

Browser Print User Guide

Overview

Zebra Browser Print is a set of scripts and an end-user application that allows web pages to communicate with Zebra Printers. The application lets a web page communicate to Zebra devices accessible to the client computer.

Currently, Zebra Browser Print supports Macintosh OS X Yosemite and above, as well as Windows 7 and 10. Google Chrome, Internet Explorer, and Apple Safari browsers are supported. It can communicate to Zebra printers connected via USB and Network. For a more complete list of supported features, see the [Supported Features](#).

This document outlines the basics for installing and using Browser Print:

[Features](#)

[Installation \(Windows\)](#)

[Installation \(Macintosh\)](#)

[Running Browser Print](#)

[Restarting or Starting Browser Print](#)

[Using the Sample Demo](#)

[Printing an Image](#)

[Integration](#)

[Uninstalling \(Windows\)](#)

[Uninstalling \(Macintosh\)](#)

[Incompatibilities](#)

[Appendix – Supported Features](#)

Features

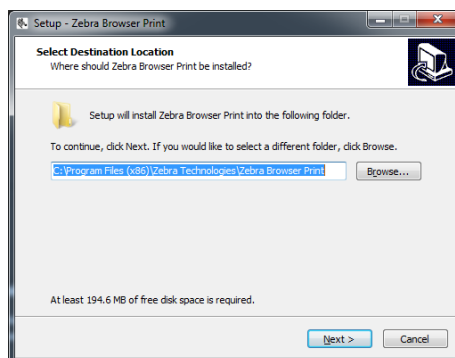
- Allows web page to communicate with Zebra Printers directly through the client computer's connection.
- Auto-discovers USB and network connected Zebra Printers.
- Allows two-way communication to devices.
- Has ability to set a default Printer for the end-user application, independent of the default printer used by the operating system.
- Has ability to print a PNG, JPG or Bitmap image using its URL.

Installation

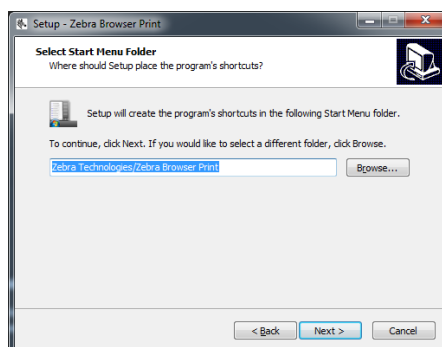
1. If you currently have a version of Browser Print or Zebra Web Driver installed, use the instructions for Windows [Uninstallation \(Windows\)](#) or [Uninstallation \(mac OS X\)](#) to uninstall it.
2. Please read the section on [Incompatibilities](#) for issues installing or running this program.
3. There are separate installers for mac OS x and Windows, follow the Windows instructions below or the Macintosh instructions [here](#) .

Installation (Windows)

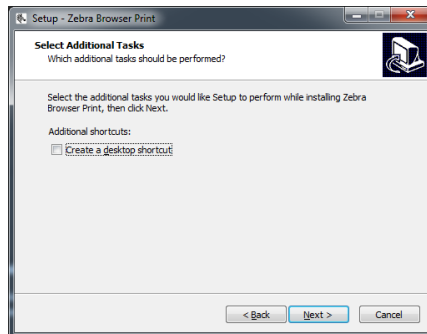
1. Run the installer executable “ZebraBrowserPrintSetup-1.2.X.exe”.
2. Select where you would like to save the Browser Print files and click “Next”.



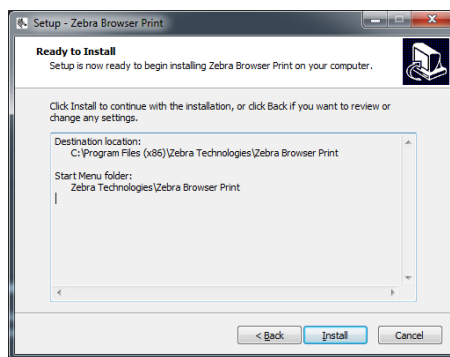
3. Select where you would like to run the program from and click “Next”.



