Realtime Rack:

Troubleshooting the Snapshot recall Ethernet connection

This document gives advice about how to ensure trouble-free operation of the Ethernet snapshot link from the console to the Realtime Rack control system.

Background

With the first Realtime Rack-compatible software release for the Vi consoles (V4.8.0/4.8.1) and the original V7.4.3 Realtime Rack application from UA, some users experienced problems getting a stable ethernet connection between the console and Mac computer. Frequent ‘Lost Connection’ messages were displayed in the console’s error log window, and snapshot recall could become very slow. This document gives a checklist of things to do if you are still experiencing this problem.

- Make sure latest Vi software is installed (6.2.0.274 for all Vix00 and x0000, and V4.8.2.234 for Vi1, 2, 4 & 6). This software is available from the various product pages: [http://www.soundcraft.com/products/vi3000](http://www.soundcraft.com/products/vi3000), [http://www.soundcraft.com/products/vi6](http://www.soundcraft.com/products/vi6)

- Download the latest UA Realtime Rack software release, V8.6.3 (released November ’16)

- If you wish to continue running the previous RTR release, 7.4.3 (not recommended unless there is no time to upgrade), make sure that the patch v1.0.1 for Realtime Rack has also been installed over the top of the existing UA software on the Mac, this is available from the UA support website: [http://www.uaudio.com/support/realtime-rack-support](http://www.uaudio.com/support/realtime-rack-support)
• Make sure you have one of the following OS installed on the Mac: Mavericks 10.9 (older OS versions are not supported), Yosemite 10.10 (must be 10.10.3 or later, otherwise it won’t be possible to get an Ethernet connection at all). El Capitan 10.11 (10.11.1). Sierra (10.12) is only supported by the latest RTR software, 8.6.3.
• On the Mac’s Network settings dialogue, under Ethernet port properties, go to the Advanced button and then ‘Hardware’ tab and change to ‘manual’ setting (default is ‘auto’), then change the Speed selection to 1Gbps* and the Duplex setting to ‘Full duplex with flow control’. Make sure the option with ‘...and energy saving mode’ is NOT selected! This causes the snapshot link to lose connections.
*For Vi1 or Vi6 consoles, the speed selection should be set to ‘100Mbps with flow control’, as these consoles have older computers with 100Mbps Ethernet interfaces.
• Uncheck the AVB/EAV mode checkbox (note, screenshot shows this in default ‘checked’ state)
Note that if you are connecting the console’s Ethernet connection to the Realtime Rack’s thunderbolt port, as shown in the hookup diagram supplied with the Realtime Rack, you will need to select ‘Thunderbolt Ethernet’ rather than ‘Ethernet’ in the left pane of the Network Settings box. There should be no difference between the performance of the control link using either of these methods.

• In the Realtime Rack user guide (available from our website or the UA site), page 35 has additional info about various Mac power management settings that are needed for reliable operation. Ensure you have applied these settings.
http://www.soundcraft.com/products/realtime-rack -see downloads page for UG.

• When trying to get a valid connection to the Realtime Rack, as indicated by the green UA indicator on the console, remember that the Realtime Rack application has to be running for this to work – it’s not enough to have the console and Mac connected to each other and the Realtime Rack connected to the Mac... The UA Enable button in Menu-System-Network-Realtime Rack page of console needs to be ON, but note that HiQnet enable button in the Network-Address page doesn’t have to be ON unless you are also using ViSi Remote and/or AKG Mic monitoring.

• You can still use the Realtime Rack with the console without the Ethernet connection being made, any UA snapshots you have stored in an existing Cue list will appear with a red line through the blue UA snapshot icon, indicating that these will not recall. You may also get periodic ‘No UA Device Available’ messages in the log. This will not affect operation of the console, and these messages can be eliminated by switching off the UA Enable button in the Menu-System-Network-Realtime Rack page.

IP address setup
For the snapshot link to work, it is essential that a valid IP address setup is made with the console and Mac computer. This means that the IP addresses must be in the same subnet, but not exactly the same address. Once an IP address setup is made, the UA Enable button must be switched ON and if the address setup is correct at both ends and the Realtime Rack application is running on the Mac, a green UA indicator should be seen in the top right corner of the console’s master screen.

Whether to use fixed IP address or DHCP mode?
As far as connection reliability is concerned, it does not matter which of these two methods for assigning IP addresses is used. Typically a fixed address setup is used if there are only two devices and the Realtime Rack and Vi console are connected to each other via a direct cable connection, but a self-assigned IP address can also be used in this type of setup. In this case, select DHCP mode on both the console and the Mac, and wait up to 1 minute for an address (address range 169.254.xxx.xxx) to be automatically assigned to both the console and the Mac. If a wireless router needs to be included in the Ethernet network, because ViSi Remote iPad control/and/or VM2 microphone monitoring is required, then the console and Mac are connected to the router and DHCP mode can be used on both console and Mac, assuming the router has a DHCP server enabled. If the router does not have a DHCP server enabled, or a switch is being used then a fixed address must be used for the console and Mac. Select MAN mode in the Menu-System-Network-Address page on the console, set the address and subnet required to match the address entered on the Mac in ‘manual’ mode, and press the SET button.
For further information, please see the following web pages:


Realtime Rack start page, including main software download link: http://www.uaudio.com/realtimerack/start

Realtime Rack support page for Realtime Rack v1.0.1 patch (only necessary for old version 7.4.3 RTR application, and for software support from UA): http://www.uaudio.com/support/realtimerack-support