

Industry-specific

QAD SOLUTIONS

Manufacturing Applications

Technical Reference Trade Management Entity Diagrams



78-0632A
MFG/PRO eB2.1
Trade Management 2.7 and higher
February 2005

This document contains proprietary information that is protected by copyright and other intellectual property laws. No part of this document may be reproduced, translated, or modified without the prior written consent of QAD Inc. The information contained in this document is subject to change without notice.

QAD Inc. provides this material as is and makes no warranty of any kind, expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. QAD Inc. shall not be liable for errors contained herein or for incidental or consequential damages (including lost profits) in connection with the furnishing, performance, or use of this material whether based on warranty, contract, or other legal theory.

QAD and MFG/PRO are registered trademarks of QAD Inc. The QAD logo is a trademark of QAD Inc.

Designations used by other companies to distinguish their products are often claimed as trademarks. In this document, the product names appear in initial capital or all capital letters. Contact the appropriate companies for more information regarding trademarks and registration.

Copyright ©2005 by QAD Inc.
78-0632A

QAD Inc.
6450 Via Real
Carpinteria, California 93013
Phone (805) 684-6614
Fax (805) 684-1890
<http://www.qad.com>

Contents

About This Guide	1
Other TrM Documentation	2
Online Help	2
QAD Web Site	3
Conventions	3
Chapter 1 Diagram Conventions	5
Introduction	6
Entity Relationship Diagrams	6
Relationship Examples	7
How to Use the Diagrams	7
Chapter 2 Trade Management Entity Diagrams	9
Base Transaction	10
Budgets	11
Claims	12
Contracts and Agreements	13
Customer Group or Brokers Structure	14
Customer Structure with Profiles	15
Deal Structure	16
Division Structures	17
Geographic Structures	18
Internal Price List	19
Internal Sales	20

iv Trade Management Entity Diagrams

Product Structure with Profiles 21

Promotion Accruals 22

Promotion Budget Linkages 23

Promotion Budget Structure 24

Promotion Structure 25

Rebate Customer Transaction Structure 26

Rebate Detail 27

Rebate Product Transaction Structure 28

Rebate Setup Structure 29

Suppliers 30

User Defined Codes I 31

User Defined Codes II 32

Users or Staff 33

Chapter 3 Table/Diagram Cross-Reference 35

Trade Management Cross-Reference 36

Index 43



About This Guide

Other TrM Documentation 2

Online Help 2

QAD Web Site 3

Conventions 3

2 Trade Management Entity Diagrams

This book includes diagrams that detail key relationships among various tables in the Trade Management database. These relationships apply starting with Trade Management 2.7 for MFG/PRO eB2.1.

Other TrM Documentation

- For software installation instructions, refer to the appropriate installation guide for your system.
- For information on using Trade Management, refer to *User Guide: Trade Management* and *User Guide Supplement: Trade Management*.
- For additional technical details, refer to *Trade Management Database Definitions*.
- To view documents online in PDF format, see the *Supplemental Documents on CD*.

Note Trade Management installation guides are not included on a CD. Printed copies are packaged with your software. Electronic copies of the latest versions are available on the QAD Web site.

Online Help

Trade Management has an extensive online help system. Help is available for most fields found on a screen. Procedure help is available for most programs that update the database. Most inquiries, reports, and browses do not have procedure help.

For information on using the help system, refer to *User Guide: Trade Management*.

QAD Web Site

The QAD Web site provides a wide variety of information about the company and its products. You can access the Web site at:

<http://www.qad.com>

For users with a QAD Web account, product documentation is available for viewing or downloading at:

<http://support.qad.com>

You can register for a QAD Web account by accessing the Web site and clicking the Accounts link at the top of the screen. Your customer ID number is required. Access to certain areas is dependent on the type of agreement you have with QAD.

Web features include an online solution database to help users answer questions about setting up and using the product. Additionally, the QAD Web site has information about training classes and other services that can help you learn about Trade Management.

Conventions

This document uses the text or typographic conventions listed in the following table.

If you see:	It means:
monospaced text	A command or file name.
<i>italicized monospaced text</i>	A variable name for a value you enter as part of an operating system command; for example, <i>YourCDROMDir</i> .
indented command line	A long command that you enter as one line, although it appears in the text as two lines.
Note	Alerts the reader to exceptions or special conditions.
Important	Alerts the reader to critical information.
Warning	Indicates situations where you can overwrite or corrupt data, unless you follow the instructions.

4 Trade Management Entity Diagrams



Chapter 1

Diagram Conventions

This chapter explains the diagram conventions used in this volume.

Introduction **6**

How to Use the Diagrams **7**

Introduction

This guide details major relationships between tables in a Trade Management (TrM) database. These diagrams are designed to help:

- Programmers interested in customizing or modifying the standard Trade Management system. The diagrams show relationships that must be preserved in any customization or modification.
- Programmers writing queries or custom reports. The diagrams show which tables can be joined and the field specifications required to make them join. Note that all possible table relationships are not shown, just the major ones.
- Administrators interested in the availability of custom reports. The diagrams show which reports you can prepare.
- Users of Progress Results who want to determine the relationships available for reporting.

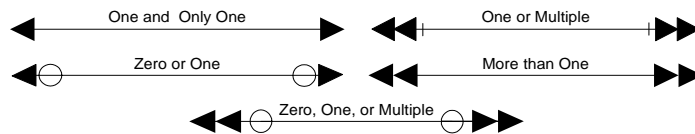
These diagrams are meant to be used in conjunction with *Trade Management Database Definitions*, which is available separately.

Entity Relationship Diagrams

In a relational database, each table is a self-contained collection of data about a single thing (or *entity*). There are five relationship line identifiers that can be combined to distinguish 15 specific entity relationships.

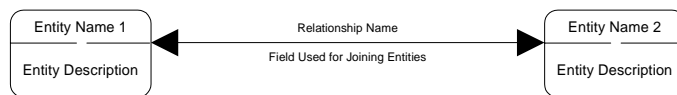
The five relationship lines are displayed in Figure 1.1

Fig. 1.1
Table Relationship Description



Relationships are identified by using the lines, as shown in Figure 1.2.

Fig. 1.2
Table Relationship Description



A bar symbol (|) indicates an OR relationship when more than one field can be used for joining.

Relationship Examples

Figure 1.3 shows that one customer can have zero or more sales orders and that one sales order has one and only one customer.

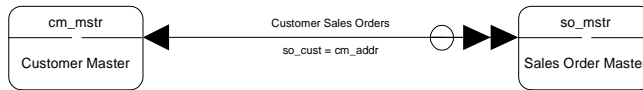


Fig. 1.3
cm_mstr to so_mstr
Relationship
Example

To join these two tables within Progress, you would set so_cust equal to cm_addr or vice versa.

```

FOR EACH cm_mstr EACH so_mstr WHERE cm_addr = so_cust:
    DISPLAY cm_addr so_nbr.
END.
    
```

Figure 1.4 shows that one accounts payable master can have zero or one check masters and that one check master must have one and only one accounts payable master.

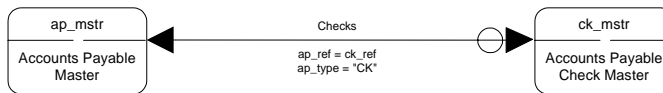


Fig. 1.4
ap_mstr to ck_mstr
Relationship
Example

To join these two tables within Progress, set ap_ref equal to ck_ref and ap_type equal to CK.

```

FOR EACH ap_mstr EACH ck_mstr WHERE ap_ref = ck_ref AND ap_type = CK:
    DISPLAY ap_vend ck_bank ck_nbr.
END.
    
```

How to Use the Diagrams

To review an area of TrM functionality, use the Table of Contents to locate the diagram for that area. Within each diagram, find the entity (table) that you are interested in and trace out the relationships.

Not all relationships are shown in any one diagram; if you are interested in the other relationships, use the cross-reference table in Chapter 3 to find the other diagrams the tables appear in.

8 Trade Management Entity Diagrams

When creating a report or browse, use the entity relationship diagrams to decide which table names you should use (and the join relationships). If no relationship exists between two tables, a report showing such a relationship is not possible.

For Progress Results users, these diagrams indicate the relationships that you can show. Progress Results shows the names of tables that have relationships with a specified table. These diagrams show those tables in graphic form and show the subsidiary relationships between tables.

The background of the page is a grayscale image of several interlocking gears. The gears are arranged in a way that they appear to be meshing together, with some in sharp focus and others blurred in the background, creating a sense of depth and mechanical complexity.

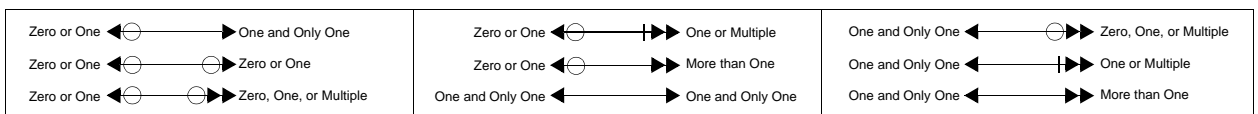
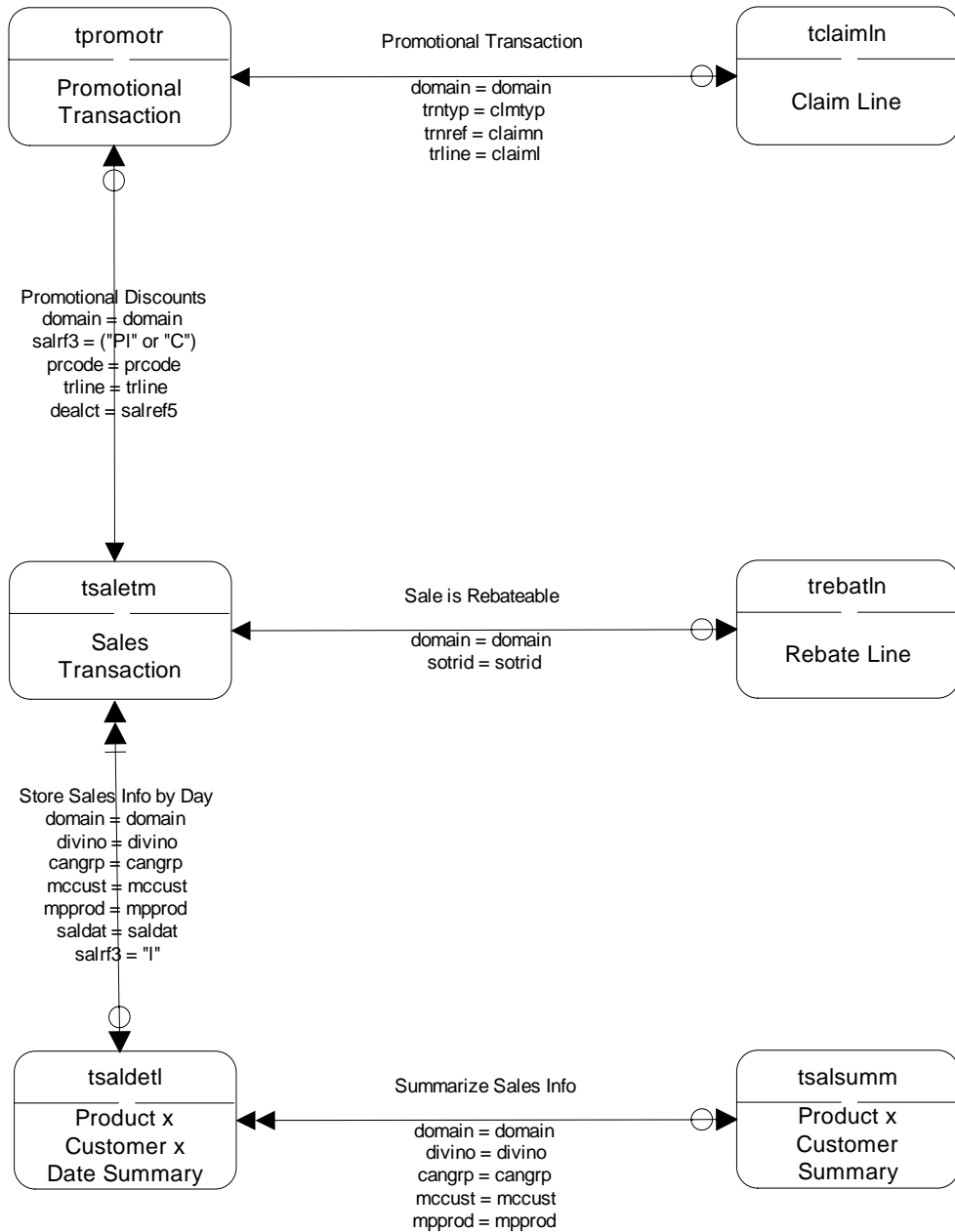
Chapter 2

