Design Tool Testing

The Beta Server

If you have made changes to files that you think are ready to be put on the main design tool file, you will need to test them first. You can do this on the AguaClara Beta Server. This is located on the computer in the AguaClara lab that faces the white board. Ask the design team leader for the username and password.

Before you test, there are a few things to keep in mind:

- If you update the server files (LabView code) you may need to specify file paths for the program to run. To do this, start the server and click on the yellow folder button next to the "Pause" button. A dialog box will pop up whose title will ask you to select the Design Tool folder. Highlight "ADT Designs" (under Final Designs) and then click "Current Folder." Then the dialog box's title will ask you to select the Requested Designs folder. This folder is "DesignRequests" found in Documents. Highlight it and click "Current Folder" again. Finally, the dialog box will ask you to specify the Completed Designs path. The filepath for this folder is D:\inetpub\wwwroot\Designs. Highlight and click "Current Folder." You should be able to run the server as usual now, and the server will remember these file paths until the next time you update.
- Do not commit 2007 .docx versions of the Design Specs. These versions will make the server crash. You may convert 2007 versions to 2010 in Word before running the server.
- Try not to resize the AutoCAD window after it pops up. Resizing the window will affect the quality/size of the preview images that appear on the webpage containing the final design returned to the user.
- In Final Designs/ADT Designs/EtFlocSedFi you will see a file called EtFlocSedFi2 after a design has been made. This file is EtFlocSedFi with the requested flow rate saved inside, and you may want to use this to help you debug.
- If you want to test an older version of the code, you can put the svn version number in the "ADT version" field next to the "SVN checkout" button before you submit a request. You may also update the Final Designs folder to a specific revision (right click Final Designs -- > Toritoise SVN -- > update to revision), and leave the ADT version field at 0. When the field is it zero, it just tells the server to read out of Final Designs as is.
- When you are debugging, you want to hit the "Stop" button on the server. You can hit the white arrow again to rerun it.

1. Go into Documents and update the Final Designs folder.
2. Edit EtFlocSedFi so that it includes the references you want to test.
3. Scroll down to the very bottom of EtFlocSedFi where Q.Plant is displayed. If a number appears there, you have references in one of the files you are testing and you need to delete them before you proceed. Do not proceed until all references are deleted and Q.Plant appears undefined at the bottom of the file.
4. Open up LabView 64 bit. Click "AguaClara Design Server.vi" to open the server. Click the white arrow on the top left to run the program.
5. There are two ways to test your files. The first time around, I would recommend doing it as the first section describes below. After an initial testing, run through the second set of instructions for a thorough testing.
    a. Initial testing:
        i. Go to http://designbeta.cee.cornell.edu:8080/adt/data/etflocsedfi.html
        ii. Submit requests for a few of average flow rates. On the server, you will see EtFlocSedFi (with the files you are testing as references) open up and it will disappear shortly after.
        iii. Check your email for the designs and debug any obvious errors before doing a thorough testing as described below.
    b. Thorough testing:
        i. Click on the version control tab on the server. Select the "method" you are testing and click "Create Stock Designs." The server will now test a wide range of flows using your code. It will take about an hour or so to process all of these requests. As they are processed the server will send a confirmation email to the cuaguaclara@gmail.com account including a link to the webpage http://designbeta.cee.cornell.edu/Designs/xLps/, where x is the flow rate of the particular test, that the server has just updated. Wait until the email lands in the inbox before you check the design to ensure you are not reviewing an older test. The server will produce pages for 6, 9,12, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100, and 120 L/s. All links to your test designs may be found at: http://designbeta.cee.cornell.edu/Designs/"method"/, where "method" is the particular method you are testing (e.g. EtFlocSedFi, LFOM, etc).
        ii. Check the designs for bugs carefully. Debug all problems you see in the average flow range, and any quick fixes you see for extreme flows. Test again.
6. If there are more extensive bugs, discuss with your team leader the strategy for committing the files. If there are extensive bugs only for extreme flows, your leader may decide it's ok to commit anyway and will put the challenges you discover on the task list to address later. Your leader may also decide that the improvement to the tool is more important that the bug that appears.