

Review

NASCAR SimRacing - Part 3

SimHQ presents a week-long series on one of the most important simulations ever produced for the Motorsports genre. In Part 3 we look at Telemetry, Chassis Setup and Multiplayer.

by **Chunx** and **Jens "McGonigle" Lindblad**



Introduction

We're off and running again! With our look at the basic physics and damage models for **NASCAR SimRacing** fresh in our minds, today we'll investigate the game's Garage features and see how we can optimize our car's setup to maximize its performance at the track. Then we'll take you into online multiplayer racing as our evaluation continues of this important new title.

Telemetry

The Telemetry program for NSR is a stand-alone executable that is commanded to run in the background when selected via the driving session GUI. When you select Telemetry, you'll often think you've just caused a computer lockup, but it just takes a long time to load, then often stays beneath the race screen until you hit Alt Tab. Jens suspects that loading times are directly proportionate to the length of the session you are loading. It is probably best to load the Telemetry program at the start of a session and then let it stay resident in background in the hope that it will "catch" all the lap information which it might not otherwise do.



Once you've loaded the telemetry software, you have access to a wealth of detailed technical information. You have the traction-circle, which tells you how many g's your car is pulling in the turns; your tire-temperatures and tire wear; the chassis slip-angle; suspension-movements and lots of other very relevant and informative information. One thing I noted was that when you check the tire temperatures you are given tips for tweaking your setup. If the temperatures are too high you can reduce camber and / or lower the tire pressure. You can also compare laps and

zoom in on the track from a helicopter overview in the telemetry software and very accurately check your racing line.

Annoyingly, sometimes the telemetry program fails to record all of your laps (a glitch also common to F1C), leaving you guessing as to your performance for much of a driving session — especially if your fastest laps were lost in translation. Telemetry also can't show you laps from other track periods in the same driving session unless it's already running, so if you run a test session of laps, then go to the garage and tweak the setup, then go back on the track, don't forget to load Telemetry and save your earlier lap times if you want to do any comparison between sessions. Otherwise all previous laps will be lost unless you specifically saved them. A simple running list of lap times would be handy, but it's not provided in NSR.



When you do save a lap time, your data is stored as a 125 KB ".lap" file in a folder named "NASCAR SimRacing-Telemetry", located in your "My Documents" folder. It seems strange that EA didn't decide to keep the lap times in the main NSR directory, yet there it is in My Documents. One nice aspect of saved telemetry laps is that you can electronically share them amongst your racing buds so you can directly compare driving lines and techniques, which can assist in increasing your learning curve for fast driving.

We noted that if you do not specifically select and save one or more laps while viewing the telemetry read-out immediately after the drive they are lost. To give an example of this; say you have just run 50 laps at Dover. You open the telemetry package and select and save laps 2, 5, 7 and 15. These laps will now be stored, but data for all other laps will no longer be available to you after you have quit the telemetry session. It stands to reason that with the cost and time associated with testing and the desire to maximize the benefits of such testing, real NASCAR teams would want to have all telemetry data stored and ready for further analysis at any given time, even after leaving the racetrack.

If you need help understanding the different measurements offered just click on the "Help" button and a 7 page document opens in you word-processor, explaining the ins-and-outs of the telemetry package. While functional, one can't help thinking about how slick it would be if the documentation and help part was integrated in to the actual telemetry package itself. It would be slicker yet, if the whole telemetry package had been seamlessly integrated into NSR's game code. As is, it feels clumsy and like it was "bolted on" at the last minute. With all the powerful info

provided by this telemetry program, it's unfortunate that EA has made no effort to remove the annoying and basic flaws in its operation over the many years its been around.

***"New Telemetry Analysis:
Analyze car setups and your best laps,
then compare your times against those
of real NASCAR drivers."
- EA Sports***

Chassis Setup

The setup "Garage" offers both a Basic tab and two Advanced tabs to allow racers to tweak their car's suspension, aero and drive train to meet the needs of each track. And you'll need to get familiar with how to set up your car, because the stock setups that ship with the game are either "undrivable" or so pitifully tight and slow that you won't be able to race with them. In fact they're so bad, if you drive them by mistake you might think there's something wrong with your wheel. Luckily, for those of us that are setup-challenged, the BASIC page works well to tweak a car from a baseline set — especially for a hack like Chunx. And that's a good thing, since the default setups in NSR are very weak, (We have mentioned that point a bit later on).

