WATER MANAGEMENT MODULE

Water Flow Diagram and balance

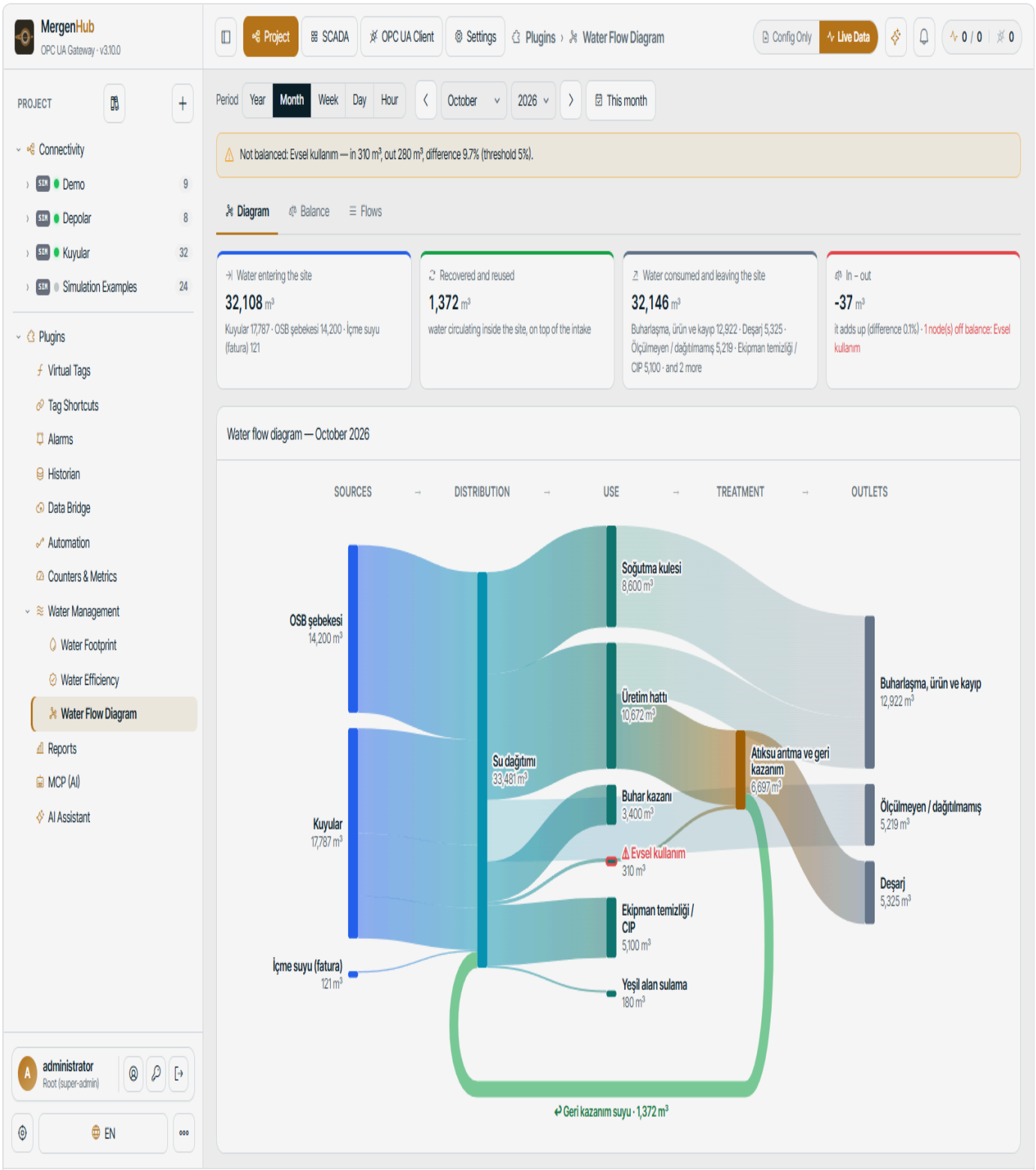
The water map of a site from source to discharge: place types, measured and computed flows, the water balance check, period and live views.

Online: mergenhub.envest.com.tr/docs/water-flow-diagram

ON THIS PAGE

- Setup in three steps
- Place types
- Flows and balance
- Reading the diagram
- Period and live view
- Outputs

The Water Flow Diagram is the site's water map: **places** (source, distribution, point of use, treatment, outlet) and the **flows** between them. Line thickness is proportional to the amount; at every place inflow and outflow are compared. Page: **Add-ons › Water Management › Water Flow Diagram** (if it is not in the menu, turn on the feature group first).

