



# Entity Relationship Diagrams

Version 23

## CONFIDENTIAL INFORMATION

The information herein is the property of Ex Libris Ltd. or its affiliates and any misuse or abuse will result in economic loss. DO NOT COPY UNLESS YOU HAVE BEEN GIVEN SPECIFIC WRITTEN AUTHORIZATION FROM EX LIBRIS LTD.

This document is provided for limited and restricted purposes in accordance with a binding contract with Ex Libris Ltd. or an affiliate. The information herein includes trade secrets and is confidential.

## DISCLAIMER

The information in this document will be subject to periodic change and updating. Please confirm that you have the most current documentation. There are no warranties of any kind, express or implied, provided in this documentation, other than those expressly agreed upon in the applicable Ex Libris contract. This information is provided AS IS. Unless otherwise agreed, Ex Libris shall not be liable for any damages for use of this document, including, without limitation, consequential, punitive, indirect or direct damages.

Any references in this document to third-party material (including third-party Web sites) are provided for convenience only and do not in any manner serve as an endorsement of that third-party material or those Web sites. The third-party materials are not part of the materials for this Ex Libris product and Ex Libris has no liability for such materials.

## TRADEMARKS

"Ex Libris," the Ex Libris bridge, Primo, Aleph, Alephino, Voyager, SFX, MetaLib, Verde, DigiTool, Preservation, URM, Voyager, ENCompass, Endeavor eZConnect, WebVoyage, Citation Server, LinkFinder and LinkFinder Plus, and other marks are trademarks or registered trademarks of Ex Libris Ltd. or its affiliates.

The absence of a name or logo in this list does not constitute a waiver of any and all intellectual property rights that Ex Libris Ltd. or its affiliates have established in any of its products, features, or service names or logos.

Trademarks of various third-party products, which may include the following, are referenced in this documentation. Ex Libris does not claim any rights in these trademarks. Use of these marks does not imply endorsement by Ex Libris of these third-party products, or endorsement by these third parties of Ex Libris products.

Oracle is a registered trademark of Oracle Corporation.

UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Ltd.

Microsoft, the Microsoft logo, MS, MS-DOS, Microsoft PowerPoint, Visual Basic, Visual C++, Win32, Microsoft Windows, the Windows logo, Microsoft Notepad, Microsoft Windows Explorer, Microsoft Internet Explorer, and Windows NT are registered trademarks and ActiveX is a trademark of the Microsoft Corporation in the United States and/or other countries.

Unicode and the Unicode logo are registered trademarks of Unicode, Inc.

Google is a registered trademark of Google, Inc.

Copyright Ex Libris Limited, 2015. All rights reserved.

Document released: November 30, 2015

Web address: <http://www.exlibrisgroup.com>

## Table of Contents

<b>1</b>	<b>Scope .....</b>	<b>4</b>
<b>2</b>	<b>Conventions.....</b>	<b>4</b>
<b>3</b>	<b>Full Relationship.....</b>	<b>5</b>
3.1	BIB Document + Authorities .....	6
3.2	ADM + HOL Document .....	7
3.3	Course Reading.....	8
3.4	Acquisitions – Orders .....	9
3.5	Serial Subscriptions .....	10
3.6	Circulation + Items .....	11
3.7	Patrons.....	12
3.8	Staff User .....	13
3.9	VIR Tables.....	14
3.10	Inter Library Loans (ILL) .....	15
<b>4</b>	<b>Direct Relationships .....</b>	<b>16</b>
4.1	Acquisition Orders .....	16
4.2	Vendors .....	17
4.3	Budgets .....	18
4.4	General Invoice.....	19
4.5	Invoice Line .....	20
4.6	Reading Room .....	21
4.7	Advance Booking.....	22
4.8	Cash.....	23

# 1 Scope

This document is intended to supply Entity Relationship Diagrams describing ALEPH's database structure. The entity diagrams are arranged according to functionalities, so that each diagram includes database tables that are related to a common function.


The document's diagrams are arranged in two separate chapters:

- Full Relationship – This chapter's diagrams map all of the tables that directly or indirectly relate to a central entity (see section 2). The following diagrams are included in this chapter:
  - BIB Document + Authorities
  - ADM Document + HOL Document
  - Course Reading
  - Acquisitions - Orders
  - Serial Subscriptions
  - Circulation + Items
  - Patrons
  - Staff User
  - VIR Tables
  - Inter Library Loans (ILL)
- Direct Relationships – This chapter's diagrams display only entities that directly relate to the central entity. The following diagrams are included in this chapter:
  - Acquisition Orders
  - Vendors
  - Budgets
  - General Invoice
  - Invoice Line
  - Reading Room
  - Advance Booking
  - Cash

# 2 Conventions

The following conventions are used for this document's diagrams.

- Each diagram has a central entity around which the rest of the diagram's entities revolve. Most, but not all, of the relationships will be related to the central diagram. The central entity is always in white.

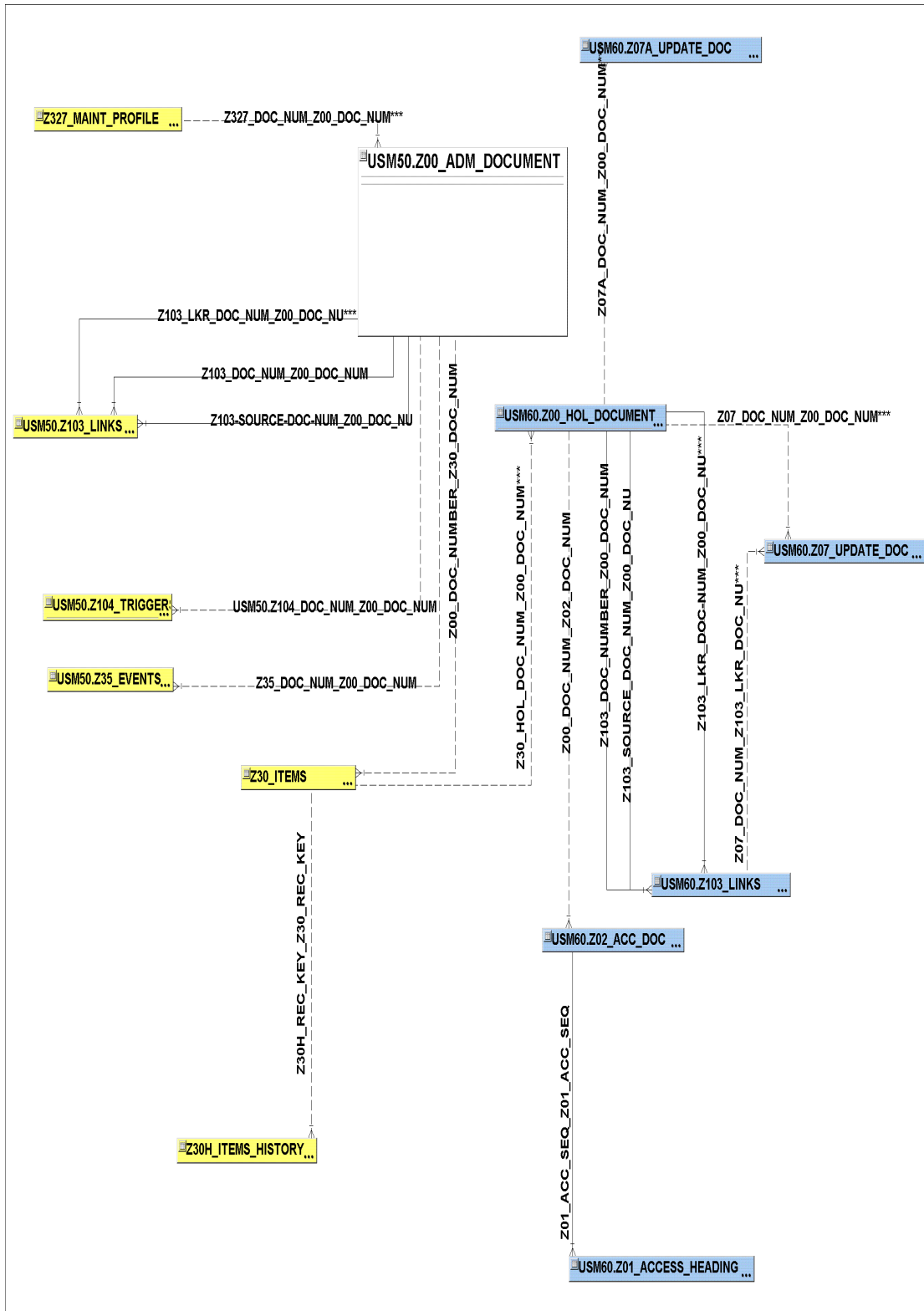
- Other entities that are stored in the same library as the central entity are in yellow. If the entity is stored in another library, it is colored differently. For example, if the central entity is Z303, which is stored in the USR library, only related entities that are stored in the USR library, such as the Z304 and Z308 records, are in yellow. Records that are stored in the ADM library, such as Z36, are colored differently.
- Each relationship has a name which includes the names of the related fields using the following convention: Oracle table name1\_Field1\_Oracle table name2\_Field2.
- Most relationships are one-to-many relationships. The  icon identifies the 'to-many' side of the connection. Where the relationship is one-to-one, a \*\*\* mark is added to the name of the relationship.
- Dashed lines symbolize optional relationships; solid lines symbolize mandatory relationships.

### 3 Full Relationship

The diagrams in this chapter display the central entity's full relationships map. Below are the Entity Relationship Diagrams.



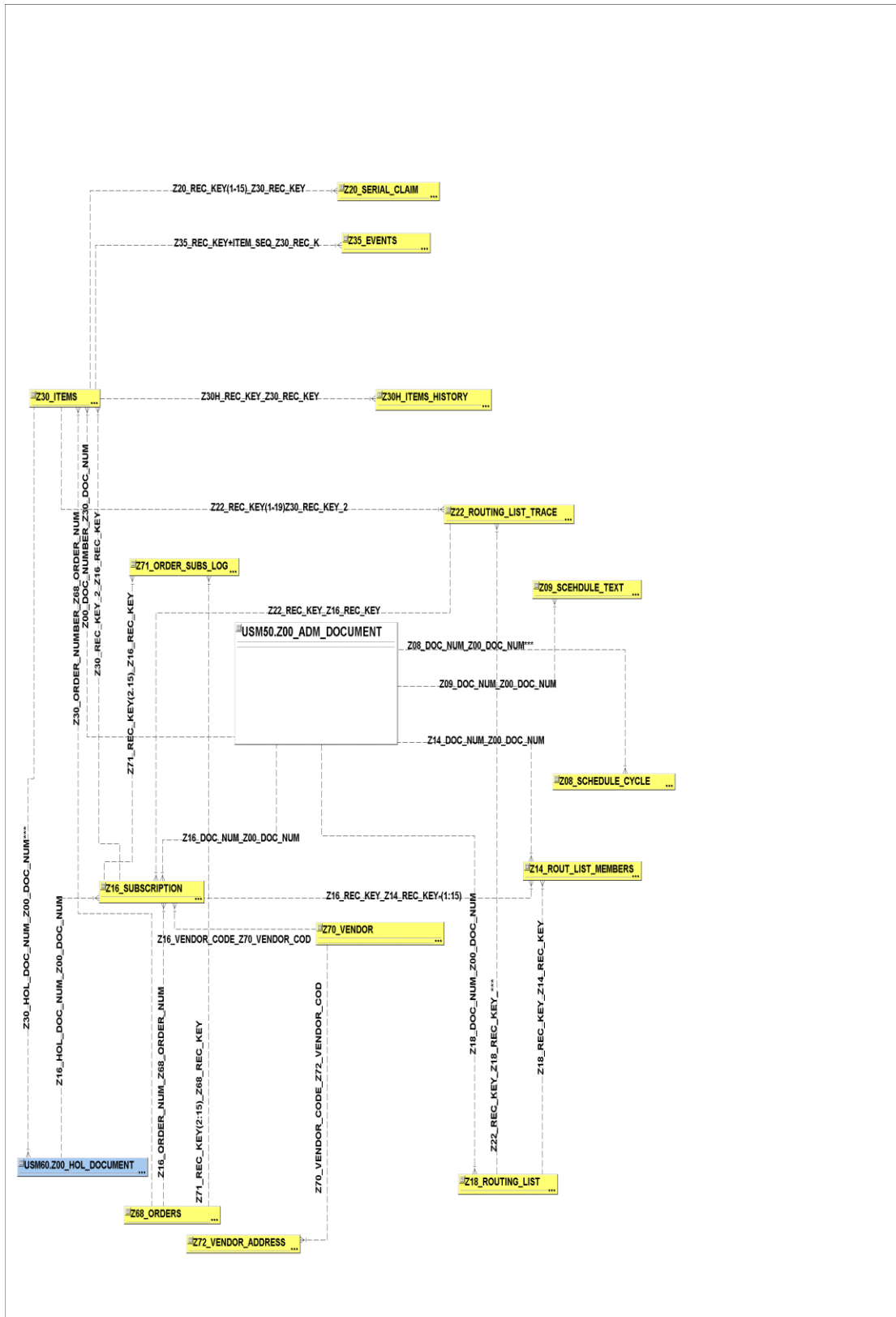
### 3.2 ADM + HOL Document





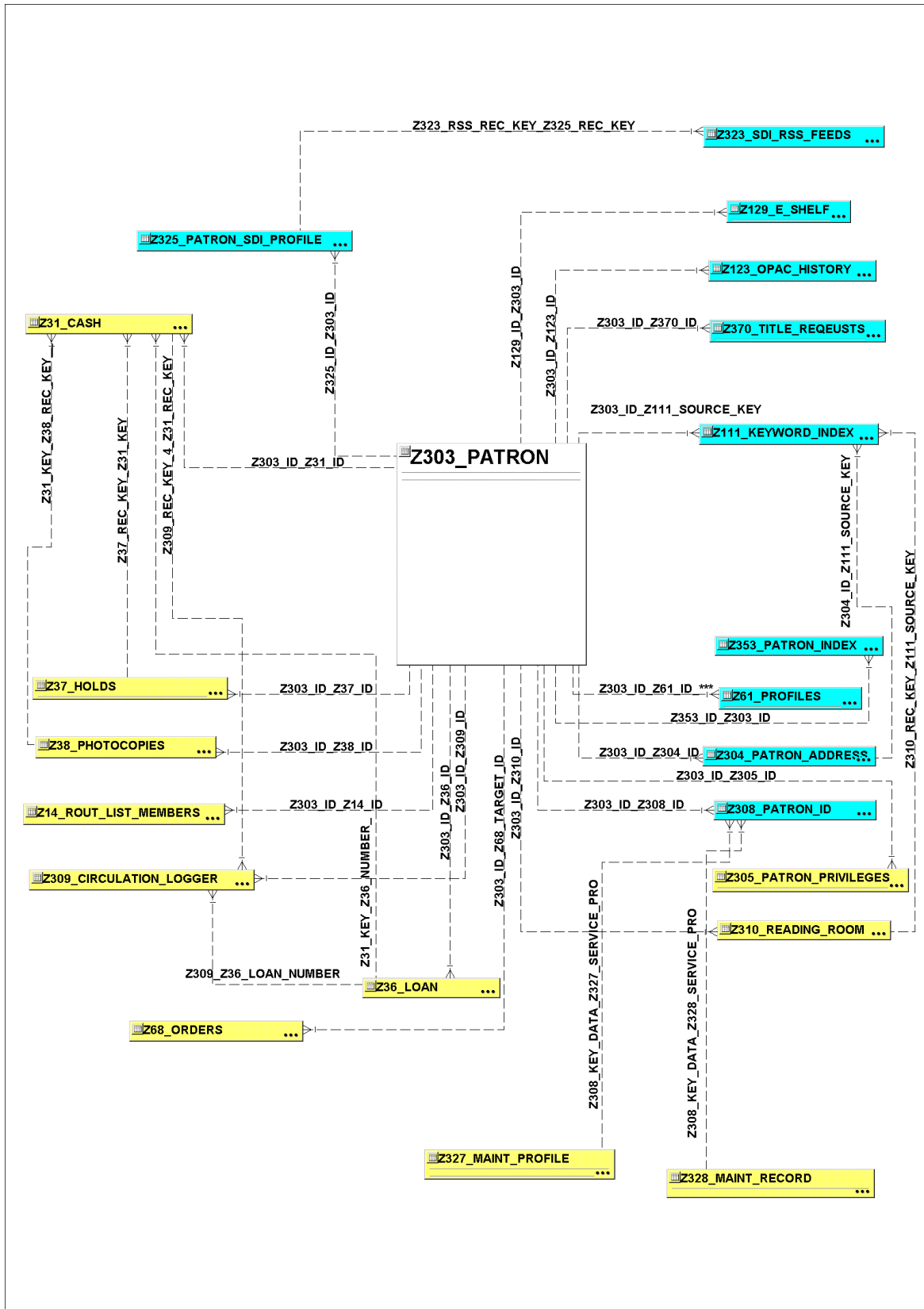


### 3.5 Serial