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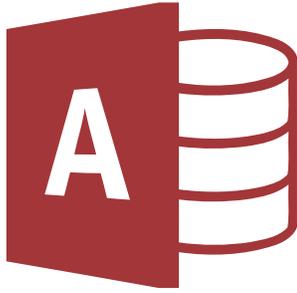
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1

Getting Started

Welcome to the exciting world of databases with Microsoft Access 2016. This chapter describes the Access environment and demonstrates the Access user interface.

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Introducing Access 2016

Access 2016 is the latest version of Microsoft's popular Relational Database Management System (RDBMS). The Access 2016 application ("app") lets you manage all types of data with ease:

- Store and manipulate data in **Tables**
- Retrieve specific data by making **Queries**
- Provide user-friendly data entry **Forms**
- Supply attractively-styled data **Reports**
- Share data with colleagues using **Access**

Access 2016 is, however, much more than a means of storing and retrieving data. If you want to, you can build complete software apps limited only by your requirements and creativity.

You don't need to be a computer programmer to use Access 2016 as you can use nearly all of Access's functionality without entering a single line of code. All that is required is some forward planning and a clear idea of what purpose the database should serve.



The New icon pictured above indicates new features of the Access 2016 app.

What is a database?

A database is simply an ordered collection of records. For example, the Rolodex you may have on your office desk is a type of database. Open it up and you have the names, telephone numbers, and addresses of your business contacts.

In a computer, database information is organized in a much more structured way but the general idea is the same. Access keeps data in Tables. A Table is like the Rolodex – it contains all the data we need. Each row of the Table contains data about a specific thing. In a Rolodex it would be a business card. The columns of the Table help us to organize the data. Each column contains some specific item of data, such as the address of a contact.

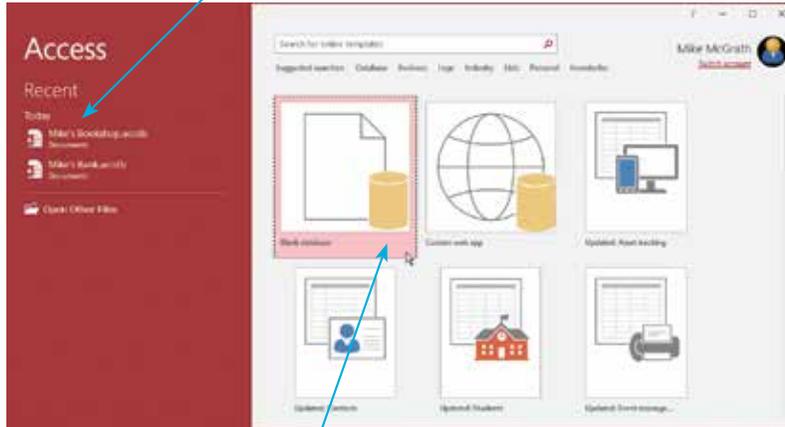
The next chapter describes how databases are structured and demonstrates how to create them, but the rest of this chapter is devoted to getting you started with the Access 2016 app.



Start thinking about your database now. What do you want it to do? What information do you need to store in the database?

Launching the Access app

Access 2016 is typically launched by clicking the Access 2016 item on the Windows Start menu, to open the “Start” screen. Here you see a range of ready-made templates, and a list of recently-opened Access files that you can click to reopen:



Access can also be launched by double-clicking on an existing database file icon. In that case, Access immediately opens that database in its user interface, bypassing this Start screen.

1 Click on the **Blank database** template icon to begin creating a brand new Access database

2 See a dialog box open that suggests a default name for the database and a default location on your computer



3 Accept the suggested defaults, or edit the dialog box to provide your preferred name and location – for example, rename the database as “FirstDatabase” and choose a **C:\MyDatabases** folder



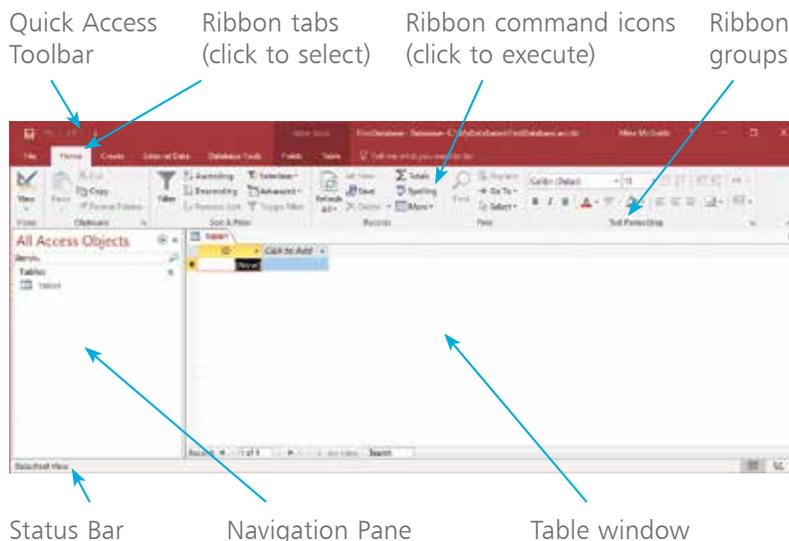
4 Click on the **Create** button to complete the creation of the new database at your chosen location – the database will now open in the Access user interface



