

Network Performance and Operational Analytics

24/7

View™

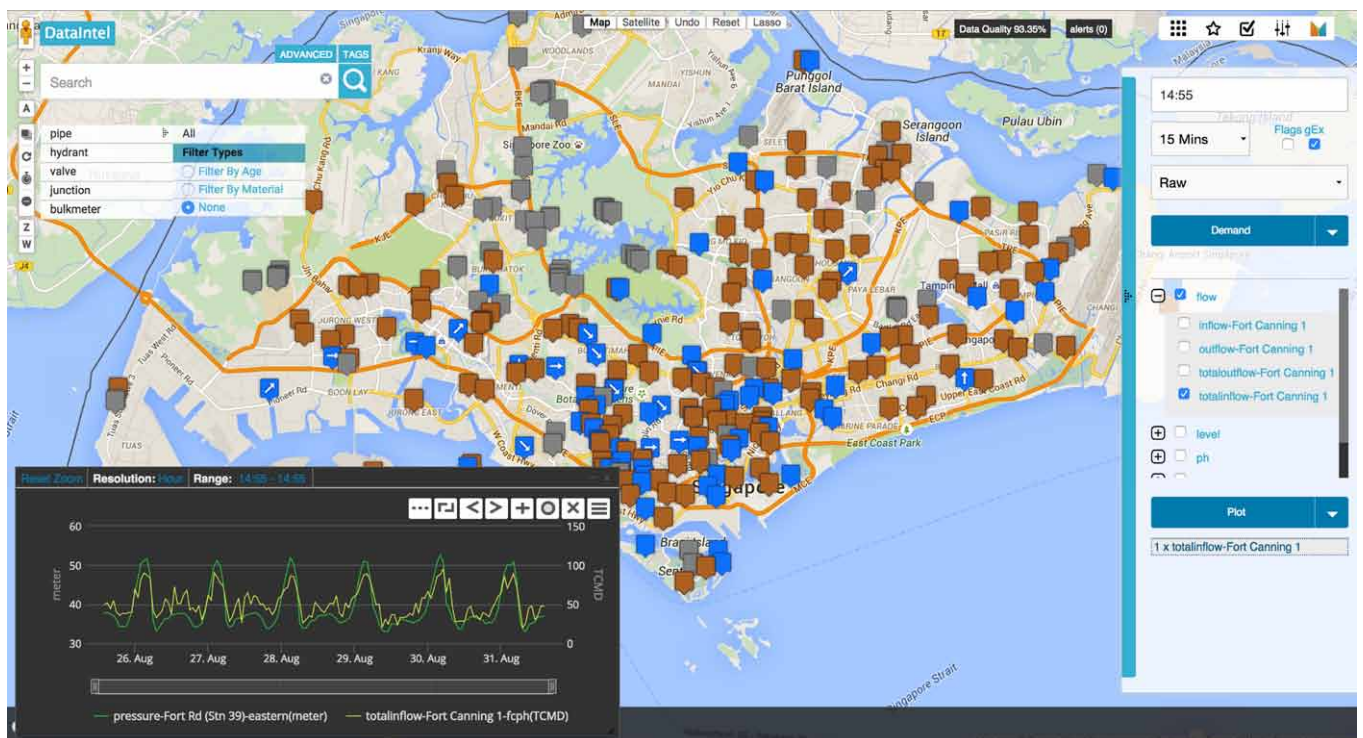
THE IOT PLATFORM FOR WATER SYSTEMS WITH BUILT-IN ANALYTICS
DESIGNED BY WATER PROFESSIONALS FOR UTILITY ENGINEERS



visenti
a xylem brand

Integrated Data Management and Network Performance Analytics

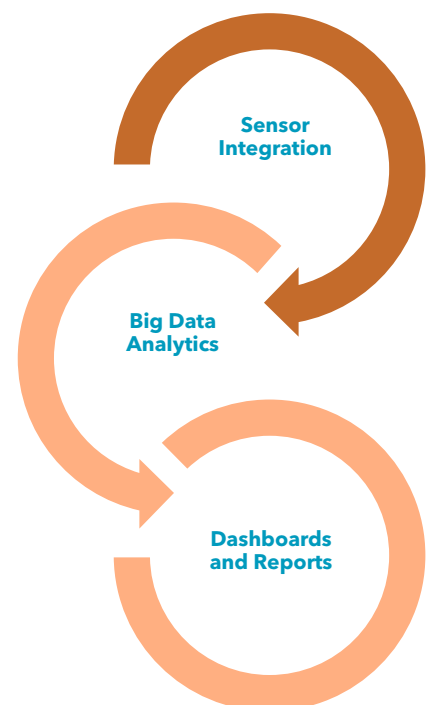
Data management and analytics to keep an intelligent eye on your assets

