XEROX

Xerox GLOBALVIEW

Pro IGES Converters User Guide

VP Series Applications

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Pro IGES Converters User Guide

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Preface

People throughout the world use Xerox GLOBALVIEW software. Xerox, therefore, tailors its software to meet various national requirements. As a result, you may find the default settings and property sheets illustrated in this publication different from those on your workstation. For example, the Page Format property sheet may display international page size default settings or U. S. page size default settings, depending on your national requirements. The functionality of the software, however, remains the same.

Introduction

This user guide is part of the *VP Series Reference Library*, which is the encyclopedia for VP software applications. This library provides the most complete source of information on VP software.

Before you begin

Several separate user guides make up the *VP Series Reference Library*. Each user guide provides information about a general category of applications, such as graphics, terminal emulation, or file conversion.

Before you refer to any VP user guide, you should become familiar with the following "core" documentation:

- *VP QuickStart Tutorial.* Provides training and exercises for basic workstation operations as well as for creating, editing, printing, mailing, and filing documents.

- *General User Guide.* Introduces the basic operations common to all VP applications. Also describes how to conduct a GLOBALVIEW session as well as how to use the keyboard, mouse, and color capabilities of your workstation.

- *Document Editor: Basics User Guide.* Provides complete information on creating and editing a document.

By mastering the basics, you will soon be able to use other VP applications to perform important tasks quickly and confidently.

About this user guide

This user guide describes the *Xerox Pro Illustrator to IGES Converter* and the *Xerox Pro Illustrator from IGES Converter* applications. These applications enable the conversion of files back and forth between Initial Graphics Exchange Specification (IGES) and *Xerox Pro Illustrator.* IGES is an intermediate graphics format for importing and exporting files from Computer Aided Design (CAD) systems. *Xerox Pro Illustrator* is a two-dimensional electronic illustration tool for professional artists and illustrators.

Xerox Pro Illustrator to IGES Converter converts Xerox Pro Illustrator graphics into an IGES file that conforms to the IGES version 5.0 - CALS Class 1 standard format.

Xerox Pro Illustrator from IGES Converter converts CAD graphics files into *Xerox Pro Illustrator* graphics.

How chapters are organized

The VP user guides provide conceptual and reference information. Reference material is rarely read through from cover to cover. Instead, you use it to look up specific information from time to time, much as you would use an encyclopedia.

To help you locate information, the major topics of most chapters are organized as follows:

- A key concepts section describes the principal elements of the application or feature. The key graphic marks the beginning of such sections.

- A description of property sheets, option sheets, and windows provides detailed information about the properties and options related to the application.

- A procedures section provides step-by-step information on how to use the application. The 1-2-3 graphic marks the beginning of such sections.

References to the keyboard

When referring to keys, the *VP Series Reference Library* uses the Xerox 6500 series workstation labels. Refer to the *General User Guide* in this library for a complete discussion of the keyboard layouts for Xerox workstations. If you have a different keyboard configuration, refer to your hardware documentation.

Documentation conventions

The *VP Series Reference Library* uses the following conventions:

- Square brackets. Names of commands and property and option choices that you select with the mouse appear enclosed within square brackets; for example, the [Close] command.

- Angle brackets. Names of workstation keys and alternate function keys are enclosed within angle brackets; for example, the <Open> key and the <Props> key. This convention applies to alphabetic and numeric keys. It does not apply to words used to describe keys marked with arrow symbols, such as the tab key.

- Italics. Application names beginning with VP and XWS, user guide names, and the library name appear in *italics*.

- Bold. Names of properties, options, selections in the User Profile, notes, and information you must type appear in **bold**.

As often as possible, graphic images (such as pointer arrows) are printed in the text as they appear on the screen or on the keyboard.

CAUTION: Cautions advise you of actions that may damage your equipment or software, or cause loss of data or time.

Software requirements

The following software must be installed, enabled, and running on your Xerox workstation:

- *XWS*
- *XWS NetCom, RemoteCom,* or *Standalone*
- *VP Document Editor.*

CAUTION: Common software loaded during installation (such as *Font Manager* and *Workstation Keyboards)* may be visible in your application loader. Do not delete these applications because applications that depend on them will not run. System messages will direct you to reinstall the required software.

For IGES file conversion, you must also install, enable, and run the following:

- *Imaging Basics* (6500 series workstations only)
- *Xerox Illustrator Basics*
- *Xerox Pro Illustrator*
- *Xerox Pro Illustrator to IGES Converter*
- *Xerox Pro Illustrator from IGES Converter.*

Refer to the *VP 3.1 Software Installation Guides* for detailed installation information.

Related documentation

The following training materials are recommended reading. You should be familiar with their contents before using the *Xerox Pro Illustrator to IGES Converter* or the *Xerox Pro Illustrator from IGES Converter* applications.

- *File Conversions User Guide*
- *Xerox Pro Illustrator Reference Manual*

Information for VP CUSP Button programmers

If you are writing a CUSP program and want the program to refer to icons for the applications described in this volume, use SimpleTextDoc as the icon type (case does not matter).

1. Overview

Xerox Pro Illustrator to IGES Converter software converts Xerox Pro Illustrator graphics into graphics files encoded according to the Initial Graphics Exchange Specification (IGES) standard 5.0. Xerox Pro Illustrator from IGES Converter software operates in GLOBALVIEW to convert an IGES graphics file into a VP document with Xerox Pro Illustrator graphics. Using these conversion applications, you can transfer graphics back and forth between VP documents and other graphics systems.

Characteristics of IGES files

Following are some of the important characteristics of IGES files that help you to understand the functionality of Pro IGES Converters.

• IGES files are encoded using the ASCII character set.

• IGES files are generally large, sometimes more than 3,000 disk pages.

The IGES standard format uses entities. An entity is a unit of information, and can be geometric or non–geometric. The geometric entities define the structure of the graphic: lines, curves, points, and other basic geometric elements. Non–geometric entities enhance the appearance of the graphic.

IGES file data can describe a three–dimensional figure. View and drawing are non–geometric entities that determine the positioning of the figure. One set of geometric data can have multiple views.

The geometric data representation in IGES is three–dimensional, and the geometric data representation in Xerox Pro Illustrator graphics is two–dimensional. A two–dimensional Xerox Pro Illustrator file remains two–dimensional when converted to IGES using Xerox Pro Illustrator to IGES Converter. The Xerox Pro Illustrator from IGES Converter converts three–dimensional IGES files into two–dimensional Xerox Pro Illustrator graphics.

The IGES file should always contain a Drawing entity. Refer to the IGES Specification Version 4.0 (National Institute of Standards and Technology#PB 86–199759) for a complete description of the IGES standard.

VP conversion applications use the Converter icon to convert the documents. When you load and run Xerox Pro Illustrator to IGES Converter and Xerox Pro Illustrator from IGES Converter software, new options appear on the converter property sheet.

For more information about the Converter icon and general conversion information, refer to the File Conversions User Guide in the VP Series Reference Library.

Conversion limitations

These limitations apply to the *Xerox Pro Illustrator to IGES Converter* application:

- One IGES file results from each Pro Illustrator frame in the VP document. Each IGES file is named according to the source document.

  For example, if the source document is VPFile, the IGES file is named VPFile. If there is more than one frame in the source document, a numeral is appended to the IGES file name: VPFile1, VPFile2. The output from multiple source documents is placed in a desktop folder named after the VP document. If the source file is VPFile, the folder name is also VPFile.

- Not all *Xerox Pro Illustrator* fonts have equivalent IGES fonts. Appearances may change.

- *Xerox Pro Illustrator* supports more area fill patterns than IGES. Multiple patterns may convert to a single pattern, obscuring the results.

- CALS class 1 supports only five line patterns. *Xerox Pro Illustrator* lines map onto similar IGES lines, but some line patterns may not match exactly.

- All text is left–aligned in the text frame.

- Word–wrapped text frames are treated as a single line of text, beginning in the lower left corner of the frame.

- Tab characters have no IGES equivalent and are not converted.

- Non–ASCII characters not supported by IGES are lost.

- Arrowheads and line endings convert as groupings of lines and curves that preserve the original shapes.

- IGES files are IGES version 5.0, CALS class I standard files.

The following apply to the *Xerox Pro Illustrator from IGES Converter* application:

- You can create up to 100 *Xerox Pro Illustrator* frames in a single VP document.

- The IGES file must be an ASCII document of file type 0 or 2, with fixed length lines of 80 characters (or 80 characters plus <CR> or <LF>).

