# What is new in ZePrA 11?

- **_Minimize Output Channels_**: Reduce the number of Multicolor channels when converting spot colors

- More Flexibility when Importing Configurations

- Speed improvements while flattening due to native Apple M1/M2 chip support

- Enhancements in the Preferences

- Improved Command Line Interface (CLI)

- Improvements to Spot Color Conversions

- New zcmdServer and Photoshop extension Push-2-ZePrA version 3

- Revised function in Job Control Files

Minimize Output Channels: Reduce the number of Multicolor channels when converting spot colors

If a Multicolor target profile is used in a ZePrA configuration and spot colors are to be converted, it is often not necessary to use all Multicolor channels. Depending on the spot colors used, 4, 5 or 6 channels can be sufficient for a given job. If a spot color conversion is to be performed, it can be very helpful to reduce the number of channels. Having fewer channels in digital printing saves click costs and inks, and in traditional printing, plates and inks are also saved.

In CoPrA 9 we had already introduced a feature for creating profile variants from Multicolor profiles, and this technology is now also used in ZePrA 11.

In order to use this feature, simply activate the new **_Minimize Output Channels_** checkbox in the **_Document/Target_** tab of the configuration. The option is available only when a Multicolor target profile is selected, and generates the most benefit when the spot color conversion is enabled (in the **_Spot Colors_** tab). If the spot color conversion is disabled, a warning message informs about enabling the option. If jobs without spot colors are to be converted and the checkbox **_Minimize Output Channels_** is activated, the file will be converted to CMYK, as this results in the minimum number of channels with still acceptable quality.
