



QAD Adaptive Applications
Enterprise Edition

Technical Reference
QAD Automation Solutions:
Warehouse Extension
Entity Diagrams

70-3434-010
Warehouse Extension Version 1.0
QAD Adaptive Applications 2019
January 2020

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Entity Relationship Diagrams Change Summary

Product Name Change

Starting in September 2019, the new name for QAD's complete portfolio of products is QAD Adaptive Applications. Additionally, QAD Adaptive ERP is the new name for QAD's flagship ERP solution. QAD Adaptive ERP includes the functionality previously associated with QAD Cloud ERP and QAD Enterprise Applications - Enterprise Edition, plus the QAD Enterprise Platform and Adaptive UX which resulted from the Channel Islands program. Going forward, the terms QAD Enterprise Applications, QAD Cloud ERP, and Channel Islands will be deprecated but will remain in previous documentation and training materials. QAD's intention is to—as soon as possible—eliminate the use of the deprecated terms going forward.

Change Summary

The following table summarizes significant differences between this document and previous versions.

Date/Version	Description	Reference
January 2020/QAD EE	Version 1.0 for QAD Warehouse Extension Module.	--



Diagram Conventions

This chapter explains the diagram conventions used in this volume.

Introduction 2

How to Use the Diagrams 3

Introduction

This guide details major relationships between tables in a QAD Enterprise Edition database. These diagrams are designed to help:

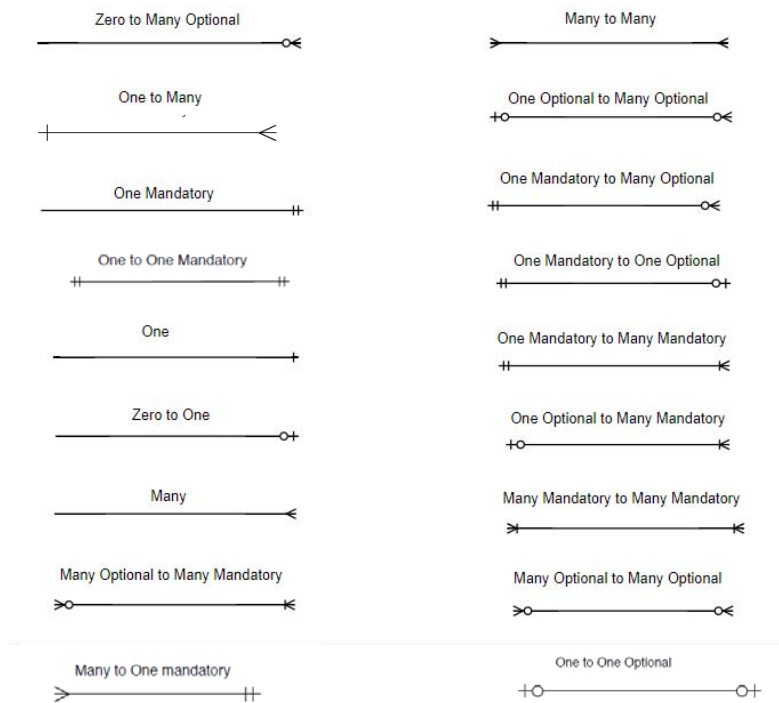
- Programmers interested in customizing or modifying the standard system. The diagrams show relationships that must be preserved in any customization or modification.
- Programmers writing queries or custom reports. The diagrams show which tables can be joined and the field specifications required to 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.

Entity Relationship Diagrams

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

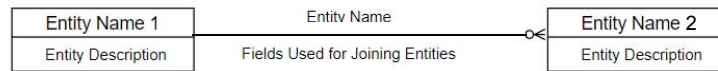
The relationship lines are displayed in Figure 1.1

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

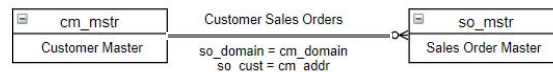


A bar symbol (|) indicates an OR relationship when more than one field can be used for joining.

