Upgrading to Roomwizard 4.5 FW

Key Takeaways

The upgrade process may take as long as 30 to 60 minutes per unit for firmware version 4.5

Upgrades are done through the RoomWizard Administrative Console 1.2 (RWAC 1.2)

If you have RWAC version 1.0.18 installed, uninstall it prior to installing RWAC 1.2.

If you have a list of RWs under control of RWAC already established and grouped, save this list using the Save feature in the File menu.

RWAC must be run on a system with Administrative Privileges, Internet and FTP connectivity.

RWAC must have network access to the RWs you wish to administer/control.

When starting RWAC, the default password is "roomwizard" (without the quotes). This can be changed in the view/options menu area if you desire.

RWAC is not known to be compatible with Windows 10.

RWAC 1.2 can be downloaded at techsupport.steelcase.com

What to Expect

Upgrading to 4.5 will involve the Room Wizard Admin Console (RWAC) tool. This tool will automatically upgrade your RoomWizards (RW20s) from any FW Version 4.1 or newer through all steps required to achieve 4.5 as the result.

When to Upgrade

It is generally expected that the upgrade process should occur outside of the normal business day. Overnight may be the right time to start an upgrade and leave it as the process is time consuming. RWAC is intended to allow for "hands off" upgrading. The results of the upgrade can be assessed the next morning. Please refer to the "Best Practices" section later in the document to determine how many RWs to include in your Upgrade Activity at any one time.

Time Expectations

This will greatly depend on the network speed and the number of RWs involved in the upgrade process. FW Patches (which are quite small) will take far less time than a full FW Upgrade Image. The following are some expected time range;
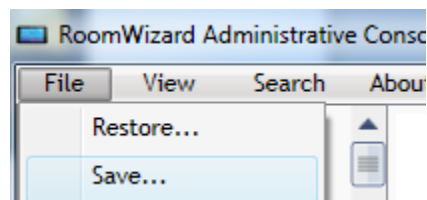
- Downloading a FW Image from the official Steelcase FTP site is bandwidth-specific and will vary from site to site. Generally, about 5 minutes is a reasonable lower boundary although the process could take up to 20-30 minutes on a slow connection. There is a progress bar to assist in monitoring the progress of this activity. This download will only occur one time. Any subsequent upgrade attempts which involve the same Image will use a locally stored version instead.

- Uploading the FW Image to the Master FTP RW will depend on the network connection between the RWAC and the target RWs. This activity will occur one time for each group of RWs upgrading to a particular FW Version. This can take anywhere from 10 to 40 minutes and will also have progress bar to assist in monitoring this activity.

- Once the Image is present on the Master FTP RW for a group, the rest of the RWs in the group will then access the files from the Master. This will depend on the network bandwidth between the group RWs and the Master RW and on the number of RWs that are accessing the Master at a given time. There is currently no progress bar indication of the status of this operation and wait times can be 10-50 minutes. Patience is required during this step.

- Rebooting times will also vary depending on which FW Image has been installed. Typical Reboot times range from 3-4 minutes when dealing with patches to 15-16 minutes for the first reboot of 4.5 after an upgrade. If for any reason the completed reboot process is not recognized by the RWAC, it may result in a time delay until an 18 minute timeout has passed. This should not impact the success of the process, but will create an additional delay.

As an upgrade may occasionally fail on the first attempt and/or there can be multiple steps required to upgrade from an older version, such as 4.1, the times stated above can be multiplied accordingly. The expectation would be a multiple hour process for most Upgrade Activities.

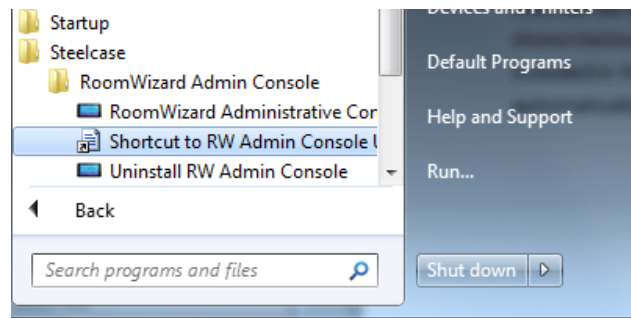## Install Room Wizard Admin Console (RWAC) 1.2

You may already have RWAC version 1.0.18 installed. If so, you should uninstall it prior to installing RWAC 1.2.

