Aleph-based dealer-payment system

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Younes and Soraya Nazarian Library
University of Haifa

IGeLU Conference

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Younes & Soraya Nazarian Library
University of Haifa

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A few words from our sponsor University of Haifa

- Faculties: Humanities, Social Sciences, Education, Science and Science Education, Law, Social Welfare and Health Sciences
- As of 2010-2011 academic year, approximately:
  - 17,000 fulltime degree students
  - 2300 academic staff (500 tenured)
  - 950 administrative staff

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A few words from our sponsor
Younes and Soraya
Nazarian Library

- central library, single acquisitions budget, open stacks
- 77 staff members
- approximately 2 million items: monographs, periodicals, audio-visual materials, electronic texts and journals, archival collections, digitization projects, etc.
- mid-2011 : New building dedicated, Library renamed in honor of the donors, Younes and Soraya Nazarian
- Ex Libris products in use: Aleph v. 20, SFX v. 4, bX, Metalib v. 4, Primo v. 3, Primo Central, Digitool v. 3
- tradition of in-house support and development

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Acquisitions process - overview

- Requests from faculty members and subject-specialist librarians (online form, email, etc.)
- Check and prioritize requests – based on urgency for upcoming courses
- Entry into Aleph – bibliographic and order records, even if order will not go out immediately
- Order sent to vendor
- Receipt of material and invoice, usually simultaneously
- Processing material – cataloging, classification, binding, barcode, place in stacks or create Web link to fulltext

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Payment process - overview

- Entry of invoice data – code ‘N’ (new)
- Scan invoice
- Selection of invoices for payment – code ‘R’ (ready)
- Generation of payment orders – code ‘P’ (paid), note in note field; letter to bank for foreign-currency conversion
- Print copies on laser printer

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Why an in-house system?

- Compatible with requirements of University financial office
- Flexibility in adapting to changing needs of Library and University
- Provides services not included in Aleph (acq-10, acq-29)
- User satisfaction!

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A stable yet evolving system

1985– Pre-Aleph; in-house software

c. 1990 – Aleph 2

c. 1995 – Aleph 300

1999 – Scanning of invoices (external vendor)

2003-2004 – Aleph 500 – major conversion

2008 – Invoice-scanning module in Aleph

2010 – Check-scanning module in Aleph

???? - Alma ????

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Software infrastructure

- **L** inux operating system
- **A** pache Web server
- **M** ySQL database
- **P** erl script language
- **O** racle database
- **P** hp script language

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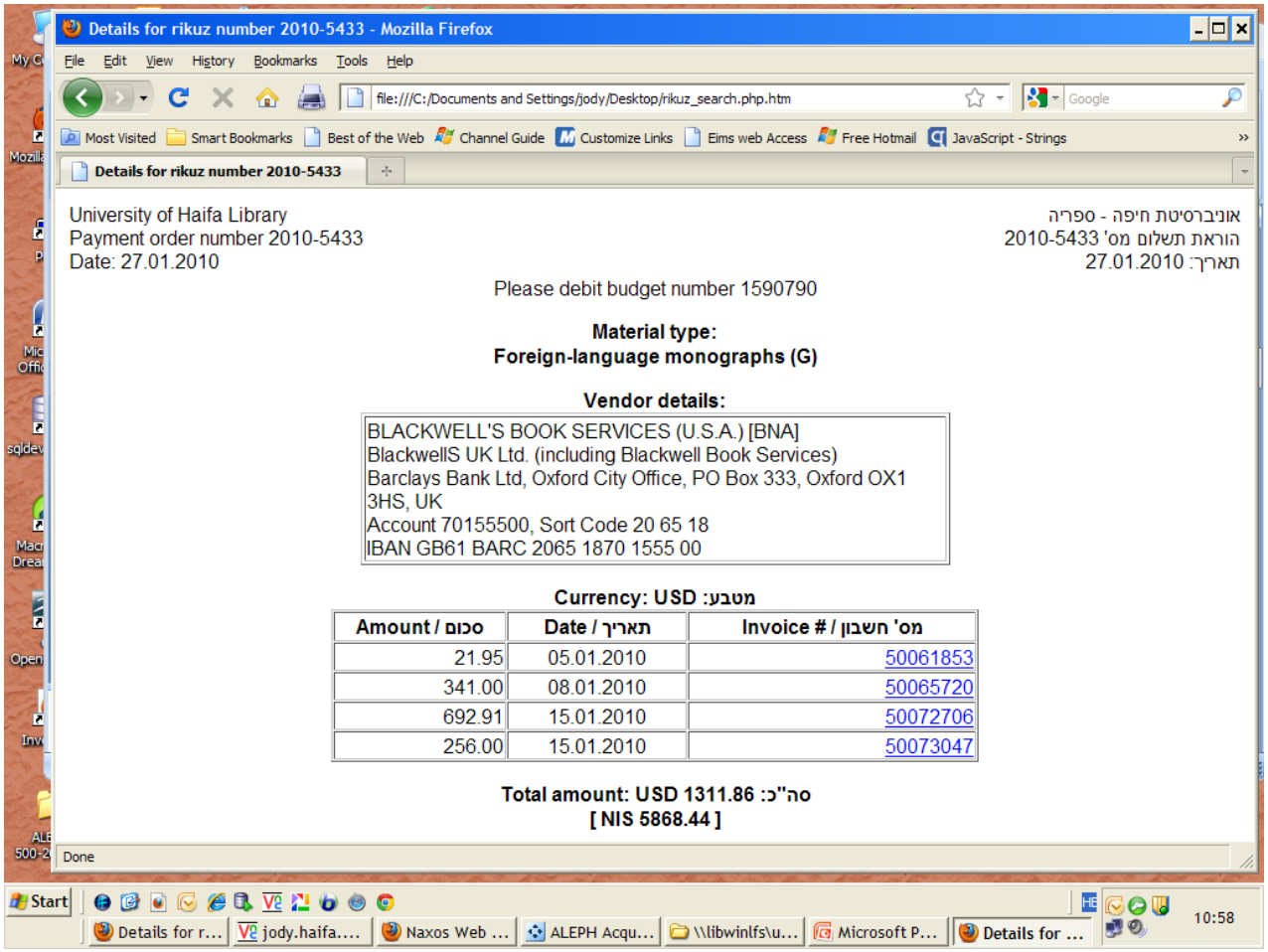
Payment order - example



