



recast

marketing technology

How Recast Works

Using Recast Technology to Enhance Your Business

By Terry Johnson

About the Author:

Terry Johnson, is an Electrical Engineer by training and the inventor of Recast Marketing Technology.

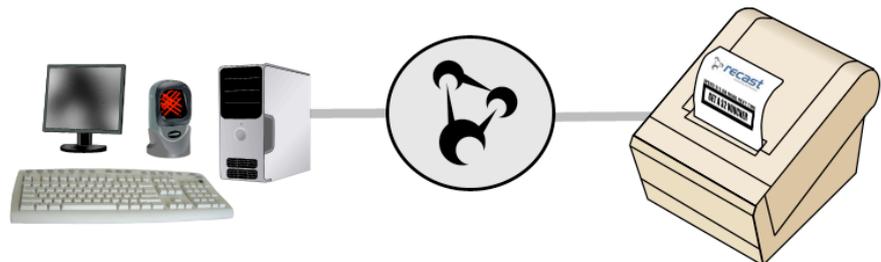
Legacy POS systems have limited flexibility and are expensive to replace. So what can you do when you require new functionality and need to keep costs to a minimum?

Recast provides multiple new applications in an old-POS environment, without changing the POS system itself. Transaction data is captured by either using a Recast software component in the POS, or through connecting external Recast hardware. By connecting with the POS and its peripherals, Recast seamlessly integrates the data flowing to and from the POS with new applications undreamt of when the POS was built.

Recast can pick up and modify data, interacting in real-time over the Internet to provide instant customer services. To any POS.

Consider the simplest application, printing a graphic promotion on a receipt;

Recast provides new opportunities for connecting with customers without the expense of upgrading your POS gear.



Old POS System + Recast = New Opportunities



Recast intercepts the POS data, and enhances it with the addition of graphic logos, advertising or other messaging. At the same time transaction data can also be uploaded to servers on the Internet.

In the store, the Recast system consists of a slave unit (software or hardware) located at the POS that handles the POS data and a site controller unit that manages the slaves and accesses the Internet. The site controller normally connects to the slaves over the existing store Ethernet network.

Make your receipts stand out with multi-color graphics and personalised messages.



Recast lets you incorporate multi-color graphics effortlessly, if the printer supports them, and can use other newer technology as well.

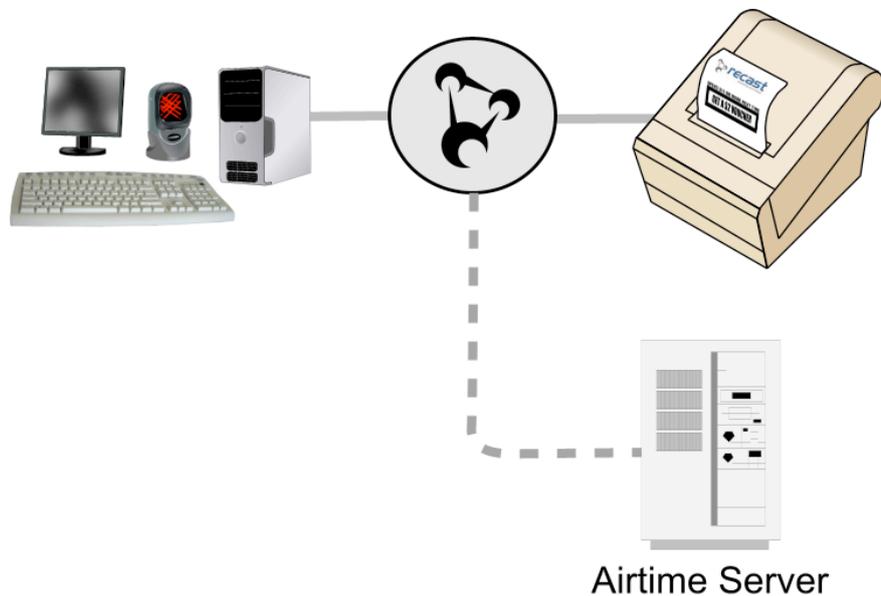
On-line Services

Printing preprogrammed content like simple advertising is just the beginning of Recast functionality. Recast can also bring in external data on demand.



