

SpaceNet 2025 Design Project Errata

3/14/25

1. You will need two additional functions that are currently missing from the Spec.
 - a. `get_next_bundle_to_send() return(bundle)`: This call will extract the next bundle to be processed for sending, popping it off its queue. Note that you have no control over which queue will be serviced next, but can only request the next bundle.
 - b. `push_fragment_onto_head_of_queue(bundle) return()`: When a bundle is fragmented, two bundles are produced. The first fragment is intended to be sent. This call will enable the system to put the remaining fragment at the head of the appropriate queue, which will be determined by the bundle header itself (source, destination, priority).

3/15/25

1. And one more:
 - a. `return_bundle_to_queue(bundle) return()`: This call returns a bundle to the queue from which it came, at the end of the queue.

3/18/25

1. It has come to my attention that there is one scenario in which bundles will need to be sent without queuing them first. When a node needs to query another node for how much storage it has available, that query (bundle) needs to be sent without queuing it behind any other bundles that might be even in the highest priority queue for that source/destination pair. So, the sender of that query bundle will need to simply send it as soon as possible without queuing, while perhaps holding the bundle that had previously been popped into memory. Furthermore, the bundle that is the “response” also needs to be sent as quickly as possible and not put at the end of a queue. So, these two bundles the query and response must be sent outside the normal queuing processes at both the requester and the target of the request and given highest priority above any queues.

4/11/25

1. There is a small contradiction in the specification and piazza feedback with respect to the information provided by the routing table. In one place it is stated that the routing table will provide one or more next hops. In other it is stated that exactly one next hop is provided for each destination. Stick with the interpretation that you used and just state it. I will make sure the teaching staff all understand that there may be differences among you on this topic.
2. In the DP Update, the text says, “As a result, at any given 10%...”. This should read, “As a result, at any give time 10%...”