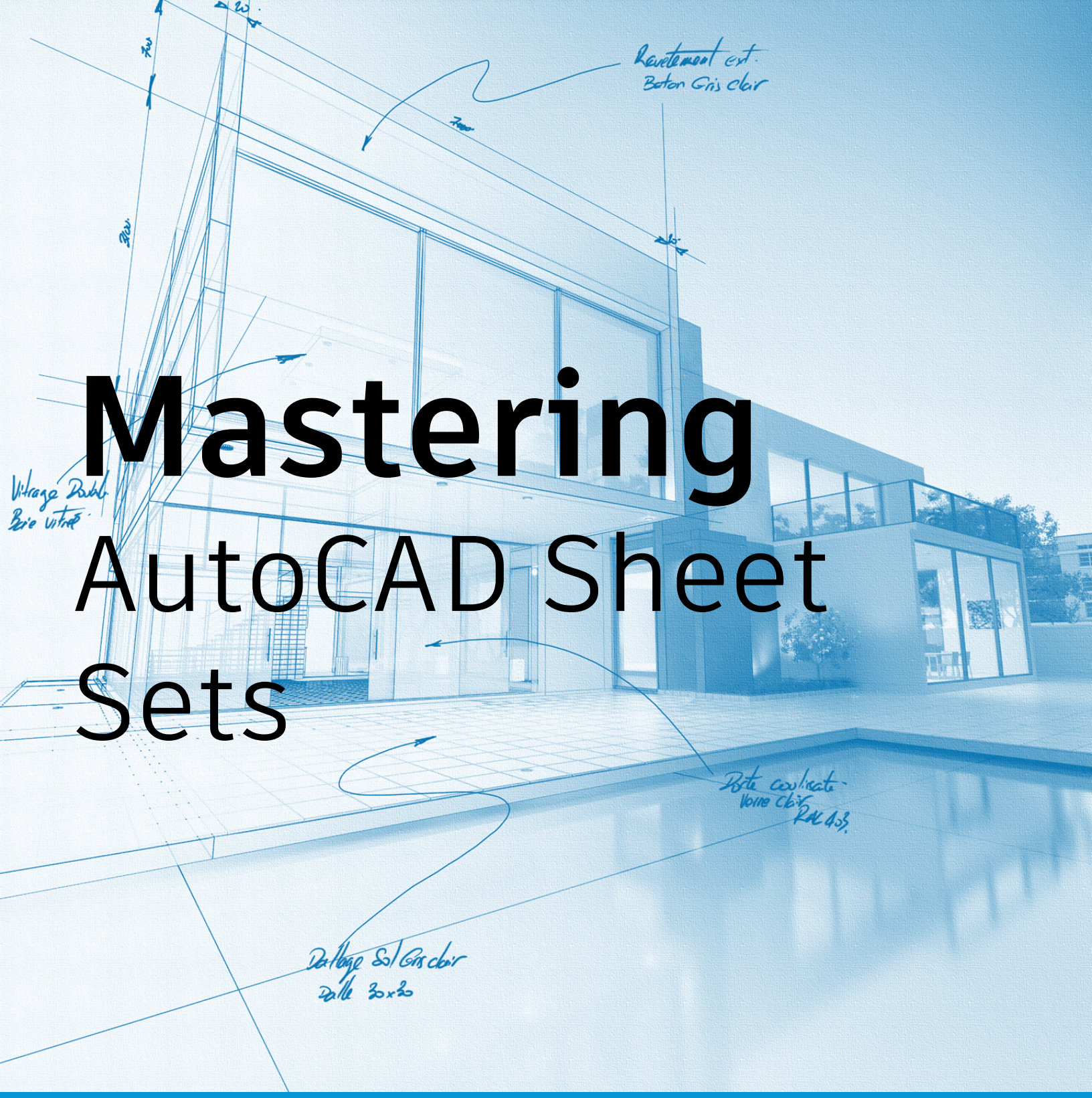


Mastering AutoCAD Sheet Sets

An Expert Guide

AUTODESK® AUTOCAD®

Contents

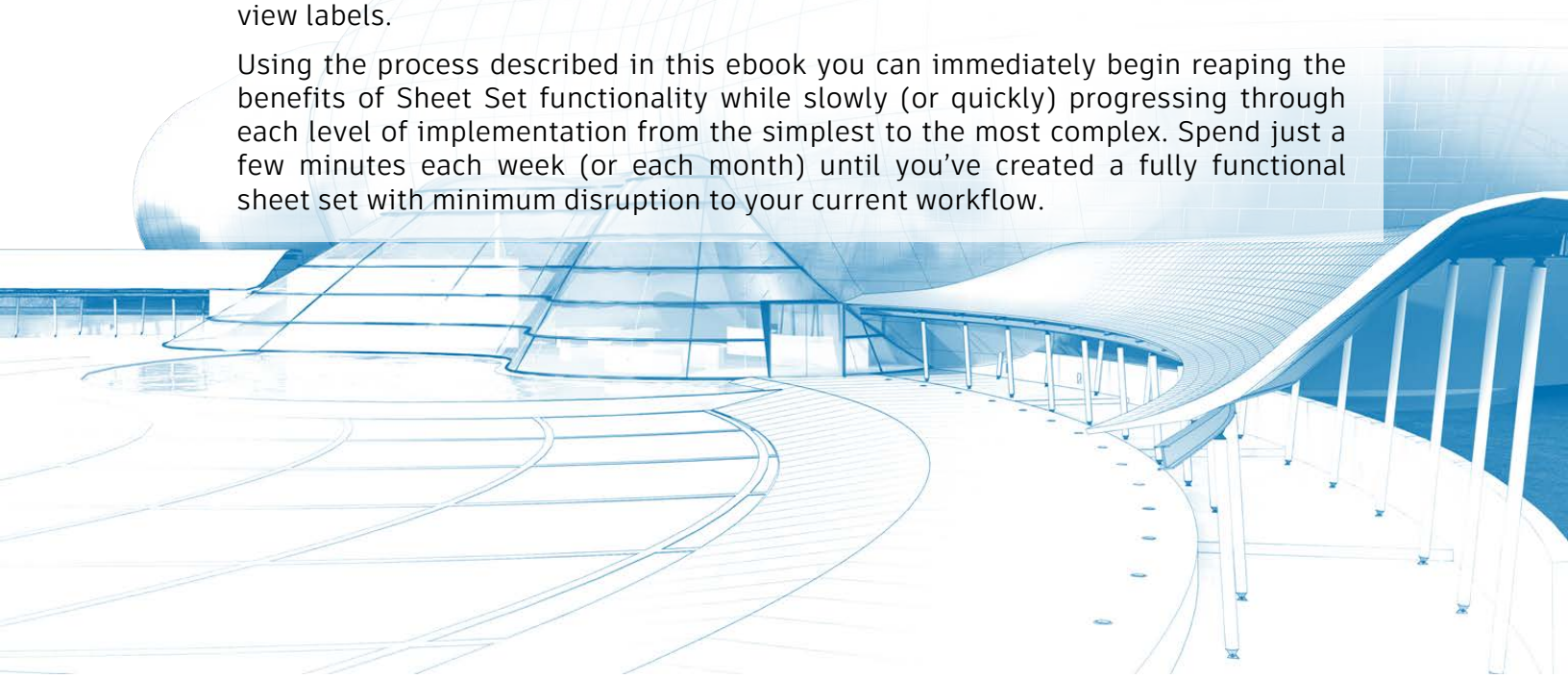
Introduction

Whether you design manufactured parts, maps, or buildings, the sheet set functionality in AutoCAD enables you to efficiently create, manage, and share your entire set of sheets from one convenient location. At first glance, the powerful functionality offered by the Sheet Set Manager may seem overwhelming but you don't have to learn and implement all of the functionality simultaneously.

Begin taking advantage of sheet set functionality for your current projects with minimal effort by importing your current drawing layouts into a sheet set. You can easily open drawings from a central location while you continue to edit those drawings using traditional tools. Create new sheets using traditional tools and then import those sheets into your current sheet set. Easily plot, publish, archive or create an electronic transmittal of the entire set of drawings.

When you feel comfortable using the most basic sheet set functionality, you can begin assigning sheet set properties and even create custom properties. Assign a drawing template file to the sheet set to easily create new sheets directly from the sheet set manager and include fields to help automate title block data. Finally, you can easily plot to any named page setup, regardless of the page setup that is saved in each of the drawing layouts. Moving on to the most powerful sheet set functionality, you can create sheet views and use fields to automate callouts and view labels.

Using the process described in this ebook you can immediately begin reaping the benefits of Sheet Set functionality while slowly (or quickly) progressing through each level of implementation from the simplest to the most complex. Spend just a few minutes each week (or each month) until you've created a fully functional sheet set with minimum disruption to your current workflow.



Process Overview

The drawing file created by the Sheet Set Manager (SSM) is just like any drawing you create using traditional methods. You can draw geometry in model space, create additional layout tabs, etc. The only technical limitation is that each sheet in the SSM sheet list can only point to one layout in a drawing file. If you have more than one layout in your drawing, you can import those additional layouts into your sheet list.

There is no technical reason why you shouldn't have multiple layouts in your drawing, however the new sheet set paradigm or "best practice" is to have one sheet drawing (DWG file) for each sheet in your set. The main benefit for this is to enable multiple users to work on different sheets at the same time. If you have two sheets that point to different layouts within the same drawing, the drawing file will be locked as soon as one person opens one of those sheets, which is how AutoCAD has always worked.

Even if the intended process for implementing sheet sets deviates from your current workflow, don't be deterred from using them. You can accomplish more than half the process without changing your current workflow while enjoying significant productivity gains all along the way.

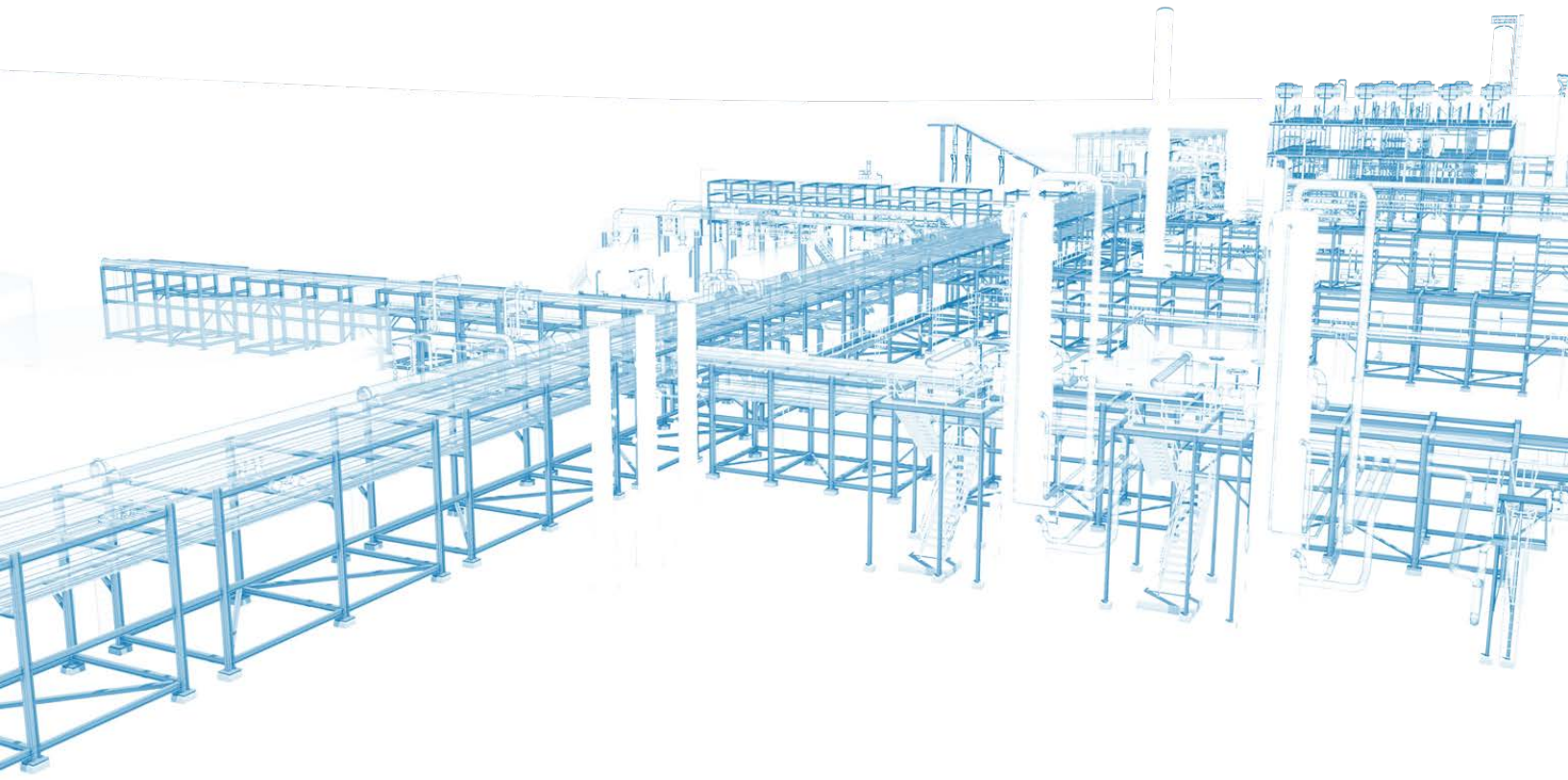
Below is a quick overview of how sheet sets are intended to work.