*On-demand top-ups means **no opportunity for shrinkage** and no need to store physical stock.*

A common application for this feature is providing mobile phone account top-ups.



The operating the phone top-up service requires the receipt data output by the POS, which will include an item that has been purchased that is recognized as a prepaid phone top-up. The slave unit then passes the request to the site controller, which forwards it to the server used to dispense top-ups. Information from this server is then passed back to the slave, which prints the top-up details at the POS.

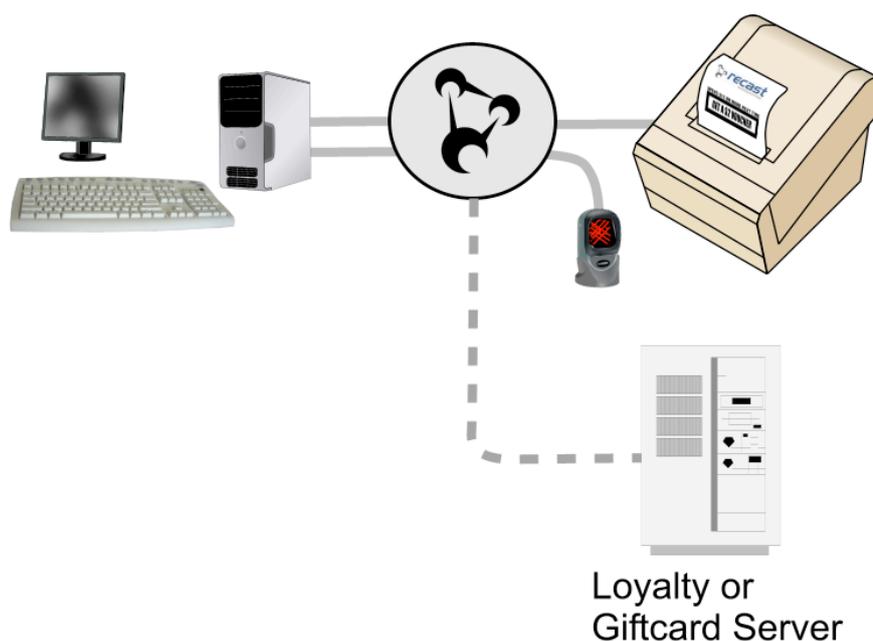
The phone top-up system is an example of what is termed 'virtual stock'. The retailer has no need to keep a stockpile of preauthorised phone top-ups in the store as all information is processed on demand.

Provided the external server can be readily interfaced with, it is a straightforward matter to connect any external server to the Recast system. The preferred method is to use a 'web service' model, but other means may also be employed.



Loyalty and Gift Card Applications

To participate in a loyalty program, the customer needs to be identified. To achieve this a card reader, either barcode or mag stripe, needs to be connected to the slave. Then the application is similar to the phone top-up system.



Obtaining real-time loyalty points balances and offering spot prizes is easy with the Recast system.

The Recast slave unit intercepts the barcode and is able to obtain customer details from the connection to the loyalty server. Depending on the facilities provided by the loyalty server, the slave unit may request loyalty point redemptions and the processing of customer transactions for the earning of points.

Gift card services are operated in an identical manner, and the functionality of a gift card is often combined with loyalty features. Loading value onto a gift card is done using the same approach as the phone top-up, but the card is scanned prior to processing the sale.

