

Import Graphics...

MAPP Online Pro gives you the ability to import DXF files by clicking Import from the File menu. You can set import options such as drawing limits as well as distance units.

To Import Graphics:

1. From the **File** menu, choose **Import > Import Graphics...**
2. Select the DXF file for import.
3. Choose the distance unit used in the target DXF file (i.e. if the the DXF file's drawing units are in inches then choose inches, if they are in meters, choose meters).
4. Click **Import**.

When importing a DXF file, the fewer objects in your drawing the better! Imported drawings should contain only the necessary vectors representing walls, doors and windows. Additional elements might include hanging points for lighting and any scenic elements related to your application. Take out any unnecessary objects from your drawing, and make sure that the origin point (0,0) is located at the edge of downstage center.

Tips on importing DXF files:

MAPP cannot display regions, surfaces, ellipses, splines, circles, dimensions, polylines, 3D solids, 3D faces and polyface meshes. It will also only display text at it's full scale.

The key is to get these items out of the drawing or changed to something MAPP can display: lines, arcs, and circles parallel to the XY plane. (MAPP is much more lenient when the entities are all laying flat on the XY plane.)

File size:

MAPP will only import DXF files of 4MB or less in file size. The xref pane in AutoCAD will show the current drawing size - so having that open while paring the drawing down is helpful to see how much impact each of these operations has on the overall file size. DXF is by nature a larger file size than DWG so saving as DXF will be an important step in getting the target file size down to the recommended 4MB.

Objects that represent seats in the listening area:

MAPP can import some blocks, but only if they don't contain any of the non-displayable entities. So the best practice is to have everything exploded. One of the things that can help keep the file size down is to use refedit to change the seats in bulk before exploding them and make them a simple rectangle (exploded) rather than a fancy 2D or 3D item. Then when exploded they become a simple shape rather than a complex one. The sheer number of these will help keep the files size down for later.

AutoCAD's Quick Select:

The Quick Select tool which can be found in the properties pane (it looks like a funnel). Once invoked the user can specify a type of item to be selected and select all of that type of item in the entire drawing. Once these items are selected the user can evaluate the need for these items and either delete them if they are unnecessary or convert them to a usable form if they are necessary.

Ellipses & Splines:

Numerous third party utilities exist to convert ellipse and ellipse arcs into polylines. They mostly convert the ellipse to something not at all representative of the original. One method that is successful is using the offset function with an extremely small number for the offset to make a copy of the ellipse into spline. Then delete the original ellipse and use the flatten command on the spline with the remove hidden lines feature on. This will convert the spline into polylines. Then explode the polyline into lines.

Arcs & Circles

This third-party VLX will convert arcs and circles to lines with excellent accuracy. http://www.cadforum.cz/cadforum_en/download.asp?fileID=282 Use the appload command in AutoCAD to load the utility. Then select the arcs and circles and use the newly loaded arc2lin command with the default settings. This will convert the arcs and circles into lines. Again if the arcs and circles are not parallel to the XY plane they should be flattened first.

Purge:

The purge command contributes significantly to reducing the file size, however the following conditions need to be met first:

1. All blocks exploded
2. All xrefs bound or detached
3. All entities on the same layer (preferably layer 0)
4. All entities having same linetype (Bylayer, layer 0 set to continuous)
5. All entities having same color (Bylayer, layer 0 set to color 251 makes autocad portion of the MAPP file fall into the background of the sound field and makes it easier to see the speakers and centerlines)
6. All entities same lineweight (Bylayer)
7. All text you need to keep exploded with the Express Tools "Explode Text" function
8. Layer 0 is current layer

Once all of the aforementioned steps are accomplished the purge command can be invoked. The user will have to hit the "Purge All" button a few times as an entity will get deleted on the first pass then that will allow the layer it was on to be deleted on the next pass, etc. This will delete all the stored blocks, textstyles, linetypes, dimension styles, unused layers, etc. Your drawing should have only one layer (layer 0) when this is completed.

3D Objects:

These can be dealt with a number of different ways. The SectionPlane tool in AutoCAD works quite well if the entities are solids. Draw a SectionPlane line through the entities and Right-click: activate live sectioning. This will draw a cutting plane through the solids in the drawing and when combined with the right-click: Generate 2D/3D section/Export to a file option will make a 2D section cut through anywhere you want saved to a new file without changing with the original drawing at all.

Overkill:

The Overkill command in AutoCAD will delete lines that are on top of other lines. In other words, once the entities are all flattened there might be many lines occupying the same space. This will delete all of these extra lines. The Fuzz Factor setting can be set to 1" (2.5cm) or larger. This will delete parallel lines that are within 1" (2.5cm) of one another and replace them with one line. This is a memory-intensive operation and should be executed on only a few hundred entities at a time by selecting a portion of the drawing before invoking Overkill.

Origin Point:

The origin point (0,0,0) should be re-defined to be the Downstage Center Point of the venue.

Linetypes:

Make sure all linetypes are set to Continuous and the same lineweight for best performance.

Layers:

Frozen Layers are not ignored.

If the DXF is still not importing:

If the drawing is still too big: use Quick Select to select all lines with length less than 1" (2.5cm). Delete all of these. Usually the larger architectural elements needed for MAPP are not that small. This can be taken further to 2" (~5cm) or 4" (~10cm).