Relationship Example

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 so_domain = cm_domain AND cm_addr = so_cust:
    DISPLAY cm_addr so_nbr.
END.
```

How to Use the Diagrams

The diagrams are organized alphabetically by function. The most practical way to find information about a particular area is to turn to the diagram for that area. Find the entity (table) that you are interested in and trace out the relationships.

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.

Operational Tables

QAD table names and table name description are closely related. The table name consists of a prefix and type, separated by an underscore (_). Common table types are listed in Table 1.1.

Table 1.1
Database Table Types

Table Type	Meaning	Description
ctrl	Control	Parameters and logical fields that control other functions.
mstr	Master Table	Used for data storage.

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Table Type	Meaning	Description
det	Detail Table	Detail related to another record. There are typically many detail records associated with one master record.
hist	History Table	Contains records created by activity within the database.
plan	Planning Table	Data for planning functions.
wkfl	Work Table	Used to support other functions.

In the typical case, the table prefix consists of two or three significant letters of the table name description.

Example The table name for sales order master is so_mstr, and po_mstr is the table name for purchase order master.

In most cases, the first letter of the table name is the first letter of the description; the few exceptions involve tables such as line changeover master, which is chg_mstr.

Detail tables related to master data typically have the same prefix with the addition of the letter d.

Example The detail table associated with so_mstr is sod_det.

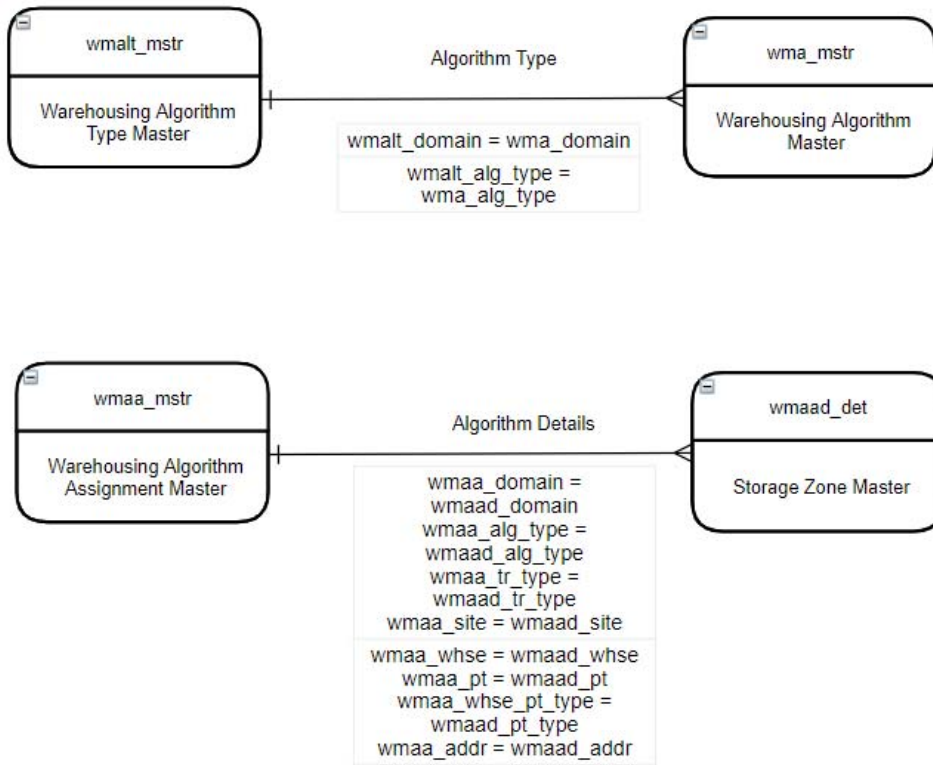
Within a table, all the data elements use the same prefix.

Example The repetitive production schedule (rps_mstr) table includes fields named rps_part and rps_record.

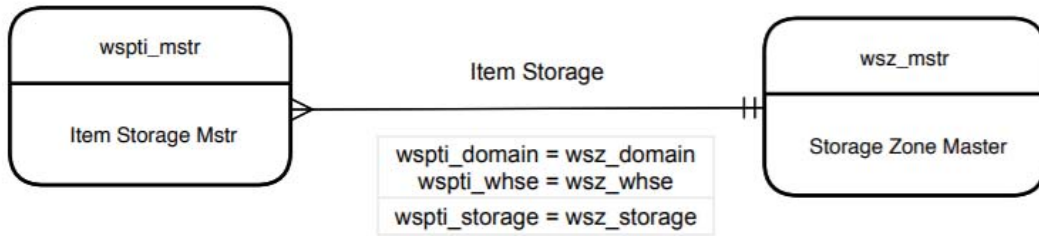
Warehousing Extension Entity Diagrams

The entity diagrams are in alphabetical order starting on the next page.

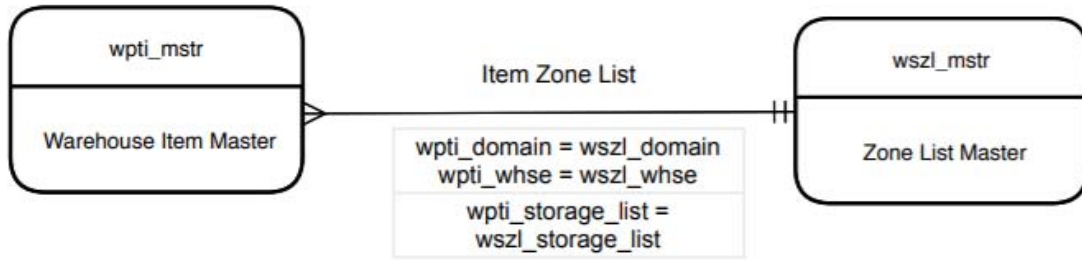
Algorithm Details



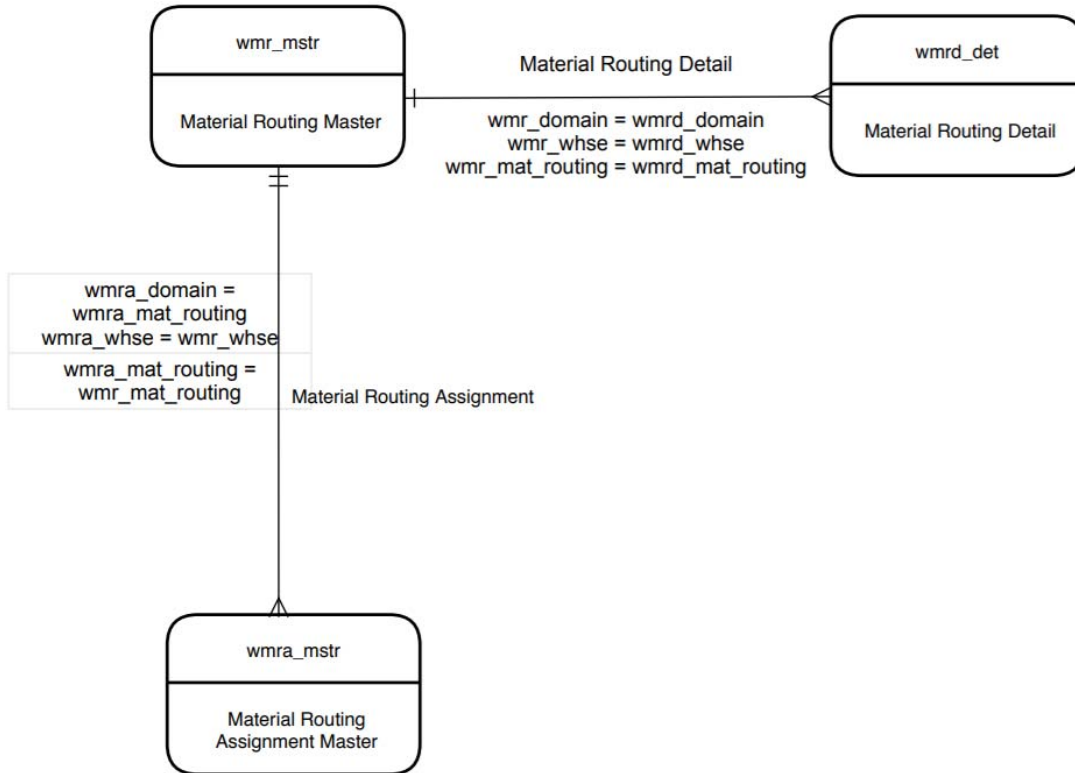
Item Storage and Storage Zone



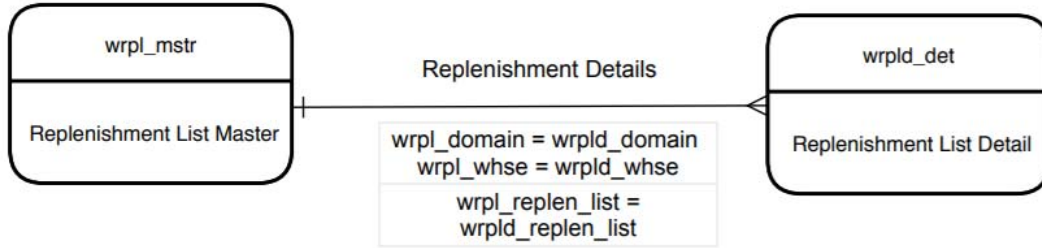
Item Warehouse and Storage Zone List



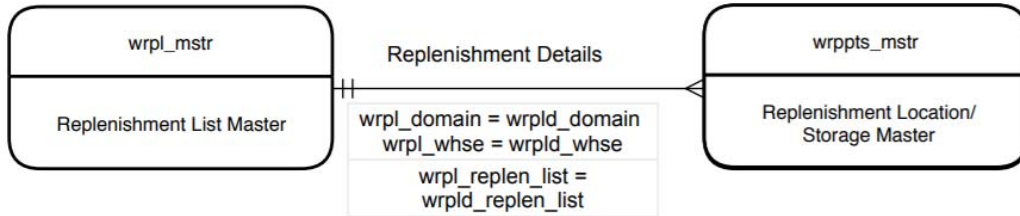
Material Routing Details



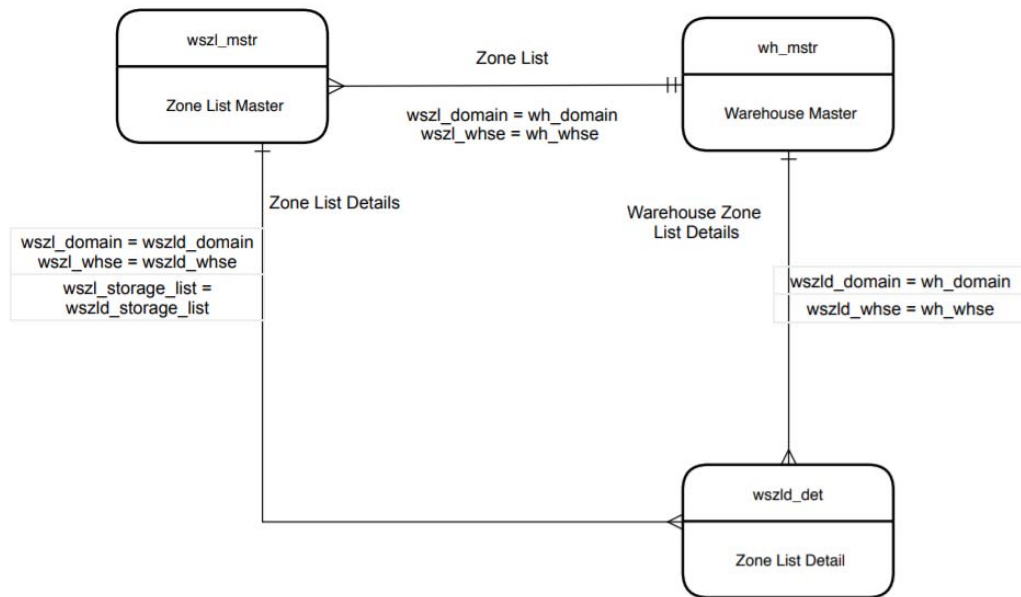
Replenishment List Details



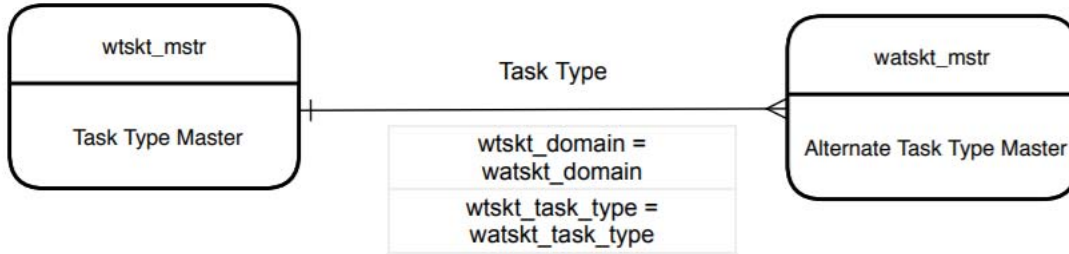
Replenishment Location/Storage Details



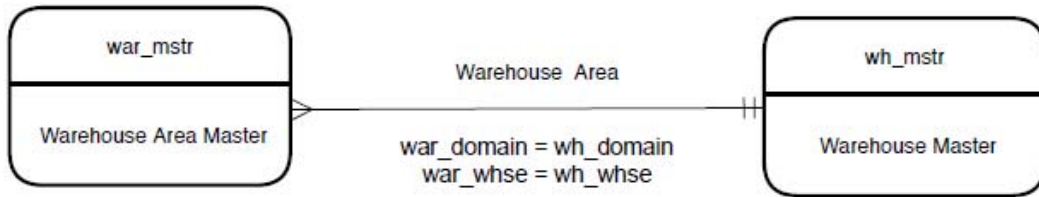
Storage Zone and Storage List



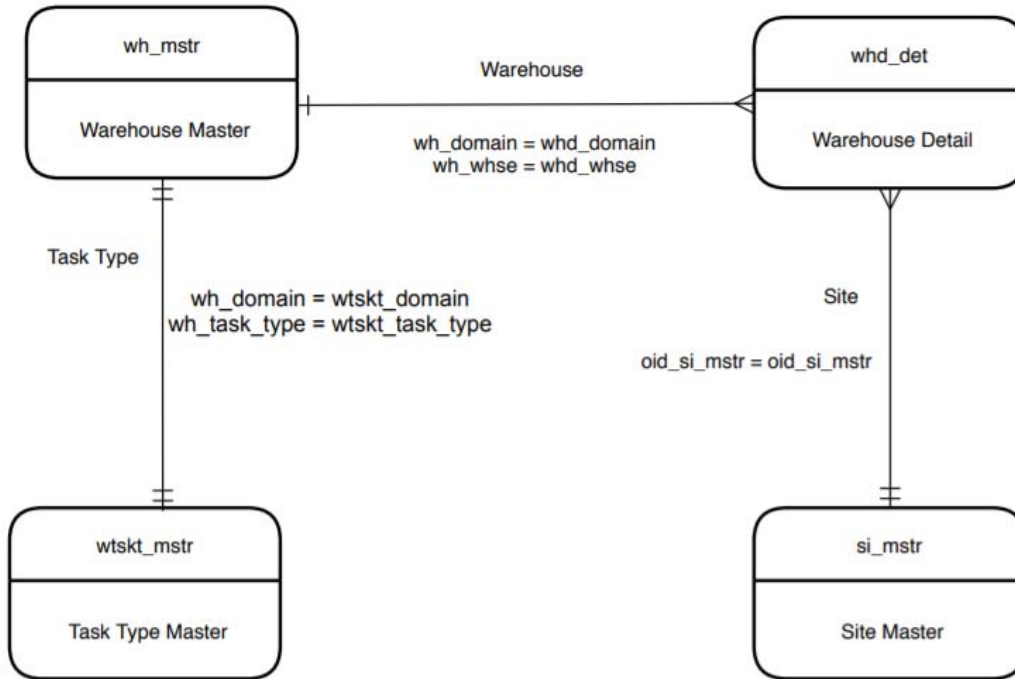
Task Type Details



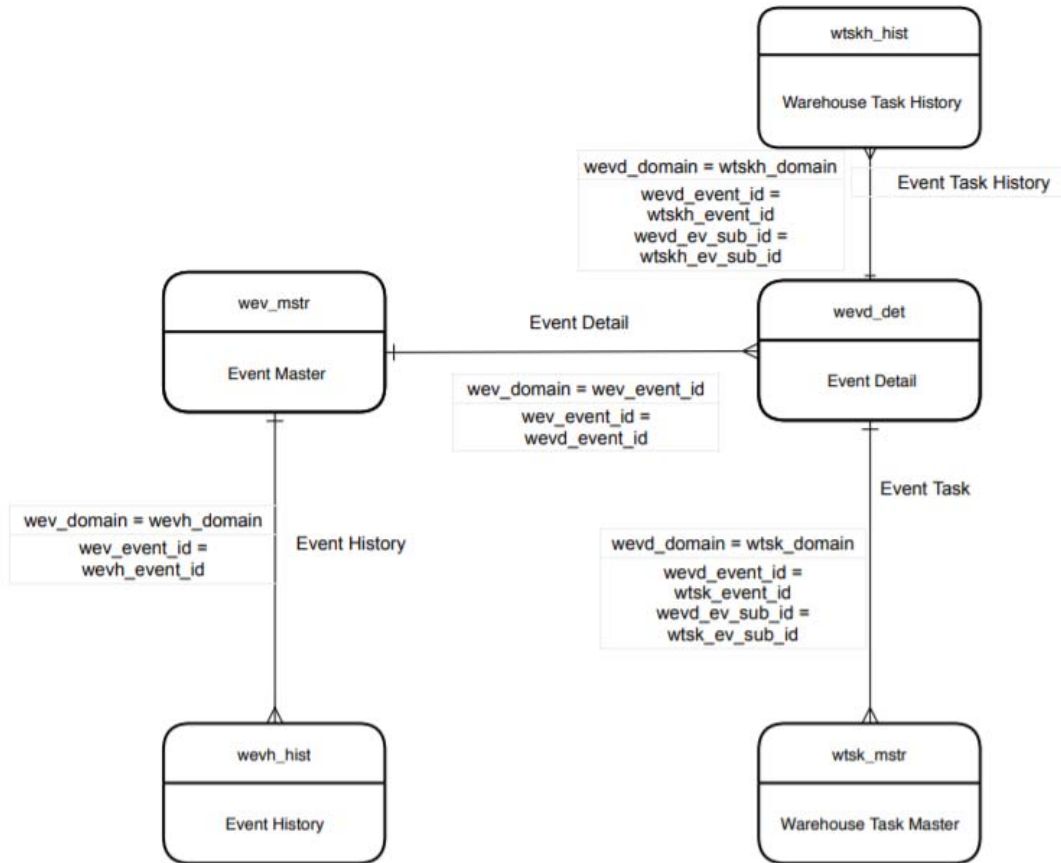
Warehouse Area



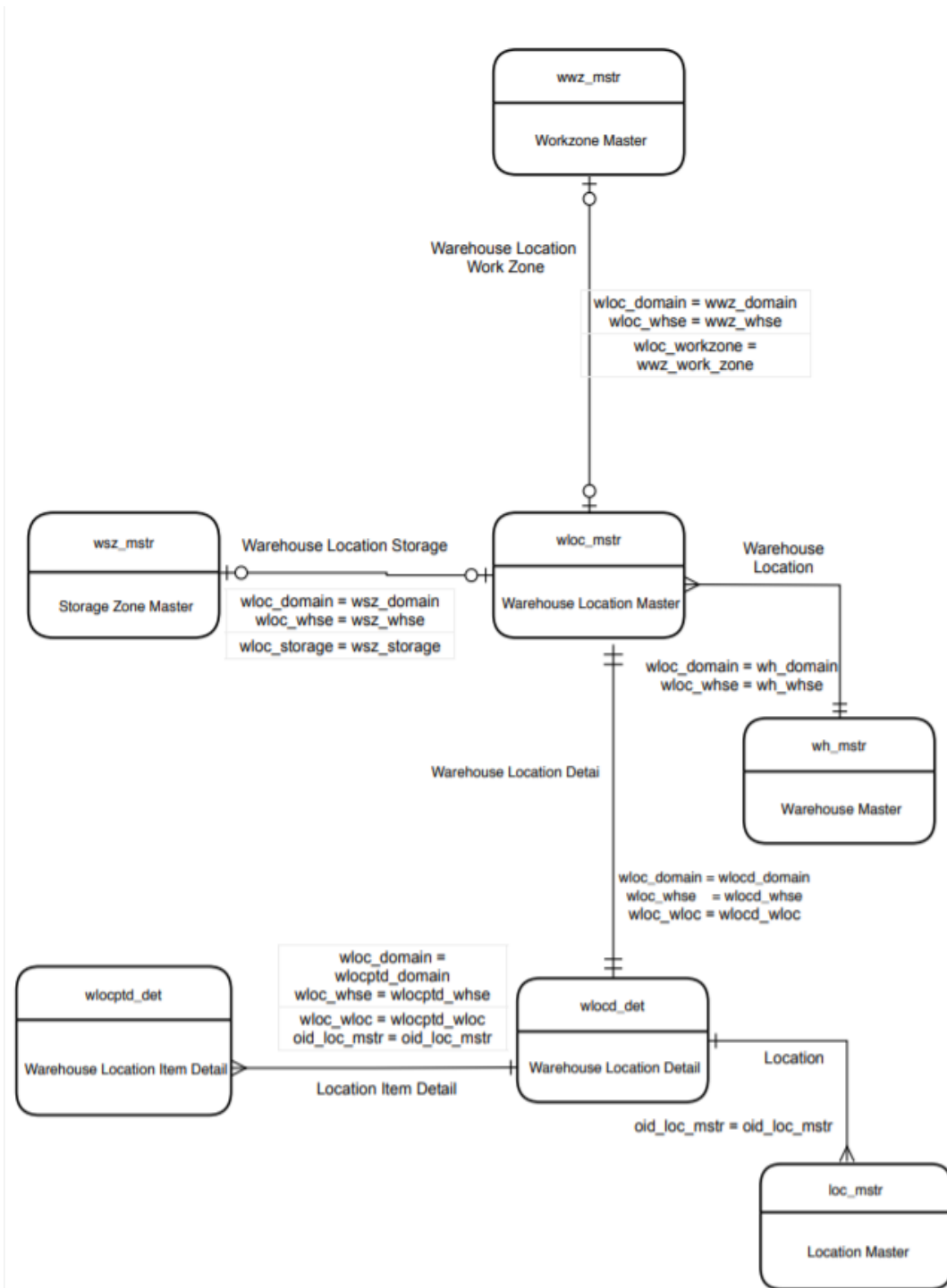
Warehouse Details and Task Type



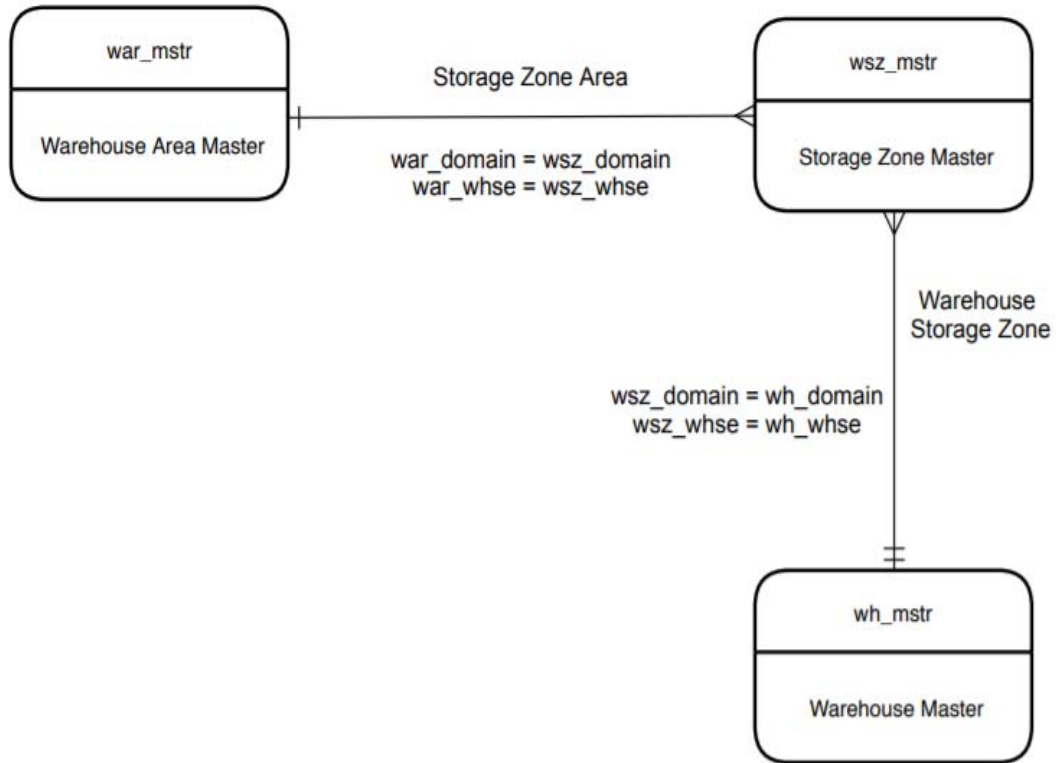
Warehouse Event and Task Details



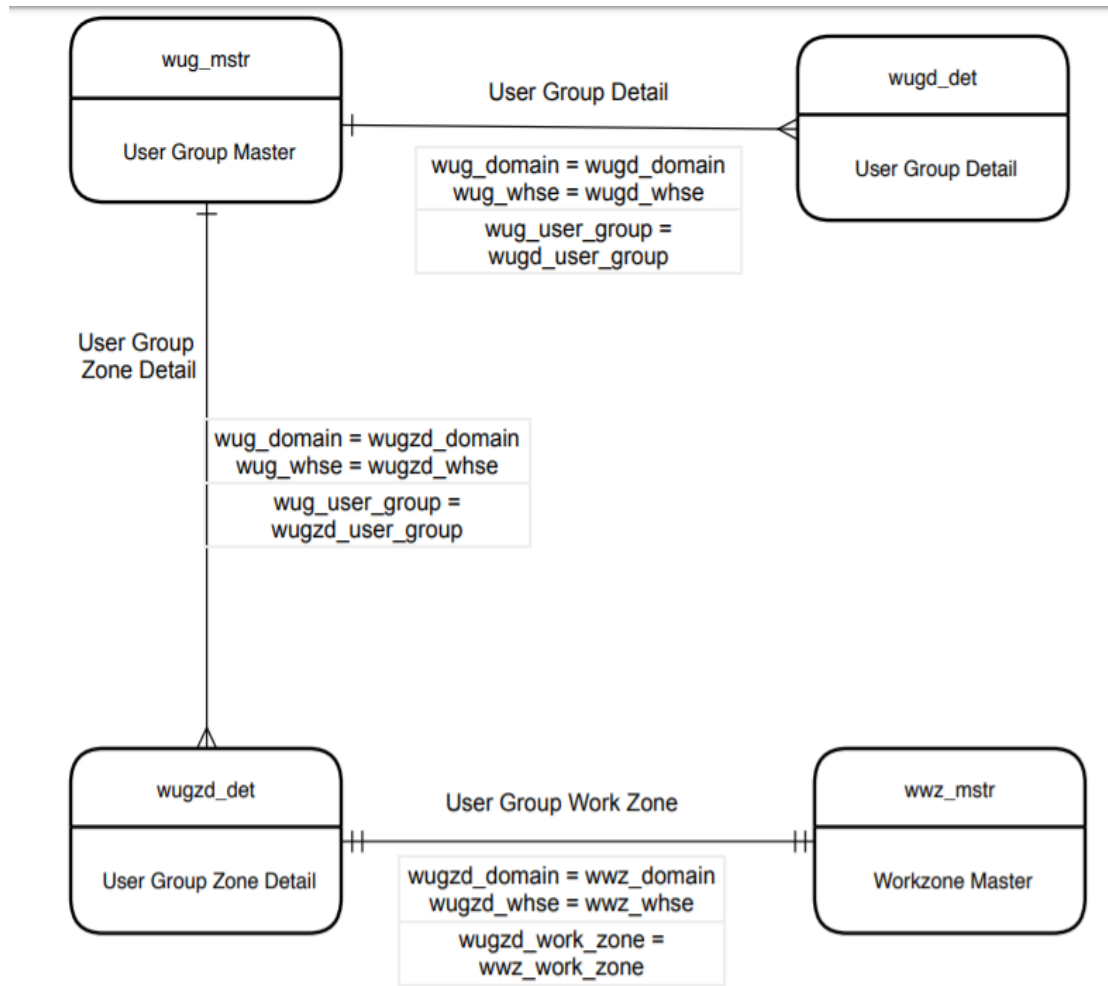
Warehouse Location Details



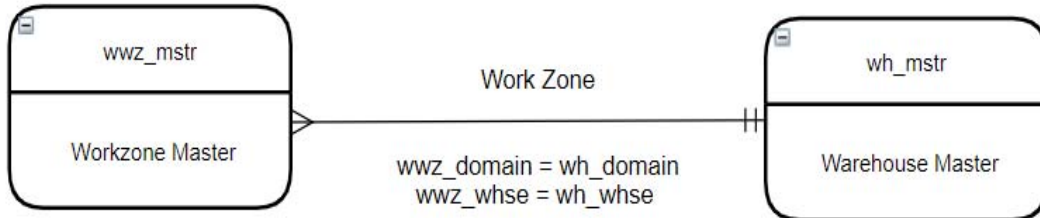
Warehouse Storage Zone



Warehouse User Groups and Zone Details



Work Zone



Table/Diagram Cross-Reference

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

Entity Cross-Reference 22

Entity Cross-Reference

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

Table 3.1
Database Table Cross-Reference

Table	Table Description	Diagram
loc_mstr	Location Master	Warehouse Location Details
si_mstr	Site Master	Warehouse Details and Task Type
war_mstr	Warehouse Area Master	Warehouse Area
war_mstr	Warehouse Area Master	Warehouse Storage Zone
watskt_mstr	Alternate Task Type Master	Task Type Details
wev_mstr	Event Master	Warehouse Event and Task Details
wevd_det	Event Detail	Warehouse Event and Task Details
wevh_hist	Event History	Warehouse Event and Task Details
wh_mstr	Warehouse Master	Warehouse Area
wh_mstr	Warehouse Master	Warehouse Details and Task Type
wh_mstr	Warehouse Master	Warehouse Location Details
wh_mstr	Warehouse Master	Warehouse Storage Zone
wh_mstr	Warehouse Master	Storage Zone and Storage List
wh_mstr	Warehouse Master	Work Zone
whd_det	Warehouse Detail	Warehouse Details and Task Type
wloc_mstr	Warehouse Location Master	Warehouse Location Details
wlocd_det	Warehouse Location Detail	Warehouse Location Details
wlocptd_det	Warehouse Location Master	Warehouse Location Details
wma_mstr	Warehouse Location Item Detail	Algorithm Details
wmaa_mstr	Warehousing Algorithm Assignment Master	Algorithm Details
wmaad_det	Storage Zone Master	Algorithm Details
wmalt_mstr	Warehousing Algorithm Type Master	Algorithm Details
wpti_mstr	Warehouse Item Master	Item Warehouse and Storage Zone List
wmr_mstr	Material Routing Master	Material Routing Details
wmra_mstr	Material Routing Assignment Master	Material Routing Details
wmrd_det	Material Routing Details	Material Routing Details
wrpl_mstr	Replenishment List Master	Replenishment Location/Storage Details
wrppts_mstr	Replenishment Location/Storage Master	Replenishment Location/Storage Details
wspti_mstr	Item Storage Master	Item Storage and Storage Zone
wsz_mstr	Storage Zone Master	Item Storage and Storage Zone
wsz_mstr	Storage Zone Master	Warehouse Location Details
wsz_mstr	Storage Zone Master	Warehouse Storage Zone
wszl_mstr	Zone List Master	Item Warehouse and Storage Zone List
wszl_mstr	Zone List Master	Storage Zone and Storage List
wszld_det	Zone List Detail	Storage Zone and Storage List

Table 3.1 — Database Table Cross-Reference — (Page 1 of 2)

Table	Table Description	Diagram
wtsk_mstr	Warehouse Task Master	Warehouse Event and Task Details
wtskh_hist	Warehouse Task History	Warehouse Event and Task Details
wtskt_mstr	Task Type Master	Warehouse Details and Task Type
wtskt_mstr	Task Type Master	Task Type Details
wug_mstr	User Group Master	Warehouse User Groups and Zone Details
wugd_det	User Group Detail	Warehouse User Groups and Zone Details
wugzd_det	User Group Zone Detail	Warehouse User Groups and Zone Details
wwz_mstr	Workzone Master	Warehouse Location Details
wwz_mstr	Workzone Master	Warehouse User Groups and Zone Details
wwz_mstr	Workzone Master	Work Zone

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

