CASE STUDY

# LendingTree cuts alert noise by 90%, transforms visibility

## Challenges

LendingTree faced increasing complexity of multicloud environments in a highly competitive industry. Hundreds of inactionable alerts took their team 10 hours per day to triage. With ever-changing compliance standards, it was critical for them to meet the requirements of regulators and partners.

## Solution

With Lacework, LendingTree established a partnership that allows both organizations to scale alongside one another. They instantly reduced alert noise while increasing visibility across their environments. With support from their DevOps and infrastructure teams, the decision to adopt Lacework was unanimous.

## Results

- Saved $200k a year by decommissioning existing tools
- Cut alert volume by 90% with context-rich alerts
- Reduced alert investigation time from 10 hours a day to 5 minutes per alert
- Easily generated SOC 2 compliance reports to pass audits and lower insurance premiums

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## About LendingTree

LendingTree is a financial services marketplace. Founded in 1996, they began in the mortgage space before branching out into student loans, small business loans, and the insurance business. Their goal is to provide an easy-to-navigate platform that allows consumers to make the best decisions possible for their financial health.

According to John Turner, Senior Security Architect for LendingTree, the organization places a high value on developing secure products and services for consumers — not to mention innovating as quickly as possible to stay ahead of the competition.

Currently, Turner focuses on all areas of information security, specifically on the application security side. “I oversee developer training, solutions architecture, new product development, and anywhere else where we need to have security embedded as far left as possible in the development process,” he notes.

The shift-left mentality is essential at LendingTree. As Turner says, “Security isn’t an afterthought or something we bolt on. It’s something we build in from the very beginning, whether it’s infrastructure, code, people processes, or data security.”

Turner considers security the most creative area of technology, inspiring out-of-the-box thinking. “Security has always excited me,” Turner shares. “It’s almost an art form. It’s open to interpretation and creativity, and every solution is unique.”

Turner applies this creativity to securing LendingTree’s diverse cloud infrastructure. “We’re essentially a cloud-native company, spanning all three major cloud providers,” he explains. However, as LendingTree has grown through acquisitions, they’ve brought up a number of legacy systems from the more traditional client server datacenter environment, which they’ve migrated to the cloud.

Given this complexity, the security team at LendingTree has grown accustomed to working with numerous tools across their multicloud environment. “We are always pushing the envelope,” states Turner. “Innovation is key at LendingTree.”

## Challenges

“Cloud security is critical for LendingTree,” says Turner. “It enables our business to scale in any direction, very quickly.”

But for all the benefits, it comes with its share of challenges. “Planning for cloud security is a very big task,” Turner notes. “The security threat landscape is constantly evolving, and we have no idea what’s going to come down the road. We have to constantly reevaluate, reassess, and ensure that we’re positioned properly.”

Prior to implementing Lacework, says Turner, “Our challenge from a security and infrastructure perspective was making sure that we leveraged all of the possibilities that the cloud offers, while maintaining operational stability and security.”

Staying secure can be a daunting task. “We implemented many products as we expanded our cloud environments, but nothing could give us the assurance that we were growing securely,” recalls Turner. “It was like drinking from a firehose. We had so many alerts and so much data coming in from so many different places, that it was impossible to manage.”

The volume of data was so high, in fact, that filtering through it quickly became unsustainable. “We were dealing with 200 alerts a day, and our frontline security operations center (SOC) staff was spending 10 hours a day to triage these alerts,” Turner remembers. “Out of that, we might have three or four actionable alerts that were escalated to our engineering teams for remediation. That overhead alone was a significant driver for us to find a new solution.”

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This data problem also limited LendingTree's ability to expand within the cloud. "Without the necessary visibility, there was no way that we could demonstrate that this was going to be a safe transition," Turner says.

The team also struggled with gaining visibility into their server lists and containerized workloads. "Moving into a containerized environment, there weren't a lot of tools out there that would let us assess the security posture of a container or host, or to see the communication between containers on hosts," Turner notes. "If I can't see into the inner workings, then there's a huge blind spot that makes it hard to quantify what's happening across our environments."

