Profile™

...the solution to web-enabled data acquisition and reporting

www.ambrit.com/profile

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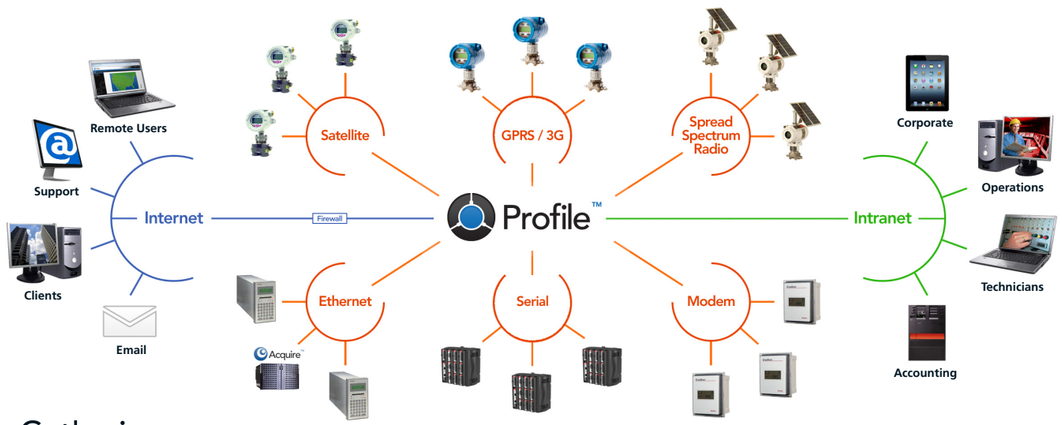
Introduction

Surprisingly little of the valuable flow measurement data collected from RTUs and flow computers across the world is actually made available to those who need to use it, especially when the RTUs are situated in remote or hostile locations. Even those systems that are controlled by sophisticated SCADA applications tend to only concentrate on the control aspects and neglect the important measurement and business data that the RTU has been installed to collect.

Profile™ is a web based data acquisition and reporting system designed to gather measurement data from a wide range of RTUs over diverse network topologies and make it easily accessible to all interested parties – operators, technicians, auditors, corporate personnel and even clients – securely through their web browser.



Data Gathering

Profile™ automatically connects to every RTU on the network in sequence, gathering their historical data, alarms, audit events, batches, proves and other reports at regular intervals.

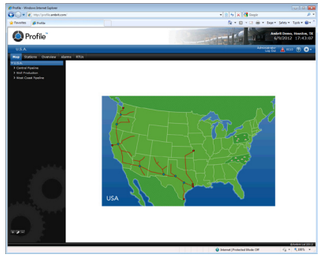
Profile™ has native support for a wide range of RTUs and flow computers and is able to communicate using an array of protocols. Furthermore, any RTU that can communicate over Modbus can easily be connected into the system without requiring a native driver. Profile™ can also gather data from a wide variety of different network topologies, including serial, TCP, satellite, canopy radio, GPRS, 3G, 4G or dial-up modem.

This approach allows Profile™ to collect data from hundreds of distributed RTUs, providing a comprehensive overview of the entire system.

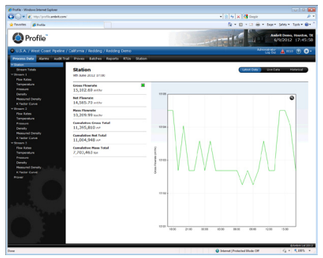
Interface

Users can access the Profile™ server using just a web browser from any location on a corporate intranet or securely over the Internet. Access is carefully controlled and individuals or groups can be granted access to the whole system, individual sites or just certain aspects of specified RTUs as required.

In addition to collecting data in the background, Profile™ allows users to view any measurement point from any RTU on the system in real time. With extended access, users can update alarm thresholds and other set points from anywhere on the network. Data can be presented as long term trends or as raw data which can easily be exported to other software tools for external analysis e.g. Microsoft® Excel®.



▲ Map



▲ Real Time Data

Profile™ monitors all the RTUs on the network for alarms and audit events. New alarms or events are presented in chronological order and can be displayed for an individual RTU, the site or the whole system to create a powerful global condition monitoring solution.

Reports generated by the RTU are automatically collected as they become available and stored within Profile™. Historical reports can be accessed through an intuitive graphical calendar, archived to disk, printed to a network printer or distributed to subscribed users as email attachments.

Profile™ also caters for the capabilities of specific flow computers, with full support for proving and batching. The raw data and flow computer report from every prove and batch is downloaded and stored in the database to provide a fully searchable audit trail: Prove data can then be viewed in chart format to help assess the performance of each meter over extended time periods and batch data can be easily handed off to external systems for automatic billing.

Navigation

Even though Profile™ can manage many hundreds of devices, the intuitive interface makes it quick and easy to navigate to an individual RTU. When an RTU is selected, using the hierarchical menu or graphical maps, Profile™ automatically establishes a connection and initiates communications, leaving the user to concentrate on the data they need.

Configuration

Setting up Profile™ is very easy; a complete system can be put together in minutes with no software skills required. As soon as the RTU's location and communication details have been entered, Profile™ starts collecting data and automatically builds a configuration that includes data screens, audit events, alarms and report schedules. Configurations can then be customized to present the data to the user's own requirements and shared between RTUs that have identical set ups, allowing changes to be made across multiple devices with a single edit.