- Color graphic objects that do not have color equivalents in GLOBALVIEW, will be converted to colors most similar to the source object. Color properties for the object will appear as [Unknown] on the Object property sheet.

- IGES text frames are scaled in size like other graphic objects.

- The text may not fit entirely inside the frame, and may be clipped from view by the frame boundary.

- Text is converted as left–aligned within the text frame.

- The text in adjacent text frames may appear to overlap.

For example, if you have an IGES file with two IGES–defined text frames on the same start point, one at a 45 degree angle and one at a 90 degree angle, they appear overlapped at a 0 degree angle in the converted VP document. Figure 1–1 illustrates this example.

Figure 1–1. **Sample text frame conversion**
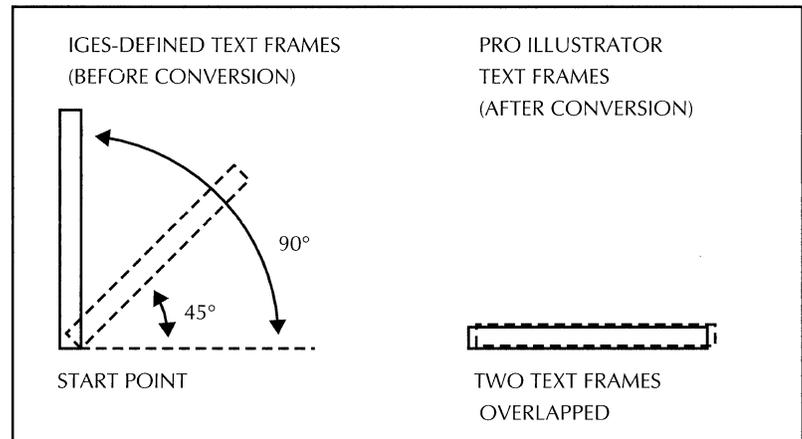
- If the IGES file does not contain a Drawing entity, the software converts each View entity into a separate Pro Illustrator frame.

- Each Drawing entity in the IGES file is converted into an equivalent Pro Illustrator frame.

- An IGES file can contain one or more View entities.

- View determines the perspective governing the conversion from three–dimensional IGES graphics to two–dimensional Pro Illustrator frames. The loss of the third dimension results in frames that may look quite different from the original graphics. For example, the two–dimensional top view of a cylinder looks like a circle; the two–dimensional side view of the same cylinder looks like a rectangle.

- CALS class 1 supports only five line patterns: solid, standard dash, centerline, phantom, and dot. IGES lines convert to similar line patterns, but the appearance may be slightly altered.

- Arrowheads appear the same, but are detached from the original line.

2. Basics of file conversion

VP file conversion software consists of two elements: the converter software, represented by the Converter icon, and the specific conversion application software. Each conversion uses application–specific software. *Xerox Pro Illustrator to IGES Converter* software converts *Xerox Pro Illustrator* files to IGES. *Xerox Pro Illustrator from IGES Converter* software converts IGES files to *Xerox Pro Illustrator* files.

The Converter icon is the interface between you and the file conversion process. You move or copy your data file to the Converter icon. The conversion software converts the data file and then passes the file back to the converter. The converter completes the process by placing a new icon for the converted data file on the desktop.

Key concepts

The file conversion has three basic elements:

- The data icon representing the data file for conversion
- The Converter icon
- The specific conversion application software.

Data icons

Before you can convert a data file you need to obtain the file and place it on your desktop. Each data file is represented by a data icon. Your system classifies data files by file type and assigns specific icon shapes to some file types.

IGES files are file type 0 or file type 2 VP documents.   A VP document is represented as a rectangle with one folded corner. Refer to the *File Conversions User Guide* in the *VP Series Reference Library* for more information on data icons.

Figure 2–1.   **Data icons**

Converter icon

The Converter icon (Figure 2–2) must be displayed on the desktop for any file conversion activities to take place. You can customize converter operation by accessing the Converter Properties sheet and setting the various available properties.

Figure 2–2. **Converter icon**

```
■→□
Converter
```

To work more efficiently, you can create multiple Converter icons on your desktop, each set up for a specific type of conversion. For example, you can set up three Converter icons: the first to convert ASCII documents, the second to convert spreadsheets, and the third to convert IGES files.

Then you simply copy or move the source document to the appropriate Converter icon. The software automatically performs the correct conversion.

Basic conversion process

The data icon representing your data file must appear on the desktop or reside in a folder on the desktop. You can either copy or move the data icon to the Converter icon.

If you copy the data icon representing your source data file to the Converter icon, the source data file remains in its original location on the desktop. The software places the converted data file in the first available location next to the source data file. A record of each conversion is filed in the Converter History log, discussed later in this chapter.

You can edit a data file that is converted to simple text format in the same way as any other simple text document. You cannot open a file larger than 64k as a simple text document. Change it to a VP document using the ASCII converter, and edit the resulting file as a VP document.

Multiple data file conversion

Multiple document icons can be copied or moved to a Converter icon. Read "Move Icons to Converter" later in this chapter for details on icon moves.

The output icon for each converted data file appears on the desktop as close as possible to the left of its corresponding source data icon.

If a data file cannot be converted, a message appears in the desktop message area. You can choose to skip the particular file, or stop the conversion process.

Folder processing—You can convert data files contained in a folder all at once by copying or moving the closed folder to the Converter icon, or you can select individual files from the open folder. Be sure to read "Move Icons to Converter" in this chapter if you decide to move the folder.

When you copy or move a folder to the Converter icon the software converts the file in one of two ways: one–to–one conversion or grouped conversion.

If a data file in a folder cannot be converted, a message appears in the message area. You can choose to stop the conversion process, or skip the particular file.

One–to–one conversion—When you convert a folder containing several data files, the system places a new folder containing the converted data file on the desktop to the left of the source folder. The files in this folder are sorted alphabetically.

The converted data file appears as close as possible to the lower right corner of the screen.

If you move a data file to the Converter icon and have the [Delete Source Icons After Conversion] property off, the system moves the source file out of the container and places it near the lower right corner of the screen.

Grouped conversion—The Converter icon can also treat a folder (and its contents) as a single item.

Document pagination

Each time you begin a conversion to a VP document, the Converter icon consults the User Profile to determine the type of pagination to perform. If you are converting non–VP document files to VP format, you can have the converted document automatically paginated by the system.

You set the pagination option by selecting one of three pagination options in the User Profile. To edit your User Profile, open your Directory and the Desktop divider.

Look in the User Profile Entries column on the left. You see a listing for Document Pagination. Next to the listing is your current selection. Options appear in the Entry Options column on the right.

[Conversion]

Document Pagination: Simple   Simple I Compress I None

- [Simple]—Performs quick pagination, but file may occupy more disk space resulting in slower file access. The default option and the fastest way to perform pagination.

- [Compress]—Performs pagination, storing the file in optimized form on the disk. Results in faster file access, but takes the longest to execute.

- [None]—Performs no pagination. Provides the fastest conversion process but can result in slower file access.

If you want to change your pagination option, delete the option by highlighting it and pressing <Del>. Do not try to delete the words "Documentation Pagination."

Highlight the desired option and copy it to the left column next to the Documentation Pagination entry.

When you are finished, select [Close] in the window header of the User Profile.

When you include pagination in the conversion process, file conversion to VP may take longer than a conversion from VP to another format.

For more information on basic conversion processes, see the *File Conversions User Guide* in the *VP Series Reference Library*.

Converter History log

The Converter History log keeps a complete record of the following items for IGES or VP conversions:

- All conversions
- Associated error messages
- Informational messages for each Converter icon.

When folders of icons are converted, the conversion messages are indented in the log to show the locations of each icon in the folder. You can display the Converter History log, in a read-only window, by opening the Converter icon.

Figure 2–3 shows an example of a Converter History log for conversion of document from VP to IGES.

Figure 2–3.   **Converter History Log**
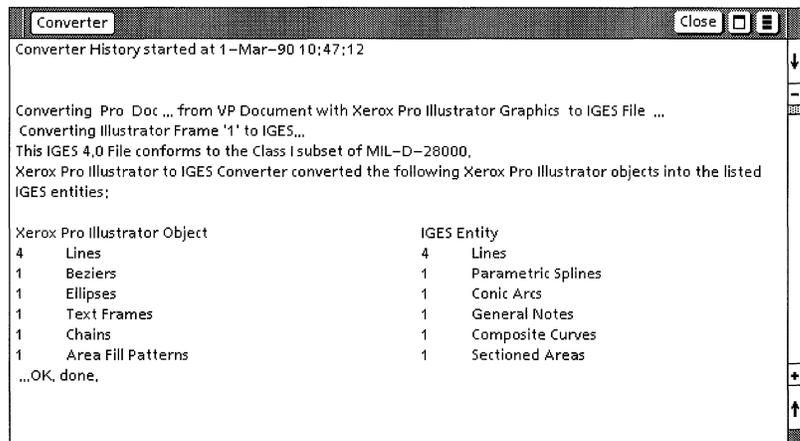
You are notified of the following conditions:

- *Xerox Pro Illustrator* objects or IGES entities that have been successfully converted.

