

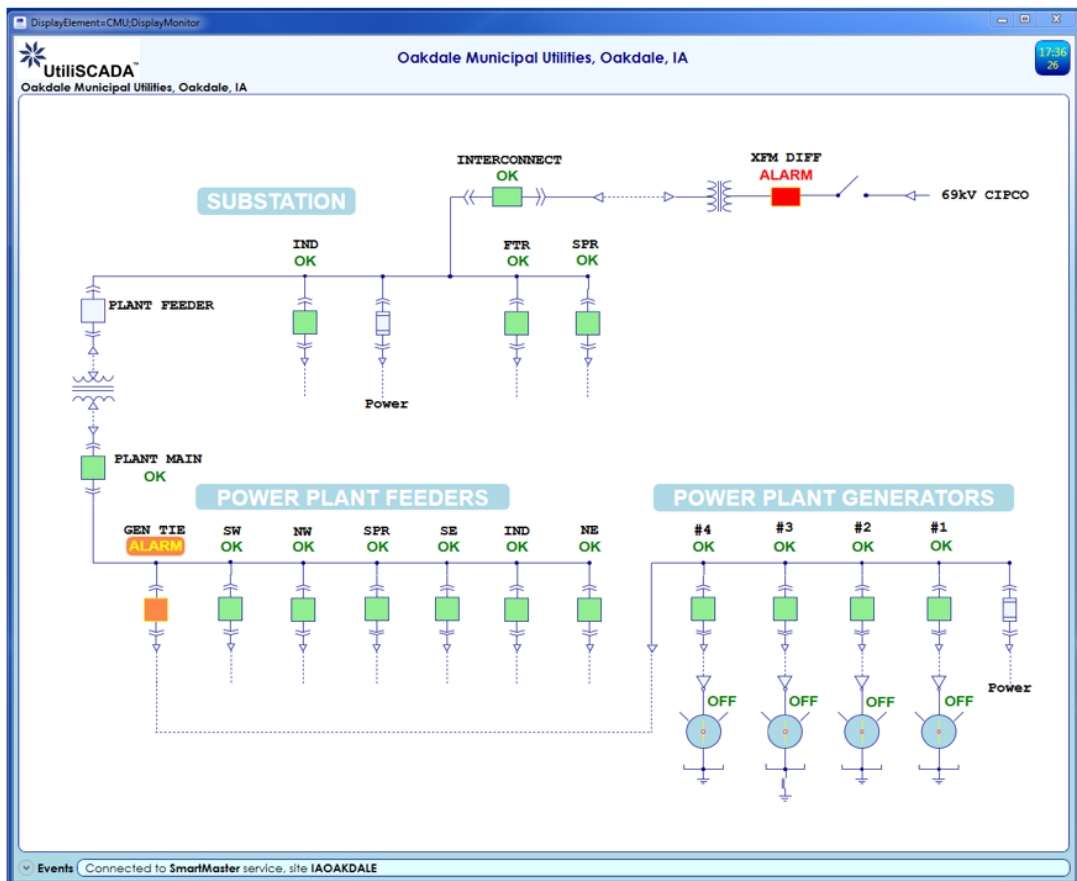


www.Telescada.com

Big System Functionality
At A Small System Price

UtiliSCADA™

The SCADA Solution Purposely Built
For Municipal and Cooperative
Electric, Gas and Water Utilities



Engineered & Designed In The USA
All Customer Support From The USA

Telescada, Incorporated
222 Bolivar Street, Canton MA 02021 USA
www.Telescada.com



Built on 30 years of operational experience, UtiliSCADA™ is our third-generation distribution management control system. UtiliSCADA™ adopts more industry standards, is Smart Grid ready, has enhanced scalability and modularity delivering an improved user experience while incorporating the latest software tools and technologies.

