Web growth profiles

The web growth feature lets the Prinergy software digitally compensate for press distortion.
On a web press, the main direction of growth is across the web. On a sheetfed press or flexo press, you may find more significant growth in the direction of paper travel. The web growth compensation mechanism in Prinergy can simultaneously compensate for growth across and along the web or sheet.

You can compensate for linear, non-linear, and trapezoidal or pillow-shaped scaling:

- Linear scaling—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. See Example: web growth profile.
- Non-linear scaling—the paper expands by varying amounts across and along the paper. For more information, see Example: non-linear web growth profiles.
- Trapezoidal or pillow-shaped scaling—the expansion of the paper fans out in a trapezoidal or pillow shape. For more information, see Example: trapezoidal/pillow sheet growth profile.

It is also possible to set margins so that web growth only occurs within a defined area, and areas outside this area (the margins) will not have any web growth applied. See Example: exclude margins option.

Note: All the sample files are available on the Prinergy server in the `\\<ServerName>\AraxiHome\CreoAraxi\data\WebGrowthProfiles` folder.

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/or other factors. You create one or more profile files using a text editor after you measure your distortions on press. You enter the measured distortions in the profile file. You can then apply a profile file to each signature in a Prinergy job. Prinergy uses the profile to alter the image for each plate for a specific press/paper combination.
A sample profile file is stored in the `CreoAraxi\data\WebGrowthProfiles` folder on the home server.

Consider these defaults when you set 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 job and the number of the press color tower running each color. A sample tower-color file (`ColorTowerMap.txt`) is stored in the `CreoAraxi\data\WebGrowthProfiles\` folder on the home server. See Example: tower-color file.

Archiving

When you archive a job, Prinergy archives a reference to the profile file that it used, but does not archive the profile file itself. If you have to remake plates, you will want to use a current profile rather than the one that was used when the plates were originally made.