



# Design Data Manager 2011

## Implementation Strategy

This document provides a strategy on implementing Design Data Manager and for getting your legacy data, part libraries, and documents into the Design Data Manager vault. By following this advice it will help to avoid problems down stream when it gets rolled out for company wide use.

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**April 19, 2011**

This document lays out a suggested implementation strategy for getting data into Design Data Manager (DDM) 2010 and early BETA 2011 versions. Again this is suggested, and if these steps are followed it should eliminate most problems you will have in the future as it is rolled out for company wide use. It is still dependent on the users still to make sure the data is clean and working before being imported. The old rule still applies, “garbage in, garbage out”.

Before any data is imported you must set up DDM and configure it to match the needs of your business. Drew Engineering offers training and installation and we highly suggest that you do so. With the purchase of training, we provide training manuals in electronic format that give step by step details on how to do certain functions in DDM and these will make your implementation experience a pleasant one. The training manuals are DDM Administrator Basic and Advanced, DDM Office Basic and Advanced, and DDM Professional specific to your cad program.

Below are the suggested steps:

1. We have a check list of things to have in place before installing DDM. Install Design Data Manager on the server and on the clients. Make sure that they are opening properly and they are talking to each other. You must fully configure DDM before importing as well (DDM comes with placeholders and it will work, but it must be populated with your users and requirements). You should also configure your cad parameter mapping tool before any imports are done and also the automated part numbering tool if you plan to use it. DDM requires IIS for their floating licenses, runs on a SQL database, and requires .NET Framework 2.0. This can be either full blown SQL 2005/2008 or SQL Express 2005/2008 which is free from Microsoft. It is important that the system is up and running before importing data into the DDM system. We highly suggest that you purchase installation and training!
2. The first data that should be imported into DDM are family tables or configurations. This is done because these will cause the most problems if they are not imported first. If the family tables are part libraries they need to be handled a little different. For part libraries we suggest that you create a project folder called standard part libraries owned by the librarian and import these part family tables into this folder and set the state to release and lock these in the folder. This will allow for others to have a read only copy, the ability to show up in BOM's and assemblies but does not allow them to make changes to these. This protects your part libraries from someone making a change without an Engineering Change! Once all you family tables and part libraries are in go on to the next step. We have another sheet that shows how to set up the library users and permissions. Keep in mind that DDM does not support Nested Family Tables or Configurations and we suggest that you flatten these to a standard family table or configuration whichever the case may be. We also suggest that you break large family tables or configurations into smaller ones as DDM will regenerate all instances on load and save and even though we do handle them it just speeds up the process. We do not support Family table accelerators at this time. We have some customers that have flattened all of these to single parts and it eliminates problems down stream considerably. Single level family tables and configurations work fine; it just cleans up lots of regeneration and up issue problems that may arise if not done properly.

3. Next you want to start bringing in legacy data. This is where you need to sit down and make a company decision on whether to bring in all legacy items or just the ones that are being worked on now. If you have a large amount of legacy, my suggestion would be to import any projects that are being worked on and to import any others on an as needed basis. ***Very important with legacy data: DDM has import and save functions. On legacy you want to make sure you import and do not just do a save. This allows for DDM to know if a part already exists in the database. So if you have a part that is used in two assemblies and you saved instead of imported, DDM is not going to let you save that part without either renaming or changing the revision or issue. If you imported DDM will prompt you that it is in the database already and give you the option to use the one already in the database or to rename or to change the revision or issue. The importing versus save and the family table or configurations causes most of the issues with legacy items. A good rule to use, "if ever in doubt, always import"***.
4. Best Practices for importing legacy data. Always grab the top level assembly drawing or top level assembly if there is no drawing. (Note: If the top level drawing has family tables it is best to import in the top level assy and then import in the drawing next.) What this does is bring in all the associated parts that make up the assembly and these speeds up the import process tremendously. Lower level sub assy drawings and part drawings do not import with this and you must open the drawing and the part or sub assy and then import to associate these lower ones, but do so only after you have done the top assy drawing. ***Important: Because some cad programs use search paths, these must be broken before importing. We suggest you do a backup to the C: /designdatamanager/working directory to do this. You then open this file from the cad application (with DDM Pro), make sure it opens correctly, and then import. This does two things, one it keeps a copy in case something happens on import and it keeps your data from being erased as DDM cleans up the working directory and with the search path intact you may end up losing your data in Windows Explorer.*** If your data is clean, you can go into the client configuration, under the import tab, and check the 3 auto save boxes on the top left and make sure the on re-importing previous component is set to prompt. What this does is bypasses the card that DDM creates each time a new item is brought into DDM. It still creates one it just does it in the background and speeds up the import tremendously. This is where the import versus save comes into play. ***Your data must be clean to do this.*** Once you have imported these items which will reside in the database, you want to set the state to the proper status (work, release, etc...) and remove from your workbench. There are some things we can you do on the import so if have some items with custom attributes or something similar please let us know your requirements and we can try and find a solution for you.
5. On data other than 3D cad applications, you can drag and drop into DDM. My suggestion is that you set up the options to save the file name off these on import or drag and drop in this case. You do this from DDM Office, tools, options, import, and select file name. This makes the file name of what you drag and drop populate the DDM card. When you drag and drop items, a window pops up and shows what has been imported. This is where you can make changes if you need to and you should make changes at this stage as it is easier at this point. DDM treats any item that is not a 3D cad file as a document. So items like PDF, JPEG, TIFF, etc... are treated as documents and will reside in that category when searching for them.

6. DDM will control just about any file that you can open by double clicking in Windows Explorer. That basically is the test to see if DDM will handle them.
7. This is mostly for legacy data where the rules apply most. Once you have DDM up and running and you are working in the controlled environment you do not have to go through the import versus save. The way to look at it is if it has never been in the system, always import. ***The golden rule: "If not sure, always import"***
8. DDM is very straight forward and easy to use. Once the Admin tool is set up you will probably be tweaking the permissions for the first month as some users will need more permission and some will need some permission removed. After that time it will level off with minimal effort required by the administrator.
9. We highly recommend that you purchase installation and training to make this transition easier.

Some things to consider:

- Legacy...import all, live projects only, or on an as needed basis.
- Custom Part Numbering? DDM has an automated part numbering tool that can match almost all schemes. Or create a new one or go with Sequential. Legacy data comes in as is.
- Set up the cad parameter mapping tool allowing DDM to talk to the cad programs.
- Custom attributes! Define what you want to come in now so it can be done on import or through a CSV import.
- Library items. Do we use family tables or configurations or do we want to flatten this and use single parts. DDM will handle either one; it is back to a preference decision. Flattened libraries take longer to build but you generally experience fewer problems. Remove ***nested*** family tables and configurations before hand. They go in the system it is down stream where problems arise.
- Drawing Formats. Get them ready for DDM as the title blocks can be auto-populated along with the revision blocks.
- Training. Training pays for itself very quickly and in my opinion is a must. I have users that jump in and do great but if you do not have any previous PDM experience these users need to have a short introduction to get up and running. Again we require less than the others for training and implementation, and I've had a group up and running right away with minimal problems so it can be done.