

# Preparing and Submitting Electronic Files for the IM 2001 Proceedings

Please read the detailed instructions that follow before you begin, taking particular note of preferred fonts, formats, and delivery options. The quality of the finished product is largely dependent upon receiving your help at this stage of the publication process.

## PRODUCING YOUR PAPER

### Acceptable Formats

Papers can be submitted in either PostScript (PS) or Portable Document Format (PDF) (see *Generating PostScript and PDF Files*). **VERY IMPORTANT: ALL FONTS MUST BE EMBEDDED** (see *Fonts*).

### Using LaTeX

Documents converted from the TeX typesetting language into PostScript or PDF files usually contain fixed-resolution bitmap fonts that do not print or display well on a variety of printer and computer screens.

Although Adobe Acrobat Distiller will convert a PostScript language file with bitmapped fonts (level 3) into PDF, these fonts display slowly and do not render well on screen in the resulting PDF file. But, **if you use Type 1 versions of the fonts you will get a compact file format that delivers the optimal font quality when used with any display screen, zoom mode, or printer resolution.**

### Using Type 1 fonts with DVIPS

The default behavior of Rokicki's DVIPS is to embed Type 3 bitmapped fonts.

**You need access to the Type 1 versions of the fonts you use in your documents in order to embed the font information (see *Fonts*).** Type 1 versions of the Computer Modern fonts are available in the BaKoMa collection and from commercial type vendors.

Before distributing files with embedded fonts, consult the license agreement for your font package. Some typeface vendors do not allow you to embed complete fonts into a PDF or Post-Script language file for public distribution. Contact the type vendor for more information.

**You must embed all fonts included in your manuscript. Do not use fonts that cannot be embedded. If you do not embed the fonts, when viewed on a system that does not have your font, it will be substituted with a different font. This can cause many Greek characters and special symbols to change to completely different characters. This will require your paper be scanned rather than using the electronic file which can negatively impact the quality of the manuscript and its searchability.**

*Use of Times fonts is highly recommended for consistency and readability both on screen and in print.*

With LaTeX2e use the command

```
\usepackage{times}
```

and with LaTeX 2.09 use the command

```
\documentstyle[times]{...}
```

You will need the following packages: times.sty, rawfonts.sty.

For more information, refer to this URL:

<http://www.adobe.com/support/techdocs/543e.htm>

If you are unable to submit your paper in any of the electronic formats, or if we encounter problems converting your electronic submission, your paper will be scanned and converted to PDF. Although a scanned paper looks identical to the original when printed, it is slower and more difficult to view on screen. **If you do plan to deliver your paper by hard copy, avoid typefaces smaller than 11 points.**

## Generating PostScript and PDF Files

The submission of your document as a PDF file is the preferred method. PDF files are more likely than others to preserve your intended layout. **IMPORTANT:** When creating a PDF, **DO NOT PASSWORD-PROTECT IT.** We need access to add page numbers and copyright footers, and to embed the Document Information fields for searching.

Almost all applications/systems can produce a suitable PostScript file, which can then be converted to PDF. PS files may be generated in a wide variety of ways. In all cases, the quality of your PostScript file will have a direct impact on the quality of the converted file. A high quality PS file is one that reliably produces pages with the desired look, as efficiently as possible.

Please review the following suggestions for producing your PostScript file. This will ensure it is usable and presented in the manner you wish.

- **You must embed ALL fonts in the PostScript file, including the base fonts. If using a Windows system, select the "Use Printer Fonts for all TrueType Fonts" option in the "Advanced Options" dialog box for the PostScript printer driver.**
- **Embed all images and figures.**
- Make sure that your submitted paper prints **correctly** to a PostScript printer. Files that cannot be printed, or print with errors, usually cannot be properly converted. Select the following printer for PostScript output:

Windows 3.1, 3.11	<b>PostScript</b> Printer driver
Windows '95	AdobePS 4.3.1 (available from <a href="http://www.adobe.com">www.adobe.com</a> )
	OR any <b>Linotronic</b> printer driver
Windows NT	any <b>Linotronic</b> printer driver
Mac OS	<b>LaserWriter 8.x</b> driver
OS/2	any <b>Apple LaserWriter w/ PostScript</b> driver