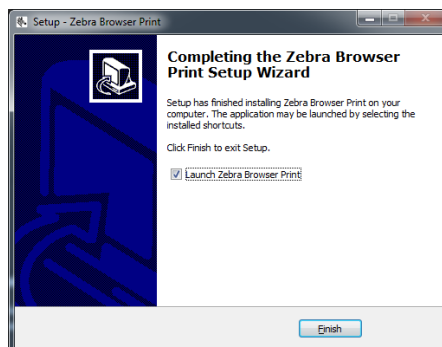
4. Decide if you want to have a desktop icon for Browser Print and click “Next”.



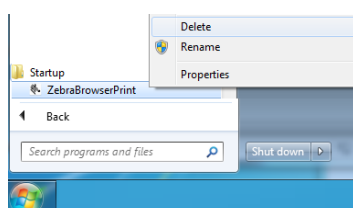
5. Click “Install”.



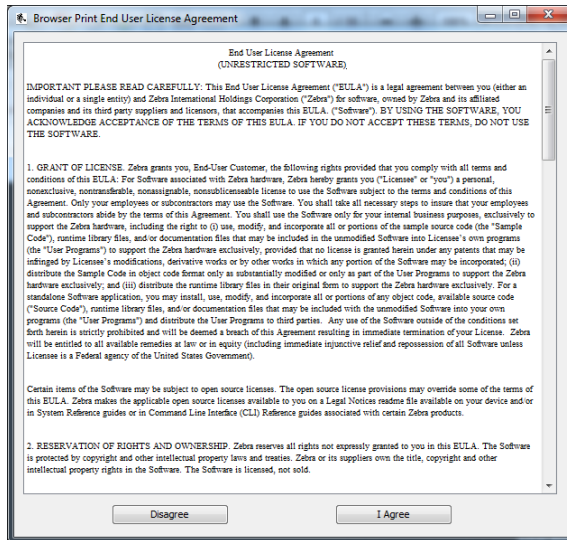
6. Check the box to launch Zebra Browser Print and click “Finish”. If you do not check the box, Zebra Browser Print will be launched the next time you restart your computer.



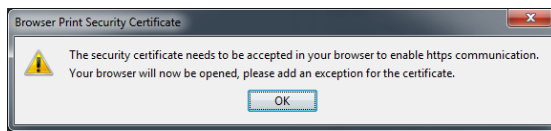
7. **Note:** The Windows installer adds a shortcut to the “startup” menu automatically. This feature will ensure that Browser Print runs when the computer is restarted. You can remove this feature by right-clicking on the shortcut in the startup menu. Browser Print will only work when [started manually](#) without the entry in “startup”.



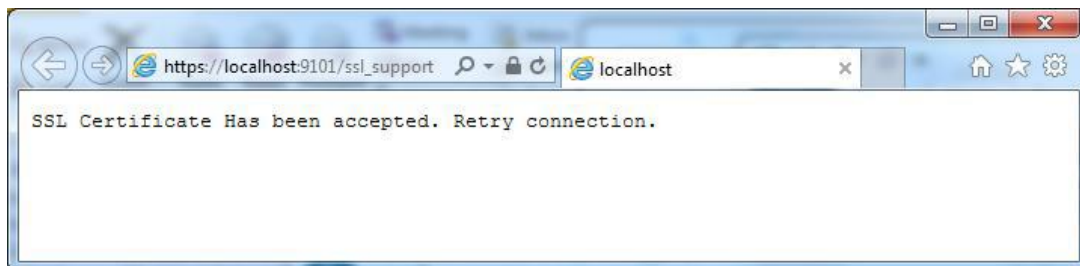
8. When the program runs for the first time, the End User License Agreement will pop-up. Select “I Agree”.



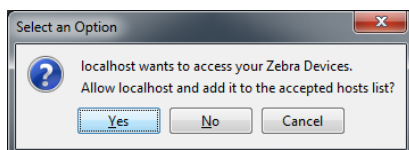
9. A pop-up about communicating with a web browser will appear. Click “OK”.



