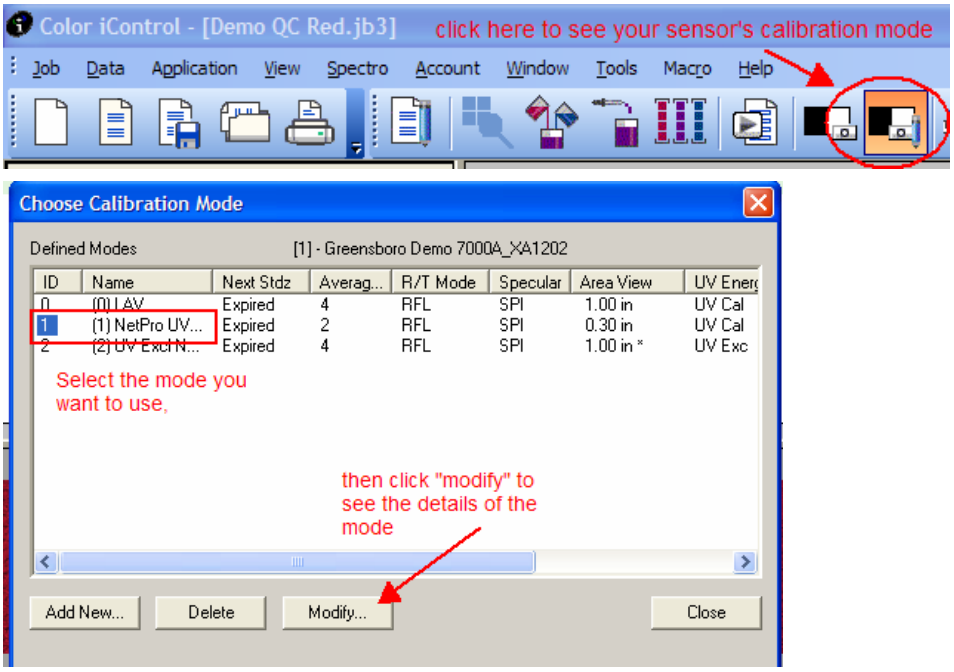
How can I use using Best Practices with my GretagMacbeth iQC / iMatch system?

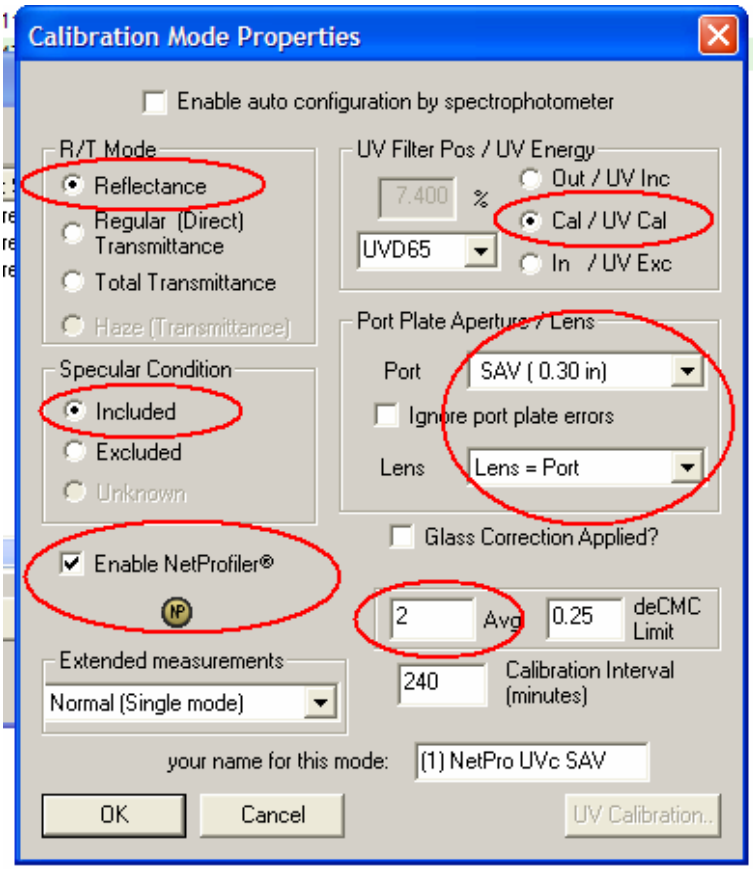
"Best Practices" refers to a system of defining, documenting, and complying with agreed-upon procedures which are shown to support rigorous data and assessment tools. For color measurement, establishing Best Practices requires you to consider several factors:

- Standardizing bodies whose methods and standards can guide you in best practices for your industry. Whenever possible, you will want to refer to existing standards, instead of writing your own. This leverages the strengths of known, published methods, and improves the ability of your partners to comply with your Best Practices.
    - ASTM (American Society for Testing and Materials http://astm.org
    - AATCC (http://www.aatcc.org/)
    - SAE (Society of Automotive Engineers) http://automobile.sae.org/
    - SPE/CAD (Society of Plastic Engineers, Color and Appearance Division) http://www.specad.org/
    - ISO (International Organizqation for Standardization) www.iso.org
    - and others.
- Instrumental measurement parameters will need to be defined for your applications.
    - Sensor geometry (45/0, sphere, or other)
    - Aperture size
    - Specular reflectance included or excluded
    - UV energy included, excluded, or calibrated (calibrated is preferred for many industries)
    - NetProfiler Certified within 30 days
    - Color i7, CE7000A, and Color i5 are frequently selected as part of Best Practices programs.
- Sample presentation parameters also need to be defined, including:
    - Sample thickness or number of layers
    - Backing material if samples are not opaque
    - Temperature and humidity of sample and ambient conditions
- Color measurement system parameters can also affect your results, and need to be defined. Colorimetric values will be calculated from spectral measurements using consistent:
    - Illuminant (D65, TL84, U3000, F02, etc) and observer (2 or 10 degree)
    - Color space (CIELAB or other)
    - Color difference equation (DE*, DEcmc, CIEDE2000, etc)
    - All of these are supported by Color iQC and Color iMatch.

Whew -- that's a lot to keep up with! How do I keep it all straight, especially if I have customers with differing requirements?

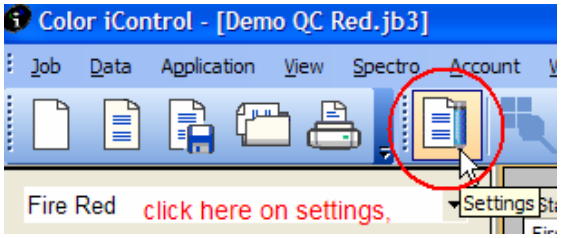
Actually, Color iQC and iMatch make it easy. Here's what you do.

