

Schedule Maintenance

Overview

The advanced queuing options include the program module, *Schedule Maintenance*. This program enables you to create and edit *Schedules*, a *super-queue* tool which incorporate several job templates into a single queue. By considering multiple job templates, the *Schedule* feature automates the use different templates (strategies) to achieve specific colorimetric and non-colorimetric requirements for the jobs in the queue.

For example, you may have one job template that limits the colorants considered for a match. When you run a queue using this template, the limited colorant selection may prevent the system from matching every target color in the queue. In this case, you may decide to use a different job template that expands the colorant selection, and re-run the unmatched targets in the queue. To do this, you must edit the job template, and manually rerun the matches.

Using a *Schedule* automates this process. It allows you to string together several templates for a single queue. When the schedule is attached to a queue, it will automatically use the second job template, when it fails to find an acceptable match to a target *using the first job template*. It will repeat this process for all of the templates in the schedule, until it finds an acceptable formula. The schedule is applied to each target in the queue, and increases the prospect that you will find a least one acceptable match for every target in the queue.

See also Applications Technology, Advanced Queuing Options for a comprehensive discussion of all program modules that are related to the advanced queuing features.

Job Templates

The Schedule option does not limit the number of templates in a single schedule. This allows you flexibility to capture a variety of different match requirements for the system to consider. Some job templates may contain different job preference selections, such as ingredient choice, acceptability tolerances, sorting preferences, etc. Other job templates may vary formula constraints such as fixed colorant amounts, or total batch size. By creating a variety of job templates, you will help the system find the best matches for your operating circumstances.

Name	Type
 All_Show Best	Job Template
 All_Show Best FF	Job Template
 Deep Base	Job Template
 Deep Base FF	Job Template
 Default Template	Job Template
 Extra Deep Base	Job Template
 Extra Deep Base FF	Job Template
 Medium Base	Job Template
 Medium Base FF	Job Template
 Pastel Base	Job Template
 Pastel Base FF	Job Template
 Transparent Base	Job Template
 Transparent Base FF	Job Template

See also *Program Features, Jobs and Templates* for a discussion of job templates.

Advancing through Templates in the Schedule

When an acceptable formula is found using the first job template in the schedule, it will not continue to the second template. This is true regardless of the number of formulas you have specified in the template. For example, if job template #1 specifies 5 formulas, and the system finds 3 formulas using template #1, it will not advance to the template #2.

This behavior remains the same as it moves through each template in a schedule. When it finds at least one answer for a target, the program will move on to the *next target color* in the queue, using the first job template in the schedule.

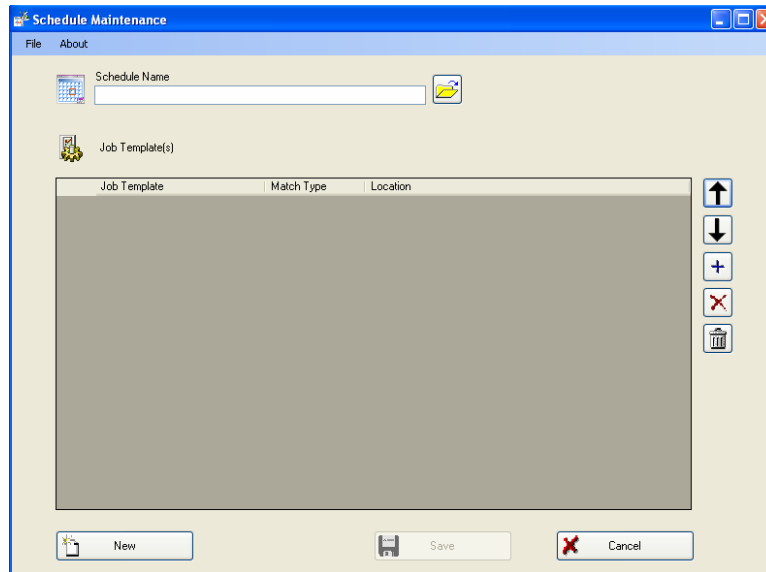
Show Best Formula Options

The job templates used in a *Schedule* should have the *Show Best Formula* feature disabled. If a job template in the schedule has *Show Best Formula* enabled, it will display the best formula it finds using the template, regardless of whether the formula satisfies your requirements. When this happens, it will move on to the next target color in the queue.