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What is a rikuz?

- A collection of invoices to be paid together, with common parameters:
  - dealer
  - currency
  - material type
  - budget
- Organizing invoices as a “batch” meets requirements of financial office and is more efficient than handling them individually

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Material types

- Monographs, audio-visual materials and other non-subscription items:
  - Hebrew
  - Arabic
  - other languages
- Periodicals
- Bibliographic databases
- Customs clearance
- Personal order - from budget other than Library's central acquisitions budget

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Relevant Aleph tables (Library HAI50)

- z70 – vendor data
- z72 – vendor addresses (orders, payments, inquiries)
- z77 – invoices
- z82 – currency conversion
- local library tables

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Data from dealer tables z70, z72

- z70_rec_key (vendor code)
- z70_vendor_name
- z72_rec_key (vendor code)
- z72_vendor_address (for payment)

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Data from invoice table z77

Invoice data

- z77_rec_key
- z77_i_date
- z77_i_rec_date
- z77_i_credit_debit
- z77_i_currency
- z77_i_total_amount
- z77_i_note

Payment data

- z77_p_status
- z77_p_date
- z77_p_amount

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Data from currency conversion table z82

- z82_currency_name
- z82_date
- z82_ratio
- Updated regularly to reflect latest exchange rates
- Exchange rate includes VAT and overhead for bank charges

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Currencies Used (Before and after Euro)

- Austrian schilling
- Australian dollar
- Belgian franc
- British pound
- Canadian dollar
- Danish kroner
- Dutch florin
- Euro
- Finnish mark
- French franc
- German mark
- Italian lira
- Japanese yen
- Norwegian kroner
- Spanish peseta
- Swedish kroner
- Swiss franc
- U. S. dollar

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Local Oracle tables used by system

- rikuzim – payment orders
- rikuz_parameters – current counter, VAT percentage, overhead percentage
- rikuzim_test_run – copy of rikuzim table, for checking results of creating new payment orders

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Extracting data and formatting output

- Acquisitions staffer manually updates payment status from ‘N’ to ‘R’ in invoices selected for payment
- SQL query retrieves invoices with status ‘R’
- php script traverses rows of data, preparing payment order(s) for each dealer

