



# Confidently Manage, Share, and Secure Your Data with Software-as-a-Service

A WHITE PAPER BY NEPTUNE TECHNOLOGY GROUP INC.

How can a water utility, especially a smaller or mid-sized one, afford the time and resources needed to support, collect, and analyze their large volumes of meter data? Today with Software-as-a-Service (SaaS), utilities can gain a deeper understanding of their information, while also managing, sharing, and securing their data more easily than ever. With SaaS, a water utility can gather and analyze data from more sources to empower faster, more informed decisions. It can also mean going far beyond a monthly meter reading and bill to lead the way to a Smart City.

## EXPAND CAPABILITIES WHEN THE TIME IS RIGHT

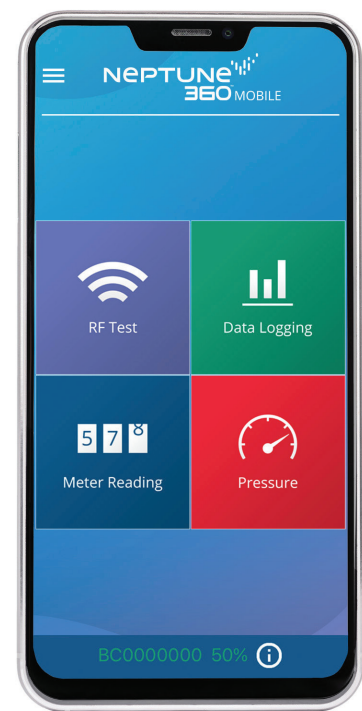
As utilities' needs change they often require new technology or different capabilities. A software application that grows along with the utility can be a major advantage. The move from mobile meter reading to an AMI network, and beyond, can be virtually seamless with SaaS. A modular-based platform makes it simple to turn on new features as needs evolve, enabling critical data to proactively plan for tomorrow.

A SaaS solution for a Smart Water Network also gives utilities more freedom to build upon existing assets. It provides a single source of secure, accurate data entry and access for all meter reading system types — AMR, AMI or hybrid. And ultimately, utilities can spend less time and money on network infrastructure, while still being ready to grow into future needs.

The total cost of ownership is typically lower with SaaS than on-premise server deployment, and a SaaS solution also means less strain on limited budgets and IT resources. Utilities of any size can have the flexibility to expand their system as their needs change, but only pay for the services they need, as they need them.

## GET CRUCIAL DATA, SHARE AND ANALYZE IT QUICKLY

AMI is just the beginning of a Smart Water Network. Management, maintenance, customer service, water quality, and other departments all need fast, easy access to information. With cloud-based SaaS, utilities can share and leverage the large volumes of data they capture, empowering collaboration and helping predict impacts. This type of platform can utilize APIs (Application Programming Interfaces)



to seamlessly integrate meter data, event data, and alerts directly with existing systems or applications, such as work order systems, customer portals, billing systems, or hydraulic modeling applications.

A utility can also use the software to share information directly with water consumers. Through direct communication via wireless, field

personnel can provide data on-demand, responding to high water bill complaints and showing the time and date when a possible leak started. Usage for individual accounts is easily translated into simple graphs and charts that can be emailed. A mobile version of the software can do the same for face-to-face presentation. In addition to pinpointing locations of possible leaks, backflows, or unauthorized water consumption, a utility can analyze a specific customer's consumption activity history for issues such as reverse flow conditions or unexplained continuous flows. Trending chart views provide a convenient way to visualize usage for a given time span and customer service calls can be resolved with confidence.

Detailed reporting of consumption activity, potential leaks, and reverse flow also enables a utility to stay on top of issues that could impact revenue. Users can quickly identify areas of concern or look for trends in order to maximize operational efficiencies. Looking to the future, utilities can leverage this type of software for trend analysis in rate structure planning and usage initiatives. Finally, the robust information collected can be utilized to help reduce Non-Revenue Water and aid utility conservation initiatives.

#### OWN YOUR DATA, KEEP IT SECURE

A subscription-based solution can free a utility from having to host and update software and worry about server maintenance and data security. It is widely acknowledged that the water sector is an attractive target

for both physical and online assaults. Ransomware attacks on cities are happening regularly, and a cloud-based SaaS solution can provide greater security than on-premise servers. Data is stored in the cloud, backed by a large-scale data center, with staff dedicated to identifying, deterring, and combatting these threats. Software versions are tested before release to check for exploitable vulnerabilities such as un-sanitized inputs susceptible to cyberattacks.

Along with added security, SaaS solutions offer a higher level of convenience and support to utilities. The software is hosted and managed by a third party, with no installation required. All that's needed is an Internet browser to log on and utilities are able to access their data anywhere, at any time. Utilities can be confident that their data is accessible 24 x 7 without having to supply the resource to monitor and maintain it. SaaS also removes the burden of implementing disaster recovery plans, leaving the coordination and resolution to the data center.

#### ELIMINATE SPECIALIZED DEVICES, COMMUNICATE MORE EFFICIENTLY

Thanks to incredible strides in communication technology, water utilities no longer have to send meter readers out into the field for weeks at a time to capture data. When water utility personnel go out to perform a radio frequency test for signal strength, or exception readings on site, they can now do so without having to purchase single-use, specialized devices.

Employees are able to use their existing Android or iOS cell phones or tablets for those tasks. They can then connect to the cloud and sync up stored data online, in real-time, without having to go back into the office.

#### ALWAYS READY FOR ACTION

With SaaS technology, utilities can concentrate on providing their consumers with clean drinking water while knowing that the utility is equipped to:

- Migrate easily from mobile to fixed network or add capabilities as needed when the time is right, while using and only paying for the features that are relevant now.
- Access and share data seamlessly across utility departments – help the utility achieve goals and objectives and make informed decisions faster.
- Ensure the security of the utility's data, while lessening the burden on IT departments or other internal resources.
- Use existing devices to gather and share information remotely, in real-time.

Win your day for your utility using a cloud-based SaaS platform. Learn more about Neptune's SaaS solution, Neptune® 360™, at [neptunetg.com/neptune360](http://neptunetg.com/neptune360).

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