The only exception to this job template configuration should be considered for the final job template in the schedule. If the system tries all of the previous templates without finding a match, enabling *Show Best Formula* will produce the best formula it can find for the target, *using the final template* in the schedule. By enabling this option in the last template, the system will produce a formula for each target color in the queue. See also *Tools Menu, Job Preferences, Results tab* for instructions to enable/disable *Show Best Formula*.

Schedule Maintenance Window

1. From the Go menu, click on **Schedule Maintenance**. The main program window displays:



The window makes use of several function buttons to execute a task. Drop-down menus provide access to additional program options.

Schedule Maintenance Window Fields

- **Schedule Name.** Identifies the schedule currently active. Use this field to assign a name to a new schedule, or to retrieve a schedule previously stored.
- **Job Template(s).** Identifies the job templates to be used in the Schedule.

Schedule Maintenance Window Buttons

The most frequently used options in Schedule Maintenance are initiated through the buttons on the window. Below is a summary:



Open. Click on this button to open an existing schedule.



Move template forward. Moves the template forward one position in the schedule. The position of a template in a schedule is an important consideration. Templates having the most desirable formula requirements should be placed at the beginning of a schedule.



Move template backward. Moves the template backward one position in the schedule. Templates having less desirable requirements should be placed at the end of a schedule.



Add templates. Used to add individual templates to a schedule. The templates must already be stored in Data Navigator. See also *Formula Central Jobs and Templates for instructions to create/edit job templates.*



Remove Highlighted Templates. Used to selectively delete individual templates from the schedule.

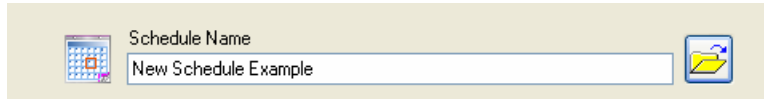


Remove All Templates. Deletes all templates in the schedule.

Creating a Schedule

Below are detailed instructions to create a schedule.

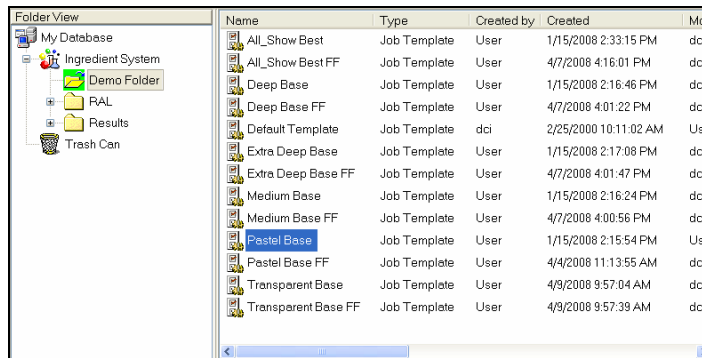
1. From the Go menu, launch Schedule Maintenance.
2. In the *Schedule Name* field, enter a name:



3. Click on the **Add Templates** button next to the job templates box.



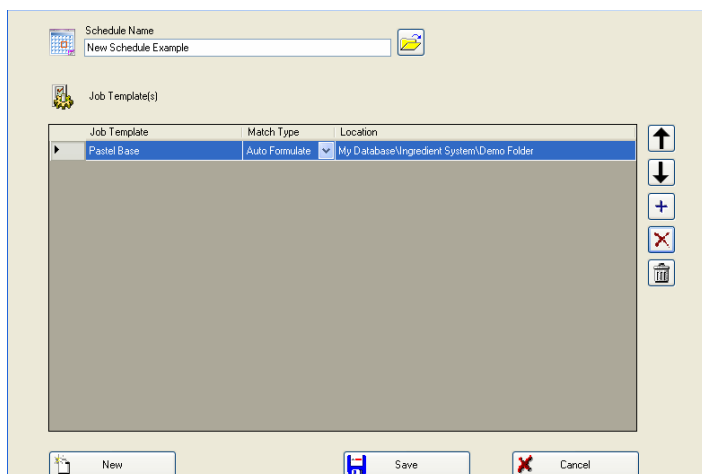
The Navigator displays:



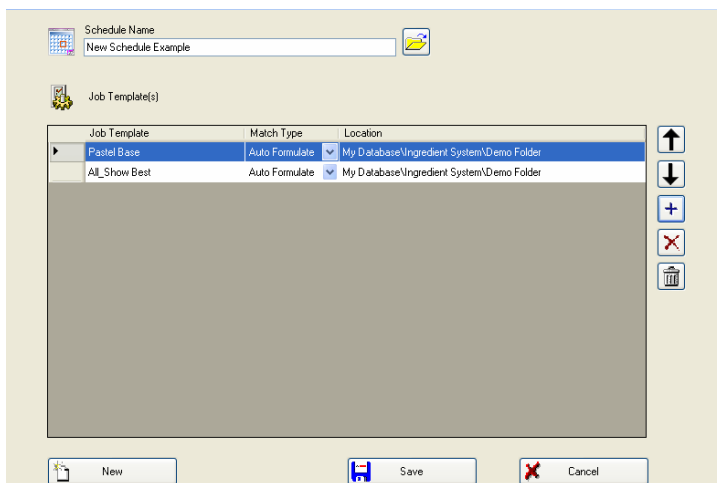
The Navigator window is split into two panes. The left pane shows a "Folder View" with a tree structure: "My Database" (expanded), "Ingredient System" (expanded), "Demo Folder" (selected), "RAL", "Results", and "Trash Can". The right pane shows a table of job templates.

Name	Type	Created by	Created	Mod
All_Show Best	Job Template	User	1/15/2008 2:33:15 PM	dci
All_Show Best FF	Job Template	User	4/7/2008 4:16:01 PM	dci
Deep Base	Job Template	User	1/15/2008 2:16:46 PM	dci
Deep Base FF	Job Template	User	4/7/2008 4:01:22 PM	dci
Default Template	Job Template	dci	2/25/2000 10:11:02 AM	Use
Extra Deep Base	Job Template	User	1/15/2008 2:17:08 PM	dci
Extra Deep Base FF	Job Template	User	4/7/2008 4:01:47 PM	dci
Medium Base	Job Template	User	1/15/2008 2:16:24 PM	dci
Medium Base FF	Job Template	User	4/7/2008 4:00:56 PM	dci
Pastel Base	Job Template	User	1/15/2008 2:15:54 PM	Use
Pastel Base FF	Job Template	User	4/4/2008 11:13:55 AM	dci
Transparent Base	Job Template	User	4/9/2008 9:57:04 AM	dci
Transparent Base FF	Job Template	User	4/9/2008 9:57:39 AM	dci

4. Browse to the appropriate folder, highlight a job template to be added to the schedule, and click **Open**. Data Navigator will close, and the Schedule window will display the template just added.



- Use the **Add Template** button to continue adding the job templates to this schedule.

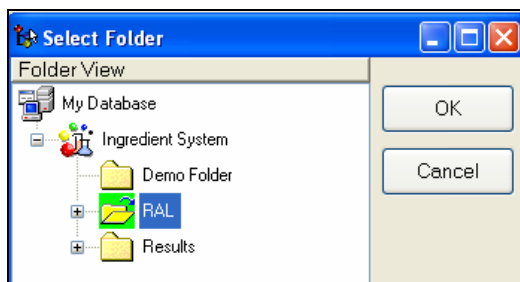


Match Type. You must select the match type to be used for each template in the Schedule. Four choices are available:

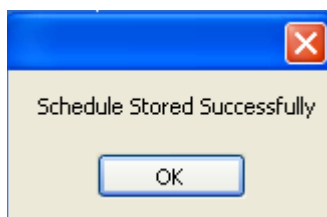
- *Autoformulate*
- *Search*
- *Search & Correct*
- *Combinatorial*
- *Ask.* When this option is selected, the program prompts for a match type when the queue is run.

