PWG SBP-2 Native Imaging Communications Profile rev 0.1d

Data Movement Use Scenarios:

How does the proposal really work?

What's covered?

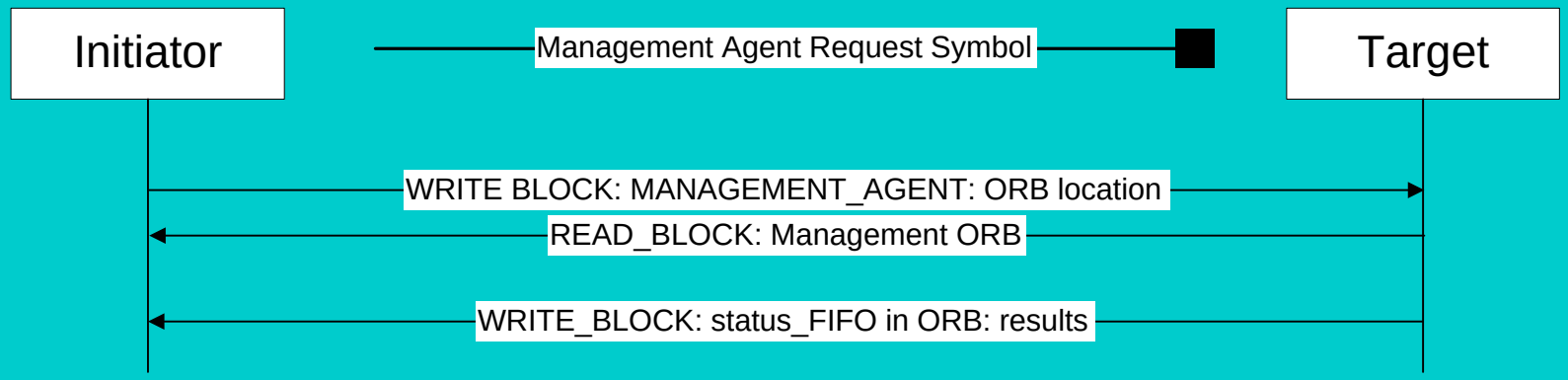
- Communication Building Blocks and Symbols
- Access Control Interactions
- Data Flow Use Scenarios
- Multiple-Instance Service Model
- Multiple-Service Device Model

Communication Building Blocks

- Management Agent Requests
- Fetch Agent Task List Update
- Initiator to Target Data Transfer
- Target to Initiator Data Transfer
- Unsolicited Status Notification

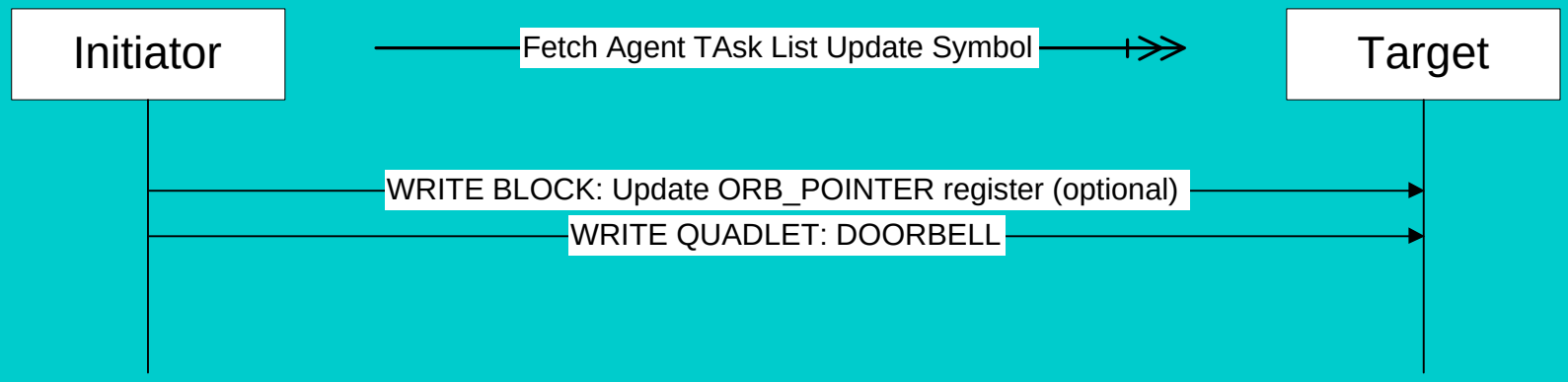
Management Agent Request

- Separate from task list
- Only one request possible at a time



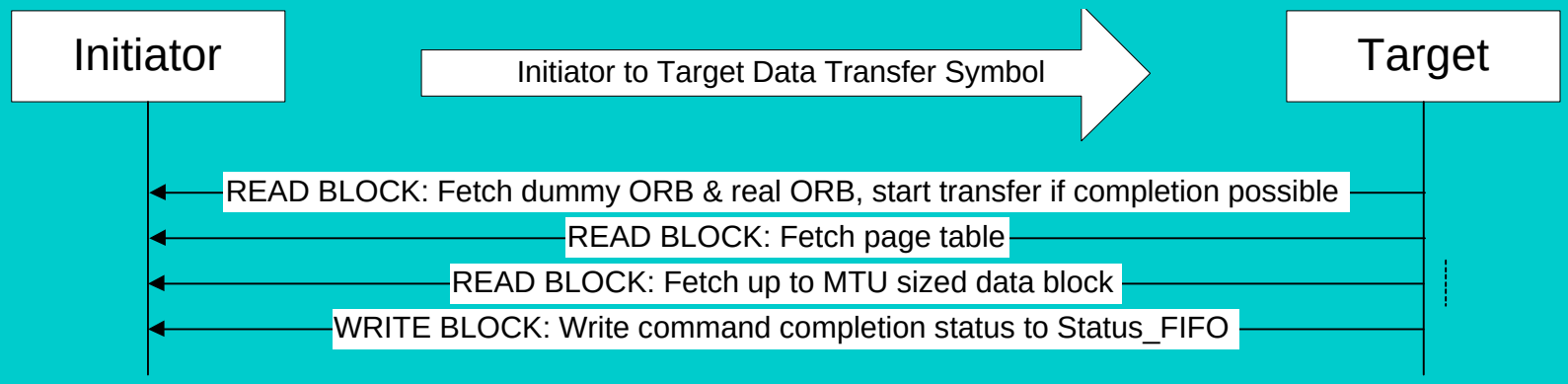
Fetch Agent Task List Update

- Only involves ringing doorbell if every list always finishes with a dummy ORB
- Requires updating of ORB pointer & doorbell if dummy ORBs not used



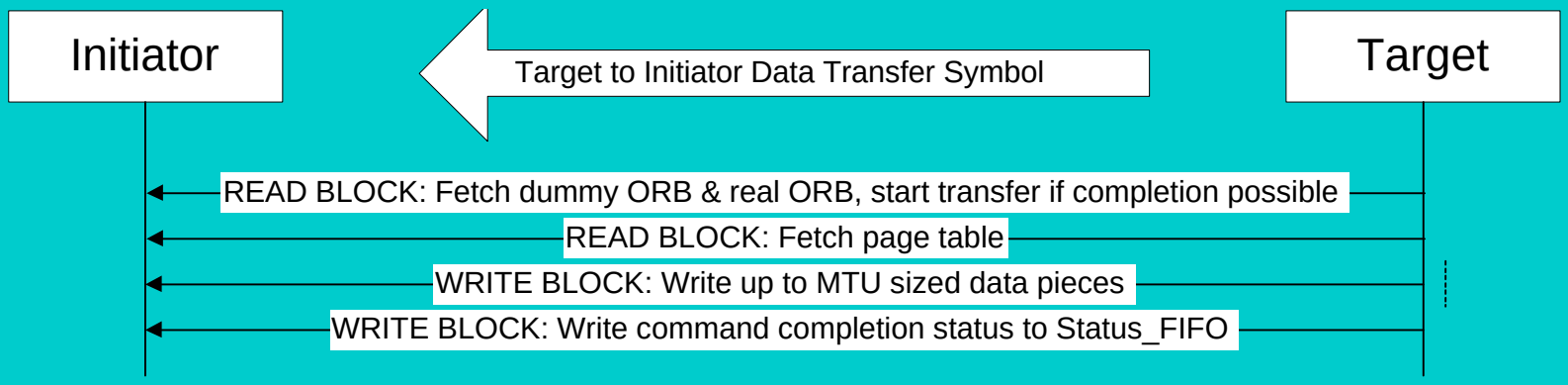
Initiator to Target Data Transfer

- Covers all possible page table formats



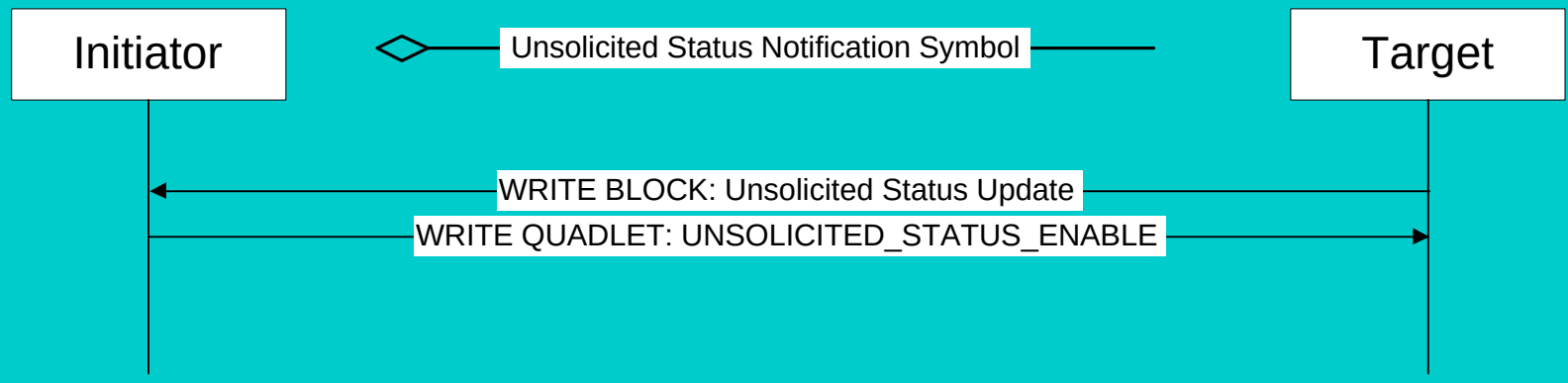
Target to Initiator Data Transfer

- Successful
- Covers all possible page table formats



Unsolicited Status Notification

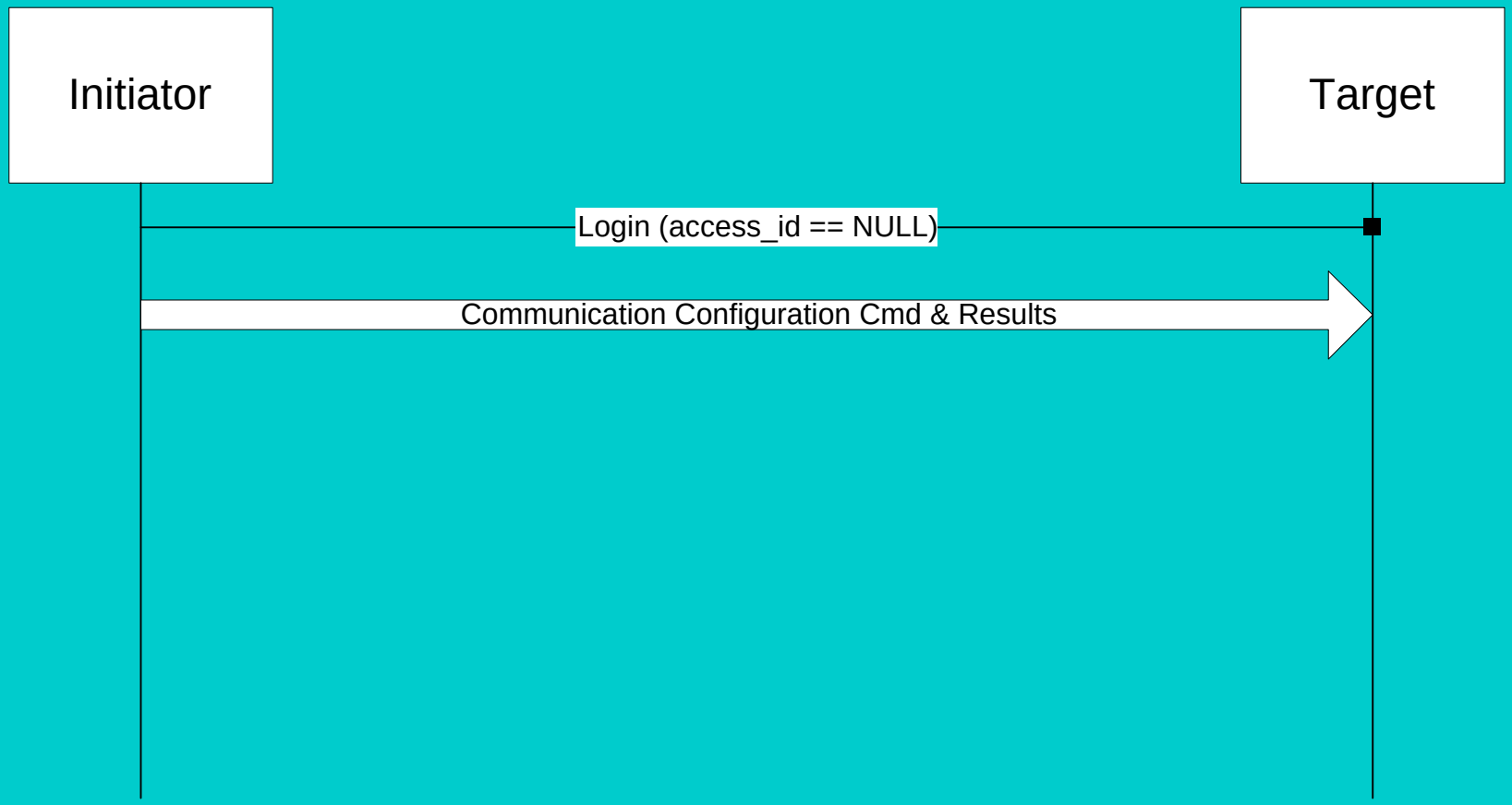
- Data Available for Initiator
- Initiator Alive Request



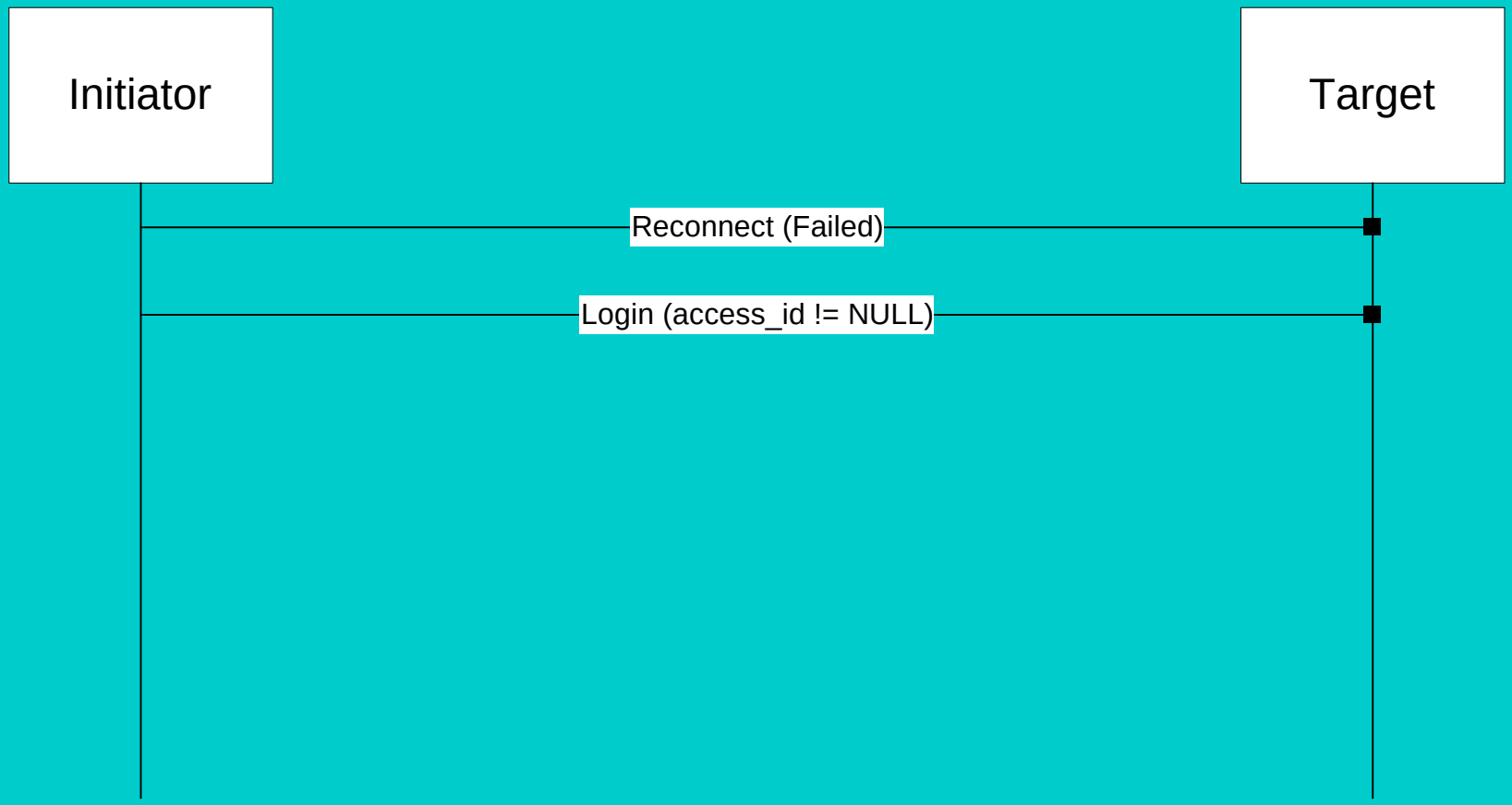
Access Control Interactions

- Start Session
- Reconnect Session
- Initiator Controlled End Session
- Target Controlled End Session
- Implicitly Ended Session

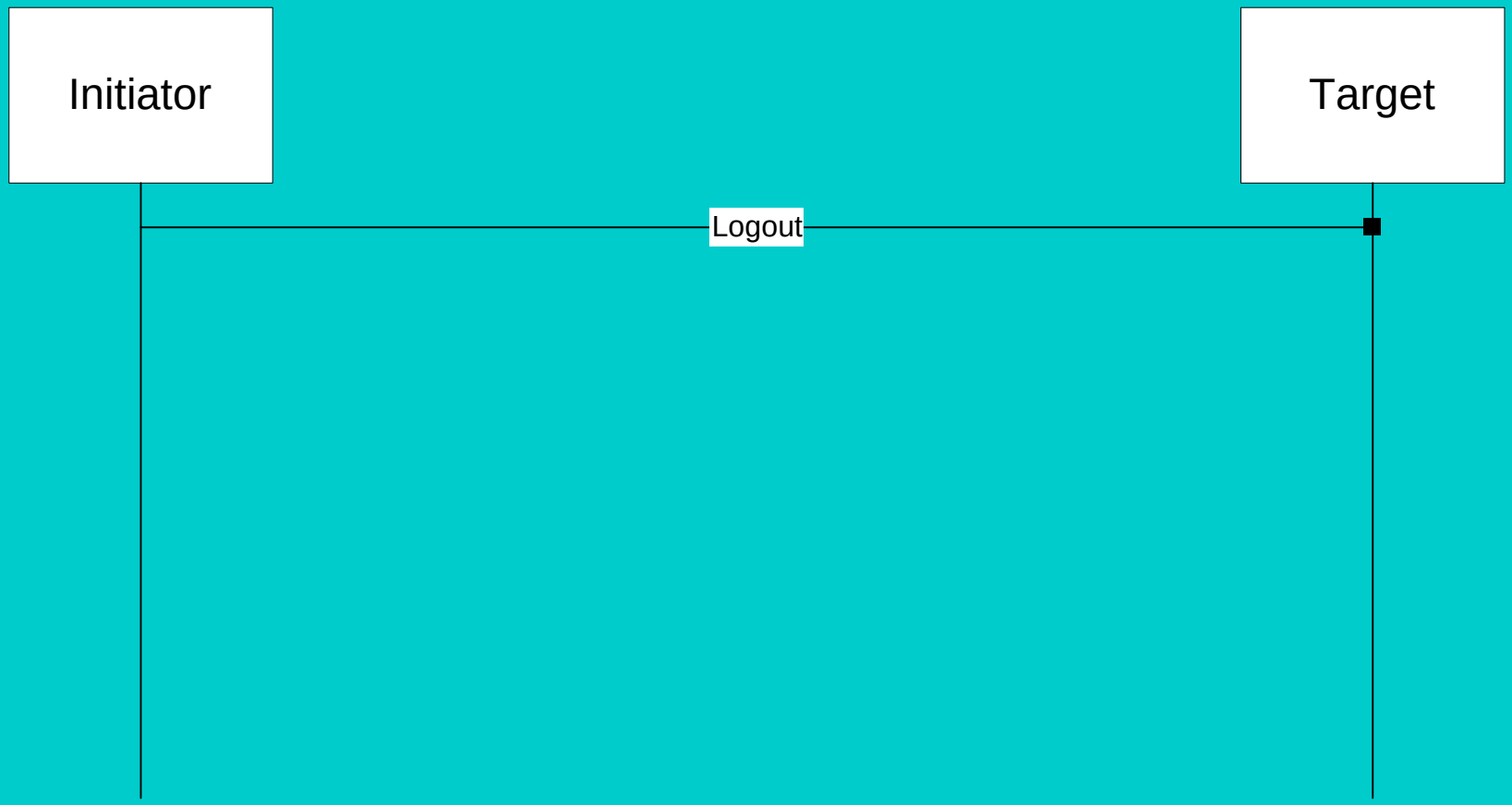
Start Session



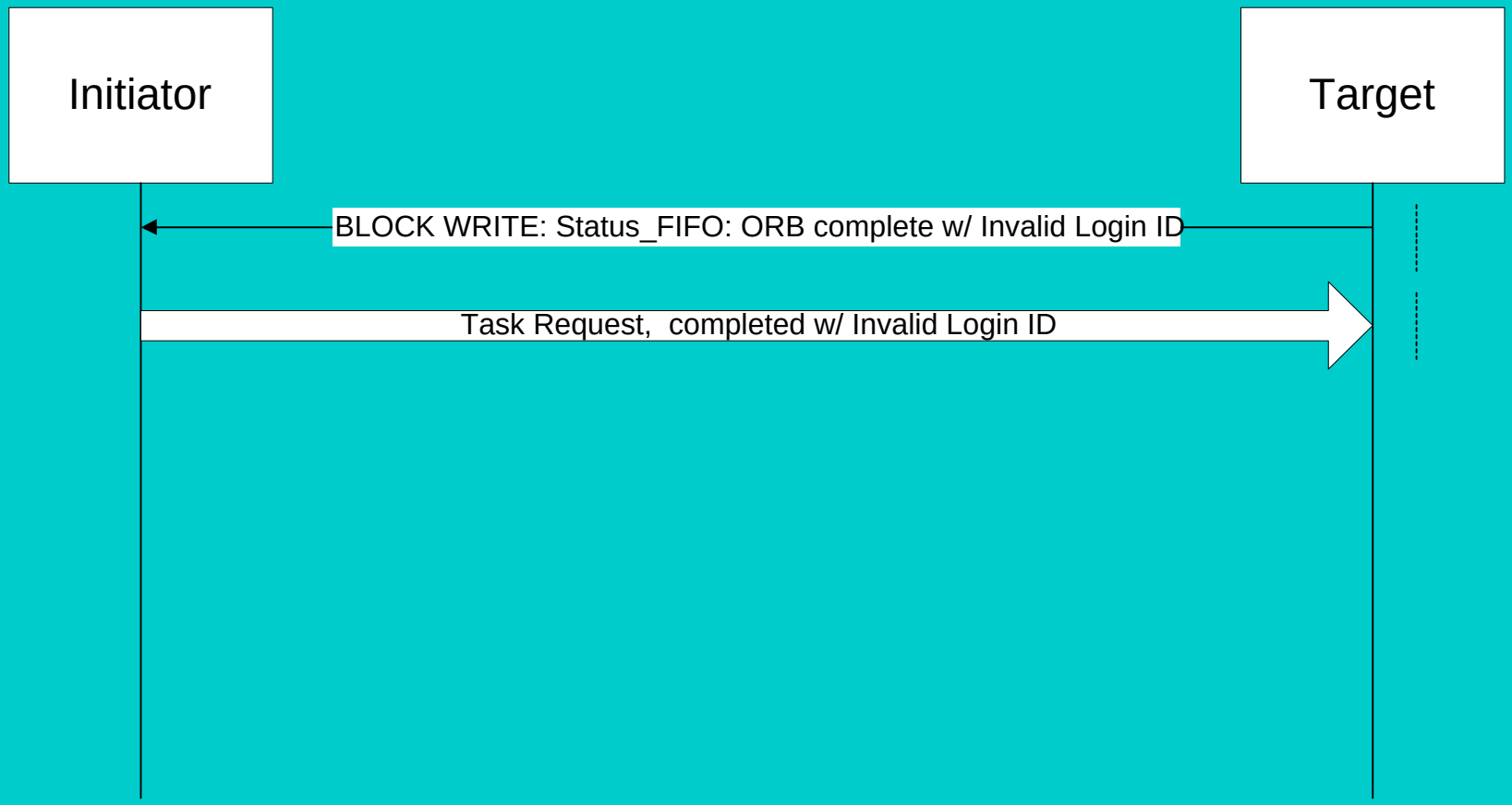
Reconnect Session



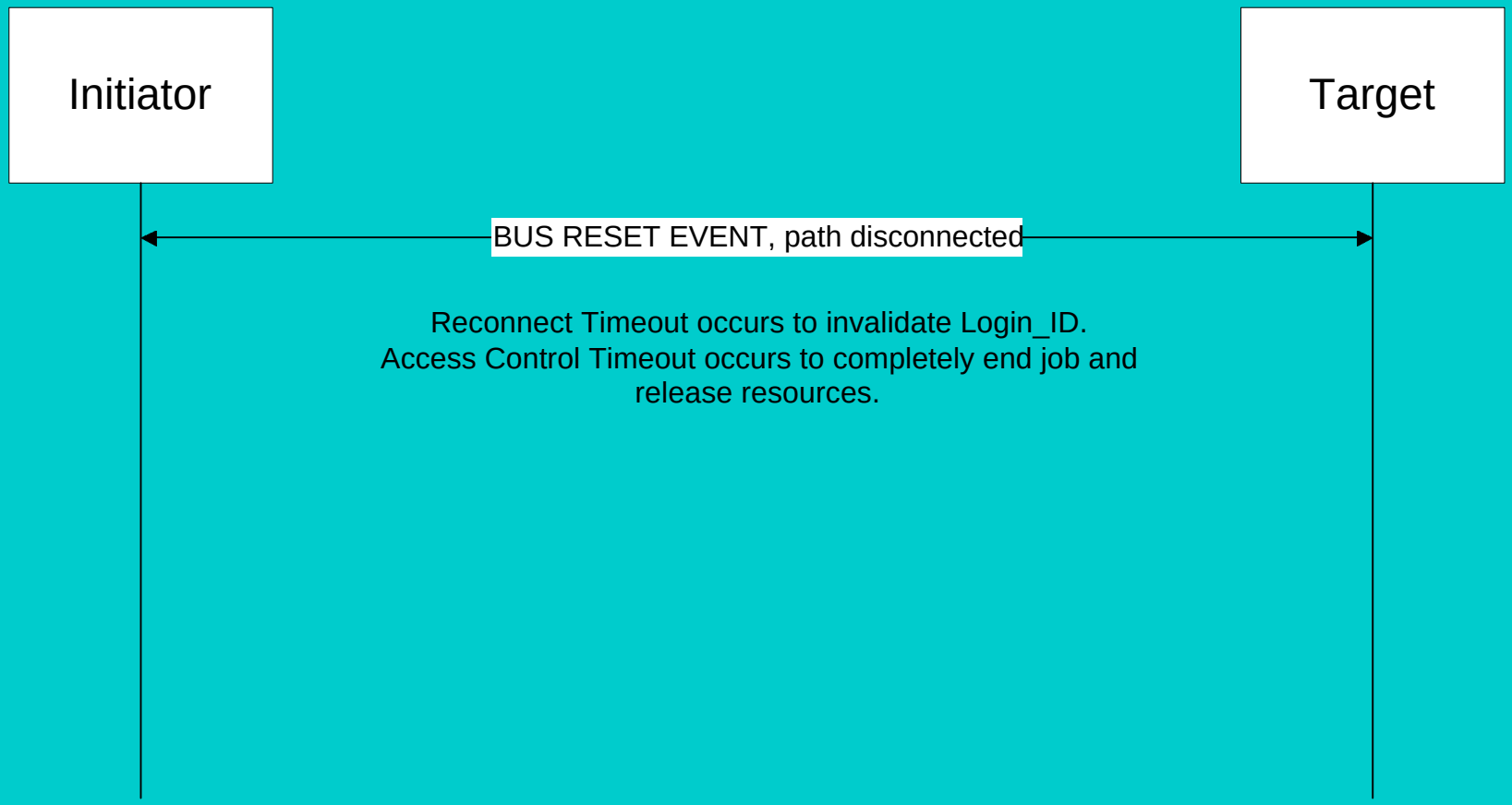
Initiator Controlled End Session



Target Controlled End Session



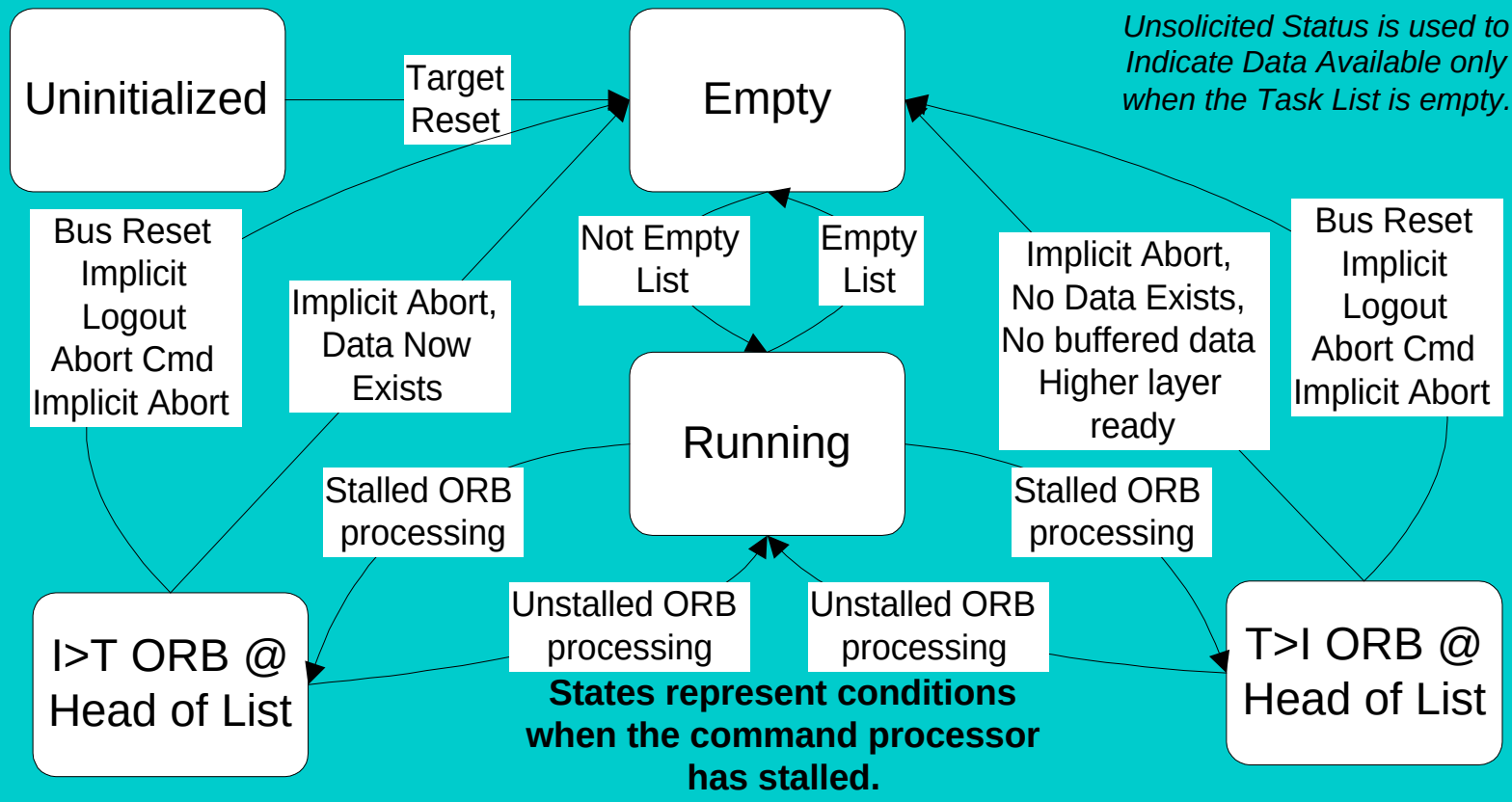
Implicitly Ended Session



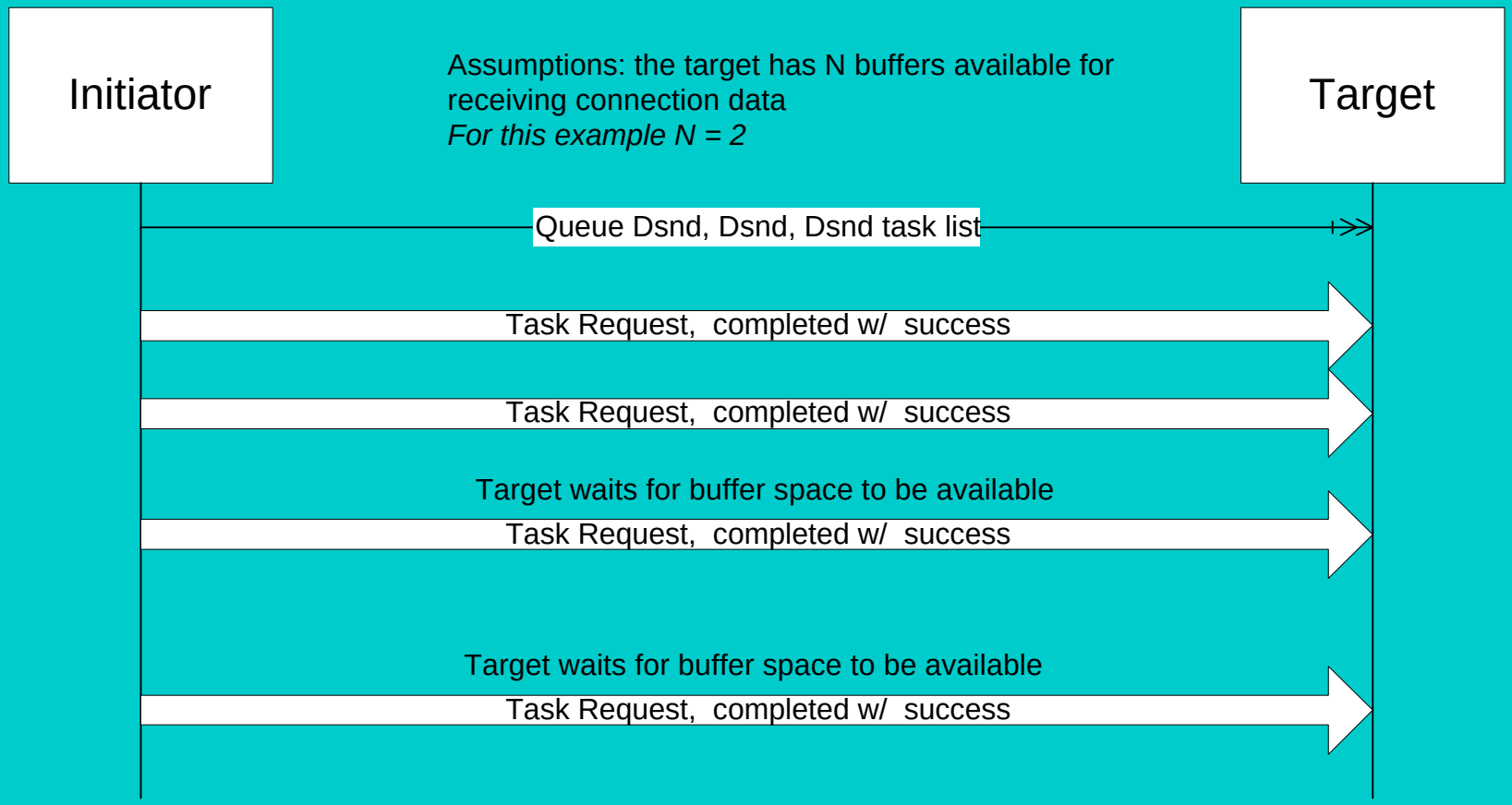
Data Flow Use Scenarios

- Fetch Agent State Machine
- Initiator to Target Data (only)
- Target to Initiator Data (only)
- Unlinked Bidi Data
- Linked Bidi Data
- Multiple Cmd Bidi Data
- Unexpected Data Available

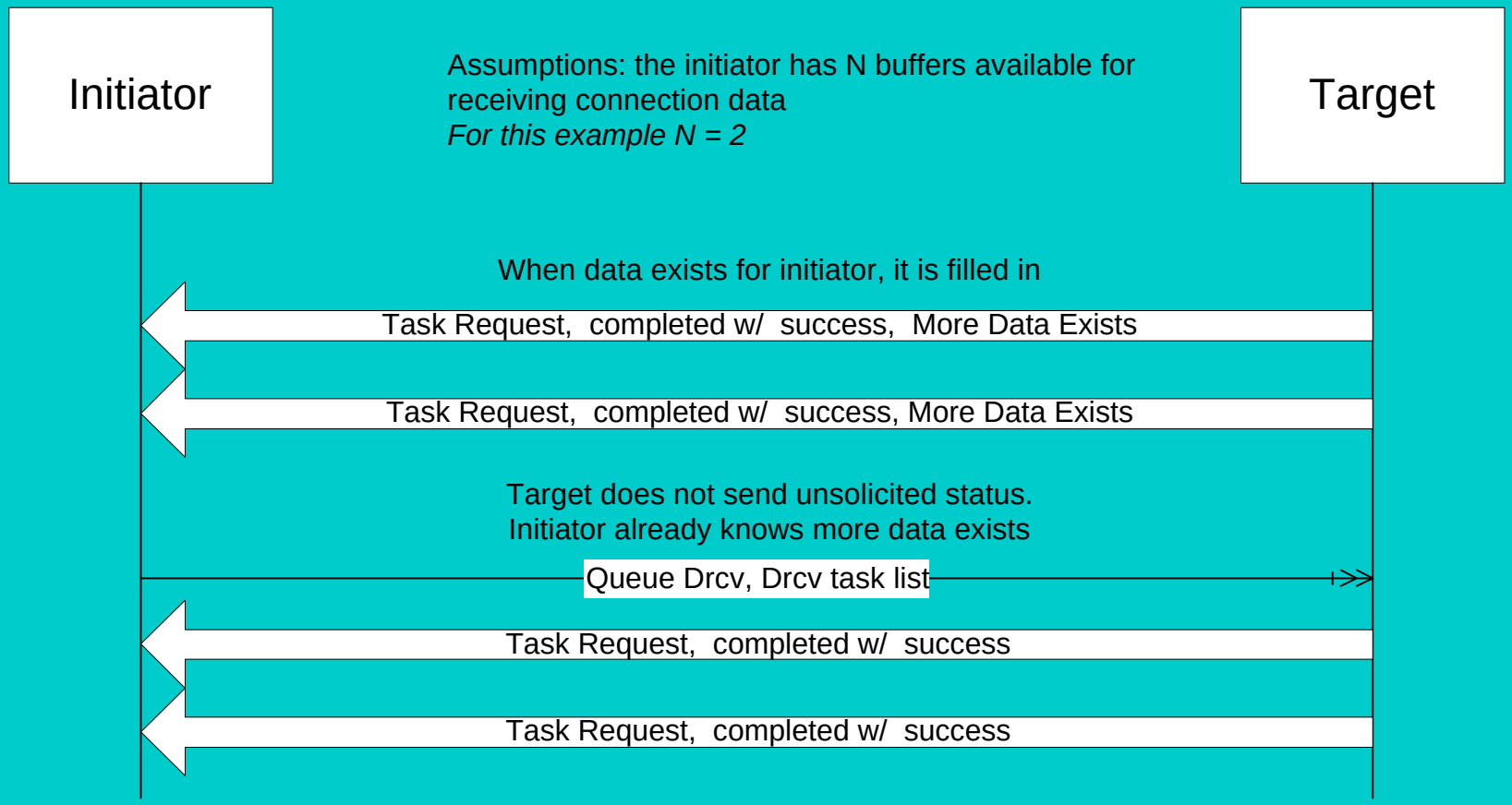
Fetch Agent State Machine



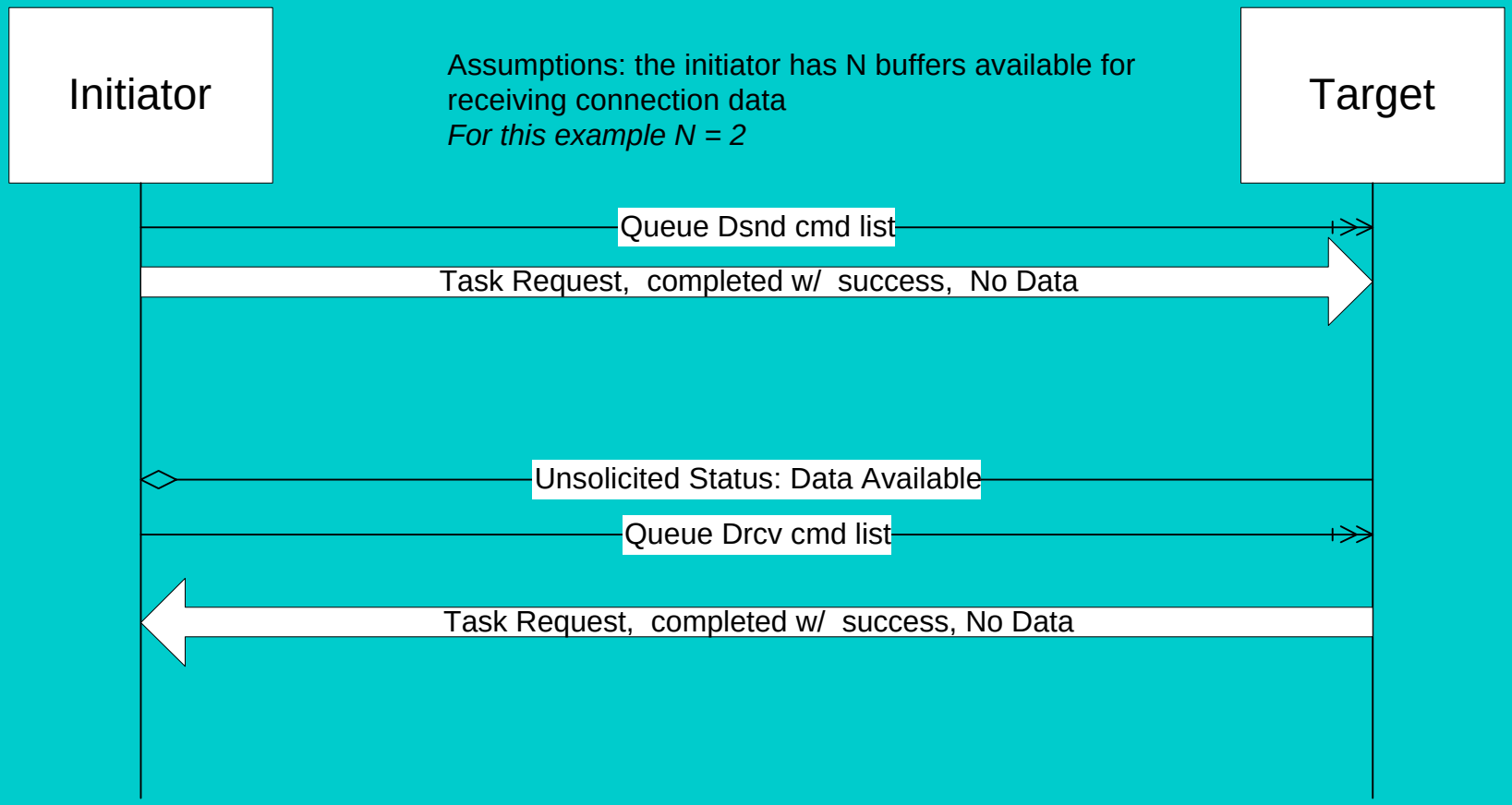
Initiator to Target Data (only)



