

Access 2016 Module 9

Importing and Exporting Data





Module Objectives

- Import data from Excel
- Link data
- Export data to Excel
- Publish data to Word
- Merge data with Word
- Export data to PDF
- Create objects using database templates
- Create objects using Application Parts



Import Data from Excel (Slide 1 of 3)

- **Importing**

- quickly copy data from an external file into an Access database

- **Types of files:**

- **Delimited** text file: stores one record on each line

- Field values: separated by a common character, the **delimiter**, e.g., comma, tab, or dash

- **CSV** (comma-separated values) file: common example of a delimited text file

- **XML** file: text file containing Extensible Markup Language (XML) tags that identifying field names and data

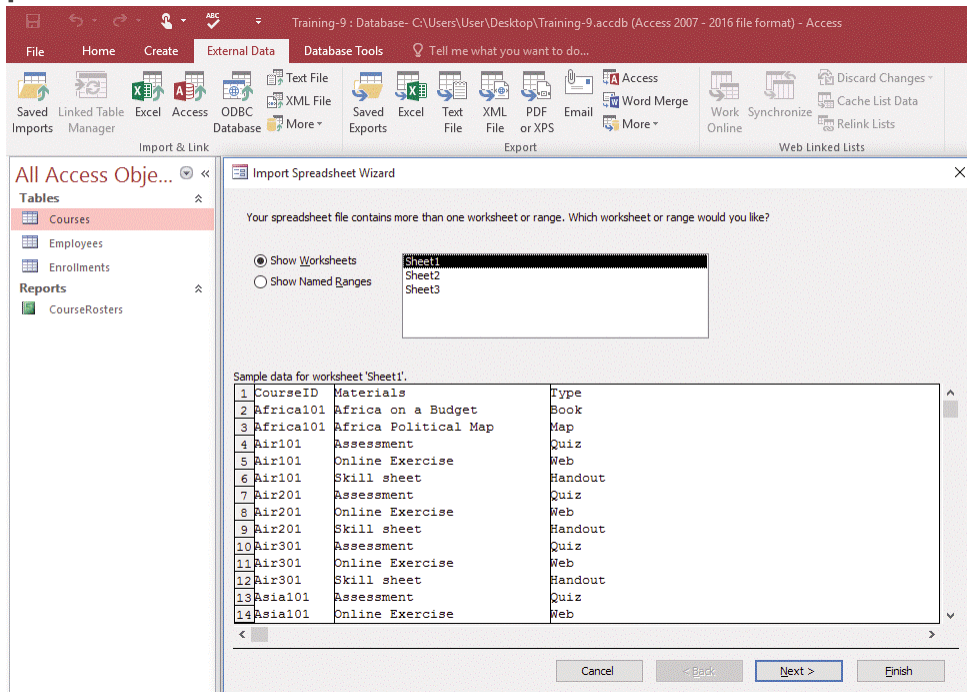
- **Microsoft Excel**

- one of the most common file formats from which to import data into an Access database



Import Data from Excel (Slide 2 of 3)

• Import Spreadsheet Wizard





Import Data from Excel (Slide 3 of 3)

- Referential integrity cascade options
 - Cascade Update Related Fields
 - If the value in the primary key field of the one table is modified, all values in the foreign key field in the many table are automatically updated
 - Cascade Delete Related Records
 - If a record in the one table is deleted, all related records in the many table are deleted



Link Data (Slide 1 of 3)

- Linking connects an Access database to data in an external file
 - Examples: another Access database, Excel spreadsheet, text file, HTML file, XML file, other data sources that support ODBC (Open Database Connectivity)
- **Linking** is different from importing
 - not copied into the database
 - data is only physically stored and updated in the original file
 - can be edited through source program or destination program



Link Data (Slide 2 of 3)

- Get External Data – Excel Spreadsheet dialog box

Get External Data - Excel Spreadsheet

Select the source and destination of the data

Specify the source of the definition of the objects.

File name:

Specify how and where you want to store the data in the current database.

☐ **Import the source data into a new table in the current database.**
If the specified table does not exist, Access will create it. If the specified table already exists, Access might overwrite its contents with the imported data. Changes made to the source data will not be reflected in the database.

