TRAINZ
Community News

Pev's TOOLMAN Series

Hyndman Pa - Cumberland to Connellsville

History of Trainz - Part 2 ⬤ **Attachment Maker (Tutorial)**
Cumberland to Connellsville - A Route by Joe Folco
Texturing a Locomotive ⬤ **Seamless Brick Patterns**
Cropping With IrfanView ⬤ **Adding Forum Avatars**
The Greenhouse ⬤ **Tall Trees 2** ⬤ **Tarm Initiative**
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This Month's Cover

Joe Folco's 106 mile Cumberland to Connellsville route covering 1343 baseboards continues to be the most popular listing on the Trainz Resources Directory.

On page 53 Joe gives us a detailed tour and tells us how to download the route. We wish to thank him for sharing this fantastic route with us.

Stop Press!

The European Side of Trainz

We're sure that many of you are familiar with Alberte (otherwise known as Zatovisualworks). His Spanish website:

http://www.ibertrainz.eu

is also a favourite stopping place. While you may not be fluent in Spanish you can get a feel for Alberte's talents as a writer and editor from viewing this ezine at:

http://issuu.com/zatodigitalworks/docs/trainz_libre
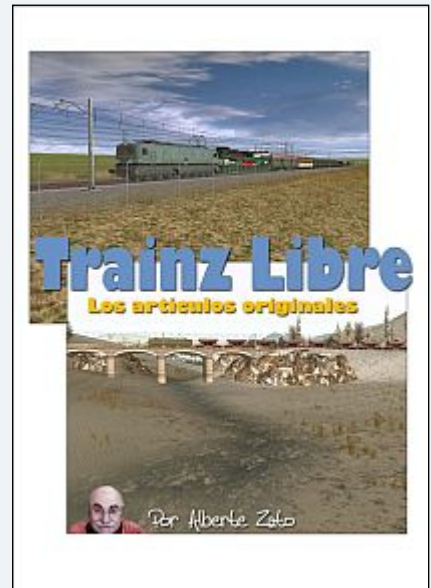
Alberte has offered to join the staff of Trainz Community Newsletter, and we are very appreciative . We have yet to work out the relationship and the way ahead but you can expect some great articles from European authors under Alberte's guidance. So from the publishing side of Alberte look for his section of TCN called "The European Side of Trainz".

Editorial

I seem to be always saying that the next issue of the Trainz Community News won't be as big as the previous one. Well this one is another bumper issue, with a heap of stuff being held over until August!

August is going to be an interesting month. The Trainz Community Web Site is begging for attention and I'll finally be moving back home after six months absence, Less than a week after that, I'll be entertaining Interstate guests. Who knows what the August issue will bring? Maybe it will just be a few typed pages, or maybe not.

This issue adds a extra few milestones: It's the first to be published using Serif PagePlus, a relative inexpensive desktop publishing program almost identical to the free version I reviewed in the April edition of the Trainz Community news.

The program is new to me, in fact I began using it for the first time about 8 days ago. Fortunately I found most things very intuitive but I'm still learning as I go and everything is taking time. Once I get a chance to read the manual and set up many of the automatic features such as paragraph formatting, I should be able to knock things over much faster.

Hey, did I say I? Well until now, I've been totally responsible for converting a variety of Word and Notepad files plus various large screenshots into what you see in front of you.

That's all about to change. Darrel Stage from the USofA has kindly offered to help and he's now in the process of getting up to speed with PagePlus, a program that's alien to him also.

We tried to get Darrel involved in this edition, of the TCN but transferring stuff from Microsoft Publisher and PDF's turned out to be too much of a struggle.

Another milestone if you like, is the first of a series of Tutorials for IrfanView, an exceptionally popular and free graphics program with over 20 million users worldwide. This issue features two simple tutorials, How to install IrfanView and cropping. Then there's a difficult one for Intermediates - Making Perspective Transformations. That's a tutorial you can pass on to all your friends who own digital cameras. It may help them recover a few really terrible photos.

In future issues I'll be talking about taking rapid screenshots, Resizing and resampling for electronic picture frames and the Internet, adding text and frames, colour enhancement, and the list goes on. Some of those tutorials won't be of much use for Trainzers wanting to create textures, but having a reasonable command of IrfanView will make life so much easier for you in the long term.

We sincerely hope you enjoy this issue of the Trainz Community News and we wish to thank all our contributors, past and present, who have made the effort to share their stuff with you. Remember, it's a free magazine that's been written entirely for you. Please let us know what you think is missing, or how you think we could do better. Without your feedback, we're just working in the dark.

Screenshot of the Week 7th June, 2010 Evan123 was the winner with this beautiful Mainline theme.

Community Comment

By Ian Woodmore

Community Comment is primarily intended to recognize major contributors who:

1. Resolve Problems in Trainz.
2. Develop new and innovative techniques for authors.
3. Develop new tools and enhance reparability

Community Comment also works in the opposite direction. That is, you the reader can contribute ideas, or bring to our attention a person who has done much for the Trainz Community.

This month we recognise the DLS New Authors. It is pleasing to see that the ranks of Trainzers who are now uploading to the DLS is rapidly expanding. Some have been with us for a number of years, in fact right back to the beginning of Trainz circa 2001. Others are fairly new. I doubt that I spotted all of them. If I missed you and you would like to be recognised, let us know.

Here are the ones I did see with effect from 31 May 2010:

Australia
forest_runner
hyper_kameo
jackford2009
kentith45
mattm

Denmark
bpk_2007

France
williamce

Germany
lokotrommel

Poland
pysi_tar

Russia
slake2010

USA
jamal17
Jaymcnally
trainman184
?
lukakashi
waldwichteline

The Country of Residence was obtained from the Planet Auran Community Search facility. This facility has been improved recently to allow searches by Trainz User ID.

The question mark **(?)** above signifies that the information was not included by the member. It would be helpful to Project TARM and particularly the Missing Assets RUMMAGE if ALL members, whose normal Country of Residence is out of date or missing, could update their profiles. Note that 'Country' means where you normally reside. 'Location' can be a temporary residence, tour of duty or your overseas experience. Mars and the Universe do not qualify.

An Update

By John King

Why Not Start a Trainz User Group in Your Area?

Last month's Community Comment about starting local User Groups where Trainzers can meet other Trainzers to share ideas went over exceptionally well.

The Trainz Forum thread generated quite a bit of interest until it fell quiet like most threads do. Fortunately for us, the Forum Moderators have made the thread Sticky where it can be seen by anyone who makes the effort to read sticky threads these days:

http://forums.auran.com/trainz/showthread.php?t=58104

A couple of people in my home town (Cairns, Australia) have already contacted me and we plan to meet up as soon as I finalise the July newsletter.

If you'd like to join a User group, please check out the above forum thread and see if someone from your area has a listing. If not, read the guidelines in the first post and make an announcement that you'd like to form or join a group in your area.

Some additional guidelines are included in my Community Comment on page 4 of the June issue, and I ask that you also read the article before posting.

Good luck, and please let us know how things turn out.
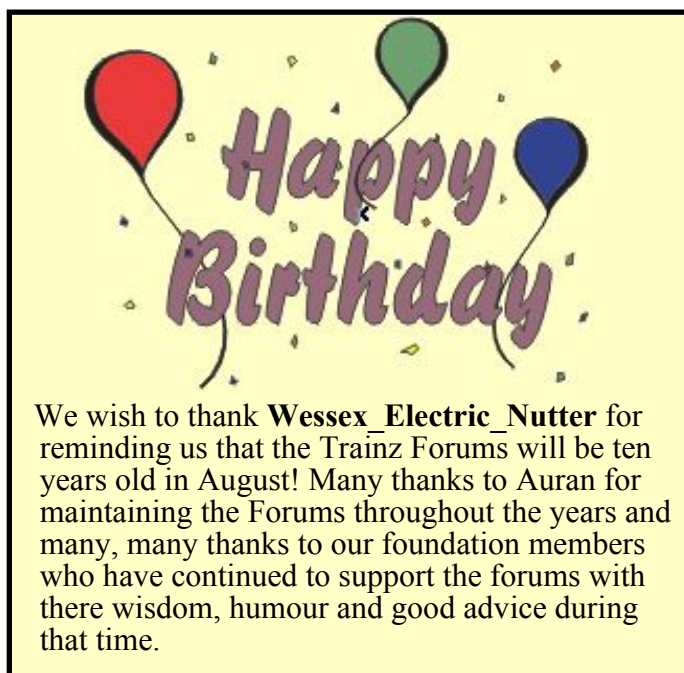
We wish to thank **Wessex_Electric_Nutter** for reminding us that the Trainz Forums will be ten years old in August! Many thanks to Auran for maintaining the Forums throughout the years and many, many thanks to our foundation members who have continued to support the forums with there wisdom, humour and good advice during that time.

How To Install IrfanView and IrfanView Plugins

by John King

This is the first in a series of articles on using IrfanView, a small but incredibly powerful image modifying program that's used over 20 million people world wide. Although it doesn't do everything, it does save you from having to open Photoshop just to do those little jobs.

I rfanView is an easy program to install, so you can skip the first section of this tutorial if you wish. I do recommend that you read the section on installing the plugins however.

1 Go to the IrfanView web site and download IrfanView (approximately 1 megabyte) and the Plugin Pack (approximately 8 megabytes). Some people say that you don't need to plugin pack to use IrfanView, but we will be using one or two components in our tutorials.

A link to the downloads is shown in the red box below.

Unless you have a special folder for downloads, the two files will probably end up on the desktop:
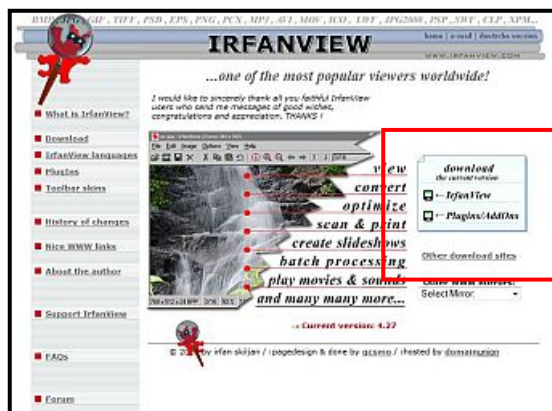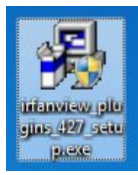

2 Double click the IrfanView***_setup icon or locate the file in your download folder to start the installation. Please follow the prompts and refer to the following steps in this tutorial to avoid installing unwanted toolbars and to ensure that IrfanView will open images when you click them.

Once you have installed IrfanView and the plugins successfully, you can delete both the above icons from your desktop to avoid unnecessary clutter.

This is the first window you will see after you start installing the program. **Note:** This is how it looks on Windows 7. It may look different if you're using XP or Vista, but the dialog will be identical.

3 • Make sure the first box is ticked.
• You may wish to tick the second box. It will install a very useful thumbnail utility.
• Make sure you tick the third box.
• Click the Radio Button For all users.

Installation Folder

• If you're using XP, use the default folder C:\Program Files
• If you're using Vista or Windows 7, it will pay you to install the program on D Drive if you have a partitioned disk, or C:\My Programs. If you install it in the default folder C:\Program Files, you may run into trouble with permissions.

Click Next

4 The next window is the usual license agreement. Just click the **Next** button.
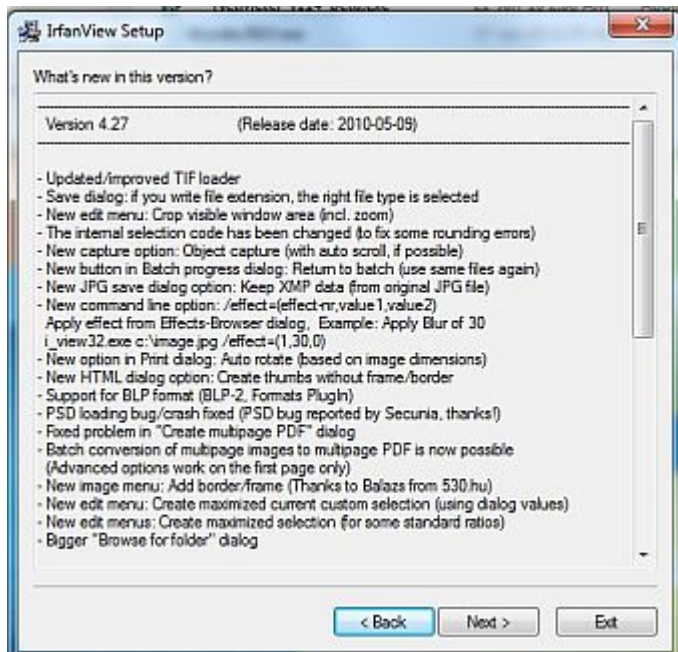
5 This window is important. It tells Windows to open IrfanView when any of these files are clicked. This is referred to as *File Associations*. I suggest you click the button **Images Only,** then click **Next.**
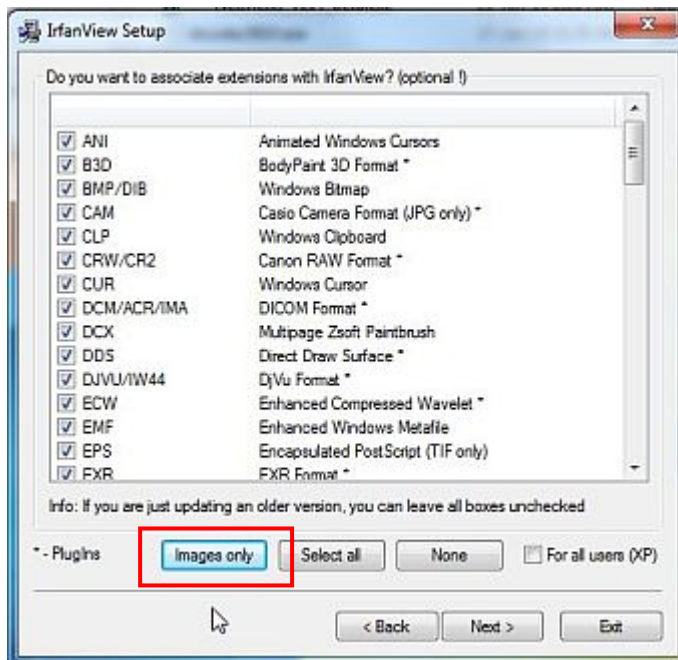
6 The next window asks if you would like to install a complimentary Google Tool bar It says it's for Internet Explorer, but I guess it also works with FireFox and Opera. It's your call! Click **Next.**
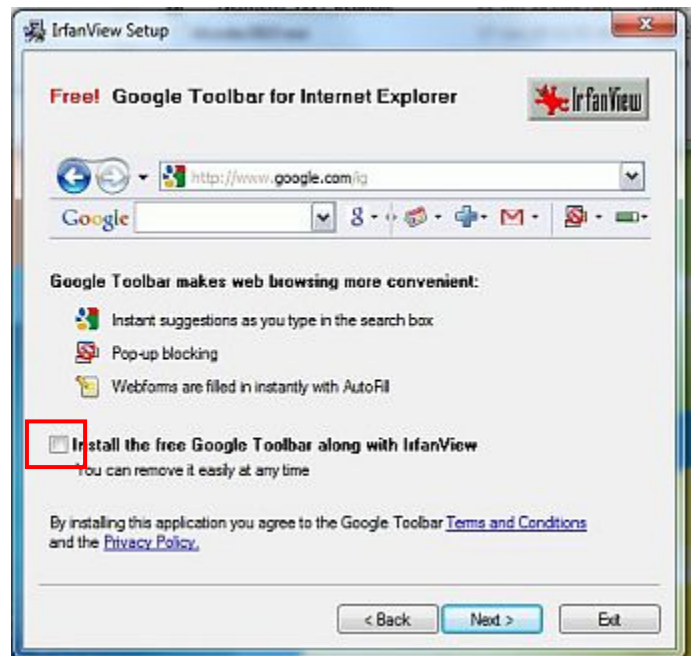
7 The next window is really a confirmation screen. Leave the options alone and click **Next.**

8 This window wants you to confirm the new file associations (Step 5). Click **Yes.**
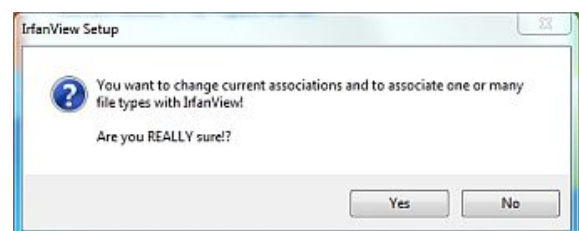
The next window is just confirming that the installation was successful.

Note: I was unable to take this screenshot with IrfanView so I used the standard Windows PrintScreen key and another program to to copy the image. Notice how the screenshot isn't as clear as the ones on other pages.

9 You can uncheck the two boxes under *What to do next?*, however I suggest you leave them checked and click **Done.**

IrfanView will open with nothing more than a black screen.
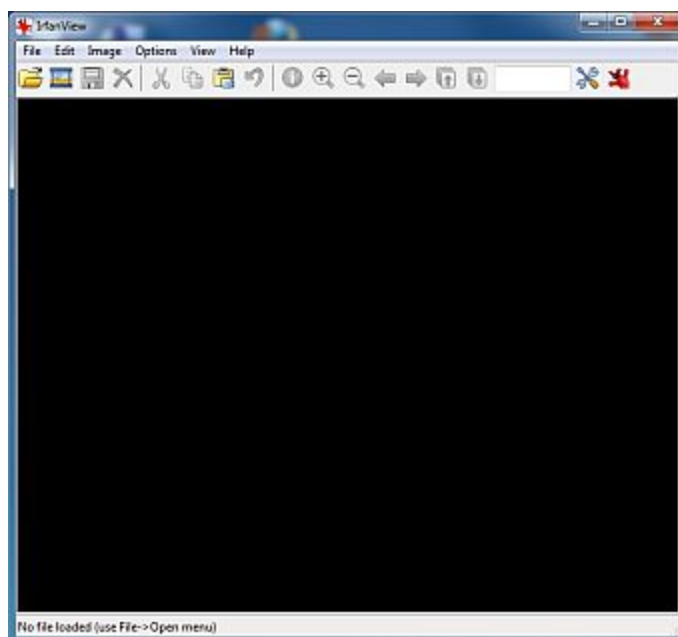
If you're running a Firewall, you may get a warning that IrfanView is trying to access the Internet. Don't panic. This will only happen the first time you run the program

IrfanView is just trying to take you to the FAQ because you ticked the box in Step 8.

The FAQ is very extensive. I don't suggest that you read it, but it may pay to save the URL to your Bookmarks or Favourites.
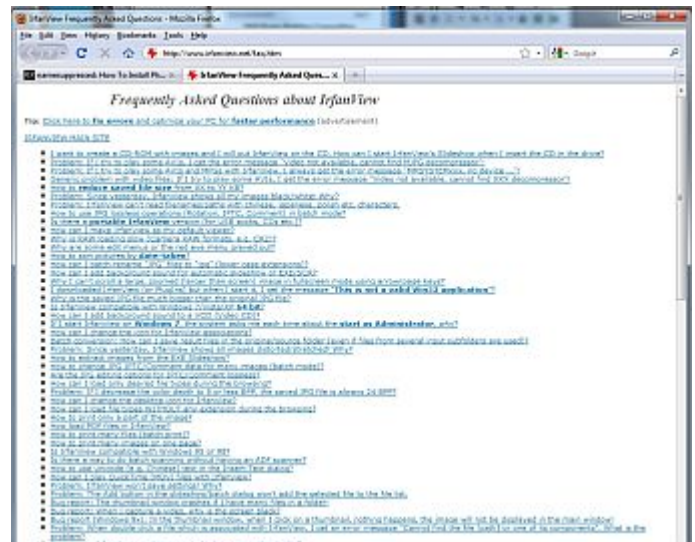
Running IrfanView For the First Time

1 Click the IrfanView icon on the desktop. IrfanView will open as a black window. (See image bottom left)

2 Click **File/Open.**
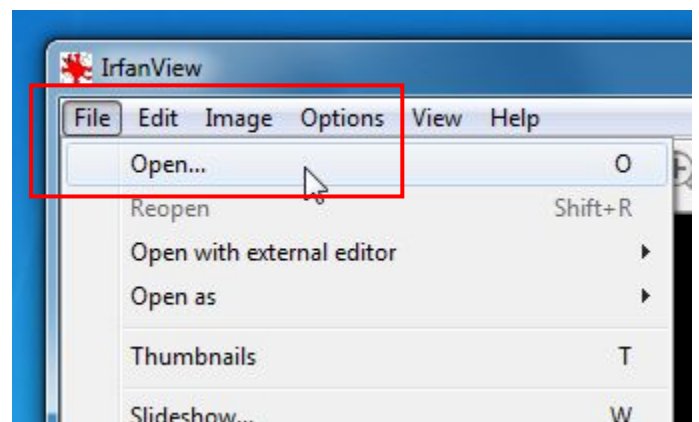
3 Search for a file in the usual way and click **Open.**
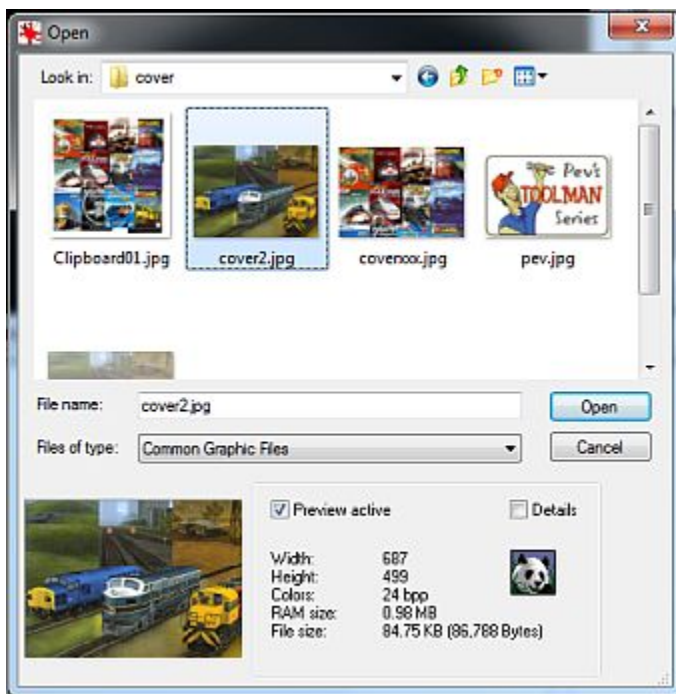
The image will appear in IrfanView ready to edit.

That's it. IrfanView is ready to use and you can jump right in and start playing around.

Before you do however, I strongly suggest that you install the Plugins so that you can follow all the tutorials in this and future editions of the Trainz Community News.

I mentioned this elsewhere, but I'll repeat it again here. IrfanView is not the greatest graphics management program on earth and it won't do everything you want to do. However, it's free, very easy to use, and small enough to run in he background without eating up precious memory.

Despite its limitations, I use IrfanView for over 90% my graphics work. All the images on my web sites and in the magazine are manipulated one way or another with the program.

Personally, I can't live without it.

Installing the IrfanView Plugin Pack

1 Click the **Plugin** Icon on your desktop or double click the file in your download folder.

2 The installer should find your original IrfanView installation okay, so just click Next. (This screenshot also taken with the keyboard Print Screen Key, thus the poor quality.
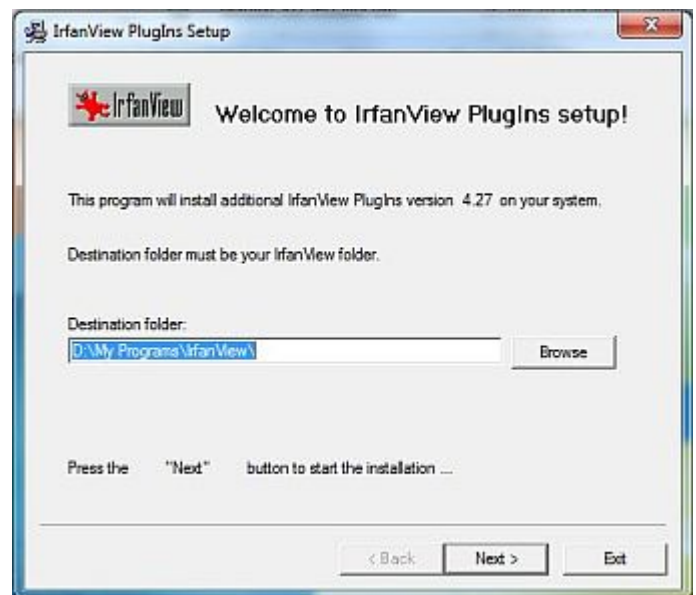
3 The installation takes about a second. Click **OK**.
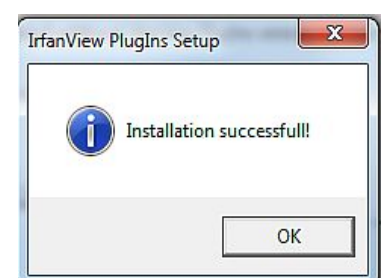
Note: If you get an error message saying that the installation failed, just ignore it. I think it's a minor Windows 7 issue.