Then, there was the issue of compliance. Staying on top of regulations is pivotal in finance, especially with a constant stream of new requirements from state and federal regulators, in addition to those of LendingTree's partner institutions. "Compliance for us is not negotiable," Turner notes. "It will keep us in business or put us out of business."

In an effort to tackle their data, visibility, and compliance goals all at once, LendingTree began their search for a cloud-native application protection platform (CNAPP) that could do it all.

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## Solution

As it turns out, Lacework was just the partner LendingTree needed.

It started three and a half years ago, with a gut feeling. "We knew from the first time we met that Lacework was the right team for us," Turner recalls. "They had a great vision and great ideas, but what sold us was their commitment to meeting the challenges of tomorrow."

Turner was especially confident that Lacework could scale alongside LendingTree. "I knew deep down that every single person on the Lacework team had our vested interests at heart," he says. "They gave us the assurance that they would be by our side through it all. It's a rare partnership, and it's something we don't see a lot in the industry."

From a deployment standpoint, the Polygraph Data Platform demonstrated the wide range of security capabilities that LendingTree was looking to add. Turner's team saw, firsthand, how Lacework could solve the alert noise challenge. "Lacework helped us deal with the massive amount of information that we were getting out of all the different systems, from the native security tools and logging and alerting tools that came from cloud providers, to third-party tools that we had purchased to help solve these problems," Turner states.

Moreover, the LendingTree team learned how Polygraph, the patented anomaly detection component of Lacework, could increase their visibility. By ingesting massive amounts of data, Polygraph builds a baseline of each user's cloud environment and alerts on unusual behavior, including unknown threats. "The Polygraph technology was mind blowing for me," Turner recalls. "That's the type of visibility we needed. I knew as soon as I saw it that it was going to be transformative for us."

The platform was so simple to use that it gained widespread popularity across the organization. "After one demo, different teams were coming to us, saying, 'We need this,'" remembers Turner. "Everyone, even non-security teams, saw how Lacework could enable us to reach the next level of visibility, compliance, vulnerability management, and threat detection."

Choosing a security product can be especially difficult since it involves so many areas of the business. But with a powerful CNAPP like Lacework, the choice was easy for LendingTree. "I've been in the industry for many years," says Turner. "When we sat down with our infrastructure and DevOps teams to review Lacework, that was the only time I've ever seen all of the teams agree on a solution."

Slashed alert volume by **90%,** down to **less than 5 a day**

**Saved $200K a year** with tool consolidation

**Decreased** investigation time from **10 hours to 5 min**

**Reduced** cyber liability insurance premiums

# Results

## Cutting alert noise and saving time

Almost instantly, Lacework granted LendingTree relief from excessive alerts. “Within a very short time of having Lacework integrated into our cloud environments, we were able to go from a couple of hundred alerts a day to just a handful. I’m talking less than five every single day,” explains Turner. “We were able to cut alert volume by 90%, with zero configuration. That’s staggering.”

In addition to this drastic reduction in the number of alerts, their quality increased profoundly.  “What’s really important is that these five daily alerts are actionable right out of the gate,” says Turner. Rich in context, Lacework alerts surface the who, what, when, where, and why of an event, helping teams speed remediation. “We took 10 hours a day and reduced those to about five minutes per alert for triage,” estimates Turner. “This was a massive savings for us.”

LendingTree also experienced substantial cost savings — an especially pivotal factor during a talent shortage. “We avoided hiring four full-time employees, eliminated spend on the human resource side, and freed up resources that we already had,” Turner details. “We were also able to save $200,000 a year by decommissioning existing tools that weren’t providing value.”

Even for team members with limited security knowledge, Lacework catches issues in real time, which empowers LendingTree to deploy new services quickly. This capability allows for remediation before anything goes to production, giving teams more freedom and less stress.