10. In a web browser, it displays that the SSL Certificate has been accepted.



11. A pop-up will appear requesting access to any connected Zebra devices. Select Yes.

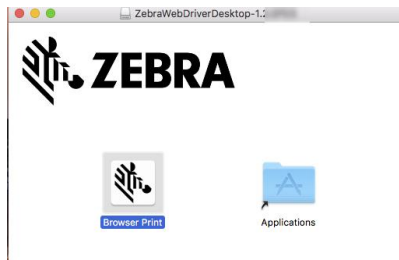


12. A Zebra logo icon will also appear in your system tray this indicates that Zebra Browser Print is running.

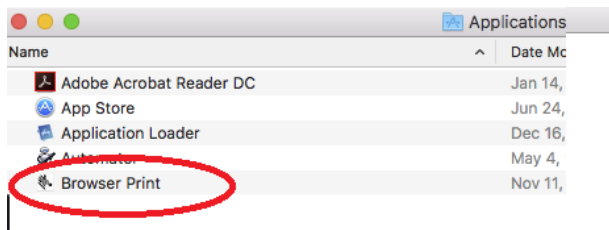


Installation (Macintosh)

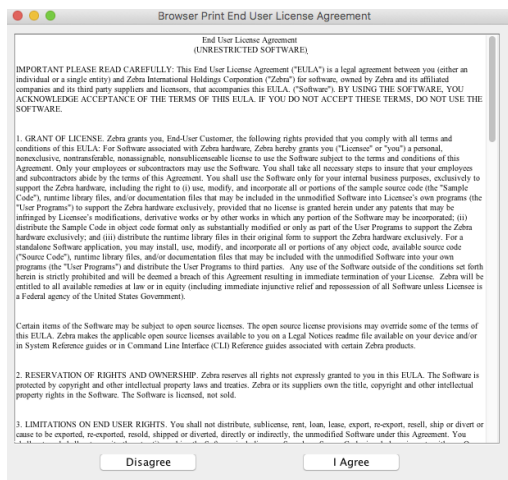
1. For Macintosh OS X: Drag the Zebra Browser Print installation into the Applications folder:



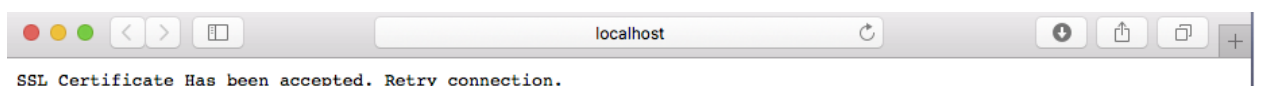
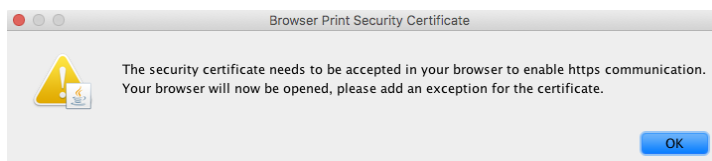
2. Click the “Applications” shortcut to open the “applications folder, then double-click the Browser Print Application:



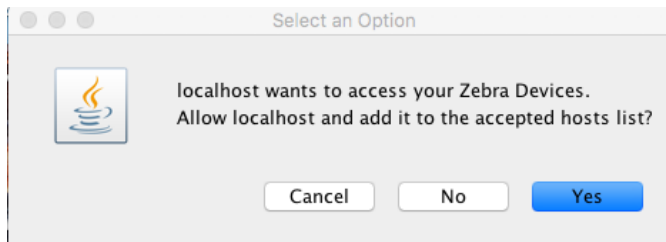
3. When started for the first time, the End User License Agreement will pop-up. Select “I Agree”.



4. A pop-up about communicating with a web browser will appear, and the certificate display in the web browser. Click “OK”.



