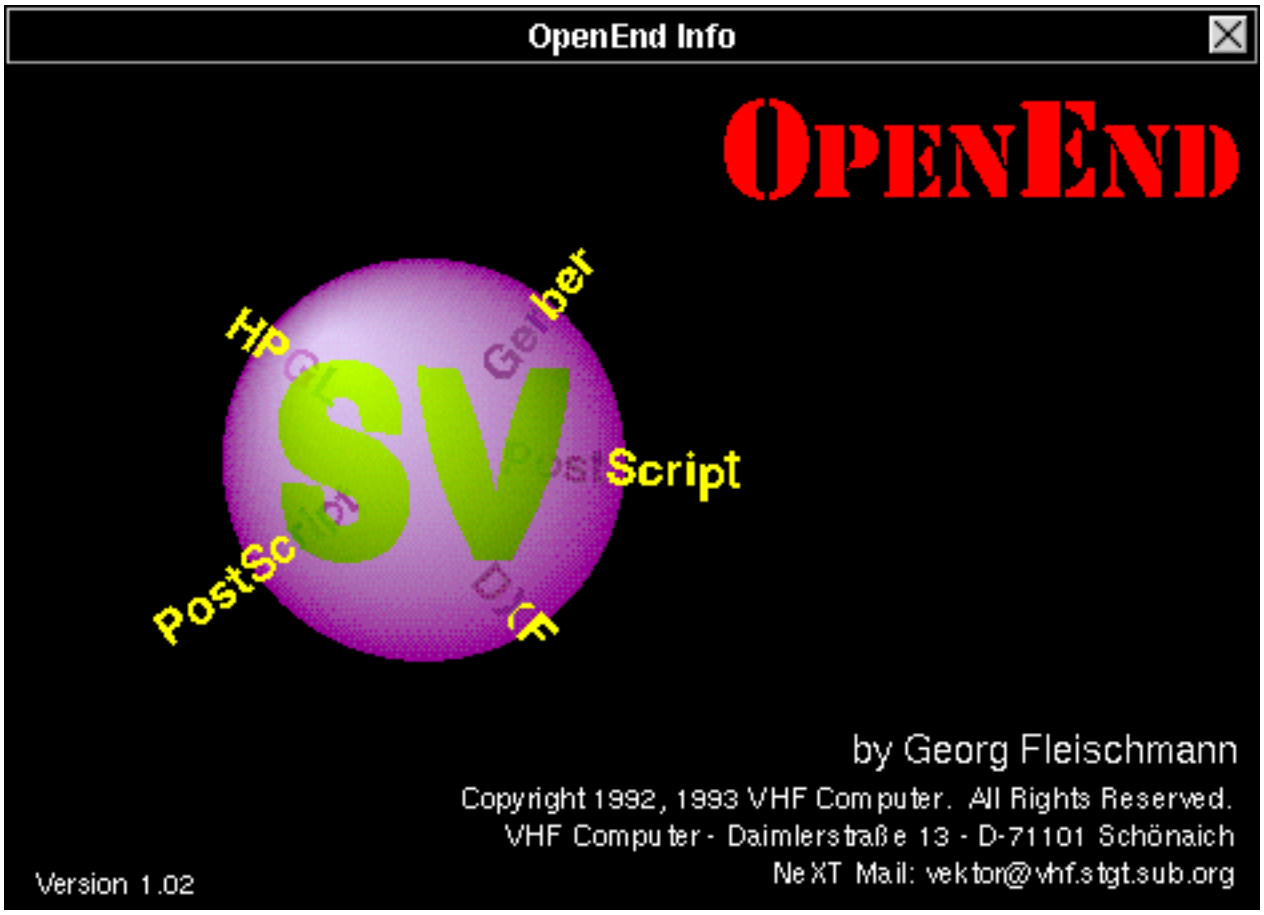
Vector Graphics Processing



Conversion, preview and high-quality output – this is OpenEnd

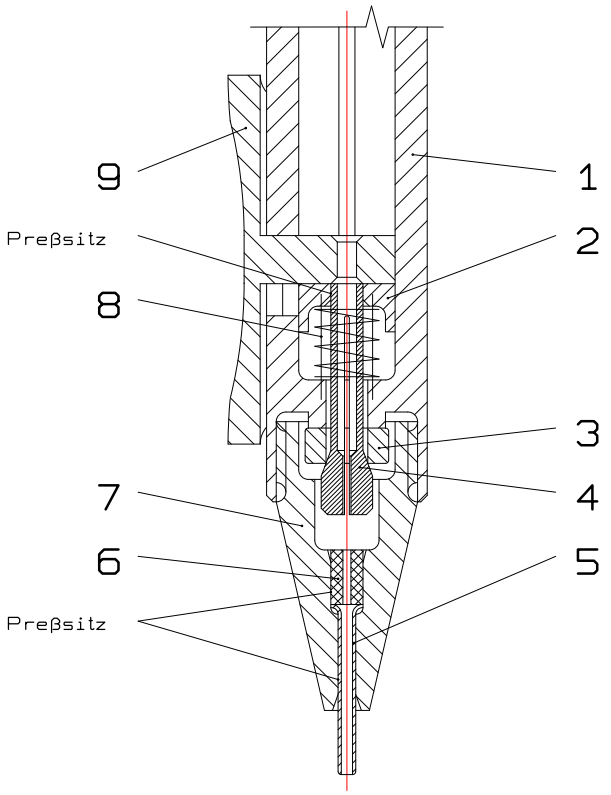
- OpenEnd resolves your problems regarding missing output formats.
- OpenEnd replaces existing device drivers if they do not function properly.
- OpenEnd overcomes all manufacturing problems.
- OpenEnd increases flexibility with the help of additional access formats.
- OpenEnd provides format interfaces for CAD and DTP software programs for graphics processing.

