

“Reasons why the shit you coded is now broke”

The paint hook now receives a width and height parameter. This shouldn't affect much in itself - but if you're calling a `derma.SkinHook` you will need to pass the width and height along, as it needs these values too now. You could start doing this now in your code without any negative effects.

<pre>function PANEL:Paint() derma.SkinHook("Paint", "Frame", self) return true end</pre>	<pre>function PANEL:Paint(w, h) derma.SkinHook("Paint", "Frame", self, w, h) return true end</pre>
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Entity:SetColor and Entity:GetColor now deal with Color tables only. Not with single variables. This is something that is always mentioned - and since we're breaking stuff anyway now seems to be a good time to make the change. `SetColor` will set the color to purple if the passed variable isn't a `Color`.

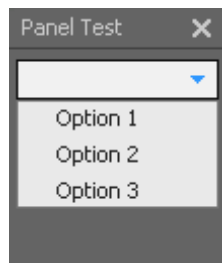
<pre>Entity:SetColor(r, g, b, a) local r, g, b, a = Entity:GetColor()</pre>	<pre>Entity:SetColor(Color(r, g, b, a)) local c = Entity:GetColor() local r,g,b,a = c.r, c.g, c.b, c.a</pre>
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KeyValuesToTable and TableToKeyValues are now in the util library.

<pre>KeyValuesToTable(blah) TableToKeyValues(blah)</pre>	<pre>util.KeyValuesToTable(blah) util.TableToKeyValues(blah)</pre>
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SetMaterialOverride, cam.StartMaterialOverride (which did the same thing) are removed and replaced with `render.MaterialOverride`.

<pre>cam.StartMaterialOverride(blah) SetMaterialOverride(blah)</pre>	<pre>render.MaterialOverride(blah)</pre>
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DComboBox is swapped with DMultiChoice.

When I originally made them they were named the wrong way around. `DMultiChoice` is now removed. This is because `DListView` was basically recreating all the functionality of `DMultiChoice`. `DListView` has extra settings to remove columns and headers - which make it exactly like the old `DComboBox`. Complicated eh?

Note: `SetEditable(boolean)` doesn't exist on `DComboBox`

DSysButton was removed. This panel used the Marlett font to create icons such as the 'close' button for windows. This isn't needed anymore since we're using GWEN skins. Plus it didn't work properly on Mac anyway.

Datastream module is removed. Datastream was less than optimal when it came to networking stuff. We now have the [new net library](#) - which doesn't work in exactly the same way - but it much more optimized to do this stuff. You should use the net library instead of datastream.

DBevel is removed. This panel was purely decorational - so it shouldn't be hard for you to replace.

utilx no longer exists. Please replace all occurrences of utilx in your code to util

entity.Classname. Caps is now enforced properly. Use entity.**ClassName** instead. (N is upper case)

TOOL:RenderToolScreen is now TOOL:DrawToolScreen(width, height)

<pre>function TOOL:RenderToolScreen() cam.Start2D() ... cam.End2D() end</pre>	<pre>function TOOL:DrawToolScreen(w, h) cam.Start2D() ... cam.End2D() end</pre>
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File library changes ([details](#))

<pre>file.FindInLua("entities/*.lua")</pre>	<pre>file.Find("entities/*.lua", "LUA")</pre>
	file.Find now returns two tables - files and folders. The second argument is the search path. "LUA" searches the lua files (in /lua/, in your gamemodes, in all the addons). "GAME" searches all the mounted content (main folder, addons, mounted games etc). "MOD" searches only the garrysmod folder. "DATA" searches in the data folder. Type "path" in the console to see the paths.
<pre>file.Find("models/model.mdl")</pre>	<pre>file.Find("models/model.mdl", "GAME")</pre>
<pre>file.FindDir("exampledir")</pre>	<pre>file.Find("example", "DATA") (2nd return)</pre>
<pre>file.Read("settings/users.txt", true)</pre>	<pre>file.Read("settings/users.txt", "GAME")</pre>
<pre>file.Read("example.txt")</pre>	<pre>file.Read("example.txt", "DATA")</pre>
<pre>file.Exists("example.txt")</pre>	<pre>file.Exists("example.txt", "DATA")</pre>
<pre>file.Exists("models/models.mdl", true)</pre>	<pre>file.Exists("models/models.mdl", "GAME")</pre>