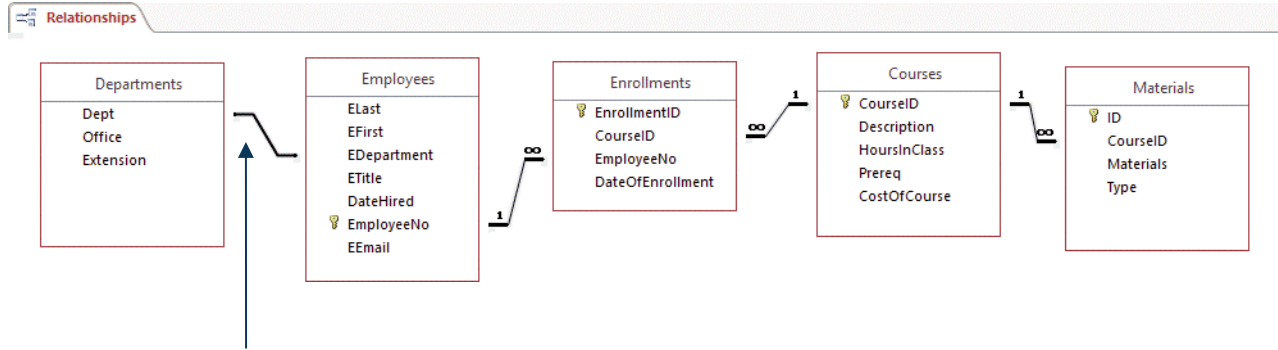
☐ **Append a copy of the records to the table:**
If the specified table exists, Access will add the records to the table. If the table does not exist, Access will create it. Changes made to the source data will not be reflected in the database.

☒ **Link to the data source by creating a linked table.**
Access will create a table that will maintain a link to the source data in Excel. Changes made to the source data in Excel will be reflected in the linked table. However, the source data cannot be changed from within Access.



Link Data (Slide 3 of 3)

- Referential integrity cannot be enforced with a linked table
- Relationships window with linked Departments table



Relationship but
not referential
integrity



Export Data to Excel (Slide 1 of 2)

- **Exporting**

- copies Access information to another database, spreadsheet, or file format.
- Can export Access data to other file types
 - e.g., Excel or Word file types, and in general file formats (text, HTML, and XML)
- Can save export steps for re-use



Export Data to Excel (Slide 2 of 2)

- File formats that Access can link to, import, and export

file format	import	link	export
Access	•	•	•
Excel	•	•	•
Word			•
SharePoint site	•	•	•
Email file attachments			•
Outlook folder	•	•	
ODBC database (such as SQL Server)	•	•	•
dBASE	•	•	•
HTML document	•	•	•
PDF or XPS file			•
Text file (delimited or fixed width)	•	•	•
XML file	•		•



Publish Data to Word (Slide 1 of 2)

- Export data from an Access table, query, form, or report into a Word document
- Techniques to copy Access data to other applications

technique	button or menu option	description
Drag and drop	Resize the Access window so that the target location (Word or Excel, for example) can also be seen on the screen	With both windows visible, drag the Access table, query, form, or report object icon from the Access window to the target (Excel or Word) window
Export	Use the buttons in the Export group on the External Data tab	Copy information from an Access object into a different file format
Office Clipboard	Copy and Paste	Click the Copy button to copy selected data to the Office Clipboard (the Office Clipboard can hold multiple items), open a Word document or Excel spreadsheet, click where you want to paste the data, then click the Paste button



Publish Data to Word (Slide 2 of 2)

Word document with Access data

To: Executive Committee

From: *Your Name*

Re: Analysis of Continuing Education Courses

Date: *Today's date*

The following information shows the overall cost for continuing education subtotaled by department. The information shows that the Marketing Department is the highest consumer of continuing education.

