

QR system setup notes v2

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A QR badge scanning system has been developed to scan and record QR codes from club member badges. The weekday, time and date are added to each scan record and each scan is labelled as "in" or "out" for the current date. Optional features include venue derived from weekday (for BCLD), and vax status (for IAA).

Any computer (PC or mac) can be used for the QR system, but the recommended device is a small netbook or laptop. There is no need for a lot of RAM, 2GB will do. The HDD or SSD likewise can be very modest, 50GB would be plenty. A suitable refurbished laptop should be available for around \$100. Additional hardware needed is a presentation mode QR scanner, and optionally a hand held QR scanner. Each of these costs \$40-\$50 and can be obtained via e-bay or elsewhere.

The OS can be anything, but should preferably be Raspian, which can be obtained from - <https://www.raspberrypi.com/software/> . It can be installed on any computer. Create a bootable USB or SD drive with the ISO file on it, and boot from that drive to install Raspian.

When the OS is installed, copy the QRentry64web.odt file from <https://rbh49.com/software.php> (QR) and paste it to the Raspian Desktop. The writer document runs entirely from a macro which is triggered by a badge being scanned when the Input Box is open.

Raspian includes Libre office, which is used to display the document. On other Oss you may need to obtain Libre Office separately (freeware). Enable macros in Libre Office by selecting Security in the Libre Office menu, then macro security, and set to Low. Enable macro recording in Libre Office Advanced Options.

Install Java Runtime Environment.

Open the QRentry64web.odt file, use Tools - Macros - Edit Macros and navigate to QRentry64web.odt - Standard - Module 1.

Edit - Select all (PC CTRL+A) and copy (PC CTRL+C).

Now select My Macros & Dialogs - Standard - Module 1 and open it.

Edit Paste (PC CTRL+V) the macros here.

Now the macros will run when a scan is made into the input box. Note that data can also be typed into the input box if the attendee has no badge. Comments can be added also, end them with |.

A few formatting tweaks follow (they may be already done in the installed document) -

Set the view size to accommodate the width of the data. Set the tabs to correctly space the data items across the page. Typically set tabs at 4.5, 7.3, 8.1, 10.3, 12.1, 13.3 cm and view to zoom 150-300%.

Make the document open on power up as follows (instructions are for Raspian OS) -

Open a terminal window  and type at the \$ prompt -

```
sudo nano /etc/xdg/lxsession/LXDE-pi/autostart
```

If editing access is denied (as I have seen in Ubuntu), enable root access using -

```
sudo -i
```

When the nano editor opens the autostart file, add the following to the end of the file -

```
xdg-open /home/pi/Desktop/QRentry64web.odt
```

Press CTRL+O to output the edited file and then CTRL+X to exit the nano editor.

Now the OO Writer document (.odt) should open in Libre Office when the computer is powered up, with the cursor in the cell that was selected when it was last closed, ready for new scans.

From power on to ready-to-scan takes less than 2 minutes on a small netbook computer, a lot less than that on a better laptop.