1. Create your model geometry in its own drawing file (DWG). Continue to create model geometry in modelspace including xrefs, nested xrefs, etc. In that particular DWG file, focus on nothing but the model… try to forget that the layout tab even exists, this is your "model file". From now on, let the "sheet file" deal with the layout.
2. Create a new sheet in the sheet set manager. This will create a new drawing file (DWG) with an active layout tab. The sheet name in the sheet list is simply a shortcut to that layout in the DWG file.
3. Open the sheet, which is really opening the drawing file with that sheet layout active.
4. Add resource drawing views to the sheet layout. This is where you create layout viewports and attach the model drawings as xrefs. Using the sheet set paradigm as it was intended, you collect design information from other sources (external references attached in model space) and assemble them into a sheet layout (titleblock, viewports, notes, etc in paper space). The only objects that should exist in model space are the attachments to external files.
5. Add sheet information to the sheet layout. You might add sheet notes or other sheet (paper space) information that is specific to the sheet. Although you can (technically) draw in model space, create more layouts, etc, the intention is for this particular DWG file to be a single sheet with external references to model drawings.

The above process isn't strictly enforced with sheet sets. However, you should consider how you can transition to this process so that you can take full advantage of Sheet Set functionality.

Aside from separating your Model and Layout into two different drawings, the general concepts (xrefs, model space, viewports, layouts) should be familiar to you. You can get started with sheet sets (Steps 1-8) and transition to a sheet set master (Steps 9-13) without significantly changing your current process. You'll likely see the most significant changes to your current workflow when you implement sheet sets for maximum efficiency (Steps 14-17).

It's important to remember, however, that regardless of how many steps you implement, sheet sets enable you to save time and work more efficiently! So, what are you waiting for?



Getting Started

Even if you only have a few minutes every few days, weeks or months, you can begin taking advantage of sheet set functionality. This section shows you how!