You may, optionally, omit the **.accdb** file extension when choosing a name – the file extension will be added automatically.

Exploring the user interface

The Access 2016 user interface comprises several components that allow you to work efficiently with databases. In common with other apps in the Microsoft Office suite there is a “Ribbon” that intelligently groups related command icons on a series of tabs. Below the Ribbon is a Navigation Pane, containing icons that represent objects within the current database, and a Table window in which to view and edit the database content. Additionally, there is an editable Quick Access Toolbar for commands you frequently use, and a Status Bar that provides useful information:



Press the **Alt** key to see keyboard shortcuts appear next to each Ribbon icon – press a shortcut key to activate the associated icon.



When you have a lot of windows open and space is at a premium you can close the Ribbon by double-clicking the tab that is currently selected – click any tab to reopen the Ribbon.

The Table window provides two possible views of the database:

- **Datasheet View** – displays the data within the database and allows you to enter and edit data, but does not allow you to change the format of the database.
- **Design View** – displays the format of the database and allows you to change the format of the database objects.

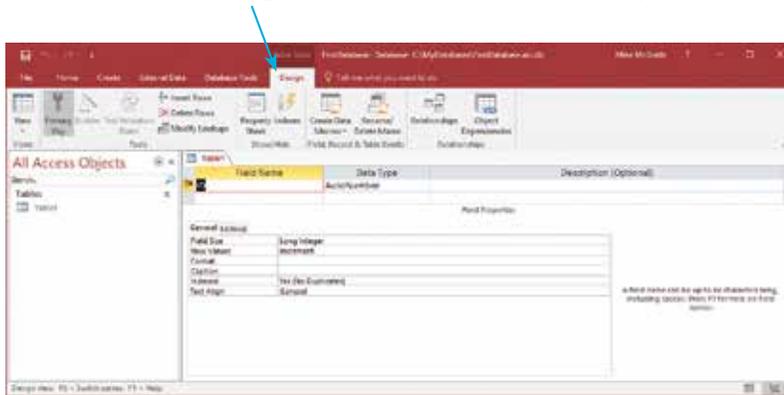
To choose the view of an opened Table:

- 1 Select the **Home** tab
- 2 Click the **View** icon in the “Views” group, then choose a view option – for example, choose Design View



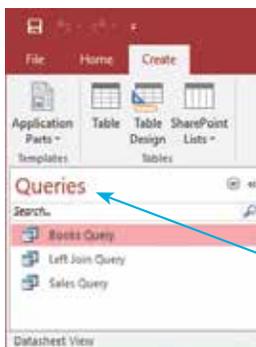
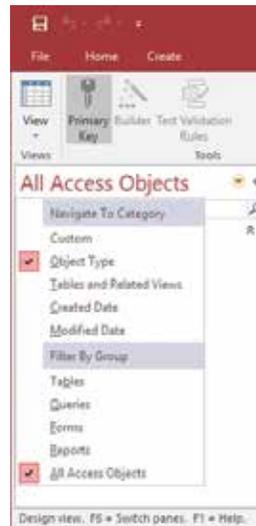
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- 3 See Design View open in the Table window and notice that the **Design** tab has become automatically selected



The Navigation Pane makes finding database objects such as Tables and Queries easier by filtering them according to their type, the date they were created, and their group:

- 1 Click the down arrow at the top of the **Navigation Pane**
- 2 From the drop-down menu, select a category to filter by – clicking the category name once
- 3 Further refine your filter by clicking once on a group name



Navigation Pane with the **Queries** database object type filter applied



The Navigation Pane displays all the database objects – **Tables** that store data, **Queries** that search data, **Reports** that explain data, and **Forms** for data entry.



You will add database objects as you construct an Access database. Select any object in the **Navigation Pane** to open it in the Table window for modification.

Customizing Quick Access

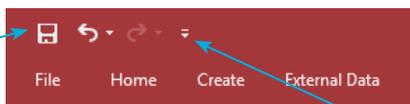
The Quick Access Toolbar provides quick and convenient access to commonly-used commands such as Save, and is normally found at the top left of the Access 2016 screen.

