

# What to Expect from ETDs: PART 2

## Library Issues and Responsibilities

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# ETD Server

- Library
  - provides, maintains, backs-up
  - upgrades hardware/software
    - NeXt 3.3 (running HP: 1989-1997)
    - Sun dual-processor Enterprise 250 running Solaris 2.7
  - other
    - training
    - information for NDLTD partners

# VT's ETD Server: Sun Netra

- 2 300 Mhz Ultrasparc processors
- 384Mb of RAM
- 9 Gb of disk space for OS, related tools
- ETDs on 9 Gb partition
- Apache, Apache SSL
- Perl 5.004\_01
- CGI.pm
- Sun 8mm Ultra Wide SCSI tape drive
  - 170m tapes; 40 Gb compressed storage

# Library Provides Access

## Internet workstations

- for authors/creators
  - computer labs and classrooms
  - New Media Center (software, hardware, and assistance)
- for library users: local and remote
  - OPAC
  - World Wide Web

# Library Internet Workstations-- for Student ETD Authors (and others)

## New Media Center -- Newman Library

- 22 Macs
- scanners, digital video/audio production, etc.
  - Netscape, Acrobat, Word, PowerPoint, Photoshop, and much more
- helpful staff
- <http://www.nmc.vt.edu>

# Library Internet Workstations-- Public, On-Campus Access to ETDs

- locate ETDs through
  - OPAC and World Wide Web
- circa 350 workstations (mostly Macs)
- throughout University Libraries
  - Newman (main) Library
    - TechConnect (50), throughout the building
  - Branch libraries

# Library Introduces Faculty to ETDs

- Overview of process and access
  - from student's submission to public access
  - virtual tour of ETD web sites
- Faculty concerns
  - Now: Future publication potential, copyright
  - Previously:
    - Does the Library have enough server space?
    - Network response time might be too slow

# Library Issues: Cataloging

Current Improvements  
and the  
Outlook for the Future



# ETD Cataloging

- Professional catalogers developed policies and procedures
- Catalogers' workstations
- Cataloging from submission form
- Copy/paste and direct keying
- Input in OCLC, download to OPAC

# VT ETD Cataloging

- same as current cataloging policies, except:
  - author-assigned keywords (not LCSH)
  - generic (not LC) call no.
  - fields/subfields as required for computer files
  - full abstracts
- time savings
  - cataloger familiar with computer files
  - equipment, software for word processing
  - 5 minutes avg. (10-15 minutes for paper TDs)

# Cataloging completed (OCLC>>OPAC)

ETDs available on the Web

- Programmatic notification e-mailed to UMI
- Browsible author and department
  - all access points available through search
- InfoSeek's ULTRASEEK search engine

# Library Costs

- \$12/vol. for paper thesis processing
  - catalog, bind, security strip, label, shelve
  - @950 vols./yr. = \$11,466
- \$3.20/vol. ETD processing
  - cataloging @950 vols./yr. = \$3040
- \$.07/vol. shelving
- \$.04/vol. circulation

# Library Savings: Processing New Titles

- 73.3% savings NOW (\$8360/yr.)
- Future: cataloging costs = \$0/title
  - to generate MARC record
    - \$3.65 credit w/OCLC for original bib record contributed
  - OCLC access costs remain
- Generate MARC from ETD
  - Use tagged elements within e-text to generate bibliographic record: SGML ETD DTD>>MARC

# Savings for Libraries can be Realized when ETDs are Available

- Circulating from the general collection
  - /month: 1997
  - 148/month: 1996 (16% from Storage)
- Retrieved from off-site storage (pre-1984)
  - 57/month: 1997 (19% fewer)
  - 70/month: 1996
- TDs out through interlibrary loan
  - 79/month: Jan. 1998 (45% fewer)
  - **175/month: Feb. 1996**

# Archiving ETDs

- Every 15 minutes back-ups made of not-yet-approved submissions
- Hourly back-ups of newly approved ETDs
- Weekly back-ups of entire ETD collection
- Copies stored on-site and off-site

# Availability of Library Resources

In a typical month

- 80% of VT ETDs available
  - 53% available without restrictions
  - 27% available to VT only
- 20% unavailable



# New Concerns for Libraries

- Authors limiting access to some ETDs
  - VT ETDs unavailable through InterLibrary Loan
  - Contact authors for copies
  - Distribute authors' e-mail addresses
- Multiple formats approved
- URLs >> PURLs and Handles
  - maintaining links to VT ETDs
  - maintaining links to external sites

# (Anticipated) Changes for ETDs

- Redesign of submission form (completed 8/99)
  - data for analysis and to generate bibliographies, etc.
- ETDs in dual formats: PDF and SGML
  - Portable Document Format
  - Standard Generalized Markup Language
- MARC derived from SGML (ETD DTD)
  - MACHine Readable Cataloging
  - ETD Document Type Definition
- Distributed searching of ND LTD (available)
  - Networked Digital Library of Theses and Dissertations

# Join the Networked Digital Library of Theses & Dissertations

- Browse
  - <http://scholar.lib.vt.edu/theses>
  - [www.ndltd.org](http://www.ndltd.org)
- Share your ideas, questions, concerns, experience: Contact
  - John Eaton, Graduate School ([eaton@vt.edu](mailto:eaton@vt.edu))
  - Ed Fox, Computer Science ([fox@vt.edu](mailto:fox@vt.edu))
  - Gail McMillan, Library ([gailmac@vt.edu](mailto:gailmac@vt.edu))

# The *VT* ETD Library

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