



Time Series Database

In this lesson, we will discuss the time series database and when to choose it for our projects.

We'll cover the following



- What is a time-series database?
- What is time-series data?
- Why store time-series data?
- Popular time-series databases
- When to pick a time-series database?
- Real-life implementations

What is a time-series database?#

Time-series databases are optimized for tracking and persisting time series data.

What is time-series data?#

It is the data containing data points associated with the occurrence of an event with respect to time. These data points are tracked, monitored, and then aggregated based on certain business logic.



Time-series data is generally ingested from IoT devices, self-driving vehicles, industry sensors, social networks, stock market financial data etc.

So, what is the need for storing such a massive amount of time-series data?

Why store time-series data?#

Studying data, streaming-in from applications helps us track the behavior of the system. It helps us study user patterns, anomalies, and how things change over time.

Time-series data is primarily used for running analytics, deducing conclusions and making future business decisions by looking at the results of the analytics. Running analytics also helps the product evolve continually.

General databases are not built to handle *time-series* data. With the advent of IoT, these databases are getting pretty popular and are being adopted by the big guns in the industry.

Popular time-series databases#

Some of the popular *time-series* databases used in the industry are *Influx DB*, *Timescale DB*, *Prometheus*, etc.



When to pick a time-series database?#

If you have a use case where you need to manage data in real-time and continually over a long period of time, a *time-series* database is what you need.

As you know, *time-series* databases are built to deal with data streaming in real-time. Its typical use cases are fetching data from IoT devices, managing data for running analytics and monitoring, writing an autonomous trading platform that deals with changing stock prices in real-time, etc.

Real-life implementations#

Here are some of the real-life implementations of the tech:

- IBM uses Influx DB to run analytics for real-time cognitive fraud detection (<https://www.influxdata.com/customer/ibm/>)
- Spiio uses Influx DB to remotely monitor vertical lining green walls and plant installations.
(https://www.influxdata.com/customer/customer_case_study_spiio/)

[< Back](#)[Key-Value Database](#)[Next >](#)[Wide-Column Database](#)[Mark as Completed](#)