In addition to saving huge amounts of time and resources, Turner notes, “We increased our level of confidence with the information coming out of the platform and were able to give management and senior leadership assurance that we had the cloud environment under control.”

Moreover, automation from Lacework allowed LendingTree’s DevOps, infrastructure, and development teams to push to market more quickly — and securely. In all, says Turner, “Right out of the gate with Lacework, we saw performance and value that we haven’t seen before from any other platform.”

## Gaining visibility with Polygraph

Thanks to Polygraph visualizations, LendingTree solved their visibility challenges. “With so much information coming in, it’s very difficult to decipher what all these signals are telling you,” Turner notes. “Polygraph allows us to see security threats in a graphical format, so we know if a host communicates with another host in an abnormal way.”

Polygraph has also saved the LendingTree team a great deal of time. “Our application teams use Polygraph visualizations to quickly debug communication issues that took hours, and sometimes days, for us to find before,” Turner says. “The platform helps us to untangle complex communications, sometimes coming out of legacy systems, so we can figure out where to improve or where we might have a bottleneck.”

Moreover, Lacework helped LendingTree tackle their difficulties gaining visibility into server lists and containerized workloads. “With Lacework, we were able to see deep down into all of these systems on every level, across all of our cloud environments,” Turner explains. “This visibility helped us get a handle on what was going on, so we could better plan and secure our infrastructure.”

## Streamlining compliance — now, and for the future

LendingTree has been able to meet ever-evolving compliance needs head on. "We have partners, regulators, and cyber liability insurance providers coming to us with questions and requests for evidence, which can be difficult in multicloud environments where you might have many disparate tools," Turner states.

Fortunately for LendingTree, out-of-the-box compliance reports from Lacework have made the auditing process a snap. "With Lacework, we've been able to provide compliance evidence to give partners and regulators the assurance that we're doing everything that we need to do, and they can see that it's actually working," Turner says. "The ability to generate reports very easily, and to monitor all aspects of compliance in our cloud systems, is critical for us. Lacework has cut down our workload when it comes to assessments and audits."

Beyond this streamlined process, LendingTree uses Lacework to better anticipate their upcoming compliance goals. Turner adds, "Lacework provides us roadmaps for the future, showing us where we need to be going and where we're falling short."

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And the cost savings they've enjoyed as a result of increased compliance doesn't hurt. Says Turner, "We've been able to reduce cyber liability insurance premiums by showing that our controls are effective, with easy evidence to provide to the insurance companies and the regulators."

## A lasting partnership

Since 2019, the LendingTree and Lacework partnership has been going strong.

Although Turner initially brought on Lacework to solve challenges with alert noise, visibility, and compliance, he has been delighted to discover how integral Lacework, with its CNAPP capabilities, has become to LendingTree's cloud posture in general: from application-level visibility with Polygraph, through compliance, and even into due diligence for mergers and acquisitions (M&A).

"We can now use the Polygraph for things that are not security-related to easily untangle very complex situations," Turner explains. "Any time that we can take a security purchase and move that into a different area, it's a win."

As LendingTree moves forward with Lacework, Turner anticipates uncovering even more features. "There are unlimited possibilities for the Lacework platform," says Turner. "Every day we're realizing new functionality and benefits, and we're utilizing Lacework in ways that we didn't think were possible on day one, or even months ago."

Still, at the root of it all are the strong interpersonal connections that the Lacework and LendingTree teams have built over the years. "Lacework is still innovating, and they're still committed to our success," Turner states. "We have a team behind us that supports our mission."

## Schedule a demo today

lendingtree

LendingTree is the nation's leading online marketplace that connects consumers with the choices they need to be confident in their financial decisions. LendingTree empowers consumers to shop for financial services and choose the option that best fits their financial needs. Services include mortgage loans, mortgage refinances, auto loans, personal loans, business loans, student refinances, credit cards, and more. LendingTree's purpose is to help simplify financial decisions for life's meaningful moments through choice, education, and support.