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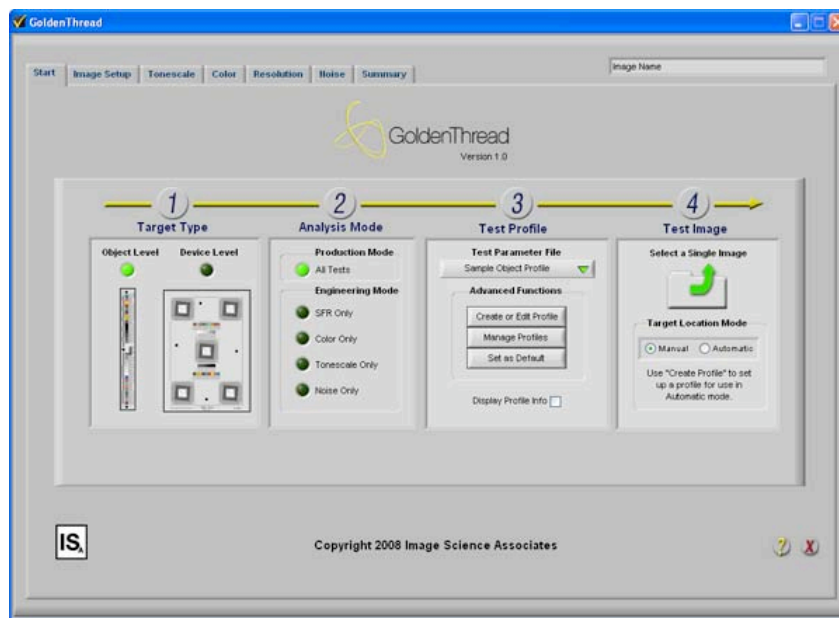
**University of Michigan
School of Information
SI 675 Digitization for Preservation (Winter 2011)**

Assignment 2: Digitization Quality Assessment

GoldenThread Analysis Procedures

The GoldenThread software is “virtualized” on a School of Information server, available to you through specialized login procedures. For security reasons, the server containing the GoldenThread software is available directly to you ONLY from UM campus IP addresses. You will be able to use a U-M configured VPN client from home. The GoldenThread technical manual is on CTools, along with a specialized user manual developed for the course.

Place your USB drive in one of the open slots and confirm that your image files are accessible.



1. Open GoldenThread

- Choose (1) Target Type: Object Level or Device Level, depending on the analysis you will do for your image from the device target or the parameter and object target.
- Choose 2) Analysis Mode: All Tests, but you can experiment with manipulating this section to see how the system responds.
- In (3) Test Profile, do nothing. Retain default profile. Do not change profile settings.
- Choose (4) Test Image, select Single Image (Target Location Mode = Manual). Find your device target image or object target image on your USB drive. The access path to your test images may be complicated in a virtual mode. The default desktop, for example, is not the desktop on your personal computer. You can confirm the file name, which is displayed in a box in the upper right corner of the interface panel
- Once your image has been retrieved and displays properly, use the Rectangle Selection Tool to select the entire target (Object or Device). If you mess up here, go back to step 2d and repeat.
- Click, Crop & Identify. Confirm that green boxes are properly located [highly likely]
- Click, Run.

- Click, Tonescale. Click OECF Curves. Confirm that Gamma matches scanner setting.
- Click, Show gamma to lay ideal curve configuration.

2. Examine OECF curves and reach tentative conclusion about scanner tone scale issues for the scanner you used. Consult Manual, pp. 36-40 plus additional sources for interpretation guidance.

- Click, Resolution. Click SFR Curves.

3. Examine SFR charts and reach tentative conclusion about scanner resolution performance of the scanner you used. Consult Manual, pp. 19-35 plus additional sources for interpretation guidance.

- Click, Summary. Make note of Pass/Fail grade for each category
- Click, Color.

4. Examine charts for DeltaE 2000 and reach tentative conclusion about scanner performance for color balance.

5. Optionally, and for 20% extra credit, provide interpretation of scanner or camera performance for the measures of Noise, Artifacts (registration and uniformity), and White Balance (Manual pp. 41-42)

6. Complete the analysis for the Device image and at least one Object image (two tests in all). Optionally, compare findings for two or more object targets. They should be nearly identical. You may run as many analyses as you wish. They are automatically saved to the appropriate database.

7. Export your findings to Excel and save on USB drive.

- Open either Object Level Database or Device Level Database
- Change setting on “Security Warning” [options] to “enable this content”
- Set filter “Operator” for the team name you put in that field. This will identify only the analyses you completed.
- Highlight your files by clicking in the left box – shift-click the full set. I believe Ctrl selection for individual files does not work properly.
- Choose to export data to file. Click the boxes for “CIELab, DeltaE, and Spatial Frequency”
- Click “Export to Excel”
- Name your file and save on USB drive. You will end up with one file for each analysis test – one file for each record. You should have three excel files, each containing different data for each record you chose.
- Quit program and remove/eject your USB drive.