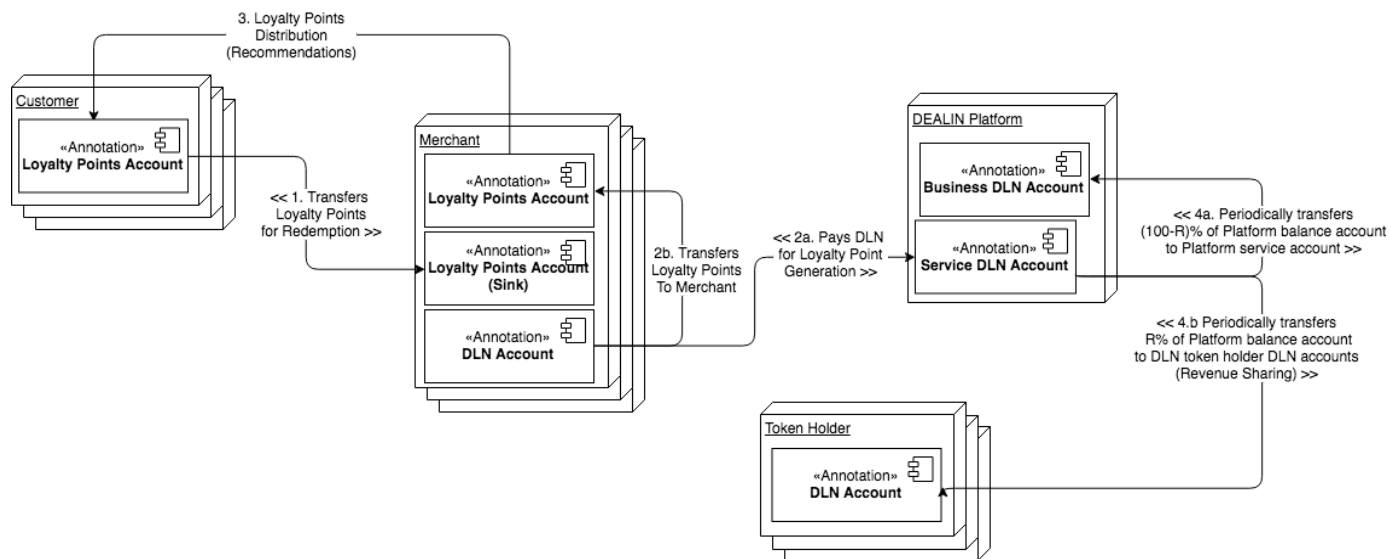


DLN DIAGRAMS

Token Flow Diagram

This diagram shows the flows of loyalty points and the DEALIN platform tokens (DLN) amongst the accounts of the various participants to the loyalty program (customer, merchant, DEALIN platform, and DLN token holder).



Description of flows on the diagram:

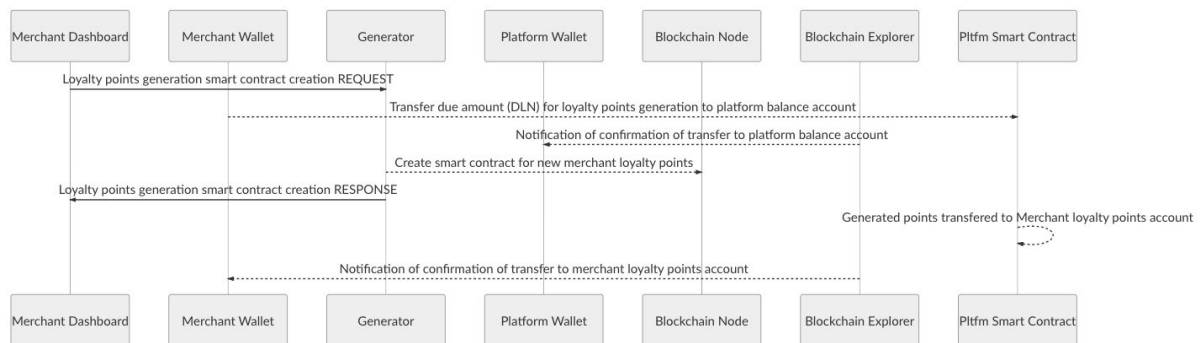
1. For loyalty point redemption, loyalty points are transferred from the customer loyalty point account to the merchant sink loyalty point account. A merchant sink wallet is one that all points sent to cannot be reused.
- 2a. For loyalty point generation, DLN tokens are transferred from the merchant DLN account to the DEALIN platform service DLN account.
- 2b. The generated loyalty points are transferred to the merchant loyalty point account.
3. For point distribution, loyalty points are transferred from the merchant loyalty point account to the “recommended” customer accounts. Additional payment can optionally be added at (2a) for customer account recommendations (based on customer profiles).
- 4a. A transfer of $(100-R)\%$ of the platform service account DLN balance to the platform business account is carried out periodically.
- 4b. A transfer of $R\%$ of the platform service account DLN balance to the DLN token holder accounts is carried out periodically.