Subscriptions





### 3.7 Patrons





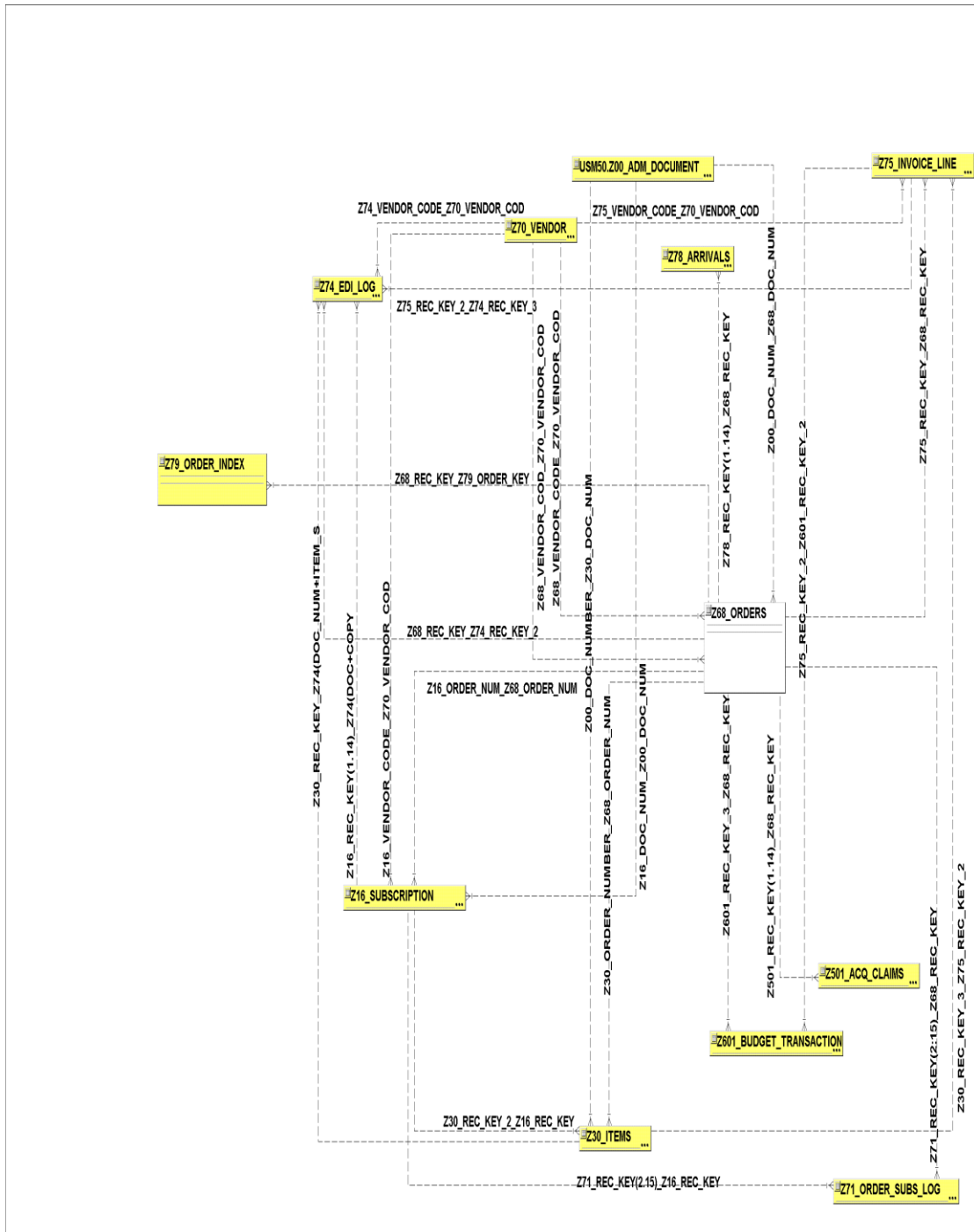




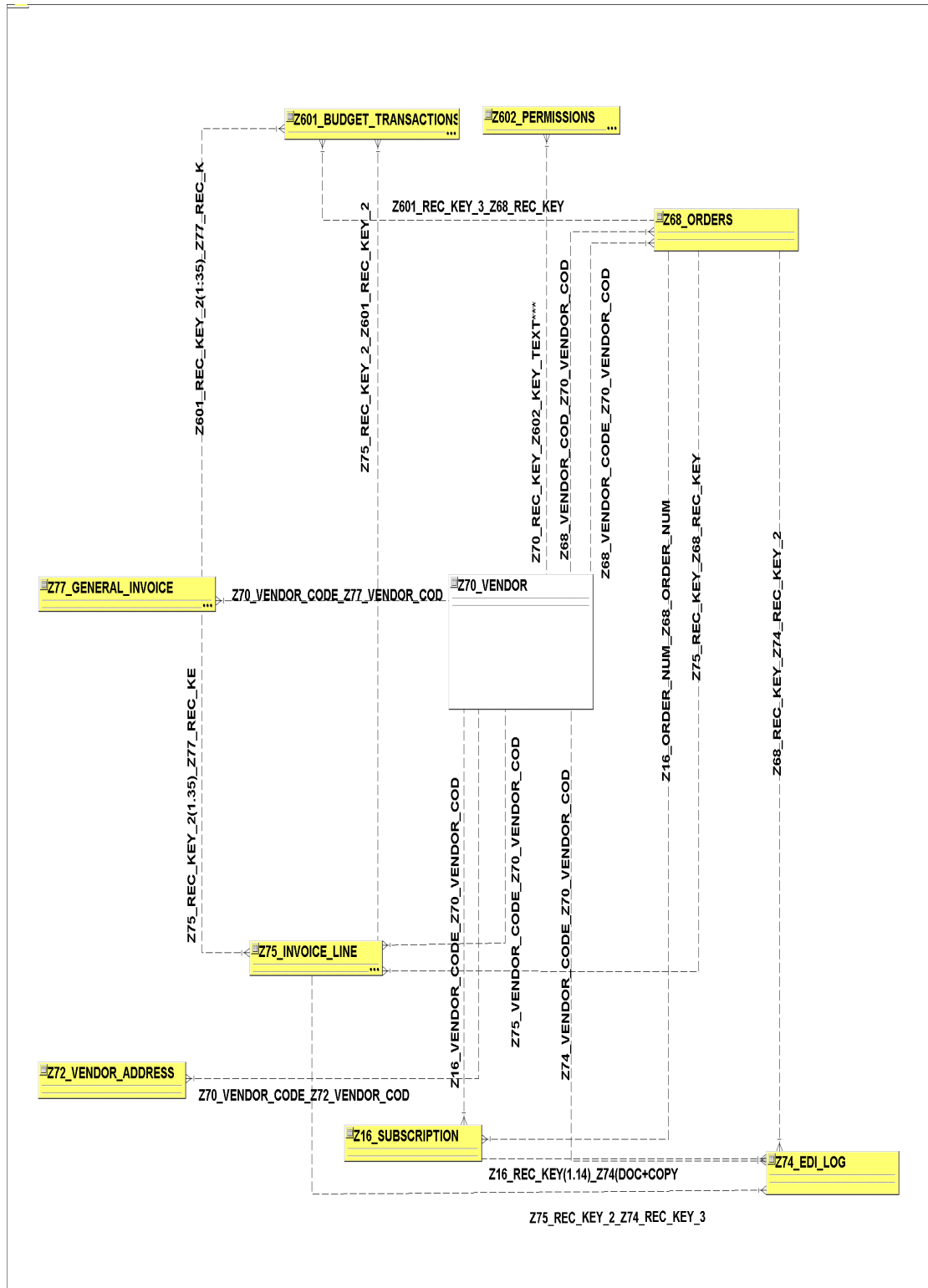
## 4 Direct Relationships

The diagrams in this chapter display only the central entity's direct relationships. Below are the Entity Relationship Diagrams.