- Always use the latest version of your PostScript driver and select PostScript Level 2 if available.
- If you design your document using color, select a color PostScript printer driver to create your PostScript file. Note that many applications create color data only when printing to a color printer and will create a grayscale document unless a color PostScript printer is selected.
- Do not use custom halftones (photographs) and pattern fills. (Fill Patterns in Lotus Freelance do not convert to PDF. White solid fill is substituted.) Instead use solid-color or grayscale fills to produce a more readable document on-screen that will also load and print significantly faster. This is especially important for charts and graphs.
- Do not select "Smooth Graphics". This option often produces extremely large files that will take a long time to display and print. The Smooth Graphics option is usually found in the Page Setup Dialog box in Macintosh applications and some Windows applications.

## Converting Word Files

You will need either the PDFWriter or any PostScript printer driver installed to create a PDF from a Word document.

**To generate a PDF file from a Word document (you must have the PDFWriter driver)**

Using the instructions below, set the PDFWriter properties (**IMPORTANT**):

1. Select File | Print
2. Under Printer Name select the Acrobat PDFWriter driver
3. Click Properties button to the right of the Printer Name text box
4. Click Compression

5. Under the Compatibility drop-down list, choose Acrobat 3.0, and click OK
6. Click Fonts
7. Check the **Embed All Fonts** option, or check the **Always Embed List** option and add all fonts (including the base fonts) to the list
8. Deselect any subsetting options (IMPORTANT)
9. Click OK twice, then either click Close to complete the configuration, or OK to create the PDF.

After the properties are set, you may also create a PDF by choosing **File | Create Adobe PDF | Print via PDFWriter**

### To generate a PostScript file from a Word document

If you have a PostScript driver you will need to create the PostScript file first, then convert it to PDF:

1. Select File | Print
2. Under the Printer Name, choose the PostScript printer
3. Check the Print To File checkbox
4. Check the resolution of the output (600 dpi minimum) by clicking the Properties button and choosing the Graphics tab.
5. Click OK to output a PostScript file. The extension of this file will be \*.prn
6. Go to the [PDF conversion site](#) and follow the simple instructions

### Converting LaTeX Files

You will need the program MiKTeX. You can install MiKTeX (basic features) on your PC. It is DOS-based thus works with all versions of Windows.

- Go to <http://www.miktex.de/getting.html> and click the closest server to you.
- Open the zip file and run **setupwiz.exe**. When prompted for "Local TEXMF Tree", respond *Yes, this is where I'll put the IEEE style file*. The wizard will perform the installation automatically.

The only thing left to you is to add the `c:\texmf\miktex\bin` to your path:

- In Windows NT add `set PATH=%PATH%;c:\texmf\miktex\bin` to your `autoexec.bat`
- In Windows 98 do `start\run\sysedit` and then add `c:\texmf\miktex\bin` to the path in `autoexec.bat`

### To generate a PDF file from your LaTeX source:

1. Copy the IEEE style file to the local `texmf` tree (if it is `c:\localtexmf`, you might want to put it in `c:\localtexmf\tex\latex\IEEE\*.cls`)
2. Copy all your files (\*.tex, \*.eps, \*.bib) to a pc directory, `d:\paper` for example). If you do not have a local directory, then make sure to put the class file in this directory, too.
3. Open a DOS prompt and `cd` to `d:\paper`.

**To generate PostScript** use: `latex mypaper`, `bibtex mypaper`, `dvips mypaper`, etc, in the DOS window.

**To generate PDF** use one of the following three options:

1. Aladdin GSview (version 2.6 or higher) from <http://www.cs.wisc.edu/~ghost/aladdin/get550.html>
  - Open the PostScript file with Gsview
  - Select File | Print, then select the PDFwrite device and Print to File.
2. Conversion site—Go to <http://www.ps2PDF.com/cgi-bin/ps2pdf> and follow the simple instructions

3. You can generate PDF directly from LaTeX using: `PDFLatex mypaper` - Note that this requires you to change the LaTeX source if you include \*.eps figures

## Fonts

The following fonts are considered **base fonts in Acrobat 4.0**, and you are encouraged to limit your font selections to this list. Although these fonts are automatically installed with Acrobat Reader 4.0, you **MUST** still embed these fonts (and all others) to ensure that your paper can be viewed and printed correctly from any system. **Please note that *Times New Roman* is the preferred font.**

