



# Best Practices

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

# Welcome and Introductions



Today's 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 compatibility mode

Fingerprinting

GFX

# Welcome and Introductions



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



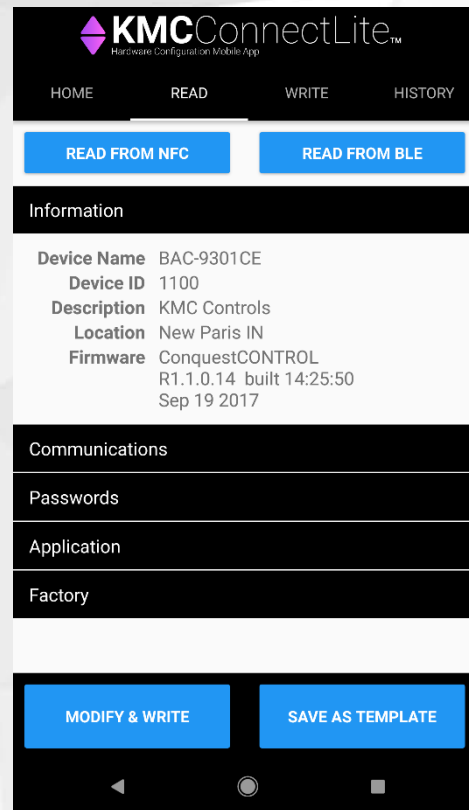
- Gateway between BACnet and KMDigital networks
- Browser configuration
- Diagnostic and status displays
- Automatically learns networks and configures routing for the discovered BACnet networks



# ConnectLite



- Brighter Screens
- Easier to read
- Same functionality





# CONNECTLITE DEMO

# BAC-5051E Router



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

KMC Conquest Bac-5051 Router KMCConquest™  
Automation Hardware


Device Refresh Save

Device Name:   
Description:   
Location:

Device Instance:   
Number APDU Retries:   
APDU Timeout:  msec  
APDU Seg. Timeout:  msec  
Backup Failure Timeout:  sec

IP Address:  Mac:   
Subnet Mask:   
Default Gateway:

Model:  FW Version:

  
**KMC**  
CONTROLS  
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# BAC-5051E Router



- VAV Balance with overrides

KMC Conquest Bac-5051 Router

Device  
Routing  
  Configuration  
  Status  
Security  
Diagnostics  
  Device Status  
  Token Use  
  Metrics  
  MS/TP Capture  
Advanced  
  Firmware  
  Configure from File  
  Balancing  
Time  
Help  
Sign Out

Balancing

Instance Range

	Device Instance	Device Name	Device Model	Correction Slope	Primary Coefficients Correction Offset	Low Flow Correction
<input type="radio"/>	8001	BAC-8001_002025	BAC-8001_E1.0.0.15	1	0	1
<input checked="" type="radio"/>	8005	BAC-8005_001396	BAC-8005_E1.0.0.15	1	0	1
<input type="radio"/>	8007	BAC-8007_001026	BAC-8007_E1.0.0.15	1	0	1

Configure Balance Command

Primary Flow

Flow Setpoint

Actual Flow

VAV Fan

Enable

Speed

VAV Reheat


Discharge Air Temperature

Modulating

Stage 1

Stage 2

Stage 3



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# BAC-5051E Router



- Diagnostics

KMC Conquest Bac-5051 Router
KMCConquest™  
Automation Hardware

Device

Routing ▲

Configuration

Status

Security

Diagnostics ▲

Device Status

**Token Use**

Metrics

MS/TP Capture

Advanced ▲

Firmware

Configure from File

Balancing

Time

Help

Sign Out

### Diagnostics

\*Stop when full\* freezes the capture when frame buffer is full.

MS/TP Token Use

Stop when full Clear

0	1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20	21
21	22	23	24	25	26	27	28	29	30	31
31	32	33	34	35	36	37	38	39	40	41
41	42	43	44	45	46	47	48	49	50	51
51	52	53	54	55	56	57	58	59	60	61
61	62	63	64	65	66	67	68	69	70	71
71	72	73	74	75	76	77	78	79	80	81
81	82	83	84	85	86	87	88	89	90	91
91	92	93	94	95	96	97	98	99	100	101
101	102	103	104	105	106	107	108	109	110	111
111	112	113	114	115	116	117	118	119	120	121
121	122	123	124	125	126	127				

Green = < 100 ms, Yellow = > 100 ms < APDU Timeout, Red = > APDU Timeout, Light Blue = Poll for Master, Blue = Router MAC

16	Total Devices (including router)
99	Avg Token Cycle time (ms)
6	Avg Token Time per Device(ms)
15	Highest MAC Discovered
65	Max Master in Use

# BAC-5051E Router



- MSTP Capture

KMC Conquest Bac-5051 Router KMCConquest™  
Automation Hardware

Device  
Routing ▲  
Configuration  
Status  
Security  
Diagnostics ▲  
Device Status  
Token Use  
Metrics  
**MSTP Capture**  
Advanced ▲  
Firmware  
Configure from File  
Balancing  
Time  
Help  
Sign Out

MS/TP Capture Refresh Save

Current State:

Start Now:

Stop Now:

Start on Restart:

Max Time:  sec


Max Length:  bytes captured

Last Start Time:

Last End Time:

Capture Filled...3.02%

[Download Capture](#)



**KMC**  
CONTROLS

# 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 (Accumulator + Analog + Binary)	42	42
Outputs (Analog + Binary)	40	40
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 Audit and discuss that feature
- Show you what the Compare 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

Q & A





**Thank you!**

**Gamification Code: 3QL5FD**