

ALEPH User Security and the Admin Module

What Is To Be Done?

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I will be talking about:

- the Oracle tables that (mostly) control user security in ALEPH
- the Admin Module's interface for updating those tables – v.14.2
- problems with this interface and how to get around some of them
- my dreams of a better setup and interface for institutions like McGill with many users

ALEPH User 'Access Rights'

- ALEPH User record – pwd50.z66
 - User name
 - Password
 - Catalog(u)ing level
 - Circulation override level
 - 'Own' permissions
 - Optional 'proxy'

ALEPH User 'Access Rights'

- A glimpse at pwd50.z66:

```
SQL-PWD50> select z66_rec_key, z66_user_password_enc, z66_user_cat_level, z66_user_proxy,  
z66_user_circ_level  
2 from z66 where z66_rec_key like 'D%';
```

Z66_REC_KEY	Z66_USER_PASSWORD_ENC	Z66_USER_CAT_LEVEL	Z66_USER_PROXY	Z66_USER_CIRC_LEVEL
DAVIST	7EHC5D92	0	BASIC	0
DECK	REFFB3TN5I	20	SYSSUPER	25
DELBALSOA	RGMKBHY	20	CATHS05	0
DELBALSOB	4X624	20	CATHSSPEC	0
DEMOSKOFF	LG2US6U9CG	5	HSCIRCPLUS	5
DERCAT01	GSV48A97S7	0		0
DERCAT02	GSV48A97S7	0		0
DERCAT03	GSV48A97S7	0		0
DERCAT04	NSXHSJ5G2P	0		0
DERCAT05	LMPRI92C	0		0

ALEPH User 'Access Rights'

- Functional access rights – pwd50.z67
 - Link to user record in pwd50.z66
 - Individual functions by Library, Sublibrary, Function and Subfunction

ALEPH User 'Access Rights'

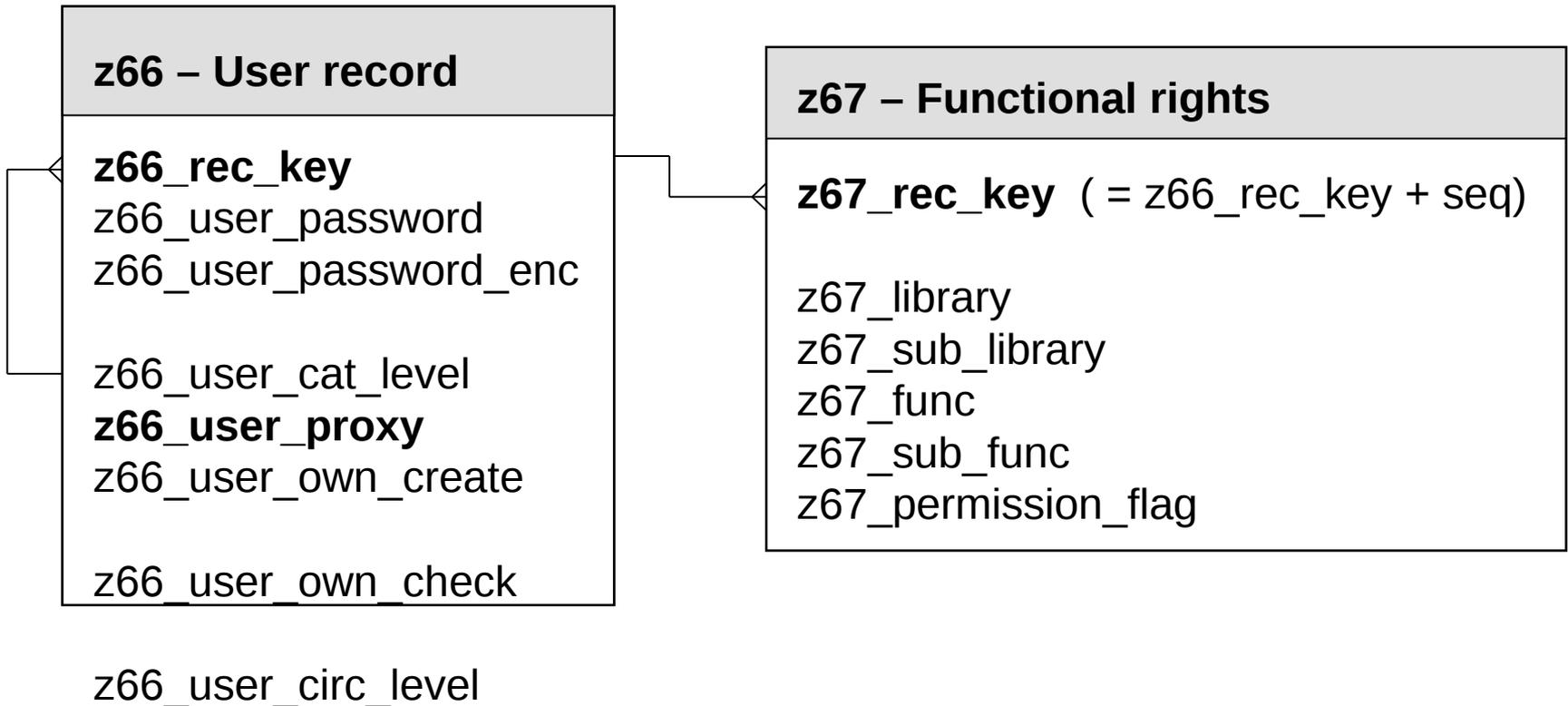
- A glimpse at pwd50.z67:

```
SQL-PWD50> select * from z67 where z67_rec_key like 'CATHS05%';  
**** Hit return to continue ****
```

Z67_REC_KEY	Z67_LIBRARIY	Z67_SUB_LIBRARIY	Z67_FUNC	Z67_SUB_FUNC	Z67_PERMISSION_FLAG
CATHS05	0010	MGU50	MGU50	ACQ	ARRIVAL-GET
CATHS05	0011	MGU50	MGU50	ACQ	ARRIVAL-LIST
CATHS05	0013	MGU50	MGU50	ACQ	CLAIM-GET
CATHS05	0014	MGU50	MGU50	ACQ	CLAIM-LIST
CATHS05	0015	MGU50	MGU50	ACQ	COPY-LIST
CATHS05	0016	MGU50	MGU50	ACQ	ITEMS-LIST
CATHS05	0017	MGU50	MGU50	ACQ	INDEX-LIST
CATHS05	0018	MGU50	MGU50	ACQ	INVOICE-GET
CATHS05	0019	MGU50	MGU50	ACQ	INVOICE-HEAD-GET
CATHS05	0020	MGU50	MGU50	ACQ	INVOICE-HEAD-LIST
CATHS05	0021	MGU50	MGU50	ACQ	INVOICE-LIST

ALEPH User 'Access Rights'

- The two tables:





Admin Module Interface user list

Privileges

Type a user name or select one from the list

User Name	Permitted libraries
ABBOTT	PROXY - CIRMUCAS
ACQBANNER	MGT01 MGT50 MGT60 MGU50 PWD50 USM01
ACQBANNERD	MGT01 MGT50 MGT60 MGU01 MGU50 PWD50 USM01
z66_rec_key	MGT01 MGT50 MGT60 MGU01 MGU50 PWD50 USM01
ACQSPEC	MGT01 MGT50 MGU01 MGU10 MGU11 MGU12 MGU50 MGU60 PWD50 USM01
ACQSUPER	MGT01 MGT10 MGT50 MGT60 MGU01 MGU10 MGU11 MGU12 MGU13 MGU30 MGU50 MGU60 PWD50 USM01 USM10 USM30 USM50
ACQTEST	PROXY - CATSPEC11
ADAMS	PROXY - MCLCIRCNRM
ADDARIO	PROXY - CIRMUCAS
ADELE	PROXY - EDCIRCSUP
ACQUILAR	PROXY - CIRMUCAS

z66_user_proxy

z67_library

New user
Modify user
Duplicate user
Delete user
Access Rights
Summary
Close
Help



Admin Module Interface individual user record

z66_rec_key →

User - Password Information [X]

User name:	<input type="text" value="ABBOTT"/>	[OK] [Cancel] [Help]
Password:	<input type="password"/>	
Cataloguer level:	<input type="text" value="05"/> [▶]	
User proxy:	<input type="text" value="CIRMUCAS"/>	
Cat. OWN ID:	<input type="text"/>	
Cat. OWN Permission:	<input type="text"/>	
Circ. Override level:	<input type="text" value="20"/> [▶]	



Admin Module Interface

user access rights summary

The screenshot shows a window titled "Summary of CIRMUCAS's Access Rights". At the top, there is a "User Name:" label followed by a text input field containing "CIRMUCAS". Below this is a list of access rights categories, each with a plus sign icon to its left. The "Cash Management" category is highlighted in yellow. Under "Item history", there is a sub-entry "MGU50" with a checkmark icon to its left. At the bottom right of the window, there are two buttons: "Close" and "Help".