Metrology

Metering data on its own doesn't give a complete picture of how metering instrumentation is performing; data from many other sources must be taken into account. Profile™ is part of the Metrology suite which also includes applications for calibrating equipment, recording logbook events and audit management:

Calibrate™	Calibration management
Record™	Inventory and event logbook
Inspect™	Audit management and reporting
Profile™	Data collection and reporting

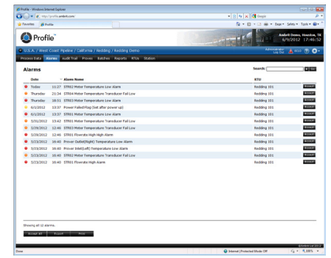
The applications can be deployed as stand alone solutions or linked together to provide a unique platform for collection, analysis and reporting of metering data.

Inventory™

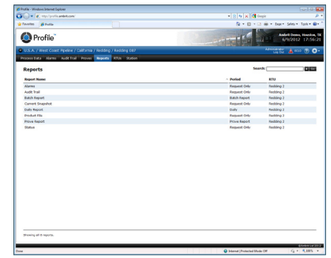
At the heart of Metrology is Inventory™, an equipment register which maintains a record of all the equipment in service on every asset, including location, model number, manufacturer, serial numbers and service status.

Once the equipment has been defined in Inventory, it can be shared with any of the other products in the Metrology suite and integrated with Acquire™, Ambrit's data acquisition and control system.

▲ Historical Data

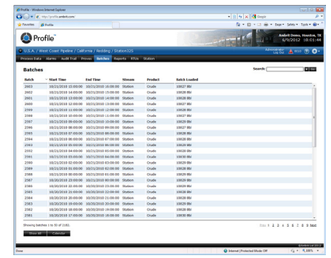


▲ Alarms



▲ Reports

▲ Report



▲ Batching

Profile™

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Ambrit Ltd.'s leading edge web technology is reflected in the new Metrology suite of web enabled metrology asset management applications, created to streamline the collection and management of metering data.

Profile™, one of the elements in the Metrology suite, is a web-enabled solution to remote data management, leveraging the latest Internet technology to provide next generation data acquisition and reporting.

Profile™ enables operators, technicians and management to reach out over vast distances to gain secure, real time access to measurement and control data from remote systems regardless of location.

Long haul SCADA systems can now be implemented without the need for custom software. System integrators can rapidly create a window into networks of distributed RTUs, providing the ideal platform for data acquisition, alarm annunciation, charting and reporting.

Using intelligent, high speed scanning, Profile™ can access data in remote RTUs through a wide variety of data carrying topologies. The data is stored and analyzed to provide process management data locally or remotely. Alarms, reports and audit trails can be generated and distributed to other locations and systems.

Any RTU on the system can be selected to initiate a two-way exchange of information that enables the RTU to be controlled remotely. Profile™ provides an innovative interface to manage this process.

At the heart of the Metrology suite is Inventory™ which provides a common access point and navigation interface so that system data can be shared seamlessly between Profile™ and the other Metrology products: Record™ for online system logbooks; Calibrate™ for management and scheduling of instrument calibration; Inspect™ for streamlining metrology audits. This interaction also extends to Acquire™ based systems, providing a truly integrated solution for all aspects of metrology measurement and control.

It's not just about the software. Ambrit expertise is on hand every step of the way – from designing the ideal network topology and providing guidance with setup, through to support, maintenance and remote monitoring of servers – to provide a first class data acquisition and reporting solution.

Features

- Multiple installations / multiple stations
- Real-time data
- Historical data
- Long term trending
- Alarm management
- Audit events
- Global overview
- RTU management

RTUs

- Omni 3000 / 6000 / RMC / LMC
- Emerson FloBoss 103 / 107
- Emerson ROC 800
- Cameron Cryoscan
- Cameron NuFlo Scanner 1100 / 2000 / 2200
- Dynamic Flowcomputers E-Chart / SFC / Micro MV
- Any Modbus RTU

Networking

- Ethernet
- Serial
- Modem
- Satellite
- GPRS / 3G / 4G

Reports

- RTU reports
- PDF reports
- Historical batches with batch export
- Historical proves with prover control charts
- Email reports

Web Interface

- State of the art web-based HMI
- Intuitive navigation
- Multi-user access
- Multi-language support
- Browser access using Internet Explorer® 7 or above
- World-wide overview via Inventory™
- Low bandwidth communication

Secure

- Integrated 256 bit SSL encryption
- Secure access via private networks (Intranet)
- Secure access via World Wide Web (Internet)
- Digest authentication for secure password control
- Individual user access privileges

Integration

- Link to Calibrate™, Record™ and Inspect™
- Interface with FLOWCAL and other external systems

Metrology

Profile™ is one of the components in a suite of web enabled metrology asset management applications:

Inventory™
Equipment and location database

Calibrate™
Calibration management

Inspect™
Audit management and reporting

Record™
Inventory and event logbook

Further information on Profile™ is available from Ambrit's web site:

www.ambrit.com/profile

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