

## Microsoft Office 2007 Encryption

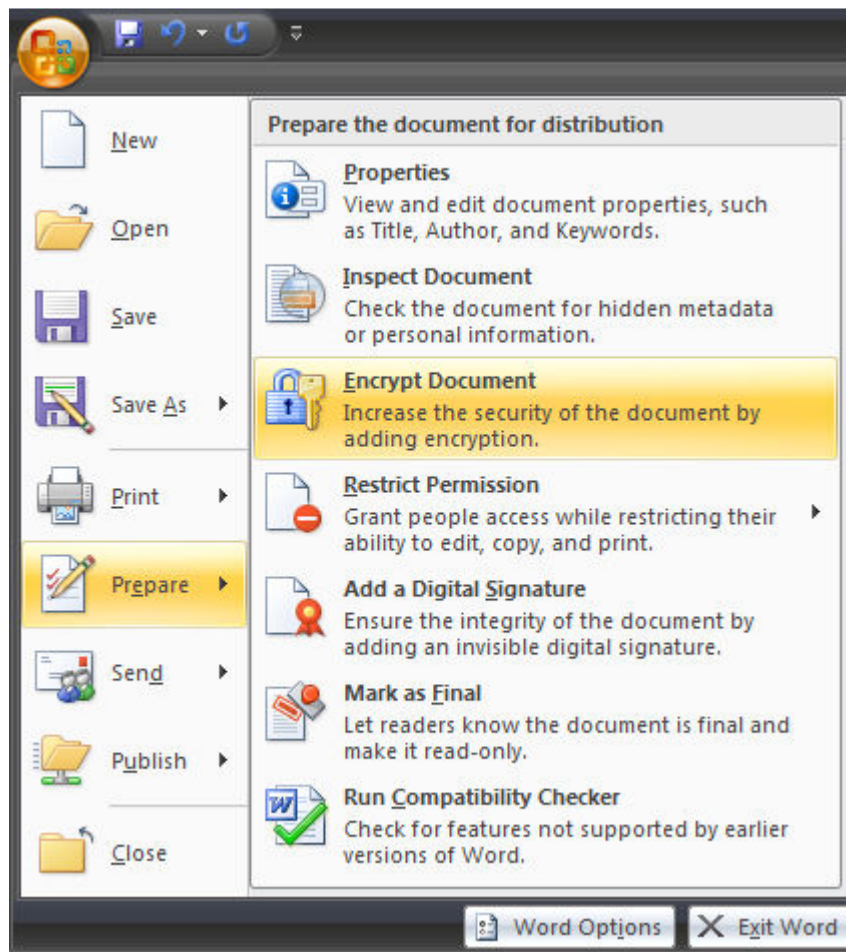
Microsoft Office 2007 is equipped with built-in encryption capabilities to secure files in Word, Excel, and PowerPoint. Unlike previous versions of Microsoft Office, version 2007 uses a well respected encryption algorithm called the Advanced Encryption Standard (AES). The Advanced Encryption Standard (AES-128 bit) is in use by the U.S. Government and approved to secure sensitive documents categorized as **classified**.

Encrypted MS Office 2007 documents that have been secured with a strong passphrase can be next to impossible to extract, or at least impractical due to the time it would require. A common attack vector for encrypted files is called “brute-force” attack. A brute-force attack consists of an automated process dedicated to enumerating and attempting all possible passwords. A dictionary attack is similar in its attempt, but instead uses a predefine set of passwords made up of dictionary words and/or common passwords. Both attacks can be used to extract a MS Office 2007 encrypted file, but due to the techniques used by AES a successful attack can take an extremely long time with a strong password/passphrase.

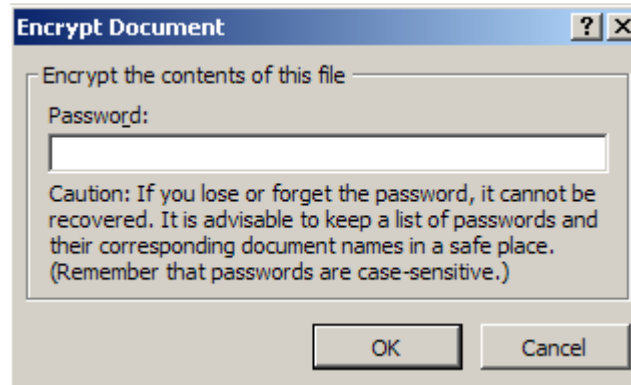
Please see our tutorial on “Choosing a Strong Password”:

[http://is.depaul.edu/security/information\\_security/Password.asp](http://is.depaul.edu/security/information_security/Password.asp)

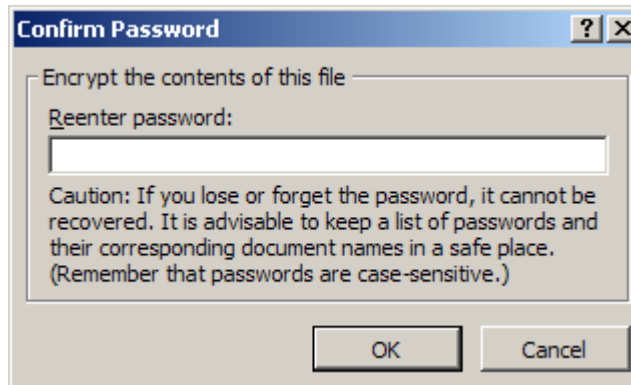
Enabling MS Office 2007 Encryption: Click on the Office icon > Prepare > Encrypt Document



This will produce a prompt where you can enter the password to secure this document.



Then a second window will prompt you to reenter the password.



If the passwords match, the process is complete. Otherwise, you will receive an error:

