



This unofficial Multigen Creator FAQ Part 1 ( 1 thru 50) is provided by [Gordon Tomlinson](#) . I hope you find the information contained with these FAQ's useful and helpful

MultiGen Creator is the industry's leading software for creating highly optimized, high fidelity realtime 3D content for use in visual simulation, urban simulation and other applications. The integrated and extensible toolset puts more interactive realtime 3D modeling power in your hands than any other mode

*If you have a tip, FAQ or code snippet etc you would like to share you can send it me at [faq@3dscenegraph.com](mailto:faq@3dscenegraph.com) and I will add to the FAQ, or if you spot an error in a FAQ or a change in Creator that makes a topic out dated let me know and I will get the items updated*

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MultiGen Creator is the industry's leading software for creating highly optimized, high fidelity realtime 3D content for use in visual simulation, urban simulation and other applications. The integrated and extensible toolset puts more interactive realtime 3D modeling power in your hands than any other modeler.

MultiGen Creator simulates almost all realtime rendering techniques for true WYSIWYG interactive modeling, enabling you to build within your world and preview interactively within your developing scene. Changes appear in realtime as you make them, improving your productivity by reducing the number of modeling system and target application viewing iterations.

## ❖ 2 ❖ What OS Platforms does creator Support

MultiGen Creator 3.x is currently only available on MicroSoft Professional windows systems

MultiGen Creator 2.x and before is/was available on MicroSoft Professional windows systems and SGI Irix systems.

## ❖ 3 ❖ What are the requirements to run Creator on windows

### Hardware Requirements:

- Intel Pentium III or IV; or AMD Athlon PC workstation (or better)
- 500MHz CPU clock speed or higher
- 128 MB memory or higher
- 4 GB or greater hard drive
- OpenGL (version >=1.2) 3D graphics card with 64 MB texture RAM (or better)
- Screen resolution 1024x 768 or greater
- CD ROM drive
- Three-button mouse

### Software Requirements:

- Windows 2000 Professional and Windows XP Professional are supported
- Windows NT® 4.0, Windows 95, Windows 98, Windows Me, and XP Home Edition are not supported ( the software may work but you will get no support from MPI on getting it to work on these version)

## ❖ 4 ❖ What are the requirements to run Creator on Irix

### Hardware/Software Requirements:

- OpenGL-based SGI IRIX workstations
  - O2
  - O2+
  - Octane
  - Octane2
  - Fuel
  - Tezro
  - Onyx2
  - Onyx3000 are supported
  - Indigo2 IMPACT not supported
  - Onyx4 with ATI-based UltimateVision graphics subsystem not recommended
- IRIX operating system version 6.5.21 or higher
- 250MHz MIPS CPU clock speed or higher
- 128 MB memory or higher
- 4 GB hard drive or greater
- Screen resolution 1024x 768 or greater

- CD ROM drive
- Three-button mouse

#### ❖ 5 ❖ Are there any Patches for Creator

Multigen current; places bug fix patches for Multigen Creator on their [downloads website pages](#)

For upgrade patches like 2.5 to 2.6 these are generally only available to customers who have purchased a maintenance support contract, and thus only available directly from Multigen and are not on line

#### ❖ 6 ❖ Is there a Creator user forums

Yes there is a very active user forum for Creator, which is well supported by the user community and the Creator support manager and Engineering manager.

You can find the Official MultiGen Creator user forum at the [MultiGen Website](#)

Also you can find an Unofficial Creator user forum at [3dSceneGraph.com](#) along with other 3d simulation forums

#### ❖ 7 ❖ What is OpenFlight

OpenFlight is MultiGen Paradigm's native 3D content which is the leading visual database standard in the world and has become the defacto standard format in the visual simulation industry.

OpenFlight's logical, hierarchical scene description file format informs the realtime image generator what, when, and how to render, resulting in realtime 3D scenes with unmatched precision and reliability. OpenFlight offers flexibility, open connectivity and easy interoperability along with advanced realtime functions, including:

- Open and Publish format
- Levels of detail (LOD)
- BSP
- Culling volumes
- Switch Nodes
- Drawing priority
- Binary separating planes
- Shaders
- Light Points
- Multi-texturing
- Cross platform
- etc
- etc

All of these benefits and more make OpenFlight the most widely adopted image generator format in realtime 3D visualisation

#### ❖ 8 ❖ Where can I get Information on the OpenFlight Format

You find much more detailed information on Multigen's OpenFlight 3d format on [their website](#)

There is also a white paper available on the OpenFlight format and API on [Multigens website](#)

The full OpenFlight format specification for the latest and previous version can also be found on [Multigen's website](#)