Trade Management Entity Diagrams

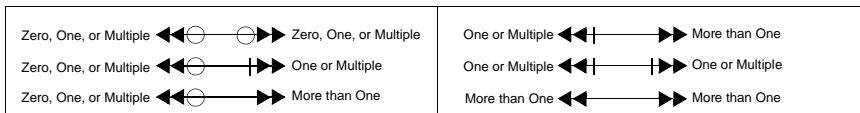
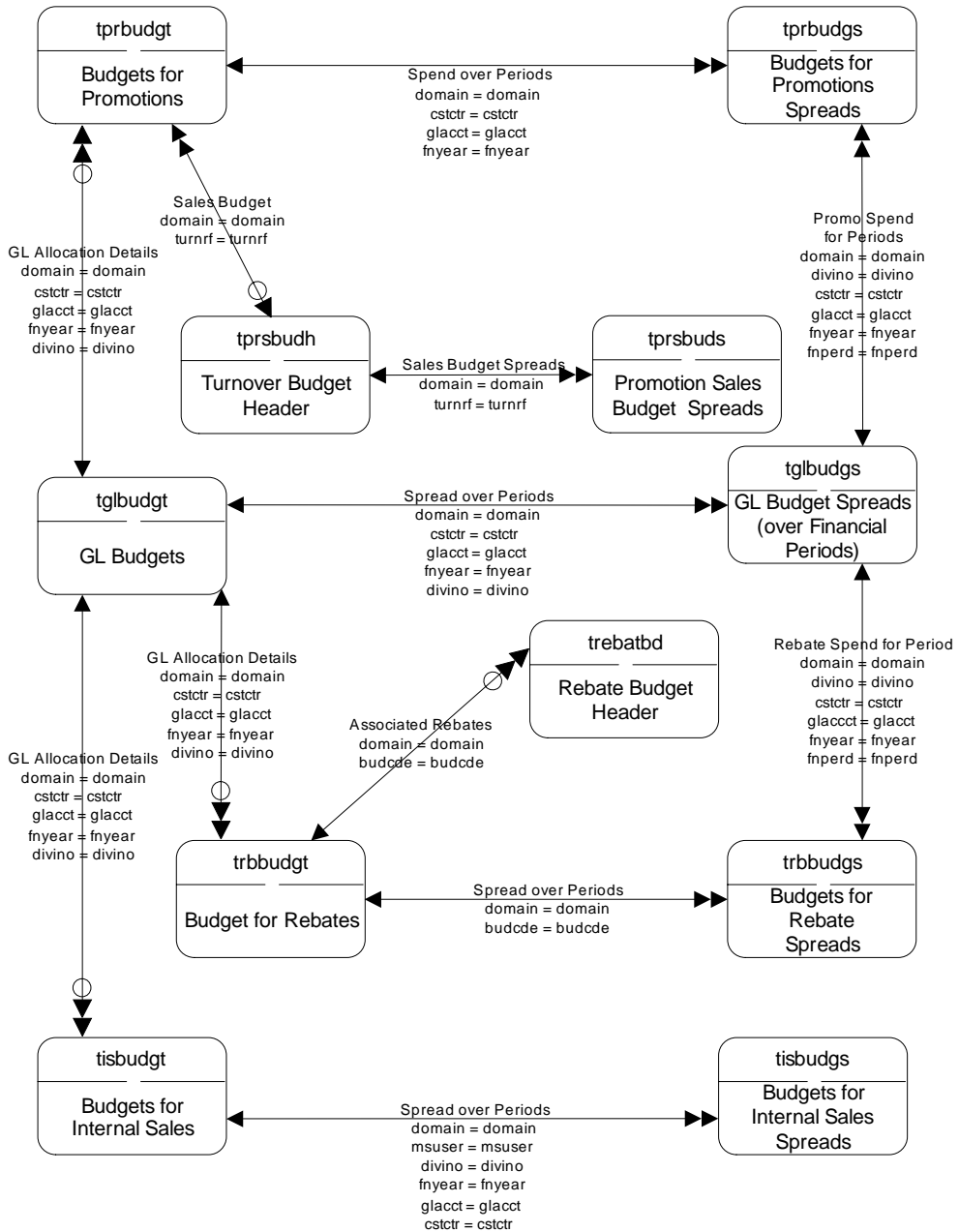
These diagrams are meant to be used in conjunction with *Trade Management Database Definitions*, which is available separately. The entity diagrams are in alphabetical order starting on the next page.

Table 3.1 on page 36 lists each table included in the diagrams and indicates the title of the diagram where the table appears.

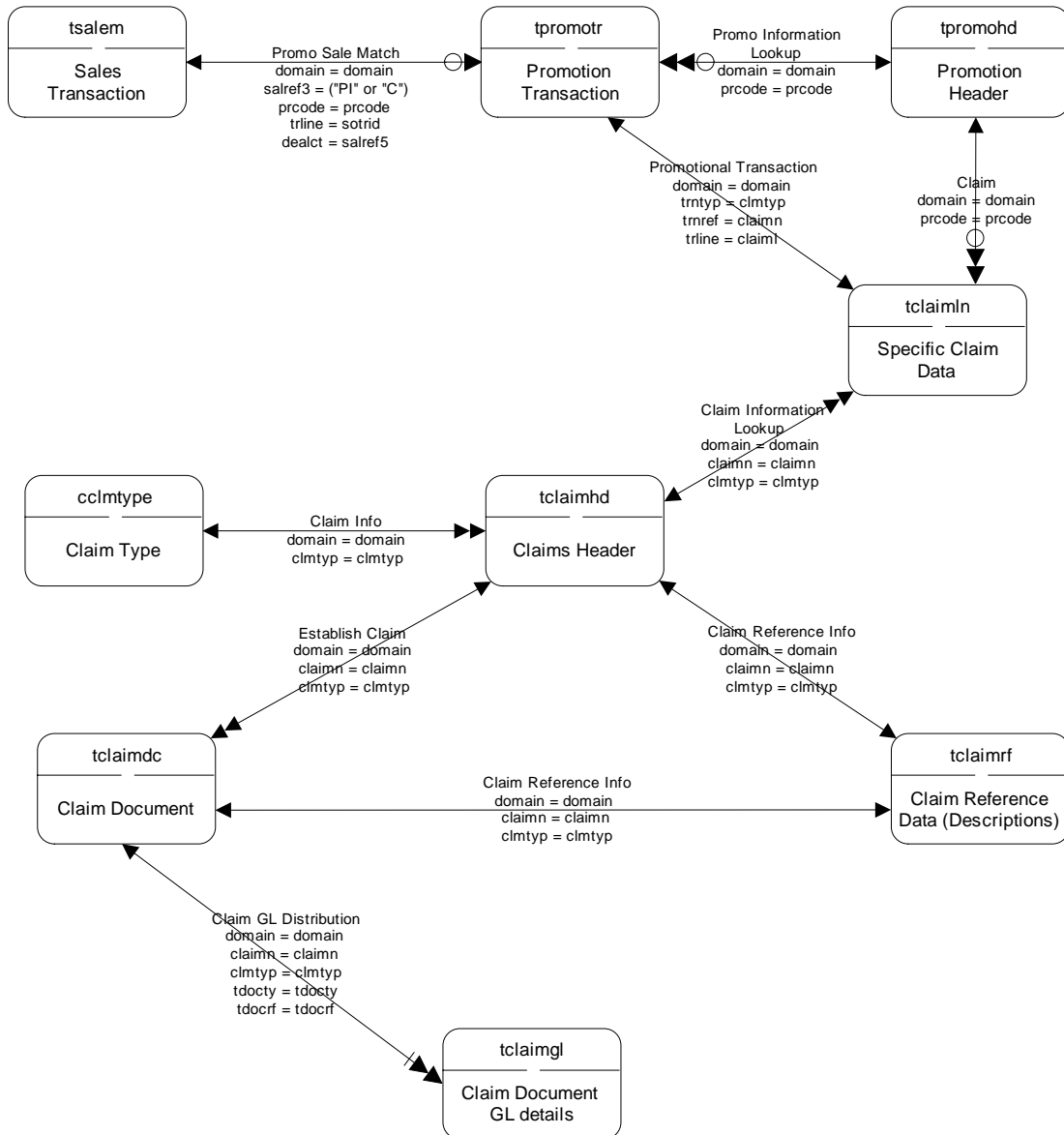
Base Transaction



Budgets

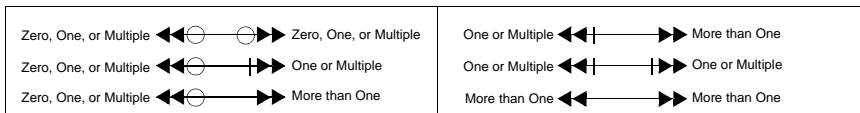
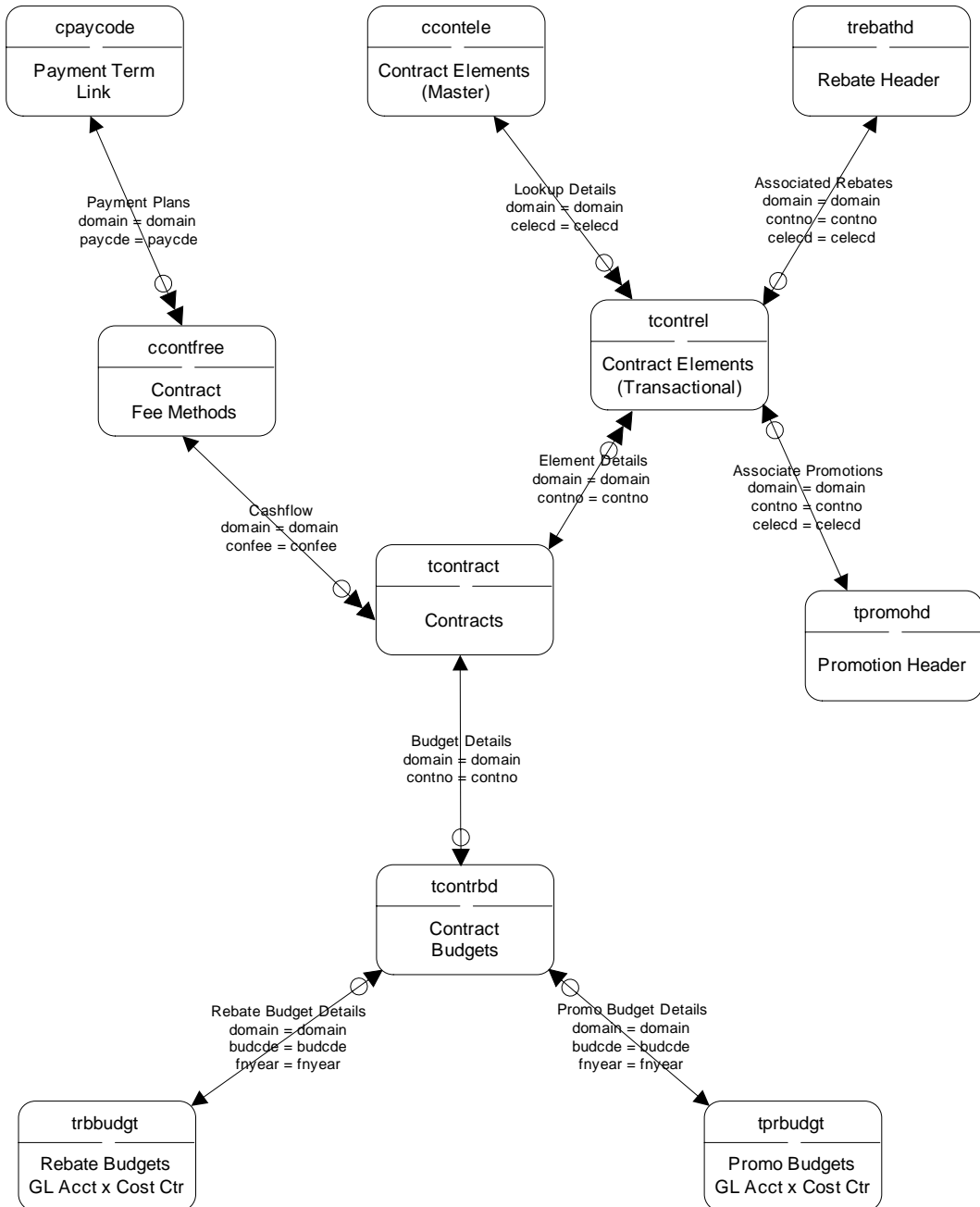


