Utilities face the challenge of regulatory mandates that dictate that they need to be able to identify outages, respond to customers, and dispatch crews faster and more efficiently. Outage restoration is perhaps the most challenging activity undertaken by utilities, as it impacts every area of business process and includes customers, control centers, and field personnel. By uniting the field optimization capabilities of Oracle Utilities Mobile Workforce Management with the proven, scalable storm performance of Oracle Utilities Network Management System, utilities can more effectively respond to outages by improving control of restoration process, information flow, and communication.

Uniting Two Powerful Applications

Oracle Utilities Network Management System Outage Management (OMS) provides scalable, best-in-class storm management performance proven under the harshest conditions across the globe. Oracle Utilities OMS provides a complete storm center environment that tightly connects customer, grid, repair, and meter processes—and their real-time data. It does so by more quickly pinpointing the size and location of outages, improving restoration process management and communication, and identifying required crew resources.

Oracle Utilities Mobile Workforce Management (MWM) helps utilities optimize resource planning, scheduling, and field services. Working in real time, it speeds emergency response from crews, cuts costs, enhances safety, and improves customer satisfaction.

More Efficient, Faster Outage Restoration

More effective outage restoration processes, reduced costs and shortened outage timeframes to prevent loss of service and revenue aren't just desired by utilities today; they are required to meet regulatory mandates while also maintaining business health. As a means to achieve these goals and benefits, utilities can leverage an integrated outage restoration solution across Oracle Utilities NMS and Oracle Utilities MWM, based on Oracle's Application Integration Architecture. Some of the benefits of the integration are:

- More timely response due to automated outage restoration processes
- Increased efficiency in scheduling and crew management, resulting in:
  - Shorter outage durations that improve reliability indices (SAIDI, CAIDI)
  - Reduced operational costs
• Accelerated crew productivity & overall trouble event management
• Efficient, timely communication of events and updates between the control center and field
• Improved utility customer satisfaction, as more frequent and accurate outage status updates will be available

Achieving these kinds of benefits requires having the right applications and business processes in place, coupled with a framework consisting of policies, governance, and practices. The NMS-MWM integration provides the process structure that enables utilities to implement such a framework.

Process Overview

Timeliness, accuracy, and efficiency are the key to restoring an outage. With this integration, an event can be raised via a customer complaint or by detection through another system such as AMI or SCADA. The event is then created in Oracle Utilities NMS, which identifies the location and predicts the faulty device. Resources for restoration are identified; these can be a single journeyman, troubleshooters, damage assessors or complete crews. Each required resource type is then assigned an activity. Assigning and scheduling the specific crew or resource can be done in Oracle Utilities MWM if not already done by Oracle Utilities NMS.

Once an event is created, crews receive assignments and service restoration work commences. Work progress and updates are captured on mobile field devices and communicated back to the control center. As part of this work status updates, the integration provides the ability to request additional information and assistance if needed. Crews can also report unrelated damage found and provide work completion information. All of the outage information can then be updated into key systems to facilitate restoration of service in an efficient and timely manner.

Integrated Business Processes

Enabled business processes include:

- From Oracle Utilities NMS to Oracle Utilities MWM:
  • Trouble activity creation
  • Trouble activity detail updates
  • Trouble activity cancellation
  • ETR notifications
  • Static network map
- From Oracle Utilities MWM to Oracle Utilities NMS:
  • Intermediate status updates
  • Trouble event detail updates
  • Crew inquiry request
  • Trouble event completion
  • Trouble event cancellation
  • Unrelated damage assessment
  • Trouble event creation (assist activity)
  • Vehicle location updates
Gain Value Faster Via Reduced Implementation Time and Costs

Oracle’s integration strategy provides a more automated, lower-cost solution platform that enables enterprise process management, while avoiding the inherent risks and longer time-to-market of point-to-point interfaces. Consistent with our demonstrated commitment to the utility marketplace, Oracle delivers a productized, supported software integration approach that leveraged industry leading middleware to facilitate a scalable and robust integration.