

Case Study: Music Publishing

Three sites: Philadelphia, New York, and Chicago.

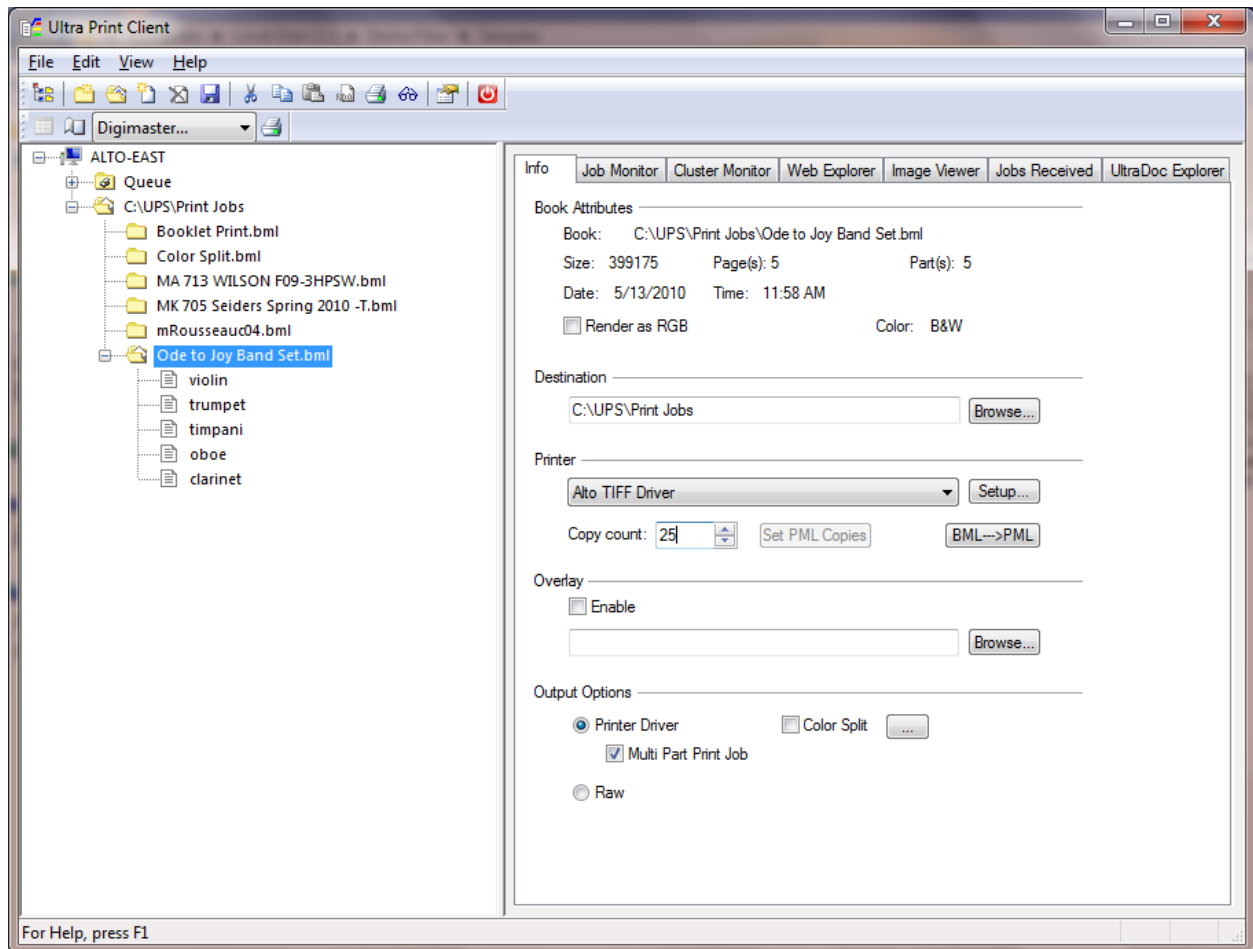
Job Requirement: Organize a data base to maintain copyrighted music for bands and choral groups, and print multi-part jobs to fulfill orders placed from company web site. Scan and clean-up hard copy of older music to enter into data base. Sites in Philadelphia and New York input all publications into data base located in the Chicago print center. Publications can originate from newly written music input from electronic format or scanned images from previously offset printed works.

Problems to be solved: 1) Set up data base in Chicago Print Shop to manage music content. Set up workstations in Philadelphia, New York, and Chicago to input music with print tickets into Chicago data base. Supplied software must have the ability to set up job properties for multi-part printing (described in detail below). 2) Set up network connection for the collaborative workflow between the three sites when there is no existing WAN infrastructure.

