

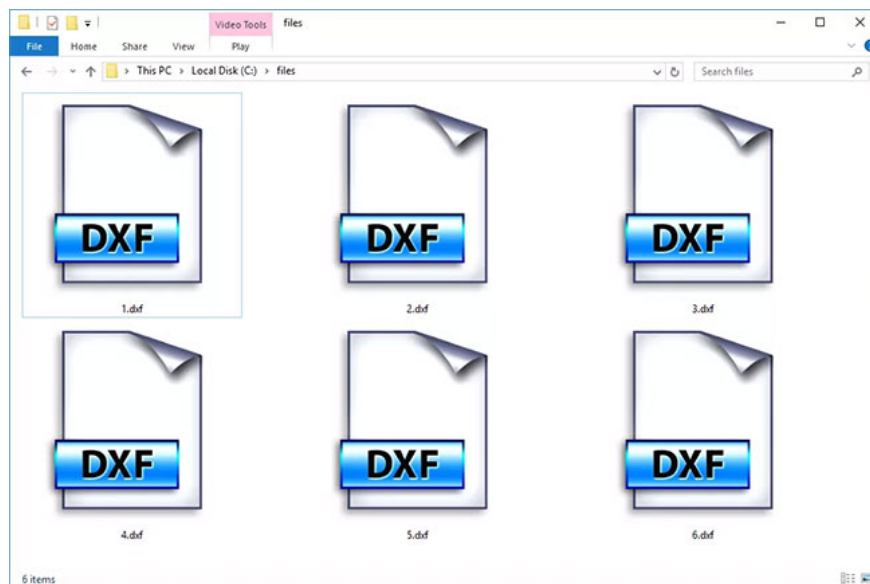
What is a DXF file?

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The DXF format is similar to the AutoCAD Drawing Database file format which uses the DWG file extension. However, DXF files are more widely used in CAD programs because they can exist in an ASCII, text-based format, which naturally makes them easier to deploy in these types of applications.

DWF files are similar to DXF files but are instead used for sharing files online or through free viewers, while DXF is intended for interoperability.



Outstanding features of DXF files

Despite its limitations, the DXF file format has the ability to store information that makes it an indispensable part of many different industries. Now, let's take a look at some of the notable features of this format.

ACCURACY

Like its DWG cousin, the DXF file type stores vector information and is known to be quite accurate at doing so. Unlike raster files, vector files do not lose quality when resized. This ensures accurate results for CNC machining and 3D printing projects.

DXF files can store positional data with up to 16 bits of floating-point precision, meaning they have an accuracy of 0.0000000596046. DXF files can store points and vertices at this accuracy, depending on the file's unit of measurement.

PROPORTION

Since the units of a DXF file are included in the geometry data, there are no scaling issues with this file type. Scaling issues are a common headache when working with files like STL, as each program that uses an STL file can have a different default unit. The DXF format bypasses all of this hassle with a unit variable that is automatically read by any program that can understand DXF files. If you are working with the same file in different CAD programs, this can save you a lot of trouble.

COOPERATE

The DXF format allows collaborators from different disciplines to work together on the same design for a project. Regardless of which CAD programs team members use, everyone can work together on the same version of the design. For example, an architect and an engineer using different CAD applications can share their work in a DXF file, which is an extremely useful feature.

How to open DXF file

Autodesk has a number of different free DXF file viewers available, including an online DXF viewer called Autodesk Viewer , as well as the desktop DWG TrueView program . There's also the AutoCAD 360 mobile app , which lets you view your DXF files stored in online file storage services like Dropbox.

eDrawings Viewer from Dassault Systèmes SolidWorks is another free DXF file opener. To quickly open DXF files online, use ShareCAD .

Some other DXF file viewers include Autodesk's AutoCAD and Design Review programs, TurboCAD, CorelCAD, CADSoftTools ABViewer, Adobe Illustrator, and ACD Systems Canvas X.

Cheetah3D and some of the programs mentioned above will work when opening DXF files on macOS. Linux users can work with DXF files using LibreCAD .

Since ASCII versions of the DXF format are just text files, they can be opened with any text editor. However, doing so will not allow you to see the drawing as you would in an actual model viewer. Instead, they will just have some sections containing letters and numbers.

1. What is an INDD file?

How to convert DXF files

Use Adobe Illustrator to convert DXF to SVG. Another option is to use a free online converter like [Convertio](#) .

Getting DXF files in DWG format (current and older versions) can be done with the trial version of [AutoDWG DWG DXF Converter](#) . You can only use this software for 15 days and on one file at a time.

The [eDrawings Viewer](#) program mentioned above can save the opened DXF file to many formats such as EDRW, ZIP, EXE, HTM, BMP, TIF, JPG and PNG.

To convert a DXF file to PDF, one option is to upload it to [DXFconverter.org](#) and select the PDF option . That site also supports saving DXF files to JPG, TIFF, PNG, and SVG.

[Bear File Converter](#) can be useful if you want DXF files in STL format.

[dxf2gcode](#) can save DXF files to G-CODE format for Linux CNC with NGC file extension.

To use the text contents of a DXF file with Microsoft Excel or some other spreadsheet software, you can convert the file to CSV using [MyGeodata Converter](#) .

One of the DXF viewers above can also convert this file to another format, such as an Adobe Illustrator AI file.

More information about DXF format

Since the DXF format was released in 1982, there have been a few changes to its specifications, which is why you might have one DXF file in binary format and another in ASCII format. You can view a PDF of the specifications on the [AutoCAD website](#) at:

http://images.autodesk.com/adsk/files/autocad_2012_pdf_dxf-reference_enu.pdf

Recent versions of AutoCAD support both ASCII files and binary DXF files. However, if you happen to be running Release 10 (which dates back to 1988, so this is unlikely), you can only work with ASCII DXF files.

A typical DXF file is organized in order with sections HEADER, CLASSES, TABLES, BLOCKS, ENTITIES, OBJECTS, THUMBNAILIMAGE and END OF FILE. You can read all the details about each section in the PDF file linked above.

[Scan2CAD](#) and [myDXF](#) are a couple of websites where you can download DXF files for free.

Still can't open the file?

If none of the above programs or services open your file, double-check that the file extension is actually .DXF, or something similar like DXR (Protected Macromedia Director Movie) or DXL (Domino XML Language), both of which open with programs unrelated to the CAD software mentioned on this page.

Frequently Asked Questions

What is a CAD file format? .DXF files, along with other CAD formats, are most commonly used in 3D modeling.

What are .DXF files used for? CAD files are used in a variety of industries from engineering to designing products to bring to market to creating realistic models for marketing campaigns.

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