By default, the Quick Access Toolbar features only three buttons – Save, Print, and Undo. Although these are useful in themselves, the choice of action is somewhat limited. As your confidence with Access 2016 increases, you will soon want to have certain actions within easy reach. Happily, you can customize the Quick Access Toolbar, and add or delete extra buttons.



Buttons on the Quick Access Toolbar appear “grayed out” if that action is not available. Here, **Save** and **Undo** actions are available, but **Redo** is unavailable.

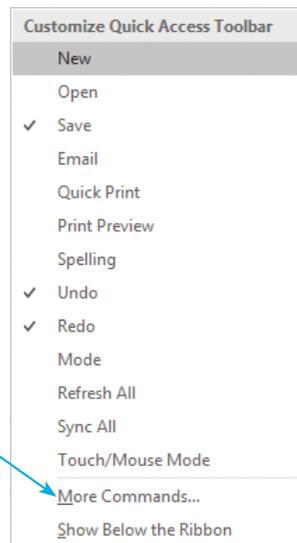
Customizing the Quick Access Toolbar



1 Click the arrow at the end of the Quick Access Toolbar – to open a drop-down menu

2 Click a menu item to add that command to the Quick Access Toolbar. Some of the most useful commands can be added to the Quick Access Toolbar using the drop-down menu, but many more commands are available

3 Click the **More Commands...** menu item – to open the “Access Options” dialog, shown opposite



To add any action to the Quick Access Toolbar simply right-click it on the Ribbon and select the **Customize Quick Access Toolbar** option.

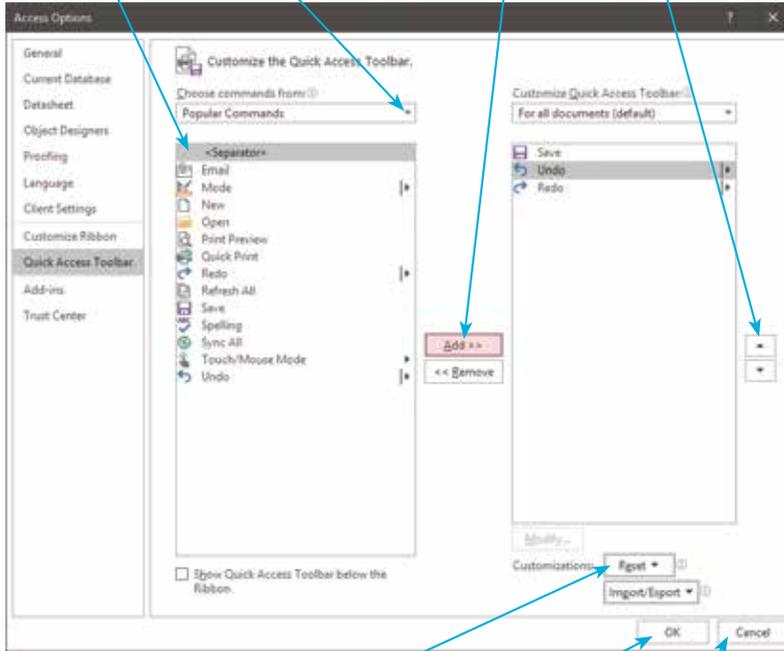
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Select the action to add here

Click here to see different groups of actions

Click here to add the selected action

Change the order in which actions are displayed on the Toolbar



If you make a mistake, click **Reset** to undo your changes

Click here to confirm your choices

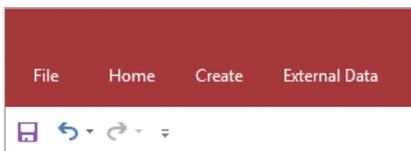
Click here to cancel your choices



It's often convenient to distinguish between different groups of actions according to their function, for example separating file access actions from Table creation actions. In order to separate actions on the Quick Access Toolbar, choose the **Separator** action.

Repositioning the Quick Access Toolbar

- 1 Click the arrow at the end of the Quick Access Toolbar
- 2 Click the **Show Below the Ribbon** menu option to position the Quick Access Toolbar below the Ribbon



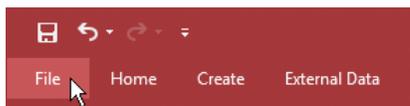
To return the Quick Access Toolbar to its default position, click the arrow button, then click the **Show Above the Ribbon** menu option.



To open the Backstage screen quickly, press the **Alt + F** keys.

Managing files Backstage

The File button on the Access 2016 menu opens the “Backstage” screen where you can perform both file management and database administration tasks. The Backstage screen allows you to Open, Save, and perform maintenance operations on your database.

