



# ATIONet Transaction Flows

**About:** This document describes the typical interactions between a transaction Capture System and ATIONet's Host. This information is based on the ATIONet Native Transaction Protocol. The information contained here is complementary of the Protocol manuals and it is provided under the assumption that the Capture System has at least the minimum set of capabilities required to process the described transactions.

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## Definitions

**Terminal**  
System or Device installed at the site responsible to perform the payment or purchase transaction capture and to communicate with ATIONet

**Regular Flow**  
The standard interaction between both actors when all pre and post conditions are met and no errors occurs

**Alternative Flow**  
A non-standard interaction resulting of an error condition or some other unexpected exception

## Scope

This document comments the interactions between Terminal and ATIONet, Regular and Alternative flows for the following operations:

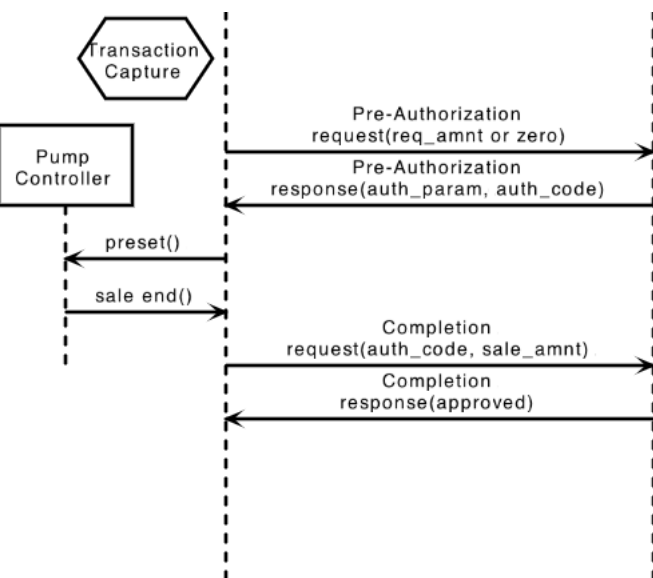
- Pre-Authorization & Completion:** Two steps operation typically used on fuel sales; may also include dry goods.
- Post-paid Sale and Refunds:** Regular POS Sale
- Batch Close:** End-of-shift or End-of-day batch close operation, used to group the transactions of a period. Includes Batch Upload alternative.

