HIPAA Data Masking On Oracle/AS400

CHALLENGE

This leading health care company works with payers and providers to improve quality and lower costs by managing patient care to the home. In 2016 they generated over $1 billion in revenue and serves thousands of members in their homes. Their established IT infrastructure is comprised of both custom and packaged applications using Oracle and AS400 (i- Series) storing data in DB2 and flat files. They faced several masking challenges that Axis was able to address:

- The client needed to comply with HIPAA regulations for protecting patient data.
- Volume of data on the AS400 platform and on their Oracle databases was a challenge since they are masking tables with billions of rows
- There were no firm requirements about how the sensitive data attributes should be masked, only HIPAA guidelines
- Inspection of the sensitive data inventory uncovered that many of the columns being flagged for masking did not make sense and required additional analysis and training of the Delphix profiler.
- In many cases data attributes were being stored in different formats (all upper case, mixed case, all lower case) but needed to be masked consistently across platforms in the expected case

SOLUTION

The Axis Data Services Team was engaged to deliver masking of the in scope applications in order to meet aggressive deadlines. Our Delphix Masking team accomplished the following:

- Reviewed and streamlined the sensitive data inventories with client application subject matter experts (SME's)
- Masked identified PHI in all database schemas and files to comply with HIPAA regulations and application requirements
- Used an innovative application of the on-the-fly masking strategy to improve masking performance and avoid key field limitations on AS400
- Delivered the project on time and budget including documentation on best practices and custom job configurations required for the client Information Security team and Application teams to support masking moving forward.

RESULTS

The Axis Data Masking Factory solution delivered outstanding results:

- Axis profiled and masked 301 tables and files with PII data in various formats including delimited, fixed-width/positional, and excel
- Axis masked billions of rows of data across vastly different technologies.
- Axis was able to meet the client's deadline to prevent the testing team from having to stop working.
- The client was able to consistently apply their corporate data security standards with minimal impact to the ongoing software development process.
- Impressed with Axis' expertise the client asked for an extension to provide transition support and masking expertise

Axis was able to handle **both the complexity of the AS400 environment as well as the billions of rows of data in the Oracle environment** without needing to resort to a painful trial and error approach.

ABOUT US

Axis Technology, LLC is a leading Data Privacy Solutions firm based in Boston. We work with clients worldwide, architecting and integrating DataOps products that speed up access to secure data. Over 20 years, Axis has built a reputation as experts in Data Security solutions solving some of the largest data privacy challenges with proven process and software. For more information, visit our website at **www.axistechnologyllc.com**