

Creating and correcting a layout

Task

In this exercise you will learn how to make a sheet layout from a 1up with the help of a wizard. The sheet layout is then to be exported as a CFF2 file.

The complete layout





Exercise description

In the first step we are going to create a layout from the 1up with the wizard.

Creating layout

- 1. On the File menu, click New. In the wizard that appears, click From Resizable Design.
- 2. Browse to C:\EngViewWork7, and click Toggle Flat Mode 1.
- 3. Type EVF11021, and select the file. Then click **Finish**.

The design opens.



4. Go to the Layout tab to start creating a layout.

5. Do any of the following:

- On the Layout menu, click New Layout Drawing.
- On the Layout tab, click tool New Layout Drawing



The Select Layout dialog box appears.

🗳 Select Layout	? 🛛
• Create new layout:	
Name: Layout	
Run layout wizard	
O Create blank	
Switch to existing layout:	
Restart layout wizard	
OK Cancel	<u>H</u> elp

6. Click Run layout wizard, and then click OK.

7. To customize the layout, select the option *User template* from the pop-up menu *Predefined template* in the Select Template window.

NOTE: The layout wizard forms an array of four layout 1ups, which is then multiplied across the sheet. For more standard cases, the layout wizard offers predefined templates — 1x1; 2 rows, 2 columns, 2 parts in rows; 2 parts in columns.

NOTE: The buttons in the *Rotation* area let you rotate the layout 1up.



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8. To go to the Second Part window, click Next.

The second part appears aligned with the first.



9. Click **Next** to go to the Third Part window. In this step you define the offset and the position of the next layout row.



🗳 Automatic Layout				? 🛛
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			Drawing Siti Siti 12 EVF11021 Rotation Angle: 1	
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10. Rotate the third part at 180 degrees (highlighted).



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11. To align the third part horizontally to the first part, in the *Horizontal Alignment* area, click the Align Horizontal Center button (pictured). Then click the lines that will control the alignment: Line 1 and Line 2 (pictured). Upon clicking Line 2 the alignment is carried out.



🗳 Automatic Layout				? 🛛
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Note that in **Correction**, the distance of the alignment (-47.50) is displayed automatically.





12. Now we'll align the third part vertically up to the first part. In the Vertical Adjustment area, click the Move Down 🗄 button.

The third part attaches automatically to the first. In Correction, the value of the alignment (-71.00) is displayed automatically.





13. In Gap, enter a 5 mm for the gap between the first and the third parts.



🗳 Automatic Layout				? 🛛
Select Template	Second Part		Fourth Part	Sheet Placement
Select Template	Second Part	Third Part	Fourth Part Drawing Siling EVF11021 Rotation Angle: 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Sheet Placement
		<u> </u>	< <u>Back</u> <u>N</u> ext > Ap	ply Cancel <u>H</u> elp

14. Click Next.

The Fourth Part step appears.

In this window you can check how the rows and columns are arranged in relation to each other. You also can correct the position and the alignment.



🗳 Automatic Layout				? 🛛
Select Template	Second Part	Third Part	e – Fourth Part	Sheet Placement
			Drawing SIU 12 Rotation Angle: 1. Horizontal Adjustment Move to: Align: Correction: 47. Gap: 0.00 Vertical Adjustment Move to: Align: Correction: 41ign: Correction: 71. Gap: 5.00	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ <
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15. Click **Next** to go to the Sheet Placement step.

Sheet definition

In the second step we will define the sheet. There are three methods for this: (1) by fitting 1ups to a predefined sheet; (2) by choosing an optimal sheet; (3) by calculating the sheet size according the number of 1ups.

METHOD 1: Fitting 1ups to a predefined sheet size

A layout you create will be based on a custom sheet format *User Defined*. In the table you can check the width, the height and the margins of the sheet and of the layout. The last column indicates a value that you must add to the sheet format if you want to place another column or row.

You can enter your own values for the sheet



Automatic Layout				?
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			Statistics <u>Calc</u> Eit to sheet Fill by counts Rows: 2 Columns: 3 Additional Optimizations	Sheet Opt. Sheet. Rotated layout X gap: 0.00 Y gap: 5.00 Corrections
QQQ == <			Karter Sinish Ap	ply Cancel <u>H</u> el

or click the Sheet column in the table to select the sheet format (pictured).

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Sheet Name	-		
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Height	HairFormat-L		^ b
Bottom	QuarterFormat-I		
Left	Bobst SP 76-E /-E	RM	
Тор	Bobst SP 102/3/	/4 Fast	
Right	Bobst SP 102/-E	1-S1	
_	Bobst SP 102 -Cl	E/-CE II	
	Bobst SP 104-E/	ER	
Statistics	Bobst SP 130	N	et
	Bobst SP 142	7	
	Bobst SP 162		*
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When you select a different sheet format, the number of columns and rows will be recalculated automatically and the 1ups will be positioned according to the selection.



