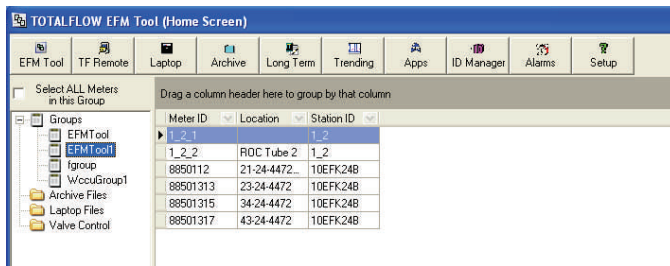


DESCRIPTION

The Totalflow EFM Tool reads gas measurement data from supported multi-vendor flow computers into an archive file (Archive) for display, reporting, and archiving. All data handling and storage is built on time tested and proven WinCCU Technology. From there, it can be exported into the EFM Tool Long Term Database (LTDB) or to formats suitable for importing into Accounting Systems, Production Databases, or Mainframe applications. The LTDB provides for editing, reporting, and display of edited and unedited data. If there is a suitable audit trail beginning in the device, that audit trail is continued. If not, an audit trail based on the acquired data is begun. All I/O is through the SCADAventure DVI.

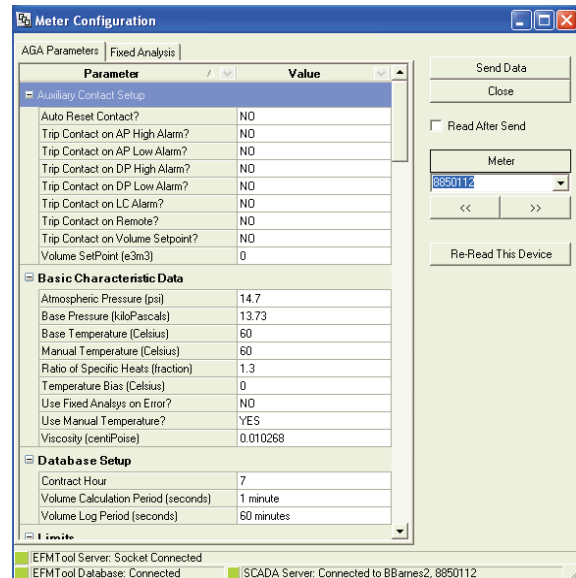


Standard displays are organized around a tree view menu and includes Tabular, Trend, and Report formats. Report outputs include Excel, Pdf, HTML, and printer formats.

FEATURES

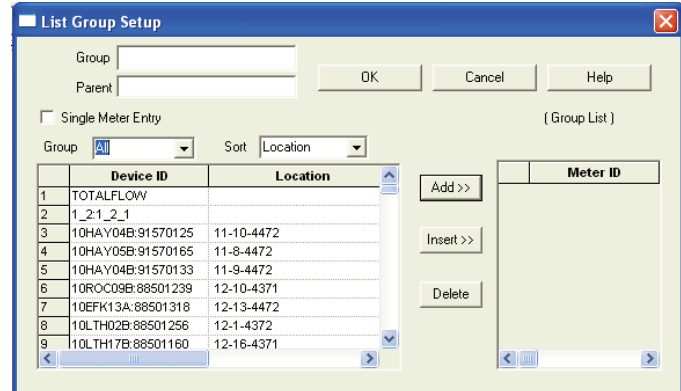
EFM Tool provides a full range of functions:

- Read and Write Meter / RTU Data
 - ◇ Poll for Current Information
 - ◇ Collect Historical Audit Trail
 - ◇ Configuration Setup Data Read and Write
 - ◇ BTU Analyzer Data
 - ◇ For Totalflow equipment , these additional functions are supported:
 - * Setup Trends
 - * Read Trend Data
 - * Read and Write Register Arrays
 - * Deliverability Test Setup and Monitor
 - * Valve Control Support
 - * Host Console – Configurable User Interface for Non-standard applications
 - * Handheld and Laptop Collection Files
 - * Device Templates Definitions
- The following EFM's and protocols are supported:
 - ◇ Totalflow via Totalflow protocol
 - ◇ Enron Modbus (including the Totalflow Implementation of the Enron Modbus)
 - ◇ Fisher ROC
 - ◇ Fisher ROC Plus

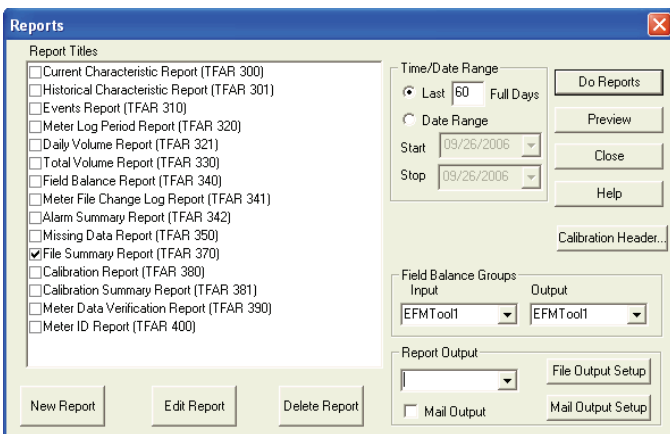


- Network
 - ◇ Designed for a Network environment (Lan / Wan / other IP based networks)
 - ◇ Modular organization allows scaling from a stand-alone PC to corporate-wide networks and over the Internet
 - ◇ Designed and Implemented as a Client/Server application
- Archive and Long Term Database Utilities
 - ◇ View Data
 - ◇ Import and Export Data
 - ◇ Copy, Extract, Verify
 - ◇ Merge
 - ◇ Reports
 - * Daily, Hourly / Log Period
 - * Characteristic
 - * Events
 - * Summary
 - * Total Volume – group of Devices
 - * Field Balance – Inputs and Outputs
 - * Alarms
 - * Calibration
 - * Missing Data
 - * Report Outputs
 - Printer
 - File
 - E-mail
 - Specify Date Range
 - Preview
 - ◇ Graph Hourly and Daily Data (Hourly may not be available using some protocols)

- SCADAverage Device Scheduler is used to schedule device requests at specific times of day. Each device may have a unique schedule or multiple devices may share a schedule via a grouping of devices. The Device Scheduler may be used to schedule either standard or gas application requests. Devices may be scheduled for Collections or Polls more than once per day.

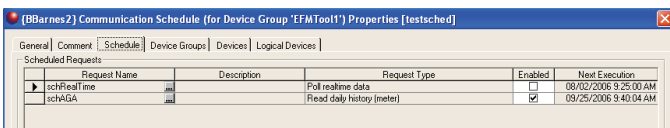


- Meter ID Management is handled both in the EFM Tool and in SCADAverage Explorer
 - ◇ Define and Edit Devices for Read/Write
 - ◇ Grouping
 - * Collection, Polling, Reports
 - * Scheduling
 - * User Defined Grouping Criteria
 - ◇ Setup Communication Ports
 - ◇ Define Communication Types
 - * Device Type
 - * Baud Rate, Link Establishment Time
 - * Delays and Protocol Parameters



BENEFITS

- EFM Tool Provides for Efficient and Effective management of multi-vendor flow devices and data.
- The EFM Tool audit trail insures data integrity for users and their clients. This increases confidence in billing accuracy.
- Device monitoring means that the Production Technicians can focus on immediate problems and not waste time visiting sites that do not need attention.
- Placing historical data into a standard database means that it can be available to any authorized user in the company – Marketing, Engineering, Accounting, etc.



- Can be combined with other Totalflow Software for additional functionality.
 - ◇ PCCU – Low level device setup
 - ◇ TDS32 – OPC / DDE / Wonderware Suite Link driver for SCADA Systems and other packages such as Excel or Visual Basic.
 - ◇ VAS – Voice call-out and call-in for alarms and current device information
 - ◇ SCADA Advantage SCADA Systems
 - ◇ TF.Net – Web Browser Interface to WinCCU, SCADA, and data stored in any standard database.
 - ◇ All on one PC, or distributed across a network as desired.
- The following EFMs and protocols are to be added:
 - ◇ Barton 1140 via Modbus
 - ◇ Bristol BSAP
 - ◇ SCADA Pack 32 via Enron Modbus
 - ◇ Telvent Micro1c via Modbus
 - ◇ AMOCAM 400 via HexRepeater
 - ◇ Prosoft MVI56 via Modbus
 - ◇ Prosoft 2100 via Modbus
 - ◇ Barton 1140 (Ngas 3) via Adept
 - ◇ Barton 1140 (Ngas 4) via Adept
 - ◇ Sherrix via Modbus

REQUIREMENTS

- Microsoft Windows 2003 SP1 or higher or Windows XP Pro.
- Microsoft SQL Server 2000 or later.
- SCADA Advantage 4.2.5 or later.

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www.abb.us
www.abb.com



ABB Inc.
Totalflow Products
7051 Industrial Blvd.
Bartlesville, OK 74006
Tel: (918) 338-4888
Fax: (918) 338-4699
(800) 442-3097

ABB Inc.
Totalflow Products
433 Northpark Central Dr., Ste. 100
Houston, TX 77073
Tel: (281) 869-5212
Fax: (281) 869-5203
(800) 442-3097

For more information,
please contact your
local ABB Totalflow
representative or visit
our website.