Waste Management creates a new environment

About Waste Management
Based in Houston, Texas, Waste Management is a leader in environmental solutions. The company provides end-to-end waste disposal services, from trash collection and treatment to recycling and composting. Through its subsidiary Wheelabrator Technologies Inc., Waste Management has created industry-leading processes for producing clean energy from the waste stream. It operates more than 1,200 recycling facilities, transfer stations, landfills and waste-to-energy plants, 22 call centers and a fleet of 20,000 garbage and recycling trucks.

Situation
Having grown through acquisition, Waste Management lacked a standardized IT infrastructure across its hundreds of sites – some of which housed only a handful of employees. Network inconsistency slowed daily business processes, hampered customer service and increased upkeep costs. While busy solving network problems, the Waste Management IT team was hampered in implementing the company’s innovative growth ideas. The company needed to put technology at the center of its strategic business plan.

Solution
Waste Management decided to update its network infrastructure and chose to work with AT&T. The AT&T Network Sourcing and Waste Management network design teams helped design and implement a full-service solution. An AT&T Virtual Private Network increased network capacity and standardized capabilities across locations. AT&T implemented a hosted Voice over IP (VoIP) solution called Voice DNA® to run voice communication for smaller sites and provided them with a range of options to meet their specific needs. The solution is fully managed by AT&T, so the Waste Management IT team can focus resources on business growth.

The Business of Transformation
Most people stop thinking about their garbage the moment they put it out on the curb for pick-up. But for Waste Management, that's when the thinking begins. A leader in waste disposal, Waste Management serves more than 20 million residential, commercial and industrial customers in the U.S., Canada, and Puerto Rico, providing a wide range of refuse-related services. With more than 100 years of experience, Waste Management knows there’s a lot more to trash than people might imagine.

For starters, Waste Management is helping make garbage green. As North America’s largest residential recycler, the company is a leader in a changing industry. In addition to traditional waste collection and disposal, Waste Management’s services include organic composting, single-stream recycling and electronics recycling. The company’s solutions help customers move towards greener processes, even zero waste.

Waste Management Facts

Business Needs
Support business growth; update and standardize IT infrastructure across sites, both large and small; increase responsiveness

Networking Solution
Virtual Private Network handles data requirements, while IP Telephony solution aids smaller sites; helpdesk services and network monitoring provide round-the-clock support

Business Value
Scalability accommodates easy expansion; consistent architecture cost-effectively supports a range of sites and enables enhanced customer experience; IT team is freed from day-to-day management

Industry Focus
Environmental services

Size
Serves more than 20 million customers

To learn more about AT&T Network Sourcing Solutions, visit www.att.com/network-sourcing or have us contact you.
For Waste Management, what used to be just garbage is now a resource. “We look at waste as material,” said Puneet Bhasin, Chief Information Officer. “We want to extract as much value out of that supply chain as we can.”

Through subsidiary Wheelabrator Technologies Inc., Waste Management owns and operates 17 waste-to-energy facilities, five independent power production plants and 115 landfill-gas-to-energy production facilities. Using innovative processes to extract energy from the gases released during decomposition, these sites produce enough clean electricity to power 900,000 homes. And Waste Management practices what it preaches. The company operates one of the nation’s largest fleets of heavy-duty trucks powered by natural gas.

*Held Back*

Waste Management was ready for more growth, but its outdated IT infrastructure was not. “The network was in the Jurassic days with frame relay, 56K capacity issues and availability and scalability problems,” said Gautam Roy, Vice President Infrastructure, Operations and Technical Support. “The situation was very bleak.” Growth through acquisition had left Waste Management with a piecemeal infrastructure. And site conditions varied widely. Larger sites employed up to 250 people, while small locations might just have a few. At some more remote locations, even basic cabling was a problem. Yet regardless of size or setting, all needed the same capabilities.

Network problems compromised Waste Management’s ability to provide consistent, high quality service – a company priority. Due to unpredictable downtime and inadequate network capacity, even fundamental business applications were slow. “Data entry, account retrieval and delivery confirmation were taking a long time,” explained Roy. Communication connecting drivers and facilities, customers and call centers was unreliable. “Servicing the customer was painful.”

In addition, without sufficient bandwidth or an efficient way to manage network traffic, Waste Management couldn’t maximize the value-added applications needed to implement innovations. “With such deficient technology, optimization to become efficient and effective goes down the tubes,” said Roy.

Building a new, all-inclusive network from the foundation up would be a major undertaking. “Putting a network in New York is very different from putting one where there are only 15 people at a remote, out-of-the-way location,” said Roy. Achieving business-wide upgrades and standardization would require site-by-site implementation. Cost and time were both concerns. “We didn’t have five years to pull this together,” Roy said. “I wanted to move in a very short time at reasonable cost to an environment that mimics the world’s best.”

*Laying a New Foundation*

Transforming the Waste Management IT infrastructure was no easy task. The overhaul would include network updates, new call center technology and a different management strategy. “It required an entire ecosystem of partners to provide an end-to-end solution,” said Roy. Waste Management chose AT&T, an existing wireline provider, to join in the project. From design to implementation, AT&T was there to help. First, to be sure where it was going, Waste Management needed to know what was in place. AT&T completed thorough site audits to document the existing services and equipment.

Together the two companies designed a new IT environment with a managed AT&T virtual private network as the foundation. The Multiprotocol Label Switching (MPLS)-based VPN provides class of service capability to prioritize network traffic.

Its smaller locations make up about 80 percent of the total sites. Here AT&T offers a choice of three classes of IP Telephony arrangements with AT&T Voice DNA. This hosted VoIP solution serves as the vehicle to deliver such capabilities as voice mail and call screening and enables the sites to choose the level of support that they require. The AT&T services are bundled into a monthly price, making the network upgrade an operational cost instead of a capital expense that is born by regional business units.