## ❖ 9 ❖ Where Can Download Plug-ins for Creator

MultiGen Paradigms provide 2 sets of plug-ins for Creator supported and unsupported:

Supported Plug-ins can be found here on the [supported downloads page](#)

While unsupported plug-ins can be found here [unsupported downloads page](#)

## ❖ 10 ❖ How to Change paths for external references path

Try using the **ChangePaths** plugin available from the downloads section of [MPI's website](#)

This will enable you to change all ex-refs and texture paths of your database(s) without even having to load them in Creator

## ❖ 11 ❖ Multi-texture can I access layer 0 UV's on other layers

**Q: When using Multi-textures can other layers access another layers UV's, say if I set layer 0 up textures and UV's and then want to use different textures on layers 1 and 2 how can I use the same UV's from layer 0**

There is a copy command for this exact thing, see Palettes>Texture Layers>Copy which does exactly what you want.

Specifically, you select the geometry you want, start the tool, specify the layer you want to copy UVs from and the layer(s) you want to copy UVs to. You also have the option of copying the texture index from the source layer to the destination layer(s) or to use the current pattern in the palette instead

## ❖ 12 ❖ How can I convert my textures to Creator formats

There are quite a lot of ways that you can convert your images, here's some of them:

- [Thumbs Plus](#) is an excellent and affordable program which can convert to SGI formats and has a batch command for multiple file, the file can also be resize in the batch process as well.
- Paint Shop Pro 8 and above supports the SGI Formats
- Dan Oller wrote an excellent Creator plug-in that will convert all images in a OpenFlight file to supported formats and will also scale the images to be a power of 2 ( see Convert Image 1.2 Windows - Irix )
- You can do a save as using the Creator Image editor
- Creator Ships with SGI format plugin for Photo Shop
- Irix and Linux has several command line tools for converting textures do a 'man -k texture convert' to see what tool you have installed
- GIMP will read and write the required formats

## ❖ 13 ❖ How can I convert my Textures in Creator to Run-time formats

See [Faq 12](#)

On of the quickest ways is to use one of Dan Oller's great Creator Plug-ins, in this case the "Convert Texture", which can be found on the [MPI's web unsupported too page](#)

## ❖ 14 ❖ Is Creator Available for Linux

Currently no MultiGen Creator is not available for Linux nor is it likely to be in the near future( the romour mill is quiet). Creator look set to be a Windows only program, Version 3.x is currently only available for windows and Irix is stuck at version 2.6x

As with any ting of this nature, I would recommend that you talk directly to MultiGen-Paradigm as they more interest they get the more they may consider the idea ( but don't bet the bank on it though) The Creator team are especially responsive to customers needs and requirements

## ❖ 15 ❖ Can I use DDS format textures with Creator

Yes MultiGen Creator does support the use of **DDS**( Direct Draw Surface) textures. Support was add in 2.60 ( might have been 2.5)

Not if you are using Creator 2.60 then it is recommend you update your version to 2.61,as the patch addresses some issue 2.60 had with DDS formatted textures.

## ❖ 16 ❖ Why do some DDS textures look strange or Inverted

What you are seeing is not a bug but is correct for **DDS** (Direct Draw Surface) textures and depends on how you generated them.

As **DDS** was designed by Microsoft and thus originally intended for Direct X, which has its origin in the upper left corner, while OpenGL has its origin in the lower left corner.

Basically you need to tell your **DDS** generation tool to invert the image, many tools can do this some don't

You can use the MultiGen Vega Prime utility program **to\_dds.exe** to do the inversion for you using the '-i' command line switch

## ❖ 17 ❖ What are DDS textures

The **Direct Draw Surface (DDS)** format is an optimized, compressed format that contains the binary representation of an image, as it is used by the hardware.

Any image format supported by Vega Prime can be converted to **DDS** as an interim step for increased performance.

The graphics hardware handles DDS textures directly, which means no decompression is needed by the texture loader. This means that when using DDS textures loading is faster, throughput is increased, while on disk storage requirements are decreased, more textures or higher quality texture can be used etc.

