



LibreOffice

The Document Foundation



LIBRELOGO & eTWINNING

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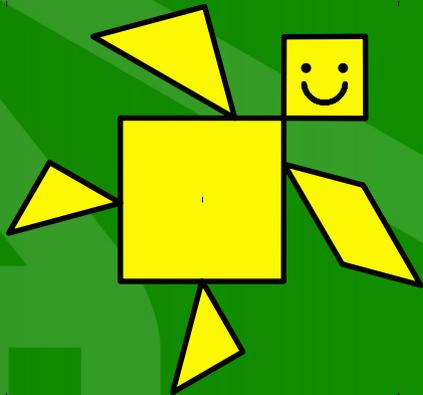
FSF.hu Foundation

TIRANA | 27 September
2018



LIBOCON

TIRANA 2018



eTwinning

LIBREOFFICE & eTWINNING

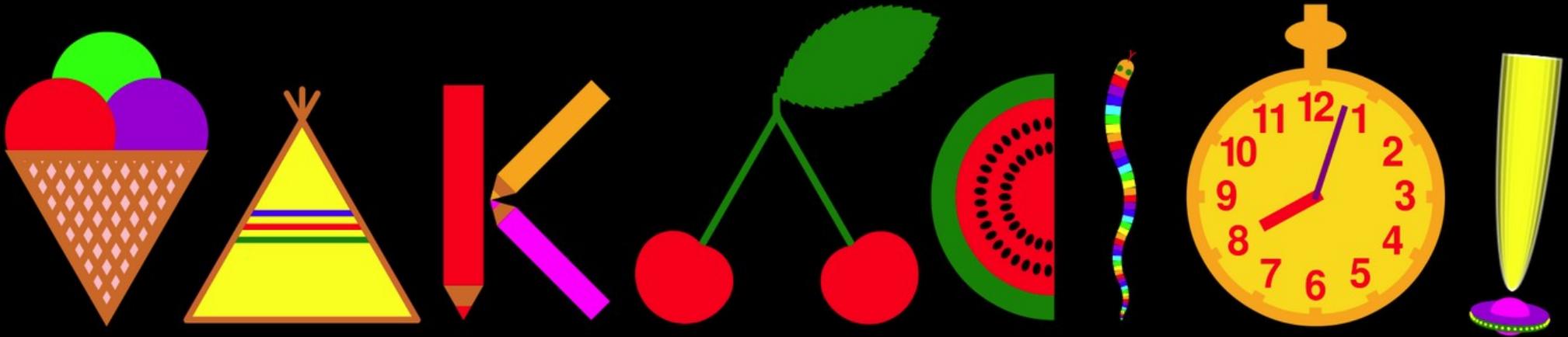
LibreLogo in schools and teacher training programs

INTRODUCTION



What is LibreLogo?

- Logo programming language
- Turtle vector graphics in Writer
- For graphic design and education.





A Writer Toolbar

The screenshot shows the OfficeDev Writer application interface. The 'View' menu is open, displaying a list of options. The 'Toolbars' option is selected, and its submenu is also open, showing a list of toolbar options. The 'Logo' option in the submenu is highlighted.

OfficeDev Writer

File Edit **View** Insert Format Styles Table Form Toc

Normal
Web

Default

User Interface
Toolbars
Status Bar
Rulers
Scrollbars

Text Boundaries
Table Boundaries
Images and Charts
Comments
Formatting Marks Ctrl+F10
Grid and Helplines
Hide Whitespace
Track Changes
Field Shadings Ctrl+F8
Field Names Ctrl+F9

3D-Settings
Align Objects
Arrows
Bullets and Numbering
Drawing
Drawing Object Properties
Edit Points
Find
Fontwork
Form Controls
Form Design
Form Navigation
Formatting
Formatting (Styles)
Frame
Image
Insert
Logo
Mail Merge
Media Playback

