

Fall 2015 Database Lab

Assignment: Database Application: Tracking Network Hardware

Textbook: Valacich, Joseph S. and Schneider, Christoph. Information Systems Today: Managing in the Digital World. 6th Edition. Prentice Hall. ISBN: 9780132971218 (eText: 9780132971799).

Presentation Creator: Preuss


Presentation Date: 10/1/2015

Notes: This presentation shows most if not all the required steps in completing the assignment. It is the student's responsibility to read and understand the assignment to insure the assignment is correctly done.


The presentation opens a blank database in Access 2013. The presentation gives the database an appropriate name.

Blank desktop database

Should I create an Access 2013 app or an Access 2013 database?

File Name: 


C:\Users\Tim\Documents\


 Create

Access

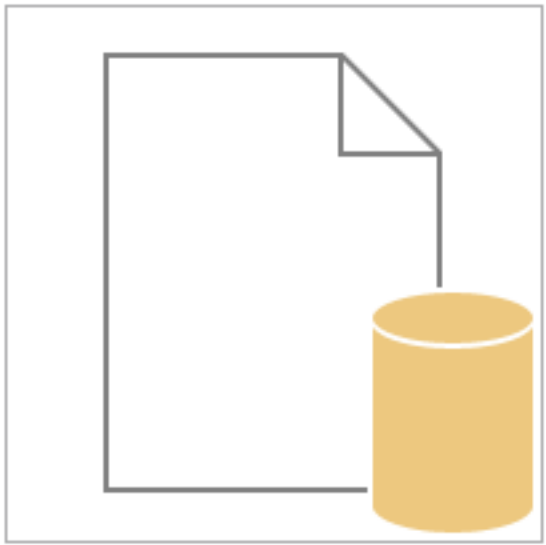

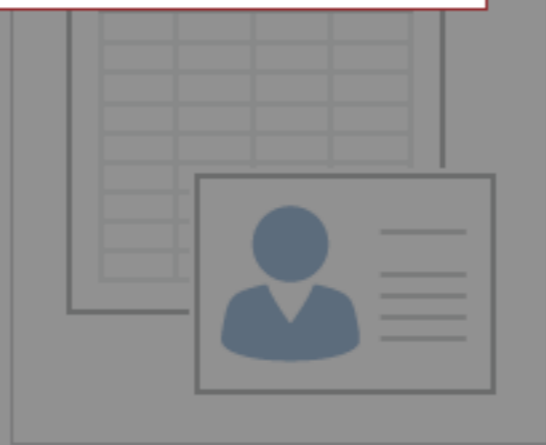
Recent

- employeedata.accdb
Documents » cptr1138 » Done » Lab04
- employeedata.accd...
- asset.accdb
Documents » cptr1138 »
- Database1.accdb
Documents
- database_lab02.accd...
- database_lab02.accd...
- Ch 3 employeedata...
- weather01.accdb
Documents
- sddry.accdb
Documents

 Open Other Files

Search for online templates 

Suggested searches: Database Business
Logs Small Business Industry Lists
Personal

The screenshot shows the Microsoft Access application window. The title bar reads "agency : Database- C:\Users\Tim\Document...". The ribbon is set to "TABLE TOOLS" with the "TABLE" tab selected. The ribbon includes sections for "Views", "Add & Delete", "Properties", "Formatting", and "Field Validation". On the left, the "All Access Objects" pane shows "Table1" under the "Tables" section. A context menu is open over the "Table1" tab, listing options: "Save", "Close", "Close All", "Design View", and "Datasheet View". A yellow arrow points from a text box to the "Design View" option. The status bar at the bottom of the window shows "Record: 1 of 1", "No Filter", and "Search".

The presentation right clicks on the "Table 1" tab for the menu shown. The presentation selects "Design View" option.

Microsoft Access interface showing the 'TABLE TOOLS' ribbon with 'FIELDS' and 'TABLE' tabs. The ribbon includes sections for 'Add & Delete', 'Properties', 'Formatting', and 'Field Validation'. The 'All Access Objects' pane on the left shows a table named 'Table1'. A 'Save As' dialog box is open, with 'Table Name:' set to 'Agencies'. A yellow callout box with an arrow points to the 'Agencies' text in the dialog box.

The presentation enters the desired name for the table.

Microsoft Access ribbon - DESIGN tab options:

- Views: View
- Tools: Primary Key, Builder, Test Validation Rules, Insert Rows, Delete Rows, Modify Lookups
- Show/Hide: Property Indexes Sheet
- Field, Record & Table Events: Create Data Macros, Rename/Delete Macro
- Relationships: Relationships, Object Dependencies

All Access Objects pane:

- Search: Search...
- Tables: Agencies

Field Name	Data Type	Description
Agency ID	Number	

Field Properties

General	
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	Yes
Indexed	Yes (No Duplicates)
Text Align	General

The presentation enters the field name as shown. This field will be the primary key for this table.

A value that is automatically entered in this field for new items

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS DESIGN

agency : Database- C:\Users\Tim\Documents\agency... Tim Preuss

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Create Data Macros Rename/Delete Macro Relationships Object Dependencies

All Access Objects

Search...

Tables

Agencies

Field Name	Data Type	Description (Optional)
Agency ID	Number	
Street Address	Short Text	

The presentation enters the field name as shown.

Field Properties

General Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

The data type determines the kind of values that users can store in the field. Press F1 for help on data types.

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS DESIGN

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Create Data Macros Rename/Delete Macro Relationships Object Dependencies

All Access Objects

Search...

Tables

- Agencies

Field Name	Data Type	Description (Optional)
Agency ID	Number	
Street Address	Short Text	
City	Short Text	

Field Properties

General Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

The presentation enters the field name as shown.

agency : Database- C:\Users\Tim\Documents\agency...

Tim Preuss

Insert Rows, Delete Rows, Modify Lookups, Property Indexes Sheet, Create Data Macros, Rename/Delete Macro, Relationships, Object Dependencies

All Access Objects

Search...

Tables

- Agencies

Field Name	Data Type	Description (Optional)
Agency ID	Number	
Street Address	Short Text	
City	Short Text	
State	Short Text	
ZIP Code	Short Text	
Phone Number	Short Text	

The presentation enters the fields name as shown.

Field Properties

General	
Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

Design view. F6 = Switch panes. F1 = Help.

NUM LOCK

Microsoft Access Ribbon: DESIGN tab

- Views: View, Primary Key
- Tools: Builder, Test Validation Rules, Insert Rows, Delete Rows, Modify Lookups
- Show/Hide: Property Indexes Sheet
- Field, Record & Table Events: Create Data Macros, Rename/Delete Macro
- Relationships: Relationships, Object Dependencies

All Access Objects

Search...

Tables

- Agencies

Field Name	Data Type	Description (Optional)
Agency ID	Number	
Street Address	Short Text	
City	Short Text	
State	Short Text	
ZIP Code	Short Text	
Phone Number	Short Text	
Number of Service Agents	Number	

Field Properties

General

Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Indexed	Yes (Duplicates OK)
Text Align	General

The presentation enters the field name as shown.

Microsoft Access ribbon: FILE, HOME, CREATE, EXTERNAL DATA, DATABASE TOOLS, TABLE TOOLS (DESIGN), Relationships, Object Dependencies

Navigation pane: All Access Objects, Tables, Agencies

Field Name	Data Type	Description (Optional)
Agency ID	Number	
Street Address	Short Text	
City	Short Text	
State	Short Text	
ZIP Code	Short Text	
Phone Number	Short Text	
Number of Service Agents	Number	
Working Hours	Number	

Field Properties (General tab):

Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Indexed	No
Text Align	General

The presentation enters the field name as shown.

Design view. F6 = Switch panes. F1 = Help.