DColorMixer.RGBBar is now DColorMixer.RGB. GMod13 using Grocel's DColorMixer

STool language phrases changed

<pre>language.Add("Tool_toolname_name", "Text")</pre>	<pre>language.Add("tool.toolname.name", "Text")</pre>
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HTTP module has changed

<pre>http.Get(url, headers, callback, ...)</pre>	<pre>http.Fetch(url, onsuccess, onfailure) http.Post(url, params, onsuccess,</pre>
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	onfailure)
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Timer calls no longer take var args to pass to callback

<code>timer.Simple(10, MyFunc, "hello", 10, 10)</code>
<code>timer.Simple(10, function() MyFunc("hello", 10, 10) end)</code>
or
<code>local func = function() MyFunc("hello", 10, 10) end</code>
<code>timer.Simple(10, func)</code>

Angle functions have all been unified. Before some were Set/GetAngles and some were Set/GetAngle. Now they're all Set/GetAngles()

<code>blahblah:SetAngle() blahblah:GetAngle()</code>	<code>blahblah:SetAngles() blahblah:GetAngles()</code>
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timer.IsTimer > timer.Exists Sounds better, yeah.

<code>timer.IsTimer("derp")</code>	<code>timer.Exists("derp")</code>
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Math duplicate functions removed (Deg2Rad,Rad2Deg)

<code>math.Rad2Deg(1) math.Deg2Rad(1)</code>	<code>math.deg(1) math.rad(1)</code>
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file.ReadString removed, use file.Read

server_settings module removed, use cvars instead

Renamed Material:[Get|Set]Material* to Material:[Get|Set]*

<code>WorldSound()</code>	<code>sound.Play(1)</code>
<code>GetWorldEntity()</code>	<code>game.GetWorld()</code>
<code>isDedicatedServer()</code>	<code>game.IsDedicated()</code>
<code>SinglePlayer()</code>	<code>game.SinglePlayer()</code>
<code>MaxPlayers()</code>	<code>game.MaxPlayers()</code>
<code>Player:GetCursorAimVector ()</code>	<code>Player:GetAimVector()</code>

Entity Colour Alpha Changes

In previous version of GMod setting the Alpha of an entity would also change its render mode. In 13 this behaviour was stopped - as it interfered with other things (like entities showing as invisible in some maps). This means that in 13 you need to change the render mode too - if you want your entity to show as transparent.

<code>ent:SetColor(255, 255, 255, 100)</code>	<code>ent:SetColor(255, 255, 255, 100) ent:SetRenderMode(RENDERMODE_TRANSPARENT)</code>
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EntityTakeDamage has been changed - the arguments attacker, inflictor, amount have been removed - as they're available by querying the passed damageinfo.

<code>GM:EntityTakeDamage(ent, attacker, inflictor, amount, damageinfo)</code>	<code>GM:EntityTakeDamage(ent, damageinfo) local infl = damageinfo:GetInflictor() local att = damageinfo:GetAttacker() local amount = damageinfo:GetDamage()</code>
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The bitwise operators have been removed. I know the old way was nicer - but we took a vote - sorry!

<code>local a = CONTENTS_SOLID CONTENTS_MOVEABLE</code>	<code>local a = bit.bor(CONTENTS_SOLID, CONTENTS_MOVEABLE)</code>
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ValidEntity has been removed. Use IsValid instead.

<code>if (ValidEntity(ent)) then</code>	<code>if (IsValid(ent)) then</code>
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