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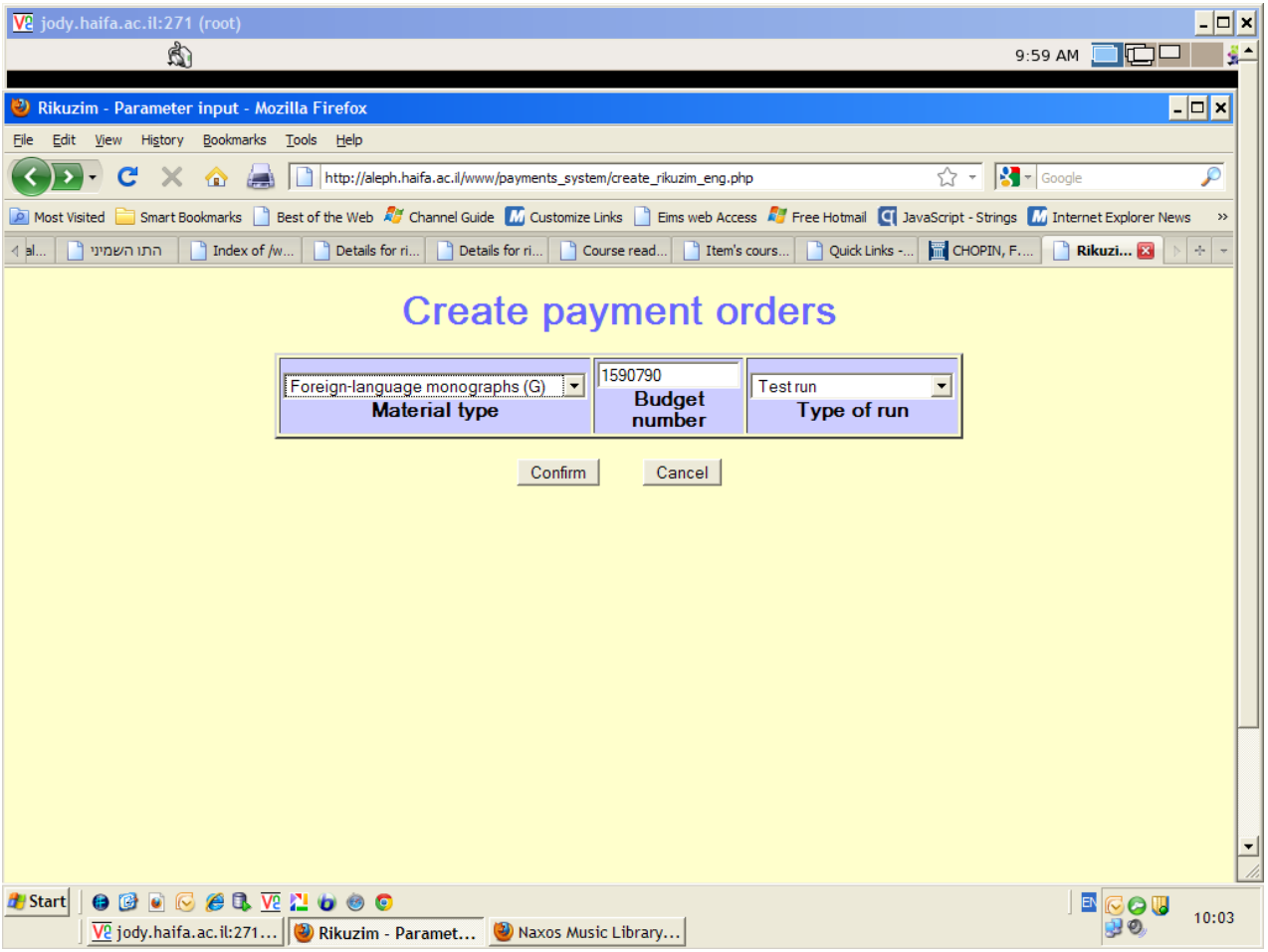
Setting Parameters



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Data in payment-order record

- Sequential ID number
- Creation date
- Budget number
- Dealer code
- Invoice numbers
- Material type code
- Currency
- Total amount
- Shekel equivalent
- Dollar equivalent
- VAT
- Fiscal year

  (1 Oct. – 30 Sept.)

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Letter to bank for payment in foreign currency

Every payment order in a foreign currency is accompanied by a letter to the bank, requesting a bank transfer (or check) for payment of the amount, with supplier details

Sample:

http://aleph.haifa.ac.il/www/public/Igelu_2011/yb/bleumi_eng.htm

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Update invoice details after inclusion in payment order

- **z77_p_status –** from ‘R’ to ‘P’
- **z77_p_amount –** same value as z77_i_total_amount
- **z77_p_date –** current date, in format YYYYMMDD
- **z77_i_note –** text citing number and date of payment order

