JACoW Team Meeting

File Upload Using Text Conversion



The Goal



- Provide a generic web interface for uploading the authors' paper in plain text.
- Convert plain text to PDF.
- No FTP. No Web File Upload.



Advantages



- Significantly less disk storage space required.
- Real-time conversion to PDF.
- Uniform PDFs.
- Less editor involvement.



Obstacles



- Wide Objects
 - Abstract Title and Author List
 - Images, Tables, Graphs, etc.
- Bullets, Numbered Lists, Footnotes
 - Special tags required by authors.



XML Solution









- "Spanning" available; however surrounding text wraps horizontally, not vertically.
- Headers & Footers are a possible workaround for wide Objects.
 - Objects must appear at top or bottom.
 - Height must be calculated programmatically.
 - Can not anticipate page breaks.



RTF Solution



- Microsoft Word properly wraps text in columns containing wide images.
- Problems
 - RTF file is complex and difficult to read.
 - Embedded images written in hexadecimal.



LaTex Solution



- Automatic image placement (top, bottom or middle).
- New Problems
 - Many special characters must be "escaped."
 - More complex programs.
- Advantage: No formatting required for papers already written in LaTex.
- Does not solve the bullets, numbered lists and footnotes obstacles



Conclusion



- Of the three tools tested; LaTex is the best method to accomplish the goal.
- No solution eliminates the need to upload files. (images, tables, graphs, etc.).
- New problems
 - Tables must be saved as an image or special tags are necessary.
 - Bullets, numbered lists and footnotes.



Recommendation



- Technically Feasible.
- Not Practical.
 - Changes to tables, graphs, bullets, numbered lists, footnotes, special characters, etc. adds an additional level of complication for authors.
- Alternate Methods?
 - I'm open to suggestions.