Designed Around Industry Standards

UtiliSCADA™ Database Engine
 Microsoft® SQL 2022 Server DBMS

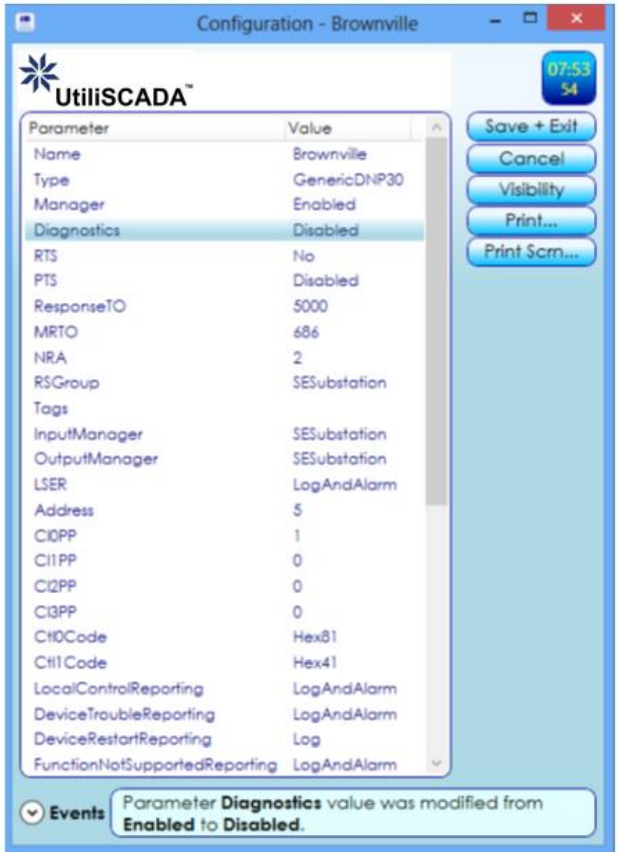
Communications Protocols
 DNP 3.0, Modbus, MultiSpeak, Vestas RCS

North American Electric Reliability Corporation Critical Infrastructure Protection Compliance

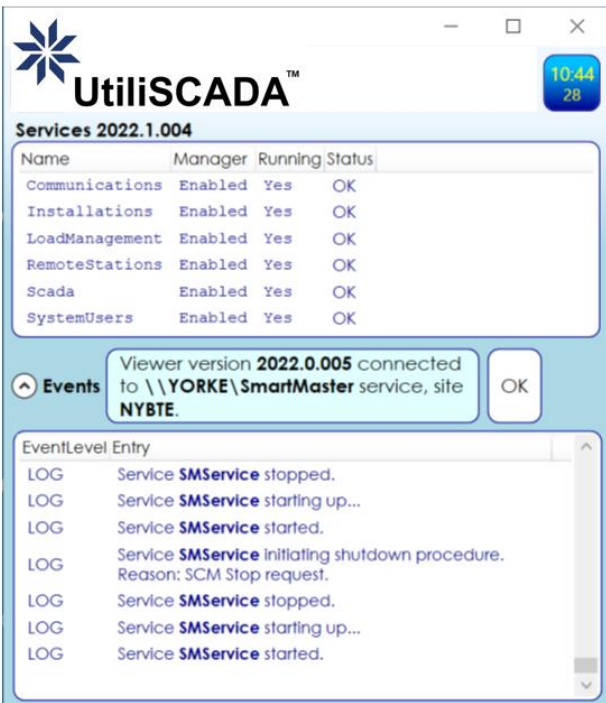
Using industry standard encryption methods, asymmetric keys and digital certificates to encrypt stored data and communications. SFTP. CIP-002, CIP-003, CIP-004, CIP-005, CIP-006, CIP-007, CIP-008, CIP-009, CIP-010, CIP-13

UtiliSCADA™ Platforms, Tools, Languages & Technologies

SQL Server 2022, Report Server 2022
 Windows® 10, CLR, .Net 4.5
 VS 2016, SSMS 2016, Report Builder
 C#, XML, XAML, SQL, T-SQL
 ADO.NET, WPF, Service Broker



DATABASE VIEWER SCREEN



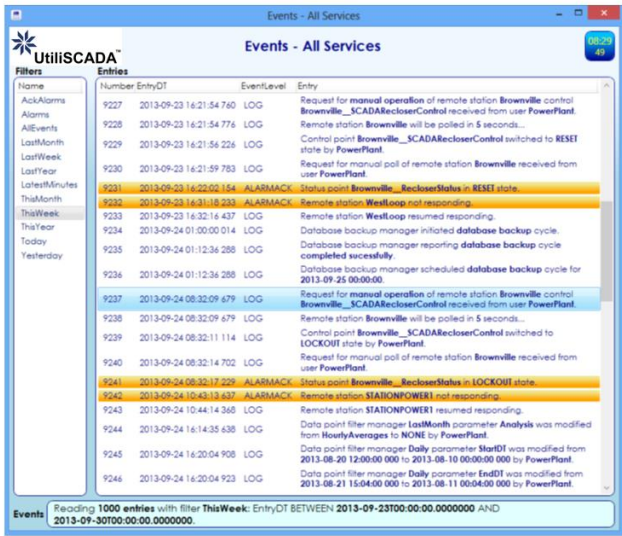
MAIN VIEWER SCREEN

Enhanced System Modularity

UtiliSCADA™ uses a multi-tier design so components can be on the same machine, or different machines. Components can be stand-alone, with no user interface, or remotely administered. Business logic is implemented as a Windows® service with no UI required to run the services. UtiliSCADA™ can also run as a standalone data concentrator for specialty applications.

Enhanced System Scalability

UtiliSCADA™ can scale from 1 to 10,000 user accounts, with millions of end points with more efficient data processing. UtiliSCADA™ provides multi-channel, asynchronous data scanning with multi-channel asynchronous control code dispatching. 500 Petabyte (500,000 TB) database capacity.



Events - All Services

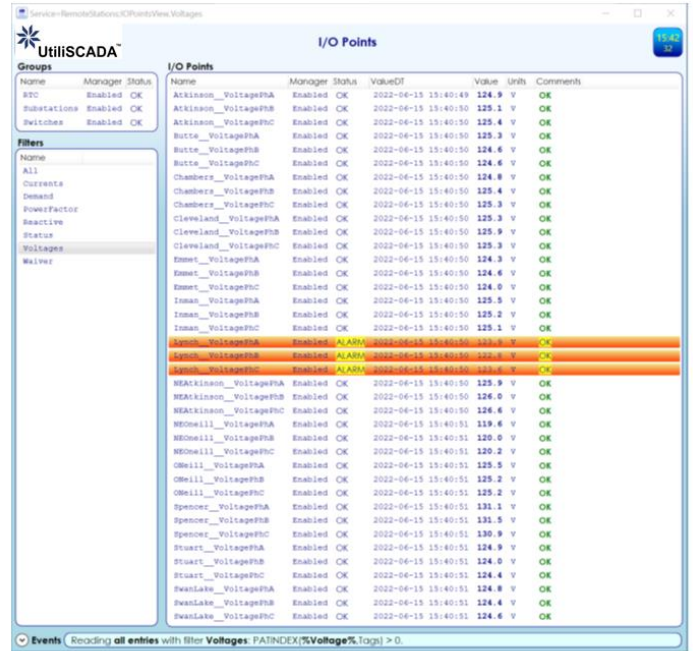
Name	Number	EntryDT	EventLevel	Entry
AckAlarms	9227	2013-09-23 16:21:54.740	LOG	Request for manual operation of remote station Brownville control Brownville_SCADAReclonerControl received from user PowerPlant . Remote station Brownville will be polled in 5 seconds...
Alarms	9228	2013-09-23 16:21:54.776	LOG	Control point Brownville_SCADAReclonerControl switched to RESET state by PowerPlant .
AllEvents	9229	2013-09-23 16:21:59.783	LOG	Request for manual poll of remote station Brownville received from user PowerPlant .
LastMonth	9230	2013-09-23 16:21:59.783	LOG	Request for manual poll of remote station Brownville received from user PowerPlant .
LastYear	9231	2013-09-23 16:22:02.154	ALARMACK	Status point Brownville_ReclonerStatus in RESET state.
LatestMinutes	9232	2013-09-23 16:21:18.233	ALARMACK	Remote station WestLoop not responding.
ThisMonth	9233	2013-09-23 16:32:16.437	LOG	Remote station WestLoop resumed responding.
ThisWeek	9234	2013-09-24 01:00:00.014	LOG	Database backup manager initiated database backup cycle.
Today	9235	2013-09-24 01:12:36.288	LOG	Database backup manager reporting database backup cycle completed successfully.
Yesterday	9236	2013-09-24 01:12:36.288	LOG	Database backup manager scheduled database backup cycle for 2013-09-25 00:00:00.
	9237	2013-09-24 08:32:09.679	LOG	Request for manual operation of remote station Brownville control Brownville_SCADAReclonerControl received from user PowerPlant .
	9238	2013-09-24 08:32:09.679	LOG	Remote station Brownville will be polled in 5 seconds...
	9239	2013-09-24 08:32:11.114	LOG	Control point Brownville_SCADAReclonerControl switched to LOCKOUT state by PowerPlant .
	9240	2013-09-24 08:32:14.702	LOG	Request for manual poll of remote station Brownville received from user PowerPlant .
	9241	2013-09-24 08:32:17.229	ALARMACK	Status point Brownville_ReclonerStatus in LOCKOUT state.
	9242	2013-09-24 10:43:13.637	ALARMACK	Remote station STATIONPOWER1 not responding.
	9243	2013-09-24 10:44:14.368	LOG	Remote station STATIONPOWER1 resumed responding.
	9244	2013-09-24 16:14:35.638	LOG	Data point filter manager LastMonth parameter Analysis was modified from HourlyAverages to NONE by PowerPlant .
	9245	2013-09-24 16:20:04.908	LOG	Data point filter manager Daily parameter StartDT was modified from 2013-08-20 12:00:00.000 to 2013-08-10 00:00:00.000 by PowerPlant .
	9246	2013-09-24 16:20:04.923	LOG	Data point filter manager Daily parameter EndDT was modified from 2013-08-21 15:04:00.000 to 2013-08-11 00:04:00.000 by PowerPlant .