<u>EDepartment</u>	<u>SumOfCostOfCourse</u>
Africa	\$13,295.00
Asia	\$13,640.00
Australia	\$6,580.00
Europe	\$11,130.00
Finance	\$6,685.00
Information Systems	\$11,145.00
Marketing	\$20,460.00
North America	\$12,490.00
Operations	\$12,345.00
Personnel	\$12,180.00
South America	\$12,800.00
USA	\$9,510.00



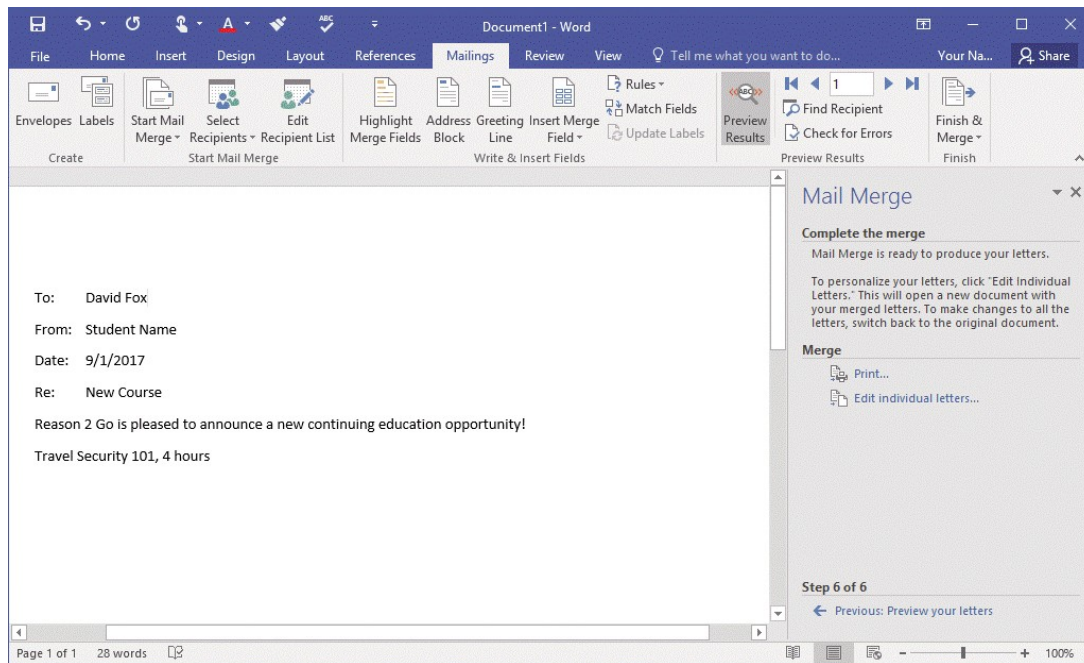
Merge Data with Word (Slide 1 of 2)

- Merge Access data to a Word document as the data source for a **mail-merge** process
 - Data from an Access table or query: combined into a Word form letter, label, or envelope to create mass mailing document
- **Main document**
 - Word document that contains standard text for each form letter
- **Merge fields**
 - Codes that are replaced with values in the field when mail merge is processed



Merge Data with Word (Slide 2 of 2)

- Inserting merge fields





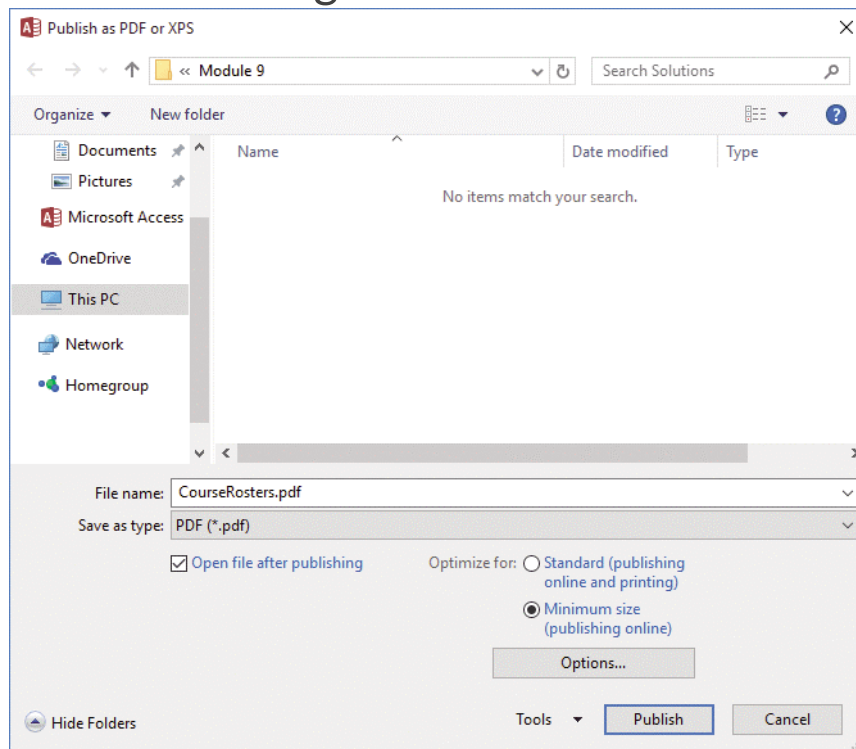
Export Data to PDF (Slide 1 of 2)

