new division focuses on engineering for internal efficiency and competitive advantage, and on value-added data services. While at Willbros, Jason Cradit, Senior Director of Technology at TRC, played a transformative role and drove public cloud use from an unsanctioned line-of-business transaction (Shadow IT) to a strategic priority. Since joining TRC, he sees a great opportunity to expand on the use of public cloud by running a technology team devoted to business and industry outcomes.

# CHALLENGES

Willbros began its cloud transformation in 2011 with Amazon Web Services (AWS). Cradit joined in 2012 and his first job was to ensure that workloads on AWS were secure. "It's vital to keep our customers' data secure, because it's related to critical infrastructures," said Cradit, who looked for a security solution built for cloud environments with customized, scalable protection for a variety of workloads.

To protect everything in a cloud environment, Willbros needed a security solution that provided visual assurance that all data, applications and operating systems were secured. They also wanted their security provider to manage security. "We didn't want to build data centers and manage transactional security-related tasks," he said.



#### Website

www.trcsolutions.com

#### Region

North America, United States

#### Sector

Engineering, Oil and Gas, Energy

# Employees

4,100

#### **Trend Micro Solutions**

• Deep Security

#### IT Environment

Amazon Web Services (AWS), Microsoft Azure

#### **Business Benefits**

- Reduced cloud costs by 40% over three months with downward elasticity
- Allowed secure sharing between dispersed offices with centralized cloud-based data
- Knowledgeable and responsive customer support
- Freed IT to add strategic value
- Closed security gaps

"The defining point for me in choosing Deep Security was that it plugged directly into the hypervisor. I can log into Deep Security instead of AWS to see my protection. No one else had that direct connectivity.""

Jason Cradit,

Senior Director of Technology, TRC

### CHALLENGES Continued

Cradit discovered Trend Micro<sup>™</sup> Deep Security<sup>™</sup> as a Service (DSaaS) in 2013 and fully deployed it for Willbros' AWS workloads. Deep Security gave him the confidence that all assets were secure. It also helped him successfully transition the Willbros systems into the TRC infrastructure. At the time of the merger, the TRC executive team needed to decide whether to keep applications in AWS or switch to Microsoft<sup>®</sup> Azure<sup>™</sup>, to leverage TRC's free Enterprise Agreement (EA) credits.

The ability to secure both AWS and Azure workloads with Deep Security enabled Cradit and his team to to recommend a multi-cloud approach at TRC. "When I learned that Microsoft Azure was fully supported and integrated by Deep Security, it made the decision easier to move projects to the Azure cloud and secure it in days rather than a few months," said Cradit. "From one pane of glass, I have been able to demonstrate the value Deep Security offers for both AWS and Azure public cloud environments."

## WHY TREND MICRO

With a firm understanding of public cloud and three years of stellar protection from Deep Security, Cradit was confident that his original security choice was still the right one. "The comprehensive capabilities and transparency of coverage made Deep Security an easy sell," said Cradit.

Cradit showed TRC management that Deep Security plugged directly into the hypervisor, something other products can't do. "If you can't attach to the hypervisor, you can't quantify what you have. I can log into Deep Security instead of AWS and see my protection," Cradit added. He also showed that Deep Security avoided the need to add other security products, like intrusion protection, or coverage for Linux systems, which would inevitably add complexity and cost to security.

A multi-cloud environment now enables TRC to leverage the downward elasticity of a multi-cloud environment, which is needed to save costs at a time when business in the oil and gas industry is volatile.

## SOLUTION

By advocating the value of Deep Security for both the AWS and Azure cloud environments, Cradit was well positioned to educate his new employers about designing cloud services. While AWS was better suited for some projects, Cradit found plenty of use cases to apply in the Azure cloud. For example, it took less than a week to establish an Azure dev-test environment for TRC's ERP system.

TRC also used Azure to create a test-dev environment for failover between the Azure and AWS clouds – a multi-cloud disaster recovery strategy. Deep Security simplifies shifting between clouds because it works the same in AWS as in Azure. "The dashboard and policy configuration are exactly the same, so there's no learning curve. It took me longer to figure out how to upload the security certificate into Azure than it did to deploy Trend Micro security controls onto my machine," said Cradit.

Cradit's group has implemented all the Deep Security features, including the firewall, intrusion detection and prevention (IDS/IPS), anti-malware, virtual patching, Web Reputation, log inspection, and integrity monitoring. However, what features they choose to deploy depends on the use case and differences between AWS and Azure. "We always have the firewall on, and we turn on web reputation so we are protected from advanced persistent threats (APTs). With integrity monitoring, we're not so worried about cryptolocker," said Cradit.



"Deep Security is ideal for multi-cloud environments, because it works the same in one cloud as in another. The dashboard and the policy configuration are exactly the same, so there's no learning curve."

Jason Cradit, Senior Director of Technology, TRC

## RESULTS

The elasticity of Deep Security and AWS has benefited TRC's bottom line. "When the oil and gas industry tanks, we have to lay people off. In the past, we were hit with a fixed depreciation cost for our infrastructure. Now, if we experience a downturn, we can reduce our capacity to scale down our spend," said Cradit. The result is a 40 percent drop in infrastructure expenses over the three months following the merger. Also, the need to hire high-level resources at the regional level has changed. With information centralized and secure in a public cloud, TRC can easily share work between dispersed offices, ensuring resources were where TRC needed them to be.

What's particularly exciting for Cradit and his team is that the CFO, CIO, and CISO have all experienced wins with Deep Security. The CFO was able to experience the cloud without having to write a big check for it. The CIO got to maintain his great relationship with Microsoft, use his Azure credits, gain multi-cloud flexibility, and see his whole ERP deployed in a few days rather than a few months. And, the CISO replaced the need for multiple security products with a comprehensive security product that was much more than just antivirus.

## WHAT'S NEXT?

TRC is now keeping a close eye on Google Cloud as a possible future addition. Currently, Google doesn't have the partner ecosystem of AWS and Azure or the necessary hypervisor connectivity. However, once Google Cloud can be secured and managed in Deep Security, Cradit will be ready to try it out. "Google has per-minute instance billing. I would love to take advantage of that for some of my workloads, where I'm running a process for 20 minutes and shutting it off," said Cradit.

# MORE INFORMATION

For more information, please contact aws.trendmicro.com or azure.trendmicro.com



#### Securing Your Journey to the Cloud

©2016 by Trend Micro Incorporated. All rights reserved. Trend Micro, and the Trend Micro t-ball logo, OfficeScan and Trend Micro Control Manager are trademarks or registered trademarks of Trend Micro Incorporated. All other company and/or product names may be trademarks or registered trademarks of their owners. Information contained in this document is subject to change without notice. [CS-SuccessStory-TRC-290416US]