Installing Adobe 8BF Plugins

The Plugin Pack you just installed includes a couple of sample Adobe Plugins, but others can be found on various sites on the Internet. Some are free and some are quite expensive.

Throughout the tutorials in this issue of the Trainz Community News, I'll be using a free plugin called Perspective Transformations available for MV's Plugins web site at:

http://www.vicanek.de/plugins/perspective.htm

1 Go to the site, download the plugin and maybe add the site to your Favourites or Bookmarks, because there's a good tutorial available there also.

2 Locate the file **Perspective.Zip** and unzip the contents. If you downloaded it to the desltop it should look similar to this:
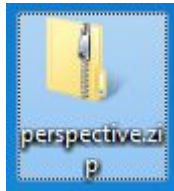
3 Copy the file **Perspective.8BF.** This is the actual plugin. Locate the folder where you installed IrfanView. I may be in C:\Program Files\Irfanview, but in my case I installed it in D:\My Programs\Irfanview.

4 Go to the folder **Plugins\Adobe 8BF** and paste Perspective.8BF there.

5 Run IrfanView and open a image - any image will do. If you don't have an image loaded, you won't be able to install the filter in IrfanView.

6 Go to **Images\Effects\Adobe 8BF Filters.**

Alternatively, you can use the **CRTL K** Hot Key.
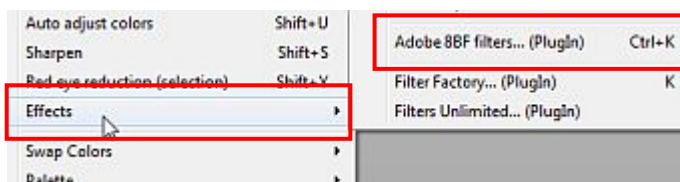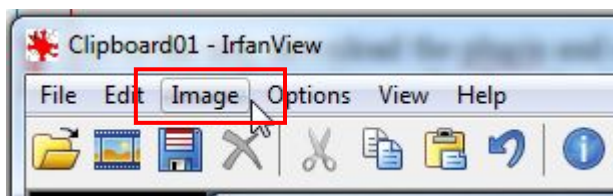
The following window will appear:

7 Click **Add 8BF Filters**
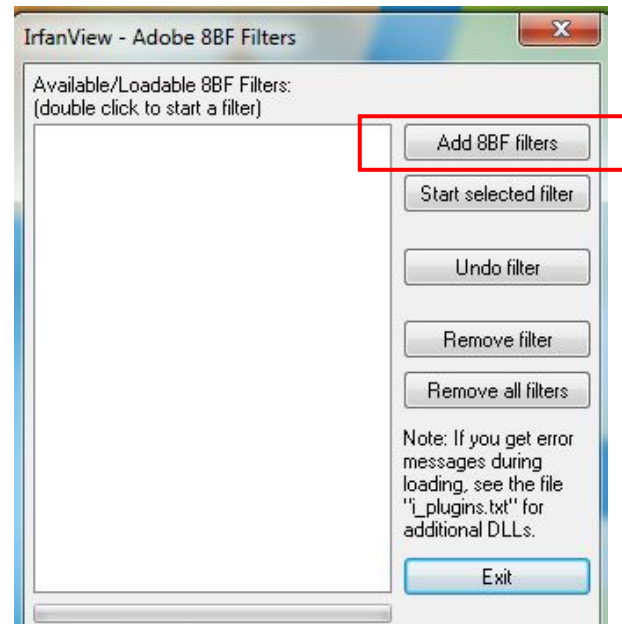
8 Use the next window to go to the folder where you installed the Perspective plugin. It may be C:\program Files\Irfanview\Plugins\Adobe 8BF, but if you followed my earlier suggestion about installing IrfanView in D Drive, it will be in D:\My programs\Irfanview\Plugins\Adobe 8BF.

9 Click the folder and click OK (See image below)
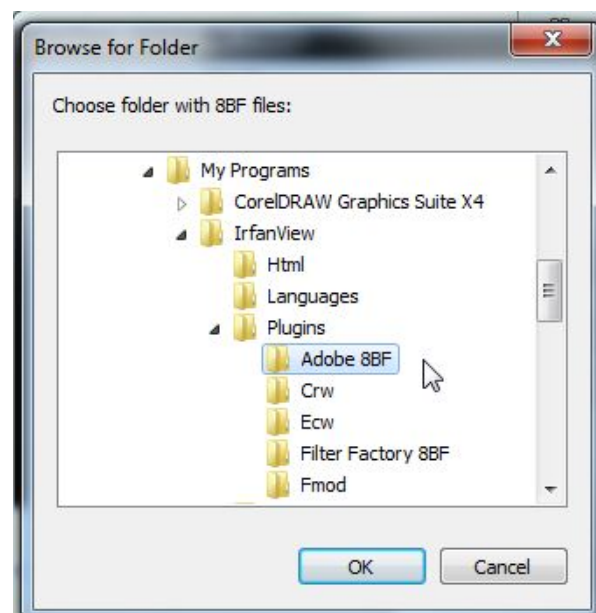
You will be returned to the Adobe 8BF Filters window and the Perspective filter will be listed along with a couple of

others that were included in the IrfanView Plugin Pack.

You will have to repeat steps 3 to 7 every time you wish to install a new filter, but that probably won't be often.

The new filters will be displayed like this:
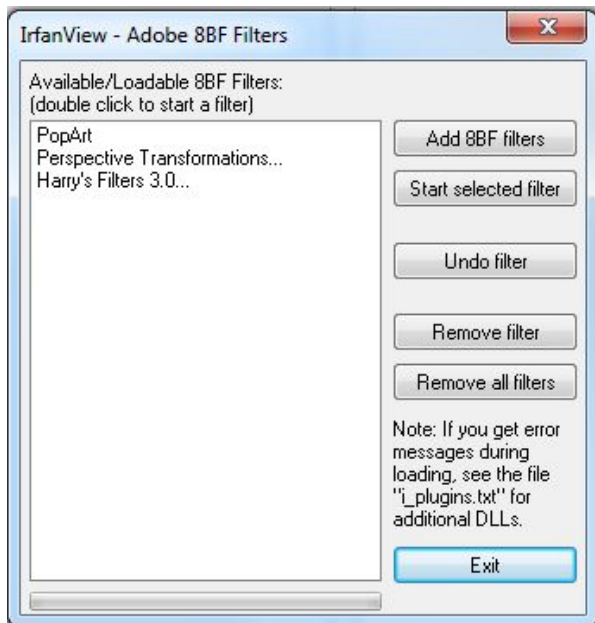
Your filters are now ready for use. You can start playing with them immediately by clicking the one you wish to try, then clicking the **Start Selected Filter** button. Alternatively, you can simply **Exit** and select a filter when you're ready to practice with it.

Not all filters will work. You may get an error message (see the **Note** in the image opposite), or they may need a special "handler" such as the *Filter Factory* plugin already installed in IrfanView.

A lot of filters aren't worth installing unless they do precisely what you want. I searched the Internet and only found a couple that interested me. I will admit that I didn't do a thorough search and no doubt I'll eventually find a few more that give me as much enjoyment as MV's Perspective Transformations Plugin.

If you know of any filters that will help Trainzers create better textures, please be kind enough to share your knowledge with us.

Our email address can be found on the bottom left side of Page 2.

You are now ready to take on the tutorials.

Good luck and enjoy!

Tall Trees 2
Progress Report Update
By Ian Woodmore

PROJECT TARM

In the Apr 2010 issue of the Newsletter I outlined the TallTreez II update program. David Drake had granted approval for the hosting of repaired and updated config files at the proposed Trainz Community website.

I can now report that progress has been steady. Work on Kuid group 99446 has been completed and is ready for upload to TARL. This group contains 651 active assets out of the original 912 with the remainder having been obsoleted.

The work involved repair of various errors, updating to full compliance with TS2010 latest validation, and incorporation of the TRAINZLAW Initiative keywords. The work spanned three months and built on previous partial amendments carried out since 2006. The majority of the assets affected will only require substitution of the TARL config file for the original. Only a small number of assets will require manual intervention of users to correct other files in the assets.

Note that this Kuid group uses group thumbnails that are stored in the thumbnail folder rather than the asset root folder, and so the config files do not require a thumbnails container. Tag thumbnail, if it existed, has been removed.

All trees within this group now have mesh-tables. Tag asset-filename has been deleted as it is obsolete from Trainz Classics onwards. For backwards compatibility see TCN August issue. You may have to re-insert this tag if your Content Manager version does not do this automatically.

The prime focus of this upgrade is to ensure error free trees for use in TS2009 and TS2010, and updating to full compliance with the latest validation. The changes do not utilise any TS specific features, or alleviate any alpha channel problems being experienced by legacy trees.

Cropping Images With IrfanView

By John King

Cropping images is one of the easiest and most useful things you can learn to do with IrfanView. By cropping a photo, you can turn an otherwise worthless snapshot into a work of art, or make it easier to produce a texture for Trainz. This tutorial will show you how to crop an image and once you learn the technique, you can apply it any way you want.

Photographers, printers, newspapers editors and webmasters seldom publish a photo that hasn't been cropped. Even portrait photographers who have total control over the set, will still crop a photo to give it more impact.

On the right we have a photo of an old ferry and a Monorail train at Darling Harbour in Sydney Australia. The original photo was taken with a cheap digital camera from a distance of about 400 metres. It was taken at high resolution to create a JPG file of around 3 megabytes. This allowed me to create the cropped images shown, something that may have been difficult if I used a lower (snapshot) resolution.

The original contains a lot of unnecessary clutter including those moorings (middle left). From an artistic sense, it's a average snapshot and I don't think it would ever get published in a magazine. The picture underneath has been cropped and it's far more likely to be accepted by a publisher.

Of course, if I was only interested in trains, I could have cropped the photo even more! (See image below.)

During any cropping exercise, it's up to you to decide when enough is enough. Cropping doesn't ruin the original photo (unless you save the new image over the top of the original), so you can do several tests and finally choose the one you like best.

There are three ways you can crop a photo. You can choose an area by eye, use preset shapes and sizes, or create your own custom size. The latter is a handy way of cropping photos if you want them to fit a digital photo frame.

Orginal

Cropped Image

In this tutorial we'll crop a photo by eye, because that usually gives the best results.

In a later tutorial we'll learn how to resize photos so don't worry if your cropped results are too large. Just concentrate on getting a nicely cropped image.

1
a. Start IrfanView.
b. Open a picture **File/Open**.
c. Place the cursor at the top left hand corner of where you would like your cropped image to start.
d. Click and hold down the left mouse button.
e. Drag down and to the right to create a frame (see photo opposite). You don't have to be accurate.
f. Release the mouse button when you think you have covered the area you wish to crop. Once again, you don't have to be accurate.

In this exercise I'm attempting to capture the old Sydney Harbour Ferry and the Monorail train passing above. The old moorings (middle left) look a bit trashy so I want to eliminate them completely.
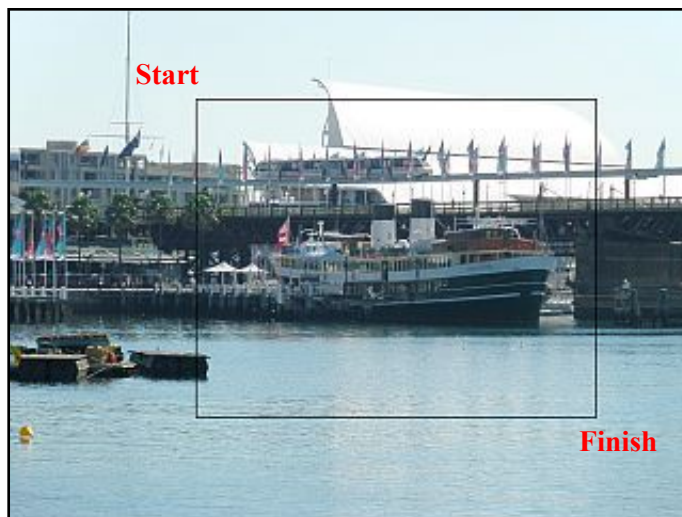
Once you've created the cropping frame, you can now fine tune the positioning. This can be tricky at first, but after you've cropped a couple of photos, it will become quite easy. Just remember, that even experienced people can sometimes get it wrong.

2 Move the cursor over the frame outline. It should change from an arrowhead to magnifying glass or double arrows:

or

- An arrow head means you're outside the cropping frame. If you click the left mouse button, the frame will disappear and you'll have to draw it again.

- The magnifying glass means that the area covered by the frame will be enlarged if you click the left mouse button. This is fantastic if you just want to enlarge a small section of a photo, but it won't help you while you're trying to crop.

- The double arrows mean that you can move the edge the arrows are currently over. Just click and hold the left mouse button and move the edge in the directions the arrows are facing.

3 Repeat the exercise on all four edges until the frame is the right shape and roughly where you want it.

4 To position the frame precisely where you want it, place your cursor inside the frame, then right click and keep holding the mouse button down while you drag the frame around. You will see a compass cursor (below right) indicating that you can move the frame in any direction.
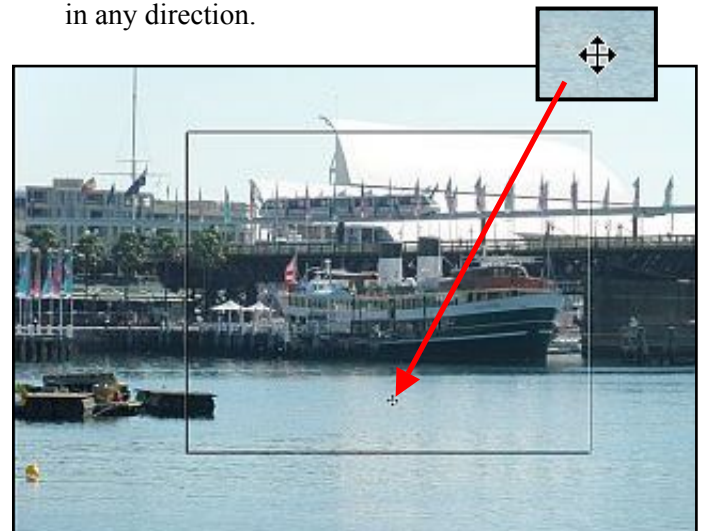
Note: If you left click, you will lose the frame and have to start again. Just remember to right click, hold and drag.

5 When you're satisfied with the positioning of your cropping frame, Open the Edit menu and click **Crop Selection**. The unwanted area will vanish.

6 If you're not happy with the result, select **Reopen** from the **File** menu and the original photo will re-appear.

That's it (well almost). You have successfully cropped your first photo using IrfanView.
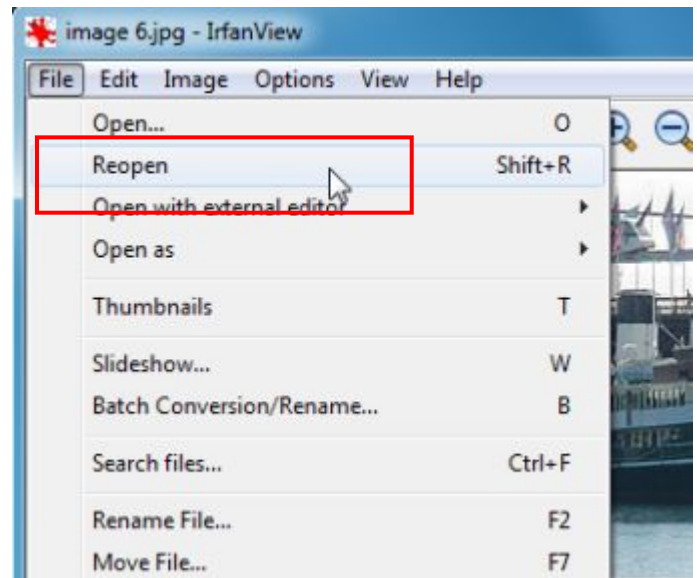
7 You can now save your work. Select **Save** or **Save As** from the **File** menu, give the cropped image a new name (**important**) and save it as a JPG file. If JPG doesn't appear in the **Save as type** box, click the arrow button **(1)** to open a dropdown box containing several file types. Select JPG - JPG files from the list.

8 Make sure the slider in the box to the right of the Save window **(2)** is in the position shown opposite. It should be set to 80. This determines the amount of compression.
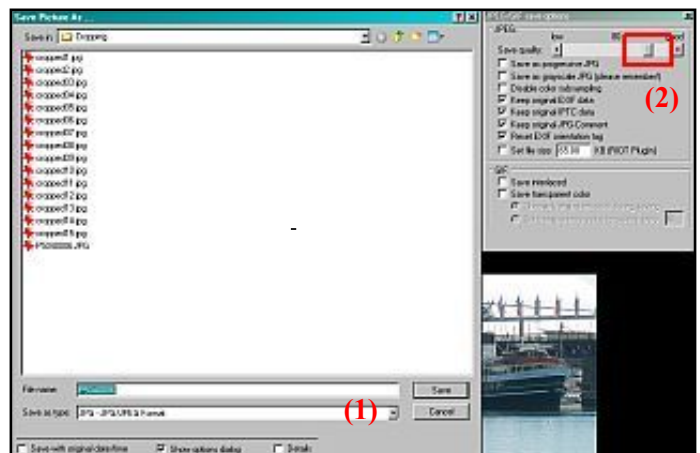
Cropping with IrfanView is dead easy. It just takes a few minute's practice to become an expert.

The Missing Assets Dilemma

By Ian Woodmore

MADE

Missing Assets Directory And Exchange

A Part of TARDIS
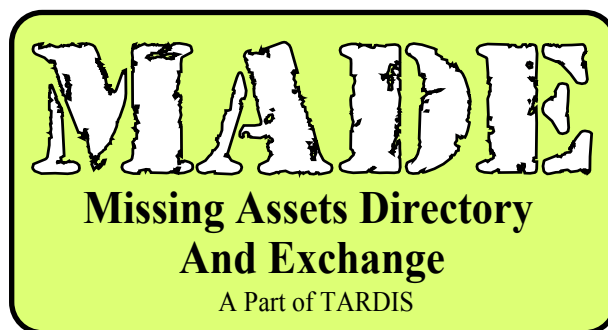
Introduction

You have just downloaded what promises to be an exciting route and several associated sessions. After Download Helper has gathered all dependent assets and Content Manager has committed these to the Trainz Asset Database (TAD) as well as validated asset status you find that a number have defects and warnings. You feel confident that you can fix these defects with the guidance given to you in TARG and using PEV's tools, but horror of horrors there are nearly 100 missing assets. How did this happen? After all you downloaded it from DLS and in that process all dependent assets are supposed to be downloaded too. Where are these missing assets and why can't you download them?

Size of Problem

My TS2010 TAD contains reference to ~175,000 assets. About 25,000 of these are builtin; some from Auran, others from authors around the world and from many different countries and languages. These builtins on my install also contain the four TS2009 Add-ons – Murchison 2, Settle and Carlisle, Classic Carbon City and Treesdemo. I have about 20,000 assets from Community websites. In addition to those assets downloadable from DLS the TAD shows some 19,000 obsolete assets, a number of Out of Date assets and more than 4,000 with Missing Dependencies status. By using RMB 'View Dependencies' we determine that some 10,000 assets have an unknown status icon (?). That's the bad news. Realistically though, very few of the missing assets cause crashes, or are even noticed in the game. An exception would be loco or rolling stock bogies.

MADE

The goal of the Missing Assets Directory and Exchange (MADE) project is to locate those missing assets, determine a link to their current whereabouts, and record that information in a database to be hosted at the Trainz Community website. This database will initially be populated with a list of missing assets gathered from my TAD. Unfortunately, the number of 'found' assets is pathetically small. It requires considerable detective work to track down missing assets. It will need the combined knowledge and skill of the whole Trainz Community. Yes, others have tackled this problem piecemeal to meet their own needs. Quite often a post in one of the Auran forums expresses the frustration of not being able to find an asset. Helpful souls point to the most likely location(s) and then that information gets buried as other matters are discussed on the forums. TARL Mk 1 had a basic Missing Assets capability and was well received by those who used it. Project TARM now builds on that foundation under TARDIS. MADE will be the central repository for information on all missing assets so that we can all benefit from the combined knowledge of the Trainz Community, no matter what country we reside in, or which language we speak.

The Missing Asset

So what causes an asset to be missing from a route or session? After all it was there when the author made the layout.

There are many factors that contribute to an asset being missing:

Upload function – When uploading assets to the DLS a number of checks are made to ascertain completeness and compliance with CM validation. Unfortunately, in the past, this was not very stringent when determining dependant assets. To an extent this is still the case today.

Cannot download asset (DLS Stuck) – there is a small group of assets (~30) that have 0KB size, are corrupted and cannot be opened, download but then seem to disappear (:127 issue). Frustratingly, these continue to show as available and only after attempting to download will you determine that this will be unsuccessful.

Missing Assets on DLS (MADS) – You will recall that we had a traumatic crash of the Auran servers in 2006. Just what we lost due to that cannot be readily ascertained. There will be occasions on which the Content Manager (CM) will say that an asset is on the DLS or FTP server but the dreaded red banner says the URL cannot be found.

Missing Assets amongst Builtin (MABI) – I'm not sure how many builtins there were in TRS2004, but as each new Trainz version is released the number of builtins grows. Trainz Classics was an exception and we had to import our builtins from TRS2004 or TRS2006. TS2010 has over 25,000 assets but as you import legacy routes and sessions you will find that a number of previous builtins

are missing. Not many, maybe a dozen. It will be different for each Trainz version, and of course only Auran can fix that. Be aware though that many TS2010 builtins are also available on the DLS because they are not builtins in earlier versions.

OOD/Obsolete confusion – The current capabilities of Content Manager are unable to resolve some assets' status. This is usually due to a convoluted obsolescence chain. The original asset was in Kuid format; the latest is maybe a Kuid2 :4 extension, but :1 and :2 are not available and :3 is shown as Out of Date (OOD). The numbers are small (<200) and tend to oscillate as CM one minute calls them OOD then next time it's obsolete. Probably the fix for this is to identify these assets and alter the config file Kuid-table entries to eliminate the uncertainty.

Obsolete Dependencies downloads – This is a very annoying factor and needs constant attention. You may have noticed that Download Helper (DLH) seems to expand the list of assets you are downloading. These are the dependent assets that you do not have in your TAD, and this is different for each version and each User. The information is determined by CM comparing the DLS asset index (dump lists) with the combined assets of all config file Kuid-tables in your TAD. Any differences associated with your current downloads then are appended to the DLH queue and get downloaded. Trouble is that the Kuid-tables of legacy assets reflect the original asset build not the latest. Now according to Auran, only the latest asset build is used in the game, and that appears to be so. That means any obsolete asset that has been downloaded is now ignored and is surplus to requirements. These local obsoletes can mount up very quickly and if you are not aware may already run into thousands. You can see how this accumulation impacts on you by building the following custom CM filter (See previous Newsletters on how to build Custom Filters):

Location local

Builtin false

Obsolete true

This will show you all non-builtin obsoletes which you can then delete, in which case they become Obsolete –DLS. You can toggle the builtin to true and this will then show the builtin obsoletes (currently 747) but of course you cannot delete these, only Auran can cleanup the builtins. Note that rarely will you see an obsolete from non-DLS websites. That is because the obsoletes are determined from the DLS dump list which don't contain the Kuids of assets hosted elsewhere unless they are also hosted at DLS.

FTP delay on DLS dump list – DLS dump lists are compiled daily. These are downloaded by TADDAEMON and then CM compares what is available on DLS against what you have. But there is a delay from the time it can be

downloaded directly from the web based server (commonly known as DLS) and the FTP server. So those with First Class Tickets will often find that a new asset is listed as available but then find it cannot be downloaded via CM. This is usually resolved within a day or two. So these are temporarily missing only.

Author withdrawals from DLS – There have been some withdrawals of assets from DLS by their authors. In other situations the author may have been banned and his assets locked or removed. Thus their assets can only be found at some non-DLS website.

RUMMAGE

This is where the fun starts in what I call a RUMMAGE A RUMMAGE involves an extensive search based on little information in the hope that you will find the missing item. A RUMMAGE involves considerable detective work. Here are some ideas:

- You will probably only have an asset Kuid and no other information. That will at least tell you who is the author.
- Planet Auran Community Search has now been enhanced so that you can search by User ID as well as Username, and the page navigation bug for Country Search has been fixed.
- Another source of information is the forum where people request help in finding assets and others share their knowledge. Unfortunately this information gets quickly buried and may be difficult to extract via the search function.
- The Forum User Profiles may provide you with an email or PM link to the author.
- There's Google of course.
- And sometimes the author surfaces and provides the linkage.
- In all other situations you will have to do a website crawl and hopefully a few assets get found.
- If you know the website name you can go directly there, but the Trainz Resources Directory (TRD) Web Link and Community websites features can assist. This facility will transfer to the Trainz Community website later this year.
- Bear in mind that many of these websites are not in English, nor might they have a translation service.

MADE Tools

How can we kickstart this project so that we have a facility that can benefit all Trainzers?