For those not familiar with EA / ISI's F1 series, the Basic Setup page uses the three horizontal sliders to make (you guessed it) basic adjustments to a car's performance characteristics that are translated by the game engine into specific chassis adjustments. Sort of like you telling the game that "you want the car to be looser" and the game then making its own changes to the chassis in an effort to meet your needs. If Chunx were a real race car driver, this is about how he'd interact with his crew chief, and then hope the crew chief could work his magic on the suspension.

Using the Basic function, Chunx began to find that by selecting the provided Qual setup and sliding the bars a certain way (+8% Accel/Grip, +22% Oversteer and +40% Twitchy) and adjusting the grill tape, he was able to find a good starting point for further tweaking of his race setup at any speedway track he chose to race at. After that, it was a few feedback loops of driving, followed by tweaking, followed by more driving, until he settled on a setup that was competitive and stable to drive. But it was obvious to Chunx that while he could make his car quick, there wasn't any way that setting up a car with the Basic tab features would yield a truly fast and competitive race car for online racing.

After you've built yourself a handful of setups for a particular track, you'll be able to put them to good use for now and in the future when you enter your first race at that track. That's because each session of a race (practice, Qualifying, Happy Hour, and Race) can have its own default set up assigned to it. But, getting there isn't made easy for you. For example, if you use the "basic" tab of the setup configuration GUI, you can adjust your car in basic concepts of acceleration vs. speed, oversteer vs. understeer, and "twitchiness" vs. stability. Despite the simple nature of these setup options, the Basic mode works well. But, if you decide to add some grill tape (something not addressed by the Basic mode), and then do some additional tweaking to the setup, your advanced changes will all be erased — while you're still in the setup GUI! This can be somewhat frustrating until you get used to the sequence you need to follow in order to not immediately erase your own changes. The bottom line is to not be afraid to use the "Save Setup As" function early and often as you build your setup library for each track and phase of a race.

Ultimately, our biggest relief about the setup function was also our biggest concern. In other racing sims, car setup is an art in itself. On the web, there are setup 'gurus' for various games that can configure a virtual racer that will shave a half second or more off your lap time (assuming you have the same driving style as the 'guru'). In NSR, that

may be a thing of the past, as Chunx found that the Basic setup configurator let him quickly refine a setup that keep his tires in good shape and lowered his lap times to near-competitive levels in just a few minutes. In fact, building a competitive setup might be 'too easy' in NSR, something that won't properly 'simulate' this all important element of real NASCAR racing. On the other hand, the confusing and complex realm of chassis setup tweaking might have been such a turnoff for some gamers that they lost interest in the game, because you can't become truly competitive online without a good setup. So there are certainly good and bad elements to the relative simplicity of setting up your car in NSR.

Jens' Advanced Setup Garage

NSR offers an extensive garage area where you can develop and refine setups for each car and track. These options are located in the advanced setup menus.

One neat thing is that if you let the mouse hover over the adjustment controls for the right wheel, the corresponding area in a graphical representation of your car will light up. The changes you make are sadly not influencing these graphics. It would be very cool if you could see what changing the camber or toe did to your car.

If you are in a real garage often, you quickly learn to appreciate a well laid out and orderly garage, one that lets you do the task at hand with as little fuss as possible. Unfortunately this is not entirely the case in NSR's setup garage.

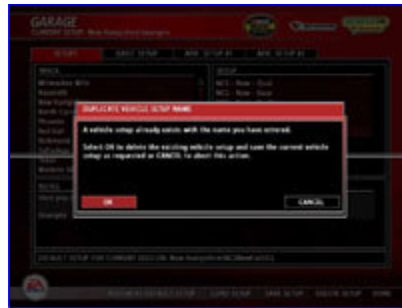
There are 4 tabs: Session Status, which is where you retrieve and save your setups as well as join the track, Basic Setup, Advanced Setup #1 and Advanced Setup #2.



