

AEthelraedUnraed's

# Guide to Surface Editing

in the IL2 Mission Editor

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*This guide is still very much a work in progress. Check back often for updates, bugfixes and additional instructions and How Tos. Many thanks go to LizLemon, Hamaha15, JimTM and many others that I've forgotten to mention for their excellent work in researching and describing the Mission Editor. In many ways, this guide is simply a collection of all the info that's already on the IL2 forum somewhere, hidden deep within several threads. If you find any errors, if something is unclear or if you would like something else explained, please let me know by posting a message in the **Guide's announcement thread** or by sending a PM. I will try to respond as soon as I can, but as I'm tied to a busy real-life schedule, I can't make any promises ;)*

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# 1 Introduction

Besides adding objects and mission logic, which JimTM has created **an excellent guide** for, it's also possible to add decals to the terrain using the Mission Editor. This makes it possible to add airfields, villages and roads, with the same visual quality as the default villages, or sometimes even better. This guide aims to explain the various functions of the Surface Edit section of the Mission Editor.

## 1.1 Limitations

Surface editing in IL2's Mission Editor brings great possibilities for mission making, but it also has its limitations. Using the Mission Editor, it is (currently) not possible to:

- Create or edit height maps.
- Create or edit water maps.
- Create or edit forest maps.
- Edit existing landscape textures (but you can overlay textures).

- Edit existing cities (but you can overlay textures).
- Edit existing roads/railways.
- Create drivable roads (but you can make vehicles follow a custom road using waypoints, as well as change the surface so that vehicles will drive smoothly).

Note that some of the above things are possible using different tools (look for the old Rise of Flight tools), but this falls outside the scope of this manual.

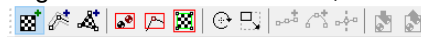
## 1.2 Unpacking game files

Some of the files you'll need to edit are packed inside the many .gtp files you'll find in the IL2 data directory. These .gtp files themselves are not editable, but you can extract their content. All extracted files will overwrite the ones in the .gtp files, as long as "Mods ON" is checked within your IL2 game settings.

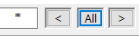
To unpack .gtp files, you'll need **the unGTP-IL2 program**. Simply put this program in the IL2 data directory, and drag and drop all .gtp files you want to extract onto the .exe file. This will create a directory called (null), under which you'll find the directory structure as it appears in the data folder. In other words, if you want to overwrite a file with a modded version, you can move this file to the same folder, without the added (null) directory; e.g. data\ (null) \graphics\LANDSCAPE\_Rheinland\_su\textures.tini becomes data\graphics\LANDSCAPE\_Rheinland\_su\textures.tini.

## 2 Surface bar

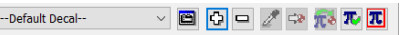
Checking Surface Edit -> Enable Editing will add the Surface bar, discussed in section 2.1, to the top of the screen:



...along with the Layer bar, discussed in section 2.2:

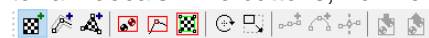


...and the Preset bar (section 2.3):





### 2.1 Surface bar

The **surface bar** is the most important one, giving the option to add and modify terrain decals. The buttons, from left to right, are:






#### 2.1.1 Object creation buttons



- **Create decal**  This adds a new **Decal** object.
- **Create tape**  This adds a new **Tape** object.

- **Create shape**  This adds a new Shape object.

### 2.1.2 Selection buttons

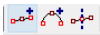

- **Select object**  If checked (blue), you can select a previously created Decal, Tape or Shape object by left-clicking on it.
- **Select knots**  If checked (blue), you can select one of the vertices of a surface by left-clicking on it. Only applies to the Tape and Shape objects.
- **Select texture gizmo**  If checked (blue), you can select the texture of an object by left-clicking on it. This allows you to move, rotate or scale the texture while keeping the object itself intact.

