

# KE2EM BACnet Product Technical Notes

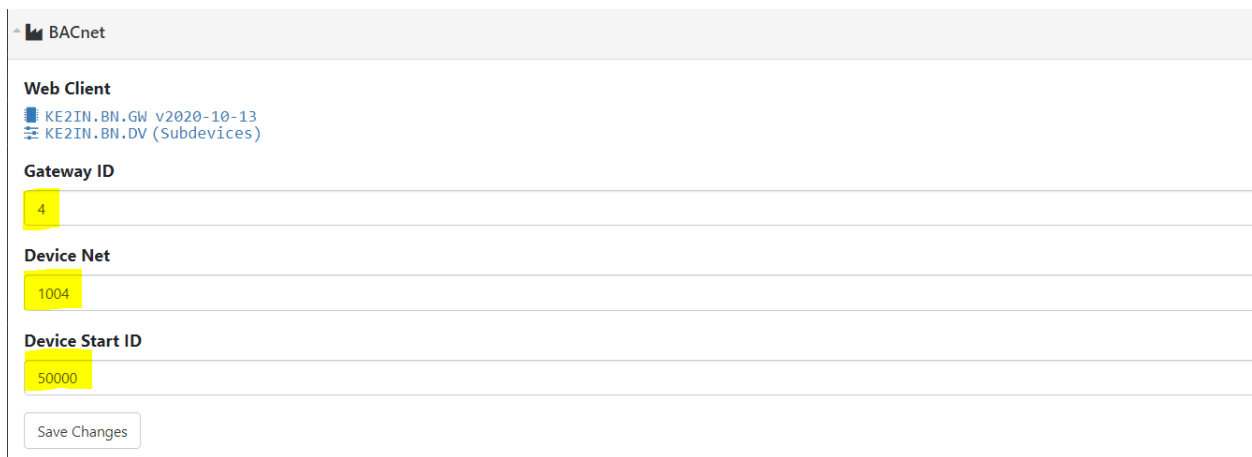
## JCI MetaSys v9 with KE2 EM integration

For JCI MetaSys v9 (or possibly any other JCI version), the following changes must be made prior to the “Discovery process” for BACnet Services to work as expected.

The KE2 EM’s default values must be altered for the JCI MetaSys product to see our devices properly. Currently, the default configuration is known to work as expected, without modification on other comparable BMS/EMS platforms. These values should not need to be altered in normal circumstances however can be as needed or directed by KE2 Technical Support.

### Step 1:

Login into the Edge Manager Management Console, scroll down and configure the BACnet properties. The values below have been modified, however note, the **default values are ok too**.



BACnet

**Web Client**  
KE2IN.BN.GW v2020-10-13  
KE2IN.BN.DV (Subdevices)

**Gateway ID**  
4







**Device Net**  
1004

**Device Start ID**  
50000

Save Changes

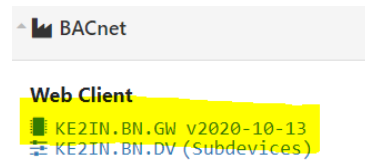
### Step 2:

In the device list above, you need to Publish the device(s) to BACnet by selecting the Industrial building icon on each device. The icon will turn dark black when Published properly.

✓			IPC	10.10.10.10	54:10:10:10:10:10	Freezer 4B Cond
✓			IPC	10.10.10.10	54:10:10:10:10:10	Freezer 3A Cond
✓			IPC	10.10.10.10	54:10:10:10:10:10	Freezer 4A Cond

### Step 3:

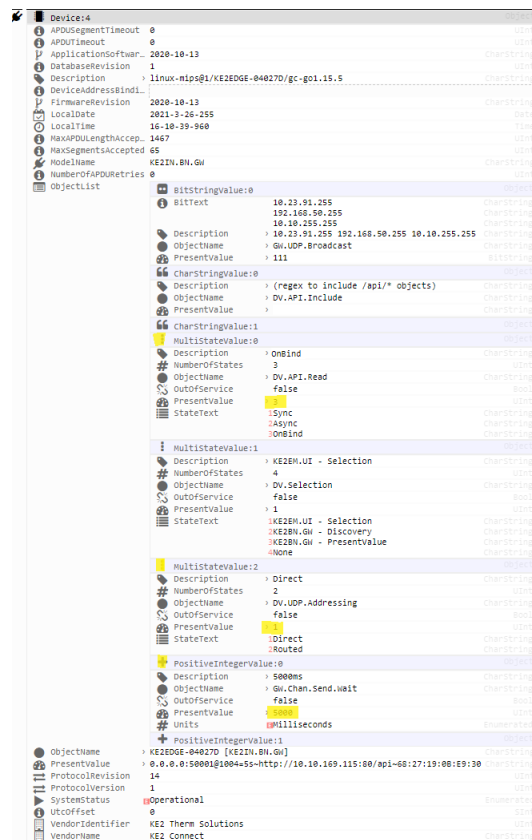
Scroll down and select the KE2IN.BN.GW link to open the KE2 BACnet Gateway configuration tool.



