

# Mongo\_Manager

This Python microservice enables interaction with a MongoDB database, focusing on the Blog collection and providing additional utility functions. Key features include:

- **CRUD Operations:** Offers a comprehensive set of functions to perform CRUD operations on the Blog collection, along with retrieval functions for secrets, currency, and password.
- **MongoDB Integration:** Uses the `pymongo` library for efficient communication with the MongoDB database.
- **Distributed Tracing :** Integrated with OpenTelemetry to capture and send trace data to Grafana Tempo (host: `Tempo` , port: `4317` ), a scalable, open-source distributed tracing backend.
- **Prometheus Metrics :** Exposes Prometheus-compatible metrics on port `8111` for real-time monitoring and performance tracking.
- **gRPC Server :** Operates a gRPC server on port `50051` for fast and reliable client-server communication.

This microservice is designed for modern application needs, combining database interaction, observability, and scalability in one solution.

## gRPC Services

### Blog

Method Name	Request Type	Response Type	Description
GetBlogs	FilterBlogMessage	BlogList	Get Blogs according to provided Filter.
AddBlog	BlogContent	BlogContent	Insert new blog.
UpdateBlog	BlogContent	BlogContent	Update existing Blog based on provided blog content.

Method Name	Request Type	Response Type	Description
DeleteBlog	FilterBlogMessage	BlogContent	Delete Blog from DB.

## Currency

Method Name	Request Type	Response Type	Description
GetCurrencyType	CurrencyDetails	CurrencyTypeMsg	Returns type of provided currency.
GetSupportedCurrencies	CurrencyTypeMsg	CurrencyList	Returns list of currencies in a given type.

## PasswordChecker

Method Name	Request Type	Response Type	Description
CheckPassword	PasswordMessage	CheckResponse	Check if password is common.

## SecretStore

Method Name	Request Type	Response Type	Description
GetSecret	SecretName	SecretValue	Get secret value based on secret name.