Prepare your water & wastewater operations for the future with Cisco and Rockwell Automation

Challenges to meet regulatory compliance, efficiency and public trust with water/wastewater treatment operations

- Cybersecurity threats and attacks
- IT/OT Convergence
- Unpredictable maintenance costs
- Growing number of Industrial IoT devices

Water/wastewater municipalities are embracing modernization of their treatment processes as the way to address these challenges.

Pain points that Cisco and Rockwell Automation are solving for

- Migrating existing disparate networks without impacting treatment processes
- Personnel need to be skilled in updating treatment processes to meet regulatory requirements
- Outdated security principals, like "security through obscurity", are not effective
- Aging software and infrastructure makes municipalities vulnerable

A solution is required to provide end-to-end visibility and control across all assets.

Together, Cisco and Rockwell Automation can help with a holistic blueprint for your digital transformation

- Deploy a converged network architecture that is resilient and secure
- Collect and analyze network data to get ahead of the maintenance curve, keep systems secure, and accelerate responsiveness
- Increase equipment efficiency, improve asset monitoring, and maintain cost control

More than 50%
of utilities have not assessed the vulnerability and reliance of their key assets [1]

Fewer than 15%
of utilities surveyed use data mining techniques to gain insights into their customers [2]

Why Cisco and Rockwell Automation?

Leading digital transformation for The Connected Enterprise with industrial ready, world-class control, power and information systems and IT networking and security technologies

Trusted domain experts with a strategic alliance
- 12+ years of experience together
- Jointly developed and validated IIoT solutions

Committed to driving industry success
- Workforce training and enablement
- Leader in technology and industry standards

Dedicated to developing ground-breaking solutions
- Versatile and future-ready solutions
- Products that are easy to deploy and manage

1. Black and Veatch, Water Report, 2019
2. Bluefield Research, Water Innovation Ecosystem: Facilitating the Digital Water Journey, 2019

Prepare your water/wastewater treatment operations for the future with the Converged Plantwide Ethernet Solution (CPwE), network architectures from Cisco and Rockwell Automation that connects treatment plants to municipality business systems.
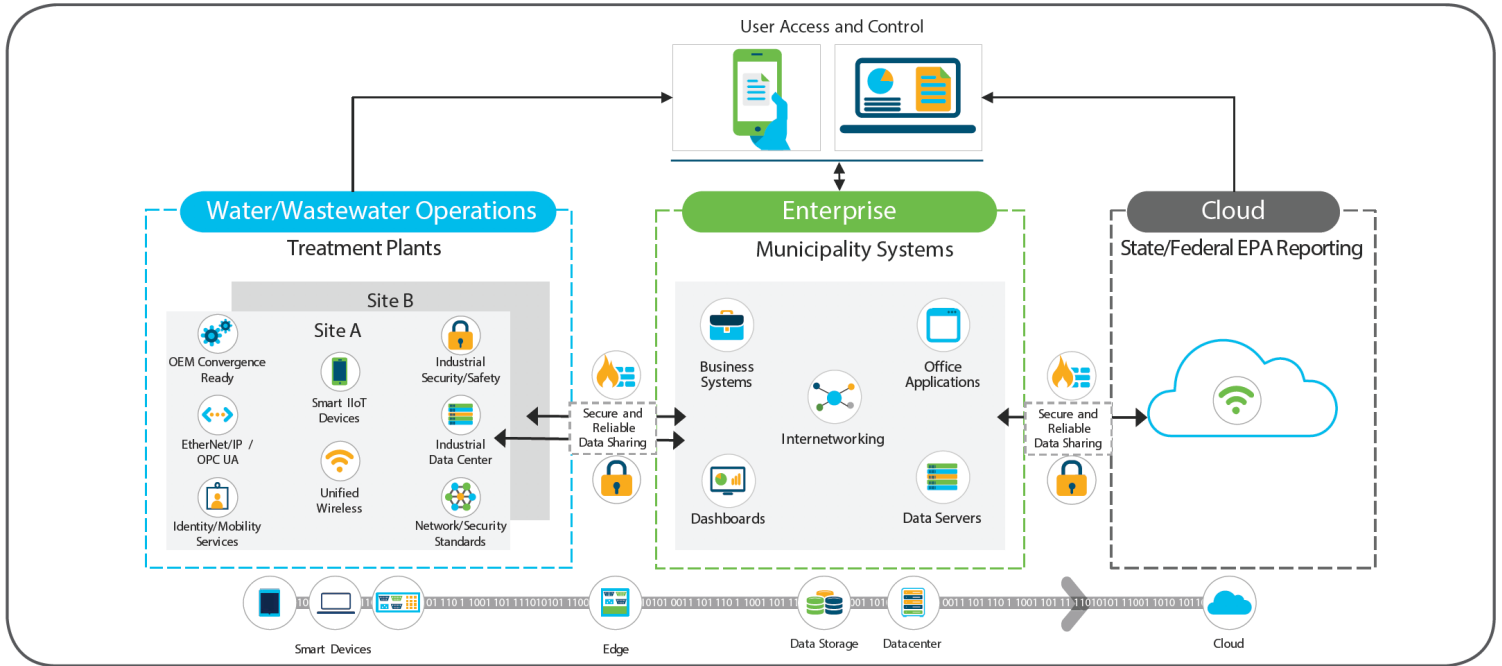
CPwE Architecture Diagram

Benefits

Regulatory compliance

Meet rigorous regulatory requirements to help process wastewater or deliver safe, reliable drinking water to your customers in a sustainable manner

Optimize treatment efficiency

Drive greater efficiencies by connecting operational and business systems for end-to-end visibility and control of operations

Minimize risk

Protect physical and network assets, intellectual property, and workers with a comprehensive security and safety architecture

Key Features

Connectivity

- Incorporate a breadth of hardware and software offerings for a holistic, end-to-end network and security architecture
- Connect treatment plants to business systems using EtherNet/IP™, Stratix® industrial switch, and Catalyst switch lines to enable extensive interconnectivity and interoperability
- Telemetry system including cellular to connect remote assets

Manageability

- Ease setup and deployment of devices and networks across the architecture with FactoryTalk® Network Manager™ software
- Maintain municipality network availability and troubleshoot network issues quickly with integrated tools and applications

Security and Safety

- Automate and enforce security policy including access control through security group segmentation with Cisco TrustSec
- Integrate and secure data into a single information management and decision support system with real-time visibility
- Align to cybersecurity and worker safety standards such as IEC 62443, NIST 800-82 and US Homeland Security best practices

Next Steps

To learn more about the Cisco and Rockwell Automation alliance and joint validated designs, like CPwE, visit:
- www.cisco.com/go/rockwellautomation
- rok.auto/cisco

Design and Implementation Guides can be found at the following URLs:
- Rockwell Automation Industrial Networking
- Cisco Design Zone

For purchase information, reach out to your local sales office or