



Red Dog Networks Company's eCurrenC Product White Paper

What is eCurrenC?

eCurrenC is a Multi-Tender Payment Network. It's a subscriber-based service designed for *creating, distributing, tracking, authenticating, validating, authorizing, redeeming, settling, disbursing, accounting and reporting* on electronic currencies.

The eCurrenC Platform is an electronic system from end to end, using no paper. This platform enables consumers to save or accumulate points, incentives or vouchers online and automatically redeem those as currency in participating brick-and-mortar stores for goods and services. Consumers simply present an identifier -- such as a loyalty card, phone number, NFC or HCE mobile token -- at the point of sale (POS).

Overview

The eCurrenC cloud services, the Multi-Tender Transaction System (MuTTS) was designed as a high-volume transaction management and reporting system. Unlike conventional electronic coupons, eCurrenC functions like an electronic banking system. More precisely, it functions more like an item-level debit card system where each item in your banking account can be electronically validated at purchase, then cleared and settled.

By using our web-based administrative tool -- or through a set of APIs -- manufacturers, retailers, advertising agencies and points issuers (Sourcing Agents) have the ability to create electronic incentives or vouchers (offers) and distribute them to consumers anywhere using any advertising channel. The consumer can engage in the process by viewing, selecting and saving these offers into a single, digital eCurrenC account.

And just like item-level debit cards, these incentives or vouchers can be electronically authenticated, validated, authorized and redeemed in real time at the point of sale of any participating eCurrenC location for goods and services.

The eCurrenC system also has the ability to provide settlement, disbursing, accounting and reporting information for both the retailer and issuer in order to complete the financial transaction.

But most importantly, eCurrenC can track all the activity associated with the incentives and vouchers in order to “close the loop” with the consumer and help build a one-to-one relationship, solidifying your omni-channel marketing strategy.

For instance, gone are the days of putting an advertisement out only to know how many clicks and views it received, but never knowing whether it led to an actual purchase of your product. The eCurrenC system allows you to follow the whole cycle from view to click to save to purchase. This provides what we call Real Time Channel Effectiveness allowing you to see a clear ROI on any advertisements you distribute along with knowing which one of your products was actually purchased to fully close the advertising loop.

Finally, the **eCurrenC system is complementary to other loyalty solution and payments systems**. It is not intended to replace any existing system; rather, eCurrenC provides an omni-channel advertising and payments network that adds value for you and your customers.

The Details

Sourcing Agents create electronic offer templates which are displayed as coupons or vouchers in digital advertisements, e-mail campaigns, website, banner ads, or button on any IP-enabled device (such as a website, smartphone or interactive TV) in the appropriate format.

When a Consumer sees and/or clicks on the offer template, an event is initiated. The event represents a series of steps from which the eCurrenC MuTTs Server creates an instance of an offer (a promissory note) with a unique ID (much like mentioning a dollar bill) and deposits it into the consumer account. All offer templates can be designated for redemption at a specific retailer or all retailers in a geographical region (e.g., zip codes), or system wide. Consumers can be targeted through specific advertising channels, or be enhanced to include behavioral targeting.

Note: The first time consumers click on a incentive link, they are prompted to create an account. The sign-up process results in the creation of a proprietary and unique eCurrenC consumer identification number that is invisible to the consumer. The consumer is then prompted to populate the data fields requesting an identification instrument such as a frequent shopper card number, phone number, or any unique identifier. These identification instruments are to be used at the POS to access their offers.

Once the consumer has selected and deposited incentives in their account, those incentives are available for redemption (in real-time, less than 200ms) at any participating retailer stores.

When the consumer has selected the products associated with the incentives, they “identify themselves” to the eCurrenC System at the retail POS. Typically, this is done by presenting the retail POS system with a frequent shopper card; however, the system was designed with the

flexibility to accept alternative identification options associated with the consumer account, such as a cell phone number, or any other identification instrument if approved by the retailer.

After the consumer presents identification to the retail POS system, a digital request is made to the eCurrenC database to retrieve the electronic incentives that are available in the consumer's account. The eCurrenC database returns a list of valid electronic incentives which are eligible for instant redemption. The retail POS system validates the consumer's UPC purchases against the list of electronic incentives and applies the reward at the register. After the transaction is complete, the retail POS system replies to the database with a redemption notification. This activity marks the consumer's electronic incentive as "redeemed" and posts this information for retailer reference (including data such as retailer ID, store ID, register ID, date and time of redemption, redemption value, products purchased, etc.). This information is used for purchase validation data to invoice the associated issuer (e.g., FMCG manufacturer) on behalf of the retailer.

Benefits of the eCurrenC POS Architecture:

- eCurrenC is a Payment System, and was not designed to replace existing Payment Systems or Loyalty Solutions. It can work beside other existing solutions.
- There is no disruption to the retailer's current information technology (IT) infrastructure.
- There is no additional hardware required. This system is a 100% software solution.
 - Alternative solutions typically required a loyalty server to "load to card."
 - Alternative solutions can require upgrades in scanner technology.
- In-store lane processing is extremely fast. eCurrenC local validation can process hundreds of transactions in 30 ms.
 - Alternative solutions try to validate offers and vouchers externally, holding up the point-of-sale transaction loop.
- A consumer has unlimited coupons in the cloud. They are NOT limited to only a few coupons placed on their loyalty card.
 - Alternative solutions (in the United States) often set a limit of 25 to 100 coupons per consumer.
- Coupons and vouchers are validated for redemption against specific UPCs not Manufacturer ID, or Family Code. This prevents misredemption and fraud on a massive scale.
- eCurrenC can support an unlimited number of UPCs per ad campaign for validation at the POS.
 - Alternative solutions (in the United States) are currently limited to 100 UPCs or require a single Family Code for Validation.
- Once a coupon or voucher is used, it is marked as "redeemed" within 5 seconds. This prevents multiple redemptions and fraud by anyone attempting to re-use the offer in another lane or at another terminal.

- o With alternative solutions (in the United States), the redemption process ranges from 30 minutes to 24 hours, allowing for additional redemptions across lanes and across stores.
- The retailer's internal accounting process for electronic coupons is handled by their current POS interface to their accounting system. All flow through accounting and closeout procedures remain the same.
- Manufacturers can offer the same types of complex promotions as the in-store system.
- Manufacturers can provide the same type of loyalty programs as the in-store system.

In addition, our system provides access to:

- Electronic reporting and settlement of funds for electronic incentives redeemed.
- Real-time data (and reports) related to the coupons redeemed.
- Transaction-level reports and accounting information. The retailer can see reports at all levels (company, brand, store, lane, etc.).
- Multiple marketing options. Retailers can use the eCurrenC System to promote and advertise their in-store coupons through other electronic channels including email, banner ads and wireless phones, just like the manufacturers.
- Audits for all paper coupons (to be featured in the next release).

Note: To prevent fraud, and to improve on the generally accepted accounting principles when tracking all transactions, this system will issue a unique identification number for each electronic incentive created (much like a serial number on a dollar bill). Furthermore, the system will issue a unique identification number for each consumer, manufacturer, retailer, and retail point of sale (POS) system associated with, or linked to, the system (i.e., all subscribers and equipment).