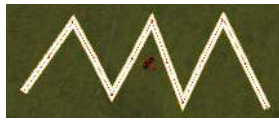
### 2.1.3 Position buttons

- **Rotate**  If checked (blue), the selected object or texture gizmo is rotated rather than dragged or scaled on a left mouse drag. The rotation centre is the mouse position.
- **Scale**  If checked (blue), the selected object or texture gizmo is scaled rather than dragged or rotated on a left mouse drag. The object will be scaled away from or towards the mouse position.
- **Both unchecked** If both **Rotate** and **Scale** are unchecked (grey), the selected object or texture gizmo will be moved on a left mouse drag.

### 2.1.4 Knot edit buttons

Knots only apply to Tapes and Shapes.

- **Add knots**  Adds a knot halfway in between two selected knots. You cannot add a knot at the end or beginning of a path; if you want to make a path longer, move the end knot to the intended final position and add knots in between it and the previous knot.
- **Add smooth knots**  Similar to **Add knots**, except that instead of placing the new knot exactly halfway the two selected knots, it will offset it to make the path seem smoother. This is very useful to make smooth corners on a road.




(a) Base **Tape** object



(b) All knots in (a) selected and **Add smooth knots** clicked.




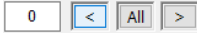


(c) All knots in (b) selected and **Add smooth knots** clicked again.

- **Split line at knot**  Splits the **Tape** into two tapes at the selected knot.

## 2.2 Layer bar



The Layer bar allows to hide icons based on which **Layer** they're in. Hiding the icons also makes it impossible to select them, and deselects items belonging to hidden layers. You can use this for instance to draw guidelines on the map to help in the creation of other things: make sure the guidelines all belong to the same layer, that is used nowhere else, e.g. layer 99. Then after you've done all your work, show only layer 99, press Ctrl-A to select everything, and then delete. Your guidelines will be gone, but all else is still there.









- **Layer box**  You can type in your layer selection here, or type \* to show all layers.
- **Layer down**  This moves the layer selection down, e.g. if layer 0 is shown and you press it, layer -1 will be shown.
- **Layer all**  This shows all layers. Equivalent to typing \* in the layer box.
- **Layer up**  This moves the layer selection up, e.g. if layer 0 is shown and you press it, layer 1 will be shown.

## 2.3 Preset bar



The Preset bar makes it possible to set or change the properties for many decals at once, as well as set the properties to use for new decals or copy properties from another decal.

- **Select preset**  This selects the preset to apply the actions of the other buttons to.

- **Remove preset**  This shows the properties box for the selected **decal type** that allows you to edit the properties of the selected preset. Note that just changing the preset properties doesn't also automatically apply it to any decals using this preset.
- **Add preset**  This adds an additional preset type of the same **decal type** as the currently selected preset.
- **Remove preset**  This deletes the selected preset type. All objects using the selected preset will be decoupled from the preset and keep all its properties.
- **Pick properties**  Copies the properties of the selected decal to the selected preset. Note that this button is only available if the selected decal is of the same **decal type** as the selected preset.
- **Set properties**  Copies the properties of the selected preset to the selected decal, without also setting its preset type. Note that this button is only available if the selected decal is of the same **decal type** as the selected preset.
- **Assign preset**  This makes the selected decal belong to the selected preset. Note that clicking this button doesn't automatically apply that preset's properties.
- **Apply preset**  This selects all surfaces belonging to the selected preset, as well as copy all properties of the selected preset to these surfaces.
- **Select surfaces**  This selects all surfaces belonging to the selected surface, without setting or modifying their properties.

### 3 Decal types

A **decal** is a texture overlaid on top of another object, in this case the terrain. There are three different types of decal in IL2:

- **Decal** This is the simplest type of ground texture. It adds a rectangular shape to the terrain. Use it for simple textures that are meant to be directly copied onto the terrain. E.g. villages or dirt patches.
- **Tape** The **Tape** decal adds a texture along a path, with a given width. A path consists of a number of knots; between each knot and the next will be

a straight path section (but lots of very short straight sections can give the illusion of a curve). Use the Tape decal for things such as paths, roads, railways and trenches.

- **Shape A Shape** is a polygon, Ancient Greek for “many corners”. You can give it exactly the shape you want, whether that’s a triangle, a square or the silhouette of the Eiffel tower. Use it for more complex shapes such as fields that are meant to use repeating textures.

All decal types share the Base properties and Appearance properties, but each type also has some specific settings. These can be reached by right-mouse clicking the decal and clicking “Properties”.

### 3.1 Base properties

- **Name** The name of the object (30 characters max). Not really used for anything, but you can enter a short description here of what the texture is supposed to represent (e.g. the name of the village).
- **X Position** The X position of the decal (note that this is the vertical axis in the Editor!).
- **Z Position** The Z position of the decal (note that this is the horizontal axis in the Editor!).
- **Angle** The object is rotated this amount of degrees around its center (X Position, Z Position).
- **Layer** Decals with a higher layer number will be drawn on top of those with a lower number.
- $\pi$  T.B.D. Seems to be related to preset templates you can create.

### 3.2 Appearance properties

- **Opacity** Decals with an opacity value smaller than 1 will be partially transparent, with 0 being completely invisible. Note that the transparency also depends on the texture!
- **Color** The texture colour will be multiplied according to this value, with an RGB value of 128,128,128 resulting in the original colour, 255,255,255 resulting in a twice as bright colour and 0,0,0 resulting in pure black.



(a) Color=128,128,128

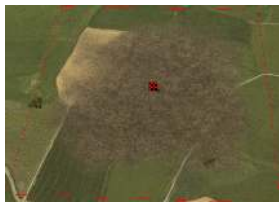


(b) Color=255,128,128

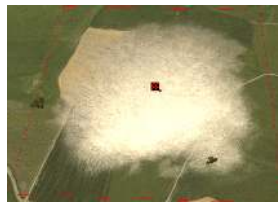


(c) Color=0,0,64

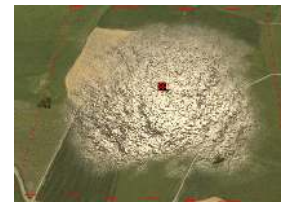
- **Texture** The texture of the decal, i.e. the image used to paint its surface.
- **Normals** The normal map of the decal, i.e. which direction the surface is oriented. Used to simulate the lighting for small bumps and holes without actually having to create a 3d model for those, thereby saving a lot of GPU cycles.
- **Aux1 Tex** T.B.D.
- **Bump** The **Normals** texture will be multiplied by this value, making bumps in the surface appear bigger or smaller according to this value (only affects the appearance, not the actual 3d bumps).
- **Terrain decal** This determines whether a texture is the actual terrain (checked), or merely colours the ground (unchecked). Check this for paved surfaces, leave unchecked for fields.
- **Split by terrain** If checked, it will do a “best effort” attempt to keep the decal above the ground surface. Only used if **Terrain decal** is checked. Check this box if the decal seems to go below ground level at some places.
- **Specular** The colour determines the reflectiveness of the decal, i.e. black is no reflections and white is an extremely shiny surface. The value determines how “focused” the reflection is, i.e. 0 is a very diffuse reflection, like a sheet of paper, while 255 gives lots of detail with many small bright spots (note that the reflection takes into account the **Normals** texture). For water or mud, try a grey colour and high value. This too is only used if **Terrain decal** is checked, as otherwise the general terrain shaders are used.



(a) Color (0,0,0), value 0



(b) Color (128,128,128), value 0



(c) Color (128,128,128), value 255

### 3.3 Decal object settings

- **Size X** The size of the object along its x-axis, in metres. Note that the X and Z axes are flipped, so that with 0 rotation, x corresponds to the height.
- **Size Z** The size of the object along its z-axis, in metres. Note that the X and Z axes are flipped, so that with 0 rotation, z corresponds to the width.