OfficeDev Writer

2 A A

6 7



Logo Toolbar Icons



FORWARD 10



BACK 10



LEFT 15°



RIGHT 15°



Start Logo program



Stop Logo program



HOME



CLEARSCREEN



Set Layout, pretty format & translate



Help



Press F1 here...|

See “LibreLogo” in LibreOffice’s Help (shortcut: Press F1 in the text box of the Logo toolbar), or https://help.libreoffice.org/Writer/LibreLogo_Toolbar

Home page: <http://www.librelogo.org>

Resources: <http://librelogo.org/resources/>

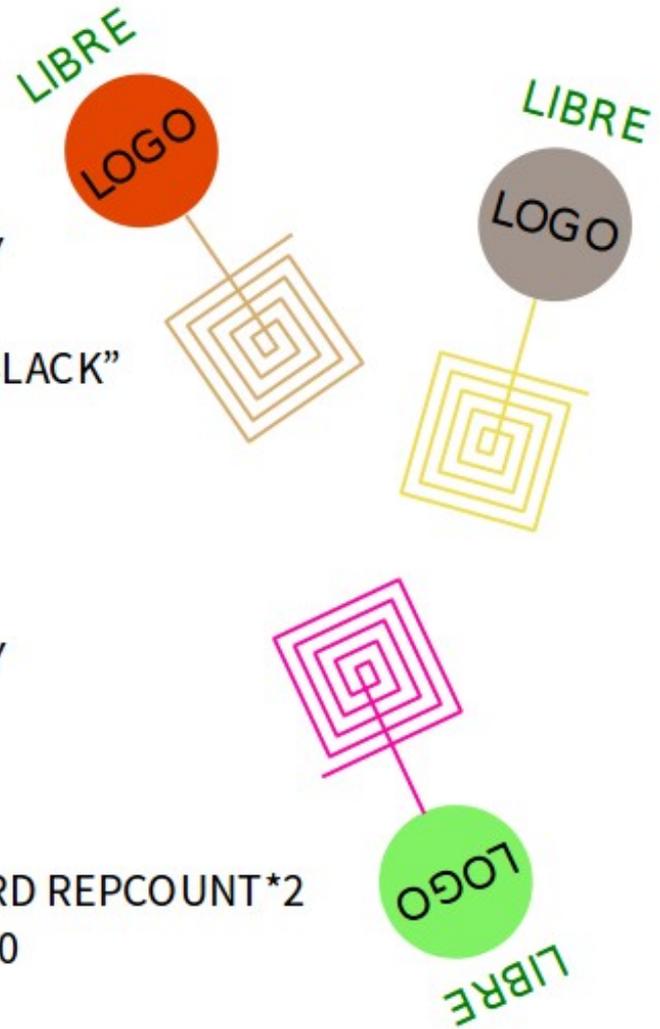


DEMO

Click on Start in an empty document to get a **localized** demo program.

Modify it, and check the result by a new run. It's fun!

```
FONTCOLOR "GREEN"  
LABEL "LIBRE"  
PENUP  
BACK 30  
PICTURE [  
  FILLCOLOR ANY  
  CIRCLE 40  
  FONTCOLOR "BLACK"  
  LABEL "LOGO"  
  LEFT 180  
  FORWARD 20  
  PENDOWN  
  PENCOLOR ANY  
  PENSIZE 1  
  FORWARD 40  
  REPEAT 20 [  
    FORWARD REPCOUNT*2  
    RIGHT 90  
  ]  
]  
PENUP POSITION ANY PENDOWN
```



IMPROVEMENTS



Better I10n, bug fixes

Ubuntu's LibreOffice has got localized Logo commands from Ubuntu 17.10 or 18.04 (LO 5.4.4, this is also fix for other Linux distributions with I10n problems...)

