



## Bullrun 2011 Driver Swap Guide

This guide describes the rFactor v1.255 driver swap feature which makes possible running on-line endurance events where driver teams join and can change drivers during the race.

The driver swap feature includes the following options. The server administrator can control which options are allowed through settings in the server configuration file.

- Swap occurs automatically during a pit stop (swap on pit), or the swap can be initiated at any time with a key command (hotswap).
- Team drivers of a vehicle may each use their own individual setup, or all drivers may be required to use a common setup.

### Preliminary Setup for Driver Swapping

#### Key Mappings

Several special keys are used to accomplish the driver swapping procedure. This guide refers to the default key mappings as found in a clean, unaltered rFactor install. You will need to check your own key mappings and change them if necessary. All of the key mappings are found by navigating to the Customize, Settings, Controls page.

Passenger Select – **E key** (need to re-map from default **P key**)

Use: Toggles between being a Spectator and being a Passenger in the car.

By default, Passenger Select is mapped to the P key; this mapping should be changed since rFactor also maps this key to the Pause function. We changed the mapping to the E key.

HUD Tachometer – 5 key

Use: Toggles the tachometer on and off.

The tachometer fuel display shows a driver the current amount of fuel in the tank.

Driver Hot Swap – W key

Use: If hotswaps are allowed, driver presses the W key to transfer control to the passenger.

HUD Multi-Function Display (MFD) – 6 key, ENTER key and ARROW keys

Use: The 6 key toggles the HUD MFD on and off. The ENTER key and ARROW keys are used to select and make changes to the MFD screen.

The MFD pit settings screen is used by the current driver to select the passenger's name who will become the new driver. If the current driver leaves his own name displayed, a pitstop will occur with no driver swapping. The refueling load may also be changed here if desired.

The ENTER key is used to cycle through the available MFD screens to navigate to the pit settings screen; the ARROW keys are used to scroll and make changes to settings on the screen. Note that with some vehicles you may need to scroll down to see the driver name select line in the display.

#### Creating a Setup

The procedure drivers follow to create a setup varies depending on whether they are required to use a common setup or if they are allowed to have individual setups.

Common Setup:

If team members are required to use a common setup, the setup loaded by the first driver will be

transferred (except for steering lock and brake pressure) to the other driver(s) when a swap occurs. Since drivers are free to have their own settings for steering lock and brake pressure, each driver must create a setup with the desired values for these two settings. Drivers should create this setup off-line, save it in the track's setup folder, and assign it as the default by clicking the Assign button.

#### Individual Setup:

If drivers are allowed to use their own personal setups, each driver needs to create a setup off-line, save it using the proper name, and assign it as the default. The setup must then be copied to the vehicle folder.

For the Bullrun track, the proper name is **Bullrun\_2010\_Chicane.svm**. Once the setup is created, you will name it Bullrun\_2010\_Chicane and save it to the Bullrun\_2010\_Chicane setup folder. Assign it as the default setup by clicking the Assign button.

The setup file Bullrun\_2010\_Chicane.svm which you just created resides in your \UserData\playername\Settings\Bullrun\_2010\_Chicane\ setup folder. The setup file now needs to be copied and pasted to the \GameData\Vehicles\NAGT\ folder.

Note that if you join as a Spectator without first having assigned the Bullrun\_2010\_Chicane setup as the default, you can still do so at any time by selecting the setup and clicking the Assign button. Spectators will find the Load setup button is disabled, but rFactor will use the setup assigned as the default.

#### Refueling at Pitstop

Pitstop refueling amounts are specified in the car setup. An exception to the way refueling is normally done occurs when a driver swap is made. The passenger swapping into the car will receive the Stop 1 fuel load specified in the current driver's MFD. On subsequent stops where no swap occurs, the car will be refueled to the amount specified in the current driver's setup. If a driver manually changes the Stop 1 refueling load using the pit menu screen and then swaps at the next pitstop, that is the amount the new driver will receive.

An exception is that during qualifying and race sessions if the refueling amount specified is less than the amount of fuel currently in the tank, no change in the fuel will occur; fuel can only be added, never removed.

#### Driver Swap Procedure

1. All drivers have created and assigned their setups off-line as described above in the Creating a Setup section. Drivers should also have the **E key** (Passenger Select), **W key** (if hot swaps are allowed), **ENTER** and **ARROW** keys correctly mapped.

2. Driver 1, the starting driver, joins the multiplayer server as usual and connects to the session with the team car.

Driver 2 (and Driver 3) need to start the game and navigate to the Multiplayer Settings screen and change Spectate to on. Now Driver 2 joins the multiplayer server with the team car. Upon joining, Driver 2 is now a Spectator. The server does not announce spectators as having joined in the way it does drivers, and spectators will not show up on the driver list in the monitor.

