SUCCESS STORY

Electrum builds trust with banks and drives payments innovation with Elastic

Leading South African payments technology company Electrum deploys Elastic Observability on AWS to scale operations, enhance transaction monitoring, and drive innovation in digital finance and retail.

Region
South Africa

Industry
Financial Services

Solution
Elastic Observability

Reduces MTTR sginificantly

Electrum reduces MTTR, scales operations and enhances transaction monitoring with Elastic.

Strengthens trust with clients

Electrum integrates metrics into client portals, providing customers with transparency and real-time insights on payments and transactions with Elastic Observability.

Moved from reactive to proactive operations

With Elastic Observability, Electrum moved from standard email alerts to role-based alerting by integrating with alerting tools to implement proactive monitoring.

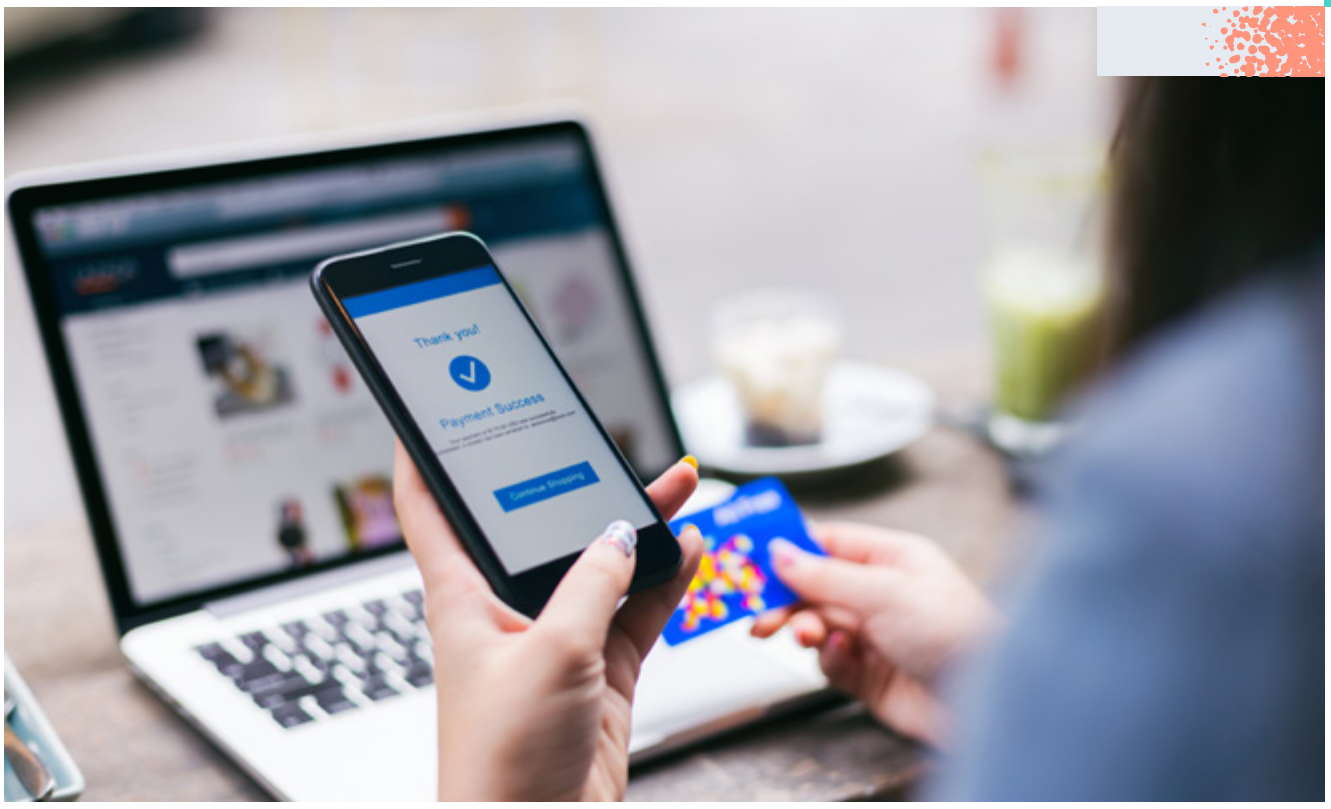
South African payments technology leader boosts observability and reliability with Elastic

Established in 2012, Electrum is the leading cloud payments technology company in South Africa with a reputation for innovative and reliable payments solutions. Its clients include tier-one banks and retailers like Nedbank and Investec, and the company plays a crucial role in the national economy as South Africa advances toward digital retail and banking platforms.

It's a huge responsibility. Electrum systems process up to 150 transactions per second and serve 25 million South Africans through its clients. This is where Elastic Observability plays a critical role, delivering insights that enable the business to maintain high-performing reliable payments systems at scale while building innovative services that support the digital economy.

> Elastic helps us build visibility and trust – both of which are crucial when working with large banks and retailers.

Heinrich Roets
Site Reliability Engineer, Electrum



elastic

Intelligence out of the box

The quest for a modern observability platform began in 2015. At the time, the company faced common scaling challenges, including decentralized logging, which hindered visibility and proactive monitoring of applications, networks, and systems. Meanwhile, its alerting tools were scattered across various applications and scripts, leading to a lack of unified operations.