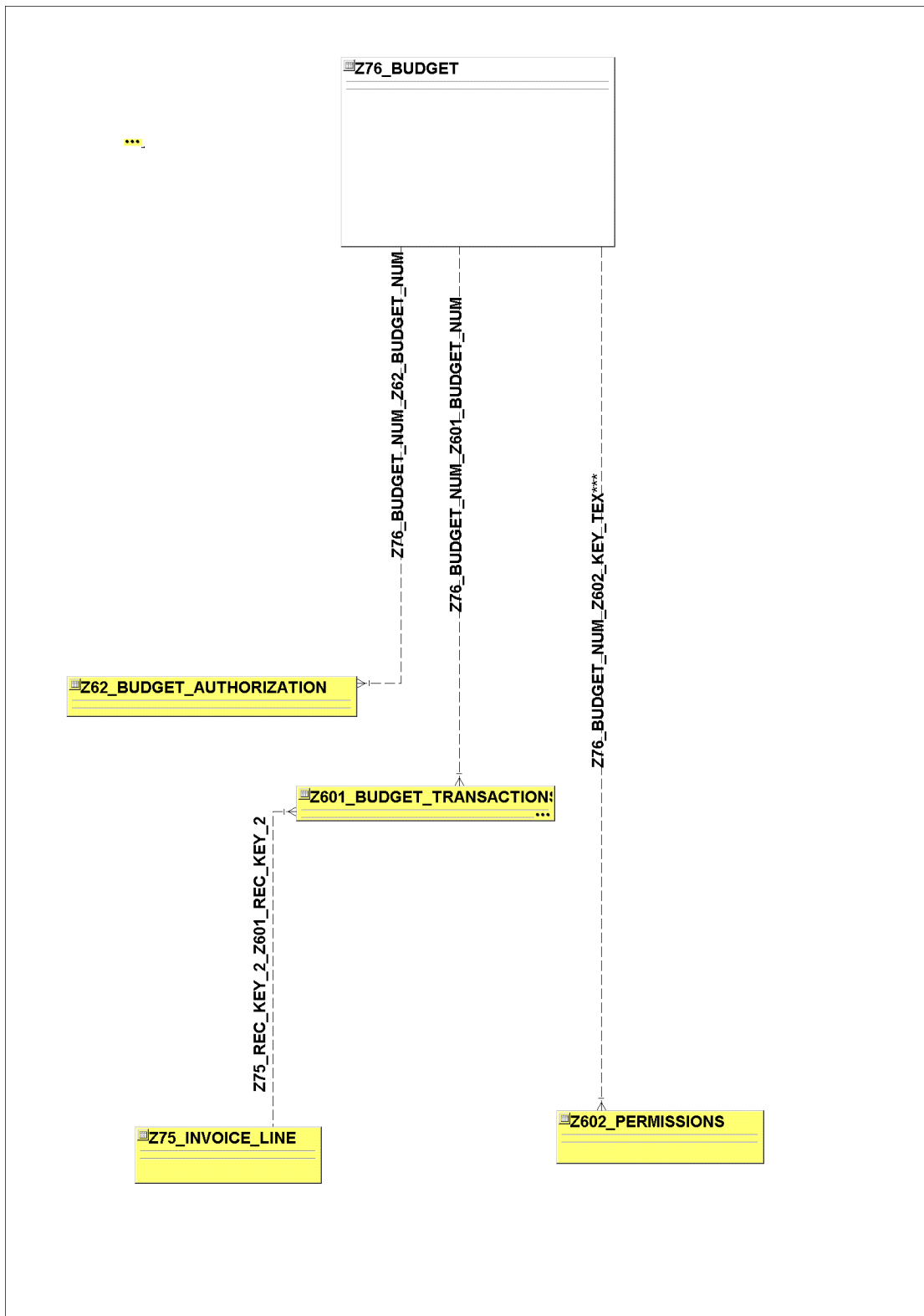
### 4.1 Acquisition Orders



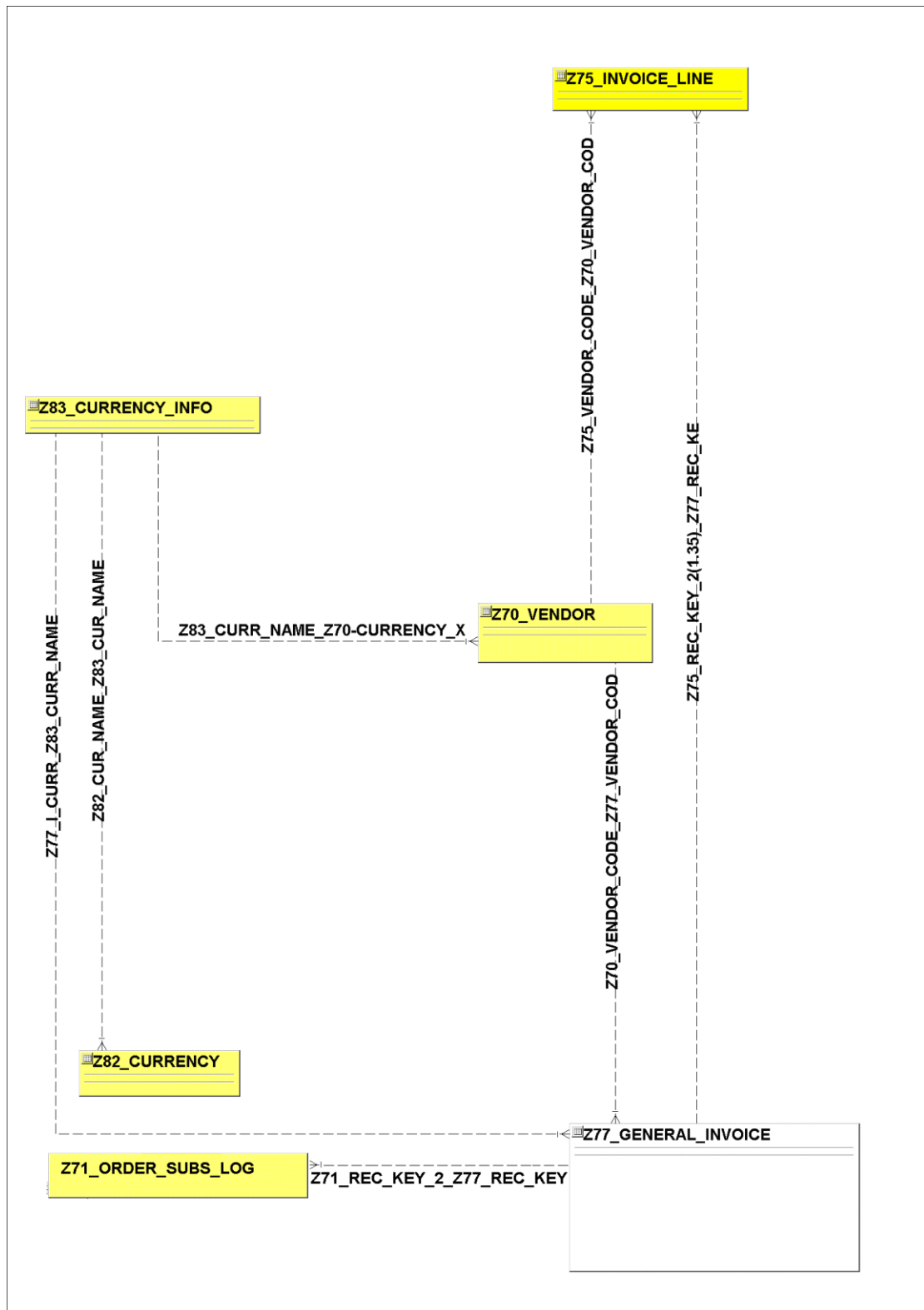
