Can your network **APPDAPT** to growing demands for unwavering application performance and total mobility?
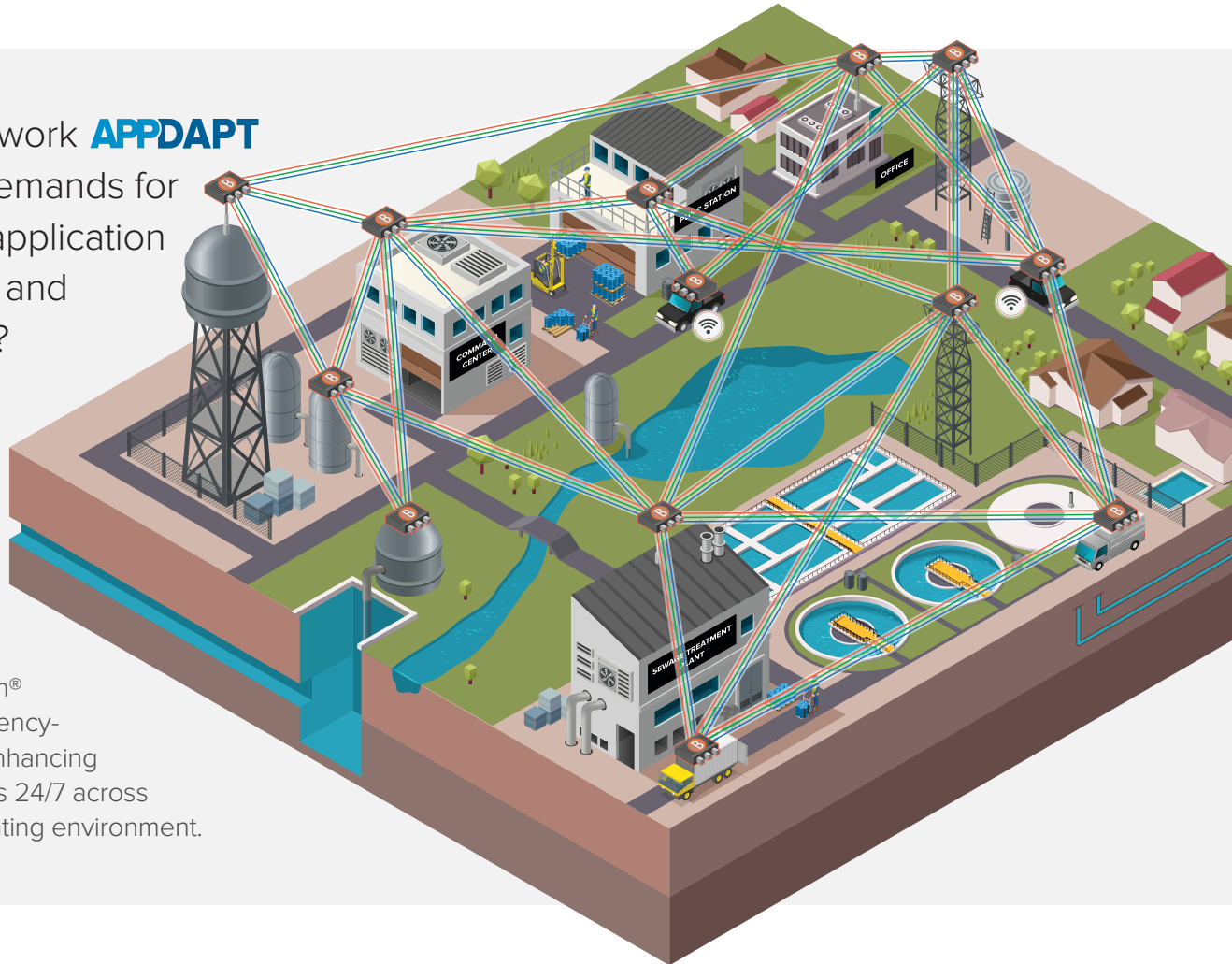
Rajant Kinetic Mesh® networks run efficiency- and productivity-enhancing utilities applications 24/7 across your diverse operating environment.