Claims

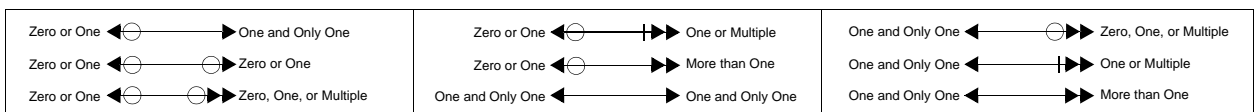
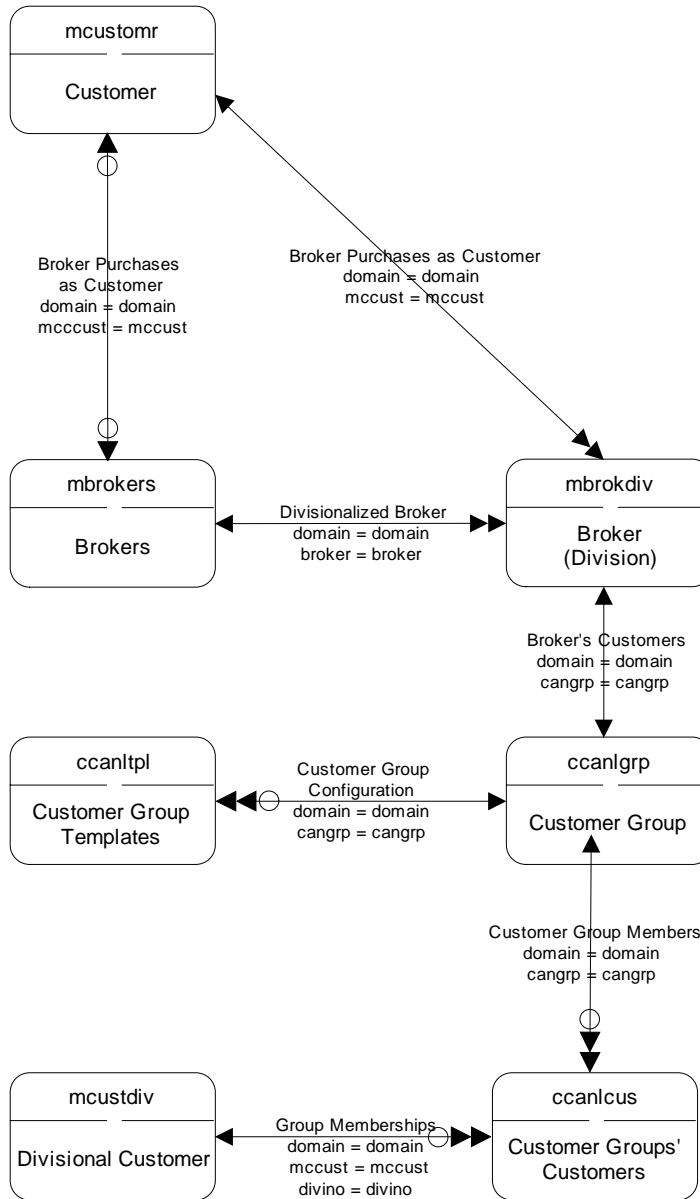


Zero or One ← ⊖ —→ ⊕ One and Only One	Zero or One ← ⊖ — → ⊕ One or Multiple	One and Only One ← ⊖ —⊕→ ⊕ Zero, One, or Multiple
Zero or One ← ⊖ —⊖→ ⊖ Zero or One	Zero or One ← ⊖ — → ⊕ More than One	One and Only One ← ⊖ — → ⊕ One or Multiple
Zero or One ← ⊖ —⊕→ ⊕ Zero, One, or Multiple	One and Only One ← ⊖ —→ ⊕ One and Only One	One and Only One ← ⊖ — → ⊕ More than One

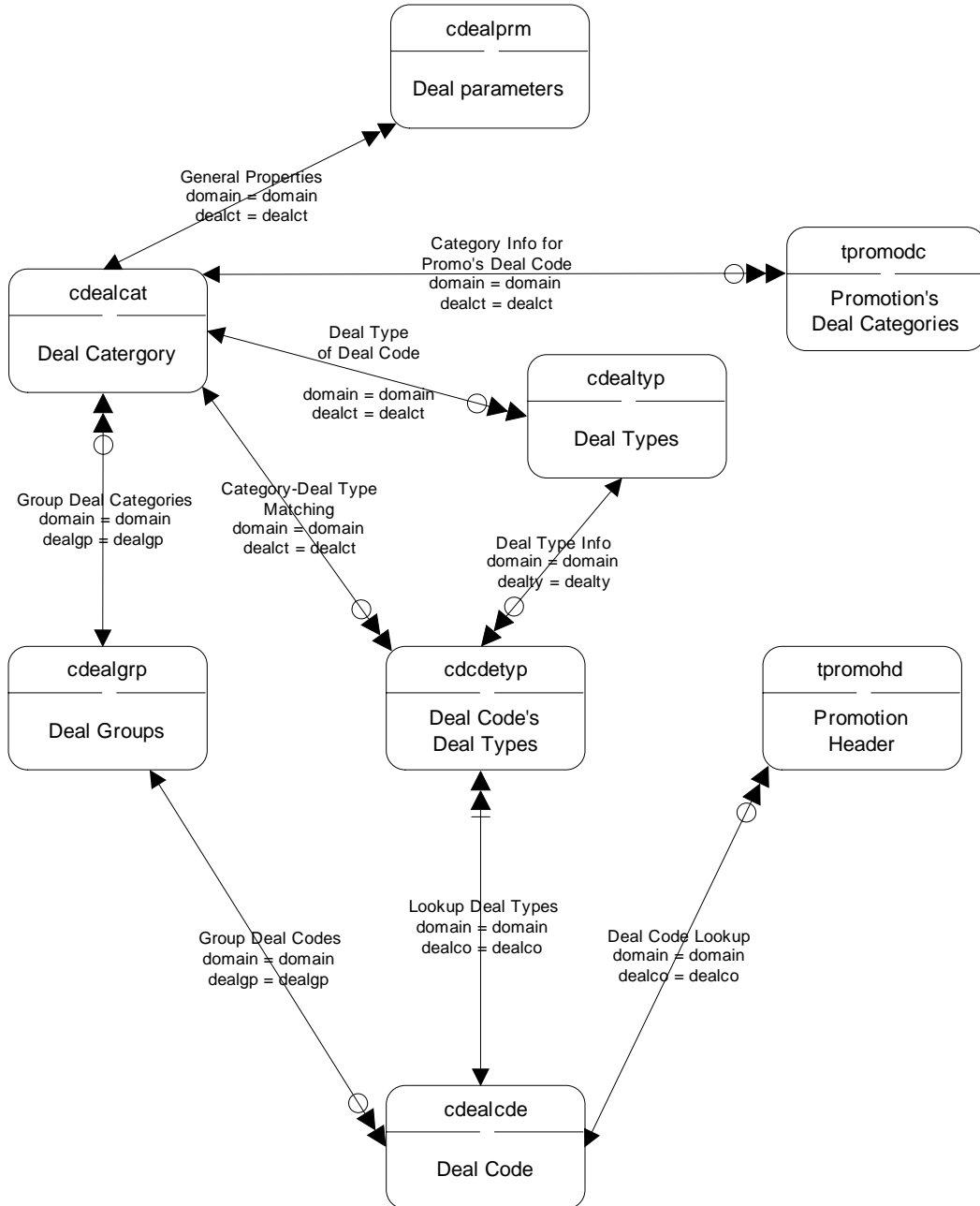
Contracts and Agreements



Customer Group or Brokers Structure

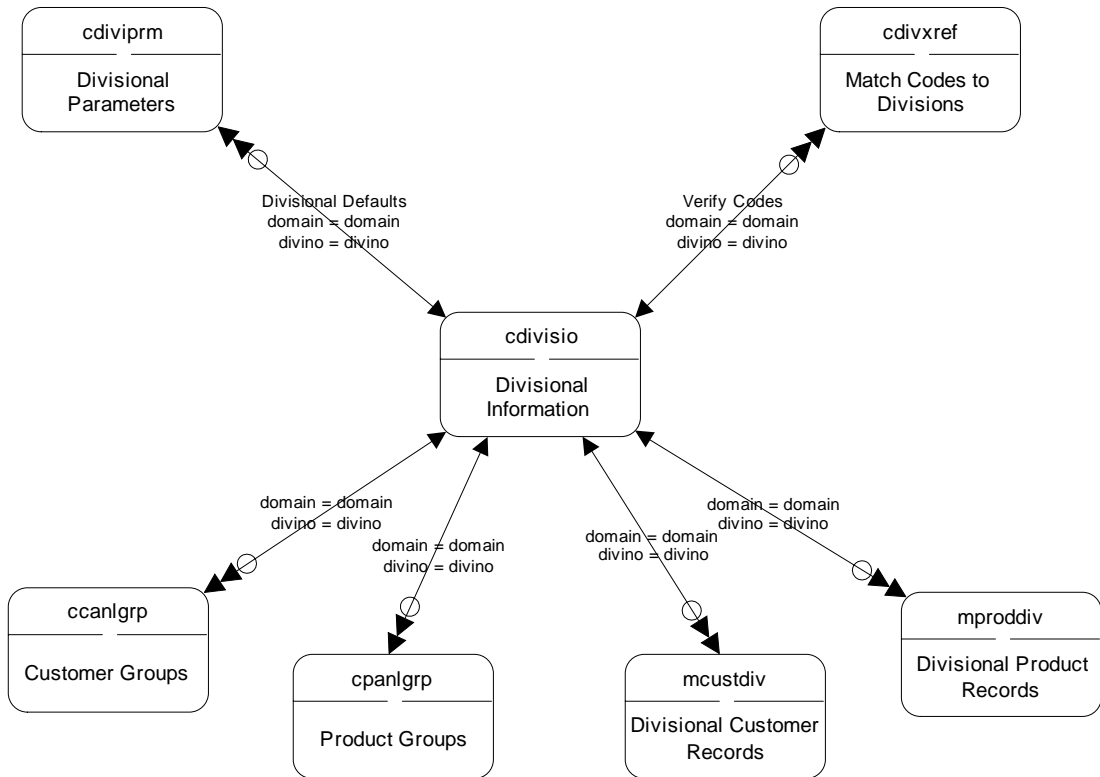


Deal Structure



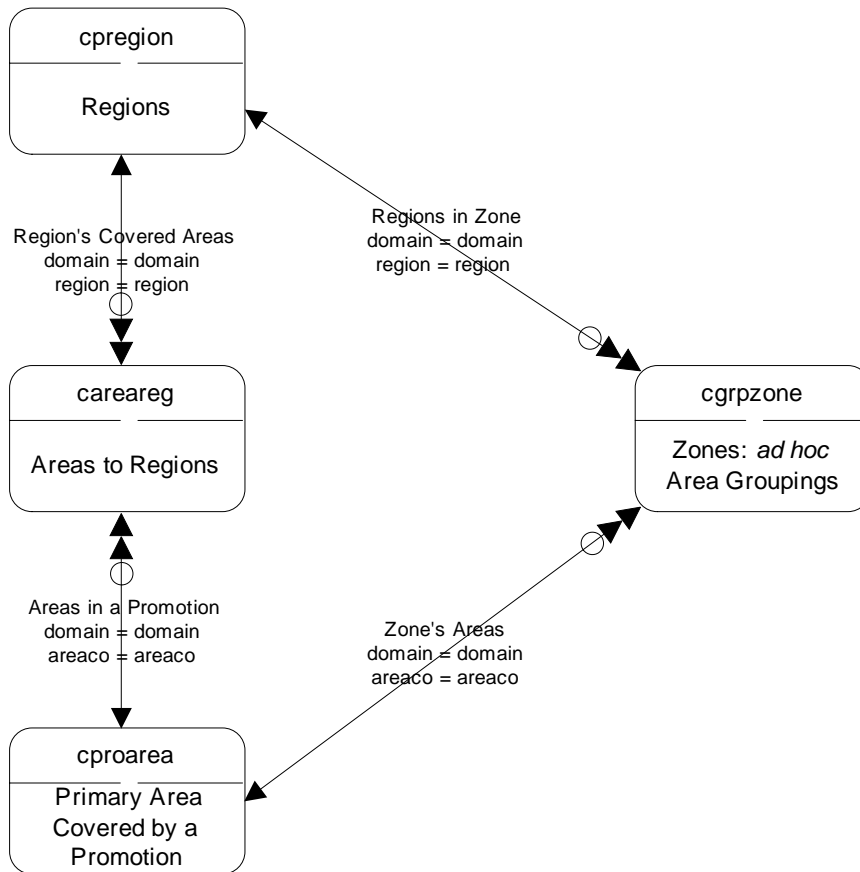
Zero or One ← ⊖ ————— ⊖ → One and Only One	Zero or One ← ⊖ ————— ⊕ → One or Multiple	One and Only One ← ⊕ ————— ⊕ → Zero, One, or Multiple
Zero or One ← ⊖ ————— ⊖ → Zero or One	Zero or One ← ⊖ ————— ⊕ → More than One	One and Only One ← ⊕ ————— ⊕ → One or Multiple
Zero or One ← ⊖ ————— ⊕ → Zero, One, or Multiple	One and Only One ← ⊕ ————— ⊕ → One and Only One	One and Only One ← ⊕ ————— ⊕ → More than One

