

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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Change Log		
Ver.	Date	Change summary
1.0	20/July/2014	Initial version

Definitions

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Pre-Authorization & Completion

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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

Alternative Flow

Scope

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

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

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

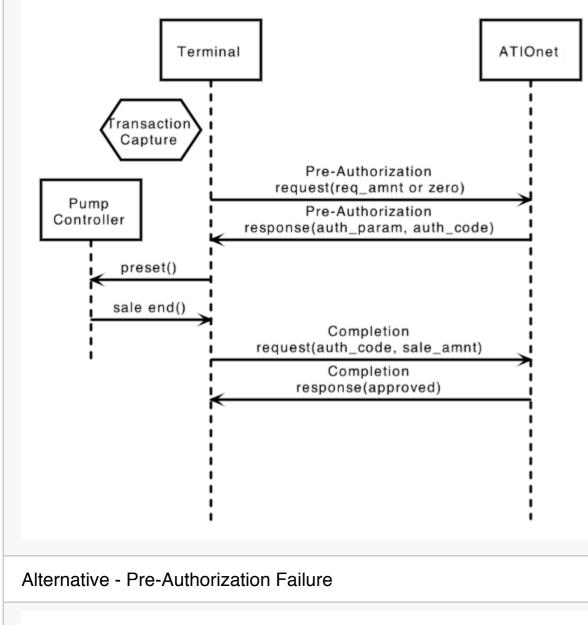
• Batch Close: End-of-shift or End-of-day batch close operation, used to group the transactions of a period. Includes Batch Upload alternative.

ATIOnet

ATIOnet

- NOTE: Only main Alternative Flows that worth mentioning are included.
- **Pre-Authorization & Completion**

Regular flow



Terminal

Terminal

ransaction

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

On Response, ATIOnet sends the authorized amount or volume,

After a local process of capturing transaction and card data, the

Request may include an amount or volume and product code; zero

Terminal sends a Pre-Authorization request to ATIOnet.

requests are also allowed.

zero values.

valid AuthCode.

In case the Terminal does not receive a Pre-authorization response

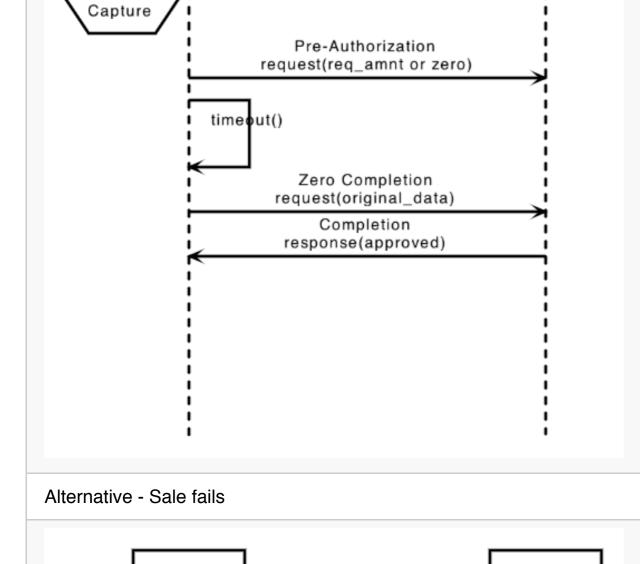
from ATIOnet, approved or declined, the Terminal must send a Zero

Completion request to ATIOnet. A Zero Completion is a regular with

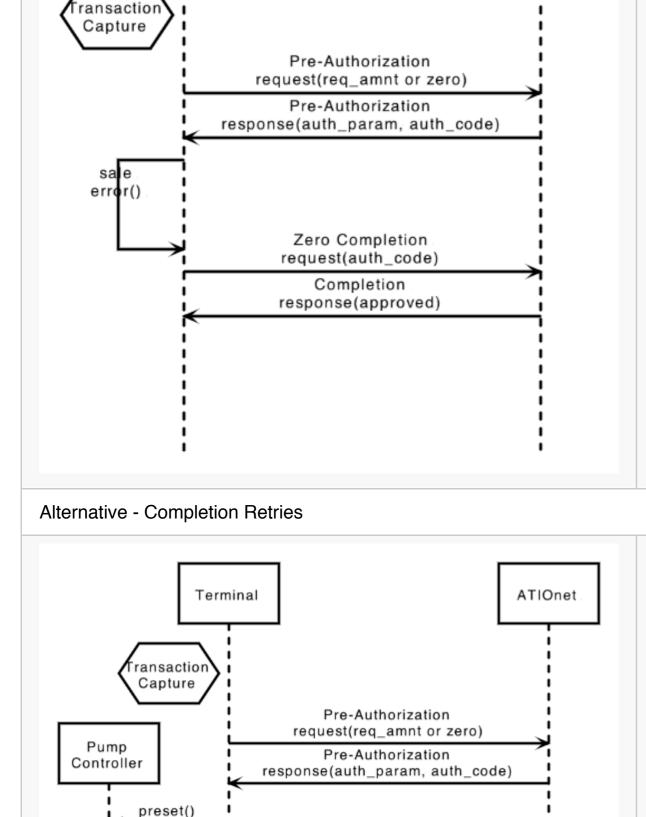
AuthCode is unknown, the Terminal must include a structure with part

As the Pre-Authorization response was never received, and the

ATIOnet, and therefore no Completion would be accepted without a



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.



