Open Design Engine - Feature # 37: Visual diffs for graphical file formats

Status:	New	**Priority:**	Normal
Author:	J. Simmons	**Category:**	
Created:	09/24/2011	**Assignee:**	
Updated:	11/07/2013	**Due date:**	
Subject:	Visual diffs for graphical file formats		

Description

"The one **killer** feature that OSHW needs for project management sites is visual diffs between revisions. It's totally possible, for any file format that lends itself to conversion to graphical formats (e.g., schematic diagrams, physical layout, gerber files). Is this on the menu?" - from Google+ conversation with Windell Oskay

History

10/26/2011 01:35 pm - J. Simmons

Blog post elaborating on visual diffs in the context of EE:

http://www.evilmadscientist.com/article.php/visdiff

07/20/2013 02:11 pm - Christopher Sigman

A simple version of this might be easy to accomplish by converting both images to 4-bit grayscale (16 shades of gray), then applying a color filter to the two of them so that one is say blue and the other red, and finally overlaying the second on the first.

07/22/2013 09:41 am - Jeremy Wright

Very cool idea Chris. I like the concept. So, I assume the files would have to be 2D drawing files or snapshots of the same 3D view in some sort of image format?

07/24/2013 06:27 pm - Christopher Sigman

Yep, that's correct. Doing diffs of a 3D object that isn't at the same view and orientation, etc, would be a bit more complicated. This is the same for cases where the size is not the same, or the proportions or scale have changed. Without user interaction, the images would have to be analyzed for features, and then scale and orientation resolved, which if there was rotation in a perpendicular plane especially, might not work. That can still be done as a second iteration of this feature, but I think the initial idea will probably work pretty well for a good number of cases.

11/07/2013 03:43 pm - J. Simmons

- Estimated time set to 16.00

Comments

 - Chris - if we stick to image file formats (png, pdf, jpeg, etc) this could be very straight forward, maybe 16 hours

 - J - not sure about the utility of working off of hand generated files, worried many users will get their png or pdf files out of sync with the actual source file, and really what needs to happen is the server needs to be able to generate the image files from the source files for itself, making this a much larger project....

 - J - guess we could start with just image files and if there is any real utility, investigate generating the images from sources on the server automatically