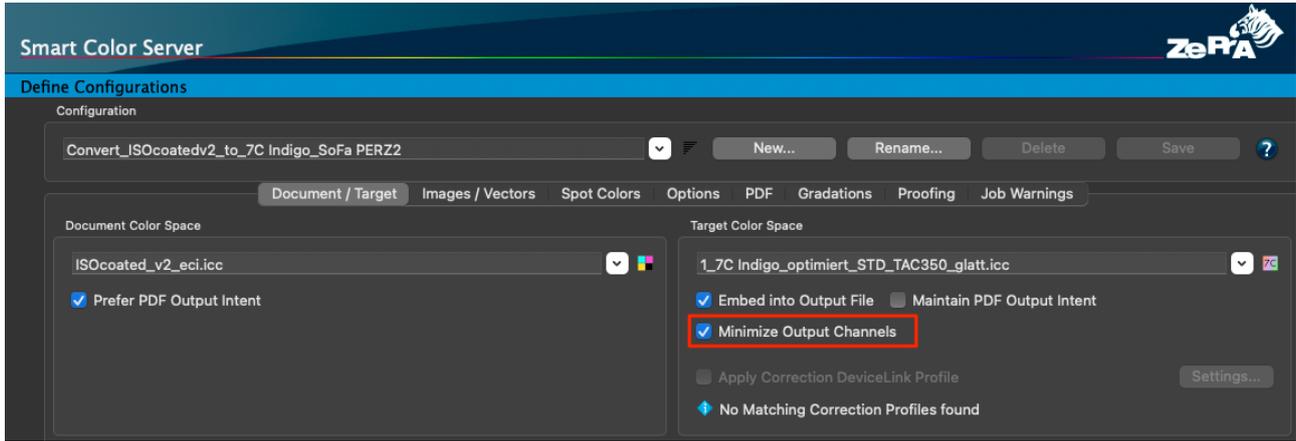
If the profile variants for the given target profile have already been created with CoPrA, ZePrA can use those existing ICC profiles and does not need to recreate them, which speeds up processing. If no profile variants are available, ZePrA creates several profile variants. For example, based on a 7C target profile, ZePrA creates a CMYK profile, three 5C profile variants, and three 6C profile variants - this can take some time. All these eight profiles are automatically analyzed by ZePrA to determine the best profile, which is then used for the conversion of the job - this check is done quickly. The beauty of this feature is that when processing multiple jobs with different spot colors, different profile variants can automatically be used in the same configuration. If the checkbox for embedding the target profile is activated, the target profile - which can be different for each job - is embedded in the converted file.
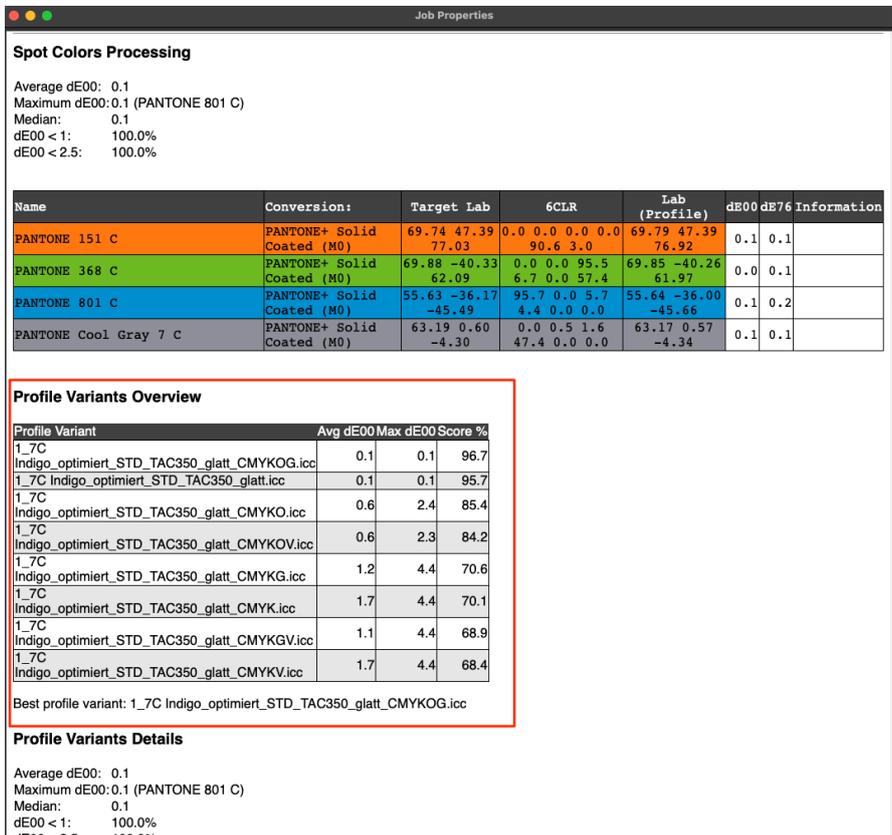
All calculated **Profile Variants** are also included in the **Job Properties Report**, which is available in the context menu that appears after right-clicking on the job in the list of **Processed Jobs**. The report shows the results for spot colors converted with all the profile variants, alongside the profile that is actually used for the job indicated as the target profile. This is helpful to understand why the automatically selected **Best profile variant** has been used by ZePrA.

Note: The evaluation ZePrA uses to determine the best profile is the same as in the **Spot Color Report** to determine the best configuration. It considers the average and maximum deltaE2000, as well as the number of channels, and is explained in more detail here: ***Spot Color Report***

More Flexibility when Importing Configurations

The dialog for importing ZePrA configurations has been revised, improved, and extended. The import function can be used either to transfer a ZePrA installation with all settings from one computer to another or to exchange single or multiple configurations between different ZePrA sites or for support reasons.

In ZePrA 11, there is now a preview section at the bottom of the dialog that lists the files to be transferred and the folders to be newly created during the import. This way, it is possible to check before the import what will happen when a CCF file with the configurations and various associated files is imported.

Configurations to be imported into ZePrA can be loaded in two different ways:

- First, by dragging and dropping the configuration (CCF) into the **Queues** section of the ZePrA **Overview** dialog (fast way).

- Second, by selecting ***Import Configurations*** from the **Tools** menu (slower way). In this case, the newly designed **Import Configuration** dialog opens. There, the desired configuration file(s) can be selected in the upper area via the **Select** button. With the drag-and-drop method, the imported configuration appears immediately in the upper area (as with ZePrA 10).
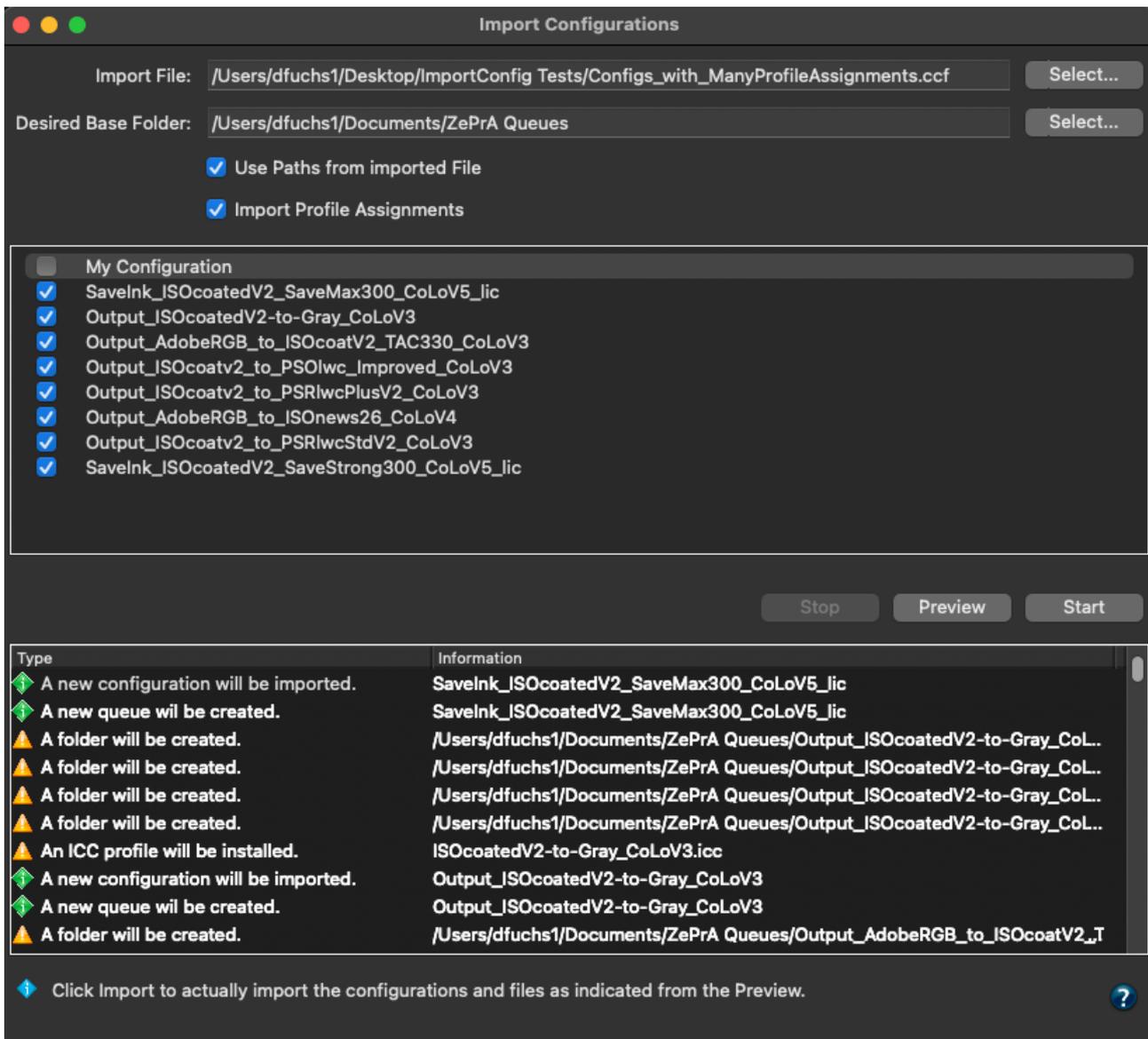
By clicking the **Preview** button, the files and settings of the CCF file(s) are examined and listed in detail before they are actually imported. This allows for inspection of the profiles that will be imported, spot color libraries, media wedges, configuration and folder names, and the locations of those folders. Sometimes folders cannot be created exactly the same as the original exported configuration - for example, if the configuration was exported from a Windows system and is imported to a Mac system, or vice versa. In such cases, an orange warning icon will be displayed in front of the folders, and it is shown where the folders will be located after importing. There may also be warnings for profiles if a profile already exists and will be overwritten. In addition, a red warning may appear if an operation cannot be performed at all, for example, if a CCF file is corrupted.

Another improvement in importing configurations concerns **Profile assignments**. Profile assignments are a special general option in ZePrA to use bespoke DeviceLinks for specific color conversions instead of using SmartLink or other color management settings.

When exporting a configuration, profile assignments can be exported along with it, which can result in many additional profiles being installed when importing such a configuration, which may not be wanted. In ZePrA 11, in such cases where the CCF file to be imported contains profile assignments, a new checkbox can be set to import these profile assignments or not. If the CCF file to be imported does not contain any profile assignments, the checkbox is grayed out. The profiles that will be installed are displayed after activating the checkbox and clicking the **Preview** button. It can then be decided whether the profile assignments and all associated profiles are to be installed or not. However, profiles included in the configurations selected for import are not affected by this option and cannot be deselected.

Only after clicking the **Import** button, the selected configurations and files are imported.

Once the import is started, the import progress is displayed in the preview area. All executed and failed operations are listed.

