**TimescaleDB** is an **open-source time series database** developed by Timescale Inc. [It extends PostgreSQL, providing efficient storage and querying capabilities for time-stamped data1](https://en.wikipedia.org/wiki/TimescaleDB). Here’s a concise overview:

* [**TimescaleDB**: An open-source **time-series database** built on top of PostgreSQL, designed to handle large volumes of time-stamped data and provide efficient and scalable query performance for time-series data](https://en.wikipedia.org/wiki/TimescaleDB)[2](https://medium.com/@SaiParvathaneni/a-complete-guide-for-postgres-timescale-db-ae75a4d45b8d)[1](https://en.wikipedia.org/wiki/TimescaleDB).
* **Key Features**:
  + **Automatic Time Partitioning**: TimescaleDB automatically partitions data based on time intervals, enabling efficient querying of large volumes of data over time.
  + **Optimized Indexing**: It extends PostgreSQL with optimized indexing techniques for time-series data.
  + **Compression**: TimescaleDB compresses data to save storage space.
  + **Advanced Analytics**: Provides features like continuous aggregates and window functions for analyzing time-series data.
* **Use Cases**:
  1. **Internet of Things (IoT)**: Ideal for storing and analyzing sensor data, device logs, and telemetry data generated by IoT devices.
  2. **Financial Services**: Efficiently handles stock prices, trading data, and transaction data.
  3. [**DevOps and Monitoring**: Useful for monitoring system performance, network traffic, and application metrics](https://en.wikipedia.org/wiki/TimescaleDB)[2](https://medium.com/@SaiParvathaneni/a-complete-guide-for-postgres-timescale-db-ae75a4d45b8d).

Here are some free resources to learn about TimescaleDB:

1. [**Medium Article**: A Complete Guide for Postgres Timescale DB](https://medium.com/@SaiParvathaneni/a-complete-guide-for-postgres-timescale-db-ae75a4d45b8d)[: Comprehensive guide covering installation, setup, modeling time-series data, and more](https://en.wikipedia.org/wiki/TimescaleDB)[2](https://medium.com/@SaiParvathaneni/a-complete-guide-for-postgres-timescale-db-ae75a4d45b8d).
2. [**GitHub Repository**: Timescale Examples](https://github.com/timescale/examples)[: Collection of example applications and tools to help you get familiar with TimescaleDB](https://en.wikipedia.org/wiki/TimescaleDB)[3](https://github.com/timescale/examples).
3. [**Timescale Documentation Tutorials**](https://docs.timescale.com/tutorials/latest/)[: Walkthroughs using example datasets to teach query construction, visualization, and graphing](https://en.wikipedia.org/wiki/TimescaleDB)[4](https://docs.timescale.com/tutorials/latest/).
4. [**Baeldung Tutorial**: Getting Started With TimescaleDB](https://www.baeldung.com/sql-timescaledb)[: Key features and practical usage examples](https://en.wikipedia.org/wiki/TimescaleDB)[5](https://www.baeldung.com/sql-timescaledb).
5. [**GitHub Repository**: TimescaleDB](https://github.com/timescale/timescaledb)[: Official repository with documentation and code samples](https://en.wikipedia.org/wiki/TimescaleDB)[6](https://github.com/timescale/timescaledb).

Happy learning! 📚🚀