How Can Students or Parents Create an Encrypted Attachment



Email encryption is the process of disguising the content of your email messages so that they can remain safe and secure from intrusive third parties. Sensitive personally identifiable information such as name, address, social security numbers, date of birth, and bank account numbers are vulnerable when sent via email. Email encryption is important because it protects you from a data breach. If the hacker can't read your message because it's encrypted, they can't do anything with the information.

S/MIME (Secure/Multipurpose Internet Mail Extensions) is built into most OSX and iOS devices. S/MIME is used most often because it is built into large web-based email companies such as Apple and Outlook.

How to Encrypt Emails in Gmail

Gmail already has S/MIME built into the app, but it only works if both the sender and receiver have it enabled.

- Make sure to sign into your Google Admin account.
- Take the following pathway. Apps -> G Suite -> Gmail -> User Settings.
- In Organization, select the domain name you want to be enabled.
- Go to the S/MIME setting and select the box that is listed as Enable S/MIME encryption for sending and receiving emails.
- When it's time to compose the message, just write your email as you normally would and then click on the lock icon which is next to the recipient on the right.

To change the level of encryption, click on "View Details". This can enable you to view the encryption levels that are present.

When changing the encryption levels note these color codes:

Green — Information is protected by S/MIME encryption and can only be decrypted with a private key. **Gray** — The email is protected with TLS (Transport Layer Security). This only works if both the sender and recipient have TLS capabilities.

Red — The email has no encryption security.

How to Encrypt Emails on iOS

iOS devices also have S/MIME support built in as a default.

- In Advanced Settings there is a S/MIME switch. Turn it on.
- Turn on the yes option for the "Encrypt by Default" toggle setting
- Make sure to press the lock icon while composing a message. This will be next to the recipient's name.

Note: If the lock is blue, the email can be encrypted. If the lock is red, the recipient needs to turn on their S/MIME setting.

Email Providers That Need Third-Party Encryption Tools

Yahoo, Android, AOL

Alternative Encryption Method from a Computer or Laptop:

There are many applications that can encrypt attachments. An example is provided below for WinZip™, with the caveat that this is not the only acceptable method.

WinZip instructions for file/folder encryption and password protection

- 1. Open a folder to the location of the file(s)/folder(s) that you wish to encrypt.
- 2. Select the file(s)/folder(s) that you wish to encrypt. Note that to select more than one file/folder, you must press the "Ctrl" key on the keyboard while selecting them.
- 3. Right-click over one of the selected items.
- 4. Select WinZip. From the submenu that appears, select "Add to Zip File."
- 5. In the "Add Files" dialog box, specify a 'File name' and 'Destination' (location) for the finished Zip file.
- 6. Select ".Zip" as the Compression Type.
- 7. Under Encryption, check the "Encrypt files" box.
- 8. Click the "Add" button.
- 9. A pop-up window may appear saying "You should be aware of the advantages and disadvantages of the various encryption methods before using this feature. Please press the F1 key for more information, particularly if this is the first time you are using encryption." Select the "OK" button to continue.
- 10. In the "Enter Password" field, enter an appropriate password. Passwords must be at least eight characters and must contain at least one of each the following: a lowercase character (a-z), an uppercase character (A-Z), a number character (0-9), and a symbol character (!, @, #, \$, %, ^, &, *, etc.).
- 11. In the "Re-enter Password" field, enter the same password from Step #10, and remember the password for future reference.
- 12. Click the "OK" button.
- 13. A pop-up window may appear saying "Add Complete. Your files have been added. The files will be compressed and encrypted when saved." Click the "OK" button to continue.
- 14. The encrypted WinZip file should be in the location identified in Step #5 above.
- 15. The password must not be included in the same message and should either be included in a separate email or verbally provided to the intended user.