- Portable Document Format (PDF) document
 - Developed by Adobe
 - Standard format for exchanging documents
 - Read with free Adobe Reader software
 - Can read but not edit or change information
- Can email PDF files directly from Access



Export Data to PDF (Slide 2 of 2)

- Publish as PDF or XPS dialog box





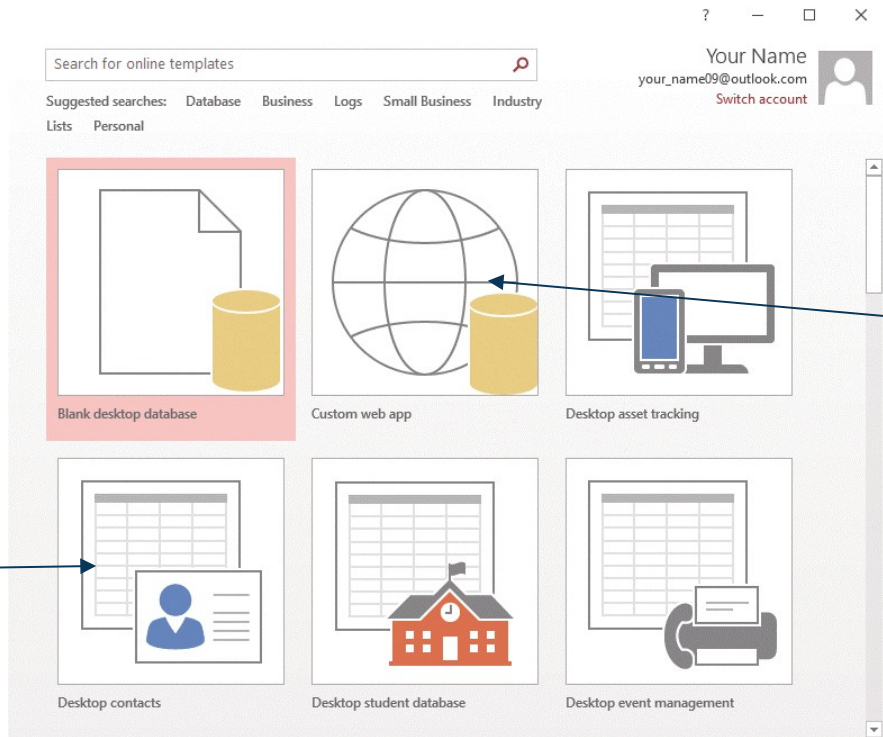
Create Objects using Database Templates (Slide 1 of 3)

- Database template
 - tool used to quickly create a new database based on a particular subject, e.g., assets, contacts, events, or projects
 - Some templates are included with Access install
 - Additional templates available from Microsoft Office Online (organized by category)
- Two types of database templates
 - Desktop (traditional) – available to users who work with Access on computers over a local area network
 - Web (Access) app – database published to a SharePoint server
- Database templates are constantly changing



Create Objects using Database Templates (Slide 2 of 3)

Creating a database from a template



Custom web
app template

Desktop
template



Create Objects using Database Templates (Slide 3 of 3)

- Startup form – opens automatically when the database opens
 - Click the File tab, click Options, then click the Current Database category in the Access Options dialog box
 - Use the Display Form drop-down list, then specify which form should automatically open when the database is started



Create Objects using Application Parts (Slide 1 of 2)

- **Application Parts**

- object templates that create objects, e.g., tables, forms, and reports
- Several table, form and report templates available
- Can also import objects from another database
 - Queries, forms, reports



Create Objects using Application Parts (Slide 2 of 2)

Application Parts list