Community websites – Any Trainz community website not yet listed at Trainz Resources Directory or part of TrainzWeb link that is hosting authors, or their assets are downloadable should apply to TRD for inclusion.

What authors and where – Anyone who knows which websites, other than DLS, host authors assets can also advise us.

Kuid summaries by author and website – How much easier this would all be if authors and websites had consolidated lists of their assets including obsolescence. I recommend something like Tafweb has at his site.:

http://www.tafweb-trainz.co.uk/kuids.html

MY LIST – I will make my list available when MADE is launched later this year. It is over 10,000 assets so not publishable in the Auran forums. Note that missing assets

are relative to a User's TAD. In my case my TAD is extensive and more importantly contains the whole DLS.

MADE specifications and functionality – The MADE specifications will be published later this year.

MADE documentation – Every effort will be made to produce a comprehensive User manual for MADE. This most likely will be in HTML so that it can be machine translated.

MADE Timetable

As we advised last month the database development has been delayed. We do not have a definite date as yet, but hopefully sometime later this year.

TrainzLaw Progress Report

By Ian Woodmore

The **TRAINZLAW** *Initiative*

In the May 2010 issue of the Newsletter I introduced you to the TRAINZLAW Initiative and discussed some of the constraints surrounding copyright, licensing and hosting Trainz assets. This was from the viewpoint of a non-legal Trainzer and in relation to repairs and updates under Project TARM.

Apart from the initial discussion when I announced the intent of Project TARM in the Auran main forum, I have had little feedback from any Trainz Community members or from Auran. The problem doesn't disappear or go away just because there is little or no comment. The launch of Project TARM TARL and MADE databases inexorably creeps closer. As a consequence of the server upgrade issues some of the repair and update work has had to proceed more slowly, and the tentative go live date was delayed from June to September 2010.

In the meantime I have:

- carried out the initial survey of 25,000 config files;
- developed TRAINZLAW keywords for use in tag 'category-keyword';
- incorporated the keywords in the Key Caddy;revised the keywords based on my own experience; and now
- added a group of default keywords to some 175,000 assets.

That brings me to Stage 5 – amending the default Hosting and License keywords to reflect the authors' conditions for the use of their assets. This is unlikely to be completed for

some time and the intention is to upload the affected config files with the default keywords so that recipients can adjust them for their own needs. Progressively I will revise the TARL hosted config files accordingly.

What can be uploaded to TARL is dependent on author approvals. The small band of enlightened authors has increased. I now have approval to host config files of assets in Kuid group 56063 by majekear. Rene Steinkamp was virtually a founder author of Trainz assets particularly locomotives and rolling stock. His designs were the basis of many cloned assets. He is still very active even now. Thank you Rene for your support. I'm happy to assist in repairing and updating your assets, so that you can continue creating new assets, hopefully in TS2010.

NEXT MONTH

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- More IrfanView Tutorials
- More Texturing Tutorials from Vulcan
- The first in a series of gMax Tutorials
- A few major announcements?
- Black September and What it really means to you!
- Plus things I don't even know about.

What do you want to see in the Trainz Community News? Please write to us and let us know.

Making a Seamless Brick Pattern for Tiling

By Ian Manion (Vulcan)

It is very efficient to use a small pattern of brickwork and then tile it across a wall (make it repeat a number of times). Suppose we have the following picture of some brickwork, it is a bit large and when tiled it does not join exactly at the edges. We will take a section of the picture and make a smaller seamless pattern.
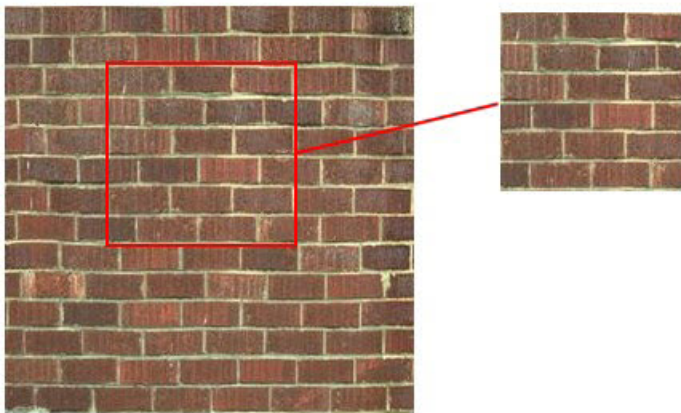
The original is a 512 by 512 jpg image. In Paint Shop Pro (PSP) use the selection tool to select the area shown, 3 brick wide by 6 bricks high, and copy and paste it as a new image. Note this selection has no mortar joint showing on the left or top of the area, but has mortar joints on the right and bottom. Otherwise, joints on two opposite sides would show double thickness at every repeating joint in the tiled pattern.

The selected area also has the bottom row of bricks staggered in comparison with the three bricks in the top row, so tiling the pattern vertically will also show the correct pattern.

.The copied area is actually 117 by 124 pixels. Use the resize function in PSP to make the new image 128 by 128. The image is a quite good tile, but does require some brick colour adjustment. Make a new blank image in PSP (say 500 by 500) and paste a number of the images adjacent to each other to check the colour match at the joins.

In the diagram below, the pattern is tiled three times horizontally. The white gaps have been left in the image to show the limits of each tile.

Notice the bricks in the red boxes that will be adjacent in the tiled pattern are different in colour. This would look unrealistic in the final wall.
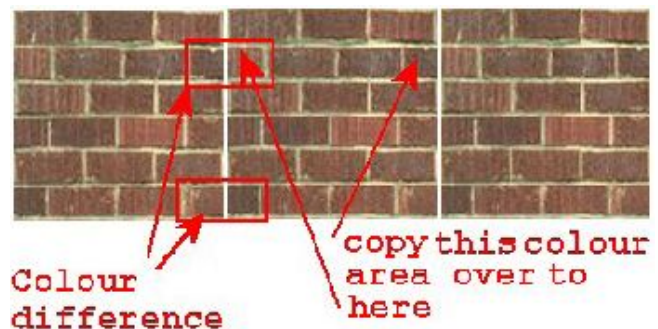
This is rectified by copying the dark brick area indicated over to the right hand side of the pattern. Copy mortar joints if required. Do the same in the lower mismatch, so the colours will match. Now it will look like a complete brick is straddling the tile joints.

Save the pattern as a tga file. Note that Trainz only accepts uncompressed tga files, and PSP when first installed, by default, wants to save them as compressed. When saving, select the options box and tick "uncompressed" (shown in the red box).
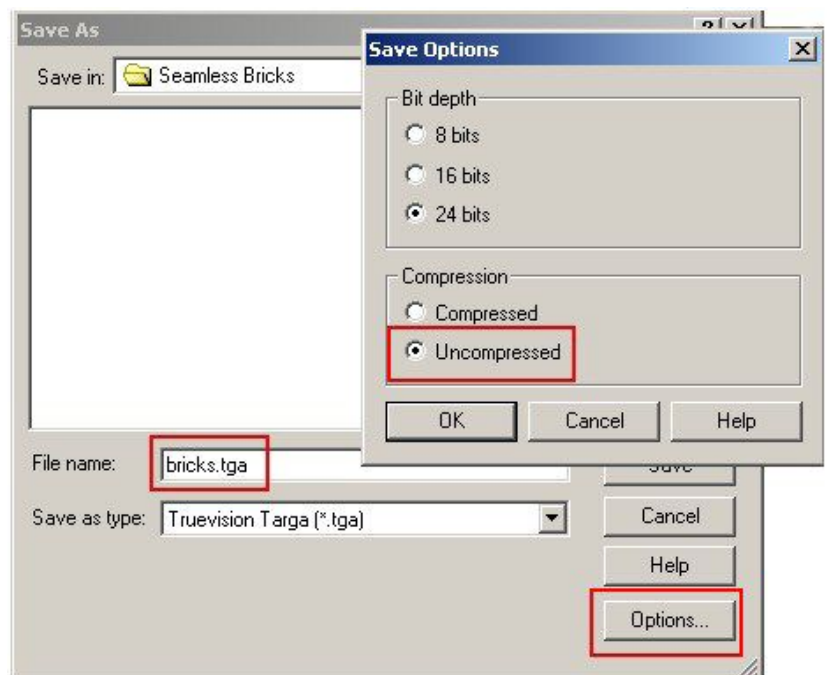
This is the finished texture, 128 by 128 bricks.tga uncompressed. Note the dark matching areas on each side of the texture.

A brick is normally about 200 mm wide by 85 or 90 mm high with one mortar joints width included in the measurement. The pattern will therefore represent a section of brickwork 600 mm by 540mm high.

We can now work out the tiling values for our house model. To allow for a slope in the ground, it is best to have part of the wall say 500 mm below the ground, so gaps will not show below the building when the ground line varies in Trainz. If the height of the wall above ground is 3 metres, total wall height will be 3.5 metres, and we would tile the pattern vertically 6.5 times (3500 divided by 540).

If the wall is 6 metres long, the pattern will be tiled 10 times (6000 divided by 600). For this particular part of the wall we will use these tile values. While the values can be rounded off for simplicity, the bricks must match as they go around corners, so use accurately calculated figures if necessary.

Always write the values down so when you have to adjust a building length or redo the texture, you can remember the tiling values previously used.

Here's the same pattern joined 3 times to create a seamless wall.
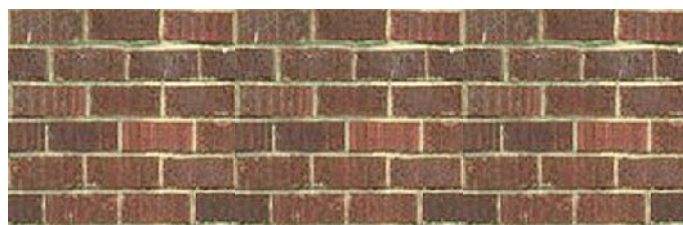
The Greenhouse

This is a new section for creators experimenting with improving grass, bushes, trees and other vegetation in Trainz.

Auran introduced Speedtrees; Mcguirel Ultratreez

Both these are attempts to overcome the limitations being experienced with legacy trees. However, you need some serious money to create vegetation with these programs, and of course there are copyright/licensing issues involved.

The idea for this section was spawned by a post recently by Xeangeance entitled *ngPlant - a possible solution to out-dated vegetation!*

http://forums.auran.com/trainz/showthread.php?t=57822

After googling for **ngPlant** I came up with the start of a **Tree Making Toolkit**. All programs suggested here are free.

Tutorial

http://yorik.uncreated.net/tutorials/treemaking.html

Yorik's Blender Greenhouse

http://yorik.uncreated.net/greenho use.html

ngPlant - Plant Modelling Package

http://ngplant.sourceforge.net/

Inkscape - Vector Graphics Editor

http://www.inkscape.org/

GIMP - Image Manipulation Program

http://www.gimp.org/

Blender

http://www.blender.org/

Blender Video - How to Create Stunning Trees

http://www.blenderguru.com/how-to-create-stunning-trees/

Blender Video - The Secret to Creating Realistic Grass

http://www.blenderguru.com/the-secret-to-creating-realistic-grass/

If you are starting from scratch it will be a steep learning curve but the rewards will be great. Who knows you may be a future Trainz Horticulturist and follow in the footsteps of the Tree Giants such as David Drake, Tundra, TMN, Jankvis and others.

Fixing Images Taken With Cheap Digital Cameras

By John King

A couple of years ago I purchased a $150 digital camera to take photos of textures I could use with Trainz. The results were so bad, I returned the camera and upgraded to one that cost $100 more. Unless a store has a camera on display, it's impossible to try before purchasing, so I just had to take the advice of the sales person.

The second camera was actually worse than the first. To demonstrate just how bad it was, I took this section of a mosaic wall in Melbourne Australia. I was probably 20 feet away. Notice the distortion at the top and bottom of the wall. I could hardly use a series of these pics for a panorama shot!

I just put the camera in a drawer and forgot about it. I began using my mobile phone instead and oddly it has no barreling at all. Unfortunately the phone can only take 2 megapixel photos which are not good enough for texturing purposes.

Barrelling can often be eliminated by using a touch of telephoto, or taking photos from a distance, but when your camera is as bad as mine, nothing helps.

While I was experimenting with a free graphics program called Photobie which I reviewed in the May issue of the Trainz Community News, I came across a free Photoshop Perspective Transformation filter on a web site called MV's Plugins.

In response to a recent thread about Perspective correction in the Trainz Forums, I've decided to revisit the filter and give it a try with irfanView. If you use IrfanView, you will need to install the IrfanView PluginPack to follow this tutorial.

The filter was very easy to install. (See tutorial on page 10. To my surprise, it was also very easy to use. I loaded the picture of the mosaic and played around with a couple of controls until things started to improve.

The results were so amazing, I resurrected the camera and now I'm using it for everything.

This is how easy it is to fix all those lousy pics:

1 **Run IrfanView** and open the image you wish to repair. IrfanView usually compresses images to fit on the screen, so don't be alarmed if the image looks smaller than you expected.

2 Click **Crtl K** to open the Adobe 8BF Filter window. The long way round is to select **Image/Effects/Adobe 8BF Filters.** The following window will appear:
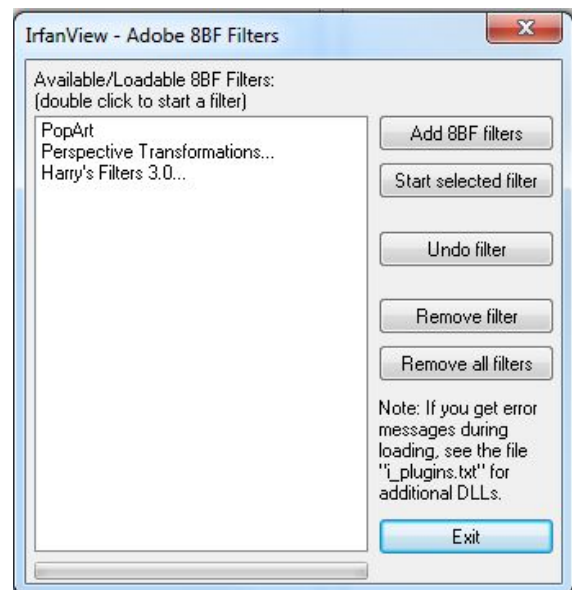
3 Click **Perspective Transformations**, then click **Start selected filter**. This will launch the MV's Plugins Perspective Transformations Filter window shown on the next page. The window can be enlarged to a certain extent by dragging the corners (See **(i)** on image)

Unfortunately there is a limit to how far you can enlarge the window and this can make a few jobs a little harder to do. It's one of those things you have to get used to.

You can also increase the size of the image in the window by using the Zoom slider **(ii)**. It's not brilliant, but it helps. I found that by making the image larger than the window can cause problems, but try by all means.

De-Barrelling

1 This is the easy bit. Simply move the De-barrel slider to the right or left to make the worst bowed line straight. In my case I chose the top of the wall and found that moving the slider to the right twenty-one (21) units fixed the problem nicely.

Hint: You can use the arrow buttons on each side of the slider to move it one unit at a time.

Here is the result. As you can see, the lines are now perfectly straight. There's still a heap of perspective distortion, but we'll deal with that in the next part of this tutorial. (The yellow lines should be vertical).

2 Click OK to save your work, or if you really feel confident, you can move on to the next section. My recommendation is to save now, because perspective adjustment can sometimes be a bit tricky.

Perspective Adjustment

It's almost impossible to take a photo of something head-on. I think I was holding the camera level with the heads in the top row. Assuming the vertical grooves on the top and bottom are the same size, the image seems to be sloping in at the bottom. (See yellow lines) This is the last thing we need when trying to create textures for Trainz, however there are ways of fixing the problem.

MV's Perspective Transformations plugin has three ways of doing it, but we'll only discuss two of them here.

Using Vertical Lines

The idea here is to draw two lines on parts of an object that should be both vertical and parallel. On my mosaic I'm going to use the grooves.

1 In the **Control Points** section, select **Vertical Lines** and click **Set**.

You can also change the line colour from red to a suitable contrasting colour by clicking the red box.
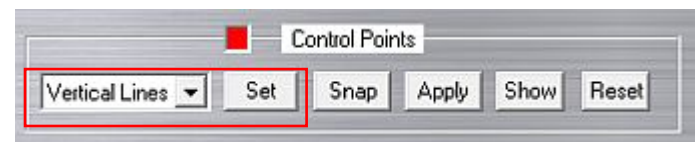
2 Place the cross hair at the top of the first vertical line. If that's not possible, place it on the edge, get it as close to the top as you can.

Left Click. A very small dot will appear.

R**epeat** the process at the bottom left corner, or as close as you can get to it.

A coloured line will appear. (See next page) This should accurately follow the vertical face. If it doesn't, learn how to move the line around and make very fine adjustments on page 25.

The first vertical line is drawn

3   Repeat Step 2 on the right side of a vertical face.

     What you should have, is two lines looking like this (exaggerated):

     Or this:

     It will depend in which way the item is sloping away from you.

4   When you're happy, click **Apply** in the Preprocess section, Then **OK**.

The vertical faces of the top and bottom concrete blocks are now aligned and the perspective distortion has been corrected.

The finished product.

Using a Rectangle

This is the best method to use if you can. For it to be successful, you must use a part of the image that you know to be rectangular. This is easy with things like windows or doors, but some structures don't contain any rectangles.

Obviously the best items to use are doors or windows if they're large enough to trace.

The Rectangle method is simplicity in itself. Even if a door looks like this in your photo:
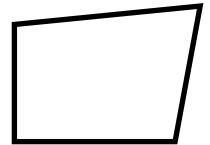
You trace the outline, click Apply, and the shape will end up like this:

The program will ensure that everything else in the photo is also correctly proportioned. Very clever!

1   De-barrel the photo if that needs to be done. De-barrelling has nothing to do with modifying the perspective. Always treat them as two separate projects.

2   In the **Control Points** section, select **Rectangle** from the drop down box and click **Set**.

     You can also change the line colour from red to a suitable contrasting colour by clicking the red box.
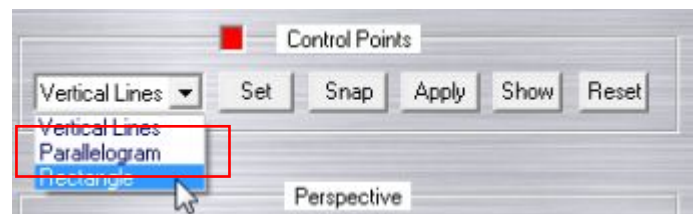
3   Place the cross hair on the top of a vertical face and click. I used the top right. You will see a little red dot.

4   Move to the next corner (top left) and click again. Don't drag, just move the cross hair and when you're happy, simply click. The two points will be filled with a red line.

5   Repeat the process on the next corner (bottom left) and the red line will follow you.

6   Finally, click the last corner (bottom right) and the red line that's been following you around will encompass the entire shape.

7   When you're happy, click **Apply** and the area will become a precise rectangular or square shape. Of course, the rest of the photo will also take on a whole new perspective. (See example next page)

8 Click OK to save your changes to IrfanView. You've finished with MV's Plugin and anything you wish to do with the image from now on will be done in IrfanView.

Here's how IrfanView sees the transformation:
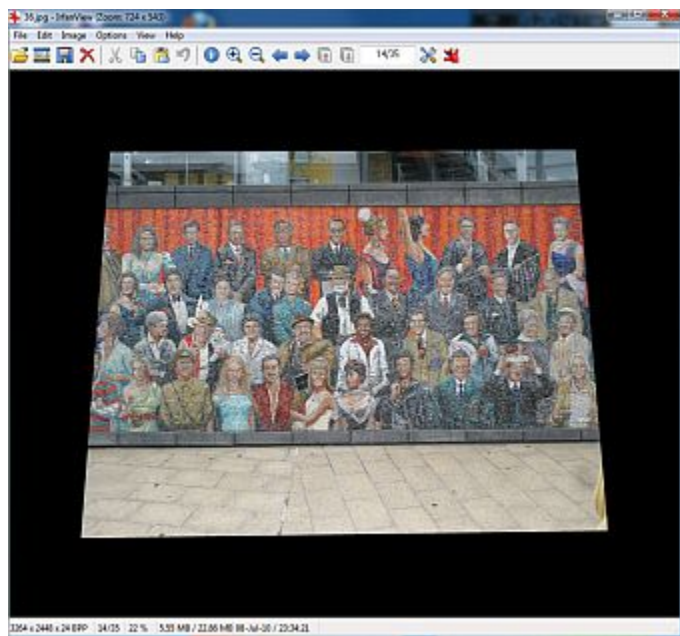
Notice how the image has become wedge shaped. By transforming the perspective, you are actually distorting the original image. This can cause severe problems, especially if you didn't allow enough "air" around the part you want to keep.

When I took my photos of the mosaic wall, I knew I was going to create a panorama. As such, I overlapped each photo so that I could lose a metre (3 feet) each side and still be able to join each section correctly.

There's nothing worse than finding a chunk is missing when you get home. Digital cameras don't cost much to run, so always take plenty of photos just to make sure.

Much to the annoyance of the friends who were with me, I took over twenty photos but only ended up using five. The yellow border in the screenshot below shows just how much of the image couldn't be salvaged.

9 Use IrfanView's Cropping facility to crop the part of the image you wish to retain. There's a cropping tutorial on Page 12.

Have a play with other image enhancing features such as **Auto Adjust Colours** and **Sharpen** until you get a satisfactory result:

Remember, it is a mosaic.

We started with this . . .

. . . and finished with this.
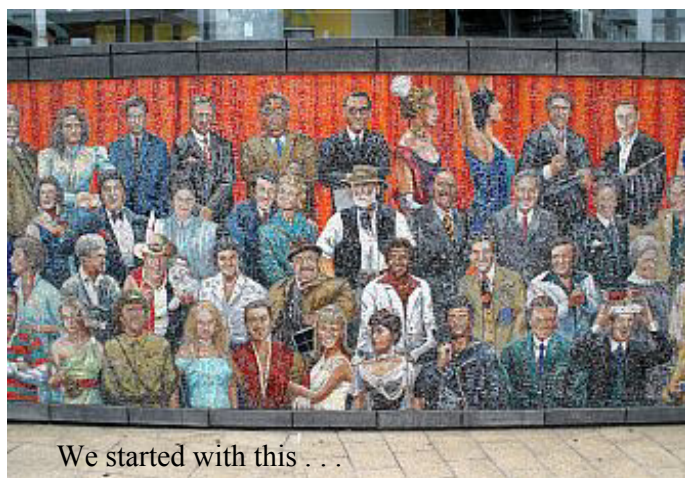
My finished panorama which is over a metre long looks absolutely spectacular. See Page 26 for a description of the Mosaic Wall and a thumbnail of my panorama.

Considering the distortion in the image opposite, you wouldn't believe it was possible to achieve such an accurate result.

Some fine Tuning

The following will work in MV's Perspective Transformations in either of the three modes - Vertical Lines, Parallelogram, or Rectangle.

As I said earlier, it's best to do these transformations before you crop a photo.

Here is a perfect photo with plenty of spare space around the sign:
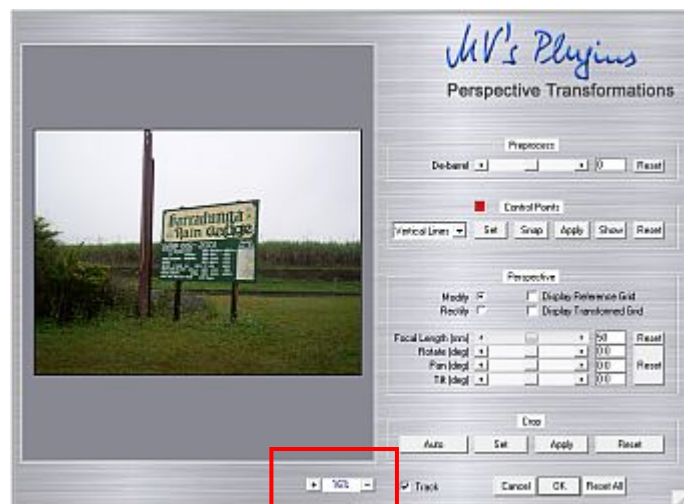
1 Once you've loaded the image into MV's plugin, use the zoom tool (red box above) to make the part you wish to transform fill the window.

As I said earlier, you can make the area larger than the window, but I prefer to see everything I'll eventually want to save. (See next image.)

Remember: You can enlarge the plugin window a certain amount by dragging the outer corners of the silver frame. You can also move the image around by right clicking and dragging.

2 De-barrel the photo if necessary. This one was from an old camera and no de-barrelling was needed.

3 Using the Vertical Line or Rectangle method, draw your lines. Be reasonably accurate, but don't stress yourself.

4 Once the lines or rectangle have been drawn, you can move the cursor over an end (line) or corner (rectangle) and hold down the Shift Key.