## ❖ 18 ❖ What DDS tool's are available

There are many **DDS** utilities and tools available these days, a quick Google search should find you many of this quite quickly

NVIDIA provide several **DDS** tools including source code (See their developer site)

NVIDIA's **DDS** tools can be found here [http://developer.nvidia.com/object/nv\\_texture\\_tools.html](http://developer.nvidia.com/object/nv_texture_tools.html)

MultiGen Paradigm ship a command line tool called '**to\_dds.exe**' for converting textures to the DDS format, this is shipped with Vega Prime and I think with CTS, but not with Creator at the moment (See this [Vega prime FAQ 42](#) on using the '**to\_dds.exe**'

## ❖ 19 ❖ Can I save my custom window layouts for Creator

**Q: I know Creator supplied default Cad and Standard view window layouts available, is it possible to set my own custom layout and then save this as my "default" layout, which would be used by Creator when opened ?**

**A:** Unfortunately **no** it is **not** currently possible to save custom window layouts in Creator

## ❖ 20 ❖ Not Quite Understanding Light point Strings

**Q: We are not really understanding how Light point Strings data is shown in the Creator database navigator dialogs; we seem to only be able to see the first vertex and there fore can only assign one normal, how can we assign normals ?**

**A:** In Creator 'Light Point Strings' are represented by a single "vertex", a "replication count" and a "transformation".

- The "vertex" gives the position of the first light in the string as well as its normal, color, and other attributes which is applied to all the lights in the string
- The "replication count" gives the total number of lights in the string
- The "transformation" defines how to get from the first light point position to the second and subsequent light point positions

If you need to assign different vertex attributes (normal in your case) to each light in a light string, you have to use individual light points and lay them out manually

## ❖ 21 ❖ How are Light Point Strings stored in an OpenFlight File

With Light Point Strings in the OpenFlight format you would expect to see the following records:

### For OpenFlight 15.8 and 16.0:

- Indexed Light Point (130)
- Matrix (49) (composite includes Translate that follows)
- Translate (78) (decomposed translate part of Matrix)
- Replication (60) Defines "how many"
- Push
- Vertex List (78) Defines pos of first and attributes of all light points
- Pop

### For OpenFlight 15.7 and earlier:

- Same as 16.0 except that Light Point (111) appears instead of Indexed Light Point (130)

## ❖ 22 ❖ Having problems with colors & textures for Terrains

**P:** *I have generated some terrain using the 'Creator Terrain Batch' processing feature. I have then isolated one or more polygons of the terrain and want to apply colour and texture to these. But I was not able apply either color or texture.*

**Q** *Why cannot I not change the attributes of the isolated polygons ?*

The likely cause of your problem here is that you have opened the master file that was generated during the batch processing.

The master file uses (references) the individual terrain files as external reference nodes, which means that in Creator you cannot edit them from within the files referencing them in this case the master files.

In order to be able to change the colours or any attributes of polygons of the terrain, you actually need to open the referenced terrain file and not the master.

To edit your terrain you can:

- Select the area in the master file you want in ( Set selection mode to 'External Reference mode')
- Once selected you can then select Edit Externals from the pull down menus
- This will open the terrain tile file you want where you can then edit the colour or other attributes
- Once you have edited you then save the file
- Then go back to the master file and select Re-read Externals which will then read the new edited version of that terrain tile back into the master

## ❖ 23 ❖ How can I measure distances in Creator

Creator provides the measurements of distances for free and by default in the 'Coordinates Panel', so you can simply select 2 vertices and Creator will calculate and display the accurate distance between them.

When you pick a vertex then pick another vertex, the Coordinate Panel in Creator displays:

- The distance between the two vertices, which is shown in the Distance field)
- The distance in each direction between the two vertices, which is shown in the Delta fields

Note if you then pick a third and subsequent number of vertices, these distance and delta fields will continue to be updated to show you the distances between the most recent pair of vertices you have picked

Also note that these fields also update while Creation Tools are active as well; for example, when using say 'the Irregular Polygon tool' the distance displayed will be that of the last and second to last points of the Polygon you have entered

## ❖ 24 ❖ The Creator 3D viewer is not working in 3.0

This is a known issue and was addressed in the Creator 3.01 patch, download and apply this patch or later patch from the [MultiGen Creator downloads page](#)

❖ 25 ❖ Which Open Flight format does Creator use 

Below is a list of creator version and the corresponding OpenFlight Version produce by the Creator version

<b>OpenFlight Version</b>	<b>Creator Release</b>
<a href="#">OpenFlight 16.0a</a>	MultiGen Creator v3.0
<a href="#">OpenFlight 15.8</a>	MultiGen Creator v2.6
<a href="#">OpenFlight 15.7</a>	MultiGen Creator v2.4; v2.4.1; v2.5; v2.5.1
<a href="#">OpenFlight 15.6</a>	MultiGen Creator v2.1; v2.2; v2.2.1; v2.3
<a href="#">OpenFlight 15.5.1</a>	MultiGen Creator v2.0; v2.0.1
<a href="#">OpenFlight 15.4.1</a>	MultiGen II v1.4; v1.5
<a href="#">OpenFlight 14.2/15.0</a>	MultiGen II v1.0 MultiGen v14.2; v14.3
<a href="#">OpenFlight 13.0</a>	MultiGen version 13
<a href="#">OpenFlight 12.0</a>	MultiGen version 12
<a href="#">OpenFlight 11.0</a>	MultiGen version 11
<a href="#">OpenFlight 10.0</a>	MultiGen version 10
<a href="#">OpenFlight 9.0</a>	MultiGen version 9