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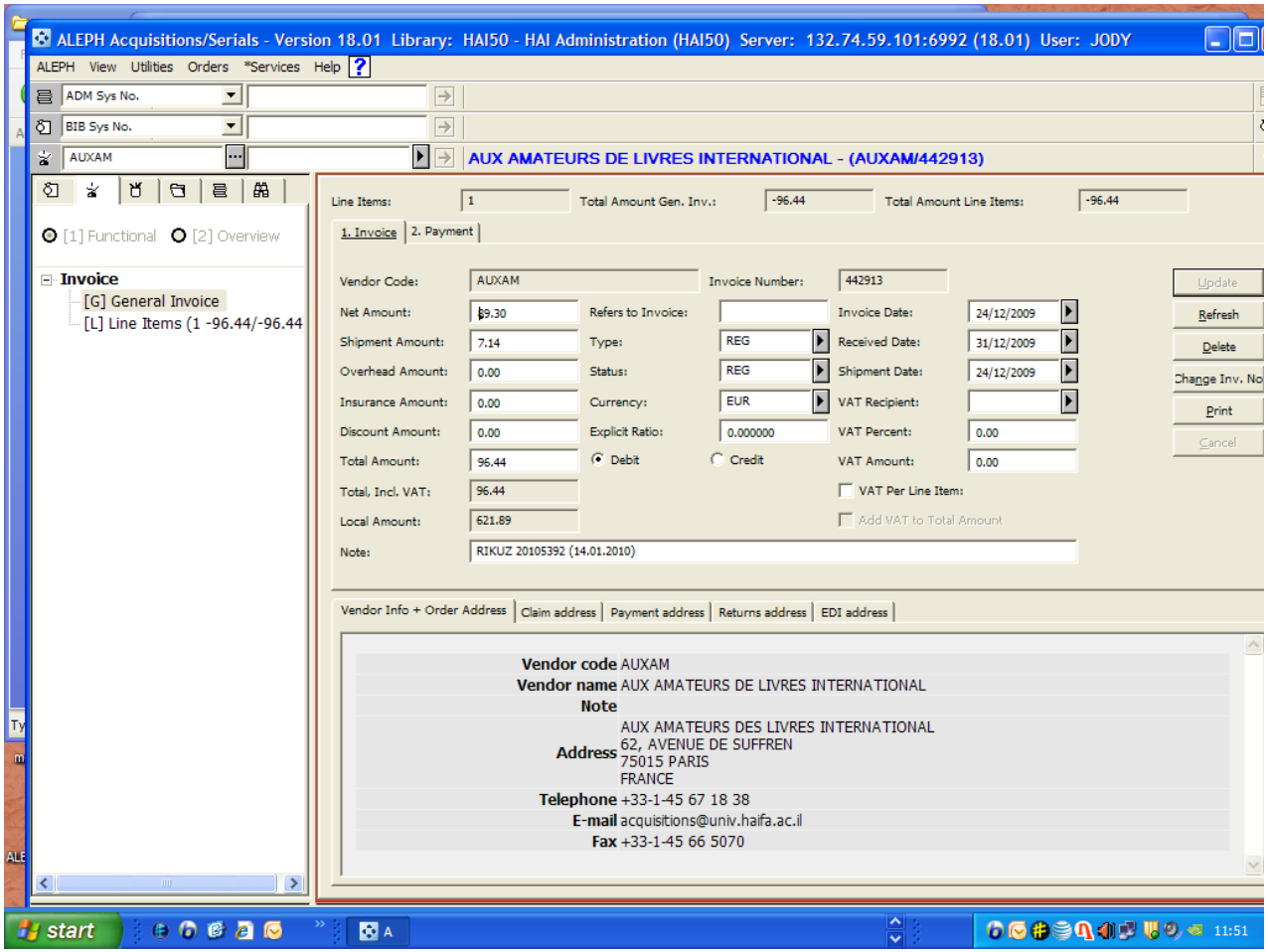
Invoice record in GUI after creation of payment order



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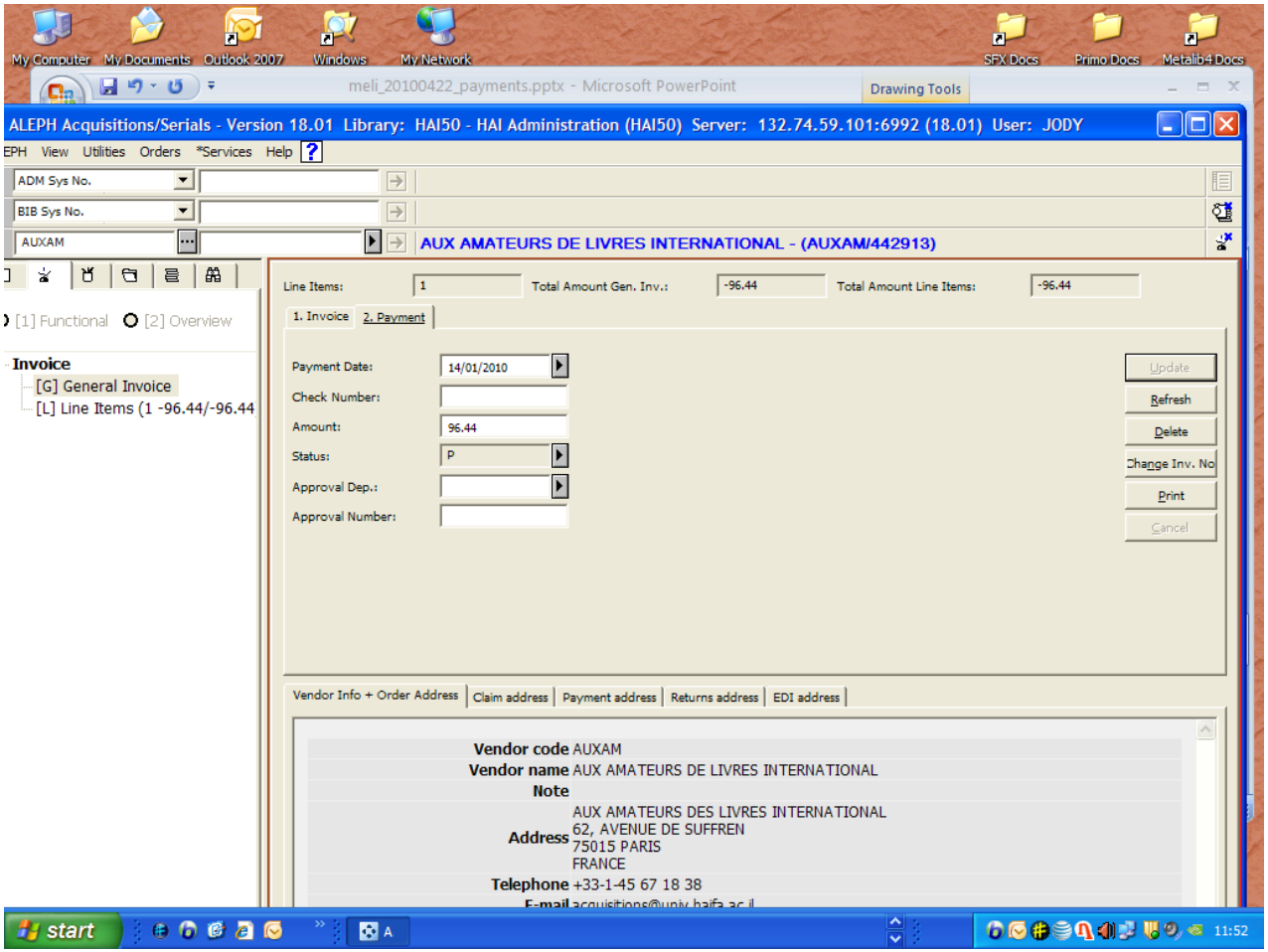
Invoice record in GUI after creation of payment order