Speed improvements while flattening due to native Apple M1/M2 chip support

The current Callas PDF engine 14.1.607, which is used for flattening PDF files, is now included in ZePrA 11. It is integrated as a universal binary that runs both on Intel Macs and natively on the new modern Macs with ARM processors. On the new Macs with M1/M2 processors, the speed improvement in flattening is clearly noticeable. This results in much faster processing of files when flattening is used.

Enhancements in the Preferences

1. Logo for Spot Color Report and Proofing Information

In the ZePrA **_Preferences_** dialog, there is a revised section where a logo for the **Spot Color Report**, the **Job Report** and **Proofing Information** can be specified. By default, a ZePrA logo is used for all three, but this can be overwritten with your own company logo. Accepted image formats are TIFF, JPEG or GIF in RGB color space.
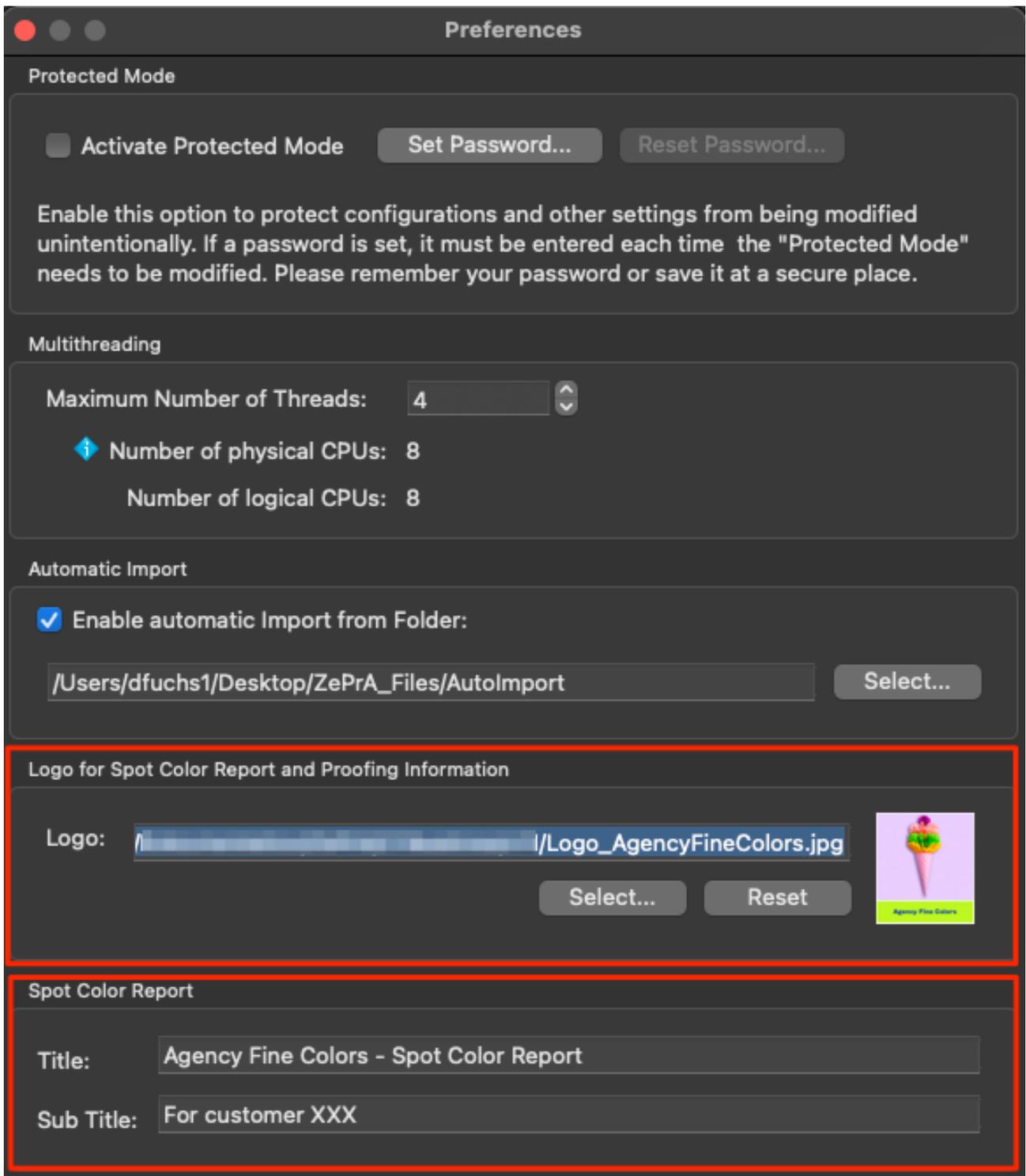
2. Spot Color Report

The default title of spot color reports created by ZePrA can now be replaced by any individual title. In addition, an individual subtitle can be added to the report as well. **Note**: To revert back to the default title, simply delete the custom title from the text box.