5. A pop-up will appear requesting access to any connected Zebra devices. Select Yes.

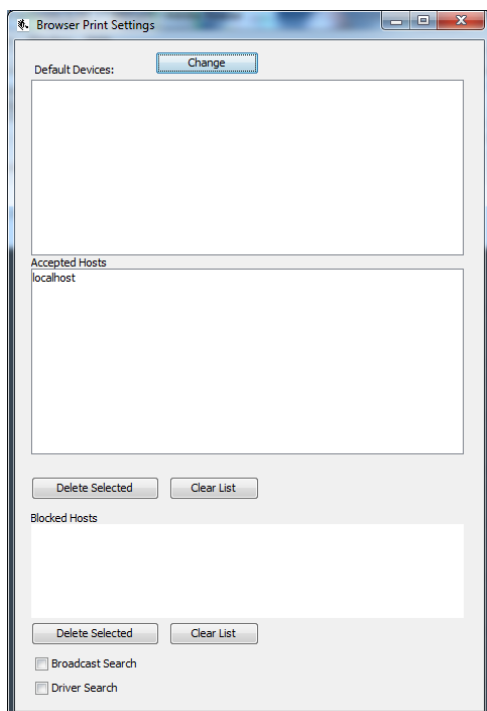
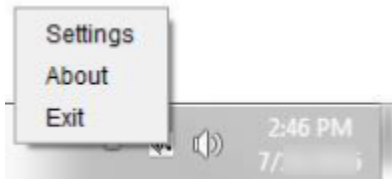


6. A Zebra logo icon will appear in your system tray this indicates that Zebra Browser Print is running.



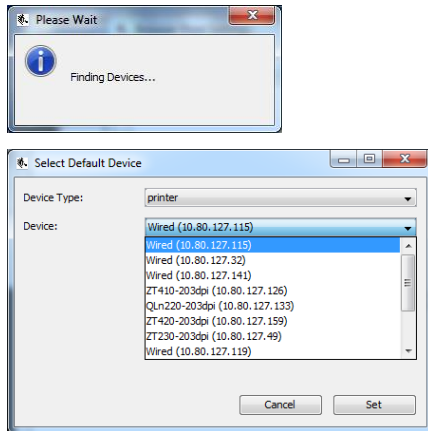
Running BrowserPrint

1. Right-click (WIN) or Click (OS X) on the Zebra log icon and select Settings. Browser Print's settings will open.

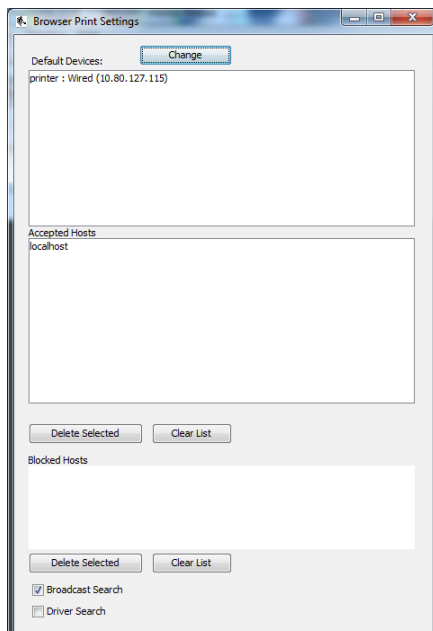


- a. **Default Devices:** Lists the default device set for this user. This is different than the default printer set by the operating system. This can be changed once set via the "Change" button or via script.
- b. **Accepted Hosts:** Lists web addresses that the user has allowed access to their devices. These can be removed using this screen.
- c. **Blocked Hosts:** Lists web addresses that the user has blocked access to their devices. These can be removed using this screen.
- d. **Broadcast Search:** Selection box allows Zebra Browser Print to find and print on network connected Zebra Printers.
- e. **Driver Search:** Not supported in this release.

3. To set or change the default printer, click the “Change” button. A pop-up will appear with a dropdown of all discoverable devices (finding network connected Zebra printers may take a few moments).



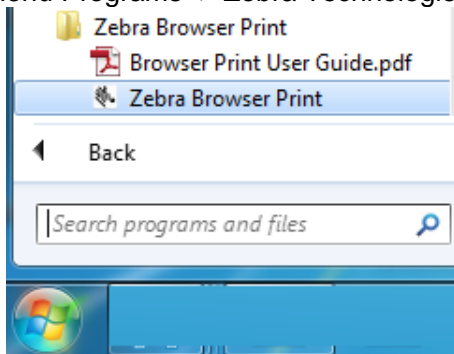
4. Select the device you would like to print to by default and click “Set”.