- **Tile U** How often the texture should be repeated along the object's Z-axis. A value of 1 will fit the texture to the decal, a value of 2 will show it twice etc. This can also be less than one, e.g. if the value is 0.5, only half of the texture will be shown. This can be used in combination with **Offset U** to only show a part of the texture.
- **Tile V** How often the texture should be repeated along the object's X-axis. A value of 1 will fit the texture to the decal, a value of 2 will show it twice etc. This can also be less than one, e.g. if the value is 0.5, only half of the texture will be shown. This can be used in combination with **Offset V** to only show a part of the texture.



(a) Tile U=1, Tile V=1



(b) Tile U=2, Tile V=1



(c) Tile U=0.5, Tile V=0.5

- **Offset U** The texture will be shifted left relative to the decal by this value. A value of 1 corresponds to the texture width, i.e. the texture is shifted one complete cycle to the left, having the same visual result as an offset of 0. **Offset U** can also be used in combination with **Tile U** to only show a part of the texture.
- **Offset V** The texture will be shifted up relative to the decal by this value. A value of 1 corresponds to the texture height, i.e. the texture is shifted one complete cycle upwards, having the same visual result as an offset of 0. **Offset V** can also be used in combination with **Tile V** to only show a part of the texture.



(a) Offset U=0, Offset V=0



(b) Offset U=0.5, Offset V=0



(c) Offset U=0, Offset V=0.5

### 3.4 Tape surfline settings

- **Width** The width of the tape, in metres. This corresponds to the width of the road / railway / etc. that you're making.



(a) Width = 10

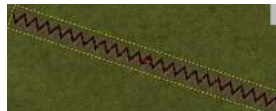


(b) Width = 20

- **U Size** The length of the texture along the path. This should generally equal the **Width** of the path, times the X to Y ratio of the texture (i.e. 2 for a 512x256 texture). The texture will tile beyond this length.



(a) Texture used (512x256)

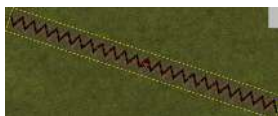


(b) U Size = Width



(c) U Size = 2\*Width

- **V Tile** The texture will be repeated this amount of times along the Width of the path. Note that you need to divide the **U Size** by this value to keep the texture ratio intact, i.e. if you have a **V Tile** of 2, divide your **U Size** by 2.



(a) V Tile = 1, U Size = Width



(b) V Tile = 2, U Size = Width

- **Specular** See **Specular** in the **Appearance properties**.
- **Blend U** This will blend the ends of the path, between the final two knots on either side. Use this to gently blend two paths together, or to make a path end less suddenly.



(a) Blend U = unchecked



(b) Blend U = checked

- **Blend V** In theory, this should blend the sides of the path, but in practice this seems to be unused.
- **3D Visible** T.B.D.
- **Split By Terrain** See **Split By Terrain** in the **Appearance properties**.
- **Physics: Solid** Makes the path behave as surfaced in-game, i.e. it will have less bumps and vehicles will be able to drive faster. Use this for custom airfields.
- **Physics: Concreate** [sic] T.B.D., probably makes the surface behave even smoother for vehicles and aircraft.

### 3.5 Shape settings

- **Border width (m)** The surface will extend this amount of metres beyond its border. The effect depends on with **Render mode** and **Border texture**.
- **Border tile** The border texture will be repeated every amount of metres equal to this value. Only used if Render mode is Alpha border or Blend border and Border texture is set.
- **Texture rotation** Rotates the **Texture** (and **Normals** and **Aux1 Tex** but not the **Border texture**) this amount of degrees relative to the object.
- **Tile X (m)** See **Tile V** in the **Decal object settings**, except that the value is now in metres; i.e. the texture repeats every amount of metres equal to this value.
- **Tile Z (m)** See **Tile U** in the **Decal object settings**, except that the value is now in metres; i.e. the texture repeats every amount of metres equal to this value.
- **Offs X (m)** See **Offset V** in the **Decal object settings**, except that the value is now in metres; i.e. the texture repeats every amount of metres equal to this value.
- **Offs Z (m)** See **Offset U** in the **Decal object settings**, except that the value is now in metres; i.e. the texture repeats every amount of metres equal to this value.