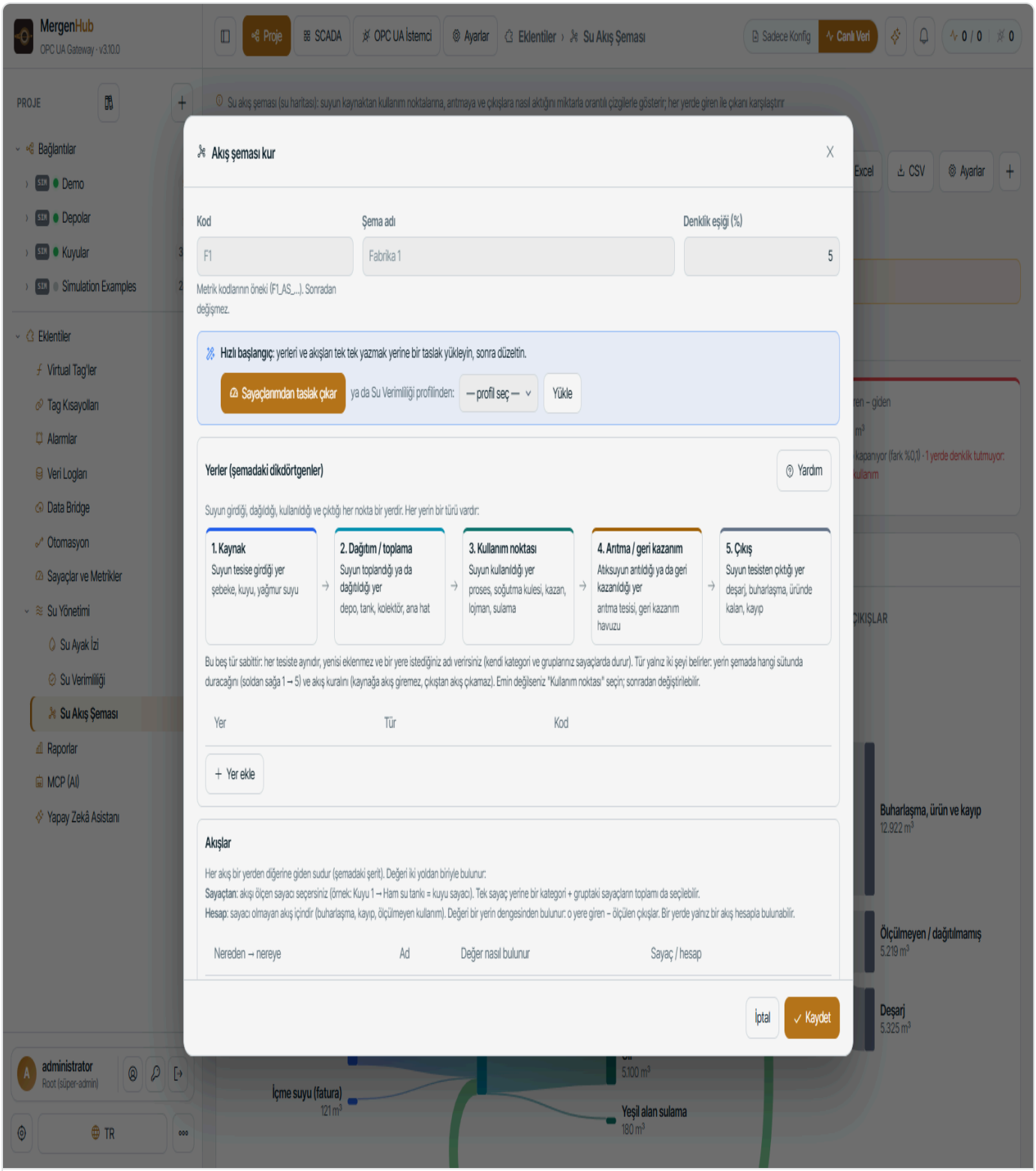


Water Flow Diagram — water flowing from sources to points of use, treatment and discharge

Setup in three steps

1. On the **Counters and Metrics** page give your water counters their category: *Water production / supply*, *Water consumption*, *Wastewater / discharge* (see Counters and period values).
2. In the new diagram window (**Set up flow diagram**) click **Draft from my counters**. Production counters become sources, consumption counters points of use and discharge counters outlets; the unmetered part is added as a computed flow and the assumptions made are listed in the window.

3. After saving, **click a place or a flow** on the diagram to change its name, type and counter; add places and flows or delete them. The whole diagram is available as a table in **Settings**.



Set up flow diagram window — the place types guide and the draft button

Tip If you have a Water Efficiency profile the draft can also be made from it ("or from a Water Efficiency profile" in the same window). The setup wizard builds the diagram from the site's counters automatically.

Place types

Every place has a type. The five types are fixed; you name the place as you like. The type decides two things: which column the place is drawn in (left to right) and its flow rule.

TYPE	WHAT	RULE
1. **Source**	Where water enters the site: mains, well, rainwater.	Has outflows only; no flow can end here.
2. **Distribution / collection**	Reservoir, tank, collector, main line.	Inflow and outflow are compared (balance).
3. **Point of use**	Process, cooling tower, boiler, housing, irrigation.	If no outflow is defined, all incoming water is counted as consumed.
4. **Treatment / recovery**	Where wastewater is treated or recovered.	A flow returning from here to distribution is drawn as a green arc.
5. **Outlet**	Discharge, evaporation, water left in the product, loss.	Has inflows only; no flow can start here.

If you are unsure, choose **Point of use**; the type can be changed later.

Flows and balance

CONCEPT	DESCRIPTION
Measured flow	Bound to a counter or a counter selector.
Computed flow	Derived from the balance of a place (inflow – measured outflows): evaporation, loss, unmetered use. Drawn faint in the diagram.
Balance	At a place whose flows are all measured, inflow and outflow are compared; if the difference exceeds the tolerance (5% by default) the place gets a red frame and a warning.

Reading the diagram

- The tiles above the diagram summarise the period: water entering the site, recovered water, water consumed and leaving, and the difference between the two.
- The **How to read this diagram** box explains the rectangle, the band, the faint band, the green arc and the red frame.
- **Click a place or a band** to see what goes in and out and which counter each number comes from (or how it is computed).

Period and live view

The period size is **hour, day, week, month** or **year**; the arrows move between periods. The **Live** button refreshes the current period every 15 seconds and turns itself off when you go to an earlier period.

> **Note** Manual counters are usually filled in monthly; in the hour, day and week views those flows stay empty. The diagram draws period totals (m^3), not instantaneous flow (m^3/h).

Outputs

The diagram downloads as **Excel** (flows and balance sheets) and **CSV**. The AI assistant and MCP clients read it with the `get_water_flow` tool ("which place does not balance").