## Win-Test Networking Requirements for WRTC2014 Live Scoreboard

## **Overview**

The WRTC2014 Live Scoreboard will be the first fully automated near-real-time scoreboard in the history of WRTC. Each station will be equipped with a small "Score Collection Computer" (or SCC) that will detect score data being shared between your PC's and upload that data to the Live Scoreboard server.

WRTC2014 will be providing each team with an Ethernet switch and a linear power supply, both of which have been tested for RFI/EMI. The Score Collection Computer will also be powered by the same power supply. *For planning purposes, this equipment will take up only a single AC outlet on your two six-outlet AC power strips.* 

Your referee will transport and set up the Score Collection Computer and Ethernet switch upon arrival at your designated operating site. We will have tested and certified this equipment in advance of WRTC2014.

You will provide:

- Two (2) straight 7' (or longer) Ethernet cables (one for each of your computers)
  - You should test your cables prior to packing them!
  - You should also bring a third straight Ethernet cable as a spare
- An Ethernet "crossover cable" (emergency backup in the unlikely event the Ethernet switch fails)
- Your own small Ethernet switch (3 ports, minimum) as an emergency backup (optional)

Please keep in mind that an Ethernet switch is *not* a router. The Ethernet switch performs the same function as a crossover cable, but because it has multiple ports it allows the Score Collection Computer (SCC) to connect to your network. Another way to think about the switch is that it's a "crossover cable tee connector." The SCC is a passive device on your network (i.e., it does not send *any* data packets on your logging network).

This diagram shows the physical network connections required for your network setup:



No additional software will need to be installed on your station PCs. However, Win-Test has a score broadcast setting that you need to configure when you create your contest log. The configuration is very simple and only involves a couple extra steps beyond the normal networking setup that everyone must do to configure Win-Test for multi-operator use.

## **Setting up your Computer Network Connections**

Set up Win-Test on each of your logging computers, following the Win-Test documentation instructions. When you set up your local area network, you *must* use the following IP addresses on your computers – set them up as static IP addresses:

Computer 1: 192.168.73.1

Computer 2: 192.168.73.2

We also strongly suggest that you disable the network firewall in order for broadcasts to work correctly. You may also want to disable virus protection prior to the contest and then enable it again when the contest is over.

After you have set up your IP addresses on each logging computer, make sure that Win-Test has the correct Ethernet Network IP address set correctly. Perform the following steps:

- 1. Open Win-Test and choose Options...Configure interfaces...
- 2. In the "Interfaces configuration" window, check the Enable Ethernet Network checkbox

	<b>.</b>				
COM1	Network	•	9600 8-N-1	Configure	LPI Contigure
COM2	Network	•	9600 8-N-1	Configure	CW PTT ON delay (ms): 50
COM3	Radio 1	•	38400 8-N-1	Configure	Ethemet
COM4	Network	•	9600 8-N-1	Configure	Enable Ethernet network
COM5	Network	-	38400 8-N-1	Configure	Broadcast address: 192.168.73.255 By default
COM6	Network	•	9600 8-N-1	Configure	Port number:
COM7	Network	•	9600 8-N-1	Configure	Network protocol
COM8	Network	•	9600 8-N-1	Configure	Advanced settings
COM9	Network	•	9600 8-N-1	Configure	Voice keyer
COM10	Network	-	9600 8-N-1	Configure	Speakers (Realtek High Definiti
COM11	Network	•	9600 8-N-1	Configure	Mute the microphone input when the DVK is playing
COM12	Network	•	9600 8-N-1	Configure	Mute the microphone input when the DVK is not playing
Fransceiver	rs				
Radio 1: [	K3 Elecraft	- Do	n't poll 📃 Use	CI-V Transceive	Polling rate (ms): Auto 🔹
Radio 2: [	_	- Do	n't poll 📃 Use	CI-V Transceive	Polling rate (ms): Auto 🗸

- 3. In the "Broadcast address" window: enter 192.168.73.255
- 4. In the "Port number" window: enter **9871**
- 5. Click OK

## Additional Steps Required for Broadcasting Score Data

When you set up Win-Test on both PCs, you selected one of the computers to "Enable time distribution across the network." Perform the following steps on *that PC only*:

- 1. With your WRTC log open, open the score Summary window by choosing Windows...Summary.
- 2. Hover your mouse over the Summary window and right-click to open the Summary popup menu.

Summary						?×			
BAND	SSB	CW	ITU	HQ	POINTS	AVG			EU NA
160	17	0	9	2	65	3.82			Elapsed tir
80	0	6	4	1	20	3.33			12
40	0	10	3	4	26	2.60			
20	2	7	5	2	19	2.11			Tim
15	2	4	4		Copy as ima	ge			Time
10	22	0	1		Copy as text				
TOTAL	43	27	36	1	copy as terre				ast date
	F IN	IAL S	CORE		Broadcasting	g on the net	work 🕨	🖌 En	able
					Include dup	es in QSO co	ounts	Se	nd now!
					Font size (12	Serif)	•	Pe	riodicity
<b>.</b>					Title bar col	or	•		Ail b
Stn					Colors				
R1					00000				
R1					Help				1 mult v
D1									

- 3. Select "Broadcasting on the network" to open the next sub-menu. If there is no checkmark to the left of the Enable menu item, click on Enable. (If the "Broadcasting on the network" menu item is disabled, return to the Contest Configuration window and make sure you have selected "Enable time distribution across the network.")
- 4. Set the score posting interval by right-clicking over the Summary window again and select Broadcasting on the network...Periodicity...
- 5. In the Broadcasting Periodicity window, enter 5 (for 5 minute interval)

Broadcasting periodicity								
Broadcasting periodicity (between 1 and 60 minutes):								
3								
OK Cancel								

6. Click OK