

Transparent transport service
over SBP-2's Task set abort

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Background.....

Two types of Target's behavior are there
before all Tasks are discarded.

Type1 Not Indicated by Status block

->Already specified

- » Bus Reset
- » Transaction failure on status block write
- » Any other error Target detects

Type2 Indicated by Status block

-> Not Specified yet

- » Abort Task Set
- » Target Reset
- » Any other error Target detects

The problem

No specification for type2 in current profile....

-> PWG profile can NOT guarantee the transparent transport to the client....

To guarantee it...

Need to specify command set level behavior for recovery mechanism from the case the status block with aborted status is stored

Solution method

To make target resume execution

from the aborted point....

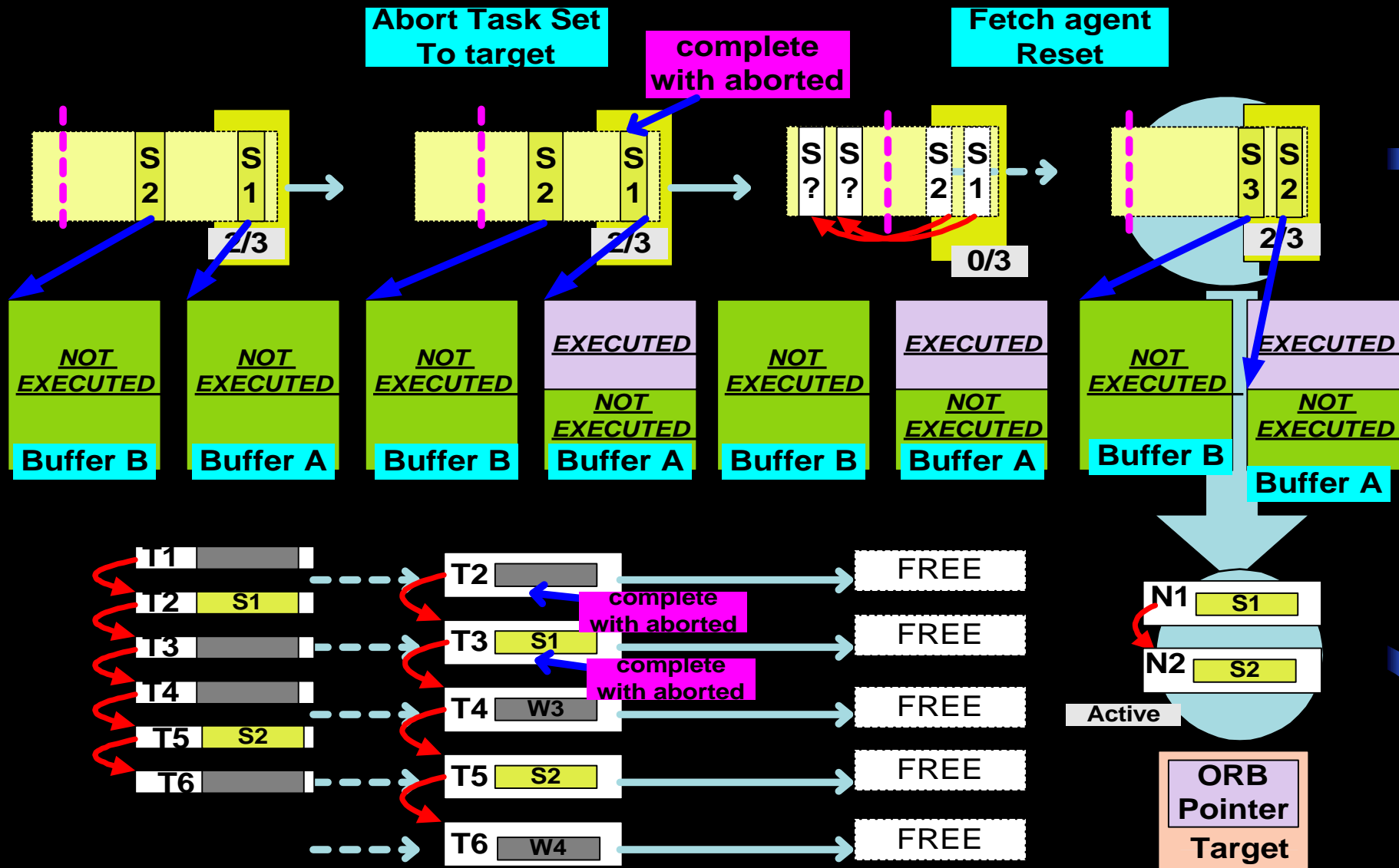
1 Initiator issues new command associated with the rest of the buffer with new SeqID

Initiator removes the executed data from the buffer of aborted command and makes new command associated with the rest of the buffer

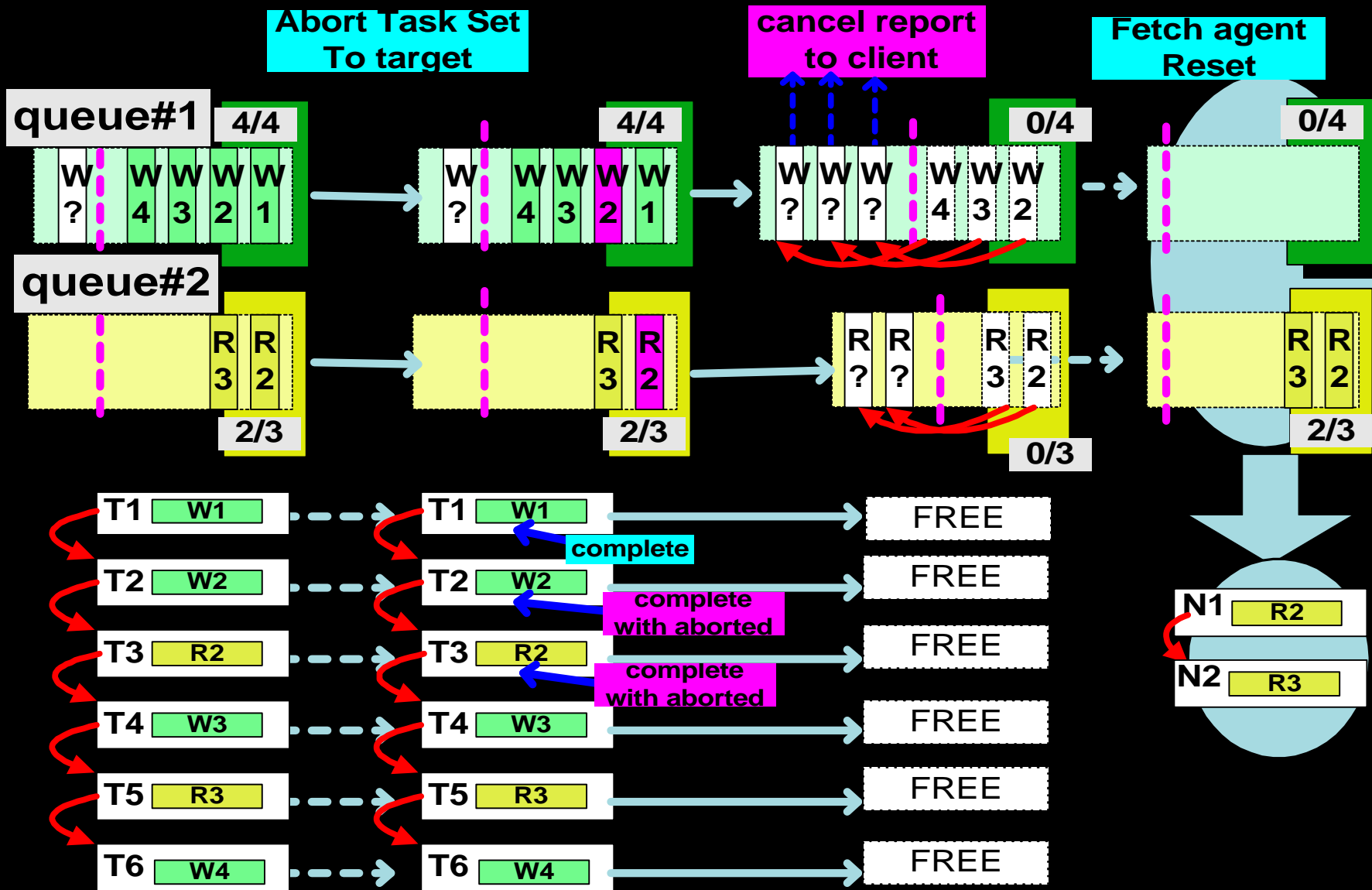
(When Abort task set is issued Initiator is informed of the correct point Target stopped executing at by status block)

2 Initiator issues aborted command with the previous SeqID and Target resumes execution from the aborted point like the recovery from Bus Reset

Solution(1)

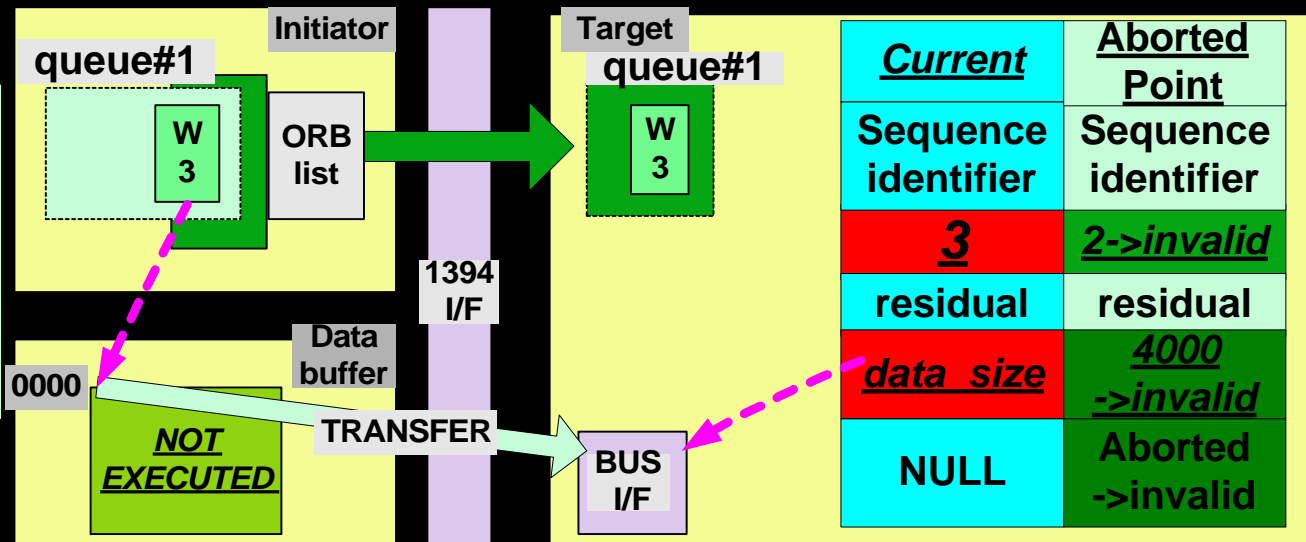


Solution (2) Initiator behavior

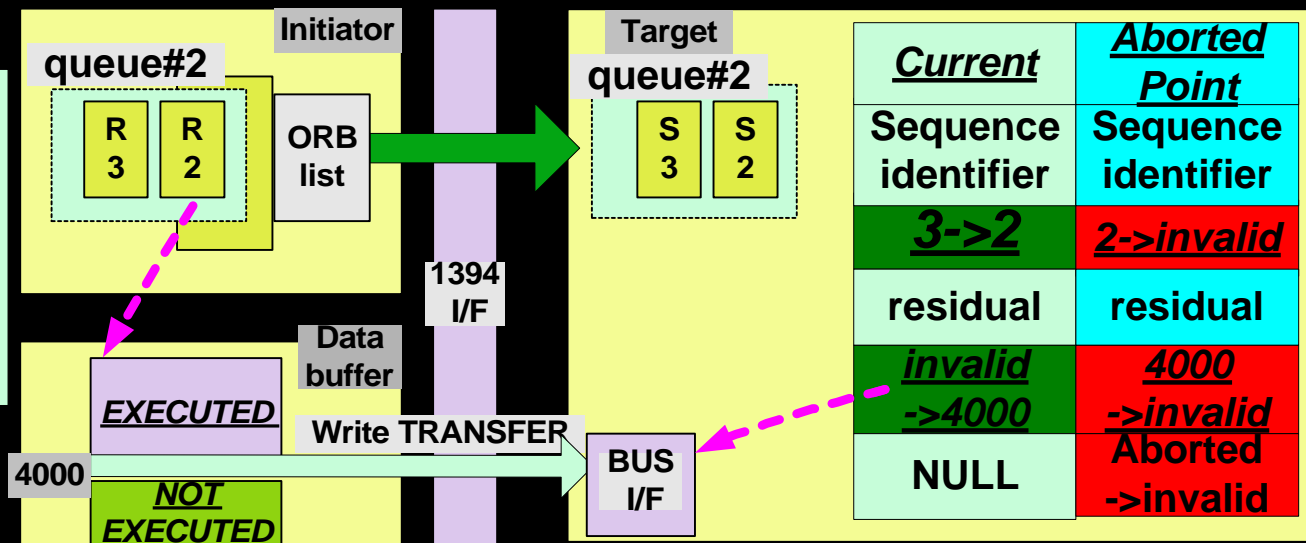


Solution (2) Target behavior(1)

After Abort Task Set.....
Initiator requests to execute new command

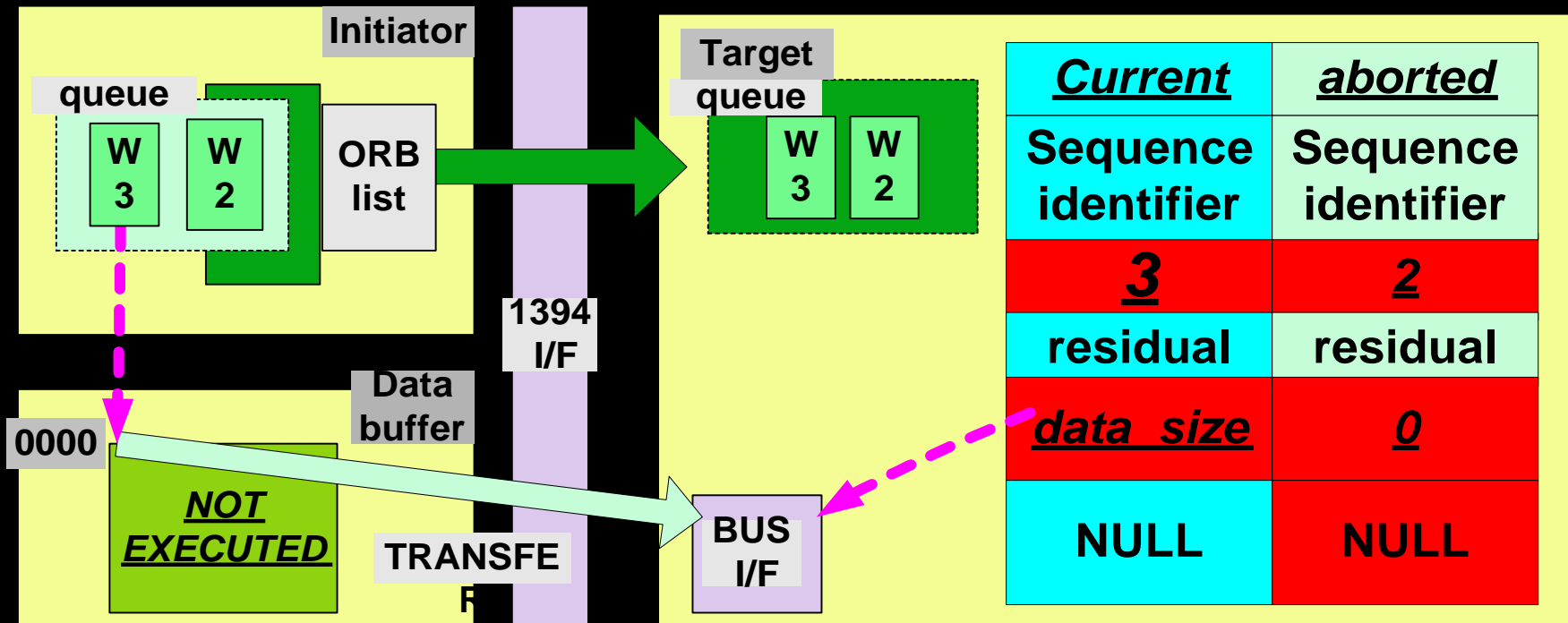


After Abort Task Set.....
Initiator requests to resume from the aborted command



Solution(2) Target behavior(2)

During the Abort Task Set procedure, the status block for "W2" (Target has already finished the command) is lost.....



First, Target stores the status block for "W2" then starts to execute "W3"

Conclusion

“Solution 1”

Only initiator is required to implement new mechanism.

“Solution 2”

Very similar mechanism to recovery mechanism from BusReset.

Which solution is better..