(Re)Starting BrowserPrint

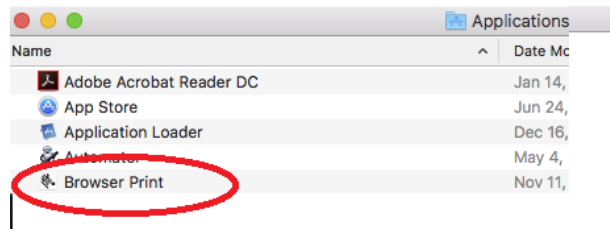
For Windows:

Start Menu Programs -> Zebra Technologies -> Zebra Browser Print



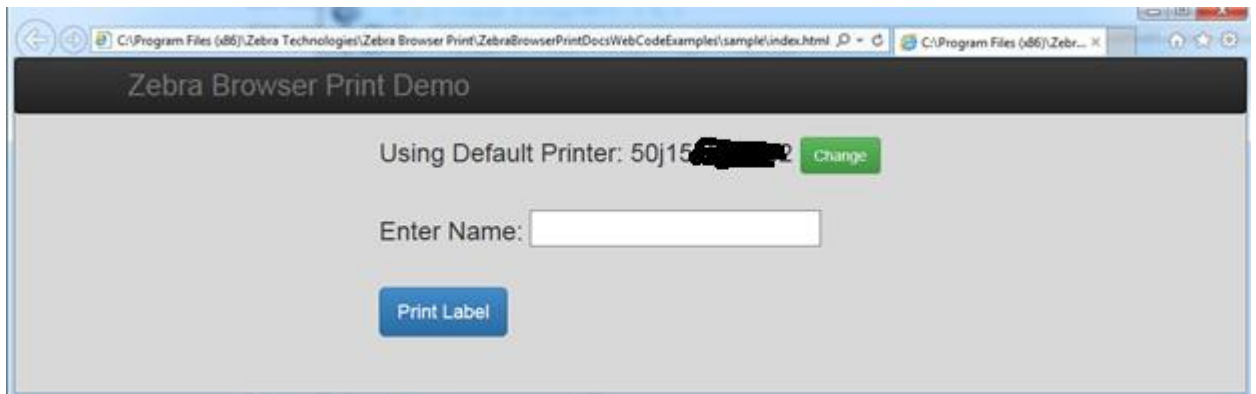
For Macintosh:

Use Finder to go to “applications” Double-Click” “Browser Print”

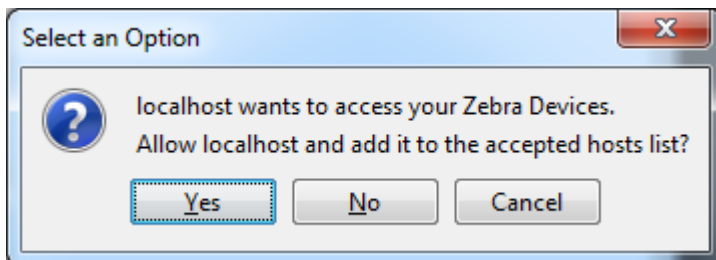


Using the Sample Demo

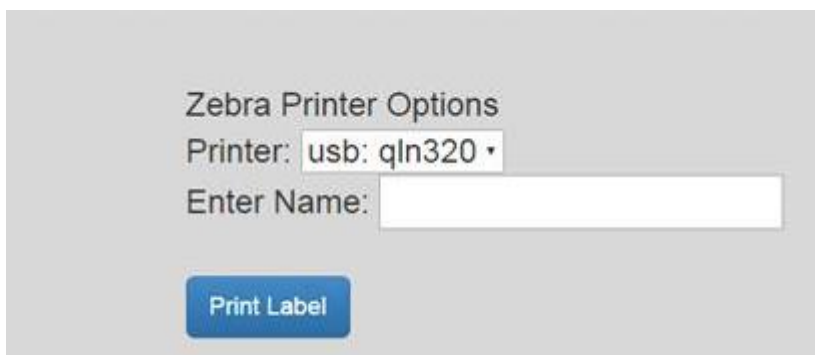
1. Connect your Zebra printer using one of the following methods and set the [default](#) printer.
 - a. Direct connect using a USB cable.
 - b. Network Connection and by selecting ["Broadcast Search"](#) on the settings screen.
2. In the "sample" (typically located: "C:\Program Files (x86)\Zebra Technologies\Zebra Browser Print\ZebraBrowserPrintDocsWebCodeExamples\sample" in Windows) folder, open the index.html file. This will open a page in a web browser.