- AdobeSanMM
- AdobeSerMM
- Arial MT
- Arial MT, Italic
- Arial MT, Bold
- Arial MT, Bold Italic
- Courier
- Courier, Italic
- Courier, Bold
- Courier, Bold Italic
- Symbol
- Times New Roman PS MT
- Times New Roman PS MT, Italic
- Times New Roman PS MT, Bold
- Times New Roman PS MT, Bold Italic
- ZapfDingbats

**Using these fonts will reduce the size of your converted paper as well as speed up the display and printing of your paper for the readers. Additionally using only the specified fonts provides a consistent look across to all material on the publication.**

*If you decide to use fonts other than “base fonts” you must submit your paper as a PostScript or PDF file with embedded fonts. The embedded fonts will be preserved during the conversion process.*

*A font group should never be subsetted!!*

## Including Graphics/Images

**All images must be embedded in your document.**

The type of graphics you include will affect the quality and size of your paper on the electronic document disc. In general, the use of vector graphics such as those produced by most presentation and drawing packages can be used without concern and is encouraged.

The use of bitmapped images such as those produced when a photograph is scanned require significant storage space and must be used with care. Bitmap graphics store an image as a series of numbers that represent the color of each dot in the image. Increasing the size, resolution (dots per inch), or number of colors in an image will dramatically increase the size of the image.

**If your paper contains many large images they will be down-sampled to reduce their size during the conversion process. However the automated process used will not always produce the best image, and you are encouraged to perform this yourself on an image by image basis.**

Suggestions for improving the quality bitmap graphics include:

- In general, bitmapped images should be limited to no more than 256 (8 bit) color/gray scale, 150 dots per inch, and should be kept as small as possible.
- Reduce the number of display colors before making screen shots. The majority of computer applications use less than 16 colors for their menus, dialogs etc.
- Select higher resolutions only for images that a reader will magnify. Image resolution of bitmapped images does not increase when readers zoom in on an image.

## DELIVERING YOUR SUBMISSION

### Compressing Your Submission

Submitting your material is quicker and easier if all of the files are collected into a single archive using one of the following formats:

- Pkzip (.zip)
- Tar (.tar)
- StuffIt (.sit)
- GNU Zip (.gz)
- GNU Zip Tar (.tgz)
- Compress (.z)
- Compress Tar (.taz)
- LHA (.lhz)
- ARJ (.arj)

### Naming Convention

The name of your file should be your paper ID + last name followed by the appropriate extension. For example, if your paper is a *PDF*, your last name is *Smith*, and your paper ID is *123*, you would submit your file as **123Smith.pdf**. If you choose to compress your submission, name the compressed file the same name, i.e. **123Smith.zip**, etc.

Updated versions of your electronic manuscript should have the exact same name. The FTP server will automatically track all versions of your paper that you submit.

### Submitting Your Camera-Ready Copies

You must send a signed copyright form (<http://www.ieee.org/about/documentation/copyright/cfrmlink.htm>) and two camera-ready copies of your paper to the following address by **2-Feb-2001**:

**Laura Hyslop**  
**IM 2001 c/o IEEE Publishing**  
**445 Hoes Lane**  
**Piscataway, NJ 08854-4150 USA**  
**+1 732 981 3422**  
**+1 732 562 1746 fax**  
**l.hyslop@ieee.org**

### Submitting Your Electronic Paper (You MUST ALSO submit camera-ready copy)

Send your manuscript to the IM01 FTP site (see below for detailed instructions) by **2-Feb-2001**. If you are unable to send your files via FTP, you may send a 3<sub>1</sub>-inch or Zip disk formatted for Macintosh or PC with your two camera-ready copies and your signed copyright form.

**You MUST send TWO camera-ready copies of your paper by 2-Feb-2001.**

When transferring files to the FTP site, if you have a choice between ASCII and binary modes, use binary. Although ASCII mode works well most of the time, binary mode incurs fewer problems.