*NOTE: Only main Alternative Flows that worth mentioning are included.*

## Pre-Authorization & Completion

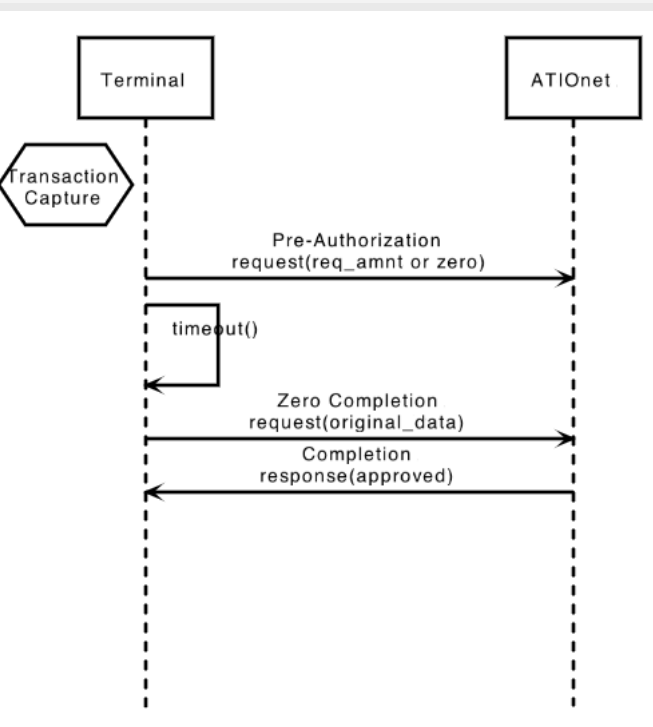
Regular flow





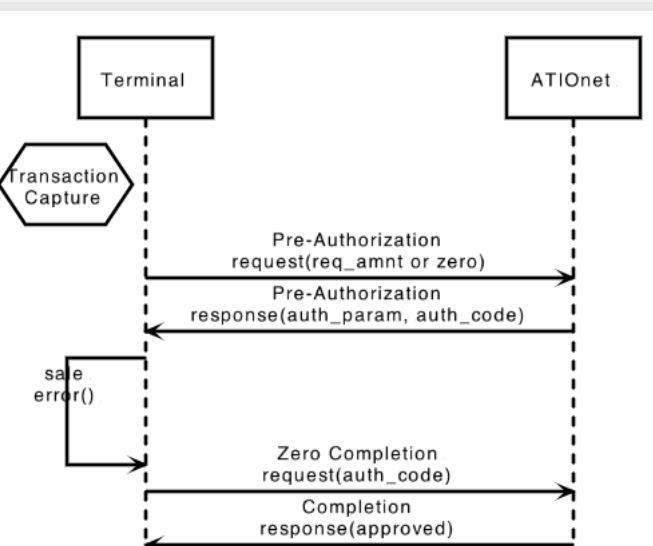
After a local process of capturing transaction and card data, the Terminal sends a Pre-Authorization request to ATIONet. Request may include an amount or volume and product code; zero requests are also allowed. On Response, ATIONet sends the authorized amount or volume, authorized product and Authorization Code, which must be reserved and re-sent on the Completion Request. After fuel sale is complete, the Terminal sends a Completion with the actual value and data of the sale, including the Authorization Code received on the Pre-Auth response. Authorization Code is the key to recover the pre-authorization on ATIONet, and therefore no Completion would be accepted without a valid AuthCode.

#### Alternative - Pre-Authorization Failure



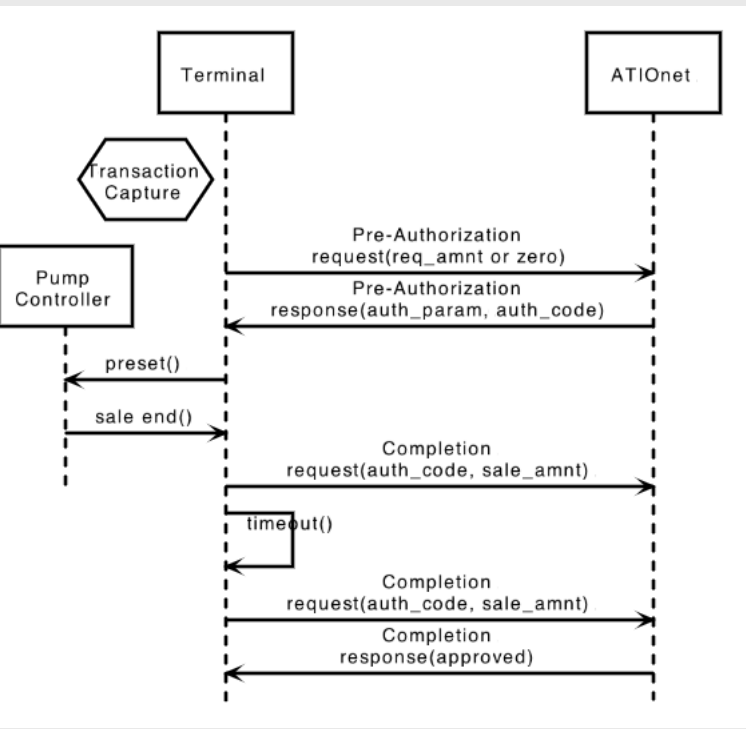
In case the Terminal does not receive a Pre-authorization response from ATIONet, approved or declined, the Terminal must send a Zero Completion request to ATIONet. A Zero Completion is a regular with zero values. As the Pre-Authorization response was never received, and the AuthCode is unknown, the Terminal must include a structure with part of the Pre-Auth request data called OriginalData. Terminal may then automatically retry the Pre-Authorization or completely fail the transaction and run a new capture flow.

#### Alternative - Sale fails



When the sale process fails or is cancelled before reaching the point to send the Completion, a Zero Completion must be sent to release the balance retention set by the Pre-Auth. In this case, as the Pre-Auth was received, the Zero Completion would use the AuthCode instead of the OriginalData.

Alternative - Completion Retries



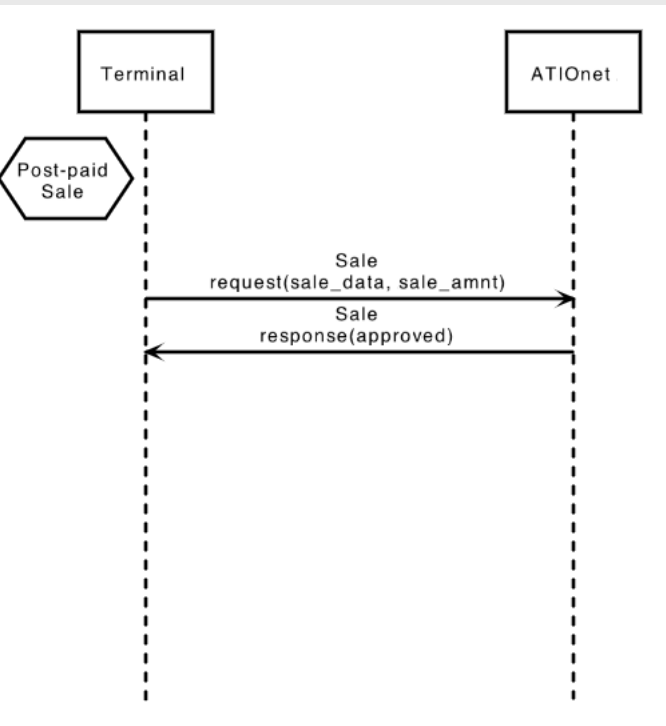
When the Terminal fails to get a response a Completion request, this must be retried; there is no maximum number of retries from ATIONet side.

ATIONet will process the requirement only once and will automatically repeat the same response on any following request with the same TSN and AuthCode coming from the same Terminal.

When a Completion request is successfully processed, ATIONet assigns the Completed status, and when it is responded the status is changed to Confirmed. Transactions Completed (not sent), are shown on the Exceptions Report, because the Host can't confirm that the Terminal received them correctly.

## Post-paid Sale

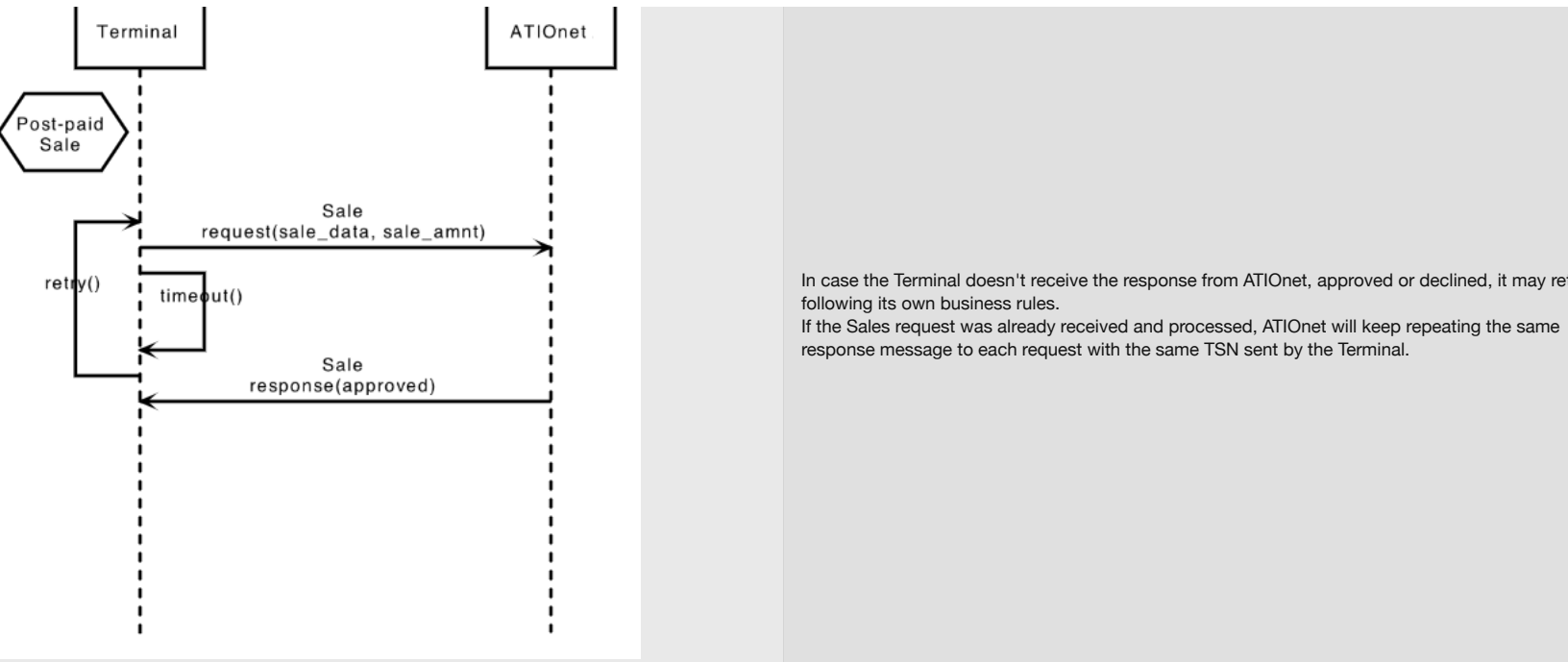
Regular flow



Once the Terminal reached the Totalize step of the sale transaction, sends a Sale request to ATIONet.

ATIONet answers with a HTTP Response

Alternative - Response failure and retry

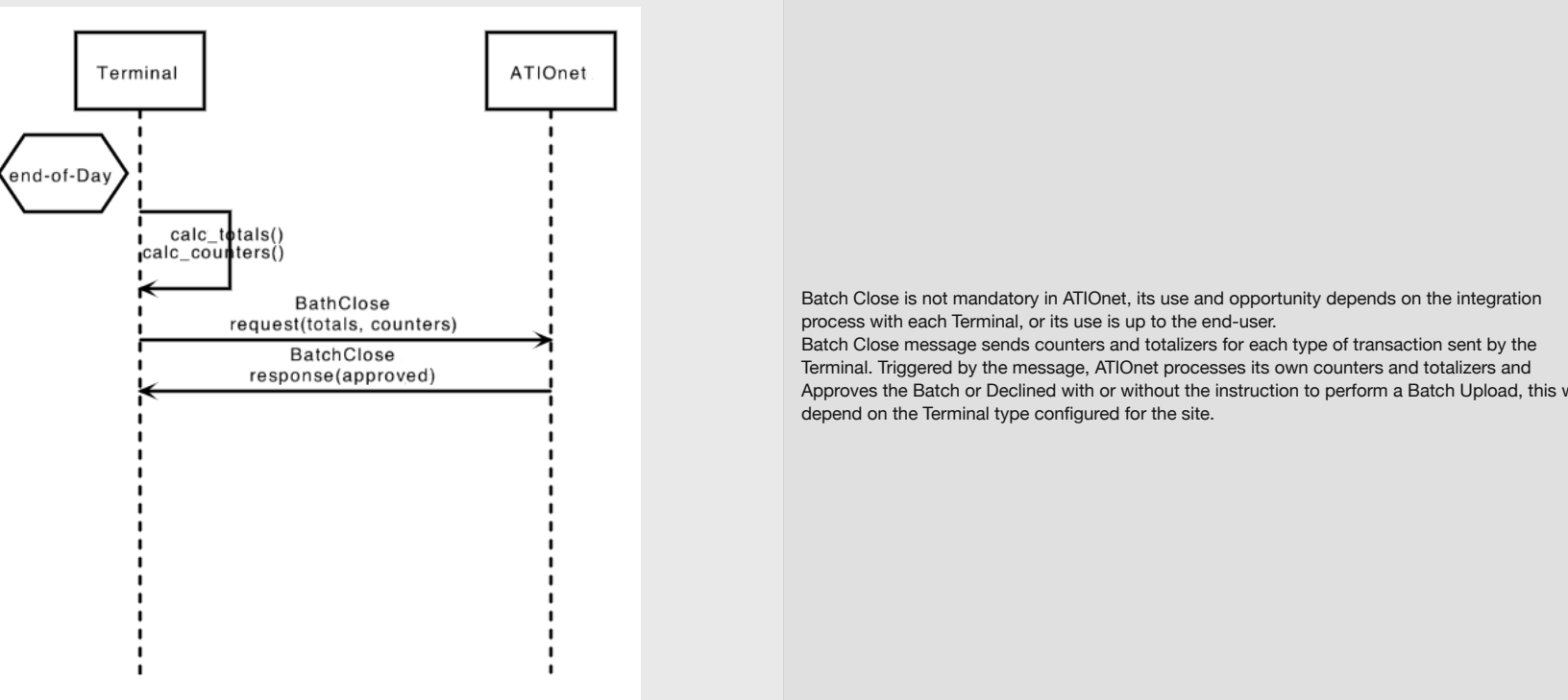


## funds

unds proceed exactly in the same way than a Post-paid Sale transaction, Regular and Alternative flows.

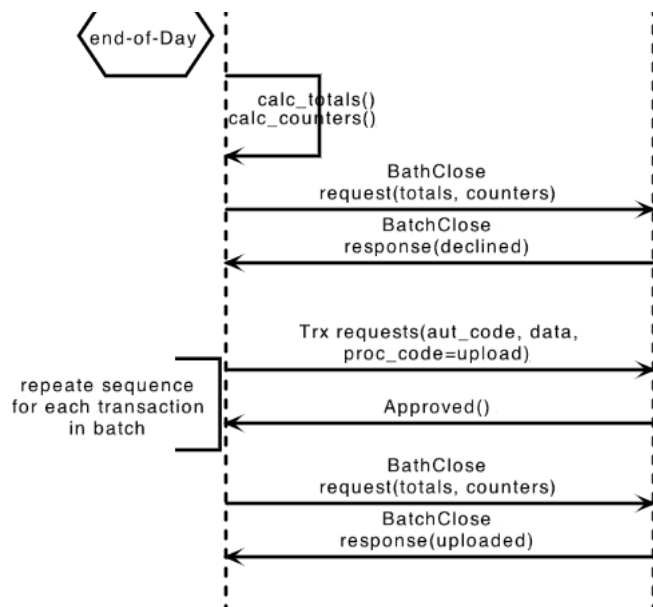
## Batch Close

Regular flow - Batch Close



Alternative - Batch Close with Batch Upload





In case the Terminal's figures don't match ATIONet's calculations and an Upload is required, the Terminal must re-send requests for each transaction included in the failed Batch. Transactions must be sent with a ProcessingCode indicating that is a BatchUpload. All firm transactions must be sent: Completions, Sales and Refunds, both Approved and Declined. Pre-Authorization are not accepted.

New transactions from the next (current) batch can be sent during a Batch Upload sequence. Batch Upload sequence ends with a new Batch Close message (retry of the rejected original). ATIONet will always approve this Batch with a special response code "Approved pending review".