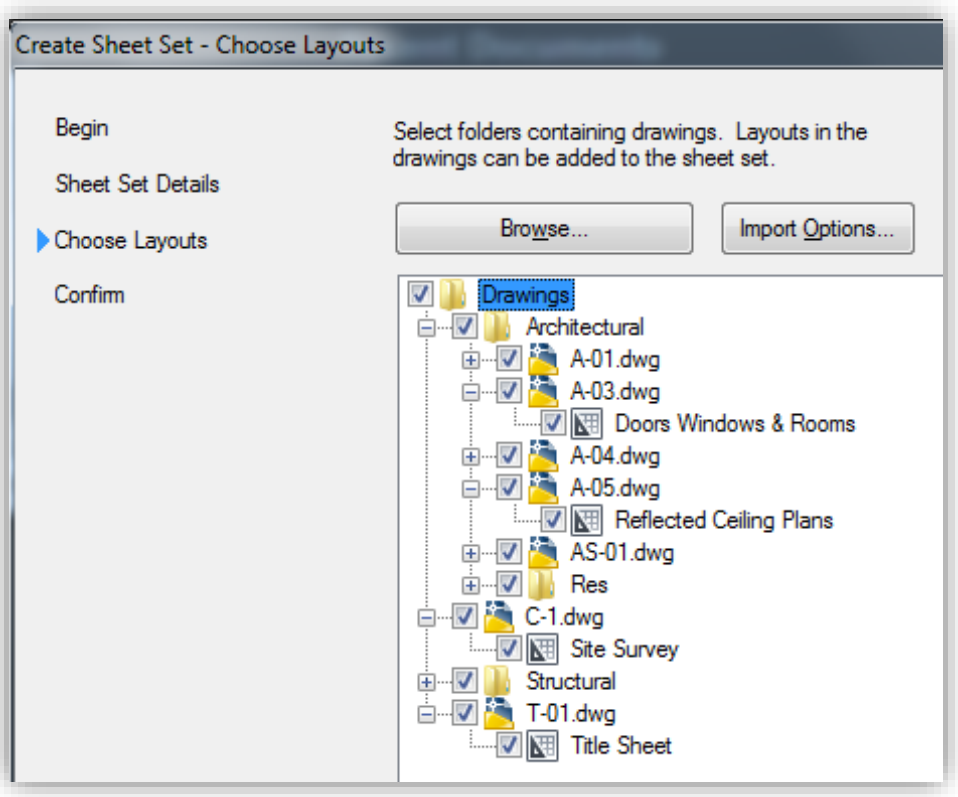
Step 1: Creating a new sheet set

The first step in implementing sheet set functionality is to create a sheet set. You can create a sheet set using an example sheet set or by importing existing drawing layouts as sheets. Although AutoCAD includes several example sheet sets, it is unlikely that they will meet your specific needs. A simpler method for creating your first sheet set is to import drawings from one of your existing projects. After you configure your first sheet set to meet your needs, you can use it as an example to create future sheet sets.

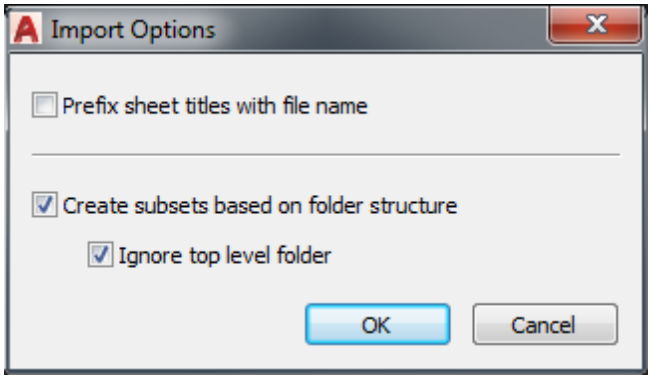
In order for you to create a new sheet set based on existing drawings, those drawings must use layouts. Don't worry about "messing up" your drawings by creating a sheet set. A sheet set file is simply a file with a DST extension, which has pointers to your drawing files.

1. Begin the Create Sheet Set wizard.
    - From the Application menu, choose New > Sheet Set.
    - In the Create Sheet Set wizard, select Existing drawings.
2. Specify the name and location for the sheet set file. The sheet set file is an XML-based file, with a DST extension. You can think of it as your project file.
    - Enter a name for the sheet set. Typically, this would be the project name.
    - Provide a description for the sheet set. The description is optional.
    - Specify the location to store the sheet set data file. Typically, this would be the main folder for this project.
3. Select the appropriate layouts to import.
    - Choose Browse and navigate to the folder where your project drawings are located. Typically, this would be the main folder that includes project drawings and/or drawing subfolders.
    - Expand the folders and drawings so that you can see all the layouts that you want to include as sheets in the sheet set. If your drawings include multiple layouts, they will be displayed in the list.

- Select all of the layouts to be included as sheets in the sheet set. Remember to select only the drawings/layouts that you want to be represented as sheets. For example, you wouldn't select drawings of model geometry that are used as xrefs.