If you have a list of RWs under control of RWAC already established and grouped, you should use the Save feature in the File menu to retain a copy of this list.

RWAC 1.2 can be obtained at techsupport.steelcase.com

Once RWAC 1.2 is installed, familiarize yourself with the User Guide for RWAC 1.2 which is installed along with the executable package and should be listed in your start menu.

NOTE: In order for the Automatic Upgrade to proceed, it is required that the RWAC be run on a system with Administrative Privileges and has Internet and FTP Connectivity as it will need to download the FW Images required for the Upgrade.
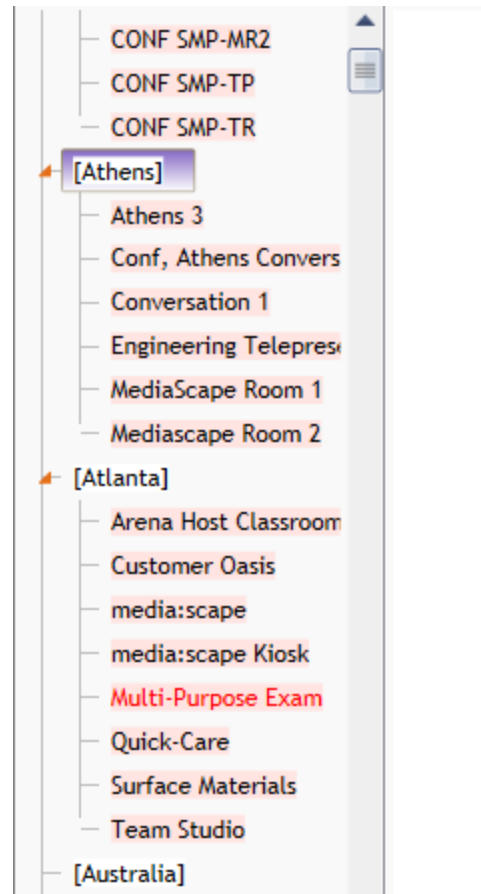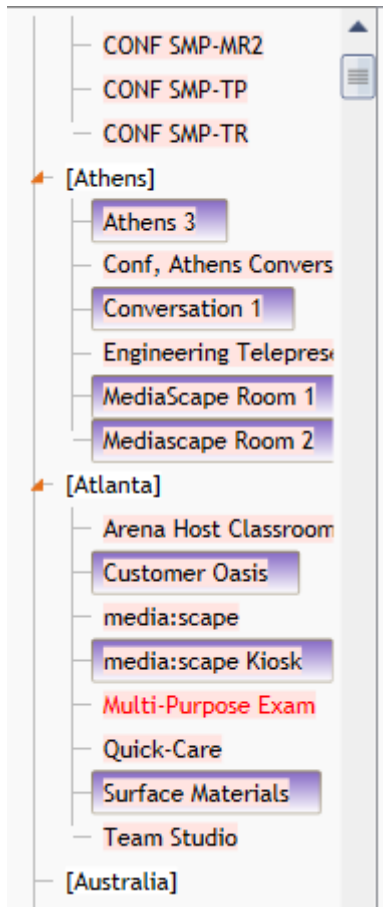
Run RWAC

When you first start RWAC, you will be asked for a password. The default password is "roomwizard" (without the quotes). This can be changed in the view/options menu area if you desire.

RWAC must have network access to the RWs you wish to administer/control.