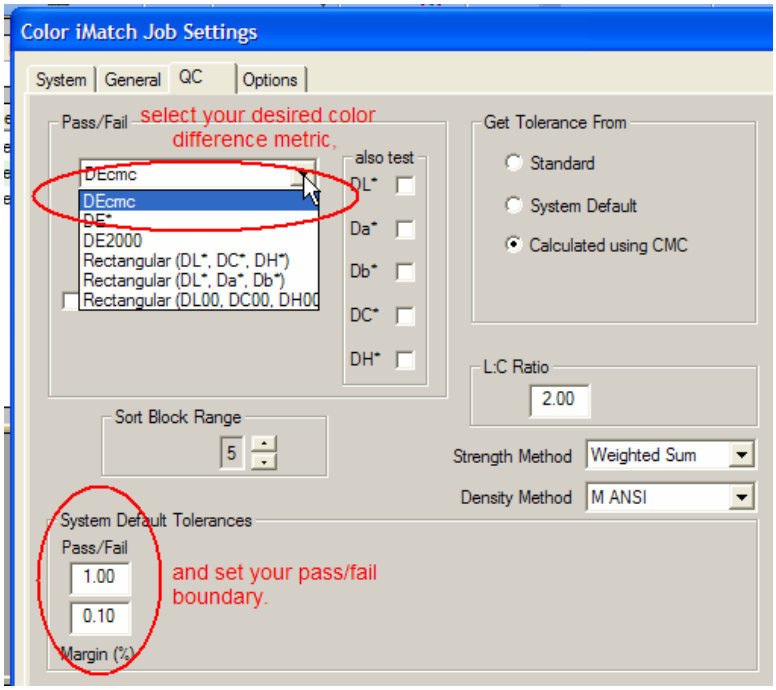


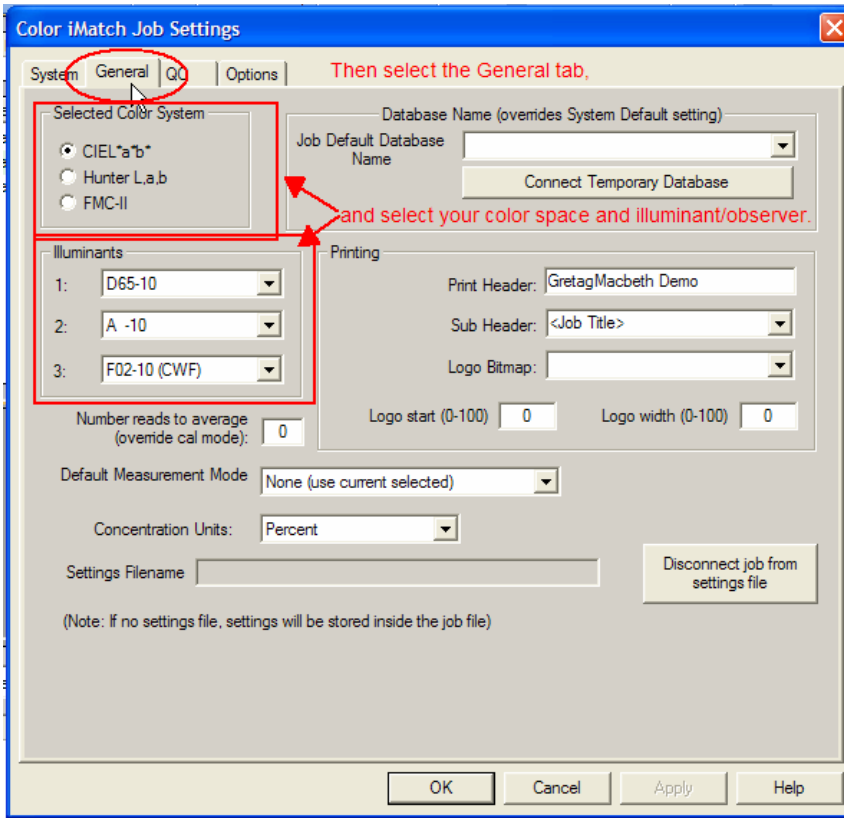


This screen is filled with items you will need to define for Best Practice for your application

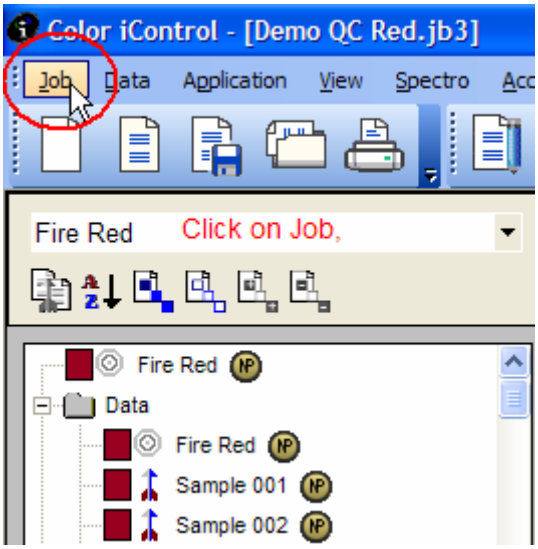
Now, let's set up the colorimetric parameters:

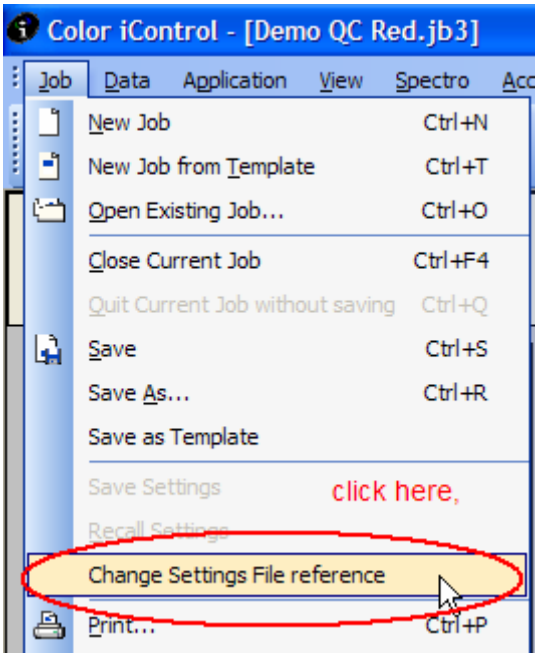


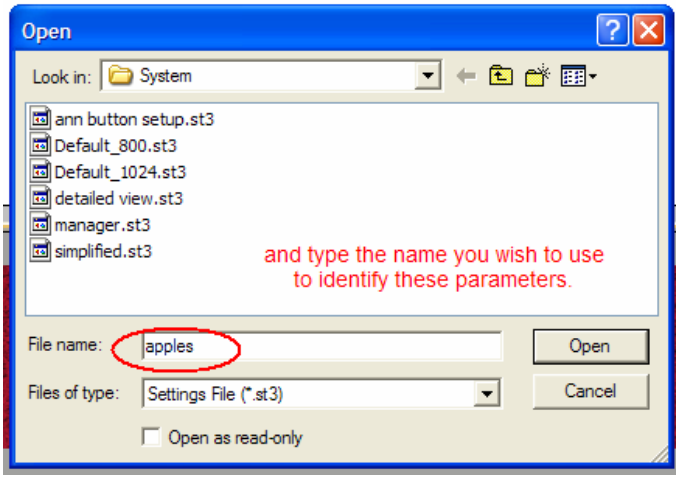




Once you set up a job in conformance to your Best Practice for a specific application, you can save the settings to a file for future work. For example, we'll save these settings as "Apples".

