

Web growth

What is the web growth feature?

The Web Growth feature lets Prinergy Evo software digitally compensate for press distortion.

On a web press, the main direction of growth is across the web. On a sheet-fed or flexographic press, you may find more significant growth in the direction of paper travel. The web growth compensation mechanism in Prinergy Evo software can simultaneously compensate for growth both across and along the web or sheet. You can compensate for:

- Linear Scaling
This means that the expansion of the paper as a percentage is the same all across the paper. The percentage growth on the left side is the same in the center as on the right side. As a result, you need to convert your measurements to a percentage expansion in the x (across web) and y (along web) directions.
- Non-linear Scaling
This means that the paper expands by varying amounts across and along the paper.

Which files does the feature use?

The Web Growth feature uses the following files:

- An XML (extensible markup language) DTD (document type definition) file
- An XML profile file (<file name>.wgp)
- A tower-color file (ColorTowerMap.txt)

The DTD file contains the definitions and comments that describe the XML tags in the profile file. The profile file uses the DTD file; you do not use the DTD file. You can either store the profile file and the DTD file in the same folder or store the files in separate folders and include the location of the DTD file in the profile file.

A profile file describes press distortions for a specific press, paper stock, humidity, ink coverage, and other factors. You create one or more profile files using a text editor after you've measured your distortions on press. You enter the measured distortions in the profile file. You can then apply a profile file to each input file. Prinergy Evo software uses the profile to alter the image for each plate for a specific press and paper combination.

There are several defaults to consider when you're setting up your web growth profile:

- When you omit the distortion values for both surfaces of a given press tower, the system does not apply compensation to either surface.
- When you omit a distortion percentage (the x percentage or y percentage), the system does not apply compensation in that direction.

The tower-color file is a text file that specifies the names of the color separations in a file and the number of the press color tower running each color.

What does the feature compensate for?

The Web Growth feature lets you compensate for linear scaling (bidirectional if desired) or non-linear scaling.

What is the webgrowth exclude margin feature?

The Web Growth Exclude Margin feature allows you to specify a margin along one or more edges of the plate where web growth scaling will *not* be applied.

When you exclude margins, two regions on the plate are created: the margins you have excluded and the rest of the plate. The area around the edge of the plate is imaged with no web growth specified, while the inside area of the plate has web growth scaling applied.

One use of this feature could be *not* to add web growth scaling to the left and right sides of a plate, which contain control marks. An automated bender could scan these marks and determine how much to bend the plate for a certain press. If you applied web growth to the left and right sides of the plate, misregistration would occur.

Things to consider:

- This feature is optional.
- When using this feature, you can specify which margins to define (for example, the left and right margins could be used). Not all margin values need to be used.
- The unit values ("mm", "m", "cm", "pts", or "inch") must always be defined.
- To keep a web growth profile with exclude margins separate from other profiles, you can create a new folder and add the profile. Ensure that you also copy the .dtd file and tower-color file to the new folder. By default, the web growth file can be found at the following location on the Prinergy Evo server computer:

```
<your servername>\PgyEvoHome$\ config_data\User\WebGrowthProfiles
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