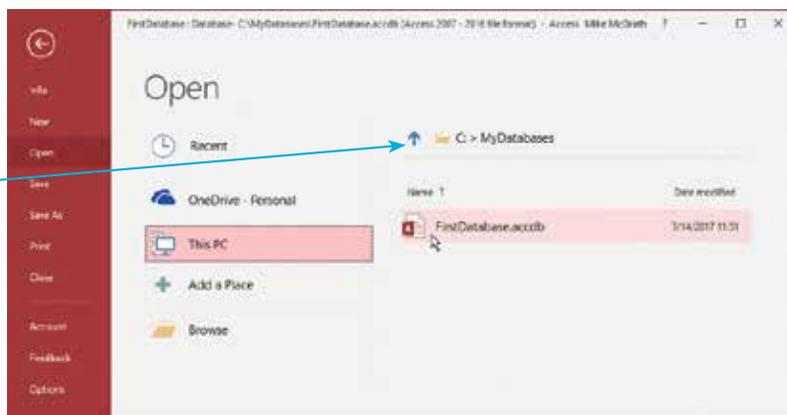


Opening a database

- 1 Click the **File** button
- 2 Click **Open** from the Backstage menu
- 3 Select **Recent**, **OneDrive**, or **This PC** to choose the database location – for example, select **This PC**
- 4 Select the folder containing the database – for example, select a folder at **C:\MyDatabases** on your computer
- 5 Double-click the database file icon to open that database



Double-click on the listed directory to launch an “Open” dialog from where you can navigate to other folders.



...cont'd

By default, Access opens a database in a restricted mode of operation. Specifically, it disables the execution of “Visual Basic for Applications” (VBA) code and Macros. To enable all the features of the database, click the Enable Content button on the “Security Warning” that appears between the Ribbon and the main database window, or click the link to see more information:



This opens the Backstage screen, where you can discover what content has been disabled. Click the Enable Content button then choose the Enable All Content option to enable all the features of the database, or choose Advanced Options to enable only specific features of the database.



Only enable content if you are absolutely certain that it doesn't contain malicious code. In most cases, such code would only be present if you were opening a database from someone else.

Saving a database

- 1 Click the **Save** button on the Quick Access Toolbar
- 2 Or, click the **File** button to open Backstage, then click the **Save** option



To save a database quickly at any point, press the **Ctrl + S** keys.

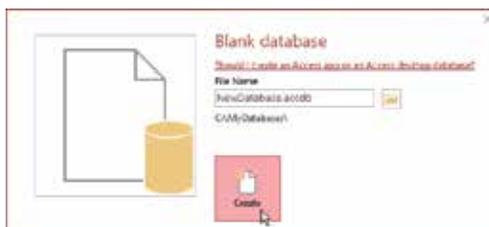
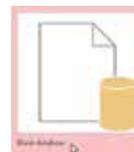
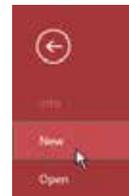


By default, Access suggests the name "Database" followed by a number – for example, "Database1". Avoid naming your databases in this manner, as having similarly-named databases can be confusing and may cause errors.

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Creating a new database

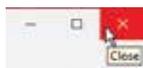
- 1 Click the **File** button to open Backstage
- 2 Click the **New** menu option
- 3 Click the **Blank database** icon
- 4 Enter a name for your new database in the dialog, and choose a location at which to save the database on your computer
- 5 Press the **Create** button



Closing a database and exiting Access 2016

Although Access 2016 is a great app, there will come a time when you want to close a database and switch off Access:

- 1 Click the **File** button to open Backstage
- 2 Click the **Close** menu option – to close the currently-open database
- 3 Click the **X** button at the top right of the Access window, or press the **Alt + F4** keys

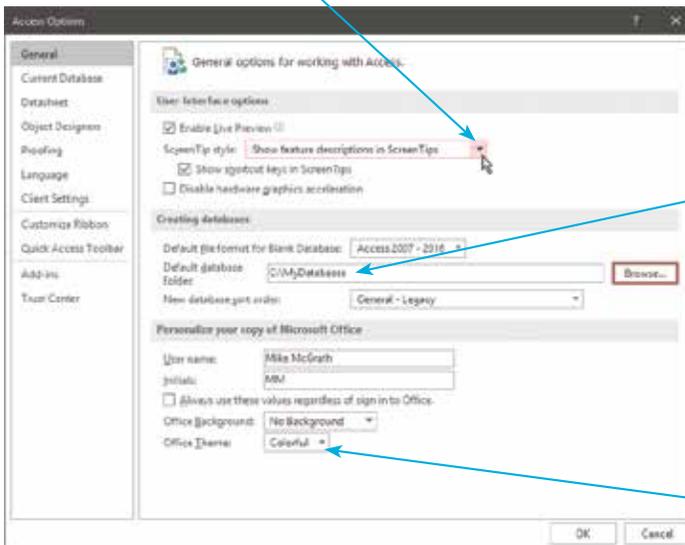


Personalizing Access options

The “Access Options” dialog contains various settings that affect the way you view and interact with Access 2016. For example, you can decide whether or not you want feature descriptions to appear in the Screen Tips, such as the one below:



- 1 Click on the **File** button to open Backstage
- 2 Click on the **Options** menu item, located at the bottom of the Backstage menu
- 3 Click the menu items at the left-hand side of the “Access Options” dialog to switch between sets of options
- 4 Click on the drop-down menus to change option settings



Notice that you can specify a default database folder of your choice in this example.



Access 2016 has introduced the option to have **White** or **Colorful** themes.



Although it's always a great idea to back up files, it is not necessary to backup an Access database when converting to other file formats, as Access generates a new COPY of the current database. It does not replace the current file. This means that converting in either direction leaves you with both an ACCDB file and an MDB file.



After you've converted a database to the newer ACCDB file format you will no longer be able to use it with the earlier version of Access.

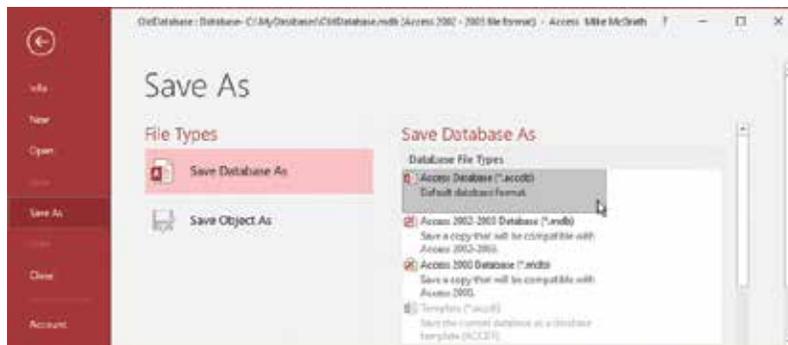


By default, a converted database retains the original name but gets the different file extension.

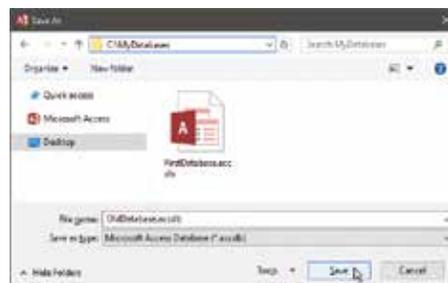
Converting older databases

Access 2016 makes it easy to open and work with a database created with an older version of Access, such as those in the MDB (.mdb) file format used by Access 2003. The older database will look and feel exactly the same as a database created with Access 2016 – but you won't be able to make use of the newer features available in Access 2016. Luckily, Access 2016 can quickly convert your old database to the newer ACCDB (.accdb) file format so that you can use the newer features in Access 2016:

- 1 Open the database you want to convert in Access 2016, then click the **File** button to open Backstage
- 2 Click the **Save As** menu option
- 3 Choose **Save Database As** under the “File Types” heading
- 4 Double-click **Access Database (*.accdb)** under the “Save Database As” heading – to open a “Save As” dialog

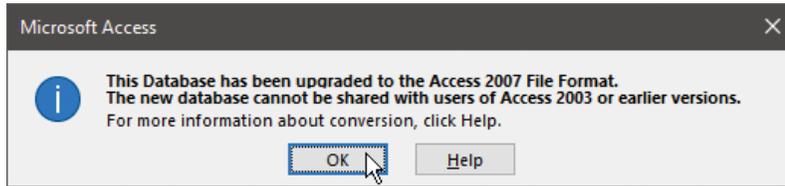


- 5 Choose a location, then click the **Save** button to create a converted copy of the old-format database



- 6 Click the **OK** button to dismiss the warning dialog

...cont'd



The ACCDB file format was introduced in Access 2007. So that year is shown when converting from the old MDB format.

Converting databases to older formats

You may sometimes need to convert your Access 2016 database to a file format that will work with previous versions of Access:

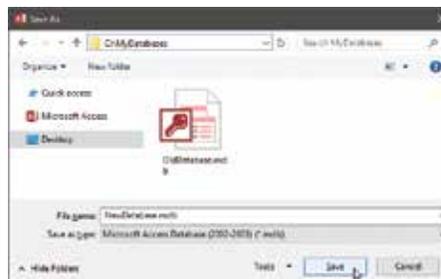
- 1 Open the database you want to convert in Access 2016, then click the **File** button to open Backstage
- 2 Click the **Save As** menu option, then choose **Save Database As** under the "File Types" heading
- 3 Double-click **Access 2002-2003 Database (*.mdb)** under "Save Database As" – to open a "Save As" dialog



Consider your options carefully before you convert a database to an older file format, as you will no longer be able to use the new features of Access 2016.