A small magnified window will appear, and it's extremely helpful to finely position the lines:
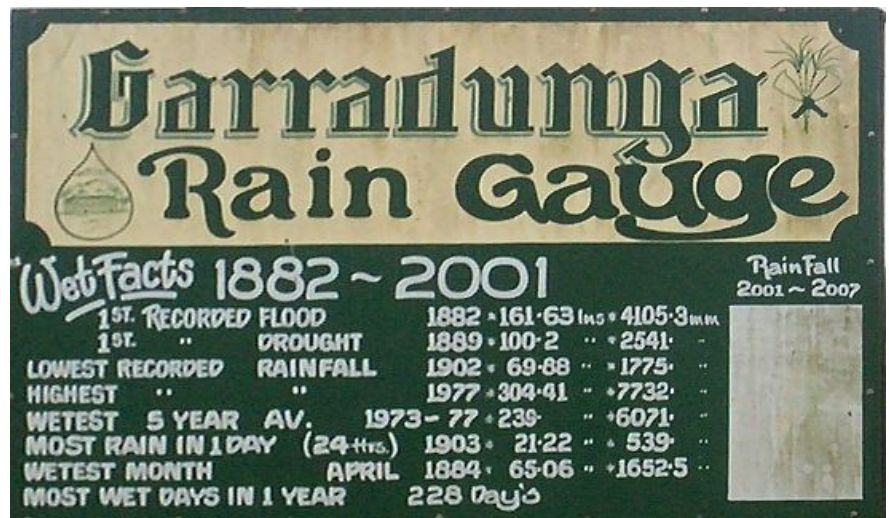
5 Move the line until it's positioned correctly, then release the left mouse button. That's about as accurate as you will get it:

6 Repeat the process for all four corners or the ends of each vertical line. Save your work under a new name so that the original file isn't damaged.

The end result is shown top right. Garrandunga is about 100km from where I live. It gets quite wet around here. It's not unusual to have a metre of rain each month during January and February.

When it doesn't Want to Work

The short help file that comes with the plugin does warn that some images can't be transformed correctly. The plugin will switch from Vertical Line or Rectangle mode to Parallelogram mode and give a distorted result. I struck the problem trying to transform the Puffing Billy sign opposite.

Oddly, another photo of the same sign taken from a slightly different angle worked fine. For the life of me, I couldn't understand why the first photo wouldn't work, but the second one did.

My advice: Take lots of photos from different angles and try them all to see which one offers the best result.
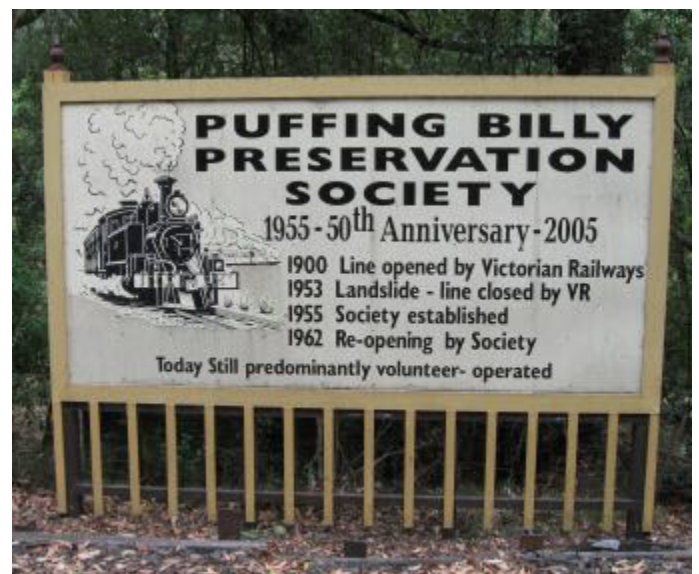
I was determined to get the first image to co-operate, so I saved the useless parallelogram image with IrfanView and reloaded it back into the plugin again. The transformation then went smoothly and the result is below.
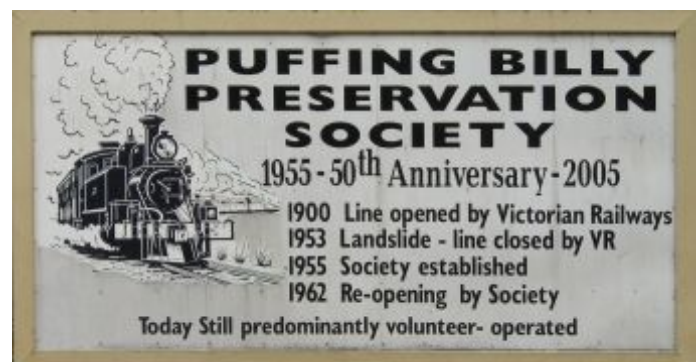
The Mosaic

The mosaic is located in the Docklands precinct in Melbourne, Australia. It's 11 metres (36 feet) long and about 2.4 metres high. Each person is life size and made up of hundreds of small mosaic tiles. (See opposite).

The wall represents almost all of Australia's nationally famous entertainers. Many overseas people may not recognise any, but Crocodile Dundee is bottom centre in the lower shot, Olivia Newton-John is fifth from the right in the lower row of the top shot and Dane Edna Barry Humphries is second from left in the same photo.

The highly compressed panorama doesn't look too great here, but at 4 inches high, it looks quite spectacular.

A section of the mosaic featuring Crocodile Dundee

See how I created the panorama in the next tutorial.

What's this got to do with Trainz?

Although I write these tutorials specifically for the Trainz Community News, they may also end up in other magazines and web sites. As much as I'd like to use Trainz stuff to get my point across, it's sometimes better for everyone if I use a more generalised subject. Having said that, you now know how to take and correct photos of billboards, the sides of buildings, railcars and hundreds of other things.

Creating a Panorama With IrfanView

By John King

Creating panoramas from a bunch of photos is a lot of fun. Panoramas are mainly used to produce impressive landscapes, but they can be equally handy for joining textures like the bricks in Vulcan's Brick Pattern tutorial on page 18.

Most digital cameras are packaged with a CD containing some kind of panorama software, but they're yet another program to learn for something you may only do a few times a year. They usually involve you, the user, to find something identical on each image, then mark the spot with a numbered tag. These tags will then be aligned automatically when you create the panorama.

IrfanView uses a completely different method of aligning, which can be great in some instances and not so great in others. IrfanView searches for groups of identical pixels in each photo and aligns them. If it can't find groups of identical pixels, it will use the edges of each image instead.

IrfanView's Panorama feature is simplicity in itself and quite seriously it doesn't warrant a tutorial. Having said that, there are some things that you can do to help get better results.

- Make sure the images overlap so that IrfanView can find groups of identical pixels in each image:
- Use images that have been taken head-on and not from the same place. (see below and opposite).
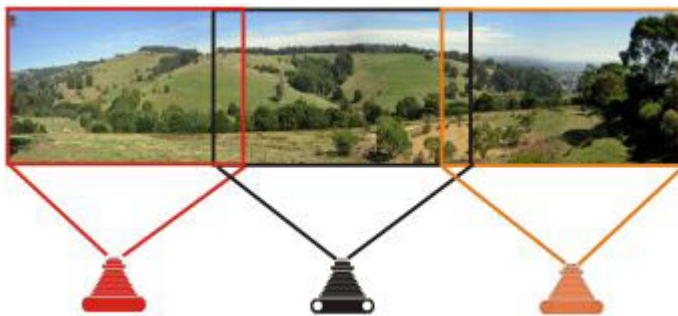
Taking a series of overlapping photos head-on isn't always possible, but if you're photographing a long building or a group of buildings like a row of shops, you do need to walk along the road and stand directly in front of each section. Try using a gutter or some other parallel line to stay the same distance away, and then use a gutter or a roof line to ensure the camera is always at the same angle.

Wherever possible, always plan your shots and take several of the same item just in case one or two are out of focus.

When photographing the mosaic, I used the edge of the pathway to maintain distance and used the top of the wall to judge the height. This gave me a reasonable chance of getting a good panorama even though I still had to de-barrel and adjust the perspective of each photo.

IrfanView (and many other panorama programs for that matter) doesn't like it if all the images are taken from the same spot. (see below) Each of the images will have a different level of distortion, thus making it almost impossible for the program to make corrections.
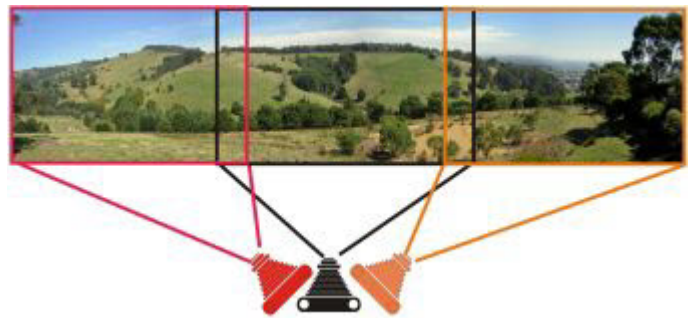
Panoramas can still be made from photos taken this way, but it's not something IrfanView was designed to tackle.

We'll take a closer look at more powerful free panorama programs in another tutorial, but in this one we'll just stick to images that we've taken head-on.

Here are thumbnails of the five images I used in my mosaic panorama. The overlaps on some were excessive, but IrfanView didn't mind a bit:

Creating the Panorama

1   Run IrfanView. Don't load any images at this stage.

     Click **Image/Create Panorama image**
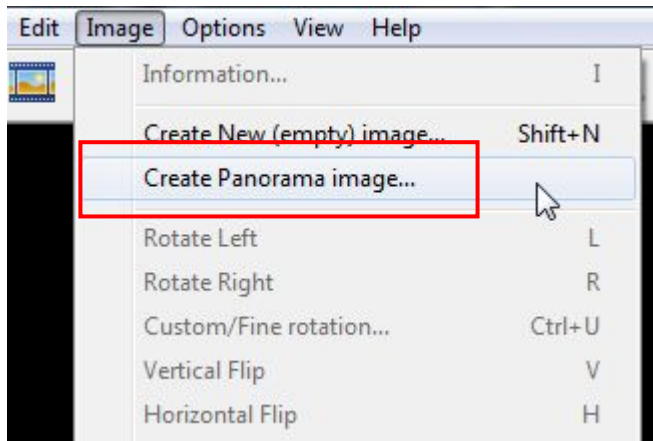
The following window will pop up.
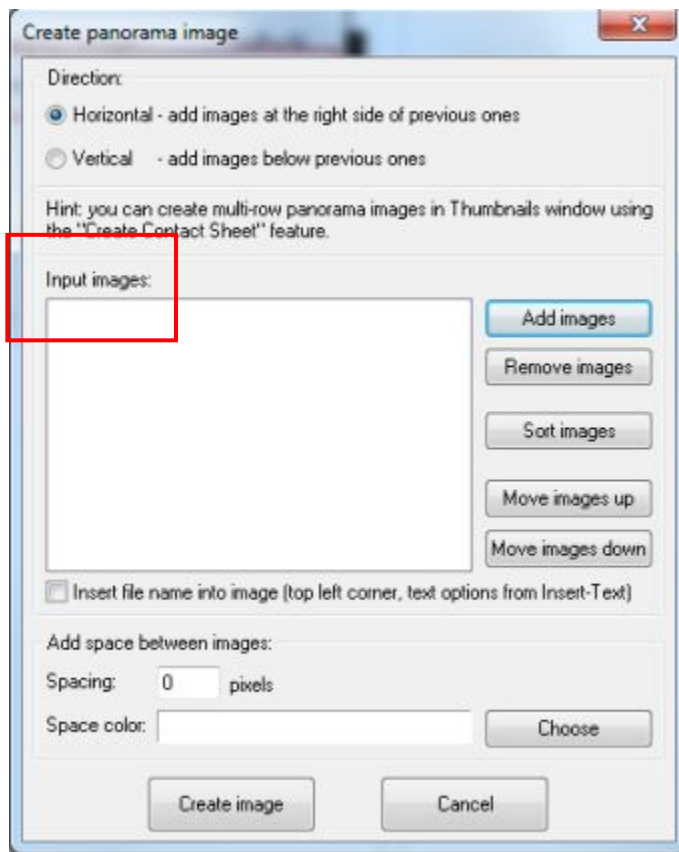
2   Click the horizontal or vertical button to tell IrfanView which way to create the panorama.

3   Click **Add images.**

The standard Windows **Open** screen will appear. You can select all the images for your panorama in one go by holding down the **Ctrl** key and clicking each of the images you wish to use.

4   Select the images and click **Open**. You'll be returned to the IrfanView Panorama window where you will see all the images you selected listed in a window. You may have to use the scroll bar to see the full image name.
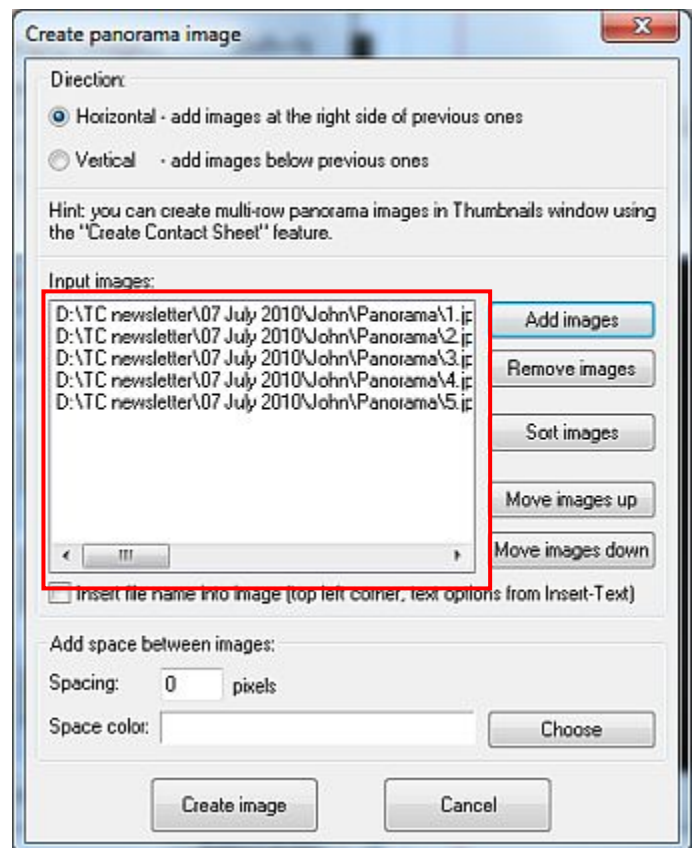
- If you get it wrong, click the offending image name in the window and click **Remove images.**

- If you forgot one or two images, **Click Add images** again and select only the ones you need

IrfanView now needs to know the order in which your photos should appear starting from the left (horizontal) or top (vertical).

5   The images may not necessarily appear in the same sequence you took them, so click an image you wish to move and use the **Move images up** or **Move images down** buttons to get them in the correct sequence. As you will see from the image on the next page, my photos were taken way out of sequence.
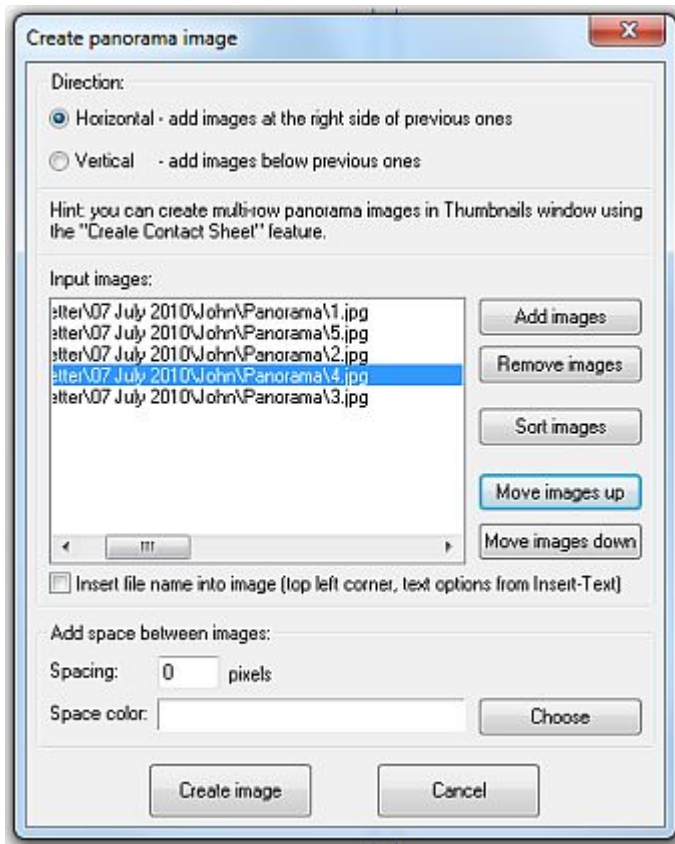
First, I made a *two image* horizontal panorama by adding the brick image twice:
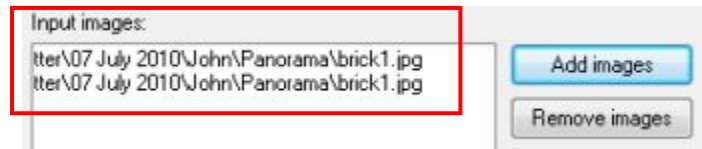
This was the result:

I saved the new file as **brick2**.

Then I made a vertical *two image* panorama, but this time I used **brick2.**

Here's the result. The tiled texture can now be reduced to the correct size to meet Trainz texturing requirements:
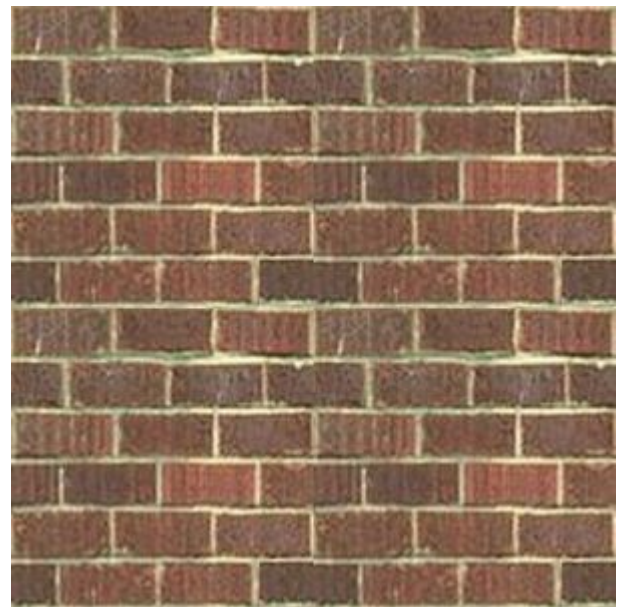
6 When you're happy, click **Create image**. You'll know soon enough if IrfanView was able to produce a decent panorama. A thumbnail of the full mosaic produced by this method is shown below. The original is almost a metre long.

The Panorama feature has many other uses. I took Ian Manion's brick sample from his tutorial on page 18 and made a tiled texture from that.

Here's the sample I used:

Just play around, but make sure you're having fun doing it. The more you experiment, the more you'll learn.

TARM Initiatives

by Ian Woodmore

Introduction

Trainz and the Trainz Community are experiencing rapid change. Not exactly a revolution, more like a chaotic evolution with insufficient information to determine its direction and final destination.

Project TARM deals with the Asset Repair Management aspect. However, there are a number of changes that could be made to the Trainz Community environment and the way it interfaces with Trainz that would benefit TARM. These are known as the Initiatives because they are not areas over which TARM can control direction, only influence by suggestion. They deal mainly with Auran facilities.

An exception is the TRAINZLAW Initiative that seeks to clarify copyright/licensing issues in relation to Trainz and persuade Authors to assist TARM in improving Trainzers enjoyment of the Train Simulator.

Progress will be reported in the ARE WE THERE YET? column.

Trainz Community ideas and input on issues are essential to the success of the Initiatives.

The Initiatives

TRAINZAURAN

- Request to Community for suggestions on improving two way communications with Auran.
- Evaluating proposals.
- Advising Auran.
- Suggestions to Community.
- Trainz Community Website and Forum.

TRAINZCCP

- Request to Community for suggestions on improvements to CCP.
- Investigating CCP functionality.
- Identifying CCP defects.
- Determining required improvements.
- Advising Auran.

Specific issues:

- Tag order for readability, reduction of errors, and maintenance of config files.
- Kuid-table need sorting numerically.

TRAINZCM

- Request to Community for suggestions on improvements to CM.
- Investigating CM functionality.
- Identifying CM defects.
- Determining required improvements.
- Advising Auran.

Specific issues:

- Lack of defect search filter similar to faulty and warning messages.
- Outputs via TrainzUtil need expanding.

TRAINZDLS

- Request to Community for suggestions on improvements.
- Investigating DLS functionality.
- Identifying DLS defects.
- Determining required improvements.
- Advising Auran.

Specific issues:

- Investigating DLSStuck assets.
- Investigating DLH OOD issues.
- Investigating DLH Obsolete issues.
- Identifying fault modes of assets downloaded from DLS.
- User preferences for sort and search.

TRAINZFORUMS

- Request to Community for suggestions on improvements.
- Investigating DLS functionality.
- Identifying DLS defects.
- Determining required improvements.
- Advising Auran.

Specific issues:

- Archives. Availability of TrainzDev Forum posts and archives.
- Language translation capability.
- Search facilities.

- User CP Info.
- Kuid lists at Community websites.
- Setting up Trainz Community Forum.

TRAINZLAW

- Introduction of TRAINZLAW Initiative.
- International copyright and licensing conditions.
- TARM and Community needs.
- Identifying Hosting and Distribution issues.
- Seeking Author approval for hosting at Trainz Community website.
- Survey of config file tag license and assess impact on TARM.
- Keywords defined and incorporated into KEY CADDY.
- Keywords being progressively added to repaired and updated config files.

Specific issues:

- Creator lack of response.

TRAINZPROFILE

- CM links
- config file personal details redundant and out of date.
- TrainzBaseSpec at TrainzOnline prefers profile at Planet Auran.
- Planet Auran facilities need expanding
- Community Search facility.
- Personal details.
- Determining changes needed.
- Advising Auran.

Specific issues:

These three issues have been resolved and functionality is now available-

- Search by Trainz User ID.
- Country Search page navigation bug fix.
- Search action by K/B Enter key.

Yet to be implemented-

- Add creator website URL.

TARM TIDBITS
by Ian Woodmore

TARP or TAUP – Attachment Errors

Trainz Asset Repair Management

One of the most significant contributors to errors reported by Content Manager in TS2010 is the attachment error. This will cause a red flag and as such will prevent the asset from being used in native mode. These errors are not new. Unfortunately they have not been reported in earlier CM versions. They tend to hide behind other errors, and it is not until those visible errors are fixed that suddenly there is an attachment error.

The confusing issue is that the error appears to be reported rather haphazardly. This is particularly noticeable when PM meshes are converted to IM. It is not a side effect of the conversion process. I have found more than 100 so far, including aliased assets, and I suspect I'll find many more once I examine the remaining red flags on my machine.

I believe that IM meshes are more stringently checked than PM meshes. What CM is reporting is that the attachments called out by the mesh do not match the entries for those attachments in the config file. You could also presume that the converse is true. That is, the entries in the config file are erroneous and not needed or provided in the mesh. Did the author have trouble aligning and attaching the secondary meshes, or did he just clone someone else's config file and not ensure the two agreed? The important

factor from CM's validation is the two do not match and a red flag is generated. There are a whole host of error messages depending on what's purportedly missing. One of the most frequent is smoke. Another is a load.

In this issue PEV discusses one method of fixing these problems in his Mr Toolman article - Attachment Maker. This will be a boon to authors and to more experienced Trainzers who are able to make new sub-meshes with this tool. You could consider this as an update as new ancilliaries can be added to the original asset for the User's own use, or distributed with the creator's permission.

For the less experienced this is not an option. Their need is to be able to use the asset, which most often is a locomotive or rolling stock, in Surveyor or Driver warts and all. Project TARM offers this second solution as a repair by eliminating the config file entry, with the expectancy that some authors will issue a corrected version via the obsoleting function. In the meantime, the rest of us can enjoy those locos and rolling stock without detriment to their functioning with only a few having noticeable visual discrepancies.

Once again PEV has come up trumps with this new tool.

RED ALERTS

Red Alert messages will remain in this list until problem has been cleared. This may take several months and may require issue of a Trainz Hotfix or Update.

a. Logon Problems new servers

Logon problems and a host of secondary issues have eased after Auran cutover to the new servers. Some problems still persist. If you have any specific issues related to logon raise a ticket at Helpdesk, but also let us know.

b. FCT and the 100MB limit problem

There is a bug in TS2010 SP2 but it has probably been there since TRS2006. CM sometimes refuses to recognise FCT and limits your download to 100MB. It may, as a consequence, also indicate by red banner that it is unable to contact Planet Auran. Usually can be cleared by exiting CM and immediately re-launching without waiting for TADDAEMON.

This problem reduced considerably during May and complaints have been at a low level during June.

c. EDR and Location unknown

After carrying out an Extended Database Repair (EDR) ALWAYS exit CM, wait 60 secs for TADDAEMON to finish housekeeping and then re-launch CM. After a few minutes any assets in location unknown should be resolved and return to correct category (usually DS or Obsolete or Out of Date). This action will only be successful if you are able to logon to Planet Auran.

