QUICK START ----DXF to Illustrator (2.1 ß)

january 1995
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Legal stuff:
This is a demo-version of DXF to Illustrator 2.1ß. This demo-version has the following restrictions: A maximum size for DXF files (approx. 150 Kb); Only one conversion at a time; Log-menu dimmed; Annoying messages and sounds.
Those who have purchased the full version can use the license number included in the package to personalize their copy and thus get the fully functional version.

System demands:
For using DXF to Illustrator (and its demo-version) you need:
- An Apple Macintosh computer. It runs on any Mac running system 6.0.5 or higher, but a minimal configuartion of a 68030-based machine with system 7 is recommended. It has been tested on SE/30, IIx, IIcx, IIci, IIsi, Quadra 650, Centris 650 and PowerMac 6100/60, running system 7.0, 7.1 and 7.5.
- 300 Kb free on disk (hard disk recommended).
- At least a 1 Mb memory partition (more if your DXF files are complex). In order to get a decent speed of conversion, DXF to Illustrator runs its conversion in memory, not on disk.

The full version:
At present there's a fully functional 2.1ß version available for about Dfl.1400 from:
ITC, Consulting and Research projects bureau
PO Box 6, 7500 AA Enschede, The Netherlands
tel: +31-(0)53-874444; fax: +31-(0)53-874400
Users of the 2.1ß version will get a free update to the final 2.1 version, expected fall 1995.

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The DXFtoIllustrator program converts a DXF file into an Illustrator 1.1 file. In this QUICK START the procedure for conversion is described and the procedure for importing the converted file into FreeHand.

THE CONVERSION in 9 easy steps
1. Start the program DXFtoIllustrator.
2. Choose "Setup" from the "File" menu.

A dialog box appears with settings for the conversion:

Figure 1 : Dialog box for Conversion Setup.

3. Change the following settings in this dialog box:
☐ If the scale of the map is known, select the option "Custom scale". In other cases choose for scaling to A4 or A3.
☐ Custom scale: click on the radio button and enter the number of mm on the map which equals to one DXF unit .The DXF unit is the mapping unit defined in the system you made the original map in. This could be anything, from meters to nautic miles. There is no way to find out what a DXF unit actually stands for by

automatically reading the DXF file. You'll have to find this out from the original application the map was made in.
NOTE 1: In many cases 1 DXF unit represents 1 meter. So given a **scale 1 : 100 000** and a **DXF unit of 1 meter** one should enter: **0.01 mm.**
NOTE 2: If one is not sure about the DXF unit then it is possible to examine a DXF file to determine this by means of trial and error!. See description of EXAMINING A DXF FILE.
❑ Set the other options in this dialog box as shown in figure 1. By moving the pointer over the various items, a short help text about that option is displayed.
4. Select OK button to confirm the settings. You can also save and load settings in setting files.

5. Select "Convert" from the "File" menu.

A dialog box appears for selecting the DXF file.

6. Select the DXF file which has to be converted.

Adialog box appears for naming and placing the file Illustrator file.

7. Enter a name and define the place (=folder) for the Illustrator file which will be created.

The conversion will now start. The elements that are converted will be displayed on the screen in a seperate window. Elements currently being converted are drawn in this window. For speed considerations, text is NOT drawn. Elements drawn in blue indicate that these elements belong to a DXF BLOCK and will be grouped in the Illustrator file. You can cancel the conversion by clicking the Stop button.

8. Click on the OK button when the conversion is ready (if the conversion is ready you will hear a sound).
9. Quit the DXFtoIllustrator program by selecting "Quit" from the "File" menu.

IMPORTING IN ILLUSTRATOR:
Files converted with the "1.1 standard" or "1.1 for Freehand" options can be opened by any Illustrator version.
Files converted with the "1.1+5.0 Layer Info" option can only be opened by Illustrator 5.0 or higher.

IMPORTING IN FREEHAND:
Only files saved with the option "1.1 for Freehand" can be converted correctly by Freehand.
1. Start FreeHand
2. Select "Open" from the "File" menu.

A dialog box for selecting the illustrator file will appear.

3. Select the file which you converted with DXFtoIllustrator.

The file will now (again) be converted. The file is opened as an "untitled" document.

4. Use "Save" or "Save as" from the "File" menu to store the FreeHand file with an appropriate name and in a correct folder.

EXAMINING A DXF FILE:

A DXF file can be examined with the "DXF File Info" option in the "File" menu. The main function of "DXF File Info" is to estimate the dimension of the document in mm AFTER conversion, **without** actually having to convert the document.