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Scanning invoices

- Goal: satisfy legal requirement to save invoices for seven years – without drowning in paper!
- HTML added to invoice display tab in GUI, invoking local module
- Functions included:
  - scan current invoice
  - view or delete existing scan
  - upload PDF-format invoice sent by vendor

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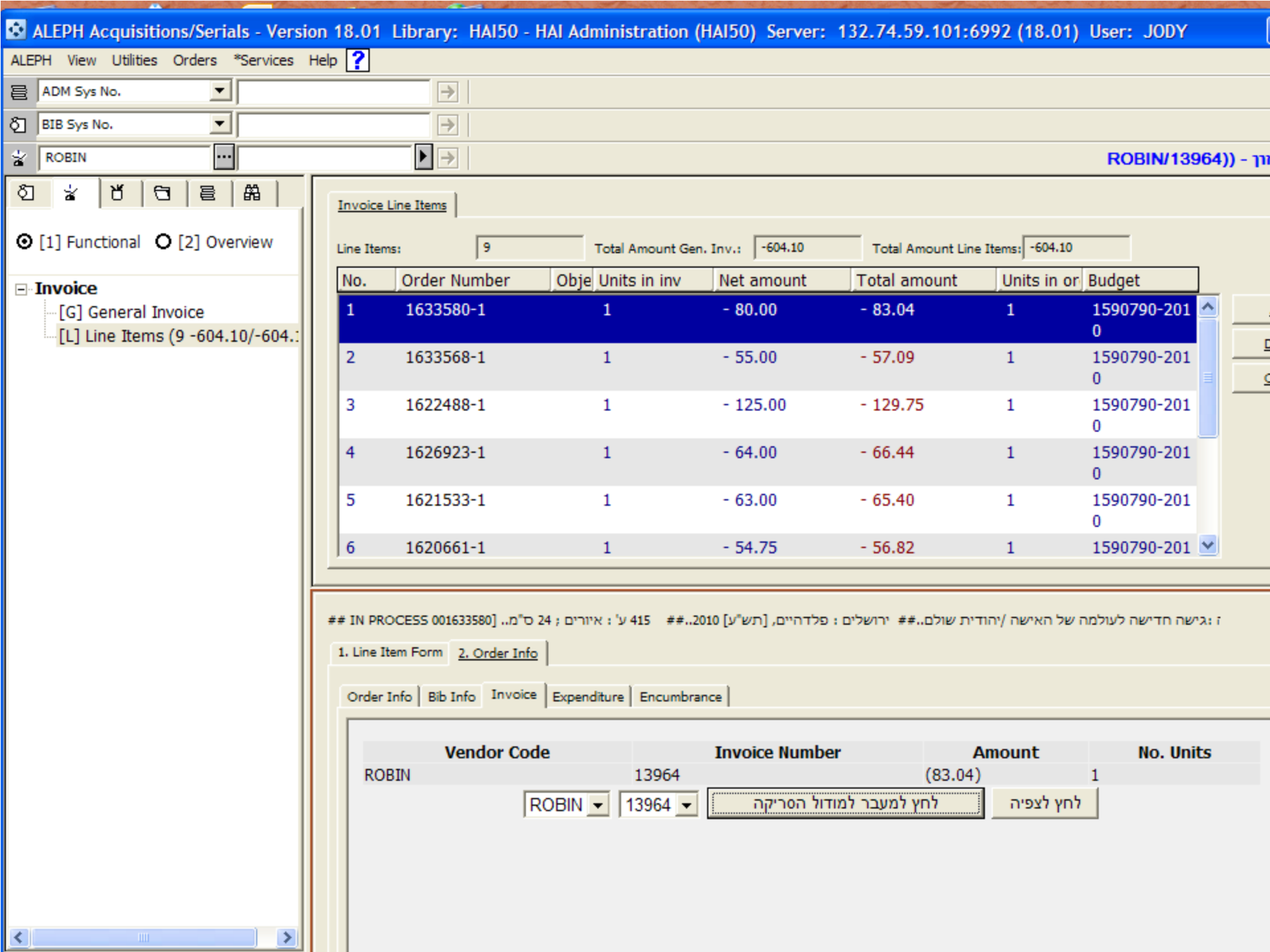
ALEPH Acquisitions/Serials - Version 18.01 Library: HAI50 - HAI Administration (HAI50) Server: 132.74.59.101:6992 (18.01) User: JODY
ALEPH View Utilities Orders *Services Help
ADM Sys No.
BIB Sys No.
ROBIN
ROBIN/13964)) - ווך
[1] Functional
[2] Overview
Invoice
[G] General Invoice
[L] Line Items (9 -604.10/-604.
Invoice Line Items
Line Items: 9
Total Amount Gen. Inv.: -604.10
Total Amount Line Items: -604.10
No. Order Number Obje Units in inv Net amount Total amount Units in or Budget
1 1633580-1 1 - 80.00 - 83.04 1 1590790-2010
2 1633568-1 1 - 55.00 - 57.09 1 1590790-2010
3 1622488-1 1 - 125.00 - 129.75 1 1590790-2010
4 1626923-1 1 - 64.00 - 66.44 1 1590790-2010
5 1621533-1 1 - 63.00 - 65.40 1 1590790-2010
6 1620661-1 1 - 54.75 - 56.82 1 1590790-201
IN PROCESS 001633580] ..ס"מ 24 ; איורים : ע' 415 ##..2010 [תש"ע], פלדהיים : ירושלים ##..יהודית שולם/ לעולמה של האישה חדישה :גישה
1. Line Item Form
2. Order Info
Order Info
Bib Info
Invoice
Expenditure
Encumbrance
Vendor Code Invoice Number Amount No. Units
ROBIN 13964 (83.04) 1
ROBIN
13964
לחץ למעבר למודול הסריקה
לחץ לצפיה

