Open Design Engine - Feature # 27: Engineering file management features

Status:	New	**Priority:**	Normal
Author:	J. Simmons	**Category:**	
Created:	04/09/2011	**Assignee:**	
Updated:	03/22/2013	**Due date:**	
Subject:	Engineering file management features		

Description

Source code control for embedded systems or computer based controls, etc should be stored in one of the available Version Control Systems (VCS) such as SVN, bzr, git, etc. But engineering documents offer challenges that VCS do not handle well (very large, on order of GB files, primarily binary files). Here are some specific requirements for engineering documents. (Should investigate Enterprise CMS like Alfresco for underlying capabilities, as many of the features below are available in this class of tools.)

History

04/09/2011 04:19 pm - J. Simmons

Additional requirements:

- Easily manage very large files (on order of GB)
- Easily handle binary files
- Find a way to keep binary files (like drawings) from entering conflicted states (one option, per rpulkrabek's comment on the forums is to allow users to mark files as in use or checked out to indicate that other users should not work on those files)
- A method to inform others, and possibly restrict others, that a certain item is currently being worked on, to avoid different design changes happening at the same time.
- A history or RSS feed of the most recently modified items.
- Document number generation. Possibly a running number to uniquely identify each document or part and possibly associate this number to the document. If this method is used, it's suggested that the number is also associated to a more readable description ex: ID=12345678rev01; Description=OHKLA COMBUSTION CHAMBER. Another thing to consider is variants and the numbers for that.
- Thumbnails next to each item to quickly view what each file is (useful for CAD models).
- A page/site to see all available attributes, such as, ID, Description, Creater, Modifier, creation date, modified date, etc.
- Configure file storage so all files in the project (including attachments to issues/forum posts, source code VCS files, and files specifically loaded into the engineering file management system) are stored in the engineering file management system. Attachments should include link back to page where they are attached in the meta-data for the file. The idea is that all of the files wind up in a central location for easy search/backup, but are still available on the page where the context about them is located.

03/22/2013 01:55 pm - J. Simmons

Some of this is covered by DMSF. Other aspects should be proposed to the DMSF team and we should work with them to implement them.