



## Insights Anonymizing Query Relay (AQR)

Aircloak's **first-in-class anonymizing analytics solution** provides both high-quality analytics and strong anonymization for any data set and any use case. Prior approaches that use pseudonymization provide good analytics but weak anonymization, falling well short of European standards. Prior forms of strong anonymization, like K-anonymity, tend to destroy the data in all but the simplest use cases.



Compared with other anonymizing solutions, Insights AQR has remarkable **ease-of-use**. There is no need to flag or remove Personally Identifiable Information (PII) or pseudo-identifiers. The existing primary-use database is not modified in any way. Rather, Insights AQR is installed in front of the database, and relays queries and answers between the analyst and the database. The only database-specific configuration needed is to identify the column or columns that hold user identifiers (database primary keys, e.g. employee number, login name, or IMEI). Insights AQR takes care of the rest automatically.

Insights AQR offers analysts a **rich explorative database interface**. Analysts submit queries to Insights AQR, which then interacts with the existing database to extract the requested data. Insights AQR slightly modifies the data to preserve anonymity, and returns the aggregate, anonymous answer to the analyst. Insights AQR itself does not store data.

The analyst has the look and feel of querying the database directly. The analyst can specify tables and columns, join tables, set ranges, and run standard or custom SQL aggregate, math, and string functions. The analyst receives answers at the speed of SQL, thus allowing the same interactive and explorative analytics the analyst would expect from native access to the database.

The distortion in reported answers due to anonymization is remarkably small and easy to understand. Reported counts are usually within  $\pm 5$  of the true count, a few outliers may be omitted, and any data pertaining to fewer than 5 or so users is suppressed (e.g. text strings).

Insights AQR **enables new use cases**; for example improving internal business intelligence, external data monetization, and reducing the cost of mandatory reporting. Internally, divisions within large corporations can use Insights AQR to share customer data with other divisions or out-sourced analysts. Organizations with a statistics reporting mandate, such as hospitals and government organizations can report more at lower cost. Organizations with valuable data, such as health, location, or financial data, can instantly and safely monetize the data regardless of its format.

**Contact us** today, and let Aircloak show you how Insights AQR can enable secondary use, allowing you to share insights, not data.

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