While basic information regarding the track you are at and the setup that is currently loaded is displayed regardless of the tab you re currently working in, you have to return to the session status tab in order to save your newly developed setup. It would have been better (in Jens' opinion) for the saving and loading of setups to have been positioned in the part of the garage area that remains unchanged, no matter what tab is currently selected. As it is, each time you make a change, you'll have to go back to the main Garage tab to save your work.

As mentioned, the Basic Setup option features a couple of sliders where you very quickly can decide if you want an under- or oversteering car, a soft, forgiving setup or a harder and more twitchy suspension, and if you want to put the emphasis on speed or acceleration. It's very nice for making a quick setup, but if you desire a bit more influence on your setups, you go to he two Advanced Setup tabs where you can adjust a multitude of items in at finer level of

calibration. The only thing that seems to be missing is bump rubbers, and it is a known fact that crew chiefs have these added to and removed from cars during races to cure minor handling problems.



In order to save a setup that you have developed in detail, first you'll have to ensure the correct setup was loaded to begin with. Then, when you have made the changes, click Save, and at this point you have to backspace in order to remove the asterisk that is automatically appended to the setup name. Then you type the new name, which can only contain 16 characters, click OK, and you then have to confirm that you want to overwrite any existing file with the same name by clicking OK.

If you rarely go into the garage you might think that this is not too bad and that we're slightly overreacting, but if you spend much time in the garage, you'd probably agree that there must be an easier and less tedious way, and that the mouse should be saved for traveling needlessly over the screen. In all honesty, a drop-down list and combined dialog box like we have seen it implemented in NASCAR Racing 2003 Season would be preferable.

Instead, NSR insists on constantly demanding your attention at several parts of the screen, forcing your eyes to shift focus all the time. Jens found it annoying and very tiring.

This confusing GUI is not limited to the setup portion of the game but is rather a general problem in all menus.



You should also be aware of the fact that it is very easy to lose track of what set up is currently loaded. It seems

like NSR wants to default back to the rookie setup when you start a race — at least that was my Jens' experience.

The game does not automatically load the qualifying setup when you head for a qualifying session. One setup and one setup only is the active setup until you designate another setup as the active one.

In fact, sometimes NSR doesn't even know where to look for setups, so you have to tell the game which track directory to look in.

Although the small manual that comes with NSR is not quite the kind of documentation that sim racers hope for, it does contain a good, albeit small section devoted to what the different options in the garage do. This is also very necessary because of the nonexistent tool-tips woefully inadequate default setups.

Incidentally, a .pdf file called "Garage 101" is available [here](#) at EA's web site for NSR. If you haven't already downloaded it, do so now. If you are serious about using the full setup options, this document is a must have.

We at SimHQ have tried to make a few setups for the CTS, NNS and NCS series that you can hopefully download and build upon by the time this review is online. They are not perfect, but they are better than those that come with the sim. You can download them at the end of this article.

To help you through the setup business, here's what was done with our setups:

- Steering lock was increased so that the wheel will turn more readily. If the steering is too twitchy, try reducing the steering lock.
- The cars are very sensitive to the amount of grille tape. If your engine runs hot or disintegrates in smoke and flames try reducing the amount of grille tape.
- Many setups had toe-in at the front. This was changed to toe-out (negative value) in order to facilitate better turn-in.
- Bump and rebound settings on the front right hand wheel were decreased, and on the left hand side they were increased. This also helps with better turn-in.
- Camber was added to the left front wheel in some cases to help the car turn better.
- The brake balance was moved further towards the back. Originally it was set at 70:30 towards the front. It was moved it to between 55:45 or 52: 48. Careful on the brakes, especially when you enter the pit. If you spin out under braking, move the balance further forward, try 60:40.
- In many setups spring tension at the front was reduced by a couple of clicks.
- In some instances, for example short tracks I we experimented with moving weight towards the front of the car.
- Talking about experiments, in some instances a bit of spring was added at the rear, to help get on the throttle a little bit earlier. Too much spring can become dangerous though, as it can lead to snap oversteer exiting bumpy turns.
- Another way of assisting quick exits is to decrease the wedge numerically.

Generally, Jens found that having adjusted most of the above mentioned items, and in particular the items related to the front end of the car, made a whole lot of difference. When adjusting items related to the rear end of the car, he found it easy to get lost in his adjustments, i.e. a whole lot of changes did not really result in any noteworthy improvement in handling. When the real setup experts have had a chance to make setups, we'll see improvements in this area. Perhaps someone will find a setup that combines good lap times with realistic feel, in other words fast setups that do away with the very large chassis slip-angles.

It is Jens' impression that changes in grille tape and rear wing are very noticeable while changes in chassis and suspension are harder to detect.

Some Jasper setups from pre-patch NASCAR Racing 2003 Season work quite well, and some don't. You'll have to

manually transpose the setups though.

We found that the Jasper setup for Daytona works really well and is quick. Other Jasper setups for e.g. Atlanta and Las Vegas were harder to get to work properly, and they didn't give the expected improvements in lap times. Lowering the front anti roll-bar, or sway-bar as it is called in the U.S., helps a bit but they need more tweaking, to the point that they are no longer Jasper derivatives but entirely new setups.

Alternatively you can just copy and paste your old setups from NASCAR Thunder 2004. They work right away and without any glitch. So much for the claim that NSR's physics engine is all new.

Multiplayer

Racing real people is a huge adrenaline rush. No matter how good the AI "bot" drivers are, in the back of your mind you always know they're not real. And until we all have Cray's in our home, the AI will be a bit, well, robotic and predictable in its behavior on any PC sim.

For years now, we have been enjoying the passion and excitement (and occasional frustration) of online racing, be it at Sierra.com (NR2003), VROC (GPL) or GameSpy (F1C/RH2004).

While EA may have done a press junket where they demonstrated multiplayer in a very sterile LAN or controlled Internet environment, it's our considered opinion on the SimHQ staff that that's not good enough for multiplayer testing. We want to see how the game plays on the provided GameSpy servers, in pick-up races like many of us will experience when racing online.

NSR's Multiplayer module (hosted by GameSpy) functions a lot like other MP GUIs. Since you've already registered with EA, all you'll need to do is type in your nickname and password in the screen provided. After that, you'll be directed to the GameSpy race roster page. NSR's race roster is like a simplified version of VROC or Sierra.com's NR race page, and like them has the ability to sort races by ping, host, track, etc. However, unlike other race server software EA couldn't make their limited list of columns fit on the page, so you have a slider bar to see all the attributes of each race on the page. Given that there is less info provided about each race than other games offer, it seems a bit of a gaff on EA's part to not fit all the data onto a page that fits the player's screen size.

***"The Definitive Online Racing Experience:
43 online players race live on the same
track. Featuring a Ranking System,
Hot Lap Leagues, Tournaments, and
Voice Over IP, online racing reaches a
whole new level."***

- EA Sports

On two occasions for Chunx, and at least two occasions for Jens, the race listing became "laggy" in response and unstable, not allowing us to scroll the page for active races, and with active races on the list quickly blinking on and off, constantly changing the lineup of races. The race lineup would change so rapidly you can't click on one to enter a race. On two occasions Chunx eventually got a "This Program Is Not Responding" cue from Windows and had to end NSR. Jens used Ctrl-Alt-Del to shut down NSR to try again. The other solution to this problem seems to be to back out of Multiplayer altogether and re-enter. Really, this is very flaky operation for any MP server.

"You must have a broadband (DSL, Cable, or faster) connection in order to play NASCAR SimRacing

online. Please note that dial-up (56k) connections are not supported by NASCAR SimRacing."

"During multiplayer races, the display driver names function, activated by pressing the TAB key, may be used to help identify players that are suffering from lag. Above each car will be a "perceived latency" value. This indicates how old the data is for that individual player that your machine is working from. As latency increases the games focus will shift from trying to render collisions as accurately as possible to trying to smooth out the opponent. As this shift occurs collisions will become less accurate. If an opponent has too high of a latency rating, and it becomes impossible to render their position accurately, the game may render that opponent non-collidable, so you will be able to drive right through them, thus avoiding having your race ended by hitting a car that appeared to be positioned incorrectly."