NUM LOCK [Grid] [Print]

Microsoft Access Ribbon: View, Primary Key, Builder, Test Validation Rules, Insert Rows, Delete Rows, Modify Lookups, Property Indexes Sheet, Show/Hide, Create Data Macros, Rename/Delete Macro, Field, Record & Table Events, Relationships, Object Dependencies, Relationships

All Access Objects pane: Search..., Tables (Agencies)

Field Name	Data Type	Description (Optional)
Agency ID	Number	
Street Address	Short Text	
City	Short Text	
State	Short Text	
ZIP Code	Short Text	
Phone Number	Short Text	
Number of Service Agents	Number	
Working Hours	Number	

Microsoft Access

Do you want to save changes to the design of table 'Agencies'?

Yes No Cancel

The presentation right clicks on the "Agencies" tab and selects "Datasheet View". The presentation selects "Yes" to save the table.

Design view. F6 = Switch panes. F1 = Help.

agency : Database- C:\Users\Tim\Documents\agency.accdb (Access 2007 - 2013 file format) - Access

FILE HOME **CREATE** EXTERNAL DATA DATABASE TOOLS

Application Parts ▾ Table Table Design Tables

Report Report Design Blank Report Labels Report Wizard Macros & Code

All Access Objects

Search...

Tables

- Agencies

Ready NUM LOCK

Under the Create tab, the presentation selects "Table" to create a new table.

Microsoft Access ribbon: FILE, HOME, CREATE, EXTERNAL DATA, DATABASE TOOLS, TABLE TOOLS (selected), FIELDS, TABLE. Tab: agency: Database- C:\Users\Tim\Document... | Tim Preuss

Microsoft Access ribbon (TABLE TOOLS): Table Properties, Before Change, Before Delete, After Insert, After Update, After Delete, Named Macro, Relationships, Object Dependencies.

All Access Objects pane: Search..., Tables (Agencies, Table1)

Table1 design grid: ID, (New)

Save As dialog box: Table Name: Table1, OK, Cancel

The presentation enters the desired name for the table.
This occurs after the presentation right click on the "Table 1" table and selected "Design View"

Datasheet View | Record: [Navigation] | No Filter | Search | NUM LOCK

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS **TABLE TOOLS** DESIGN

agency : Database- C:\Users\Tim\Documents\agency... ? - [Close] Tim Preuss

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Create Data Macros Rename/Delete Macro Relationships Object Dependencies

All Access Objects

Search...

Tables

- Agencies
- AgencyServices

Primary Key
Cut
Copy
Paste
Insert Rows
Delete Rows
Properties

AgencyServices

Description (Optional)

Properties

Field Size	
New Values	
Format	
Caption	
Indexed	No
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

The presentation right clicks on the grey box showing a key. The presentation selects the "Primary Key" option to remove the key from the field.

TABLE TOOLS DESIGN

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Show/Hide Create Data Macros Rename/Delete Macro Relationships Object Dependencies

All Access Objects

Search...

Tables

- Agencies
- AgencyServices

Field Name	Data Type	Description (Optional)
Agency ID	Number	
Service ID	Number	

The presentation enters the fields name as shown.

Field Properties

General	
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	
Validation Text	
Required	No
Indexed	Yes (Duplicates OK)
Text Align	General

The data type determines the kind of values that users can store in the field. Press F1 for help on data types.

agency : Database- C:\Users\Tim\Documents\agency... ? - [Close] X

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS DESIGN

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Show/Hide Create Data Macros Rename/Delete Macro Relationships Object Dependencies

All Access Objects

Search...

Tables

- Agencies
- AgencyServices

Agencies

AgencyServices

Data Type	Description (Optional)
Number	
Number	

Save Close Close All Design View Datasheet View

General Lookup

Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	
Validation Text	
Required	No
Indexed	Yes (Duplicates OK)
Text Align	General

determines the kind of values store in the field. Press F1 for help on data types.

The presentation right clicks on the "AgencyServices" tab and selects "Datasheet View".

Under the Create tab, the presentation selects "Table" to create a new table.

