Feature list of pybacnet and BACpypes

Sources:

BACnet stack: http://bacnet.sourceforge.net/

Pybacnet: https://github.com/BuildingRobotics/pybacnet
- Description:
  - Documents and examples of Pybacnet

BACpypes: https://github.com/JoelBender/bacpypes
- Description:
  - Documents and examples of BACpypes

http://bacpypes.sourceforge.net/index.html
- Description:
  - Tutorial of BACpypes

Pybacnet writes all BACnet services in functions, users can easily do the services by calling that function. But it only supports readProperty, writeProperty, and who-is services.

BACpypes is a BACnet stack written in python, it supports more BACnet services, including readPropertyMulti and writePropertyMulti, which we care a lot, and some other services like who-has, I-have, acknowledgeAlarm, confirmedCOVNotification and etc. When use BACpypes, unlike Pybacnet just call functions, users will have to build the local device object, and then use that object to make requests. However, user can build the service function by themselves, and call that service function when they want execute some services.

Overall, BACpypes has more BACnet services, and the code quality/documentation is more or less the same with Pybacnet.

(the next page is some detailed information about Pybacnet and BACpypes)

Pybacnet

1. readProperty
   ReadProperty, the link is an example of smap drivers by using pybacnet to read or write

2. writeProperty
   WriteProperty, the link is an example of smap drivers by using pybacnet to read or write

3. readPropertyMulti
   NO

4. writePropertyMulti
   NO

5. Address devices:
   Who-Is, the link is the scan function by pybacnet using who-is services

6. Code Quality/documentation
   Use bacnet.Init to build the local device object, use bacnet.read_prop, write_prop and bacnet.whois functions to do BACnet services, users don't need to build local device object, make the request, the library functions will do that for users.

BACpypes

1. readProperty
   ReadProperty, this is a BACpypes application that read properties of objects.

2. writeProperty
   WriteProperty, this is a BACpypes application that write value to objects.

3. readPropertyMulti
   ReadProperty Multiple, this is a BACpypes application that read multiple objects.

4. writePropertyMulti
   Yes, BACpypes has writePropertyMulti service, but I haven't find example, I find a list of functions user will use when do writePropertyMulti service.

5. Address BACnet devices
   Who-Is, I-am, this is a BACpypes application that does who-is and i-am services.
   Who-has, I-have, this is a BACpypes application that does who-has and i-have services.

6. code quality/documentation
   When use BACnet services, users will have to build a local device object first, then build the requests, and then use that local object to make the requests.