Please refer to the "Best Practices" section below prior to attempting your upgrade.
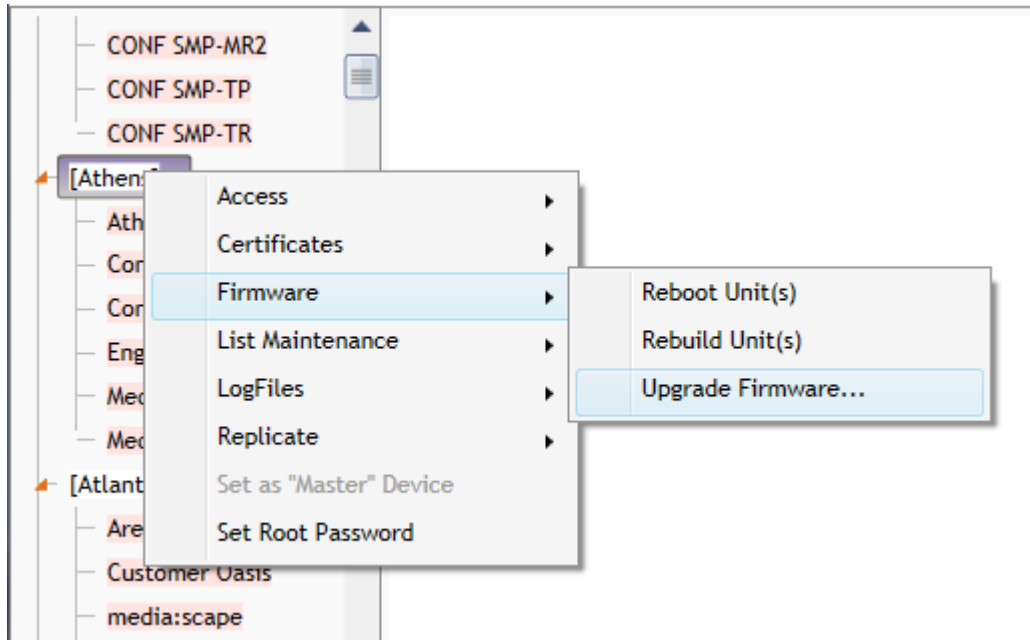
Select RWs to upgrade

RWs can be selected as individuals or as an entire group if you have them so organized, respectively shown below. By selecting RWs individually, as shown on the left below, only those RWs selected will be included in the upgrade process initiated with the next step. By selecting the Athens group, it will automatically include all RWs in that group.
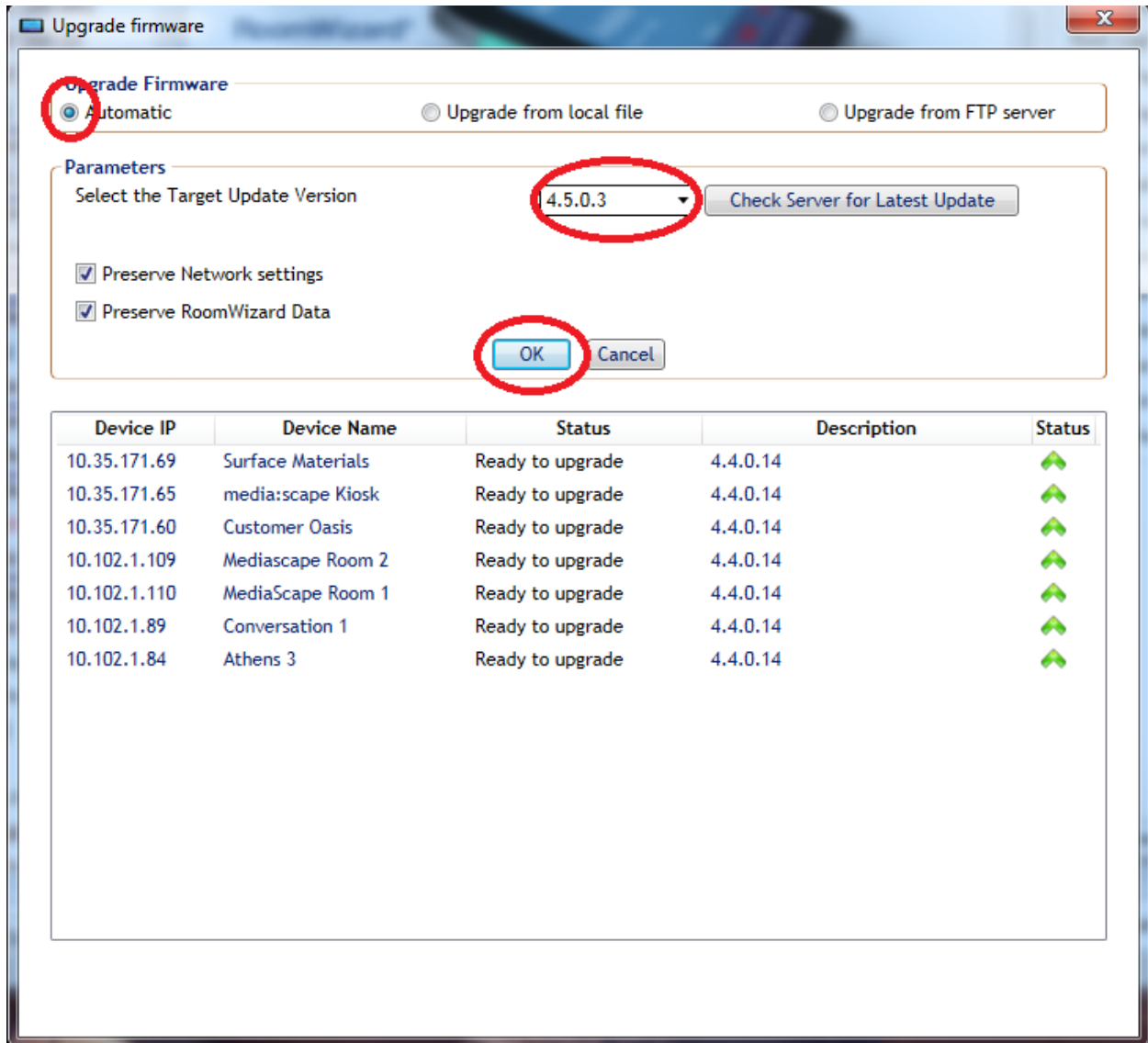
It does not matter if you select RWs of differing FW Version. RWAC logic can handle and appropriately deal with upgrading each RW appropriately to its version. As shown in the examples above, it is likely that the RWs in the list will have a Pink Background. This simply indicates that the RW is out of date with the most current FW Version available.

