MV-RS®
Meter Reading Software Solution

Overview
The Need
In today’s competitive marketplace, utilities of all sizes are looking to take advantage of new meter reading technologies—while still keeping an eye on the bottom line. Unfortunately, the exhaustive support required by many systems can cancel out even the most valuable benefits. Worse still is the risk of locking into an expensive technology that may quickly be headed for obsolescence. What’s needed is a flexible, easy-to-use software solution that is rich in functionality, yet doesn’t require the resources of an entire IT department.

The Solution
Itron’s MV-RS is an affordable PC-based meter reading software solution that improves operations today while providing a clear migration path to advanced metering applications for the future. MV-RS is designed for utilities of all sizes and service types—electric, gas, water or a combination—and can be quickly installed, trained and implemented with minimal of resources. This simple, yet powerful tool automates the meter reading process without requiring extensive, costly IT support. A utility may choose one or any combination of data collection options in the same MV-RS system, for the ultimate in flexibility. Reading methods can be easily added as automation requirements and technologies change.

Functional and Flexible: Features and Benefits
Advanced AMR for Gas and Water Metering
Gas and water utilities can utilize MV-RS with Itron mobile and handheld reading devices in order to extract up to 40 days of hourly data from compatible devices (including the 100G datalogging gas ERT® and 100W modules). Move in/move out reads can be stored and retrieved for a specific date. Daily data can be accessed to address customer service and billing inquiries, as well as mid-cycle rate changes; hourly data can help facilitate load studies and conservation programs. Monthly gas balancing reads are possible with advanced AMR.

Unattended Processing
When configured to operate in unattended mode, MV-RS automates all system functions, including handheld communications, file downloads and report generation. Unattended processing saves the utility money by freeing up operators to accomplish more productive work, and by allowing operations to continue around the clock, even when no one is in the office. Tasks may be scheduled throughout the day to run automatically at pre-assigned times.

Flexible Configuration
MV-RS is designed to take advantage of the processing capabilities of local and wide-area computer networks, but can also operate on a single, stand-alone PC. In distributed processing mode, the MV-RS software operates simultaneously on multiple networked PCs to form a highly efficient multi-user and multi-tasking route management system. The system’s inherent flexibility and scalability allow utilities to add new reading devices such as handhelds or mobile collectors without requiring any new software.
Maximum Reading Functionality
MV-RS leads the industry in proven, multi-vendor interrogation of electric and gas electronic recorders, registers and meters. The system also supports universal and manufacturer-specific probes to read touch pads for hard-to-access water meters.

Communication Flexibility
In addition to the PC calling the handheld to download and upload routes, a meter reader may request routes directly from the handheld while the handheld is in its cradle. Users can also access the system to schedule tasks, manage routes or run reports from anywhere on the network, and distribute and level the processing among multiple PCs. Handheld route data compression improves transfer speeds between the handheld computers and workstations.

The Value
Build a Strong Foundation for the Future
Don’t limit your growth opportunities by deploying an inflexible system. MV-RS offers a clear and proven migration path to automated systems, allowing your system to change along with your operations and strategic objectives. With MV-RS, you’re in a better position to add the new services your customers are sure to demand. Buy what you need now, but rest assured that whether your future includes Walk-By Meter Reading, Drive-By Meter Reading, new optical probing devices, network technology or additional workstation PCs, MV-RS is the platform to get you there.

Improve Your Operations—Now
It just makes sense. The faster your system is deployed, the faster you can start reaping the benefits: reduced costs, improved productivity, better customer service and streamlined meter reading operations. So why not select a system that’s very hallmark is simplicity? MV-RS is an off-the-shelf meter reading system that can be quickly implemented and trained. You don’t need an extensive IT department to support or maintain MV-RS, and the system’s Graphical User Interface (GUI) gives it the familiar look and feel of commonly used software applications.

Extend the Reach of Meter Reading
With the latest advancements in metering technology, utilities can now go beyond traditional meter reading for monthly billing reads. While collecting monthly billing reads remains a core strength of MV-RS, other parts of the utility organization can now leverage and apply meter data. Tampers and events are collected from the meter to help with both theft as well as loss management. 40 days of interval data from gas and water meters can be used to assist customer service representatives with high bill complaints, while the accounting department can utilize the data for better forecasting. With more detailed information comes more opportunity for application—and MV-RS provides the means for collecting this data.

Don’t Take Chances with Unproven Technology
More than 2,000 utilities worldwide depend on MV-RS software to accurately collect and manage millions of reads each day. That kind of track record is no accident. It’s the result of more than 20 years of developing solid, effective solutions for utility companies of all sizes and service types. This experience gives Itron customers a clear competitive advantage as solid, innovative approaches to current—and future—requirements are delivered.
Specifications

**Route and Handheld Management**
- Route status tracking
- Pre-assigned routes
- Manual requests from handheld
- Unprocessed read management
- Partial route assignments

**Task Scheduling and Processing**
- Process tasks using configurable task list
- Execute in date/time order
- Integrated automated/unattended processing
- Communications manager monitors communications sessions between the PC and handhelds independently of other tasks

**User-Configurable**
- Centralized/distributed
- Host download/upload processing
- Workstation processing
- Handheld parameters include audit checks, message display and battery management
- User-defined handheld display
- User-defined handheld log-on
- Security parameters

**Extensive Management Reporting**
- 32 standard reports available
- Schedule daily or as needed
- Define reports for a specific region, zone, office, cycle or date
- Write to screen, printer, disk or email
- Create and manage custom reports using Crystal Reports

**Flexible Configuration**
- Network or stand-alone
- Multi-user/multitasking
- Scalable as system requirements change
- Tasks “level-loaded” among workstations
- Data/tasks can be accessed or restricted as needed for network users

**Handheld Communications**
- Direct-connect and/or remote communications using IP/Intranet/Internet, USB or Serial
- Initiate communications from the host PC or the HH
- Route compression speeds data transfer and significantly reduces modem communication time
- Auto software update downloads new handheld programs and/or configuration files as handheld units communicate with workstations

**Handheld Interfaces**
- Electric, gas and water ERTs
- Remote reads using:
  - VersaProbe
  - Bluetooth available

**Optical Probing**
- TOU and load profile
- Over 175 devices supported W/G5 by manufacturers that include ABB, GE, Siemens, Schlumberger and others
- Partial load profile reads minimize read time and reduce handheld storage
- Automatic protocol selection identifies the type of meter and initiates correct protocol

**Data Collection Formats Supported**
- Keyed
- Walk-by AMR
- Remote scan disk reading for water meters
- Drive-by AMR
- Optical probe reading
- MicroNetwork™

**System Compatibility**
- Handheld hardware compatibility:
  - G5, FC200, FC300
- Standalone operating system compatibility:
  - Windows XP
  - Windows Vista
- Network operating system compatibility:
  - Windows Server 2003

**Workstation Requirements**
An MV-RS workstation (stand-alone or on a LAN/WAN) requires a Windows XP or Vista PC. For LAN/WAN operation, an MV-RS multiple PC system client workstation (processing workstation PC or additional workstation PC) is required. The MV-RS workstation minimum PC requirements are:
- Pentium III 550 MHz processor
- 512 MB of RAM
- 64-bit graphics accelerator
- 2GB drive (for single PC system) / 1GB drive (for multiple PC system)
- 15” SVGA monitor
- 3 1/2” floppy drive
- CD-ROM drive
- Mouse
- 101-keyboard
- Standard COM1 & COM2 serial ports (for workstations performing handheld communications)
- HP LaserJet or compatible printer (for reports)