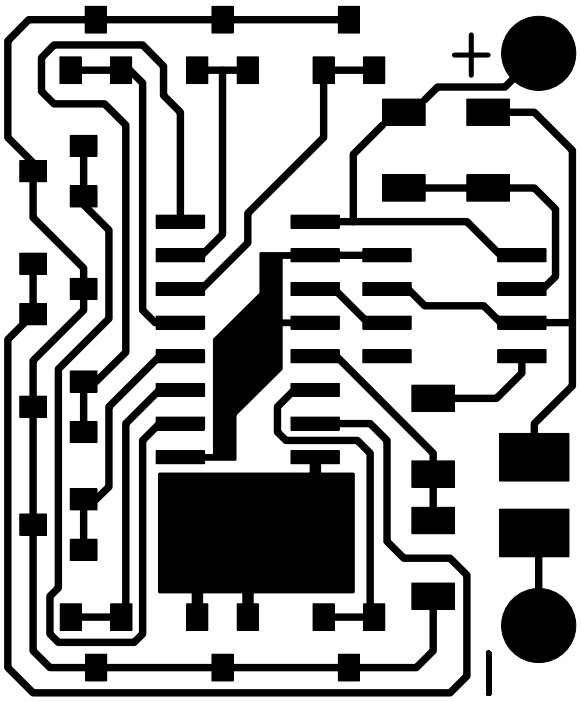
AI, labels, CAE, CAD, CAM, CNC, design, DTP, DXF, ECAD, EDA, EPS, Excellon, film processing, drilling and milling plotter, Gerber, graphics, engraving systems, HPGL, construction, laser processing, layout, PCB production, labels for fair stalls, NeXTSTEP, plotter, PostScript, signs, cutting plotter, Sieb & Meyer, stamps, vector formats, advertising, machine tools, Wessell

Applications

Documentation

Using OpenEnd you are able to take over and edit Graphics from nearly every CAD-Software to any text or DTP-Software.

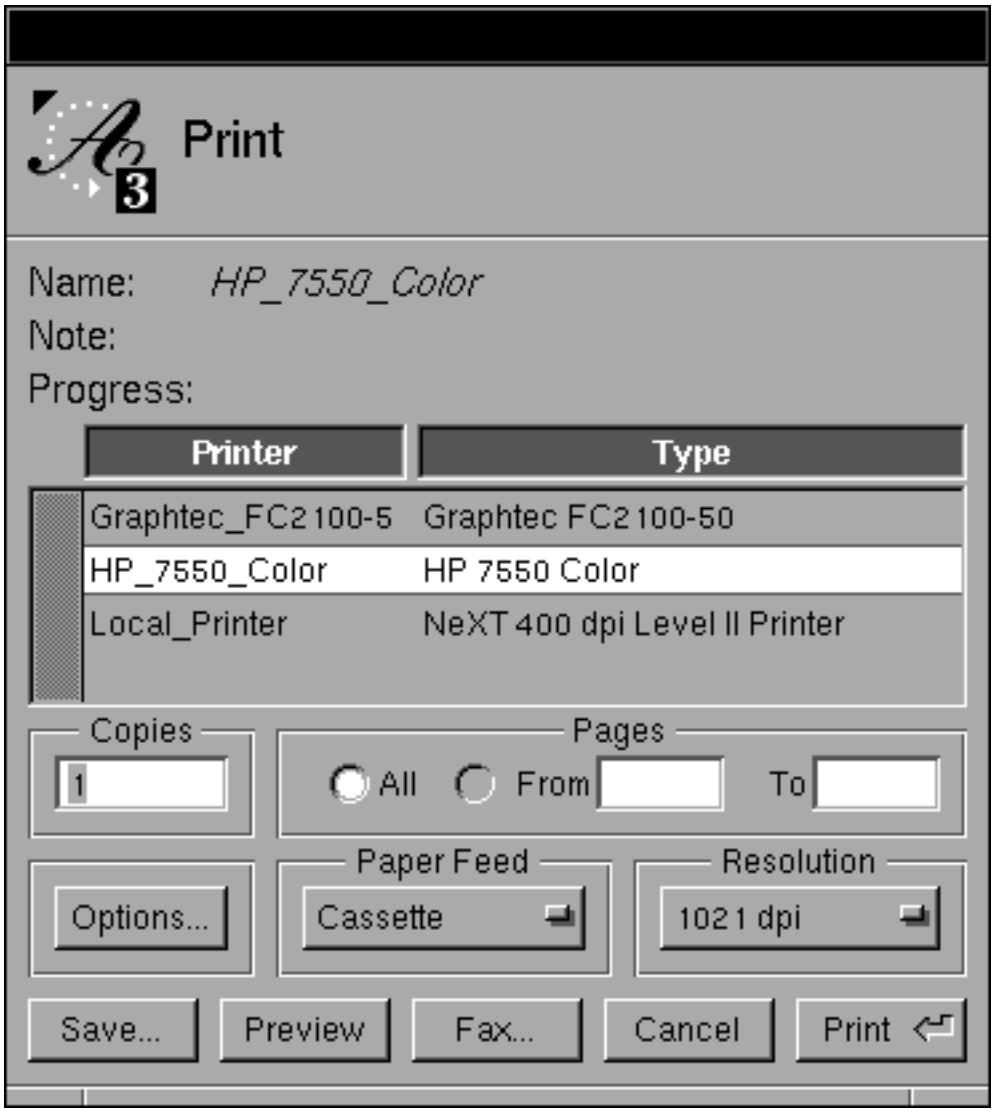




On the other side you can take logos from a DTP-system over to a CAD-application for example.