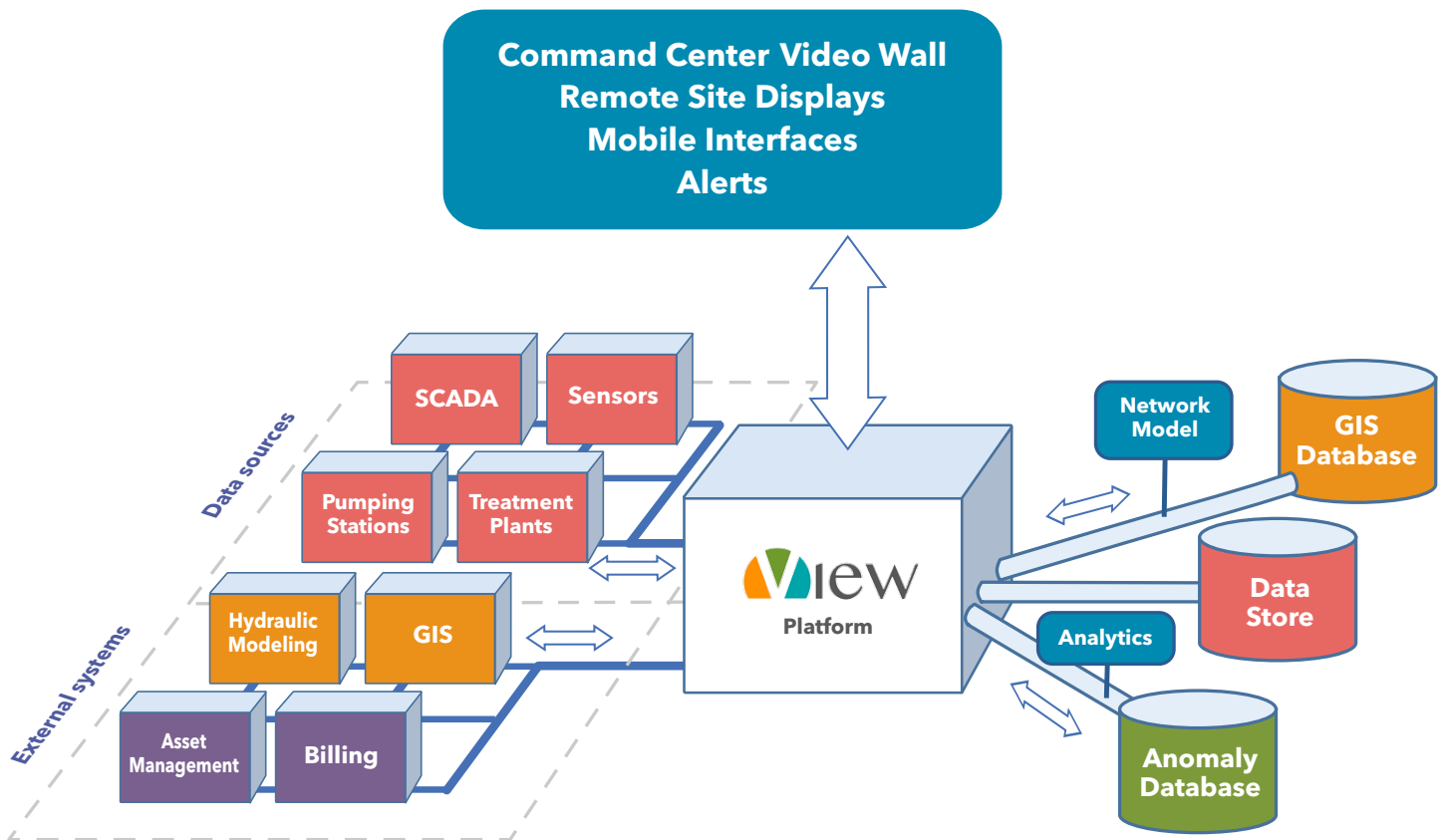


Visenti's View™ platform is an Internet of Things (IoT) solution with analytics built for water networks. It is a scalable system that manages data supplied by a variety of sensors installed on water systems, such as: flow-rate, level, volume totalizer, pressure (transient and baseline), water-quality and automated customer meters.