Summary of CIRMUCAS's Access Rights

User Name: CIRMUCAS

- + All Functions
- + Quick Catalog
- + Acquisitions
- + ALEPH Administration
- + Budget Maintenance
- + Budget Usage
- + Cash Management
- + Cataloging
- + Circulation
- + Subscription
- + Currency utilities
- + Record Triggers
- Item history
 - Item history
 - ✓ MGU50
- + ILL
- + Items Control
- + Subscription (from ACQ)
- + ALEPH User Passwords
- + ALEPH User Profiles

Close

Help



Admin Module Interface

user access rights summary

Summary of CIRMUCAS's Access Rights

User Name: CIRMUCAS

- + Acquisitions
- + ALEPH Administration
- + Budget Maintenance
- + Budget Usage
- Cash Management
 - All subfunctions
 - Expand cash transaction
 - ✓ MGT50
 - ✓ MGU50
 - Make payment
 - Waive payment
 - Print cash receipt
 - Print cash summary
 - Update cash transaction
- + Cataloging
- + Circulation
- + Subscription
- + Currency utilities
- + Record Triggers
- Item history

Close

Help



Admin Module Interface

user access rights summary

Summary of CIRMUCAS's Access Rights

User Name: CIRMUCAS

- Acquisitions
- ALEPH Administration
- Budget Maintenance
- Budget Usage
- Cash Management
 - All subfunctions
 - Expand cash transaction
 - ✓ MGT50
 - ✓ MGU50
 - Make payment
 - Waive payment
 - Print cash receipt
 - Print cash summary
 - Update cash transaction
- Cataloging
- Circulation
- Subscription
- Currency utilities
- Record Triggers
- Item history

z67_library
z67_func
z67_sub_func
by way of
.../alephe/tab/user_function.eng

Close
Help



Admin Module Interface –

some problems with SQL solutions

- Opaque tree structure of functional rights list prevents ‘full view’ of rights
- No straightforward print function
- No ‘reverse indexes’
 - which users are proxied to x ?
 - which users have rights to perform function y ?

SQL for rights list

```
SQL-PWD50> start access_by_name
```

```
Name or proxy: abbot
```

```
Users proxied to CIRMUCAS
```

USERNAME	CA	CI
ABBOTT	5	20
ADDARIO	5	20
CAICEDO	5	20
CHAMBERLAN	5	20
ELYSEE	5	20
FAULDS	5	20
FREY	5	20
HALPERIN	5	20

```
8 rows selected.
```

SQL for rights list cont.

Access rights in MGU for users proxied to CIRMUCAS

PROXY	Library	Function	Sub-function
-----	-----	-----	-----
CIRMUCAS	MGU50	CASH	DOC-INFO EXPAND GET SUMARY
		CIRCULATION	BOR-SHOW OFFLINE RETURN-DATE LOAN-RENEW HOLD-PRINT ITEM-RESTORE HOLD-REQUEST-OVERRIDE HOLD-REQUEST-GET
[. . .]		USR	LIST
ITEM-H-GET			

31 rows selected.

SQL for reverse function index

```
SQL-PWD50> start users_by_function
Library (default is MGU): MGU50
Function (default is ACQ): CASH
Subfunction: GET
```

Users with rights to CASH - GET in MGU50

LIB	FUNCTION	SUBFUNCTION	PROXY	USERNAME
-----	-----	-----	-----	-----
MGU50	CASH	GET	ACQSPEC CATALOG1 CATMUS01	HAY TESTCAT BLACK CURTIS LEIVE
[. . .]			CIRMUCAS	ABBOTT ADDARIO CAICEDO CHAMBERLAN ELYSEE
[. . .]	GLOBAL	GLOBAL	SYSSECUR SYSSUPER	ALLEN COZA AITKENS DECK DOGGY JOHNSTON TOUTANT



Admin Module Interface – some other problems

- Not always clear how module functions correspond to `z67_func/sub_funcs`
- Cumbersome for adding blocks of rights
 - abstract ‘roles’ as opposed to proxies?