Fixing broken work on some versions of macOS, related to the path of the localization

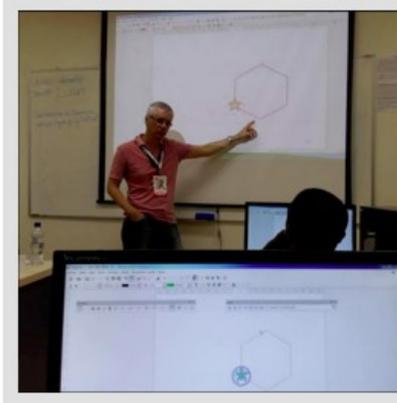
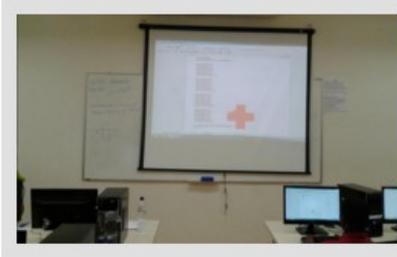
Fixing regression of recent development code: drawing shorter line than the turtle path, caused by code clean up in LibreOffice's graphics support.

EDUCATION



In Brazil

Teacher
training
program
at SENID
lead by
Gilvan
Vilarim





In Portuguese

Manual by Gilvan Vilarim





In Germany

Upcoming grade 5/6
exercise book

With LibreLogo
worksheet templates

by Mirek Hancl,
Cornelsen Publishing



Informatische Bildung

Informatik unterrichten
Klasse 7/8

Kopiervorlagen

Verlag: Cornelsen



Informatische Bildung

Informatik unterrichten
Klasse 9/10

Kopiervorlagen

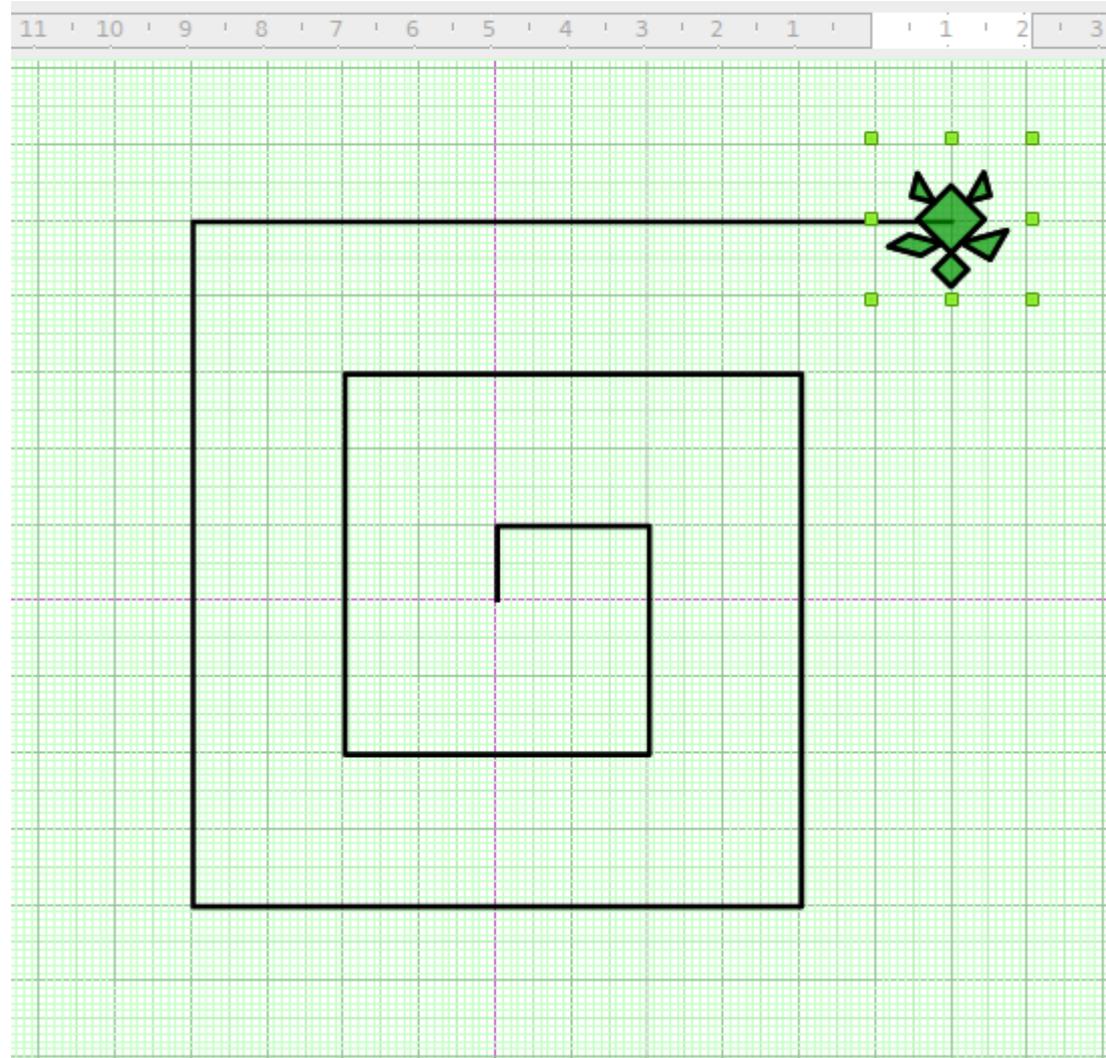
Verlag: Cornelsen



In Hungary

In elementary & middle schools

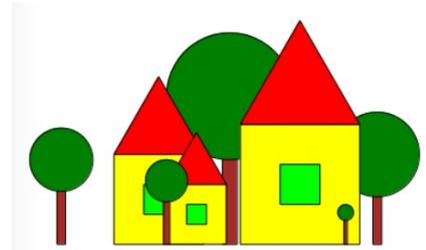
Worksheet template:
immutable background image → Insert it as a GDI metafile, wrap it in the background, protect its position and size (graph paper idea by Péter Kecskeméti)





In Italy

University textbook by Andreas Formiconi
Why Logo? “Low floor and a high ceiling...”





University of Florence

IT teacher training program using LibreLogo

Research with 250+34 university students

<https://groups.etwinning.net/30442/pages/page/393155>

Result: *A step back into the future* by
A. Formiconi and F. Mancini, 2017

<https://groups.etwinning.net/files/collabspac/e/2/42/442/30442/files/becbce91.pdf>



A step back into the future