- **Render mode** This can be either **Normal**, **Alpha border** or **Blend border**:

- **Normal** The texture is slowly blended to the terrain texture, extending **Border width (m)** metres beyond the surface boundary. **Border texture** is not used.
- **Alpha border** Uses the alpha channel of the Similar to Alpha border, except that the texture of the border will now also be equal to the Border texture. as the opacity of the texture, from the edge of the **Shape** up to **Border width (m)** metres beyond. In this way, it allows for a more complex border than the **Normal** option. The texture of the border will be the same as the **Texture** in the **Appearance properties** (except of course for the alpha channel). The lower pixel row corresponds to the surface boundary, the uppermost pixel row to **Border width (m)** metres beyond the boundary. Note that the surface itself will have an opacity equal to the opacity at the boundary, i.e. the lower row of pixels of the **Border texture**.
- **Blend border** Similar to **Alpha border**, except that the texture of the border will now also be equal to the **Border texture**.

The following image shows the different options for **Render mode** with a pavement **Texture** and a grassy **Border texture**.



(a) Normal

(b) Alpha border

(c) Blend border

- **Auto border size** This assigns an automatic value to the **Border width (m)**. I don't know on what this automatic value is based.
- **Texture random rotation** This assigns a random rotation to the **Texture rotation**. This makes it an easy way to make several **Shape** decals seem less repetitive.
- **Absolute texture space** If checked, the coordinates of the **Texture** are based on the global object position rather than the position relative to the object coordinates. Can be used to make several shapes use a shared coordinate system, so that they seamlessly fit together if they overlap.



(a) Absolute texture space unchecked



(b) Absolute texture space checked

## 4 How to...

In this section, you'll find short guides explaining how to accomplish several useful things.

### 4.1 ...save a surface file

If you want to store your surface file as the default file the game uses every time you load a map, simply click **Surface Edit** -> **Save File** (note that you have to be in Surface Editing mode for this button to be clickable). This will now be the default surface file the game uses each time it loads this map (unless a separate surface file is linked in the mission, see the next section).

### 4.2 ...pack a surface file with a mission or campaign

If you want to pack your surface file along with a mission or campaign, so that only those specific missions use that surface file but all other missions (including Quick and Career missions) still use the default surface, we'll have to do a couple of additional actions:

1. Start by saving the surface file as described in section 4.1. Note that it's advisable to do this step before making any changes to the surface (but not necessary, however otherwise your changes may show up in other missions as well. If that's the case, just delete `Surface.dat` and it should revert to the default surface).
2. Open Windows Explorer, and go to `[IL2 install directory]\data\graphics\[mapname]`. Note that `[mapname]` is usually `LANDSCAPE_` followed by the name of the map and the season code, e.g. the folder name of the Rheinland map is `LANDSCAPE_Rheinland_au`.
3. Duplicate the files `Surface.dat` and `SurfaceTex.dat` and rename them into something you can remember. You can for instance append the mission or campaign name to it, e.g. if you're creating a campaign called "Hurtgen", you could call it `Surface_hurtgen.dat` and `Surface_hurtgenTex.txt`. You are free to name them however you like though, but remember that the name of the `.txt` file needs to be equal to the name of the `.dat` file with `Tex` appended to it (see the example above).

