Global Multi-line Insurance Company and Subsidiaries Use SecureCloud for Customer Innovation

Trend Micro SecureCloud encryption restricts access to sensitive data on Amazon Web Services infrastructure.

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— Rob Prager, Director of IT, Farmers Insurance Group of Companies

EXECUTIVE SUMMARY

Customer Name: Farmers Insurance Group of Companies

Industry: Insurance/Financial Services

Number of Employees: 50,000+ (parent company)

CHALLENGE:

- Evaluate the security issues surrounding a SaaS solution for electronic signature capabilities related to customer policies
- Ensure compliance with parent company's data privacy requirements, based on industry regulations in the U.S. and Europe
- Select a security solution that can encrypt data that is stored in the SaaS service provider's cloud-hosted infrastructure
- Maintain complete ownership and control over data encryption keys

SOLUTION:

- Trend Micro SecureCloud, for encryption of data stored on Amazon Elastic Block Storage (EBS) for use with Amazon Elastic Compute Cloud (Amazon EC2) instances.

BUSINESS RESULTS:

- Cloud-hosted service approved by security and privacy officers, allowing the business team to introduce the new online signing service to customers
- Restricted access to keys, extending protection to sensitive information even in the event of a data leak
- Central control and visibility over encryption keys
- Easy deployment and minimal ongoing administration
- Separation of duties, allowing the business to control who has access to the encrypted data through robust encryption key management

Challenge

"When a business team at Farmers Insurance Group of Companies wanted to give customers the ability to sign policies electronically, they found a software provider that could deliver a complete solution over the Internet. However, when they got Farmers business application architects involved, many questions arose about data privacy.

"The software-as-a-service solution would give us 100% electronic handling capabilities for getting policies signed," said Rob Prager, director of IT for Farmers Insurance. "But the business team looked to our department to make sure we could meet the privacy requirements. Our company has different data classifications, with customer names, addresses, social security numbers, and other personally identifiable information deemed highly sensitive and therefore more stringently protected. To license the e-signature solution, we had to be sure that sensitive data would be protected at a level that is acceptable to our internal compliance team."

The business team wanted to bring the customer e-signature innovation to the Farmers Insurance customer base as soon as possible. IT was given the challenge of quickly finding and deploying a security solution that could pass the audits by the insurance company's legal and privacy officers.

Solution

The e-signature project marked the insurance company's entrance into the world of cloud services. Since documents containing sensitive customer information would be traveling out to the software company's hosted infrastructure, the IT team first looked into the security employed by the cloud provider, Amazon Web Services (AWS).

"We carefully evaluated security, and we've been happy with the layers of protection for the Amazon Elastic Compute Cloud [Amazon EC2]," said Prager. "With support from Amazon Web Services, we carried out penetration tests and found the Amazon EC2 environment to be robust."

Amazon EC2 passed the insurance company's tests, but the security provided by AWS does not extend into the application layer. "We offer a shared-responsibility security model that gives customers control of their data from the guest OS up," said Stephen Schmidt, Chief Information Security Officer at Amazon Web Services. "This allows customers to choose the security solution that best meets their application's needs while AWS remains focused on providing a safe and secure infrastructure."

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"Putting the line of demarcation at the guest OS makes sense," said Prager. "It allows us to choose and control our own data security, especially in the case of encryption keys. We have to prove to our in-house compliance officers that we retain exclusive access control of our encrypted data."

After evaluating various data protection solutions on the market, Farmers Insurance narrowed it down to Trend Micro SecureCloud and one other solution for data encryption. SecureCloud lets companies protect their data in public and private clouds with patent-pending policy-based key management that gives them exclusive control over the access of sensitive data.

"With SecureCloud we are able to validate that the virtual machine security posture is safe to process sensitive data. This is achieved by being able to set policies in SecureCloud to check the virtual machine for things like the location of the instance, antivirus signature files, network services and many more," said Prager.

Results

The research into cloud security has led to overcoming all of the data protection issues initially raised by the electronic signature application architecture.

"Some people think that the cloud provider should do it all, but we needed to control our encryption and security," said Prager. "It is good that AWS leaves data encryption up to us. By deploying SecureCloud ourselves, in combination with AWS's infrastructure security, we remain the custodians of our encryption keys. No matter what happens, our data is always protected. SecureCloud gives us the preferred way to meet our requirements."

Trend Micro and AWS collaborate to ensure that their joint customers have the protection that makes sense in virtualized and cloud environments. "SecureCloud is an innovative solution offered by Trend Micro—a solution that is very compatible with our security model," explained Schmidt. "AWS is driven to provide the safest and most secure infrastructure as a service possible. Adding a product like SecureCloud provides that extra blanket of protection for the applications and data running in our cloud."

Available as a hosted or on-premise solution, SecureCloud is easy to deploy and manage. "If a solution works and I don't have to deal with it every day, it is a winning solution in my opinion, and that's been my experience with SecureCloud," said Prager. "We set it up, and it is running, and now it is almost invisible. Our data is secured, and the footprint is minimal, with no overshadowing of server performance. The customer electronic signature service is running perfectly for us."

Next Steps

By protecting data that travels to the cloud, SecureCloud has helped Farmers Insurance gain approval for using cost-efficient cloud services that speed time to market for new customer services such as e-signature capability.

"This is a fantastic cloud use case for our company—a truly live production environment with dynamic content," explained Prager. "Amazon EC2 and Trend Micro SecureCloud give us the multiple layers of security we need to handle sensitive data with confidence, even when it travels off of our in-house infrastructure."

The successful pilot of the e-signature solution resulted in the decision to extend the customer capability worldwide.

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— **Stephen Schmidt, Chief Information Security Officer,** Amazon Web Services

DEPLOYMENT ENVIRONMENT

Pilot deployment of new service: western U.S.

Hosted security for data in a hosted cloud environment

Trend Micro SecureCloud

Amazon Web Services (Amazon Elastic Compute Cloud)

Company Profile

Farmers Insurance Group of Companies is the country's third-largest insurer of both private Personal Lines passenger automobile and homeowners insurance, and also provides a wide range of other insurance and financial services products. Farmers operates primarily in 41 states across the country through the efforts of approximately 20,000 employees. Farmers exclusive and independent agents, along with Farmers employees, are responsible for servicing more than 15 million customers.

Trend Micro Security

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