For the latest details make sure to check the Mutigen-Paradigms [document center](#)

❖ 26 ❖ Where did all the Creator Plug-ins go 


**Q: There are a lot of links to plug-ins for Creator on the MultiGen Creator user forum but all the links seem to be broken, where can I get these plug-ins ?**

The plug-ins used to be place on the MultiGen Creator public FTP site, but where later given there on webs pages in 2 places:

Unsupported plug-ins can be found [here on MPI's Creator support pages](#)

Supported plug-ins can be found [here on MPI's Creator support pages](#)

Also some of the plug-ins may have been adopted and added directly into the Creator product

❖ 27 ❖ How can I change the FID number of a DFD feature 

**From with in MultiGen Creator you can :**

1. GeoFeature->Import DFD and select the file you want to load
2. Select the feature you want to change
3. Open its attribute page, select a new FID
4. GeoFeature->Export DFD to write the changed DFD file back out.

## Outside of Multigen Creator:

- You can use the DFD API to read/modify/write DFD files, which is included on the Creator product CD.

### ❖ 28 ❖ I cannot enter numbers directly into dialog box

**P: In Creator 3 for Windows I find that I cannot enter a number directly into the numeric fields of dialog boxes, without first changing the values via the mouse.**

For example, if I want to rotate something, I would like to click on the rotate tool, select a centre of rotation with the mouse, then enter 2 in the dialog, when I do so I only get a warning bell. This is annoying to have this extra, unnecessary step.

**Q: Is this an input bug in creator , or is it a feature, or an operator error?** It worked just fine on my SGI version

Taking the following example

1. Select something to rotate
2. Start the rotate around point tool
3. Use the mouse to set the rotation
4. Try to enter a number with the keyboard with out doing any other click...

The Issue is more than likely that you set the rotation centre then try to simply enter a number.

The Problem is 2 fold here,

1. at this point the Rotate dialog does NOT have focus, so when you just try to hit a number you get the system bell because the graphics window has focus and does not take numbers ....
2. Even if you click on the Rotate dialog the input box does not have focus, the Cancel button has focus

This is the default behaviour for windows dialogs, in that the Cancel button gets focus by default

So in this case you have to do :

1. Select something to rotate
2. Start the rotate around point tool
3. Use the mouse to set the rotation
4. Make the rotation dialog active
5. Click or tab to the input box
6. Enter your number
7. Hit tab

This is a basic difference between the Windows and Irix operating systems and how they handle dialogs and focus etc.

On Irix, the dialog or window with the mouse in and under the mouse gets focus. On windows you have to click or tab to the window to get focus

### ❖ 29 ❖ How to Create one OpenFlight file from a set of many files

**Q: I have an OpenFlight files that references many other OpenFlight, that are the steps required to create only one flt file from them with no references ?**

Assuming you are talking about a master file and external references the to integrate the externals into the master file

1. First save a copy of the Original master
2. Change the selection mode to Externals
3. Select all the external references
4. Then select from the main Creator menu "File>Convert Externals" on the selected externals, this makes them instanced geometry with in the master file
5. Now select all the new instanced node
6. Then select from the main Creator menu select "Local-DOF/Make Geometry"

## 7. Save the file

You should now have a file that contain all geometry

### ❖ 30 ❖ How can I do character animation in Creator

Creator is not really suited for creating character animations, currently Creator only offers **Flip-book** animations and some articulations through DOF nodes.

If you are looking for Character animations for use in the simulation world then you cannot do better than using DI-Guy from Boston Dynamics, they provide wonderfully fully animate characters both civil and military, See the [Boston Dynamics website](#) for more information. Boston Dynamics also offer module for the various run-time API such as Vega, Vega Prime and SGI Opengl Performer etc.

Flipbook animation can be useful but is expensive in turns of polygons, see the sample shipped with creator called 'characteranim.flt' for one example

Also you see an [example of a walking man](#) flipbook animation made many years ago, this was designed to be on some form of a path such as a Vega Navigator

### ❖ 31 ❖ How to mirror image of a model with textures

**Q: With Creator how do you create mirror image of a model or node that has textures, as we when we try this the textures distorted textures and are not aligned properly**

If the geometry of your model has texture mappings applied, then the mirror tool will not do what you expect.

