

Logicworks' 24x7 Cloud Support Saved a Company's Critical Data During an Incident

Incident

At 4PM on a Friday before a holiday weekend, Logicworks' Network Operations Center learned that a client's engineering team was unable to connect to certain instances in their AWS environment.

Within minutes, five senior engineers on the Logicworks team immediately began to investigate and determined that a custom software package deployed by the customer made accidental configuration changes to the entire system.

Further investigation showed that the new configuration changes were deployed to nearly 200 servers, across production, stage, devtest, and DR. Not only was the primary production application stack affected, so too were the instances supporting a new customer of the company that were scheduled to go live the following Tuesday. Because DR was impacted, failover was not an option.

Despite the long holiday weekend, Logicworks engineers worked a combined 170 hours over three days to fix the issue. The incident highlighted the enormous value of engaging a Managed Service Provider as an insurance policy against human error and unforeseen incidents, and the "above and beyond" work Logicworks performs for every client behind-the-scenes.

"With Logicworks as a partner, you get access to a deep bench of world-class talent that is willing and able to create miracles out of thin air on your behalf."

- A Logicworks Engineer

Skill In Action

Logicworks' engineers have an in-depth understanding of all client systems, especially those clients that have been with Logicworks for many years. Due to Logicworks' unique support model, the same set of engineers and project managers are devoted to a small number of clients, enabling Logicworks to provide high-touch support for each client.

This 24x7x365 support model is what enabled Logicworks to solve this client's permissions issue rapidly. Here is a sample of the tasks that Logicworks performed on behalf of the client over those 170 hours:

- **Forensic Investigation:** Learn what caused the error and its impact.
- **Incident Management:** Coordinate multiple engineering resources and customer operations staff members, provide on-going status updates.
- **Initial Remediation:** Make minimum set of changes to restore access temporarily, so that more in-depth fixes can take place. Use custom scripts to determine blast radius.
- **Remediation Strategy:** Get the smartest engineers in a room to discuss the solution with the smallest impact and fastest resolution.
- **Custom Scripting:** Write custom scripts (Python) to partially automate the fix, so that each instance could be repaired in 3-5 minutes, rather than 2-3 hours.
- **Remediation:** Task skilled engineers that understand environment to carry out remediation with custom scripts.
- **Proactive Protection:** Discuss strategies for preventing future recurrence of error and limit blast radius, work with client to carry out these changes.

The company's technical problem could have been solved by restoring the affected instances from snapshots manually, but this would have caused days of data loss and taken up to 10 days due to the extensive impact of the error. Because Logicworks engineers are not only highly experienced cloud technicians, but also highly creative and skilled in writing automated scripts, they were able to solve the problem relatively quickly while eliminating data loss.

Results

After 170+ hours of remediation, the Logicworks team successfully brought the affected instances back to service with zero data loss, preventing a costly rebuild and potentially damaging customer relations. The incident not only highlighted the benefit of having a deep bench of outsourced cloud engineering talent, but also the value of outsourcing to a team of engineers with programming capabilities and infrastructure-as-code tooling experience. Logicworks' unique approach to cloud management, which includes reliability and security automation, is customized for every client and empowers internal client teams to deploy faster with less risk.

About Logicworks

Logicworks, the leader in compliant cloud solutions, provides end-to-end cloud strategy, operations, security services to clients in the finance, healthcare, and SaaS industries. Logicworks is an AWS Premier Consulting Partner and Microsoft Gold Certified Partner, and one of the only cloud partners in the world to have achieved HIPAA, HITRUST CSF, PCI-DSS Level 1, SOC1, and SOC2 certification. Our customers include MassMutual, Pitney Bowes, Orion Health, and other top companies that demand the highest standards of agility and governance.

To learn more about Logicworks Managed AWS Services, contact us at **(212) 625-5454** or visit us online at **www.logicworks.com**