### Step 4:

Navigate to ObjectList and make the following changes:

- 1) Change PositiveIntegerValue from 500 to **5000** (This may/may not be required in future installs)
- 2) Change MultiStateValue 2 from Routed to **Direct**
- 3) Change MultiStateValue 0 from Sync to **OnBind**



### Step 5:

The Published KE2 BACnet devices should now be available to the JCI MetaSys BMS. At this stage the JCI MetaSys engineer will need to “Discover” the devices and add them to their system. Once confirmed, all objects have been recognized and delivered as expected, proceed to the next step.

## Step 6:

Final Change... Change MultiStateValue from OnBind back to **Sync**

The screenshot displays a configuration window for 'Device4'. The 'ObjectList' section is expanded, showing various configuration parameters. The 'MultiStateValue:0' is highlighted, showing its 'PresentValue' as '3' and 'StateText' as 'Sync'. The 'MultiStateValue:1' is also visible, showing its 'PresentValue' as '1' and 'StateText' as 'KE2BH.UI - Selection'. The 'MultiStateValue:2' is also visible, showing its 'PresentValue' as '1' and 'StateText' as 'Direct'. The 'PositiveIntegerValue:0' is also visible, showing its 'PresentValue' as '5000ms' and 'Units' as 'Milliseconds'. The 'PositiveIntegerValue:1' is also visible, showing its 'PresentValue' as '5000' and 'Units' as 'Milliseconds'.

Object Name	Value	Unit
APDUsegmentTimeout	0	ms
APDUTimeout	0	ms
ApplicationSoftware	2020-10-13	CharString
DatabaseRevision	1	ms
Description	linux-nips@1/KE2EDGE-04027D/gc-g01.15.5	CharString
DeviceAddressBind		CharString
FirmwareRevision	2020-10-13	CharString
LocalDate	2021-3-26-255	Date
LocalTime	16-10-39-960	Time
MaxAPDULengthAccept	1467	ms
MaxSegmentsAccepted	49	ms
ModelName	KE2IN.BH.GW	CharString
NumberOfAPDUretries	0	ms
ObjectList		
BitStringValue:0		ms
BitText	10.23.91.255	CharString
Object Name	192.168.50.255	CharString
Description	10.23.91.255 192.168.50.255 10.10.255.255	CharString
Object Name	GW.UDP.Broadcast	CharString
PresentValue	111	BitString
CharStringValue:0		ms
Description	(regex to include /api/* objects)	CharString
Object Name	DV.API.Include	CharString
PresentValue		CharString
CharStringValue:1		ms
MultiStateValue:0		ms
Description	Sync	CharString
NumberOfStates	3	ms
Object Name	DV.API.Read	CharString
OutOfService	false	Bool
PresentValue	3	ms
StateText	Sync	CharString
Async	OnBind	CharString
MultiStateValue:1		ms
Description	KE2BH.UI - Selection	CharString
NumberOfStates	4	ms
Object Name	DV.Selection	CharString
OutOfService	false	Bool
PresentValue	1	ms
StateText	KE2BH.UI - Selection	CharString
KE2BH.GW - Discovery		CharString
KE2BH.GW - PresentValue		CharString
None		CharString
MultiStateValue:2		ms
Description	Direct	CharString
NumberOfStates	2	ms
Object Name	DV.UDP.Addressing	CharString
OutOfService	false	Bool
PresentValue	1	ms
StateText	Direct	CharString
Routed		CharString
PositiveIntegerValue:0		ms
Description	5000ms	CharString
Object Name	GW.Chan.Send.Wait	CharString
OutOfService	false	Bool
PresentValue	5000	ms
Units	Milliseconds	Enumerated
PositiveIntegerValue:1		ms
Object Name	KE2EDGE-04027D [KE2IN.BH.GW]	CharString
PresentValue	0.0.0.0:50001@1004+55-http://10.10.169.115:80/api-68:27:19:08:E9:30	CharString
ProtocolRevision	14	ms
ProtocolVersion	1	ms
SystemStatus	Operational	Enumerated
UtcOffset	0	ms
VendorIdentifier	KE2 Therm Solutions	ms
VendorName	KE2 Connect	CharString