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			Sheet Name Width Height Bottom Left Top Right Statistics © Fit to she © Fil by cou Rows: Columns:	Sheet Sheet Bobst SP 130 1310.00 925.00 13.00 2.00 2.00 2.00 2.00	Layout +1 ?: 1293.50 299.00 744.00 60.00 13.00 8.25 168.00 8.25 168.00 8.25 t Opt. Sheet Rotated layout
		u)	Y < Back	Finish Apply	Cancel Help

NOTE: To see an alternative layout array, rotated at 90 degrees counterclockwise, you can use the functionalities for displaying statistical information and then choose whether or not to use rotated layout. Select the **Statistics** check box. This changes the data in the table, displaying the alternatives in bold case (pictured).



Item	Straight	Rotated	Item	Straight	Rotated
All Parts	12	10	All Parts	12	10
Area	0.799970 m ²	0.666642 m ²	Area	0.799970 m ²	0.666642 m ²
Sheet Area	1.211750 m ²	1.211750 m ²	Sheet Area	1.211750 m^2	1.211750 m ²
Waste %	33.98%	44.99%	Waste %	33.98%	44.99%
Statistics			Statistics	Calc Sheet	
• <u>F</u> it to sheet	B	otated layout	• <u>Fit</u> to sheet	🗹 Ro	otated layout

Straight layout settings

Settings for layout rotated at 90 degree.

METHOD 2: Defining sheet size by choosing an optimal sheet

1. Click the **Opt. Sheet** button below the table to run the wizard. This starts a method of sheet selection that offers the sheet with least waste.



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Select Template	Second Part	Third Part	Fourth Part	Sheet Placement
			Sheet Name Width Height Bottom Left Top Right	Sheet Layout +1 ?: Bobst SP 130 1293.50 299.00 1310.00 1293.50 299.00 925.00 744.00 60.00 13.00 13.00 2.00 2.00 8.25 2.00 2.00 8.25 2.00
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			✓ < <u>B</u> ack Finist	n Apply Cancel <u>H</u> elp

2. In Optimal Sheet Selection: Input, specify the total number in the Number of pieces box.

Available sheets lists the sheets that you have.

TIP: To edit the list, on the **Format** menu, click **Sheets**, and then remove unnecessary sheet formats or add new ones.

3. Select the respective sheets in the *Available sheets* list box and click the button to add them to the list of selected sheets. The selected sheets appear in the right list box.

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🗳 Optimal Sheet Select	ion: Input				? 🔀
Select Sheets Number of pieces: Available sheets: A3-Landscape A3-Portrait	100000 ÷ ↓ 420.00x297.00 mn ▲ 297.00x420.00 mn	Sel	ected sheets:	Select	-) t Best Sheet
A4-Landscape A4-Portrait Bobst SP 102 -CE/-CE II Bobst SP 102/3/4 Fast Bobst SP 102/-E/-S/ Bobst SP 104-E/-ER Bobst SP 104-E/-ER Bobst SP 142 Bobst SP 162 Bobst SP 76-E/-BM FullFormat-L	297.00x210.00 mn 210.00x297.00 mn 1030.00x715.00 m 1040.00x725.00 m 1025.00x715.00 m 1050.00x746.00 m 1310.00x925.00 m 1415.00x1020.00 1650.00x1133.00 776.00x572.00 mn 1000.00x700.00 m ✓	> >> <			
Allow rotation of the layou	ut 🔲 Trim sheet's	s width by layo	ut 🗍	Trim sheet's height	by layout

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Number of pieces: 100000 Available sheets: 420.00x297.00 m A3-Portrait 297.00x420.00 m A4-Landscape 297.00x210.00 m A4-Portrait 210.00x297.00 m Bobst SP 102 -CE/-CE II 1030.00x715.00 r Bobst SP 102/3/4 Fast 1040.00x725.00 r Bobst SP 102/-E/-S/ 1025.00x715.00 r	Selected sheets: Bobst SP 130 1310.00x925.00 mm Bobst SP 142 1415.00x1020.00 m Bobst SP 162 1650.00x1133.00 m
Available sheets: 420.00x297.00 m A3-Landscape 420.00x297.00 m A3-Portrait 297.00x420.00 m A4-Landscape 297.00x210.00 m A4-Portrait 210.00x297.00 m Bobst SP 102 -CE/-CE II 1030.00x715.00 m Bobst SP 102/3/4 Fast 1040.00x725.00 m Bobst SP 102/-E/-S/ 1025.00x715.00 m	Selected sheets: Bobst SP 130 1310.00x925.00 mm Bobst SP 142 1415.00x1020.00 m Bobst SP 162 1650.00x1133.00 m
A3-Landscape 420.00x297.00 m A3-Portrait 297.00x420.00 m A4-Landscape 297.00x210.00 m A4-Portrait 210.00x297.00 m Bobst SP 102 -CE/-CE II 1030.00x715.00 r Bobst SP 102/3/4 Fast 1040.00x725.00 r Bobst SP 102/-E/-S/ 1025.00x715.00 r	Image: Second state
Bobst SP 104-E/-ER 1050.00x746.00 r Bobst SP 76-E/-BM 776.00x572.00 m FullFormat-L 1000.00x700.00 r FullFormat-P 700.00x1000.00 m HalfFormat-L 700.00x700.00 m HalfFormat-L 500.00x700.00 m	
Allow rotation of the layout	sheet's width by layout