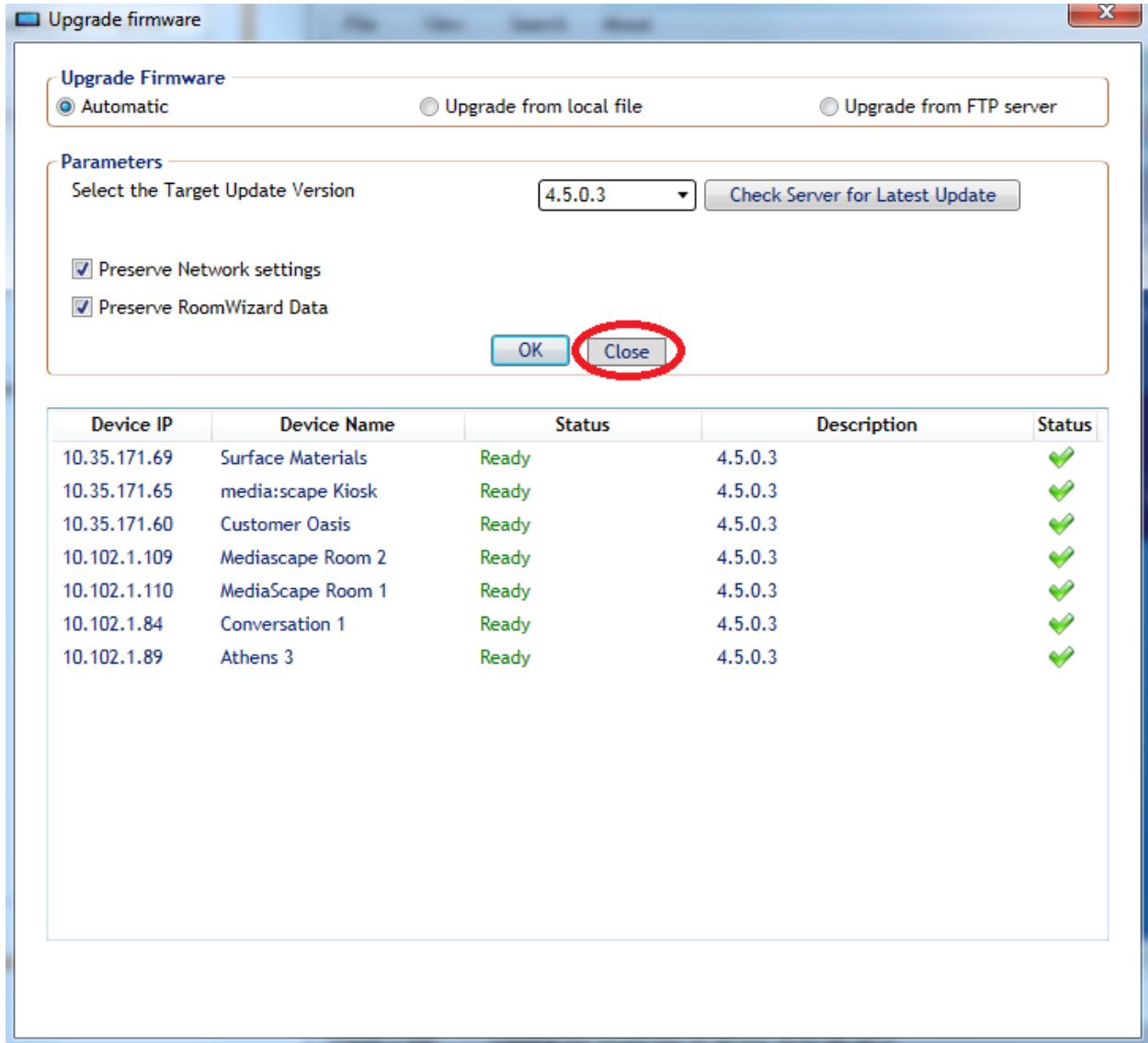## Navigate Right Click Menu to Firmware Upgrade