4. Likewise for `textures.tini` (you'll find this file in the **unpacked** map directory). Rename it into e.g. `textures_hurtgen.tini`.
5. Move all three files to the folder of your mission file or career (or actually any folder you like within `[IL2 install directory]\data`).
6. Open the `.tini` file created in step 4 with your favourite text editor and scroll to the line starting with `surface=` (in my case line 29). Replace the value with the local path of the modified `Surface.dat` file, without extension. E.g. if in step 5 you stored the files in the directory `[IL2 install directory]\data\Missions\Hurtgen`, change this line into `surface = "Missions\Hurtgen\Surface_hurtgen`.
7. Open the `.mis` file of your mission in your favourite text editor and scroll to the line starting with `Textures =`. Replace the value with the local path of the modified `textures.tini` file. E.g. if in step 5 you stored the files in the directory `[IL2 install directory]\data\Missions\Hurtgen`, change this line into `Textures = "Missions\Hurtgen\textures_hurtgen.tini`.
8. Delete the `.msnbin` file of your mission.
9. Open the mission file in the Mission Editor, and resave. If all is well, you should see the updated filename in the Mission Properties, under Landscape info -> Textures, and your changes to the surface should now show.

All subsequent changes to the surface file will be saved to the new file, so you only need to do this once for each mission.

Note that it is not necessary for people to have Mods On enabled to see a packed surface.

### 4.3 ...add textures to choose from

It's possible to add additional textures, besides the ones already packed with the map. To do so:

1. Open the **Appearance** tab of any decal (preferably a decal you want to use the additional texture on). Click **Browse** on the **Texture** property.
2. The **Textures** screen will open. Click File->Add in the top bar.
3. Browse to the texture you want to add, and click **Open**.

Note that the texture needs to be inside the IL2 install directory, and that it needs to be present in the same location for other people who play the mission. So if you want to include **unpacked** textures from another map, be sure to first move these outside the `(null)` folder.

It's also possible to add your own textures. They will need to be stored as `.dds` files, with BC3/DXT5 compression.

#### 4.4 ...create a village or city block

1. Enter Surface Editing mode by checking Surface Edit -> Enable Editing.
2. Click the **Create decal** button in the Surface bar.
3. With the **Create decal** button enabled (blue), click in the viewport at the location where you want to add a village.
4. Right-mouse click the decal that just appeared, and click **Properties**.
5. Go to the **Appearance** tab and click "Browse" next to the **Texture** field. Browse through the textures and select the village texture you want to use.
6. Do the same thing for the **Normals** field (and possibly the **Aux1 Tex** field; not every village texture has an Aux texture).
7. Go to the **Decal** tab. Most village/city textures use the same texture for four different village layouts, so you'll have to select the right one. Set the **Tile U** and **Tile V** properties to 0.5 to only show a quarter of the image. Set **Offset U** and **Offset V** to either 0 or 0.5 until it shows the right texture.
8. On the same tab, set the **Size X** and **Size Z** properties to the size in metres of the decal. For the Rheinland villages, this is 128x128 for the tiny square villages, 128x256 for the slightly larger rectangular villages, 250x500 for the even larger rectangular villages and 500x500 for the large square villages and city blocks.
9. Move the decal to the desired position using the **Position** buttons.

#### 4.5 ...create a road or railway

1. Enter Surface Editing mode by checking Surface Edit -> Enable Editing.
2. Click the "Create tape" button in the Surface bar.
3. With the "Create tape" button enabled (blue), click the viewport at the location where you want the road to start.
4. Continue adding road nodes by clicking the viewport, until you're satisfied with the rough outline of the road.
5. Smooth any corners as desired using the **Knot edit** buttons.
6. When satisfied with the layout, click the **Select object** button and right-click the road. Open the **Properties** panel.
7. Go to the **Appearance** tab and click "Browse" next to the **Texture** field. Browse through the textures and select the road texture you want to use.

8. Do the same thing for the **Normals** field (and possibly the **Aux1 Tex** field; not every road texture has an Aux texture).
9. Go to the **Surfline** tab. Set the **Width** property to the approximate width of the road in metres (note that some textures have transparent edges, so the actual width will usually be a little smaller).
10. Set the **V Tile** property to the amount of times you want to repeat that texture. For road textures, this is usually 1 (although setting it to 2 could be an easy way to create a double-tracked railway or Autobahn-style road). For runways and other wide surfaces, this can be larger.
11. Set the **U Size** property to the **Width** value multiplied by the aspect ratio of the **Texture** (width:height) and divided by **V Tile**. E.g. if your **Width** is 10, your **Texture** is 512x128 pixels (ratio 4:1) and **V Tile** is 2, set **U Size** to  $4 \cdot 10 / 2 = 20$ .