At its call centers, outbound calls are routed through a Session Initiated Protocol (SIP) Trunking solution or IP Flexible Reach. To cap it off, an AT&T life cycle management team provides ongoing operational support which includes a 24x7x365 helpdesk.

Since this would be a transformational project, Waste Management created a system of governance and set of processes that would provide structure, enable program oversight and ensure appropriate communications. These standards, policies and procedures were then enhanced and fine-tuned as needed during the program's implementation.

Waste Management met its project goals, with AT&T there every step of the way. The implementation was completed on time. “We did it in record pace, with minimal disruption to our business operations,” said Roy.

“*We have leapfrogged a few generations of technology, into a place where we can predictably deliver value to our customer.*”

– Gautam Roy, Vice President Infrastructure, Operations and Technical Support, Waste Management

*Reducing Technology Waste*

The VPN enables Waste Management to provide consistent, reliable service across its locations. “Standardization brought a lot of benefits. It instantaneously made things more stable, faster and easier to troubleshoot,” said Roy. Uptime has increased, enabling operational efficiency and keeping communication flowing. The network’s class of service capability provides scalable bandwidth that’s easily allocated to ensure high priority applications run smoothly.

Waste Management has added multiple value-added applications, including a comprehensive web-based customer service system (providing 24x7x365 online service and support across the globe), order-to-cash (OTC) processes, logistics and routing applications, self-service functions and on-board truck diagnostics. All were designed to boost efficiency and improve the customer experience. These enhancements would have been impossible without the network transformation. As more services move online, scalable bandwidth that the solution provides will become even more important.

With the infrastructure upgrade, services are streamlined to reduce excess costs. With voice moving over the data network, Waste Management is able to operate more efficiently. Under the old phone system, the stacking of services, such as forwarding local calls to toll-free numbers, was costly. Running over the global AT&T IP network,
SIP Trunking with IP Flexible Reach bypasses those fees. "We are doing a great job in cost containment," said Roy. "Our overall free cash flow and our SG&A costs have improved over the past couple of quarters. Transformational projects like this certainly contribute to the strategy."

In addition, the fact that AT&T delivers some capabilities as managed services saves Waste Management’s valuable resources. Through Network Sourcing, the AT&T team handles the day-to-day network performance management and maintenance.

"Network care needs to be constant," said Roy. "We need to make sure the configurations are consistent across the routers and switches and that the software versions and hardware versions are up to speed. With 1,200 or so sites so it would have taken an army for us to do that." With AT&T managing the network, the Waste Management IT staff can concentrate on core strategies, not on daily maintenance. The managed network is hosted at AT&T data centers, increasing Waste Management’s infrastructure security.

"The speed and the time to execute the transition have been greatly simplified." — Gautam Roy, Vice President Infrastructure, Operations and Technical Support, Waste Management

‘Predictably Deliver Value’
Waste Management now has the platform it needs to increase efficiency while supporting its growth and business strategy. "We are decreasing the number of call centers because our network is stable and solid," said Roy. Fewer call centers does not mean less service. The new call system automatically routes calls to the next available agent. Waste Management keeps its local feel by routing local phone numbers through IP Flexible Reach. It can easily add new lines, numbers and employees.

A key application the new network supports is OCS – the onboard computer systems placed in Waste Management trucks. "We capture all kinds of data when we service a customer – when we are there, when we leave and the duration of our stay," said Roy. "The goal is to be effective, efficient and optimize our operations while reducing the cost of doing business. Having computers and software on the trucks to best serve our customers is a very critical transformational program."

Other network-enabled applications include Order to Cash, which links the Waste Management customer relationship management system used in call centers with other business process applications, such as billing and operations. The VPN is critical to the proper routing of all of this data.

Waste Management’s capabilities have come a long way from slow computers and telephone busy signals. "We have leapfrogged a few generations of technology, into a place where we can predictably deliver value to our customer," said Roy.

Flexibility and Efficiency
The highly available, flexible network also facilitates a key Waste Management strategy: growing through acquisition. The recent purchase of a U.S. recycler shows the advantages. "The integration of this business with this network has been extremely simplified," Roy said. "Instead of a point-to-point link, we are taking the new locations to the cloud where they are connected back to our data centers. The speed and the time to execute the transition have been greatly simplified."

With the right technology, Waste Management is moving ahead with industry-leading innovations. One is a Machine-to-Machine (M2M) solution for monitoring compactor capacity. Smart monitors sense when trash compactors are nearing capacity and alert Waste Management through the AT&T wireless network. Waste Management can then proactively reach out to the customer to update the pick-up schedule. That means better service for customers and better business for Waste Management.

The updated infrastructure provides the foundation for enhanced operations and delivers “a lot more precision,” Roy said. "We are making the most accurate decisions based on real-time changes and information. We are identifying profitable customers, pinpointing waste in our system, and ensuring that we are very effective and efficient in our operation."

‘A Reflection of the Relationship’
At the heart of the achievement is a fruitful relationship between Waste Management and the AT&T team. For Roy, several aspects stand out. "AT&T comprehends our needs, aligns their products and services to best fit them, and offers flexible pricing to align to our current and future needs. These three things are very critical.

“It started out with data for all sites and voice to our small sites,” he added. “Since then we have added Canada and other international locations such as India. The network has grown. It’s a reflection of the relationship and of what AT&T has done to strengthen our belief in this partnership.”

For more information contact an AT&T Representative or visit www.att.com/network-sourcing.