Reading 1000 entries with filter **ThisWeek: EntryDT BETWEEN 2013-09-23T00:00:00.0000000 AND 2013-09-30T00:00:00.0000000**

EVENTS VIEWER SCREEN

Better User Experience

Users simply log on to Windows®, and start the UtiliSCADA™ Viewer. UtiliSCADA™ Viewer, DBMS & Windows® Security is integrated into all components. User credentials are determined from the User's Windows® account. Automated, or manual software updates. Better backup, archiving and user notification services via the UtiliSCADA™ DBMS.



I/O Points

Name	Manager	Status	ValueDT	Value	Units	Comments
Atkinson_VoltagePRA	Enabled	OK	2022-06-15 15:40:49	124.9	V	OK
Atkinson_VoltagePRB	Enabled	OK	2022-06-15 15:40:50	125.1	V	OK
Atkinson_VoltagePRC	Enabled	OK	2022-06-15 15:40:50	125.4	V	OK
Butte_VoltagePRA	Enabled	OK	2022-06-15 15:40:50	125.3	V	OK
Butte_VoltagePRB	Enabled	OK	2022-06-15 15:40:50	124.6	V	OK
Butte_VoltagePRC	Enabled	OK	2022-06-15 15:40:50	124.4	V	OK
Chambers_VoltagePRA	Enabled	OK	2022-06-15 15:40:50	124.8	V	OK
Chambers_VoltagePRB	Enabled	OK	2022-06-15 15:40:50	125.4	V	OK
Chambers_VoltagePRC	Enabled	OK	2022-06-15 15:40:50	125.3	V	OK
Cleveland_VoltagePRA	Enabled	OK	2022-06-15 15:40:50	125.3	V	OK
Cleveland_VoltagePRB	Enabled	OK	2022-06-15 15:40:50	125.9	V	OK
Cleveland_VoltagePRC	Enabled	OK	2022-06-15 15:40:50	125.3	V	OK
Emery_VoltagePRA	Enabled	OK	2022-06-15 15:40:50	124.3	V	OK
Emery_VoltagePRB	Enabled	OK	2022-06-15 15:40:50	124.6	V	OK
Emery_VoltagePRC	Enabled	OK	2022-06-15 15:40:50	124.0	V	OK
Inman_VoltagePRA	Enabled	OK	2022-06-15 15:40:50	125.5	V	OK
