EMMSYS MDMS

Meter Data Management Software.

Itron meter data management software (MDM) is the core software solution for day to day operational use by utilities.

The MDM stores data from various data collection systems and its unified standard interface provides enhanced use-ability for users within the utility.

Itron MDM can manage data from water, heat, and cooling applications and interfaces with utility IT infrastructure including workflows and processes leading to full integration.
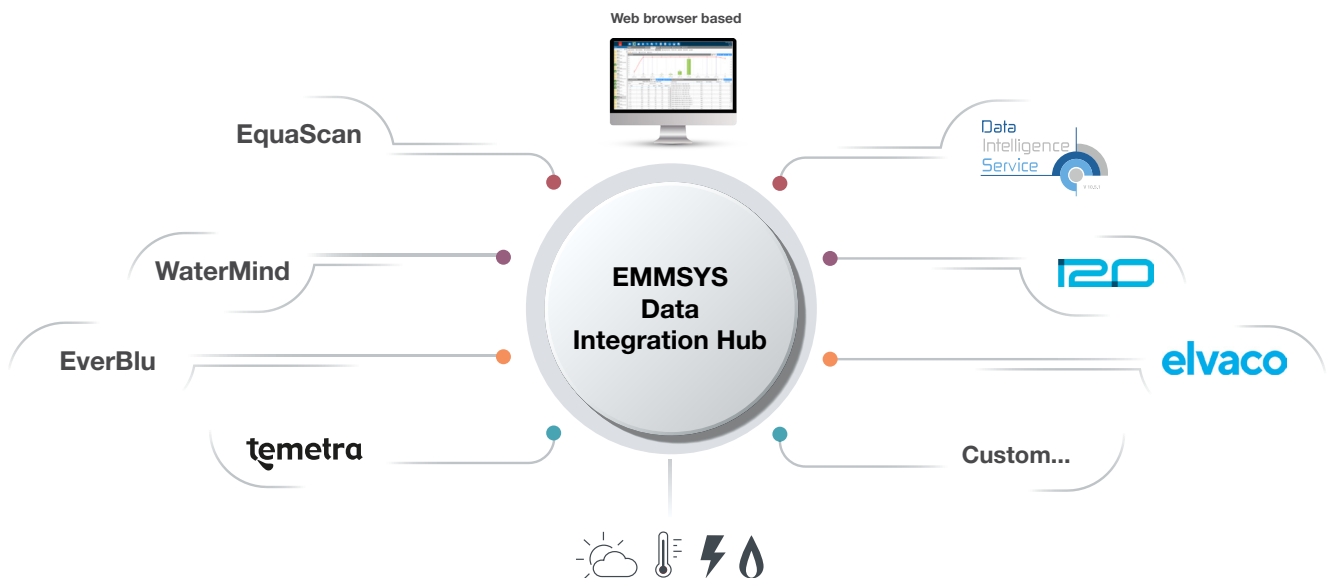
MDM, as part of an Itron solution for non-revenue water (NRW) reduction, is a complete end to end solutions for utilities.

MDM focuses on data and can perform the following functions:

» Standardization of the data collection process
» Standardization of data storage
» Data Analysis
» Alarms
» Work Order Module

» Reporting
» Non-Revenue Water
» End Use Access
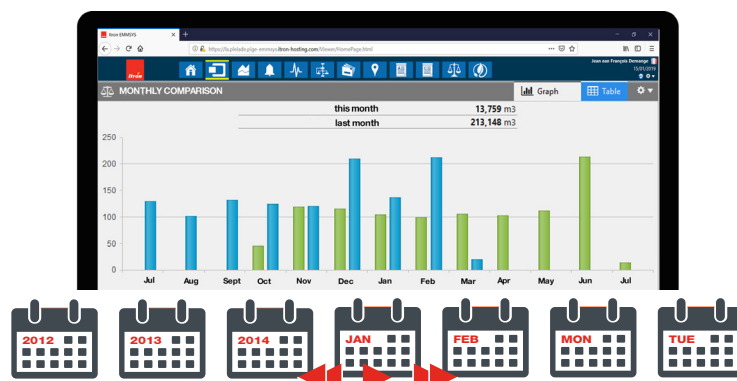» Interfacing utilities system.

STANDARDIZING DATA COLLECTION

Data collection systems can vary according to the manufacturer. Itron MDM has the ability to manage the full interface with its own data collection software and also from data collection systems and software from other manufacturers.
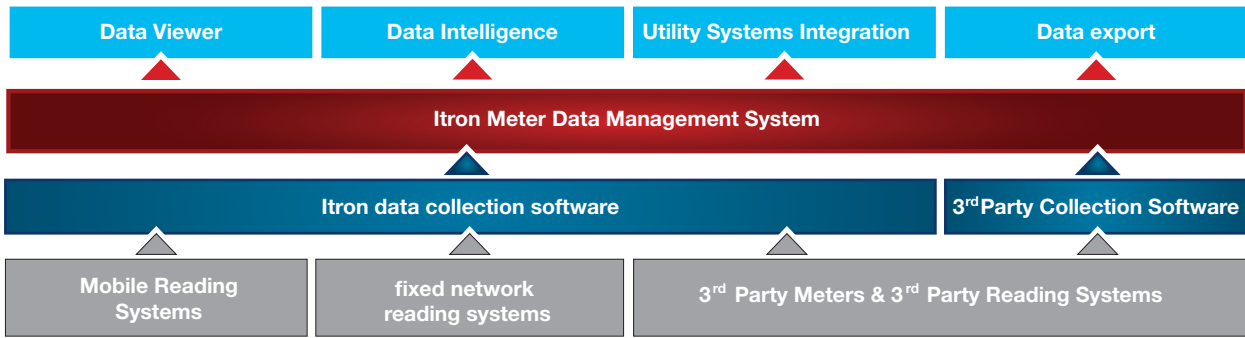