What you will need to upload your file:

- A computer with Internet access and an Internet browser. Netscape is available free at [www.netscape.com](http://www.netscape.com). Internet Explorer is available free at [www.microsoft.com](http://www.microsoft.com). (Explorer requires an ftp plug-in that can be found on the Microsoft website)
- FTP software (Optional). There are many free FTP software programs available for the PC and Mac at [www.shareware.com](http://www.shareware.com)

Uploading your file is a two step process:

- 1) Launch your Internet browser and go to the IM01 FTP site for submitting your paper (<http://www.incontrolproductions.com>). **Please note that this site is different from the IM 2001 home page.** Use the link to access “Secure FTP”. Once there, create a secure directory for your submission and receive a User ID.
- 2) Use your browser or FTP software to upload your file to your secure directory (see below for detailed instructions). The site will confirm receipt of your submission by email.

**Note: If uploading a new version of your manuscript, do not change the filename. The Secure FTP software will do this automatically to every version you submit.**

### Step-By-Step FTP Instructions

To create the secure directory for the IM01 FTP site.

- a) Launch your Internet Browser
- b) In the Address/Location field, type <http://www.incontrolproductions.com>
- c) Click on the link for ‘Secure FTP’. This will take you to the “Create Secure Directory” page.
- e) Enter the IM01 Site ID: **350289**
- f) Click on the “Submit” button.
- g) The screen will refresh and you enter:
  - Your First Name
  - Your Last Name (your last name is used to create a unique User ID; the only characters the system will accept are A-Z, 0-9, (, ), and ( \_ ))
  - Telephone Number
  - Your Email Address
  - A password of your choice
- f) Click “Submit”.
- g) If there are no problems with what you entered in the fields above, the system will confirm that you have successfully created a Secure FTP directory.
- h) Click on the url (blue link on the page) which will take you to your directory. Drag and drop your files to this window. An email will be sent indicating your paper has been received.

Note: If you have created a directory before on this system, your personal information, including your password, will be shown on the screen. If you make any changes, this will update all of your directories.

To submit your manuscript at a different time other than when the Secure Directory was created or to submit a new version of your paper:

A. Using MS Internet Explorer or Netscape –

- 1) Launch your browser
- 2) In the Address field type [www.incontrolproductions.com](http://www.incontrolproductions.com).
- 3) Click on the link to “Secure FTP”, taking you to the “Create a Secure Directory” page.
- 4) Enter in the Site ID number and your email address. Click “Submit”.

- 5) Enter the information in the required fields. Click “Submit”.
- 6) When the “Secure Directory Exists” page is displayed, click on the link.
- 7) In the “Password” field, type the password you chose when you created your secure FTP directory. (Passwords are case sensitive.)
- 8) Drag and Drop your file(s) into that directory. The full paper filename should be named according to the naming convention discussed earlier. To see your files, you may have to refresh the window displaying the contents of your directory. When FTP Services detects your file (after you have uploaded it) it will move the file to inside a firewall. So, you may not see your file if you refresh the directory view a few minutes later. Do not resubmit your file; it has already been accepted.

**Note: If uploading a new version of your manuscript, do not change the filename. The Secure FTP software will automatically track every version you submit.**

B. Using FTP software –

- 1) Launch your FTP software application
- 2) In the Address field (sometimes called Host Name, Location or Site), type [www.incontrolproductions.com](http://www.incontrolproductions.com)
- 3) Enter your User ID and Password
- 4) Open the folder with the same name of your Site ID
- 5) Open the folder with the same name as your User ID

**When your file is detected by FTP Services, you will receive an email message at the address you provided when you created your directory. It will confirm that your submission was received.**

**We will contact you in the event of any problems.**

### **Frequently Asked Questions**

Q. How will I know if my electronic manuscript was received?

A. You will receive an email confirmation at the address you entered when you set up your Secure FTP folder. If you do not receive a confirmation within a day or two, try uploading your file again, and look out for error messages or any other problems.

Q. What if I need to send a new version?

A. Use the same FTP instructions, and keep the same filename. The Secure FTP software will automatically track all versions submitted.

Q. I have uploaded two different versions of my paper. How do you know which one to use?

A. The Secure FTP software tracks all versions of manuscripts submitted. It is helpful to keep the same filename for this purpose.

Q. My system keeps timing out when I try to upload my file. What should I do?

A. You can try two things:

- If your file is large, you may want to compress it before uploading it. (\*.zip, \*.sit, \*.tar, etc.)
- Sometimes your specific Internet route may experience heavy Internet traffic, slowing down your connection and resulting in time-outs and/or painfully slow transmissions. Try to upload your file during periods of low Internet usage.