Application Parts
Table
Table Design
Table Styles

All Access Objects

Search...

Tables

- Agencies
- AgencyServices

Report Wizard
Labels
Macro
Reports

agency : Database- C:\Users\Tim\Document... ? - □ ×

Tim Preuss

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS **TABLE TOOLS** FIELDS TABLE

Table Properties Before Change Before Delete After Insert After Update After Delete Named Macro Relationships Object Dependencies

Properties Before Events After Events Named Macros Relationships

All Access Objects

Search...

Tables

- Agencies
- AgencyServices
- Table1

Table1

Save Close Close All Design View Datasheet View

Record: 1 of 1 No Filter Search

The presentation right click on the "Table 1" table and selected "Design View"

The screenshot shows the Microsoft Access interface. The ribbon is set to 'TABLE TOOLS' with the 'TABLE' tab selected. The ribbon includes options like 'Table Properties', 'Before Change', 'Before Delete', 'After Insert', 'After Update', 'After Delete', 'Named Macro', 'Relationships', and 'Object Dependencies'. On the left, the 'All Access Objects' pane shows a list of tables: 'Agencies', 'AgencyServices', and 'Table1'. A 'Save As' dialog box is open in the center, with 'Table Name:' set to 'Services'. The dialog has 'OK' and 'Cancel' buttons. A yellow callout box with an arrow points to the 'Services' text in the dialog, containing the text: 'The presentation enters the desired name for the table.'

The presentation enters the desired name for the table.

TABLE TOOLS | agency : Database- C:\Users\Tim\Documents\agency... | Tim Preuss

FILE | HOME | CREATE | EXTERNAL DATA | DATABASE TOOLS | DESIGN

View | Primary Key | Builder | Test Validation Rules | Insert Rows | Delete Rows | Modify Lookups | Property Indexes Sheet | Show/Hide | Create Data Macros | Rename/Delete Macro | Relationships | Object Dependencies

All Access Objects

Search...

Tables

- Agencies
- AgencyServices
- Services

Field Name	Data Type	Description
Service ID	Number	

The presentation enters the field name as shown. This field will be the primary key for this table.

Field Properties

General	
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	
Validation Text	
Required	Yes
Indexed	Yes (No Duplicates)
Text Align	General

The data type determines the kind of values that users can store in the field. Press F1 for help on data types.

TABLE TOOLS DESIGN

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Create Data Macros Rename/Delete Macro Relationships Object Dependencies

All Access Objects

Search...

Tables

- Agencies
- AgencyServices
- Services

Field Name	Data Type	Description (Optional)
Service ID	Number	
Type of Service Name	Short Text	
Description	Long Text	

Field Properties

General Lookup

Format	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Format	Plain Text
Text Align	General
Append Only	No

The presentation enters the field name as shown.

agency : Database- C:\Users\Tim\Documents\agency... ? - [Close] Tim Preuss

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS **DESIGN**

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Show/Hide Create Data Macros Rename/Delete Macro Relationships Object Dependencies

All Access Objects

Search...

Tables

- Agencies
- AgencyServices
- Services

Save Close Close All Design View Datasheet View

Data Type	Description (Optional)
Number	
Short Text	
Long Text	

The presentation right clicks on the "AgencyServices" tab and selects "Datasheet View".

General Lookup

Format	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Format	Plain Text
Text Align	General
Append Only	No

type determines the kind of values
rs can store in the field. Press F1 for
help on data types.

TABLE TOOLS DESIGN

View Primary Key Builder Test Validation Rules Insert Rows Delete Rows Modify Lookups Property Indexes Sheet Show/Hide Create Data Macros Rename/Delete Macro Relationships Object Dependencies

All Access Objects

Search...

Tables

- Agencies
- AgencyServices
- Services

Field Name	Data Type	Description (Optional)
Service ID	Number	
Type of Service Name	Short Text	
Description	Long Text	

Microsoft Access

General Lookup

Format

Caption

Default Value

Validation Rule

Validation Text

Required No

Allow Zero Length Yes

Indexed No

Unicode Compression Yes

IME Mode No Control

IME Sentence Mode None

Text Format Plain Text

Text Align General

Append Only No

Microsoft Access

Do you want to save changes to the design of table 'Services'?