Dream documentation

Budget Information [X]

1. Information Screen 1 | 2. Information Screen 2

Open date: 31 May 2002 [Update]

External budget: 27373100316 7000173100 000000000000

Budget code: ML AN1M-2003

Budget parent:

Budget type:

Valid from:

Note 1:

Note 2:

Note 3:

Note 4:

Budget group: MCL [▶] CF [▶]
SPEC [▶] ISAB [▶]
MONO [▶]

Name: Anthropology Isabella McLennan

Department: HEBERT [▶]

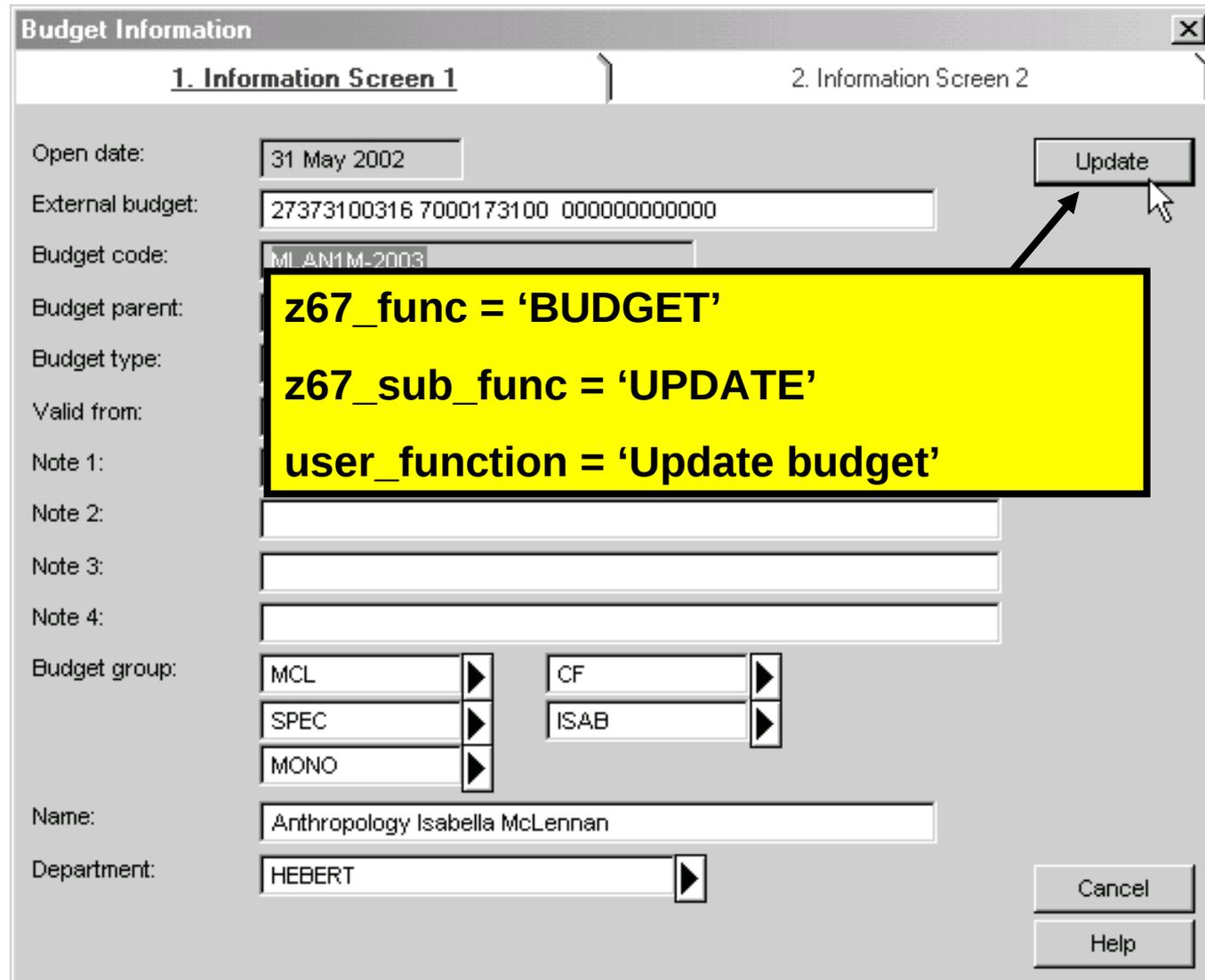
Cancel

Help

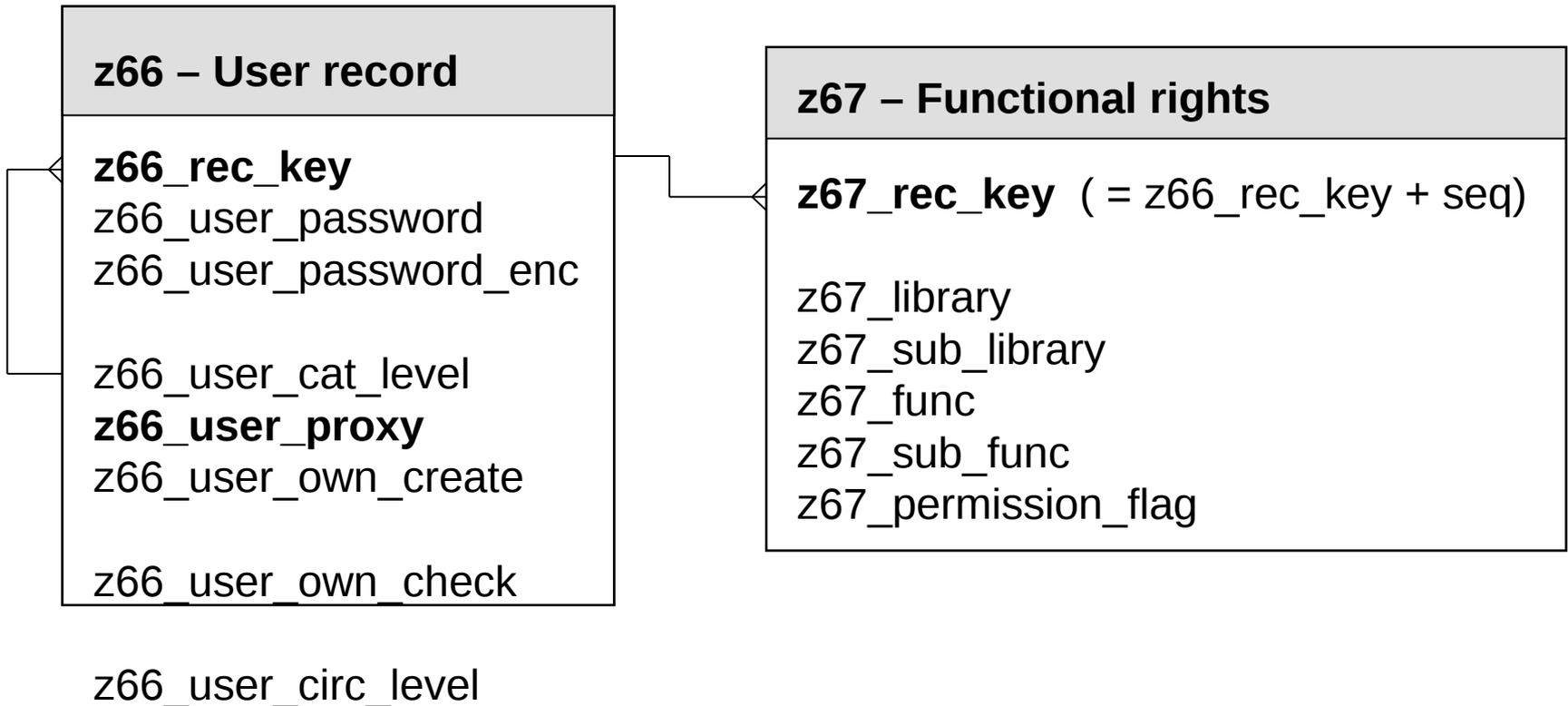
z67_func = 'BUDGET'

z67_sub_func = 'UPDATE'