- *Xerox Pro Illustrator* objects or IGES entities that have not been successfully converted.

- Conversions that have been suspended because you pressed <Stop>.

- Conversions that have been suspended because the converter was unable to open a damaged VP document or IGES file.

Converter Properties sheet

The Converter provides the software you need to perform data file conversions. You specify the details of each file conversion by using the Converter Properties sheet or the Converter Options sheet, discussed later in this chapter.

You use the Converter Properties sheet to complete the following tasks:

- Name the Converter icon

- Customize the conversion operation

- Choose the format and naming convention for the converted data file

- Control the **Converter History** option.

When you open the Converter Properties sheet, you see information about conversions that are in progress. Changes to the Converter Properties sheet do not affect conversions being processed. Changes do affect subsequent conversions.

An example of a Converter Properties sheet with the default settings selected is shown in Figure 2–4.

Figure 2–4.   **Converter Properties sheet showing default settings**

Converter Properties					Done	Cancel	Defaults

Icon Label `Converter`

Destination Suffix **None** | Date & Time | Other

Converter History **Start New** | Append To Old

Choose Source **Automatically Using Icon File Type** | Manually (override icon file type)

Process In **Foreground** | Background

MOVE Icons To Converter ALLOWED

DISPLAY OPTIONS

Show Conversions | Resolve Icon File Type Conflicts

SHOW ICON FILE TYPES

Source	Destination
Details IGES Document	→ VP Document with Xerox Pro Illustrator Graphics
VP Document with Xerox Pro Illustrator Graphics	→ IGES File

Properties

This section describes the properties on the Converter Properties sheet.

Icon Label

Name that you assign the Converter icon. You can use up to 100 characters.

Destination Suffix

Determines the suffix of the name of the converted file.

[None]
Specifies that the name of the converted file is to be the same as that of the source file. This is the default setting.

[Date & Time]
Specifies that the converted document has a name consisting of the original document name, plus "CONVERTED" following the date and time of conversion.

[Other]
Specifies that another text box appears on the properties sheet. This box displays the suffix ".converted." You can delete ".converted." and furnish your own suffix.

The maximum file name length is 100 characters. If the file name and suffix exceeds 100 characters, the software truncates the name and inserts an ellipsis.

Converter History

Determines the duration of the current Converter History log.

[Start New]
The log from the previous conversion is deleted whenever a conversion begins. A new log starts with each new conversion.

[Append To Old]
Adds up to 65,534 characters of new conversion messages to the end of the current file. You can view this file by opening the Converter icon and can copy text from this file to a VP document.

Choose Source

Allows you to choose the source file type.

[Automatically Using Icon File Type]
Specifies the use of the source icon file type to determine the format of the file. This is the default setting.

For instance, if the icon is a Type 4353 VP document, the Converter icon assumes it is a document. This is true for all files with specific icon types (for instance, spreadsheets, record files, and 860 documents).

The format and file type are not always a reliable indication of the contents of a file. For example, file types 0, 2, and 65535 are used for many files.

Table 2–1 shows some of the file type conflicts that can occur between these types of files. A single file type can represent multiple source formats and a source can have multiple file types.

Table 2–1. **Source file types**

Source	Type 0	Type 2	Type 65535
Spreadsheet	•		•
ASCII document	•	•	
Word processing document	•	•	•
IGES document	•	•	

If a particular icon type can support more than one file format (for instance, both ASCII files and spreadsheets can be type 0 files), you must specify the format. The converter uses only the file type to determine the correct conversion. In this instance, the converter cannot determine the kind of file to be converted.

[Manually (override icon file type)]
    Lets you select a destination file type that is different from a source file type (Figure 2–5). Use this option only if all files you convert with this Converter icon have the same format.

Figure 2–5. **Converter Properties sheet showing Manually (override icon file type)**
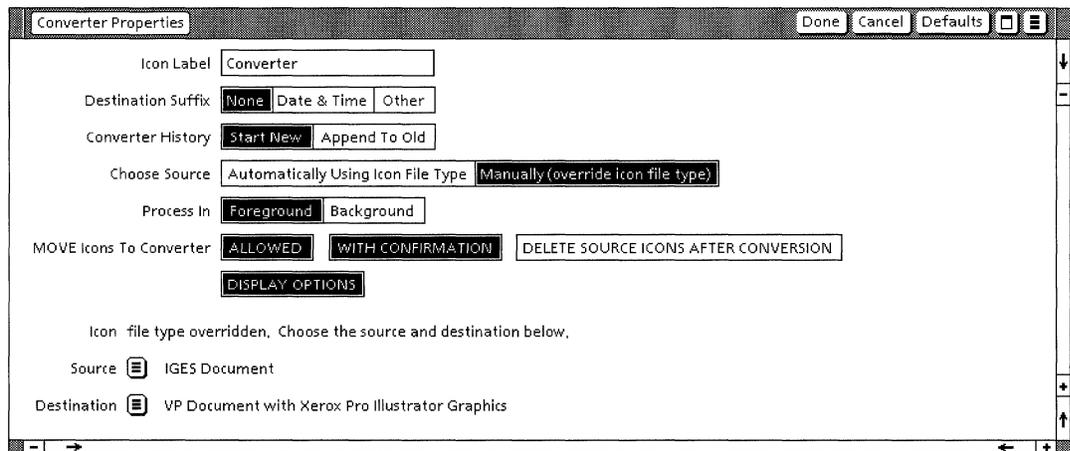
If you have multiple choices for the destination format, you ned to select one of the choices that appear. If you specify an invalid format, special symbols may replace unrecognized characters in the converted document.

Process In
Allows you to process the conversion in the foreground or background.

[Foreground]
Specifies that the file conversion process be done in the foreground (the default setting). The hourglass appears until all selected icons are converted. Messages stating the progress of the conversion are displayed in the message area at the top of the screen.

[Background]
Specifies that the converter perform the file conversion in the background, so you can use the workstation for other activities. Multiple background jobs can run sequentially using a single converter icon, and multiple Converter icons can run background jobs at the same time. The message area at the top of the screen displays information about the conversion activity.

Most types of conversions can be run in the background. If the software cannot convert a particular source icon in the background, a message appears in the message area asking you to allow the converter to either immediately process the icon in the foreground or skip the icon.

If you choose to convert the icon in the foreground, the software converts only that icon in the foreground. After the foreground conversion, the rest of the background conversion jobs continue.

The top of the screen message area displays a message for every icon it cannot convert in the background. If a problem arises during background processing, the software skips the source icon and enters an error message in the Converter History log.

Background conversions are similar to other VP background processes. You can cancel these conversions using the background activities menu in the upper right corner of the screen. The name of the Converter icon running the conversion appears on the background activities menu.

If you try to run a foreground job in a converter that is running one or more background jobs, the foreground job waits until all background jobs are complete.

A status message in the message area at the top of the screen indicates how many background jobs are ahead of the foreground job. You can suspend the foreground job by pressing <Stop>.

Note: If you are running a background job on one Converter icon, save time by using a different Converter icon for a foreground job.

Move Icons to Converter

Allows you to choose the method of delivering files to the converter.

[Allowed]

The [Allowed] property defaults to off. When this option is off, you can only copy files to the Converter icon. If you attempt to move a file to the Converter icon with [Allowed] off, you see an error message.

When you copy a file to the Converter icon, the copy is deleted after the conversion. The converted data file appears on the desktop to the left of the original source icon.

Because the converter works on the copy of the source icon, the number of available disk pages decreases while the conversion is in progress.

If you want to move a file to the Converter icon, select the [Allowed] property.

You should create a backup of any file you move to the Converter icon, because the source file could be lost if a system problem occurs during the conversion process.

When you select the [Allowed] property option, the software displays two other choices: [With Confirmation] and [Delete Source Icons After Conversion].

[With Confirmation]

Displays a confirmation message in the message area when you move an icon to the Converter icon. This is the default setting. You may proceed with, or cancel, the move activity at that time.