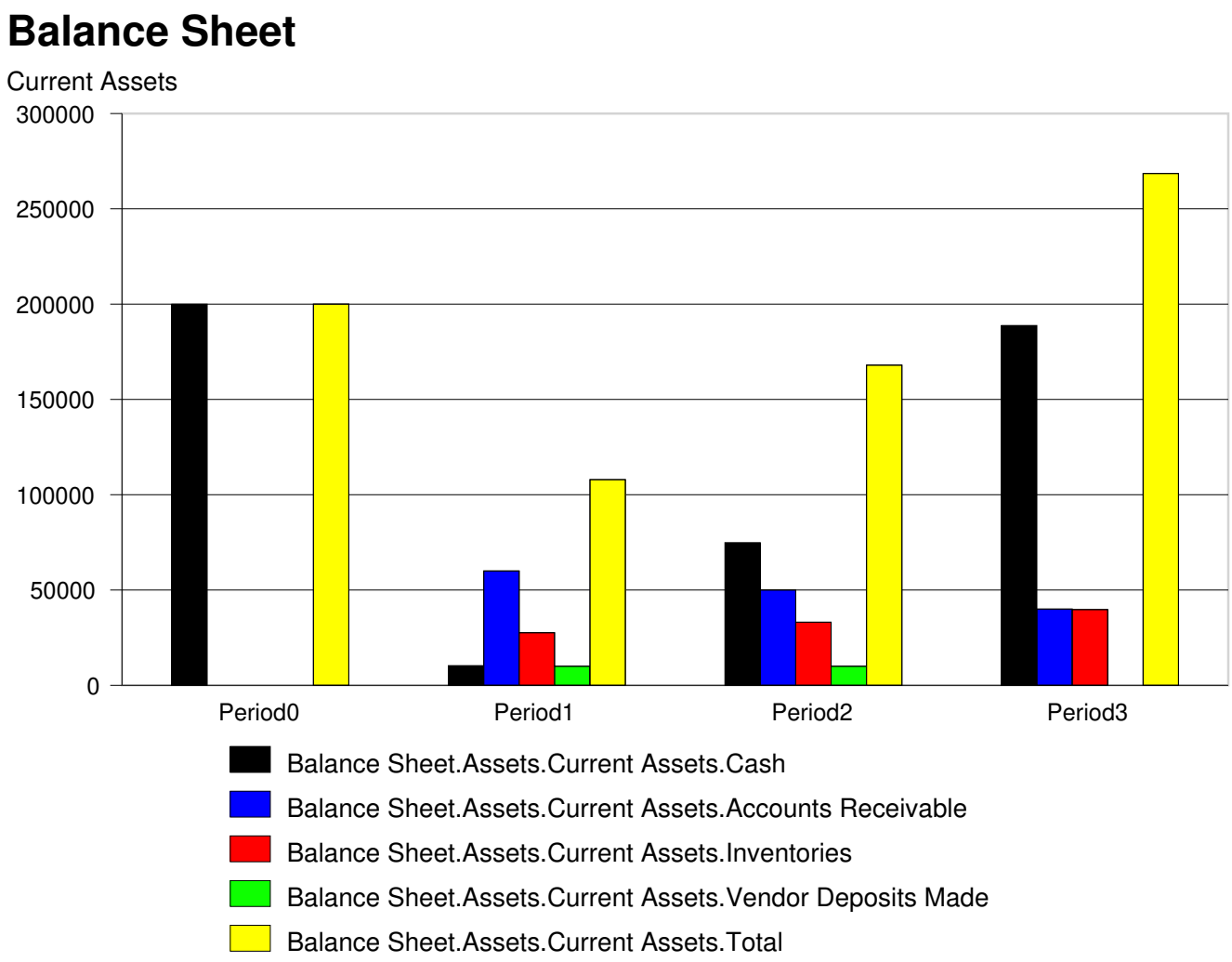
Plotting

OpenEnd provides a high quality plotter output for NeXTSTEP. The plotter driver is installed NeXT like using the print manager. This way it is available from out any application.



For the output of CAD-drawings beyond tabloid-format you have little alternatives to a plotter. By the way, the resolution and precision of a plotter hasn't been achieved from any printer!

Overhead foils for business charts can be produced elegantly as well.