3. Driver 1 starts the race. On the pit lap, Driver 2 (a spectator) becomes a passenger by clicking on his team car in the driver list and then pressing the **E key** (Passenger Select). Driver 2 then clicks the Race button to join the driver on track as a passenger in the car.
4. Driver 1 slows and enters pit lane. Before entering the pit box, Driver 1 navigates to the HUD MFD pit settings screen using the **ENTER key**. Now Driver 1 uses the **ARROW keys** to scroll down the screen and select the passenger's name to be the next driver. Driver 1 needs to make the next driver selection before entering the pit box or the swap will not occur.

When Driver 1 enters the pit box, the swap to Driver 2 is made automatically. After the swap Driver 1 becomes a passenger. Driver 1 should now press the **E key** to become a spectator, and then Esc off the track and back to the monitor.

Note that on the swap pitstop, Driver 2 will be refueled to the Stop 1 amount shown in Driver 1's MFD . Subsequent pit stops by the same driver will fuel the car to the amount in the driver's setup.

If hot swapping is allowed, Driver 1 swaps places with Driver 2 by pressing the **W key**.

5. Process repeats with the next spectator becoming a passenger and then a driver.

### Detailed Swap Steps, by Noel Hibbard

I am about to do my 11th race over at VLMS-ERL and my team (4 drivers last season but down to 3 drivers this season) has only had one driver swap problem so far. Everyone says no plugs but I have had no problem with RealFeel and the DAQ (Although not logging) installed. I think most of the problems are really just random or just intermittent internet connection problems. There are ton of steps I see people list and some of them I have even forgotten to perform and still didn't have a problem. I will go over the steps my team does and how we prepare.

First we use Box.net to share our setups and keep notes on which setup is for what. Once we are all done and have finalized a setup we post it with a very simple filename like S4R3\_race.svm. Everyone copies the final setup to the correct directory and then opens it up in rF, changes the brake pressure and steering lock to match their driving rig and then saves it and then assigns it as their default setup. This part is important. Then here are the steps we go through when swapping. I will assume there are only 2 drivers and driver 1 is currently on track.

1. Driver 2 joins the server as a spectator
2. Now Driver 2 will look for his car in the monitor and then click on it. Be VERY sure you clicked on the correct car.
3. Driver 2 contacts Driver 1 over the radio to inform him that he is about to enter the car as a spectator.
4. Driver 1 then watches the chat box to be sure that it says "Noel Hibbard" (or whatever Driver 2's name is) joined as passenger and not some other yahoo.
5. Driver 2 then clicks the passenger select hotkey (this is assigned in the controller menu).
6. Driver 1 reports back that the correct name popped up. Sometimes Driver 2 will enter the car and Driver 1 will see the wrong name. If so, communicate this over the radio. Just keep hitting passenger select to go in and out of the car until Driver 1 responds over the radio saying it has the correct name. Normally it works the first time. But I have had to go in and out 5 or 6 times before it shows my name correctly.
7. Driver 2 now hits the Race button at the bottom right of the screen. You will now be in the cockpit and watching Driver 1 drive.
8. Driver 1 then opens the pit menu and scrolls down to the driver name and hits left or right to select Driver 2's name. If you didn't communicate while entering the car to be sure the correct name showed up in the chat box you will be in for a surprise when you go into the pit menu at the last second and notice someone else other than your team mate is in the car.
9. Driver 1 now enters the pits and stops in his box. STAY IN THE CAR. DO NOT HIT ESCAPE YET.
10. Driver 2 will see the pit timer and a count down showing when he will gain control of the car. Keep an eye on the gear selection. I can never remember if it starts in N or 1. But if you have a gates shifter I would put it in 1 and always have the clutch in so you don't stall when it takes over.
11. Driver 1 WAITS UNTIL HE SEES HIS TEAM MATE DRIVE OUT OF THE PIT BOX. I normally stick around as a passenger and watch them drive a few laps.
12. Driver 1 now hits escape which goes back to the monitor.
13. Driver 1 now hits passenger select to exit the car. I have forgotten this step more times than I can count without problems but I try to do it anyways.
14. Driver 1 now exits the server.

I know this sounds like a ton of steps but it really isn't that bad. I suggest reading the steps a few times and then practice this a bunch of times. You really only have to do it a few times to get the hang of it. The most important thing is getting the teams setup assigned as the default and then making sure that when you enter the car as a passenger that the current driver acknowledges that it said the correct name. You could also have the current driver confirm that the next driver is in the list. Just make sure you don't wait until the last minute to do this. And be sure to communicate over the radio if it isn't right. You don't have to restart rF or rejoin the server. You simply have to keep hitting passenger select until the correct name comes up.