

Best Practices

January 19, 2018 | The Langham Luxury Hotel, Chicago, IL

Welcome and Introductions

Todays agenda will include:

New and updated products~ ConnectLite App BAC-5901 Expanded memory CAN-5902 IO Expansion 16 Input BAC-5051E Router KMD-5551E Translator

Connect ~

Schedule BacNet backups Compare

Converge~

Niagara compatability mode Fingerprinting GFX



Welcome and Introductions

2018

Our goal today is to..

- Demonstrate how we would set up a small job
- Setup our BAC-9001 controllers using the ConnectLite App
- Deploy a custom application to our BAC-5901 controller
- Deploy a standard application from our library to the BAC-9001 and the BAC-9301 controllers
- Audit our job
- Discover the controllers in Niagara and bring in points using the fingerprint function in Converge
- Make a mobile graphic using GFX

KMD-5551E



- Gateway between BACnet and KMDigital networks
- Browser configuration
- Diagnostic and status displays
- Automatically learns networks and configures routing for the discovered BACnet networks



ConnectLite

- Brighter Screens
- Easier to read
- Same functionality

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HOME	READ	WRITE	HISTORY	
READ FROM	NFC	READ	FROM BLE	
Information				
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Communication	าร			
Passwords				
Application				
Factory				
MODIFY & W	/RITE	SAVE A	S TEMPLATE	

		nectLi	te™
HOME	READ	WRITE	HISTORY
READ FROM	NFC	READ FI	ROM BLE
Information			
Communication	าร		
Subnet Mask Gateway Addr UDP Port	Normal 192.168.1.10 255.255.255 192.168.1.1 47808 172.16.1.254 47808	0	
Passwords			
Application			
Factory			
MODIFY & W	IRITE	SAVE AS 1	TEMPLATE





CONNECTLITE DEMO

- New look
- Diagnostics
- VAV Balance with overrides
- MSTP Capture

onquest Bac-5051 R	outer				
Ţ	Device				(Refresh) (Save)
-	Device Name: Ge	ene Router 204			
stics ▼ ed ▼	Description: Co	onquest Small Router			
	Location:	MC Controls: New Paris, IN			
	Device Instance:	25050			
	Number APDU Retrie	ies: 3			
	APDU Timeout:	6000 msec			
	APDU Seg. Timeout:	:: 5000 msec			
	Backup Failure Time	eout: 600 sec			
	IP Address:	10.110.2.204 Mac:	00:d0:6f:02:15:bb		
	Subnet Mask:	255.255.0.0			
	Default Gateway:	10.110.1.1			
	(Restart Device)			Model: BAC-5051E	FW Version: R1.8.0.0
B. All rights reserved					

2018

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• VAV Balance with overrides

e						
ing 🔺	Balancing					
Configuration	Instance Range	8000 8050	Discover Refresh			
Status						
ırity	Device	Device	Device		Primary Coefficients	
nostics	8001	Name BAC-8001_002025	Model BAC-8001_E1.0.0.15	Correction Slope	Correction Offset	Low Flow Correction
Device Status	0 8005	BAC-8005_001396	BAC-8005_E1.0.0.15	1	0	' 1
Token Use			_			
Metrics	8007	BAC-8007_001026	BAC-8007_E1.0.0.15	1	0	1
MS/TP Capture						
		Delense				
Firmware	Configure	Balance Comman	a			
Configure from File						
Balancing	Primary Flo	w Relinquish Co	mmand Refresh			
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Balancing 9	Primary Flo	Flow Setpoint	mmand Refresh			
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• Diagnostics

KMC Conquest Bac-505	1 Router										KMCConquest
Device Routing A Configuration		I' freezes the capture whe	n frame buffer is full.								
Status						MS/TP To	ken Use				
Security	Stop wh	en full									Clear
Diagnostics Device Status											Cieur
Token Use											
Metrics					(5)					(10)	
MS/TP Capture		2 (2) (3) (2) (3) (2) (3) (2) (3) (2) (3) (2) (3) (2) (3) (3) (4) (3) (3) (4) (3) (3) (4) (3) (3) (4) (3) (3) (4) (3) (3) (4) (3) (3) (4) (3) (3) (4) (3) (3) (4) (4) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	4 14 24 33 44 54 54 54 54 54 54 54 54 54 54 54 54	(15)	6 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 9 8	7 17 27 37 47 57 57 57 57 57 107 117 127	8 18 18 18 18 10 11 18 10 10 11 18 10 10 10 10 10 10 10 10 10 10	9 9 9 9 9 9 9 9 9 9 8 8 9 9 8 8 9 9 8 8 9 9 8 8 9 19 9 9 9	19 20 30 40 55 66 70 88 90 110 120	
Advanced	21	22	23	24	25	26	27	28	29	30	
Firmware Configure from File	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	
Balancing	51	52	53	54	55	56	57	58	59	0	
Time		(62)	(63) (73)	(64) (74)	(65)	(66) (76)	(67) (77)	(68)	(69)	(70)	
Help	81	82	83	84	85	86	87	88	89	90	
Sign Out	11 21 31 41 51 66 71 81 91 111 121	92	93	94	85 85 45 85 85 85 85 85 85 85 85 85 85 85 85 85	96	97	98	99	(100	
	(111)	(112)	(113)	(114)	(115)	(116)	(117)	(118)	(119)	(120)	
	121	122	123	(124)	125	126	(127)	<u> </u>	_	_	
	Green = < 100 ms	, Yellow = > 100 ms < APDU Time	out, Red = > APDU Timeout L	ight Blue = Poll for Master Blue	e = Router MAC						
	16	Total Devices (includi									
, i	6	Avg Token Cycle time Avg Token Time per E									
	15	Highest MAC Discove									
	65	Max Master in Use									
CONTROLS											



• MSTP Capture

KMC Conquest Bac-5051 Ro	outer	KMCConquest
Device Routing ▲	MS/TP Capture	Refresh Save
Configuration Status	Current State: Data Ready	
Security	Start Now:	
Diagnostics	Stop Now:	
Device Status	Start on Restart:	
Token Use	Max Time: (60)sec	
Metrics	Max Length: 0 bytes captured	
MS/TP Capture		
Advanced Advanced		
Configure from File	Last Start Time: Tuesday 01/09/2018 10:12:31	
Balancing	Last End Time: (Tuesday 01/09/2018 10:12:53)	
Time	Capture Filled3.02%	
Help		
Sign Out	Download Capture	



BAC-5051E ROUTER DEMO

BAC-5901



Expanded Memory



General Purpose Controller Number of Objects

Object Type	2 MByte	4 MByte
Device	1	1
File	180	300
Inputs	42	42
(Accumulator + Analog + Binary)		
Outputs	40	40
(Analog + Binary)		-10
Analog Value	120	300
Binary Value	80	300
Multi-State Value	40	100
Calendar	1	10
Event Enrollment	40	100
Loop	10	50
Notification Class	5	20
Program	10	30
Schedule	2	20
Trend Log	20	40
Trend Log Multiple	4	20
Digital Sensor	8	8
Expansion I/O	4	4
**Input Tables	4	20
**CB Tables	4	20

CAN-5902



- New expansion module
- 16 inputs (no outputs)





End of first session...

Game Code FWX767

Connect



We are going to...

- Schedule BACnet backups
- Perform an <u>Audit</u> and discuss that feature
- Show you what the <u>Compare</u> feature can be used for
- Discuss Niagara Compatibility Mode

Converge



We are going to...

- Show you how Fingerprinting works
- Configure points
- Look at the block programming
- Create mobile graphics using GFX







Thank you!

Gamification Code: 3QL5FD