- 4 Choose a location, then click the **Save** button to create a converted copy of the new-format database





Templates are downloaded from an online repository so you will need to have an internet connection to open templates that are not already on your computer.



Scroll through the list of popular templates to discover some great ideas on how you might use the Access 2016 app.

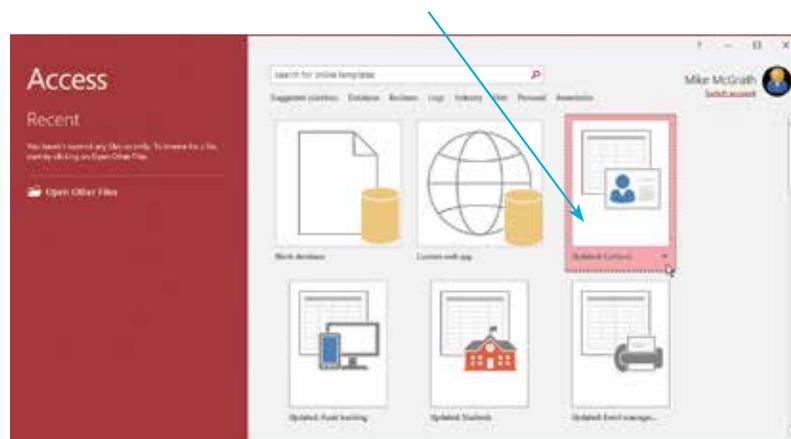
Using Access templates

Access 2016 provides many high-quality templates that, for most people, can be used straight out of the box. For example, if your sole reason for investing in a Relational Database Management System is to maintain the contact details of your customers, then Access 2016's Contacts template might be perfect for your needs.

The best way to see if Access 2016's templates are right for your organization is to open them up and see what they do:

Opening a template

- 1 Launch Access 2016 from the Windows Start menu to see the Access Start screen – or close all open databases, then click the **File** button to see the Access templates
- 2 From the scrollable list of popular templates on the Start screen, click on the (Updated) **Contacts** template

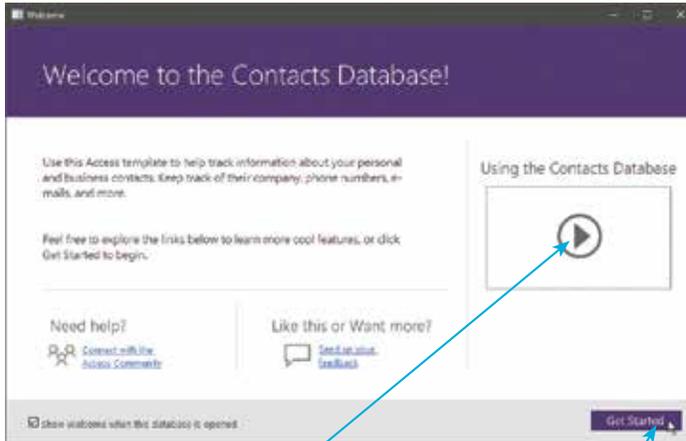


- 3 Enter a name and location in the dialog, then click the **Create** button to create a database from the template

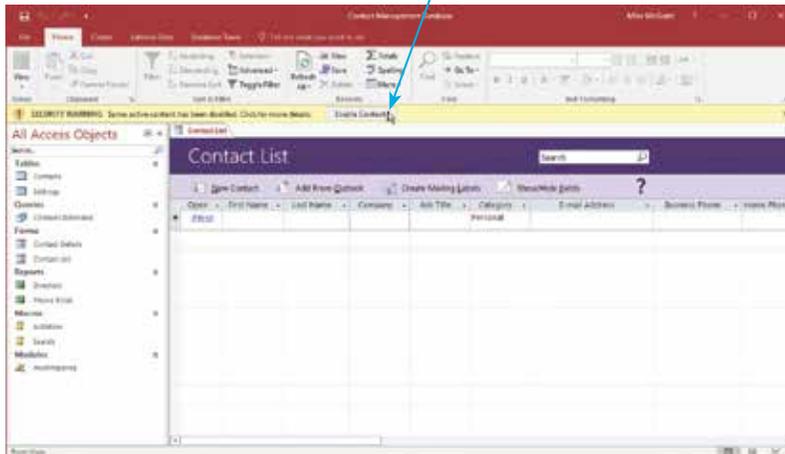


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- 4 You will now see a **Welcome** screen appear that provides a brief description of the database and offers assistance



- 5 Click the arrow button to watch an online video demonstrating how to use this database
- 6 Click the **Get Started** button to open the database in Access 2016
- 7 Make all features available so you can begin to use this database by clicking the **Enable Content** button



You will need to have an internet connection to watch the online video.