Yes

The presentation right clicks on the "Services" tab and selects "Datasheet View".

Design view. F6 = Switch panes. F1 = Help.

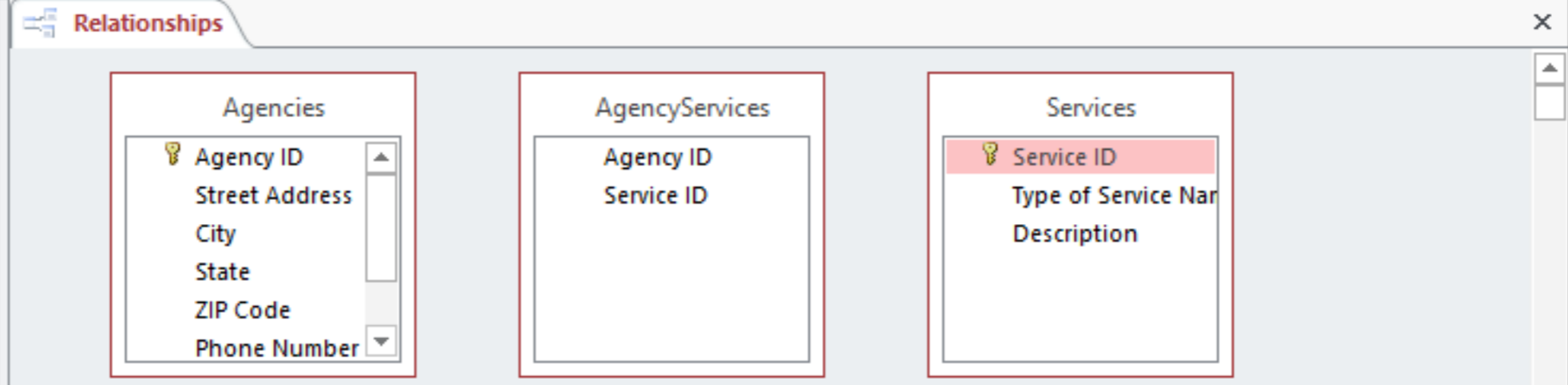
The screenshot shows the Microsoft Access application window. The title bar reads "agency : Database- C:\Users\Tim\Documents\agency.accdb (Access 2007 - 2013 file format) - Access". The ribbon is set to "DATABASE TOOLS". The "Relationships" group is selected, and a yellow callout box with a black border and arrow points to the "Relationships" icon. The callout text reads: "The presentation selects the 'Database Tools' tab. The presentation selects 'Relationships' option." The left-hand pane shows "All Access Objects" with a search bar and a list of tables: Agencies, AgencyServices, and Services. The status bar at the bottom of the application window shows "Ready" on the left and "NUM LOCK" on the right.

The presentation selects the "Database Tools" tab. The presentation selects "Relationships" option.

Microsoft Access ribbon: FILE, HOME, CREATE, EXTERNAL DATA, DATABASE TOOLS, DESIGN. Tab: RELATIONSHIP TOOLS. Window title: agency: Database- C:\Users\Tim\Documents...

Tools: Edit Relationships, Clear Layout, Relationship Report. Relationships: Hide Table, Direct Relationships, All Relationships, Close.

All Access Objects pane. Search: Search... Tables: Agencies, AgencyServices, Services.



Show Table dialog box. Tables: Agencies, AgencyServices, Services (selected). Buttons: Add, Close.

The presentation selects each table and adds each table to "Relationships". The presentation arranges the tables as shown.