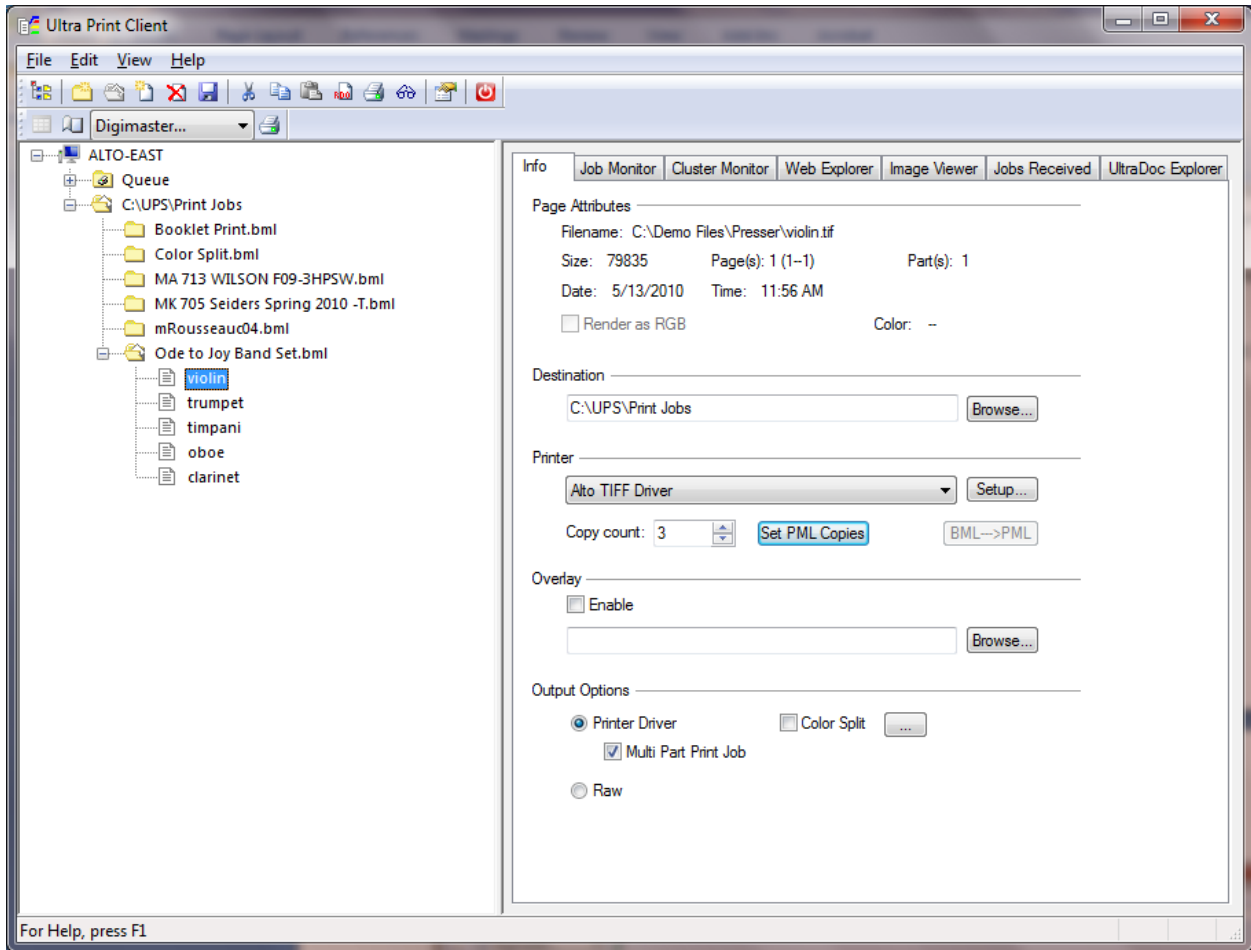
Solution: 1) Installed UltraDoc/ UltraWeb data base on local server at the Chicago Print Center. Image Arranger and UltraPrint Server installed on local workstation. Installed one Image Arranger and UltraPrint Server Workstation, and one client station in both the Philadelphia and New York offices. 2) Obtained public IP address for Chicago Server, and created VPN connection.

Workflow Description: Band Sets and Choral Music are both 'multi-part' print jobs. Typically, a given song will consist of the following elements: one score for the conductor and individual sheets for each instrument such as violin, trumpet, and oboe, etc. A tricky requirement for band sets is that each piece of music requires different numbers of players for each part. For example, a given song will have one score, and may have three violins, four trumpets, and two oboes, etc. Using Alto's nested XML job ticketing system, these individual settings can be input. The 'Super Ticket', or BML contains the common properties such as 12x18 paper, finished to a booklet maker, and total set quantity to be printed. The 'Sub Tickets', or PML for each part would contain the required number of copies of each part. Once these settings are input, the nested tickets stay linked to the job and its parts. The Philadelphia and New York creative departments set up new music in PDF format, import into their local UltraPrint, set up print ticket(s), and upload to the Chicago based UltraDoc data base. Older sheet music not yet in electronic format is scanned using Image Arranger, cleaned, de-skewed, paginated, and saved as a TIFF file. Multi-part jobs are then assembled in UltraPrint, ticketed, and uploaded to the data base. When an individual job is accessed from the data base, a folder containing pointers to all the parts and the associated nested tickets is available in the UltraPrint queue. The operator in the Chicago Print Center need only input the total quantity of sets needed, and release the job to the printer.

The following screen shot shows the UltraPrint queue with a band set for 'Ode to Joy' ready to print 25 sets of the complete Band Set:



The next screen shot shows the 'nested' sub ticket for the violin part, requesting three copies of the violin part:



See attached diagram for graphical representation of the workflow topology:

