

Introduction – The purpose of this note is to provide installation instructions and comments on a patch for the CQ/X Client software. The patch applies to version 1.8.0 of the software and is provided to implement the enhancements and fix the problems described below.

Previous Patches – This is the sixth patch for version 1.8.0. Users of version 1.7.9 that have installed all of the patches for that version and Patch 180-01, 180-02, 180-03, 180-04, and 180-05 can apply this patch without downloading version 1.8.0. Other users should first download and install a full copy of version 1.8.0 from www.no5w.com then apply Patch 180-01, 180-02, 180-03, 180-04, and 180-05 followed by Patch 180-06.

Installation – In addition to these notes the zip file associated with this patch contains a setup file for automatically installing the patch in C:\ProgramFiles\CWSoft\. **WARNING: Please note that the setup file assumes that you have installed the program in C:\Program Files\CWSoft\.** If this is not the case you can still run the setup but following this you will need to manually copy each of the files to their corresponding directories in your location. Here's a list of the files contained in this patch and a description of where they will be installed. On a Win 7 system the directory Program Files referenced below will be Program Files (x86). CQ/X is a 32-bit application.

File	Installation
CQXClient.exe CabrilloTags.txt	These are the main executable and a file containing the Cabrillo tag definitions. They replace the files of the same name in the main directory which in the standard installation is C:\Program Files\CWSoft\CQXClient\
TQP.DLL	This is the DLL that is used with all state QSO parties. It replaces the file of the same name in the ContestDefns subdirectory which in the standard installation is C:\Program Files\CWSoft\CQXClient\ContestDefns\
CHE_Poly.txt CHE_PolyXY.txt LAB_Poly.txt LAB_PolyXY.txt MGY_Poly.txt MGY_PolyXY.txt	These are the polygon files for Cherokee, Labette, and Montgomery counties in southeast KS. They replace files of the same name in the KSQP_Polygons directory which in the standard installation is C:\Program Files\CWSoft\CQXClient\ContestDefns\KansasQsoParty\KSQP_Polygons\
ShowActivityUsingGoogleMap.pdf	This is a revision of the document of the same name that resides in the Documents subdirectory explaining the steps required to post activity information on the web in the form of a Google Map. It resides in the following directory C:\Program Files\CWSoft\CQXClient\Documents\
CQX-Driver.apk	This is the file that implements the Android device end of the Driver interface to allow communication of certain status information to the driver wirelessly via an Android phone or tablet. It is a new file which resides in a new directory (Android) located on the following path C:\Program Files\CWSoft\CQXClient\Devices\Android\

Problems Addressed/Enhancements – The following problems/enhancements are addressed.

Problem/Enhancement	Description
The status indicators Contest Mismatch and Op ID only apply to networked operation but are giving false alarms showing red even in non-networked situation.	This has been fixed.
During the preparation of KMLs showing activity it would be nice to flag counties that are misspelled since they do not show up on the	This has been implemented.

resulting KML.	
County detection in Cherokee county KS at the boundary with MO does not occur until about 3 miles into Cherokee	This has been fixed.
An incorrectly formatted log entry will sometimes cause the program to hang on start up	This has been fixed. Incorrectly formatted log entries are removed from the log and written to an error log for review and correction. Review/correction of items in the error log can be performed using the menu item File Review Error Log.
Station activity information for each county on the activity map could use some better formatting	Station activity information is now presented in tabular form in the pop-up balloons for each county.
It would be nice if information of interest to the driver (distance to next turn, etc) could be provided wirelessly to the driver's cell phone.	This has been implemented for Android devices. A short description of how to set up this feature is described on the next page.

Setting up the Driver Interface – As mentioned in the above notes this patch introduces the capability of interfacing an Android phone or tablet to CQ/X to obtain information of interest to the driver.

What Information is Supported - Here's a screen shot showing the information that is currently supported.

STATUS: ON-TRACK	Q/HR: 114
NXT WP: LT-US19-SR26E	00:07:12 7.2
NWP+1: S/R GILCHRIST	00:07:42 7.7
NWP+2: LT-SR26-US19E	00:10:42 10.7
CUR CTY: DIX	01:00:47
NXT CTY: LEV	00:06:19 6.32
Q/M/S: 89	37 12358

The first section containing Status and NxtWP is the section of most usefulness to the driver. The display indicates that the driver is on-track following the planned route, that the next waypoint is 7.2 miles down the track and is a left turn from US19 to State Route 26 East and at current speed it should be reached in about 7 minutes (7:12). Following that a stop and run (S/R) is scheduled for Gilchrist county with the planned stopping point 7.7 miles down the track. It is also shown that the current county is DIXie and that the operator has been in DIXie for over an hour – so no need for looking for a stopping point in DIXie. The last line indicates the number of QSOs, Mults, and total score.

What Do You Need - Here is what is needed in order to implement this interface.

- A wireless router that can be powered from 12v dc
- A wireless- capable laptop
- An Android device that supports wi-fi
- The CQX-Driver.apk file supplied with Patch 180-06
- CQ/X patched through 180-06
- In order to have available the real-time data required by the interface you will need to have planned your route using the methods described under menu item **Help | Use Google Map to Create Crossing File** and you should have developed a set of way points that identify the points along your route that you want to monitor. Naming of way points should be done carefully using the minimal length name that still conveys the meaning due to the small screen of the Android device.

Setup Steps – Here is what you need to do to get the interface going after installing the apk file on the Android device and installing Patch 180-06 on the laptop and powering up the router, laptop, and Android device.

1. Connect the laptop to the network implemented by the router
2. Connect the Android device to the network implemented by the router
3. Use ipconfig from the laptop command prompt making note of the IP Address.

4. Start up CQ/X and perform the normal startup activities. Once data is being received from the GPS use the menu item GPS | Enable Driver Network to start the CQ/X end of the interface.
5. A dialog will appear on CQ/X asking which port number to use. The default is 777 and that has worked well during development and testing. If that port is unavailable you might try something in the range above 49152 (e.g. 49200). Make a note of the port number.
6. Start up CQX-Driver on the Android device. Use the Connect menu item to begin the connection using the IP Address and Port number when prompted.