

# Baffle™ Encryption As A Service



End-to-end encryption for database contents with zero data loss

Baffle is pioneering a solution that makes data breaches irrelevant by ensuring data remains encrypted, not only when it is stored but also when it is being processed by databases and applications. With automated self-monitoring and enhanced application performance, Baffle makes it easy and feasible to provide enhanced data protection for sensitive data in public or private cloud environments. The solution includes dynamic management of customer-owned keys and the ability to protect databases at a column-level granularity.

## Key Benefits

- Secure database contents through processing
- Extensive monitoring and audit capability
- Seamless key management
- Protect records with column-level granularity
- Leverage cloud infrastructure without compromising security

## How It Works

The Baffle Encryption as a Service will migrate data from an existing SQL/NoSQL database into a secure database with the ability to encrypt fields at a column granularity thereby enabling selective privacy. This is accomplished by inserting the Baffle Shield driver layer proxy between the application and the database. It will intercept SQL or its NoSQL equivalent generated by the application to access data records in the database by encrypting on writes and decrypting on reads. The encryption process manages keys that are generated by a commercially available key management service such as Amazon KMS or Microsoft Azure Key Vault. This change is transparent to the application which will continue to obtain data from the database in the clear. Application performance is minimally impacted allowing for enterprise workflows to continue to operate in a much more secure environment. The Baffle Manager is the cloud-based management console providing scalability, fault tolerance, and manageability of this service at all times. It also provides comprehensive monitoring of the usage and health of each of the components of the Baffle encryption service and generates audit logs of how the data records are accessed for further analysis.

Baffle has announced an early access program now to allow customers to migrate their data into encrypted databases. To learn more, please contact us at [info@baffle.io](mailto:info@baffle.io).



Delivered as a Service – no upfront costs, pay as you go



Comprehensive monitoring of service components



No performance impact v/s existing at rest solutions

## About Baffle

Baffle is an advanced data protection solution built from the ground up for distributed data and hybrid cloud environments where outdated solutions continually fail to stop breaches.

Only Baffle processes sensitive information without ever decrypting it or breaking applications. Using industry standard AES encryption and customer-owned keys, Baffle's frictionless, data-centric encryption never exposes sensitive information. Without any application changes, only Baffle protects data at rest, in memory, and while in use.



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