ALEPH Acquisitions/Serials - Version 18.01 Library: HAI50 - HAI Administration (HAI50) Server: 132.74.59.101:6992 (18.01) User: JODY

ALEPH View Utilities Orders *Services Help

ADM Sys No.

http://aleph.haifa.ac.il/www/ksafim/data/2010/ROBIN/invoices/13964.pdf - Windows Internet Explorer

http://aleph.haifa.ac.il/www/ksafim/data/2010/ROBIN/invoices/13964.pdf

Bing

File Edit Go To Favorites Help

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http://aleph.haifa.ac.il/www/ksafim/data/2010/ROBI...

Page Safety Tools

1 / 1 97% Find

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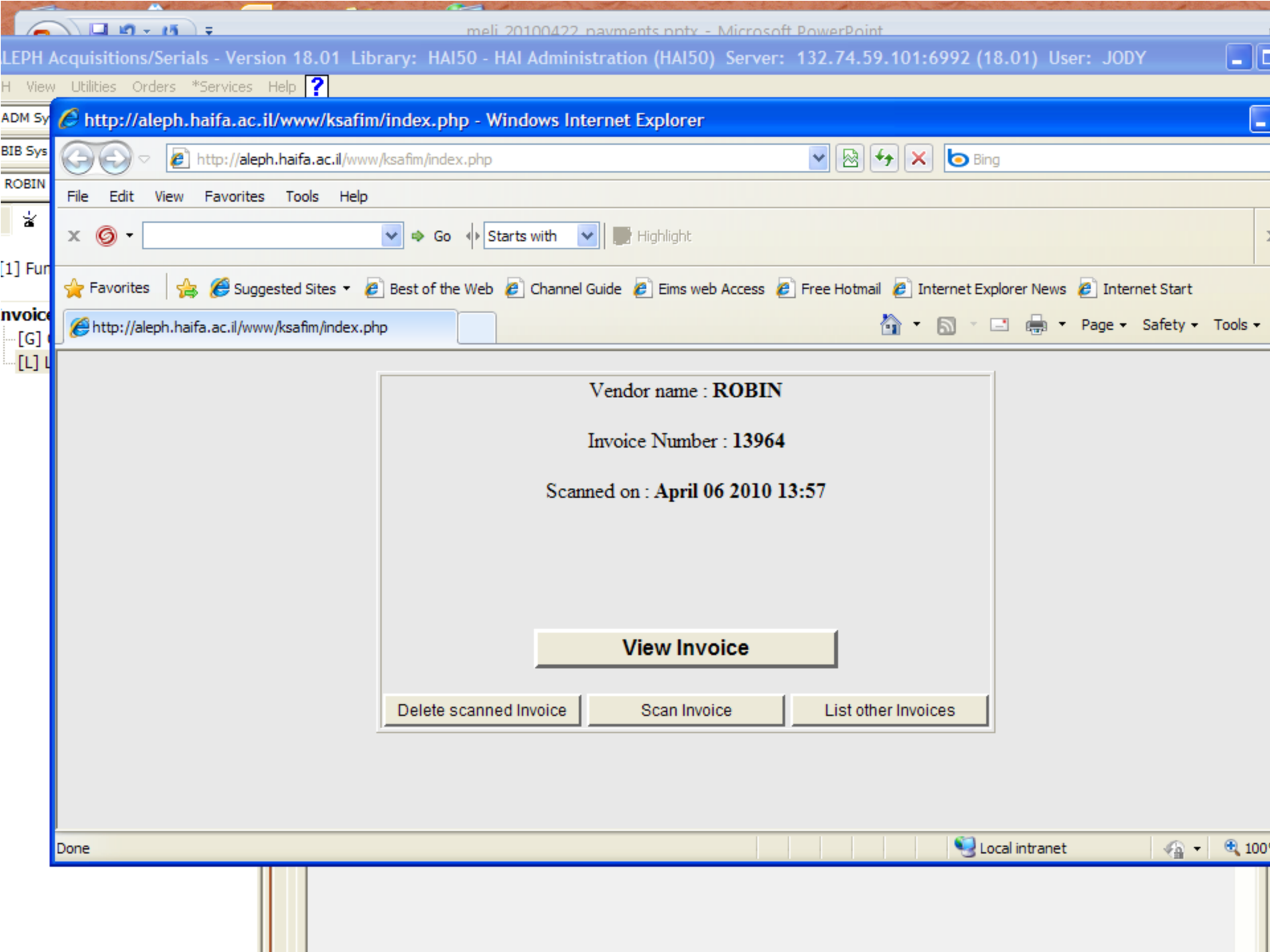
557291028 :מ.ע E-Mail: rob_book@netvision.net.il WWW.ROBINSON.CO.IL
09:48 31/03/10