See also Formula Central, Matching and Correcting Colors, Matching Features for a description of the match types available.

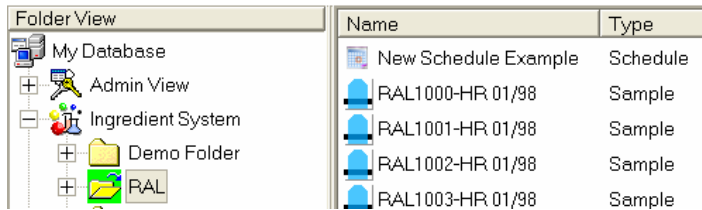
- When all templates are added and match types selected, click on the **Save** button. The Navigator will open and prompt you for a folder destination for the schedule:



- Highlight the folder to hold the schedule, and Click **OK**. The program will confirm that the schedule has been stored.



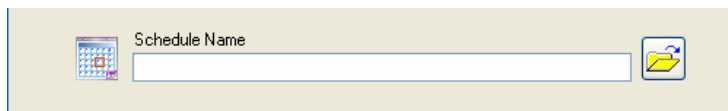
The schedule displays in the Navigator folder list.



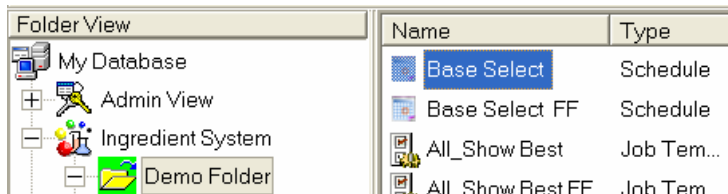
This schedule can now be added to a queue. See also *Queue Maintenance* for instructions to add a schedule to a queue.

Editing a Schedule

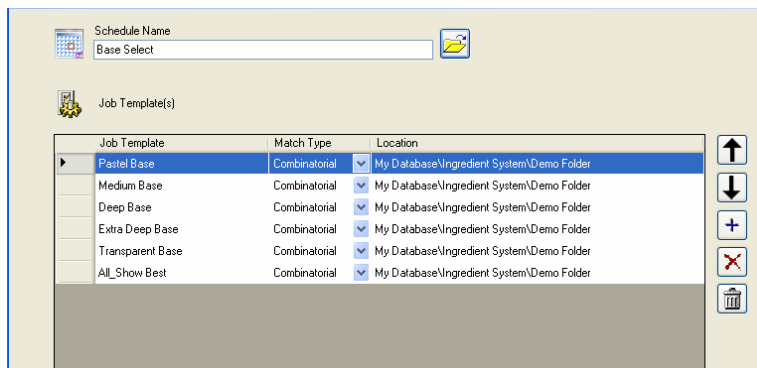
1. From the Navigator Go menu, launch **Schedule Maintenance**.
2. At the end of the *Queue Name* field, click on the **Open Folder** button.



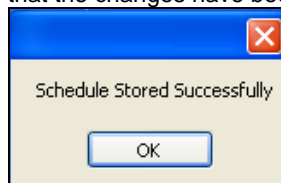
3. Browse to the schedule you want to edit, and highlight it.