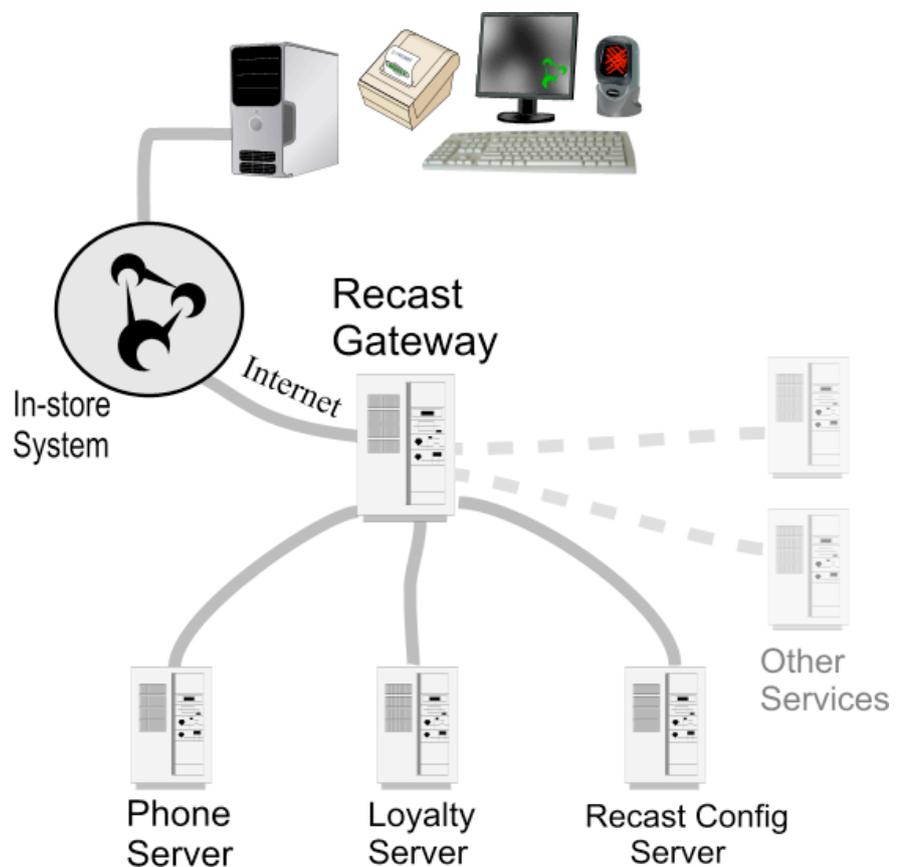
Recast has been used for loyalty and gift card services for the last five years, and is part of the Australian Direct



Marketing Association medal winning system operated by Australia's largest bookseller.

Recast System Management

The Recast network is managed through the use of gateway servers, and a configuration ('config') server. The gateways provide the connection points for all the site controllers in the stores and provide a connection to external servers.



The Recast Gateway serve two key functions, acting as a switch board to connect site requests to their servers (along with implementing any protocols to perform those requests) and performing maintenance functions for the sites such as upgrading firmware.

The Recast Config Server generates the files necessary for the slave to function. These files contain the images that need to be printed, rules for the operation of the applications and information about how the site systems



work, such as the layout of the receipt. Periodically the sites check to see if a new config file has been built and downloads it if it has. The Recast Config Server has a web based interface through which configs may be defined.

The template system allows retailers to easily upload images and promotions.

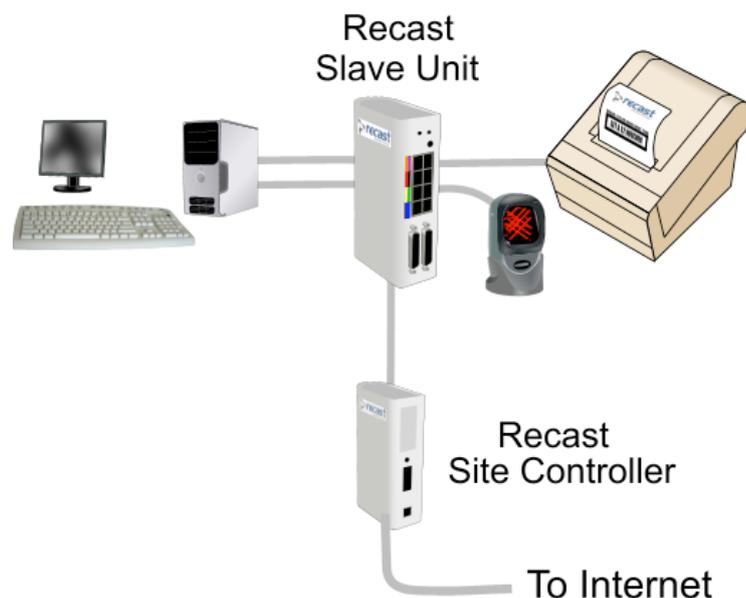
The Recast Config Server can also connect to other content providers so that external servers may have input into the config through the use of templates. The template system means that the technical aspects of a Recast job may be handled internally by Recast technicians, but elements such as images to be printed may be managed and provided by a 3rd party system, making this system well suited to reseller relationships.