If this is the case, then remove the texture mappings from the faces (set their Mapping index to -1, this will "fix" the UV's to their "current" values), then do mirror. Then you should get what you expect.

Also note that if any face has more than 3 vertices and has UV coordinates that are not linear (i.e. warped in any way), then the texture on the mirrored face may not render exactly like the original.

The possible problem in a case like this is that the original face may be distorted to begin with, but it is accepted as being correct because it was first. This is a quirk when you have UV coordinates that are not linear across a surface. OpenGL does not promise to render them in a deterministic fashion. Sometimes you may see a seam across the surface that moves when you re-orient your eye point. If this is your case, it's not necessarily the mirrored face that is distorted, the original is as well, but the fact that they are each distorting differently makes the problem more evident

### ❖ 32 ❖ Can I encrypt models with Creator

**Q: Is it possible to encrypt my models and textures with Creator, I want give demos out but need to protect my content and IP**

Unfortunately it is not currently possible to directly encrypt your model and texture file with Creator

### ❖ 33 ❖ How to modify the default Ambient Light settings

Open up the Light Source palette and "edit" Light Source #1. Change its ambient value to the settings you wish to use. (Note assuming this light is "Activated for Modeling", then this will change how your scene looks in lit situations) This will change the ambient light value in the current database only.

To change the ambient light value for all databases you have to do a little more work.

To set up a "default" light source palette file that will be used to initialize all subsequent "New" files using the procedure shown here: (note this is for Creator 3)

- Close all databases in Creator
- Open the light source palette, modify the ambient value of light source #1 as described above
- In the Light Source Palette, do File->Save Palette
- Save the light source palette file to `flt1.lights` in:
  - If the environment variable: `MPI_CREATOR_RESOURCEPATH` exists, save the file to this location
  - If this variable does not exist, save the file to `/config/creator` where is where Creator is installed.

After you do this, next time you do a "New" database, the light source palette will be initialized to the contents of this file.

Note that if you saved the file to b) and subsequently create environment variable **RESOURCEPATH** or **MPI\_CREATOR\_RESOURCEPATH** Creator will look there instead of b) from that point forward.

If you want the ambient light value to change in existing dbs, you have two options:

- If the db only has one light source, go to the Light Source Palette and do File->Load Palette. Select the file you saved from above. This will load your saved light sources into "this" db.
- If the db has more than one light source, you can't simply load a new palette as in option 1) above, this will wipe out all light sources except the single light source saved in flt1.lights. I am afraid, in this situation, you have to manually edit light source #1 and resave the file

Note by default since Creator (2.61), Creator now places the default palette files in C:\Program Files\Multigen-Paradigm\config\creator

#### ❖ 34 ❖ How to Set/Create a Default Color palette

You can set the colors in the default color palettes that is used every time you use Creator by saving a palette with the default palette name

The Default color palette name is **flt1.color**

When Creator launches, it searches for the file **flt1.color**. If **flt1.color** is found, then Creator loads this file as the default Color palette.

Creator looks for **flt1.color** first in the directory specified by the **RESOURCEPATH** or **MPI\_CREATOR\_RESOURCEPATH** environment variable, then in the working directory. The working directory for Windows is the directory where Creator is installed, and for IRIX it is the directory where Creator was launched

If Creator cannot find **flt1.color** in either location it loads a standard palette of 1024 shaded color definitions. You can save custom Color palette files with other names, but must reload them each time Creator starts up

Note by default since Creator (2.61), Creator now places the default palette files in C:\Program Files\Multigen-Paradigm\config\creator

#### ❖ 35 ❖ How to Set/Create a Default Materials palette

You can set the materials in the default materials palettes that is used every time you use Creator by saving a palette with the default palette name

The Default materials palette name is **flt1.materials**

When Creator launches, it searches for the file **flt1.materials**. If **flt1.materials** is found, then creator loads this file as the default materials palette.

Creator looks for **flt1.materials** first in the directory specified by the **RESOURCEPATH** or **MPI\_CREATOR\_RESOURCEPATH** environment variable, then in the working directory. The working directory for Windows is the directory where Creator is installed, and for IRIX it is the directory where Creator was launched

If Creator cannot find **flt1.materials** in either location it loads a standard palette of 64 materials definitions. You can save custom materials palette files with other names, but must reload them each time Creator starts up

Note by default since Creator (2.61), Creator now places the default palette files in C:\Program Files\Multigen-Paradigm\config\creator

#### ❖ 36 ❖ How to Set/Create a Default Texture palette

The default texture palette name is **default.txt**

When Creator launches, it searches for the file **default.txt**. If **default.txt** is found, then Creator loads this file as the default Texture palette.

