



Mastering & Using Access 2002

Napier & Judd
McLaren



Establishing Relationships Between Tables

Objectives

- Establish table relationships
- Establish other one-to-many relationships
- Enforce referential integrity
- Verify referential integrity



Establishing Relationships Between Tables

- 4.a Establishing Table Relationships
 - Common field values link tables
 - Primary table
 - Related table
 - Primary key
 - Foreign key

Establishing Relationships Between Tables

- 4.a Establishing Table Relationships
 - One-to-one relationship
 - One-to-many relationship
 - Many-to-many relationship
 - Junction table
 - Relationships window

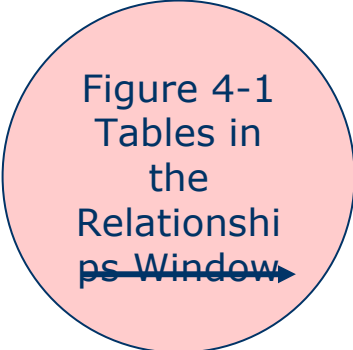
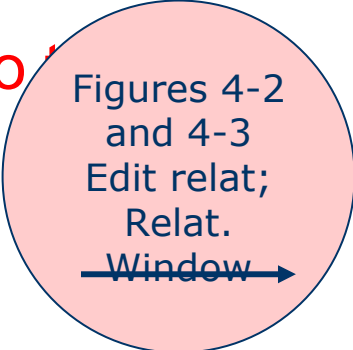


Figure 4-1
Tables in
the
Relationships Window

Establishing Relationships Between Tables

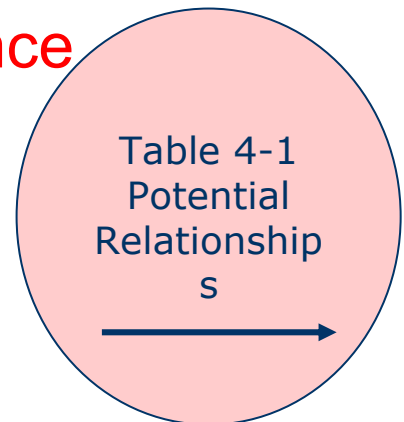
- 4.a Establishing Table Relationships
 - Create relationship
 - Link common fields
 - Drag from primary table to related table
 - Join line indicates relationship
 - Set relationships before adding data to tables



Figures 4-2
and 4-3
Edit relat;
Relat.
Window

Establishing Relationships Between Tables

- 4.b Establishing Other One-to-Many Relationships
 - Examine potential relationships
 - Join on more than one field
 - Click join line to edit
 - Print Relationships window for reference



Establishing Relationships Between Tables

- 4.c Enforcing Referential Integrity
 - Ensures relationships are valid
 - No orphan records
 - Cannot delete record with existing relationship without first deleting relationship
 - Enforce before adding data

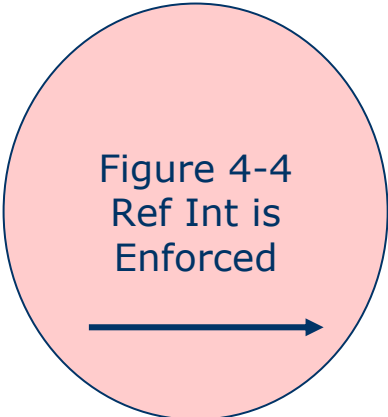



Figure 4-4
Ref Int is
Enforced

Establishing Relationships Between Tables

4.d Verifying Referential Integrity

- Check enforcement
 - Add a record with no matching primary record
 - Delete a related record from a primary table
- Access issues warnings



Figures 4-5
and 4-6
Message
Warnings

→



Establishing Relationships Between Tables

○ Summary

- Relationships link common fields with the same values in separate tables
- All values in related key must match a value in the primary key
- Every primary key value does not have to have a match in the related key
- Three kinds of relationships



Establishing Relationships Between Tables

o Summary

- Create relationships by drawing a join line and dragging field from primary to related table
- A join is the actual link that defines the relationship
- Enforce referential integrity to ensure related records stay related when changes are made to the database