Machine Translation for the Offices of Inspector Generals

Bart Maczynski
and Charlie Breeding

April 2023

RWS
Language Weaver

Introduction

The Offices of Inspector General (OIGs) are tasked with preventing, detecting, and investigating fraud, waste, and abuse in federal agencies.

In today's globalized world, where communication and collaboration across borders in different languages is ubiquitous, OIG investigations face some critical challenges in dealing with multilingual documents, emails and presentations.

Key challenges include:

Providing URGENT translation support

Most OIGs have heavy data loads that they simply cannot turn around and translate in a timely manner.

Working efficiently in integrated workflows

There is a lack of integrated language translation solutions that seamlessly integrate with eDiscovery, forensics and other investigation tool sets.

Enterprise-grade solutions at a reasonable cost

Finding a machine translation solution that has the security, scalability and adaptability required but at a reasonable total cost of ownership (TCO) is difficult.

Secure neural machine translation (NMT) can help OIGs overcome these challenges – enabling them to efficiently and accurately translate multilingual content and fulfil their mission.

This white paper discusses the benefits of using secure NMT by OIGs and highlights where it can be used to translate emails, documents, images and presentations within federal agencies – either directly, or via integration with eDiscovery platforms like Relativity or digital forensic tools like NUIX or Cellebrite. It also looks at the requirements of enterprise-grade security, scalability, and integrability that must be present in the machine translation solution, before concluding with some examples of successful implementations.

Benefits of secure neural machine translation

Secure neural machine translation (NMT) provides several significant benefits to OIGs:

Multilingual content analysis

OIGs may receive a large volume of documents, emails and presentations in multiple languages that need to be reviewed for possible violations as soon as possible. Secure NMT can quickly and accurately translate this content into a language understood by the OIG investigators – enabling them to understand and analyze the content for potential fraud, waste and abuse.

Faster analysis and investigation

The ability to quickly translate multilingual content enables OIGs to perform analysis and investigation faster, allowing them to respond quickly to any potential violations. With the help of secure NMT, OIGs can work more efficiently, resulting in a faster and more effective response.

Cost savings

The traditional method of translating content involves hiring professional translators, which can be expensive and time-consuming. Secure NMT can help OIGs save costs by providing a faster and more cost-effective solution for multilingual content analysis and translation.

How can secure NMT be used?

Secure NMT can be used in several ways by OIGs to translate multilingual content within federal agencies, including:

Direct translation of emails and documents

Secure NMT can be used to translate emails, documents, websites, spreadsheets, presentations and other assets directly from one language to another. This can help OIG investigators quickly understand the content and identify any potential violations.

Integration with eDiscovery platforms

Secure NMT can be integrated with eDiscovery platforms like Relativity to automatically translate multilingual content within the platform. This can help OIG investigators quickly analyze large volumes of multilingual data by providing an automated translation service directly within the familiar eDiscovery environment.

Integration with digital forensic tools

Secure NMT can be integrated with digital forensic tools like NUIX to translate multilingual content found during digital forensic investigations. This can help investigators quickly understand the content and identify any potential violations across all data sets – regardless of the original language in which the assets were authored.

Successful implementation criteria

To ensure the successful implementation of secure NMT, OIGs need to consider the requirements of enterprise-grade security, scalability and integrability.

Secure and encrypted communication

The machine translation solution chosen must ensure secure and encrypted communication between the translation engine, the user interface, and the data store. This is essential to protect sensitive and confidential data from unauthorized access. In most cases, on-premises MT platform deployments are required.

Integration with existing systems

The machine translation solution chosen must be integrable with the existing systems used by OIGs, such as eDiscovery platforms and digital forensic tools – but also with common Microsoft Office applications and web browsers. This will enable OIG investigators to use the translation solution seamlessly within their existing workflows.

Scalability and reliability

As OIGs deal with a large volume of multilingual content, the machine translation solution chosen must be scalable to handle the large volume of content effectively. The solution must also be reliable, giving consistent results, and support continuous use even when there are sudden spikes in demand.

Language Weaver Edge

Language Weaver Edge is our enterprise-grade machine translation solution, which provides accurate, fast, and secure translations of multilingual text and documents. Built for optimal scalability and throughput, it can be deployed with a baseline performance level of 2,000 words per minute, right up to 100,000+ words per minute.

Commodity Futures Trading Commission (CFTC)

The successful implementation of Language Weaver Edge at the OIG CFTC highlights the benefits of a secure NMT solution.

Language Weaver Edge was integrated with the Relativity eDiscovery platform to translate large volumes of multilingual data during an investigation. The integration provided seamless translation capabilities within the Relativity platform, enabling OIG investigators to work more efficiently.

The implementation of Language Weaver Edge also met the requirements of enterprise-grade security, scalability and integrability. The machine translation solution's secure and encrypted communication ensured the protection of sensitive data, while its integrability with the Relativity platform enabled OIG investigators to use the translation solution seamlessly. The solution's scalability and reliability ensured consistent and accurate translation, even when faced with sudden spikes in demand.

Department of Defense (DOD)

Language Weaver Edge was integrated with the Department of Defense's digital forensic tools, enabling OIG investigators to translate multilingual content during forensic investigations seamlessly. The integration provided a more efficient and accurate translation process, enhancing the investigators' ability to detect and prevent fraud, waste and abuse.

The deployment of Language Weaver Edge at the OIG DOD ensured it had secure and encrypted communication, and provided protection for sensitive data during translation. The integration of Language Weaver Edge with the DOD's digital forensic tools also allowed OIG investigators to seamlessly use the translation solution in their workflow. Furthermore, the solution's scalability and reliability ensured that it could handle sudden surges in demand, yet still provide consistent and accurate translations at scale.

Conclusion

Secure NMT can provide significant benefits to OIGs in preventing, detecting, and investigating fraud, waste, and abuse in Federal agencies.

The successful implementation of Language Weaver Edge at the OIG CFTC and with DOD serves as an example of how secure NMT can enhance the efficiency of the translation process and support OIGs in their mission.

Find out more

rws.com/language-weaver/government-solutions

About RWS

RWS Holdings plc is a unique, world-leading provider of technology-enabled language, content and intellectual property services. Through content transformation and multilingual data analysis, our unique combination of technology and cultural expertise helps our clients to grow by ensuring they are understood anywhere, in any language.

Our purpose is unlocking global understanding. By combining cultural understanding, client understanding and technical understanding, our services and technology assist our clients to acquire and retain customers, deliver engaging user experiences, maintain compliance and gain actionable insights into their data and content.

We work with over 80% of the world's top 100 brands, more than three-quarters of Fortune's 20 'Most Admired Companies' and almost all of the top pharmaceutical companies, investment banks, law firms and patent filers. Our client base spans Europe, Asia Pacific and North and South America. Our 65+ global locations across five continents service clients in the automotive, chemical, financial, legal, medical, pharmaceutical, technology and telecommunications sectors.

Founded in 1958, RWS is headquartered in the UK and publicly listed on AIM, the London Stock Exchange regulated market (RWS.L).

For further information, please visit: **www.rws.com**