## 4.2 Vendors



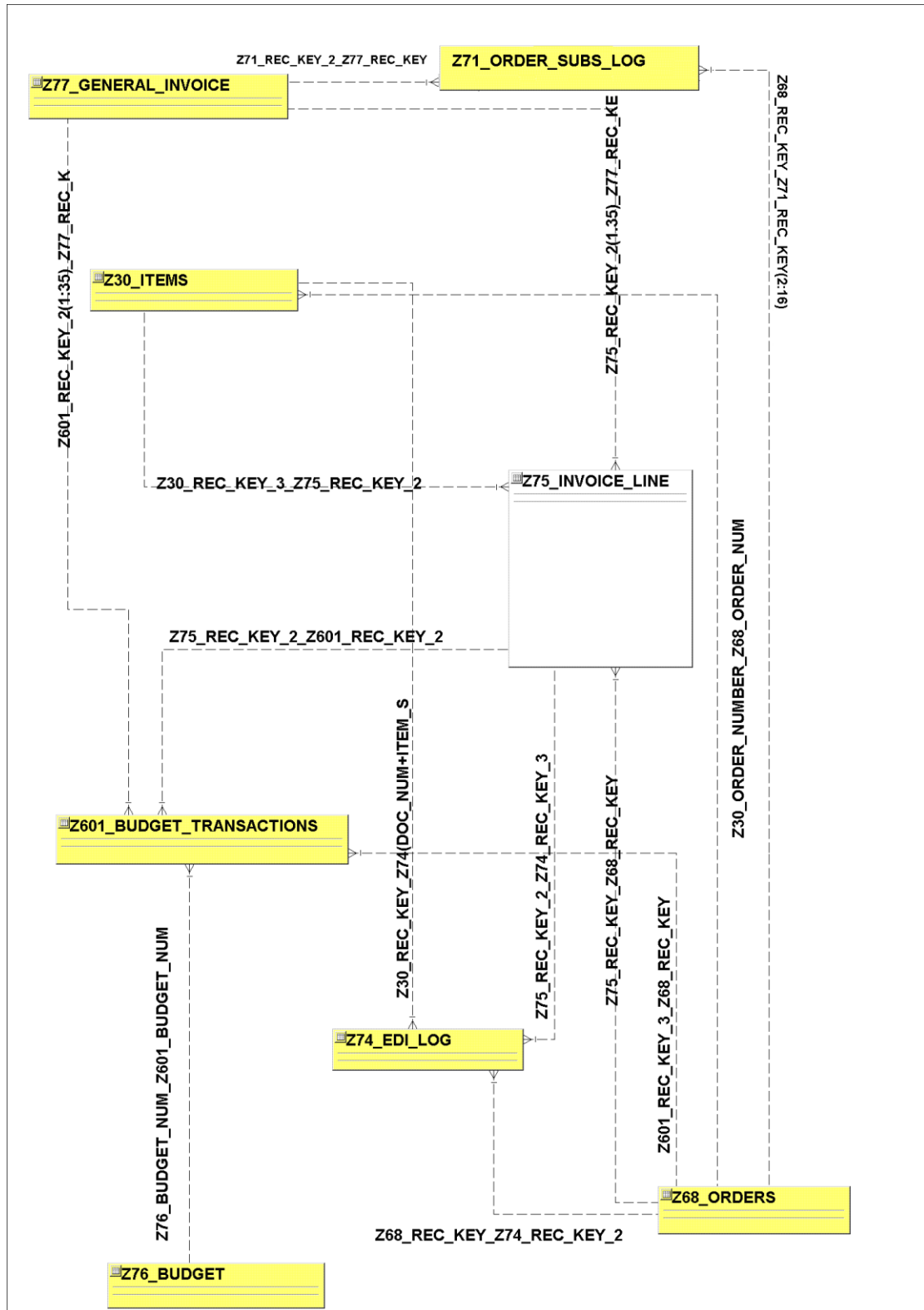
### 4.3 Budgets



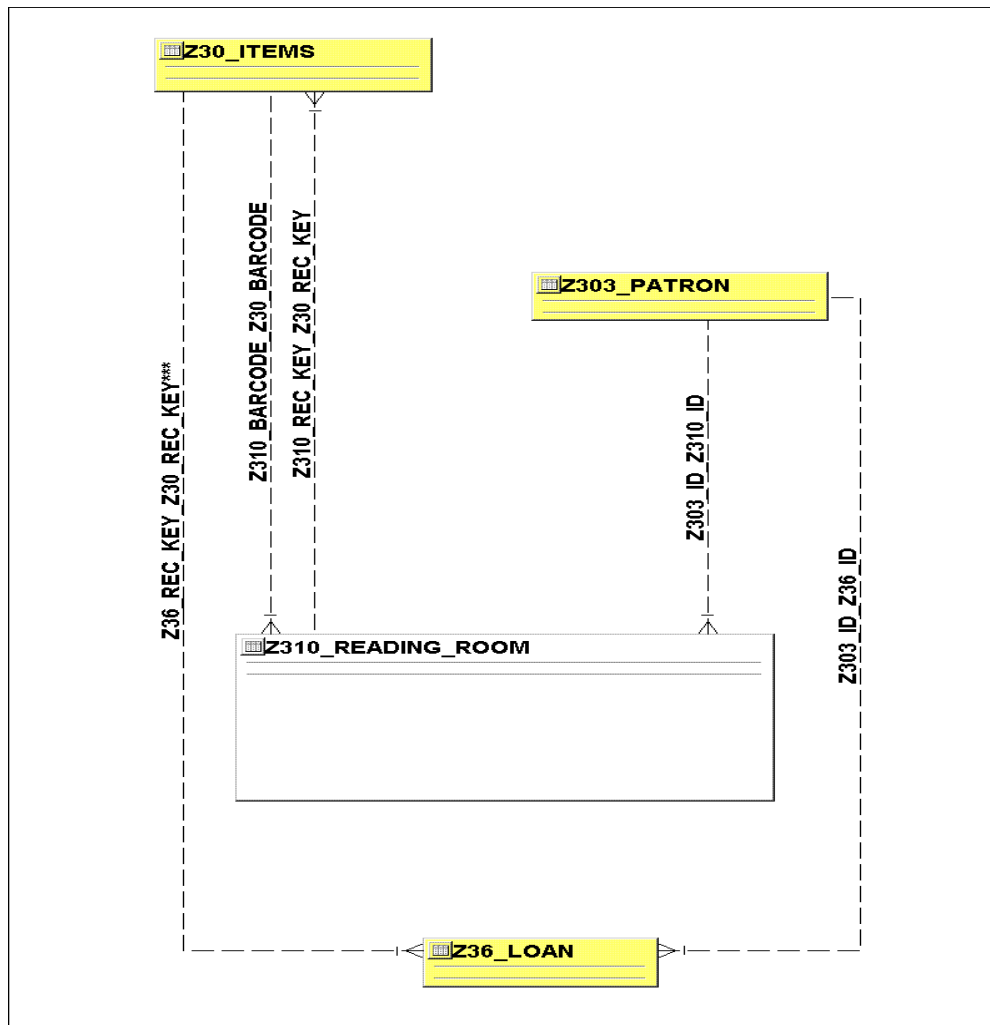
## 4.4 General Invoice