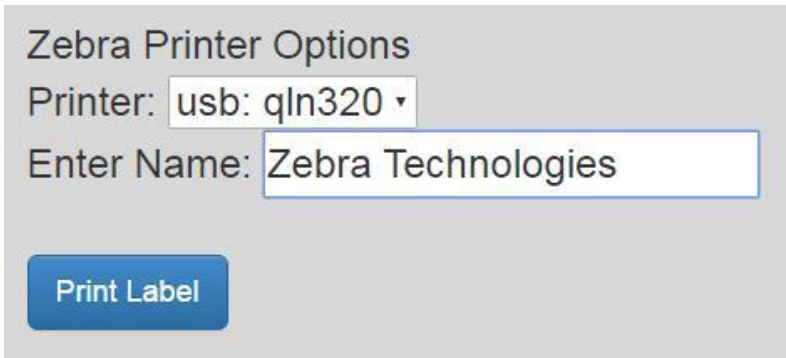
3. The website may ask permission to access your system's printers. Select "Yes" to give it access.



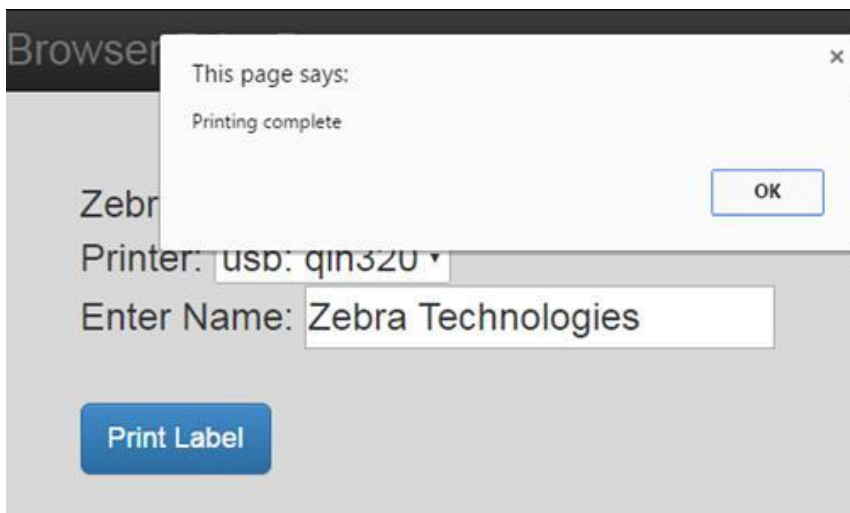
4. The website will then be added to the list of Accepted Hosts in Browser Print.
5. If you have selected a default printer in the Browser Print settings, the website will have it listed. If you have not, the printer will be undefined. If the printer [is undefined](#), click Change and select the printer you would like from the drop down menu.



6. On the demo page, enter a name in the appropriate field and click “Print Label”.



7. The printer should print a label with the name you entered.

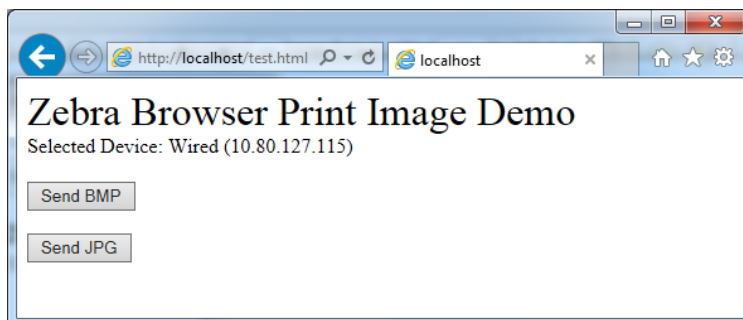


Printing an image

1. This demonstration requires IIS, Apache or another web-server implementation. The [default printer](#) must be set for this demonstration. The following example uses Microsoft IIS server installed on the local computer.
2. Copy in the contents of the “js” directory and files, “test.html”, “Zebra_logobox.bmp” and “ZebraGray.jpg” into the proper directory (root in this example) of your test server:
 - i) For Windows, the directory is typically: “C:\Program Files (x86)\Zebra Technologies\Zebra Browser Print\ZebraBrowserPrintDocsWebCodeExamples\sample”
 - ii) For Macintosh, the directory is typically: /Applications/Browser\ Print.app/Contents/Resources/documentation/sample



