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RÉPUBLIQUE FRANÇAISE
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Agence du numérique de la sécurité civile

SUCCESS STORY

French Civil Security Digital Agency ANSC, improves its emergency response management systems with Elastic

Location
France

Industry
Public Sector

Solution
Elastic Observability, Elasticsearch, Kibana
Elastic Cloud on Kubernetes (ECK)
Elastic Consulting Services

ANSC transforms France's emergency response with Elastic's real-time monitoring and observability solutions

Real-time emergency response enhancement

- ANSC leverages Elastic Observability to ensure the quickest response times for its Fire and Rescue Services applications, utilizing real-time application performance monitoring and user insights.

Accelerated development and reduced troubleshooting

- Elastic supports ANSC's dynamic environment with rapid application updates and streamlined troubleshooting, significantly boosting development productivity and facilitating troubleshooting.

Scalable and efficient data management

- With Elastic's scalable solutions, ANSC adeptly manages increasing volumes of data, optimizing log management for rapid and lifesaving information access.

The Agence du Numérique de la Sécurité Civile (ANSC) is a public administrative establishment of the French government under the supervision of the minister in charge of civil security. The agency acts as a service provider for the State, the fire and rescue services, and any public or private body responsible for a public service mission in civil security.

ANSC's ambitious project, NexSIS 18-112, emerged from the critical need for a unified national information system in the aftermath of the 2015 terrorist attacks in France. This innovative system aims to dissolve information silos, streamline data management, and enhance crisis response coordination across various departments. NexSIS 18-112 is not just a response system for fire and rescue – it's a comprehensive platform facilitating efficient crisis management at the regional and national levels.

Starting from a blank page, with no legacy systems to overhaul, ANSC embarked on integrating an Application Performance Management (APM) solution into their NexSIS 18-112 platform to improve application performance, secure them, and help problem identification.

> With Elastic, we got a centralized solution for application tracing and performance analysis that worked perfectly with our vision. With their deployment agent, it integrated easily with our Kubernetes environment, which was crucial for managing NexSIS 18-112."

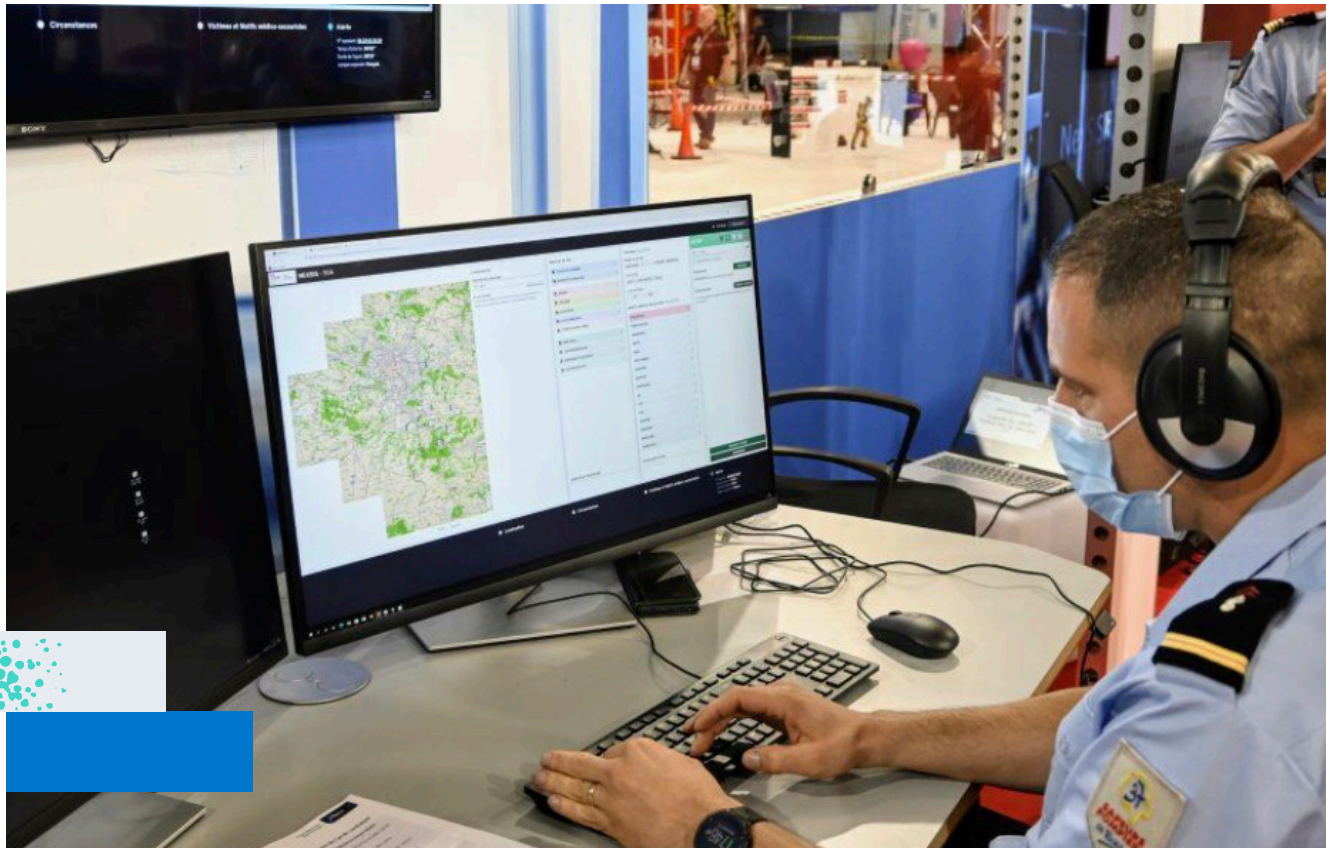
Yann Pascal,
Head of Infrastructure, ANSC