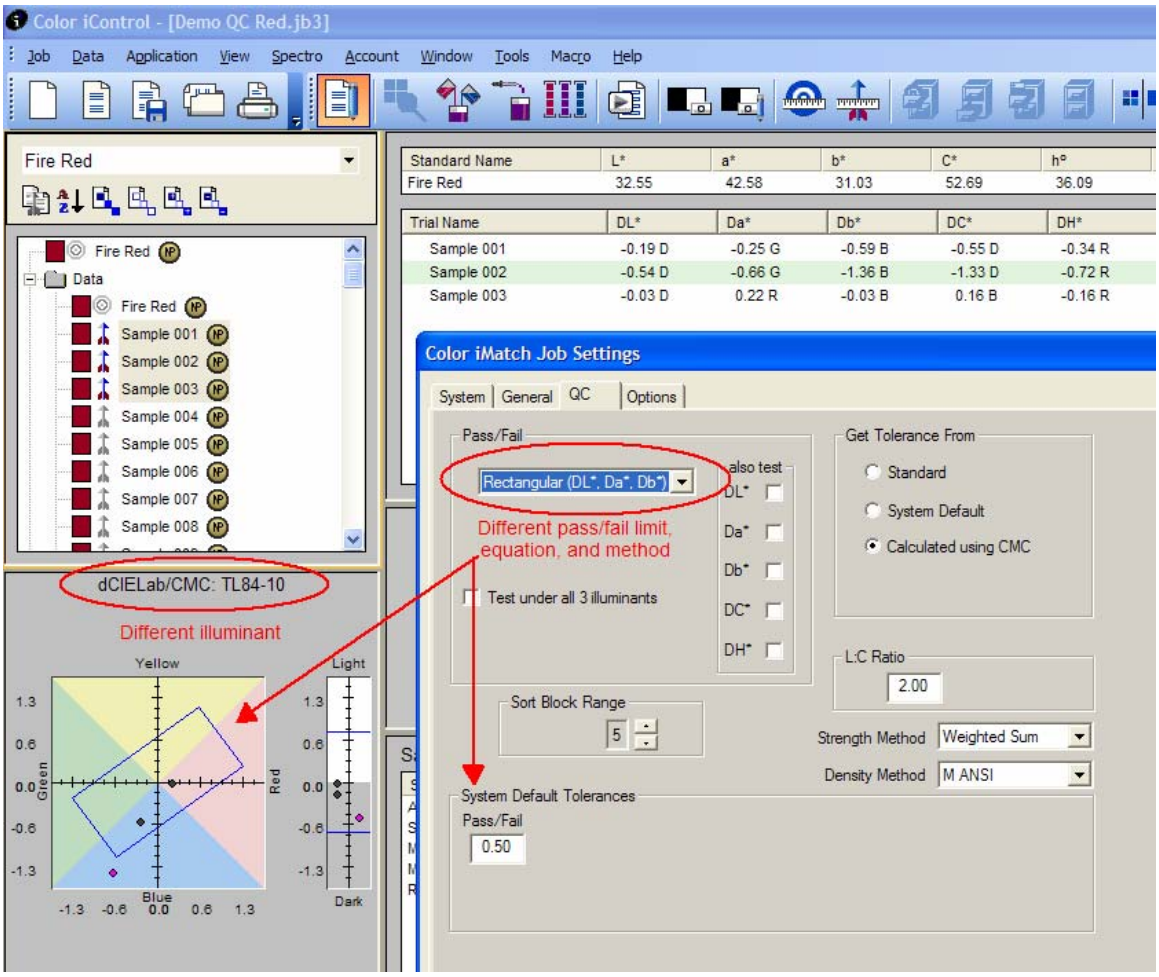


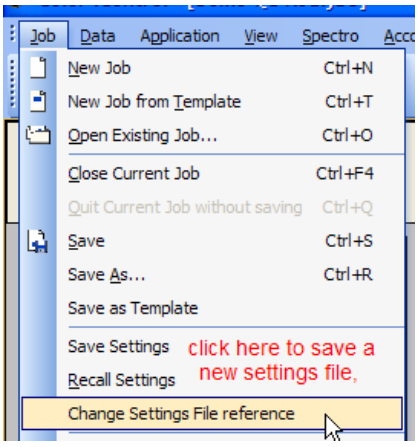


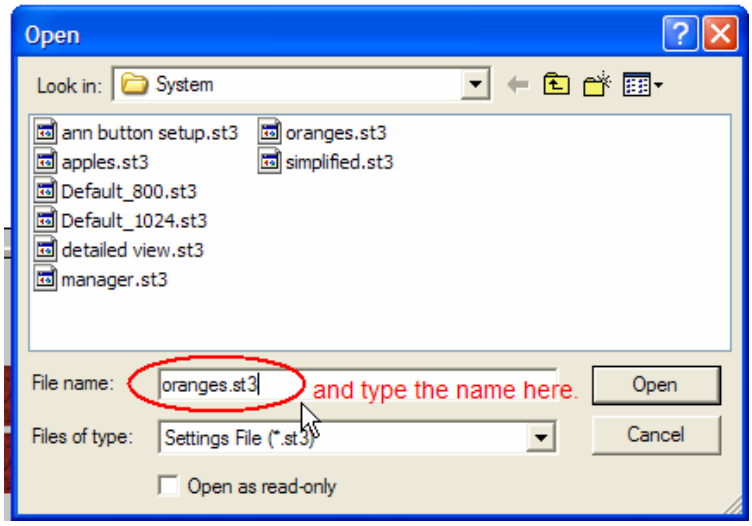


From now on, any jobs that point to the Apples settings file will have the parameters and setting you have defined.

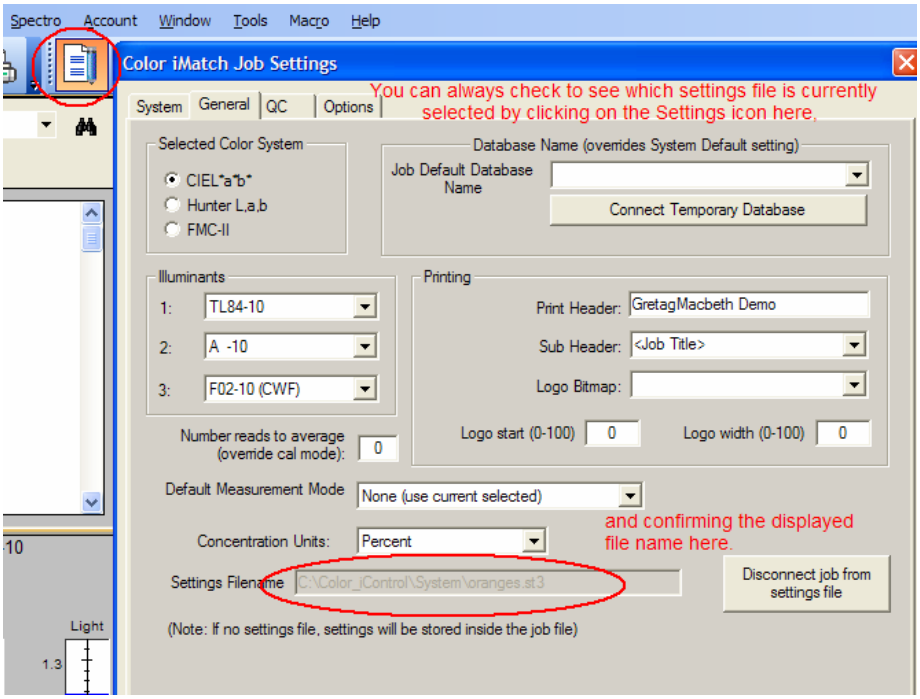
Now, let's say you need to create a different set of Best Practice parameters for another application. We'll call it Oranges.







Now, you can easily assess color measurement results in compliance with your two defined Best Practices for two difference applications, simply by using the appropriate settings file.



You now have the tools you need to establish and maintain a program of Best Practice color measurement. And, you've made it easy for others in your organization to understand the relevant parameters of your Best Practice, and conform to your requirments.

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