CASE STUDY

LEADING CANADIAN FINANCIAL POWERHOUSE

SIMPLIFIES DATA ANONYMIZATION AT SCALE across DB2 and Oracle, while anonymizing 7 times faster

Challenge

As premier multinational banking and financial services company, one of Canada's Big Five banks faced the dual challenge of compliance with worldwide **data protection regulations** and the need for efficient and consistent **anonymization of personal or identifying data** (PII) across multiple database types.

Anonymization is critical at the bank during the software testing process. To ensure test quality and minimize the risk of downtime, **test and development environments must be provisioned with realistic production data**. However, when used outside of the secure production environment, PII must be screened and anonymized accordingly.

The Code Control and Automation team were struggling with the performance and complexity of their existing anonymization tool. For example, on the IBM i platform, **the team needed to anonymize 500 different fields across 270 files in 2 different libraries, meaning as many as 5M records at one time to anonymize.**

With their previous tool - they needed to break up their files before processing, and in order to handle the total load of 5 million records they had to split into batches of 20-30 records meaning the process would run for 3 days!

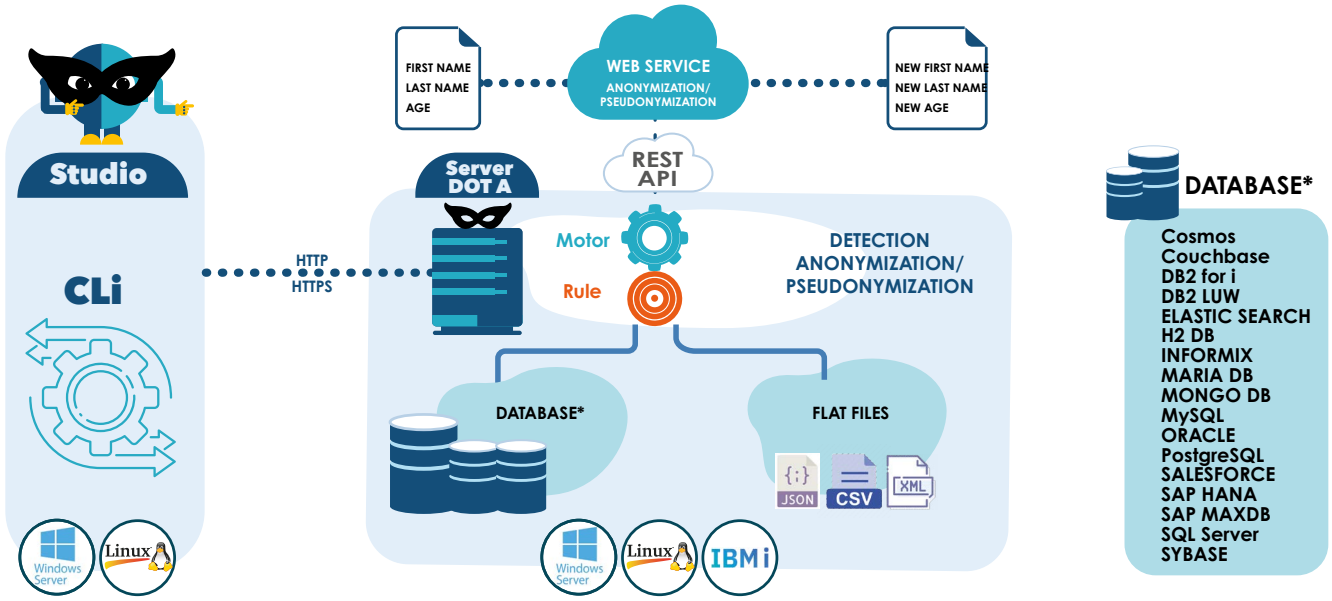
To overcome these limitations with their previous tool, the bank started the search for a replacement in 2022 and ran a Proof of Concept (POC) of DOT Anonymizer comparing with other data masking solutions on the market.

Solution: DOT Anonymizer

DOT Anonymizer preserved the readability, consistency, and referential integrity of the anonymized data.

At the same time, security remained the topmost priority at the bank:

"DOT Anonymizer fulfils our stringent security criteria and ensures the irreversible anonymization of our test data", *Senior Manager, Code Control and Automation.*



DOT Anonymizer – multi-database anonymization of PII

The team documented several advantages of DOT Anonymizer, which met or exceeded objectives on the following criteria:

Evaluation Criteria	DOT Anonymizer
Irreversible anonymization of personal/identifying data (PII)	High
Extensibility of anonymization rules	High
Scalability across multiple DBMS	High
High performance with high data volumes	High
Secure management of user authorities	Validated
Secure communications between anonymization server and database (SSL)	Validated
Centralization of anonymization rules across all databases (DB2 for i and ORACLE in the first instance)	Validated
Re-use/portability of anonymization rules	High
Usability/integrity of anonymized data	High

Conclusion

After several months of DOT Anonymizer use, the team confirmed a major improvement in anonymization times:

"DOT Anonymizer has proved a huge improvement on our previous anonymization tool. On average, we now anonymize at least 7 times faster. Some processes that previously ran over 2 days now complete in 2 hours. This means that we can run ad hoc anonymizations as needed", *Senior Manager, Code Control and Automation.*

The traceability features within DOT Anonymizer were a significant aid during the audit process:

"DOT Anonymizer is a very user-friendly tool, and we can easily track anonymization history and monitor progress in real-time from the studio"

ARCAD support was also a key factor in their choice:

"ARCAD support has been excellent. The ARCAD team are very reactive and always ready to help. We usually receive an immediate reply to our queries", *Senior Manager, Code Control and Automation.*