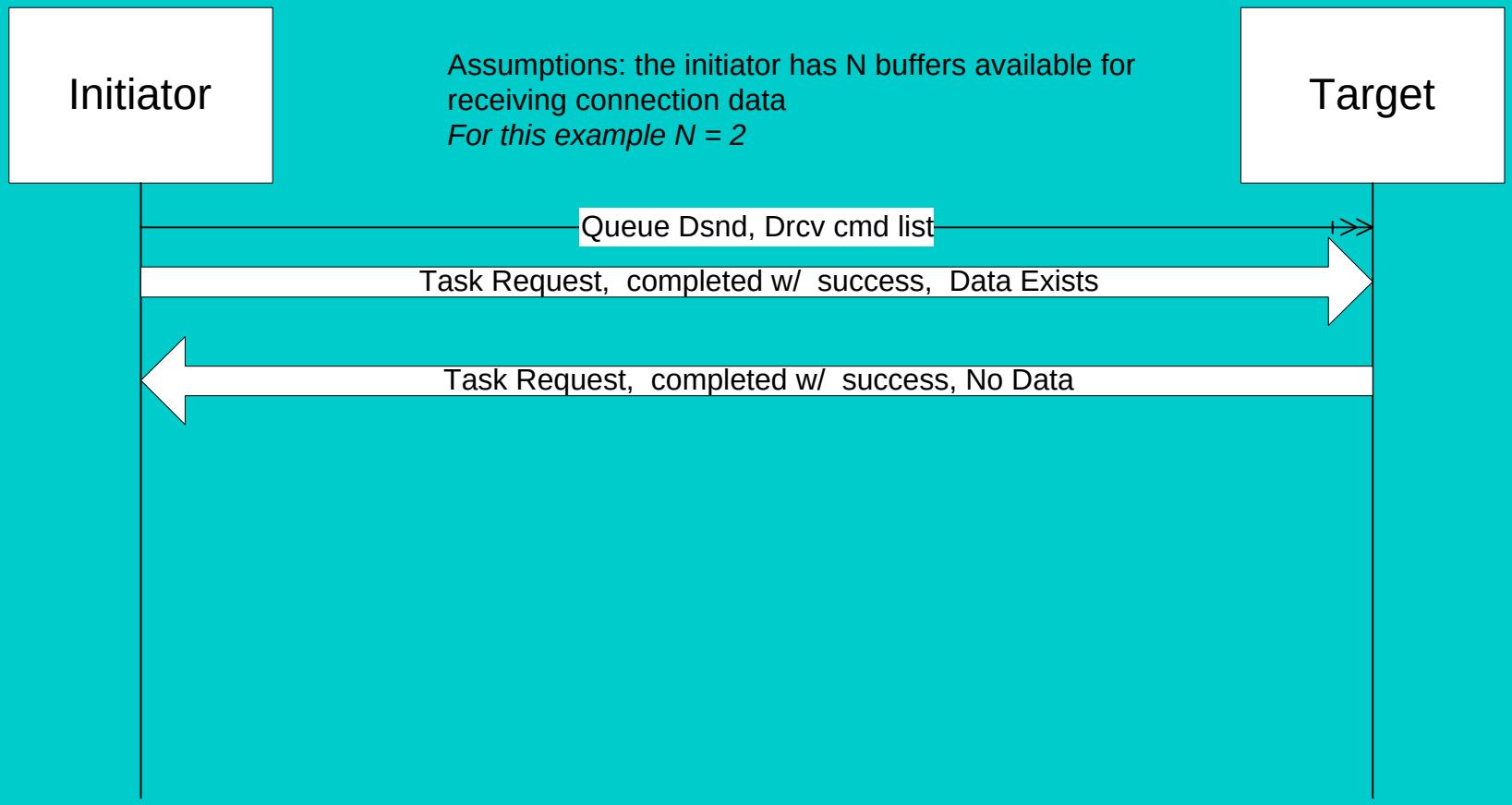
Target to Initiator Data (only)



