



Using a Tablet Device as a POS Station

WineWeb Position Paper

By Ron Kreutzer, President, WineWeb Enterprises, Inc.

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1 Stone Ridge Rd, Santa Fe, NM 87505
Tel: 888-236-0058, Fax: 888-236-1439
services.wineweb.com

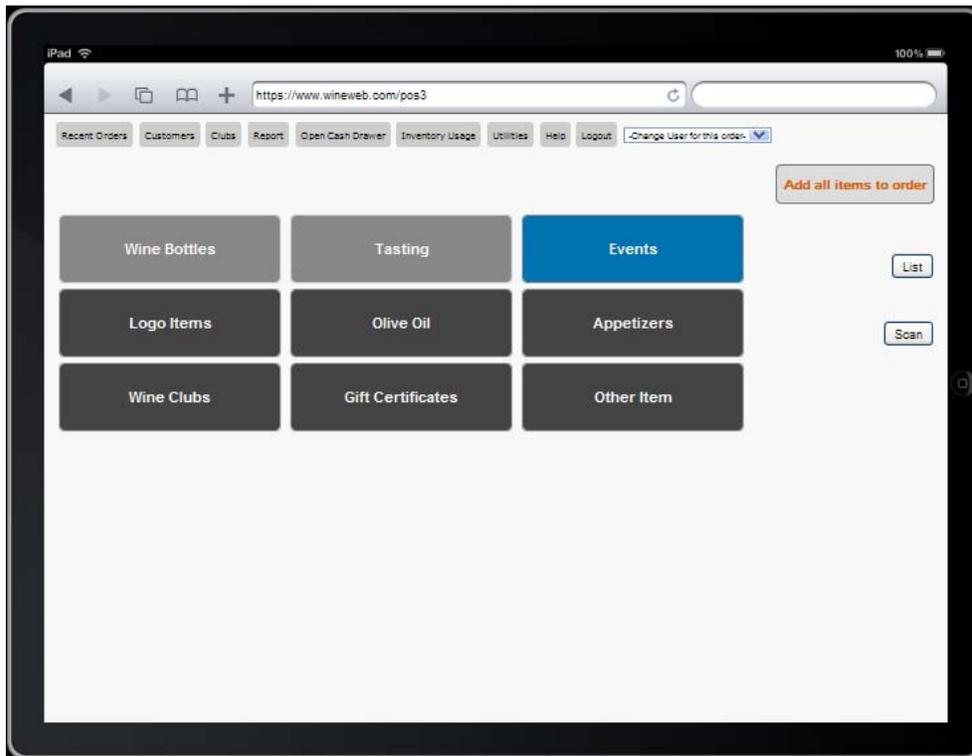
Overview

We are frequently asked by our clients if they can use our Point-of-Sale (POS) service with an iPad® or similar tablet device. Our short answer is yes, as the POS service works on any device with a browser, however we don't recommend using it as a primary POS station as there are issues connecting peripherals such as magnetic card readers and receipt printers to it.

We believe there are more viable uses for tablet devices in a tasting room environment. We have published a POS Planning Guide (available at www.wineweb.com/info) that discusses these options.

User Interface

The user interface of the WineWeb POS has been optimized to look and function well on a tablet device, as well as a smartphone. The touch screen interface makes it work well with the big-button product view. Here's a screen shot from an iPad.



You can process orders and select to email receipts to the customers. If it's a credit card order, you can key in the number and process it through your payment gateway as a keyed, card-present transaction. The POS now supports electronic capture of signatures, which works well via a finger on the tablet device.

You can also use the tablet to take orders and hold them for later checkout at another POS station (useful for food and by-the-glass purchases).

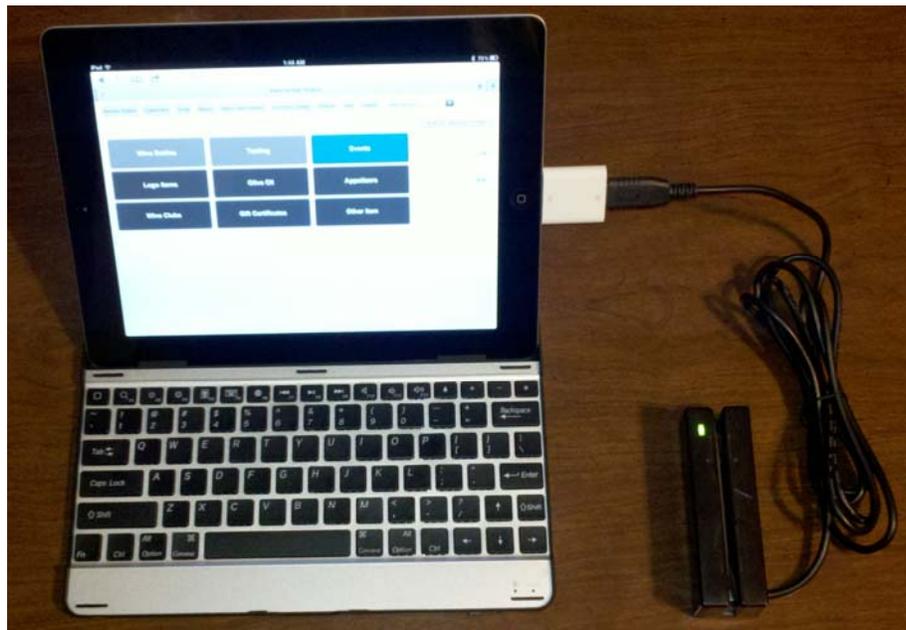
Also, as the Safari and Chrome browsers support local databases, you can save orders in the POS offline mode if your Internet connection is lost.