Sequence diagrams for main operations

Loyalty Points Generation

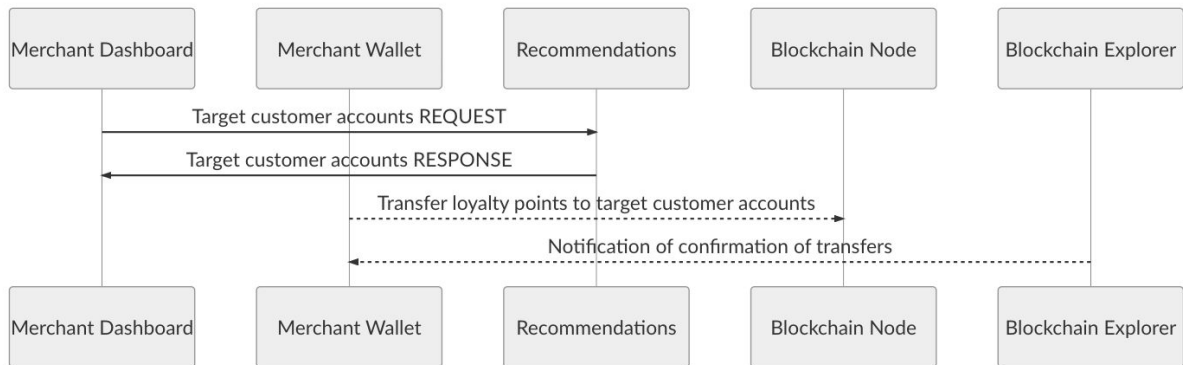
Merchants pay the platform for points generation with DLN, the platform token. Parameters to token generation include the following:

- Total supply
- Value in fiat currency
- Expiry date
- Ticker
- icon²



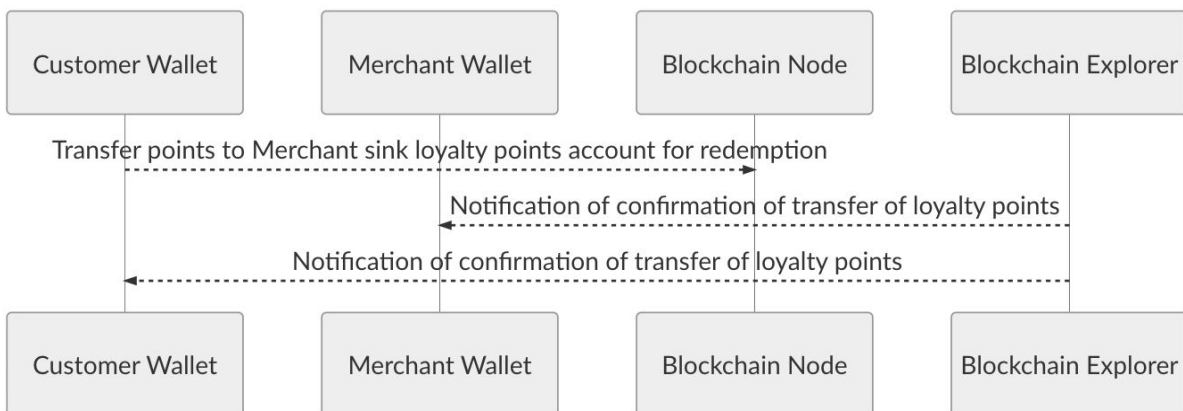
Loyalty Points Distribution

Points are distributed to target customer accounts “recommended” by the AI recommendations engine. Access to this service could be charged to the merchant just like the loyal point generation service. The MVP will use only location-based pull mechanism to present deals to customers.



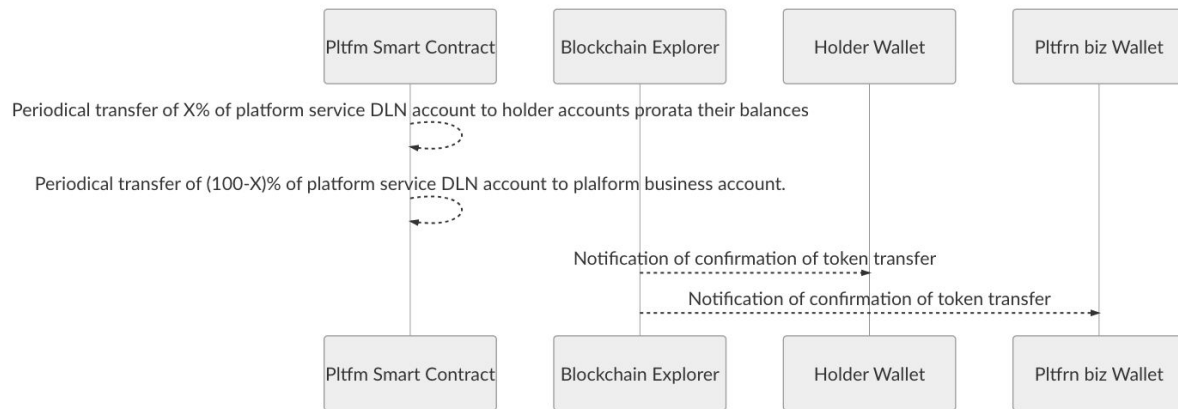
Loyalty Points Redemption

Loyalty points transferred by the customer to the merchant go in a merchant sink account and cannot be reused.

