

Getting started with the Virtual Radar Client (VRC)

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This guide is for anyone who wants to start observing on Vatsim. It sets out the minimum configuration and software needed to observe ATC using the Virtual Radar Client (VRC). The official Quick Start Guide, Command Reference List and User Manual can be found at www.metacraft.com/VRC/. Further information about controlling can be obtained from www.vatsim.net via the link "New ATC start here". The examples given are for observing in the UK.

Setting up VRC

1. Download VRC (xxxx.zip) from www.vatsim.net via the Controller Resources link or from the developers' web page www.metacraft.com/VRC/
2. Unzip and install into the default directory, or a directory of your choice. It is strongly recommended that you install the VRC sound set from the optional components.
3. Once VRC is installed the Help menu links directly to the online Quick Start Guide, Command reference list and manual. The Quick Start guide assumes some knowledge of ATC procedures, so if you find it is not detailed enough, use this Observers Guide for more detailed information.
4. Download the radar map for the area you want to observe. These maps are known as sector files, and are available on the websites of the individual VATSIM divisions (see the links on the right hand column of www.vatsim.net). The UK sector files can be found at www.vatsim-uk.org on the Downloads page. The UK area file covers the whole of the UK and can be found in Downloads>sector files>CTR-TMA. You may also want to download a more detailed file for particular airports.
5. Sector files can be unzipped to the VRC directory, which is the default location for VRC to search for them, or you can create a folder for sector files, and unzip into this.
6. Before opening VRC make sure you are connected to the internet, so that server information can be downloaded and a version check completed (this happens automatically when VRC is launched). If you are not connected, a Windows prompt box should appear. However making a connection at this stage may result in the cached server list being used rather than a downloaded one.
7. Open VRC. You will see the Profile Selection dialog.
8. Choose the Default profile by double-clicking on it, or on OK, or by pressing the enter key.
9. The radar screen will appear.
10. Choose **Audio devices...** from the settings menu. Select your input and output devices appropriately. Use the "Wave" option initially, but if the sound quality is poor try "DirectSound". Set both volumes to 100%.

11. If you wish to set up your microphone now, choose **Calibrate Mic...** from the Settings menu. Follow the prompts to calibrate your microphone input level. The default Push-to-Talk key is the RIGHT_CTRL key.
12. From the **File** menu select **Open sector...** Navigate your way to the unzipped sector file and open it. Your radar screen will show a map of the area. The default settings are adequate to start observing, but feel free to experiment.
13. Now continue with the Observers Guide.

Observers Guide

Logging on

1. Before opening VRC make sure you are connected to the internet, so that server information can be downloaded and a version check completed (this happens automatically when VRC is launched). If you are not connected, a Windows prompt box should appear. However making a connection at this stage may result in the cached server list being used rather than a downloaded one.
2. You will see a message at the bottom of the screen " Loading Network Information ... "
3. If you are connected properly you will quickly receive a message "Network info loaded. <nn> servers found", followed shortly by a report on the Version Check.
4. Choose **Connect...** from the File menu. A dialog box will open.
5. Enter your callsign. When you are controlling this will be the callsign of your position, but as an observer you can choose your own. It is recommended that you choose something by which you can be recognised online, such as your initials or first name, followed by **_OBS**. e.g. RUTH_OBS, RM_OBS.
6. Enter your real name (as registered with VATSIM) in the appropriate box.
7. Set the Facility Type to Observer.
8. Set the Rating box to your official Vatsim rating. If you are just starting out this will be Observer. You can only log on at a higher rating when you have passed the appropriate exam. Observers can watch and can take part in private chats, but must not communicate on ATC radio frequencies.
9. Enter your CID and password.
10. Choose any one of the servers from the drop down menu to log in
11. Press **Connect**, and you will be connected to VATSIM.
12. You will now see aircraft positions appear on the map. You have successfully logged on!

Observing a controller

You now need to choose a controller to observe. The best position for a beginner to observe is a Tower (TWR), because these control all the take-offs and landings, and if there is no Ground controller available, they will also give the clearances and taxi instructions. You can also observe the Approach (APP) and En-route (CTR) controllers, who will be giving specific headings, flight levels and speeds for aircraft already in the air.