Inman_VoltagePRB	Enabled	OK	2022-06-15 15:40:50	125.2	V	OK
Inman_VoltagePRC	Enabled	OK	2022-06-15 15:40:50	125.1	V	OK
Orwell_VoltagePRA	Enabled	ALARM	2022-06-15 15:40:50	123.9	V	OV
Orwell_VoltagePRB	Enabled	ALARM	2022-06-15 15:40:50	123.9	V	OV
Orwell_VoltagePRC	Enabled	ALARM	2022-06-15 15:40:50	123.9	V	OV
NEAkinson_VoltagePRA	Enabled	OK	2022-06-15 15:40:50	125.9	V	OK
NEAkinson_VoltagePRB	Enabled	OK	2022-06-15 15:40:50	126.0	V	OK
NEAkinson_VoltagePRC	Enabled	OK	2022-06-15 15:40:50	126.6	V	OK
NEOswell_VoltagePRA	Enabled	OK	2022-06-15 15:40:51	119.6	V	OK
NEOswell_VoltagePRB	Enabled	OK	2022-06-15 15:40:51	120.0	V	OK
NEOswell_VoltagePRC	Enabled	OK	2022-06-15 15:40:51	120.2	V	OK
Oswell_VoltagePRA	Enabled	OK	2022-06-15 15:40:51	125.5	V	OK
Oswell_VoltagePRB	Enabled	OK	2022-06-15 15:40:51	125.2	V	OK
Oswell_VoltagePRC	Enabled	OK	2022-06-15 15:40:51	125.2	V	OK
Spencer_VoltagePRA	Enabled	OK	2022-06-15 15:40:51	131.1	V	OK
Spencer_VoltagePRB	Enabled	OK	2022-06-15 15:40:51	131.5	V	OK
Spencer_VoltagePRC	Enabled	OK	2022-06-15 15:40:51	130.9	V	OK
Stuart_VoltagePRA	Enabled	OK	2022-06-15 15:40:51	124.9	V	OK
Stuart_VoltagePRB	Enabled	OK	2022-06-15 15:40:51	124.0	V	OK
Stuart_VoltagePRC	Enabled	OK	2022-06-15 15:40:51	124.4	V	OK
SwanLake_VoltagePRA	Enabled	OK	2022-06-15 15:40:51	124.8	V	OK
SwanLake_VoltagePRB	Enabled	OK	2022-06-15 15:40:51	124.4	V	OK
SwanLake_VoltagePRC	Enabled	OK	2022-06-15 15:40:51	124.6	V	OK

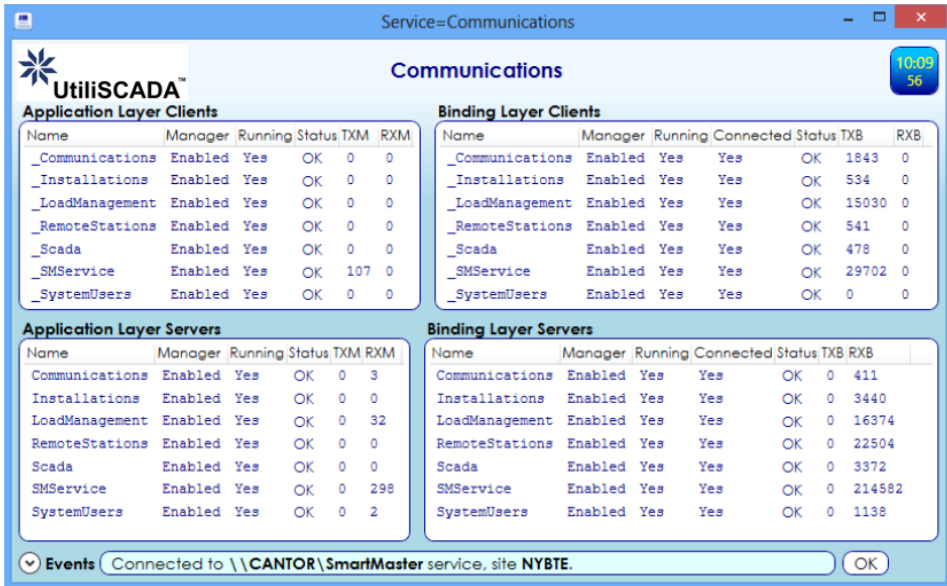
Events: Reading all entries with filter **Voltages: PATINDEX(TSVoltage%Tags) > 0**