3. Point the web browser to the address for the test page (<http://localhost/test.html>)



4. Click “Send BMP” or “send JPG”, the printer will print a label with a Zebra on it.



Integration

Zebra's Browser Print is intended to make it easier to print to a device from a web-based application using minimal coding effort.

Packaged with the Browser Print program, there is a full example of a web application that prints using Browser Print in the sample directory. This sample contains the BrowserPrint.js file as a basic API to help you integrate into your website. This file is also in the lib folder. It is recommended that you include this JavaScript class in your web page to facilitate the use of the Browser Print application.

```
<script type="text/javascript" src="js/BrowserPrint-1.0.4.min.js"></script>
```

Full API documentation for the BrowserPrint-1.0.4.min.js file can be found in the "docs" directory.

Incompatibilities

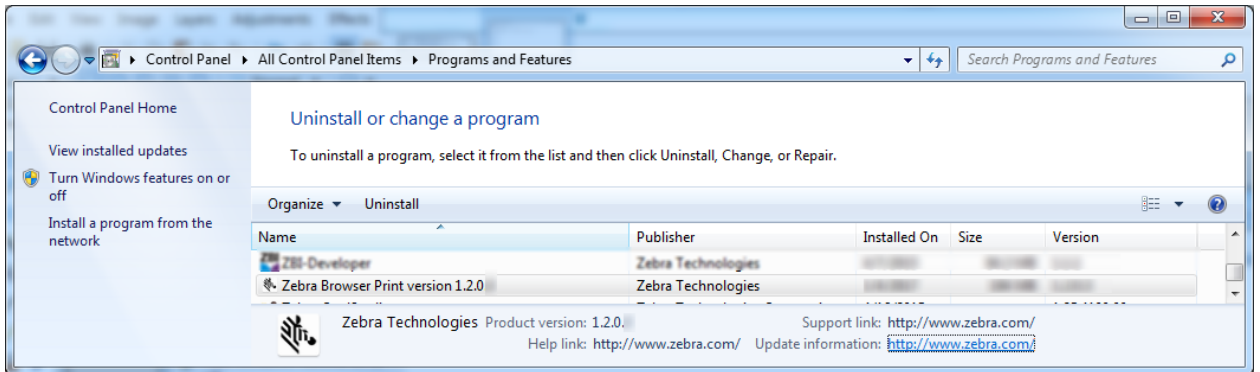
Browser Print runs in the background of a computer; however, it cannot run at the same time as certain other pieces of software. Browser Print cannot run when any other program is using the computer's 9100 or 9101 ports. These ports are used for RAW printing; that is, sending commands to the printer in a printer language, such as ZPL.

When a program is using these ports, Browser Print will display a message stating that it cannot print in the current state. This will also be the case if you have an older version of the program running.

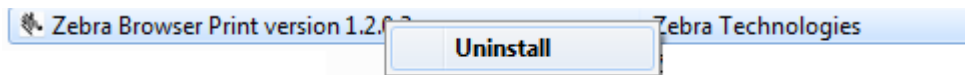
Note: The only known Zebra software to be incompatible is CardStudio, ID card design software.

Uninstallation (Windows)

1. Right click the Browser Print icon in your system tray.
2. Select Exit. This makes Browser Print cease function in the background. The icon should disappear.
3. Enter the Windows Start menu and open your computer's Control Panel.
4. Click Programs and Features. Scroll down to Zebra Browser Print.



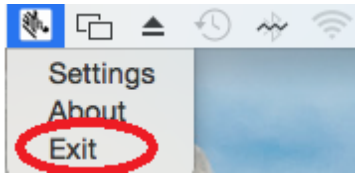
5. Right click Zebra Browser Print and select Uninstall.