The screenshot shows the Microsoft Access interface with the 'RELATIONSHIP TOOLS' ribbon selected. The 'DESIGN' tab is active, showing a relationship diagram. The 'All Access Objects' pane on the left lists 'Agencies', 'AgencyServices', and 'Services'. The 'Relationships' pane shows three tables: 'Agencies' (with primary key 'Agency ID'), 'AgencyServices' (with foreign key 'Agency ID'), and 'Services' (with primary key 'Service ID'). A relationship line connects 'Agency ID' in the Agencies table to 'Agency ID' in the AgencyServices table. Two yellow callout boxes with arrows pointing to the 'Agency ID' fields provide detailed instructions on how the presentation interacts with these fields.

The presentation selects "Agency ID" in the "Agencies" table. The presentation continues to hold down the left button and moves the cursor to the "AgencyServices" table and on the "Agency ID" field. Then the presentation releases the button.

The presentation continues to hold down the left button and moves the cursor to the "AgencyServices" table and on the "Agency ID" field. Then the presentation releases the button.

Tools

- Clear Layout
- Relationship Report
- Hide Table
- Direct Relationships
- All Relationships
- Show Table
- Close

All Access Objects

Search...

Tables

- Agencies
- AgencyServices
- Services

Edit Relationships

Table/Query:	Related Table/Query:
Agencies	AgencyServices
Agency ID	Agency ID

Enforce Referential Integrity
 Cascade Update Related Fields
 Cascade Delete Related Records

Relationship Type: One-To-Many

Buttons:

- Create
- Cancel
- Join Type..
- Create New..

The following menu appears. The presentation selects "Enforce Referential Integrity", then "Create".

RELATIONSHIP TOOLS agency : Database- C:\Users\Tim\Documents... Tim Preuss

DESIGN

Tools: Edit Relationships, Clear Layout, Relationship Report

Relationships: Hide Table, Direct Relationships, All Relationships, Show Table, Close

All Access Objects

Tables: Agencies, AgencyServices, Services

Relationships

Agencies: Agency ID (PK), Street Address, City, State

AgencyServices: Agency ID, Service ID (PK)

Services: Service ID (PK), Type of Service Name, Description

1 to ∞ relationship between Agencies and AgencyServices.

The relationship is successfully established.

Ready NUM LOCK

The relationship is successfully established.

RELATIONSHIP TOOLS | agency : Database- C:\Users\Tim\Documents...

DESIGN

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS

Tools: Edit Relationships, Clear Layout, Relationship Report

Relationships: Hide Table, Direct Relationships, All Relationships, Show Table, Close

All Access Objects

Tables: Agencies, AgencyServices, Services

Relationships

Agencies

AgencyServices

Services

Service ID

Agency ID

Service ID

Type Service Name Description

The presentation continues to hold down the left button and moves the cursor to the "AgencyServices" table and on the "Service ID" field. Then the presentation releases the button.

The presentation selects "Service ID" in the "Services table. The presentation continues to hold down the left button and moves the cursor to the "AgencyServices" table and on the "Service ID" field. Then the presentation releases the button.

Microsoft Access ribbon: FILE, HOME, CREATE, EXTERNAL DATA, DATABASE TOOLS, DESIGN. Tab: RELATIONSHIP TOOLS. Sub-tab: DESIGN. Path: agency: Database- C:\Users\Tim\Documents...

Tools: Edit Relationships, Clear Layout, Relationship Report, Hide Table, Direct Relationships, All Relationships, Show Table, Close.

All Access Objects pane: Search..., Tables: Agencies, AgencyServices, Services.

Edit Relationships dialog box:
Table/Query: Services | Related Table/Query: AgencyServices
Service ID | Service ID
 Enforce Referential Integrity
 Cascade Update Related Fields
 Cascade Delete Related Records
Relationship Type: One-To-Many

The following menu appears. The presentation selects "Enforce Referential Integrity", then "Create".