If [With Confirmation] is off, the move immediately occurs.

[Delete Source Icons After Conversion]

Deletes the source icons after the conversion is complete, leaving only the converted icons. If [Delete Source Icons After Conversion] is off, source icons disappear during conversion, reappearing after conversion is complete.

To avoid losing data, select [With Confirmation] when you select [Delete Source Icons After Conversion].

Table 2–2 shows details about the disk–space usage of the various options.

Table 2–2.   **Effects of Move options**

Property choices	Move
[Allowed] off (default)	Does not allow you to move a source icon. You can only copy a source icon to a converter.
[Allowed] on [Confirm] on [Delete] off	Allows you to move a source icon, subject to your confirmation. Conversion works directly on source icons, which are moved back to the desktop when the conversion ends. The number of available disk pages decreases after the conversion because of the creation of destination icons.
[Allowed] on [Confirm] off [Delete] off	Allows you to move an icon. Conversion works directly on source icons, which are moved back to the desktop when the conversion ends. The number of disk pages decreases after the conversion because of the creation of the converted file.
[Allowed] on [Confirm] off [Delete] on	Allows you to move a source icon. Conversion works directly on source icon. The number of disk pages decreases after the conversion.
[Allowed] on [Confirm] on [Delete] on	Allows you to move a source icon, subject to your confirmation. Conversion works directly on source icon. The number of disk pages decreases after the conversion.

You can perform a background icon move or copy by selecting the Converter icon as the destination and pressing the right mouse button.

If you make a background move or copy to a Converter icon with **Process In** set to [Foreground], the options sheet displays regardless of the [Display Options] setting. You must indicate whether you want the conversion performed in the background or the foreground before selecting [Start].

If you move the source data icon from the desktop to the Converter icon and the source icon is retained upon conversion, the converted icon appears on the desktop to the left of the source icon.

If you move the source data icon from the desktop to the Converter icon and the source icon is deleted upon conversion, the converted icon appears in the original location of the source icon.

If the conversion job is interrupted, moved icons that have not been processed return to the desktop regardless of the setting of the [Delete Source Icons After Conversion].

[Display Options]
Displays the Converter Options sheet when you copy or move a file to the Converter icon. This allows you to change options before the conversion begins.

If you do not select [Display Options], the Converter icon uses the current settings and does not display the options sheet unless a problem occurs.

[Show Conversions]

Creates an alphabetical listing of source and destination files. A highlighted arrow box (see Figure 2–3) designates a current conversion. Single arrows represent single–input conversions; double arrows represent grouped–input conversions.

Each source has a single destination. The destination appears in read–only format, as shown in Figure 2–3.

If more than one destination is possible, an auxiliary menu to the right of the arrow shows the default destination choice. You may change the default destination using the menu.

[Resolve Icon File Type Conflicts]

Selecting this option when there are no type conflicts causes an error message to appear. If there is a conflict, a new menu appears on the bottom of the property sheet.

Figure 2–6 shows the properties sheet with [Resolve Icon File Type Conflicts] selected. You can resolve file type conflicts and choose a single conversion process for file types that can be converted in more than one way.

Figure 2–6.   **Resolve Icon File Type Conflicts**
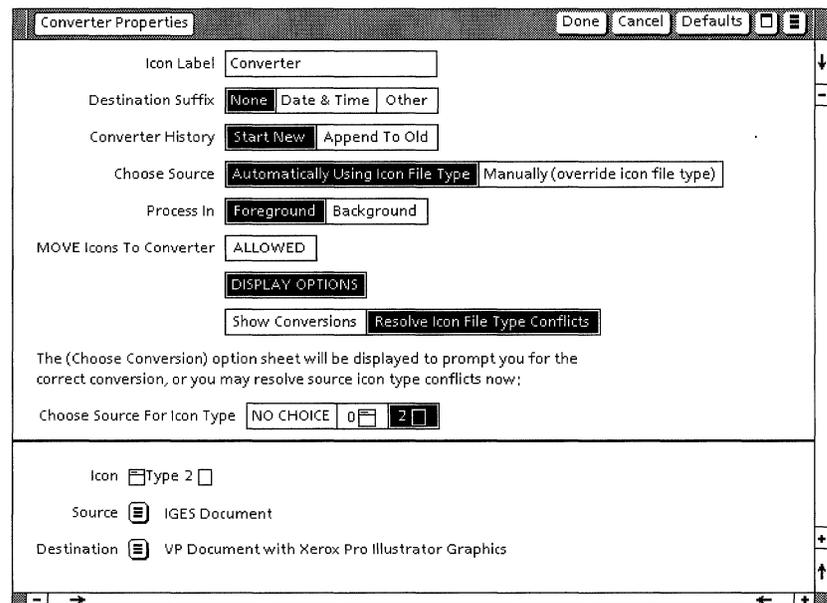
If you do not want to use this option to resolve file type conflicts, select [Show Conversions] and start the conversion job. If file type conflicts are present, the converter prompts you to resolve them.

Choose Source for Icon Type

Allows you to resolve source icon file type conflicts (see Figure 2–5).

[No Choice]

No changes occur in the current conversion. This is the default setting. Other choices vary depending upon which **Source** and **Destination** pairs are selected in the [Show Conversions] display. The choices include file types for current conversions that have file type conflicts.

If you select a file type, the area below the line displays the file type number, a representation of the icon for that file type, and **Source** and **Destination** choices. You can select the **Source** and **Destination** formats from the auxiliary menus.

The values below the line show the **Source** and **Destination** pair associated with the icon type. If you select an option other than [No Choice], the settings of the current values below the line do not change.

When you select [Resolve Icon File Type Conflicts] and then select [Show Conversions], all of the settings made through **Choose Source for Icon Type** affect the current conversions.

The **Source** and **Destination** pairs that you define in the **Choose Source for Icon Type** choices remain active, and those that you do not select are deactivated. You choose the conversion pair simply by selecting **Choose Source for Icon Type**. Selecting [No Choice] allows you to avoid making a choice.

[Show Icon File Types]

The [Show Icon File Types] choice appears only when you select [Show Conversions]. It lists the icon file types associated with the source icon, with small icons representing file type and the file type number (see Figure 2–7). A single source may accept more than one file type, so several types may be listed.

Figure 2–7. **Show Icon File Types**
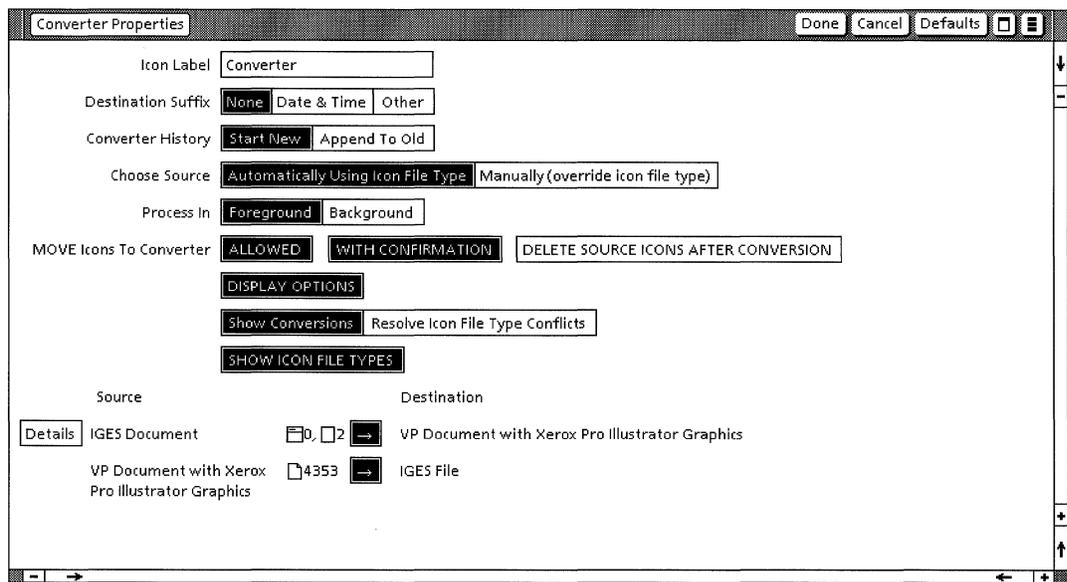
Source and **Destination** information

If conversion software runs automatically when the system boots, the information in a Converter properties sheet does not change between sessions. It accurately reflects previously set options such as **Source** and **Destination**.

