Improve water management for people and industry.

Driving business agility in government

Highlights

- Use BPM to enable effective, efficient water management on a small or large scale

- Connect all water management stakeholders with each other and the data they need to allow them to make timely and effective decisions

- Get a consolidated view of sensor status and alerts, and control operations remotely

- Understand and address local and regional water management issues

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Enabling smart water management

Water is an intrinsic component of our daily lives. It is used to process raw materials, manufacture products, generate electricity, and to transport people and goods. Each time we interact with water, we change its direction, chemistry, usefulness or availability. Because of this complexity, water is poorly understood and often mismanaged. For example:

- Global agriculture wastes an estimated 60 percent of the 2,500 trillion liters it uses each year.
- Municipalities lose as much as 50 percent of their water supply through leaky infrastructure.
- Each of the 53,000 different water agencies in the United States manages only a short stretch of river or a handful of reservoirs. The problem is mirrored across the globe.
- One in five people lack access to clean, safe drinking water, and the United Nations predicts that nearly half the world's population will experience critical water shortages by the year 2080.
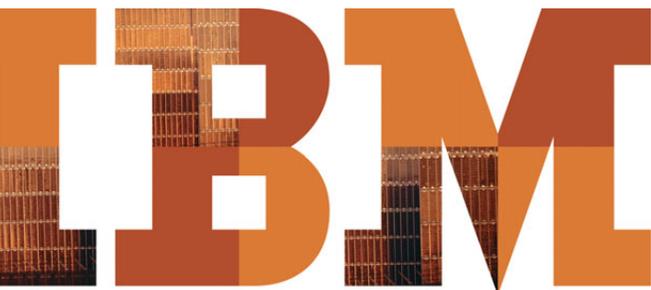
Intelligent Water Management: *automated and centralized development and operation*
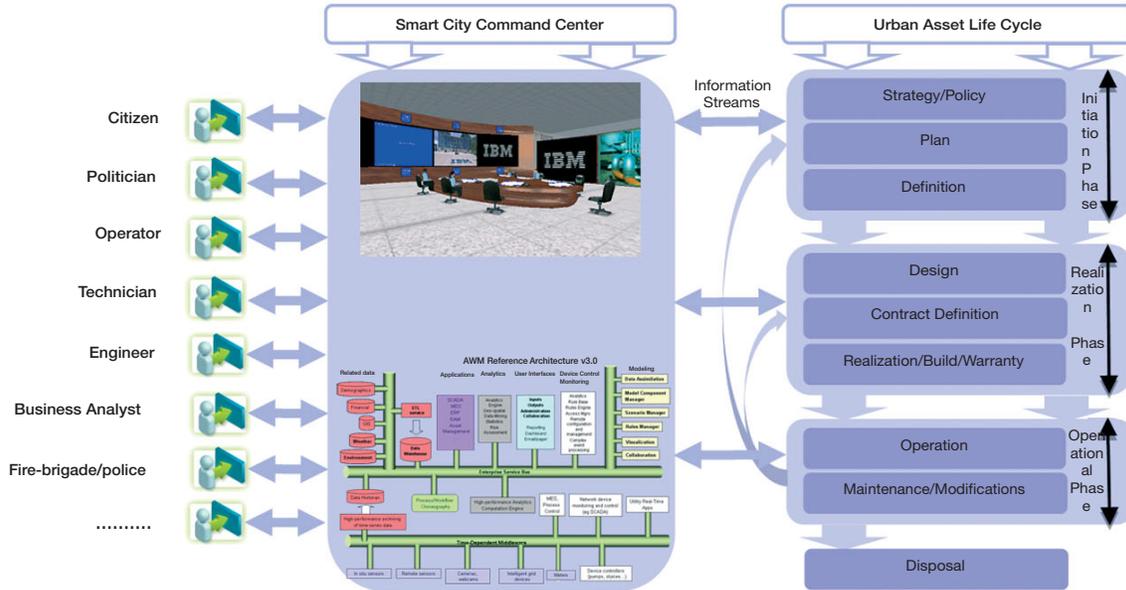
Intelligent Water Management: Automated and centralized development and operation

IBM offers proven Business Process Management (BPM) solutions, built with *BPM powered by Smart SOA™* including ILOG® business rules and optimization decisions, business event processing, and form/document management, all interoperating on the durable and scalable IBM WebSphere® platform with enterprise and Web connectivity. These solutions are specially designed to enable intelligent water management on a local, regional or global scale. Our service-oriented architecture (SOA)-based solutions provide government agencies and utilities with the customized framework needed to make their water management systems instrumented, interconnected and intelligent.

Consolidating control, expanding communications

A typical water management system uses a functioning but not interconnected, collection of sensors, actuators and staff to control operations. Such a system is unwieldy, inefficient and prone to error even on a small scale; and it is virtually impossible to maintain effectively on a large scale.

At IBM, we can help water management operations become interconnected, not only within a single facility, but with other operations and organizations as well. For example, a single dashboard can enable a water management expert to gather and analyze information from a wide variety of integrated sources – including water sensors and actuators such as pumps and sluice gates, unstructured information such as news feeds or the Internet, and structured information such as databases – and then to take corrective action as/if needed.

Successfully controlling water availability, quality, and environmental impact

IBM's BPM solutions can help with a wide variety of water-management projects, including:

- broadening water flow monitoring capabilities to include information such as amount of water entering a city, current and historical flow at each facility, unexplained water usage, and specific water characteristics;
- creating large-scale water management solutions using advanced analytics, rules and optimization technology and statistical process controls;
- helping to reconcile urban and agricultural water use with protection of the environment; and
- preparing for and mitigating the effects of a water management crisis, such as large scale flooding of a region.

At IBM, we have the tools, knowledge and experience to help government agencies and utilities manage the Earth's most valuable resource—water—today and into the future.

For more information

To learn more about BPM solutions, please contact your IBM marketing representative or IBM Business Partner, or visit the following Web site: **ibm.com**/bpm

Additionally, financing solutions from IBM Global Financing can enable effective cash management, protection from technology obsolescence, improved total cost of ownership and return on investment. Also, our Global Asset Recovery Services help address environmental concerns with new, more energy-efficient solutions. For more information on IBM Global Financing, visit: **ibm.com**/financing

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