מקור No. 13964 חשבונית מס

החשבונית כוללת מע"מ.
מס לקוח: 0002

לכבוד:
אונ'חיפה רכישה(עברי)ספריה

Unknown Zone


meli_20100422_payments.pptx - Microsoft PowerPoint
LEPH Acquisitions/Serials - Version 18.01 Library: HAI50 - HAI Administration (HAI50) Server: 132.74.59.101:6992 (18.01) User: JODY
H View Utilities Orders *Services Help
http://aleph.haifa.ac.il/www/ksafim/index.php - Windows Internet Explorer
http://aleph.haifa.ac.il/www/ksafim/index.php
File Edit View Favorites Tools Help
Go
Starts with
Highlight
Favorites
Suggested Sites
Best of the Web
Channel Guide
Eims web Access
Free Hotmail
Internet Explorer News
Internet Start
http://aleph.haifa.ac.il/www/ksafim/index.php
Page
Safety
Tools
Vendor name : ROBIN
Invoice Number : 13964
Scanned on : April 06 2010 13:57
View Invoice
Delete scanned Invoice
Scan Invoice
List other Invoices
Done
Local intranet

Scanning checks

- Option added April 2010
- When a check is issued (in place of bank transfer), it is scanned and stored, identified by payment-order number
- When viewing a payment order, the system detects that a check is included and displays a link to it following rikuz details

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Summary, 1995-2011

- 17,250 payment orders
- 1400 vendors
- c. 235 million shekels,
  58 million dollars
- 43,000 scanned invoices
- 40 scanned checks (2010-2011)

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Followup, reports and statistics

- View payment orders and invoices by dealer code, rikuz number or invoice number
- Summary of payments to single dealer
- Queries can be run for summary data based on fiscal year, currency, material type, etc.
- Delete a payment order

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You may have thought to ask…

- Isn't it premature to mark the invoice paid?
- Why are you still pushing all this paper around?
- Does the Library system interface with the University ERP?

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Thank you!

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972-4-8240288

972-52-8666430

http://aleph.haifa.ac.il/www/public/Igelu_2011/yb/Vendor_Payments.ppsx

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Orders processing status reports

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Acquisitions process - overview

- Requests from faculty members and subject- specialist librarians (online form, email, etc.)
- Check and prioritize requests
- Entry into Aleph – bibliographic and order records, even if order will not go out immediately
- Order sent to vendor
- Receipt of material and invoice, usually simultaneously
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Notifying users

Purpose: inform users of the status of their order requests, by means of:

- Periodic mailing with details of items whose status has changed recently
- Online display of all the user's outstanding requests

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Connecting the order to the requester

Local fields in bibliographic record, tags 904/905:

904 – Academic staff

905 – Library staff

Field specifies:

- User name
- Department
- Identification number

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Sample 904/905 entries

- 000075880 904 L $$Wyziwyg, Wendell (Dr.)—Ergonomics (011205887)
- 001573258 904 L $$aRubin, Billy (Dr.)—Physiology (015787468)
- 002345678 905 L $$aSafrani, Marion (Ms.)—Library, Cataloging (013683131)
- 002345678 904 L $$aNitzan, Saul J. (Prof.)—Russian Language and Literature (011494762)
- 003964376 904 L $$aRubino, Marcia (Dr.)—Bible Studies (304338692)

