



Get the most out of **Live Path Effects**

Special Thanks to the **Inkscape Vectors Team**

Get the Most Out of **Live Path Effects**



# What are **Live Path Effects** or **LPEs**?

They are used to **generate a SVG element** based on user-defined parameters.  
The values of the original item data in a, normaly, **non destructive way**

```
<path  
  d="result visible on all SVG renders"  
  original-d="original path definition"  
>
```

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## What **kind of items** work with LPE?

It depends on the LPE selected. You can use them on **groups, shapes and paths**. Clones have a special workaround. We're looking at **future** support for text and images.

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# Why select LPE as a way to **start contributing** to Inkscape coding?

It was a good way to start because the **LPE code was isolated**, so you didn't need to understand the whole codebase.

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# Why are LPEs so hard to find?

The LPE system will have **improved visuals** to give more info and accessibility in version 1.0.

<http://inkscape.ramonmiranda.org>



And now for some tricks...

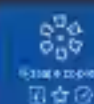
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## LPEs can **generate** elements

This new feature in version 1.0 will allow you to **add extra elements** to the LPE item, such as **Mirror Symmetry** and **Rotate copies**.

ROTATE  
COPIES LPE



Path Effects (Shift+Ctrl+7)

Rotate copies

+ - ^ v

Rotate copies

Method: Normal

Number of copies: 6

Starting angle: -0,90

Rotation angle: 60,00

Gap: 50,00000

X: -159,45

Origin Y: 200,24

✓ 360° Copies

✓ Mirror copies

Split elements

Reset styles

▶ Rotate copies: Set default parameters

✓ Fill and Stroke (Shift+Ctrl+F)

✓ Path Effects (Shift+Ctrl+7)

XML Editor (Shift+Ctrl+X)

Drag to select objects to edit



0:00 / 2:06





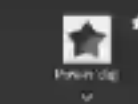
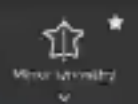
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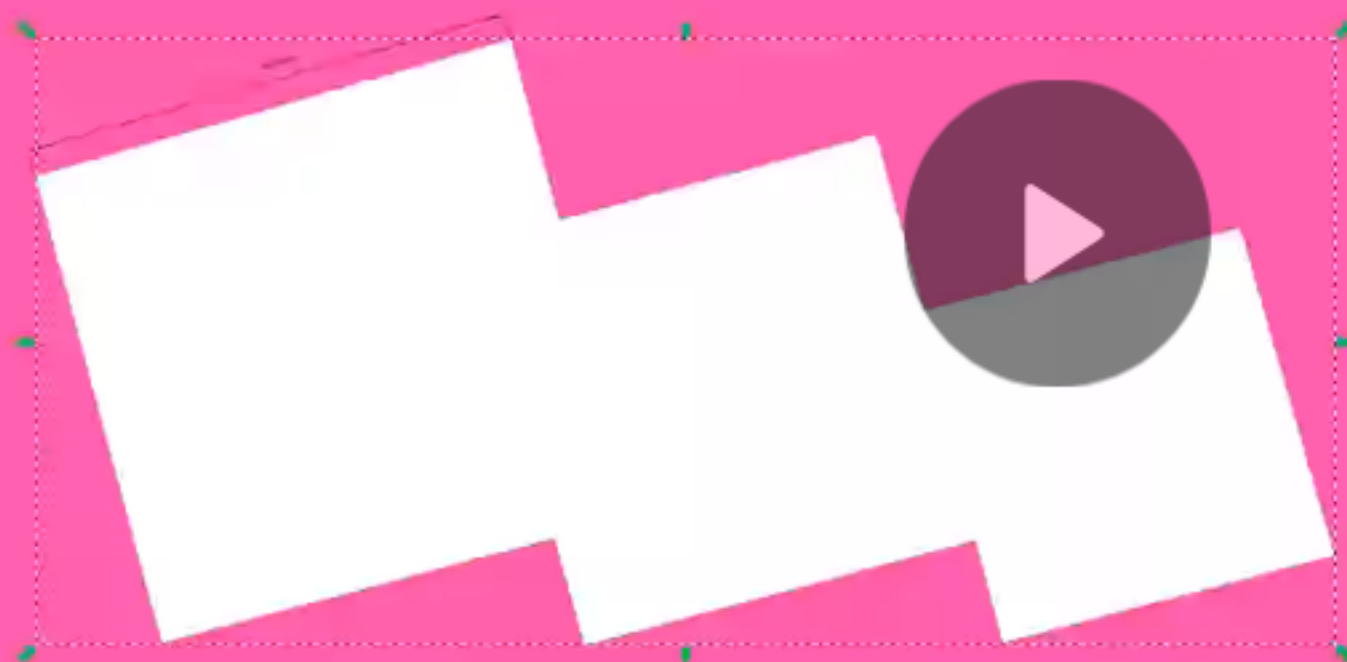
## LPEs can be **stacked**

You're **not limited to using one LPE** only for one object. You can also **repeat** an LPE. For example, here with the **Mirror Symmetry** and the new **Measure Segments LPE**.

**MEASURE  
SEGMENTS LPE**  
133.93mm



RECTS



Path Effects (Shift+Ctrl+7)

Measure Segments

Measure Segments

General Projection Options Help

Unit: mm

Quantities: 1000000

Font: Sans Serif 16

Merge overlaps: 0

Position: 5,00

Label position: -3,00

Help line distance: 0,00

Help line elongation: -1,00

Line width: 0,15

Scale: 1,0000

Arrows outside

Flip side

☒ Snap vertices

☒ Rotate labels

☒ Hide line under label

☒ Avoid label collision

Measure Segments: Set default parameters

Unit: Set

Quantities: Set

Path (2 mode): path effect: Measure segments in layer Layer 1. Click search to toggle search (Shift+F).



0:00 / 1:50



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## The power of **offset** in LPE

This improved LPE now allows you to **offset a item** retaining cusp nodes or to add an extrapolated arc to it.

OFFSET LPE



PATH

PREVIOUS  
DESTRUCTIVE  
OFFSET



LPE OFFSET



Path Effects (Shift+Ctrl+7)



Click button to add an effect

☒ Fill and Stroke (Shift+Ctrl+F)

☒ Path Effects (Shift+Ctrl+7)

Drag to select objects to edit, click to edit this object (more: Shift)



0:00 / 2:03



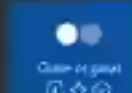
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## Cloning with a LPE

This LPE has been improved and updated for 1.0. It **creates an object** that is very **similar** to a clone, but much **more powerful**.

CLONE ORIGINAL LPE  
ORIGINAL LPE



GROUP  
dupl



Path Effects (Shift+Ctrl+7)



Click button to add an effect

☒ Fill and Stroke (Shift+Ctrl+F)

Path Effects (Shift+Ctrl+7)

XML Editor (Shift+Ctrl+X)

Group of 11 object in layer Layer 1. Click selection to toggle scale/rotation handles (or Shift+s).



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# LPE parameter can **change defaults**

You can **change default settings** for each LPE.

CHANGE  
DEFAULTS ON LPE



Path Effects (Shift+Ctrl+7)

+ - ^ v

Select a path or shape

☒ Fill and Stroke (Shift+Ctrl+F) ^

Path Effects (Shift+Ctrl+7) ^



Alt: click to select under; scroll mouse-wheel to cycle-select; drag to move selected or select by touch



0:00 / 1:12







# Thank you!

@jabiertxof • @michele • @moini • @prkos @ <https://chat.inkscape.org>

Slides <https://tinyurl.com/lpe-lgm19>

<http://www.inkscape.org>



OBS

remark