3. CLI - Use ZePrA settings from the current user account in CLI

The section **CLI** in the **_Preferences_** and the function **_Use ZePrA settings from the current user account in CLI_** that has been introduced in ZePrA 10.0.5 has been adapted for ZePrA 11. This function is addressed to experts among ZCMD users only. It is intended for the case that the ZePrA GUI and all its configurations and settings are managed and used under one user account, but the CLI is to be used on the same computer with a different user account. This case could occur when other systems need to connect to ZePrA via the CLI with a different user account. For the CLI to work properly, it requires access to the settings created in the ZePrA GUI, and these are typically stored in special folders in the corresponding user account. To make the settings available to the CLI, the checkbox must be activated and the CLI must be given access rights to the ZePrA settings folders in the other user account. This is usually accomplished by running the CLI under an admin or super user account.
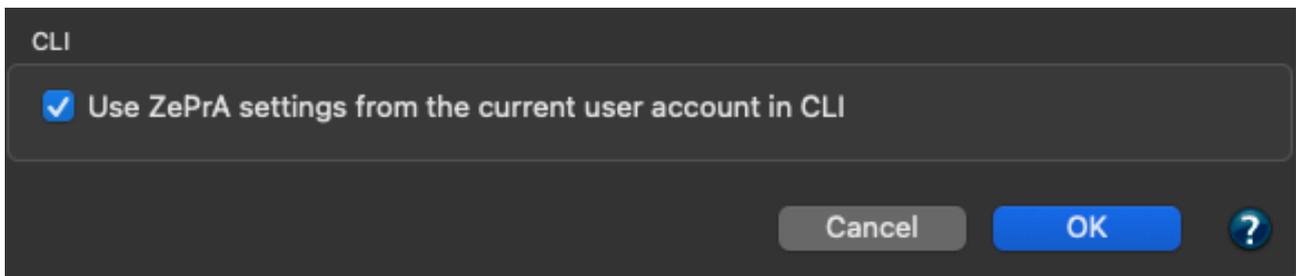
Enabling the checkbox allows ZePrA to be used within automated workflows from other vendors.

Improved Command Line Interface (CLI)

The ZePrA **Help** menu contains the new ZePrA **_CLI manual_**. Intended for developers, scripters and experts, the PDF document contains not only additional explanations, but also several new filters for the **_listconfigurations_** command. They allow dedicated search options to search the list of ZePrA configurations required by other systems that want to access ZePrA. These filters allow searching by color spaces, tags, and profile names. Feature requests from partners have also been implemented, such as the ability to write job reports in multiple formats with one command or the support of boolean parameters.

Improvements to Spot Color Conversions

ZePrA uses advanced spot color conversion methods that have been further improved with version 11. All calculation methods - such as visual match, least number of channels, or using two or three channels - are even more accurate than before and in addition they now favor the four main channels of the target Multicolor profile for converting spot colors to process colors - in most cases, these are the CMYK inks.