Look at your radar screen and find an airport that looks reasonably busy. You can identify the airports by turning on their labels. First choose **Colours...** from the **Settings** menu, and change the Airport colour to one of your choice. From the **View** menu, and ensure both **Airports** and **Airport Labels** are selected. This will display the ICAO code of each airport. There is a detailed database of ICAO codes at www.airlinecodes.co.uk . If you cannot see the codes because the colour is too dark select **Colours...** from the **Settings** menu, and change the Airport colour to one of your choice.

To see a list of active controllers and observers in your visibility range, click on **Controller List** in the **Tools** menu. Right double-clicking will move your visibility centre to the position of the cursor.

What do the controller codes mean? Each controller has a location and a facility identifier. For example, Stansted is EGSS, and Luton is EGGW, so Stansted Tower is EGSS_TWR, and Luton Ground is EGGW_GND. En-route controllers use the suffix CTR, sometimes following a geographical identifier. Other abbreviations you may see are T(rainee), M(entor), R(adar), and X for examiners. Detailed information about callsigns can be found on the Divisional websites.

Observing a controller

1. In order to observe a controller you need to connect to his ATC frequency using the Communications Panel.
2. The Controller List shows both the controller's callsign and the ATC frequency e.g. EGSS_TWR 123.800. Make a note of both.
3. Each controller uses a voice room, identified by the server IP address or host name and the controller's callsign e.g. 80.249.98.88/egss_twr. To find out which voice server a controller is using, you need to read his ATIS (Automated Terminal Information Service).
 - a. Type **.atis <callsign> <enter>** in the Command Line (the narrow window at the bottom of the VRC screen). The **.** is important.
 - b. You will see the background of the callsign in the Controller List change colour. Double-click on it.
 - c. A chat window will open with the ATIS in it. You can reposition the window or close it in the normal manner.
 - d. Make a note of the IP address/host name and voice callsign; note the latter is sometimes different from the text callsign. In some areas the radio frequency may be used instead of a callsign.
4. Open the Communications Panel by clicking on the first item on the left in the Button Bar at the top of the screen.
5. Click on the first box in the column **Name**.
6. In the dialog box enter the position name (the name you want on the button e.g. EGSS_TWR), the frequency (e.g. 123.800), the voice server (e.g. 80.249.98.88) and the Voice Channel (the voice callsign e.g. EGSS_TWR). Click on **Save Changes**.
7. To connect to the controllers frequency on text only, select the box under Rx. To connect to the voice channel select HDST or SPKR as required. You will now receive both text and voice. Do not select TX as this is for transmissions by active controllers.
8. You can check you are connected correctly by looking at the Frequency Button at the right end of the Button Bar. This will show the frequency, the type of connection (Text only, HDST or SPKR) and the Rx box should be green.
9. You may get a better view of what is going on if you use the sector file specifically designed for the airport you are observing. This shows the taxiways, runways, buildings and boundaries in detail. Sector files can be found on the relevant Divisional websites.
11. You may wish to experiment with the settings using the menus at the top of the screen. See the User Manual for details. These can then be saved via **Save profile as..** in the **File** menu.

Using private chat

Observers can communicate with other people online by using the private chat facility.

Receiving a text call

1. If you have an incoming message you will hear an alerting sound. You can change the sound used from the **Sounds...** item in the **Settings** menu.
2. If you don't have the controller list open, open it from the **Tools** menu. The controller calling you will have his callsign highlighted.
3. To view the message, double-click on the callsign. You can also select the callsign by typing the alphabetical ID to the left of the callsign and then pressing the controller select key. This will be \ if you haven't changed the default setting.
4. A chat window will open with the incoming message displayed. The identity of the caller will be displayed in the title bar of the window.
5. To reply just type your answer in and press <enter>. If you have changed the focus back to the radar screen, the Tab key toggles the keyboard focus between the Primary Display and the last chat window that you used.
6. You can roll up with chat window by double-clicking on the title-bar. Do the same again to reopen it. To close a chat-box, press the **Esc** key if you want to keep the chat history. The messages will reappear when you reopen the chat-box. You can also close with window using the X in the top right corner; this will wipe the chat history.

Initiating a text call

1. To open a chat-box with anyone in the controller list double-click on their callsign.
2. The chat window will appear. Anything you type will then be sent to that individual
3. Their reply will appear in the chat-box.