INPUT/OUTPUT VIEWER SCREEN

Better User Customization

The UtiliSCADA™ Viewer is an agnostic user interface. There is no business logic in the Viewer. Users can select standard table views, or create custom views of existing tables.

Users can create custom data tables with the built-in report server and report builder. UtiliSCADA™ has multi-media capabilities with resizable screens using vector graphics.



Communications

Application Layer Clients						Binding Layer Clients						
Name	Manager	Running	Status	TXM	RXM	Name	Manager	Running	Connected	Status	TXB	RXB
_Communications	Enabled	Yes	OK	0	0	_Communications	Enabled	Yes	Yes	OK	1843	0
_Installations	Enabled	Yes	OK	0	0	_Installations	Enabled	Yes	Yes	OK	534	0
_LoadManagement	Enabled	Yes	OK	0	0	_LoadManagement	Enabled	Yes	Yes	OK	15030	0
_RemoteStations	Enabled	Yes	OK	0	0	_RemoteStations	Enabled	Yes	Yes	OK	541	0
_Scada	Enabled	Yes	OK	0	0	_Scada	Enabled	Yes	Yes	OK	478	0
_SMService	Enabled	Yes	OK	107	0	_SMService	Enabled	Yes	Yes	OK	29702	0
_SystemUsers	Enabled	Yes	OK	0	0	_SystemUsers	Enabled	Yes	Yes	OK	0	0

Application Layer Servers						Binding Layer Servers						
Name	Manager	Running	Status	TXM	RXM	Name	Manager	Running	Connected	Status	TXB	RXB
Communications	Enabled	Yes	OK	0	3	Communications	Enabled	Yes	Yes	OK	0	411
Installations	Enabled	Yes	OK	0	0	Installations	Enabled	Yes	Yes	OK	0	3440
LoadManagement	Enabled	Yes	OK	0	32	LoadManagement	Enabled	Yes	Yes	OK	0	16374
RemoteStations	Enabled	Yes	OK	0	0	RemoteStations	Enabled	Yes	Yes	OK	0	22504
Scada	Enabled	Yes	OK	0	0	Scada	Enabled	Yes	Yes	OK	0	3372
SMService	Enabled	Yes	OK	0	298	SMService	Enabled	Yes	Yes	OK	0	214582
SystemUsers	Enabled	Yes	OK	0	2	SystemUsers	Enabled	Yes	Yes	OK	0	1138

Events: Connected to \\CANTOR\SmartMaster service, site NYBTE.