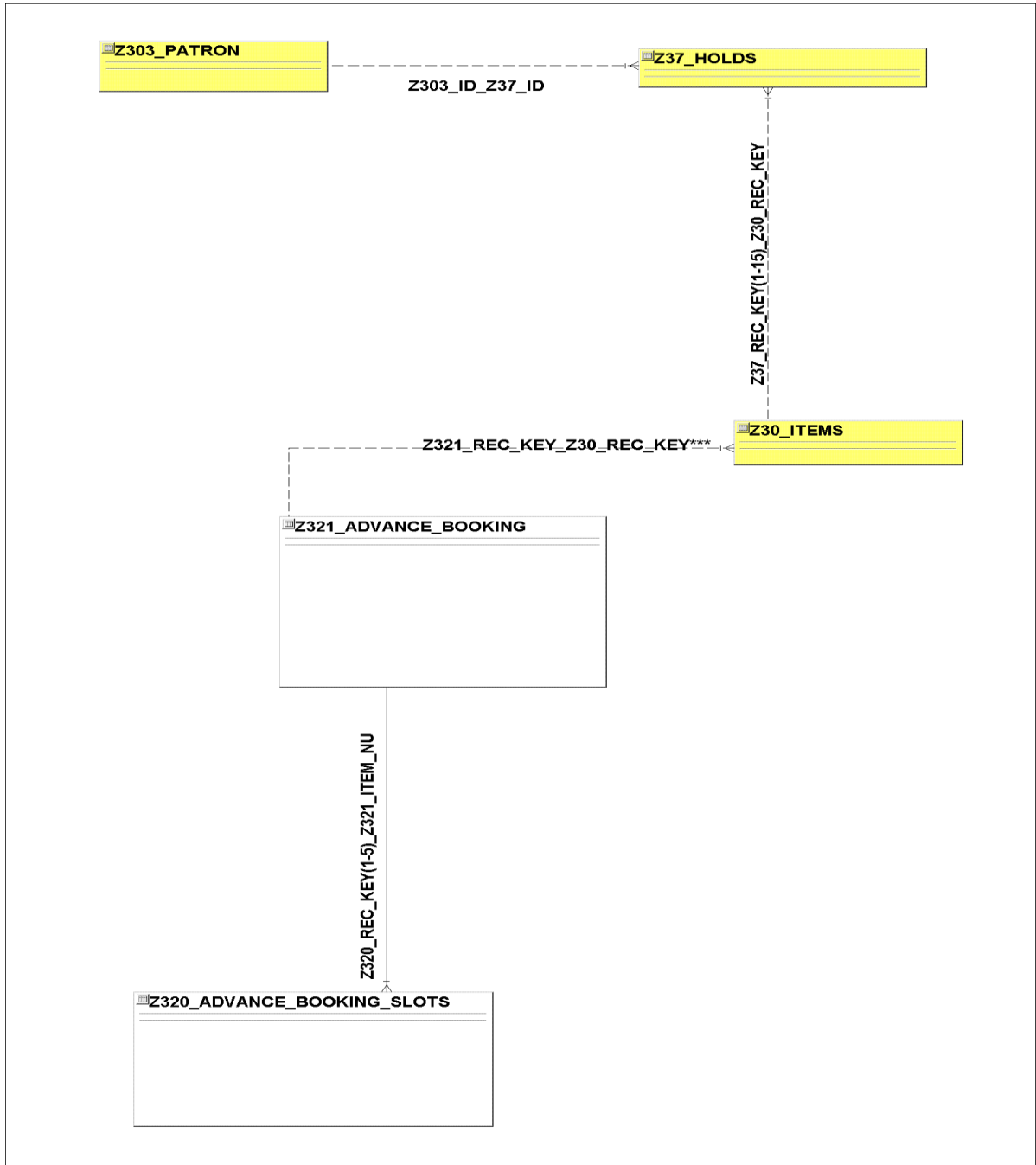
## 4.5 Invoice Line



## 4.6 Reading Room



## 4.7 Advance Booking



## 4.8 Cash