Unifying data with a one-in-all platform integrated with the existing technology stack

To develop and launch NexSIS 18-112, Yann Pascal's top priority was to source and deploy a single central platform capable of integrating various functionalities and addressing their unique requirements. He focused on a system that could offer observability with centralized logging and APM, and potentially integrate with Security Information and Event Management (SIEM) systems in the future. In looking at the various solutions available, Elastic platform stood up as a front-runner for ANSC, with its easy deployment, flexible maintenance, and modular scalability. Another consideration was integration with Kubernetes clusters, which enables compliance with the ANSC deployment model. Its infrastructure, heavily reliant on Kubernetes, required a solution that smoothly integrated without disrupting its technological ecosystem. With Elastic's deployment capabilities, it was the perfect fit.

Integration in Kubernetes clusters, which enables compliance with the ANSC deployment model, was another factor in the choice.

Providing cloud services that met the stringent requirements was essential. ANSC chose Scaleway from a list of cloud providers offering a managed Kubernetes service. Thanks to Elastic's adaptability to Kubernetes and deployment via Elastic Cloud on Kubernetes (ECK), deployment of the Elastic stack was easy. The Elastic solution was implemented in just two months.



The ANSC acts as a service provider for France, the fire and rescue services and any public or private organization responsible for a public service mission in the field of civil security.

“Elastic offered us a consolidated platform that met our three main tooling needs: comprehensive tracing, and a tool for analyzing application performance and security. Its smooth integration into our Kubernetes clusters and the rapid deployment on Saleway notably accelerated our project timelines,” says Pascal.

Elastic’s observability stack was not just technically compatible; it was also user-friendly, which facilitated its rapid adoption by ANSC’s technical teams. It allowed ANSC to monitor application performance and troubleshoot quickly, which was essential for smooth service operations. Elastic’s easy-to-use and easy-to-implement solutions quickly became a part of ANSC’s operational workflow, allowing them to respond faster and better to critical situations.

Easy integration and deployment with Elastic support

From the first proof of concept, Pascal appreciated the quality of support offered by Elastic Professional Services. “At the outset, our team needed guidance to understand how Elastic could best fit into our ecosystem. Elastic’s technical pre-sales support was instrumental in providing insights and solutions during our proof-of-concept phase. This early support was key to helping us see Elastic’s potential in our context,” says Pascal.