Creator looks for **default.txt** first in the working directory, and then in the directory specified by the **TXTPATH** or **MPI\_CREATOR\_TXTPATH** or **MPI\_CREATOR\_RESOURCEPATH** environment variable. The working directory for Windows is the directory where Creator is installed, and for IRIX it is the directory where Creator is launched.


If Creator cannot find **default.txt** in either location, it loads a Texture palette that contains no texture patterns. You can save Texture palettes with other names, but you must reload them each time Creator starts up

Note by default since Creator (2.61), Creator now places the default palette files in C:\Program Files\Multigen-Paradigm\config\creator

❖ 37 ❖ I cannot see Lighting or shading on black polygons 

If your geometry is using a black color and is does not have a material applied, then your geometry will always appear black because the final color, even with lighting applied, the color is calculated by multiplying the RGB values into the lighting equation. Since the RGB values are all 0 for the color black, multiplying them by anything will be 0, thus black will stay black.

If you were to apply a material to the geometry( with its emissive property not set to black) this material will be used and thus you will get some color other than black

❖ 38 ❖ Creator 2.6 Light points not working in SGI Performer 

**Q: There seems to be a problem in displaying light points that are created using Creator 2.6 and above; which are not being displayed in SGI Opengl Performer 2.3**

Light points went through some major change in Creator 2.6 as Creator took over functionality that was in originally in Vega

Unfortunately the version of Performer currently cannot correctly load flight files with the newer Light Point records introduced with the release of Creator 2.6, note you may also have problems with other attributes until the SGI performer update their OpenFlight loader to support the new version of OpenFlight

Note that Creator has the option to save the light points in the older format specifically for Performer, you should try that, although there was a problem with this which I think was fixed in Creator 3.0 ( Check with MPI for further details)

❖ 39 ❖ Can Creator generate terrain from DEM and S-57 data 

The Creator Terrain bundle contains a tool known as the DED Builder. The Creator's terrain tools only process DED elevation files, but the DED Builder converts other formats to DED format. The builder can convert DEM to DED (Digital Elevation Data), but it cannot convert S-57 to DED

Multigens new Creator Terrain Studio (a different product than Creator Terrain Bundle) currently supports reading DEM and from version (v1.2) it will also support reading of S-57 data as well.

If you have FME (Feature Manipulation Engine) from [Safe Software](#) that program will allow you to convert S-57 to a number of other formats that are supported by Creator terrain tools

❖ 40 ❖ How to run Creator by command line in Windows 

**Q: I want to be able to run Creator from the command line and open two or more flt files. But the command "mgflt.exe building1.flt" works, but "mgflt.exe building1.flt building2.flt"**

Unfortunately **mgflt.exe** will only accept one file on the command line

However if you call mgflt.exe once for the first file and call it again with a second file, and so on you will get what you want.

You can do this for as many files as you want. This works because if you run creator while another instance of the app is running, the new invocation "attaches" to the currently running instance and loads the file in that instance.

For example if you create a batch file similar to below should work:

```
mgflt.exe file1.flt
mgflt.exe file2.flt
mgflt.exe file3.flt
.....
mgflt.exe file40.flt
```

❖ 41 ❖ How to Set/Create a Default Light Points palette 

You can set the **light points** in the default light point palettes that is used every time you use Creator by saving a palette with the default palette name

The default **Light Point Palette** name is **mgprop.dat**

When Creator launches, it searches for the file **mgprop.dat**. If **mgprop.dat** is found, then Creator loads this file as the default Light Point palette.

Creator looks for **mgprop.dat** first in the directory specified by the **RESOURCEPATH** or **MPI\_CREATOR\_RESOURCEPATH** environment variable, then in the working directory. The working directory for Windows is the directory where Creator is installed, and for IRIX it is the directory where Creator was launched

If Creator cannot find **mgprop.dat** in either location it creates an empty Light Point palettes. You can save custom light point palette files with other names, but must reload them each time Creator starts up

*Note by default since Creator (2.61), Creator now places the default palette files in C:\Program Files\Multigen-Paradigm\config\creator*

#### ❖ 42 ❖ My Shading keeps Dissappearing

**Q: I keep shading my model and saving it, but when I re-open my file all my shading has gone, what am I doing wrong ?**

In Creator with your model loaded Double click in the database background to open up the Header Attributes of your model.