4. Click **OK**. The window refreshes and the schedule information displays.



5. Change the *Match Type* as necessary.
6. Use the navigation buttons to add/delete templates or change the template order in the schedule. See also *Schedule Maintenance Windows* for a description of each button.
7. When you have made all of the changes, click the **Save** button. The program confirms that the changes have been saved:

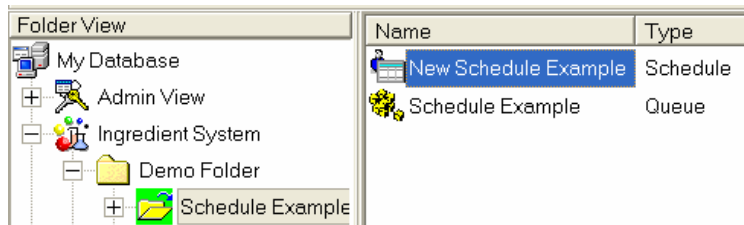


8. Click **OK**.

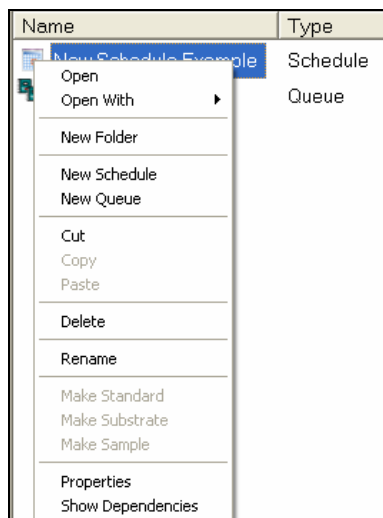
Deleting a Schedule

You must use the Data Navigator to delete an entire schedule.

1. In Data Navigator, browse to the folder containing the schedule to be deleted, and highlight the schedule to be deleted.



2. Right-click on the highlighted schedule to display the Navigator menu:



3. Click **Delete**. The schedule is deleted. No confirmation message displays before it is deleted.

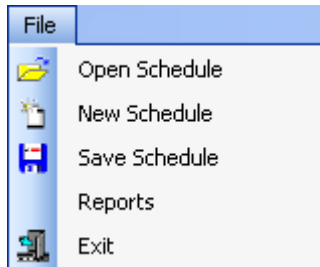
Schedule Reports

The reports are an essential tool for reviewing the important details of the schedules you are using. To revise the strategy you are designing with a schedule, you need to see some essential settings in the job template. The Schedule report displays the fundamental job requirements for every job template in the schedule:

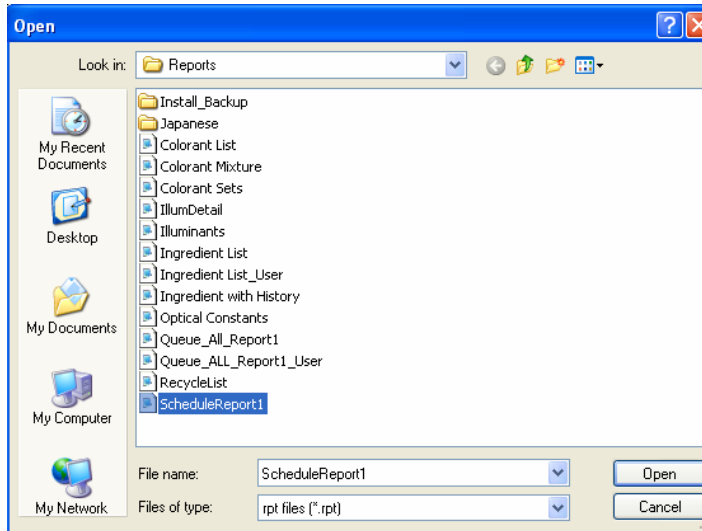
datacolor		MATCH PIGMENT		Schedule List											
				Friday, May 16, 2008 10:58:55AM											
Schedule Name:		Base Select													
Job Template Name: Pastel Base				Colorant Set Demo Paint						Match Type: Combinatorial					
DE1 Tol	DE2 Tol	CR Tol	Met Tol	ShowBest	Sort 1	Sort 2	Sort 3	Goal1	Wgt1	Goal2	Wgt2	Goal3	Wgt3		
0.10	0.50	0.00	10.00	False				DE1	60.00	C_Fit	40.00		0.00		

To access the Reports option, do the following:

1. From the menu bar, select **File, Reports**.



The Open dialog box displays.