Division Structures



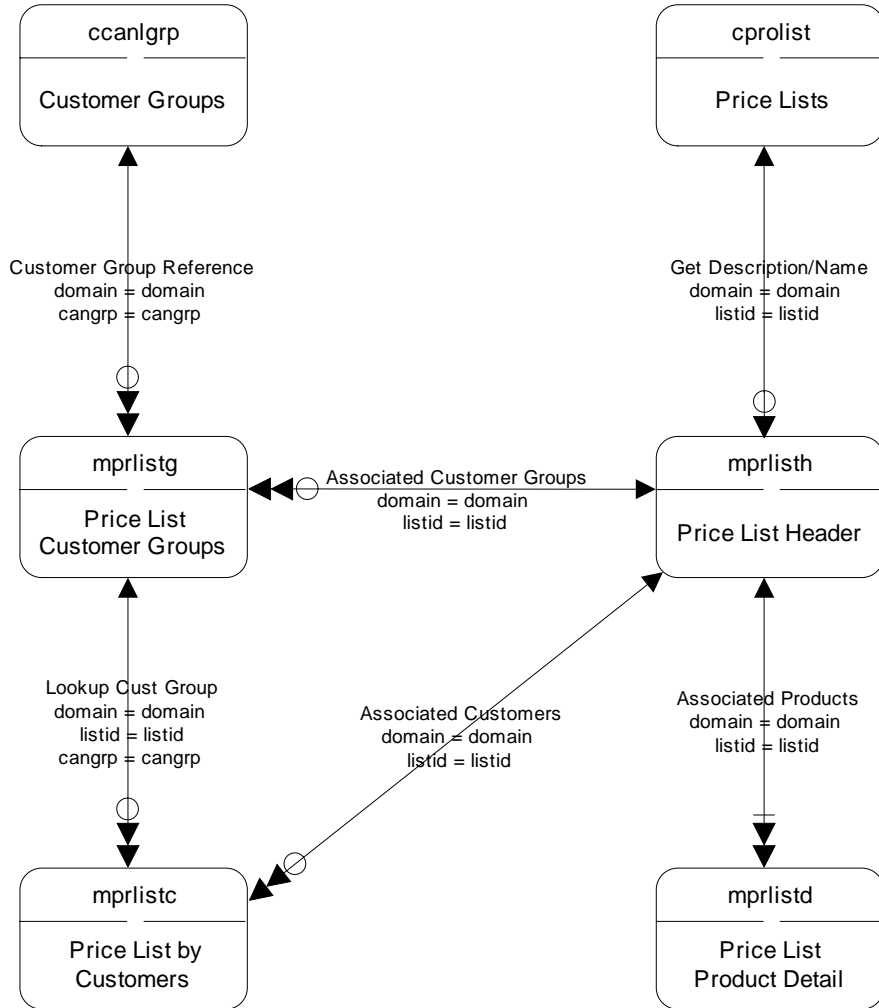
Zero, One, or Multiple	◀◀⊖⊕▶▶	Zero, One, or Multiple
Zero, One, or Multiple	◀◀⊖▶▶	One or Multiple
Zero, One, or Multiple	◀◀⊕▶▶	More than One
One or Multiple	◀◀⊕▶▶	More than One
One or Multiple	◀◀⊖▶▶	One or Multiple
One or Multiple	◀◀⊖▶▶	One or Multiple
More than One	◀◀▶▶	More than One

Geographic Structures



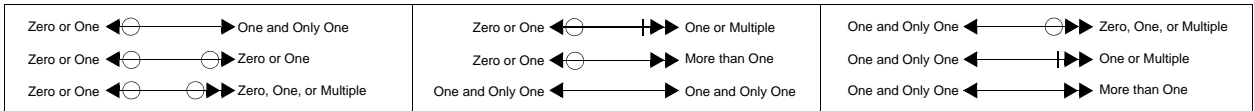
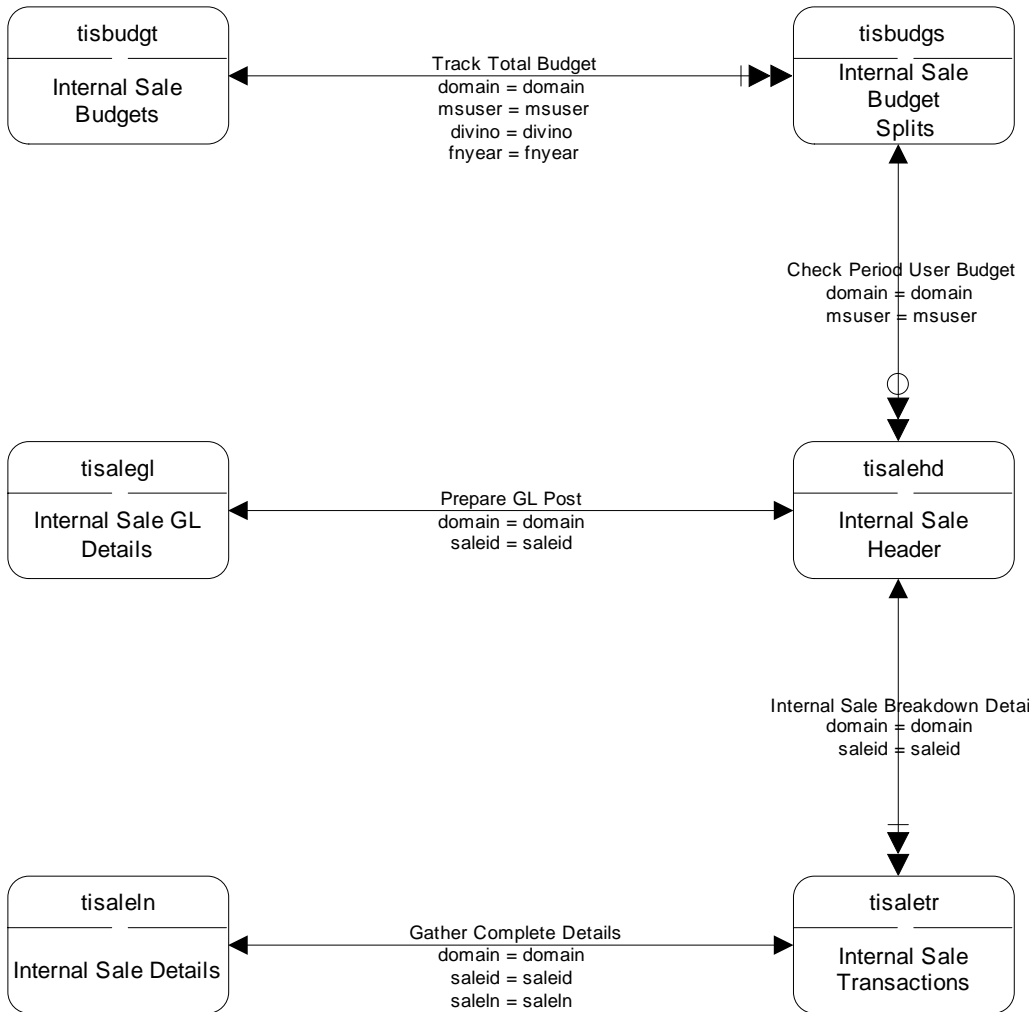
Zero or One ← ⊖ → One and Only One	Zero or One ← ⊖ ⊥ → One or Multiple	One and Only One ← ⊕ → Zero, One, or Multiple
Zero or One ← ⊖ ⊖ → Zero or One	Zero or One ← ⊖ ⊥ ⊥ → More than One	One and Only One ← ⊕ ⊥ → One or Multiple
Zero or One ← ⊖ ⊕ → Zero, One, or Multiple	One and Only One ← ⊕ ⊥ → One and Only One	One and Only One ← ⊕ ⊥ ⊥ → More than One

Internal Price List

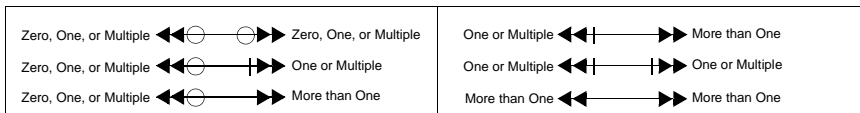
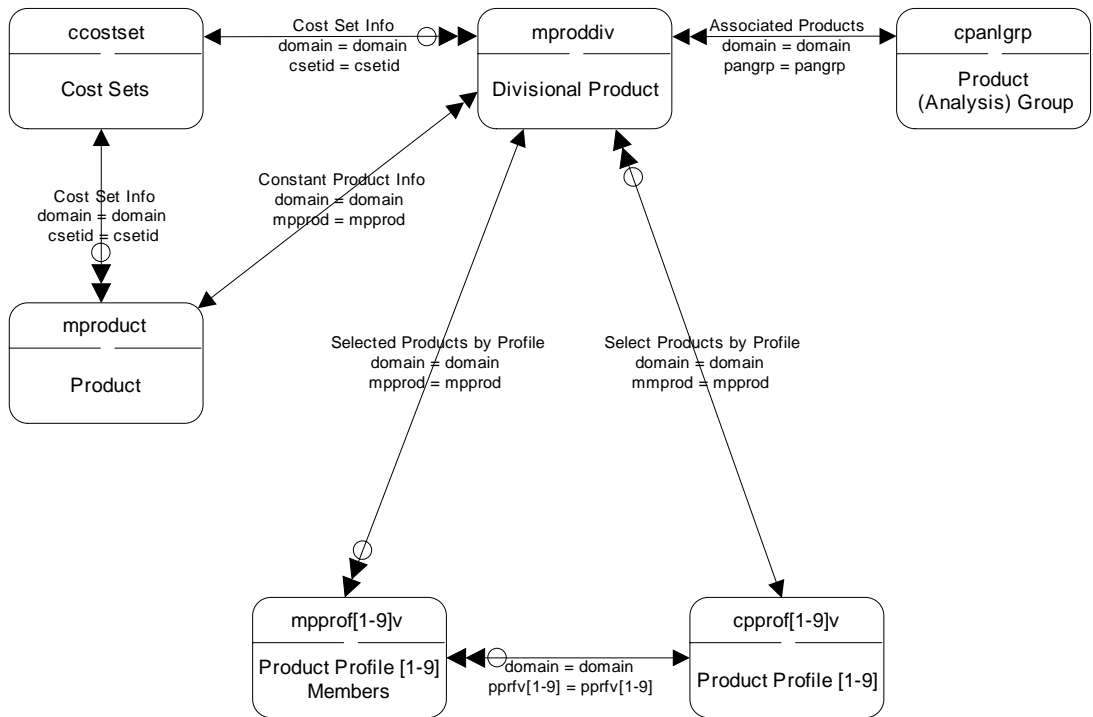


Zero, One, or Multiple	Zero, One, or Multiple	One or Multiple	More than One
Zero, One, or Multiple	One or Multiple	One or Multiple	One or Multiple
Zero, One, or Multiple	More than One	More than One	More than One

