

NIMAS Experience

Laserwords started creating NIMAS files in February 2007. Since then we have seen a phenomenal increase in our production in this area. By June 2008, our output was 120,000 pages of NIMAS for McGraw Hill and 250,000 pages for all K-12 publishers. We are proud that our clients have entrusted us with the responsibility of dealing directly with NIMAC on their behalf. From follow-up of submitted files to certification, we ensure a smooth execution of NIMAS projects for our clients.

We are proud to go on record that from June 2007 to June 2008, more than 50 percent of the titles received by NIMAC were books submitted by Laserwords.

Creating NIMAS Files

At Laserwords, we developed a workflow to cater to the specific requirements of NIMAS. Our workflow has in place systems and processes to ensure that we produce high quality files that meet the stringent NIMAS specifications.

Workflow Stages

- **Review/Analysis:** A complete review of the input files to verify that they meet NIMAS standards. This involves a NIMAS production-based review, tag review and NIMAC metadata review.
- **Content Extraction:** Content extraction is done through a proprietary tool specifically built for xml extraction.
- **Image Creation:** Laserwords has a graphics team dedicated to take care of the image creation needs.
- **Normalization:** Since the content extracted from the PDF is not an exact replica of the PDF, a normalization process in which we manually reorder the content using a set procedure is required.
- **Rendering and Quality Assurance:** After normalization, we ensure that the XML content matches the PDF exactly through rendering and QA.
- **Packaging:** We Zip complete file set containing XML, images, a package file, and PDF of copyright and ISBN.
- **Validate Package:** Package is validated using local and NIMAC tools.
- **Upload and Certification:** Depending on size, we upload file set to NIMAC or to OverDrive, or send DVD to OverDrive.
- We include metadata XL if package will be uploaded to OverDrive

Laserwords NIMAS Cross Training and Its Advantages

Customer Focus

The NIMAS team is highly customer focused and has taken several initiatives to move from a composition workflow system to a structured content environment. These initiatives benefit our clients by: enabling workflow and infrastructure; supporting turnkey book production and sales; cross training in InDesign and research and development work.

NIMAS Cross-training Benefits

- Laserwords XML technologists working with an excellent understanding of the application files
- Approaching, analyzing, standardizing and understanding the data in a logical way
- Cross training helps identify: 1) where we need to make changes and 2) how we can incorporate the new requirements into the existing school workflow
- Helps us to switch to both print and electronic for K-12 books
- XML developers have more room to work with template creators, composition team to bring a high degree of automation to content, page layout, and production instructions

Research and Development Activities

The training is being effectively utilized. We are taking this forward with a team of Specialists (NIMAS XML developers and InDesign experts) doing research and development to create a process where both print and electronic production run smoothly.

Research and Development Processes

XML First: DITA and DocBook Standard

- Style incoming word documents to ensure that the output is a structured document
- Transform tags to styles through XSL.
- Auto generate InDesign document
- Generate valid NIMAS and webML (eBook, SCORM)

Production-Ready Template

- Modify InDesign template as required
- Modify Inline text frames as required
- Label all items in template to ensure content flow can be generated
- Create rules to map InDesign paragraph and character styles to XML to generate NIMAS XML tags
- Normalize math expressions, images with overlapping text
- Generate valid NIMAS XML