Please note that TS2010 should carry out database repair automatically, and you should not have to do an extended or quick database repair manually except in extreme circumstances.

d. File Access Error (FAE)

File access errors have been prevalent in a number of builds up to and including TS2010 SP2. This results in about 8-10% of downloads staying open after a download of any sort and requires you to go to Open for Edit folder and commit. You may have to repeat this several times for some stubborn assets. This fault occurs randomly and is very difficult to trouble shoot. Auran is aware of the issue and may have found the cause. A hotfix is being thoroughly tested.

After downloading 100,000+ DLS assets there were no instances of FAE. You may see an occasional FAE in CM error messages if a filepath or filename is incorrect.

e. View Dependencies

There has been a change to the coding to correct missing assets data. While one problem was fixed, another involving obsolete and out of date assets remains.

Suggestions for improving ability to 'Copy to Clipboard' made to Auran.

f. Main View Tabs

You may experience rolling of the TABS in CM Main View and be unable to stabilise the display. The rolling is more likely to occur if you have a large number of TABS loaded in Main View and/or lots of other CPU hogging activities running at the same time as Trainz. Close any other applications. You may also have to use Windows Task Manager or Performance Manager to exit CM and then re-launch immediately.

I eventually gave up and did what is a rare event for me. I reinstalled with no problem as long as server is available. I wonder if this problem is related to tab selection where the order is changed to put the selected row at the bottom of the tabs. For me this is counter-productive. I name my tabs in a certain way so that I can group like custom filters for ease of operation. I want my tabs in alphanumerical order permanently. I believe this problem would then disappear.

Problem continues to occur randomly when initially launch CM.

g. WARNING !! Change of purpose for local folder

Many of you may backup your 'local' folder as insurance in case of loss or corruption or a computer problem, This is where all your downloaded assets are. Right!

Wrong. For TS2010 this is NOT so. I made a terrible mistake thinking that the 'original' folder was duplicating my 'local' folder and in a mad two hours I deleted 107GB (70,000 assets) from my installation. Now I have to download those again which will take me months. My stupid mistake in not checking thoroughly enough, but with so little information in the documentation??

In TS2010 the folder structure was changed as part of preparation to separate the program from the 'userdata'. A good move. Hence you will find a number of folders that were in the Trainz root folder now grouped under a folder named 'userdata'.

So that you are quite clear where your assets are:

1. Builtins are kept in ja files and these are always in the 'builtin' folder. If you have add-ons mounted they are also ja files and reside here.

2. Original copies of assets downloaded from DLS or imported from *.cdp files NOW reside in the 'original' folder permanently.

3. They will only be duplicated in the 'local' folder if you modify them.

Which then leaves me in a quandary. When you OFE/commit an asset, a green triangle icon appears signifying a modified asset. Does that mean I will get a duplication in 'local' folder? From my observation the answer is no. Otherwise my 275GB instal would be 550GB. Similarly, the search filter 'Location local' still operates the same way as before but includes assets that are builtin, original and local. We can separate Builtins from the rest of the 'Locals' using the 'builtin false' filter. Does the 'modified true' filter now reflect the 'local' folder and 'modified false' the 'original'?

For backup purposes you need to backup:
1. Local folder.
2. Original folder.
3. Asset.tdx from the Trainz root folder.
4. Assets.bku from the bin/cache folder.
5. Trainzoptions.txt if you have customised it.
6. KeywordsDump.dat from Trainz root folder.
7. Thumbnails folder.

In a large installation it may be better to mirror these.

Note the 'Trash' folder contains a copy of assets that CM could not resolve during validation. The originals still exist elsewhere in TAD, or from wherever you downloaded. You can delete these if you are not using them for fault analysis.

h. Don't delete assets.tdx and assets.bku files to rebuild database

For those of you transitioning from legacy Trainz versions to TS2009 and TS2010 you may have employed the technique of deleting assets.tdx and assets.bku to force TRS2006 or TC3 to rebuild the database, unless of course you had installed that excellent Steve Forget utility called 'TADMON'.

In TS2009 and TS2010 you do not need TADMON. A TS2010 utility called TADDAEMON performs similar functions. TS2009 has a similar function.

Nor do you delete the assets files. While the assets.tdx and assets.bku files will be restored and rebuild you will lose your password and User ID. In any case, database repair is now automated and should not require your intervention. You may notice that repair seems to run more often though.

i. Blinking video and audio interruptions

A momentary blinking of video with accompanying audio drop out or distortion occurs sometimes. The blinking lasts less than a second and repeats randomly. If using multiple monitors the mouse focus moves away from your work and moves to the primary display. It is more noticeable during downloading assets and particularly when Commit occurs. It does not appear to cause any corruptions on its own, but has the potential for the user to induce an error if in the middle of a repair or edit. This is extremely annoying.

Not experienced during June. Updates to nVidia graphics driver may have alleviated this problem.

j. Feint text in some Main Menu and Main Menu Options panels

This is more likely to happen in DirectX. Go to Launcher Options Advanced Options Miscellaneous. De-select 'Vertex Offset'>.

k. Red Banner shows when Obsolete primary asset is in DLH queue and can't be downloaded.

This is a temporary situation that occurs regularly and affects FTP server users only. The newly approved assets appear on the web based DLS and are displayed in the CM DLS filter, but are not available for download. Usually resolved within a day when next dump list is produced.

l. DLH downloads obsolete dependencies.

Asset dependencies are derived from the config file Kuid-table. Legacy assets therefore reflect the original version of the asset not the latest version available in your TAD. This results in numerous obsolete dependencies being downloaded.

These assets are not used in the game and can be deleted, but will get downloaded again the next time CM checks.
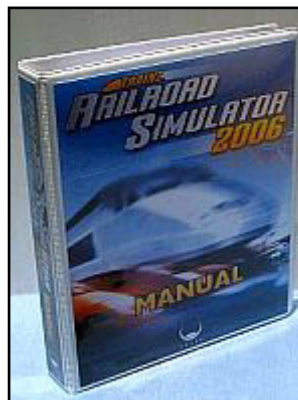
Another Apology

My offer to supply a correctly paginated version of the TRS2006 Manual, subject to Auran's permission, has failed again. When I went looking for the manual on my hard disk I couldn't find it. I know I've got a backup somewhere, but it may take time to find.

The History of Trainz

Part 2 - Making it Happen
by Greg Lane

From the outset Trainz was going to be a big project. When we first started work on it one thing was very clear... making all of the content was an exercise that was well beyond the resources that Auran had at the time.

Also, over the years prior to starting Auran I had on many occasions played numerous computer games and I always felt that there was something missing from each of them. In fact if you asked just about anyone for comments about any game at the time most would say '..it was a great game ... but...'. It was that '...but' that I wanted to address. I felt that by opening Trainz up to a much broader audience early in the design phase that we could get a lot more ideas, a lot more feedback and in the end, a much better game.

 What both of the points above have in common of course is people, people outside of Auran, people who had an interest in what we were making and who may be prepared to help design and work on the various elements of the product.

So with that in mind I started working with a good friend, John Banks, who had worked with me before on 'Dark Reign' and who had a lot of community knowledge. In fact, as an aside,

John ended up doing his Ph.D. using Trainz as a case study. The title of the Thesis for his Ph.D. was 'Participatory Culture and Enjoyment in the Video Games Industry: Reconfiguring the Player – Developer Relationship' and that title I think sums up very well what I wanted to do with Trainz.

Over the 1st 12 months of development John and I contacted many people in the Train Simulator community, some of those were invited to visit Auran and flown at our expense to our offices in Brisbane. We invited comments

and suggestions from an every growing audience of people from all over the world. One thing that we tried hardest of all to do was to seek input from those who had some form of criticism of us or the product we were working on. One point that I stressed over and over to the development team was that people were, more often than not, critical because they wanted our product to be better and the fact that they had taken to the time to write to us, for good or bad, meant that they had the motivation to partake in some form. In fact many of the ideas for Trainz came from people who were initially most critical of us.

At the same time as this was happening I was involved in discussions with Autodesk regarding their new product 'gMax'. At the time Auran was a significant user of 3DS

Max and we had a great relationship with them. We had heard rumours of gMax and so we set about becoming one of their first customers for that product. In essence gMax was a limited functionality version of 3DS Max that was only allowed legally to import and save 3D files in a game limited file format. In other words it only worked for one game, but for that game you could use it to make assets. Of course the benefit to Autodesk is obvious, they get a lot of people knowing how to use 3DS Max who may go on to work with Autodesk products in the future. For me however it was the opportunity I had been waiting for; a

full blown 3D Asset Editor that I could give away with every version of Trainz sold.

As the community around Trainz grew in size we were faced with a number of challenges as to how to keep some semblance of order and structure to the community and in particular with how Auran would communicate with the community. Over the following months, as Trainz approached it's first public beta, John and I developed a system of email communication with community leaders that would allow us to disseminate information quickly and easily and to just as easily get a feel for how the community was responding to our various initiatives.

We also developed a number of other communication initiatives, that now in hindsight seem quite obvious and accepted, however at the time they were all quite new. Things like regular IRC chats that anyone could join in, online discussions of proposed features that were posted on our forums for discussion and the creation of an elite beta group who had a direct channel of communication to myself and the development team. All of this meant an unprecedented level of communication to our customers and I believe that in many cases the line between players and the developer became blurred and merged, much like the title of John's Thesis.

I believe that this lead to a much better product being delivered than Auran could ever have produced on its own and when Auran finally did release the very 1st version of Trainz, it was called the 'Community Edition' for very good reason.

So to any of you reading this who may have been a part of that 1st version thanks once again for all of you time, your input and your faith in Auran. Trainz was at the time, and remains to this day, a landmark in a community assisted development and one I remain very proud of.

Screenshot Winner - 5th December 2002

Australian map and objects by Simon Connolly - Published on the Auran web site 3rd October 2001

Screenshot posted on web site 2nd March, 2001

Many thanks to Amigacooke, Electro, Wessex_Electric_Nutter and PerRock for helping me source the images used in Greg's article. The Images came from the original Trainz web site and are the copyright © of N3VRF41L Publishing

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Texturing a Locomotive

By Josh E Harvey - joshEH

Hello, In this tutorial I hope to show you how I create my textures for locomotives. There is better ways I'm sure, but this way has been working out for me so far. I am using Photoshop 6 and assume you know your way around photoshop. If you're using Paintshop pro you can still somewhat follow along with this tutorial, but features that aren't in paintshop pro that I mention I'm leaving it up to you to figure out how to duplicate that feature for psp.

Editor's Note: If you have difficulty following the article because the images are too small, please go to the web tutorial at:

http://trainzresources.com/directory/tutorials/josheh_textures/

Simply click on each image for an enlargement.

Let's get started shall we? We're going to make a ATSF sort of skin from scratch, well the side of the loco anyhow. To start off with we have our side line drawing, not allot to look at but we'll use it as a guide.
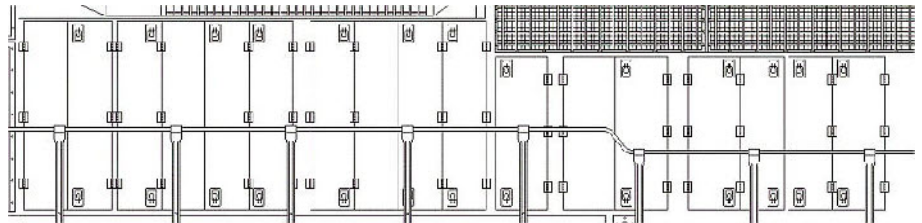
I created 3 folders for each part of the doors and a layer white layer above the line drawing, this is the white background for the texture, we'll turn this on and off along the way to check on things.

The names of the folders are more or less self explaining I think.
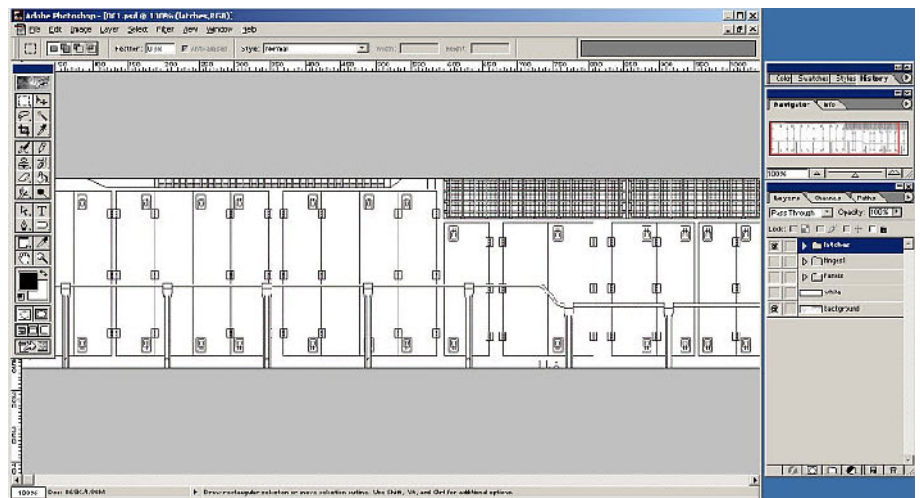
Let's get to work, under the Panels folder create a new layer and start dragging out selections, keep the boxes within the lines of the panels on the line drawing and fill them in with black.

Now, open the Layer Style for the layer with the panels (double click on the layer or right click on it and click on blending options) and turn on "Drop Shadow" and "Colour Overlay" In the options for drop shadow change the distance so it is at 0. In the colour overlay options change the colour to white. If you need to check something you can turn off the layer styles, that's why it's black, so if you need to check it against something white (which it probably will be) you'll be able to make it out better.
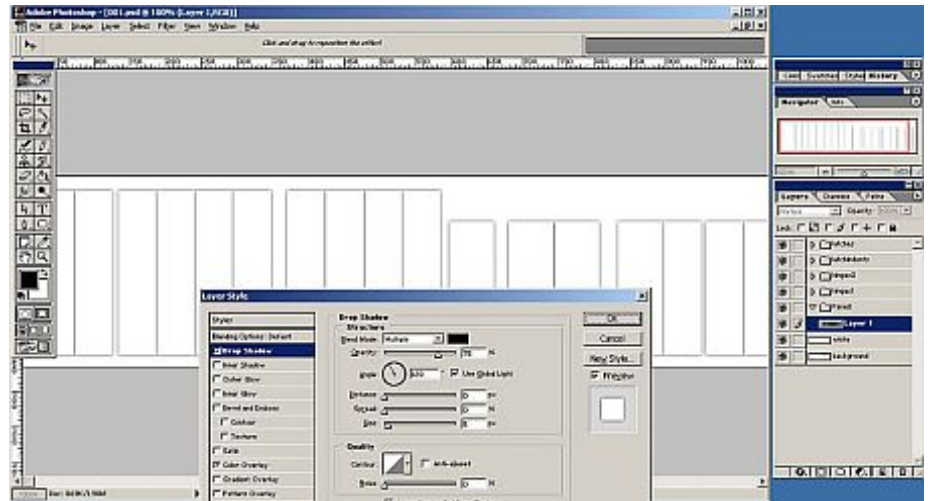
Drop Shadow
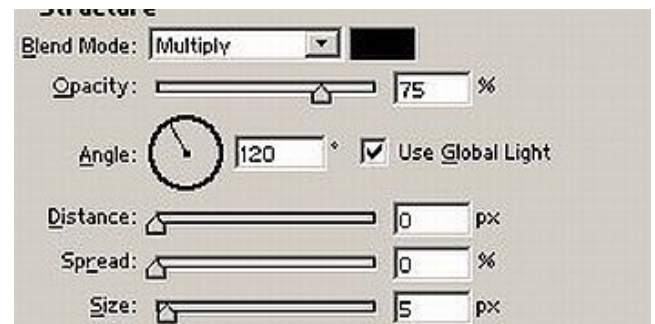
Color Overlay

Now for the hinges, create 2 new layers in the hinges folder, copy the layer style for the panels and paste them on these 2 new layers. Go into the Layer styles for those two layers and for the drop shadow change the size to 2. Now, Look at the screenshot for reference, the top of the 2 layers is the red part, the bottom of the two layers is the black part. Make sure to keep it within the lines of the hinge plate.
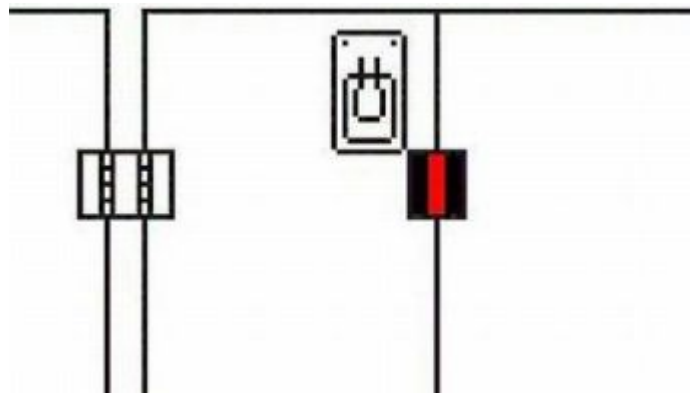
Go through and fill in the areas for all of the hinges.
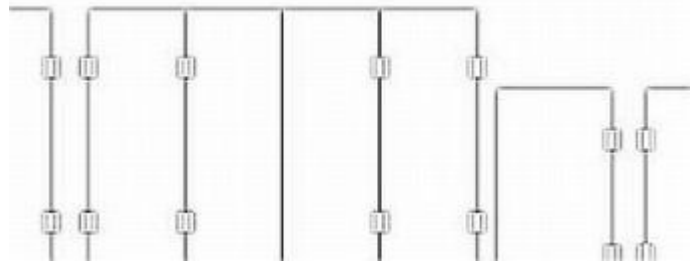
Next is the latches (the things for opening the doors?? whatever they're called, I call them latches) Create a new layer in the latches folder, then select the inside of one of the hatch areas and using the "Gradient Tool" fill it in, use two darker colours, but not to dark. Then copy the layer and move the new layer down to the bottom latch on that panel, merge the two layers then copy the new layer and move it to another panel... Keep doing this sort of thing until they are all filled in. There is the indent, you can change the Opacity so it isn't so dark also.
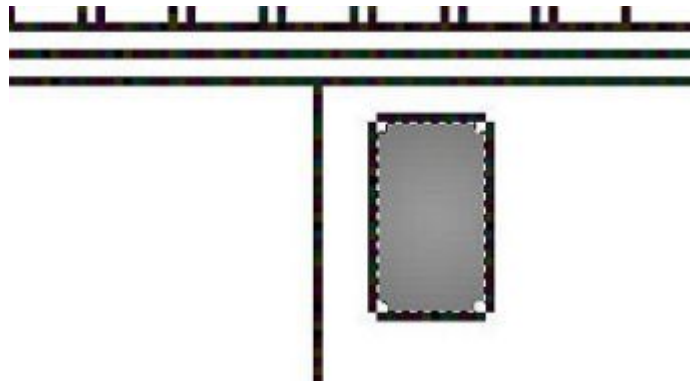
Now hide that layer, it's time to do the latches themselves make a selection, fill it in, then as you did with the indent part, copy it over to all the other latches. Once you're finished and it's one layer again add a Drop Shadow and Colour Overlay to it, on the Drop Shadow, change the Angle to 90, the Distance to 1 and the Size to 1. On mine I erased the top part some so it faded in a little bit.
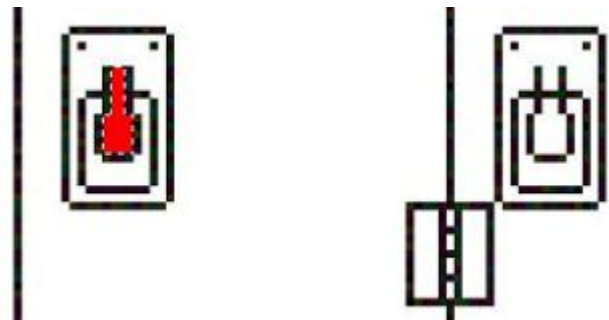
We'll start out with just our undec, We'll create a folder called Colours, this is where we'll put the colours for the locomotive. Make sure to change the folder type to "multiply".
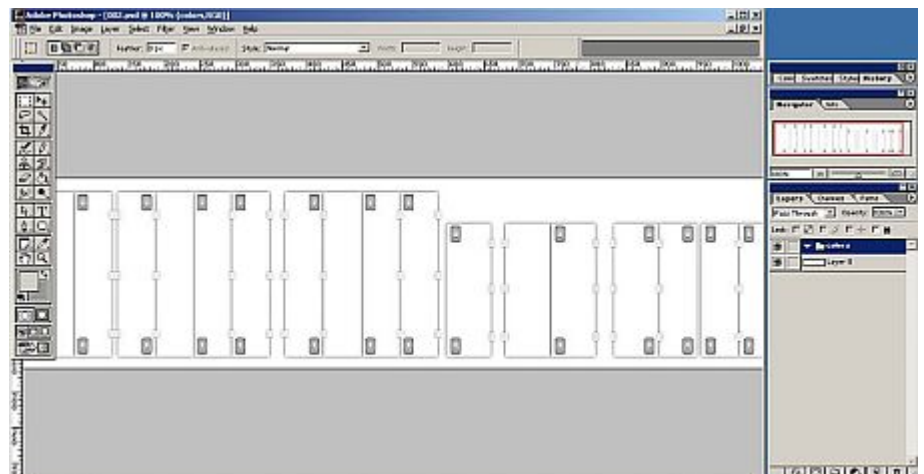
Next we'll add a gradient, use a dark and light grey and apply it, this will be the silverish part of the paint job.
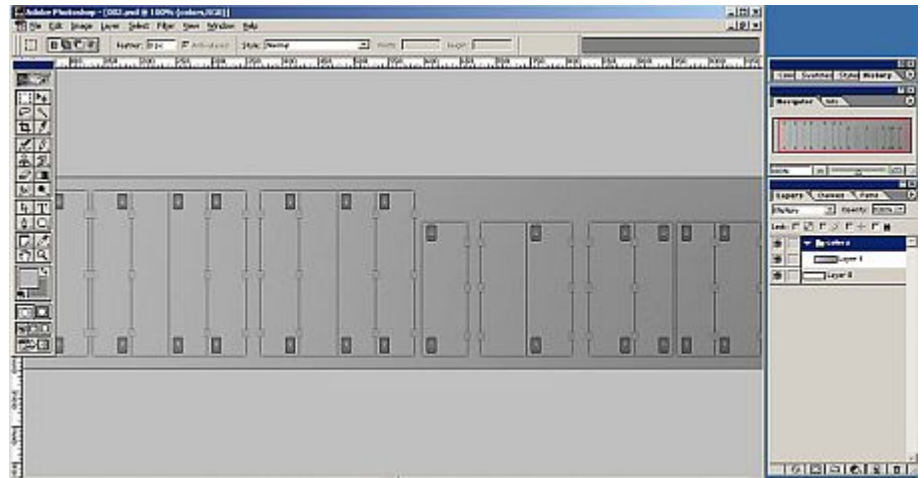
For the weird curves of the ATSF paint job we'll use the pen tool, just start drawing out a line that about matches what ATSF uses. Make sure it creates a path and not a new layer with an mask channel.
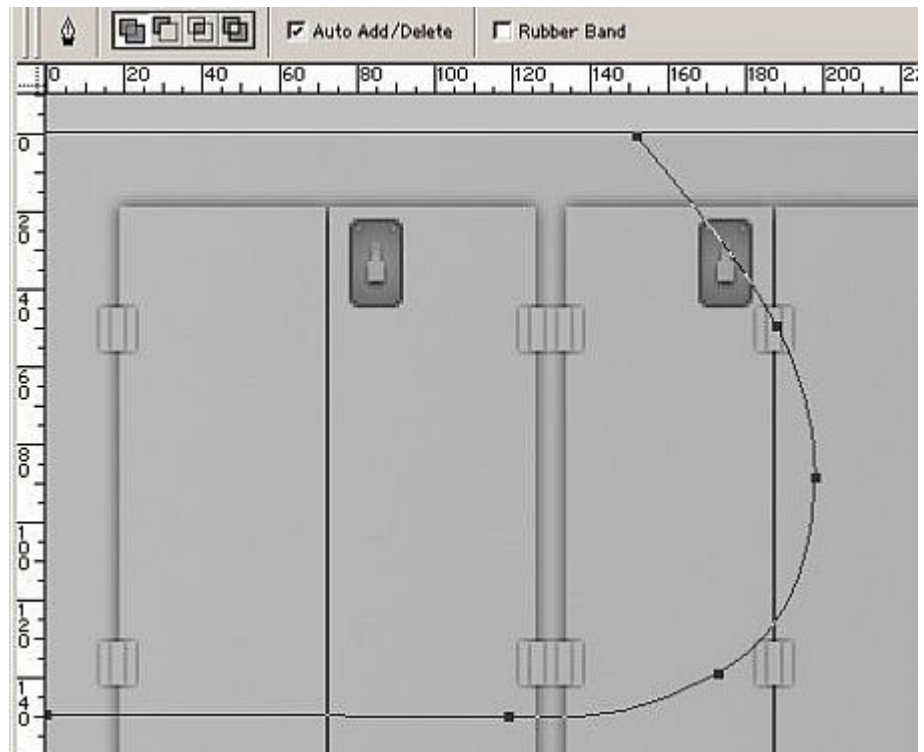
Right click on the new Path and click on "Make Selection..."
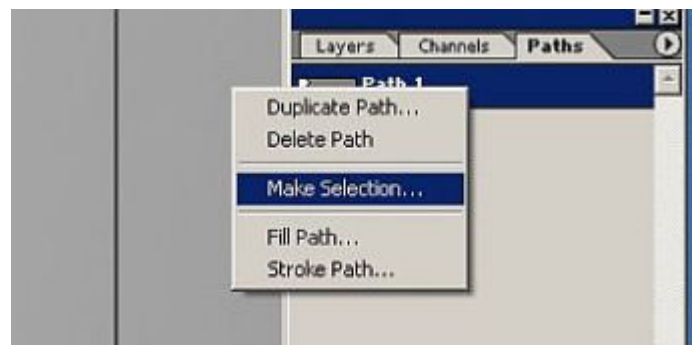
Now create a new layer in the colours folder. Change the colour to a yellowish colour, then click on edit, then stroke, put in 5 pixels, and under location set to inside. Now change the colour to a very dark grey, almost black and do edit->stroke again, but this time set it to 2 pixels and outside.
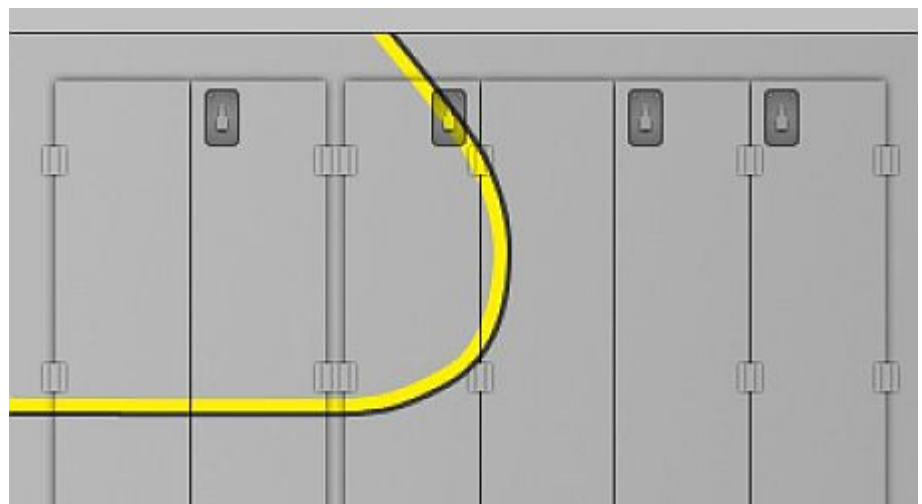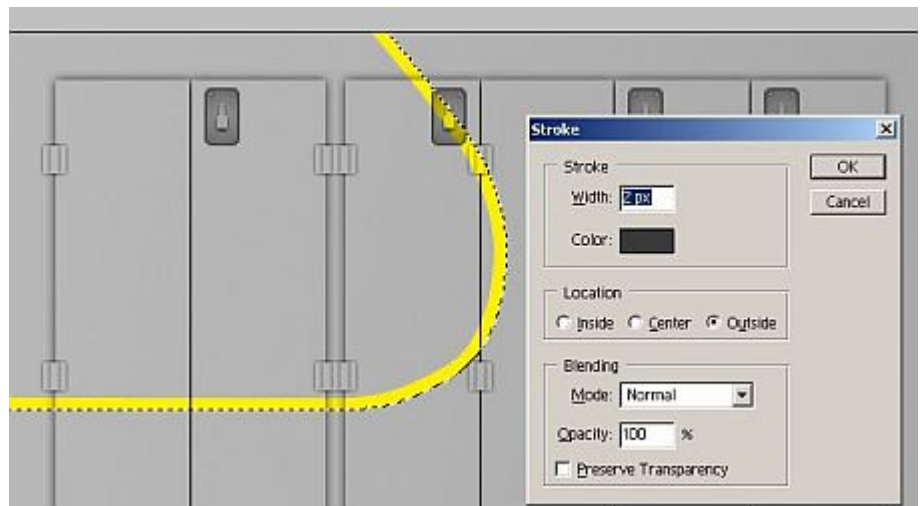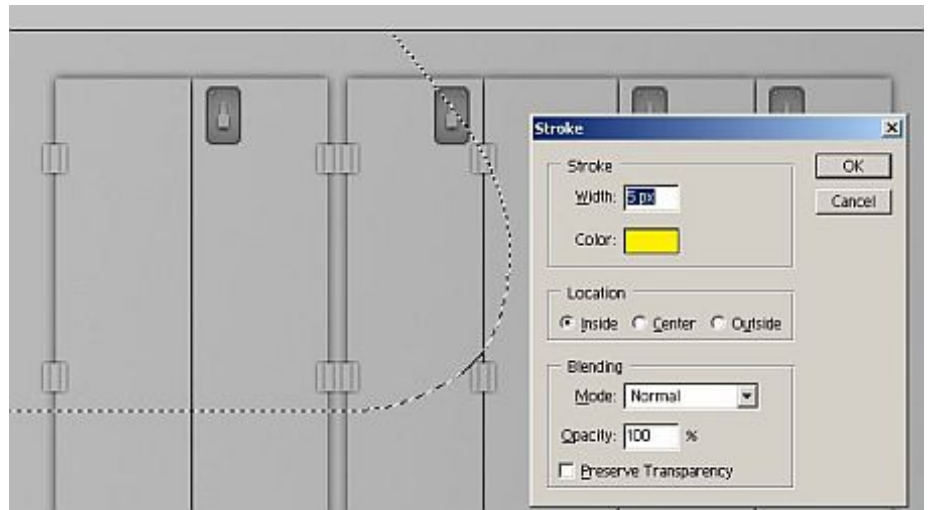
Create a new layer under that layer and fill in the Red and other such parts that are needed. Add your text also.