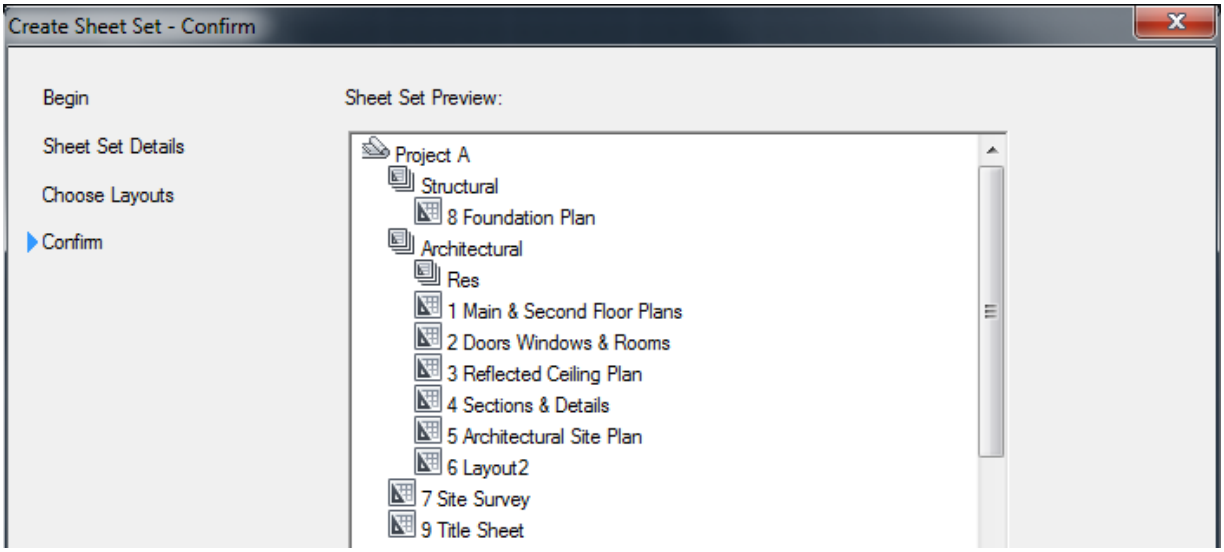
4. Specify the appropriate import options.
   - Choose Import Options.



- Specify the options that fit your situation. If you want the drawing file name to be included as part of the sheet name, choose the option to prefix sheet titles with file name. If you want to create subsets in the sheet set file that match your folders, choose the option to create subsets based on folder structure. Subsets are like visual folders that enable you to organize your sheets in the sheet list. If you don't want to create a subset of the main folder from which you are importing your drawings, you can choose Ignore top level folder. Don't worry too much about these options because you can always reorganize your sheet set later.

5. Finalize the sheet set.

   - Review the sheet set structure. You can preview your sheet set before completing the sheet set process. If the sheet set preview is missing sheets or has extra sheets that should not be included, you can use the back button so select different folders, drawings, layouts, or import options.
   - Choose Finish. When you are satisfied with the sheet set preview, you can complete the sheet set creation process.



After exiting the Create Sheet Set wizard, your sheet set data file will automatically open on the Sheet List tab of the SSM. The sheet names in the sheet list are like shortcuts or pointers to the layouts in your DWG files. The drawings have not changed and AutoCAD didn't create new drawings or folders. All it did was create a sheet set data file with a list of sheets that link to your existing drawings. Now you can use the SSM to organize and open your drawing sheets. Right-click on a sheet name and choose Rename and Renumber to enter a sheet number or change the sheet title. Drag and drop sheets to reorganize them in the sheet list. And, double-click on the sheet name to open the associated drawing in the drawing editor. Even if you only use the SSM as a tool for opening your drawings, you will save time and increase efficiency. You no longer have to navigate through complex folder structures or remember archaic file names. Just double click on the sheet name!

Are you worried about “messing up” your drawings as you experiment with the sheet set manager? Read on…

TIP: *At this point, absolutely nothing in your drawings has changed. However, if the sheet set is open in the SSM and you open and save the drawings that are being pointed to by the sheet set, a small piece of data will be saved with the drawings. This data is called a “hint” and it tells the drawing (DWG) files which sheet set they belong to. Having the hint in a drawing enables AutoCAD to automatically open the appropriate sheet set even if you open the drawing using traditional methods. The “hint” is the only change that AutoCAD will make to your original drawing files. If, for some reason, you want to “undo” the sheet set, you can right-click on the sheet set name and choose Close Sheet Set and then delete the sheet set data file (DST). If you delete the DST file without first closing the sheet set, the DST file will be automatically recreated. After you successfully delete the DST file, you can open and save the associated drawings to remove the hints.*