View™ provides a wide range of real-time analytical capabilities to monitor, detect and notify on anomalies related to pressure variations, night flow, water quality issues, demand fluctuations and consumer-level Non-Revenue-Water (NRW) tracking for revenue protection.

When deployed to monitor the entire water network, View™ serves as an essential IoT system to monitor the performance of the network and swiftly respond in case of anomalies.





Seamless and Scalable Connectivity

Utilities source multi-vendor equipment and use multi-vendor GIS, SCADA, Billing and Asset Management systems. On top of this, utilities must deal with a variety of visualization, database and analytics packages.

Visenti's View™ platform is here to help by integrating data from different sensing and management systems into a single platform, delivering unified analytics and visualizations throughout your organization. You can focus on running the water network while View™ delivers you the right data and analytics at the right time and in the right format - 24/7.

The View™ platform helps with resolving the multi-vendor dilemma



Key Features

- Sensor Data Management
- Integrates SCADA and GIS data
- GIS-MAP based Visualization
- Interactive Dashboards
- Customizable Reports
- Customer Analytics
- Water Balance
- Demand Analytics
- Asset Management Views
- Heat-maps

- Smart Alerts (Email, SMS)
- Operational Impact Assessment

Security

The View™ platform has been built to use industry standard security features. For on-premise deployments, Visenti follows the hardening and security protocol requirements of our customers, based on their regions and respective regulations. If the customer chooses a Cloud-based deployment, we will use the Amazon Web Services Cloud located in the nearest region to the customer. Amazon Cloud's security architecture is built to meet the requirements of the most security sensitive organizations*.

*Details on the AWS Security Compliance are available at aws.amazon.com/security.

Interactive Dashboards

Various analytical modules in the View™ platform provide a variety of views for real-time visualization, alert monitoring, asset display, GIS based displays, custom dashboards, pressure transient visualizations, display of pipes at risk of failure, and various network-level views such as:

- i) network-wide pressure heat-map,
- ii) network-wide water quality heat-map,
- iii) hydraulic simulation results and impact assessment (e.g., effects of valve closure, pipe isolation, flushing) and
- iv) water age heat-maps.

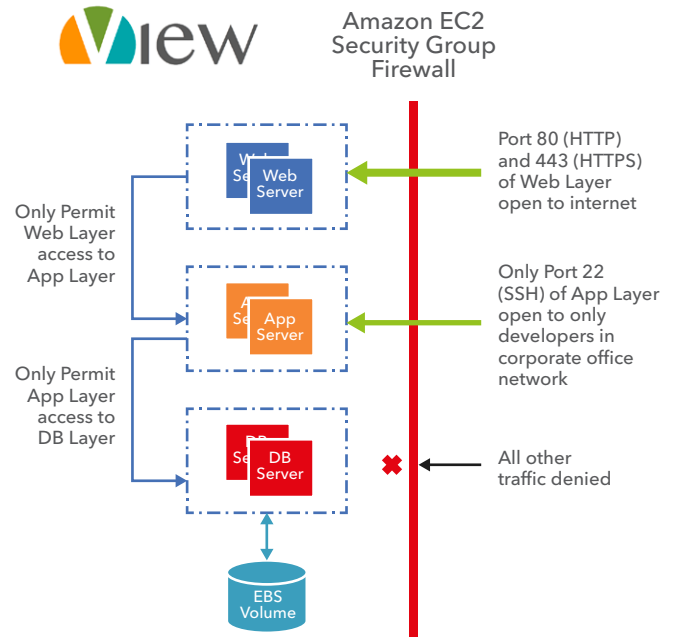
Sensor Health and Communications Management

View™ provides effective means to track the performance of the sensors network installed at all levels, ranging from sensor failures, issues with actual readings sent by the sensors and the health of the communications network.