So there are the colours.

Next we need to add the weathering. Create a new folder called dirty, and a new layer. In this new layer use the air brush and the colour black to put in some shadowing and stuff along the bottom of the texture and turn the pressure down some for the airbrush

If you feel it's a little to dark you can always turn the Opacity down a little. Now, create a new layer and select the airbrush tool again, this time use a rustish looking colour and look at the pictures to see what settings I use, turn on fade, and pressure fade for the brush then go through and create downward streaks from all the latch indents Adjust the layer opacity after to something that seems about right, then create a new layer and do the same thing again on the hinges but with a slightly different colour.
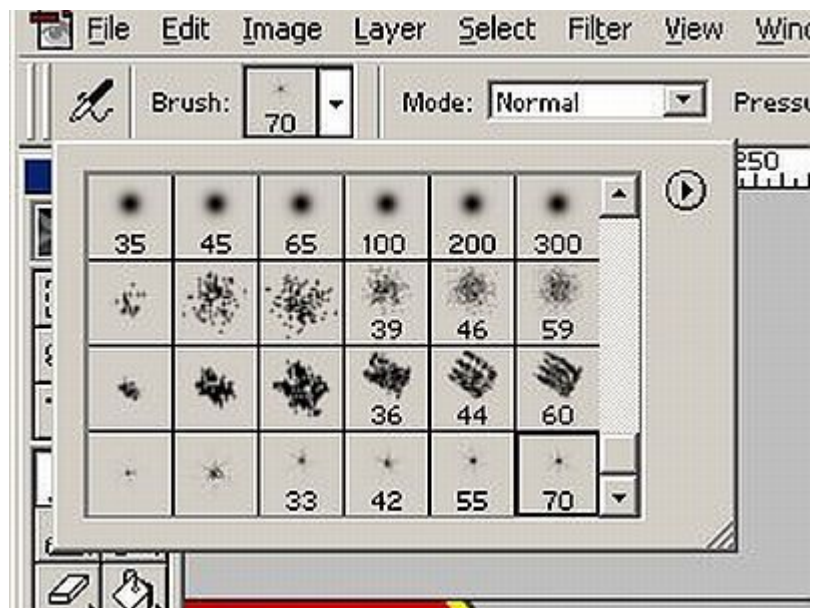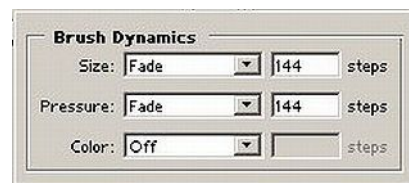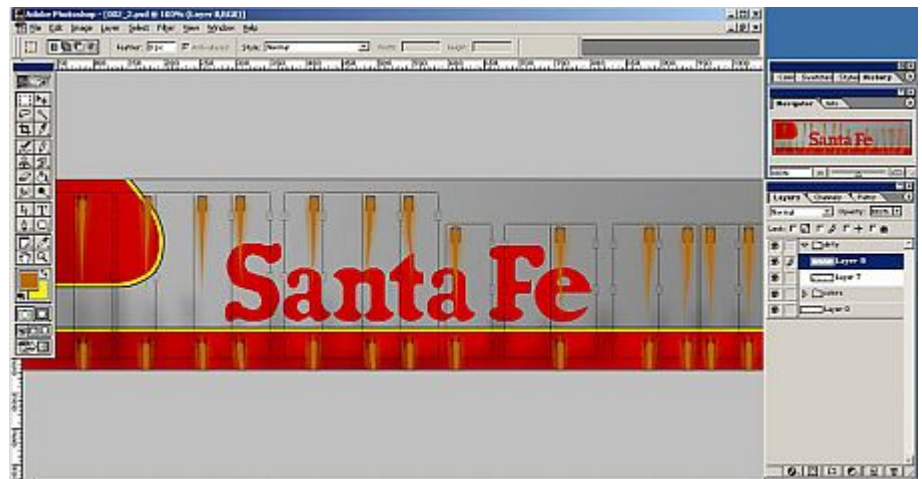
Now create a new layer on top of that, fill it in with black, then go to Filter->Nose->Add Nose. I used Amount 50% Gaussian Monocromatic, you can play around with the settings though. Now then go to Filter->Blue->Motion Blue. In the settings type in -90 for angle and set the distance to about 50. Change the layer type to something else, I put mine on "Screen" and set the opacity at 71%
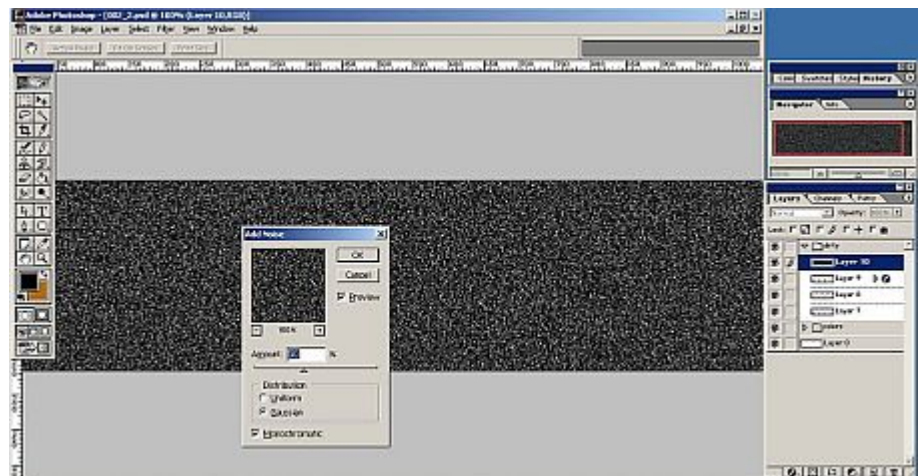
It's finished!
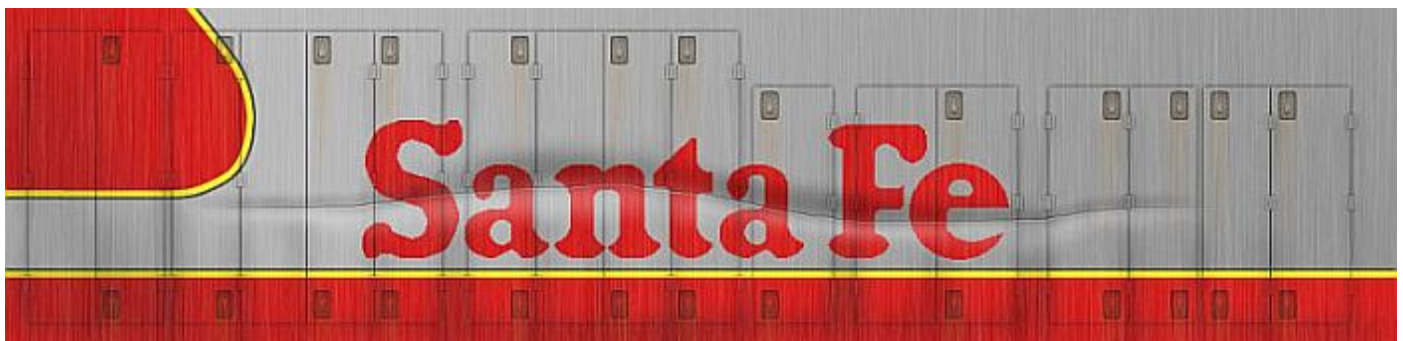
Tools for Asset Repair
Attachment Maker
A New Tool From PEV

A way to quickly and accurately add attachments to any asset.

Introduction.

Some Trainz users wish to add attachment points to existing assets for their own use or, with permission of the original creator, make some additions to his asset for sharing with others.

A well proven way to add attachments involves making a another mesh in GMax/3dsMax or Blender with what ever attachments are needed along with an invisible object to allow the mesh to export out of the modelling program. This method is a bit hit or miss because there is no way to get the original model into the modelling program so that the attachments can be positioned relative to the shape of the parent object.

Attachments are easily added to meshes directly, but again no visual reference is provided to know where to place the attachments. And of course Auran's policy of not allowing users to mess with their meshes also needs to be adhered to. Auran's TrainzMeshImporter is specifically written to allow meshes from a variety of sources to be safely imported into the game, and in this case it provides the necessary conversion between the attachment data and an IM mesh for Trainz.

GMax and other modelling programs provide neat multiple views of an object in wire frame mode that allow attachments to be positioned within a model. It seemed logical that if we could directly make a multi view display of a mesh we could add attachments quickly and accurately.

So I set to work to make a program that gives front, side, and top views in wire frame mode, with all views zoomable and moveable.

The resulting Attachment Maker program provides views that are linked so that the relationship between them always maintains third angle projection; meaning the details are always aligned view to view. You will understand the significance of this once you start to use the program.

The views are the standard third angle projection, with the plan (top) view being above the front view, and the side view to the right. Those of you with drafting experience should identify with this layout.

I think I have created a really simple tool that will make adding attachments a snap. Users will need to be able to read an engineering drawing, and be able to visualise a 3d object from the three basic views. Other than that virtually no drafting skills are needed.

Using Attachment Maker.

Installation.

The program is available for free download from my PEVSoft Download page.

http://www.members.optusnet.com.au/~villaump/pevsoft.htm

Run the installer and the program will be loaded on to the Program Files area of your C: drive, along with a desktop icon and an entry in the PEVSoft folder of your All Programs menu.

Auran's TrainzMeshImporter.exe is included in the setup program. It may require a further download from MicroSoft (See below)

Note that the beta and first release versions of this program have some errors in the attachment rotation mathematics that have now been resolved.

Opening a File

The purpose of this program is to add attachments to an existing asset. Say for example you want to add safety valve and whistle attachments to a small steam loco for visual steam outlets.

Firstly use Content manager to open the loco asset for editing and find the main body mesh. Then launch Attachment Maker and open the body mesh using the File Open menu. **(See Image 1 on next page.)**

Note the loco body is in three views. Top left is plan (top) view, lower left is front view, and lower right is the side view.

Use the mouse wheel to zoom in or out. Note that all views zoom at the same rate (on purpose) Zooming is also possible by using the cursor Up/Down keys with the shift key. The mouse cursor must be on the drawing for the key zoom or pan.

Adding an Attachment Point

To add an attachment point ensure you have an axis origin visible in at least one view. The origin is where the dark yellow axis lines cross.

Press the "Add Attach" button in the panel on the upper right side of the window. A yellow attachment tripod will appear at the origin, (in all views)
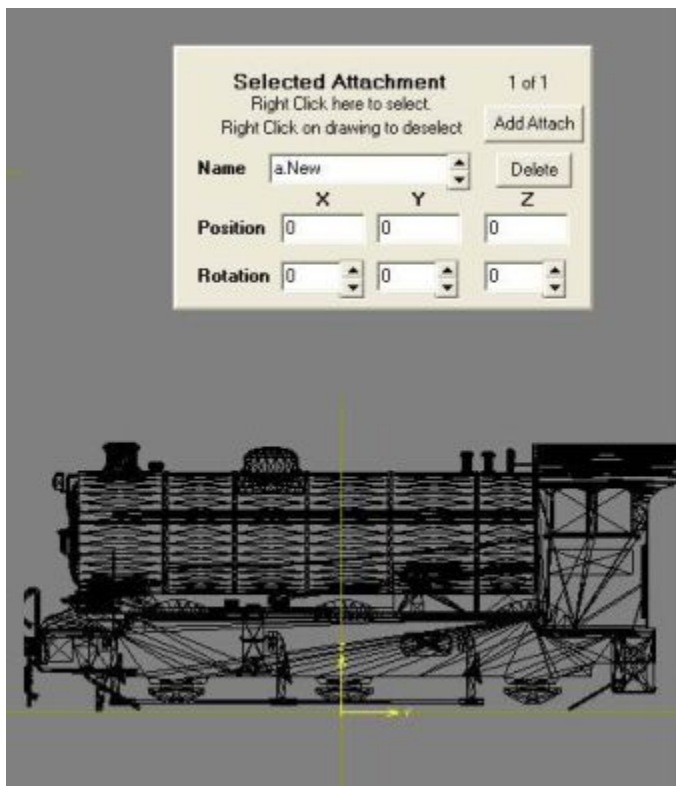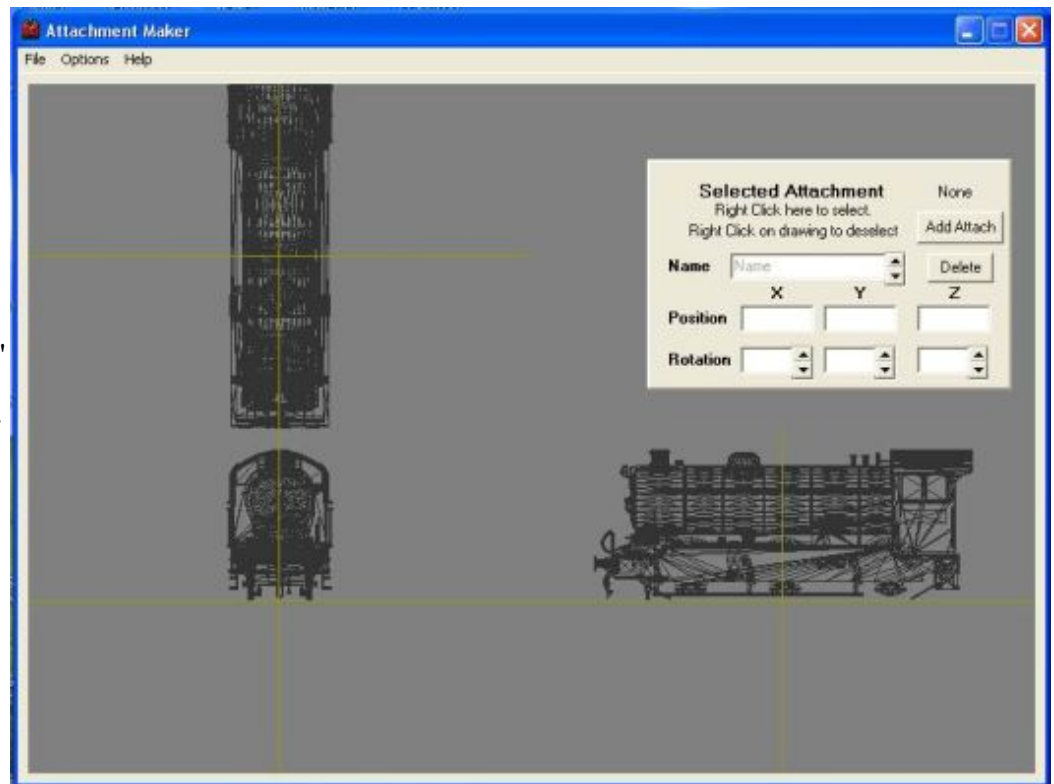
Left Click in any view and the attachment tripod will follow the cursor when you drag it. Positioning as you can see takes moments.
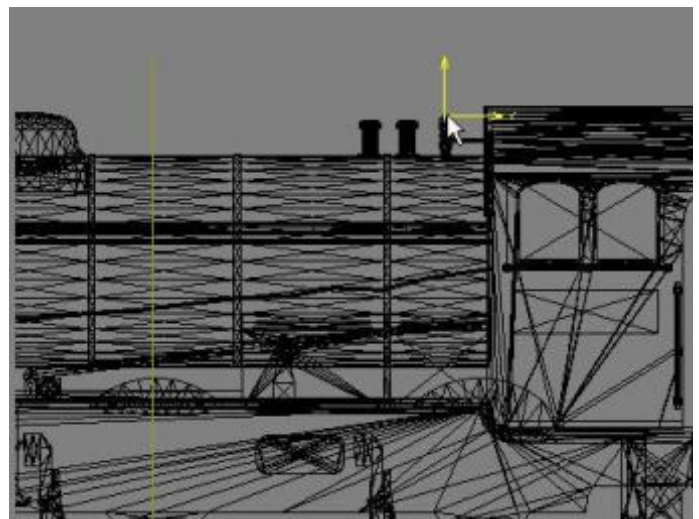
In the case of our steam loco example, move the attachment to the top of the whistle, and rotate as necessary to have the Y axis of the tripod pointing in the direction of steam flow. In this case rotating about the X axis will make the Y axis of the attachment tripod point upwards. To rotate the attachment you can use the up/down buttons next to the rotation axis box, or enter a number in the box.

(See image on top of next page.)
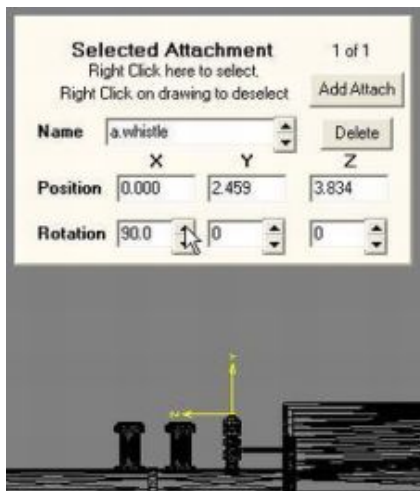
In the "Selected Attachment" panel with the "Add Attach" button, there are edit boxes to change the attachment name, its position, and its rotation.
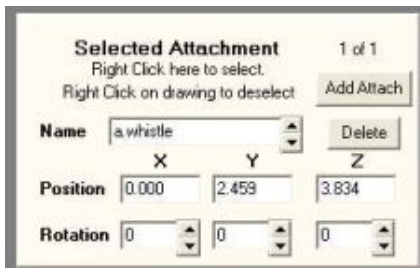
When you press the "Add Attach" button the the new attachment is always called "a.New". In our example, change the name to "a.whistle" in the name box on the Selected Attachment panel.