The new **Prefer CMYK** function is now available in the ***Spot Color Conversion Options*** (in the **Spot Colors** tab under **Configuration**). It allows spot colors to be converted to the CMYK components of a Multicolor profile even if the combination with other gamut extending process colors is equally possible, or even if less process colors would be used. If you would like to allow a higher tolerance for the CMYK buildup over the matches that can be achieved with the gamut-extending process colors of the Multicolor profile you can enter an additional dE00 value. Note that this value is added to the dE00 match of each spot color. It is therefore recommended to use only a small value such as 1 to 3 to avoid rendering the spot colors with an overall dE00 threshold that is too high.
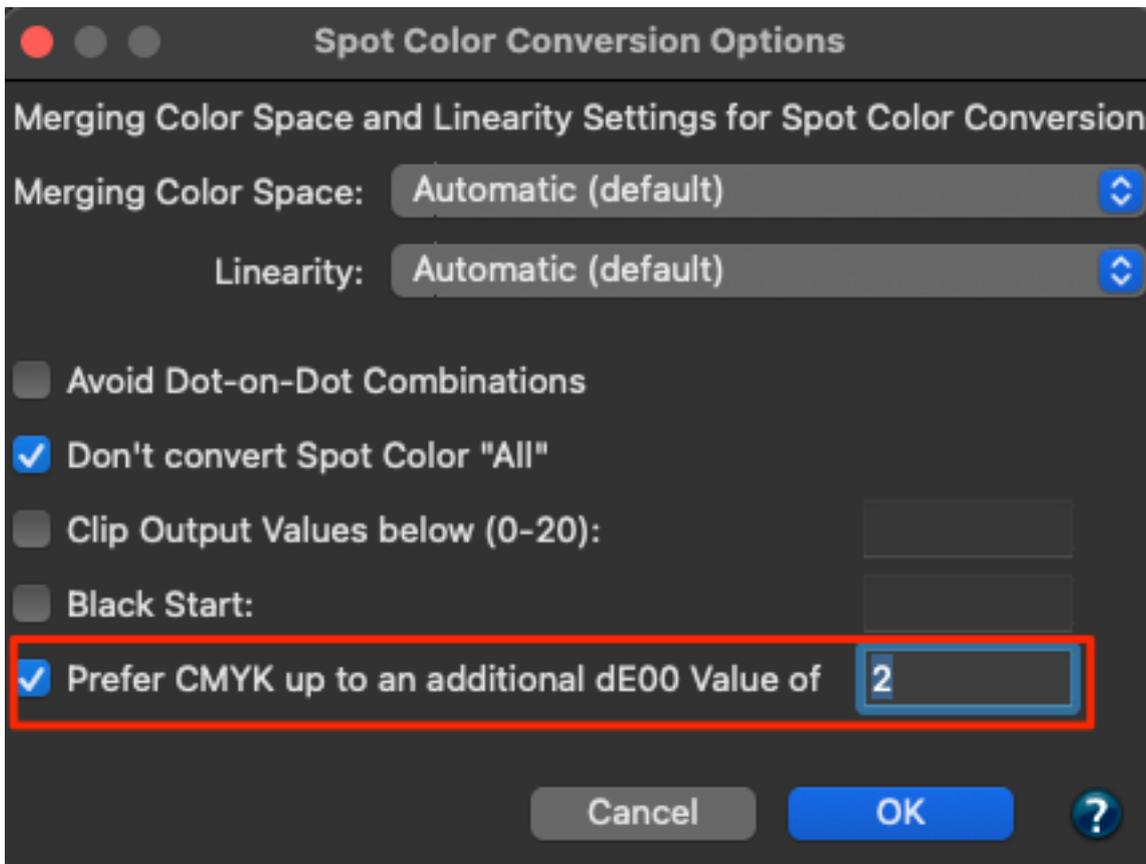
The improved spot color conversion methods and the new *Prefer CMYK* feature are especially helpful when using the *Minimize Output Channel* option. We recommend enabling the *Prefer CMYK* feature when using the *Minimize Output Channel* option.