Use default options on FW Upgrade dialog and click OK

This will initiate an Automatic Process to upgrade all of the selected RWs (no matter their starting FW Version) through the appropriate steps required to bring them up to date with the latest FW Version.

Wait for Upgrade to complete and the "Close" button to become enabled

The process can take a very long time and you may be tempted to exit the Upgrade Dialog via the Red X in the upper right of the dialog. Please DO NOT do this as it can leave the RWAC in a confused state as to what Upgrade Conditions each RW is actually in and leave active processes underway in the background.

Best Practices

This section will instruct you on certain ways to use RWAC to avoid issues.

General

Do not run multiple versions of RWAC on the same computer at the same time

Do not attempt to modify the same RWs from multiple versions of RWAC even when run on different computers.

When doing searches for RWs, limit the subnet to a single wildcard (e.g., 255.255.255.0) otherwise the search will take far too long. In this case, the 0 field reflects a wildcard for the last field of the IP (which includes all IP Addresses from 0 to 255 in that spot). If, for example, you enter 255.255.0.0, then that will include all IP Addresses from 0 to 255 in the 3rd spot along with all IP Addresses for each of those 256 3rd spot values with 0 to 255 in the 4th spot resulting in 65535 total IPs checked.

Form RW groups which logically can be limited to 30 or fewer.

When starting RWAC, wait until the application has completed updating the status of existing RWs in its list. This can take several minutes when there are very large numbers of RWs involved. Please give RWAC ample time to "settle" before proceeding with other operations.

Upgrading

Do not exit the Upgrade Dialog using the red "X" at the upper right of the dialog.

If the spinning ("working") icons are active, then you should assume RWAC is still active.

During the Upgrade process, the display may appear frozen for several minutes at a time. This can result in the spinning ("working") icons not appearing active. Unless the condition (completely frozen appearance with no icon activity either) persists for more than 10 minutes, you can assume RWAC is still active so please leave it working.

Under some circumstances, the RWAC may suggest that the upgrade has succeeded but in fact the RW will have encountered an error and will therefore still be at the previous FW version. This can be noticed by a non-white background color on the RW in the list view. If you see such RWs in the list, you can select them (individually or as a group of like circumstance RWs) and attempt another Upgrade on only those units. A future version of RWAC will help catch and manage these types of conditions automatically.

When using the "Local File" option for Upgrading FW, limit the number of involved RWs to 20 or fewer.

Security

RWAC has a single login protection when the application is started. As some operations may take a long time and you may end up leaving RWAC up and unattended, it is advised that you only use it on a system which is also password protected during absences at the system level.

Also, since RWAC stores credentials for the RWs it accesses, and that Room Wizards come with a well-known default password, you may want to change the default password on your Room Wizards (from RWAC). This will result in an RWAC version which can access your Room Wizards while the "off the shelf" RWAC app, if run by another user, would no longer have access to the Room Wizards unless they knew the new password.

Logs

Each time the RWAC Application is started, it creates and writes to a file called "Debug.log" located in the same folder as the RWAC executable. If at any time you have concerns which prompt you to want to capture log information which might be beneficial to pass back to Steelcase Tech Support, you can simply copy this log (even while the RWAC is still running).

It is important that you make a copy of the Debug.log file before starting a new session with RWAC as the file will be cleared each time the RWAC Application is started.

Compatibility

RWAC is not known to be compatible with Windows 10.

Troubleshooting

During the course of the Upgrade Process, RWAC may display a number of error messages. Under most circumstances, the RWAC Automatic Upgrade logic will account for these conditions and retry until the RW has successfully accomplished the current upgrade step. Some examples where this can occur are shown below and should not cause undue concern.