If conversion software does not run automatically when the system boots, the settings in the properties sheet may default to the original settings. Restore prior **Destination** settings by loading the conversion before opening the Converter Properties sheet, then select [Done].

If the desired conversion software is not running when the converter is accessed, the converter uses the default destination.

The arrow box between the **Source** and **Destination** pair acts like a switch. If the arrow box is highlighted, the conversion is active. If the arrow is not highlighted, the conversion is not active.

The **Destination** file type and the [Details] box are shown only for arrow boxes that are selected. All arrow boxes default to on when a conversion is initially loaded, but thereafter, default to the last specified setting.

When you have multiple conversions that accept the same file type as input, you can set one of the arrow boxes on and the other off, thereby resolving possible conflicts. This allows you to use multiple Converter icons to handle possible conflicting **Source** formats.

Details

A Details property on the Converter Properties sheet applies only to *Xerox Pro Illustrator from IGES Converter* conversions. *Xerox Pro Illustrator to IGES Converter* software ignores any selections made on the Details sheet. Figure 2–8 shows an example of the Details property on the Converter Properties sheet.

Figure 2–8. **Details property on the Converter Properties sheet**
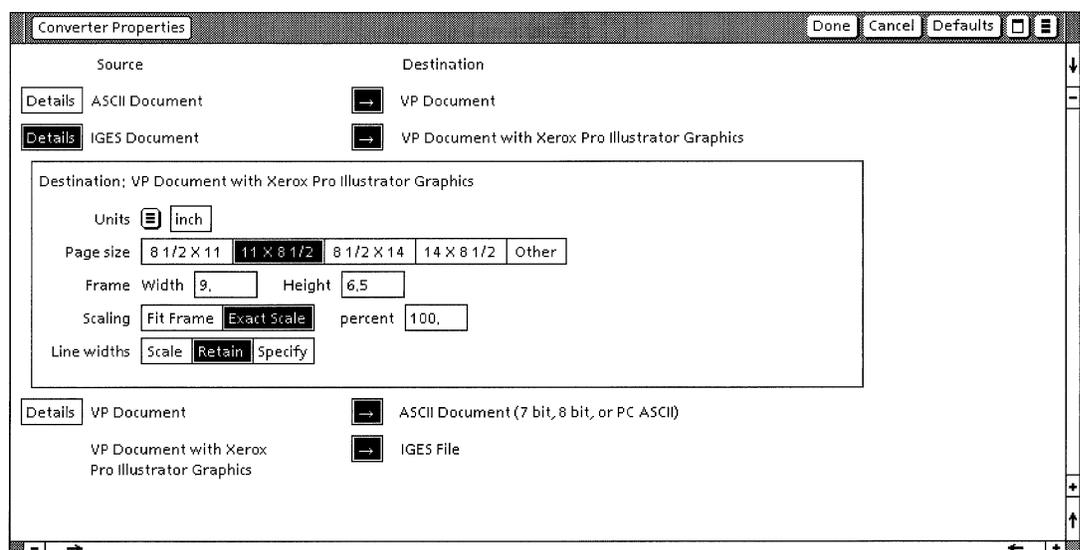
Units
> Allows you to select mica, millimeter, centimeter, point, pica, inch, mil, and didot units. These units interpret the page and frame size parameters and the line width parameters on the details sheet.

Page Size
> Allows you to select one of four preset page sizes. Default is 11 x 8.5 inches (landscape). Page width and height parameters are only visible when you select the **Other** page size option. Use the **Other** option to define metric page sizes, including A3 and A4 pages. The specification for A3 paper is 29.725cm x 42.05 cm. A4 paper size is 21.025cm x 29.725cm.

Frame
> The frame size is specified explicitly, and may not be larger than the page size parameters on the Details sheet.

Scaling
> Allows you to specify the scale of the converted file as a percentage of the IGES drawing or of the frame size. Default is exact scale (100 percent). The scale percentage parameter is visible only when you select **Exact Scale**. Choosing **Exact Scale** may result in placing objects outside the frame, if the IGES drawing is larger than the Pro Illustrator frame.

Line widths
> Allows you to specify one of three options for width.
>
> [Retain]
>> Specifies that line widths are not scaled along with the drawing. This is the default.
>
> [Scale]
>> Specifies that line widths are scaled with the drawing. You must also select a minimum line width.
>
> [Specify]
>> Specifies widths for all lines. The width parameter is visible only when you select [Specify].

Converter Options sheet

You use the Converter Options sheet to customize the conversion process, naming conventions, and history options for a specific converted data file.

The selections you make on the Converter Options sheet override the options set on the Converter Properties sheet. The Converter Options sheet selections apply only to the current conversion job.

To display the Converter Options sheet, select [Display Options] on the Converter Properties sheet. Then copy or move the data icon to the Converter icon.

The Converter Options sheet has the same items as the properties sheet except for the **Icon Label**, [Move Icons to Converter], and [Display options] properties. The arrow boxes are the same as on the properties sheet, but the [Details] boxes are always off.

Choose Conversion Options sheet

The Choose Conversion Options sheet lists acceptable conversions. The options sheet also shows a pair of choices similar to the [Manually (Override Icon File Type)] and [Resolve Icon File Type Conflicts] choices on the properties sheet.

The Choose Conversion Options sheet (Figure 2–9) appears when the file type has multiple formats and the converter cannot determine what conversion to use.

Figure 2–9. **Choose Conversion Options sheet**
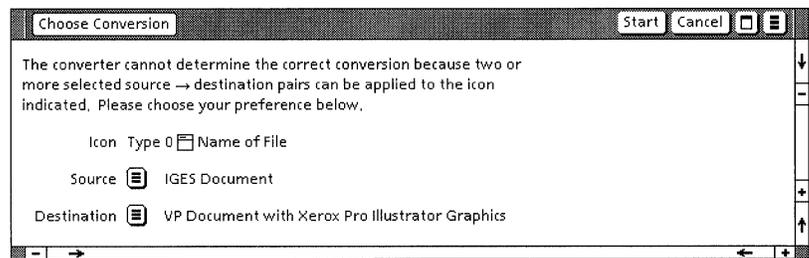
Select the auxiliary menu to see an alphabetical list of possible source file types. The first item on the list is the default. Change the source and destination using the auxiliary menu.

Select [Start] to convert the source icon. If you select [Cancel], you can choose whether you want to [Skip] or [Quit]. If you are converting a group of files and select [Skip], the named icon is skipped and the conversion job continues. If you select [Quit], the software interrupts the entire conversion job.

A Choose Conversion Options sheet appears for unresolved file type conflicts. You may need to monitor the conversion process if the job contains many icons.

3. Converting Xerox Pro Illustrator to IGES

File conversion is simple once you set the properties and options you want on the Converter Properties sheet or the Converter Options sheet. To start the conversion process, you place a data file on your desktop and move or copy it to the Converter icon.

Retrieving the Converter icon

If you do not already have a Converter icon on your desktop, you need to retrieve one from the Directory.

1. Open the Directory divider, the Workstation divider, and the Office Accessories folder.

2. Copy the Converter icon to the desktop. You can place multiple converter icons onto your desktop, each set for a specific type of conversion.

Setting converter properties or options

The selections you make on the Converter Properties sheet or the Converter Options sheet control the conversion process.

The Converter Options sheet is similar to the Converter Properties sheet, except that changes made on the options sheet control the current conversion activity only. Settings on the Converter Properties sheet remain in effect for all conversion activities until you change them.

You need to configure each Converter icon by setting the properties or options as needed. Refer to chapter Chapter 2 for a description of the Converter Properties sheet and the Converter Options sheet.

Performing a file conversion

Follow these steps to convert a file:

1. Select the source data icon, and press <Move> or <Copy>.

    If you want to convert multiple data icons, you can select them from the desktop individually, or assemble them all in a folder and deliver the folder to the Converter icon.

2. Select the Converter icon.

    The Converter options sheet appears (see Figure 3–1).

3. Select [Start] to begin the conversion.

    See the "Basic conversion process" section in Chapter 2 for more detailed information on handling multiple data icons and some helpful troubleshooting facts.