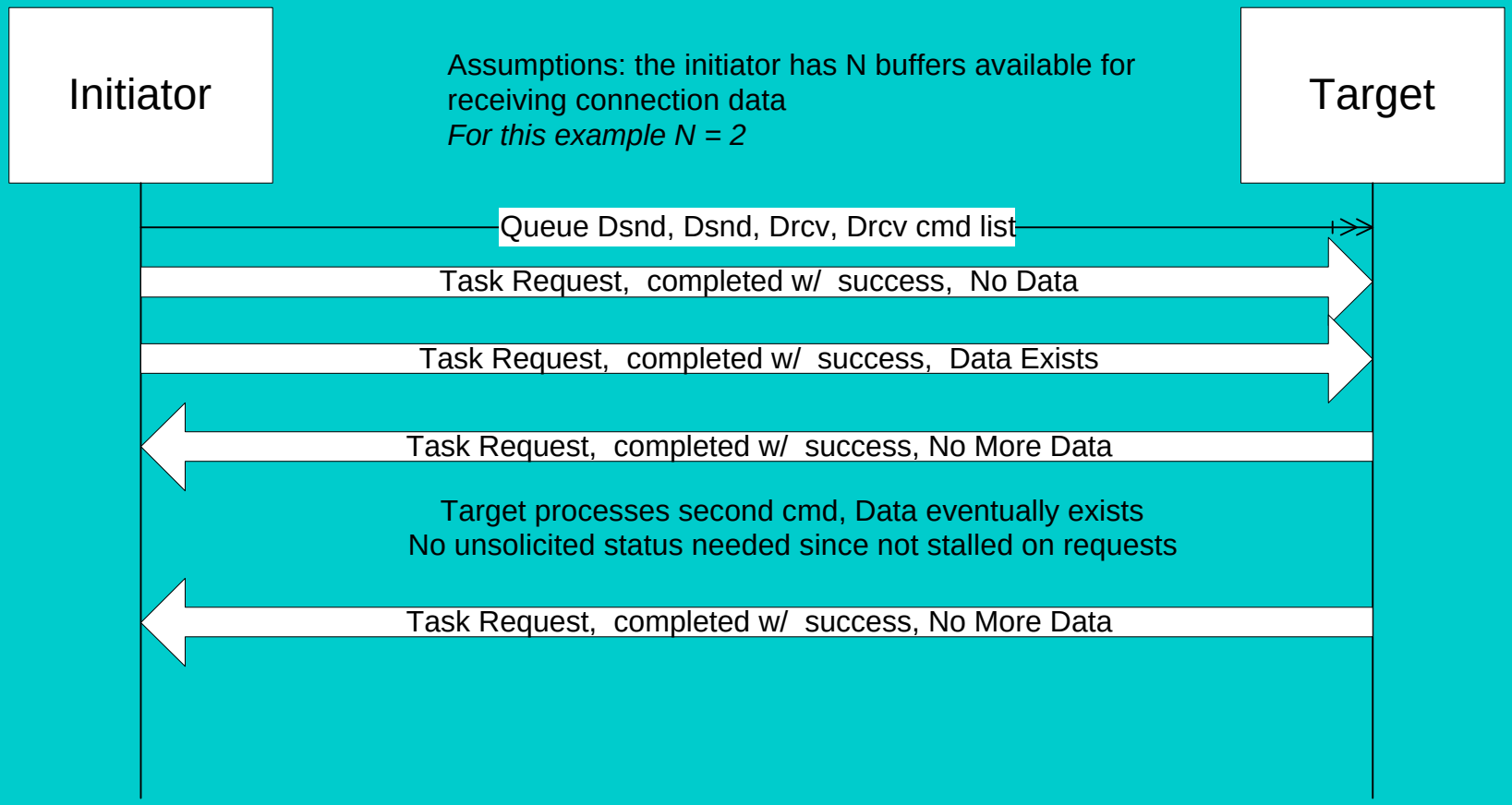
Unlinked Bidi Data



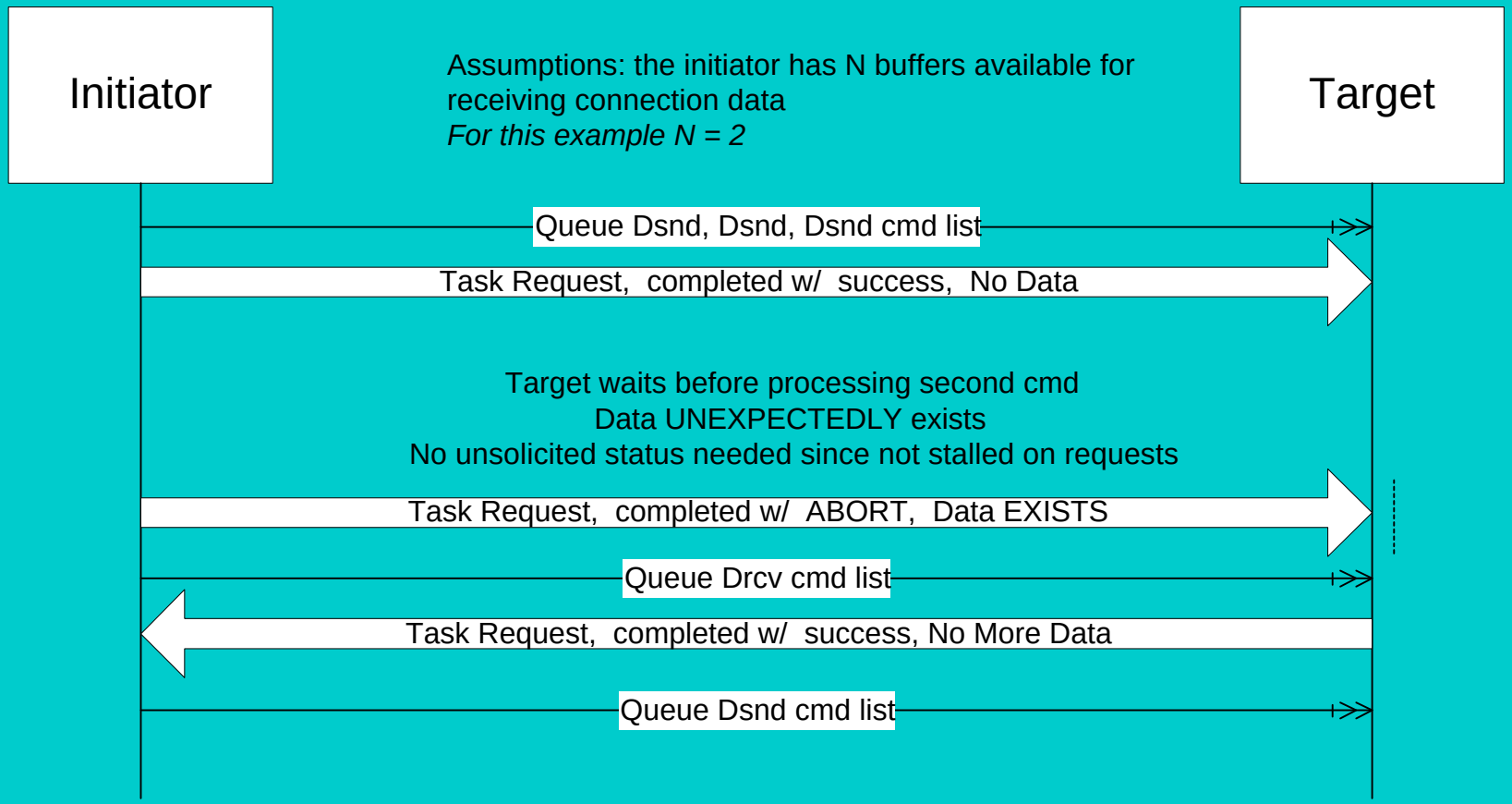
Linked Bidi Data



Multiple Cmd Bidi Data

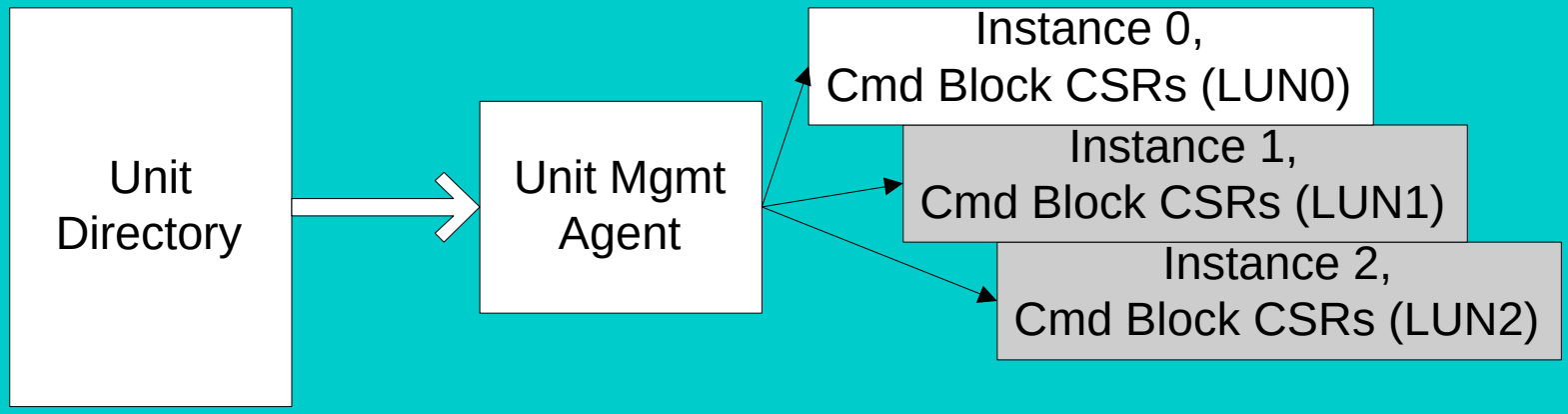


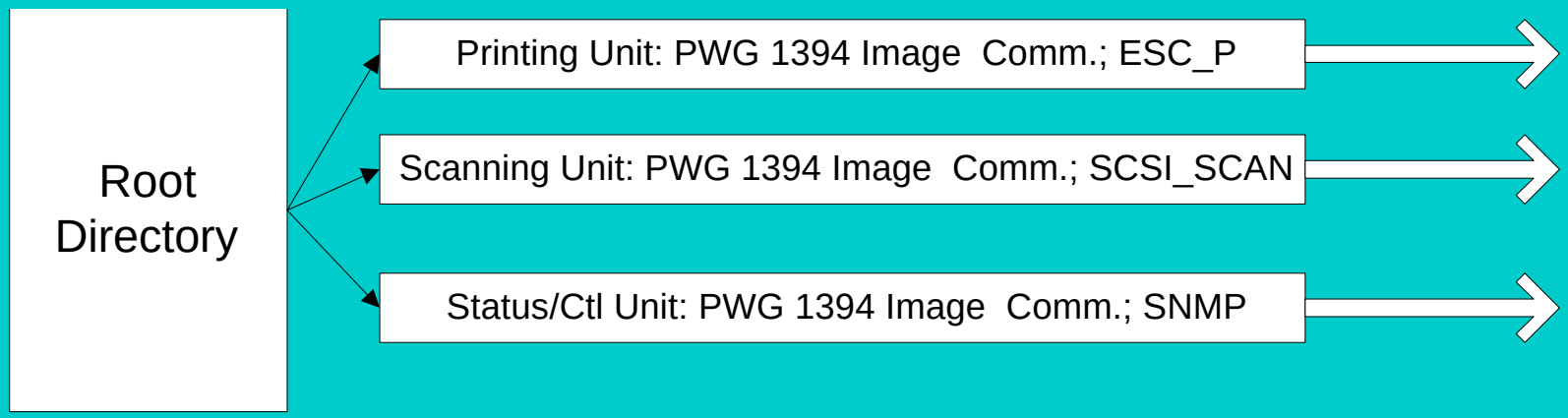
Unexpected Data Available



Multiple-Instance Service Model

- One Unit directory per type of service
- Each instance has a separate Logical Unit Number
- Each LUN has a separate, independent connection
- LUN numbers unique within the Unit



Multiple-Service Device Model

- Multiple Services means Multiple Units
- Service includes entire binding
  - SBP-2; PWG profile; Application Cmd set