In practice, the notification system uses only the tag and the ID number. Personal details (name, title, email address) are extracted from Oracle tables z303/304/305

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Managing identifier fields

Indicators are added to 904/905 tag for inactive users:

10 – temporarily inactive (sabbatical, incomplete personal data)

20 – permanently inactive (retirement, death, left University)

Indicators are checked weekly and revised or deleted per change in user status

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Order requests by user type

As of 8.9.2011:

101,262 accumulated requests:

- academic staff: 72.85%
- library staff: 27.15%

17,838 active requests:

- academic staff: 83.16%
- library staff: 16.84%

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Aleph tables

- items - z30 (library HAI50)
- bibliographic details - z00, z00r (library HAI01)
- local tables:
  - osr_requests
  - osr_item_status

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Fields from Aleph tables

- **z00r**:
  - z00r_doc_number
  - z00r_text

- **z30**:
  - z30_rec_key (z00r_doc_number + 6 digits for specific item)
  - z30_item_process_status

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Status codes (z30_item_process_status)

- OI – Not yet ordered
- OR – On order
- NP – Delayed: Not yet published
- OS – Delayed: Out of stock
- OQ – Delayed: Out of print, searching
- CA – Order cancelled
- OO – Cancelled: Out of print
- PA – Cancelled: Publication abandoned
- IP – Arrived - In Process

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Distribution of orders by processing status (as of 8.9.2011)

Status	Number of items	Percentage
OI – Not yet ordered	9411	55.33
OR – On order	1543	9.07
NP – Delayed: Not yet published	287	1.69
OS – Delayed: Out of stock	23	0.14
OQ – Delayed: Out of print, searching	24	0.14
CA – Order cancelled	3261	19.17
OO – Cancelled: Out of print	928	5.46
PA – Cancelled: Publication abandoned	144	0.85
IP – Arrived - In Process	1389	8.17

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Distribution of orders by processing status (14.4.2010 - 8.9.2011)

Status	Minimum %	Maximum %	Average %
OI – Not yet ordered	49.73	78.21	57.47
OR – On order	5.73	14.81	8.94
NP – Delayed: Not yet published	1.58	2.33	1.85
OS – Delayed: Out of stock	0.06	0.4	0.2
OQ – Delayed: Out of print, searching	0.09	0.44	0.2
CA – Order cancelled	1.2	20.71	17.44
OO – Cancelled: Out of print	0.91	6.37	4.69
PA – Cancelled: Publication abandoned	0.18	0.92	0.7
IP – Arrived - In Process	7.18	11.07	8.51

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Daily update procedure

- Locate bibliographic records added or updated the previous day
- Update table osr_requests per 904/905 fields in new/updated bibliographic records
- Extract item data from z30 corresponding to records in osr_requests
- Update table osr_item_status to reflect current orders' processing status

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Entries in table osr_item_status

000075880000050 OI

000553959000010 CA

000590734000010 CA

000590734000020 CA

000591948000010 CA

000591948000020 OR

000591948000030 CA

000591948000040 IP

000599706000010 OO

000599770000010 CA

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List of latest changes, as a basis for formatting letters

- User ID number
- Aleph ID number
- Item record number in z30_items
- Current status code
- Previous status code

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List of latest changes, as a basis for formatting letters

Comparison of current list with previous produces list of changes:

000773861|001622947|001622947000010|OR|OI

001049154|001511022|001511022000010|99|IP

001049154|001553532|001553532000010|99|OR

001049154|001554179|001554179000010|99|IP

001049154|001553006|001553006000010|IP|OR

001049154|001626680|001626680000010|IP|OR

001049154|001628480|001628480000010|IP|OR

001625250|001417298|001417298000010|99|OR

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Generating letters

Dear …
The following is an update regarding the status of your Library acquisition requests.
It includes:

- ❑ new requests you submitted in the last week, and their current status
- ❑ requests whose status has changed in the past week

Requests whose status has not changed are not included. You may view a cumulative listing of all your requests by clicking here

If you have questions or comments, please contact Ms. Cila Harel :
telephone 04-8249324, 3324 (internal) or
email: harel@univ.haifa.ac.il

Sincerely,
Technical Services Division
University of Haifa Library

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Sample letters

- 316872910
- 065528978
- 016751919
- 055559645
- 015192594
- 012074340

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Online view of all requests

- Access to interface via:
  - link embedded in letter
  - direct access through Library web site

http://aleph.haifa.ac.il/www/public/orders_status_reports/user_item_status.php

- Summarizes processing status of all outstanding requests
- Extracting data from items table enables system to indicate that volumes of multivolume set might have different statuses

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Thank you!

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972-4-8240288

972-52-8666430

http://aleph.haifa.ac.il/www/public/Igelu_2011/yb/Orders_Status_Reports.ppsx

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