For unpaved roads, you can stop here. For paved roads, please continue:

12. Still on the **Surfline** tab, check **Physics: Solid** and **Physics: Concrete[sic]**. This makes any vehicles or aircraft move smoother and faster, like they're supposed to do on a paved road.
13. Go back to the **Appearance** tab. Check the **Terrain decal** and **Split by terrain** boxes. This will make the game attempt to put the road texture on top of the terrain, though no guarantees are given. Check if it works properly. If the road disappears under the ground at some places, add some additional nodes near those places, as outlined in point 4.
14. Many road surfaces have some sort of specularity (i.e. "shininess"). Change the **Specular** colour and value until satisfied (please refer to the **Specular** settings).

Note that even though vehicles will move faster on a paved road, they won't automatically follow a created road (either paved or unpaved). Add **Waypoint MCUs** along the road to make vehicles follow it (see **JimTM's Mission Editor Manual**).

For now, it isn't possible to make trains use any custom railways.

## 4.6 ...create an airfield

1. Using the same techniques as outlined in section 4.5, add the runway(s). You'll generally need only two points (start and end of the runway), although it can be necessary to add additional ones to keep the runway on top of the surface (see section 4.5 point 13).
2. Similarly, add the taxiways and other paved areas.



3. Using the same techniques as outlined in section 4.4, add additional decals such as dirt patches or caponier textures.
4. Use **Layers** to make sure the order of the textures is correct (i.e. the right textures are drawn on top).

Note that although you can create a smooth, concrete surface that planes can land on, you cannot change the actual heightmap of a map. That means that it's recommended to only add airfields to rather flat area's, or else you'll have a sloped runway.

Furthermore, note that aircraft won't automatically take off, land or taxi on your airfield. To enable this, create an Airfield object as described in **JimTM's Mission Editor Manual**.

Lastly, it's often easiest to copy-paste an already existing airfield instead of building one from the ground up. With the **Select object** button checked, left-mouse drag around an airfield, press Ctrl-C to copy and Ctrl-V to paste. Drag it to the new position by clicking and dragging one of the selected (red) icons.

## 4.7 ...change all textures in the surface file

If you want to move your surface file from one season to another, e.g. from the summer version of the map to the winter version, it can be useful to change all textures in the map at once, rather than manually updating every object one by one.

There should be a [surfacename]Tex.txt file saved along with [surfacename].dat. Open it in a text editor. It'll look like the following:

```
tex=0,"graphics\LANDSCAPE_Rheinland_su\surfacetex\town_forest.dds",0
tex=1,"graphics\LANDSCAPE_Rheinland_su\surfacetex\town_forest_nm.dds",0
tex=2,"graphics\LANDSCAPE_Rheinland_su\surfacetex\town_forest_aux.dds",0
tex=3,"graphics\LANDSCAPE_Rheinland_su\surfacetex\town_sand.dds",0
tex=4,"graphics\LANDSCAPE_Rheinland_su\surfacetex\town_sand_nm.dds",0
```

et cetera. Change each line with the winter version of the texture:

```
tex=0,"graphics\LANDSCAPE_Rheinland_wi\surfacetex\town_forest.dds",0
tex=1,"graphics\LANDSCAPE_Rheinland_wi\surfacetex\town_forest_nm.dds",0
tex=2,"graphics\LANDSCAPE_Rheinland_wi\surfacetex\town_forest_aux.dds",0
tex=3,"graphics\LANDSCAPE_Rheinland_wi\surfacetex\town_sand.dds",0
tex=4,"graphics\LANDSCAPE_Rheinland_wi\surfacetex\town_sand_nm.dds",0
```