

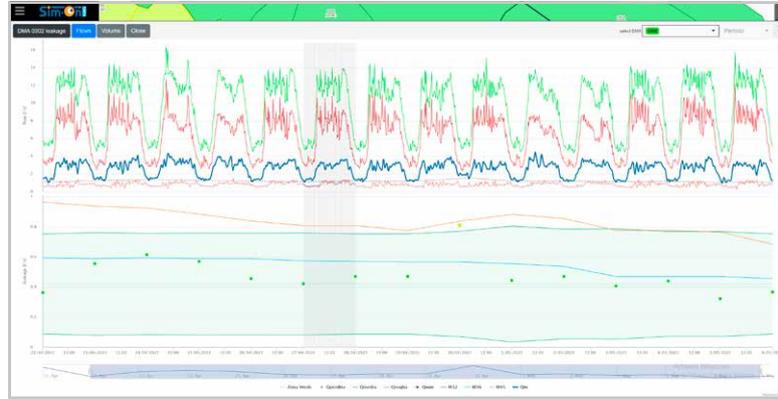
Web-based tool to efficiently target water leaks

Sim-On Water

Sim-On Water is a real-time web application that combines multiple data sources and uses the latest mathematical approaches to detect leaks. It automatically generates leakage reports and issues alarms so that leaks can be found and repaired rapidly, saving water.

In focussing specifically on fast leak detection, Sim-On Water has been designed to cut down time, effort and uncertainty in identifying leaks on the network. Separate algorithms have been developed with a focus on both District Metered Areas and Trunk Mains (DMAs and TMs).

A leakage targeting dashboard, which is accessed via a web browser on desktops or mobiles, makes it easy for engineers and technicians to see areas where leakage is high, providing valuable information for daily reporting and deploying field resources. It improves teams' response time to finding and therefore repairing leaks, lowering leakage levels, and saving time and money for water companies.



Operational benefits

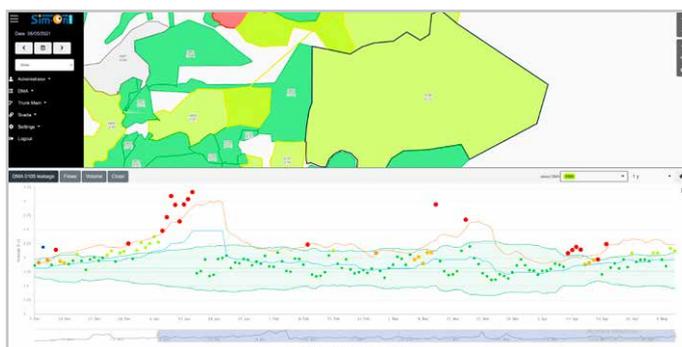
- > Supports water company staff in managing processing, organising and presenting their water flow data.
- > Helps with efficient allocation of field operators to address leakage problems.
- > Control panel facilitates leakage identification, and provides performance indicators for each managed area.
- > Results in a better understanding of problem areas, supporting prioritised works to achieve greatest savings reducing the amount of water lost.
- > Easy generation of reports on the performance history of each DMA or TM area, with supportive statistical analysis that can inform the operators of the current state of each area.

Strategic analyses

- > Leakage level assessment for each DMA or TM is derived from measured flows and legitimate night usage.
- > Statistical analysis of leakage trends is carried out in each area.
- > Comparison with best long term leakage performance is performed for each area.
- > In order to avoid false alarms, a further analysis of volumes is carried out.
- > Alarms to warn about leakage problems are raised through the user interface.
- > Calculation of further performance indicators is carried out, such as the dynamic (i.e. daily varying) Infrastructure Leakage Index (ILI), leakage per unit length, and leakage per connection.
- > Advanced data mining minimises false alarms caused by water consumption seasonal variations or operational boundary changes (e.g. DMA interconnections).

Usability

- > Sim-On Water is installed on a Windows server, and users can access the system via a web browser. It is not necessary to install or manage client applications.
- > Sim-On Water is designed to be supremely easy to use with only a handful of menus. There is no need for advanced training nor for high levels of IT skill to deploy it.
- > Our staff can offer training and support in installation and configuration of this application.



Easy access to data and trends enable informed identification of leakage problems