Figure 3–1.   **To IGES Options sheet**
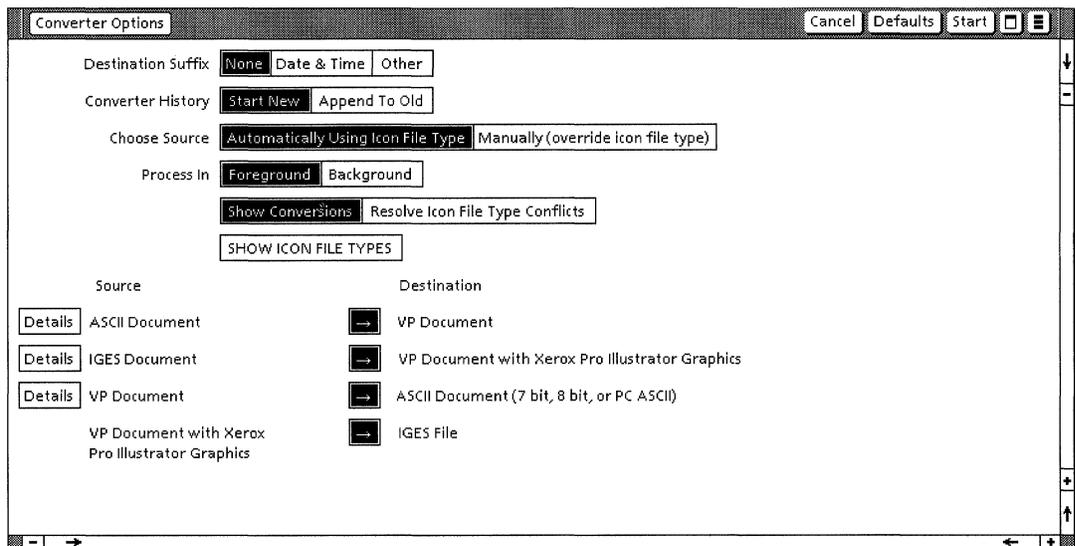
Stopping a conversion

You can stop a conversion job from running in the foreground by pressing <Stop>. If you want to stop a job that is running in the background, select [Cancel Current Activities] in the Background activities menu.

Recovering and restarting

Source icons are kept within the Converter icon. In this way, the source icons are protected if a system problem occurs while a conversion job is in progress.

When you access the Converter icon after a system reboot, the converter searches for source icons that did not complete the conversion process. These icons are packaged in a folder named "Converter Input Icons For Job Started [time stamp]." The folder is copied onto the desktop, and a message is posted.

Messages

Messages intended for *Xerox Pro Illustrator* graphics conversion are displayed in the desktop message area at the top of the screen.

Table 3–1 shows messages that appear in the Converter History log after running *Xerox Pro Illustrator to IGES Converter.* An n indicates how many *Xerox Pro Illustrator* objects of that particular type were found in the source file. An m indicates how many IGES objects of that particular type have been successfully converted from the source VP file.

Table 3–1. **Messages: Xerox Pro Illustrator to IGES Converter**

Pro Illustrator objects	IGES entities
n Lines	m Lines
n Ellipses	m Conic Arcs
n Parallelograms	m Composite Curves m Lines
n Conic Arcs	m Conic Arcs
n Beziers	m Parametric Spline
n Circular Arcs	m Circular Arcs m Conic Arcs

Table 3-1. **Messages: Xerox Pro Illustrator to IGES Converter** (continued)

Pro Illustrator objects	IGES entities
n Points	m Composite Curves m Lines m Circular Arcs
n Area Fill Patterns	m Sectioned Areas
n Chains	m Composite Curves
n Text frames	m General notes
n Clusters	m Subfigures
n Line Ends	m Composite Curves m Lines m Sectioned Arcs
n Bitmaps	m not converted
n Illustrator Subframes	m not converted

The following error messages can appear on the Converter History log:

• **The conversion was aborted by the user.** Occurs when you press <Stop> while the conversion is running in the foreground and results in this message in an incomplete IGES file. The converter history does not contain a report for the incomplete file.

• **Aborting...Conversion aborted by user.** Stopping a conversion that is running in the background (using the Background Activities menu) results in this message. No destination icon will appear on the desktop.

• **Xerox Pro Illustrator to IGES Converter cannot proceed because required software option is not enabled.** Workstation needs product factoring for conversion. Contact your System Administrator.

• **The source object could not be opened.** Unknown problems with the *VP Document Editor.*

• **The source object was not converted due to an error while creating the output file.** The conversion is running out of disk space.

4.   Converting IGES to
Xerox Pro Illustrator

File conversion is simple once you set the properties and options you want on the Converter Properties sheet or the Converter Options sheet. To start the conversion process, you place a data file on your desktop and move or copy it to the Converter icon.

Retrieving the Converter icon

If you do not already have a Converter icon on your desktop, you need to retrieve one from the Directory.

1. Open the Directory divider, the Workstation divider, and the Office Accessories folder.

2. Copy the Converter icon to the desktop. You can place multiple converter icons onto your desktop, each set for a specific type of conversion.

Setting converter properties or options

The selections you make on the Converter Properties sheet or the Converter Options sheet control the conversion process.

The Converter Options sheet is similar to the Converter Properties sheet, except that changes made on the options sheet control the current conversion activity only. Settings on the Converter Properties sheet remain in effect for all conversion activities until you change them.

You need to configure each Converter icon by setting the properties or options as needed. Refer to chapter Chapter 2 for a description of the Converter Properties sheet and the Converter Options sheet.

Ask your System Administrator for information about retrieving non-VP data files from IBM and DEC mainframes via the Xerox Gateway Services, or refer to the *Network Administration Library*.

Performing a file conversion

Follow these steps to convert a file:

1. Select the source data icon, and press <Move> or <Copy>.

   If you want to convert multiple data icons, you can select them from the desktop individually, or assemble them all in a folder and deliver the folder to the Converter icon.

2. Select the Converter icon.

   The Converter options sheet appears (see Figure 4–1).

3. Select [Start] to begin the conversion.

   See the "Basic conversion process" section in Chapter 2 for more detailed information on handling multiple data icons and some helpful troubleshooting facts.

Figure 4–1. **From IGES Options sheet**
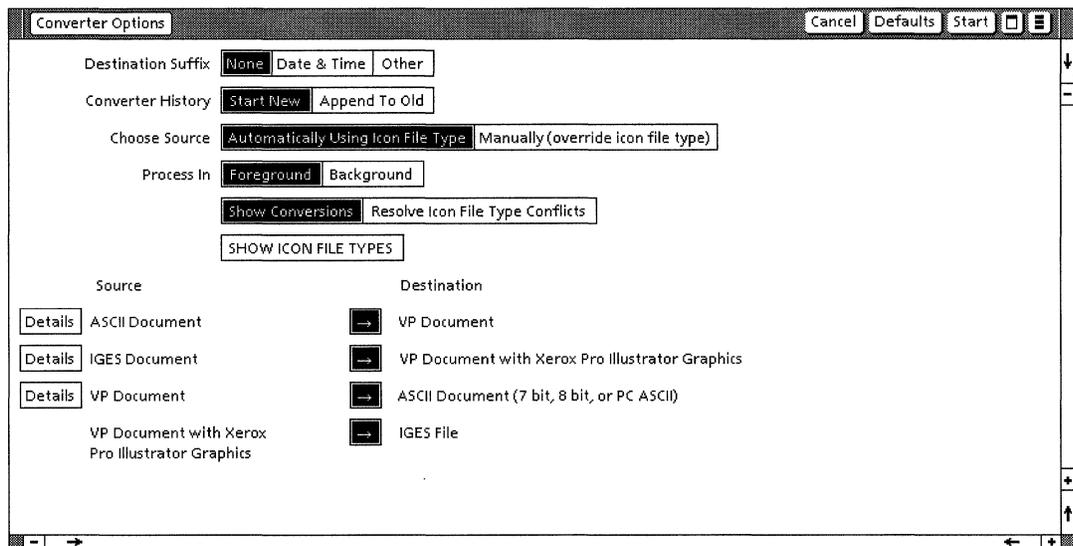
Stopping a conversion

You can stop a conversion job from running in the foreground by pressing <Stop>. If you want to stop a job that is running in the background, select [Cancel Current Activities] in the background activities menu.

These actions are recorded in the Converter History log. See the "Converter History log" section in Chapter 2 for more details.

Recovering and restarting

The Converter icon keeps source icons to protect them if a system problem occurs while a conversion job is in progress.

When you access the Converter icon after a system reboot, the converter searches for source icons that did not complete the conversion process. These icons are packaged in a folder named "Converter Input Icons For Job Started [time stamp]." The folder is copied onto the desktop, and a message is posted.

Messages

Messages intended for IGES file conversion are displayed in the desktop message area at the top of the screen and can appear in the Converter History log.

"Pass One" is displayed while the IGES conversion gathers information about the structure entities of the IGES file, and "..OK" appears if Pass One was successful.