“Paradoxically, Scratch may be frustrating because everything seems so easy but soon it might get much harder. Because coding it’s hard. Like math. Making life much easier is not always a good idea. A number of studies revealed that a Scratch introduction to programming does not necessarily facilitate the transition to conventional coding languages (Lewis, 2010; Lewis, Esper, Bhattacharyya, Fa-Kaji, Dominguez & Schlesinger 2014; Weintrop & Wilensky, 2015).” – Andreas Formiconi & F. Mancini, A step back into the future, draft, 2017

A step back into the future - A.R. Formiconi & F. Mancini, University of Florence

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A step back into the future

Recovering Papert’s lesson using free software tools: text-based coding as a cross curricular teaching and learning tool to foster creative thinking skills in primary and secondary classrooms under the European cooperative umbrella action of eTwinning

Andreas R. Formiconi & Francesca Mancini

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7th June 2017

University of Florence

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or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.



A step back into the future

“LibreLogo is a very clever implementation of Logo.”

*“...most interestingly, those that mixed the mathematical control in drawing figures with a kind of aesthetics research, looking, at the very end, for the most pleasant results: kind of STEM to **STEAM** path.”*

[STE(A)M: Science, Technology, Engineering, (Art) and Mathematics]



In EU



eTwinning

eTwinning: platform of 600 thousand registered teachers and 200 thousand registered schools

23–25 May, LibreLogo in European Workshop for teacher training institutes involved in eTwinning activities, presented by Andreas Formiconi

17, 28 September, **Online LibreLogo eTwinning course** by Andreas Formiconi with more than 230 teachers:

<https://iamarf.org/2018/09/15/kick-off-etwinning-learning-event/>



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