> "OpenShift is a complete out of the box, go and start building your applications, modernizing your applications, or revamping your infrastructure to fit your organizational needs. We designed it with hybrid multi cloud in mind. So not only can you scale exponentially from an OpenShift side of the house, but then you can scale along with it from an Elastic perspective as you're monitoring your environment."
>
> - John Gibson, *Red Hat*
> Jared Pane, *Elastic*

RESOURCES

Elasticsearch (ECK) Operator
carah.io/redhat-elastic-overview

Application Performance and Developer Productivity to the Next Level
carah.io/redhat-elastic-solution-brief

Red Hat & Elastic Collaboration
carah.io/redhat-elastic-resource

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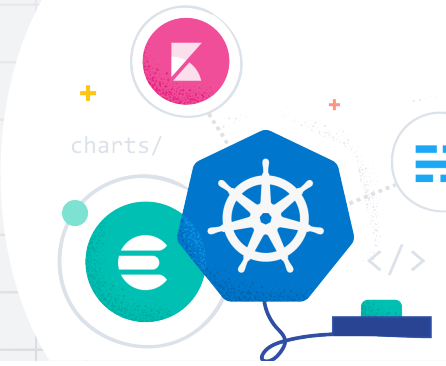
Open, Extensible Public Sector Observability with Elastic and Red Hat



Technical Summary

As the amount of data continues to grow, public sector organizations must keep up while maintaining secure and transparent data management practices. Faced with an overwhelming amount of tool and software options, agencies must find the right solution to secure data, applications, microservices and cloud infrastructures. Tool consolidation has become integral to mitigating risk and cutting costs in an effort to secure an agency's cybersecurity environment. Red Hat and Elastic are working together to ensure government agencies are able to leverage solutions for end-to-end visibility, proactive insight and the easy collection and interactive analysis of data.

The Challenges

Tool Sprawl

As public sector organizations modernize applications and technologies, data still resides in various legacy applications and form factors waiting to be transferred, thus creating data sprawl. Consistency across applications and infrastructures is crucial in ensuring there are no security issues that may arise in the transferring of those applications, whether vulnerabilities from previous legacy applications or possible downtime during the process of modernization.

Data Silos

Siloed working units create a wide breadth of data across the environment, making it difficult for agencies to manage that data. Without data management, potential threats and malware data leaks can occur with unauthorized or untrained users having access to data they shouldn't. Unauthorized user access to incoming data is a significant risk to public sector organizations.

Zero Trust

Observability for authorized users across all data is critical to protecting public sector information as well as maintaining zero trust practices. Another part of zero trust is responsibility for where the data lies and where it needs to reside. There must be transparency to ensure the data is secure. Monitoring and analysis tools—along with well-established policies and procedures—give public sector agencies the ability to be more responsive.

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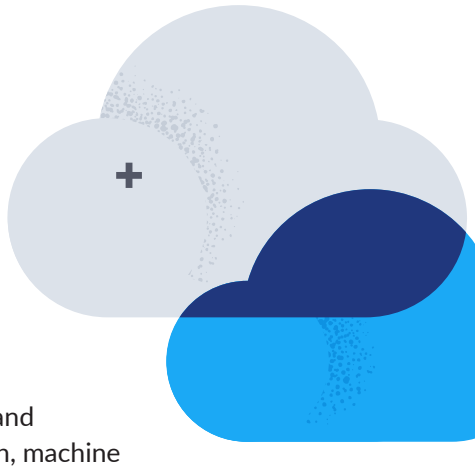
The Solution



Elastic and Red Hat have partnered to provide full-stack observability and scalable, centralized log monitoring for the modern hybrid cloud. Red Hat OpenShift is a leading provider in Kubernetes, which allows state and local agencies to speed up their environment, development and their ability to scale out exponentially in a fraction of the time. OpenShift is a completely out-of-the-box enterprise, cloud native, Kubernetes platform to build and modernize an agency's application or overhaul infrastructure to fit any organizational needs, all with the hybrid and multicloud environment in mind.

The Elastic Stack builds on Red Hat OpenShift's monitoring solution, doing a deep dive on what is occurring in each application and container within an agency's Kubernetes environment. This creates a proactive approach where detection becomes more efficient, and users are alerted to activity before it even happens. Integrated with this proactive approach, machine learning (ML) studies OpenShift applications and system operations to alert users of outliers before there is a problem. Elastic monitors all the way down to the application and database level, the entire stack. Application performance monitoring (APM), log monitoring and ML are just a few of the services that are deployed in an agency's OpenShift environment, which enables an agency to scale exponentially with OpenShift and the Elastic Stack.

Elastic and Red Hat address data sprawl by combining the OpenShift environment and Elastic monitoring in a way where public sector organizations are able to consume, observe and take action on data, regardless of where it resides, either in a hybrid or multicloud environment.

KEY BENEFITS

Visibility and scalability across multicloud and hybrid environments
These are not your standard Consolidate metrics, logs and traces quickly and easily from applications and systems in data centers or via cloud providers such as AWS, Microsoft Azure and Google Cloud. Our cloud-native integrations enable you to seamlessly adopt cloud-native and microservice technologies such as OpenShift and serverless functions.

Quick and easy collection of telemetry data
Allows elimination of data and tool silos by ingesting business and operational data with the unified Elastic Agent. Elastic provides integrations and native support for open standards such as Open Telemetry, Jaeger, Zipkin and Prometheus. Consolidating monitoring tools and tearing down tool silos while efficiently storing long-term data to analyze historical trends to help lower your OpenShift Total Cost of Ownership (TCO).

Increased Security and Zero Trust policies
Red Hat and Elastic solutions have foundations in openness, transparency and community and are committed to improving public sector organizations' data security. Red Hat and Elastic Security help deploy a consistent security-focused platform, no matter where an agency is in their hybrid cloud journey.

Detection of anomalies and faster issue resolution
Detect anomalies, outliers and even rare events in your observability data. Set up rules, actions and connectors to initiate root cause analysis and remediation work. Use the power of anomaly detection to automatically identify abnormal behavior and make proactive decisions within your OpenShift Cluster.

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