Since then, Elastic’s Professional Services has helped ANSC optimize its platform performance. “The Elastic Professional Services team has always been there to help us address specific issues and optimize platform performance,” says Pascal. He also reflects on the importance of having a support contract with Elastic, especially for incident management: “Having Elastic’s global support meant we could quickly resolve any incident, minimizing interruptions to applications that keep them operational.”

When comparing Elastic implementation to other solutions, Pascal notes that the initial deployment went smoothly, facilitated by the support that ANSC received. ‘The real challenge was beyond deployment; it was about making Elastic a living part of our IT landscape. We needed to make the solution available quickly to our development teams so that they could create and use customized dashboards independently,’ noted Pascal.

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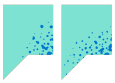
Taking advantage of the Elastic Stack's scalability

Another key factor for the ANSC when selecting Elastic was the ability to scale and manage increasing volumes of data without performance degradation. As more departments integrated into the system, the need to handle larger volumes of logs and data became a critical challenge. Elastic's scalable nature was key, allowing ANSC to expand its capabilities in line with growing data volume.



With ECK, it's easy to add a node to our Cloud infrastructure. This scalability is a real asset, allowing us to respond to increased demand and then scale down after optimizing our platform."

Yann Pascal,
Head of Infrastructure, ANSC

Moreover, Elastic's ability to optimize log management lifecycle was a significant advantage for ANSC. It enabled the agency to maintain rapid access to essential logs, a critical factor in emergency services where swift and accurate information access can be lifesaving.

Enabling real-time insights for proactive monitoring

For ANSC, the ability to monitor applications and measure performance in real time was crucial. Elastic Observability, with its APM and Real User Monitoring (RUM), provided the necessary tools to achieve this. "These solutions offer deep insights into the system's performance and user interactions, ensuring quick response times for critical services," Pascal explained. "Our developers extensively use APM to optimize database calls and improve overall application performance. Its user-friendly interface makes it easy to identify why a particular module in an application is slow, which has been a significant advantage for us."

Moreover, the RUM feature in Elastic enhanced ANSC's understanding of user experiences, particularly in different departmental contexts. This aspect was crucial in providing rapid and accurate responses to user-reported issues such as system latency. "APM and RUM allow us to refine the NexSIS 18-112 system and rapidly respond to user feedback. Comparing performance across departments is now more straightforward, helping us address network response times and other user-specific issues effectively," said Pascal.

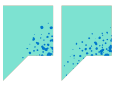
Elasticsearch, combined with data visualization with Kibana, also played a pivotal role in enabling ANSC's control teams to visualize complex data in real time. This capability enabled us to respond to complex application incidents.

Powering agile solutions and troubleshooting reduction

The dynamic nature of ANSC's operations required a solution that could adapt rapidly and reduce troubleshooting. Elastic's APM and RUM systems played a crucial role in this. ANSC's applications, particularly NexSIS 18-112, undergo frequent updates and refinements, with application refreshes every two weeks. Elastic's solutions are implemented into these rapid cycles of testing and updates, ensuring that ANSC's systems were always at the cutting edge.

By reducing troubleshooting, Elastic allowed ANSC's development teams to focus more on optimization and adoption. This shift not only enhanced productivity and efficiency, but also ensured that the NexSIS 18-112 system remained robust and responsive to emergency services demands.

Looking forward, Pascal is confident that Elastic's scalability will support NexSIS 18-112's ongoing evolution. "As NexSIS 18-112 grows, with more users, more applications, and therefore more logs, we will be able to adapt our Elastic stack accordingly," he says. He also plans on adding SIEM capabilities and lifecycle workflows for indexes and logs, which he believes will make cloud storage more efficient and cost-effective: "We're fine-tuning our SIEM strategy and anticipate constructing SIEM dashboards soon, marking a significant step in our journey with Elastic."



It has been a game changer for us to be able to delegate the creation of custom dashboards in Kibana. Each of our product teams has embraced this aspect of Kibana, creating specific dashboards for each application within NexSIS 18-112. In order to federate agency and SDIS skills, some of these are shared with users, resulting in faster fault detection and remediation. This customization has significantly enhanced our operational efficiency and decision-making processes."

Yann Pascal,
Head of Infrastructure, ANSC

Learn more about Elastic Observability and how it can benefit your business

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