Another addition to the *Spot Color Conversion Options* dialog can be found in the *Linearity* drop-down menu. There is now a third option called *Use ISO 20654 (SCTV) for undefined Tints*. It applies the SCTV linearity curve to spot color tints for which no tints measurements are stored in ZePrA's spot color library. In cases where tints are available, e.g., if CXF/X-4 measurement data is available for a spot color, or if the used spot color library contains measurements of spot color tints on white background, ZePrA will use this information for rendering the gradients of the tints.
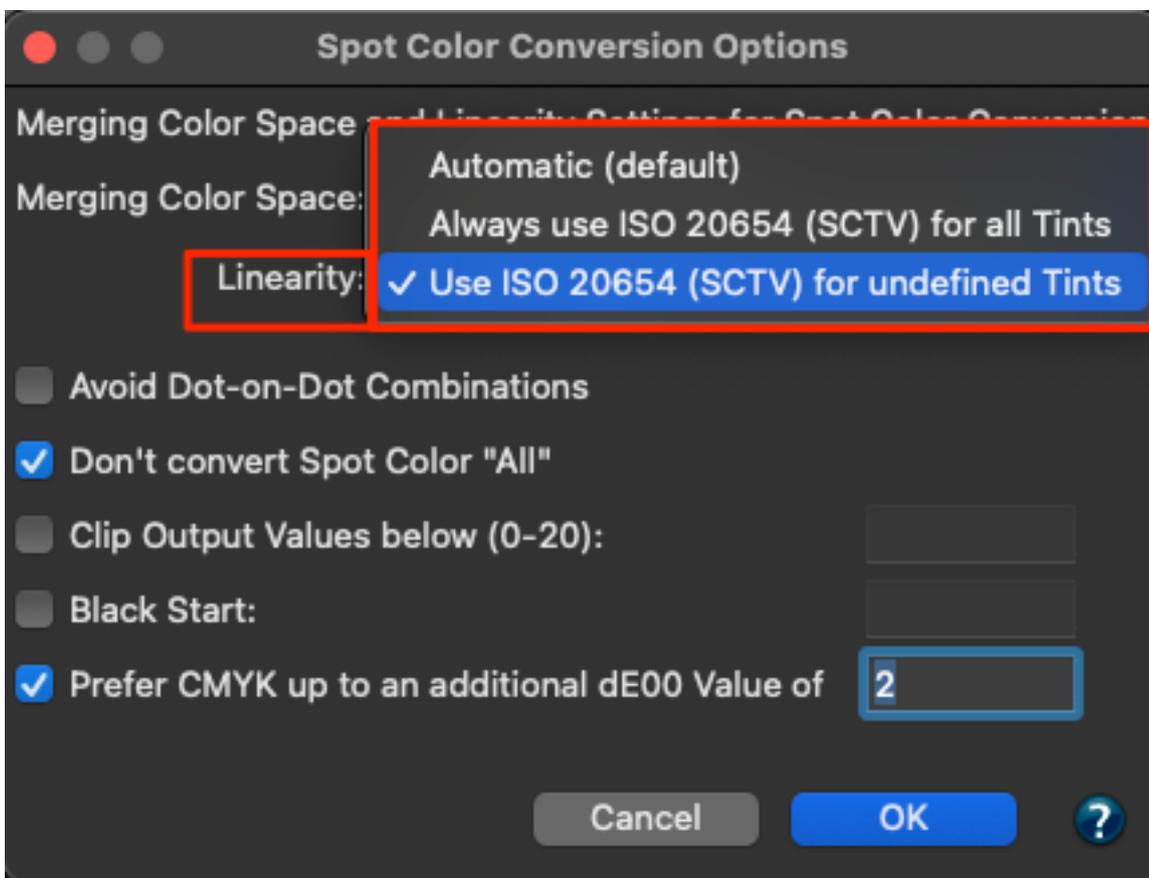
Spot color tints rendering has always been an additional quality aspect of ZePrA, besides full tone rendering. The conversion of tints has been improved, resulting in smoother curves and more accurate matches when target Lab values for spot color tints are available in the spot color library.

Revised function in Job Control Files

The use of the **BaseConfiguration** command has been clarified. It now works as described in the [Job Control File documentation](#).

If neither **BaseConfiguration** nor **AutoSetup** is specified in a job control file, the default configuration is used. When used with queues, the default configuration is the one assigned to the queue. If there is no configuration assigned, the new configuration will be created solely based on the information in the **Options** dictionary. When used with the CLI, the default configuration is that one which is specified on the command line. If none is specified, the new configuration will be created solely based on the information in the Options dictionary.

This change can produce a different result when job control files are used without **BaseConfiguration**. Previously, the generated configuration was completely defined by the **Options** dictionary. Now it is defined by the default configuration of the queue or that defined in the command line, modified by the **Options** dictionary. This will work as before if the queues have no configuration or no configuration is specified on the command line, but in other cases it can lead to a different result than before. For the case that the use of a **BaseConfiguration** should be explicitly prevented, the value **none** (written in lower case) can be specified in the job control file.

New zcmdServer and Photoshop extension Push-2-ZePrA version 3

The Push-2-ZePrA Photoshop extension, which allows ZePrA's high-quality color conversion to be used directly in Photoshop, has been updated to version 3. This extension is only executable with ZePrA 11. The reason for this are improvements to the zcmdServer, which is used for the remote connection available in the extension. The zcmdServer is included in ZePrA 11 and allows the processing of image files up to a size of 2 GB. The previous zcmdServer of ZePrA 10 is limited to a file size of 512 MB.