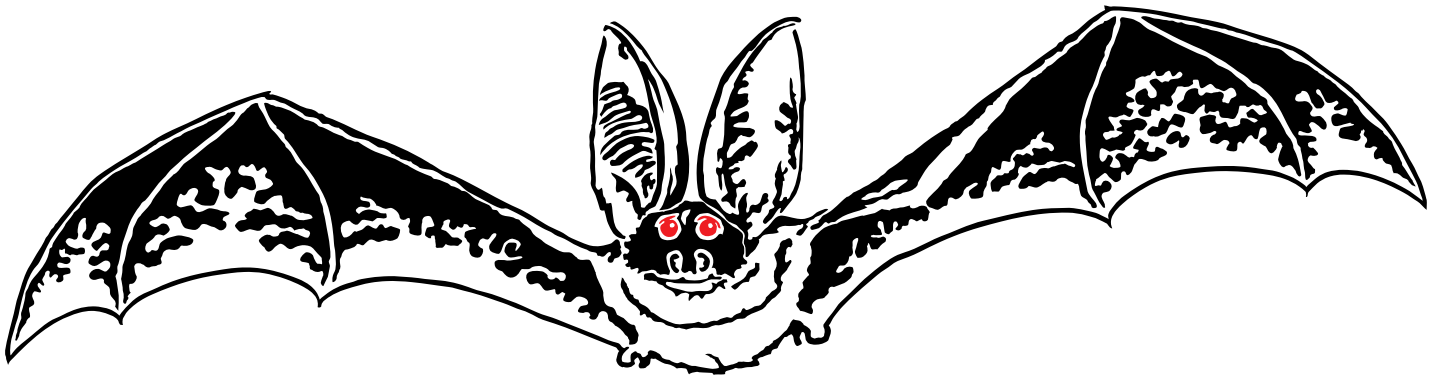


Cutting

Since OpenEnd NeXTSTEP has a cutting software, which is not dependent on a graphical editor. OpenEnd offers a possibility to cut from any construction program like Adobe Illustrator or Virtuoso. Naturally OpenEnd has full support of PostScript fonts. For simple lettering as well as

OpenEnd
vector processing
converter
cutting software

for complex applications.



Besides this animal is our attraction at fairs. Hard to find a visitor who pass without having a look at this specimen with a span of about one meter. The based PostScript file has a size of more than 150 KB and is calculated and cutted in a few minutes.

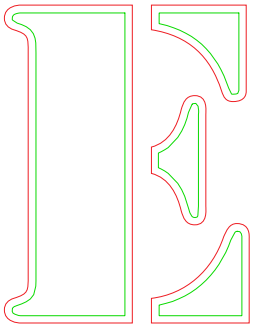
Supported formats

- Adobe Illustrator, PostScript (EPS, PS)
- DXF (optional)
- Gerber (optional)
- HPGL
- Sieb&Meyer, Excellon, Wessel (optional)
- More in progress

Technical details

Inner contour

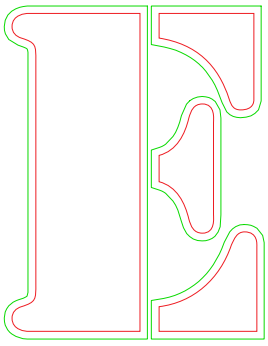
For plotting and engraving, OpenEnd supplies this algorithm. To ensure a result that won't become larger than the design, the moves of the tool have to be corrected to the inner side.



- Red (outside), the result
- Green (inside), the moves of the tool.

Outer contour

For milling, in contrast to plotting and engraving, OpenEnd supplies this algorithm. To ensure a result that won't become smaller than the design, the moves of the tool have to be calculated to the outer side.

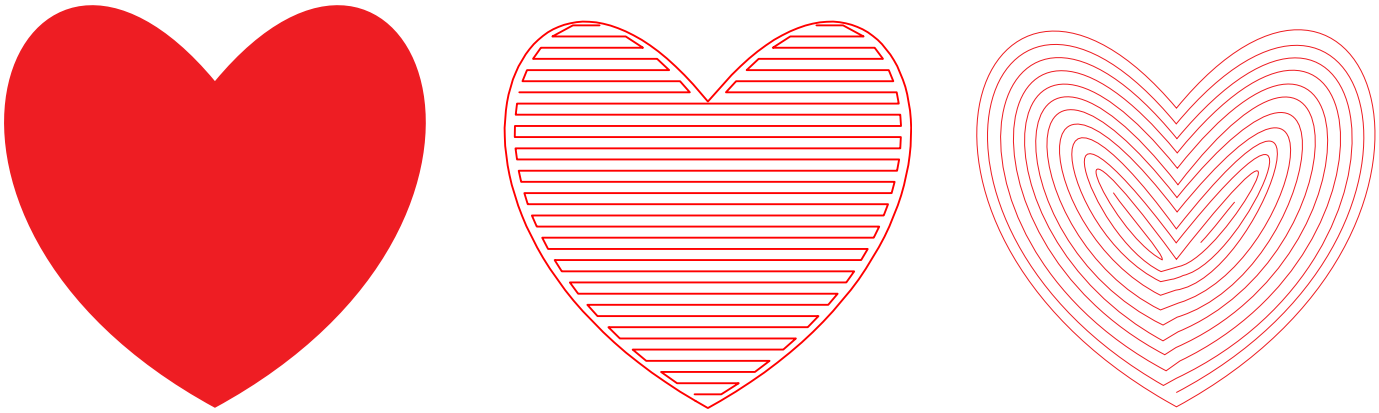


- Red (inside), the result
- Green (outside), the moves of the tool

Filling

Naturally, areas are filled as well as possible for the appropriate device formats like HPGL. OpenEnd supplies two Algorithms for this purpose:

- On the lefthand side we have the original
- In the middle you see the moves of the tool using the normal fill algorithm.
- On the righthand side you can see the result of the contour-fill algorithm. The advantage of this algorithm is a minimum of overdrawing. In addition the pen is moved in an even speed which will grant for a better filling.

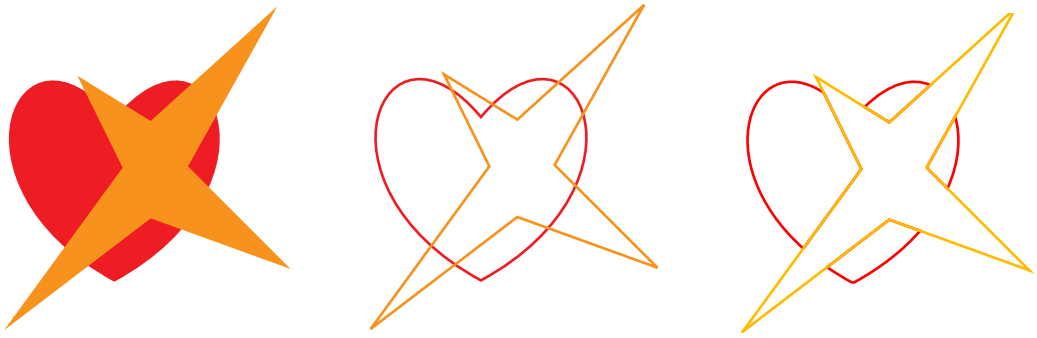


Removing hidden areas

This function is especially necessary in handling PostScript files because the elements of the drawing can overlap in any way. In the following processing this would inevitably result in problems.
The implemented hidden area algorithm prevents two problems:

1. that the pen draws more than once over a position on the paper
2. that, for example a yellow pen must compete with a black one which has drawn previously.

This is just an example for plotting; but the same is true for engraving.



The pictures show the function of the algorithm quite good.

- On the lefthand side you can see the original.
- In the middle you can see the original without filling to show the intersecting lines limiting the filled areas.
- On the righthand side you can see the result of the hidden area algorithm. The intersecting lines are removed.

Others

Demo version

Please order your current demo version directly from the distributor.

System requirements

OpenEnd runs on all platforms supporting NeXTSTEP 3.0 or newer.

Features

- supported formats:
  PostScript, AI, HPGL, DXF, Gerber, Wessel, Sieb & Meyer, Excellon and SV
- format conversion in any direction
- CAD preparation
- format previewing (WYSIWYG)
- high quality through floating-point precision
- tool and pen radius correction (inside and outside outlines)
- intelligent optimization algorithm
- support for any kind of fill pattern
- selection of device drivers provided, and easy integration of existing devices
- modular structure
- intuitive operation through conform and system-specific integration in existing user interfaces

Upgrades and Customization

If you require special customization or if you need vector formats and output drivers not supplied with OpenEnd, simply contact us. Moreover, we can grant you access to our standard C libraries and share our experiences with you that way. These libraries contain all the necessary functions for vector graphics processing and put you in the position to integrate OpenEnd moduls in your own software applications.
Contact us if you need more information about further applications like software controlling the main machine functions of milling and drilling plotters or package solutions for engraving and cutting tasks.

Prices

Package:	PostScipt, AI, HPGL, SV	DM	1.680,--
Add-on moduls:	DXF	DM	850,--
	Gerber	DM	1.450,--
	Excellon	DM	900,--
	Sieb & Meyer	DM	900,--
	Wessel	DM	900,--

Converters from either HPGL or DXF to PostScript are available for DM 300,--.

Manufacturer

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