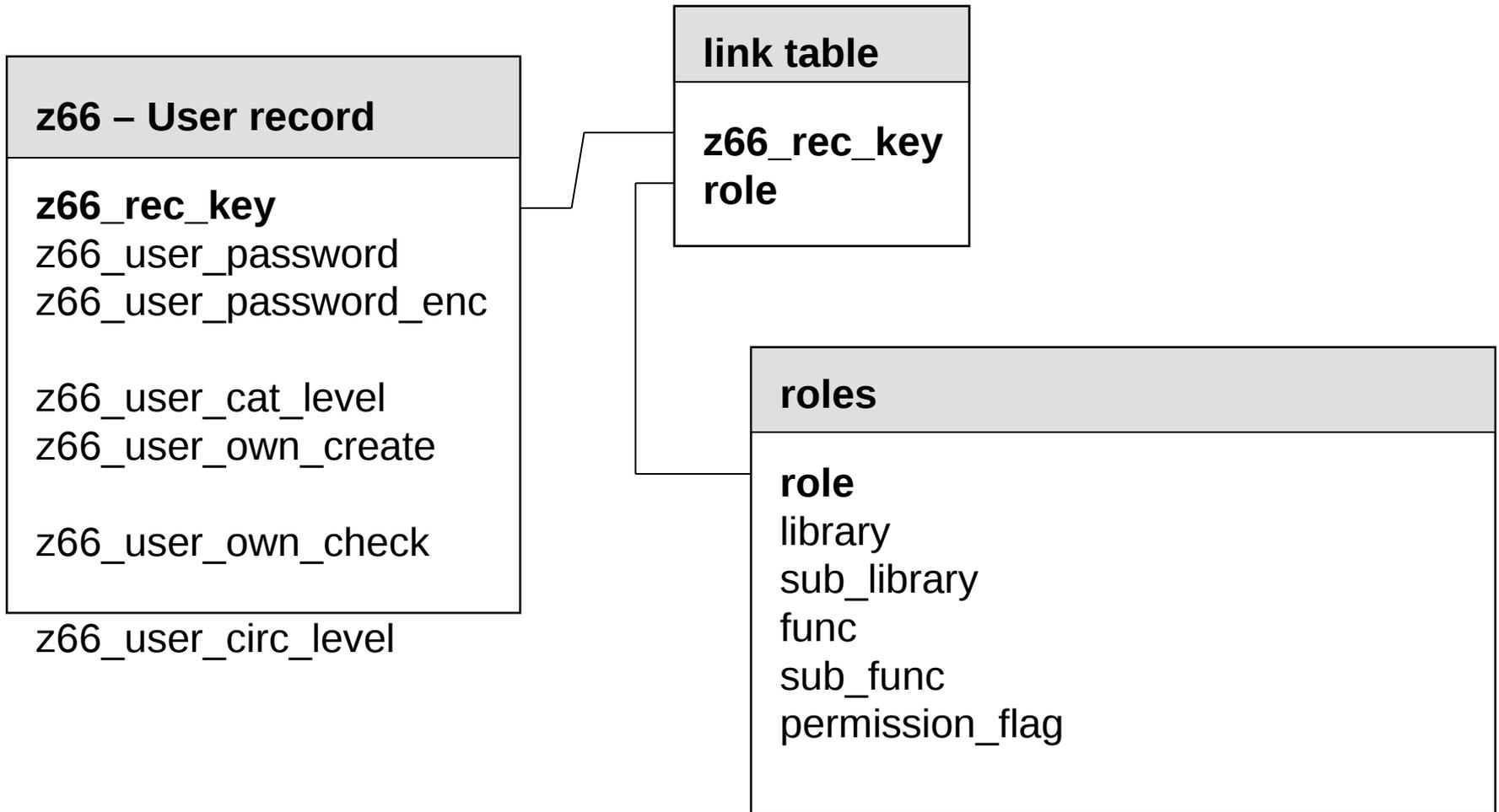
user_function = 'Update budget'



Roles rather than proxies?



Roles rather than proxies?



Roles rather than proxies?

- What might the interface be like?
 - ‘**user list**’ could show list of roles in place of libraries
 - ‘**modify user**’ could include the same list with links to individual role details and ‘add role’ function
 - ‘**summary**’ could list all actual rights with roles
 - e.g. Budget update – *from* ACQSUPER
 - **new dialogue, ‘role details’** could list access rights with add/deny function and link to users
 - reverse indexes from functional rights to roles and users



User Security System – other possible improvements

- Additional info about users
 - full name, *email*, department (notes)
- Validation on proxy
- Triggers
 - change password
 - delete

Further reading

- Systems Administration Enhancement Group – 2002, *Proposal for Development Work # 2: Staff Users Privileges* online at <http://www.naaug.org/enhancements/>