Recast Clients

Recast's hardware implementation enables additional functionality on any POS with PS2, serial, or parallel interfaces.

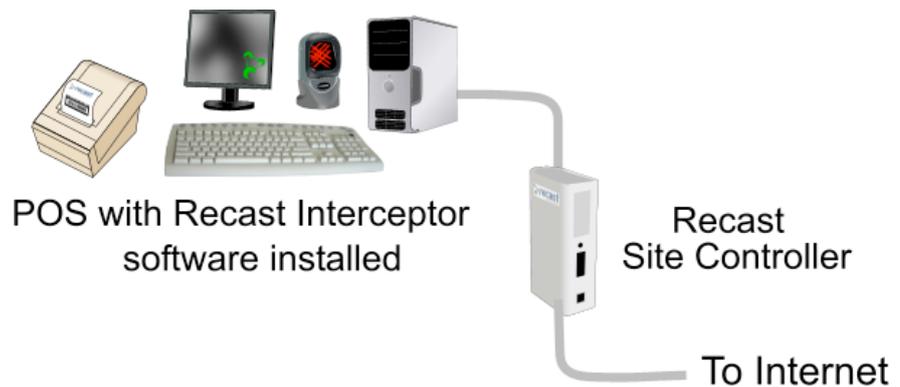
Recast offers two methods of implementation at the POS hardware and software clients. The software client is compatible with Windows based POS, while the hardware may be used with POS systems that do not allow Recast software to be run on the POS.

The hardware implementation directly connects between the POS and its peripherals that use PS2, serial or parallel interfaces.





The alternative to using the Recast hardware interceptor unit at the POS is to use 'thin client' software that directs data over the network to the site controller where a 'virtual slave' operates on the data streams.



This approach requires placing a 'thin client' application on the POS itself. This application does not perform any complex logic so requires few updates. It also does not store any data on the POS other than its own settings. This application therefore has very light demands on the POS and keeps the POS software environment extremely stable.

Using the 'thin client' option is cheaper, easier to deploy and allows for USB printer support.

The operation of the 'virtual slave' follows the same logic as the 'hardware slave', but the execution point has been moved. Naturally this brings advantages to the cost of deployment of the program (simplifying physical installation as well as lowering equipment cost) and allows peripherals such as USB printers to be used where they are not currently supported by the hardware slave.





The POS client also provides 'pop up' functionality where the operator can be notified of events (such as being made aware of the customer's birthday) or may be prompted for input (such as entering address details for a new loyalty card holder).

If necessary the hardware slaves and virtual slaves can be mixed in a site as they are compatible. In the event that communications between POS client and the Site Controller are lost, the POS client will 'fail safe' and simply drop out Recast functionality until communications are able to be re-established.

The Recast Advantage

By enabling retailers to add functionality and extend the life of their current POS systems, Recast helps businesses save money while still reaching customers in meaningful ways. Whether you are looking to implement loyalty programs, analyze shopping behaviors, issue targeted promotions or sell virtual stock, Recast is the reliable low-cost solution to your legacy POS limitation problems.

Contact S4 Technology at <http://www.s4-technology.com> for more information on how Recast can help your business.