"Pass Two" appears when the IGES conversion starts to convert the geometric entities of the IGES file into *Xerox Pro Illustrator* graphics. "..OK" appears if Pass Two was successful.

The content from the start section of the original IGES file is in the Converter History log. The start section is a prologue in the IGES file.

Table 4–1 shows messages that appear in the Converter log after running *Xerox Pro Illustrator from IGES Converter*. Only the messages that are applicable to converted files are displayed in the log.

The messages are preceded by the following statement:

"Xerox Pro Illustrator from IGES Converter converted the following IGES entities into the following Xerox Pro Illustrator objects:"

The log and the screen include the message "End of Xerox Pro Illustrator from IGES Converter."

An n indicates how many IGES entities of that particular type were found in the source IGES file. An m indicates how many *Xerox Pro Illustrator* objects of that particular type have been successfully converted from the source IGES file.

A dash (—) indicates that there is no conversion for that entity. The — does not appear in the Converter History window. "Not converted" is used only with subentities in a group. When a subentity is converted, the name of the *Xerox Pro Illustrator* object is listed in the table. When a subentity is not converted, "Not converted" is listed.

Table 4–1. **Messages: IGES to Xerox Pro Illustrator Converter**

IGES entities	Pro Illustrator objects
n Circular Arc	m Circular Arc
n Composite Curve	converted

n Conic Arc
        General Form
        Ellipse
        Hyperbola
        Parabola
	
	m converted
	m Ellipse
	m not converted
	m Parabola

n Copious Data
        Form 1 Lines in Plane
        Form 2 Lines in Space
        Form 3 Lines with Vectors
        Form 11 Lines in Plane
        Form 12 Lines in Space
        Form 13 Lines with Vectors
        Form 20 Centerline through two Points
        Form 21 Centerline through one Circle
        Form 31 Section Entity 31
        Form 32 Section Entity 32
        Form 33 Section Entity 33
        Form 34 Section Entity 34
        Form 35 Section Entity 35
        Form 36 Section Entity 36
        Form 37 Section Entity 37
        Form 38 Section Entity 38
        Form 40 Witness Line Entity
        Form 63 Simple Closed Area
	
	m Line
	m Line
	m not converted
	m Line
	m Line
	m not converted
	m Line
	m Line
	m Line
	m Line
	m Line
	m Line
	m Line
	m Line
	m Line
	m Line
	m Line
	Chain with m Lines

n Plane	—
n Line	m Line

n Parametric Spline Curve
        Linear Spline Type
        Quadratic Spline Type
        Cubic Spline Type
        Wilson–Fowler Spline Type
        B–Spline Type
	
	m Bezier
	m Bezier
	m Bezier
	m Bezier
	m Bezier

Table 4–1. **Messages: IGES to Xerox Pro Illustrator Converter**
(continued)

IGES entities	Pro Illustrator objects
n Parametric Spline Surface	—
n Point	m Point
n Ruled Surface	—
n Surface of Revolution	—
n Tabulated Cylinder	—
n Transformation Matrix	—
n Flash	—
n Rational B–Spline Curve	m Bezier
n Rational B–Spline Surface	—
n Offset Curve	—
n Connect Point	—
n Node	—
n Finite Element	—
n Nodal Displacement and Rotation	—
n Offset Surface	—
n Curve on a Parametric Surface	—
n Trimmed Parametric Surface	—
n TNodal Results	—
n Element Results	—
n Block	—
n Right Angular Wedge	—
n Right Circular Wedge	—
n Sphere	—
n Torus	—
n Solid of Revolution	—
n Solid of linear extrusion	—
n Ellipsoid	—
n Boolean tree	—
n Solid instance	—

Table 4–1. **Messages: IGES to Xerox Pro Illustrator Converter**
(continued)

IGES entities	Pro Illustrator objects
n Solid Assembly	—
n Angular Dimension	converted
n Diameter Dimension	converted
n Flag Note	—
n General Label	converted
n General Note	m Text Frame
n Leader (Arrow)	converted
n Linear Dimension	converted
n Ordinate Dimension	converted
n Point Dimension	converted
n Radius Dimension	converted
n General Symbol	converted
n Sectioned Area	converted
n Associativity Definition	—
n Line Font Definition	—
n Macro Definition	—
n Subfigure Definition	converted
n Text Font Definition	—
n Text Display Template	—
n Color Definition	—
n Network Subfigure Definition	—
n Associativity Instance	—
n Drawing	m Pro Illustrator Frame
n Property	—
n Subfigure Instance	converted
n View	converted
n Rectangular Array Subfigure Instance	converted
n Circular Array Subfigure Instance	converted
n External Reference	—
n Nodal Load/Constraint	—

Table 4–1. **Messages: IGES to Xerox Pro Illustrator Converter**
(continued)

IGES entities	Pro Illustrator objects
n Network Subfigure Instance	—
n Macro Instance	—
n Attribute Table Definition	—
n Attribute Table Instance	—
n Unknown Entities	—

The following error messages can appear in the Converter History:

- **Conversion Common Software has not been loaded. Please obtain assistance from your System Administrator.** You cannot perform any conversion unless this software is loaded and running.

- **Xerox Pro Illustrator from IGES Converter cannot proceed because required Software Option not enabled.** Workstation needs product factoring for conversion. Contact your System Administrator.

- **The source object was not converted due to an error while creating the output file.** The conversion is running out of disk space.

- **IGES File has unknown units.** Units in Global Section are not correctly defined.

- **Format error in Global Section of IGES file.** The IGES file does not comply with the IGES standard: fixed line length ASCII format (80 character).

- **Format error in Directory Section of IGES file.** The IGES file does not comply with the IGES standard: fixed line length ASCII format (80 character).

- **Format error in Parameter Section of IGES file.** The IGES file does not comply with the IGES standard: fixed line length ASCII format (80 character).

- **Format error IGES File is in Binary or Compressed Format.** Conversion supports only non–compressed ASCII format.

- **Fatal error while scanning IGES file.** IGES file does not comply with IGES standard. Start, Global, Directory, and/or Parameter sections are inconsistent.

- **Error in integer parameter format.** An integer format is incorrect. For example, a real value was given where an integer was required.

- **Error in floating point parameter format.** A floating point number format is incorrect.

A.   Xerox Pro Illustrator to IGES conversion results

The following tables list the *Xerox Pro Illustrator* to IGES conversion results. Table A–1 shows Pro Illustrator objects and corresponding IGES geometric entities. Table A–2 lists Pro Illustrator objects and corresponding IGES non–geometric entities.

Table A–1. **Pro Illustrator objects and IGES geometric entities**

Pro Illustrator object	IGES geometric entity	
	#	Name
Circular Arc	100	Circular Arc
Sheared Circular arc	104	Conic Arc–General
Bezier	112	Parametric Spline Curve
Conic	104	Conic Arc–General
Ellipse	104	Conic Arc–General
Line	110	Line
Parallelogram	102	Composite Curve
Point	102	Composite Curve
Trajectory	102	Composite Curve

Table A–2. **Pro Illustrator objects and IGES non-geometric entities**

Pro Illustrator object	IGES non-geometric entity	
	#	Name
Area Fill Patterns	230	Sectioned Area
Cluster	308	Subfigure Definition
Color	314	Color Definition
Text frame	212	General Note

B. IGES to Xerox Pro Illustrator conversion results

The following tables list the IGES to *Xerox Pro Illustrator* conversion results.

A dash (—) indicates that an entity is not converted or, in some cases, when entities have subentities (forms), the subentity is not converted.