STANDARDIZING DATA STORAGE

MDMS can act as a library to store data from the variety of data collection systems that it can interface with. The quality and content of data the MDMS can output far exceeds that of current collection systems and software.

MDMS automatically adapts to the various collection systems in order to only give access to the data provided by the third party system.
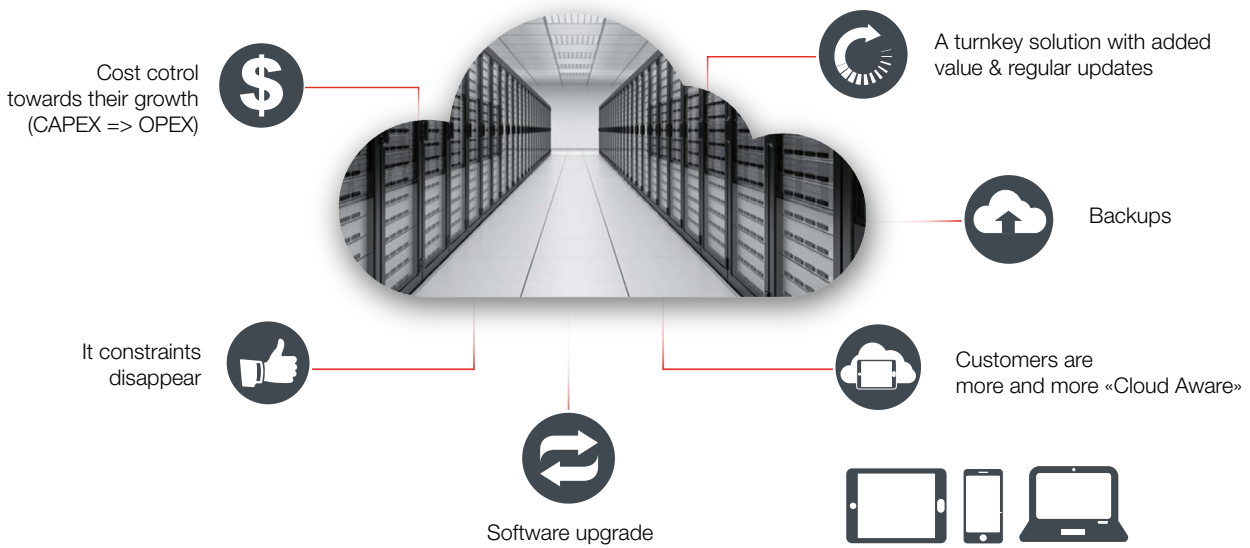
GLOBAL DIAGRAM

The functional diagram of a complete solution deployed for a utility is shown below:

Data Viewer	Data Intelligence	Utility Systems Integration	Data export

Itron Meter Data Management System

Itron data collection software	3rd Party Collection Software

Mobile Reading Systems	fixed network reading systems	3rd Party Meters & 3rd Party Reading Systems

FULL SAAS CLOUD SOLUTION

MDM is fully hosted on Itron Saas servers which permits to give below benefits for customers:

Cost cotrol towards their growth (CAPEX => OPEX)

A turnkey solution with added value & regular updates

Backups

It constraints disappear

Customers are more and more «Cloud Aware»

Software upgrade

DATA ANALYSIS

The MDM can perform the following data analysis functions:

» Analysis of consumption trends. Single or multiple metering points per customer

» Analysis of the alarms sent to MDM

» Management of metering point information

» Comparison of metering point data issued from data collection engines

» Comparison of metering point alarms issued from data collection engines

» Analysis of customer consumption

» Comparison of metering point consumption over different periods

» Geographical analysis to identify consumption trends.

» All data analysis above is simple examples of MDM capabilities.

The MDM is ideal for performing simple commands, for deeper

ALARMS

Alarms from the MDM are based on automatic day to day work processes.

The MDM server has a module to configure alarm management and the workflow through the utility.

The MDM can process alarms from the following:

» Data collection system
Alarms are generated from Itron's own data collection system or from third party systems. The MDM manages these alarms and combines them with data to display them in an appropriate format.

