# **LDraw Tutorial (VII)**

## Interview with Michael Lachmann

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Good news for MLCad users: after a silence of several years, only a few weeks ago a new version of this program has been published, MLCad v3:30. In order to celebrate this landmark, Hispabrick Magazine has been able to interview the creator of this tool, Michael Lachman. It will shed some light on this update and the future that lies ahead for MLCad

#### Interview with Michael Lachmann

Hispabrick Magazine: To start off, please tell us something about yourself.

**Michael Lachman:** I'm 44, married and have one 9 year old boy called Florian.

I live in Vienna, the capital city of Austria which is in Europe. I work in a local dependence of an international mobile operator Telekom.

I'm responsible for a team which coordinates the software development itself and the processes around software development within the company.

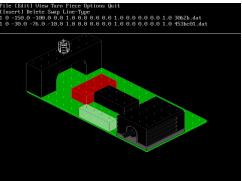
HB: How did you first get involved with LDraw?

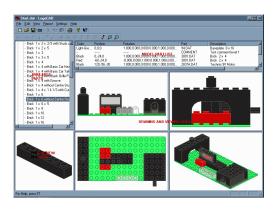
**ML:** This was long time ago, somewhere in the 90's when I was collecting LEGO® trains. I built some trains and cars myself and therefore was looking for software to keep the idea of these creations.

That was when I found the original LDraw software for Dos and some tools around it to display LDraw files.

**HB:** What was the first version of MLCad like and how has it evolved over the years?

**ML:** The first version of MLCad was just an attempt at developing software to display ldraw models myself - it was just for fun to program something like this. When this program was finished I had the idea of extending its functionality for editing such files. The basic functions provided where those provided by the original ledit tool but with the still existing split views of the model including the side bars to select parts. Here you can see a picture of the main window of version 1.0 from July 1999.





**HB:** What has made you pick up development of MLCad again?

**ML:** There simply was a time slot to do developments on MLCad. This doesn't mean that I will do frequent continued development from now on, because this is based on the spare time I have left. But I will try to keep some time left for MLCad.

**HB:** Can you tell us something about the improvements in the latest version?

**ML:** The newest version has a changed colour handling which is based on the colour definitions in the ldconfig file. The rest of the colour handling is identical with one exception: The so called dithered colours, a fine mixture of two different colours near to each other (a method to virtually provide more colours when only 16 colours where available), are no longer supported by MLCad. That doesn't mean you can't use them, but MLCad draws a calculated mixed solid colour instead, and you cannot define dithered colours from within MLCad. Other changes were quite small, like to not suppress empty lines from the input file when part editors where editing their files, an updated MLCad.grp file and some error corrections.

HB: Can you explain the advantages of these changes?

**ML:** The wider range of default part groups in the new installations makes life easier for new users; the colour thing is just to support the new colour standard of LDraw.

HB: How do you see the future of MLCad?

**ML:** The near version of MLCad will again change the way of how to deal with colours, but with some nice features for the users. Generally users will not be able to change the standard colour palette – this is to be defined from within Idconfig – but users will have the option to define even more colours than until now and use them in their creations.

I also have some plans to improve the handling of zooming

and scrolling. Finally, have ideas on how to improve the speed of MLCad by supporting multiple core cpu's in the future.

**HB:** Aside from your involvement in LDraw, are you involved in building with real bricks?

**ML:** Playing with LEGO® got very rare in the mean time; my son is more interested into my present hobby – model trains in N scale (1:160) – and in playing with other modern electronic stuff like Wii. The sad thing is that I really tried to convince him to play with LEGO but none of his friends did and so he just played to make his father happy...

For myself there is no time left to build with real bricks - the time left is invested in my model railway – you can see it on my website [1] (German language only).

Michael Lachman has highlighted some of the new features in this version of MLCad. Among these is a different colour management. Until now MLCad used its own colours, but on 28 July 2009, The LDraw Steering Committee presented a new version of Idconfig.ldr. [2] This file has the following characteristics:

- \* 100% backwards compatible with the old LDConfig.ldr file
- \* Uses LEGO RGB values
- \* Uses LEGO numbering where possible
- \* Lists the matched LEGO name
- \* Uses Bricklink names
- \* Contains all colors currently listed at Bricklink
- \* Colors are listed in alphabetical order

\* New color definitions for "Glitter" and "Speckle" as defined by the LSC

Besides the intended purpose of this file was to unify the way the different LDraw related applications used colours. To this end it was requested that applications use ldconfig.ldr for their colour definitions.

The format of this file is really simple. Below you can see an extract that shows how the official numbering is associated to the each colour, of which the LDraw number and values for element and border colour are given.[3]:

0 // LEGOID 26 – Black

0 VALUE #	!COLOUR 212121		CODE #595959	0	
0	// LEGOID 23 - Bright Blue				
0 VALUE #	!COLOUR :0033B2	Blue EDGE	CODE #333333	1	
0	// LEGOID 28 - Dark Green				
0		Green	CODE	2	

0	!COLOUR	Green	CODE	2
VALUE	E #008C14	EDGE	#333333	

In addition, this file can be translated and is as a matter of fact already available in English, German and Italian [4]. The new colour selection interface for MLCad allows you to select a colour from a list sorted by numbers as well as from an alphabetically sorted list for which a translated Idconfig.ldr file can be a great advantage..

You can see a render with each of the colours of the present

ldconfig.ldr file together with its corresponding number (by kind permission of Philo).



Another change in MLCad is related to the MLCad.grp file. This file contains the structure for the parts tree you can see in the top left pane of MLCad. The file has been changed to make things easier for those just starting out with MLCad, but for users who already have some experience it may pose a minor obstacle: if you have added custom groups to the parts tree – as explained in part three of this tutorial – installing the latest version will overwrite MLCad.grp and so eliminate any changes you may have made. In order to avoid this there are two options. Yu can either not copy the new MLCad.grp file into your installation or you can open the file and copy your modifications over into the file (e.g. using notepad) before copying it.

To finish off a few words about installing MLCad v3.30 (you can download it from the official MLCad website [5]). The program doesn't require any installation. All you need to do is decompress the zip file that contains the latest version and place it in the directory of your choice. The first time you launch the program it may ask you if you want to register the files that are associated with it to which you can answer yes. Any further configuration is done with MLCd.ini. This is explained in parts 4 and 5 of this tutorial. It is advisable to always use the latest version of MLCad.ini and make sure that it is properly configured to find the library of LDraw parts you have installed (By default MLCad.ini expects to find the library under C:\LDraw )

[1] http://spurn.lm-software.com

[2] http://news.lugnet.com/cad/?n=16368

[3] http://www.ldraw.org/Article550.html

[4] http://www.ldraw.org/Article93.html

[5] http://www.lm-software.com/mlcad/

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