Consumer-End Leakage Management

Through dedicated analytics on AMRs, View™ learns the end water consumer patterns and determines the expected consumption on various trend scales such as daily, weekly, monthly, seasonal and yearly. Statistical algorithms are then applied to detect anomalies, trends and useful insights such as:

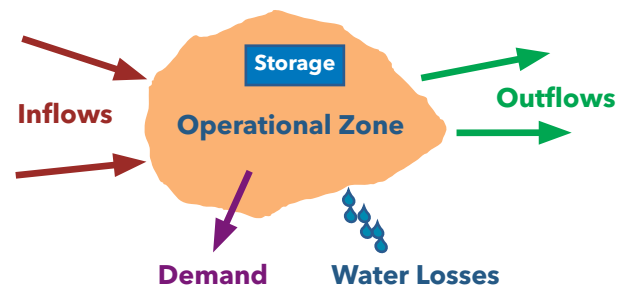
- Top-N Accounts Revenue Protection
- Usage on Inactive
- Unreported Usage
- Night-flow Tracking
- Demand Correlation with weather
- Comparative Demand Analytics
- Leakage



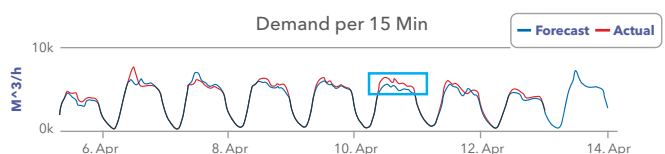
Advanced Water Balance Calculations

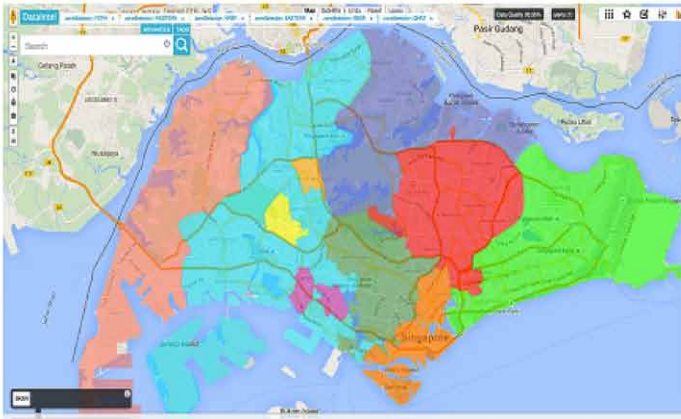
Where flow meter data is available from the boundaries of a District Metered Area (DMA), View™ provides a comprehensive water balance online calculator for the purpose of detecting emerging water losses inside the DMA.

To avoid over or under evaluation of unaccounted-for-water, the system provides statistical predictions/corrections for faulty or missing meter readings, taking into account the consumption patterns and weather effects in the DMA.

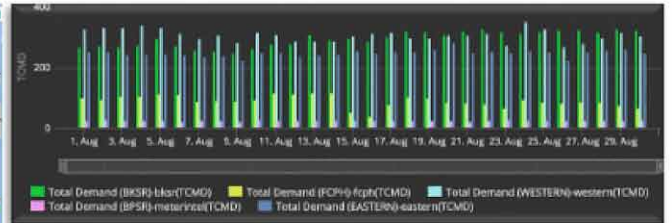


View™ then processes the flow meter data and compares that with the total consumption in the system. A growing disparity between the two measurements is first corrected by taking into account faulty meters before any alarm is raised. This smart water balance approach helps in dramatically reducing the number of false positive alerts.

