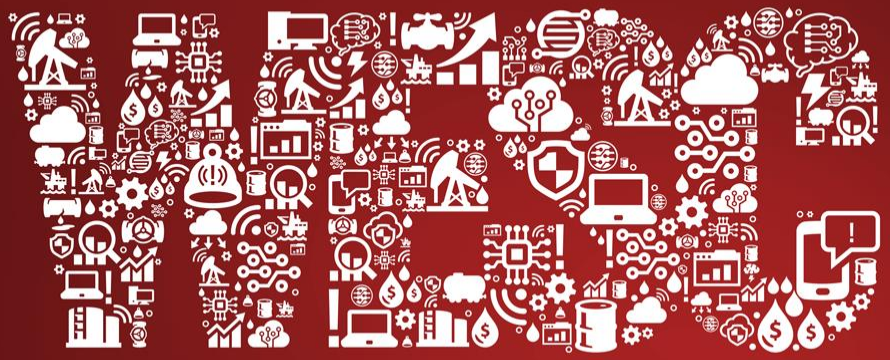

INTRODUCTION TO NEW OPC AND DNP3 PROTOCOL ENGINES

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DNP3 EIE
DISTRIBUTED NETWORK PROTOCOL

Features

- Auto Time Sync
- Events Data Group
- Internal Indicators
- Device Compliance Levels

AUTO TIME SYNC

- DNP3 Protocol requires the use of Coordinated Universal Time (UTC).
  - The Display Name drop-down menu of the Time Zone page on the Device Editor must be set to "(UTC) Coordinated Universal Time".
  - Ensure that you properly define and install a CygNetTimeZones.xml file to include the UTC drop-down time zone option for the DNP3 EIE.

DEVICE COMPLIANCE LEVELS

- Level 1 – Minimum implementation level
  - Simple reads and writes and unsolicited messages
- Level 2
  - All features of Level 1, including:
    - Freeze requests on Binary Counter objects, and parsing read requests for different variation and object combinations
- Level 3
  - All features of Level 1 & 2, including
  - Outstation processing of a wider range of read requests
  - Assigning and reassigning data objects to classes dynamically

CONFIGURABLE DATA GROUP

- Point ID-based data groups, using the remote device editor
- Data Group Elements
- Data Group Element Properties

SINGLE-POINT DATA GROUP

- Read from and write to a single user-specified point

CUSTOMIZABLE DEVICE TEMPLATE FILE

- Specifically designed
  - The DNP3 device template file includes sections specific only to the DNP3 device.

POINT TYPES

POINT TYPE	POINT NAME	DESCRIPTION
Analog	AI	Analog Input
	AID	Analog Input Deadband
	AIF	Analog Input Frozen
	AO	Analog Output
Binary	BI	Binary Input
	BI2	Double-bit Binary Input
	BO	Binary Output
Counter	CT	Counter
	CTF	Counter Frozen
IIN	IIN	Internal Indications
String	STR	String

DEMO

OPC EIE
OPEN PLATFORM COMMUNICATION

FEATURES

- Supports controllers whose data is maintained by an OPC server
- Uses the OPC Comm device to communicate with an OPC server
- CygNet OPC EIE acts as an OPC client

POLLING

- OPC EIE data group, the 'Get' button gives the user options to get cached values or fresh (device) values from the OPC server

POLLING ARRAYS

- An array data group enables you to display array data elements in a table
  - Non-historical array
  - Historical array

CONFIGURABLE DATA GROUP

- A "Configurable Data Group" (CfgDg) provides a flexible way to create parameter-based data groups on a per-device basis by using the remote device editor

SINGLE ITEM DATA GROUP

- The "Single Item" (SingleItem) data group enables you to read from and write to a single user-specified item ID for an OPC EIE. You can use a single item data group on an ad hoc basis from a data group editor or you can set up a UIS command that uses a single item data group.

OPC GROUP MANAGEMENT

- An OPC group is used to represent a set of points that have a common polling/update frequency, are related by functionality, or are commonly viewed together

QUALITY MAPPING

- The OPC EIE device template file includes a section for quality bit mapping, which is specific only to the OPC device.

DEMO

QUESTIONS