The zcmdServer can be enabled in ZePrA in the **Tools** menu under **Server Settings**.
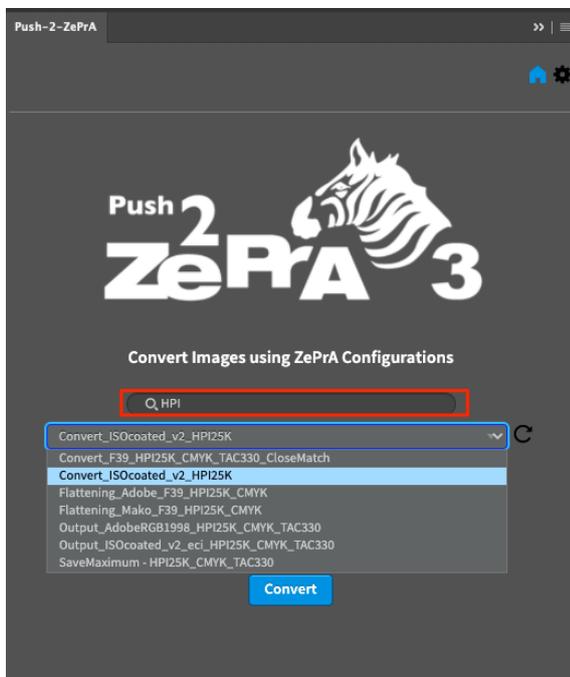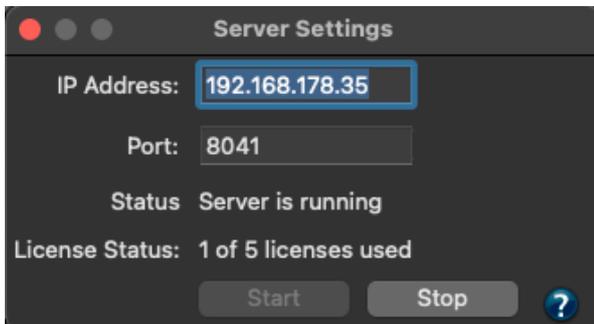
Another improvement is available right in the extension itself. A search option is available here, where any number and letter can be entered and only the configurations containing these numbers and letters are listed in the drop-down menu below. This makes it easier to search for specific configurations, especially if the list of configurations in ZePrA is very long.
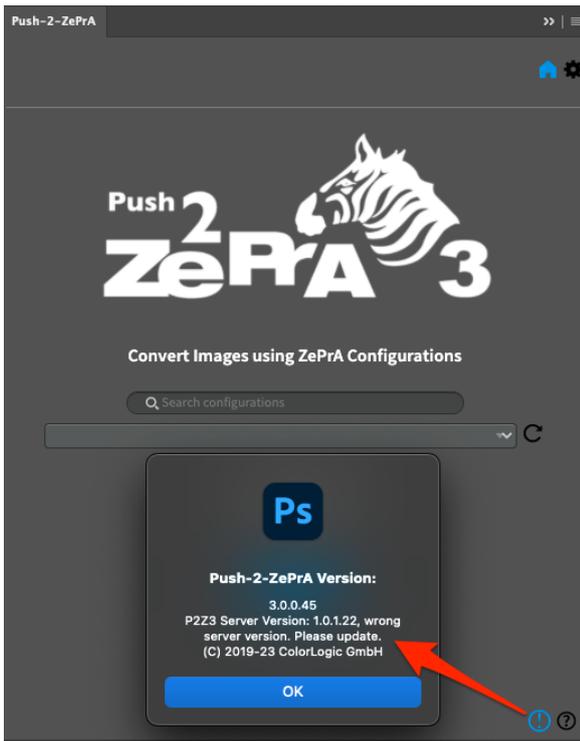
As the extension only runs with ZePrA 11, a warning message is displayed if with a remote connection the previous server from ZePrA 10 is in use or if the local connection to an older ZePrA version is in use. This message appears either next to the **Connect** button in the extension's **Settings** dialog or it appears in the dialog that appears when you click on the information icon (see screenshot).

Helpful information for beta testers wishing to test Push-2-ZePrA v3

1. When installing the Push-2-ZePrA V3 Photoshop extension please follow the guidelines in our online help: https://onlinehelp.colorlogic.de/en/push2zepra/ The system requirements and recommendation are the same as for the previous version 2 of Push-2-ZePrA.

2. The installer on the Mac will take an additional step to prepare Photoshop. Hence Photoshop must be closed before installation. The message on the shown screenshot is displayed twice. Just click the **Allow** button twice to install.

3. For users on the Mac with modern M1/M2 processors make sure to start Photoshop in Rosetta mode. How this is done is explained in the online help, too.

4. Please do not use the zcmdServer from ZePrA 10 and 11 at the same time. Make sure the server in ZePrA 10 is not running (click the **Stop** button in the **Server Settings** dialog). After that open the **Server Settings** dialog in ZePrA 11 and click on **Start** to activate the new zcmdServer.

5. After that set up the Push-2-ZePrA extension in Photoshop as explained in the section **Using Push-2-ZePrA over the network** in the online help: https://onlinehelp.colorlogic.de/en/push2zepra/

6. The Push-2-ZePrA V3 Photoshop extension does not work with an older version of ZePrA neither with the remote nor the local connection. It will work only with ZePrA 11.