How can I create a digital twin of a project?

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The digital twin (or design one, build many) concept has been used in various large projects. Often you will be asked to resubmit documents which have already been used on previous projects, and reference the previous document numbers etc.

In these scenarios, the tag numbers should all be the same (maybe some add/remove, but many which are the same).

DocBoss allows you to copy projects (and equipment lists), but we don't copy documents from one project to another. We created the following suggested sequence of steps to allow you to copy data from an original project, and re-use it when re-submitting documents on a digital twin project.

Its a bit involved, so to be clear - this handles some complex meta data requirements for the new coverpage:

- Every document must display the ORIGINAL document number/title/revision on the new submittal coversheet (showing its the same).
- A yes/no flag identifying that ONLY the tag numbers have changed or other changes
- A description of any changes/reason why a new doc (page and comment)
- The new document will have its own unique number.
- Assumes the TAGS/Models etc are the same. If you uploaded a new equipment list, be sure that there are no extra characters on the tags showing a duplicate "-P2". You can add that later, but for now they should be the same.

Here are the steps we would follow:

- 1. Copy project with equipment.
- 2. Copy stages/levels if not set.
- 3. Add custom doc code fields (to system first then enable on project)
 - Previous Doc No.
 - Previous Title
 - Previous Rev
 - Same Doc (except tag) [checkbox y/n]
 - Updated page/comment [text you will enter i.e. pages:comment (put all pages and comment in same field)]
- 4. Copy old data to new cards
 - a. Export card list from both projects (ORIGINAL and NEW)
 - b. In the NEW card list, use VLOOKUP formulas (using CARD NAME as your matching field) in each of the 3 fields you need to pull into the NEW card list.
 - Previous Doc No.

- Previous Title
- Previous Rev
- 5. Export all docs from previous project (use card name as ouput).
- 6. The card names of both projects should match, so you can bulk upload all docs into new project. Make sure you advise the system whether there are/are not cover pages on upload so system will remove them. You can drag drop too, but bulk match is much faster/no errors.
- 7. Issue all docs in a customer submittal which you DO NOT SEND TO THE CUSTOMER. This will LOCK LOCK all of the cards, and allow us to start tracking card to unit changes, and assign cards to osbolete in future steps. Even if you will eventually replace the files some cards, you want to upload all to force them to obsolete when tags are changed.
- 8. Update equipment list. ** Don't update equipment list until this point! If you change earlier, your cards may not be pushed into the card to unit changes, or the obsolete area. We want to preserve EVERY card.
- 9. Accept all card unit to changes.
- 10. In card list, check the "Same Doc (except tag)" field for all cards with attached cards (where only the tag list changed).
- 11. For all obsolete cards, make decision if cards should be reattached. i.e. For tag level cards (e.g. datasheets), you will generally need new files (as the tag generally INSIDE of the actual document).

For this step - if you need to keep the cross reference, you will need to re-attach the obsolete document to the new card (the cards have been removed). And THEN upload the new cards. Remember that when you remove all units from a card and they go to obsolete - new cards are created. They will not have the cross references. But - if you reattach the files from obsolete - the system will fill in the data from the obsolete card.

- 13. Void the submittal so all docs are reset to X status. Ready to be resent (except obsolete ones)
- 14. Upload any new files
- 15. Submit all for real.