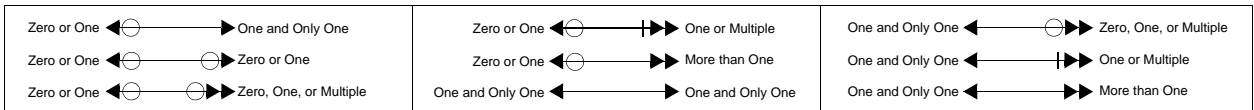
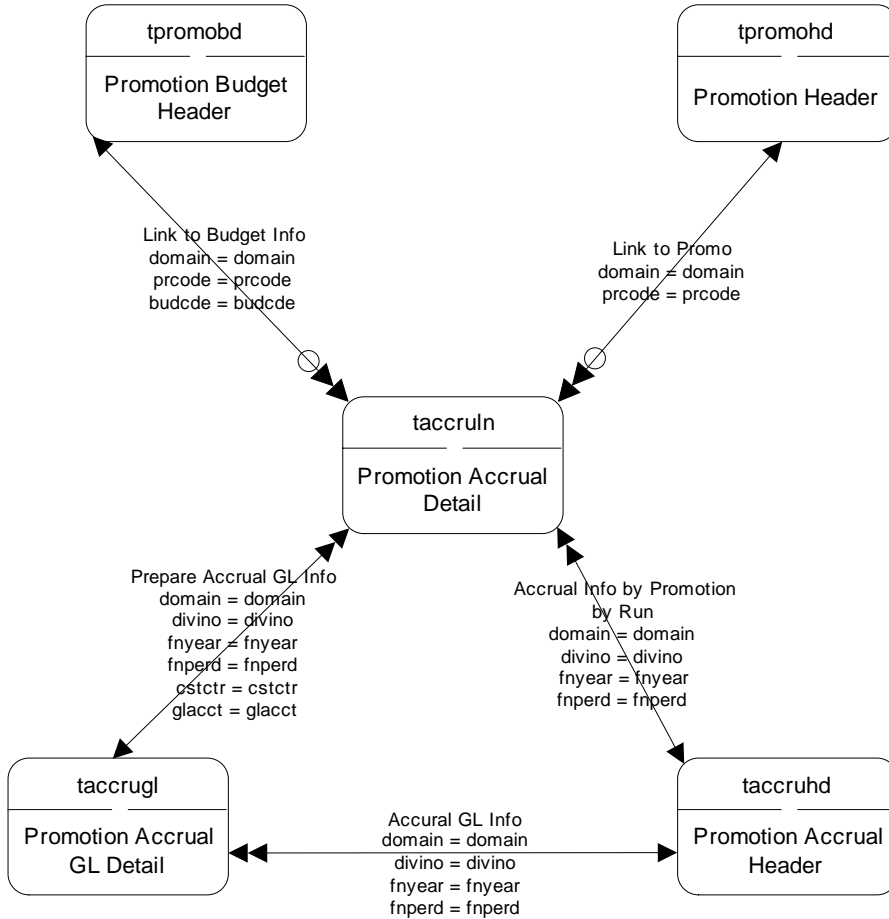
Internal Sales



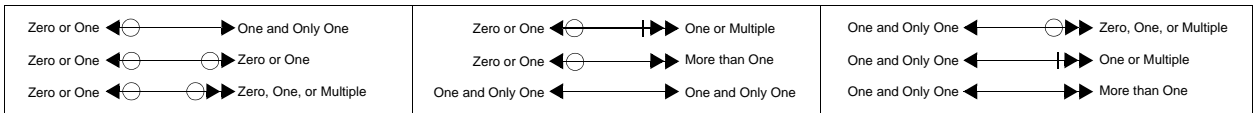
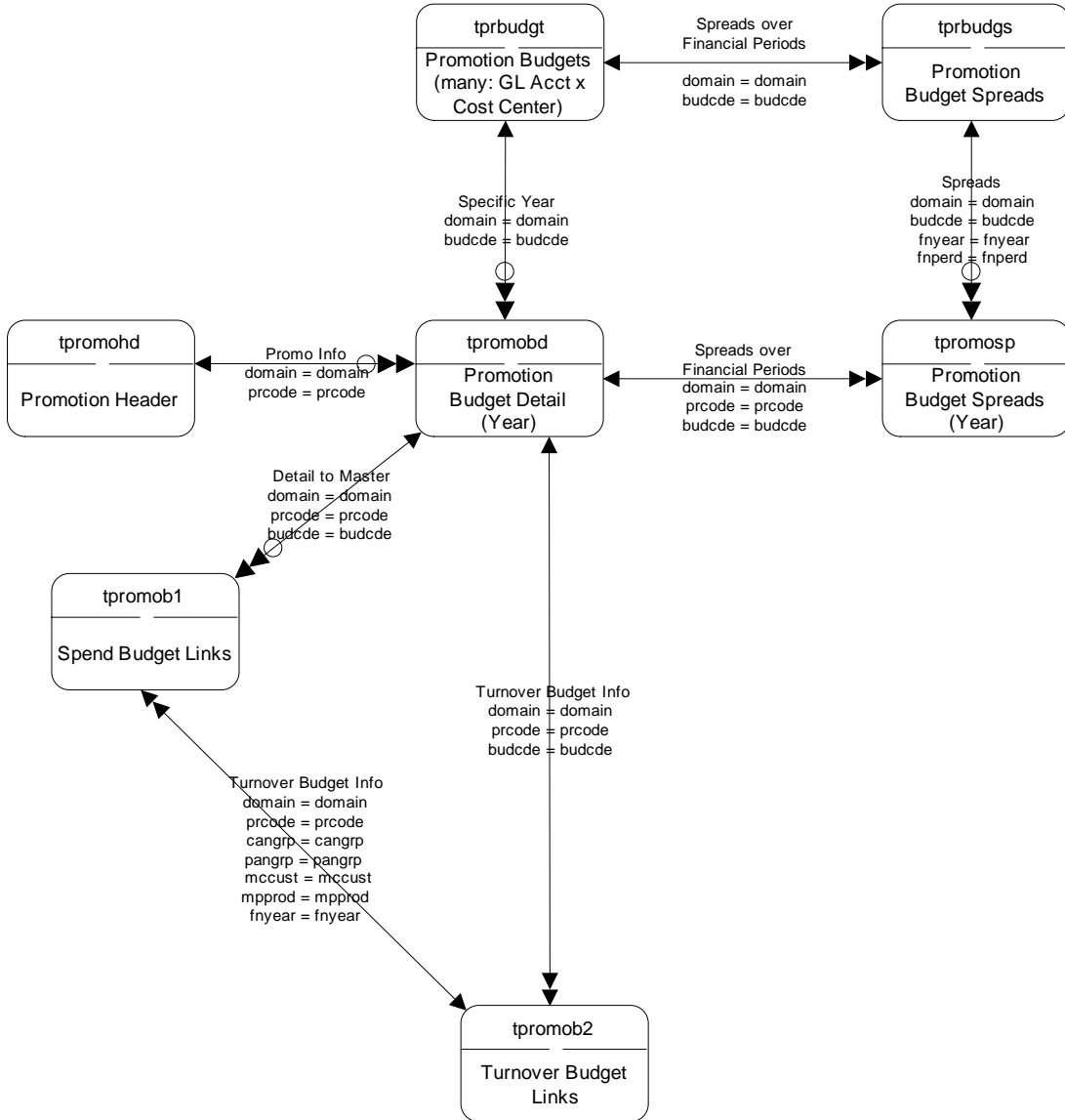
Product Structure with Profiles



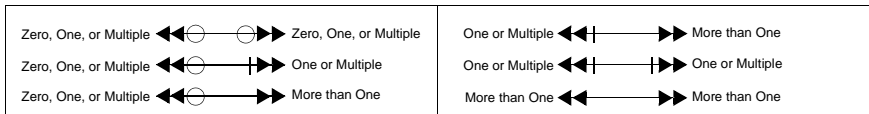
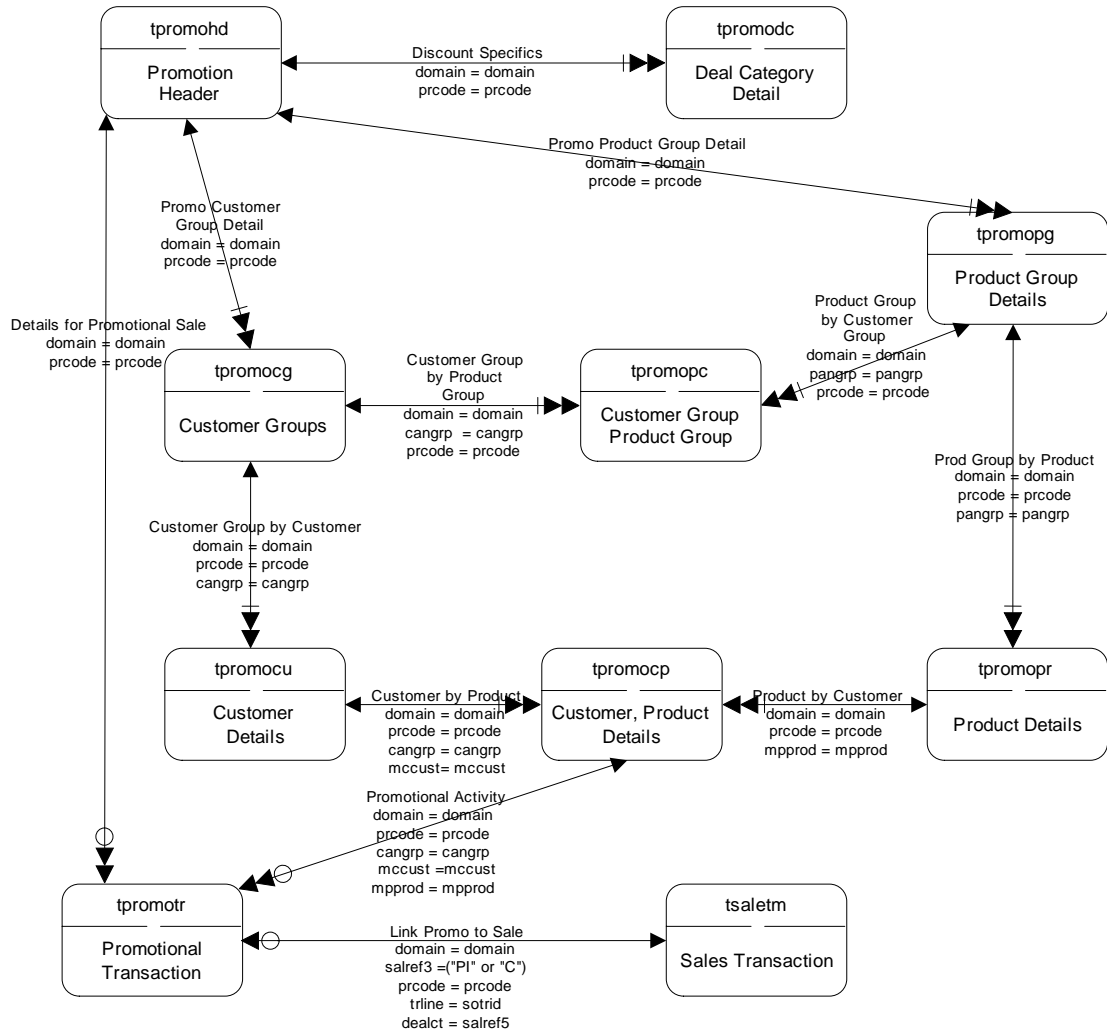
Promotion Accruals



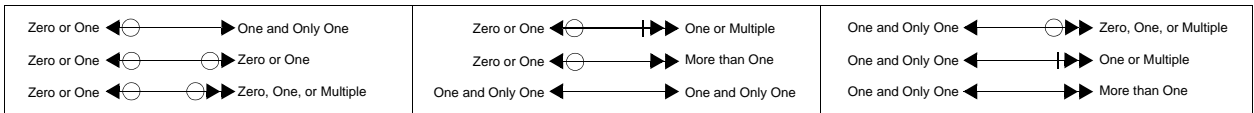
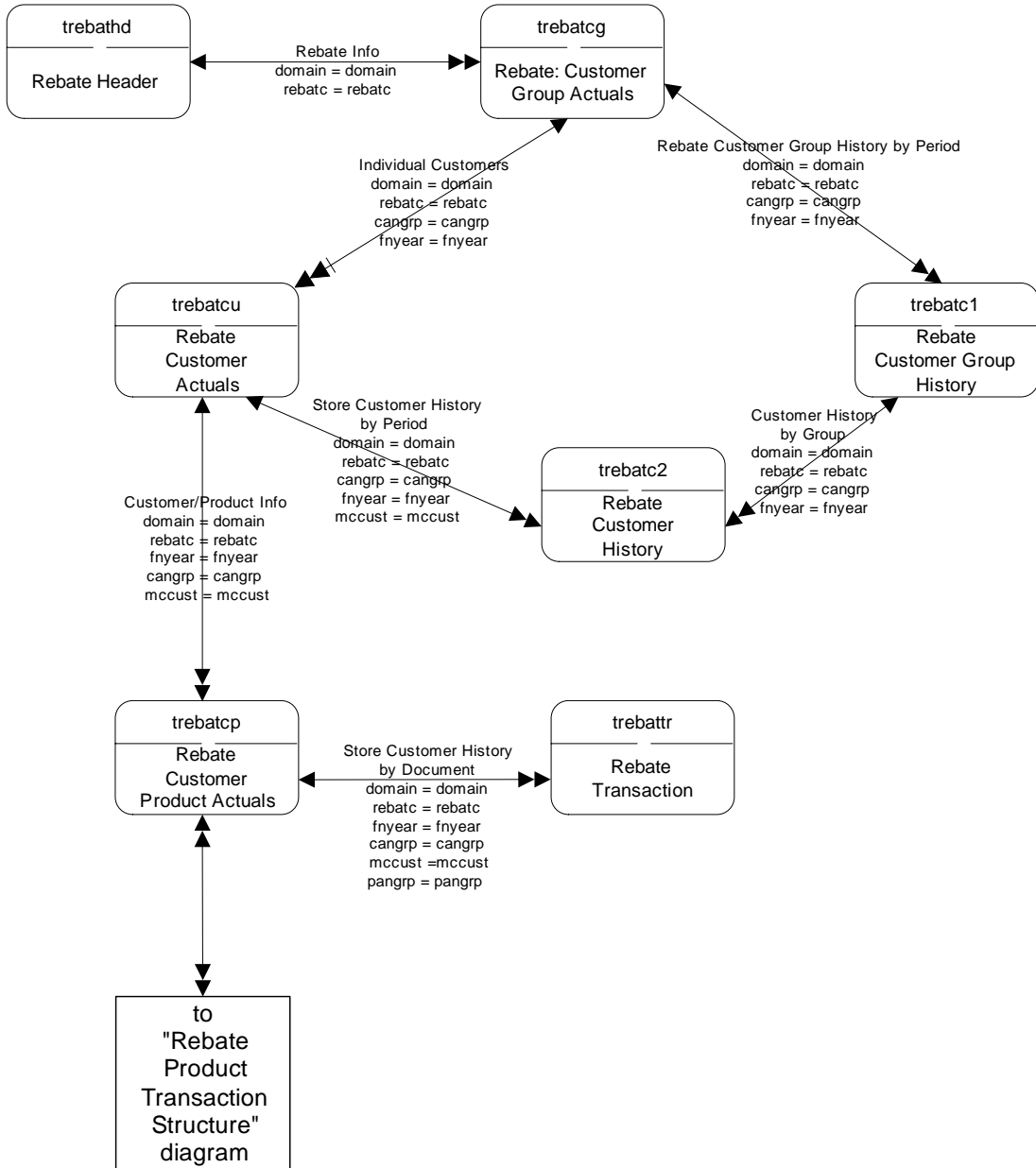
Promotion Budget Structure