Heinrich Roets, Site Reliability Engineer at Electrum, was determined to address these challenges. He evaluated various options but these proved complex and didn't deliver a sufficient value return. The business turned to Elastic, initially hosting its own Elasticsearch-Logstash-Kibana (ELK) stack before settling on Elastic Observability running on Elastic Cloud on Amazon Web Services (AWS).

Roets was especially impressed by the out-of-the-box features of Elastic that minimized stress on internal resources. "We chose Elastic Observability because it delivers pre-built insights and can ingest logs from multiple sources with little or no configuration," says Roets.

Elastic Observability runs smoothly in Electrum's containerized AWS cloud environment. "Along with innovative releases and new features, Elastic is open and simple to integrate with cutting-edge cloud technologies. It gives us great confidence as we look to the future," says Roets.

He also highlights Elastic Observability's versatility, which enables comprehensive monitoring across Electrum's payments and value-added services. Elastic tracks application failures to gauge service reliability, monitor response times for an optimal customer experience, and observe infrastructure and database to maintain system health.

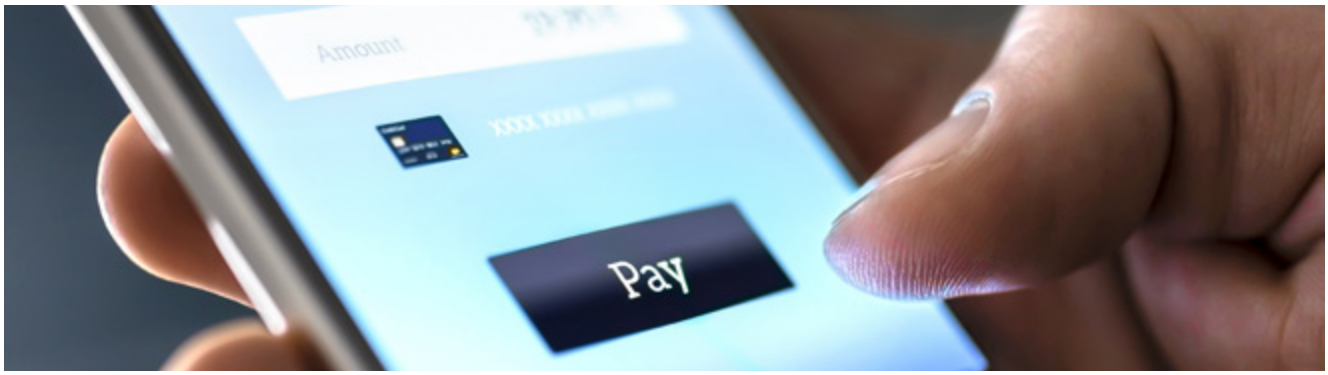
 |

elastic

Electrum achieves enhanced transaction monitoring through real-time tracking of transaction metrics at a granular level, sophisticated threshold-based observability, and performance measurements that compare specific services against detailed success and failure metrics.

Elastic also strengthens trust with Electrum's clients. Roets has integrated Elastic-backed metrics into client portals, providing customers with transparency and real-time insights. "We need tight controls and a clear understanding between our organization, banks, and retailers. Elastic ensures that we stay within those parameters and meet our service level agreements," he says.

"We've implemented a more targeted approach, based on resource-level alerts, success rate alerts, latency alerts, and application failure alerts that signal major outages," says Roets. "Since implementing Elastic, our ability to deliver dashboard and visualization insights alongside our alerts has skyrocketed. Previously, Electrum's capabilities were limited, but now every alert we send includes hyperlinked access to relevant dashboards. This seamless integration has tremendously improved our Mean Time to Resolution (MTTR).



Insights that drive innovation

Elastic Observability also streamlines and accelerates the company's operations. Electrum has moved from basic email alerts to more direct alerting mechanisms by integrating with paging tools to realize more proactive monitoring. By developing load-balancing features, Electrum can proceed with optimal transaction routing. Running on AWS supports ISO 20022-enabled solutions, enabling Electrum to stay at the forefront of industry standards.

Improved operational efficiency also allows Electrum to recoup time to focus on innovation and deliver more value-added services to its customers. Recently, Electrum expanded its solution to support Payshap transactions, a service that enables smartphone users to transfer funds and pay for goods with just a mobile number or unique identifier.

Elastic's role in the business resonates with one of Electrum's core values: partnership. "We emphasize the importance of partnering with our customers to enable their success," says Roets. "Similarly, partnerships with technology providers such as Elastic are crucial for delivering future-fit services and innovation."

Looking ahead, Electrum is also exploring the potential of Elastic machine learning and generative AI features. “We are excited about the potential of leveraging AI to detect anomalies to deliver better service health,” says Roets.

Above all, Elastic Cloud has enabled Electrum to scale its monitoring capabilities in line with business growth and make data-driven decisions based on comprehensive system insights. This future-proofed environment ensures the business remains at the forefront of payments innovation in South Africa.

> Elastic Observability has empowered Electrum to better serve our clients through transparent, real-time monitoring and proactive issue resolution that addresses potential problems before they impact customers.

Heinrich Roets
Site Reliability Engineer, Electrum

elastic