

PLC

What You Need To Know!

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Hardware – Outdated Systems

- Really? Caffeine? Were here to talk about CEMS?!
- SLC 5/05s
 - The caffeine of your CEMS!
 - A gentle end of life reminder
- Outdated Hardware = Outdated Performance
 - Lower scan times, limited networking options, no future expansion, less secure

Hardware – What To Upgrade To – PLCs

- Allen Bradley
 - CompactLogix
 - 1769 (L3x Series) - Approaching end of life
 - Option A – Replace the CPU
 - Option B – Migrate to 5069
 - 5069 (5380 Series)
 - Great mid-range option; stay here
 - Our go to for SLC 5/05 upgrades
 - ControlLogix
 - 1756 (L7x, L8x Series)
 - You've made good life choices
 - Upgrade within family: L6x -> L7x -> L8x
- Emerson
 - One realistic path: 9030's to Rx3i's



Hardware – What To Upgrade To – OITs

- **Premier Path:** Panel Mount PCs – Running RealView
- Allen Bradley
 - **Obsolete:** PanelView Standard, PanelView Plus 6
 - **Legacy:** PanelView Plus 7 Standard
 - **Supported:** PanelView Plus 7 Performance
 - **Preferred:** PanelView 5000 Family (5310)
- Automation Direct
 - **Obsolete:** EA5, EA7
 - **Legacy:** EA9
 - **Preferred:** CM5



Hardware – Upgrade Considerations

- Go beyond replacing your SLC 5/05s!
 - HSL Controllers
 - Analyzers
 - Networking Equipment
 - Power Supplies, Relays, AGM Boards and More!





Hardware – Upgrade Considerations

- What to expect during a software upgrade
 - Check your handout! (Customer Action Items)
 - Drawings, Photos, and IO
 - Air Permit
 - Networking Schema, DAHS, and ViewNodes
 - Protocol Conversion
 - Modbus, Kepware OPC, PASCAL?
 - Cylinder Information



Software – More Standardization

- PLC Refresher
 - Long Term Goals
 - Analyzer Tag Structure
 - Button Controls & OIT Integration
 - PGVP Logic
 - Complete Code Overhaul – UDT10!
 - Configuration Wizardry



Software as a More Standardized Solution

- OIT Standardization
- The Main Focus...
- Have a working state
- What is The Idea?!?!?

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Process StatusNormalDAHS Auditing Off

O2	0.00	%	Good
NOx	0.00	ppm	Good
CO	0.00	ppm	Good
NH3/NOx	0.00	ppm	Good
NH3 Slip	0.00	ppm	Good
SCR O2	0.00	%	Good
SCR NOx	0.00	ppm	Good
GT Nat Gas Flow	20.0	klb/hr	Good
DB Nat Gas Flow	0.00	klb/hr	Good
Ammonia Injection	0.0	klb/hr	Good
GT Megawatts	0.0	MW	Good
ST Megawatts	0.0	MW	Good
Shelter Temp	62.5	°F	Good
Stack HSL Temp	0.0	°F	Good
NH3 Converter Temp	0.0	°F	Good
SCR Inlet HSL Temp	0.0	°F	Good

Stack

In Service

Start Cal

Abort Cal

Auto Cal Enabled

Auto Cal Time (HHMM):700

Start Backflush

Backflush Interval (MMMM):1440

STACK IN SERVICE

SCR

In Service

Start Cal

Abort Cal

Auto Cal **Disabled**

Auto Cal Time (HHMM):800

SCR INLET IN SERVICE

OverviewAlarmsNOx/LNOx/HCO/LCO/HNH3/NOxO2SCR NOx/LSCR NOx/HSCR O2Cal Sequencing

AUTOMATIONDIRECT

OVERVIEW

Process StatusNormalDAHS Auditing Off

NOx	0.00	ppm	Good	CTG Megawatts	0.00	MW	Good
CO	0.00	ppm	Good	Percent Load	0.00	%	Good
O2	0.00	%	Good	GTC Gas Fuel Flow	0.00	kscf/hr	Good
SCR NOX	0.00	ppm	Good	Urea Flow	0.00	gal/hr	Good
Stack HSL Temperature	0.00	°F	Good	Steam Flow	0.00	klbs/hr	Good
SCR HSL Temperature	0.00	°F	Good				
Shelter Temperature	0.00	°F	Good				
Ambient Temperature	0.00	°F	Good				

Stack

In Service

Start Cal

Abort Cal

Auto Cal Enabled

Auto Cal Time (HHMM):0100

Start Backflush

Backflush Int (MMMM):1440

Stack In Service

SCR

In Service

Start Cal

Abort Cal

Auto Cal **Disabled**

Auto Cal Time (HHMM):0700

Start Backflush

Backflush Int (MMMM):1440

SCR In Service

Screen Select

Software – More Standardization

- Customer Facing Improvements
 - Continuity throughout your fleet (OITs)
 - Cylinder pressure tracking on calibration reports
- New CiSCO Standards
 - End of Cal & End of Audit Air Purge
 - Startup and Shutdown time remaining (available upon request)
 - More robust inter-valve lockout controls
 - QA Shutdown Logic



Customer Service – Yes, We Can!

- What we offer, who to contact, after hours support
- How to get started with Customer Service
 - o During Business Hours
 - Email- SoftwareSupport@ciscocems.com
 - Call Main Number Choose 2 for Software or 6 for PLC
 - 7AM MDT- 6PM MDT
 - o After Hours
 - Leave Voice Mail
 - Response time



What We Need

Name of the Site

Control Room Phone Number



Are We Meeting Your Customer Service Needs?

Discussion

