

FEDERAL BUREAU OF INVESTIGATION VIOLENT CRIMINAL APPREHENSION PROGRAM (VICAP)

MISSION



The Challenge

The FBI needed a virtualized & analytical-based database to replace their legacy technology used to execute search queries against multiple databases.

The FBI ViCAP team was designated a 2018 Public Sector Innovation Winner by 1105 Media.



The Response

Technica recommended open source Elasticsearch technology enhanced through Technica's internal research and development efforts. The prototype was built using an Elasticsearch instance created in AWS GovCloud. It ingests data by pulling from the database using a four-step interrelated process:

SOLUTION

- 1 Data is reshaped for analysis
- 2 Data is extracted from the database in JSON format
- 3 Extracted documents are transformed for compatibility with Elasticsearch
- 4 Data is formatted and then loaded into Elasticsearch for querying, reporting and visualization

BENEFITS TO THE FBI

State of the Art Data Analytics

Technica's prototype incorporated state of the art data analytics technologies such as Elasticsearch, Kibana and Logstash, which enabled a host of additional program capabilities.

Additional Program Capabilities

Elasticsearch, Kibana and Logstash, enabled a host of additional program capabilities including inclusion/exclusion queries, multiple query dimensions being returned in a single list, and customizable/interactive searches.

Display Variety of Results

These additional capabilities were able to allow agents to see previously uncorrelated results in a variety of different displays such as tables, graphic charts and geospatial views.

Contact Us, We can Help.

Call: 703-662-2000

Email: Contact-Us@technicacorp.com