This will occur if the file being accessed from the Master Copy of the Upgrade Image is not successfully copied to a target RW. Generally RWAC resolves this automatically by recopying the Image.

If any of your RWs are starting from a FW Version earlier than 4.3, you may encounter this condition. Again, it is more of a status than an error and should be handled by normal RWAC processing.

Additionally, you might see similar reports which note the following which should also be handled by normal RWAC processing and should not cause undue concern.

1) Insufficient Space
2) MD5 Error

Under some circumstances, RWAC may not be able to figure out how to manage an error condition in an RW during the upgrade process. This can occur due to an actual error or due to loss of connectivity. Under these circumstances, it is advised that you simply reattempt the upgrade on the device, or group of devices and see if the results improve. To reattempt, you should allow the current upgrade to run through to conclusion and close the Upgrade Dialog. Please allow a few minutes for the newly upgraded RWs to update their FW Version information in the list structure. Then, you may either reenter the Upgrade Dialog with the same group of RWs (successfully upgraded ones will not be involved anymore) or you can hand select only those RWs which were marked as abandoned and retry them.

Some examples of abandonment are shown below.

Abandoned   Device is rebooting   ✖

In this particular circumstance, the RW might have successfully upgraded during the previous operation but not registered as rebooted completely. If this is the case, then the RW may show the proper FW Version upon reentry into the Upgrade dialog and no further process will be initiated.

Abandoned   Could not upgrade device.
                   Either password is incorrect or could   ✖
                   not connect to device.

Abandoned   Executing command on device
                   failed.For details check logs.   ✖

Abandoned   Uploading firmware failed on a
                   device. Check logs for details   ✖

Other causes for Abandonment exist and all should be handled the same as described in the original paragraph above.

After the Upgrade

Once an upgrade attempt has been completed, there should be an "in-person" inspection of all involved RWs. The about button should be pressed to ensure the RW is reporting as having the proper FW Version. Additionally, if any RWs appear in an unusual state, then they should be manually rebooted by pressing the reset button which can be accessed through a small hole on the underside of the RW toward the left of center. After rebooting, the About Button should be used to validate FW Version.

Failed RWs

If any RWs are not fixable by simply rebooting, then there are some further steps which can be taken to recover them.
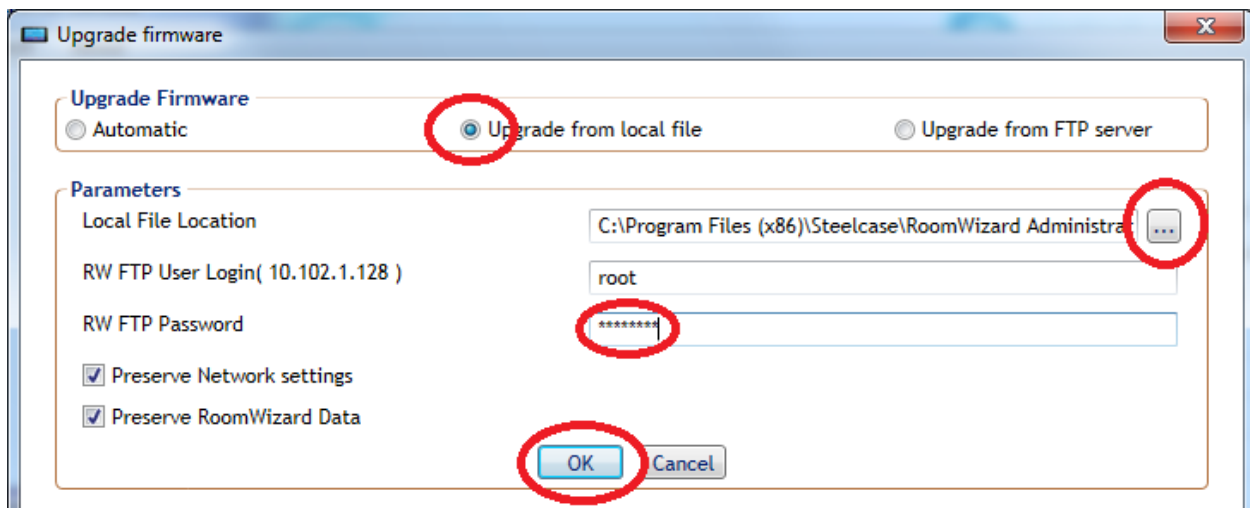
Retry the Upgrade

Make a note of any RWs which are not behaving normally and access them again from RWAC. Select them specifically and bring them into the Firmware Upgrade Dialog. If any of the RWs report as FW Versions earlier than 4.5.x.x, then attempt another Automatic Upgrade on the selected RWs. (If there are RWs which report as 4.5.x.x, they will not be involved in the Automatic process at this point).