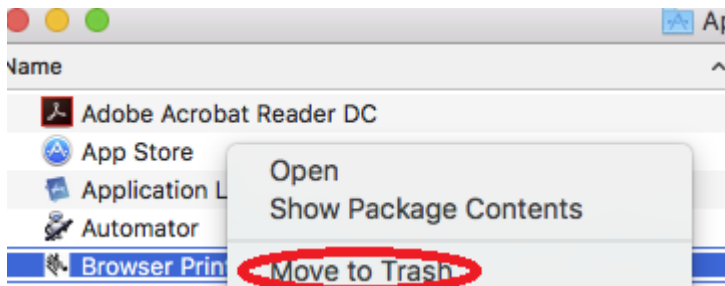
6. Zebra Browser Print will then be uninstalled by your computer. The Zebra Browser Print icon will disappear from your system tray and the Browser Print directory will no longer be on your system.

Uninstallation (mac OS X)

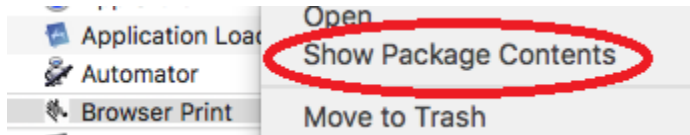
1. Exit the application:



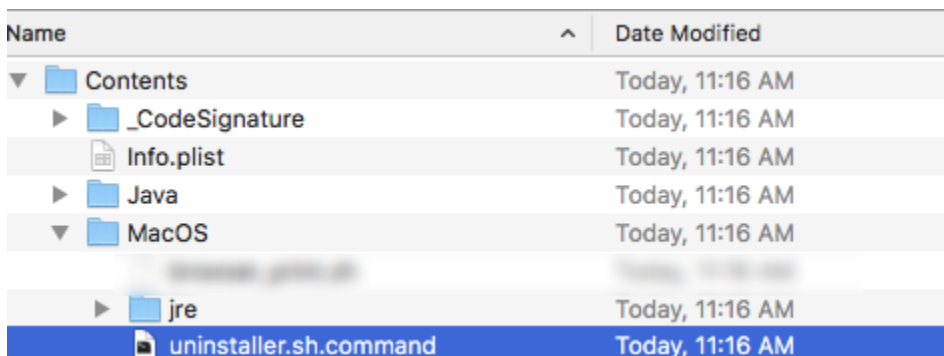
2. **NOTE:** Just moving the application to the trash leaves behind a settings file, see step [#3](#) to remove this file first. To remove the application: Use Finder to go to “applications” Use the CMD-Click, click “Move to Trash”



3. This step, and #4 are optional steps to remove the settings file: Use the CMD-Click, click “Package Contents”



4. Expand “Contents” and “MacOS”, DoubleClick uninstaller.sh.app.command





Appendix – Supported Features

The following is a table of the currently supported features for Zebra's Browser Print.

Feature	Current Release
OS	Windows 7, Windows 10, mac OS X 10.10+
Browsers	Chrome 51+, Internet Explorer 11+, Edge, Safari 9.1.3+
Printers	ZD500™, ZD410™, LP2824+™, ZT230™, ZT420™, QLn320™, GX420™
Print Languages	ZPL II
Connection Types	USB and Network
File Size Limit	2 MB download to printer
Bi-directional Communications	^H and ~H ZPL commands (except ^HZA), and the following Set/Get/Do (SGD) commands: device.languages (read and write) appl.name (read only) device.friendly_name (read and write) device.reset (write only) file.dir (read and write) file.type (read only but must give an argument) interface.network.active.ip_addr (read and write) media.speed (read and write) odometer.media_marker_count1 (read and write) print.tone (read and write)
Image Printing	Yes (JPG, PNG or Bitmap)

Document Control

Version	Date	Description
1	August, 2016	Initial Release
2	November, 2016	mac OS X and Network Version 1.2.0
3	January, 2017	Updated images, fix typos

Disclaimer

All links and information provided within this document are correct at time of writing.

Created for Zebra Global ISV Program by Zebra Development Services.