On the Preference's tab, under Data Preferences, ensure that the '**Save Vertex Normals**' is checked, this will then save any shading you apply

#### ❖ 43 ❖ Problems with Intergrated Graphics Cards

**Q: I have an Integrated graphics card with 128mb texture memory that supports Opendgl but when I use Creator I get various graphics issues and glitches**

Integrated Intel graphics chips are notoriously bad at OpenGL and are really designed for the basic consumer windows tasks and users and not professional tasks such as 3d modeling or simulation One thing to try is getting the latest driver from Intel if you don't have it, but sadly the real solution is you need to install a real graphics card that has full and proper support OpenGL

See this article on Toms Hardware about intergrated graphics cards <http://graphics.tomshardware.com/graphic/20050915/index.html>

This repsonse from Intel really says it all:

"Intel says it designs its graphics processors with what it calls the "mainstream user" in mind, creating a low-cost part that does not consume an inordinate amount of power. The equation is not so much about letting you enjoy playing Unreal Tournament on your laptop. Rather, it is about getting the job done for Internet access, email, home office applications and maybe a few games that are albeit not so graphically-intensive. "

#### ❖ 44 ❖ Problems Setting the Size of the Modeling Grid in Creator

**Q: In Creator I can use the arrow keys to cycle through the preset grid sizes set in my preferences, this is all well and good, but When I try to enter a value directly into the grid size Creator will not accept my input whether I use the return, tab keys etc my input is ignored, but I know it has worked in the past, what is the problem ?**

The problem is likely to be a bug that was found in Creator version up to at least 3.02, basically in your preference if you set the lowest grid size to say 20 and then try to enter a value for the grid that is less than the smallest preference in this case 20 Creator will ignore your input.

The work around is to set you lowest grid size preference to a low number say 0.001 then you can set grid size down to that size, this does not appear to affect the upper bounds of the grid size only the lower bounds.

This issue will be fixed in a upcoming patch or release.

#### ❖ 45 ❖ Why do I get at these [T..R..S] in my Imported Geometry

**Q: When I import my files into Creator all my group have [TRS], what are these and can I do anything about them ?**

T = Translation

R = Rotation

S = Scale

Basically they mean that the group node has a Translation, Rotation and scaling applied which will affect of its child nodes

Many other modeling programs use a lot of internal translations and scales to position and size geometry that you do not normally need in an OpenFlight file or your simulation runtime

When export these other formats to OpenFlight you get a T, Rand S on nearly if not all group nodes

The reason the faces move and jump as you put when you copy and paste is the Translations and scale are applied from the group down to the faces, when you remove the faces from that node the translation and scale are no longer applied thus the faces move.

You can flatten out ( apply and remove ) the translations and scaled so that they are burned into the vertices of the faces,

by Selecting the groups then go to the main Menu/Local-DOF/ and Selecting "Make Geometry"

Note that there is no undo for this operation

#### ❖ 46 ❖ Why Does Creator Crashes when I Set MPI\_CREATOR\_TXTPATH



**Q: Why I set the environment variable MPI\_CREATOR\_TXTPATH with several directories where my textures reside, Creator 3.20 crashes on start-up, if I remove some from the path then Creator starts OK, is there a finite length to the paths I can set ?**

Da Man from MPI replies with:

"It appears that although the string used to store the environment variable is dynamically allocated and therefore has no "hard" limit in length, the code that uses it down the line will fall over if the length of the expansion plus the length of any file it looks up takes more than 1024 characters.

I believe this is what is happening to you. I have fixed the offending code but be warned that if the environment variable + length of texture name is longer than 1024, the file won't be found. It won't crash but it won't be found!"