When you are happy that you have the attachment correctly located and named, Right Click on the drawing and the attachment will be locked, and deselected. It changes colour from yellow to green when deselected as in GMax.
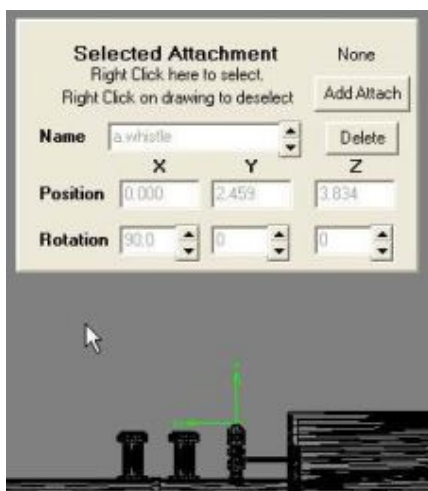
Repeat the process above to add more attachments. (The safety valve attachments in our example)
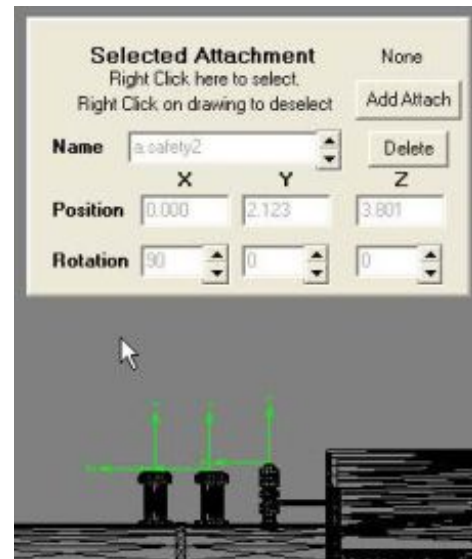
To edit an attachment, you can select by Right Clicking on the Selected Attachment panel. A list of attachments will be presented and you can chose one by name.
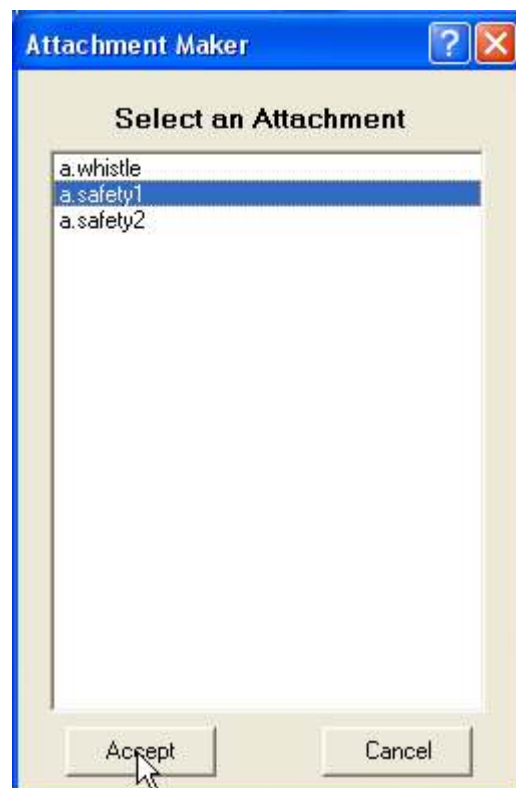
Click on an attachment and press the "Accept" button to select. "Cancel" turns off the selection window. Remember that the selected attachment is yellow on the drawing.

You can also change selection with the up/down buttons next to the name box. (Please note at this stage in program development I don't have attachment selection by mouse click working)

A selected attachment can be deleted by pressing the "Delete" button.

Making the Attachment Mesh

When you have placed your new attachments the results are saved in the form of a mesh named "attach_mesh.im". The name can be changed, if you so desire, in the Save file dialogue.

To save the mesh click on the "Save Att Mesh" item in the "File" menu.
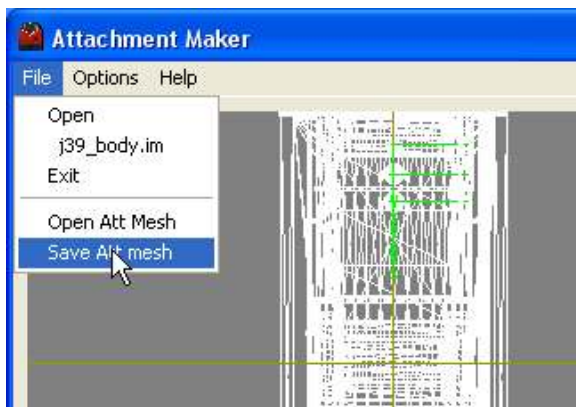
Your new attachment data is converted to a mesh by TrainzMeshImporter. The mesh has a single plane surface 20mm square invisible from above, but visible from below.(just to test its validity) The mesh requires no textures.

Please be aware that the program overwrites any existing "attach_mesh.im" file when saving the data.

Editing an Attachment Mesh

If you are unhappy with your attachment mesh or wish to add more attachments, you can edit the mesh by first loading the parent mesh using the "File" "Open" menu as above. Then click on the "Open Att Mesh" item in the "File" menu.
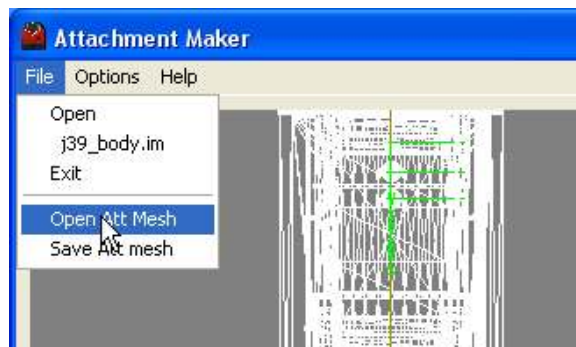
Select the "attach_mesh.im" and the attachments will be reloaded and displayed on the drawing.

Additions, deletions, and edits are easily done once the appropriate attachments are selected.

Putting the Attachment Mesh into Trainz

To make the attachments work in Trainz an attachments mesh reference must be added to the mesh table in the config.txt file for the asset. The following example adds attachments to a single mesh object.(mesh table only shown here)

```
mesh-table {
    default {
        mesh     "steam_loco.im"
        auto-create   1
    }
    attachments {
        mesh     "attach_mesh.im"
        auto-create   1
    }
}
```

Because the two meshes share the same origin, (the second having been built around the first) no other data is needed.

The above assumes that "steam_loco.im" and the "attach_mesh.im" file are in the same folder as the config.txt file. (the asset root folder). The program help shows an example where the meshes are in a sub-folder of the asset. See the Content Creators' Guide for your Trainz version for advice on asset folder layout.

The attachments should now behave as if they are part of the default mesh.

If you have added passenger, load, or smoke attachments and so on further additions will be needed to the config.txt file. Again, refer to your Content Creator's Guide.

TrainzMeshImporter

As part of the attachment mesh generation process, Attachment Maker creates a file in XML format which is then converted to an IM by Auran's TrainzMeshImporter program. Auran's policy of having their own software make all game content is thus maintained.

The Attachment Maker program will not operate if the TrainzMeshImporter.exe is not in the Attachment Maker application folder. A notice to this effect is displayed for a few seconds before the program closes.

TrainzMeshImporter is included in the Attachment Maker installation package and is latest version as of 17 April 2010.

TrainzMeshImporter requires some Microsoft C++ 2005 SP1 runtime files, and if these are not present the TMI will not run, or may freeze. The Attachment Maker will fail to produce an output mesh in this instance.

The files can be downloaded as a package from

http://www.microsoft.com/downloads/details.aspx?family id=200B2FD9-AE1A-4A14-984D-389C36F85647&displaylang=en

To test that TrainzMeshImporter is working open a DOS window in the Attachment Maker application folder.

To open a DOS window, create a file named "DOSWin.bat" in the Attachment Maker application folder. The file should contain the following two lines:-

```
@echo off
cmd.exe /k
```

When you run this batch macro a DOS window will be opened. Type "trainzmeshimporter.exe" in the window. The TMI will display its help page if all is working correctly.

FootNotes:

1. In the program help there is a reference to an error message "Gimball Lock. Cannot resolve angles."T

This message will only occur if reloading an attach_mesh.im and there is an attachment rotation where the Y axis rotation is + or - 90deg. The mathematics to convert a rotation matrix to axis angles has a divide by zero occurrence under these conditions. The program will zero the X axis angle and make the Y axis 90deg, hopefully leaving any Z axis rotation as it stands.

The problem is called "Gimball Lock" because the same mathematics is used in gyro guidance systems and gyros are mounted on gimballs. (the rings with bearings that allow x,y,z rotation of one object relative to anot

It's best to avoid Y=90deg or Y=-90deg. However it will still work, the conversion from angles to matrix works fine. It's the reloading of such data back into this program that will give the message. Fortunately rotation around the Y axis is rare in Trainz because the Y axis is used as a direction pointer, so rotations about the X and Z axes are used to have the Y axis pointing in the desired direction. See the CCGTC for advice on orienting smoke attachments as an example of this.

2. The Attachment Maker program can handle only 256 attachments in one mesh. This is the same limit as the Trainz game itself imposes.

Image Published on Auran Web Site: 4th May 2001

-Trainz chat-

Are We There Yet?

Are We There Yet? is a regularly updated diary of achievements, current projects and future plans for a small group of people trying to repair damaged assets in the Download Station and establish a community of supporters for all Trainz versions.

You can show your support by subscribing to the Newsletter or joining the community as an active member.

For a list of abbreviations and their meaning, please refer to the last page of the June Newsletter.

We suggest that you print the list and use it as a reference as you read this and other articles in the Trainz Community News.

Milestones

The major moments in Project TARM development.

Dec 2009

Release of TS2010 SP1 build 41615 heralds the initial validation baseline against which all repairs are judged.

Jan 2010

- 20,000 reworked config files in final stages of checking prior to uploading to TARL.
- 10,000 Missing Assets named and the start of the RUMMAGE.
- First TARM Tidbits and Red Alert articles published.

Feb 2010

- Start of TARL and MADE database development.
- Added 11,000+ assets from European external websites.
- Update to TS2010 SP2 build 42287 in progress. This is the new validation baseline.

Mar 2010

- Approval by David Drake for repaired config files for all or any of his ~10,000 assets to be hosted on TARL at Trainz Community website.

Apr 2010

- Playing catch up of February and March tasks.
- Introducing changes to meet Auran Life Cycle Policy.

May 2010

- Playing catch up of February and March tasks

Jun 2010

- *Completed downloading all DLS assets for use in CONTROL version of Trainz.*
- CONTROL assets are unmodified and contain the original defects.
- These are used for comparison with the TARL repaired versions to ensure that repairs are relative to what other Trainzers will see.

Stage 1 Completion Date

Sep 2010

Tentative target for TARL, TARG, MADE and Trainz-Author to go live at Trainz Community Web Site.

Due to significant delays caused by the server updates and inability to download new assets during March and April, this target has been revised. There are only so many hours in a day in which to catch up. Be assured we will do our best to bring these milestones to fruition as soon as possible.

Ongoing Activities

Every Month

- Progress red flag repairs.
- Progress yellow flag repairs
- Improve compliance with CCGTC and Wiki.
- Categorise defects via keywords.
- Find some missing assets.
- Progress repair procedures.
- Prepare articles for Newsletter.
- Update CONTROL by downloading latest assets available.
- Maintain KEYCADDY.

Work in Progress on Projects and Initiatives

CONTROL

- Download latest assets available
- Checking original fault status and comparing with TARL.

FIXIT

- Progressing priority repairs.
- Progressing opportunity repairs.
- Updating statistics.

MADE

- Investigating missing assets on DLS/FTP servers.
- Awaiting Trainz Community website development.
- Awaiting database development.

TARG

- Developing repair procedures.
- Incorporating TRAINZLAW requirements.
- Making provision for automated repair procedures.
- Monitoring changes to Wiki.

TARL

- Preparing sanitised config files for upload.
- Awaiting Trainz Community website development.
- Awaiting database development

TARM

- Amending Project TARM documentation to meet Auran Life Cycle Policy.

TAUP

- Incorporating Auran Life Cycle Policy needs.
- Defining TAUP update categories.
- Modifying repair procedures.

TOOLMAN

- Beta testing PEV's Tools.
- Incorporating use into repair procedures.
- Publishing Mr Toolman series of articles in Newsletter.
- Investigating automation of repair and update.

TRAINZCCP

- Request to Community for suggestions on improvements.
- Investigating CCP functionality.
- Identifying CCP defects.
- Determining required improvements.

TRAINZCM

- Determining required improvements.
- Identifying bugs.

TRAINZDB

- Development of MADE, TARL and TrainzAuthor databases.

TRAINZDLS

- Identifying DLSStuck assets.
- Investigating DLH Obsolete/OOD issues.
- Identifying fault modes of assets downloaded from DLS.

TRAINZFORUMS

- Identifying possible improvements to Auran Forums.
- Setting up Trainz Community Forum.

TRAINZTOOLBAR

- Research and design of a Trainz Community Toolbar.
- Development and beta testing of prototype.

- Improving Wiki Navigator linkage.
- Refining features.
- See TCN article in TARM Tidbits.

TRAINZLAW Initiative

- Survey of config file tag license and assess impact on TARM.
- Introduction of TRAINZLAW Initiative.
- Keywords defined and incorporated into Key Caddy.
- Keywords being progressively added to repaired and updated config files.

TRAINZNEWS

- Writing articles for Trainz Community Newsletter.
- Determining additional subjects to be incorporated.
- Talent Scouting.
- Liaison with Authors and Contributors.
- Editor duties.

TRAINZPROFILE

- Determining changes needed to Planet Auran.
- Working with Auran on changes to Community Search facility.
- Bug fixes on Community Country search.

TRAINZWEB

- Development of new Trainz Community website.

TARDIS ODOMETER

Marks the monthly progress of Trainz and the elimination of defects shown in my Content Manager. This will be different for each Trainzer. Mine relates mostly to DLS in toto (275GB) but also includes additional assets from European websites and Add-ons.

Priority is the reduction of red flags. Reduction of yellow flags and improving compliance are on an opportunity basis.

Total assets shown in TAD	175,095
Builtins for maxi TS2010	24,256
Obsoletes	19,938
Out of Date	163
Faulty	3,910
Warning	24,873
Missing Dependencies	4,212
Missing Assets	>10,000

TARG PUBLISHER

Tracks the progress in developing and writing the repair procedures and associated tutorials, tips and tricks.

Repair Schemes:

Required	TBD
Draft	100
Ready	25
Loaded on website	0

TARL ARCHIVER

Indicates progress in populating TARL database.

Auran Life Cycle Policy will increase this. *Major rework in progress.*

Fixes required	54,159	Under review.
TARL ready	305	
TARL Loaded	0	
Total	54,464	~30% of Total assets non-compliant with CCGTC and wiki

Software of the Month

In previous issues I've been introducing you to free software that's eventually found it's way onto my computer.

Well this month's offering is IrfanView and there are several starter tutorials for the program scattered throughout the magazine.

This will probably be the last time I'll introduce you to a new program unless something really hits me in the eye. I just don't have the time any more to find these programs and test them before passing them on to you.

Over the next few months, time permitting, I'll be writing more tutorials on IrfanView and also learning how to use gMax or Blender so that I can write tutorials about one of those products as well.

I haven't made up my mind which one it will be, but I don't think we should discard gMax just yet. Blender is a great program, but it probably contains far more than what we will ever need.

Either way, I'll be learning one of these programs from scratch and writing tutorials as I go. These will be absolute beginners tutorials and we'll start a forum thread to allow us to share our successes or frustrations. See you then!

TAUP CHRONICLE

As a consequence of the Auran Life Cycle Policy I have decided to utilise some updates as a means of repair, and to achieve convergence with CCGTC/wiki compliance as part of future proofing. Some TAUP procedures are the best solution for repair.

Totals below are tentative and incomplete as review is still under way.

Indicative only. Will be progressively revised.

MADE RUMMAGE

No work in this area during Jun 2010.

Await development of MADE database.

Missing Assets	>10,000
Found	268

Update initiative	Total Required	Total Achieved
Attachments	*TBD*	*TBA*
Bogey Transition	~5,000	0
Boolean Correction	<200	168
Category-Class Correction	Maybe 1,000	35
Category-Era Format Update	>50,000	9,165
Category-Region Format Update	>50,000	9,145
Empty Tag Removal	*TBD*	*TBA*
Engine Specs	*TBD*	*TBA*
Garbage	*TBD*	*TBA*
Kuid-table Cleanup	*TBD*	*TBA*
Mesh-table Update	>30,000	289
Obsolete Tag Removal	Maybe 2,000	Most
Opacity Correction	<100	6
PM Conversion	~5,000	3,802
Profile Update	All	TBA
Rules	*TBD*	*TBA*
Scripts	*TBD*	*TBA*
Shadows	>1200	442
Texture Conversion	~8,000	~8,000
Third Party Tags	~500	0
Thumbnails	>50,000	~23,511
Trainzbuild Rationalisation	*TBD*	*TBA*
Water	120	TBA

Cumberland to Connellsville
Another Route by Joe Folco

Dickerson Run

Narrative by Joe Folco

This narrative is a description of the construction of The Cumberland to Connellsville route, and a brief history of the railroads included in it. The route was constructed using two of Paul Haglund's (Fishlipsatwork) Hog generated maps. Rock Cumb 2, which is primarily the Western Maryland's Connellsville Subdivision past Frostburg MD, up Big Savage Mountain to Sand Patch, and from there on to Rockwood Pa.

The second of Paul's Hog generated maps (Rockwood), which goes from Rockwood to Connellsville, Pa., was merged with Rock Cumb 2 to form a continuous route from Cumberland to Connellsville.

Paul did make a third map of the area called Rockwood Cumb, which is primarily the B&O's route from Cumberland to Rockwood, heading North to Hyndman Pa., and West, up Sand Patch grade to Rockwood. However, the use of this map would have necessitated deleting all of the baseboards in Cumberland, and everything West of Sand Patch tunnel, so I used Transdem to generate the terrain between the East portal of Sand Patch tunnel, and the Maryland state line, and merged it with the rest of the layout to form the final Cumberland To Connellsville route.

I started building the layout in the spring of 2006, and it took almost two years to complete. I did the construction one segment at a time, starting with Cumberland and progressing to the west end of the Narrows completing it right down to the last detail. This included waterways, track, roads, structures, ground cover, flora, cameras, signals, speed signs, telegraph poles, and beta testing. From there I continued west, arriving in Connellsville in Nov 2007.

The layout uses six different trees, which, along with the ground cover were installed using copy and paste. Most of the residential structures are Sirgibby's Lo Poly NZ houses, while the commercial structures are DmDrake's, with a few others thrown in.

In addition to the Western Maryland and the B&O which are the two primary railroads, I've also included portions of the Cumberland and Pennsylvania, the PRR, Pittsburgh & Lake Erie, Pittsburgh & West Virginia, and the B&O's Somerset & Cambria, Salisbury Branch, Indian Creek Valley, and the Fairmont Morgantown & Pittsburg (FM&P) railroads. These roads all interchange with the B&O and WM at various locations along the route.

The time period of the route takes place in the 1950's, but is not necessarily limited to that period. In my research, I used historical USGS maps which are available on Maptech.com's web site. The location of the rail lines, yards, etc. is fairly accurate.

I live about 20 miles east of Pittsburgh, Pa, and I'm about 2 hrs drive from Cumberland, and 1 hr from Connellsville. In addition, my wife and I have ridden the abandoned P&LE, and WM rails to trails bike route from McKeesport

Pa (south of Pittsburgh) to Cumberland four years prior to completing the route. So I've had a chance to do some good research in the area.

Before the arrival of the B&O (1842) and WM (1905) in Cumberland , there were two railroads, the Cumberland & Pennsylvania, and the Georges Creek & Cumberland. Each was owned by competing coal mining companies.

The GC&C occupied the south bank of Wills Creek through the Narrows and turned west paralleling the National Road (US 40) to Georges Creek, just below Frostburg Md The GC&C also crossed Wills Creek at the

Confluence Pa

west end of the Narrows, and interchanged with the PRR at Ellerslie Pa. This route was known as the State Line Branch, and later was acquired by the WM when it took over the GC&C. This is the only part of the original GC&C that I've modelled

The C&PA occupied the north bank of Wills Creek through the narrows, and turned north where it later interchanged with the PRR just above the state line at Ellerslie Pa. A couple of miles below Ellerslie at Corrigan Md was Mt Savage Junction where the C&PA turned west up Jennings Run valley, and headed to the town of Mt Savage, its headquarters. The C&PA built about 30 of its locomotives, and most of its hoppers and passenger cars at the Mt Savage shops, which at one time employed about 600 workers.

The railroad entered Mt Savage, backed east to a switchback, and then headed west up Jennings Run. However, there was a track that went straight through town and joined the main line about a mile west. Why the belt and suspenders arrangement? The "run through" track was known as the Valley Track, and because of its grade in

excess of 3%, only passenger trains were permitted to use it to save time.

The railroad continued west up Jennings Run to the base of Big Savage Mountain, where it took a switchback east up the south slope of the valley to a second switchback called Switch #9. In 1912, the WM came up the south slope of Jennings Run valley and interchanged with the C&PA at Switch #9, before proceeding up Big Savage Mountain on its way to Connellsville. I obtained the track plan for this area from historical USGS maps.

From Switch #9, the C&PA headed west again up to the Frostburg station where it went through a 600 ft curved tunnel under Frostburg and the National Road, and followed Georges Creek to Westernport and Piedmont on the North Branch Potomac, about 16 miles from Frostburg.

I modelled the railroad to the edge of the baseboard (app 2 miles), and put in a coal mine and lumber mill.

Today, the Western Maryland Scenic Railroad runs rail excursions from the WM station, in Cumberland, to the vicinity of switch #9, and then proceeds up the former C&PA line to the Frostburg station which has been restored into a nice restaurant and railroad museum. Just beyond the station, and in front of the original tunnel entrance (Yes it's still there, but closed off) they installed a turntable where they turn their former Wisconsin Central 2-8-0 around. If you're in the area during excursion season, by all means, check it out. You'll get a chance to ride around Helmstetter's curve.

Back in the Narrows, the C&PA crossed Wills Creek on a stone viaduct, headed West, and paralleled the National Road past La Vale Md, where it serviced a lumber mill, and continued west about 5 miles to the town of Eckhart Mines. I've installed two mines, one I call Eckhart Mine, and Hoffman Mine, which are accessible by means of a double switch back. Again, I used historical maps to locate the track plan. Hoffman Mine actually did exist and was located just south of Hoffman Hollow. Today Interstate 68 runs up through the hollow.

Getting back to the first switch back before Eckhart Mine, the terrain rises so rapidly westward, that I could only get a few hoppers in it, so I made a tunnel, extended it under route 40, and concealed the other end behind some trees. It worked, and I was able to get a train with 40 plus hoppers into the switch back. Not very prototypical, but practical.

Connellsville Pa

Back around the turn of the century, George Gould, the future owner of the Western Maryland, purchased the West Virginia Central & Pittsburg, a coal and logging road that ran from Elkins W Va to Cumberland. The line ended at Ridgeley Yard, but was later extended across the Potomac to the basin of the C&O canal, where coal was loaded onto canal boats, and sent to Washington. This crossing was made via a through truss bridge, and connected to the C&PA. I found the track plan on a 1950's historical map.

A year after purchasing the WVC&P, the Gould enterprises purchased the Western Maryland from the city of Baltimore, (it was acquired from it's previous owners for unpaid taxes) and extended the line from Hagerstown Md to Cumberland, interchanging with the WVC&P at Maryland Junction, after passing through Knobley tunnel. The WVC&P became the WM's Thomas Subdivision, and in 1912 the WM constructed the Connellsville Sub-division to Connellsville.

I've also modelled the PRR's Bedford division from the state line at Ellerslie, past Hyndman Pa to a portal at the end of the map. The track plan at Ellerslie and Hyndman was also obtained from historical maps.

The B&O ran to Ellerslie, where it interchanged with the PRR and C&PA, and continued north to Hyndman where it again interchanged with the PRR. The line then turned west for the 19 mi trip up Sand Patch grade, where it interchanged with the WM at Keystone Pa. From there, the two lines paralled each other to Connellsville.

The WM was primarily a bridge route between Cumberland and Connellsville, but at Rockwood Pa, it crossed the Casselman River and had trackage rights on the B&O's Somerset & Cambria branch to Gray Pa, where

it serviced numerous mines in the area. The line between Garrett Pa and Rockwood was double tracked, but the track closest to the river actually belonged to the B&O, and was known as its low grade Quemahoning line.

The next town is Confluence Pa. Here, the Casselman river forms a confluence with the Youghiogheny, hence the name Confluence. The B&O's original line into Confluence was very steep, and later on they constructed a low grade eastward line paralleling the Casselman river,(but 2.5 mi longer), to eliminate eastbound helpers. A line called the Ursina & North Fork RR interchanges with the B&O at Confluence, extends north through the town of Ursina, and ends at a portal.

In the 1940's, the Corp of Engineers built the Youghiogheny Dam to control flooding below Confluence. I modelled the dam just for fun, as it can't be seen from the rails. If you're in Surveyor at Confluence, go up the Yough and check it out.

From Confluence, it is 11 miles to Ohiopyle, where the Youghiogheny forms a horseshoe curve and drops consider-ably, in a short distance, to create the whitewater rapids.

The next 17 miles from Ohiopyle to Connellsville, are uneventful, except for the Indian Creek Valley RR which interchanges with the B&O about half way, and runs up to a portal at the edge of the baseboard. Before the turn of the century there were numerous narrow gage logging roads that ran through the mountains between Meyersdale Pa, and Connellsville. The area was well known for its coal and lumber reserves.

Finally we arrive in Connellsville. It seems like this area had more railroads than roads. At the turn of the century, the Connellsville area had the finest metallurgical coal in the country, Eighty five percent of the steel produced in the U.S. at that time, was made with coal from this area. The Connellsville area had large limestone reserves which is

also used in the manufacturing of steel. This is probably what attracted so many railroads.

The Western Maryland arrived at Bowest Junction, and went to Connellsville station which was owned jointly by the WM and the Pittsburgh & Lake Erie RR. The consists then travelled another 5 mi on P&LE tracks to the Dickerson Run yard, where the locomotives were turned on the turntable, picked up eastbound traffic, and returned to Bowest junction. At Bowest Junction, they stopped just before the bridge, uncoupled the locomotive, and backed into Bowest yard, which was the WM's main yard in Connellsville. Here they picked up additional cars, changed crews, pulled back up to the main line, and headed back east.