Attaching a Magnetic Card Reader

When using a desktop or laptop computer as a POS station, you can attach a magnetic card reader to a USB port on the computer. The computer senses the card reader as an additional keyboard device. Then when the cursor is positioned in the credit card number field in the browser window and you swipe a credit card, the data on the magnetic stripe is entered into that data field. The POS application then parses that data into the appropriate fields (card number, expiration, customer name).

So let's just attach the card reader to your iPad, right?

- Do you see a USB port on your iPad? Nope.
- What about Apple's iPad Camera Connection Kit, a \$30 device that plugs into the charging port and has a USB port? That works and the iPad senses the card reader as a keyboard, and you can swipe a credit card into the card number field in the POS. The issue is that the iPad senses the external "keyboard" and disables the onscreen keyboard, so you can't enter any text without unplugging the card reader, and how long will that cable last if you repeatedly plug/unplug?
- OK, then can I use the Camera Connection Kit with a USB hub and attach a card reader and an external USB keyboard to the hub? Yes, this does work, but all those devices and cables don't make it very portable.
- What about using a Bluetooth keyboard? Yes, this does work and it reduces the number of cables. This photo shows the setup using an Agptek keyboard that doubles as a case. Similar keyboards are available from Hip Street and other manufacturers.



This is a viable solution for festivals and other events, especially where there is no electricity available.

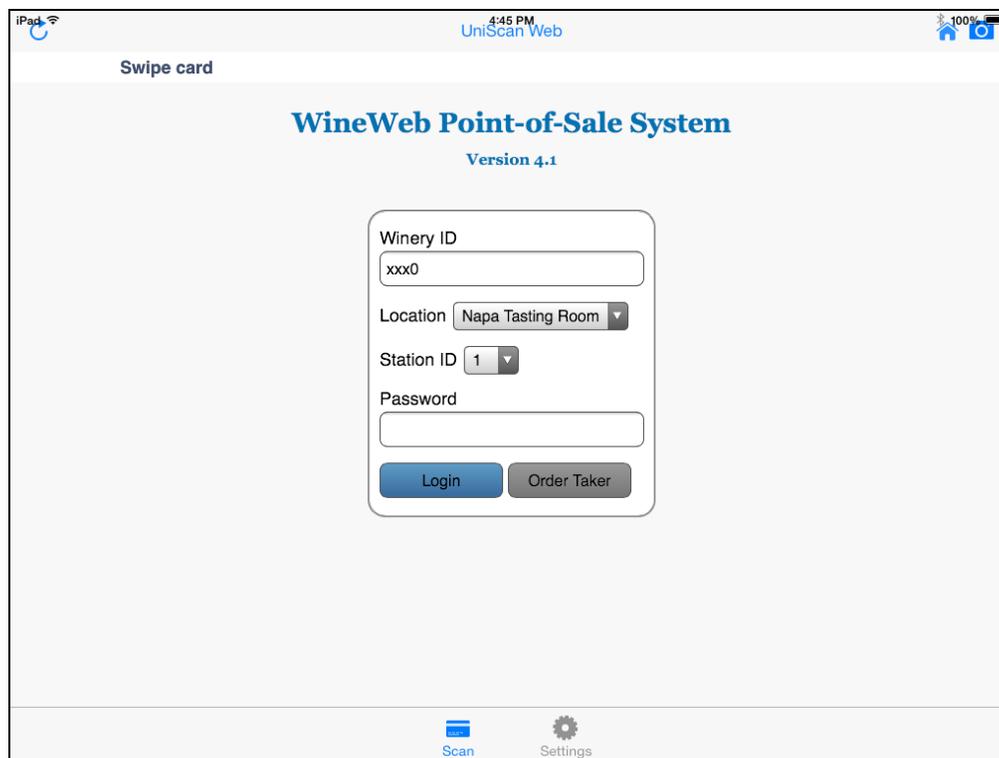
Attaching a credit card reader to the microphone jack

What about those card readers that attach to the headphone jack of the tablet? The issue is that the browser can't access the microphone jack and convert an audio stream into a data stream for the card number. Programs that can access the microphone are built as apps, not websites. That said, Google recently announced that their Chrome browser now supports access to a device's microphone and camera. Unfortunately Chrome for the iPad doesn't yet support this, and routines to translate the audio stream into characters read from the magnetic stripe are not yet available.

In early 2013, due to client requests to use an iPad with a microphone jack connected credit card reader, WineWeb created a POS iPad app that combined its POS service and an app to read credit card data from a microphone jack card reader.