Templates for **Asset tracking, Contacts, Event management, Students, and Task management** were redesigned for the Access 2016 app.



You can safely **Enable Content** when using Microsoft Office templates to enable their Macro code functions.

Searching for templates

If you're looking for a template to use in Access 2016, but you can't instantly see an appropriate template in the list of popular templates on the Start screen, you can easily search the thousands of Microsoft Office online templates to find something suitable. For example, you might want to create a database to retain important details of personal belongings for insurance purposes:



The search will return templates for use with all Microsoft Office apps, including Word, Excel, and PowerPoint – not all results can be used as templates for Access databases.

- 1 Launch Access 2016 from the Windows Start menu to see the Access Start screen – or close all open databases, then click the **File** button to see the templates
- 2 Next, type “personal belongings” into the Search box at the top of the Start screen



- 3 Now, click the Search button, or hit the **Enter** key, to perform a search for a suitable template



- 4 The search finds a suitable “Home Inventory” template, and the result indicates the categories in which this template can be found

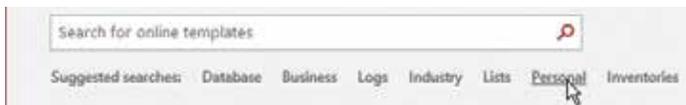


Simply click on the template icon in the search result to download and use that template in Access 2016.

...cont'd

As an alternative to searching by typing text into the Start screen's Search box, you can also search categories for a suitable template. Links to popular categories appear as hyperlinks below the Search box. To find a template for a database of personal belongings, it is reasonable to explore the "Personal" and "Inventories" categories:

- 1 Open the Access Start screen, then click the **Personal** hyperlink to explore that category



- 2 The suitable "Home Inventory" template is found alongside other templates in the **Personal** category



You can see the complete list of all categories in the right-hand pane. These are also hyperlinks, which you can click to reveal the templates within each category.

- 3 Return to the Access Start screen, then click the **Inventories** hyperlink to explore that category

- 4 The suitable "Home Inventory" template is found alongside other templates in the **Inventories** category



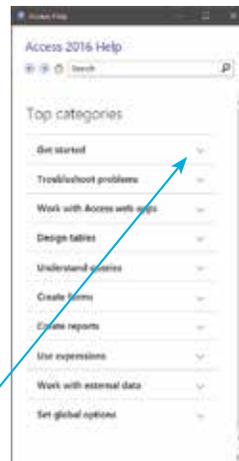


To use Access 2016 **Help**, you must have an internet connection. Unlike previous versions of Access, there is no Offline Help option.

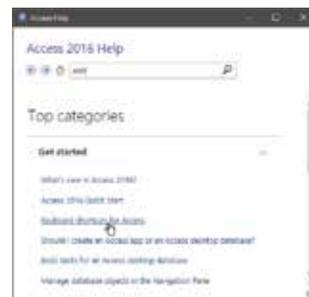
Getting some Help

If you need assistance at any time in the Access 2016 app, you can call upon the Access Help feature:

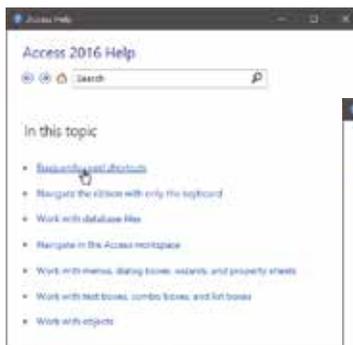
- 1 Open any database in Access 2016, then simply press the **F1** key (or **Fn + F1**) to see a Help window appear listing “Top categories” of help for the Access 2016 app
- 2 You can click on the arrow button beside any category to expand a list of topics within that category. For example, if you are looking for help when you’re new to Access 2016, click on the **Get started** button



- 3 Explore any topic to discover help on that specific subject. For example, if you want to discover common keyboard shortcuts, first select the **Keyboard shortcuts for Access** hyperlink



- 4 Now, when the next list of options appears, select the **Frequently used shortcuts** hyperlink to see a list of common shortcuts