The B&O crossed the Youghiogheny River at Greene junction, headed south into Bowest yard to Dunbar, interchanged with the WM, and continued 63 miles to Fairmont, W VA. This branch of the B&O was called the Fairmont Morgantown & Pittsburg (FM&P). Also known as the "Sheepskin" The PRR also came past Bowest yard on its way to Uniontown Pa.

I've modelled both roads below Dunbar to portals at the edge of the baseboard. The WM serviced several large coal mines in Fairmont, and had trackage rights over the FM&P to that area.

The B&O entered Connellsville at Greene Junction, continued past its huge Connellsville yard and continued west to Pittsburgh. It ends at a portal across the river from Dickerson Run yard.

The PRR came south from its Pittsburgh Division at Greensburg Pa, crossed the Yough river, and proceeded to a wye right in the middle of town. One branch of the wye went eastward to the Bowest yard area. The other branch continued through town where it interchanged with the P&LE's West Connellsville yard, and then went on to Leisenring, Pa, servicing mines in that area. Just west of its river crossing, the PRR interchanged with the B&O.

Last, but not least, in 1931 the Pittsburgh & West Virginia RR arrived in Connellsville, crossing the Yough, and interchanged with the Western Maryland. The P&WV had been previously named the Pittsburgh Toledo & Western, and was also owned by George Gould. The road went into receivership in 1917, was resurrected, and renamed the P&WV. Over the next 44 yrs, most of the westbound traffic generated on the WM went by way of the P&WV. The P&WV interchanged with the PRR north of the Yough River.

With the exception of a double track stretch north of the Yough, the P&WV did not have a yard in Connellsville, and had to travel to Bowest Junction, where it backed down into the yard. Here their huge challengers were turned on the wye, westbound traffic was picked up, backed up to the main, and proceeded west to Pittsburgh.

Today, the Western Maryland and the P&LE are gone, the former PRR is now privately owned from the its B&O interchange, north to Greensburg, the P&WV has been replaced by the Wheeling and Lake Erie, and makes occasional trips from Pittsburgh to Connellsville.

I wrote this narrative to give readers a brief history of the railroads involved, and to help you navigate the Cumberland to Connellsville route.

I hope that you enjoy the route. I certainly enjoyed building it.

Route Description

Cumberland to Connellsville is the route of the B&O, and the Western Maryland from Cumberland Md. to Connellsville Pa.The route is a terrain generated map, constructed from USGS DEMS.

The CDP file is approximately 60 MB in size, and contains 1343 baseboards. The distance between Cumberland and Connellsville is 106 miles. Running under AI, the route takes about 2 hrs & 45 minutes to traverse.

In addition to TRS2004, the route can be successfully converted to TRS2006, and TS2009. All dependencies are available on Auran's download station, with one exception. Prowler's RGS Ridgway Depot (Kuid:43955:28020) can be downloaded from his website at:

http://steammachine.com/prowler/

Click on downloads\ structures\Trainz UTC/SP3.

Some of the original Hog textures show up as missing dependencies. They are the original Tiger Lines that have been covered by ground texture, and are not necessary to run the route. However, if you want to download them, they are available here:

 http://www.fishlips.net/Trainz/Hog%20Textures/

The route has been successfully tested in TRS2004, TRS2006, and TS2009 on 3 computers.

Desktop 1
- Win XP Sp-3
- Intel Core 2 Duo 3.16GHz E8500 processor
- Nvidia GeForce 9800 GT graphics 512 MB memory
- 4 GB ram

Desktop 2
- Win XP Sp-3
- AMD Athlon 64 3700 San Diego 2.21GHz processor
- Nvidia GeForce 7600 GT graphics 256 MB memory
- 2 GB ram

Dell 1720 Inspiron Laptop Running Vista Home Premium
- Intel Core 2 Duo 2.00 GHz
- Nvidia GeForce 8600m GT 256 MB memory
- 3Gb ram

Adapting Meshes for
Running Numbers and Coupling

by Dale W Pattee (bsnteng)
BSnT Services, Inc.

This month I like to talk a bit about a little mesh that I have that might interest some of you. It is just a simple, little black box created in GMax that has eight attachment points clustered around it for adding running numbers to Roger Crouch's original GP7/9 locomotives. Two are for cab side numbering, two are for front end numbering and two are for back end numbering.

The remaining two are located just above a.limfront and a.limback and are for raising Wulf_9's ARG animated airbrake air hose mounting grids up to a level so that the they are aligned to Z=0.89. This makes the airbrake hoses line up with other rolling stock.

The running numbers can now be set in the locomotive's config file mesh-table. In the same effects section of the table where the ARG code is, a section of 'kind' 'name' statements are used to set both the particular running number's colour and number. Added to the config file is a string-table entry with the same running number that is read by the locomotive's script file and is added to the locomotive's Edit Properties panel, at the top.

I also have black boxes for his low nose GP20 mesh and am working on Prjindigo's SD9 mesh that I'm adapting to an SD24 with texture. I'm also working with the folks at the TPR for an upload of these meshes for distribution. Otherwise, if anyone is interested right now, email me at bsnteng@gmail.com and I'll send you a developers kit with instructions.

A sample Config file is on the next page.

```
kuid                                    <kuid:312521:100170>
name                                    "GP7 GN (620)"
company                                 "Great Northern"
origin                                  "US"
category-era-0                          "1960s"
category-era-1                          "1970s"
category-era-2                          "1980s"
category-class                          "AL"
category-region-0                       "US"
trainz-build                            2
bogey                                   <kuid:58422:100266>
engine                                  1
interior                                101475
mass                                    111684
script                                  "diesel_loco"
class                                   "Diesel_Loco"
mesh-table {
        default {
                mesh                    "gp7 gn no db_body/gp7 gn no db_body.pm"
                auto-create             1
        }
        additions {
                mesh                    "gp7 gn no db_body/added.im"
                auto-create             1
                effects {
                        arg_g0 {
                                kind "attachment"
                                att "a.front_grid"
                                default-mesh <kuid2:104722:2521000:1>
                        }
                        arg_g1 {
                                kind "attachment"
                                att "a.back_grid"
                                default-mesh <kuid2:104722:2521001:1>
                        }
                        hose_front {
                                kind "attachment"
                                att  "a.hose0"
                                default-mesh <kuid2:104722:136:2>
                        }
                        hose_rear {
                                kind "attachment"
                                att  "a.hose1"
                                default-mesh <kuid2:104722:139:2>
                        }
                        rd_num0 {
                                kind            "name"
                                fontsize        0.3
                                fontcolor       255,199,0
                                att             "a.left_side"
                                name            "620"
                        }
                        rd_num1 {
                                kind            "name"
                                fontsize        0.3
                                fontcolor       255,199,0
                                att             "a.right_side"
                                name            "620"
                        }
                        rd_num2 {
                                kind            "name"
                                fontsize        0.15
```

```
                        att                     "a.left_front"
                        name                    "620"
                }
                rd_num3 {
                        kind                    "name"
                        fontsize                0.15
                        fontcolor               200,200,200
                        att                     "a.right_front"
                        name                    "620"
                }
                rd_num4 {
                        kind                    "name"
                        fontsize                0.15
                        fontcolor               200,200,200
                        att                     "a.left_back"
                        name                    "620"
                }
                rd_num5 {
                        kind                    "name"
                        fontsize                0.15
                        fontcolor               200,200,200
                        att                     "a.right_back"
                        name                    "620"
                }
            }
        }
}
string-table {
        running_number                          "620"
}
queues {
        load-diesel {
                size     6400
                initial-count   3200
                product-kuid    <kuid:86105:60600>
                allowed-products {
                        0       <kuid:-3:10011>
                        1       <kuid:86105:60600>
                }
        }
}
kuid-table {
        0                                       <kuid:58422:100266>
        1                                       <kuid:312521:1502>
        2                                       <kuid:104722:53567>
        3                                       <kuid:-1:42003101>
        4                                       <kuid:86105:60600>
        arg_grid_f                              <kuid2:104722:2521000:1>
        arg_grid_r                              <kuid2:104722:2521001:1>
        air_front                               <kuid2:104722:136:2>
        air_rear                                <kuid2:104722:139:2>
        sfx_lib                                 <kuid2:104722:2502000:1>
}
smoke_shade                                     0.18
smoke_random                                    2.5
smoke_slowlife                                  6
smoke_fastlife                                  0.8
smoke_height                                    1.7
smoke_fastspeed                                 3.2
enginespec                                      <kuid:312521:1502>
enginesound                                     <kuid:104722:53567>
hornsound                                       <kuid:-1:42003101>
description                                     "
```

```
Great Northern owned ? GP7's without dynamic brakes
Paint: GN Orange & Omaha Green
GM-EMD GP7 'Geep'
Built: 1949-53"
asset-filename                                    "GP7 gn no db"
username                                          "GP7 gn (620)"
thumbnail
author                                            "Adam Gase"
organisation                                      "Cincinnati Southern Railway's Cumberland Shops"
contact-email                                     "CNSR_INC@yahoo.com"
contact-website                                   "www.geocities.com/CNSR_INC"
modified                                          "Dale Pattee, BSnT Services, Inc. 12/10/07
reskined for the Great Northern. Engine spec
and bogey bear my Auran ID but are soley the
work of others. I use my ID to keep all files
together for backup"
license                                           "→"
kind                                              "traincar"
```


Screenshot of the Week 14th June: Ozark took off first prize with this shot for the "Mainline Trains" theme.

Note: I'm afraid we were only supplied two Screenshot of the Week winners for June. It was our intention to bring you all the weekly winners for each month, but we can only publish what we receive. Sadly it looks like another great Community idea has bitten the dust.

Railroads as Common Carriers

By David A. Petersen

A private carrier railroad would be a logging road where its only purpose is to haul logs out of the forest. It carries one commodity for one customer (usually the owner) and as such is not regulated by any government agency. On the other hand, if you want to run a railroad that provides transportation to multiple industries, your railroad will be classified as a common carrier.

Common Carrier - an individual or corporation undertaking to transport for compensation persons, goods or messages under license or authority provided by a regulatory body which may create, interpret, and enforce its regulations upon the common carrier (subject to judicial review) with independence and finality, as long as it acts within the bounds of the enabling legislation. A common carrier must further demonstrate to the regulator that it is "fit, willing, and able" to provide those services for which it is granted authority.

Common carriers are legally bound to carry all passengers or freight as long as there is enough space, the fee is paid, and no reasonable grounds to refuse to do so exist. A common carrier may establish reasonable regulations for the efficient operation and maintenance of its business. Common carriers typically transport persons or goods according to defined and published routes, time schedules, and rate tables upon the approval of regulators. These rates are based on the type of commodity the goods represent. Rates are in part, based on the commodities vulnerability to shipping damage. Pig iron ingots are almost impossible to damage in shipment whereas glassware is easily damaged if not properly packaged and handled. In the United States, rates have been set by the Interstate Commerce Commission since the passage of the Esch-Cummins Act of 1920. Prior to that, they were set by the railroads and at times, were quite unfair to various shippers.

The term common carrier is a common law term, which is seldom used in continental Europe because it has no exact equivalent in civil-law systems. In continental Europe, the functional equivalent of a common carrier is referred to as a public carrier (or simply as a carrier). (However, public carrier in continental Europe is defined differently than "public carrier" in British English, in which it is a synonym for contract carrier.)

Carriers were very common in rural areas prior to motorized transport. Regular services by horse drawn vehicles would ply to local towns, taking goods to market

or bringing back purchases for the village. If space permitted, passengers could also travel.

So, you ask, what does this have to do with creating a Trainz route. The answer is - it depends. If you are modelling an imaginary route where you are making up everything as you go, including the operations, then all this is meaningless. However, if you are modelling a prototype railroad and you want to develop prototype operations, then it can be important. In some countries, the railroads

Rockwood - Cumberland to Connellsville (See Page 53)

are state owned and in others, they are privately owned and regulated by the government. Knowing the regulations and how they affect operations can be important.

First some basics. It would be impossible to handle each freight car independently. For efficient operations, they are gathered together at various points along the railroad. These are called Yards. In the yard, they are sorted according to direction of destination and possibly other criteria. Some may go east, some west, some south and some may go to another local industry. Some may be empty and are low priority. Some may be perishable commodities. They are sorted in the yard and when there are enough of one type or "class", those cars are then assigned motive power and a road crew. When that happens that string of cars then becomes a train. The train will then be directed over the railroad by the Dispatcher. If there are no signals, it is said to be a "dark territory" where all train movements are controlled by time table and train orders issued by the Dispatcher.

As this train traverses the railroad on its assigned route, it may drop off and pick up cars at various industries and

yards. Or, the train may run non-stop from one yard to the next, or from one major terminal to the next. With trains running like this on a regular basis, the freight will make its way to its destination in an orderly manner.

This general structure of operations is modified in various ways to meet the specific needs of each railroad. If 90% of a railroad's freight is coal, their operations would be different from a railroad that serves a variety of industries where no one commodity makes up more than 10% of their traffic.

For operational purposes, most railroads are divided up into Divisions where each Division represents a specific portion of the trackage of the railroad. A division may represent a geological separation of terrain. A mountain division would be operated differently than an area where there are no major grades and no need of heavy motive power or pusher engines.

Management of railroads were organized either by department, the New York Central for example, or by Division like the Pennsylvania RR. Either way, each Division would have it own various managers in charge of the various aspects of running a railroad. Let's look at divisional management. Here the Superintendent is the top dog. All department managers within his division would report to him.

The various departments are:

- **Transportation Department** - operations of stations, yards and movements of trains
- **Maintenance of Way** - maintains track, bridges, signals
- **Equipment Maintenance** - repair and maintains rolling stock and motive power
- **Plant maintenance** - maintain and repair buildings and other infrastructure

The transportation department was always the biggest as it supported the primary function of the railroad. It may be organized under the Superintendent as follows:

Chief Dispatcher
- Assistant Dispatcher
- Clerks, crew caller
- Train Crews

Yard Master
- Car Inspectors
- Car Clerks, office clerks
- Yard Crews

The point of all this is that, as a common carrier, a railroad must have a set way of processing the transportation needs of its customers. That is why railroads are operated the way they are - keeping a steady flow of traffic moving on a regular basis.

About a year ago, the question was asked on one of the forums, "What role am I playing when I am running a train?" This is a good question because there is no one role - there are many. The easy one to identify is the engineer, the person who controls the movement of the locomotive.

You become the conductor when, by examining your way bills, you determine that you have to spot a car at an industry, which car and where it is to be set. Then you become the brakeman, setting the track switch to get the car where it needs to go and pulling the pin to uncouple the cars.

The Narrows - Cumberland to Connellsville (See Page 53)

If your AI trains are hung-up (as they do from time to time), you become the dispatcher, solving the problem and issuing new commands to the train crews.

I hope this has shed some light on why railroads operate the way they do. Next month we will take a look at yard design, explore different types of yards and define the necessary elements to make a workable yard.

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Artur Vill and Robert Shaw - Published 3rd October, 2001

Forum Tips

Adding an Avatar, Title and Location (Country)

by John King

I f you want an avatar like the one below, it's easy to add one to all your posts, including older ones. Just keep in mind that the range of avatars you can use are restricted by Auran and the forum itself, but there are still plenty of nice locomotives to choose from.

This tutorial will show you how to add the Avatar and a title (mine is **Boarded October 2001**) and a location (Country) like the one below:

Adding an Avatar

1   Go to your personal **Control Panel** by clicking this link towards the top left of the forum screen

2   Click **Edit Avatar** in the side menu. You'll find it under **Control Panel / Settings & Options**


This next screen is where you select your Avatar.

3   In the section Pre-defined Avatars, choose a General Avatar from the first few pages, or click the arrow in the drop-Down List to choose a country then click the Go button. I've chosen Australia & New Zealand.

4   Scroll through the various offerings and choose a locomotive by clicking the radio button next to the description. I selected the QR 4000 class on page 1.
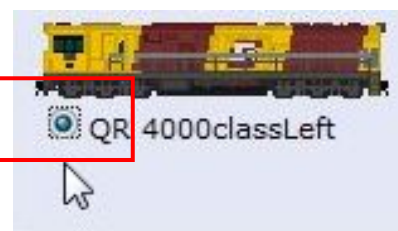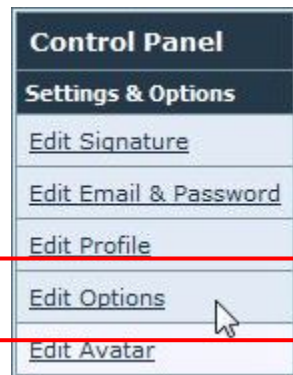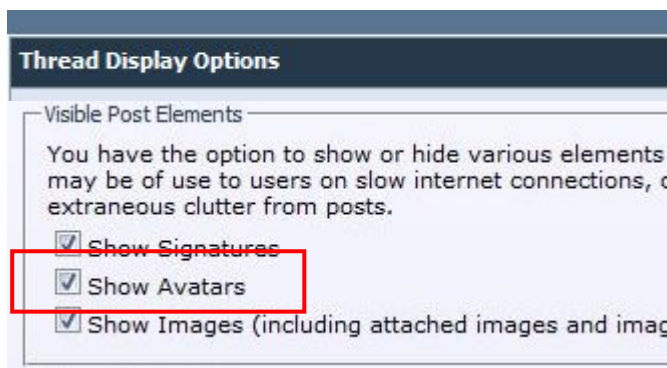
5   Click **Save Changes**.
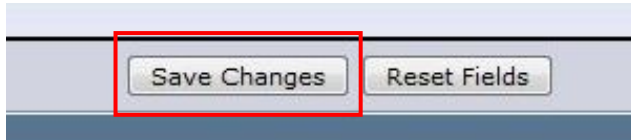
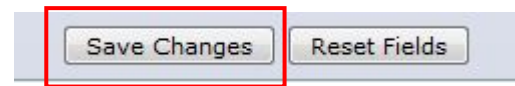The avatar will now appear in the box entitled "**Your current avatar**".

6   Click **Edit Options** in the side menu under **Control Panel Settings and Options**

7   Find your way to the section Thread Display Options and make sure **Show Avatars** is ticked.

8   Go to the bottom of the page and click **Save Changes.**
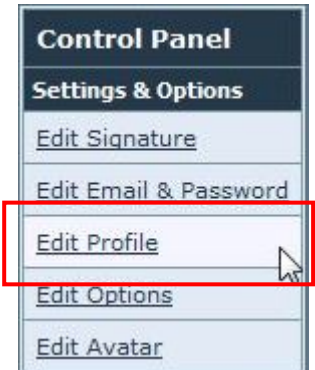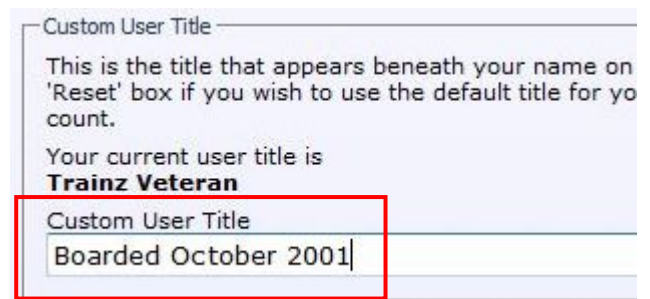

Adding a Title

This can be done separately or combined with an Avatar.

1   Click **Edit Profile** in the side menu under **Control Panel Settings and Options**

2   In the section **Custom User Title**, enter your title.

3   You can put pretty much anything you like here, but I believe the phrase Trainz Veteran should be reserved for Trainzers who have been with us for many years. I've been around since 2001, but instead of using Trainz Veteran, I've used Boarded in 2001 to indicate when I joined the forum.

4   Go to the bottom of the page and click **Save Changes.**

Adding a Location (Country)

This can be done separately or combined with an Avatar.

Join Date: Nov 2006
Location: Australia, Queensland, Cairns
Posts: 1,427

This can be found on the top right hand side of your post. Some people find it amusing to themselves by entering silly locations like *Earth, In My Loungeroom, In front of my computer* etc., but that's not what the listing is for.

Many readers like to know the country where a person is posting from. It can often help them understand why the post was made, why the writer's English may not be perfect, and how to reply diplomatically.

Fortunately most forum users do show their country, and many like myself, also include the state and city.

1 Click **Edit Profile** in the side menu under **Control Panel Settings and Options**

Control Panel

Settings & Options

Edit Signature

Edit Email & Password

Edit Profile

Edit Options

Edit Avatar
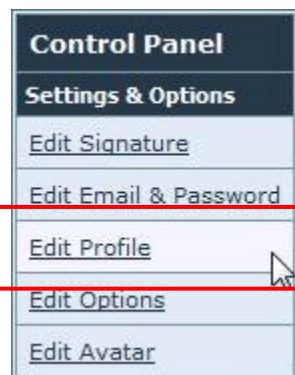
2 Go to the bottom of the page. **Under Additional Information**, add your country in the **Location** box.

Location
Where you live
Australia, Queensland, Cairns

3 Go to the bottom of the page and click **Save Changes.**

Save Changes   Reset Fields
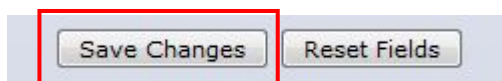
All done! Your forum posts will now look similar to mine (below). The Trainz versions shown will depend on which versions you have registered in your Planet Auran Profile and the Join Date will be the date you joined the forum.

Note: On the previous page I said I joined in October 2001, yet the forum shows I joined in November 2006.

During November of that year the original Trainz Forums crashed and all old posts were lost. Any person who had been a member of the forums prior to 2006, rejoined in November.

If you have any questions about the Trainz Forum, you are welcome to ask them here. I'll either answer them for you in this section or post them as a letter to the Editor. Please use the email link on the bottom left of Page 2.

Images from the original Trainz web site.: Top 27th July 2001., Bottom 3rd October 2001. © N3VRF41L Publishing

June 22nd, 2010, 04:07 PM   #1

Johnk
Boarded October 2001   TS2009   TRS2006   Trainz   Join Date: Nov 2006
Location: Australia, Queensland, Cairns
Posts: 1,427

Gallery of Trainz Cover Art
Update

Robert Swiatlon has kindly sent us more information about some of the Trainz releases listed on pages 14 to 26 in the June Issue of the TCN,

TRS 2007 With the Hammer on the Cover:

- Trainz version: 2.6 Build: 3489
- Language: German
- Release: October 2008

  #### Description:

  TRS 2007 with SP1 and New layouts: Roanne 07, Montparnasse and Tire Bouchon 07

TRS 2007:

- Trainz version: 2.6 Build: 3325
- Language: German
- Release: July 2007

  #### Description:

  TRS2006 with SP1 and German Content:

  - New Layouts: Bad Schandau - Decin Niddertal-bahn, Wirtschaftswunder DE, Deutschland im Winter and Thueringen
  - New rolling stock: BR 24, BR 64, BR 44, P8, BR 103, BR 143, BR 232, BR 628, Desiro
  - New Objects: German railroad objects: railroad crossing, KS-Signal, stations, bridges, rails

Trainz Expansion Pack:

- Trainz version: Add-On for TRS2006, TRS2007
- Language: German
- Release: March 2008

  #### Description:

  - New Layouts: Ohmtalbahn, Mariazeller Bahn, and Nebenbahnromantik
  - New rolling stock: BR 52, BR 110, VT08, X2200, X2800, OBB 2092, OBB 1099, OBB 2095, OBB 4090
  - New content: station platforms, stations, streets, cars

TRS2007 Deluxe Edition:

- Trainz Version: TRS2007 with SP1 (Build 3489) and Trainz Expansion Pack
- Language: German
- Release: October 2008

Letters to the Editor
Edited by John King

Hello John,

Exceptional June issue of the Trainz mag. Thought the write up on Quick Shadows was great, Something I needed to know about to fix a few assets in my CMP. Thought the outcome for the Route Building Competition was well deserved for the 4 competitors, well done to them all. Western Maryland Sub write up was a terrific read and is now under download as I write this email. The Trainz user Group idea is great, I can see quite a few looking into this idea. Wish I had more than 3 community members I know of to get a good group of like minded people together, Though I may have to put out a flyer to see if I can get more interest. I am sure there are many more closet Trainz/ Model Trains people in my community.

Thanks John, and the team for this months Magazine, another worthwhile download for this month, and anyone who hasn't read this magazine before. You are missing out!

Look forward to the next issue when time permits.

Regards

Trent (Tanvaras - KUID 448593)

We also received a PM from Zec Murphy regarding my Community Comment on starting a User Group.

Zec informed us that there is already a User Group in Melbourne Australia, however it only meets on school holidays.

Zec's post to the User Group thread which contains the same information he sent me, can be read here:

http://forums.auran.com/trainz/showpost.php?p=626241&postcount=6

Considering the geographic size of Melbourne, I'm sure it wouldn't hurt to start other groups in some of the outer suburbs, but it would be great if anyone planning to do so could contact Zec first.

Please feel free to write to the Editor on any subject you wish. Unfortunately we can't answer questions about problems with Trainz or your home computer, but most other things are fair game. The Trainz Community will be a non-political mob, so please leave your frustrations with Trainz and or Auran on the Trainz forum. We're here to help the community enjoy Trainz and hopefully make the 1st September, 2010 look like any other day.