In September 2013, WineWeb discontinued that app in favor of a third-party app that could support multiple devices, multiple card readers and multiple types of scans (credit card, driver's license, membership cards, etc.) with the scan data being sent directly to the appropriate form field in the POS browser window.

The following image shows an iPad running WineWeb's POS service within a third-party app (UniScan Web from IDScan.net) that allow card swipes from a card reader attached to the microphone jack.



Note that the app is currently available on the iPad / iPhone / iPod Touch and works with over 10 models of microphone jack or charger port card readers. Instructions for using this app with the WineWeb POS is available in the online help system of the WineWeb Administration Console.

Attaching a Receipt Printer

Tablet devices don't support directly connected printers, so you can't attach a receipt printer to that USB hub (above) and expect it to work. Remember installing the printer driver software for the receipt printer on your computer. You can't do that, and it doesn't exist, for a tablet.

iPads can print to certain models of wireless printers, none of which are receipt printers. Several apps are now available that allow you to print to a printer connected to another computer on your network. So you could install such an app and print to a receipt printer connected to a POS station. However after testing all known printing apps, we've not found any that allow you to set the paper size and control the margins, so you get very tiny print and wide margins, making the receipt unusable.

There are some wireless receipt printers that connect via Bluetooth, but they require a specially coded app to use, and are not supported in a browser.

WineWeb POS has addressed this mobile printing limitation and allows any mobile device to print to any receipt/ticket printer on the network. You merely set the preference for the mobile device as not being able to print directly, and then any receipt or ticket is queued to print via one of the "real" POS stations that is running a print processor in a background browser window.

Order Taker component

Smaller tablets and mobile phones can also be used with our POS Order Taker function in the tasting room to reduce bottlenecks at the POS stations. The POS Order Taker is formatted for a smartphone and allows the staff to take orders and add to existing orders, but it does not contain the checkout functions of a regular POS station. Below is a screen image of our POS Order Taker function, which is included with the POS service.

The screenshot displays the POS Order Taker interface. At the top, there are two buttons: "Recent Orders" and "Logout". Below these is a grid of nine buttons representing different item categories: "Wine Bottles", "Tasting", "Events" (highlighted in blue), "Logo Items", "Olive Oil", "Appetizers", "Wine Clubs", "Gift Certificates", and "Other Item". Below the grid is a button labeled "Add all items to order". At the bottom, there is a form with a "Location" dropdown menu, and two text input fields for "First name" and "Last name".

Summary

Given the limitations of a tablet device to support attached peripherals, we do not recommend these devices for primary POS stations. They can be used for more mobile scenarios where key entry of credit card numbers is acceptable, or where a Bluetooth keyboard is also used.

With touch screen laptops being released, we believe that the desire to use a tablet as a POS station is reduced. Many hardware vendors have released touch screen laptops than an iPad and priced equal to or less than an iPad. Given the ease of attaching devices to the USB ports on the laptop, this appears to be a better solution.

We also believe a more suitable use for tablets in a tasting room environment is in direct visitor interaction with the tablet device, and we have created a tablet app component to support this.

Smaller tablets and mobile phones can also be used with our POS Order Taker function in the tasting room to reduce bottlenecks at the POS stations. The POS Order Taker is formatted for a smartphone and allows the staff to take orders and add to existing orders, but it does not contain the checkout functions of a regular POS station.

The WineWeb POS does support attaching a magnetic card reader via the microphone jack of an iPad using a third-party app that provides the communication between the card reader and the browser.

About the Author

Ron Kreutzer has over 30 years information technology (IT) experience, over 15 years IT project management experience, over 20 years Internet technology experience, and over 17 years experience with wine industry technology. Ron is President of WineWeb Enterprises, Inc. a company he founded in 1995 to provide an electronic marketplace for wine and Internet services to wineries and wine retailers. He has worked over eight years with a global information technology services provider, and previously was a Senior Manager with Deloitte & Touche Management Consulting (Deloitte Consulting) having spent over eight years on a variety of IT projects across many industries and technologies. Ron is a PMI-certified Project Management Professional (PMP) and a Certified Public Accountant (CPA-inactive).

About WineWeb Enterprises, Inc.

WineWeb provides winery websites, e-commerce sales processing, point-of-sale, wine clubs, customer relationship management, email campaign management, advanced content management, and e-Marketplace promotion services. Our winery software services provide a complete solution to managing your winery direct sales channel.

WineWeb's online order processing service is customized to the needs of wineries and includes fully compliant shopping cart, credit card processing, shipping carrier integration, age verification, fulfillment center routing and order fulfillment tools. The e-commerce service can be integrated into an existing website, and includes both direct-to-consumer and direct-to-trade sales.

WineWeb services can integrate with your other winery applications, and provides tools to manage your online sales channel and customer repository. Advanced features including multiple users, role-based security, event reservations and ticketing, gift certificates, sales dashboard and reporting module, with additional components for wine club member management, email campaigns and affiliate sales.

Since 1995 WineWeb has been providing cost-effective Internet services to wineries. WineWeb provides small winery value with a large winery feature set. There is no contract commitment period. WineWeb earns your business each month.

For more information, please visit services.wineweb.com

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