Completion

request(auth_code, sale_amnt)

Completion request(auth_code, sale_amnt) Completion response(approved)

Sale request(sale_data, sale_amnt) Sale

response(approved)

ATIOnet

timeout()

When the Terminal fails to get a response a Completion request, this

must be retried; there is no maximum number of retries from ATIOnet

ATIONet will process the requirement only once and will automatically

repeat the same response to any following request with the same

When a Completion request is successfully processed, ATIOnet

assignes the Completed status, and when is responded the status is

on the Exceptions Report, because the Host can't confirm that the

changed to Confirmed. Transactions Completed (not sent), are shown

TSN and AuthCode coming from the same Terminal.

Terminal received them correctly.

sends a Sale request to ATIOnet.

same TSN sent by the Terminal.

up to the end-user.

ATIOnet answer with a HTTP Response

When the sale process fails or is cancelled before reaching the point

to send the Completion, a Zero Completion must be sent to release

In this case, as the Pre-Auth was received, the Zero Completion

the balance retention set by the Pre-Auth.

side.

would use the AuthCode instead of the OriginalData

Once the Terminal reached the Totalize step of the sale transaction,

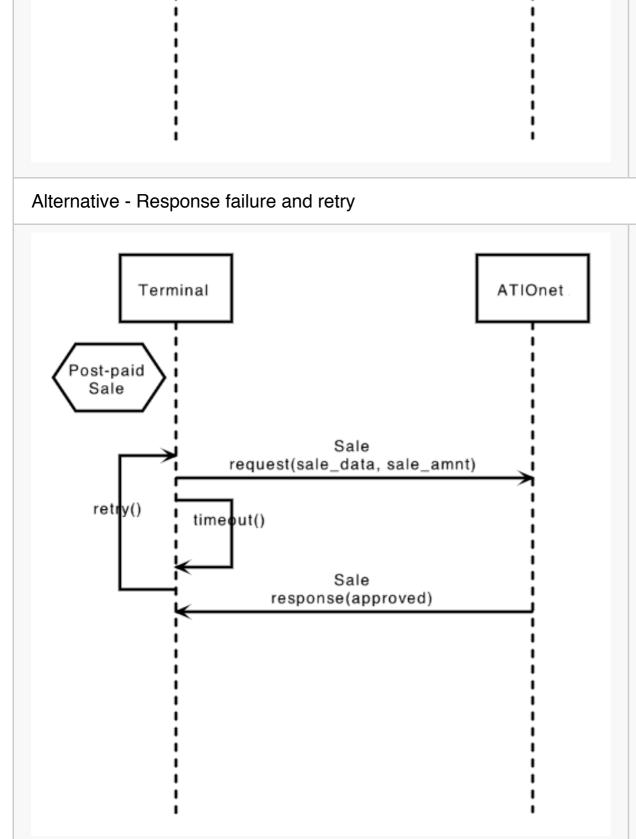
Post-paid Sale

Post-paid Sale

Terminal

Regular flow

sale end()



In case the Terminal doesn't receive the response from ATIOnet,

approved or declined, it may retry following its own business rules.

If the Sales request was already received and processed, ATIOnet will

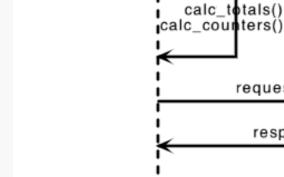
keep repeating the same response message to each request with the

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

Batch Close Regular flow - Batch Close

BathClose

ATIOnet



end-of-Day

Terminal

request(totals, counters) BatchClose response(approved) Alternative - Batch Close with Batch Upload **ATIOnet** Terminal end-of-Day

Batch Close is not mandatory in ATIOnet, its use and opportunity depends on the integration process with each Terminal, or its use is

Batch Close message sends counters and totalizers for each type of

transaction sent by the Terminal. Triggered by the message, ATIOnet

processes its own counters and totalizers and Approves the Batch or

Declined with or without the instruction to perform a Batch Upload,

this will depend on the Terminal type configured for the site.

calc_totals() calc_counters()

BathClose request(totals, counters) BatchClose response(declined) Trx requests(aut_code, data, proc_code=upload) repeate sequence for each transaction Approved() in batch BathClose request(totals, counters) BatchClose response(uploaded)

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"

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