#### ❖ 47 ❖ Gouraud Shading Confusion



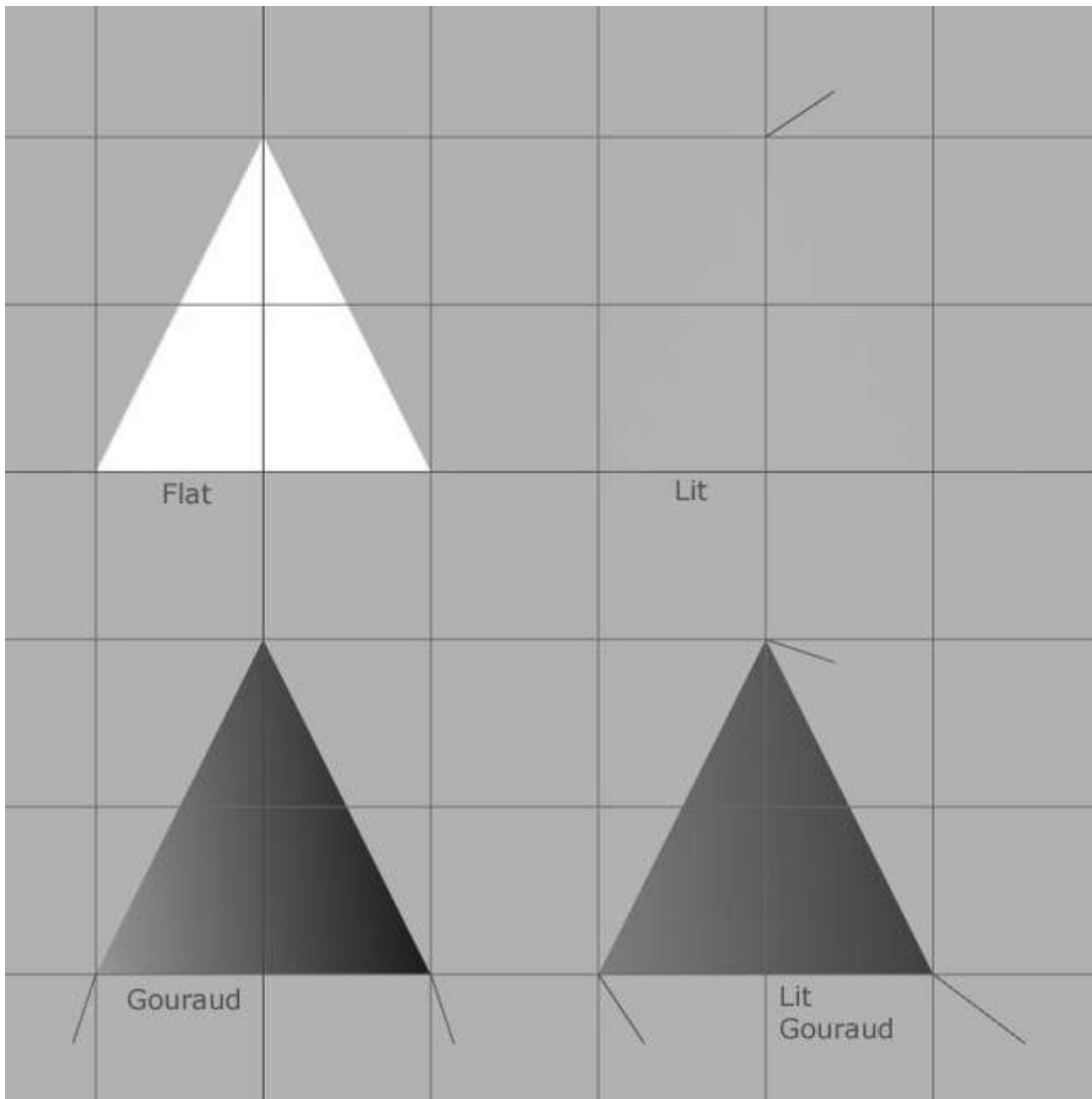
Make sure that you recalculate the shading after you have set the vertex colors, this should then apply the correct shading method selected

Don't forget to turn off 'Update Vertex Colors ' when using Gouraud shading...

The difference between 'Gouraud ' and 'Lit Gouraud ' is simply the latter will respond to light and time of day changes etc.

For example here's 4 Tri's with Flat, Lit, Gouraud and Lit Gouraud shading modes

Face are White, Top Verts are Red, Left verts are Green, Right verts are Blue



❖ 48 ❖ How Can I Save my File as An Older Version of OpenFlight 

**Q: My run-time application does not yet support OpenFlight Version 16.0, how Can I save my files as an Older version of OpenFlight**

With Creator 3.x you can save your models out to the following OpenFlight Versions 15.4, 15.6, 15.8, 16.0 you can also set the default version its saves to as one of these options as well

If you need to go 14.2 you can import your model into Polytrans ([www.okino.com](http://www.okino.com)) as export them there

❖ 49 ❖ How Can I Edit Attributes for Multiple Faces 

**Q: I have many faces that I need to edit, is it possible to edit the attributes of multiple faces in one go?**

This is quite straightforward Select all the faces you want to edit (in face pick mode and open up the Face Attributes page (CTRL + =)

Make sure that **Modify All** in the upper right hand corner of the Face Attribute dialog is checked. Now when you make your changes, you should see the changes occurring on all of the selected faces

❖ 50 ❖ How Can I Align Faces Orientation to One Another 

**Q: When I'm importing dxf files into Creator, some the normal normals are changed and thus the face orientation can be wrong on many faces, so I need to flip normals one by one. Is there a tool to help me align the faces in Creator**

In Creator 2.6 and above , there is a tool called Orient Faces.

You pick a face that is "correctly" oriented (normal facing the right way) and then invoke the tool. The tool will finds all "connected" faces and for each face that faces away from your "correct" face, reverses the verts of that face. It uses a recursive algorithm to "orient" all "connected" faces. Note that two faces are considered "connected" if they share a common edge

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