

Currency Connect Implementation Overview

What is Currency Connect?

Currency Connect is a cross property virtual currency exchange. Users will be encouraged to engage in activities across participating partner sites and exchange currency between partners with daily maximums, partner agreed exchange rates and other system rules.

Currency Connect has been designed with the partner in mind, providing centralized logging and complete transparency of inter-partner transactions. Partners will be able to log into a portal that allows for configuration and reporting. In addition, to provide data security and integrity all user authentications are handled only on the partner site where activity is taking place, there is no cross-site authentication or single-sign on required.

How does it work?

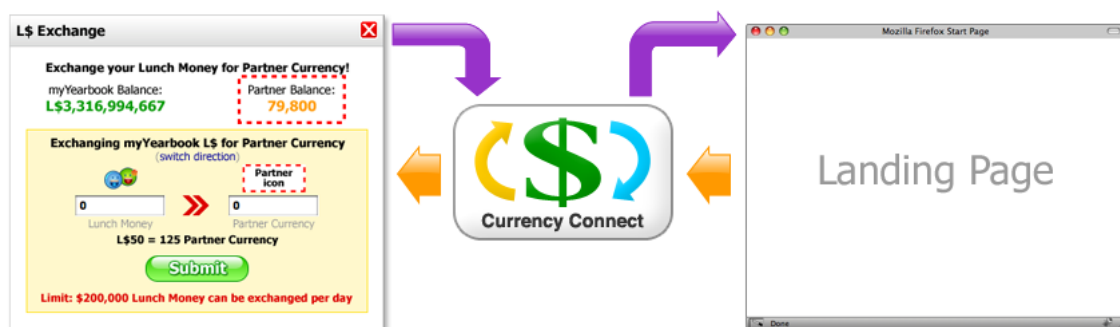


Figure 1 - Example Exchange including all three areas

The workflow for a typical currency exchange is illustrated in Figure 1. The user begins the exchange process and is directed to Currency Connect. Currency Connect creates a transaction ID and sends the user to the destination partner's landing page. Once the user has authenticated and optionally has agreed to the exchange on the partner site, the partner site notifies Currency Connect. It is at this point Currency Connect coordinates the debit and deposit of virtual currency on each side of the exchange.

What is needed to implement it?

There are three distinct implementation areas for partner sites to become active in the Currency Connect exchange:

1. Currency Exchange Widget placement on site
2. Landing page for users
3. Partner web services API

The customizable Currency Exchange Widget is the user-facing element of the process as illustrated in Figure 2. The partner can use the Currency Connect widget JavaScript or create custom integration elements. This piece is integrated into the actual partner website and allows the user to select their currency amount to transfer to or from the site. To facilitate this, Currency Connect implements a small number of REST API methods and user facing redirect URLs.

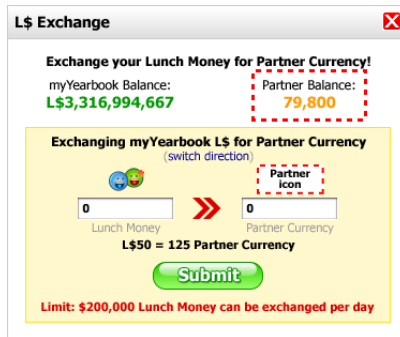


Figure 2 – Example currency exchange widget

The partner should implement landing pages for both incentivized actions and the exchange process. These landing pages are responsible for user registration or user login and optional transaction confirmation. Currency Connect uses a transaction id as a token to pass between partners instead of requiring off-site authentication of users.

The minimal Partner REST API includes 5 methods to implement:

- Deposit Currency
- Debit Currency
- Acknowledge Exchange Transaction
- Acknowledge Incentivized Action Transaction
- Liveness Check

To minimize implementation time, Currency Connect can provide stub code to partners in C#, Java, PHP, Python and Ruby. Partners can utilize the stub code as a reference for implementation, or as the basis for the web service.

Is it Secure against gaming?

Virtual Currency stability is a key concern for Currency Connect. As virtual currency may be a revenue center for partners or a key part of the site engagement for users, Currency Connect has been designed to limit negative impact to partner economies while stimulating engagement for partners. The following list is sample of the actions taken to prevent virtual-currency gaming:

- Users face a custom per-partner daily maximum transfer amount without regard to the number of exchanges with different partners.

- The currency exchange process, once initiated is server-to-server only, preventing users from attempting to game the system by hacking.
- User activity is tracked on the Currency Connect servers, for abuse prevention only. Methods of tracking include:
 - Building associations of accounts across partner sites
 - IP Address tracking
 - Currency Connect session tracking
- Flagging of suspicious activity by users who are likely to be using multiple accounts.
- Complete transparency to partners of transaction data including cross-site user mapping and IP address and Currency Connect session data.
- All exchange transactions occur in the natural currency of each respective partner, leaving the determination of amounts to the Currency Connect service.