Table B–1.   **IGES geometric entities to Pro Illustrator objects**

IGES geometric entity	Pro Illustrator object
Circular Arc	Circular Arc Ellipse
Composite Curve	Circular Arc Ellipse Line Bezier Point

Conic Arc
    Form 0 General Form
    Form 1 Ellipse
    Form 2 Hyperbola
    Form 3 Parabola
	
	Conic Arc
	Conic Arc/Ellipse
	Conic Arc
	Conic Arc

Copious Data
    Form 1 Lines in Plane
    Form 2 Lines in Space
    Form 3 Lines with vectors
    Form 11 Lines in Plane
    Form 12 Lines in Space
    Form 13 Lines with vectors
    Form 20 Centerline through two
      points
    Form 21 Centerline through one
      circle
    Form 31 Section Entity 31
    Form 32 Section Entity 32
    Form 33 Section Entity 33
    Form 34 Section Entity 34
    Form 35 Section Entity 35
    Form 36 Section Entity 36
    Form 37 Section Entity 37
    Form 38 Section Entity 38
    Form 40 Witness Line Entity
    Form 63 Simple Closed Area
	
	Line
	Line
	—
	Line
	Line
	—
	
	Line
	
	Line
	Line
	Line
	Line
	Line
	Line
	Line
	Line
	Line
	Line
	Chain

Table B–1. **IGES geometric entities to Pro Illustrator objects** (continued)

IGES geometric entity	Pro Illustrator object
Plane Entity	—
Line	Line

Parametric Spline Curve
    Linear Spline Type
    Quadratic
    Cubic Spline Type
    Wilson–Fowler
    Modified Wilson–Fowler
    B Spline
	
	Bezier
	Bezier
	Bezier
	Bezier
	Bezier
	Bezier

Parametric Spline Surface	—
Point	Point
Ruled Surface	—
Surface of Revolution	—
Tabulated Cylinder	—

Transformation Matrix
    Form 0 default
    Form 1 orthogonal mirror
    Form 10
    Form 11
    Form 12
	
	Used
	—
	—
	—
	—

Flash	—
Rational B–Spline Curve	Bezier
Rational B–Spline Surface	—
Offset Curve	
Connect Point	—
Node	—
Finite Element	—
Nodal Displacement and Rotation	—
Offset Surface	—
Curve on a Parametric Surface	—
Trimmed (Parametric) Surface	—
Nodal results	—
Element results	—

Table B–1.   **IGES geometric entities to Pro Illustrator objects** (continued)

IGES geometric entity	Pro Illustrator object
Block	—
Right angular wedge	—
Right circular wedge	—
Sphere	—
Torus	—
Solid of revolution	—
Solid of linear extrusion	—
Ellipsoid	—
Boolean tree	—
Solid instance	—
Solid assembly	—

Table B–2.   **IGES non–geometric entities to Pro Illustrator objects**

IGES non–geometric entity	Pro Illustrator object
Angular Dimension	Line, Conic Arc, Text Frame
Diameter Dimension	Line, Text Frame
Flag Note	—
General Label	Line, Text Frame
General Note	Pro Illustrator Text Frame (Text is displayed horizontally only)
Leader (Arrow)	Line
Linear Dimension	Line, Text Frame
Ordinate Dimension	Line, Text Frame
Point Dimension	Line, Text Frame
Radius Dimension	Line, Text Frame
General Symbol	Line, Text Frame
Sectioned Area	Texture
Associativity Definition	—

Associativity Instance
    Form 3
    Form 4
    Form 6
    Form 9
    Form 13
	
	Used
	Used
	Used
	Used
	Used

Drawing	Pro Illustrator Frame
Line Font Definition	Used
Macro	—
Property	—
Drawing size	Used
Intercharacter spacing	—
Subfigure Definition	Used
Network Subfigure Definition	Used
Subfigure Instance	—
Rectangular Array Subfigure Instance	Used

Table B–2.   **IGES non–geometric entities to Pro Illustrator objects**
(continued)

IGES non–geometric entities	Pro Illustrator objects
Circular Array Subfigure instance	Used
Network Subfigure Instance	—
Text Font Definition	—
View	Used
External Reference	—
Nodal Load/Constraint	—
Color Definition	—
Text Display Template	—
Attribute Table definition	—
Attribute Table instance	—

Table B–3.   **Mapping from IGES units to Pro Illustrator objects**

IGES units	Pro Illustrator objects
Inches	Inches
Millimeters	Millimeters
Feet	Inches
Miles	Inches
Meters	Centimeters
Kilometers	Centimeters
Mils	Inches
Micons	Points
Centimeters	Centimeters
Microinches	Inches

Table B–4.   **IGES line font pattern to Pro Illustrator line styles**

IGES line font pattern	Pro Illustrator line styles
Solid	Solid
Dash	Dash
Phantom	Phantom
Centerline	Centerline

Table B–5.   **Xerox Pro Illustrator from IGES objects**

IGES objects	Pro Illustrator objects
Blank Status	0: IGES Conversion converts that entity 1: IGES Conversion uses entity when its parent entity is converted
Line weight	Default Line width or as required in Global Section and Directory Section, or as indicated in Prop's sheet

Table B–6.   **IGES color to Xerox Pro Illustrator color**

IGES color	Xerox Pro Illustrator color
black	black
red	vivid red
green	unknown*
blue	moderately strong blue
yellow	unknown*
magenta	unknown*
cyan	unknown*
white	white

*Color graphic objects that do not have color equivalents in GLOBALVIEW, will be converted to colors most similar to the source object. Color properties for the object will appear as [Unknown] on the Object property sheet.

C.   Glossary

Annotation
Text or symbols that provides information and are not part of the geometric model.

Blank Status flag
A portion of the status number of the directory entry designating whether an entity is to be displayed on the output device.

CAD/CAM
Computer Aided Design and Computer Aided Manufacturing. Widely used graphics systems tools.

CALS
Computer Aided Logistics Support. A Department of Defense initiative.

Circular Arc entity
A geometric entity that is a connected portion of a circle or the entire circle.

Composite Curve entity
A connected curve formed by concatenating two or more curve segments.

Conic Arc entity
A geometric entity that is a finite connected portion of an ellipse, a parabola, or a hyperbola.

Copious Data entity
A geometric entity sometimes used as an annotation entity, containing arrays of types of real numbers to which a specific meaning is assigned. One form number corresponds to one special meaning.

Directory section
The section of an IGES file, consisting of fixed field data items for an index and attribute list of all entities in the IGES file.

Drawing entity
A structure entity in an IGES file that specifies the projection(s) of a geometric model onto a plane, with any required annotation and dimensions.

Entity
The basic unit of information in a IGES file. The term applies to single items that may be individual elements of geometry, collections of annotation to form dimensions, or collections of entities to form structured entities.

Form number
An integer used to further define a specific entity. This is necessary when there are several interpretations of an entity.

General Note entity
An annotation entity in an IGES file that consists of text displayed in a specific size and at a specific location and orientation.

Global section
The section of an IGES file consisting of general information describing the file, the file generator (pre-processor), and the information needed by the file reader (post-processor).

IGES	Initial Graphics Exchange Specification. A graphics standard, developed by the National Institute of Standards and Technology that establishes parameters for commonly used CAD/CAM graphics data.
Line Font	A pattern for the appearance of a curve. The pattern is a repeating sequence of line segments.
Line weight	An entity attribute used to determine the line thickness for that entity.
Mil	A unit equal to 0.001 of an inch.
Model	A particular collection of data in an IGES file which describes a product.
Parameter Data section	A section of an IGES file consisting of specific geometric or annotative information about the entities or pointers to related entities.
Pica	A printer unit of type size, equal to 12 points (approximately 1/6 of an inch).
Point	A printer unit of type size equal to 0.01384 inch (approximately 1/72 of an inch).
Product definition	Data required to describe and communicate the characteristics of physical objects as manufactured products.
Section entity	A pattern used to distinguish a closed region in a diagram.
Start section	The section of an IGES file containing a readable file prologue.
Subfigure Definition entity	A structure entity that permits a single definition of a detail used in multiple instances.
Subfigure Instance entity	A structure entity which specifies an occurrence of the subfigure.
Transformation Matrix entity	An entity that allows translation and rotation to be applied to other entities. This is used to define alternate coordinate systems for definition and viewing.
View entity	A structure entity used to provide the definition of readable representation of a two dimensional projection of a selected subset of the model and non geometrical information.
Witness Line	An annotation entity consisting of line segments and used in engineering drawings to indicate the beginning or the end of a measurement.

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Customer Comments

XEROX®

VP Series Reference Library
Pro IGES Converters User Guide

Our goal is to improve the organization, ease of use, and accuracy of this library. Your comments and suggestions will help us tailor our manuals to better suit your needs.

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Please rate the following:

| | Excellent | Good | Fair | Poor |

1.   Is the organization suitable for your needs?

_____

2.   Are you able to easily find the information you need?

_____

3.   Are the illustrations useful?

_____

4.   Overall, how would you rate the documentation?

_____

Did you find any errors?
Page number / Error

_____

_____

_____

How can we improve the documentation?

_____

_____

We appreciate your comments regarding our documentation. Thank you for taking the time to reply.

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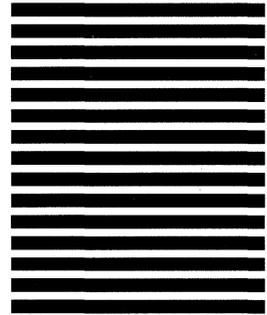
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