Tools

- Edit Relationships
- Relationship Report
- Clear Layout

Relationships

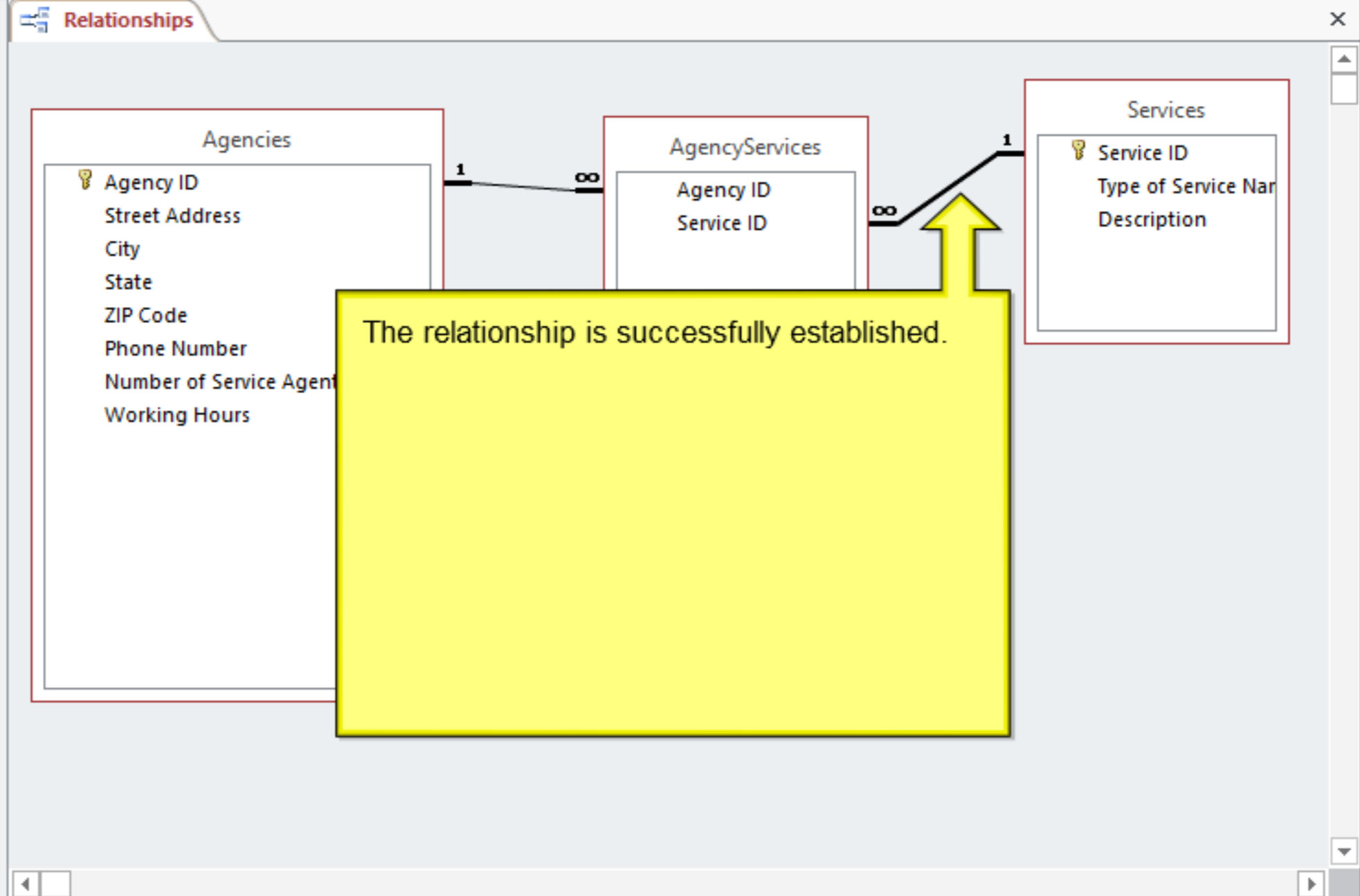
- Show Table
- Hide Table
- Direct Relationships
- All Relationships
- Close

All Access Objects

Search...

Tables

- Agencies
- AgencyServices
- Services



The relationship is successfully established.