Applications Important to Streamlining Our Customers' Utilities Operations:

- AMR (Automated Meter Reading)
- Video Surveillance
- SCADA (Supervisory Control and Data Acquisition)
- Substation Monitoring
- Machine-to-Machine Communications
- Vehicle-to-Vehicle Communications
- Process Control

- Vehicle Dispatch and Routing
- Equipment Health Monitoring
- Vehicle Health Monitoring
- Fuel Management
- Supervisor Email/Internet
- Time Collection
- TPMS (Tire Pressure and Temp Monitoring)
- Voice-over-IP
- Transformer Monitoring

- Power Quality Monitoring and Control
- Demand Optimization
- Delivery Optimization
- Analytics
- Asset Management
- Remote Control of Water Pumps and Lifts
- Energy Conservation Monitoring
- Water Conservation Monitoring

Maximize Network Adaptability with Easy-to-Deploy BreadCrumb® Wireless Nodes

Using Rajant's industrial-strength BreadCrumb wireless nodes powered by our patented InstaMesh® networking software, you can create a self-healing network able to dynamically adapt as people and assets move across your environment—all while keeping the network available, intact, and secure.

Each BreadCrumb can connect with multiple neighboring nodes via multiple links, providing fully redundant communications throughout the network. InstaMesh orchestrates this traffic and automatically optimizes communications based on physical surroundings and frequency availability.

BreadCrumb LX5

BreadCrumb ME4

Any BreadCrumb can be fixed or mobile, infrastructure or edge. The small-footprint, lightweight nodes are readily deployed on vehicles, towers, lampposts, buildings, and personnel.

Consider the following ways a Rajant Kinetic Mesh® network can help utilities managers to both reduce expenses and enhance profitability.

REDUCE COSTS with Improved Operational Efficiency.

Minimize unplanned downtime.

Wind farms can lose **$5,000 a week** if a 2 Megawatt turbine is out of commission.[1]

Rajant's network empowers you with real-time visibility into utility equipment and systems status, so you can prevent breakdowns before they happen and fix them faster when they do.

Move to a condition-based maintenance model.

Recent data shows that **86% of maintenance** is reactive (too late) or unnecessary.[2]

Ensure service efforts correlate to condition by running remote equipment health monitoring applications that provide real-time insights into maintenance needs.

Prevent lost energy and revenues.

$6B worth of electricity is stolen in the US each year.[3]

Rajant Kinetic Mesh® networks support smart grid solutions that can detect when and where power is being lost, and enable remote control of grid equipment to keep costs down and reliability up.

INCREASE REVENUES with Greater Productivity.

Leverage Advanced Metering Infrastructure (AMI).

In 2014, U.S. electric utilities had about **58.5 million AMI installations**.[4]

Unlock new levels of productivity with AMI analytics that support outage management, voltage optimization, load planning, and revenue protection.

Automate operations for added productivity gains.

Collection efficiency has **improved by 5-10%** with the use of automated meter reading.[5]

Automation applications supported by Rajant's Kinetic Mesh® network have the potential to significantly improve operating discipline and overall productivity.

Continually optimize operational efficiency.

Expanding the operating range of a hydropower plant can **increase its income by 61%**.[6]

Rajant's network gives you the ability to run new technologies that enable dynamic adjustability to optimally serve lower loads and higher peaks, as a percentage of capacity.

See the ROI for Yourself

Submit your application requirements—both current and desired—to Rajant's team at **www.rajant.com/applicationchallenge** to get started today!

1. http://www.energy.gov/sites/prod/files/wv_chapter2_wind_power_in_the_united_states.pdf
2. http://www2.emersonprocess.com/siteadmincenter/PM%20Central%20Web%20Documents/plantweb-ops-maint.pdf
3. http://news.verizonenterprise.com/2015/03/energy-utilities-internet-things-technology/
4. http://www.eia.gov/tools/faqs/faq.cfm?id=108&t=3
5. http://www.slideshare.net/sushantsinha3998/amr-ems-automated-meter-reading-and-energy-management-system
6. http://www.renewableenergyworld.com/articles/2013/05/three-ways-to-increase-hydropower-efficiency-and-revenues.html

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