NOTE: To select all available sheets, press the button . This sets ups all the sheets as possible choices for the final sheet.

Allow rotation of the layout — the layout 1ups can be rotated to include optimization options.

Trim sheet's width by layout — trims the sheet according to the width of the used layout.

Trim sheet's height by layout — trims the sheet according to the height of the used layout.

4. Click Next to go to the Select Best Sheet window.

In this page the sheets are listed in descending order according to the percentage of waste area.

Select Sheets elect the sheet th	s nat best suits y	our needs.				Select Best Sheet
Vame	Rotated	Sheets	Parts/Sheet	Parts	Waste Area	%
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The list box provides information on the number of required sheets, the number of 1ups per sheet, the total number of pieces produced and the amount of waste for each selected sheet format.

5. Choose Bobst SP 142 list box, since this selection would result in the least waste; then click Finish.

In the selected sheet size, the program has fitted as many 1ups as possible.

METHOD 3: Calculating sheet size according the number of 1ups per sheet

In this method you enter the number of 1ups per sheet that you need. Then you use the **Calc Sheet** button. The program computes the sheet size. During the computation, also the margins get taken into account.



Automatic Layout				? 🗵
Select Template	Second Part	Third Part	Fourth Part	Sheet Placement
			Sheet Name Br Width Height Bottom Left Top Right	Sheet Layout +1 ?: obst SP 142 1415.00 1293.50 194.00 1020.00 970.00 191.00 13.00 13.00 2.00 2.00 60.75 2.00 2.00 60.75 2.00 2.00 60.75 2.00 970.00 10.00 10.00
			Eit to sheet Eil by counts Rows: 4 Columns: 4	Rotated layout X gap: 0.00 * Y gap: 5.00 * Corrections
			A Back Finish	Apply Cancel Help

After you have chosen one of the three sheet size definition methods and have your final sheet size, click Finish to complete the procedure.

The finished layout appears in the drawing area.



Recalculating a template

You may need to make corrections to the 1up to be able to fit more boxes into the layout. A standard correction is the editing of the glue flap width. In this case, we will edit the width from 12 to 10 mm. This affects the rule-to-rule width of the box (the overall horizontal dimension).

1. In the 1up drawing, change the expression of the GL parameter, which controls the width of the glue flap, to 10.

TIP: Normally, to save space not all parameter groups are shown in the tabular area. To view a particular group, right-click anywhere in the tabular area, point to **Groups**, and then on the context menu click the name of the parameter group that you want visualized.





As a consequence of the editing a gap appears in the layout (pictured).

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Sloping dimension. Keep SHIFT pressed to hold the mode	

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2. In the layout drawing, on the Layout toolbar, click **Recalculate Template**

The program updates the array with the new size of the box. The gaps are eliminated.



Applying layout to a new sheet

When you have a template-generated layout, you can later apply a new sheet to the already-defined

array of the boxes. To do so, on the Layout toolbar, click **Apply Layout Template to New Sheet** 1990, and then, in the dialog that appears, proceed with the definition of the sheet.





The application of the new template can be carried out by using any of the three sheet definition methods described above.

Exporting layout in the CFF2 file format

The layout drawing can be exported as an CFF2 file.

- 1. Make sure the Layout window is shown.
- 2. Choose File > Export.



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	ile Edit View Format Obje	cts Trans	sformations Dime	ensions Layout Too	ls Window Help				_ @ ×
	New Open Import as New Project	Ctrl+N Ctrl+O	Dijects	s g ^o Transformation	s HHDimensions 🗗 3D	88Layout 89 Print 6	Diemaking	Counterplate	
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Save:	s the active drawing under a new	name							

The **Export** dialog box appears.



3. Choose the option Common File Format CFF2 in the pop-up menu *File of type* and save the file to the proposed folder.

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