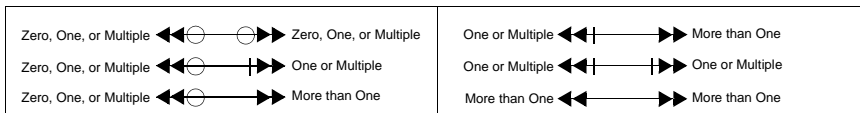
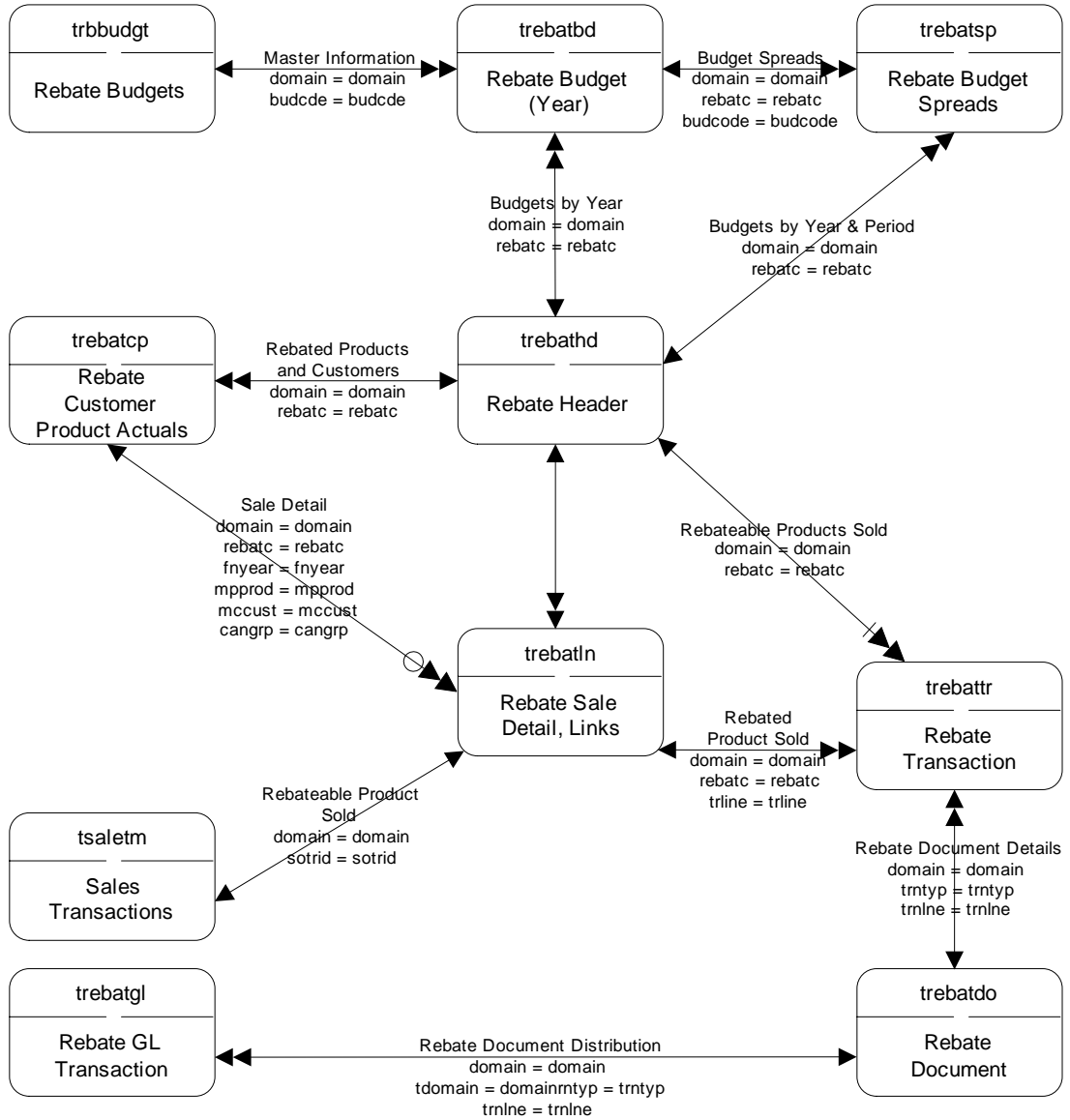
Promotion Structure



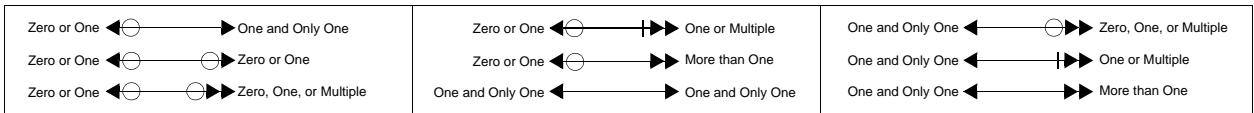
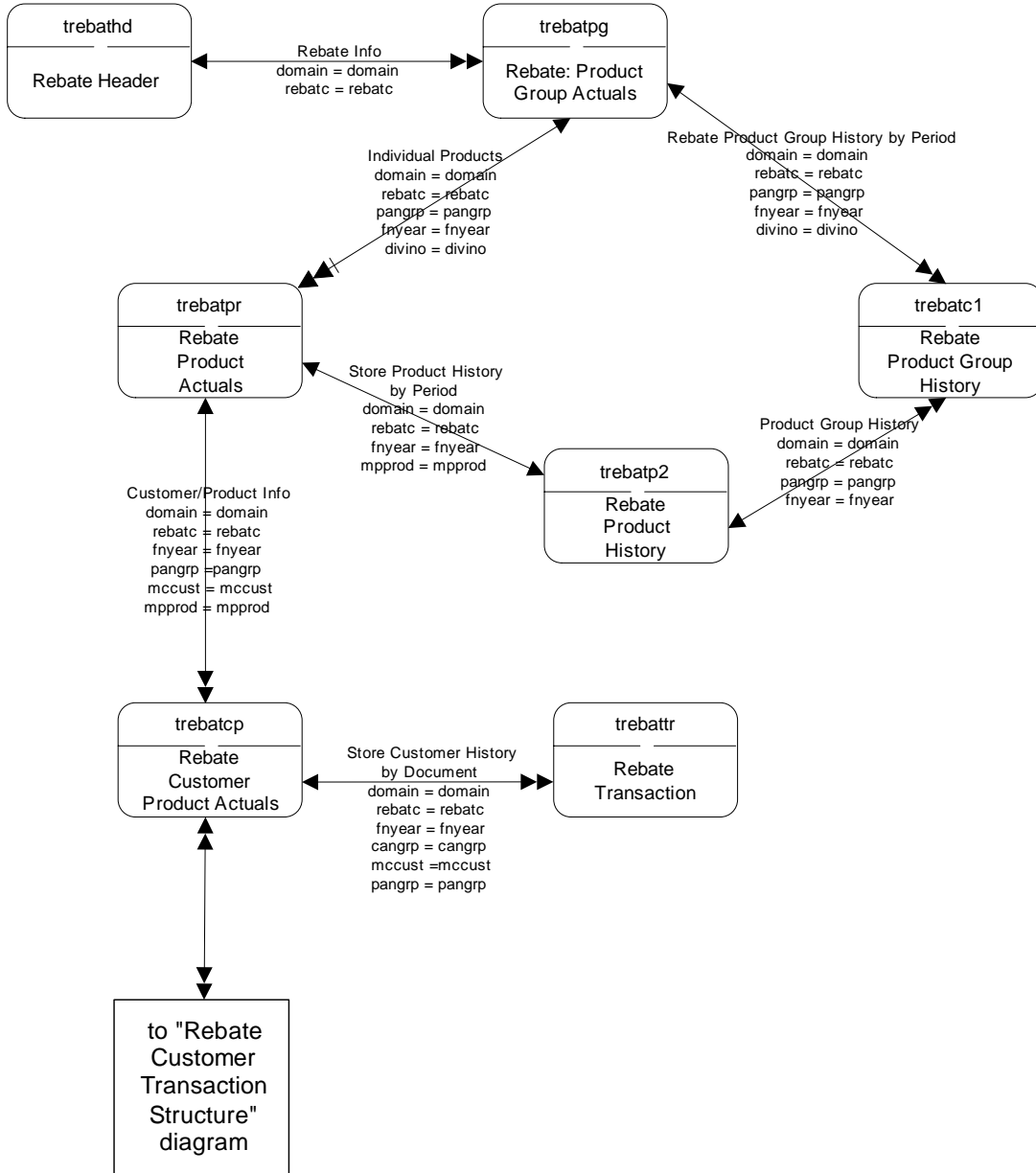
Rebate Customer Transaction Structure