1. Select the "DXF File Info" option in the "File" menu.

The program will now read the DXF file. After examining the file the program will show the results in a dialog box (see figure 2).
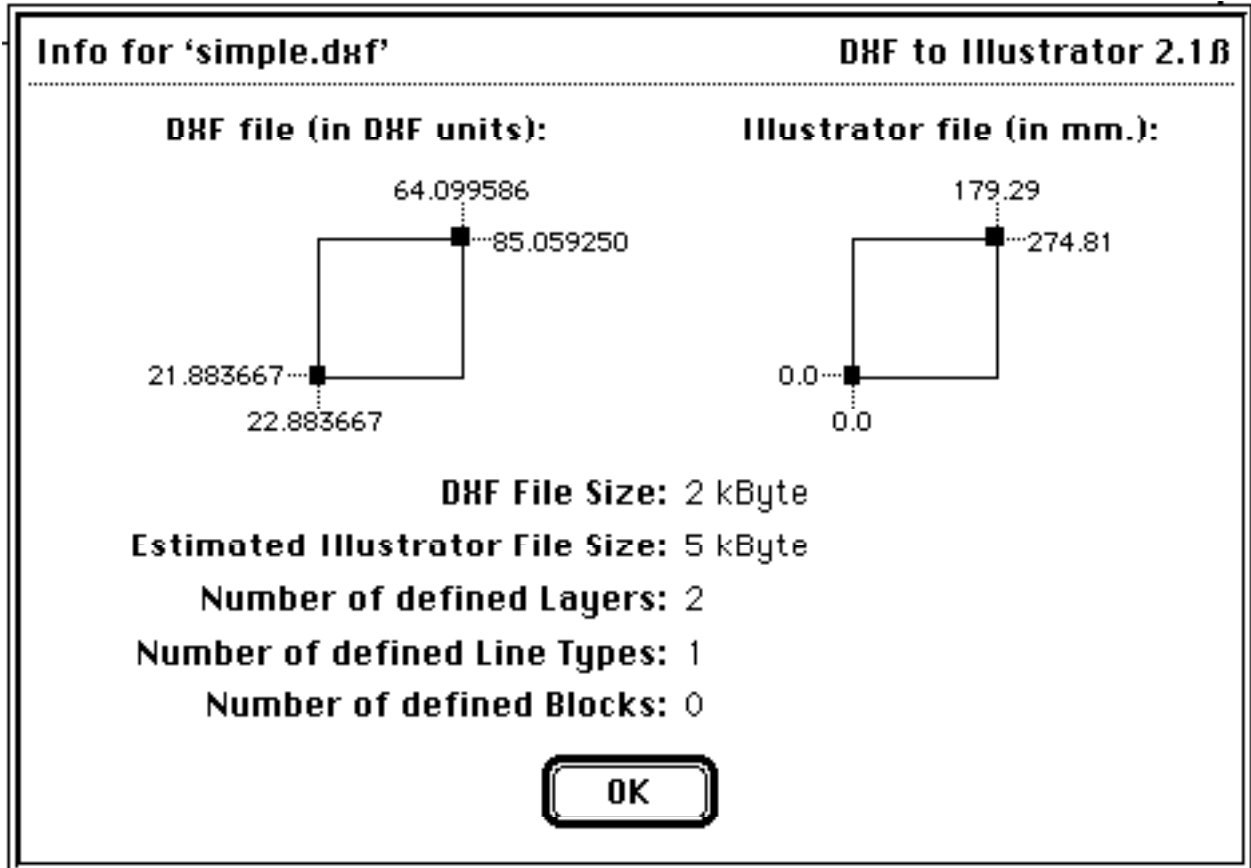

Figure 2: result of the "DXF File Info" command

The most important information given in this dialog box is:
– the Minimum X and Y and Maximum X and Y values in the DXF file.
– the dimensions of the document/map in mm after conversion.

Important:
For the calculatiuon of the dimensions in mm the program will take the **current** scale setting from the Conversion Setup dialog box!

Using "DXF File Info", you are able to find the **proper scale**:
If the DXF unit and/or the scale of the map is not known one can find these by a trial and error proces in which one successively selects the "Setup" command , changes the custom scale, checks the "DXF File Info" command for the resulting dimensions, etcetera.

SOME REMARKS ABOUT THE FEATURES IN THE SETUP DIALOG:

– Choosing "1.1 + 5.0 Layer info" will result in files that can only be imported by Illustrator 5.0 and up. Don't try to import these into other programs, this might lead to crashes! As Adobe Europe is at present not publishing the Illustrator 5.0 format specifications, we cannot garantuee a 100% safety of this option. Our tests, however, have not resulted in any problems.

– When choosing "1.1 + 5.0 Layer Info" the grouping options are dimmed, because otherwise an illegal "nesting" of layers would be possible.

– Lineweights are not implemented in the DXF-format. Most DXF-out convertors fake lineweights by converting the elements to POLYLINEs, which support a 'startwidth' and 'endwidth'. DXF to Illustrator 2.1ß can convert these 'startwidths' to (scaled) Postscript lineweights. As Postscript doesn't support variable lineweights, the 'endwidth' of an element is ignored.

– The only filled elements supported by the DXF format are SOLIDs (a rectangle or triangle). Most DXF-out convertors convert filled elements to closed POLYLINEs or ARCs.
DXF to Illustrator 2.1ß gives you the option to fill the SOLIDs, CIRCLES or closed POLYLINEs and ARCs in the DXF file. Fills will always have the current DXF line colour, as the DXF format doesn't allow seperate line- and fill-colours. Note that most DXF-out convertors will convert ellipses to closed ARCs, nót to CIRCLEs!

– DXF BLOCKS will always be grouped, regardless of the grouping options chosen. BLOCKs with elements on various layers will become a group on the first layer encountered in the BLOCK definition record. Text within BLOCKs will be seperated from the BLOCKS and converted as normal text.
Note that "Cells", as used in Intergraph DGN-files, will be converted to BLOCKs by most DXF-out convertors, thus losing any "cell-family" information.