

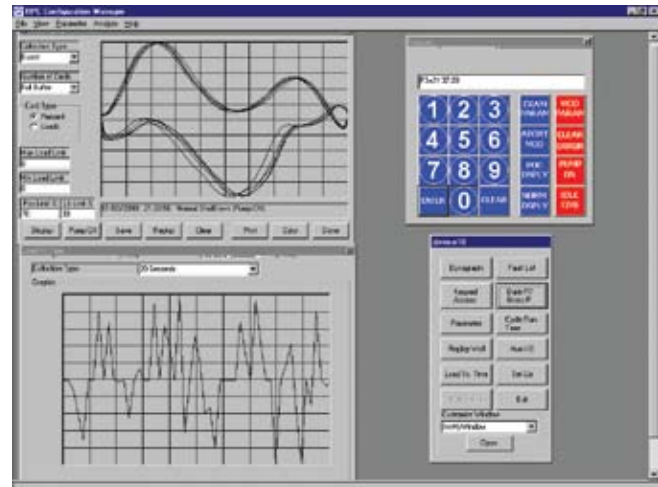


CACService™ Software

(OPC Server for Weatherford Products)

OLE for Process Control™ (OPC™) is a software standard designed to provide business applications with easy and common access to instrumentation data. The OPC specification is maintained by the OPC Foundation™ and is a nonproprietary technical specification. Standard interfaces are based upon Microsoft's® OLE/COM technology and will enable the definition of standard objects and properties for servers of real-time information such as programmable logic controllers (PLCs), remote terminal units (RTUs) and other field devices.

The major benefit of using OPC is the ability for vendors to offer a standard server which will plug in to OPC compliant clients, including but not limited to Shell Services International Artificial Lift Application, Intellution® and Wonderware™. *CACService* software has been developed to handle the direct interface with instrumentation manufactured by Weatherford using 8500 protocol. *CACService* software is based upon the OPC toolkit from FactorySoft, and features a Windows® interface for configuration of devices and tags. *CACService* software delivers process specific data for rod pump controllers (RPCs) and manages a keypad display for Weatherford's **EXS-1000™** RTU and RPC product lines.



Communication Summary

Gather and display statistics about the communication history per device. Each transaction is logged for success or failure, along with data about total bytes read/written, retry attempts and current scanning status. This information is useful for tuning communication parameters to increase the efficiency with telemetry.

OPC and OPC Foundation are trademarks of the OPC Foundation.
Microsoft and Windows are registered trademarks of Microsoft.
Intellution is a registered trademark of GE Fanuc Automation.
Wonderware is a trademark of Invensys.



CACService Software (OPC Server for Weatherford Products)

Message Logging

The raw I/O will be logged on demand to the screen. This is useful for discovering why the server may reject a message when the associated device is responding.

Other OPC Related Products

- Dynagraph ActiveX Control
- Keypad ActiveX Control

Features, Advantages and Benefits

- Module easily integrates with SCADA packages
- Dynagraph data available
- View data directly
- Provides industry standard design to access instrumentation data
- Customer can plug in the OPC Server, configure devices, tag points and bring in real-time information to a data acquisition system quickly
- Uses Weatherford's 8500 or 8550 native protocols to gather tagged-base or dynagraph data from RPCs
- Supports direct connection, CDPD, dial-up modems and radio keying applications
- Supports scan scheduling to allow user to prioritize data collection from all devices
- Communication statistics for each device are displayed with details about bytes sent/received and retries
- Each communication port is handled by a separate task to increase cycle scanning time
- Access EXS-1000 RTUs or RPC products directly through an Internet connection

Telemetry Options

- Directly connected
- Dial-up modem (regular line and CDPD)
- Radio keying support
- Dynamically built tags



CACService Software (OPC Server for Weatherford Products)

Features, Advantages and Benefits (continued)

Communication Configuration

- Message response time-outs
- Unique address per device
- Serial device communication parameters
- Telephone number for dial-up applications
- All radio keying parameters
- Scan rate selection
- Scan priority configuration
- Transaction retry count before communication failure
- Modem configuration strings

DeviceID	Address	Port	Type	ScanRate	ScanPriority	Location	Description
WEAL2009	100000	COM3	serial	1000	1	PL Houston-Bldg 1	
WEAL2009	100001	COM3	serial	1000	1	PL Houston-Bldg 4	
WEAL2009	100002	COM3	serial	1000	1	Task 1 Control Loop	
WEAL2009	100003	COM3	serial	1000	1	Task 2 Control Loop	
WEAL2009	100004	COM3	serial	1000	1	Task 3 Control Loop	
WEAL2009	100005	COM3	serial	1000	1	Task 4 Control Loop	
WEAL2009	100006	COM3	serial	1000	1	Task 5 Control Loop	
WEAL2009	100007	COM3	serial	1000	1	Water 1 Control SP	
WEAL2009	100008	COM3	serial	1000	1	Water 2 Control SP	
WEAL2009	100009	COM3	serial	1000	1	Water 3 Control SP	
WEAL2009	100010	COM3	serial	1000	1	Water 4 Control SP	
WEAL2009	100011	COM3	serial	1000	1	Water 5 Control SP	
WEAL2009	100012	COM3	serial	1000	1	Water 6 Control SP	
WEAL2009	100013	COM3	serial	1000	1	Water 7 Control SP	
WEAL2009	100014	COM3	serial	1000	1	Water 8 Control SP	
WEAL2009	100015	COM3	serial	1000	1	Water 9 Control SP	
WEAL2009	100016	COM3	serial	1000	1	Water 10 Control SP	

Device Properties

Name: WEAL2009

Port: COM3

Address: 100000

Type: MOD POC

Retries: 3

Max: 10

Testing in Milliseconds:

Response Timeout: 1000

RTS Hand: 100

RTS Delay: 1000

CTS Timeout: 0

RTS: W

DTR:

Schedule:

Dial-Up Properties:

CDPD

Pulse

Telephone Number: _____

Command String: _____

Hang-Up String: _____

(Caution: I/O errors will occur for (MODEM) devices)

Serial Port Pass: _____

Device and Groups Configuration

Each physical instrument may have one or more devices associated with it. The device associates data tags to collect from the instrumentation. The device may optionally group tags together to facilitate related data being displayed together.

Tag Configuration

Each tag is associated with data either being gathered and/or written to the device. Most of the tagged data is of common data types, such as analog or digital.

Dynagraph Collection

CACService software facilitates gathering of dynagraph data from pump off controllers from a single tag. By using a single tag for the interface of dynagraphs, client applications may request the delivery of dynagraph data with a simple Read instruction on the tag. All the details of the interface with the controller to gather the data are transparent from the client applications.

Summary Screens

Two screens for displaying information about the communication status are available.