INTRODUCTION

Today, utilities are looking to digital technology to help control costs, improve customer service and optimize workloads. It can be a challenge to handle the flood of AMI data generated by meters—you might have thousands of transactions per second comprised of countless terabytes of data entering your systems, but leveraging that data and turning it into actionable insights is critical. How can AMI data be managed while simultaneously minimizing the complexity of your operations?

Itron has an unequaled track record of success in delivering smart metering and smart city solutions. As the industry leader, we provide cloud-based operations and services for more than 1,000 utilities throughout the world—enabling organizations like yours to achieve valuable insights and operational success.

A fully supported managed services model allows your resources to focus on the critical issues that drive your business while Itron keeps your technology solutions current, optimized for performance and efficiently maintained. This allows you to maximize the value from your key applications. Through a managed services model that utilizes a secure, cost-effective and scalable cloud platform, we’ll gather, host and analyze your field network data—and then leverage it to help you make the most of your investment.

These services support a variety of advanced capabilities including: meter data collection, analytics, meter data management, customer care, web presentment, workforce management, network and endpoint management and load management programs.

Hosted Application Services

Our Hosted Application Services delivery model provides you with access to Itron applications running on a private cloud infrastructure while Itron manages and controls the underlying cloud infrastructure, including network, servers, operating systems and storage. You have operational responsibilities for your application/solution services and configuration settings, allowing you to achieve outcomes and benefits independently.

Under this offering, Itron performs server administration, database administration and secure network infrastructure administration, as well as monitoring and alerting for incidents with an Itron application on an Itron-hosted back office. Service-level agreements (SLAs) are provided for application availability, file delivery and endpoint read rates.

Types of Managed Services

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<th>Service Catalog</th>
<th>Hosted Application Services</th>
<th>Managed Services*</th>
<th>Hosted Network as a Service</th>
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<tr>
<td>Infrastructure</td>
<td>Itron</td>
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<td>Infrastructure ownership</td>
<td>Itron</td>
<td>Customer</td>
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<tr>
<td>Application Uptime SLA</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>File Delivery SLA</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Field Network Management</td>
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<td>Optional</td>
<td>Yes</td>
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<tr>
<td>Field Endpoint Management</td>
<td>No</td>
<td>Optional</td>
<td>Optional</td>
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<tr>
<td>Read Rate SLA</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>

* A Managed Appliance is available for the managed services offering in place of the hosted solution. This provides Itron server rack(s) and router hardware to be placed in your datacenter, connected via VPN to the Itron Global Managed Services team for sole operation and management of the infrastructure and applications. You are provided the same access and service as the full managed services, with the only difference being the location of the hardware, positioning of the VPNs and some reduction to the benefits of scale from the support team and hosted infrastructure available in a fully managed services hosted environment.
Managed Services

In the Managed Services delivery model, we manage your hosted IT infrastructure and operate your system. Specifically, we provide all services described in the Hosted Application Services delivery model and have operational responsibility for some or all the application/solution services and configuration settings. This delivery model allows your resources to focus on operations while we keep your technology current, therefore enabling you to derive more value from your applications.

Under this offering, Itron performs management of the hosting infrastructure, networking equipment, server and database administration, secure network infrastructure and application upgrades for the applications. This service includes remote management of the network, firmware management and read rate optimization. The SLAs provided include application uptime, file delivery and read rate performance, along with timely response to four levels of severity issues.

As a part of this delivery model, hardware (servers, routers, racks, etc.) to host the applications can be provided in one of three models:

- Public cloud such as Microsoft Azure
- Private cloud such as commercial datacenters
- On premise with Itron-specified Managed Appliance

Hosted Network as a Services for Smart Cities

To reduce the upfront capital requirements of deploying new smart city applications, Itron offers a full, turnkey Hosted Network as a Service option for cities and municipalities. Under a Hosted Network engagement, Itron will deploy, monitor and maintain the field network and will make it available to the city or municipality for a monthly fee per device. Hosted Network Services combined with a managed services offering, lowers the barrier to entry and enables a city to accelerate the realization of operational benefits that come from deploying new “smart” solutions.

Optional Field Services

Itron has optional services that our Global Delivery Services team offers:

- **Device Management:** Itron on-site services team is responsible for monitoring and analyzing missed reads and device communication. This includes an option for Itron field investigation of non-responsive endpoint devices reported by the collection system or dispatched by work orders to utility systems. SLAs are provided for meter read rates.

- **Network Management:** Itron services team provides back-office, system-based investigation of non-communicating network devices with a work order ticket if field investigation is required. This includes an option for Itron field investigation of a non-responsive network devices reported by the collection system or dispatched by work orders. SLAs are provided for device availability and notification of non-communicating devices.

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1Timing of public cloud is dependent on software application availability for public cloud deployment—typically some development is required to enable public cloud support.
Security
Under all models, Itron ensures high levels of security and redundancy across its operations for both the physical and electronic network infrastructure. The network is designed to ensure the availability, integrity and confidentiality of your data. Security features are designed to deter, detect and deny access to unauthorized parties.

Managed Services Benefits
» Reduce capital expenses to achieve a lower total cost of ownership
» Predict and control costs more efficiently
» Deploy solutions rapidly and accelerate benefit realization
» Scale immediately to match business needs
» Reduce IT burden on existing staff by minimizing overhead and training costs
» Receive operational support from dedicated, experienced subject matter experts
» Maintain operational effectiveness while focusing on core business objectives
» Proven communication backed by Service Level Agreements and 24x7 monitoring from Itron’s Network Operations Centers
» Continuous access to the latest features via firmware and software updates
» Proven business benefits without requiring specialized networking knowledge
» Single point of contact for any issues or concerns

LOOKING AHEAD
A managed services approach from Itron provides you with a lower total cost of ownership, the ability to scale instantly, enhanced security, faster implementation and rapid innovation—all while providing the service levels, infrastructure, security, operations and support you’ve come to expect from an industry leader. As we look to the future, we will support the ever-expanding portfolio of IoT applications via a managed-services approach to help improve your community while increasing efficiency, safety and quality of life. We are committed to enhancing critical infrastructure through innovative, multi-commodity IoT applications such as air quality sensing; traffic counting; streetlight, seismic, wastewater and transformer monitoring; smart parking; radiation detection and much more. Partner with Itron to help you deliver value-based outcomes using a managed services approach.

200 million+ communication modules deployed
~3 million streetlights under management
8000+ customers in more than 100+ countries
60 million+ endpoints under management