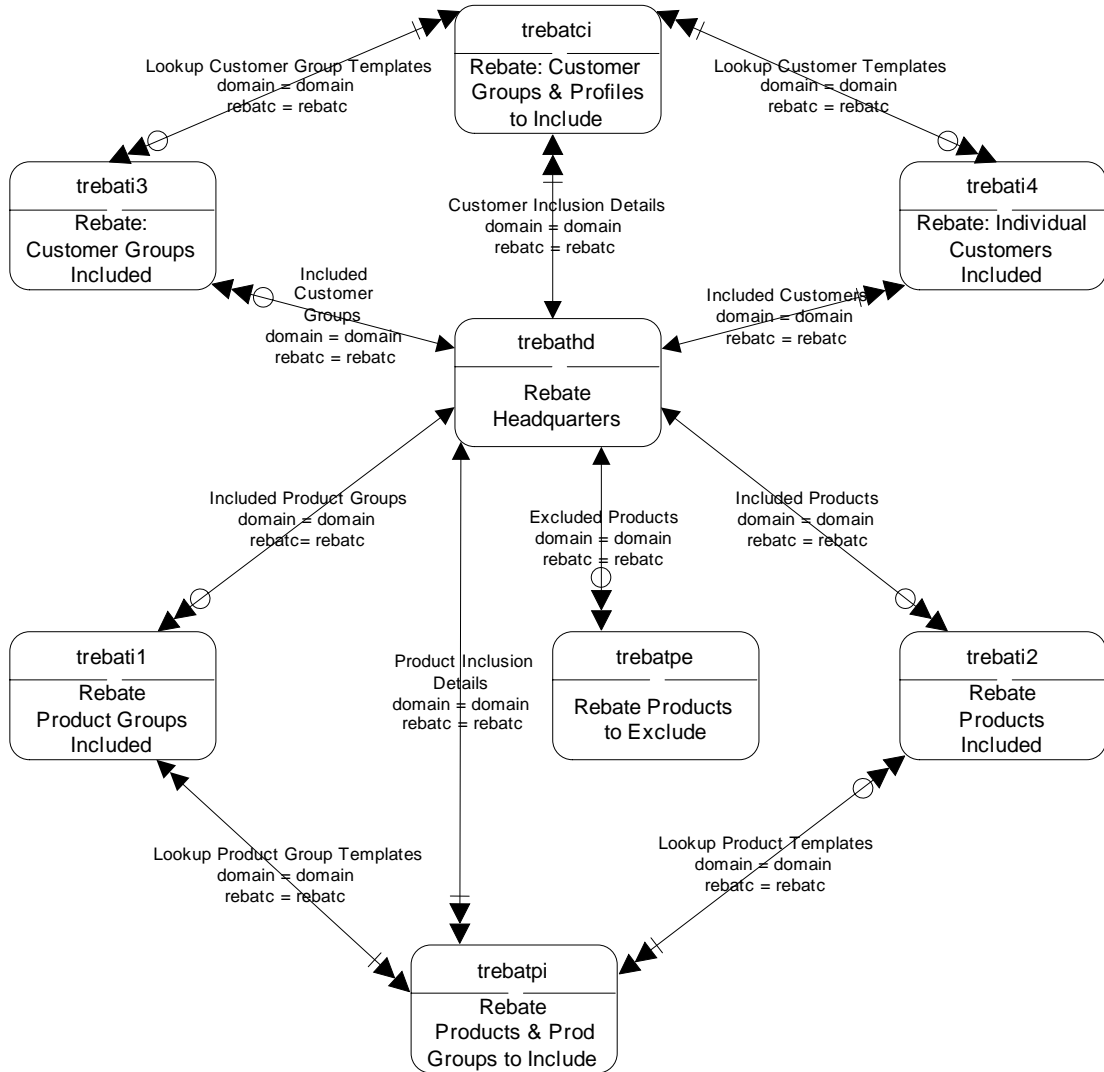
Rebate Detail



Rebate Product Transaction Structure

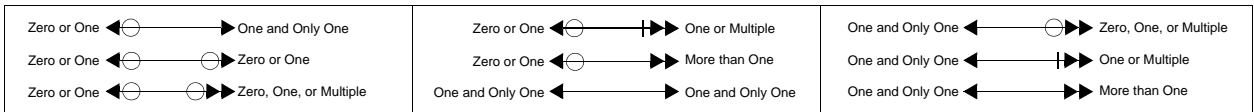
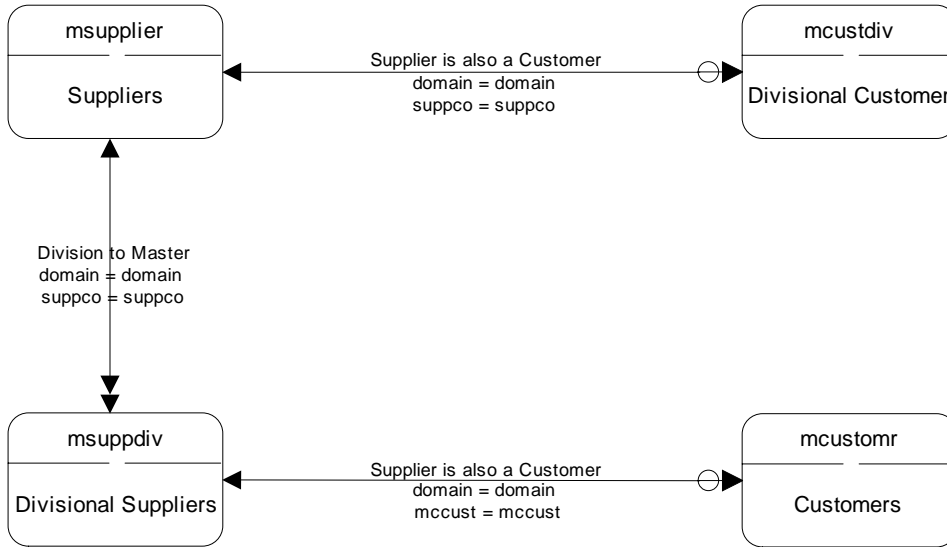


Rebate Setup Structure

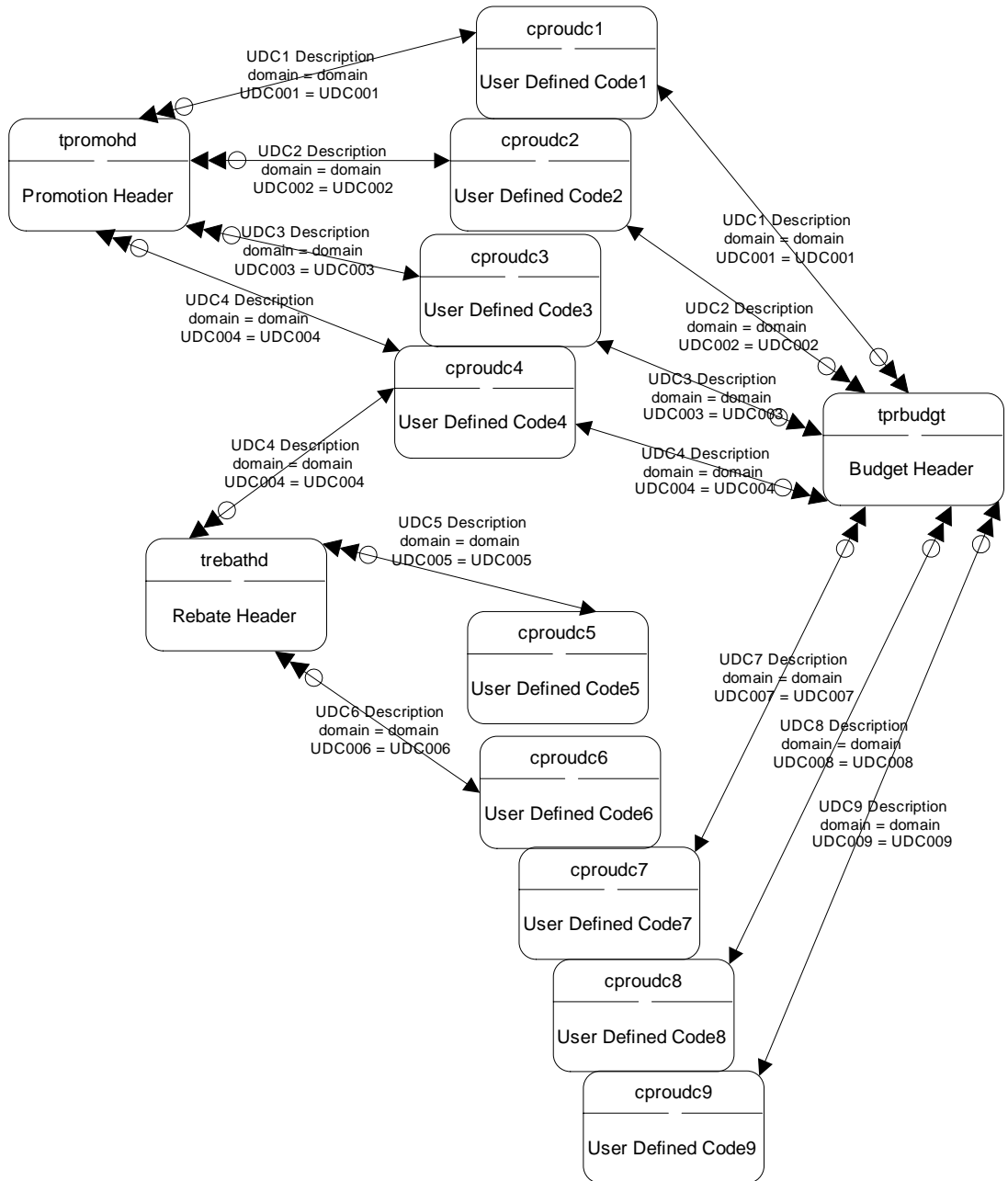


Zero, One, or Multiple	Zero, One, or Multiple	One or Multiple	More than One
Zero, One, or Multiple	One or Multiple	One or Multiple	One or Multiple
Zero, One, or Multiple	More than One	More than One	More than One

Suppliers

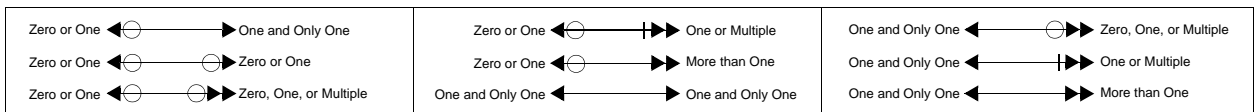
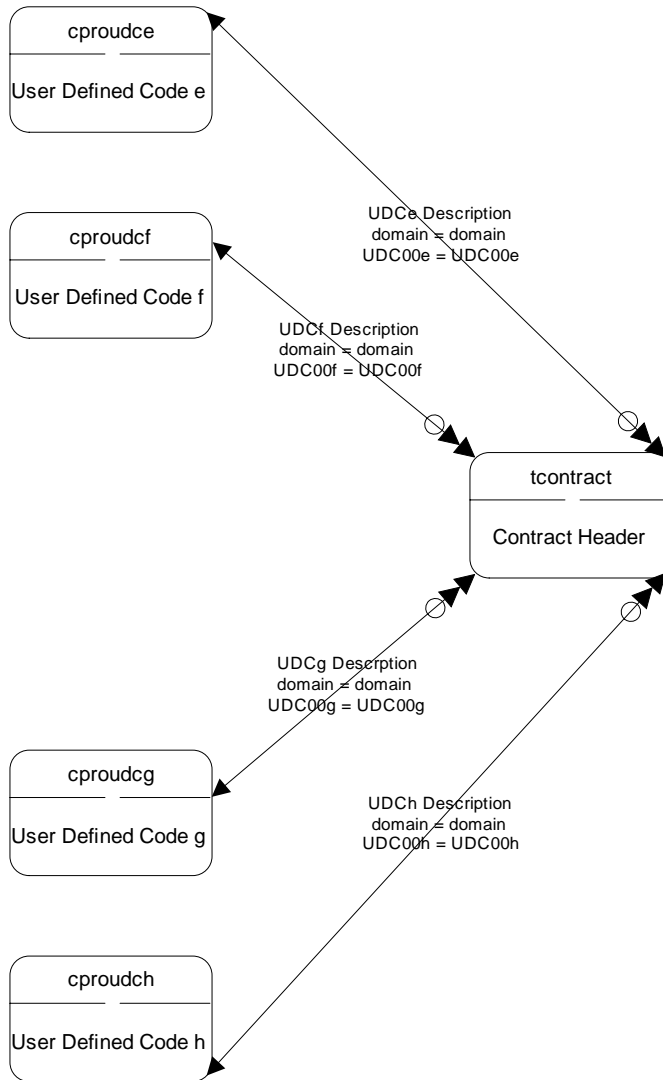