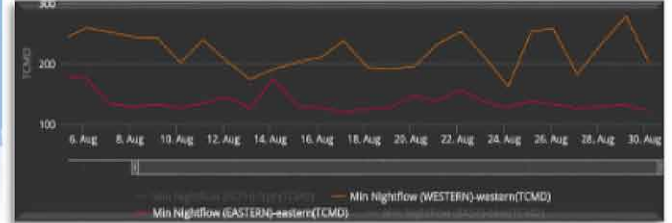




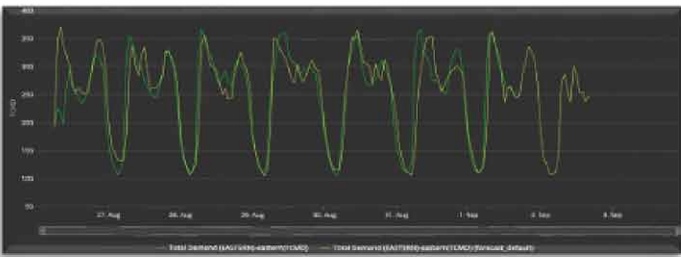
Integrated View on a GIS Map



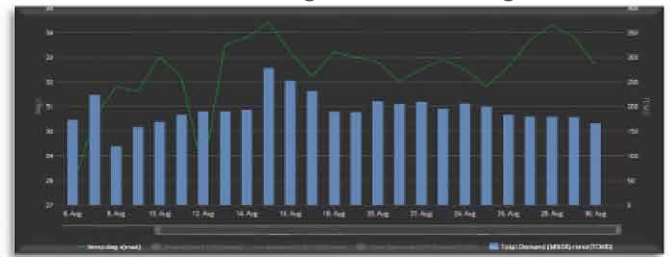
Zonal Demand Calculations



Minimum Night Flow Tracking



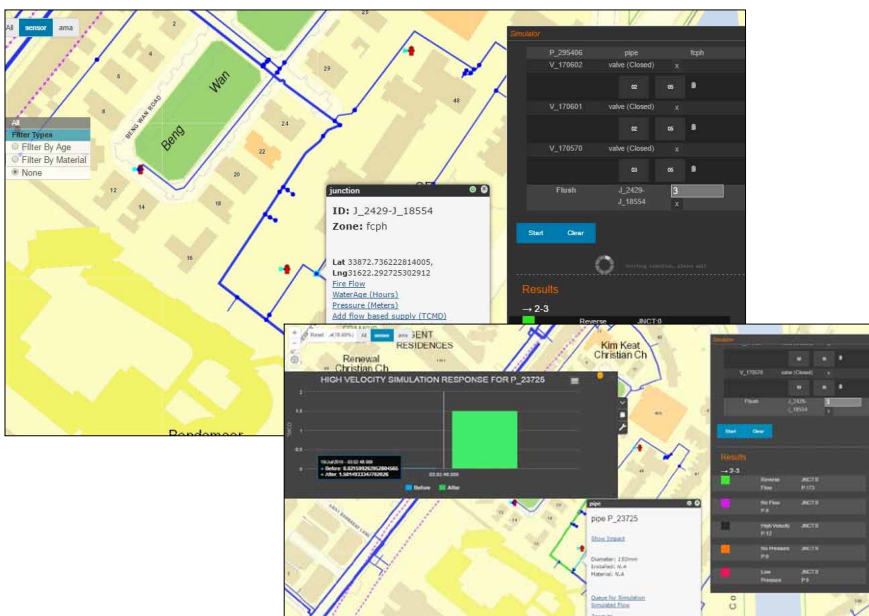
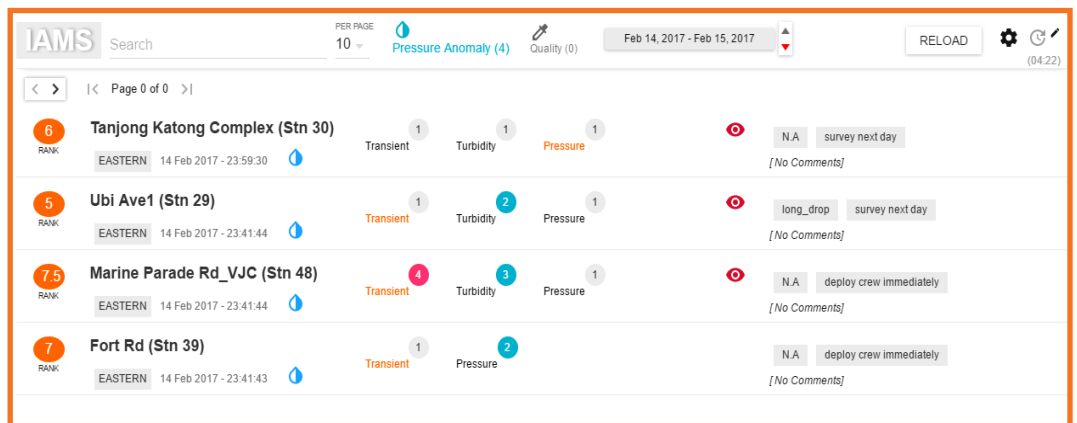
Zonal Demand Forecast



Demand Correlation with Weather

Intelligent Alerts Management System

provides a dashboard to view anomalies related to pressure, flow, water quality and acoustics.



Hydraulic Impact Assessment Simulator

Simulate impact of field operations such as pipe isolation, valve operations, flushing, addition of demand and other complex what-if scenarios. This helps with understanding the impact of such operations on the network in terms of impacted customers, low pressure areas and water quality concerns. Simulate before operation and avoid unintended consequences.

What can Xylem do for you?

Xylem [ˈzɪl m]

- 1) The tissue in plants that brings water upward from the roots;
- 2) A leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services, and agricultural settings. With its October 2016 acquisition of Sensus, Xylem added smart metering, network technologies and advanced data analytics for water, gas and electric utilities to its portfolio of solutions. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com



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