Getting Data Into Microsoft Access

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Microsoft Access is a database management system (dbms), often shortened to "database" or "database software." A database is a collection of related tables, and a database management system is the interface.

Why Use Microsoft Access?

- More muscle than Excel but more user-friendly than mySQL
- Want to generate individual records
- Have multiple data tables that need to work together
- Useful for quickly filtering/analyzing data in separate tables
- Can be browser-based or desktop-based
- May be the only database software your newsroom has!

How To Access Access

Used to be routine part of old Microsoft Office package, but now it's only with select desktop or cloud-based Office packages, so double-check. In a newsroom, you may be working with Access 2013, 2010, 2007 or 2003, and it may be on only a few computers.

Access is not available for Macs, so either use a compatible open-source program, Parallels or a different database management software.

Access Basics

Access has four types of objects: Tables, Forms, Queries, Reports

Think of your database like a folder of objects. A database can have multiple objects, and each can be created, modified and saved individually.

- Tables are lists of data with multiple columns and rows (called records), and there can be multiple tables in a database.
- Forms are user-friendly ways to add data into tables.
- Queries are where the power lies in Access. You can create a query to quickly pull data from multiple tables.
- Reports are a pretty way to display or export query results.

Getting Data Into Access

There are two ways: Manual Entry (boo!) and Import Existing Files (yay!)

To import, make sure your data is clean and in an approved file format.

With .txt, .asc, .xml and .html files, these work best when exported from another source instead of scraped from a web page or written as plain text. Get that data into .csv or .xls for easy import.

File Extension	File Type	Import into Access?
.mdb or .accdb	Microsoft Access	Yes
.dbf	database file	Yes
.xls	Microsoft Excel	Yes
.csv	comma-separated values	Yes
.txt or .asc	plain text files	Conditional
.xml	Extensible Markup Language	Conditional
.html	Hypertext Markup Language	Conditional
.pdf	Portable Document Format	No
.doc	Microsoft Word	No

When you import a .accdb, .mdb or .dbf file, you're looking for at least one table, and there may be existing forms, queries and reports. Go to Access Home > Open > [file name]

When you are starting out with any other type of file format, you need to import that file into an existing database. Go to Access Home > File > New > Blank Database to create that initial database. Save As an .accdb or .mdb file.

To add new tables to an existing database, go to External Tables and select the file type to be imported. Use the Wizard to make things easy.

Some things to look for with the Wizard:

- Data Type property that determines what type of info a field will store and display
- Delimited/Fixed Width determines how the data is separated into columns, you may need to play around with these options before import
- Primary Key unique identifier for each record, choose if one is already included in the data or if Access should generate one
- Save Your Steps creates a macro if you have multiple files to import

Add Data To Existing Tables

Three ways to add data to a table that already exists within a database:

- Manually entering new records
- Importing a file into existing table
- Creating a form tied to existing table

Manual Entry: open the table (OK to be in Datasheets View), skip to last record using tools at bottom of table, add data to each column using the tab key (unique identifier will generate for each new record)

Import Into Table: Is data clean, do fields line up? Go to External Data > Import Excel, browse for file in Wizard, select table to append records to, run the Wizard, double-check your new records in table

Create A Form: go to Create > Form Wizard, choose target table, select fields to enter, choose layout style, give form a title, choose "modify form design," in Design View select Design Tab, add buttons for functions like Record Operations > Add New Record and Save Record, back to Form View for data entry

Tables Made From Scratch

When you have an existing database but need to create a new table within, but don't have anything to import, you'll need to create a table from scratch.

Go to Create > Table > Design View, set fields and field type and save, switch to Datasheet View, manually enter content