

# DIMS.CORE

## Data integration and business processes

DIMS.CORE provides the **perfect data repository for your management and real-time operation data** and **turns data into invaluable information** concerning the performance. DIMS.CORE can **link to all data sources, share and provide data to users worldwide**. DIMS.CORE has an impressive track record of combining multiple data sources into one platform and providing tailored reports on your water-related business processes.

### APPLICATIONS

#### OPERATION OPTIMISATION

DIMS.CORE is designed for building solutions that transform data into information for operations and management of utilities.

#### TYPICAL APPLICATIONS

- Wastewater treatment plants
- Water supply and distribution
- Collection systems

DIMS.CORE is a generic and flexible tool, which is also applicable within other domains such as:

- monitoring, reporting and real-time control (RTC) for industries
- real-time monitoring of catchment areas integrating surveillance data from deployed automatic equipment
- real-time monitoring and control of water intakes for early warning systems
- integration with decision support systems (DSS) and information management systems (IMS)

### FEATURES

#### DATA INTEGRATION

DIMS.CORE is used for linking SCADA system data and models in projects that implement monitoring and model-based RT control systems.

DIMS.CORE has flexible and automated reporting capabilities including integration with Google Maps and MS Excel.

Key components include:

- **Hosts** - modules, which execute tasks and collect data, are distributed to different computers (load balancing)
- **Clients** - the interactive user interface is for configuration and presentation. It supports user accounts and logins, thus enabling different access levels
- **Service** - include modules executing basic functions such as aggregation of time series
- **Plugins** - scalable through software extensions via user or third party configured plugins (.NET)
- **Data validation** - includes quality labels and confidence values assigned to the monitoring and calculated data input
- **Guard** - for system-wide surveillance

### SOLUTION EXAMPLE

#### REDUCING COSTS FOR AARHUS WATER

##### Challenge

Aarhus water is responsible for the operation of wastewater treatment plants (WWTP) equivalent to 500.000 PE. The population growth in the area is creating a need for additional treatment capacity. This need may be met either by building new infrastructures, such as aerations or settlement tanks, or by process optimisation within the existing physical configuration.

##### Solution

By installing ammonium, nitrate and phosphate sensors and feeding the data into DIMS.CORE, operational data are established and used to make the treatment process more efficient. As a result, the power consumption has dropped substantially and so has the use of expensive chemicals, while effluent quality has improved.

##### Value

By introducing DIMS.CORE and additional online sensors with operational control at four of their largest WWTPs, Aarhus Water has reduced yearly operational costs by EUR 250,000. Moreover, by improving the effluent quality, Aarhus Water has saved EUR 150,000 per year in effluent taxes.

For more information about this project, visit [www.mikepoweredbydhi.com/](http://www.mikepoweredbydhi.com/) references



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