User Defined Codes I

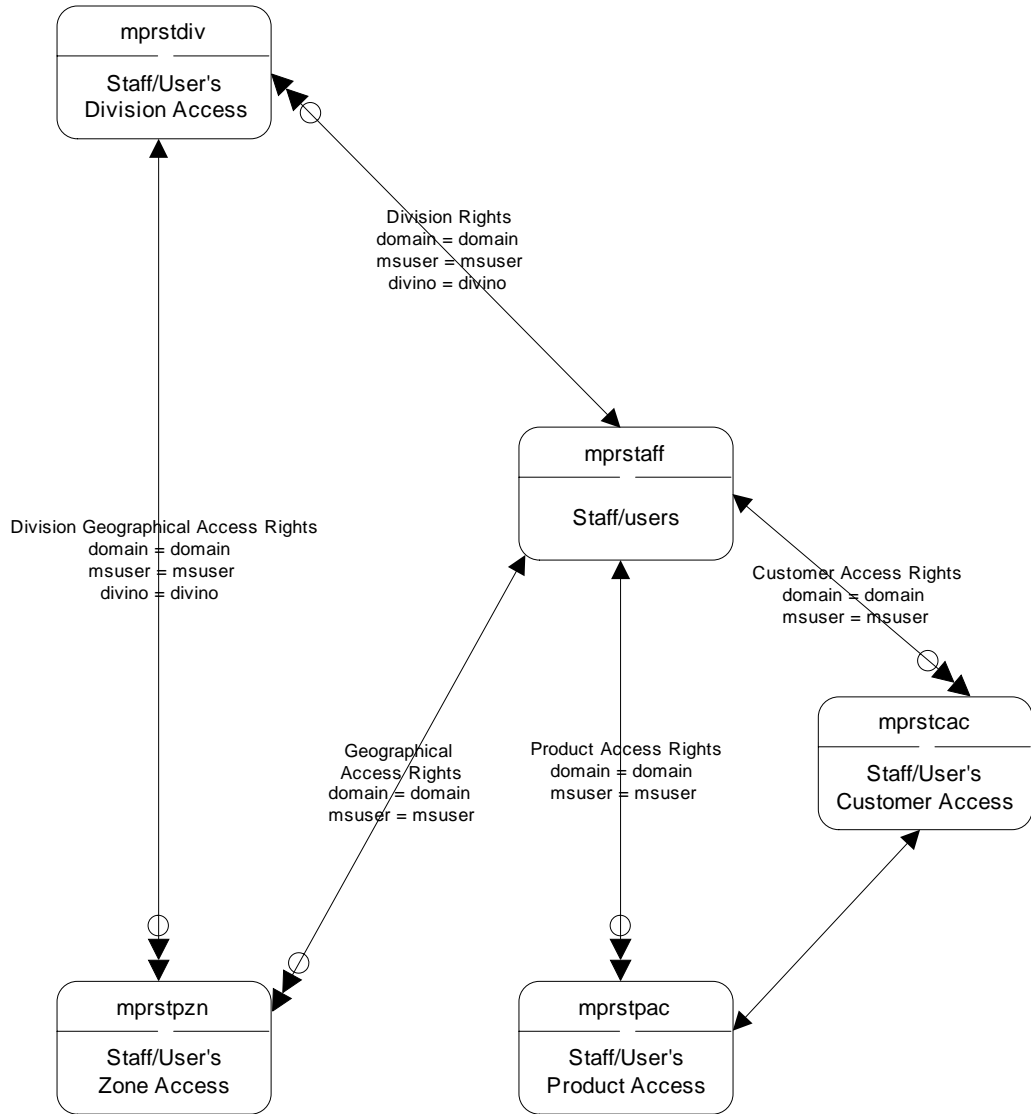


Zero, One, or Multiple	Zero, One, or Multiple	One or Multiple	More than One
Zero, One, or Multiple	One or Multiple	One or Multiple	One or Multiple
Zero, One, or Multiple	More than One	More than One	More than One

User Defined Codes II

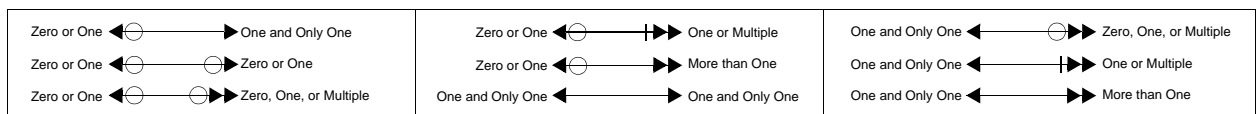


Users or Staff



Zero, One, or Multiple	◀◀⊖	⊖▶▶	Zero, One, or Multiple
Zero, One, or Multiple	◀◀⊖	▶▶⊖	One or Multiple
Zero, One, or Multiple	◀◀⊖	▶▶	More than One
One or Multiple	◀◀⊕	▶▶	More than One
One or Multiple	◀◀⊕	▶▶⊕	One or Multiple
More than One	◀◀⊕	▶▶⊕	More than One

34 Trade Management Entity Diagrams





Chapter 3

Table/Diagram Cross-Reference

This chapter provides a cross-reference of Trade Management tables and the diagrams in which they appear.

Trade Management Cross-Reference 36

Trade Management Cross-Reference

Table 3.1 lists TrM tables in alphabetical order and indicates the diagrams where the tables appear.

Table 3.1
Cross-Reference of
Database Tables

Table Name	Diagram Name
careareg	Geographic Structures
ccanlcus	Customer Group or Brokers Structure
ccanlgrp	Customer Group or Brokers Structure
ccanlgrp	Division Structures
ccanlgrp	Internal Price List
ccanltp1	Customer Group or Brokers Structure
cclmtype	Claims
ccontele	Contracts and Agreements
ccontfee	Contracts and Agreements
ccostset	Product Structure with Profiles
ccprof1v	Customer Structure and Profiles
ccprof2v	Customer Structure and Profiles
ccprof3v	Customer Structure and Profiles
ccprof4v	Customer Structure and Profiles
ccprof5v	Customer Structure and Profiles
ccprof6v	Customer Structure and Profiles
ccprof7v	Customer Structure and Profiles
ccprof8v	Customer Structure and Profiles
ccprof9v	Customer Structure and Profiles
cdcdetyp	Deal Structure
cdealcat	Deal Structure
cdealcde	Deal Structure
cdealgrp	Deal Structure
cdealprm	Deal Structure
cdealtyp	Deal Structure
cdiviprm	Division Structures
cdivisio	Division Structures

Table 3.1 — *Cross-Reference of Database Tables* — (Page 1 of 7)

Table Name	Diagram Name
cdivxref	Division Structures
cgrpzone	Geographic Structures
cpanlgrp	Division Structures
cpanlgrp	Product Structure with Profiles
cpaycode	Contracts and Agreements
cpprof1v	Product Structure with Profiles
cpprof2v	Product Structure with Profiles
cpprof3v	Product Structure with Profiles
cpprof4v	Product Structure with Profiles
cpprof5v	Product Structure with Profiles
cpprof6v	Product Structure with Profiles
cpprof7v	Product Structure with Profiles
cpprof8v	Product Structure with Profiles
cpprof9v	Product Structure with Profiles
cpreigion	Geographic Structures
cproarea	Geographic Structures
cproulist	Internal Price List
cproudc1	User Defined Codes I
cproudc2	User Defined Codes I
cproudc3	User Defined Codes I
cproudc4	User Defined Codes I
cproudc5	User Defined Codes I
cproudc6	User Defined Codes I
cproudc7	User Defined Codes I
cproudc8	User Defined Codes I
cproudc9	User Defined Codes I
cproudce	User Defined Codes II
cproudcf	User Defined Codes II
cproudcg	User Defined Codes II
cproudch	User Defined Codes II
mbrokdiv	Customer Group or Brokers Structure
mbrokers	Customer Group or Brokers Structure

Table 3.1 — *Cross-Reference of Database Tables* — (Page 2 of 7)

Table Name	Diagram Name
mcprof1v	Customer Structure and Profiles
mcprof2v	Customer Structure and Profiles
mcprof3v	Customer Structure and Profiles
mcprof4v	Customer Structure and Profiles
mcprof5v	Customer Structure and Profiles
mcprof6v	Customer Structure and Profiles
mcprof7v	Customer Structure and Profiles
mcprof8v	Customer Structure and Profiles
mcprof9v	Customer Structure and Profiles
mcustdiv	Customer Group or Brokers Structure
mcustdiv	Customer Structure and Profiles
mcustdiv	Division Structures
mcustdiv	Suppliers
mcustomr	Customer Group or Brokers Structure
mcustomr	Customer Structure and Profiles
mcustomr	Suppliers
mpprof1v	Product Structure with Profiles
mpprof2v	Product Structure with Profiles
mpprof3v	Product Structure with Profiles
mpprof4v	Product Structure with Profiles
mpprof5v	Product Structure with Profiles
mpprof6v	Product Structure with Profiles
mpprof7v	Product Structure with Profiles
mpprof8v	Product Structure with Profiles
mpprof9v	Product Structure with Profiles
mprlistc	Internal Price List
mprlistd	Internal Price List
mprlistg	Internal Price List
mprlisth	Internal Price List
mproddiv	Division Structures
mproddiv	Product Structure with Profiles
mproduct	Product Structure with Profiles

Table 3.1 — *Cross-Reference of Database Tables* — (Page 3 of 7)

Table Name	Diagram Name
mprstaff	Users or Staff
mprstcac	Users or Staff
mprstdiv	Users or Staff
mprstpac	Users or Staff
mprstpzn	Users or Staff
msuppdv	Suppliers
msupplier	Suppliers
taccrugl	Promotion Accruals
taccruhd	Promotion Accruals
taccruln	Promotion Accruals
tclaimdc	Claims
tclaimgl	Claims
tclaimhd	Claims
tclaimln	Base Transaction
tclaimln	Claims
tclaimrf	Claims
tcontract	Contracts and Agreements
tcontract	User Defined Codes II
tcontrbd	Contracts and Agreements
tcontrol	Contracts and Agreements
tglbudgs	Budgets
tglbudgt	Budgets
tisalegl	Internal Sales
tisalehd	Internal Sales
tisaleln	Internal Sales
tisaletr	Internal Sales
tisbudgs	Budgets
tisbudgs	Internal Sales
tisbudgt	Budgets
tisbudgt	Internal Sales
tprbudgs	Budgets
tprbudgs	Promotion Budget Structure

Table 3.1 — Cross-Reference of Database Tables — (Page 4 of 7)

Table Name	Diagram Name
tprbudgt	Budgets
tprbudgt	Contracts and Agreements
tprbudgt	Promotion Budget Structure
tprbudgt	User Defined Codes
tpromob1	Promotion Budget Linkages
tpromob1	Promotion Budget Structure
tpromob2	Promotion Budget Linkages
tpromob2	Promotion Budget Structure
tpromobd	Promotion Accruals
tpromobd	Promotion Budget Structure
tpromocg	Promotion Budget Linkages
tpromocg	Promotion Structure
tpromocp	Promotion Budget Linkages
tpromocp	Promotion Structure
tpromocu	Promotion Budget Linkages
tpromocu	Promotion Structure
tpromodc	Deal Structure
tpromodc	Promotion Structure
tpromohd	Claims
tpromohd	Contracts and Agreements
tpromohd	Deal Structure
tpromohd	Promotion Accruals
tpromohd	Promotion Budget Structure
tpromohd	Promotion Structure
tpromohd	User Defined Codes
tpromopc	Promotion Structure
tpromopg	Promotion Budget Linkages
tpromopg	Promotion Structure
tpromopr	Promotion Budget Linkages
tpromopr	Promotion Structure
tpromosp	Promotion Budget Structure
tpromotr	Base Transaction

Table 3.1 — Cross-Reference of Database Tables — (Page 5 of 7)

Table Name	Diagram Name
tpromotr	Claims
tpromotr	Promotion Structure
tprsbudh	Budgets
tprsbuds	Budgets
trbbudgs	Budgets
trbbudgt	Budgets
trbbudgt	Contracts and Agreements
trbbudgt	Rebate Detail
trebatbd	Budgets
trebatbd	Rebate Detail
trebatc1	Rebate Customer Transaction Structure
trebatc2	Rebate Customer Transaction Structure
trebatcg	Rebate Customer Transaction Structure
trebatci	Rebate Setup Structure
trebatcp	Rebate Customer Transaction Structure
trebatcp	Rebate Detail
trebatcp	Rebate Product Transaction Structure
trebatcu	Rebate Customer Transaction Structure
trebatdo	Rebate Detail
trebatgl	Rebate Detail
trebathd	Contracts and Agreements
trebathd	Rebate Customer Transaction Structure
trebathd	Rebate Detail
trebathd	Rebate Product Transaction Structure
trebathd	Rebate Setup Structure
trebathd	User Defined Codes
trebati1	Rebate Setup Structure
trebati2	Rebate Setup Structure
trebati3	Rebate Setup Structure
trebati4	Rebate Setup Structure
trebatln	Base Transaction
trebatln	Rebate Detail

Table 3.1 — Cross-Reference of Database Tables — (Page 6 of 7)

42 Trade Management Entity Diagrams

Table Name	Diagram Name
trebatp1	Rebate Product Transaction Structure
trebatp2	Rebate Product Transaction Structure
trebatpe	Rebate Setup Structure
trebatpg	Rebate Product Transaction Structure
trebatpi	Rebate Setup Structure
trebatpr	Rebate Product Transaction Structure
trebatps	Rebate Detail
trebatrc	Rebate Customer Transaction Structure
trebatrd	Rebate Detail
trebatrp	Rebate Product Transaction Structure
tsaldetl	Base Transaction
tsaletrn	Base Transaction
tsaletrn	Claims
tsaletrn	Promotion Structure
tsaletrn	Rebate Detail
tsalsumm	Base Transaction

Table 3.1 — *Cross-Reference of Database Tables* — (Page 7 of 7)

Index

B

Base Transaction 10
Budgets 11

C

Claims 12
Contracts and Agreements 13
Customer Group or Brokers Structure 14
Customer Structure with Profiles 15

D

Deal Structure 16
Division Structures 17

G

Geographic Structures 18

I

Internal Price List 19
Internal Sales 20

P

Product Structure with Profiles 21
Promotion Accruals 22
Promotion Budget Linkages 23
Promotion Budget Structure 24
Promotion Structure 25

R

Rebate Customer Transaction Structure 26
Rebate Detail 27
Rebate Product Transaction Structure 28
Rebate Setup Structure 29

S

Suppliers 30

U

User Defined Codes I 31
User Defined Codes II 32
Users or Staff 33

44 Trade Management Entity Diagrams