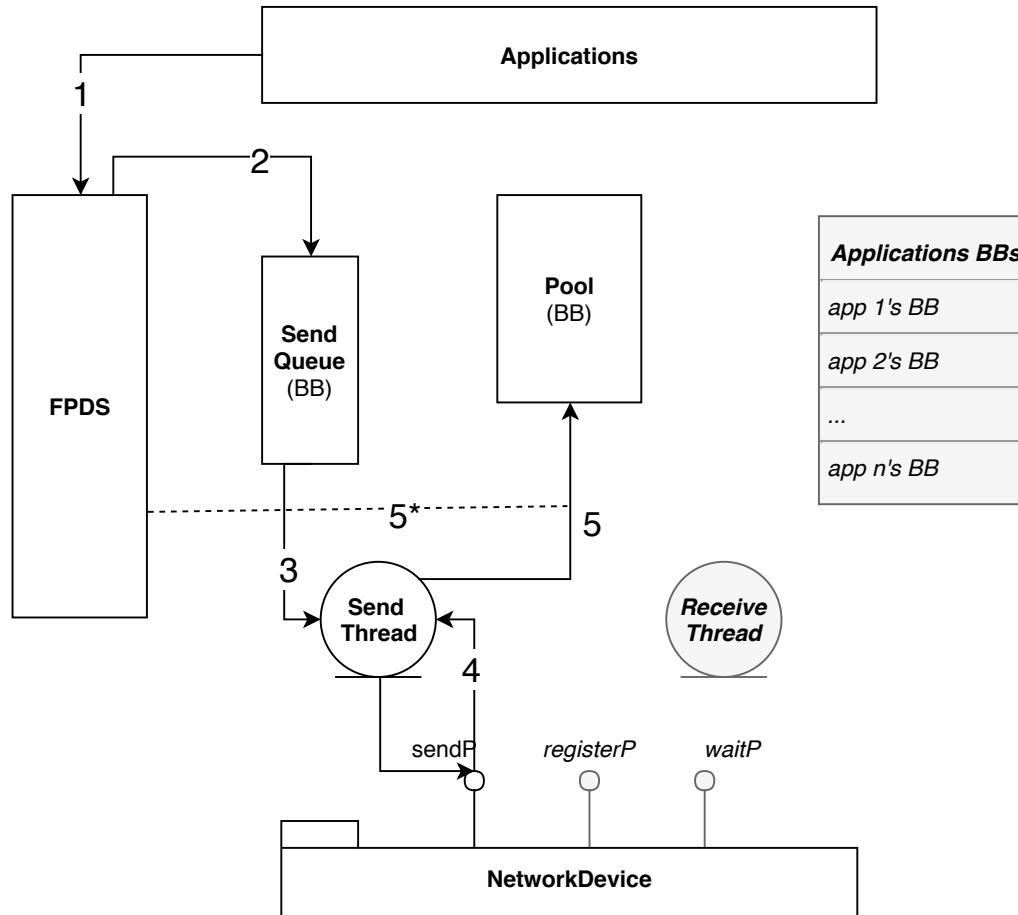


Application sending packet to the network



*BB stands for Bounded Buffer

*FPDS stands for FreePacketDescriptorStore

*Send Queue is implemented with a Bounded Buffer (not a queue)

Application is any of the applications with PID 0-10 during the execution of the simulated network

1. Application grabs a packet descriptor from the FPDS
 2. Application calls either `blockingSendPacket` or `nonBlockingSendPacket`, attempting to put it into the send queue (a bounded buffer)
 3. The PacketDescriptor put into the send queue by the application is picked up by the send thread for processing
 4. The send thread repeatedly attempts to call `sendPacket` on the network device with the appropriate PacketDescriptor, failing after N tries
 5. Regardless of whether the send thread succeeded, it tries to return the packet descriptor to the pool
- 5*. If the packet fails to go in the pool, it is returned to the FPDS