- NSR "readme" file



Once you have joined a race, you find yourself in what is one of THREE tabs in the game. Why they needed to have 3 tabs, with two of them chat rooms, is a mystery. However, one is called "advanced chat". Perhaps this is provided for teenagers who are "veteran" chatters and have nothing better to do than load NSR so that can go online and, well, chat! (and pester the racers with their chattering).

All the information that has been spread out on three screens could have been and should have been integrated into one screen. There's even a lot of free space on all three screens, so it wouldn't have been a problem.

If you're hosting, take notice of the fact that you can decide which type of players will be allowed to join by setting the required ranking. For the moment though we have no idea how that ranking is calculated, and if there are any ranking sites being prepared by EA, but you can see your own ranking under "My NASCAR, Resumé". So what does that default setting of 50 to 300 mean? Who knows, and EA isn't telling. Don't look for the answer in EA's "Online 101" PDF download. It isn't there.

Chunx Multiplayer Impressions

"I did a lot of Multiplayer driving on Feb 18th, where I randomly entered various races, with various skill levels of participating drivers. I'm using the same PC and DSL that I use for NR2003, F1C, etc. My normal pings are in the 70 to 168 ms range. Nothing stellar, but NR, GPL and F1 run real smooth with this broadband connection.

and guod hosted another one with the dedicated server option on the 20th. In these sessions, despite one player in Denmark and the other in the Western U.S., we had solid frame rates and beautifully stable cars to race against at all times. Of course, that was just two of us and some AI cars, so how well a race featuring 43 online drivers will work remains to be seen.

"One final thing that I miss from NR2003 is the ability to run "fixed setup" MP races. Using a good, stable fixed setup can really level the playing field in a race, and create closer competition in open online races. It may not be realistic, but it does offer an alternative way to enjoy the game, and I for one miss it in NSR."

Jens hosted one race with his ISDN connection (B+D channel). NSR lets you host races with up to 6 cars including yourself. As mentioned we didn't try the limit with 6 cars.

Jens' Multiplayer Impressions

"On Feb. 26, I entered some pick-up races and whether it was an honest accident or other factors contributed is impossible to say, but before getting out of the pit lane in the first race I was hit by at least 3 cars that came from nowhere.

"The driving standards varied from some that were obviously faster and more experienced drivers than me, to some that were noob's. No problem with that, we all have to have our first multiplayer experience some time — and with EA's ubiquity in the marketplace, NSR might very well recruit a whole new crop of Racing Simulation enthusiasts (which would be a very good thing for the genre).

"The next race I entered had about 36 drivers on the tracks and from that race I have two distinct impressions: Just about everyone was running with too much grille tape so every lap there would be at least 3-4 cars trailing a white plume of smoke (certainly attributable to folks getting used to the game, or to online racing in general). The other impression was that there was continuous chatting and votes being proposed, which was very distracting to one's online "immersion" factor.

"I guess that the quality of your multiplayer experience really depends on a good connection and good drivers around you. I didn't get to feel quite confident enough in the connection to really feel comfortable up close. There was a lot of crashing-into-walls going on."

Our online experiences have left us wondering — is an online 43 car race — made up of AI or real drivers — even possible in TCP/IP? The half-page blurb on MP in the "manual" says 43 is a 'go' on a LAN, but nothing on TCP/IP. You can pick 43 cars in the menu setup, but we've yet to achieve a racing field with more than 10 cars total. So what's going on here? 43 is possible offline. If you're an online racer coming from NR2003, this could be the showstopper against NSR. If you don't enjoy online racing, then it is much less of an issue. But online a 10 car field maximum at Daytona just isn't "right".

Dedicated Server

The dedicated server provides the basics but it certainly pales by comparison to what is offered in NR2003. NSR's dedicated server is essentially three Windows screens with just the basics. Want to review how the 5 car and 20 car collided? Forget it — there is no visual spectating of the race. Undoubtedly this is to minimize the overhead on the weak multiplayer code that's already been discussed. Does the dedicated server work? Yes, it does and predictably it offers better throughput to the clients verses when the host plays as "one of 'da boys". But it's lacking and unfinished in features, especially if you want to monitor the race you're hosting.