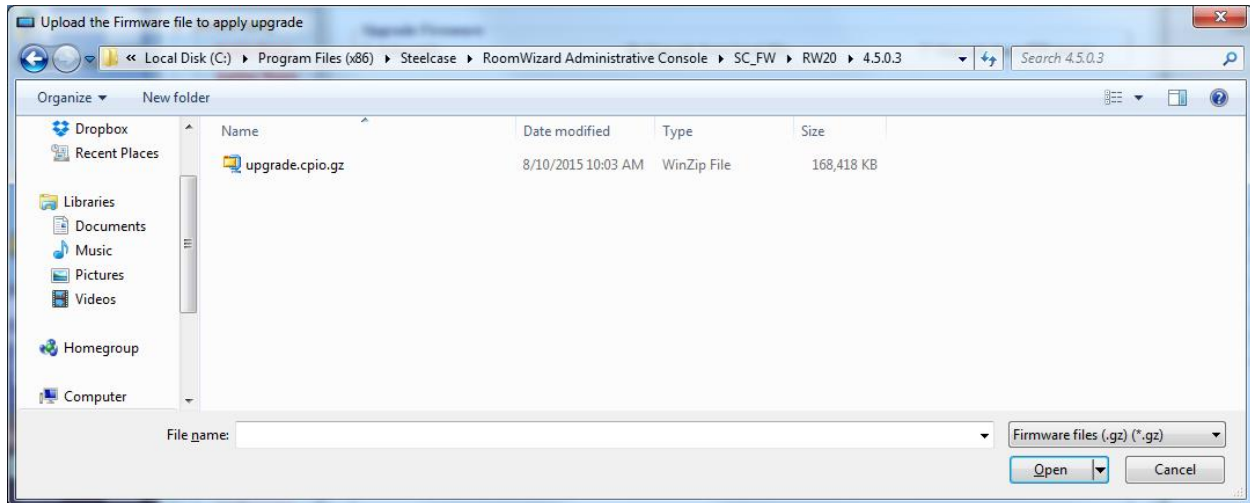This step can be repeated a time or two until you are convinced the RW is not going to Upgrade.

"Side Grade" the RW

Under some circumstances, a RW may report as 4.5.x.x FW Version but still not be correct in other appearances. When this is the case, you can attempt a "side grade" which is actually just a reapplication of the 4.5.x.x FW Image.

To do this, select the RWs which fall into this category and enter the Firmware Upgrade Dialog as per normal. This time however, you will want to click on the radio button for "Upgrade from local file" and then browse to the FW Image for the 4.5 release. In this case, you will also need to enter a Password for accessing the RW(s), the default for which is "ScRwPw01" without the quotes. Finally, Click OK.

The 4.5 FW Image will be named upgrade.cpio.gz and can be found following the relative path "SC_FW/RW20/4.5.0.3" when starting from the installation folder where the RWAC executable resides. The example below shows a typical browse path.

Unrecoverable RWs

If, after all of these steps, an RW remains unrecoverable, please contact Steelcase Tech Support for further instructions. They may have additional steps they can take or they may inform you the RW is unrecoverable and will need to be replaced under the Steelcase warranty.

Support:

For Tech Support: If you run into any issues during the firmware upgrade process, Steelcase Tech Support is available 24 hours a day, 5 days a week.

In the USA and Canada, contact Steelcase USA Technical Support:

- Phone: 1.800.334.4922 Support available in English and Spanish
- Monday through Friday, 8 am to 8 pm Eastern time
- Email: techsupport@steelcase.com

Europe, Middle East, and Africa, contact Steelcase EU Technical Support:

- Phone: +33 3 88 13 36 36 Support available in English, French and German
- Monday through Friday, 7:30 to 18:30 Central European Time
- Email: emea.techsupport@steelcase.com

In the Asia Pacific region, the technical support desk will reply to any inquiries by phone or email within 24 hours.

- Phone: +60 3 2027 6161 Support available in English and Mandarin
- Monday through Friday, 8:00 to 17:00 KL Time
- Email: apac.techsupport@steelcase.com