» Metering point
Meter manufacturers develop metering points with intelligence and on-site data computed to generate alarms such as tamper, backflow… All these alarms are processed through the data collect systems and are managed inside the MDM

» Combined data from different sources
The MDM handles data from a number of different sources and can turn this into actionable information.
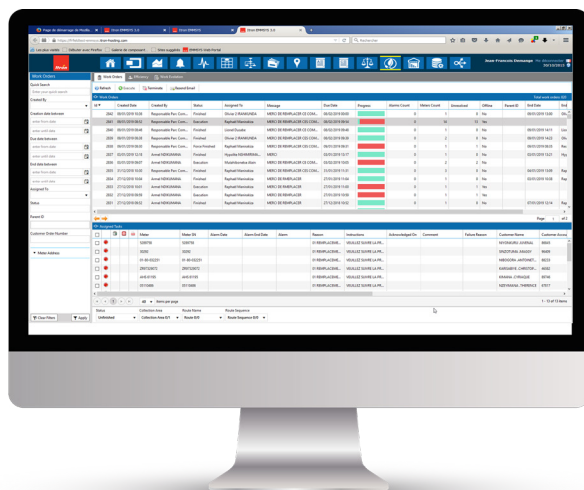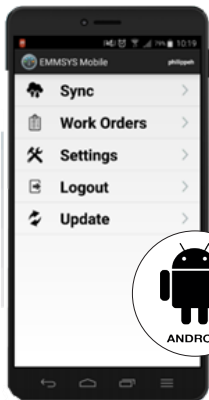

WORK ORDER MODULE

The work order management module of the MDM allows the water utility to manage trouble shooting teams with work order assignment and management.

» Alarm check/Acknowledgement
» Meter Replacement
» Meter Audit/Survey
» Device/Logger Deployment
» Device/Logger Replacement

Back office can create their own procedure and customize the existing ones

A dedicated Android App is available to manage WO on field with advanced mobile features like Pictures, GPS coordinates recording and Off-line mode.

REPORTING

Reporting from the MDM can be done automatically or through a user enabled module. The following lists the type of reports available:

- » Data collection system reports
- » Consumption reports
- » NRW assessment reports
- » Metering park efficiency reports
- » Alarm management reports
- » Alarm reports
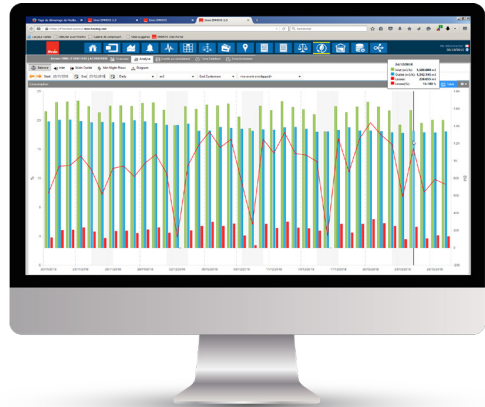- » Project deployment reports
- » Billing reports

Today, more than 150 standard reports are available within the groups listed above. Reports can be produced in various formats and can be instantly saved or emailed.

NON-REVENUE WATER

EMMSYS is able to build District Meter Area providing the following outcomes:

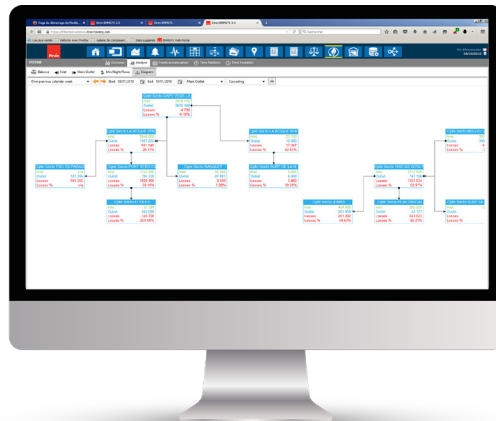Water **Losses** evaluation

High Resolutions **Water Balance** (Hourly)

Minimum Night Flow measurement

Inlet **Meter Sizing** Analysis

Multi DMA Hierarchy

INTERFACING

MDMS interfaces with existing essential systems used in Utility IT infrastructure. In addition, Itron provides full integration with other Itron systems and third party systems.

Itron Interface

The Itron interface is bi-directional to allow integration of all data available through the different Itron components supplied for the project.

Others Application interfacing

Itron MDMS can interface with a number of systems including the following:

» Billing software

» CRM software

» Asset Software

» SCADA Systems

» …

Interfaces are managed during project deployment.

PROJECT MANAGMENT

Itron's skill in project management enables system deployment, NRW reduction, and software implementation.

Itron experts meet Utility IT and operation departments to define the scope of work (SOW) and discuss:

» Integration into the Utility
  Itron will work with use cases to define real integration needs

» Interfaces with the utility
  Define the interfaces handled by the MDMS during project implementation in the SOW

» Change requests from management
  Define a change request process in the SOW

END USER ACCESS

End Users of Utilities can access to their own layout presenting their meter data.

This access is available from computer through the usual URL with a dedicated layout which can be customized by the utility.

Or connect to the mobile web site version from smart phone or tablets:

Our company is the world's leading provider of smart metering, data collection and utility software systems, with over 8,000 utilities worldwide relying on our technology to optimize the delivery and use of energy and water.

To realize your smarter energy and water future, start here: **www.itron.com**

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