

Welcome to this issue of ON TRACK

In this issue:-

- Message from the editor
- We've moved!
- It's here!... AutoTrack 8 on 64-bit
- Land Transport New Zealand use AutoTrack
- Training News
- Turn transitions: The importance of speed
- Tips and Tricks: AutoTrack for Highway Design
- And finally...

In future ON TRACK will be emailed to all on our mailing list. If you'd like to add your name then go to www.savoy.co.uk/maillist.php.

Message from the editor

It's been a fraught three months since our last newsletter but we've finally overcome everything that Microsoft and Autodesk could throw at us and released AutoTrack 8. It's later than we had planned but we had to make sure it was right and we hope the result proves to be worth the effort. Of course, you'll have noticed that this newsletter is also later than normal and that's because we were far too embarrassed to report another delay!

We've moved!

Please make a note, our address has changed. Our new address is Savoy Computing Services Ltd, Clermont House, High Street, Cranbrook, Kent, TN17 3DN. Everything else is the same.

It's here!... AutoTrack 8 on 64-bit

AutoTrack 8 is now available for download. It is the **first ever** 64-bit vehicle swept path program to be fully natively compatible with 64-bit AutoCAD 2008 and 64-bit editions of Windows XP and Vista.



The new version further enhances the already popular animation mode with the addition of acceleration and deceleration and multiple selectable camera angles and user-definable vehicle colour in 3D. These two features added to the already flexible animation system make it possible to create even more realistic drive through videos.

We've also enhanced the advanced vehicle editor so that it can model more vehicle types. You can now model steering linkages by effective wheelbase as well as by angles and speed.

AutoTrack has modelled self-steered axles for many years but now we've added support for partial and limited self-steering and now you can specify self-steering in one direction only. In fact both this feature and the new effective wheelbase linkage type are required to model the semi-trailer vehicle in the latest New Zealand standard (see below).

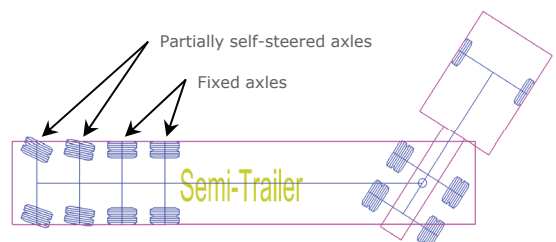
Last but not least, we've added **wing mirrors**. Yes folks, we've been asked so many times whether wing mirrors were included in the body outlines that we've decided to give you an easy way of adding them. Let us know what you think.

Land Transport New Zealand use AutoTrack for new standard



Land Transport New Zealand have published an updated version of their **New Zealand on-road tracking curves for heavy motor vehicles** which was produced using AutoTrack.

The new standard includes four design vehicles including a semi-trailer with a four axle trailer in which two axles are fully fixed and two partially self-steer... but only up to a limiting value and only whilst travelling forwards! As far as we know AutoTrack is currently the only swept path program capable of modelling this vehicle. No doubt our competitors will catch up in due course... 😊



New Zealand semi-trailer with partially self-steered trailer

The new vehicles are in the AutoTrack 8 New Zealand design vehicle library.



Training News

It never ceases to amaze us how some people use only a tiny part of the functionality available in AutoTrack. Often it's because they don't even know that certain features exist. It's easy to see how this happens, you use the features you know to get the job done and then move on to the next urgent task. The problem with that is that you never learn about the new features that might allow you to do an even better job. Christmas is a quiet time for many companies so it might be a good time to get some training ready for the new year rush. We will be training right up to Christmas so book early to avoid disappointment. Dates are listed on our website www.savoy.co.uk.

" Really enjoyed the course.
Never opened AutoTrack before - found it easy to use and understand"

Level 1 course delegate

Turn transitions: The importance of speed

When you turn the steering on a vehicle it takes time for the vehicle to reach a steady turn radius. The zone during which the turn radius is changing is called the transition.

We're often asked "how significant is the effect of the transition curve?". The answer is that it depends on several factors, not least of which is the type of transition you are using. We strongly recommend use of the lock-to-lock time based transition since this is speed dependent.

Why is this so important? Well, unlike the other transition curves, the lock-to-lock time based transition automatically adjusts the length of the transition curve to varying design speeds and is therefore, in our view, the most realistic approximation to real life.

Ok, so this is the best transition, but why use one at all? Well, it's never a good plan to work at the absolute limits of anything and by disabling turn transitions you are removing probably the final safety margin in your design. Without turn transitions your design will require the driver to turn the steering wheel instantaneously to whatever angle is required, whilst the vehicle remains stationary. This causes severe tyre scrub and, although power steering makes it possible, it is actively discouraged by most freight operators.

All the drive modes in AutoTrack, by default, use the lock-to-lock time based transition curve for both forwards and reverse turns. Some swept path software providers will tell you that it's not significant for slow reverse turns but we prefer to let our users decide for themselves!

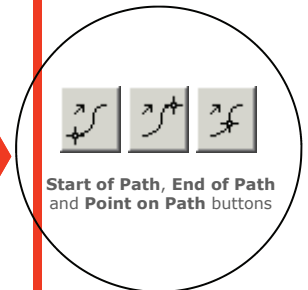
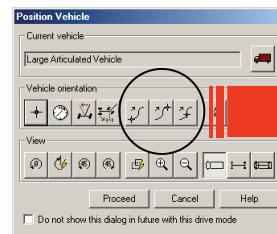
We recommend that turn transitions (preferably speed based) are used on all manoeuvres.

Tips and Tricks

AutoTrack for Highway Design: Starting a new path from a position on an existing path

It is often useful to start a path from a position on an existing path. For example when modelling multi directional turns or when modelling roundabouts to show the vehicle exiting at each leg.

1. Open the Library Explorer, select a vehicle and drive a path.
2. Make sure the first path is not selected and select a second vehicle to drive and make as if to position it.
3. Before you position the vehicle, click the right mouse button to display the **Position Vehicle** dialog.
4. Click the **Point on Path** button.
5. Use the mouse cursor to move the start position on the path and click the left mouse button to confirm.
6. Now simply complete the second path from the chosen start point.



The **Start of Path** and **End of Path** buttons work in the same way to start from the start or end of the existing path respectively.

And finally...

A propos nothing in particular, we just couldn't resist this example of bad parenting...



Keep smiling...



www.savoy.co.uk

SAVOY



COMPUTING SERVICES LTD

Savoy Computing Services Ltd
Clermont House
High Street
Cranbrook
Kent, TN17 3DN
England

T: +44(0)1580 720 011
F: +44(0)1580 720 022
E: sales@savoy.co.uk
W: www.savoy.co.uk
US: 1-866 527 3790