



Solutions for Printing from Web Browser-Based Applications on iOS, Android and Windows





Receipt technology has advanced dramatically in the last several years. Previously, in every transaction, a customer would pay for their purchases at the POS terminal and accept a printed sales receipt as a proof of purchase in case they needed to make a return or exchange. Mobility, however, has revolutionized POS and changed the process of providing a customer with a receipt.

Consumers are increasingly mobile, so it seems counterintuitive that sales associates wouldn't have options for printing from mobile devices. As IT solutions providers and ISVs, your retailer clients turn to you for solutions that provide them with that capability. While in many cases integrating printers with mobile POS is routine, there are certain circumstances that can be difficult to overcome, such as printing from Web-based applications via HTTP(s) or from Filemaker on Android™ or iOS devices.

Star Micronics has developed a variety of printing solutions for mPOS, including two that facilitate receipt printing from Web-based applications via HTTP(s) and from a project on an Android device or iOS hardware such as an iPad®, iPhone®, or iPod touch®. These solutions, WebPRNT and PassPRNT, solve common problems merchants often encounter with mobile printing.

The Solutions:

WebPRNT enables direct communication: Integrators can develop their POS application to communicate directly with a Star Micronics printer with WebPRNT emulation technology.

PassPRNT facilitates rerouted communication: PassPRNT acts as a print relaying app that retrieves print data from an iOS, Android or Windows POS application and then sends this information to the Star Micronics printer.

Print from a Web Browser-Based Application

The Problem:

Given the prevalence of Web-based POS solutions, it's frustrating when a retailer's employees can't print from these platforms to issue receipts or reports. When this issue arises, it's common to blame the system's hardware as being incompatible. However, the problem isn't which mobile device you are using, because most Web-based solutions are device agnostic. This means the hardware should work with a variety of different systems without alterations. If the device can connect to the Internet, it can run the application.

Despite this flexibility, it's still necessary for the printer to receive data directly from the Web-based POS solution. For users running Windows and Mac desktop systems, printing is possible by downloading a driver. However, this is a hassle for end users because operating systems (OS) are designed to favor (8.5 x 11") desktop printing. In addition, iOS and Android platforms don't have drivers available, so it was impossible to print from a Web browser to a receipt printer.

WebPRNT

WebPRNT, which enables device-agnostic receipt printing technology, supports HTTP(S) requests used in Web-based applications. It facilitates printing on any Star Micronics WebPRNT-enabled printer — including receipt, label, and kitchen printers — from any local device running a Web-based application.

This low-cost, versatile solution to printing from Web browser-based applications allows users to print high-quality POS receipts with professional, crisp graphics on Star's line of WebPRNT-compatible printers.

How it works:

You can use any device you want when you download WebPRNT, so businesses can eliminate the need to spend money on upgrading their current hardware. This solution enables local printing from a device with a browser to a compatible WebPRNT printer (desktop or mobile) on the same network.

WebPRNT is easy to read, maintain and modify for developers. It works with XML tags or a JavaScript software development kit (SDK) that is integrated into the Web application's code. This functionality can be extended to Bluetooth printers by using the WebPRNT Browser with no changes to the Web code. In addition to Web-based applications, Star's WebPRNT also supports HTTP(S) requests from native applications.

One advantage of integrating WebPRNT is that the application the engineer or developer creates can give a retailer more complete control of printing, such as the ability to adjust the formatting, operate the cash drawer, or check the status of the printer. It also enables additional, innovative features to be added to the print application including digital receipts and other cloud services.

WebPRNT technology is available with several of Star Micronics' printers including the TSP654IWEBPRNT, SP742WEBPRNT, TSP743IWEBPRNT, TSP847IWEBPRNT as well as any of Star's Bluetooth printers by using WebPRNT Browser.

Why choose WebPRNT:

- **Easy to use.** WebPRNT eliminates time spent downloading software and installing drivers. The app enables printing from any local device hosting a Web-based application (e.g., Explorer, Chrome, Firefox and Safari) to a Star WebPRNT-enabled receipt printer.
- **Affordable.** WebPRNT enables printing from any application or operating platform without the need for expensive, multi-platform development costs.
- **Compatible.** WebPRNT allows users to print from their application to a WebPRNT-enabled receipt printer from any device, regardless of its operating platform.

If you're curious about whether your Star Micronics receipt printer supports WebPRNT, visit www.starmicronics.com/pages/webprnt



PassPRNT

PassPRNT is the newest printing application for iPad, iPhone, iPod touch, and Android devices. The app resolves issues associated with printing from POS solutions supported by native iOS, Android or Web applications send the receipt data using a URL scheme. The PassPRNT native application accepts the data, formats the receipt for the printer and sends it to any Star Bluetooth, Ethernet or USB (Android only) printer connected to the iOS, Android and Windows devices.

How does PassPRNT work?

For the first time, PassPRNT links with Star's POS and portable printers to enable printing using the company's unique URL scheme-based printing method and the PassPRNT companion app.

Its easy-to-use integration allows users to print from any Web application in any Web browser including Safari/Chrome using a URL scheme to print on a Star Bluetooth printer. The operating system is capable of automatically switching from a host application to the PassPRNT application and back, with a simple and user friendly "one tap" request to print from any iPad, iPhone or iPod touch to a Star Bluetooth printer.

Why choose PassPRNT:

- Uses Star's unique URL scheme-based printing method
- Available for receipt, label and kitchen printer models
- Automatically switches from host to PassPRNT app and back for "one tap" printing
- Very little coding involved in the main application to communicate with PassPRNT
- Empowers users to print from any iPad, iPhone or iPod touch and Android devices when using Filemaker

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Conclusion

Receipts are an important part of the customer experience, but disruptive technology like mobile POS and payments have changed the way both customers and businesses think about receipts — how they are printed, issued, and what information they include. A customer who opts for the mobile checkout to avoid waiting in line still expects to receive a receipt and it's inconvenient to look for drivers, update software and struggle with formatting options so proofs of purchase can be generated. Star Micronics' printing and receipt solutions like WebPRNT and PassPRNT give businesses easy solutions and flexibility they need at affordable prices.

WebPRNT and PassPRNT are part of Star Micronics' Star Cloud Services, a new digital service delivering digital solutions intended to reduce cost and boost the return on investment for businesses. For more information about Star Micronics' modern Web-based applications using both legacy and mPOS Star products already installed in store, please visit [Star Cloud Services](#).

About Star Micronics

Star Micronics America, Inc. is a subsidiary of Star Micronics Company Ltd., one of the largest printer and POS manufacturers world-wide. Star Micronics also manufactures high precision machine tools and precision parts. Star Micronics Company Ltd. is ranked as one of the Top 50 "Most Stable" Japanese companies on the Japanese Nikkei. For more information, visit www.starmicronics.com or call 800-782-7636.