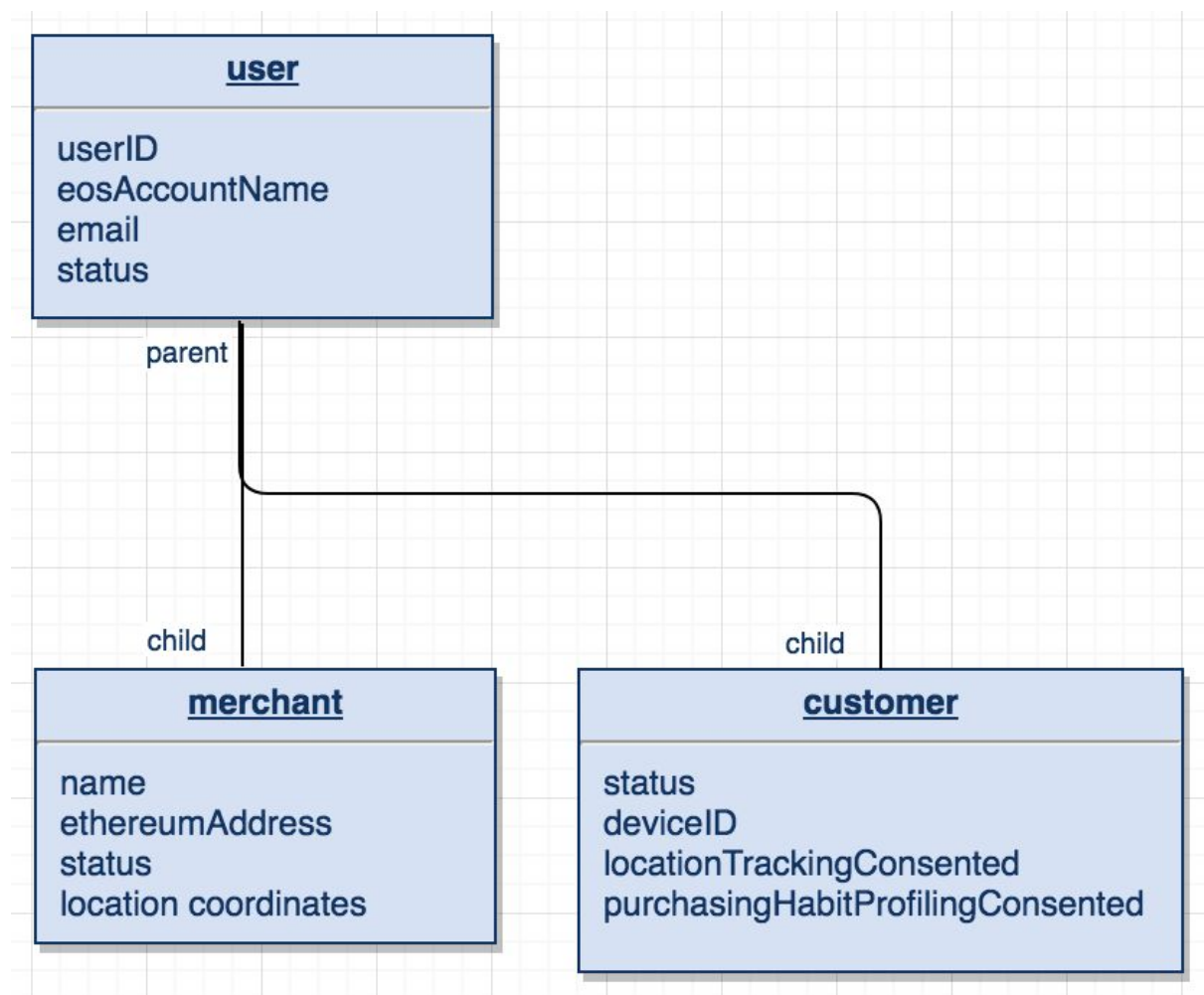


Revenue sharing with platform token holders

This operation is carried out every end of pre-defined period.



DealIN platform data schema for merchants and customers



Main data element for users in DealIN are:

- The userID to uniquely identifies the user (merchant or customer) on the platform

- The eosAccountName is the EOS 12 character human readable identifier on the EOS blockchain. It is different from the EOS address and is directly associated with one, and uniquely identifies the user on the EOS blockchain. It is also associated to the EOS public key to be used for cryptography.
- The email is the third option for user verification if not using Gmail or Facebook authentication.
- The status field is used to track the internal status of the main user data from creation to verification

The “merchant” and “customer” are children of the main user class. They bring additional to the main user data structure:

Fields added for the merchant:

- name: name of the business
- ethereumAddress: ethereum address the merchant uses to pay for the DealIN platform services in DLN tokens (on the Ethereum blockchain)
- status: to track the specific status a merchant could have as seen from the platform.
- location coordinates: this field is use by the recommendation engine to direct deals to close by customers.

Fields added for the customer:

- Status: to track the specific status a customer could have as seen from the platform.
- deviceId: the ID of the user’s device where DealIN activities are carried out, and the location of which is tracked.
- locationTrackingConsented: true or false depending on the customer consenting to having device location tracked or not.
- purchasingHabitProfilingConsented: true or false depending on the customer consenting to having purchasing habit profiled or not.