COMMUNICATIONS VIEWER SCREEN

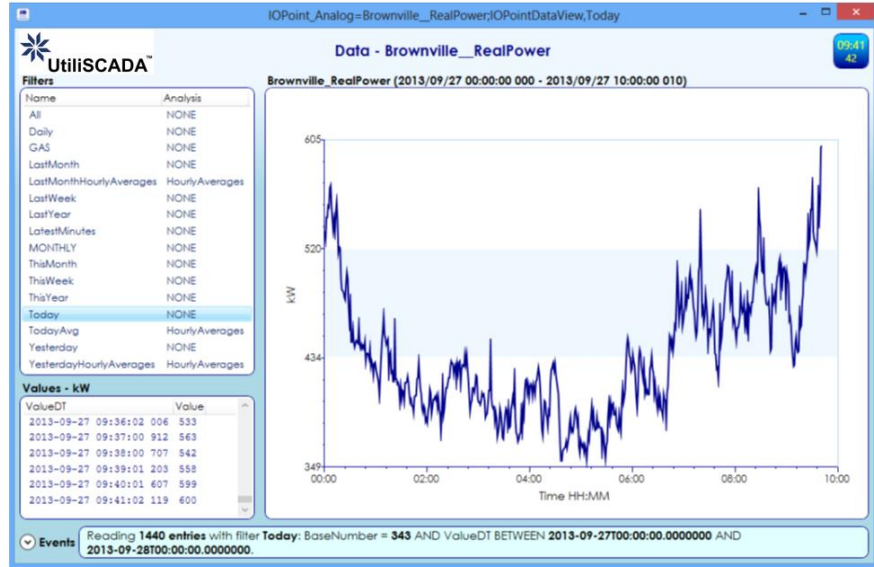
Enhanced Communications

UtiliSCADA™ can communicate with devices on one communications channel, or as many channels as needed simultaneously. Popular communications protocols are supported. Multiple protocols can run over the same channel. Communications can go over Ethernet or serial connections, or via any other medium when appropriate transceivers are used (e.g. radio, fiber optic cables, cellular modems, etc.).

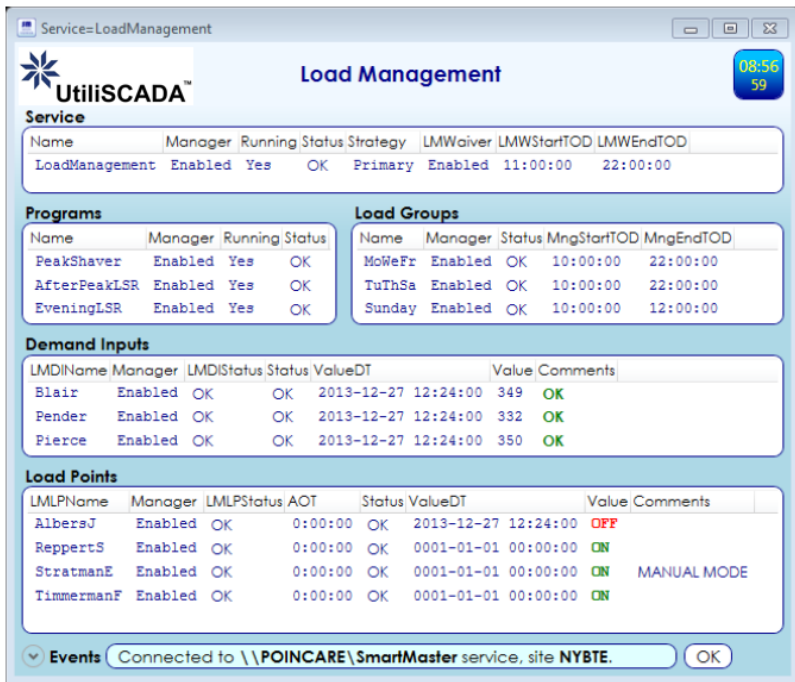
Enhanced Reporting and Notification

A special server component is dedicated to management, definition, generation, and dispatching of reports. Management can be done through the UtiliSCADA™ user interface, or via a web browser. Users can define custom reports with little or no programming. Reports can contain tables, various kinds of charts, plots, and gauges. And can be rendered in html, pdf, Excel, Word, etc.

Reports can be generated manually, or on a scheduled basis. Reports can be dispatched to selected lists of users via electronic mail on a one time, or subscription basis. In the latter case reports are sent out to mailing lists periodically as needed. Security can be defined so users can access only reports that they are entitled to see.



DATA HISTOGRAM SCREEN



LOAD MANAGEMENT APPLICATION SCREEN

Enhanced Multitiered Architecture
 UtiliSCADA™ provides application specific components for automated,

- SCADA
- Load Management /Load Control
- Automated Meter Reading / AMI
- Capacitor Control / Volt/Var Management
- DNP Integrated Data Concentrator

The SCADA Solution Purposely Built
 For Municipal and Cooperative
 Electric, Gas and Water Utilities