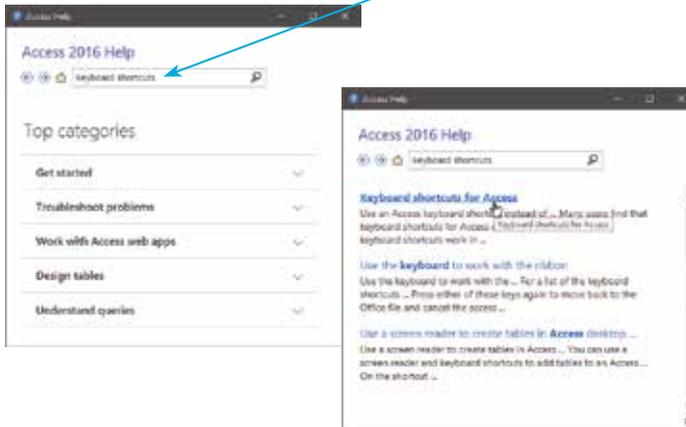


You invoke the **Help** feature in the same way in each Microsoft Office app, though the Help window that opens is specific to the active app; in this case, Access. The layout is similar for all Office apps.

...cont'd

You can search for assistance in a **Help** window:

- 1 Enter keywords for a subject, e.g. “keyboard shortcuts”



Whichever topic you select, you will still have the **Search** box so you can locate new topics, or click the **Home** button to return to the initial Help window.

- 2 Click on any result topic for help on that specific subject

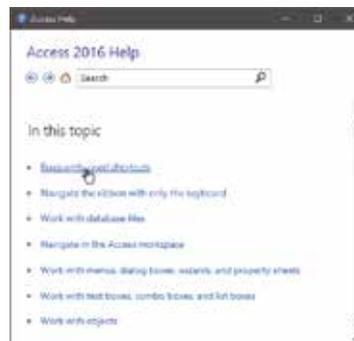
You can also seek assistance by typing a query word or phrase into the **Tell me what you want to do** box on the Access title bar:

- 1 Enter “keyboard shortcuts” into the **Tell Me** box



- 2 Click the suggested option on the context menu to open **Help**

- 3 Select the **Frequently used shortcuts** hyperlink to see a list of common shortcuts



The **Tell Me** box is a great new feature in Access 2016. Type in anything you like, and Access will attempt to help you.

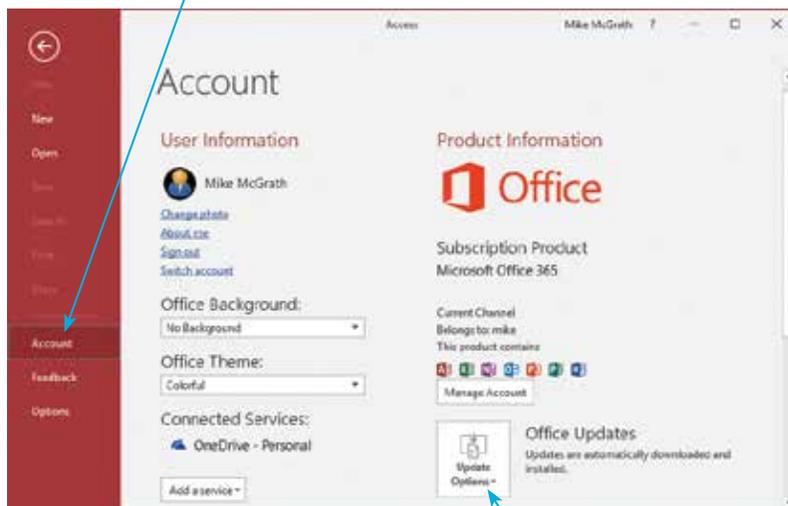
Applying Access updates

Microsoft will, by default, automatically update Access 2016 with new features as they become available. If you prefer not to enable automatic updates for the Access 2016 app, you can manually check for and apply updates at any time:

- 1 In Access, click the **File** button to open Backstage
- 2 Click the **Account** menu option to see your Microsoft Office **User Information** and **Product Information**



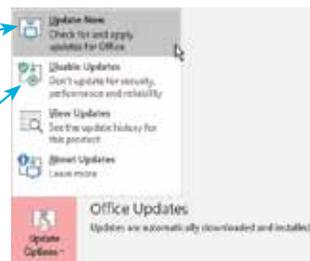
You can also change the **Office Background** and **Office Theme** settings to your preference using the drop-down menus on the Account screen.



- 3 Click the **Office Updates, Update Options** button to open a menu offering various settings options

- 4 Choose the **Update Now** option to apply all available updates immediately

- 5 Choose the **Disable Updates** option to stop receiving automatic updates



Choose the **View Updates** option to discover which new features have been recently installed.

When you revisit these update options you will see an Enable Updates option that you can choose to resume automatic updates.