

MODULES

Historian (data logger)

Log groups, triggers, SQLite or ODBC targets, store-and-forward, trends and export.

Online: mergenhub.envest.com.tr/docs/historian

ON THIS PAGE

[Targets](#)[Log groups](#)[Store-and-forward](#)[Trends and export](#)[OPC UA HistoryRead](#)[Sizing](#)

The historian records tag values into a database and serves trends, exports and OPC UA HistoryRead. It runs as its own service (`MergenHubHistorian`) and reads live values from the core over the local API.

Extensions > Historian – log groups and the trend viewer

Targets

TARGET	WHEN TO USE
SQLite (<code>logs.db</code> , default)	single server, up to a few hundred million rows; zero setup
ODBC	SQL Server, MySQL/MariaDB, PostgreSQL, Oracle — corporate databases, reporting tools, long retention

Settings › *Historian* (or the log group) holds the connection; the *Browse* button discovers SQL Server instances on the network, lists databases and can create the table for you.

Log groups

A log group is a set of tags with one storage rule:

- **Trigger** — periodic (every N ms), on change (with deadband), on a trigger tag edge, or a time window (e.g. 06:00–22:00). Advanced latched triggers match Kepware's behaviour.
- **Table format** — *narrow* (one row per tag sample) or *wide* (one column per tag), with selectable column mapping.
- **Table mode** — single table, table per day/month, or fixed table with automatic creation.
- **Batch size / flush interval** — tune for the database.

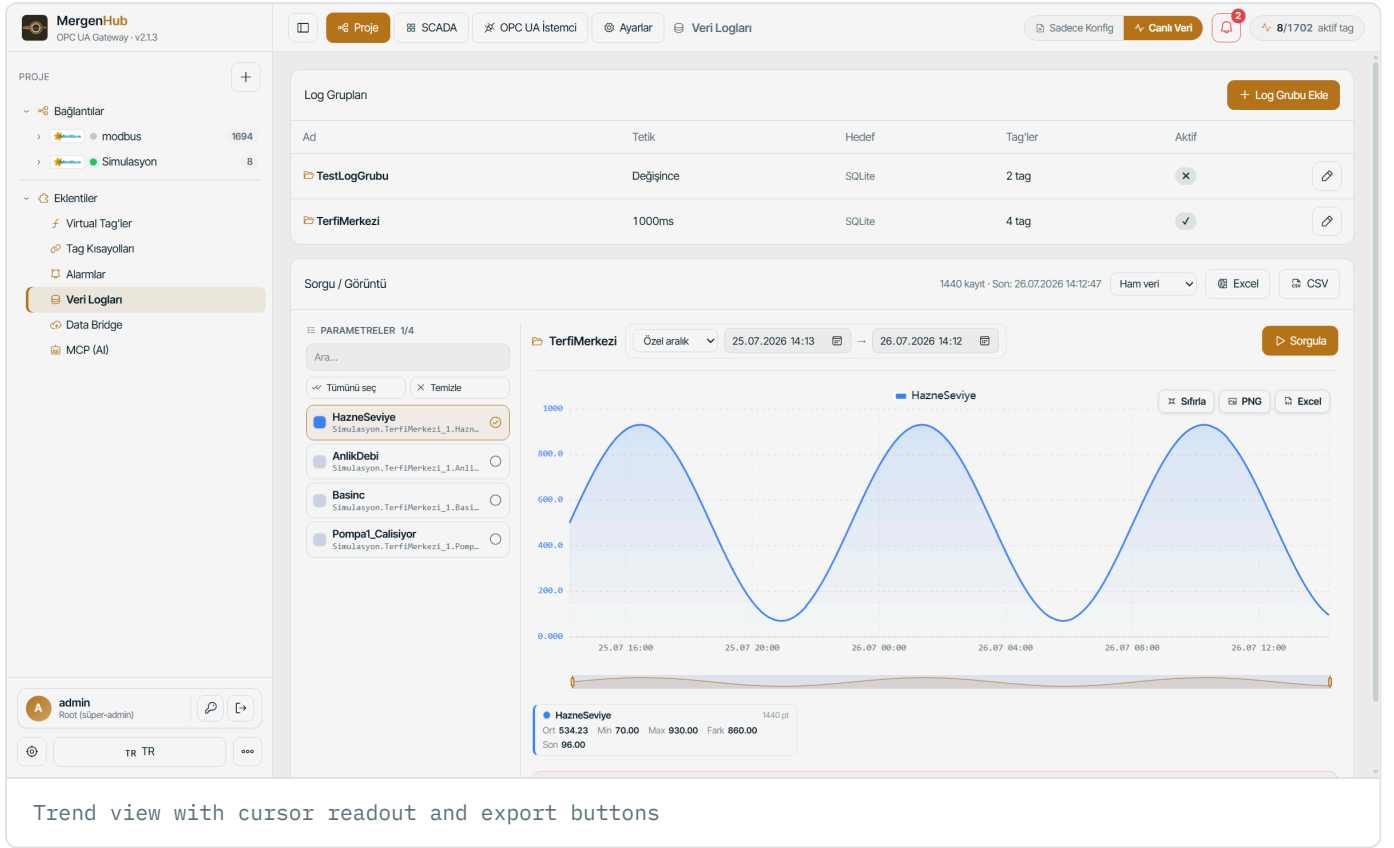
Store-and-forward

When the target is unreachable the historian buffers samples on disk and writes them when the connection returns; nothing is lost during database maintenance or network outages.

Trends and export

Historian › *Trend*: pick tags and a time range, zoom, pan, compare, then export as **CSV, Excel or PNG**.

Downsampling (averages/min/max per bucket) keeps long ranges fast.



OPC UA HistoryRead

Tags inside a log group answer HistoryRead requests (raw values and processed aggregates such as average/min/max/interpolative) so UA clients can chart history without direct database access.

Sizing

Narrow SQLite storage costs about 40–60 bytes per sample. 1,000 tags every 10 s $\approx$ 8.6 M samples/day $\approx$ 0.4–0.5 GB/day. Use on-change logging with deadbands for slowly moving values, and an ODBC database for multi-year retention.