2. Highlight the **Schedule Report** and click **Open**. The Schedule List report displays.

NOTES

This report includes all schedules included in the system. There is currently no feature available to display the information for a single schedule.

This report includes the detail for all schedules that are stored on your system. The information is taken directly from the job templates included in the schedule.

The order in which the schedules are displayed depends on an internal number the program assigns to the schedule when it is created. Currently there is no option to filter or sort the schedule report.

Schedule Report Fields

Below is a description of the data included for each *job template* in the Schedule report. The tolerances included in this report are the tolerances used by the job template to determine if a formula is acceptable.

		Schedule List Friday, May 16, 2008 10:58:55AM	
Schedule Name:		Base Select	
Job Template Name: Pastel Base		Colorant Set Demo Paint	
Match Type: Combinatorial			
DE1 Tol	DE2 Tol	CR Tol	Met Tol
0.10	0.50	0.00	10.00
ShowBest	Sort_1	Sort_2	Sort_3
False			
Goal1	Wgt1	Goal2	Wgt2
DE1	60.00	C_Fit	40.00
Goal3	Wgt3		
	0.00		

- **Schedule Name.** Identifies the schedule that is using the job template.

- **Job Template Name.** Identifies the job template associated with the information displayed.
- **Colorant Set.** Identifies the colorant set used by the template.
- **Match Type.** Identifies the matching tool used for the template. The choices can include AutoFormulate, Search, Search & Correct, and Combinatorial. *See also Formula Central Matching and Correcting Colors, Matching Features for a description of each.*
- **Match Order.** Identifies the position of the job template in the Schedule. *Not shown in example.*
- **DE1 Tol.** The maximum acceptable color difference permitted under the primary illuminant.
- **DE2 Tol.** The maximum acceptable color difference permitted under the secondary illuminant.
- **CR Tol.** The contrast ratio required for the match. When 0.0 is displayed, a contrast ratio value is not specified.
- **Met Tol.** The maximum acceptable value for the metamerism index of the formula.
- **ShowBest.** Identifies whether the *Show Best Formula* option is enabled. This should be disabled for most of the job templates in the schedule. If it is not, the queue will not advance to the next job template in the schedule.
- **Sort 1.** Default sort order applied to the queue results. This is the first choice for the sort order.
- **Sort 2.** Default sort order applied to the queue results. This is the second choice for the sort order.
- **Sort 3.** Default sort order applied to the queue results. This is the third choice for the sort order.

See also Matching Features, Formula Sorting for a discussion of Formula Central sorting options.

- **Goal 1.** In each job template, an objective, or *goal function* is defined for the job. The goal can have multiple components. This column identifies the first goal component for the template.
- **Wgt 1.** The components of a goal function are *weighted* for relative importance in the overall goal function. This column identifies the weight assigned to goal component 1.
- **Goal 2.** Identifies the second component of the goal function.
- **Wgt 2.** Identifies the weight assigned to the second component of the goal function.
- **Goal 3.** Identifies the third component of the goal function.
- **Wgt 3.** Identifies the weight assigned to the third component of the goal function.

See also Applications Technology, Optimizer Goal for a detailed discussion of the optimizer goal function used in matching and correction.

NOTES

The tolerances displayed in this report are based on the *job template* settings. These tolerances are used by the program to determine whether a formula is acceptable. *See also Tools Menu, Job Preferences for information to view or edit these acceptability tolerances.*

A separate set of tolerances are used by the Queue Viewer to filter and sort the queue results. The queue results have already satisfied the tolerances in the job template. *See also Queue Maintenance, Edit View Tolerance, and Queue Viewer, Filter and Sort Options for information on the tolerances used to filter and sort the queue result*